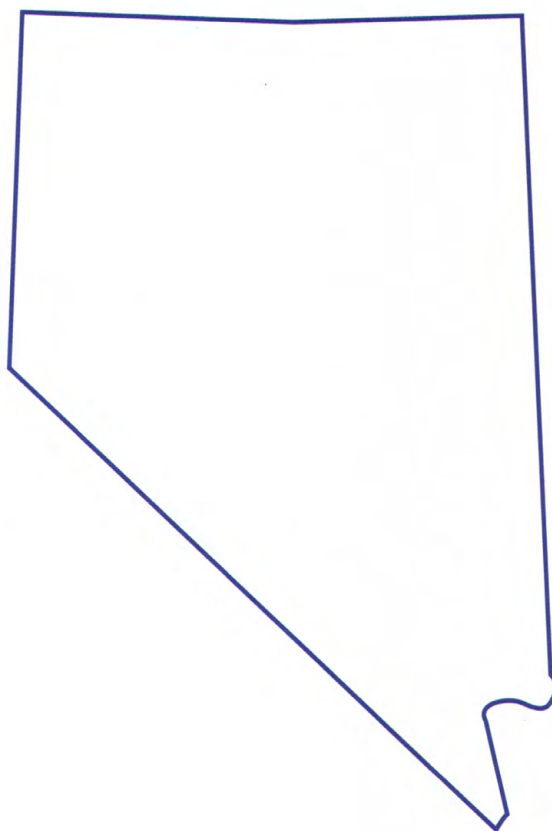


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Water Resources Data Nevada Water Year 1991



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Prepared in cooperation with the State of Nevada
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CALENDAR FOR WATER YEAR 1991

1990

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
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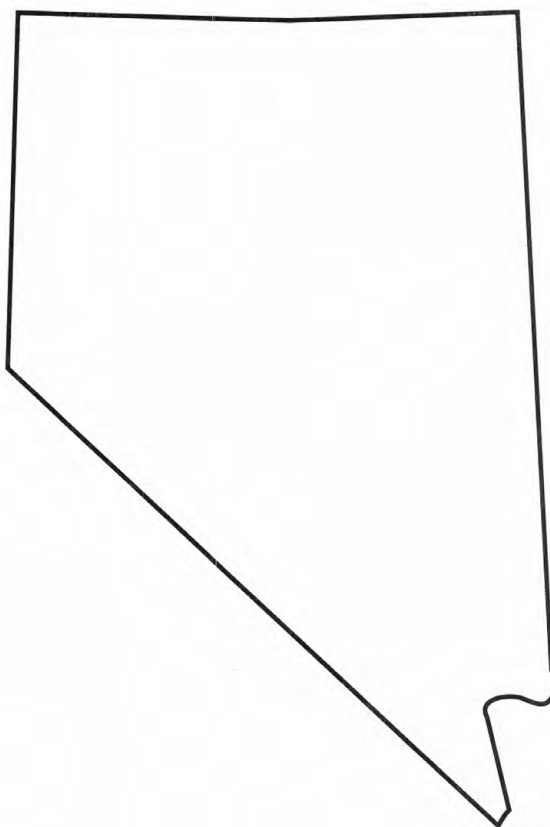
1991

JANUARY							FEBRUARY							MARCH						
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13	14	15	16	17	18	19	10	11	12	13	14	15	16	10	11	12	13	14	15	16
20	21	22	23	24	25	26	17	18	19	20	21	22	23	17	18	19	20	21	22	23
27	28	29	30	31			24	25	26	27	28			24	25	26	27	28	29	30
														31						
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
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21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29
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JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	9	10	11	12	13	14
14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21
21	22	23	24	25	26	27	18	19	20	21	22	23	24	22	23	24	25	26	27	28
28	29	30	31				25	26	27	28	29	30	31	29	30					



Water Resources Data Nevada Water Year 1991

by K.T. Garcia, G.C. Gortsema, R.N. Pennington, and A.M. Preissler



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NV-91-1
Prepared in cooperation with the State of Nevada
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

MANUEL LUJAN, JR., Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information regarding water-resources investigations
in Nevada, write to:

Nevada District Office Chief, Water Resources Division
U.S. Geological Survey
Room 227, Federal Building
705 North Plaza Street
Carson City, Nevada 89701

PREFACE

This report for Nevada is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface-water and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streams, canals, drains and springs, lakes and reservoirs, and observation wells provide the hydrologic information needed by State, local, and Federal agencies and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by personnel of the U.S. Geological Survey who collected, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The four authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines.

In addition to the authors, U.S. Geological Survey personnel in Nevada who contributed significantly to the collection and preparation of the data in this report were: Robert E. Bostic, Mike L. Childress, Sonya L. Clary, Ronald P. Collins, E. James Crompton, Deloy C. Emmet, Richard D. Hayes, Anthony Henderson, Charles R. Herrick, Dan L. Hess, Daniel E. Hitch, Douglas D. Hutchinson, Judy M. Jacoboni, Loren A. Lawson, Donald R. McClary, Karen A. Mello, Robert M. Moquino, Kari L. O'Hair, Darren D. Reeves, Margaret M. Riek, Timothy G. Rowe, Robert J. Sexton, Robert A. Swanson, James R. Swartwood, Thomas B. Tucker, Lloyd Van Gordon, Rita Whitney, Rhea P. Williams, and Richard L. Young.

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15. Supplementary Notes Prepared in cooperation with Federal, State and local agencies.			
16. Abstract (Limit: 200 words) Water-resources data published herein for the 1991 water year comprise the following records: - o Water discharge for 142 gaging stations on streams, canals, and drains. - o Discharge data for 131 peak-flow stations and miscellaneous sites, and 57 springs. - o Stage and contents for 21 lakes and reservoirs. - o Water-quality data for 131 stream, canal, and drain sites, and 140 wells. - o Precipitation totals for 7 streams. - o Precipitation totals for 12 high elevation sites. - o Water levels for 33 continuous record wells, and 493 observation wells. Additional water-data, collected at various sites that are not part of the systematic data-collection program, are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Nevada.			
17. Document Analysis a. Descriptors *Nevada, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate. Gaging stations, Lakes, Reservoirs, Chemical analysis, Sediments, Water temperatures, Sampling sites, Water levels. Water analysis. b. Identifiers/Open-Ended Terms c. COSATI Field/Group			
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CONTENTS

	Page
PREFACE	iii
LIST OF SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME. . .	vii
LIST OF GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME.	x
LIST OF DISCONTINUED SURFACE-WATER DISCHARGE STATIONS	xi
LIST OF DISCONTINUED SURFACE-WATER QUALITY STATIONS	xvi
INTRODUCTION	1
COOPERATION	1
SUMMARY OF HYDROLOGIC CONDITIONS	2
Surface water	2
Surface-water quality	5
Ground water	8
Water use	11
SPECIAL NETWORKS AND PROGRAMS	14
EXPLANATION OF THE RECORDS	14
Station identification numbers	14
Downstream order system	14
Latitude-longitude system	15
Local site numbers	15
Records of stage and water discharge	15
Data collection and computation	15
Data presentation	16
Identifying estimated daily discharge	18
Accuracy of the records	18
Other records available	18
Records of surface-water quality	18
Classification of records	18
Arrangement of records	18
On-site measurements and sample collection	19
Water temperature	19
Laboratory measurements	19
Sediment	19
Data presentation	20
Remark codes	20
Records of ground-water levels	21
Data collection and computation	21
Data presentation	21
Records of ground-water quality	22
Data collection and computation	22
Data presentation	22
ACCESS TO WATSTORE DATA	22
DEFINITION OF TERMS	23
REFERENCES CITED	28
WATER-RELATED PUBLICATIONS FOR NEVADA COMPLETED BY THE U.S. GEOLOGICAL SURVEY DURING CALENDAR YEAR 1991	29
PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS	32
SURFACE-WATER RECORDS.	35
Surface-water stations	46
Spring discharge.	354
Discharge at partial-record stations and miscellaneous sites.	358
Crest-stage partial-record stations.	358
Miscellaneous sites.	362
Analyses of samples collected for	
Water-quality partial-record stations and miscellaneous sites.	369
Low-flow investigation of the Truckee River and selected tributaries	370
GROUND-WATER RECORDS	373
Hydrographic areas, State of Nevada	374
Ground-water levels, primary observation wells.	379
Ground-water levels, secondary observation wells.	390
Quality of ground water	422
Laughlin wells	422
SPECIAL NETWORKS AND PROJECTS	424
Data for Desert Valley	424
Data for Douglas County	431
Data for Lake Tahoe Basin	445
Data for Carlin Area, northeastern Nevada	460
Nevada High-Elevation Precipitation Network	475
INDEX	477

ILLUSTRATIONS

	Page
Figures 1-5. Graphs showing:	
1. Comparison of discharge during water year 1991 with the long-term mean discharge at two representative gaging stations	3
2. End-of-year water-surface elevation at Walker and Pyramid Lakes, water years 1965-91	4
3. Mean dissolved-solids concentrations at National network sites in 1991, compared with ranges of dissolved-solids for the period of record	6
4. Dissolved-solids concentrations in the Colorado River below Hoover Dam (station 09421500) for water years 1970-91	7
5. Number of well logs submitted to the Nevada State Engineer's Office during water years 1971-91	9
6. Map showing long-term water-level depths below land surface in six selected observation wells	10
7. Graph showing monthly water withdrawals for public supply in the Las Vegas, Reno, and Carson City areas, 1982-91	12
8. Map showing distribution of population in Nevada for 1990	13
9-29. Maps showing data sites listed in this report:	
9. Gaging stations	36
10. Gaging stations, west-central Nevada	37
11. Gaging stations, Lake Tahoe basin	38
12. Gaging stations in Carlin area, northeastern Nevada	39
13. Gaging stations, southeastern Nevada	40
14. Surface-water quality stations	41
15. Surface-water quality stations, Lake Tahoe basin	42
16. Surface-water quality stations in Carlin area, northeastern Nevada . .	43
17. Surface-water quality stations, southeastern Nevada	44
18. Springs and high-elevation precipitation sites within carbonate-study area, eastern Nevada	353
19. Crest-stage partial-record stations	356
20. Crest-stage partial-record stations, southeastern Nevada	357
21. Observation wells	375
22. Observation wells, west-central Nevada	376
23. Selected observation wells within carbonate-rock study area, eastern Nevada	377
24. Observation wells, southeastern Nevada	378
25. Ground-water quality sites	421
26. Ground-water quality sites, west-central Nevada	435
27. Ground-water quality sites, south-central Douglas County	437
28. Ground-water quality sites, Lake Tahoe basin	447
29. Ground-water quality sites in Carlin area, northeastern Nevada	465

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

NOTE.--Data for partial-record stations and miscellaneous sites for both surface-water discharge and quality are published in separate sections of the data report. See references at the end of this list for page numbers for these sections.

[Letters after station name designate type of data: (d) discharge, (c) chemical, (m) microbiological, (p) precipitation, (t) water temperature, (s) sediment (e) elevation, gage heights, or contents,]

	Station number	Page
<u>COLORADO RIVER BASIN [PART 09]</u>		
Colorado River:		
VIRGIN RIVER BASIN		
Virgin River at Littlefield, AZ (d,c,m,t,s)	09415000	46
White River (head of Muddy River):		
Water Canyon Creek near Preston (d)	09415515	49
White River near Lund (d)	09415550	50
Crystal Spring near Hiko (d)	09415590	51
White River above Upper Pahranaqat Lake near Alamo (d)	09415700	52
Pahranaqat Wash near Moapa (d,c,t)	09415850	54
Muddy Spring at L.D.S. Farm near Moapa (d)	09415900	57
Pederson Spring near Moapa (d)	09415910	58
Warm Springs West near Moapa (d)	09415920	59
Muddy River near Moapa (d,c,p,t)	09416000	60
Meadow Valley Wash:		
Meadow Valley Wash near Caliente (d)	09418500	65
Meadow Valley Wash near Rox (d,c,t,s)	09418700	66
Muddy River near Glendale (d)	09419000	71
Muddy River above Lake Mead, near Overton (d,c,m,t,s)	09419515	72
Rogers Spring near Overton Beach (d)	09419550	75
LAS VEGAS VALLEY		
Lee Canyon near Charleston Park (d)	09419610	76
Corn Creek Spring at National Fish and Wildlife Headquarters (d)	09419625	77
Las Vegas Wash above Detention Basin, near North Las Vegas (d,c,t,s)	09419648	78
Las Vegas Creek at Lamb Boulevard, near Las Vegas (d,p)	09419656	80
Las Vegas Wash near Sahara Avenue near Las Vegas (d,p)	09419658	81
Sloan Channel at Charleston Boulevard, near Las Vegas (d,p)	09419665	82
Flamingo Wash near Torrey Pines Drive, near Las Vegas (d,p)	09419673	83
Flamingo Wash at Nellis Boulevard, near Las Vegas (d,p)	09419678	84
Las Vegas Wasteway near East Las Vegas (d)	09419679	85
Las Vegas Wash near Henderson (c,t)	09419700	86
Las Vegas Wash above Three Kids Wash, below Henderson (d,c,t)	09419753	88
Lake Mead at Hoover Dam (e)	09421000	91
Colorado River below Hoover Dam (d,c,m,t,s)	09421500	93
Lake Mohave at Davis Dam (e)	09422500	96
Colorado River below Davis Dam (d)	09423000	97
<u>THE GREAT BASIN [PART 10]</u>		
SPRING VALLEY		
Cleve Creek near Ely (d)	10243700	98
STEPTOE AND GOSHUTE VALLEYS		
Steptoe Creek near Ely (d,c,m,t,s)	10244950	99
JAKES VALLEY		
Illipah Creek near Hamilton (d)	10245445	102
MONITOR VALLEY-DIAMOND VALLEY SYSTEM		
Pine Creek near Belmont (d)	10245900	103
Mosquito Creek near Belmont (d)	10245910	104
Stoneberger Creek near Austin (d)	10245925	105
HOT CREEK AND NORTHERN RAILROAD VALLEYS		
Little Currant Creek near Currant (d)	10246846	106
Sixmile Creek near Warm Springs (d)	10246930	107
Big Creek near Warm Springs (d)	10247200	108
STONE CABIN VALLEY		
Willow Creek near Warm Springs (d)	10249190	109
BIG SMOKY VALLEY (NORTHERN PART)		
Kingston Creek below Cougar Canyon, near Austin (d)	10249280	110
South Twin River near Round Mountain (d,c,m,t,s)	10249300	111
PAHRUMP VALLEY		
Peak Spring Canyon Creek near Charleston Peak (d)	10251890	114
WALKER LAKE BASIN		
Walker Lake near Hawthorne (e)	10288500	115
Virginia Creek (head of Walker River):		
Upper Twin Lake near Bridgeport, CA (e)	10290300	116
Lower Twin Lake near Bridgeport, CA (e)	10290400	117
East Walker River (continuation of Virginia Creek):		
Bridgeport Reservoir near Bridgeport, CA (e)	10292500	118
East Walker River near Bridgeport, CA (d)	10293000	119
East Walker River above Strosnider ditch, near Mason (d)	10293500	120
West Walker River:		
West Walker River below Little Walker River, near Coleville, CA (d)	10296000	121
West Walker River near Coleville, CA (d)	10296500	122
West Walker River above Topaz Lake at Topaz, CA (c,t)	10296650	123
Topaz Lake near Topaz, CA (e)	10297000	124

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME--Continued

	Station number	Page
<u>THE GREAT BASIN--Continued</u>		
<u>WALKER LAKE BASIN--Continued</u>		
West Walker River at Hoye bridge, near Wellington (d,c,t)	10297500	125
West Walker River near Hudson (d)	10300000	127
Walker River near Wabuska (d,c,m,t,s)	10301500	128
<u>HUMBOLDT-CARSON SINK BASIN</u>		
<u>CARSON RIVER BASIN</u>		
East Fork Carson River below Markleeville Creek, near Markleeville, CA (d)	10308200	131
East Fork Carson River near Gardnerville (d,c,t)	10309000	132
Indian Creek near Woodfords, CA (d)	10309025	134
Indian Creek at Diamond Valley, near Paynesville, CA (d)	10309030	135
Pine Nut Creek near Gardnerville (d)	10309050	136
Buckeye Creek near Minden (d)	10309070	137
West Fork Carson River at Woodfords, CA (d)	10310000	138
Fredericksburg Canyon Creek near Fredericksburg, CA (d)	10310300	139
Miller Spring near Sheridan (d)	10310350	140
West Fork Carson River near Dresslerville (c,t)	10310355	141
Daggett Creek near Genoa (d)	10310400	142
Clear Creek near Carson City (d)	10310500	143
Carson River near Carson City (d,c,t)	10311000	144
North Fork Kings Canyon Diversion near Carson City (d)	10311089	146
North Fork Kings Canyon Creek near Carson City (d)	10311090	147
Kings Canyon Creek near Carson City (d)	10311100	148
Ash Canyon Creek near Carson City (d)	10311200	149
Vicee Canyon Creek near Sagebrush Ranch near Carson City (d)	10311260	150
Eagle Valley Creek at Carson City (d)	10311300	152
Carson River at Deer Run Road near Carson City (d)	10311400	153
Carson River near Fort Churchill (d,c,m,t,s)	10312000	155
Lahontan Reservoir near Fallon (e)	10312100	158
Carson River below Lahontan Reservoir, near Fallon (d)	10312150	159
Stillwater Diversion Canal near Fallon (d,c,t)	10312210	160
S-Line Diversion Canal near Stillwater (d,c,t)	1031221902	165
Carson River at Tarzyn Road, near Fallon (d)	10312275	167
Palute Drain below TJ Drain near Stillwater (d,c,t)	10312277	168
<u>HUMBOLDT RIVER BASIN</u>		
<u>East Fork Humboldt River:</u>		
Marys River above Hot Springs Creek, near Deeth (d)	10315500	173
Lamoille Creek near Lamoille (d)	10316500	174
Humboldt River near Elko (d)	10318500	175
South Fork Humboldt River above Tenmile Creek, near Elko (d)	10319900	176
South Fork Humboldt River above Dixie Creek, near Elko (d)	10320000	177
Dixie Creek above South Fork Humboldt River, near Elko (d,s)	10320100	178
Humboldt River near Carlin (d,c,m,t,s)	10321000	180
Jack Creek below Indian Creek near Carlin (d,c,t)	10321860	183
Maggie Creek at Maggie Creek Canyon, near Carlin (d,c,t)	10321950	185
Maggie Creek near Carlin (d)	10321970	187
Marys Creek at Carlin (d,c,t)	10322150	188
Humboldt River at Palisade (d,c,t)	10322500	190
Humboldt River at Old US 40 Bridge, at Dunphy (d,c,t)	10323425	192
Rock Creek near Battle Mountain (d,c,t)	10324500	194
Boulder Creek near Dunphy (d)	10324700	196
Humboldt River at Battle Mountain (d,c,t)	10325000	197
Humboldt River at Comus (d)	10327500	199
<u>Little Humboldt River:</u>		
Little Humboldt River near Paradise Valley (d)	10329000	200
Martin Creek near Paradise Valley (d)	10329500	201
Humboldt River near Imlay (d)	10333000	202
Rye Patch Reservoir near Rye Patch (e)	10334500	203
Humboldt River near Rye Patch (d)	10335000	204
<u>PYRAMID AND WINNEMUCCA LAKES BASIN</u>		
Pyramid Lake near Nixon (e)	10336500	205
Upper Truckee River at South Upper Truckee Road, near Meyers, CA (d,c,t,s)	10336580	206
Upper Truckee River at Highway 50, above Meyers, CA (d,c,t,s)	103366092	210
Upper Truckee River at South Lake Tahoe, CA (d,t,s)	10336610	214
<u>Lake Tahoe:</u>		
<u>Taylor Creek:</u>		
Fallen Leaf Lake near Camp Richardson, CA (e)	10336625	218
Taylor Creek near Camp Richardson, CA (d)	10336626	219
General Creek near Meeks Bay, CA (d,t,s)	10336645	220
Blackwood Creek near Tahoe City, CA (d,t,s)	10336660	224
Ward Creek at State Highway 89, near Tahoe Pines, CA (d,t,s)	10336676	228
First Creek near Crystal Bay (c,t,s)	10336688	232
Second Creek at Lakeshore Drive near Crystal Bay (c,t,s)	10336691	233
Wood Creek above Jennifer Street near Incline Village (c,t,s)	10336692	234
Wood Creek at Mouth near Crystal Bay (c,t,s)	10336694	235
Third Creek below Unnamed Tributary near Incline Village (c,t,s)	103366958	236
Third Creek at Village Boulevard at Incline Village (c,t,s)	103366965	237
Third Creek near Crystal Bay (d,c,t,s)	10336698	238
Incline Creek above Tyrol Village, near Incline Village (d,c,t,s)	103366993	241
Incline Creek at Highway 28, at Incline Village (d,c,t,s)	103366995	245
Incline Creek Tributary at Country Club Drive near Incline Village (c,t,s)	103366997	248
Incline Creek near Crystal Bay (d,c,t,s)	10336700	249

WATER RESOURCES DATA - NEVADA, 1991

ix

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME--Continued

	Station number	Page
<u>THE GREAT BASIN--Continued</u>		
PYRAMID AND WINNEMUCCA LAKES BASIN--Continued		
Marlette Lake near Carson City (e)	10336710	253
Marlette Creek near Carson City (d)	10336715	254
Glenbrook Creek at Old Highway 50 near Glenbrook (c,t,s)	10336725	255
Glenbrook Creek at Glenbrook (d,c,t,s)	10336730	256
North Logan House Creek at Highway 50 near Glenbrook (c,t,s)	10336735	260
Logan House Creek near Glenbrook (d,c,t,s)	10336740	261
Edgewood Creek below South Benjamin Drive near Daggett Pass (c,t,s)	10336750	264
Edgewood Creek Tributary near Daggett Pass (c,t,s)	10336756	265
Edgewood Creek at Palisades Drive, near Kingsbury (d,c,t,s)	103367585	266
Eagle Rock Creek near Stateline (d,c,t,s)	103367592	269
Edgewood Creek at Lake Tahoe near Stateline (d,c,t,s)	10336765	272
Trout Creek at U.S. Forest Service Road 12N01, near Meyers, CA (d,c,t,s)	10336770	276
Trout Creek at Pioneer Trail, near South Lake Tahoe, CA (d,c,t,s)	10336775	280
Trout Creek near Tahoe Valley, CA (d)	10336780	284
Trout Creek at South Lake Tahoe, CA (t,s)	10336790	285
Lake Tahoe at Tahoe City, CA (e)	10337000	288
Truckee River at Tahoe City, CA (d)	10337500	289
Donner Lake near Truckee, CA (e)	10338400	290
Donner Creek at Donner Lake, near Truckee, CA (d)	10338500	291
Martis Creek at State Highway 267, near Truckee, CA (c,t,s)	10339250	292
Martis Creek Lake near Truckee, CA (c,t,s)	10339380	293
Martis Creek near Truckee, CA (c,t,s)	10339400	294
Prosser Creek Reservoir near Truckee, CA (e)	10340300	297
Prosser Creek below Prosser Creek Dam, near Truckee, CA (d)	10340500	298
Little Truckee River:		
Independence Lake near Truckee, CA (e)	10342900	299
Independence Creek near Truckee, CA (d)	10343000	300
Sagehen Creek near Truckee, CA (d,c,m,p,t,s)	10343500	301
Stampede Reservoir near Truckee, CA (e)	10344300	306
Little Truckee River above Boca Dam, near Truckee, CA (d)	10344400	307
Boca Reservoir near Truckee, CA (e)	10344490	308
Little Truckee River below Boca Dam, near Truckee, CA (d)	10344500	309
Truckee River at Farad, CA (d)	10346000	310
Truckee River at Reno (d,t)	10348000	311
Truckee River near Sparks (d,t)	10348200	314
Franktown Creek (head of Steamboat Creek) near Carson City (d)	10348460	317
Steamboat Creek:		
Washoe Lake near Carson City (e)	10348700	318
Little Washoe Lake near Steamboat (e)	10348800	319
Galena Creek at Galena State Park (d)	10348850	320
Galena Creek near Steamboat (d)	10348900	321
Steamboat Creek at Steamboat (d)	10349300	322
Truckee River at Vista (d,t)	10350000	323
Truckee River below Tracy (d)	10350400	326
Truckee River at Clark (t)	10350500	327
Truckee Canal near Wadsworth (d)	10351300	329
Truckee Canal near Hazen (d)	10351400	330
Truckee River below Derby Dam, near Wadsworth (d,t)	10351600	331
Truckee River near Nixon (d,c,m,t,s)	10351700	334
Truckee River at Marble Bluff Dam (t)	10351775	339
BLACK ROCK DESERT BASIN		
Quinn River:		
McDermitt Creek near McDermitt (d)	10352500	341
Kings River near Orovida (d)	10353600	342
SUMMIT LAKE VALLEY		
Mahogany Creek near Summit Lake (d)	10353750	343
HUALAPAI FLAT		
South Willow Creek near Gerlach (d)	10353770	344
SMOKE CREEK DESERT		
Smoke Creek below Reservoir near Smoke Creek (d)	10353800	345
<u>SNAKE RIVER BASIN [PART 13]</u>		
SALMON FALLS CREEK BASIN		
Salmon Falls Creek near San Jacinto (d)	13105000	346
BRUNEAU RIVER BASIN		
Bruneau River at Rowland (d)	13161500	347
OWYHEE RIVER BASIN		
Wild Horse Reservoir near Gold Creek (e)	13174000	348
Owyhee River near Gold Creek (d)	13174500	349
Owyhee River near Mountain City (d)	13175100	350

x

WATER RESOURCES DATA - NEVADA, 1991

GROUND-WATER WELLS, BY VALLEY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

GROUND-WATER LEVELS

						Page
<u>PARADISE VALLEY</u>						
Well 412910117321001	Local number 69	N42 E39 25CAC 1	.	.	.	379
<u>WASHOE VALLEY</u>						
Well 391233119484501	Local number 89	N16 E19 35ACD 1	.	.	.	379
<u>CARSON DESERT</u>						
Well 392825118470501	Local number 101	N19 E28 36AABC1	.	.	.	379
<u>EAGLE VALLEY</u>						
Well 391126119441901	Local number 104	N15 E20 04DBDC1	.	.	.	380
Well 391126119441902	Local number 104	N15 E20 04DBDC2	.	.	.	380
Well 391155119460401	Local number 104	N15 E20 05BBCA1	.	.	.	380
Well 391155119460402	Local number 104	N15 E20 05BBCA2	.	.	.	381
Well 391110119470501	Local number 104	N15 E20 07BBAB1	.	.	.	381
Well 391004119433301	Local number 104	N15 E20 15BDBA1	.	.	.	381
Well 391004119444901	Local number 104	N15 E20 16BCAA1	.	.	.	382
Well 390954119460401	Local number 104	N15 E20 17BCCD1	.	.	.	382
Well 390958119464301	Local number 104	N15 E20 18BDDA1	.	.	.	382
Well 390807119450901	Local number 104	N15 E20 29DAAB1	.	.	.	383
Well 390728119453801	Local number 104	N15 E20 32BDAA1	.	.	.	383
Well 391205119444901	Local number 104	N16 E20 33CCDD1	.	.	.	383
<u>CARSON VALLEY</u>						
Well 385559119485701	Local number 105	N12 E19 02BDDD1	.	.	.	384
Well 385620119453101	Local number 105	N12 E20 04BAAA2	.	.	.	384
Well 385612119464401	Local number 105	N12 E20 06BADD1	.	.	.	384
Well 385821119475001	Local number 105	N13 E19 24CADD1	.	.	.	385
Well 385859119461501	Local number 105	N13 E20 19AAAB1	.	.	.	385
Well 385655119432101	Local number 105	N13 E20 34ACBC1	.	.	.	385
Well 385658119432001	Local number 105	N13 E20 34ACBC2	.	.	.	386
<u>PAHRUMP VALLEY</u>						
Well 360836115531701	Local number 162	S21 E54 10AAC 1	.	.	.	386
<u>STEPTOE VALLEY</u>						
Well 393310114475001	Local number 179	N20 E64 32C 2	.	.	.	386
<u>CAVE VALLEY</u>						
Well 382807114521001	Local number 180	N07 E63 14BADD1	.	.	.	387
<u>COYOTE SPRING VALLEY</u>						
Well 364743114533101	Local number 210	S13 E63 23DDDC1	.	.	.	387
<u>LAS VEGAS VALLEY</u>						
Well 363212115240301	Local number 212	S16 E58 24BB 1	.	.	.	387
Well 361843115161001	Local number 212	S19 E60 09BCC 1	.	.	.	388
Well 361611115151301	Local number 212	S19 E60 27BDC 1	.	.	.	388
Well 360846115091401	Local number 212	S21 E61 04DDBA1	.	.	.	388
Well 360349115100001	Local number 212	S22 E61 04BCB 1	.	.	.	389
<u>MUDDY SPRINGS AREA (Upper Moapa Valley)</u>						
Well 364650114432001	Local number 219	S13 E65 28BDAC1	.	.	.	389
<u>AMARGOSA DESERT</u>						
Well 364556116413501	Local number 230	S13 E47 35BDBA1	.	.	.	389

WATER RESOURCES DATA - NEVADA, 1991

xi

DISCONTINUED SURFACE-WATER STATIONS

The following continuous-record surface-water discharge stations (gaging stations) in Nevada and parts of California have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Those stations with an asterisk (*) after the station number are currently operated as crest-stage partial-record stations.

Station name	Station number	Drainage area (mi ²)	Period of record
MESQUITE CANAL NEAR MESQUITE, NV	09415060	--	1951-55
BUNKERVILLE CANAL NEAR BUNKERVILLE, NV	09415080	--	1951-55
VIRGIN RIVER AT RIVERSIDE, NV	09415190	5,890	1971-74
VIRGIN RIVER ABOVE HALFWAY WASH NEAR RIVERSIDE, NV	09415230	5,980	1978, 1980-83, 1985
WHITE RIVER NEAR PRESTON, NV	09415500	--	1914
PRESTON BIG SPRING NEAR PRESTON, NV	09415510	--	1983-85
PAHRANAGAT VALLEY TRIB NEAR HIKO, NV	09415600	17.0	1964-77
MUDDY RIVER POWER DIVERSION NEAR MOAPA, NV	09415950	--	1978-85
MUDDY RIVER ABOVE MOAPA INDIAN RES NEAR MOAPA, NV	09416500	3,890	1914-18
MUDDY RIVER AT RR PUMP PLANT NEAR MOAPA, NV	09417000	3,900	1915-17
MUDDY RIVER AT WEISER RANCH NEAR MOAPA, NV	09417400	4,360	1916-17
MEADOW VALLEY WASH AT EAGLE CANYON, NEAR URSINE, NV	09417500	293	1962-75
MEADOW VALLEY WASH NEAR PANACA, NV	09418000	450	1945-50
MATHEWS CANYON WASH NEAR CALIENTE, NV	09418200	34.0	1958-84
PINE CANYON WASH NEAR CALIENTE, NV	09418300	45.0	1958-84
MUDDY RIVER NEAR OVERTON, NV	09419500	8,180	1913-16, 1948-52
LAS VEGAS WASH AT NORTH LAS VEGAS, NV	09419650*	1,300	1962-78
THOUSAND SPRINGS CREEK NEAR WILKINS, NV	10172907	--	1985-90
THOUSAND SPRINGS CREEK NEAR SHORES, NV	1017290880	--	1985-87
THOUSAND SPRINGS CREEK BLW TOANO DRAW NEAR SHORES, NV	1017290885	--	1987-90
BAKER CREEK AT NARROWS NEAR BAKER, NV	10243240	16.4	1948-55
BAKER CREEK NEAR BAKER, NV	10243250	10.0	1913-16
LEHMAN CREEK NEAR BAKER, NV	10243260	11.0	1948-55
FRANKLIN RIVER NEAR ARTHUR, NV	10244720	10.3	1964-83
OVERLAND CREEK NEAR RUBY VALLEY, NV	10244745	9.00	1960-67, 1977-82
DUCK CREEK NEAR CHERRY CREEK, NV	10245005	--	1986-88
CURRIE SPRING NEAR CURRIE, NV	10245030	--	1983-86
GOSHUTE CREEK NEAR CHERRY CREEK, NV	10245040	9.67	1983-86
NEWARK VALLEY TRIB NEAR HAMILTON, NV	10245800	157	1962-86
BIG SPRING NEAR DUCKWATER, NV	10246835	--	1970-71
UPPER HOT CREEK RANCH SPRINGS NEAR WARM SPRINGS, NV	10246910	0.07	1967-72
HOT CREEK RANCH SPRINGS NEAR WARM SPRINGS, NV	10246920	--	1967-73
MOORES STATION SPRINGS AT MOORES STATION, NV	10246940	136	1967-73
WARM SPRINGS AT WARM SPRINGS, NV	10246950	--	1967-73
HOT CREEK NEAR WARM SPRINGS, NV	10247050	1,030	1967-73
PENOYER VALLEY TRIB NEAR TEMPIUTE, NV	10247860	1.48	1966-77

WATER RESOURCES DATA - NEVADA, 1991
DISCONTINUED SURFACE-WATER STATIONS--Continued

Station name	Station number	Drainage area (mi ²)	Period of record
ELDORADO VALLEY TRIB NEAR NELSON, NV	10248510	1.41	1966-77
MCCLUSKY CREEK NEAR AUSTIN, NV	10249200	11.6	1979, 1981-82
CAMPBELL CREEK TRIB NEAR EASTGATE, NV	10249411	2.14	1964-82
CHIATOVICH CREEK NEAR DYER, NV	10249900	37.3	1961-82
AMARGOSA RIVER NEAR BEATTY, NV	10251220	470	1964-68
LOVELL WASH NEAR BLUE DIAMOND, NV	10251980	52.8	1967-77
VIRGINIA CREEK NEAR BRIDGEPORT, CA	10289000	63.6	1954-75
GREEN CREEK NEAR BRIDGEPORT, CA	10289500	19.5	1954-75
SUMMERS CREEK NEAR BRIDGEPORT, CA	10290000	8.26	1954-59
ROBINSON CREEK AT TWIN LAKES OUTLET NEAR BRIDGEPORT, CA	10290500	39.1	1954-75
ROBINSON CREEK NEAR BRIDGEPORT, CA	10291000	40.2	1911-12
BUCKEYE CREEK NEAR BRIDGEPORT, CA	10291500	44.1	1912-14
SWAUGER CREEK NEAR BRIDGEPORT, CA	10292000	52.8	1912-15, 1954-75
EAST WALKER RIVER BELOW SWEETWATER CREEK NEAR BRIDGEPORT, CA	10293050	467	1974-82
EAST WALKER RIVER ABOVE MASON VALLEY NEAR MASON, NV	10294000	--	1916-18, 1921-24
EAST WALKER RIVER NEAR YERINGTON, NV	10294500	--	1903-08
EAST WALKER RIVER NEAR MASON, NV	10295000	1,230	1911-16
LITTLE WALKER RIVER NEAR BRIDGEPORT, CA	10295500	63.1	1945-87
SARONI CANAL NEAR WELLINGTON, NV	10298000	--	1920-23
WEST WALKER RIVER NEAR WELLINGTON, NV	10298500	521	1918-24
DESERT CREEK NEAR WELLINGTON, NV	10299100	50.4	1965-69
WALKER RIVER NEAR MASON, NV	10300600	2,400	1974-84
WALKER RIVER AT MASON, NV	10301000	--	1911-16, 1921-23
WALKER RIVER ABOVE WEBER RESERVOIR NEAR SCHURZ, NV	10301600	2,700	1977-82
WALKER RIVER AT SHURZ, NV	10302000	2,850	1914-33
EAST FORK CARSON RIVER ABOVE SODA SPRINGS RANGER STATION, NEAR MARKLEEVILLE, CA	10302500	30	1947-51
SILVER KING CREEK NEAR COLEVILLE, CA	10303000	31.6	1947-51
EAST FORK CARSON RIVER AT SILVER KING VALLEY, NEAR MARKLEEVILLE, CA	10303500	--	1911-12
WOLF CREEK NEAR MARKLEEVILLE, CA	10304000	11.7	1947-51
SILVER CREEK BELOW PENNSYLVANIA CREEK, NEAR MARKLEEVILLE, CA	10304500	19.6	1947-67
SILVER CREEK NEAR MARKLEEVILLE, CA	10305000	27.3	1911-12
EAST FORK CARSON RIVER NEAR MARKLEEVILLE, CA	10305500	208	1911-31
HOT SPRINGS CREEK NEAR MARKLEEVILLE, CA	10306000	14.3	1947-57
HOT SPRINGS CREEK AT MARKLEEVILLE, CA	10306500	26.7	1912-30
PLEASANT VALLEY CREEK ABOVE RAYMOND CANYON CREEK NEAR MARKLEEVILLE, CA	10307000	14.6	1947-50
PLEASANT VALLEY CREEK NEAR MARKLEEVILLE, CA	10307500	25.2	1911-12

WATER RESOURCES DATA - NEVADA, 1991
DISCONTINUED SURFACE-WATER STATIONS--Continued

xiii

Station name	Station number	Drainage area (mi ²)	Period of record
MARKLEEVILLE CREEK AT MARKLEEVILLE, CA	10308000	53.7	1911-31
EAST FORK CARSON RIVER AT CALIFORNIA-NEVADA STATE LINE, CA	10308500	300	1911-14
BRYANT CREEK NEAR GARDNERVILLE, NV	10308800	31.5	1961-70, 1977-82
EAST FORK CARSON RIVER AT MINDEN, NV	10309100	392	1974-84
WEST FORK CARSON RIVER ABOVE WOODFORDS, CA	10309500	53	1947-51
CARSON RIVER AT GENOA, NV	10310405	570	1974-82
VICEE CANYON CREEK NEAR CARSON CITY, NV	10311250	1.30	1883, 1983-85
CARSON RIVER NEAR EMPIRE, NV	10311500	988	1901-07, 1911-23
BUCKLAND DITCH NEAR FORT CHURCHILL, NV	10311900	--	1962-72
STILLWATER SLOUGH CUTOFF DRAIN NEAR STILLWATER, NV	10312220	--	1967-81
PAIUTE DIVERSION DRAIN NEAR STILLWATER, NV	10312240	--	1967-81
PAIUTE DRAIN ABOVE D-LINE CANAL NEAR STILLWATER, NV	10312250	--	1989-90
INDIAN LAKES CANAL NEAR FALLON, NV	10312260	--	1967-81
INDIAN LAKES CANAL BELOW EAST LAKE NEAR STILLWATER, NV	10312265	--	1979-82
D-LINE CANAL BELOW EAST LAKE NEAR STILLWATER, NV	10312267	--	1989
PAIUTE DRAIN AT WILDLIFE ENTRANCE NEAR STILLWATER, NV	10312270	--	1980-82
TJ DRAIN AT WILDLIFE ENTRANCE NEAR STILLWATER, NV	10312274	--	1989-90
CARSON RIVER BELOW FALLON, NV	10312280	--	1967-85
STARR CREEK NEAR DEETH, NV	10313000	--	1913-24
MARYS RIVER AT MARYS RIVER CABIN, NEAR DEETH, NV	10313500	--	1913-14
HANKS CREEK NEAR DEETH, NV	10314000	--	1913-14
MARYS RIVER AT BUENA VISTA RANCH, NEAR DEETH, NV	10314500	--	1913-14
MARYS RIVER NEAR DEETH, NV	10315000	355	1903, 1912-28
SECRET CREEK NEAR HALLECK, NV	10316000	35.0	1917-24
LAMOILLE CREEK NEAR HALLECK, NV	10317000	245	1913-19
NORTH FORK HUMBOLDT RIVER NEAR NORTH FORK, NV	10317400	11.0	1965-82
MAHALA CREEK NEAR TUSCARORA, NV	10317420	4.48	1980-85
MAHALA CREEK AT STATE HWY 225 NEAR TUSCARORA, NV	10317430	22.9	1980-82
GANCE CREEK NEAR TUSCARORA, NV	10317450	6.45	1980-87
GANCE CREEK AT STATE HWY 225 NEAR TUSCARORA, NV	10317460	20.2	1980-82
NORTH FORK HUMBOLDT RIVER AT DEVILS GATE NEAR HALLECK, NV	10317500	830	1914-22, 1944-82
NORTH FORK HUMBOLDT RIVER NEAR HALLECK, NV	10318000	1,020	1898-1900, 1904-14
SOUTH FORK HUMBOLDT RIVER NEAR LEE, NV	10319000	54.0	1945-55
HUNTINGTON CREEK NEAR LEE, NV	10319500	770	1949-73
TENMILE CREEK ABOVE SOUTH FORK HUMBOLDT RIVER NEAR ELKO, NV	10319950	164	1989-90

WATER RESOURCES DATA - NEVADA, 1991
DISCONTINUED SURFACE-WATER STATIONS--Continued

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTH FORK HUMBOLDT RIVER NEAR ELKO, NV	10320500	1,310	1896-1922, 1924-32, 1937-74
SUSIE CREEK NEAR CARLIN, NV	10321500	82.5	1956-58
MAGGIE CREEK AT CARLIN, NV	10322000	400	1913-24
PINE CREEK NEAR PALISADE, NV	10323000	999	1912-14, 1946-58
HUMBOLDT RIVER NEAR DUNPHY, NV	10323400	--	1981-83
HUMBOLDT RIVER NEAR ARGENTA, NV	10323500	7,490	1946-83
HUMBOLDT RIVER BELOW SLAVEN DITCH NEAR ARGENTA, NV	10323600	--	1981-84
REESE RIVER NEAR IONE, NV	10325500	53.0	1951-80
REESE RIVER NEAR BERLIN, NV	10326000	94.0	1913-16
REESE RIVER NEAR AUSTIN, NV	10326700	1,130	1964-68
FISH CREEK NEAR BATTLE MOUNTAIN, NV	10326800	64.7	1977-85
HUMBOLDT RIVER NEAR VALMY, NV	10327000	--	1950-58
POLE CREEK NEAR GOLCONDA, NV	10328000	10.7	1961-74
NORTH FORK LITTLE HUMBOLDT RIVER NEAR PARADISE VALLEY, NV	10328450	210	1976-82
SOUTH FORK LITTLE HUMBOLDT RIVER NEAR PARADISE VALLEY, NV	10328475	431	1976-83
LITTLE HUMBOLDT RIVER BELOW CHIMNEY DAM NEAR PARADISE VALLEY, NV	10328500	780	1942-51, 1975-82
COTTONWOOD CREEK NEAR PARADISE VALLEY, NV	10330000	--	1925-34
COTTONWOOD CREEK AT PARADISE VALLEY, NV	10330500	57.4	1945-51
HUMBOLDT RIVER NEAR WINNEMUCCA, NV	10330900	14,600	1961-64
HUMBOLDT R NEAR ROSE CREEK, NV	10331500	15,200	1948-70
H L I L & P COMPANY FEEDER CANAL NEAR MILL CITY, NV	10332490	--	1914-31, 1937-38
H L I L & P COMPANY FEEDER CANAL NEAR IMLAY, NV	10332500	--	1947-76
H L I L & P COMPANY OUTLET CANAL NEAR HUMBOLDT, NV	10334000	--	1914-20, 1922-41
HUMBOLDT RIVER NEAR LOVELOCK, NV	10336000	16,600	1912-27, 1950-59
LOWER HUMBOLDT DRAIN NEAR LOVELOCK, NV	10336050	--	1965-66
EDGEWOOD CREEK TRIB NEAR DAGGETT PASS, NV	10336756	--	1981-83
TRIB OF EDGEWOOD CREEK TRIB NEAR TAHOE VILLAGE, NV	10336757	--	1981-83
EDGEWOOD CREEK TRIB AT HIGHLAND DRIVE NEAR TAHOE VILLAGE, NV	10336758	--	1981-83
TRUCKEE RIVER NEAR TRUCKEE, CA	10338000	553	1945-61, 1977-82
SOUTH FORK PROSSER CREEK NEAR TRUCKEE, CA	10339500	6.37	1910
PROSSER CREEK AT HOBART MILLS, CA	10339700	27.4	1959-63
ALDER CREEK NEAR TRUCKEE, CA	10339900	7.47	1959-69, 1971-73
PROSSER CREEK NEAR TRUCKEE, CA	10340000	47.4	1904, 1908-12
WEBBER CREEK NEAR TRUCKEE, CA	10341000	14.7	1910

WATER RESOURCES DATA - NEVADA, 1991
DISCONTINUED SURFACE-WATER STATIONS--Continued

xv

Station name	Station number	Drainage area (mi ²)	Period of record
LITTLE TRUCKEE RIVER NEAR TRUCKEE, CA	10341500	32.3	1910
LITTLE TRUCKEE RIVER NEAR HOBART MILLS, CA	10342000	37.1	1947-72
TRUCKEE RIVER NEAR ESSEX, NV	10347000	991	1889
DOG CREEK NEAR VERDI, CA	10347300	16.2	1956-61
HUNTER CREEK NEAR RENO, NV	10347600	11.5	1962-72, 1978-81
PEAVINE CREEK NEAR RENO, NV	10347800	2.34	1963-74
NORTH TRUCKEE DRAIN AT KLEPPE LANE NEAR SPARKS, NV	10348300	--	1890, 1976-81
FRANKTOWN CREEK AT FRANKTOWN, NV	10348500	14.0	1948-55, 1958
WHITES CREEK NEAR STEAMBOAT, NV	10349700	8.02	1962-66
STEAMBOAT CREEK AT KIMLICK LANE NEAR RENO, NV	10349980	--	1976-81
FERNLEY A-DRAIN NEAR FERNLEY, NV	10351350	--	1969-80
'A' DRAIN AT POWERLINE CROSSING NEAR FERNLEY, NV	10351356	--	1989-90
TRUCKEE RIVER AT WADSWORTH, NV	10351650	1,728	1965-86
EAST FORK QUINN RIVER NEAR MCDERMITT, NV	10353000	140	1949-82
QUINN RIVER NEAR MCDERMITT, NV	10353500	1,100	1949-85
QUINN RIVER NEAR DENIO, NV	10353650	3,520	1964-67, 1978-81
LEONARD CREEK NEAR DENIO, NV	10353700	52.0	1961-83
RED MOUNTAIN CREEK NEAR GERLACH, NV	10353790	30.0	1967-68
BADGER CREEK TRIB NEAR VYA, NV	10361700	7.70	1964-72
OWYHEE RIVER AT PATSVILLE, NV	13174900	305	1972-75
OWYHEE RIVER AT MOUNTAIN CITY, NV	13175000	350	1913-14, 1927-49
OWYHEE RIVER NEAR OWYHEE, NV	13175500	380	1914-26
OWYHEE RIVER ABOVE CHINA DIVERSION DAM NEAR OWYHEE, NV	13176000	458	1939-84
JACK CREEK BELOW SCHOONOVER CREEK NEAR TUSCARORA, NV	13176900	19.8	1962-69
JACK CREEK NEAR TUSCARORA, NV	13177000	31.0	1913-25
SOUTH FORK OWYHEE RIVER AT SPANISH RANCH NEAR TUSCARORA, NV	13177200	330	1959-74
SOUTH FORK OWYHEE RIVER NEAR DEEP CREEK, NV	13177500	--	1921-24
SOUTH FORK OWYHEE RIVER NEAR WHITEROCK, NV	13177800	1,080	1956-82
BIG SPRING NEAR ASH MEADOWS, NV	362230116162400	--	1976-88
JACK RABBIT SPRING NEAR ASH MEADOWS, NV	362324116163900	--	1976-88
POINT OF ROCKS SPRING NEAR ASH MEADOWS, NV	362405116161300	--	1976-81, 1984-86
SCHOOL SPRING NEAR ASH MEADOWS, NV	362538116181100	--	1981
MARSH SPRING NEAR ASH MEADOWS, NV	362547116183500	--	1981
SCRUGS SPRING NEAR ASH MEADOWS, NV	362601116182800	--	1981
FAIRBANKS SPRING NEAR ASH MEADOWS, NV	362924116203001	--	1976-88

WATER RESOURCES DATA - NEVADA, 1991

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following stations were discontinued as continuous-record surface-water-quality stations in Nevada. Daily records of temperature, specific conductance, pH, or dissolved oxygen were collected and published for the period of record shown for each station.

Discontinued continuous-record surface-water-quality stations

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record (water years)
Virgin River at Littlefield, AZ	09415000	5,090	Temp. S.C.	1947-88 1950-60, 1965-88
Virgin River above Halfway Wash near Riverside, NV	09415230	5,980	Temp., S.C.	1978-82
Las Vegas Wasteway near East Las Vegas, NV	09419679	--	Temp. S.C.	1980-87 1979-87
Las Vegas Wash near Henderson, NV	09419700	2,125	Temp., S.C.	1986-87
Las Vegas Wash at powerline crossing below Henderson, NV	09419755	--	Temp., S.C.	1986-87
Las Vegas Wash near Boulder City, NV	09419800	2,193	Temp. S.C.	1979-86 1976-77, 1979-86
Colorado River below Hoover Dam, AZ-NV	09421500	171,700	Temp. S.C.	1980, 1986-87 1986-87
Steptoe Creek near Ely, NV	10244950	11.1	Temp.	1967-83
South Twin River near Round Mountain, NV	10249300	20.0	Temp.	1966-68, 1970-83
Chiatovich Creek near Dyer, NV	10249900	37.3	Temp.	1975-82
Walker River near Wabuska, NV	10301500	2,600	Temp., S.C.	1969-76
Leviathan Creek above mine near Markleeville, CA	10308783	--	Temp., S.C.	1981-82
Leviathan Mine tunnel spring near Markleeville, CA	10308784	--	Temp., S.C.	1981-82
Leviathan Mine pit flow near Markleeville, CA	10308785	--	Temp., S.C.	1982
Leviathan Mine waste flow near Markleeville, CA	10308786	--	Temp., S.C.	1981
Leviathan Mine seep below crusher near Markleeville, CA	10308787	--	Temp., S.C.	1982
Leviathan Creek below delta near Markleeville, CA	10308788	--	Temp., S.C.	1982
Leviathan Creek below mine near Markleeville, CA	10308790	--	Temp., S.C.	1981-82
Bryant Creek below Mountaineer Creek near Markleeville, CA	10308794	--	Temp., S.C.	1982
Bryant Creek near Gardnerville, NV	10308800	31.5	Temp., S.C.	1982-83
East Fork Carson River near Gardnerville, NV	10309000	356	Temp.	1953-72
Carson River near Fort Churchill, NV	10312000	1,302	Temp., S.C.	1972-82
Carson River near Silver Springs, NV	10312020	1,450	Temp., S.C.	1963-71
Carson River below Lahontan Reservoir near Fallon, NV	10312150	1,801	Temp.	1981-83
Stillwater Point Diversion Drain near Stillwater, NV	10312215	--	Temp., S.C., pH, D.O.	1988-90
Palute Drain above D-line Canal near Stillwater, NV	10312250	--	Temp., S.C. pH, D.O.	1988-90 1988-89
D-line Canal below East Lake near Stillwater, NV	10312267	--	Temp., S.C., pH, D.O.	1989
TJ Drain at wildlife entrance near Stillwater, NV	10312274	--	Temp., S.C., pH, D.O.	1988-90
Humboldt River near Carlin, NV	10321000	4,310	Temp.	1966-68, 1981-83
Humboldt River at Palisade, NV	10322500	5,010	Temp.	1962-65
Reese River near Ione, NV	10325500	53	Temp.	1962
Humboldt River near Rye Patch, NV	10335000	16,100	Temp.	1952-58, 1960-81
Third Creek near Crystal Bay, NV	10336698	6.05	S.C. Temp.	1965-81 1980-85
Martis Creek at Highway 267 near Truckee, CA	10339250	25.8	S.C. Temp.	1980-84 1973-88
Truckee River at Floriston, CA	10345900	932	Temp., S.C.	1964-71
Truckee River at Farad, CA	10346000	932	Temp. S.C.	1972-81 1972-80
Truckee River near Verdi, NV	10347336	--	Temp.	1980
Truckee River at Lockwood, NV	10350050	1,433	Temp.	1980-81
Truckee River above Tracy, NV	10350390	1,590	Temp.	1972-82
Truckee River below Tracy, NV	10350400	1,590	Temp.	1972-82
Truckee River right bank below Tracy, NV	10350405	1,590	Temp.	1972-82
Truckee River at Clark, NV	10350500	1,600	S.C.	1984-88
Truckee River at Derby Dam, NV	10351000	1,676	Temp.	1980-81
"A" Drain at powerline crossing near Fernley, NV	10351356	--	Temp., S.C., pH, D.O.	1988-90
Truckee Canal at U.S. 50 above Lahontan Reservoir, NV	10351590	--	Temp.	1980
Truckee River at Wadsworth, NV	10351650	1,728	Temp.	1965-80
McDermitt Creek near McDermitt, NV	10352500	225	Temp.	1975-78
Quinn River near McDermitt, NV	10353500	1,100	Temp., S.C.	1980-83
South Lead Lake-Southwest landing	393652118311201	--	Temp., pH S.C., D.O.	1988-90 1988-89

Abbreviations: D.O., dissolved oxygen; S.C., specific conductance; Temp., water temperature.

WATER RESOURCES DATA - NEVADA, 1991

INTRODUCTION

Water-resources data published herein for the 1991 water year comprise the following records:

- o Water discharge for 142 gaging stations on streams, canals, and drains.
- o Discharge data for 131 peak-flow stations and miscellaneous sites, and 57 springs.
- o Stage and contents for 21 lakes and reservoirs.
- o Water levels for 33 primary observation wells, and 493 secondary observation wells.
- o Water-quality data for 131 stream, canal, and drain sites, and 140 wells.
- o Precipitation totals for 19 stations.

Additional water data, collected at various sites that are not part of the systematic data-collection program, are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Nevada.

Records of stream discharge and content or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through water year 1960, these water-supply papers were in an annual series; for 1961-70, they were in a 5-year series. Records of water quality were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published through 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted at the libraries of principal cities in the United States, or, if not out of print, they may be purchased from the U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 810, Box 25425, Denver, CO 80225.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-by-State basis. Water-quality records for water years 1964 through 1974 were similarly released, either in separate reports or in conjunction with the streamflow records.

Beginning with the 1975 water year, surface-water, ground-water, and water-quality data have been published annually as official Geological Survey reports on a State basis. These reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NV-91-1." For archiving and general distribution, the reports for water years 1971-74 are also identified as official water-data reports. The water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. For further ordering information, the Customer Inquiries telephone number is (703) 487-4650, between 8:30 am and 5:30 pm EST.

COOPERATION

The U.S. Geological Survey and organizations of the State of Nevada have had cooperative agreements for the systematic collection of streamflow records since 1909, and for water-quality records since 1951. Organizations that assisted in collecting data or funding through cooperative agreement with the Survey during 1991 are:

Nevada Department of Conservation and Natural Resources
Nevada Division of Water Resources
Nevada Division of Environmental Protection
Nevada Department of Transportation
California Department of Water Resources
Carson-Truckee Water Conservancy District
Carson Water Sub-Conservancy District
Clark County Flood Control District
Clark County Sanitation District
Las Vegas Valley Water District
South Tahoe Public Utilities District
Summit Lake Paiute Tribe
Tahoe Regional Planning Agency
Truckee-Carson Irrigation District
Walker River Irrigation District
Douglas County
Elko County
Washoe County Department of Comprehensive Planning
Washoe County Public Works Department
City of Carson City
City of Las Vegas
City of Reno
City of Sparks

The following Federal Agencies assisted in the data-collection program by providing funds or services:

Bureau of Land Management
Bureau of Reclamation
Corps of Engineers, U.S. Army
U.S. Board of Water Commissioners
U.S. Department of Fish and Wildlife
U.S. District Court Watermaster

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Compiled by Robert E. Bostic, E. James Crompton,
Karen A. Mello, and James R. Swartwood

Surface Water

Nevada has no truly large rivers. The largest streams in the State are the Humboldt, Truckee, Carson, Walker, Muddy, Virgin, and Colorado Rivers. The Colorado River, which is by far the largest, forms the boundary between southeastern Nevada and northwestern Arizona. Of the remaining listed rivers, only the Humboldt and Muddy begin and terminate in Nevada.

The larger rivers typically follow the flow pattern of a gaining stream in the well-watered mountain reaches and a losing stream in the lower altitude reaches. Most of Nevada is typified by basin and range topography, and most rivers have no direct connection with the ocean. Downstream depletion of flow is caused by irrigation, public use, infiltration, and evapotranspiration. Characteristically, stream discharge is low in late summer, and then increases through the autumn and winter until the snowmelt season in the spring. Maximum discharge for the year normally can be expected in May and June, although floods have occurred from November through March as a result of rain or rain on snow.

Much of Nevada is drained by small streams that are dry most of the year. Typically, such streams respond only to intense precipitation, which generally occurs only a few times a year at the most. In many years, the streams have no flow, and even in relatively wet years, total flow duration in such streams can be measured in hours.

Streams throughout Nevada continued to experience drought conditions for the fifth consecutive year, causing less-than-normal discharge and near-record or record lows for most streams. Most reservoirs for the 1991 water year reached less than 50 percent capacity during the spring runoff and were depleted to near empty at the end of the water year.

The Humboldt River begins in northeastern Nevada and terminates in northwestern Nevada. For water year 1991, the discharge at Palisade (station 10322500) was 36 percent of the 84-year mean. Monthly and annual mean discharges for water year 1991 and for the period of record (water years 1903-06, 1912-91) at the Palisade station are shown in figure 1. Rye Patch reservoir (station 10334500), the last impoundment on the Humboldt River, was at 10 percent of full capacity at the end of April, and 1.4 percent at the end of September.

The Carson River flows mostly in Nevada, with its headwaters in the Sierra Nevada of California. The 1991 discharge at Carson City (station 10311000) was 35 percent of the 52-year mean. Monthly and annual mean discharges for water year 1991 and for the period of record (water years 1940-91) at the Carson City station are shown in figure 1. Lahontan Reservoir (station 10312100), the major impoundment on the Carson River, reached 36 percent of full capacity during the spring runoff, and was down to 6 percent near the end of the water year.

The Walker River is formed in Mason Valley by the confluence of the East and West Forks; both forks originate in the Sierra Nevada. The East Fork discharge is controlled by Bridgeport Reservoir and the West Fork by Topaz Lake. The 1991 discharge of the Walker River at Wabuska (station 10301500) was 15 percent of the 66-year mean (water years 1904, 1921-35, 1940-41, 1943, 1945-91). The river terminates in Walker Lake (station 10288500), a saline remnant of ancient Lake Lahontan north of Hawthorne. Water-surface elevations for the lake are shown in figure 2 and illustrate a steady decline from 1969 through 1981. In contrast, the high discharges in the Walker River from 1982 through 1984 raised the lake level by about 14 feet. Lake levels have steadily declined since 1986. The lake-surface elevation decreased 3.5 feet during the 1991 water year, from 3,957.3 to 3,953.8 feet above sea level.

The Truckee River is another major western Nevada stream for which discharge is significantly controlled by reservoirs and regulated lakes in the Sierra Nevada. The 1991 discharge at Reno (station 10348000) was 25 percent of the 64-year mean (water years 1907-21, 1926, 1931-34, 1947-91). The river terminates in Pyramid Lake (station 10336500), a closed-basin water body similar to Walker Lake. Water-surface elevations, in figure 2, illustrate a decline like that of Walker Lake from 1975 through 1981, an increase during 1982-84, and a steady decline since 1986. The high discharge in the Truckee River from 1982 through 1984 dramatically raised the lake level, by about 25 feet. The lake-surface elevation decreased 2.8 feet during the 1991 water year, from 3,804.0 to 3,801.2 feet above sea level.

The Colorado River in southeastern Nevada is completely controlled by a series of impoundments that includes Hoover Dam (station 09421000) and Davis Dam (station 09422500) in Nevada. Since 1935, the mean annual discharge of the river below Hoover Dam (station 09421500) has been about 14,000 cubic feet per second. Mean annual discharge fluctuates on the basis of upstream supply and downstream power and irrigation requirements. The 1991 discharge of the Colorado River below Hoover Dam was 88 percent of the 57-year mean (water years 1935-91).

The Virgin River is one of the major tributaries to Lake Mead on the Colorado; at Littlefield, Arizona (station 09415000), its 1991 discharge was 42 percent of the 62-year mean (water years 1930-91).

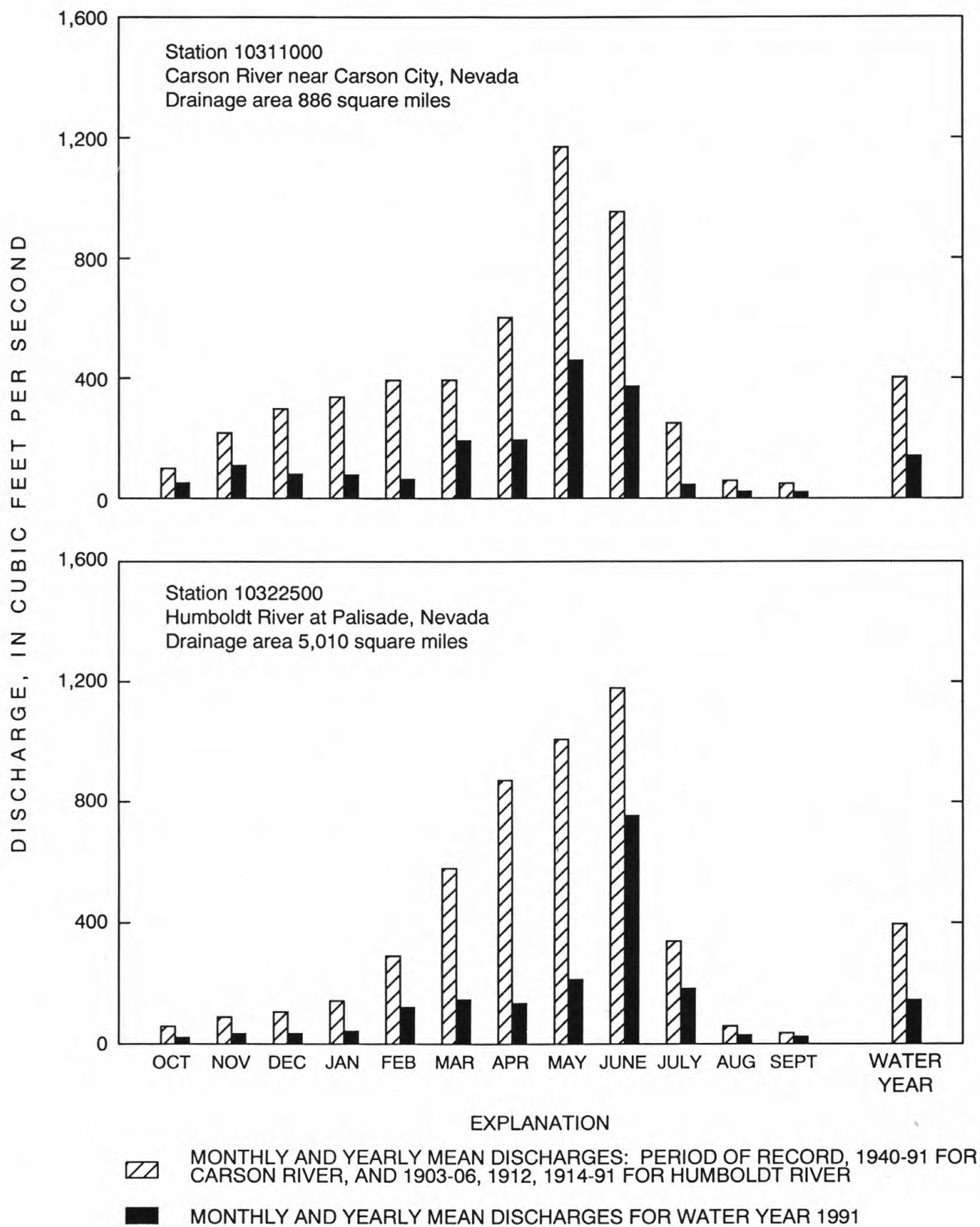


FIGURE 1.--Comparison of discharge during water year 1991 with the long-term mean discharge at two representative gaging stations.

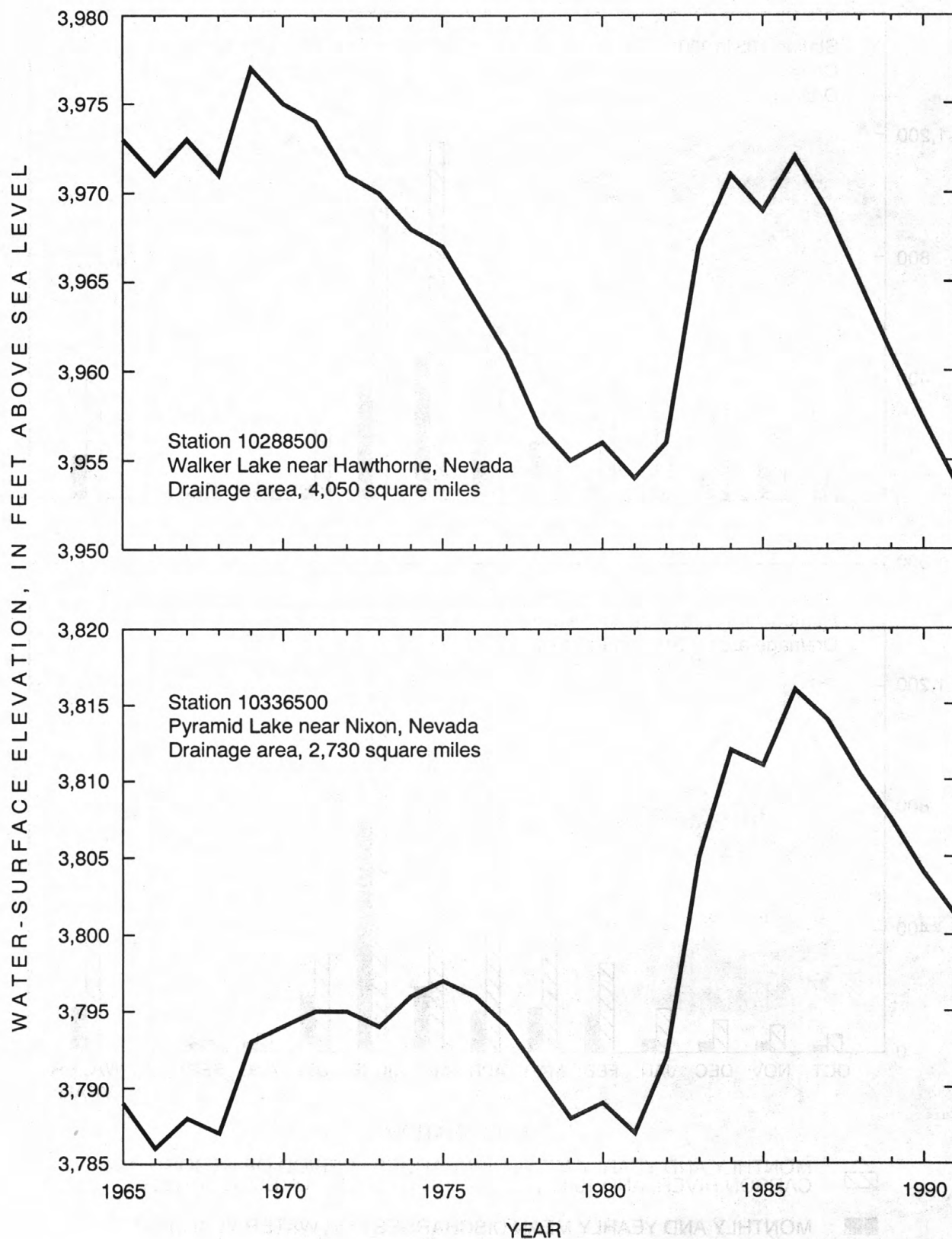


FIGURE 2.--End-of-year water-surface elevation at Walker and Pyramid Lakes, water years 1965-91.

Surface-Water Quality

The quality of surface water in Nevada varies greatly from place to place, as well as seasonally. Concentrations of dissolved solids are generally higher in the southern part of the state than in the northern part, and are dependent to a large extent upon water discharge. Concentrations usually are greatest during periods of low streamflow, and lowest during periods of high streamflow due to dilution by precipitation or snowmelt.

The ranges of dissolved-solids concentrations for the period of record at stations that are monitored as part of the National Stream Quality Accounting Network (NASQAN) and Hydrologic Bench-Mark Network, are presented in figure 3. Measured concentrations of dissolved solids ranged from 61 to 704 mg/L at stations in the northern part of the state, and from 433 to 4,250 mg/L at stations in the southern part. Mean concentrations of dissolved solids for the period of record and for the 1991 water year also are indicated in figure 3. Table 1 presents mean discharge and dissolved-solids data for the 1991 water year and compares it to data for the period of record.

At two northern Nevada stations, the Carson River near Fort Churchill (station 10312000) and the Truckee River near Nixon (station 10351700), mean dissolved-solids concentrations in water year 1991 were, respectively, 125 percent and 201 percent of the long-term mean. This reflects the impact of drought-induced low streamflows that characterized the northern part of the state during 1991. During the 1991 water year, discharges at those stations were 28 percent and 6 percent, respectively, of the long-term means.

At two southern Nevada stations, the Virgin River at Littlefield (station 09415000) and the Muddy River near Overton (station 09419515), mean dissolved-solids concentrations in the 1991 water year were, respectively, 122 percent and 89 percent of the means for the period of record. During the 1991 water year, discharges at those stations were 44 and 202 percent of the long-term means.

At the Colorado River below Hoover Dam (station 09421500), the mean concentration of dissolved solids in the 1991 water year was 90 percent of the mean for the period of record. Annual discharge in water year 1991 was 88 percent of the mean for the period of record (1935-91). Figure 4 shows the dissolved-solids concentrations measured at the Colorado River station since the 1970 water year. The downward trend in concentration during 1983-85 probably was the result of dilution by five consecutive years of greater than average inflow to Lake Mead. During 1988-91, in contrast, the concentration has increased, presumably because the amount of runoff from the upper basin has been less than the long-term mean.

Table 1.--Comparison of streamflow and dissolved-solids concentrations at National network sites for the 1991 water year and for the period of record

Station name and number	Mean discharge (cubic feet per second)		Mean for 1991, as percentage of long-term mean	Mean concentration of dissolved solids (milligrams per liter)		Mean for 1991, as percentage of long-term mean
	Period of record	1991		Period of record	1991	
Virgin River at Littlefield, Ariz. (09415000)	236	100	42	2,000	2,450	122
Muddy River above Lake Mead near Overton (09419515)	9.04	5.63	62	2,304	2,058	89
Colorado River below Hoover Dam, Ariz.-Nev. (09421500)	14,000	12,400	89	699	628	90
Steptoe Creek near Ely (10244950)	7.37	3.40	46	179	179	100
South Twin River near Round Mountain (10249300)	6.50	3.20	49	87	91	105
Walker River near Wabuska (10301500)	167	25.4	15	289	229	79
Carson River near Fort Churchill (10312000)	367	101	28	248	311	125
Humboldt River near Carlin (10321000)	378	136	36	304	285	94
Truckee River near Nixon (10351700)	520	29.7	6	267	538	201

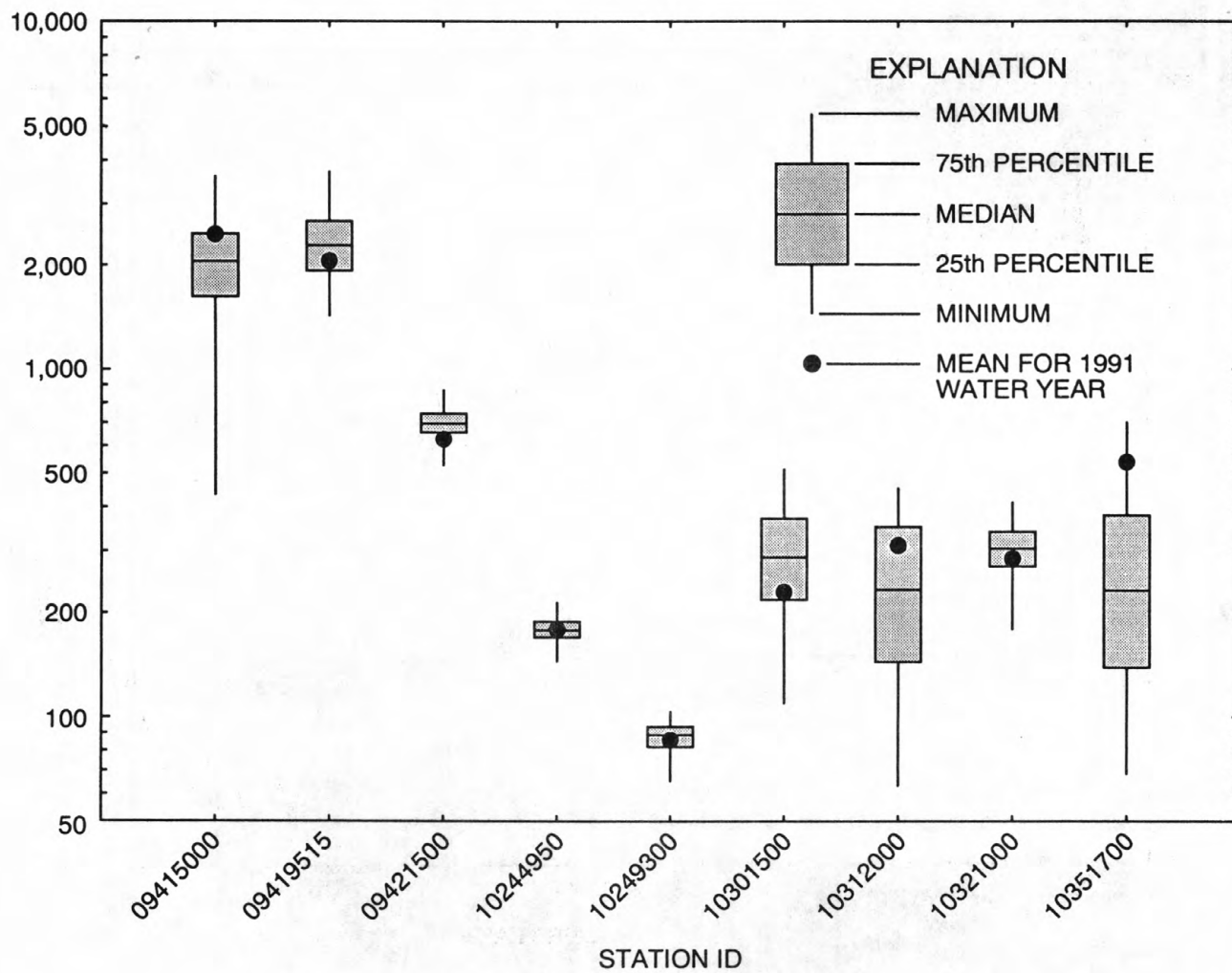


FIGURE 3.--Mean dissolved-solids concentrations at National network sites in 1991, compared with ranges of dissolved-solids for the period of record.

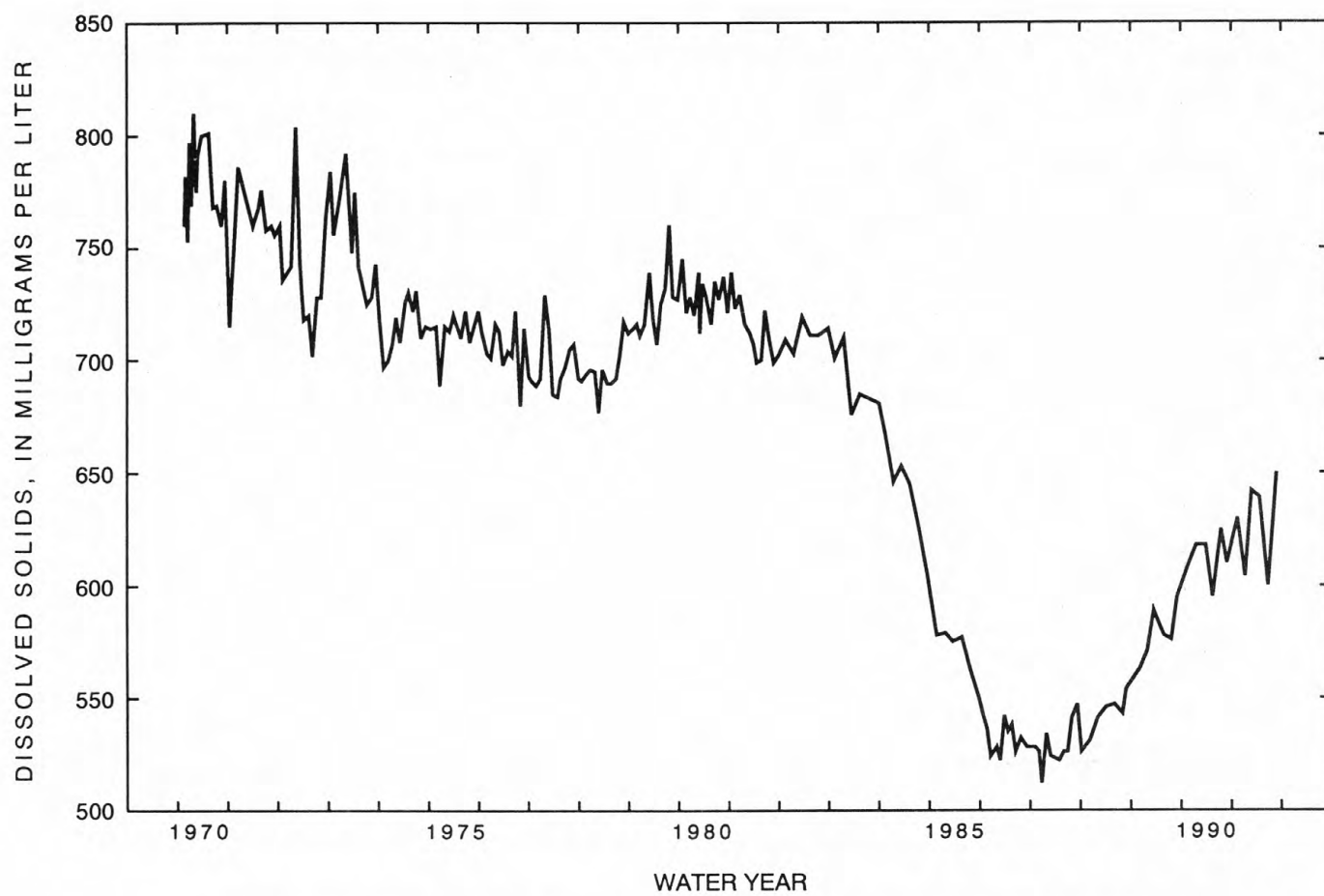


FIGURE 4.--Dissolved-solids concentrations in the Colorado River below Hoover Dam (Station 09421500) for water years 1970-91.

Ground Water

Development of ground-water supplies in Nevada declined slightly during water year 1991 as logs of 1,869 wells were submitted to the State Engineer's office compared to 2,082 logs submitted in 1990 (figure 5). Only 649 of the 1,869 logs have been stored in the U.S. Geological Survey computerized database.

As in the past, most wells were drilled into unconsolidated sedimentary deposits that partly fill the numerous basins in Nevada. Surrounding the basins are mountains underlain by igneous, metamorphic, and sedimentary rocks. These consolidated rocks also underlie the unconsolidated deposits in the basins. Some consolidated rocks can yield substantial quantities of water, particularly in parts of eastern and southern Nevada where ground water flows through thick sequences of limestone and dolomite. Locally, fractured volcanic rocks also can yield substantial quantities of water. Water wells, however, are not commonly drilled into consolidated rocks, because most present-day development is in the basins where water is readily obtained from shallow depths in unconsolidated deposits, and because well yields in the consolidated rocks are less predictable.

Ground-water levels fluctuate seasonally and annually in response to changes in withdrawals and climatic conditions that can cause changes in natural recharge to and discharge from the ground-water reservoirs. Water levels also fluctuate in response to both seasonal and long-term changes in climate. Water levels generally rise from late winter to early summer, in response to runoff from melting snow in the surrounding mountains and, particularly in the northern part of the State, to application of surface water for irrigation. Water levels generally decline during the summer to early winter, when recharge is small and ground water is discharged by evapotranspiration. Long-term climatic changes also can affect water-level trends, but the effects occur over a period of years. Superimposed on the natural fluctuations in water levels are changes caused by increasing or decreasing ground-water withdrawals and, in some areas, by recharge from surface irrigation.

Water-level trends for six selected wells are shown in figure 6. The well in Paradise Valley is in a part of the valley where water-levels fluctuate primarily in response to variations in streamflow. Two wells are near areas of intensive irrigation withdrawals (in Pahrump and Diamond Valleys). Two wells tap aquifers used for public supply (in Carson City and Las Vegas). The well in White River Valley shows trends in a less developed basin where the water levels respond primarily to climatic fluctuations.

In the Paradise Valley well, the seasonal pattern and the range of water-level measurements has remained relatively stable since 1965. The well is in the northwestern part of the valley.

The water level in the Pahrump Valley well declined rapidly in the 1960's in response to irrigation withdrawals. Except for seasonal variations, the water level has been relatively stable since 1974. Land use in the area near the well has changed from primarily agricultural to residential since 1974. The well is in the middle of the valley.

The water level in the Diamond Valley well declined in 1991, following a brief recovery in 1989-90. Prior to that recovery, a slow long-term decline began in the mid-1950's, and accelerated in the early 1970's when electric power became available in the basin and ground-water withdrawals increased. The well is in an area of ground-water withdrawals for irrigation.

The water level in the Carson City well during 1991 continued a general decline that began in 1987. Before that, the level had recovered briefly between 1983 and 1987, following a period of steady decline since 1975, when measurements began. Precipitation in Carson City was above normal between 1982 and 1986 and below normal between 1987 and 1991. The well is on the west side of the city, where declines due to ground-water withdrawals for municipal use have exceeded 50 feet in some places. Measured water-level declines elsewhere in the basin have been less.

The water level in the Las Vegas Valley well declined rapidly in the 1960's and 1970's as population in the valley increased greatly. By 1978, ground-water pumpage had been redistributed and, in part, replaced by use of water from Lake Mead to such an extent that the water-level declines stopped temporarily, and levels rose during 1982 and 1983. In 1991, water levels in the Las Vegas Valley well continued to decline from the level of 1985, probably a combined result of pumping and the very dry water years during 1988-90 in southern Nevada. The well is in the northwest part of the basin several miles from the municipal well field on the west side of the city, and reflects general water-level changes in the principal aquifers on the west side of the basin. Shallow water levels on the east side have been rising, largely because of lawn irrigation.

The water level in the White River Valley well continued to decline in 1991, following an 8-foot rise between 1982 and 1985 probably because of wetter-than-normal conditions. The decline between 1986 and 1991 may be a natural decline from elevated levels that developed as a result of the wet years early in the previous decade. Water levels similarly declined from 1971 to 1978 following wetter-than-average years in 1967-70. The well is in the northeastern part of the valley.

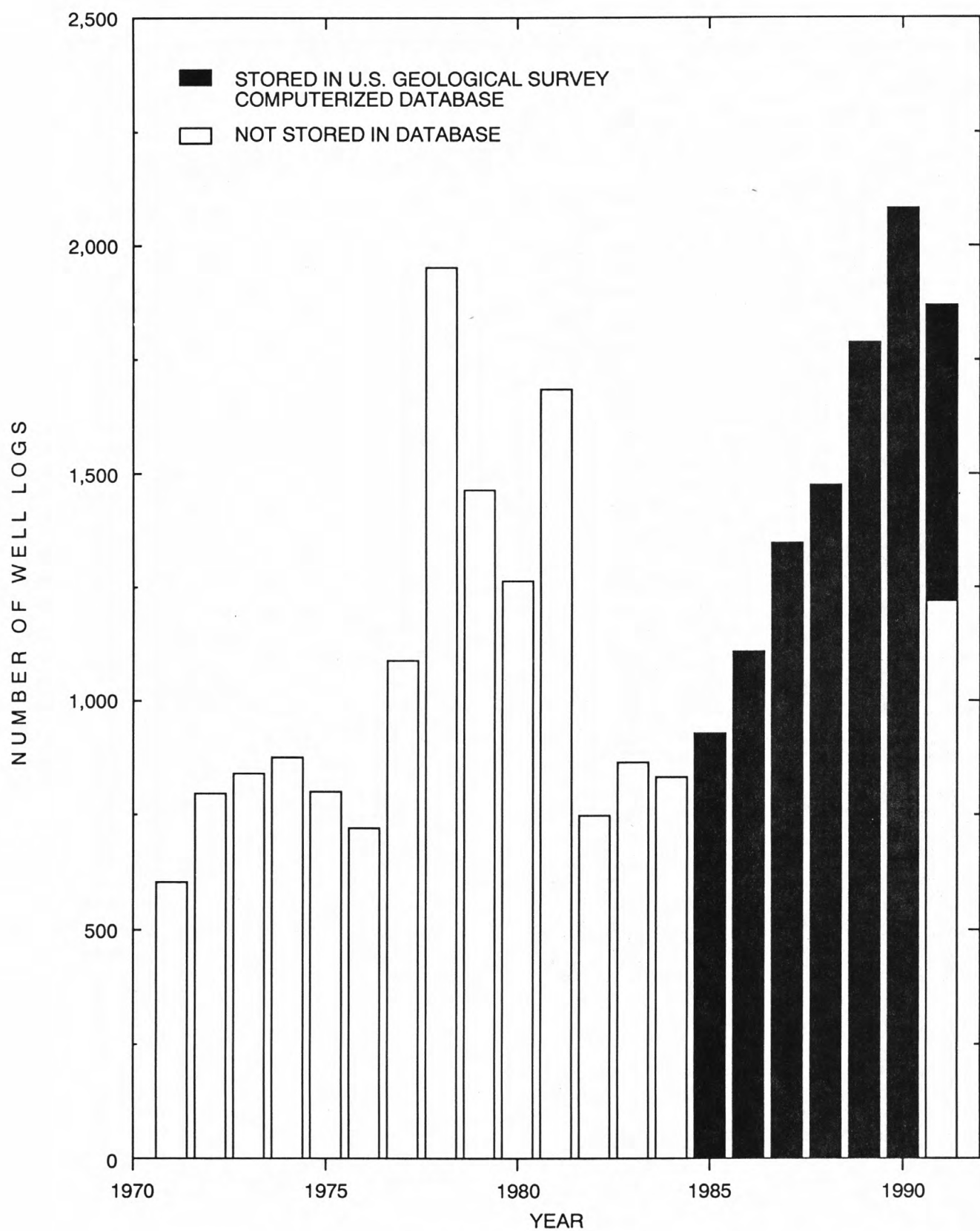


FIGURE 5.--Number of well logs submitted to the Nevada State Engineer's Office during water years 1971-91.

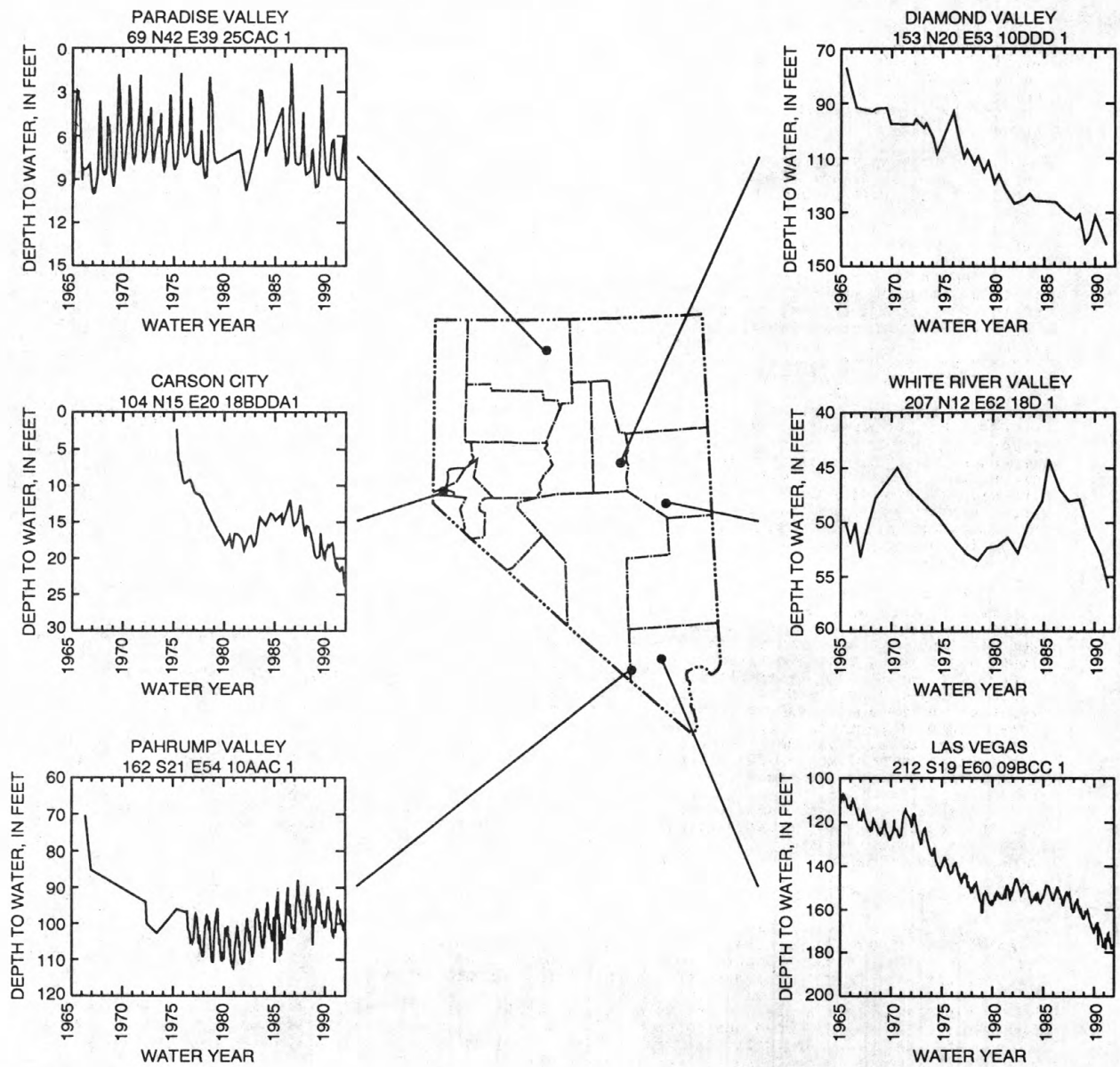


FIGURE 6.--Long-term water-level depths below land surface in six selected observation wells.

Water Use

Water year 1991 was a drought year in Nevada, and the fifth consecutive year of drought for most areas of the State. Below-normal precipitation produced surface water supplies that were not equal to the needs of agricultural water users (E.A. Jesse, Nevada Division of Water Planning, oral commun., 1991). In a normal year, surface water is the source for about 75 percent of Nevada's water withdrawals. Overall, surface-water use in 1991 was less than normal (E.A. Jesse, Nevada Division of Water Planning, oral commun., 1991). Users that normally rely mostly on surface water for their withdrawals used ground water to help make up the shortfall. However, that option was not widely available, since both a ground-water supply and a ground-water permit were needed.

Irrigation is the largest use of water in Nevada. In 1990, this use accounted for about 84 percent of all offstream withdrawals. Because of the continuing drought, surface-water allocations within irrigation districts were reduced, as was the amount of water delivered to junior water-right holders. In the Truckee-Carson Irrigation District (TCID), which includes the Newlands Project near Fallon, water allocations for 1991 were 44 percent of normal (M. Lipnicki, TCID, oral commun., 1992). In June 1991, Governor Miller declared 11 of Nevada's 17 counties as agricultural drought disaster areas.

Public supply is a rapidly growing use of water in the State. In 1990, this use accounted for about 12 percent of all offstream withdrawals. The rate of increase in these withdrawals nearly parallels the rapid growth in the State's population. During 1980-90, Nevada had the fastest rate of population growth in the Nation, with a 50.1-percent increase (U.S. Bureau of the Census, 1991a). In 1991, Nevada's population increased by 6.8 percent, the highest population growth in the Nation (U.S. Bureau of the Census, 1992).

The three largest population centers in the State are the Las Vegas, Reno, and Carson City areas; in 1990, about 80 percent of the State's population lived in these three areas. The amount of water withdrawn by the principal public-supply utilities servicing each of these areas for the period from October 1981 to September 1991 is shown in figure 7. In 1990, these three areas accounted for about 83 percent of all the water withdrawn by public-supply utilities in the State. The small peak for the January billing period, seen at all three areas for most years, indicates, in part, increased water use by tourists during the Christmas and New Year's holidays.

The primary source of water for Las Vegas and Reno is surface water; for Carson City, it is ground water (E.A. Jesse, Nevada Division of Water Planning, oral commun., 1991). In the Las Vegas area, the Colorado River is the principal source of public-supply water. Las Vegas is becoming increasingly dependent upon the Colorado River to meet its public-supply water needs. In 1974, surface-water and ground-water withdrawals were about equal; by 1988, surface-water withdrawals were nearly three times the ground-water withdrawals (the latter have remained almost constant during this period). Some of the water conservation measures taken in the Las Vegas area in 1991 were: water in restaurants was served on request only, no outside watering from Noon to 7 p.m., and fines for excessive waste of water. Las Vegas is actively seeking over 800,000 acre-feet per year of ground-water and surface-water rights to meet projected demands.

In the Reno area, the Truckee River accounts for about 80 percent of the water used for public supply. Winters with below-normal snowpacks (such as during this water year) cause below-normal streamflows for the rest of the year, resulting in both increased ground-water withdrawals and restrictions on the amount of use. The Reno area has been on Stage II water restrictions since June 4, 1990, which means that: outside watering is limited to twice a week, washing down hard surfaces is prohibited, decorative water displays are turned off, and water in restaurants is served on request only. Between June 1 and August 15, 1991, the Reno area was on Stage III water restrictions which, in addition to the above restrictions, also prohibited outside watering in the afternoon, lawn seeding from June 1 through September 15, and sod planting from July 1 through August 15, and no water was allowed to run onto hard surfaces (Reno Gazette-Journal, 1991). Lake Tahoe, the source of the Truckee River, has remained below its natural rim since September 16, 1990. It has not been necessary to pump water out of Lake Tahoe to meet downstream needs.

Ground water is the source for about 80 percent of Carson City's public water supplies; during drought years, this percentage increases. A city ordinance limits outside watering to every other day from June through September, with no watering between 1 p.m. and 7 p.m.; this is done to reduce peak demand, rather than to limit water use. As a conservation measure in 1991, this ordinance went into effect on May 1, and the no-watering period was from 10 a.m. to 7 p.m. Carson City is actively seeking surface-water rights and leases to reduce the amount of ground water use.

Many people think of Nevada as a rural State, since it has an average population density of less than 11 people per square mile. In fact, Nevada is the fourth most urban State in the Nation, with over 88 percent of the State's population living in communities of 2,500 people or more (U.S. Bureau of the Census, 1991b). This leaves most of the State sparsely populated (fig. 8).

The State legislature was in its biannual session during the first six months of 1991. Several new water bills were enacted during this session; among them was legislation that encourages the use of sewage effluent. Another bill that was approved requires counties and cities to adopt building-code changes that mandate low-flush toilets in new homes and buildings by March 1, 1992. The restrictions are further tightened a year later, when toilet limits cannot exceed 1.6 gallons per flush, and shower heads and faucets are limited to 2.5 gallons per minute (Legislative Counsel Bureau, oral commun., 1992).

The State's wildlife continues to be affected by the drought. The Cui-ui, an endangered fish found only in Pyramid Lake, have not been able to swim up the Truckee River to spawn since 1987 because of low stream flows (Nevada Appeal, 1991). In the last 4 years, Pyramid Lake has dropped 14 feet. The low stream flows in the Truckee River below Reno and the Carson River below Carson City have caused fish losses in these river reaches. The Truckee-Carson Irrigation District agreed to set aside 4,000 acre feet of water in Lahontan Reservoir for fish habitat (Lahontan Valley News, 1991). Stillwater wetlands continued to dwindle despite the purchase and diversion of agricultural water for use at the wetlands. In 1991, the wetlands covered only 2,000 acres; in contrast, the historic average permanent wetlands cover 15,500 acres (A.R. Hallock, U.S. Fish and Wildlife Service, oral commun., 1992). Washoe Lake, 20 miles south of Reno, dried up in June 1991, for the first time since the late 1930's; normally, the lake covers about 3,000 acres.

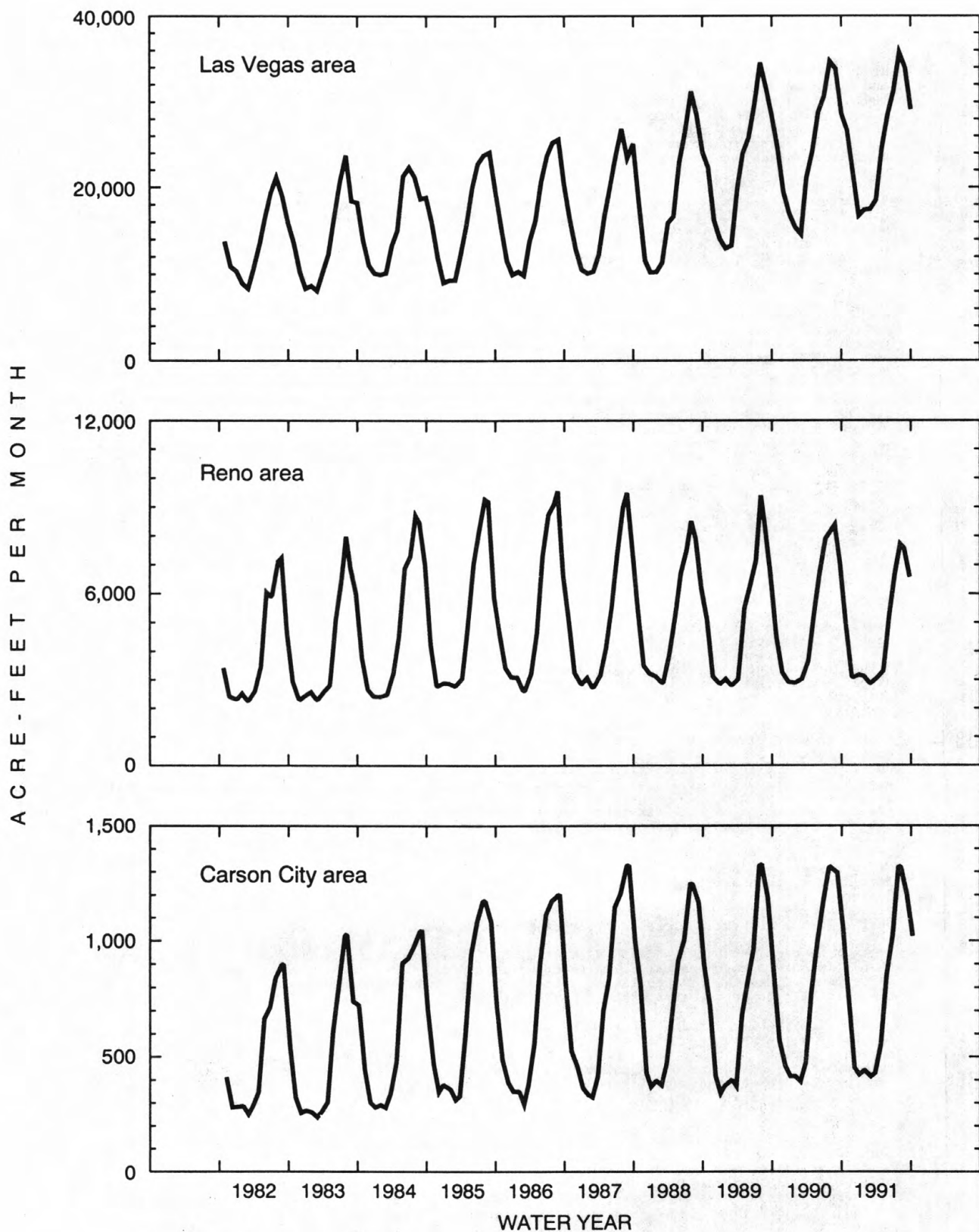


FIGURE 7.--Monthly water withdrawals for public supply in the Las Vegas, Reno, and Carson City areas, 1982-91. Sources of data: Las Vegas area--City of North Las Vegas, Colorado River Commission, Las Vegas Valley Water District, and Nellis Air Force Base; Reno area--Westpac Utilities; and Carson City area--City of Carson City.

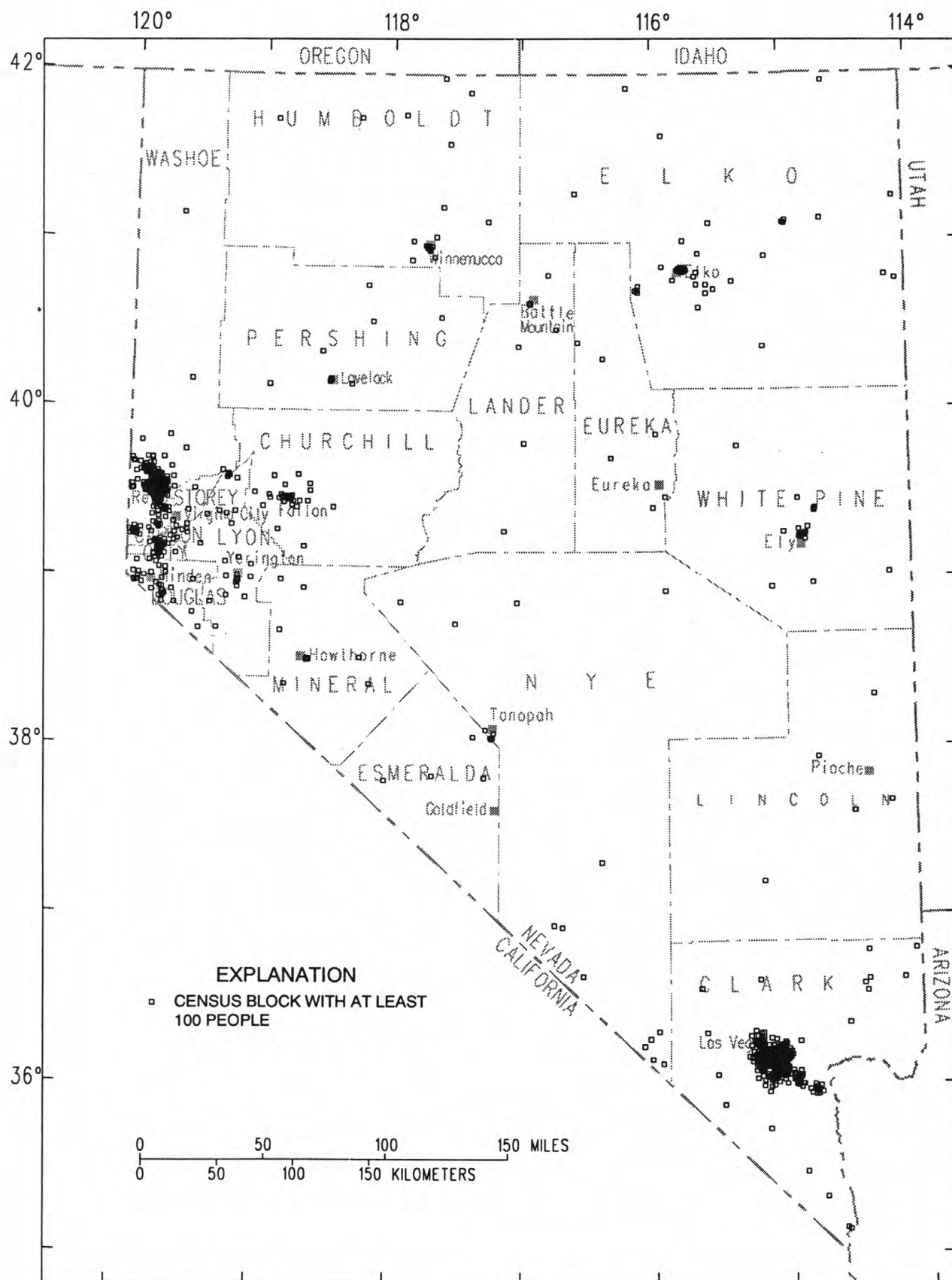


FIGURE 8.--Distribution of population in Nevada for 1990 (source: U.S. Bureau of the Census).

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of about 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream-Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 450 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

The National Trends Network (NTN) is a network of about 150 sites for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

High-Elevation Precipitation Network is a 12-station network for measuring precipitation in the high mountains of eastern Nevada. The data will be used to estimate snowmelt runoff and ground-water recharge.

Truckee River Low-Flow Investigation is a 40-station network for measuring gains and losses of streamflow along the Truckee River during drought years. Selected water-quality samples were also collected at these sites.

Douglas County Ground Water is a network of 50 ground-water sites where water-level and water-quality data are routinely collected, principally in Carson Valley, western Nevada. The data will be used to establish background information to determine if changes in quantity or quality of the ground water occurs.

Lake Tahoe Basin study is a network of 22 surface-water and 33 ground-water sites where streamflow, water-level, and water-quality data are routinely collected around Lake Tahoe. The surface-water data will be used to provide a long-term data base of streamflow and of sediment and nutrient loadings from major tributaries to Lake Tahoe. The ground-water data will be used to determine possible long-term changes in water-level and ground-water quality.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1991 water year that began October 1, 1990, and ended September 30, 1991. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells where the data were collected are shown in figures 9-15. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and, in Nevada, for surface-water stations where only miscellaneous measurements are made.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports has been in a downstream direction along the main stream. All stations on a tributary entering from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indentation in the list of gaging stations. Each indentation represents one rank. This downstream order and system of indentation show (1) which stations are on tributaries between any two stations and (2) the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 10351700, which appears just to the left of the station name, includes the 2-digit part number (10) plus the 6-digit downstream-order number (351700). In this report, the records are listed in downstream order by parts. The part number refers to an area the boundaries of which coincide with certain natural drainage lines. Records in this report are for sites in Part 9 (Colorado River basin), Part 10 (The Great Basin), and Part 13 (Snake River basin). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description.

Local Site Numbers

Local site numbers used in Nevada locate ground-water data sites (wells or springs) by hydrographic areas and by the official rectangular subdivision of the public lands with reference to the Mt. Diablo base line and meridian. Nevada has been divided into 14 hydrographic regions or major basins and approximately 250 individual hydrographic areas or valleys. The classification is used to compile information pertaining to water resources in Nevada. The local site number uses as many as 19 digits to locate the site by hydrographic area, township, range, section, and section subdivision.

The first segment of the local site number specifies the hydrographic area as defined by Rush. The remainder of the number specifies the township north or south of the Mt. Diablo base line, the range east of the Mt. Diablo meridian, the section, and the subdivision of the section. Sections are divided into quadrants labeled counterclockwise from upper right as A, B, C, and D. Each quadrant is then similarly subdivided up to as many as three times, depending on the accuracy of available maps; thus each section of about 640 acres may be subdivided into tracts approximately 330 ft on a side containing about 2.5 acres. Lettered quadrants are read from left to right, with the largest subdivision on the left. Sites within the smallest subdivision used are numbered sequentially with 1 digit. As an example, a well in Mason Valley (hydrographic area 108) located within the NE1/4NE1/4SW1/4 section 6, Township 13 North, Range 26 East, would have the number 108 N13 E26 06CCAA1. A second well within the same 2.5-acre tract would be numbered 108 N13 E26 06CCAA2.

Prior to January 1976, local site numbers in Nevada were published according to the following general format: 13/26-16abl. The first number was the township north of the base line (if the township was south of the base line, the first number was followed by an "S"). The second number was the range east of the meridian, the third number was the section, and the following letter or letters and number indicated the quarter sections and sequence as defined above.

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with recorders that sample stage values at selected time intervals. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations, the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves or tables defining the relationship of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly in error as the lapsed time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

For some gaging stations, there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development. The median of yearly mean discharges also is given under this heading for stations having 10 or more water years of record, if the median differs from the average given by more than 10 percent.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the offices whose addresses are given on the back of the title page of this report to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

The daily table for stream-gaging stations gives mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN."), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in a table of annual maximum stage and discharge at crest-stage stations. The table of crest-stage stations is followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true values; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables is on file in the Nevada District Office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the offices whose addresses are given on the back of the title page of this report.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records", as used in this report, and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 14-17.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in a table following the table of discharge measurements at miscellaneous sites.

On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the in-situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in-situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" which appears at the end of the introductory text. Detailed information on collecting, treating, and shipping samples may be obtained from the Nevada District Office.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the Nevada District Office whose address is given on the back of the title page of this report.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams normally have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, mean, maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the Nevada District Office.

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Historical and current (1991) dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in a table following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

<u>PRINTED OUTPUT</u>	<u>REMARK</u>
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

Samples where the dissolved concentration of a constituent (which is theoretically less than or equal to the total concentration) exceeds the respective total, may be due to unavoidable errors associated with subsampling and sample processing, or limitations on precision and accuracy of the analytical procedure.

Records of Ground-Water Levels

Data from the basic Statewide network of primary and secondary observation wells are published herein. Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local well number. (See the section titled "Station Identification Numbers.")

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by hydrographic area arranged in ascending order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number, an alphanumeric number, derived from the township-range location of the well.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level means are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

WATER RESOURCES DATA - NEVADA, 1991

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes, one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed at the end of the introductory text. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed numerically by hydrographic basin and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO WATSTORE DATA

The National WATER Data STORAGE and RETrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from the offices whose addresses are given on the back of the title page.

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

DEFINITION OF TERMS

Terms related to data on surface water, ground water, and water quality are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 3°C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C plus or minus 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C plus or minus 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C plus or minus 1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by micro-organisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square mile (g/mi^2).

Dry mass refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic foot per second (ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic foot per second per day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters.

Cubic feet per second per square mile [(ft³/s)/mi²] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45-um membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, half of the bicarbonate (generally a major dissolved component of water) is converted to carbonate and the other half is lost as water vapor and carbon dioxide gas. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO₃).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (ug/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per liter (UG/L, ug/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m²), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
Clay.....	0.00024 - 0.004	Sedimentation
Silt.....	.004 - .062	Sedimentation
Sand.....	.062 - 2.0	Sedimentation or sieve
Gravel.....	2.0 - 64	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass, or volume.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/(m².time)] for periphyton and macrophytes and [mg C/(m³.time)] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O₂/(m².time)] for periphyton and macrophytes and [mg O₂/(m³.time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed-load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total-sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

Seven-day 10-year low flow (7 Q₁₀) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water, per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring emerged or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata, is the following:

Kingdom.....	Animal
Phylum.....	Arthropoda
Class.....	Insecta
Order.....	Ephemeroptera
Family.....	Ephemeridae
Genus.....	<u>Hexagenia</u>
Species.....	<u>Hexagenia limbata</u>

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1991, is called the "1991 water year."

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

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The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

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- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

SURFACE-WATER RECORDS

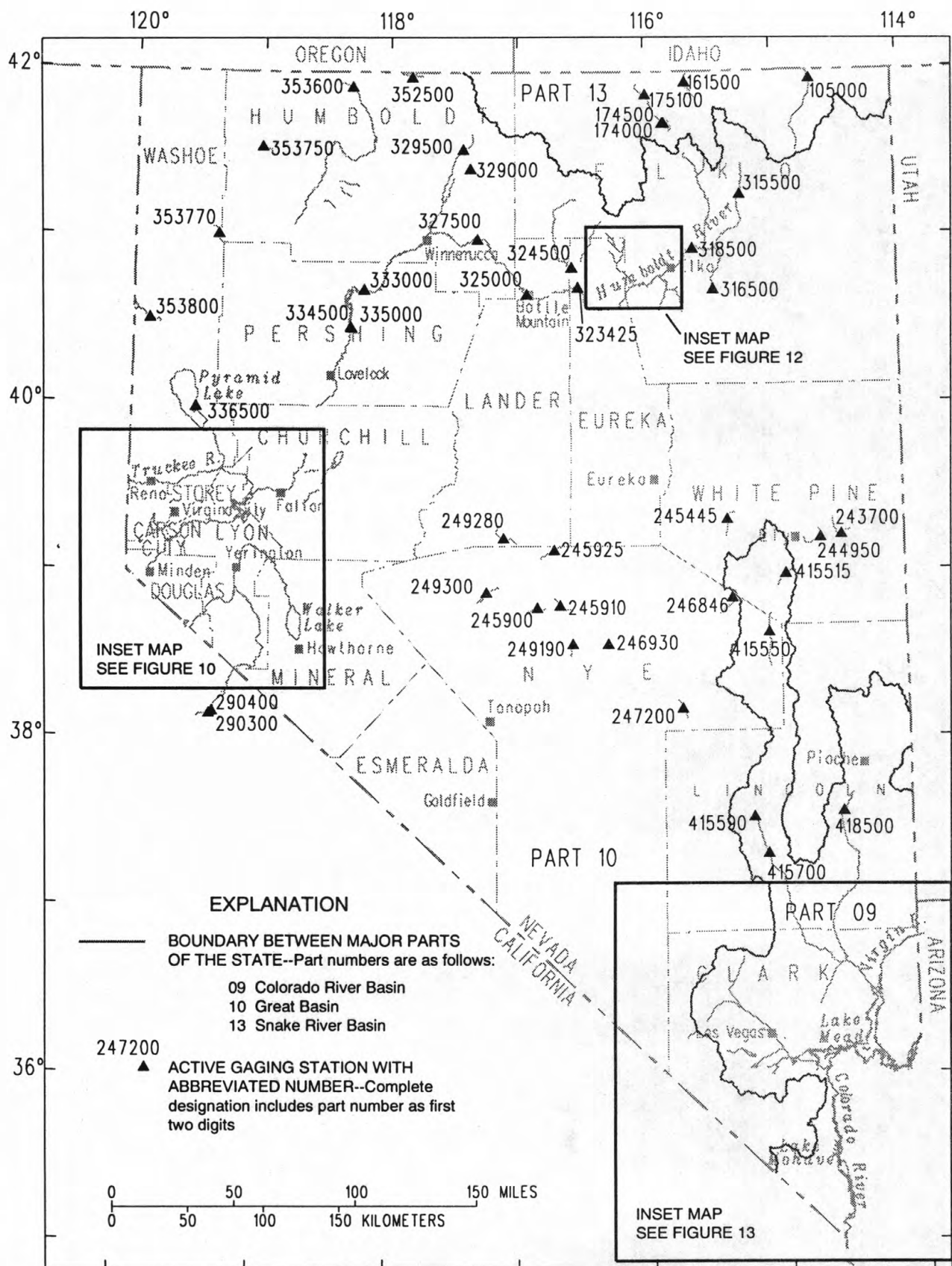
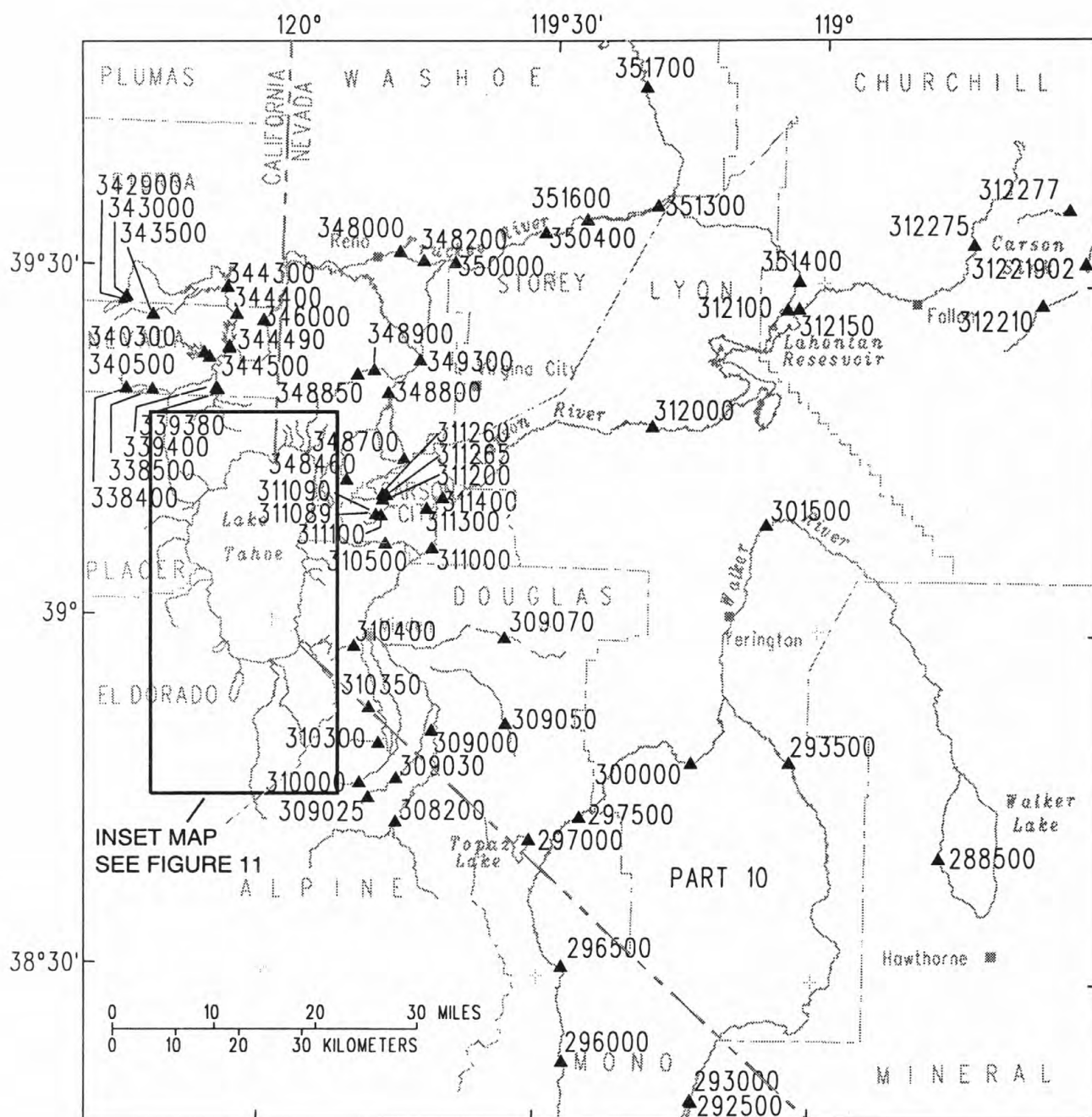


FIGURE 9.--Gaging stations listed in this report.



EXPLANATION

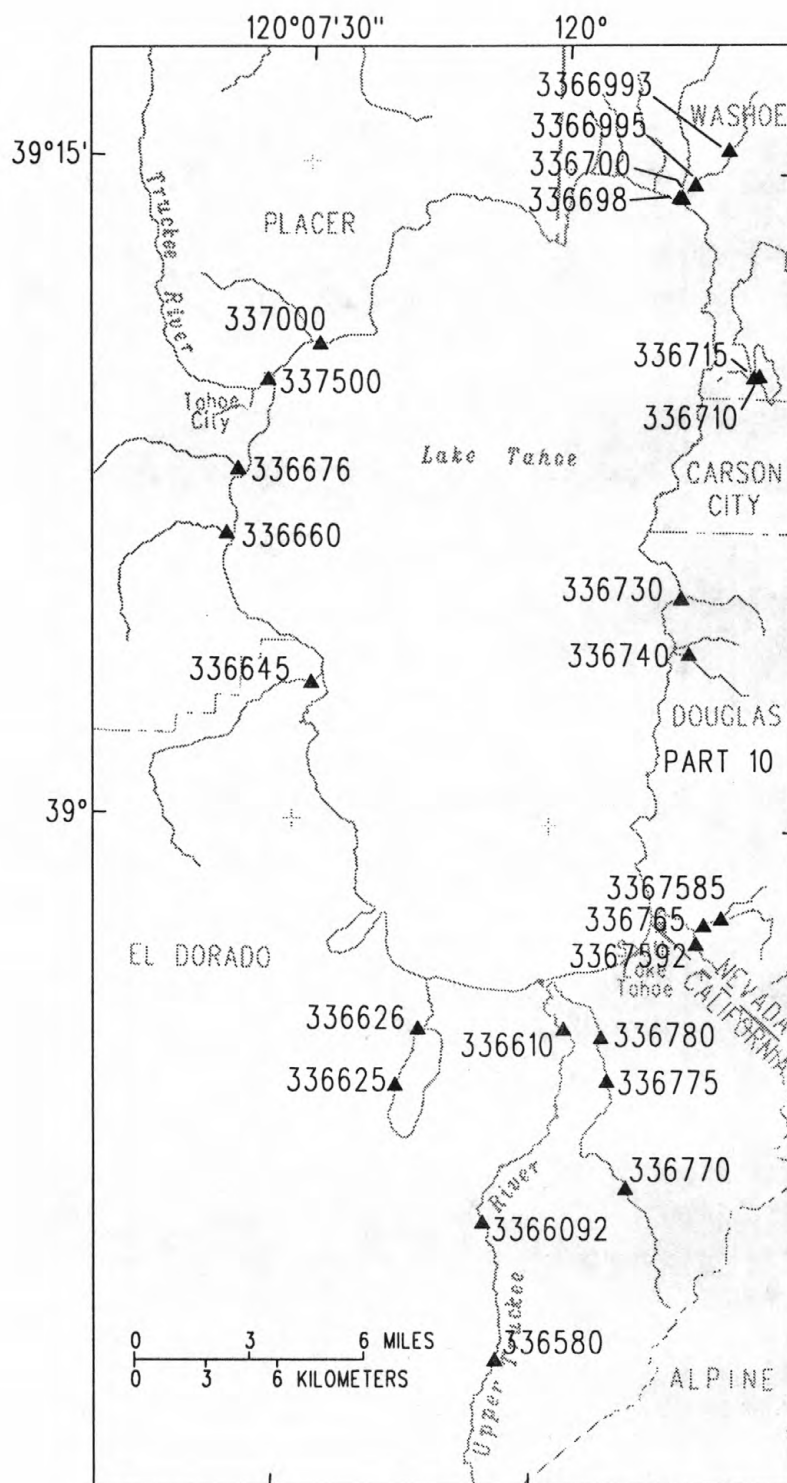
309070



ACTIVE GAGING STATION WITH ABBREVIATED NUMBER--
Complete designation includes Part number as first two digits.
Part number is as follows:

10 Great Basin

FIGURE 10.--Gaging stations, west-central Nevada.



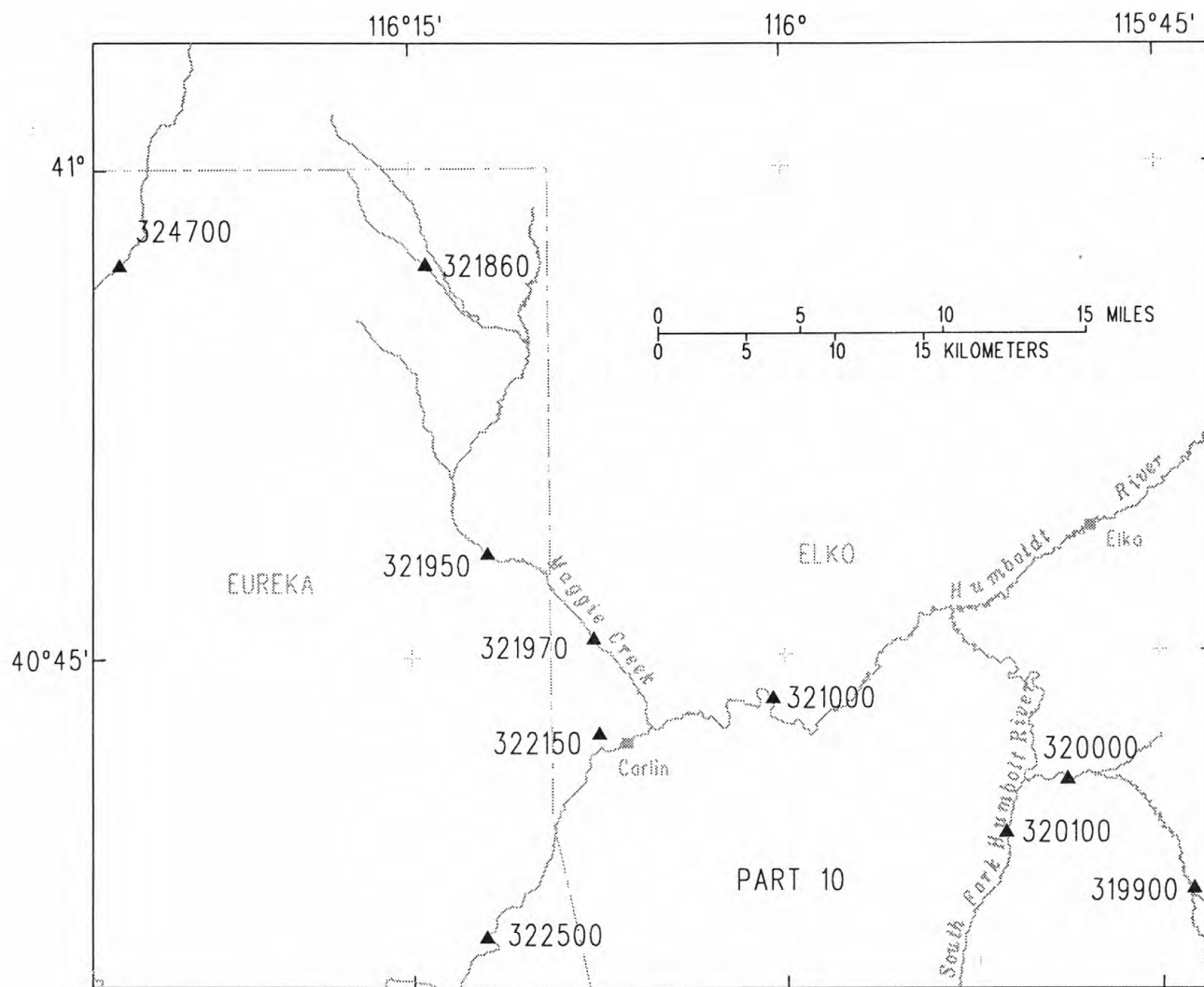
EXPLANATION

336625
▲

ACTIVE GAGING STATION WITH ABBREVIATED NUMBER--
Complete designation includes Part number as first two digits.
Part number is as follows:

10 Great Basin

FIGURE 11.--Gaging stations, Lake Tahoe basin.



EXPLANATION

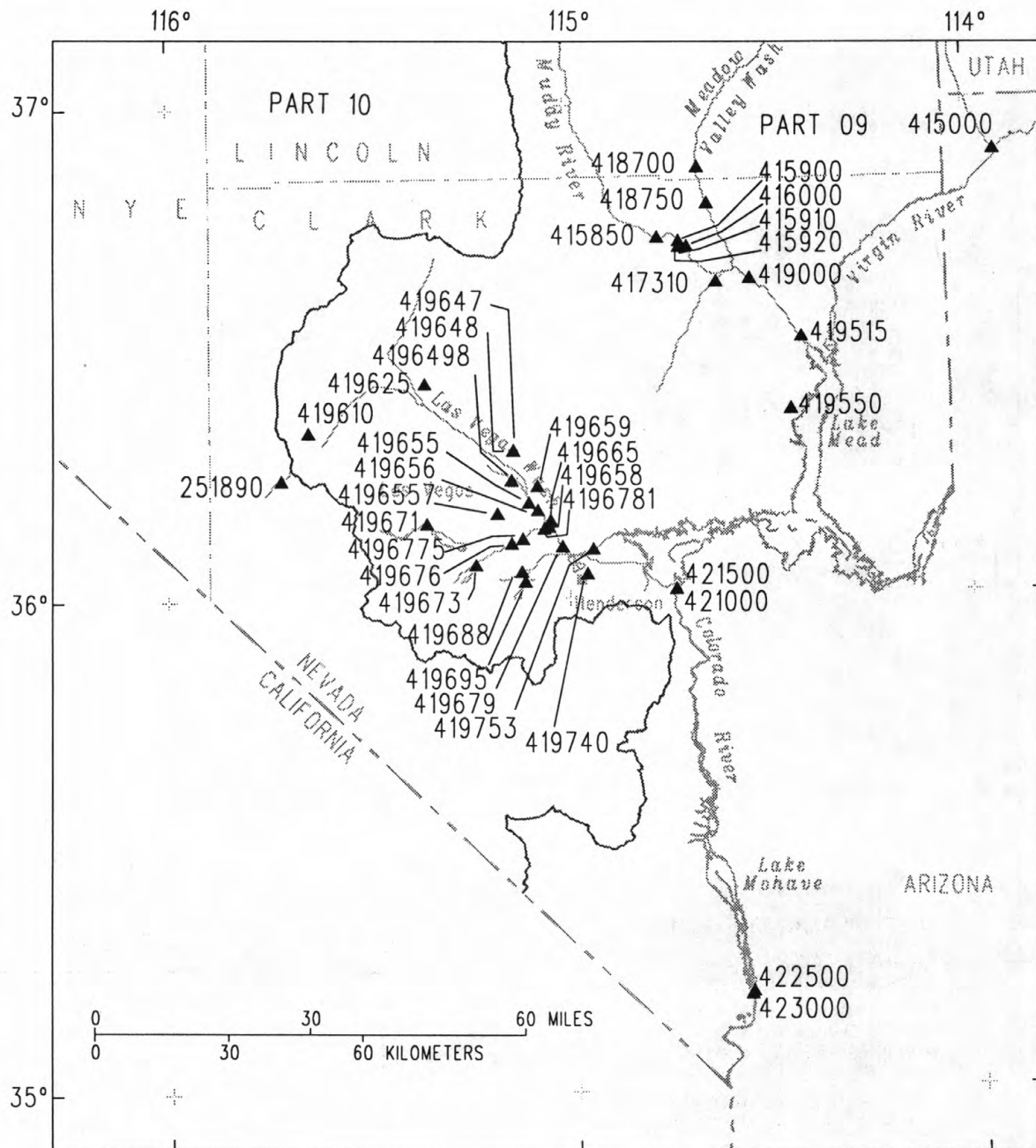
322500



ACTIVE GAGING STATION WITH ABBREVIATED NUMBER--Complete designation includes Part number as first two digits. Part number is as follows:

10 Great Basin

FIGURE 12.--Gaging stations in Carlin area, northeastern Nevada.



EXPLANATION

- BOUNDARY BETWEEN MAJOR PARTS OF THE STATE--Part numbers are as follows:
- 09 Colorado River basin
 - 10 Great Basin
- ▲ 423000 ACTIVE GAGING STATION WITH ABBREVIATED NUMBER--Complete designation includes Part number as first two digits

FIGURE 13.--Gaging stations, southeastern Nevada.

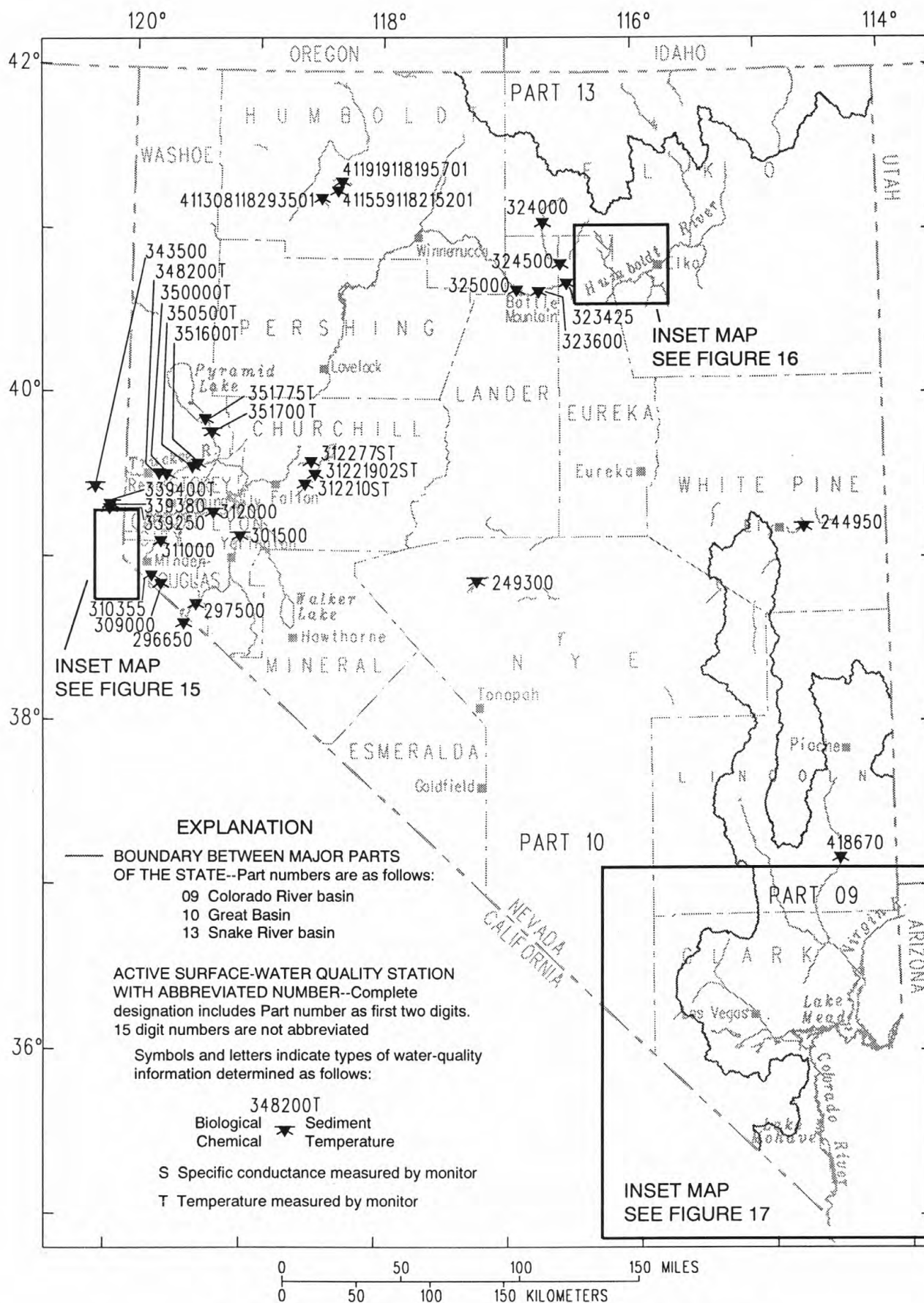


FIGURE 14.--Surface-water quality stations listed in this report.

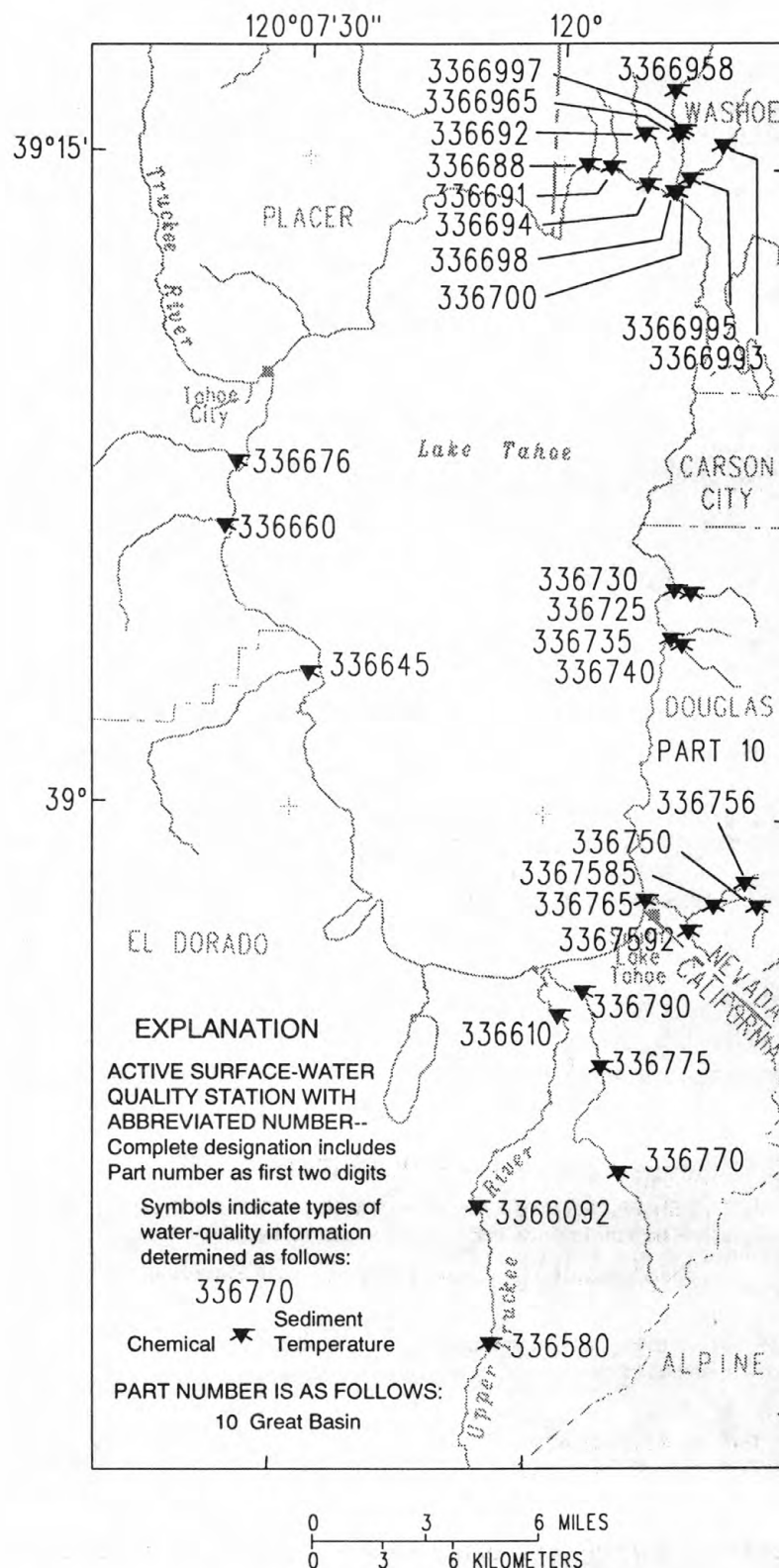
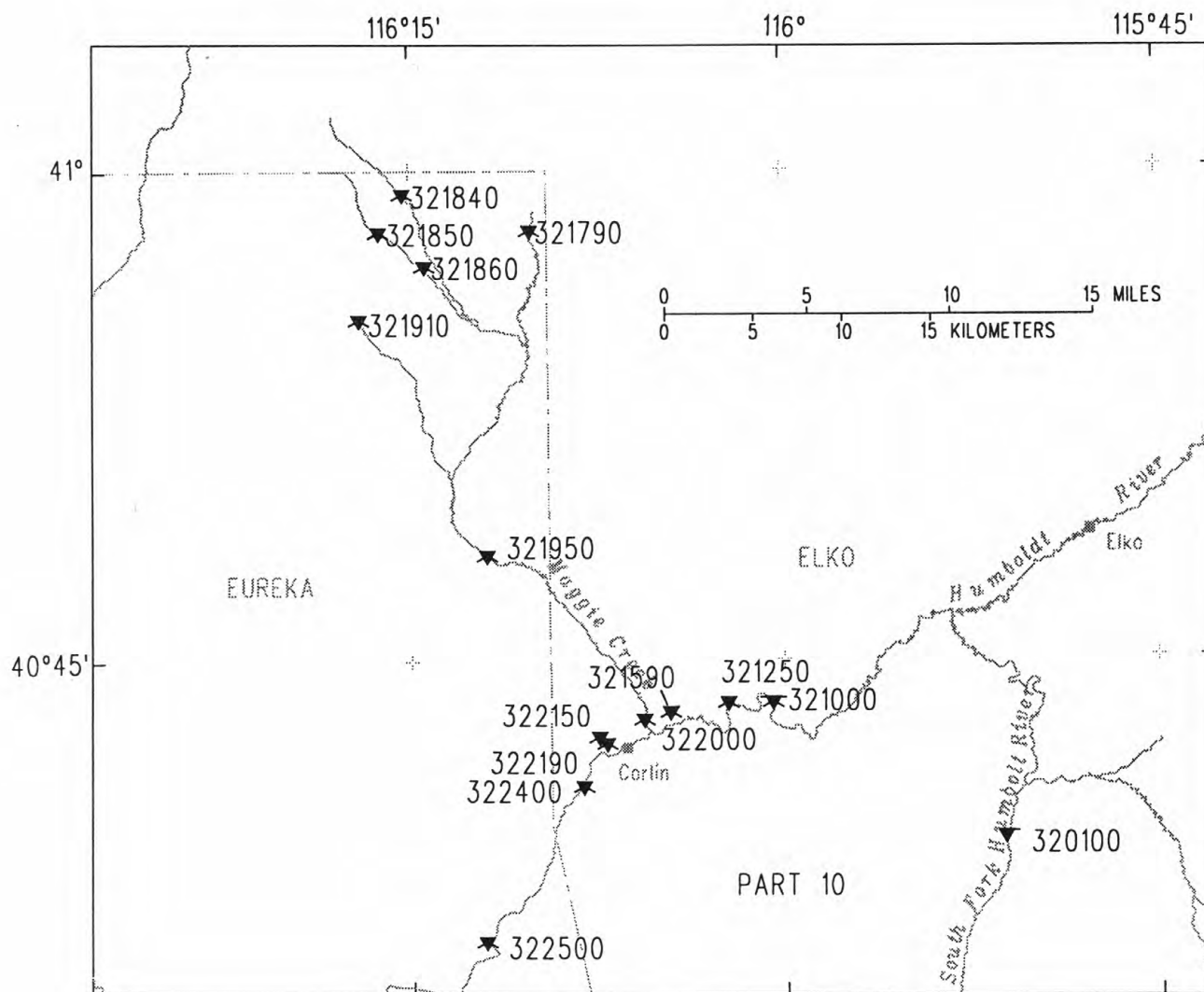


FIGURE 15.--Surface-water quality stations, Lake Tahoe basin.



EXPLANATION

ACTIVE SURFACE-WATER QUALITY STATION WITH ABBREVIATED NUMBER--
Complete designation includes Part number as first two digits

Symbols indicate types of water-quality information determined as follows:

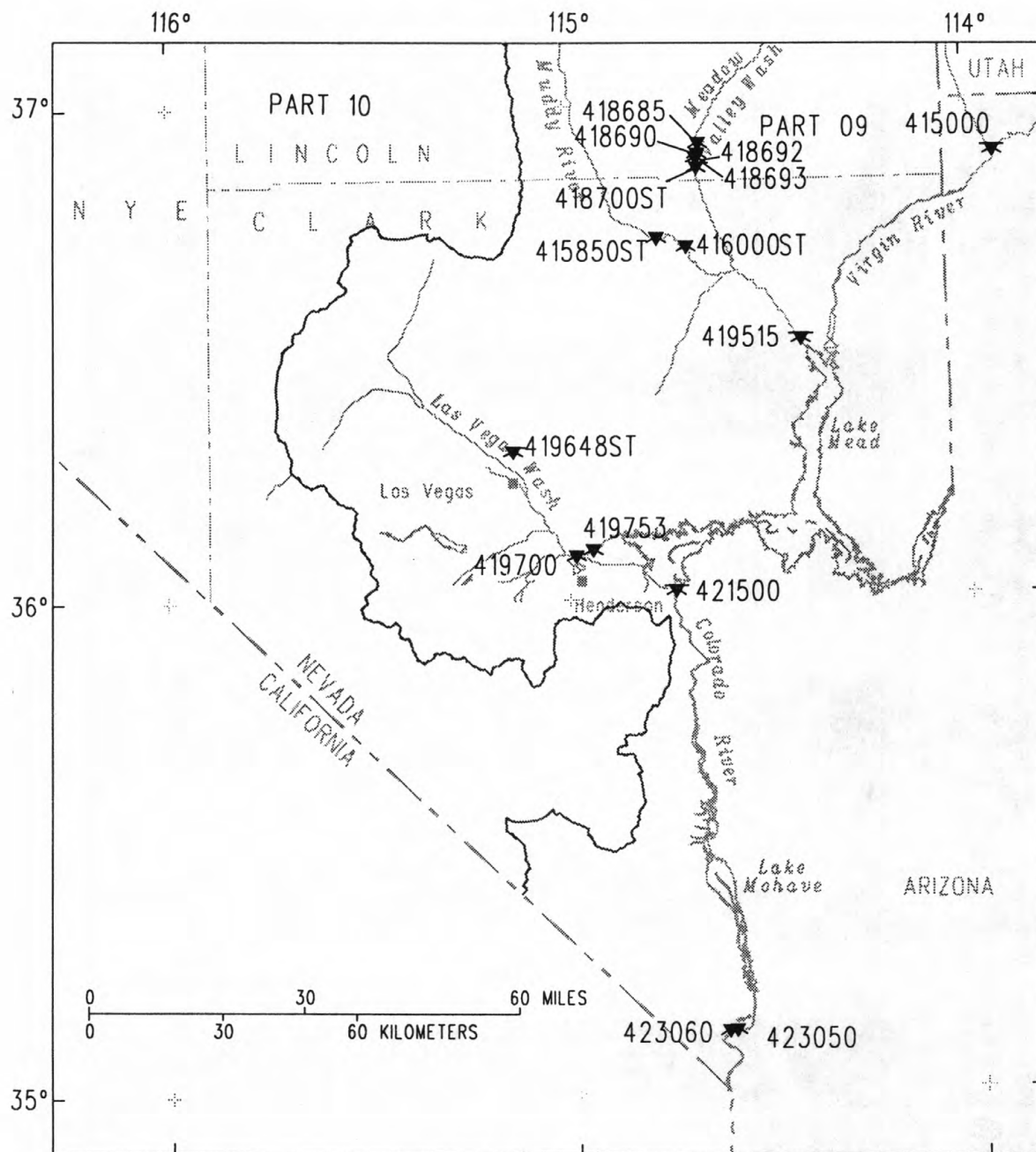
321000

Biological	○	Sediment	★
Chemical	□	Temperature	△

PART NUMBER IS AS FOLLOWS:

10 Great Basin

FIGURE 16.--Surface-water quality stations in Carlin area, northeastern Nevada.



EXPLANATION

— BOUNDARY BETWEEN MAJOR PARTS OF THE STATE--Part numbers are as follows:

09 Colorado River basin

10 Great Basin

ACTIVE SURFACE-WATER QUALITY STATION WITH ABBREVIATED NUMBER--

Complete designation includes Part number as first two digits

Symbols and letters indicate types of water-quality information determined as follows:

419648ST
 Biological Sediment
 Chemical Temperature

S Specific conductance measured by monitor

T Temperature measured by monitor

FIGURE 17.--Surface-water quality stations, southeastern Nevada.

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SURFACE-WATER RECORDS

COLORADO RIVER BASIN

VIRGIN RIVER BASIN

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 36°53'30", long 113°55'25", in SW 1/4 SW 1/4 sec.4, T.40 N., R.15 W., Mohave County, Hydrologic Unit 15010010, on right bank 0.5 mi downstream from Beaver Dam Wash, 0.4 mi upstream from Littlefield, and 36 mi upstream from Lake Mead.

DRAINAGE AREA.--5,090 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1929 to current year.

REVISED RECORDS.--WSP 959: 1932. WSP 979: 1930-31, 1933-37. WSP 1313: 1940 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,763.68 ft above National Geodetic Vertical Datum of 1929. Prior to May 28, 1933, nonrecording gage at site 300 ft upstream, and May 28, 1933, to Nov. 7, 1939, at same site, both at datum 2.53 ft higher. Nov. 8, 1939, to Mar. 31, 1942, nonrecording gage at same site at datum 2.00 ft higher. Apr. 1, 1942, to Sept. 30, 1970, water-stage recorder at same site at same datum. Oct. 1, 1970, to Aug. 7, 1979, at site 300 ft upstream at same datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--62 years, 236 ft³/s, 171,000 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,000 ft³/s, Jan 1, 1989, gage height, 22.37 ft, from rating curve extended above 12,000 ft³/s on basis of slope-area measurement of peak flow, due to failure of Quail Creek Dam; minimum, 38 ft³/s, May 1, 10, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 8	0115	*1,150	*6.18				

Minimum daily, 54 ft³/s, July 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	92	111	127	120	166	131	79	77	60	58	74
2	111	90	115	123	120	158	135	83	78	62	58	75
3	104	90	116	123	124	227	129	94	75	59	58	76
4	95	89	115	135	129	171	130	95	77	58	58	76
5	94	97	116	145	126	249	132	90	72	57	59	75
6	92	95	117	141	120	264	128	80	73	60	58	127
7	88	94	120	133	118	155	144	85	e72	111	57	468
8	79	99	119	127	116	130	115	86	e69	75	57	466
9	85	96	120	125	115	121	104	94	e69	106	56	161
10	80	97	119	124	115	123	92	122	79	73	58	104
11	80	103	122	120	116	123	90	124	e70	60	116	96
12	77	99	124	118	116	123	96	94	e70	62	75	86
13	81	96	127	116	114	118	94	94	e70	59	74	77
14	81	93	128	115	127	114	102	85	e68	59	70	71
15	83	91	124	115	135	151	96	88	e66	57	65	67
16	81	95	122	119	104	203	90	87	e66	61	82	74
17	82	95	124	118	99	171	92	74	e68	63	65	69
18	79	96	123	120	106	144	90	72	75	60	63	69
19	84	100	122	121	101	128	91	84	e68	57	63	63
20	115	105	122	126	99	137	85	74	e64	59	62	65
21	134	124	125	124	99	142	84	70	e64	61	63	68
22	109	127	116	127	100	143	95	73	e65	59	62	69
23	103	109	96	126	111	130	88	82	e65	56	62	63
24	105	104	93	121	93	128	82	76	e66	54	63	63
25	96	106	107	120	87	127	80	69	e65	55	99	60
26/	95	108	118	120	84	134	98	69	62	57	124	59
27	97	110	125	124	92	150	89	73	59	56	97	66
28	95	112	123	124	96	148	77	72	59	56	124	64
29	95	108	130	126	---	146	78	71	70	57	113	63
30	94	107	135	128	---	158	80	70	60	57	81	76
31	94	---	123	119	---	131	---	70	---	58	81	---
TOTAL	2896	3027	3697	3850	3082	5073	3017	2579	2061	1944	2281	3090
MEAN	93.4	101	119	124	110	164	101	83.2	68.7	62.7	73.6	103
MAX	134	127	135	145	135	518	144	124	79	111	124	468
MIN	77	89	93	115	84	114	77	69	59	54	56	59
AC-FT	5740	6000	7330	7640	6110	10060	5980	5120	4090	3860	4520	6130

CAL YR 1990 TOTAL 38367 MEAN 105 MAX 1060 MIN 47 AC-FT 76100
WTR YR 1991 TOTAL 36597 MEAN 100 MAX 518 MIN 54 AC-FT 72590

e Estimated

VIRGIN RIVER BASIN

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

47

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948 to current year.

PERIOD OF DAILY RECORD.--

CHEMICAL ANALYSES: July 1949 to September 1969.

SPECIFIC CONDUCTANCE: October 1947 to March 1988.

WATER TEMPERATURE: October 1947 to March 1988.

SEDIMENT DATA: October 1947 to September 1968.

REMARKS.--Streamflow is not completely homogenous chemically from bank to bank. Flow adjacent to north (right) bank is generally somewhat more dilute than average, particularly at times of low streamflow; monthly data collected during June 1975-September 1976 indicate that specific conductance off north bank was 93 to 100 percent of streamwide average (range of discharge, 60-230 ft³/s). Water temperature characteristically shows little or no variation from bank to bank. Detailed sampling information for period since June 1975 is available from U.S. Geological Survey, Carson City, Nev.

EXTREMES MEASURED FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 4,650 microsiemens, Aug. 21, 1966; minimum, 615 microsiemens, May 27, 28, 30, 31, 1983.

WATER TEMPERATURE: Maximum, 33.5°C, July 7, 1953; minimum, 2.0°C, Jan. 4, 1949, Jan. 4, 1950, Jan. 4, 5, 1971.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CaCO3)
NOV 14...	1200	95	3400	8.1	26.0	15.5	0.70	15.0	162	80	56	1200
JAN 07...	1440	139	2800	8.0	16.5	14.0	12	11.2	116	K15	780	1000
FEB 27...	1345	93	3380	8.2	11.0	15.5	3.0	13.0	141	K30	K40	1200
APR 24...	1100	86	3190	8.0	23.0	21.0	2.5	10.6	128	--	110	1200
JUN 24...	1415	66	3380	7.9	30.5	26.5	1.0	8.7	117	K65	K97	1300
AUG 29...	0900	139	3480	7.9	32.0	23.5	530	7.1	90	460	1500	1400

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV 14...	320	94	340	4	31	357	293	870	440	1.1	16	2560
JAN 07...	270	82	280	4	25	337	276	870	380	0.30	17	2220
FEB 27...	310	98	300	4	28	310	254	1100	420	0.70	15	2440
APR 24...	300	97	300	4	29	329	270	1200	470	1.1	15	2400
JUN 24...	350	110	290	3	28	325	266	1100	380	0.40	15	2460
AUG 29...	400	90	280	3	27	320	262	1300	410	0.70	16	2640

VIRGIN RIVER BASIN

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)
NOV 14...	2290	3.48	0.010	0.020	0.100	0.100	0.050	0.070	0.30	0.080	0.030	0.040
JAN 07...	2090	3.02	0.030	0.040	0.700	0.700	0.130	0.120	0.30	0.080	0.060	0.070
FEB 27...	2430	3.32	<0.010	0.010	0.160	0.180	0.020	0.030	0.40	0.060	0.040	0.020
APR 24...	2580	3.26	0.010	0.010	0.240	0.140	0.030	0.030	0.20	0.040	0.010	0.020
JUN 24...	2440	3.35	<0.010	<0.010	0.110	0.120	0.040	0.020	<0.20	0.020	<0.010	<0.010
AUG 29...	2690	3.59	0.050	0.040	0.900	0.900	0.220	0.190	0.50	0.210	0.080	0.060

DATE	PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)
NOV 14...	0.030	<10	9	<100	<10	<1.0	<1	<1	1	<10	<1	460
JAN 07...	0.060	--	--	--	--	--	--	--	--	--	--	--
FEB 27...	0.040	<10	8	100	<10	<1.0	3	2	2	40	<1	440
APR 24...	0.020	10	8	<100	<10	<1.0	1	<1	2	10	<1	440
JUN 24...	0.010	<10	7	28	<2	<3.0	4	<9	1	10	1	480
AUG 29...	0.050	60	9	100	<10	<1.0	<1	<1	3	60	<1	360

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 14...	20	<0.1	13	1	1	<1.0	4200	11	<10	74	19	33
JAN 07...	--	--	--	--	--	--	--	--	--	64	24	--
FEB 27...	20	<0.1	2	2	1	<1.0	4200	10	<10	95	24	24
APR 24...	20	<0.1	3	1	1	<1.0	4100	12	<10	69	16	28
JUN 24...	8	--	<30	<1	1	1.0	4300	<18	18	32	5.7	36
AUG 29...	20	<0.1	2	2	1	<1.0	4300	12	<10	1640	614	95

K: NON-IDEAL COLONY COUNT

VIRGIN RIVER BASIN

49

09415515 WATER CANYON CREEK NEAR PRESTON, NV

LOCATION.--Lat 38°59'16", long 114°57'27", in SW 1/4 NW 1/4 sec.13, T.13 N., R.62 E., White Pine County, Hydrologic Unit 15010011, on right bank, 7 mi northeast of Preston, and about 17 mi south of Ely.

DRAINAGE AREA.--11.0 mi².

PERIOD OF RECORD.--June 1983 to September 1987, March 1990 to current year.

REVISED RECORDS.--NV-86-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,400 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--5 years, 2.42 ft³/s, 1,750 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90 ft³/s, Aug. 16, 1984, gage-height, 5.92 ft; minimum daily, 0.01 ft³/s, Dec. 23-26, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.1 ft³/s, Apr. 13; minimum daily, 0.01 ft³/s, Dec. 23-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.49	e.10	e.12	e.23	.60	.28	.31	.54	.39	.44	.98
2	.30	.66	e.12	e.16	e.25	.43	.36	.30	.71	.39	.48	.74
3	.32	e.60	e.15	e.18	e.28	.41	.62	.30	.52	.39	.50	.74
4	.37	.53	e.16	e.20	e.30	.32	.91	.23	.50	.39	.47	.74
5	.38	.63	e.18	e.21	e.32	e.35	1.1	.23	.47	.43	.47	.74
6	.43	e.55	e.20	e.21	e.34	e.26	.90	.21	.44	.38	.47	.79
7	.51	.46	e.23	e.21	e.34	e.22	.69	.20	.43	.33	.47	.91
8	.50	.67	e.23	e.22	e.35	e.52	.78	.19	.43	.38	.47	.91
9	.47	.82	e.24	e.22	e.34	e.57	1.1	.25	.43	.43	.47	.91
10	.49	.72	e.25	e.23	e.34	e.57	.72	.25	.40	.48	.39	.74
11	.48	.56	e.24	e.24	e.34	e.52	e1.4	.26	.40	.39	.42	.74
12	.51	.69	e.24	e.27	e.35	e.52	1.4	.24	.42	.39	.56	.74
13	.54	.70	e.23	e.28	e.34	e.32	e1.6	.23	.35	.39	.52	.74
14	.57	.69	e.22	e.29	e.34	.63	1.0	.31	.37	.39	.52	.74
15	.63	.70	e.20	e.29	e.33	.42	.53	.28	.34	.39	.52	.74
16	.54	.68	e.18	e.29	e.32	.39	.52	.22	.35	.39	.52	.74
17	.51	.68	e.16	e.27	e.31	.41	.54	.23	.34	.39	.52	.82
18	.44	.82	e.14	e.25	e.29	.45	.71	.26	.35	.34	.52	.91
19	.53	.92	e.10	e.22	e.29	.53	.51	.25	.35	.29	.52	.89
20	.44	.99	e.06	e.20	e.29	.59	.50	.25	.37	.31	.52	.82
21	.46	.37	e.04	e.18	e.32	.55	.50	.25	.39	.35	.63	.82
22	.50	.64	e.02	e.18	e.38	.39	.49	.28	.39	.35	.68	.82
23	.51	.24	e.01	e.18	e.39	.32	.46	.30	.39	.39	.66	.78
24	.47	e.24	e.01	e.19	e.38	.45	.42	.15	.39	.42	.62	.69
25	.47	e.24	e.01	e.20	e.37	.45	.62	.16	.39	.37	.56	.68
26	.48	e.20	e.01	e.20	e.36	.36	.53	.16	.37	.38	.52	.68
27	.47	e.10	e.02	e.20	e.36	.30	.46	.17	.35	.38	.60	.68
28	.47	e.09	e.03	e.19	.27	.42	.58	.18	.35	.37	.68	.66
29	.47	e.09	e.04	e.18	---	.36	.40	.20	.35	.41	.82	.62
30	.47	e.10	e.06	e.19	---	.32	.39	.23	.37	.39	.91	.62
31	.47	---	e.08	e.20	---	.28	---	.24	---	.42	1.0	---
TOTAL	14.51	15.87	3.96	6.65	9.12	13.23	21.02	7.32	12.25	11.89	17.45	23.13
MEAN	.47	.53	.13	.21	.33	.43	.70	.24	.41	.38	.56	.77
MAX	.63	.99	.25	.29	.39	.63	1.6	.31	.71	.48	1.0	.98
MIN	.30	.09	.01	.12	.23	.22	.28	.15	.34	.29	.39	.62
AC-FT	29	31	7.9	13	18	26	42	15	24	24	35	46

WTR YR 1991 TOTAL 156.40 MEAN .43 MAX 1.6 MIN .01 AC-FT 310

e Estimated

VIRGIN RIVER BASIN

09415550 WHITE RIVER NEAR LUND, NV

LOCATION.--Lat 38°38'17", long 115°05'32", in NE 1/4 SE 1/4 sec.14, T.9 N., R.61 E., Nye County, Hydrologic Unit 15010011, on right bank, 1 mi west of Hardy Springs, and 17 mi south of Lund.

DRAINAGE AREA.--703 mi².

PERIOD OF RECORD.--October 1990 to September 1991.

GAGE.--Water-stage recorder. Elevation of gage is 5,300 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3.6 ft³/s, Mar. 3, 1991, gage-height, 1.19 ft; no flow most days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.6 ft³/s, Mar. 3, gage height, 1.19 ft; no flow most days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	2.0	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	3.0	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	1.2	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.34	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.95	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	2.8	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	1.4	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	11.83	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.38	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	3.0	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	23	.00	.00	.00	.00	.00	.00

WTR YR 1991 TOTAL 11.83 MEAN .032 MAX 3.0 MIN .00 AC-FT 23

VIRGIN RIVER BASIN

51

09415590 CRYSTAL SPRING NEAR HIKO, NV

LOCATION.--Lat 37°31'55", long 115°13'54", in SE 1/4 NE 1/4 sec.10, T.5 S., R.60 E., Lincoln County, Hydrologic Unit 15010011, on right bank, 75 ft south of State Highway 375, 200 ft southeast of junction of State Highway 318, and 4.5 mi south of Hiko.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--September 1985 to September 1988, March 1990 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 3,800 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19 ft³/s, Aug. 21, 1990, gage height, 1.30 ft; minimum daily, 1.0 ft³/s, Sept. 24, 27, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17 ft³/s, June 22, gage height 1.41 ft; minimum daily, 1.0 ft³/s, Sept. 24, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	12	8.9	9.5	6.5	9.3	4.9	9.8	8.9	9.4	8.8
2	12	12	12	8.9	9.5	9.4	9.2	9.6	9.8	4.4	9.4	8.8
3	12	12	12	9.0	9.5	9.4	9.3	9.5	9.8	1.6	9.4	4.3
4	12	12	12	9.0	9.5	9.4	9.2	9.5	9.5	1.6	9.4	2.0
5	12	12	12	9.0	9.5	9.4	5.6	9.4	10	4.2	9.4	2.0
6	12	12	5.7	9.0	9.5	9.4	4.3	9.5	10	9.5	9.4	1.8
7	12	12	1.4	9.0	9.5	9.4	4.3	9.4	9.9	9.4	9.4	1.6
8	12	12	1.4	9.0	9.5	9.4	7.8	9.4	9.9	9.4	9.4	1.6
9	12	12	1.4	8.9	9.5	9.4	9.4	9.5	9.9	9.5	9.3	6.6
10	12	12	1.4	8.9	9.5	9.4	9.9	9.4	10	9.4	9.2	8.8
11	12	12	1.4	8.9	9.5	9.4	10	9.6	9.9	9.4	9.1	8.6
12	12	12	5.4	8.9	9.4	9.4	10	9.6	4.8	9.3	8.9	8.5
13	12	12	8.2	9.0	9.4	9.5	10	9.6	1.5	9.3	8.8	4.6
14	12	12	8.1	9.0	9.4	9.5	9.7	9.6	1.5	9.4	8.7	1.3
15	12	12	8.3	9.1	9.5	9.5	9.7	9.6	1.5	9.3	8.7	1.4
16	12	12	8.3	9.3	9.5	9.4	9.7	9.6	1.5	9.3	8.8	1.2
17	12	12	8.3	9.3	9.5	9.4	9.7	9.6	1.4	4.4	9.0	3.4
18	12	12	8.4	9.4	9.3	9.5	9.7	8.1	1.4	1.6	8.9	8.6
19	12	12	9.0	9.4	9.3	9.6	9.7	5.0	1.4	1.6	8.9	8.6
20	12	12	9.0	9.5	9.3	9.5	9.7	6.2	5.1	1.6	9.0	8.5
21	12	12	9.0	9.3	9.3	9.5	9.8	9.6	9.5	3.1	9.0	8.5
22	12	12	9.0	9.4	9.3	9.4	9.8	9.5	9.7	2.5	9.0	8.4
23	12	12	8.9	9.3	9.3	9.4	9.8	9.5	9.4	1.7	9.0	5.5
24	12	12	8.9	9.3	9.4	9.5	9.8	9.4	9.3	1.7	9.0	1.0
25	12	12	8.9	9.3	9.4	9.5	9.8	9.6	9.4	4.6	9.0	1.1
26	12	12	8.8	9.4	4.3	4.2	4.1	9.8	9.4	9.4	8.8	1.1
27	12	12	8.8	9.3	3.7	1.7	1.8	9.8	9.4	9.3	8.8	1.0
28	12	12	8.9	9.3	4.9	1.7	1.8	9.8	9.4	9.3	8.8	6.2
29	12	12	8.9	9.4	---	7.2	1.8	9.8	9.2	9.3	8.8	8.3
30	12	12	8.8	9.5	---	9.4	1.8	9.9	8.7	9.3	8.8	3.4
31	12	---	8.8	9.5	---	9.3	---	9.9	---	9.3	8.9	---
TOTAL	372	360	243.4	284.4	248.7	266.6	236.5	283.2	222.0	202.6	280.4	145.5
MEAN	12.0	12.0	7.85	9.17	8.88	8.60	7.88	9.14	7.40	6.54	9.05	4.85
MAX	12	12	12	9.5	9.5	9.6	10	9.9	10	9.5	9.4	8.8
MIN	12	12	1.4	8.9	3.7	1.7	1.8	4.9	1.4	1.6	8.7	1.0
AC-FT	738	714	483	564	493	529	469	562	440	402	556	289

WTR YR 1991 TOTAL 3145.3 MEAN 8.62 MAX 12 MIN 1.0 AC-FT 6240

VIRGIN RIVER BASIN

09415700 WHITE RIVER ABOVE UPPER PAHRANAGAT LAKE NEAR ALAMO, NV

LOCATION.--Lat 37°18'42", long 115°07'54", in SE 1/4 NW 1/4 sec.27, T.7 S., R.61 E., Lincoln County, Hydrologic Unit 15010011, on left bank, 1200 ft upstream of Upper Pahranaagat Lake, and 4.1 mi south of Alamo.

DRAINAGE AREA.--2,630 mi².

PERIOD OF RECORD.--June 1990 to current year.

GAGE.--Water-stage recorder. Concrete weir was installed Oct. 1, 1990. Elevation of gage is 3,360 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for June to September 1990, and those below 0.5 ft³/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27 ft³/s, Mar. 1, 1991, gage height, 3.91 ft; maximum gage height, 4.04 ft, Jan. 11, 1991; minimum daily, no flow, July 5, 30, 1991.

EXTREMES FOR CURRENT PERIOD.--June to September 1990: Maximum discharge, 10 ft³/s, June 11, gage height 2.77 ft; minimum daily, 0.04 ft³/s, July 20.

Water year 1991: Maximum discharge, 27 ft³/s, Mar. 1, gage height 3.91 ft; maximum gage height, 4.04 ft Jan. 11; no flow July 5, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	4.6	.12	e.14	.16
2	---	---	---	---	---	---	---	---	2.8	.10	e.16	.15
3	---	---	---	---	---	---	---	---	1.9	.10	e.16	.14
4	---	---	---	---	---	---	---	---	1.6	.09	e.18	.15
5	---	---	---	---	---	---	---	---	1.3	.09	e.18	.15
6	---	---	---	---	---	---	---	---	.99	.08	e.20	.15
7	---	---	---	---	---	---	---	---	.91	.09	e.18	.42
8	---	---	---	---	---	---	---	---	1.1	.11	e.18	1.1
9	---	---	---	---	---	---	---	---	.73	.10	e.16	.21
10	---	---	---	---	---	---	---	---	.84	e.10	e.16	.16
11	---	---	---	---	---	---	---	---	4.0	e.08	e.25	.15
12	---	---	---	---	---	---	---	---	3.4	e.08	e.40	.15
13	---	---	---	---	---	---	---	---	.90	e.08	e.65	.18
14	---	---	---	---	---	---	---	---	.48	e.05	e.90	.22
15	---	---	---	---	---	---	---	---	.46	e.05	e1.1	.25
16	---	---	---	---	---	---	---	---	.36	e.05	e.85	.26
17	---	---	---	---	---	---	---	---	.44	e.05	.28	.27
18	---	---	---	---	---	---	---	---	.54	e.05	.32	.33
19	---	---	---	---	---	---	---	---	.34	e.05	.17	.40
20	---	---	---	---	---	---	---	---	.39	e.04	.15	e.42
21	---	---	---	---	---	---	---	---	.27	e.05	.46	e.42
22	---	---	---	---	---	---	---	---	.27	e.05	.26	e.44
23	---	---	---	---	---	---	---	---	.29	e.05	.17	e.44
24	---	---	---	---	---	---	---	---	.30	e.08	.22	e.46
25	---	---	---	---	---	---	---	---	.25	e.08	.14	e.46
26	---	---	---	---	---	---	---	---	.20	e.10	.14	e.48
27	---	---	---	---	---	---	---	---	.17	e.10	.16	e.48
28	---	---	---	---	---	---	---	---	.15	e.10	.19	e.50
29	---	---	---	---	---	---	---	---	.20	e.12	.15	e.52
30	---	---	---	---	---	---	---	---	.17	e.12	.15	e.54
31	---	---	---	---	---	---	---	---	---	e.12	.34	---
TOTAL	---	---	---	---	---	---	---	---	30.35	2.53	9.15	10.16
MEAN	---	---	---	---	---	---	---	---	1.01	.082	.30	.34
MAX	---	---	---	---	---	---	---	---	4.6	.12	1.1	1.1
MIN	---	---	---	---	---	---	---	---	.15	.04	.14	.14
AC-FT	---	---	---	---	---	---	---	---	60	5.0	18	20

e Estimated

VIRGIN RIVER BASIN

09415700 WHITE RIVER ABOVE UPPER PAHRANAGAT LAKE NEAR ALAMO, NV--Continued

53

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	11	6.8	5.7	15	24	12	7.3	7.1	.21	.26	1.3
2	.72	12	7.4	5.9	16	25	12	6.8	6.9	.22	.18	.14
3	1.4	9.6	7.2	6.5	16	20	11	7.2	7.2	.06	.09	.34
4	1.5	9.2	6.2	8.8	15	20	9.8	7.0	7.8	.02	.30	.92
5	.60	10	6.6	11	16	19	6.7	7.1	7.9	.00	.07	.48
6	.41	13	7.9	11	17	18	9.1	7.0	6.6	.16	.05	.15
7	.59	12	6.5	15	18	18	8.0	7.1	5.3	.84	.11	.48
8	.75	12	3.9	18	17	17	7.1	7.3	5.4	.25	.93	1.2
9	.93	13	3.7	16	16	16	7.4	6.8	4.4	.66	1.1	.42
10	1.0	11	3.9	18	16	9.5	8.0	5.5	4.1	.24	.26	.57
11	1.6	9.9	3.9	20	17	7.2	7.8	5.6	4.0	.03	.10	.32
12	2.8	11	3.8	18	18	9.3	8.5	6.4	4.5	.03	.11	.33
13	1.6	5.4	3.8	16	14	9.6	7.6	5.8	3.1	.52	.53	.57
14	1.3	5.1	4.2	15	10	15	7.9	6.6	3.6	.50	.55	.60
15	1.4	4.8	5.4	16	8.0	15	12	7.7	2.3	.62	.22	.63
16	1.1	5.1	5.9	14	8.5	21	11	7.3	2.4	.72	.08	.49
17	.52	5.4	6.1	13	9.1	18	9.9	7.5	.83	1.4	.07	.55
18	1.7	4.5	8.0	14	8.8	17	9.6	6.0	.71	.90	.05	.25
19	3.3	2.9	7.9	14	7.8	15	8.7	5.2	.23	.62	.03	.17
20	5.7	4.1	9.1	13	5.2	19	9.9	5.8	.52	.28	.03	.72
21	7.7	4.9	7.9	12	6.7	20	9.1	5.0	.58	.20	.20	.45
22	8.9	5.4	6.8	13	7.2	21	9.2	5.9	1.5	.78	.12	.40
23	10	4.4	5.7	13	5.9	13	8.9	5.2	2.4	.40	.03	.56
24	12	5.2	4.2	14	5.6	12	7.7	5.6	1.9	.24	.08	.59
25	12	5.1	4.8	15	7.8	13	6.6	6.2	.42	.04	.06	.93
26	7.6	5.8	5.8	11	9.7	13	8.8	4.6	.69	.02	.05	.11
27	8.1	6.9	6.6	11	12	15	8.2	4.7	.76	.01	.02	.10
28	7.3	3.7	7.0	12	13	12	6.9	5.0	.46	.02	.01	.26
29	5.6	6.2	7.4	11	---	9.8	7.2	4.9	.72	.01	.01	.18
30	7.7	4.9	6.8	11	---	8.6	7.4	4.7	1.8	.00	.01	.12
31	11	---	5.8	12	---	10	---	5.3	---	.01	.24	---
TOTAL	127.38	223.5	187.0	403.9	336.3	480.0	264.0	190.1	96.12	10.01	5.95	14.33
MEAN	4.11	7.45	6.03	13.0	12.0	15.5	8.80	6.13	3.20	.32	.19	.48
MAX	12	13	9.1	20	18	25	12	7.7	7.9	1.4	1.1	1.3
MIN	.41	2.9	3.7	5.7	5.2	7.2	6.6	4.6	.23	.00	.01	.10
AC-FT	253	443	371	801	667	952	524	377	191	20	12	28

WTR YR 1991 TOTAL 2338.59 MEAN 6.41 MAX 25 MIN .00 AC-FT 4640

VIRGIN RIVER BASIN

09415850 PAHRANAGAT WASH NEAR MOAPA, NV

LOCATION.--Lat 36°43'46", long 114°46'09", in NE 1/4 SE 1/4 sec.12, T.14 S., R.64 E., Clark County, Hydrologic Unit 15010012, on left bank, 2.0 mi downstream of Arrow Canyon Dam, and 9.0 mi northwest of Moapa.

DRAINAGE AREA.--252 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1988 to current year.

REVISED RECORDS.--WDR NV-90: 1988, 1989 (M). WDR NV-91: 1990 (M).

GAGE.--Water-stage recorder. Elevation of gage is 2,110 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,350 ft³/s, Sept. 6, 1991, gage height, 15.83 ft, on basis of indirect measurements of peak flow; no flow most days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,350 ft³/s, Sept. 6, gage height, 15.83 ft, on basis of indirect measurements of peak flow; no flow most days.

REVISIONS.--The maximum discharge for the water year 1990 has been revised to 3,050 ft³/s, Aug. 15, 1990, gage height, 15.62 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.00	.00	.00	.00	.12	.00	.00	.00	.00	.00	.00
2	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00
7	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00
8	.00	e.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00
9	.00	e.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00
10	.00	e.00	.00	e.00	.00	.00	.00	.00	.00	.00	4.5	e.00
11	.00	e.00	.00	e.00	.00	.00	.00	.00	.00	.00	72	e.00
12	.00	e.00	.00	e.00	.00	.00	.00	.00	.00	.00	9.7	e.00
13	.00	e.00	.00	e.00	.00	.00	.00	.00	.00	.00	.01	e.00
14	.00	e.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00
15	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00
16	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00
17	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00
18	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00
19	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00
20	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	47	.00
27	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	6.5	.00
28	.00	.00	.00	e.00	1.6	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	e.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	e.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	1.60	0.12	0.00	0.00	0.00	0.00	139.71	411.02
MEAN	.000	.000	.000	.000	.057	.004	.000	.000	.000	.000	4.51	13.7
MAX	.00	.00	.00	.00	1.6	.12	.00	.00	.00	.00	72	394
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	3.2	.2	.00	.00	.00	.00	277	815

CAL YR 1990 TOTAL 170.81 MEAN .47 MAX 84 MIN .00 AC-FT 339
WTR YR 1991 TOTAL 552.45 MEAN 1.51 MAX 394 MIN .00 AC-FT 1100

e Estimated

09415850 PAHRANAGAT WASH NEAR MOAPA, NV--Continued

TEMPERATURE, WATER (DEG C.), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

[illegible]

VIRGIN RIVER BASIN

57

09415900 MUDDY SPRING AT L.D.S FARM NEAR MOAPA, NV

LOCATION.--Lat 36°43'18", long 114°42'53", in SE 1/4 NE 1/4 sec.16, T.14 S., R.65 E., Clark County, Hydrologic Unit 15010012, on left bank, 0.1 mi downstream from L.D.S. mansion, and 6 mi northwest of Moapa.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,770 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Regulation for recreational purposes occurs 0.1 mi upstream. The gage was submerged by backwater and over bank flow from Muddy River on Aug. 15, 1990, gage height unknown.

AVERAGE DISCHARGE.--6 years, 7.44 ft³/s, 5,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40 ft³/s, Mar. 23, 1991, gage height, 1.90 ft; minimum daily, 6.1 ft³/s, Dec. 19-22, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 40 ft³/s, Mar. 23, gage height, 1.90 ft; minimum daily, 6.1 ft³/s, Dec. 19-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e7.0	7.6	7.1	6.7	7.2	6.6	7.5	7.5	7.3	7.3	6.9	7.7
2	e7.2	7.6	7.2	6.7	7.3	6.5	7.5	7.5	7.9	7.3	6.9	6.7
3	7.2	7.6	7.1	6.7	7.6	6.6	7.3	7.4	7.0	7.1	7.1	6.8
4	7.1	8.8	6.8	6.7	7.0	6.7	7.4	7.6	7.2	7.0	7.7	6.7
5	7.2	8.2	6.5	6.8	7.1	6.7	7.4	8.1	7.1	7.0	6.8	6.9
6	7.6	7.5	6.4	6.8	7.2	6.6	7.3	7.4	6.9	7.2	7.0	7.1
7	8.0	7.6	6.4	6.7	7.2	6.6	8.0	7.3	6.9	8.2	7.0	7.7
8	7.1	7.5	6.6	6.7	7.1	6.6	7.4	7.1	7.0	7.2	7.0	8.0
9	7.2	7.4	6.9	6.7	7.1	6.6	7.4	7.2	7.6	7.5	8.1	7.0
10	7.1	7.3	6.9	6.7	7.2	6.9	7.5	8.0	6.9	7.5	7.4	7.0
11	7.3	7.5	7.0	6.7	7.2	6.9	7.5	7.3	6.9	7.5	8.1	7.0
12	7.5	6.9	7.0	7.0	7.2	6.9	7.5	7.9	7.0	7.4	6.8	7.1
13	8.0	7.0	6.9	7.4	6.6	6.8	7.5	7.4	7.0	7.3	7.0	7.1
14	8.2	7.0	6.9	6.7	6.6	6.4	8.3	7.3	7.1	7.9	7.0	7.0
15	7.4	7.0	7.9	6.7	6.6	6.4	7.4	7.3	8.1	7.1	7.0	7.0
16	7.5	7.0	7.5	6.7	6.6	6.4	7.5	7.3	7.8	7.3	7.0	8.1
17	7.5	7.5	7.5	6.7	7.1	6.4	7.5	7.3	6.8	7.4	7.0	7.0
18	7.7	7.4	6.6	6.7	6.7	6.3	7.5	7.3	6.9	7.3	8.4	7.0
19	7.7	6.8	6.1	6.9	6.7	6.3	7.6	7.9	6.9	7.3	6.9	7.0
20	7.6	6.7	6.1	7.0	6.5	6.6	9.1	7.4	6.9	7.3	6.9	7.0
21	8.0	6.7	6.1	7.0	6.4	6.4	8.5	7.2	6.9	7.8	6.9	7.3
22	7.4	6.7	6.1	7.0	6.4	6.3	7.7	7.2	7.4	7.4	6.8	7.8
23	7.5	6.7	6.3	7.0	6.4	8.2	7.6	7.0	7.7	7.0	7.2	6.9
24	7.5	7.4	6.3	7.1	6.7	9.0	8.7	7.0	6.9	7.0	6.9	7.0
25	7.5	7.5	6.3	7.0	6.3	8.0	7.5	8.1	7.0	7.0	6.7	7.0
26	7.5	7.5	6.2	7.2	6.5	8.3	7.5	7.9	7.0	6.9	6.8	7.0
27	8.2	7.0	6.2	8.0	6.6	8.0	7.8	7.0	7.0	7.0	6.9	7.0
28	8.1	7.0	6.8	7.2	6.6	7.7	8.5	7.0	7.0	7.7	6.8	7.3
29	7.3	7.0	6.4	7.2	---	7.6	7.5	7.0	7.3	6.9	6.5	7.8
30	7.5	6.9	6.9	7.2	---	7.7	8.1	7.2	7.9	6.9	6.9	7.0
31	7.5	---	6.8	7.2	---	8.5	---	7.3	---	6.9	6.9	---
TOTAL	233.1	218.3	207.8	214.8	191.7	217.5	231.5	229.4	215.3	225.6	219.3	215.0
MEAN	7.52	7.28	6.70	6.93	6.85	7.02	7.72	7.40	7.18	7.28	7.07	7.17
MAX	8.2	8.8	7.9	8.0	7.6	9.0	9.1	8.1	8.1	8.2	8.4	8.1
MIN	7.0	6.7	6.1	6.7	6.3	6.3	7.3	7.0	6.8	6.9	6.5	6.7
AC-FT	462	433	412	426	380	431	459	455	427	447	435	426

CAL YR 1990 TOTAL 2630.5 MEAN 7.21 MAX 8.8 MIN 6.1 AC-FT 5220
WTR YR 1991 TOTAL 2619.3 MEAN 7.18 MAX 9.1 MIN 6.1 AC-FT 5200

e Estimated

VIRGIN RIVER BASIN

09415910 PEDERSON SPRING NEAR MOAPA, NV

LOCATION.--Lat 36°42'35", long 114°42'54", in NE 1/4 NE 1/4 sec.21, T.14 S., R.65 E., Clark County, Hydrologic Unit 15010012, at U.S. Fish and Wildlife Station, 0.2 mi north of Battleship Wash, 2.0 mi west of State Highway 168, and 5.8 mi northwest of Moapa.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder and 45° V-notch weir. Elevation of gage is 1,800 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--5 years, 0.20 ft³/s, 145 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 0.29 ft³/s, Apr. 19 and June 22, 1990, gage height, 0.60 ft; minimum daily, 0.17 ft³/s, several days Oct., Nov., 1989, Mar. and June 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 0.25 ft³/s, July 5, 6, gage height, 0.57 ft; minimum daily, 0.17 ft³/s, several days in Mar. and June.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.22	.22	.20	.18	.18	.19	.21	.17	.20	.21	.20
2	.22	.22	.22	.19	.18	.17	.19	.21	.17	.20	.21	.20
3	.22	.21	.22	.19	.18	.17	.19	.21	.18	.20	.21	.20
4	.22	.22	.22	.19	.18	.18	.19	.21	.18	.22	.21	.21
5	.22	.22	.22	.18	.18	.18	.19	.20	.18	.24	.21	.21
6	.22	.22	.22	.18	.18	.18	.20	.20	.19	.23	.21	.20
7	.22	.21	.22	.18	.19	.18	.20	.20	.19	.23	.21	.20
8	.22	.21	.23	.18	.19	.18	.19	.20	.19	.22	.21	.20
9	.22	.21	.23	.18	.19	.18	.20	.21	.19	.22	.21	.20
10	.22	.22	.23	.18	.19	.19	.20	.20	.19	.21	.21	.20
11	.22	.22	.23	.18	.19	.19	.20	.20	.19	.20	.20	.20
12	.22	.22	.21	.18	.19	.18	.19	.20	.19	.20	.20	.20
13	.22	.22	.20	.19	.18	.19	.20	.20	.19	.21	.21	.20
14	.22	.22	.20	.19	.19	.18	.20	.20	.19	.21	.21	.20
15	.22	.21	.20	.19	.19	.18	.20	.19	.18	.21	.21	.20
16	.22	.21	.20	.19	.19	.17	.20	.19	.18	.21	.22	.20
17	.22	.22	.20	.19	.19	.17	.20	.19	.18	.21	.21	.20
18	.22	.22	.20	.19	.18	.18	.20	.19	.19	.21	.21	.20
19	.22	.22	.22	.19	.18	.18	.19	.19	.19	.21	.21	.20
20	.22	.21	.21	.19	.18	.17	.19	.19	.19	.21	.21	.20
21	.22	.21	.21	.19	.18	.17	.19	.19	.19	.20	.21	.20
22	.22	.21	.21	.19	.19	.17	.19	.19	.19	.21	.21	.20
23	.22	.21	.20	.19	.19	.17	.19	.19	.20	.21	.21	.20
24	.22	.21	.20	.19	.18	.18	.19	.19	.20	.21	.21	.20
25	.22	.21	.20	.18	.18	.18	.21	.20	.20	.21	.21	.20
26	.22	.22	.20	.18	.19	.18	.20	.19	.20	.20	.21	.20
27	.22	.21	.20	.18	.19	.18	.20	.19	.20	.21	.21	.20
28	.22	.20	.20	.19	.19	.18	.20	.19	.20	.21	.21	.20
29	.22	.21	.20	.18	---	.18	.21	.19	.20	.21	.21	.20
30	.22	.21	.19	.18	---	.18	.21	.19	.20	.21	.21	.20
31	.22	---	.19	.18	---	.19	---	.18	---	.21	.20	---
TOTAL	6.82	6.43	6.50	5.76	5.19	5.54	5.90	6.08	5.68	6.54	6.49	6.02
MEAN	.22	.21	.21	.19	.19	.18	.20	.20	.19	.21	.21	.20
MAX	.22	.22	.23	.20	.19	.19	.21	.21	.20	.24	.22	.21
MIN	.22	.20	.19	.18	.18	.17	.19	.18	.17	.20	.20	.20
AC-FT	14	13	13	11	10	11	12	12	11	13	13	12

CAL YR 1990 TOTAL 79.47 MEAN .22 MAX .28 MIN .18 AC-FT 158
WTR YR 1991 TOTAL 72.95 MEAN .20 MAX .24 MIN .17 AC-FT 145

VIRGIN RIVER BASIN

09416000 MUDDY RIVER NEAR MOAPA, NV

LOCATION.--Lat 36°42'40", long 114°41'40", in SE 1/4 SE 1/4 sec.15, T.14 S., R.65 E., Clark County, Hydrologic Unit 15010012, on left bank, 0.1 mi upstream from Battleship Wash, 0.8 mi downstream from Home Ranch, 5 mi northwest of Moapa, 9.5 mi upstream from Meadow Valley Wash, and 26 mi upstream from Lake Mead.

DRAINAGE AREA.--3,820 mi², approximately, of which about 40 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1913 to September 1915, April 1916 to September 1918, June 1928 to October 1931, April to July 1932, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for January 1904 to December 1906 (gage heights only), 1908-9 (discharge measurements only), and April to October 1910 not equivalent owing to large difference in drainage area.

REVISED RECORDS.--WSP 1243: 1914 (M). WSP 1343: 1950 (M). WSP 1733: Drainage area.

GAGE.--Water-stage recorder and Cipolletti weir. Elevation of gage is 1,710 ft above National Geodetic Vertical Datum of 1929, from river-profile map. October 21, 1944, to September 30, 1948, water-stage recorder at datum 0.08 ft higher.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation above station. Beginning Oct. 1, 1976, records do not include part-time diversion about 100 ft upstream, for cooling of powerplant downstream. Normal flow originates from springs in reach 0.9 to 2.5 mi upstream from station. Flood peaks may be dampened by Arrow Canyon Dam.

AVERAGE DISCHARGE.--39 years (1914-15, 1917-18, 1929-31, 1945-76), 41.5 ft³/s, 32,670 acre-ft/yr, adjusted for flow which bypasses stream due to pump about 100 ft upstream which diverts water part of the time for power-plant cooling.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,760 ft³/s, Aug. 16, 1990, gage height, 13.33 ft from rating curve extended above 148 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, 20 ft³/s, Oct. 13, 1985, and Aug. 21, 1986. Maximum daily precipitation, 2.04 in., Aug. 15, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 718 ft³/s, Sept. 6, gage height, 5.82 ft; minimum daily, 27 ft³/s, Oct. 3-6, 8. Maximum daily precipitation, .64 in., Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	31	35	36	36	38	37	42	39	34	32	35
2	30	30	34	37	36	37	35	42	38	34	31	35
3	27	30	34	39	36	37	35	42	38	33	31	35
4	27	31	35	40	35	37	34	41	38	32	31	35
5	27	32	36	39	37	36	36	41	38	32	31	36
6	27	31	36	37	37	37	35	41	37	31	32	85
7	28	33	36	36	36	36	35	41	37	32	32	86
8	27	32	36	36	37	36	36	40	36	33	31	66
9	28	32	35	36	37	37	40	41	36	33	31	39
10	28	31	35	36	37	38	37	40	35	33	32	39
11	28	31	38	36	37	40	37	41	35	32	68	39
12	29	31	38	37	37	38	37	41	37	32	45	39
13	30	34	38	36	36	37	38	41	36	31	33	40
14	31	38	38	36	36	38	40	41	35	32	32	39
15	29	36	39	36	36	38	38	40	34	31	32	38
16	29	34	37	36	36	39	38	40	34	33	31	39
17	29	33	38	37	37	39	38	40	34	33	31	39
18	30	34	39	39	36	39	38	39	34	33	32	39
19	29	33	39	39	36	40	39	40	34	32	31	40
20	30	35	39	37	37	41	39	39	34	32	31	40
21	30	33	38	36	35	40	40	39	34	32	31	39
22	30	34	36	36	36	39	39	39	33	32	31	39
23	29	36	37	36	36	39	37	39	34	32	32	39
24	30	35	37	37	36	40	41	38	34	32	32	39
25	31	33	37	40	36	40	39	37	35	32	31	39
26	30	32	37	37	36	38	37	37	34	32	49	39
27	32	34	38	37	37	41	36	35	34	32	45	39
28	33	35	40	37	40	40	37	36	34	33	32	40
29	31	36	39	37	---	40	37	37	34	32	33	40
30	31	36	38	36	---	39	37	37	34	31	33	39
31	31	---	36	36	---	40	---	39	---	32	35	---
TOTAL	914	996	1148	1146	1020	1194	1122	1226	1059	1000	1064	1275
MEAN	29.5	33.2	37.0	37.0	36.4	38.5	37.4	39.5	35.3	32.3	34.3	42.5
MAX	33	38	40	40	40	41	41	42	39	34	68	86
MIN	27	30	34	36	35	36	34	35	33	31	31	35
AC-FT	1810	1980	2280	2270	2020	2370	2230	2430	2100	1980	2110	2530
†	0.00	0.08	0.20	0.32	0.40	1.80	0.00	0.88	0.68	0.52	1.32	1.04

CAL YR 1990 TOTAL 13410 MEAN 36.7 MAX 930 MIN 27 AC-FT 26600
WTR YR 1991 TOTAL 13164 MEAN 36.1 MAX 86 MIN 27 AC-FT 26110

† Precipitation, in inches

VIRGIN RIVER BASIN

61

09416000 MUDDY RIVER NEAR MOAPA, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1988 to current year.

WATER TEMPERATURE: June 1988 to current year.

INSTRUMENTATION.--Specific-conductance recorder since Sept. 1988, hourly. Water-temperature recorder since June 1988, hourly.

REMARKS.--Records represent water temperature at probe within 0.5°C. Interruptions in record due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded (more than 20 percent missing record), 1470 microsiemens,

Aug. 16, 1990; minimum recorded, 496 microsiemens, Sept. 7, 1991.

WATER TEMPERATURE: Maximum, 33.0°C, Aug. 9, 1990, July 28, 29, Aug. 8, 13, 1991; minimum, 21.5°C, Jan. 17, 1990.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE.--Maximum recorded (more than 20 percent missing record), 1440 microsiemens, Aug. 11;

minimum recorded, 496 microsiemens, Sept. 7.

WATER TEMPERATURE.--Maximum, 33.0°C, July 28, 29, Aug. 8, 13; minimum, 20.5°C, Sept. 6, 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT 02...	1630	23	1010	28.5	30.5	--	--	--	--
NOV 15...	1130	34	1030	20.5	26.0	290	67	30	100
DEC 19...	1230	38	1030	16.0	25.5	--	--	--	--
FEB 01...	1330	34	1000	9.0	21.5	280	66	29	100
MAR 14...	1500	37	1050	--	27.5	--	--	--	--
MAY 13...	1315	41	1030	27.0	28.5	290	67	29	110
JUN 24...	1530	33	950	--	29.5	270	64	26	100
AUG 14...	1230	E34	970	--	31.0	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
OCT 02...	--	--	--	--	--	--	637	--	--
NOV 15...	3	11	200	61	2.2	31	638	652	0.87
DEC 19...	--	--	--	--	--	--	630	--	--
FEB 01...	3	12	210	70	2.0	31	624	647	0.85
MAR 14...	--	--	--	--	--	--	690	--	--
MAY 13...	3	11	200	71	2.6	31	624	659	0.85
JUN 24...	3	11	200	69	2.0	31	632	633	0.86
AUG 14...	--	--	--	--	--	--	623	--	--

E: ESTIMATED

VIRGIN RIVER BASIN

09416000 MUDDY RIVER NEAR MOAPA, NV--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	---	---	---	---	---	---	1040	1020	1030
2	---	---	---	---	---	---	---	---	---	1050	1030	1030
3	---	---	---	---	---	---	---	---	---	1050	1030	1040
4	---	---	---	---	---	---	---	---	---	1120	1050	1080
5	---	---	---	---	---	---	---	---	---	1070	1040	1060
6	---	---	---	---	---	---	---	---	---	1050	1030	1040
7	---	---	---	---	---	---	---	---	---	1050	1030	1040
8	---	---	---	---	---	---	---	---	---	1050	1030	1040
9	---	---	---	---	---	---	---	---	---	1040	1030	1030
10	---	---	---	---	---	---	---	---	---	1040	1020	1030
11	---	---	---	---	---	---	---	---	---	1030	1010	1030
12	---	---	---	---	---	---	---	---	---	1040	1020	1030
13	---	---	---	---	---	---	---	---	---	1040	1020	1030
14	---	---	---	---	---	---	---	---	---	1040	1020	1030
15	---	---	---	---	---	---	---	---	---	1030	1010	1020
16	---	---	---	---	---	---	---	---	---	1020	1010	1020
17	---	---	---	---	---	---	---	---	---	1030	1010	1020
18	---	---	---	---	---	---	---	---	---	1030	1010	1020
19	---	---	---	---	---	---	---	---	---	1020	1010	1010
20	---	---	---	---	---	---	1050	1000	1030	1010	1000	1010
21	---	---	---	---	---	---	1020	1000	1010	1010	993	1000
22	---	---	---	---	---	---	1030	1000	1020	1010	995	1000
23	---	---	---	---	---	---	1030	988	1010	1010	988	1000
24	---	---	---	---	---	---	1030	989	1020	1040	989	1010
25	---	---	---	---	---	---	1040	1020	1030	1020	1000	1010
26	---	---	---	---	---	---	1040	1020	1030	1020	1000	1010
27	---	---	---	---	---	---	1040	1010	1030	1020	1000	1010
28	---	---	---	---	---	---	1040	1020	1030	1010	1000	1010
29	---	---	---	---	---	---	1040	1020	1030	1010	1000	1000
30	---	---	---	---	---	---	1040	1020	1030	1010	980	1000
31	---	---	---	---	---	---	1040	1020	1030	1010	990	1000
MONTH	---	---	---	---	---	---	---	---	---	1120	980	1020
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1010	1000	1000	1090	1060	1080	1070	1060	1070	1050	1040	1040
2	1020	992	1010	1070	1050	1050	1070	1050	1070	1040	1030	1040
3	1020	997	1010	1060	1040	1050	1070	1050	1060	1050	1030	1040
4	1020	1000	1010	1060	967	1040	1070	1050	1060	1050	1030	1040
5	1030	1010	1020	1050	1030	1040	1070	1050	1060	1040	1030	1040
6	1030	1010	1020	1040	1030	1030	1070	1050	1060	1050	955	1040
7	1050	1010	1030	1040	1030	1030	1070	1060	1060	1050	1040	1040
8	1040	1020	1030	1040	1020	1030	1060	1050	1060	1050	1040	1040
9	1040	1020	1040	1040	1020	1030	1070	1050	1050	1050	1030	1030
10	1050	1040	1040	1030	1020	1030	1060	1050	1050	1050	1030	1030
11	1050	1030	1040	1030	1020	1020	1060	1040	1050	1040	1030	1030
12	1060	1030	1050	1030	1020	1020	1060	1040	1050	1040	1030	1030
13	1060	1040	1050	1030	1010	1020	1060	1050	1050	1040	1020	1030
14	1070	1050	1060	1070	1030	1050	1070	1040	1050	1030	1020	1020
15	1070	1050	1060	1050	1030	1040	1060	1040	1050	1040	1020	1030
16	1070	1060	1060	1050	1030	1040	1050	1040	1050	1040	1020	1030
17	1080	1050	1060	1040	1030	1040	1050	1040	1050	1030	1020	1020
18	1060	1050	1060	1040	1030	1040	1050	1040	1050	1030	1010	1020
19	1070	1050	1060	1120	923	1040	1060	1040	1050	1040	1020	1020
20	1070	1060	1070	1090	1050	1070	1070	1050	1060	1020	1010	1010
21	1070	1050	1060	1090	1060	1080	1060	1040	1050	1020	996	1010
22	1060	1050	1060	1070	1050	1070	1060	1050	1050	1020	996	1010
23	1060	1050	1060	1070	1060	1060	1060	1050	1060	1000	1000	1010
24	1060	1040	1050	1070	1050	1060	1070	1050	1050	1010	1000	1010
25	1050	1040	1050	1070	1050	1060	1060	1050	1050	1010	994	1000
26	1050	1040	1050	1060	1050	1050	1050	1040	1050	1020	994	1000
27	1050	1040	1050	1130	1050	1080	1050	1040	1050	1000	983	996
28	1230	1040	1130	1100	1070	1080	1060	1040	1050	1000	993	998
29	---	---	---	1080	1060	1070	1050	1040	1050	1000	992	995
30	---	---	---	1070	1060	1060	1050	1040	1040	1000	982	993
31	---	---	---	1070	1060	1070	---	---	---	1000	991	993
MONTH	1230	992	1050	1130	923	1050	1070	1040	1050	1050	955	1020

VIRGIN RIVER BASIN

63

09416000 MUDDY RIVER NEAR MOAPA, NV--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	1050	991	1020	1000	981	992	998	967	987	982	970	979
2	1010	990	996	1000	982	992	998	988	990	985	972	977
3	1000	990	993	1000	982	989	998	978	987	988	967	977
4	999	989	991	1000	982	995	998	978	985	991	979	982
5	989	979	983	1000	982	995	988	958	981	991	972	983
6	998	979	988	1000	982	994	989	968	982	1080	614	965
7	1010	988	998	1020	992	999	989	969	980	805	496	657
8	1010	988	999	1000	993	1000	989	969	978	938	617	692
9	997	987	993	1000	993	996	989	969	978	1010	948	983
10	997	987	993	1000	993	996	1260	959	987	1020	990	1000
11	996	986	991	1000	983	993	1440	639	802	1000	992	1000
12	996	986	991	1000	993	998	980	620	827	1000	985	997
13	995	985	990	1000	994	999	980	970	977	996	985	993
14	995	985	987	1000	994	999	982	960	976	998	977	992
15	995	974	985	1000	994	995	982	964	973	1000	979	990
16	994	974	980	1000	984	995	979	957	971	1000	970	992
17	974	963	971	1000	984	995	979	961	970	993	973	989
18	973	963	965	1020	995	1010	984	963	972	995	984	992
19	973	952	961	1010	995	1000	988	957	972	997	966	987
20	962	952	956	1000	995	999	982	960	975	999	977	993
21	962	941	950	1000	995	998	985	973	981	1010	960	990
22	951	941	948	1010	995	999	989	976	981	1010	991	1000
23	961	940	946	1010	996	998	992	971	983	1000	992	1000
24	1000	940	963	1010	986	996	992	973	982	1000	994	999
25	1000	980	994	1010	986	997	989	967	982	1010	995	998
26	1000	980	993	1010	986	995	991	672	869	999	987	995
27	1000	980	989	1010	986	994	985	653	859	1000	989	997
28	1000	981	990	997	987	992	989	976	983	1000	991	994
29	1000	981	995	997	977	991	992	979	986	1000	992	996
30	1000	981	993	997	977	992	985	964	978	995	975	987
31	---	---	---	997	987	992	998	975	984	---	---	---
MONTH	1050	940	983	1020	977	996	1440	620	962	1080	496	969

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	30.5	28.5	29.0	28.0	27.0	27.5	---	---	---	26.0	24.0	25.0
2	30.5	28.0	29.0	27.0	26.0	26.5	---	---	---	26.0	24.5	25.0
3	30.0	28.0	29.0	27.0	25.0	26.0	---	---	---	26.0	25.0	25.5
4	30.5	27.5	29.0	28.0	26.0	26.5	---	---	---	26.0	25.0	25.5
5	30.5	27.5	28.5	27.5	25.5	26.5	---	---	---	27.0	25.5	26.0
6	30.0	28.0	29.0	26.5	25.5	26.0	---	---	---	26.5	25.0	25.5
7	29.5	27.5	28.5	26.5	25.0	25.5	---	---	---	27.0	26.0	26.5
8	28.5	27.0	27.5	27.0	25.0	26.0	---	---	---	27.0	26.0	26.5
9	29.5	27.0	28.0	28.0	25.0	26.5	---	---	---	27.0	25.5	26.0
10	29.5	26.5	27.5	28.0	26.0	27.0	---	---	---	27.0	25.5	26.0
11	29.5	26.0	27.5	28.0	26.0	27.0	---	---	---	27.0	25.5	26.0
12	29.5	26.0	28.0	28.0	26.0	27.0	---	---	---	27.0	25.5	26.0
13	29.5	26.0	27.5	28.0	25.5	26.5	---	---	---	27.0	25.5	26.0
14	29.5	26.5	28.0	27.5	25.5	26.5	---	---	---	27.0	25.5	26.0
15	29.5	26.0	28.0	27.5	25.5	26.5	---	---	---	27.0	25.5	26.0
16	29.5	27.0	28.0	27.5	25.5	26.5	---	---	---	26.0	25.5	26.0
17	29.0	26.5	28.0	27.5	26.0	26.5	---	---	---	26.5	25.5	26.0
18	28.5	27.0	27.5	27.5	26.0	26.5	---	---	---	27.5	25.5	26.5
19	28.0	26.5	27.5	27.0	26.0	26.5	---	---	---	27.0	25.5	26.0
20	28.0	26.5	27.0	26.5	25.5	26.0	25.5	24.5	25.0	26.5	25.0	25.5
21	28.5	26.5	27.0	26.5	24.5	25.5	25.0	24.0	24.5	26.5	25.0	25.5
22	28.5	25.5	27.0	26.5	25.0	25.5	25.0	23.0	24.0	26.5	25.0	25.5
23	29.0	26.5	27.5	26.5	25.0	25.5	25.0	23.0	24.5	26.5	24.5	25.5
24	29.5	26.5	28.0	27.0	24.5	25.5	25.5	24.0	24.5	26.5	24.5	25.5
25	29.0	26.0	27.5	27.0	25.0	26.0	25.5	24.5	25.0	26.5	24.5	25.0
26	29.0	25.5	27.5	25.5	24.5	25.0	25.5	24.5	25.0	27.0	24.5	25.5
27	29.0	26.5	27.5	---	---	---	25.5	24.5	25.0	27.0	25.0	25.5
28	29.0	26.0	27.5	---	---	---	25.5	24.5	25.0	26.5	25.0	25.5
29	29.0	26.5	27.5	---	---	---	25.5	24.5	25.0	26.0	24.5	25.0
30	29.0	26.0	27.5	---	---	---	25.5	23.5	24.5	26.5	24.5	25.0
31	28.5	27.0	27.5	---	---	---	25.5	24.0	24.5	26.5	24.5	25.5
MONTH	30.5	25.5	27.9	---	---	---	---	---	---	27.5	24.0	25.7

VIRGIN RIVER BASIN

09416000 MUDDY RIVER NEAR MOAPA, NV--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	27.0	25.0	25.5	26.5	25.5	26.0	28.0	26.0	26.5	29.0	25.5	27.0
2	27.5	25.0	26.0	28.0	25.5	26.5	29.0	25.5	27.0	27.5	25.0	26.5
3	27.5	25.5	26.5	28.5	25.5	27.0	29.0	25.5	27.0	29.0	26.0	27.0
4	28.0	25.5	26.5	28.0	26.0	27.0	29.5	25.0	27.5	29.5	26.0	27.5
5	27.5	25.5	26.5	27.5	25.5	26.5	29.0	25.5	27.5	29.5	26.5	28.0
6	28.0	26.0	26.5	28.0	25.5	26.5	29.0	25.5	27.0	30.0	26.5	28.0
7	27.5	26.0	26.5	27.5	25.5	26.5	29.0	25.5	27.0	30.5	27.0	28.5
8	27.5	25.5	26.5	28.0	25.0	26.5	28.5	25.5	26.5	29.0	26.5	28.0
9	27.5	25.5	26.5	28.0	26.0	26.5	29.0	25.5	27.0	28.0	25.0	26.5
10	28.0	25.5	26.5	27.5	26.0	27.0	27.5	23.0	26.0	29.0	25.5	27.0
11	28.0	25.5	26.5	27.0	25.5	26.5	27.5	24.5	25.5	28.5	26.5	27.5
12	28.0	26.0	26.5	28.0	25.5	26.5	28.0	24.5	26.0	30.0	26.0	27.5
13	27.5	25.5	26.5	27.5	25.5	26.0	28.5	25.0	26.5	29.0	26.5	27.5
14	28.0	26.0	26.5	27.5	26.0	26.5	29.0	25.0	26.5	28.5	26.5	27.5
15	27.5	26.0	26.5	26.5	25.5	26.0	27.5	25.5	26.5	30.0	26.5	28.0
16	27.5	26.0	26.5	28.0	25.0	26.0	28.0	25.5	26.0	30.5	26.5	28.0
17	27.5	25.5	26.0	28.0	25.5	26.5	29.0	25.0	26.5	28.5	26.0	27.5
18	27.0	25.0	26.0	28.5	25.5	26.5	29.0	25.0	26.5	29.0	25.5	27.0
19	27.5	25.0	26.0	26.0	25.5	26.0	29.0	25.5	27.0	29.5	26.5	27.5
20	28.0	25.0	26.0	26.5	25.0	25.5	29.0	25.5	26.5	30.0	26.0	27.5
21	28.0	25.5	26.5	27.0	25.0	26.0	29.5	25.5	27.0	29.5	26.0	27.5
22	27.0	25.5	26.5	28.0	25.5	26.5	29.5	25.5	27.0	29.5	26.5	28.0
23	28.0	25.5	26.5	27.5	25.5	26.5	29.5	26.0	27.5	30.5	27.0	28.5
24	28.0	26.0	26.5	28.5	25.5	26.5	29.5	25.5	27.0	31.0	27.0	28.5
25	28.0	25.5	26.5	27.0	25.5	26.0	28.5	26.0	27.0	30.5	27.0	28.5
26	28.0	25.5	26.5	27.0	25.5	26.0	29.0	25.0	27.0	30.5	27.0	28.5
27	27.5	25.0	26.0	26.0	25.0	25.5	28.5	25.5	27.0	30.5	27.0	28.0
28	27.0	23.5	26.0	28.0	25.0	26.5	29.0	26.0	27.0	30.5	27.0	28.5
29	---	---	---	28.5	25.5	26.5	29.5	25.5	27.0	30.0	26.5	28.0
30	---	---	---	28.5	25.5	26.5	29.5	25.5	27.5	29.5	26.0	27.5
31	---	---	---	29.0	25.5	27.0	---	---	---	28.0	26.5	27.0
MONTH	28.0	23.5	26.3	29.0	25.0	26.4	29.5	23.0	26.8	31.0	25.0	27.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	30.0	26.5	28.0	32.0	27.5	29.5	32.5	30.0	31.0	31.0	28.0	29.0
2	29.5	27.5	28.5	32.5	27.5	29.5	32.0	29.5	30.5	31.0	28.0	29.0
3	31.0	27.5	29.0	32.5	28.5	30.0	32.5	29.5	30.5	31.0	28.0	29.0
4	31.0	27.5	29.0	32.5	28.5	30.0	32.5	29.5	30.5	30.5	28.0	29.0
5	30.5	28.0	29.0	32.5	29.0	30.5	32.0	28.5	30.0	29.5	28.0	28.5
6	31.0	27.5	29.0	31.5	29.0	30.0	32.0	28.5	30.0	28.5	20.5	27.0
7	31.5	27.5	29.0	32.0	29.0	30.0	32.0	28.5	30.0	26.5	20.5	24.5
8	31.5	27.0	29.0	32.0	29.0	30.0	33.0	28.5	30.0	28.0	23.5	25.5
9	31.5	27.5	29.0	32.0	28.5	30.0	32.5	28.5	30.0	29.5	27.5	28.5
10	32.0	27.5	29.5	32.0	28.5	30.0	32.0	28.0	30.5	29.5	27.5	28.0
11	31.5	28.0	29.5	32.0	28.0	29.5	28.5	26.5	27.5	30.0	26.5	28.0
12	31.0	28.0	29.0	32.5	28.0	30.0	32.5	27.0	29.5	30.0	27.0	28.5
13	30.5	28.0	29.0	32.5	28.5	30.0	33.0	29.5	31.0	30.5	27.5	28.5
14	31.0	28.0	29.0	32.0	29.0	30.0	32.5	30.5	31.0	30.5	27.5	28.5
15	31.0	27.5	29.0	32.0	28.5	30.0	32.0	29.5	30.5	30.5	27.5	28.5
16	31.0	27.5	29.0	32.0	28.5	30.0	32.5	29.0	30.5	30.5	27.5	28.5
17	31.0	27.0	29.0	31.5	28.5	30.0	32.5	29.0	30.5	31.0	27.5	29.0
18	30.0	28.0	29.0	32.0	29.0	30.0	32.5	29.0	30.5	31.0	28.0	29.0
19	30.0	27.5	28.5	31.5	28.5	30.0	32.0	28.5	30.0	31.0	28.0	29.5
20	31.0	27.0	28.5	31.5	28.0	29.5	32.0	28.5	30.0	31.5	28.5	29.5
21	30.5	26.5	28.5	32.0	28.0	29.5	32.0	28.5	30.0	31.5	29.0	30.0
22	31.0	27.0	28.5	32.0	28.5	30.0	32.0	28.5	30.0	31.5	29.0	30.0
23	31.0	27.0	28.5	32.0	28.0	30.0	32.0	28.5	30.0	31.5	28.5	30.0
24	30.0	27.5	28.5	32.0	28.0	30.0	32.0	29.0	30.0	31.5	28.5	29.5
25	30.0	27.0	28.5	32.5	28.5	30.0	32.0	29.0	30.0	31.5	28.5	29.5
26	30.0	27.0	28.0	32.5	28.5	30.0	31.0	26.5	29.0	31.5	28.5	30.0
27	28.0	27.0	27.5	32.5	28.5	30.0	30.5	26.0	28.0	31.0	29.5	30.0
28	30.0	26.5	28.0	33.0	28.5	30.5	30.5	27.5	28.5	31.5	29.5	30.5
29	30.5	27.0	28.5	33.0	29.5	31.0	30.5	27.0	28.5	32.0	29.5	30.5
30	31.5	27.0	29.0	32.5	29.5	31.0	29.5	27.5	28.5	32.0	29.5	30.5
31	---	---	---	32.5	30.0	31.0	29.0	28.0	28.5	---	---	---
MONTH	32.0	26.5	28.7	33.0	27.5	30.0	33.0	26.0	29.8	32.0	20.5	28.9

VIRGIN RIVER BASIN

65

09418500 MEADOW VALLEY WASH NEAR CALIENTE, NV

LOCATION.--Lat 37°33'20", long 114°33'50", in SW 1/4 NE 1/4 sec.35, T.4 S., R.66 E., Lincoln County, Hydrologic Unit 15010013, on right bank, 0.5 mi east of Etna, 4.5 mi southwest of Caliente, and 6 mi downstream from Clover Creek.

DRAINAGE AREA.--1,670 mi².

PERIOD OF RECORD.--January 1951 to September 1960, November 1964 to September 1983, and October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,200 ft above National Geodetic Vertical Datum of 1929, by barometer. Prior to June 16, 1955, at site 1.8 mi downstream at different datum.

REMARKS.--Records fair. Several diversions for irrigation above station.

AVERAGE DISCHARGE.--34 years (1952-60, 1966-83, 1985-91), 10.8 ft³/s, 7,820 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 2,400 ft³/s, Mar. 5, 1978, gage height, 9.41 ft, from floodmarks; no flow July 26-28, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 1	1830	*25	*6.19				
Minimum daily, 0.81 ft ³ /s, July 29-31.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.6	3.0	4.0	5.9	16	14	12	8.7	2.2	.84	e1.1
2	1.6	1.8	3.1	4.1	6.1	23	13	11	5.5	2.1	.86	e1.2
3	1.4	1.7	3.2	4.1	6.4	20	12	11	7.6	2.1	e.88	e1.2
4	1.4	1.7	3.3	4.0	7.1	19	11	11	4.5	2.1	e.88	e1.2
5	1.4	1.8	3.4	3.8	8.1	18	11	10	4.6	2.0	e.90	e1.2
6	1.3	1.6	3.5	3.8	8.3	17	11	10	3.9	2.0	e.90	e1.2
7	1.4	1.5	3.5	3.2	8.5	16	10	11	3.6	2.0	e.90	e1.2
8	1.5	1.7	3.5	3.2	8.6	17	9.8	10	3.3	2.0	.94	e1.2
9	1.4	1.7	3.4	3.7	8.5	15	11	9.5	3.0	1.9	e.94	e1.3
10	1.5	1.7	3.3	4.3	8.5	15	11	9.7	2.8	2.1	e.94	e1.3
11	1.5	1.6	3.5	4.5	8.5	14	11	9.5	2.4	2.1	e.96	e1.4
12	1.4	1.7	4.1	4.3	8.3	14	11	8.1	2.1	2.0	e.96	e1.4
13	1.5	1.8	4.8	4.8	8.2	14	11	7.0	2.0	2.0	e.96	e1.5
14	1.3	2.0	5.0	5.8	8.0	15	11	6.8	2.0	1.8	e.96	e1.5
15	1.4	2.1	4.5	6.0	8.1	16	11	7.2	2.0	1.6	e.98	e1.5
16	1.4	2.2	4.5	6.3	8.1	18	11	7.1	2.1	1.5	e.98	e1.6
17	1.4	2.3	4.1	6.1	8.2	17	11	6.2	2.2	1.3	e.98	e1.6
18	1.6	2.3	4.3	6.6	8.0	16	11	5.6	2.3	1.1	e.98	e1.5
19	1.5	2.2	4.3	7.2	7.8	16	11	5.4	2.3	.96	e1.0	e1.5
20	1.4	2.3	4.2	6.6	7.5	15	11	5.2	2.3	.91	e1.0	e1.4
21	1.4	2.4	3.6	6.4	7.2	13	11	5.0	2.3	.92	e1.0	e1.4
22	1.5	2.4	3.6	5.7	6.9	13	11	5.1	2.3	.91	e1.0	e1.3
23	1.5	2.4	3.5	5.3	6.8	13	12	5.1	2.3	.89	e1.0	e1.3
24	1.5	2.5	3.8	5.5	6.5	13	12	4.7	2.2	.89	e1.0	e1.2
25	1.6	2.5	3.8	5.9	6.5	13	13	4.5	2.1	.89	e1.0	e1.1
26	1.6	2.8	3.8	6.1	6.5	13	14	4.2	2.1	.89	e1.0	e1.1
27	1.5	2.6	3.9	6.2	6.3	15	14	3.8	2.1	.85	e1.0	1.0
28	1.5	3.0	3.9	5.8	6.7	14	14	3.8	2.2	.82	e1.1	.97
29	1.6	3.1	3.9	5.9	---	14	13	3.6	2.2	.81	e1.1	.95
30	1.5	3.1	3.9	5.9	---	14	12	3.5	2.2	.81	e1.1	.91
31	1.6	---	4.0	5.9	---	13	---	7.4	---	.81	e1.1	---
TOTAL	45.8	64.1	118.2	161.0	210.1	479	349.8	224.0	91.2	45.26	30.14	38.23
MEAN	1.48	2.14	3.81	5.19	7.50	15.5	11.7	7.23	3.04	1.46	.97	1.27
MAX	1.7	3.1	5.0	7.2	8.6	23	14	12	8.7	2.2	1.1	1.6
MIN	1.3	1.5	3.0	3.2	5.9	13	9.8	3.5	2.0	.81	.84	.91
AC-FT	91	127	234	319	417	950	694	444	181	90	60	76

CAL YR 1990 TOTAL 962.80 MEAN 2.64 MAX 32 MIN .72 AC-FT 1910
WTR YR 1991 TOTAL 1856.83 MEAN 5.09 MAX 23 MIN .81 AC-FT 3680

e Estimated

VIRGIN RIVER BASIN

09418700 MEADOW VALLEY WASH NEAR ROX, NV

LOCATION.--Lat 36°52'11", long 114°26'33", NW 1/4 NW 1/4 sec.25, T.12 S., R.65 E., Lincoln County, Hydrologic Unit 15010013, on right bank, downstream side of service road wingwall, 0.5 mi south of Rox, and 4.1 mi north of Farrier.

DRAINAGE AREA.--2,384 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,855 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 550 ft³/s, Sept. 24, 1990, gage height, 4.97 ft, from rating curve extended above 10 ft³/s on basis of slope-conveyance measurement; minimum daily, 0.14 ft³/s, Aug. 9, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 145 ft³/s, July 7, gage height, 3.73 ft; minimum daily, 0.39 ft³/s, July 6, 12-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.53	.86	1.1	1.9	1.6	2.6	2.1	2.1	2.8	.46	.48	.69
2	.56	.89	1.1	2.0	1.7	2.0	2.1	2.1	2.1	.44	.50	.66
3	.56	.87	1.1	2.1	1.6	1.8	2.2	2.2	1.9	.42	.49	.66
4	.57	.86	1.1	2.6	1.5	1.9	2.1	2.1	1.7	.41	.49	.67
5	.58	.89	1.2	2.2	1.5	1.8	2.2	2.0	1.4	.40	.48	.67
6	.59	.90	1.1	2.1	1.4	1.7	2.2	2.0	1.3	.39	.48	.74
7	.60	.90	1.1	2.1	1.4	1.7	2.3	1.9	1.2	.44	.48	3.4
8	.59	.94	1.1	2.1	1.4	1.8	2.1	1.9	1.2	.50	.49	1.2
9	.62	.94	1.1	2.3	1.5	1.9	2.1	1.7	1.1	.41	.51	.79
10	.63	.95	1.2	2.3	1.4	1.9	2.1	1.8	1.1	.41	.50	.76
11	.63	.94	1.2	2.3	1.4	1.9	2.2	1.8	1.0	.41	.55	.79
12	.62	.98	1.3	2.4	1.5	1.9	2.3	1.7	.93	.39	.58	.80
13	.65	1.0	1.2	2.4	1.4	2.1	2.2	1.7	.87	.39	.58	.74
14	.66	1.0	1.2	2.5	1.4	2.7	2.0	1.7	.82	.39	.59	.73
15	.68	1.0	1.2	2.6	1.5	2.7	1.9	1.8	.81	.39	.56	.70
16	.69	1.0	1.2	2.6	1.5	2.3	1.9	1.9	.87	.39	.55	.69
17	.70	1.1	1.1	2.2	1.5	2.0	1.9	1.8	.82	.40	.56	.66
18	.72	1.1	1.2	1.8	1.5	1.9	2.0	1.8	.80	.40	.59	.63
19	.77	1.0	1.3	1.8	1.4	2.2	1.9	1.8	.77	.40	.58	.61
20	.77	1.0	1.4	1.7	1.5	2.4	2.0	1.9	.72	.44	.57	.62
21	.77	1.0	1.5	1.7	1.5	2.7	2.0	1.9	.71	.44	.58	.63
22	.80	1.0	1.5	1.7	1.5	2.4	2.0	1.9	.67	.45	.60	.64
23	.82	1.1	1.4	1.7	1.5	2.0	2.1	1.9	.64	.45	.59	.62
24	.82	1.1	1.5	1.8	1.5	1.9	2.1	1.9	.61	.46	.58	.60
25	.81	1.1	1.5	1.8	1.4	1.9	2.1	1.9	.59	.47	.56	.58
26	.86	1.1	1.5	1.8	1.5	2.1	2.0	1.7	.58	.47	.58	.60
27	.86	1.1	1.5	1.7	1.6	2.6	2.1	1.6	.61	.47	.59	.56
28	.86	1.1	1.6	1.6	8.6	2.5	2.0	1.6	.60	.47	.57	.56
29	.85	1.1	1.7	1.5	---	2.2	2.1	1.5	.51	.45	.59	.56
30	.86	1.1	1.8	1.5	---	2.0	2.0	1.5	.48	.45	.61	.55
31	.86	---	1.8	1.5	---	2.1	---	2.4	---	.47	.70	---
TOTAL	21.89	29.92	40.8	62.3	48.7	65.6	62.3	57.5	30.21	26.89	17.16	23.11
MEAN	.71	1.00	1.32	2.01	1.74	2.12	2.08	1.85	1.01	.87	.55	.77
MAX	.86	1.1	1.8	2.6	8.6	2.7	2.3	2.4	2.8	14	.70	3.4
MIN	.53	.86	1.1	1.5	1.4	1.7	1.9	1.5	.48	.39	.48	.55
AC-FT	43	59	81	124	97	130	124	114	60	53	34	46

CAL YR 1990 TOTAL 454.94 MEAN 1.25 MAX 32 MIN .20 AC-FT 902
WTR YR 1991 TOTAL 486.38 MEAN 1.33 MAX 14 MIN .39 AC-FT 965

VIRGIN RIVER BASIN

67

09418700 MEADOW VALLEY WASH NEAR ROX, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1988 to current year.

WATER TEMPERATURE: June to September 1988, January 1990 to current year.

INSTRUMENTATION.--Specific conductance and water-temperature recorder since June 1988, hourly.

REMARKS.--Records represent water temperature at probe within 0.5°C. Interruptions in record due to instrument malfunction. Temperature record not published prior to Jan. 9, 1990 due to poor location of probe.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 7,460 microsiemens, Jan. 18, 1990; minimum, 368 microsiemens, Sept. 23, 1990.

WATER TEMPERATURE: Maximum, 30.0°C, July 13, 18, 19, and 21, 1990; minimum, 3.0°C, Dec. 23, 1990, but may have been lower during periods of missing record.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 5,920 microsiemens, Mar. 1; minimum, 462 microsiemens, July 7.

WATER TEMPERATURE: Maximum, 29.0°C, July 4; minimum, 3.0°C, Dec. 23, but may have been lower during period of missing record.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
OCT											
02...	1000	0.55	1360	21.0	18.5	--	--	--	--	--	--
NOV											
14...	1030	1.0	1600	18.0	12.5	490	100	58	170	3	11
DEC											
18...	1015	1.2	1820	4.0	8.5	--	--	--	--	--	--
JAN											
30...	1045	1.4	1690	5.0	7.5	480	100	56	170	3	11
FEB											
27...	1230	1.5	1590	18.0	13.5	--	--	--	--	--	--
28...	1030	2.5	1660	12.5	14.0	460	95	55	170	3	13
MAR											
01...	1500	2.8	3210	--	14.0	800	140	110	430	7	36
14...	1100	3.1	1680	8.5	13.0	--	--	--	--	--	--
MAY											
13...	1100	1.8	1450	26.0	17.0	440	93	50	160	3	11
JUN											
25...	1415	0.60	1350	29.5	27.0	400	86	45	140	3	11
AUG											
13...	1100	0.58	1310	32.0	23.0	--	--	--	--	--	--

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT										
02...	--	--	--	--	912	--	--	185	0.27	--
NOV										
14...	450	92	1.8	47	1130	1100	1.54	81	0.22	--
DEC										
18...	--	--	--	--	1220	--	--	26	0.09	--
JAN										
30...	450	110	1.8	45	1130	1110	1.54	49	0.19	--
FEB										
27...	--	--	--	--	1110	--	--	83	0.34	--
28...	490	110	2.0	44	1160	1160	1.58	92	0.62	--
MAR										
01...	1200	250	1.9	39	2330	2400	3.17	109	0.82	--
14...	--	--	--	--	1180	--	--	120	1.0	--
MAY										
13...	380	100	2.1	42	993	1010	1.35	36	0.17	--
JUN										
25...	370	91	1.5	40	916	937	1.25	11	0.02	29
AUG										
13...	--	--	--	--	892	--	--	15	0.02	98

VIRGIN RIVER BASIN

09418700 MEADOW VALLEY WASH NEAR ROX, NV--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	1410	1360	1370	1320	1310	1310	1810	1790	1800	---	---	---
2	1360	1340	1350	1340	1310	1330	1810	1770	1800	---	---	---
3	1350	1330	1340	1360	1320	1340	1810	1780	1800	---	---	---
4	1350	1310	1330	1370	1350	1360	1800	1780	1790	---	---	---
5	1340	1310	1330	1380	1350	1370	1830	1800	1810	---	---	---
6	1340	1300	1320	1430	1380	1400	1840	1790	1810	---	---	---
7	1330	1300	1310	1440	1420	1430	---	---	---	---	---	---
8	1330	1290	1310	1460	1430	1440	---	---	---	---	---	---
9	1310	1290	1300	1500	1450	1470	---	---	---	---	---	---
10	1310	1280	1300	1530	1490	1500	---	---	---	---	---	---
11	1310	1290	1300	1530	1500	1520	---	---	---	---	---	---
12	1300	1290	1300	1550	1490	1510	---	---	---	---	---	---
13	1300	1290	1300	1600	1530	1550	---	---	---	---	---	---
14	1300	1280	1300	1640	1590	1610	---	---	---	---	---	---
15	1300	1280	1290	1640	1610	1620	---	---	---	---	---	---
16	1310	1290	1300	1640	1620	1630	---	---	---	---	---	---
17	1310	1290	1300	1670	1610	1640	---	---	---	---	---	---
18	1310	1290	1300	1680	1650	1660	---	---	---	---	---	---
19	1310	1290	1300	1700	1640	1660	1810	1780	1800	---	---	---
20	1310	1290	1300	1730	1670	1700	1830	1800	1810	---	---	---
21	1310	1300	1300	1740	1720	1730	1810	1750	1780	---	---	---
22	1310	1290	1300	1720	1690	1710	1770	1730	1750	---	---	---
23	1300	1280	1290	1750	1680	1710	1740	1690	1710	---	---	---
24	1300	1280	1300	1760	1740	1750	1680	1640	1660	---	---	---
25	1300	1280	1300	1760	1740	1750	1680	1650	1670	---	---	---
26	1300	1290	1300	1810	1750	1770	1690	1570	1670	---	---	---
27	1300	1280	1300	1840	1800	1820	1720	1690	1710	---	---	---
28	1300	1290	1300	1800	1740	1770	1740	1720	1730	---	---	---
29	1300	1280	1290	1780	1750	1760	1730	1700	1710	---	---	---
30	1300	1280	1290	1810	1780	1790	---	---	---	---	---	---
31	1310	1280	1300	---	---	---	---	---	---	---	---	---
MONTH	1410	1280	1310	1840	1310	1590	----	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	5920	2950	3940	1720	1650	1680	1490	1440	1470
2	---	---	---	3310	2230	2780	1720	1620	1680	1500	1450	1480
3	---	---	---	2210	1930	2060	1700	1620	1650	1490	1450	1470
4	---	---	---	1920	1840	1880	1680	1610	1650	1500	1460	1490
5	---	---	---	1840	1780	1820	1670	1620	1640	1510	1460	1490
6	---	---	---	1790	1730	1760	1670	1610	1640	1480	1440	1470
7	---	---	---	1730	1700	1720	1660	1600	1620	1480	1260	1440
8	---	---	---	1700	1680	1690	1590	1550	1570	1480	1440	1460
9	---	---	---	1690	1670	1680	1600	1570	1590	1480	1440	1460
10	---	---	---	1680	1660	1670	1600	1570	1590	1460	1430	1440
11	---	---	---	1670	1650	1660	1610	1560	1590	1460	1440	1440
12	---	---	---	1660	1620	1640	1610	1520	1570	1460	1430	1440
13	---	---	---	1640	1600	1630	1570	1510	1550	1450	1420	1440
14	1650	1640	1650	2750	1600	1980	1600	1530	1550	1450	1420	1440
15	1650	1620	1640	2540	1880	2090	1590	1540	1560	1440	1420	1430
16	1650	1620	1630	2410	1870	2140	1600	1530	1570	1450	1420	1440
17	1630	1620	1630	1860	1740	1800	1590	1540	1560	1450	1420	1430
18	1630	1600	1620	1740	1680	1710	1580	1490	1540	1420	1410	1420
19	1620	1580	1600	1780	1640	1690	1560	1490	1520	1410	1380	1400
20	1600	1580	1600	2120	1760	1940	1570	1510	1540	1420	1390	1410
21	1610	1580	1600	2510	1830	2140	1570	1500	1530	1410	1380	1400
22	1650	1610	1630	2050	1830	1930	1550	1470	1520	1410	1380	1400
23	1640	1620	1630	1880	1800	1830	1560	1500	1530	1410	1390	1400
24	1640	1620	1620	1850	1750	1790	1540	1470	1510	1420	1190	1360
25	1630	1600	1610	1800	1730	1750	1520	1490	1510	1410	1360	1380
26	1610	1590	1600	1770	1700	1730	1520	1490	1510	1410	1390	1400
27	1620	1590	1600	2140	1620	1750	1520	1480	1500	1400	1380	1390
28	5890	557	2150	2160	1770	1900	1520	1460	1480	1400	1370	1380
29	---	---	---	1770	1710	1740	1500	1460	1480	1400	1330	1380
30	---	---	---	1780	1570	1710	1510	1460	1490	1410	1380	1390
31	---	---	---	1730	1600	1660	---	---	---	1430	1370	1390
MONTH	---	---	---	5920	1570	1910	1720	1460	1560	1510	1190	1430

VIRGIN RIVER BASIN

69

09418700 MEADOW VALLEY WASH NEAR ROX, NV---Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	2260	1460	1780	1350	1340	1340	1330	1290	1310	1330	1300	1320
2	2450	1500	1990	1360	1310	1350	1320	1300	1310	1320	1270	1300
3	1640	1570	1600	1360	1340	1350	1330	1300	1310	1310	1280	1300
4	1570	1490	1540	1360	1340	1350	1320	1300	1310	1300	1240	1290
5	1480	1400	1450	1360	1350	1350	1330	1300	1310	1310	1280	1300
6	1440	1410	1420	1360	1320	1350	1320	1260	1310	1360	1260	1300
7	1420	1380	1400	1810	462	882	1320	1280	1300	1390	---	1240
8	1410	1370	1390	1010	583	811	1320	1280	1300	1020	605	803
9	1400	1370	1380	1260	1050	1160	1310	1250	1290	1210	1040	1130
10	1390	1360	1380	1360	1240	1320	---	---	1310	1290	1210	1250
11	1390	1370	1380	1360	1300	1340	1330	1310	1320	1330	1300	1310
12	1380	1360	1370	1360	1330	1350	1320	1290	1310	1330	1310	1320
13	1390	1360	1370	1360	1310	1290	1320	1260	1300	1320	1290	1300
14	1390	1360	1370	1350	1330	1340	1320	1250	1300	1310	1280	1290
15	1380	1350	1370	1360	1320	1340	1320	1290	1300	1300	1270	1290
16	1370	1360	1360	1340	1300	1330	1320	1240	1290	1300	1240	1280
17	1370	1100	1340	1340	1260	1320	1310	1280	1300	1290	1230	1280
18	1370	1350	1360	1340	1300	1320	1310	1280	1300	1290	1270	1280
19	1370	1310	1350	1330	1310	1320	1310	1270	1300	1290	1250	1280
20	1370	1350	1360	1330	1300	1320	1310	1260	1300	1290	1250	1270
21	1360	1340	1350	1330	1290	1310	1310	1270	1300	1290	1260	1280
22	1360	1330	1350	1330	1290	1320	1310	1260	1300	1290	1270	1280
23	1360	1320	1350	1330	1300	1320	1310	1290	1300	1290	1260	1280
24	1360	1320	1350	1330	1270	1310	1310	1290	1300	1290	1260	1280
25	1360	1300	1350	1330	1290	1310	1320	1290	1310	1290	1230	1270
26	1360	1330	1350	1330	1290	1310	1320	1300	1310	1280	1260	1270
27	1350	1340	1340	1320	1280	1310	1330	1260	1300	1280	1260	1270
28	1350	1320	1340	1320	1300	1310	1320	1290	1310	1280	1260	1270
29	1360	1340	1350	1320	1270	1300	1310	1280	1300	1290	1260	1270
30	1360	1340	1350	1330	1250	1310	1300	1280	1290	1290	1250	1270
31	---	---	---	1330	1280	1320	1360	1300	1320	---	---	---
MONTH	2450	1100	1410	1810	462	1290	---	---	1300	1390	---	1260

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	22.0	18.5	20.0	16.5	14.5	15.5	12.0	8.0	10.0	9.0	5.5	7.0
2	21.5	18.0	19.5	15.0	12.5	14.0	11.5	8.0	9.5	---	---	---
3	21.5	17.5	19.0	14.0	11.5	13.0	12.0	9.0	10.5	---	---	---
4	21.0	16.5	18.5	14.5	11.0	12.5	12.5	9.0	10.5	---	---	---
5	21.0	16.5	18.5	14.0	10.5	12.5	12.0	9.0	10.5	---	---	---
6	21.0	17.0	18.5	13.5	11.5	12.5	12.5	9.5	11.0	---	---	---
7	20.0	16.5	18.0	13.5	10.5	12.0	12.0	9.0	10.5	---	---	---
8	18.5	15.0	16.0	14.0	10.5	12.0	---	---	---	---	---	---
9	18.5	14.0	16.0	16.0	12.0	13.5	---	---	---	---	---	---
10	18.0	13.0	15.5	16.0	12.0	14.0	---	---	---	---	---	---
11	18.0	13.5	15.5	15.5	11.0	13.5	---	---	---	---	---	---
12	18.5	14.0	16.0	16.0	11.5	13.5	---	---	---	---	---	---
13	18.0	13.5	15.5	15.5	11.5	13.5	---	---	---	---	---	---
14	18.5	13.5	15.5	15.5	11.5	13.5	---	---	---	---	---	---
15	18.5	14.0	16.0	15.5	12.0	14.0	---	---	---	---	---	---
16	19.0	14.5	16.5	16.0	13.5	15.0	---	---	---	---	---	---
17	18.5	14.5	16.5	16.5	13.5	14.5	---	---	---	---	---	---
18	16.5	14.5	15.5	16.0	13.0	14.5	---	---	---	---	---	---
19	16.0	14.0	15.0	15.0	13.5	14.5	10.0	7.5	9.0	---	---	---
20	15.5	12.0	13.5	15.5	13.0	14.5	10.0	8.0	9.5	---	---	---
21	16.0	12.0	14.0	14.0	11.0	12.5	8.5	6.5	7.5	---	---	---
22	16.0	11.5	13.5	13.5	10.0	11.5	7.5	4.5	5.5	---	---	---
23	16.5	12.0	14.0	13.5	10.0	11.5	6.5	3.0	4.5	---	---	---
24	17.5	13.0	15.0	13.5	9.5	11.5	7.5	4.0	5.5	---	---	---
25	18.0	13.5	15.5	13.0	9.0	11.5	8.5	5.0	6.5	---	---	---
26	17.5	13.5	15.5	12.5	10.5	12.0	9.0	6.5	7.5	---	---	---
27	17.5	13.0	15.0	12.0	9.0	10.5	9.5	6.5	8.0	---	---	---
28	17.5	13.0	15.0	11.5	8.0	10.0	9.0	5.5	7.0	---	---	---
29	17.0	13.0	15.0	12.5	9.0	10.5	9.5	5.0	7.5	---	---	---
30	17.0	13.0	15.0	12.0	9.0	10.5	9.0	4.5	6.0	---	---	---
31	17.0	14.5	15.5	---	---	---	7.0	4.0	5.5	---	---	---
MONTH	22.0	11.5	16.1	16.5	8.0	12.8	---	---	---	---	---	---

VIRGIN RIVER BASIN

09418700 MEADOW VALLEY WASH NEAR ROX, NV--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	14.5	12.0	13.0	17.5	13.5	15.0	19.0	13.5	16.0
2	---	---	---	15.5	11.5	13.5	18.5	13.0	15.5	16.5	13.0	15.0
3	---	---	---	16.0	11.5	14.0	20.0	14.0	17.0	18.5	14.0	16.5
4	---	---	---	16.0	13.0	14.5	20.5	15.0	17.5	20.5	13.5	17.0
5	---	---	---	17.0	14.5	15.5	19.5	15.5	17.5	20.5	15.0	18.0
6	---	---	---	16.0	12.5	14.0	19.5	15.0	17.0	21.5	15.0	18.0
7	---	---	---	15.5	11.0	13.0	20.5	15.5	17.5	22.5	16.5	19.5
8	---	---	---	15.5	10.0	13.0	19.5	14.5	17.0	20.5	16.5	19.0
9	---	---	---	15.0	11.0	13.5	20.0	14.0	16.5	20.0	15.5	17.5
10	---	---	---	15.5	12.5	14.0	18.5	13.0	15.5	19.5	14.5	17.0
11	---	---	---	16.0	12.0	13.5	17.0	12.0	14.0	19.5	15.0	17.0
12	---	---	---	15.5	10.5	13.0	17.0	12.0	14.0	20.5	14.5	17.5
13	---	---	---	14.5	10.5	13.0	18.5	12.5	15.0	19.5	15.0	17.5
14	17.0	13.0	15.0	14.0	12.5	13.0	19.0	12.5	15.5	18.5	16.0	17.5
15	16.5	13.5	15.0	12.5	11.0	12.0	18.0	13.5	15.5	21.5	15.0	18.0
16	16.5	14.5	15.5	14.0	10.0	12.0	19.0	14.5	16.0	22.5	16.5	19.5
17	16.0	12.5	14.0	15.0	10.5	13.0	19.5	14.0	16.5	21.0	16.5	18.5
18	15.0	11.0	13.0	16.0	11.0	13.5	20.0	14.0	16.5	20.0	14.5	17.0
19	15.5	11.0	13.0	14.0	12.0	13.0	19.0	14.0	17.0	20.0	14.0	17.5
20	15.5	10.5	13.0	13.0	11.0	12.0	18.5	14.5	16.5	21.0	14.5	18.0
21	15.5	10.5	13.0	13.5	10.5	12.0	20.0	14.0	17.0	20.5	15.5	18.0
22	14.5	11.0	12.5	15.5	11.5	13.5	20.0	14.0	17.0	21.0	16.0	18.5
23	15.5	10.5	13.0	15.5	11.5	13.5	21.0	15.0	18.0	23.5	17.5	20.0
24	16.5	12.0	14.0	16.0	11.5	14.0	20.5	15.0	17.5	23.0	17.5	20.5
25	16.5	12.0	14.0	14.0	12.0	13.0	19.5	15.5	17.0	23.0	18.0	20.5
26	16.5	12.0	14.0	15.0	12.0	13.0	20.0	14.5	17.0	22.5	17.5	20.0
27	14.5	11.0	13.0	13.0	11.0	12.5	19.0	13.5	16.0	22.0	16.5	19.5
28	14.5	11.5	13.0	16.0	10.0	13.0	19.5	13.0	16.0	23.5	18.0	20.5
29	---	---	---	17.0	11.5	14.5	19.0	13.0	16.0	22.0	16.5	19.5
30	---	---	---	17.5	12.0	14.5	20.0	13.5	16.5	21.5	17.0	18.5
31	---	---	---	18.0	12.0	15.0	---	---	---	18.0	16.0	17.0
MONTH	---	---	---	18.0	10.0	13.4	21.0	12.0	16.3	23.5	13.0	18.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	21.5	16.0	18.5	26.5	20.0	23.0	28.5	24.0	26.0	25.5	20.0	22.5
2	21.0	18.0	19.5	28.0	21.5	24.0	28.0	23.0	25.0	26.5	21.5	23.5
3	23.5	18.0	20.5	28.5	22.0	24.5	27.5	23.0	25.0	26.5	22.0	24.0
4	24.0	19.0	21.5	29.0	22.5	25.5	26.5	22.0	24.0	27.0	22.0	24.5
5	23.5	19.0	21.5	28.0	22.0	25.0	26.0	20.0	23.0	24.5	22.5	24.0
6	24.0	19.0	21.5	27.5	23.0	25.0	25.5	20.5	23.0	23.0	22.0	22.5
7	24.5	18.5	21.5	25.5	22.5	24.0	25.5	19.5	22.5	24.5	17.0	22.0
8	24.5	18.5	21.5	27.0	22.5	24.5	26.5	19.0	22.5	22.5	17.0	20.0
9	25.0	18.5	21.5	26.5	22.0	24.0	26.5	19.5	22.5	22.0	19.5	21.0
10	25.5	19.5	22.5	27.0	22.0	24.5	26.0	20.5	23.0	22.0	19.0	20.5
11	25.0	20.0	22.5	26.0	20.5	23.5	24.5	22.5	23.5	---	---	---
12	25.0	19.5	22.0	27.0	20.5	23.5	27.0	22.5	24.5	---	---	---
13	24.5	20.5	22.5	27.5	21.5	24.5	26.0	22.5	24.5	---	---	---
14	24.5	20.0	22.5	26.5	22.0	24.5	27.0	23.5	25.0	---	---	---
15	25.0	19.0	22.0	26.5	21.0	23.5	26.5	22.5	24.5	---	---	---
16	25.0	19.5	22.5	26.0	20.5	23.5	26.5	21.5	24.0	---	---	---
17	24.0	19.0	21.5	26.0	21.0	23.5	26.5	21.5	24.0	---	---	---
18	23.5	20.0	21.5	26.0	21.5	23.5	26.5	22.0	24.0	---	---	---
19	23.0	19.5	21.5	26.0	22.0	23.5	26.5	21.5	24.0	---	---	---
20	23.5	18.0	21.0	25.5	19.5	22.5	26.5	20.5	23.5	---	---	---
21	23.5	17.0	20.0	26.0	19.5	22.5	26.5	21.0	23.5	---	---	---
22	23.5	17.0	20.0	26.5	20.0	23.0	27.0	22.0	24.5	---	---	---
23	23.5	17.5	20.5	26.0	19.5	22.5	28.0	22.5	25.0	---	---	---
24	23.0	17.5	20.0	26.0	19.5	22.5	28.0	23.0	25.5	---	---	---
25	22.5	18.0	20.5	26.0	20.0	23.0	28.0	24.0	25.5	---	---	---
26	21.5	17.0	19.5	26.5	20.0	23.5	27.5	23.5	25.5	---	---	---
27	18.5	17.0	18.0	26.5	20.0	23.0	26.5	23.5	25.0	---	---	---
28	22.0	15.5	18.5	27.5	21.0	24.0	25.0	20.0	22.5	---	---	---
29	23.5	18.5	20.5	28.5	22.0	25.0	25.0	18.5	21.5	---	---	---
30	25.5	18.5	21.5	28.0	24.0	26.0	23.0	19.0	21.0	---	---	---
31	---	---	---	28.5	24.5	26.0	22.5	21.0	21.5	---	---	---
MONTH	25.5	15.5	20.9	29.0	19.5	23.9	28.5	18.5	23.8	---	---	---

VIRGIN RIVER BASIN

71

09419000 MUDDY RIVER NEAR GLENDALE, NV

LOCATION.--Lat 36°38'35", long 114°32'20", in NE 1/4 SW 1/4 sec.7, T.15 S., R.67 E., Clark County, Hydrologic Unit 15010012, on left bank at the Narrows, 150 ft downstream from Weiser Wash, 2 mi southeast of Glendale, 2.4 mi downstream from Meadow Valley Wash, 4.5 mi northwest of Logandale, and 16 mi upstream from Lake Mead.

DRAINAGE AREA.--6,780 mi², approximately, of which about 3,000 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--January 1904 to December 1906 (gage heights only) and April to October 1910 (published as "near Moapa"), July 1913 to February 1914 (published as "near Logan"), February 1950 to September 1983, and October 1984 to current year.

REVISED RECORDS.--WSP 1243: 1906 (M). WSP 1733: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,460 ft above National Geodetic Vertical Datum of 1929, from river-profile map. Jan. 1, 1904, to Dec. 31, 1906, nonrecording gage just upstream at different datum. Apr. 22, 1910, to Feb. 21, 1914, nonrecording gage and rating flume at lower end of the Narrows, 1.2 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, and discharges above 100 ft³/s, which are poor.

AVERAGE DISCHARGE.--40 years (water years 1951-83, 1985-91), 44.0 ft³/s, 31,880 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,400 ft³/s, Aug. 10, 1981, gage height, 27.10 ft, from rating curve extended above 7,400 ft³/s on basis of slope-area measurements of peak flow; minimum, 7.6 ft³/s, Sept. 29, 1964, result of temporary storage upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 30 ft, Mar. 26, 1906 (datum then in use), discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 210 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 7	2230	*1,150	*12.12	No other peak greater than base discharge.			
Minimum daily, 19 ft ³ /s, Aug. 23, 25.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	29	36	e38	36	57	37	39	46	28	24	26
2	33	29	35	e39	37	35	33	48	43	24	22	25
3	26	27	35	e40	37	37	30	58	41	23	25	25
4	26	27	34	e42	37	36	32	58	31	23	23	26
5	24	30	36	e40	37	36	32	58	34	25	24	23
6	26	29	36	e39	38	37	29	56	32	25	25	36
7	25	29	36	e38	37	35	29	71	31	24	25	326
8	26	30	37	e38	37	31	33	71	27	27	25	428
9	26	28	34	e38	36	34	40	59	26	27	24	61
10	26	28	36	e38	36	37	41	44	25	27	24	40
11	26	30	35	e38	36	37	38	52	24	28	39	40
12	25	32	38	e40	34	33	40	49	26	31	57	41
13	29	32	38	e38	37	32	40	52	28	29	28	40
14	28	36	38	e38	41	33	41	49	28	27	25	41
15	29	35	39	e38	42	32	38	50	28	24	25	38
16	27	32	39	e38	40	34	37	48	24	26	24	38
17	26	31	37	e39	38	34	35	44	24	29	20	39
18	26	31	40	e41	44	33	34	45	23	28	22	39
19	21	31	39	e42	44	35	31	34	24	27	23	40
20	23	31	37	e40	43	36	32	36	27	22	25	39
21	23	31	40	e38	43	37	35	43	27	25	21	39
22	27	33	38	e38	42	35	38	43	25	24	23	39
23	27	36	37	e38	42	35	34	44	29	25	19	38
24	28	34	38	e39	43	35	34	43	31	24	20	39
25	29	28	41	e42	39	35	37	45	30	24	19	38
26	26	24	41	e39	35	35	29	44	27	27	22	38
27	25	29	41	e39	37	35	30	43	26	21	42	39
28	26	33	42	e39	39	37	32	42	24	22	23	40
29	27	36	44	e39	---	35	34	41	29	22	24	39
30	25	36	41	e38	---	36	35	38	29	24	25	38
31	28	---	e38	e37	---	35	---	41	---	24	24	---
TOTAL	818	927	1176	1208	1087	1104	1040	1488	869	786	791	1798
MEAN	26.4	30.9	37.9	39.0	38.8	35.6	34.7	48.0	29.0	25.4	25.5	59.9
MAX	33	36	44	42	44	57	41	71	46	31	57	428
MIN	21	24	34	37	34	31	29	34	23	21	19	23
AC-FT	1620	1840	2330	2400	2160	2190	2060	2950	1720	1560	1570	3570

CAL YR 1990 TOTAL 14950 MEAN 41.0 MAX 1630 MIN 17 AC-FT 29650
WTR YR 1991 TOTAL 13092 MEAN 35.9 MAX 428 MIN 19 AC-FT 25970

e Estimated

LOCATION.--Lat 36°31'21", long 114°24'49", in SE 1/4 SW 1/4 sec.20, T.16 S., R.68 E., Clark County, Hydrologic Unit 15010005, on right bank in Overton State Wildlife Management Area, 0.8 mi downstream from diversion dam, and 2.3 mi southeast of Overton.

WATER-DISCHARGE RECORDS

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,110 ft³/s, Aug. 11, 1981, gage height, 16.54 ft, from rating curve extended above 436 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 0.32 ft³/s, Dec. 12, 1979, June 3, 4 and July 6, 1990.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	9.0	3.0	1.5	1.8	14	12	3.3	2.2	1.4	1.2	1.3
2	10	8.9	2.7	1.5	1.8	12	11	3.0	2.2	1.3	1.2	1.3
3	8.0	8.5	2.5	1.6	1.8	12	10	2.9	2.1	1.2	1.1	1.3
4	8.0	8.6	2.3	1.6	1.9	12	10	2.9	1.8	1.2	1.2	1.3
5	7.4	9.4	2.1	1.6	1.9	12	11	2.9	1.7	1.3	1.2	1.3
6	8.0	9.2	1.9	1.7	1.9	12	10	2.8	1.6	1.2	1.2	1.2
7	7.8	9.3	1.7	1.7	1.9	11	10	2.8	1.5	1.2	1.3	2.5
8	8.0	9.2	1.6	1.7	1.9	10	10	2.7	1.4	1.3	1.3	33
9	8.0	8.8	1.5	1.7	1.9	11	11	2.6	1.3	1.4	1.3	188
10	8.0	8.9	1.5	1.7	1.9	12	13	2.3	1.3	1.4	1.2	9.0
11	7.9	9.4	1.5	1.7	2.0	12	18	2.1	1.2	1.4	1.3	2.8
12	8.1	10	1.4	1.7	2.0	11	22	2.1	1.3	1.5	1.6	2.5
13	9.0	10	1.4	1.7	2.2	11	24	2.1	1.4	1.5	2.9	2.5
14	8.8	11	1.4	1.7	2.3	10	24	2.0	1.4	1.4	1.6	2.5
15	8.8	11	1.3	1.7	2.5	10	24	2.0	1.4	1.3	1.3	2.5
16	8.6	9.8	1.3	1.7	2.8	11	22	2.0	1.3	1.3	1.2	2.3
17	8.3	9.8	1.3	1.7	3.1	11	21	1.9	1.2	1.3	1.2	2.3
18	8.0	9.8	1.3	1.7	3.4	11	20	1.8	1.2	1.4	1.1	2.4
19	6.6	9.8	1.3	1.7	3.8	12	19	1.7	1.2	1.4	1.1	2.5
20	7.0	9.8	1.3	1.7	4.1	12	19	1.8	1.3	1.3	1.2	2.4
21	7.4	10	1.3	1.7	4.4	12	21	2.0	1.4	1.2	1.2	2.4
22	8.1	11	1.3	1.8	4.7	12	22	2.2	1.3	1.2	1.1	2.5
23	8.5	11	1.3	1.8	5.4	12	23	2.2	1.4	1.2	1.1	2.4
24	8.7	10	1.4	1.8	6.1	12	21	2.2	1.5	1.2	.96	2.4
25	9.0	8.9	1.4	1.8	7.2	12	21	2.2	1.6	1.2	.71	2.4
26	8.2	7.1	1.4	1.8	8.0	12	20	2.2	1.4	1.3	.94	2.4
27	8.0	6.0	1.4	1.8	9.6	12	15	2.2	1.3	1.3	1.1	2.3
28	8.1	4.7	1.4	1.8	12	12	10	2.1	1.2	1.1	1.1	2.4
29	8.6	4.0	1.4	1.8	---	12	5.2	2.1	1.4	1.1	1.2	2.4
30	8.0	3.4	1.5	1.8	---	12	3.8	2.0	1.4	1.1	1.4	2.5
31	8.4	---	1.5	1.8	---	12	---	2.1	---	1.2	1.3	---
TOTAL	254.3	266.3	49.6	53.0	104.3	361	483.0	71.2	43.9	39.8	38.81	289.0
MEAN	8.20	8.88	1.60	1.71	3.72	11.6	16.1	2.30	1.46	1.28	1.25	9.63
MAX	10	11	3.0	1.8	12	14	24	3.3	2.2	1.5	2.9	188
MIN	6.6	3.4	1.3	1.5	1.8	10	3.8	1.7	1.2	1.1	.71	1.2
AC-FT	504	528	98	105	207	716	958	141	87	79	77	573
CAL YR 1990	TOTAL 7082.37		MEAN 19.4	MAX 2670	MIN .32	AC-FT 14050						
WTR YR 1991	TOTAL 2054.21		MEAN 5.63	MAX 188	MIN .71	AC-FT 4070						

VIRGIN RIVER BASIN

09419515 MUDDY RIVER ABOVE LAKE MEAD NEAR OVERTON, NV--Continued

73

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-1974 and 1979 to current year (published as Muddy River below Overton, station 09419510, October 1969 to January 1974).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CaCO3)
NOV 15...	1000	11	2200	8.2	22.5	11.5	32	9.7	92	2000	2500	650
JAN 08...	1200	1.7	4530	8.1	13.5	10.0	12	10.2	95	K85	K77	1400
FEB 28...	1115	12	2560	8.3	3.5	13.0	80	9.2	93	930	8300	840
APR 23...	1100	23	2020	8.2	22.0	18.0	59	9.0	100	3700	2400	600
JUN 25...	1200	1.6	3290	8.3	29.0	28.0	8.2	9.3	126	K220	--	970
AUG 28...	1300	1.1	1670	8.5	34.0	31.0	26	9.6	136	K8400	950	570

DATE	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV 15...	130	78	250	4	27	400	328	720	150	2.9	34	1590
JAN 08...	250	180	570	7	40	556	456	1700	330	3.0	43	3580
FEB 28...	170	100	290	4	25	392	322	880	220	2.8	34	1910
APR 23...	120	71	220	4	28	359	294	680	170	3.1	31	1470
JUN 25...	190	120	360	5	30	420	344	1200	250	2.5	41	2450
AUG 28...	120	66	210	4	23	298	244	680	140	2.1	32	1350

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P)
NOV 15...	1590	2.16	0.050	0.050	0.300	0.400	0.070	0.090	0.50	0.150	0.040	0.100
JAN 08...	3390	4.87	<0.010	<0.010	<0.100	<0.100	0.070	0.050	0.50	0.070	0.050	0.060
FEB 28...	1920	2.60	0.020	0.030	0.520	0.540	0.050	0.070	0.60	0.130	0.090	0.090
APR 23...	1510	2.00	0.080	0.060	0.590	0.470	0.070	0.060	0.80	0.280	0.120	0.140
JUN 25...	2410	3.33	0.010	<0.010	<0.050	<0.050	0.030	0.020	0.70	0.080	0.020	0.030
AUG 28...	1420	1.84	0.040	0.040	0.510	0.410	0.030	0.030	0.60	0.110	0.050	0.040

VIRGIN RIVER BASIN

09419515 MUDDY RIVER ABOVE LAKE MEAD NEAR OVERTON, NV--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)
NOV 15...	0.050	<10	37	<100	<10	<1.0	2	<1	1	10	<1	340
JAN 08...	0.060	--	--	--	--	--	--	--	--	--	--	--
FEB 28...	0.100	<10	37	100	<10	--	<1	--	--	30	--	--
APR 23...	0.110	<10	39	<100	<10	<1.0	1	<1	1	20	<1	310
JUN 25...	0.030	<10	92	33	<2	<3.0	<1	<9	1	19	<1	450
AUG 28...	0.020	<10	37	35	<0.5	<1.0	<1	<3	1	10	<1	290

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 15...	60	<0.1	16	1	<1	<1.0	2900	10	<10	567	17	--
JAN 08...	--	--	--	--	--	--	--	--	--	349	1.6	--
FEB 28...	190	0.1	16	--	1	--	3500	10	<10	548	18	44
APR 23...	70	<0.1	14	1	<1	<1.0	2700	11	10	340	21	68
JUN 25...	100	--	<30	<1	<1	<1.0	4300	<18	24	143	0.63	26
AUG 28...	22	<0.1	20	2	2	<1.0	2500	7	17	103	0.31	93

K: NON-IDEAL COLONY COUNT

VIRGIN RIVER BASIN

75

09419550 ROGERS SPRING NEAR OVERTON BEACH, NV

LOCATION.--Lat 36°22'36", long 114°26'33", in SE 1/4 SE 1/4 sec.12, T.18 S., R.67 E., Clark County, Hydrologic Unit 15010005, on left bank, in Lake Mead National Recreation Area, 6.6 mi southwest of Overton Beach and 14 mi south of Overton.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,570 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Minor temporary regulation for recreation upstream.

AVERAGE DISCHARGE.--6 years, 1.60 ft³/s, 1,160 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26 ft³/s, Aug. 16, 1990, from rating curve extended above 2.2 ft³/s on basis of velocity-area study; minimum daily, 1.0 ft³/s, Mar. 3, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.2 ft³/s, Nov. 11; minimum daily, 1.4 ft³/s, Aug. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.8	1.9	1.7	1.7	1.8	1.7	1.6	1.5	1.6	1.6	1.5
2	1.6	1.8	1.9	1.7	1.7	1.8	1.7	1.6	1.5	1.6	1.5	1.5
3	1.6	1.9	1.9	1.7	1.7	1.8	1.7	1.6	1.5	1.6	1.5	1.5
4	1.6	1.9	1.9	1.7	1.7	1.8	1.7	1.6	1.5	1.6	1.5	1.6
5	1.6	1.9	1.9	1.7	1.7	1.8	1.7	1.6	1.5	1.6	1.5	1.6
6	1.6	1.9	1.9	1.7	1.7	1.8	1.7	1.6	1.5	1.6	1.5	1.6
7	1.6	1.9	1.9	1.7	1.7	1.8	1.7	1.6	1.5	1.6	1.5	1.6
8	1.6	1.9	1.9	1.7	1.7	1.8	1.7	1.6	1.5	1.6	1.5	1.6
9	1.6	1.9	1.9	1.7	1.7	1.8	1.7	1.5	1.5	1.6	1.6	1.6
10	1.6	1.9	1.8	1.7	1.7	1.8	1.7	1.6	1.5	1.6	1.6	1.6
11	1.6	2.1	1.8	1.7	1.7	1.8	1.7	1.6	1.5	1.6	1.5	1.6
12	1.6	2.1	1.8	1.7	1.7	1.8	1.7	1.5	1.6	1.6	1.6	1.6
13	1.6	2.1	1.8	1.7	1.7	1.8	1.7	1.6	1.7	1.5	1.6	1.6
14	1.6	2.1	1.8	1.7	1.7	1.8	1.7	1.6	1.7	1.5	1.4	1.6
15	1.6	2.0	1.8	1.7	1.7	1.8	1.7	1.6	1.7	1.5	1.5	1.6
16	1.7	1.9	1.8	1.7	1.7	1.8	1.7	1.6	1.7	1.5	1.5	1.6
17	1.7	1.9	1.8	1.7	1.7	1.8	1.6	1.6	1.7	1.5	1.5	1.6
18	1.7	1.9	1.8	1.7	1.7	1.8	1.6	1.6	1.7	1.5	1.5	1.6
19	1.7	1.9	1.7	1.7	1.7	1.8	1.6	1.6	1.8	1.5	1.5	1.6
20	1.7	1.9	1.8	1.7	1.7	1.8	e1.6	1.6	1.8	1.5	1.6	1.6
21	1.7	1.9	1.7	1.7	1.8	1.7	1.6	1.6	1.8	1.5	1.6	1.6
22	1.7	1.9	1.7	1.7	1.8	1.7	1.6	1.6	1.7	1.6	1.6	1.6
23	1.7	1.9	1.7	1.7	1.8	1.7	e1.6	1.6	1.7	1.6	1.6	1.6
24	1.7	1.9	1.7	1.7	1.8	1.7	1.6	1.5	1.7	1.6	1.5	1.6
25	1.8	1.9	1.7	1.7	1.8	1.7	1.6	1.6	1.6	1.6	1.5	1.6
26	1.7	1.9	1.7	1.7	1.8	1.7	1.6	1.6	1.6	1.6	1.5	1.6
27	1.8	1.9	1.7	1.7	1.8	1.7	1.6	1.6	1.6	1.6	1.5	1.6
28	1.8	1.9	1.7	1.7	1.8	1.7	1.6	1.6	1.6	1.6	1.5	1.6
29	1.7	1.9	1.7	1.7	---	1.7	1.6	1.6	1.6	1.6	1.5	1.6
30	1.8	1.9	1.7	1.7	---	1.7	1.6	1.6	1.6	1.6	1.6	1.6
31	1.8	---	1.7	1.7	---	1.7	---	1.5	---	1.6	1.6	---
TOTAL	51.8	57.7	55.5	52.7	48.4	54.7	49.6	49.2	48.4	48.7	47.5	47.7
MEAN	1.67	1.92	1.79	1.70	1.73	1.76	1.65	1.59	1.61	1.57	1.53	1.59
MAX	1.8	2.1	1.9	1.7	1.8	1.8	1.7	1.6	1.8	1.6	1.6	1.6
MIN	1.6	1.8	1.7	1.7	1.7	1.7	1.6	1.5	1.5	1.5	1.4	1.5
AC-FT	103	114	110	105	96	108	98	98	96	97	94	95

CAL YR 1990 TOTAL 596.8 MEAN 1.64 MAX 2.8 MIN 1.3 AC-FT 1180
WTR YR 1991 TOTAL 611.9 MEAN 1.68 MAX 2.1 MIN 1.4 AC-FT 1210

e Estimated

LAS VEGAS VALLEY

09419610 LEE CANYON NEAR CHARLESTON PARK, NV

LOCATION.--Lat 36°20'25", long 115°39'00", in SW 1/4 NE 1/4 sec.35, T.18 S., R.56 E., Clark County, Hydrologic Unit 15010015, in Toiyabe National Forest, on right bank, 50 ft above bridge on State Highway 158, just south of junction with State Highway 156, and 5.5 mi north of Charleston Park.

DRAINAGE AREA.--9.20 mi².

PERIOD OF RECORD.--Water years 1961-63 (annual maximum), October 1963 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,820 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1960, to Sept. 30, 1963, crest-stage gage at same site and datum. Prior to May 16, 1973, on right bank at datum 0.14 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No flow exists in this channel except at times of heavy rainfall or rapid snowmelt.

AVERAGE DISCHARGE.--28 years, 0.018 ft³/s, 13 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16 ft³/s, July 28, 1969, gage height, 3.60 ft, on basis of slope-area measurement of peak flow; no flow most days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16 ft³/s, Sept. 5; no flow most days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	e.20
4	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	e.10
5	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	e.80
6	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	e.50
7	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	e.40
8	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.20
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.20
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.073
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.80
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.4

CAL YR 1990 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1991 TOTAL 2.20 MEAN .006 MAX .80 MIN .00 AC-FT 4.4

e Estimated

LAS VEGAS VALLEY

77

09419625 CORN CREEK SPRING AT NATIONAL FISH AND WILDLIFE HEADQUARTERS, NV

LOCATION.--Lat 36°26'20", long 115°21'26", in NW 1/4 NE 1/4 sec.34, T.17 S., R.59 E., Clark County, Hydrologic Unit 15010015, in Desert National Wildlife Range, on right bank, located at National Fish and Wildlife Headquarters complex, 4 mi east of U. S. Highway 95, and 20 mi northwest of Las Vegas.

DRAINAGE AREA--Indeterminate.

PERIOD OF RECORD.--July 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,790 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair.

AVERAGE DISCHARGE.--6 years, 0.26 ft³/s, 188 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 0.30 ft³/s, many days most years, gage height, 1.01 ft, maximum gage height, 1.44 ft, Apr. 2,3, 1989, backwater from debris on weir; minimum daily, 0.24 ft³/s, July 15-19, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 0.29 ft³/s, several days in Dec., Mar. and Apr., gage height, 1.05 ft; minimum daily, 0.25 ft³/s, July 2-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	.27	.27	.27	.27	.27	.29	.27	.27	.26	.27	.27
2	.27	.27	.27	.27	.27	.27	.29	.27	.27	.25	.27	.28
3	.26	.27	.27	.27	.27	.27	.29	.27	.27	.25	.27	.28
4	.26	.27	.27	.27	.27	.27	.28	.27	.27	.25	.27	.28
5	.26	.27	.27	.27	.27	.27	.27	.27	.27	.25	.27	.27
6	.27	.27	.27	.27	.27	.27	.27	.27	.27	.25	.26	.27
7	.27	.27	.27	.27	.27	.27	.27	.27	.27	.26	.26	.27
8	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.26	.27
9	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.26	.27
10	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27
11	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27
12	.27	.27	.27	.27	.27	.28	.27	.27	.27	.27	.27	.27
13	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.26	.27
14	.27	.27	.28	.27	.27	.27	.27	.27	.27	.27	.26	.27
15	.27	.27	.28	.27	.27	.27	.27	.27	.27	.27	.27	.27
16	.27	.27	.28	.27	.27	.27	.27	.27	.27	.27	.27	.26
17	.27	.27	.28	.27	.27	.27	.27	.27	.27	.27	.27	.27
18	.27	.27	.28	.27	.27	.27	.27	.27	.27	.27	.27	.27
19	.27	.27	.28	.27	.27	.27	.27	.27	.27	.27	.27	.27
20	.27	.27	.28	.27	.27	.27	.27	.27	.27	.27	.27	.27
21	.27	.27	.29	.27	.27	.27	.27	.27	.27	.27	.27	.27
22	.27	.27	.29	.27	.27	.27	.27	.27	.27	.27	.27	.27
23	.27	.27	.29	.27	.27	.26	.27	.27	.27	.27	.27	.27
24	.27	.27	.29	.27	.27	.27	.27	.27	.27	.27	.27	.27
25	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27
26	.27	.27	.27	.27	.27	.27	.27	.26	.27	.27	.27	.27
27	.27	.28	.27	.27	.27	.27	.27	.26	.27	.27	.27	.27
28	.27	.28	.27	.27	.27	.27	.27	.26	.27	.27	.27	.27
29	.27	.28	.27	.27	---	.27	.27	.27	.27	.27	.27	.27
30	.27	.27	.27	.27	---	.27	.27	.27	.27	.27	.27	.27
31	.27	---	.27	.27	---	.29	---	.27	---	.27	.27	---
TOTAL	8.34	8.13	8.52	8.37	7.56	8.39	8.17	8.34	8.10	8.25	8.31	8.12
MEAN	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27
MAX	.27	.28	.29	.27	.27	.29	.29	.27	.27	.27	.27	.28
MIN	.26	.27	.27	.27	.27	.26	.27	.26	.27	.25	.26	.26
AC-FT	17	16	17	17	15	17	16	17	16	16	16	16

CAL YR 1990 TOTAL 98.03 MEAN .27 MAX .29 MIN .25 AC-FT 194
WTR YR 1991 TOTAL 98.60 MEAN .27 MAX .29 MIN .25 AC-FT 196

LAS VEGAS VALLEY

09419648 LAS VEGAS WASH ABOVE DETENTION BASIN NEAR NORTH LAS VEGAS, NV

LOCATION.--Lat 36°18'09", long 115°08'18", in SE 1/4 NW 1/4 sec.15, T.19 S., R.61 E., Clark County, Hydrologic Unit 15010015, on left bank, 0.5 mi upstream of North Las Vegas Detention Basin Dam, 5.2 mi north of Craig Road, and 4.5 mi northwest of North Las Vegas.

DRAINAGE AREA--Not determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,140 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 278 ft³/s, July 15, 1990, gage height, 6.98 ft, on basis of indirect measurement of peak flow; no flow most days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 77 ft³/s, July 8 or 31, gage height, about 6.03 ft, from floodmarks; no flow most days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	e.01	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	e2.0	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	e.01	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	e1.0	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	3.00	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.001	.000	.000	.000	.097	.000	.000
MAX	.00	.00	.00	.00	.00	.01	.00	.00	.00	2.0	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.04	.00	.00	.00	6.0	.00	.00

CAL YR 1990 TOTAL 4.08 MEAN .011 MAX 3.5 MIN .00 AC-FT 8.1
WTR YR 1991 TOTAL 3.02 MEAN .008 MAX 2.0 MIN .00 AC-FT 6.0

e Estimated

LAS VEGAS VALLEY

79

09419648 LAS VEGAS WASH ABOVE DETENTION BASIN NEAR NORTH LAS VEGAS, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1989 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1989 to current year.

WATER TEMPERATURE: September 1989 to current year.

INSTRUMENTATION.--Specific-conductance recorder since September 1989, two times per hour. Water-temperature recorder since September 1989, two times per hour.

REMARKS.--Records represent water temperature at probe within 0.5°C. Stream is normally dry. Two storm events were observed during the 1991 water year, July 8 and 31. The July 8 event flooded the gage shelter and the water-quality record was destroyed. An instantaneous specific conductance value of 218 microsiemens was measured Aug. 1. The instantaneous water temperature measured August 1 was 22.0°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 225 microsiemens, Aug. 15, 1990; minimum recorded, 128 microsiemens, Sept. 23, 1990.

WATER TEMPERATURE: Maximum recorded, 27.5°C, Aug. 15, 1990; minimum recorded, 19.5°C, Sept. 23, 1990.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum and minimum unknown, (see REMARKS).

WATER TEMPERATURE: Maximum and minimum unknown, (see REMARKS).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SEDI- MENT, SUS- PENDED (MG/L)
MAR 27...	0900	E0.02	87	6.0	56	923
AUG 01...	1030	E0.20	218	22.0	140	--

E: ESTIMATED

LAS VEGAS VALLEY

09419656 LAS VEGAS CREEK AT LAMB BOULEVARD NEAR LAS VEGAS, NV

LOCATION.--Lat 36°10'53", long 115°04'46", in SE 1/4 NE 1/4 sec.30, T.20 S., R.62 E., Clark County, Hydrologic Unit 15010015, on downstream side of box culvert at Lamb Blvd.

DRAINAGE AREA.--46.3 mi².

PERIOD OF RECORD.--March 1988 to current year.

GAGE.--Water-stage recorder and recording tipping bucket rain gage with .04 inch increment. Elevation of gage is 1,780 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,070 ft³/s, May 13, 1989, gage height 15.13 ft; no flow many days most years. Maximum daily precipitation, 1.68 in., June 10, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 438 ft³/s, Feb. 28, gage height 12.78 ft; no flow many days. Maximum daily precipitation, .68 in., Mar. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.76	1.9	3.2	e.00	.00	29	.00	.00	9.1	.00	25	.00
2	.71	4.6	3.9	e.00	.00	.00	.00	.00	.00	.00	.16	.00
3	.40	1.5	4.6	e.00	.00	.00	.00	.58	.00	.00	.00	.01
4	.47	1.7	3.8	e.00	.00	.00	.00	.00	.00	.00	.00	.01
5	.14	2.4	2.0	e.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.39	2.6	.15	e.00	.00	.00	.00	.00	.00	.00	.00	9.4
7	.57	1.1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.47	1.4	.00	.00	.00	.00	.00	.00	.00	21	.00	.32
9	.29	1.2	.00	.00	.00	.00	.00	.00	.00	1.3	.00	.00
10	.21	8.0	.00	.00	.00	.00	.00	.00	.00	.00	29	.00
11	.50	8.2	.00	.00	.00	.00	.00	.00	.00	.00	11	.00
12	.28	8.6	.00	.00	.00	.00	.00	.00	.00	.00	.74	.00
13	.52	8.9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.75	8.7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.61	4.6	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
16	.73	3.4	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00
17	.44	2.8	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.52	3.7	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	18	3.9	e.00	.00	.00	6.4	.00	.00	.00	.00	e.00	.00
20	3.2	3.8	e.00	.00	.00	9.6	.00	.00	.00	.00	e.00	.00
21	2.0	1.4	e.00	.00	.00	.00	.00	6.7	.00	.00	e.00	.00
22	1.8	1.4	e.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
23	1.6	2.1	e.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
24	1.9	2.4	e.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
25	2.0	2.3	e.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
26	1.2	1.8	e.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
27	1.1	1.7	e.00	.00	.01	90	.00	.00	.00	.00	e.00	.16
28	.78	2.4	e.00	.00	62	.51	.00	.00	.00	.00	e.00	.00
29	.83	2.6	e.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	1.4	2.7	e.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.60	---	e.00	.00	---	.00	---	.00	---	15	.00	---
TOTAL	45.17	103.8	17.65	0.00	62.01	135.52	0.00	7.28	9.15	37.30	65.90	9.90
MEAN	1.46	3.46	.57	.000	2.21	4.37	.000	.23	.30	1.20	2.13	.33
MAX	.18	8.9	4.6	.00	.62	.90	.00	6.7	9.1	.21	.29	9.4
MIN	.14	1.1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.90	206	.35	.00	123	269	.00	.14	.18	.74	131	.20
†	.12	.00	--	--	.68	1.40	.00	.16	.20	.20	.20	.00
CAL YR 1990	TOTAL 579.46 MEAN 1.59 MAX 82 MIN .00 AC-FT 1150											
WTR YR 1991	TOTAL 493.68 MEAN 1.35 MAX 90 MIN .00 AC-FT 979											

e Estimated

† Precipitation, in inches

LAS VEGAS VALLEY

81

09419658 LAS VEGAS WASH NEAR SAHARA AVENUE NEAR LAS VEGAS, NV

LOCATION.--Lat 36°08'47", long 115°03'07", in SW 1/4 SE 1/4 sec.4, T.21 S., R.62 E., Clark County, Hydrologic Unit 15010015, .5 mi east of Nellis Boulevard on Sahara Avenue where Sahara deadends at the Desert Rose Golf Course. Gage is located on right bank and secured to the north (upstream) side of a wood and concrete footbridge.

DRAINAGE AREA.--1,146 mi².

PERIOD OF RECORD.--March 1988 to current year.

GAGE.--Water-stage recorder and recording tipping bucket rain gage with .04 inch increment. Elevation of gage is 1,715 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those below 1.0 ft³/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,960 ft³/s, June 10, 1990, gage height, 16.27 ft, from rating curve extended above 380 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, no flow many days during 1991 water year. Maximum daily precipitation, 1.56 in., June 10, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 591 ft³/s, Feb. 28, gage height, 14.61 ft, from rating curve extended above 380 ft³/s, on basis of slope-area measurement of peak flow; no flow many days. Maximum daily precipitation, .56 in., Feb. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.3	.80	e.00	.00	59	.73	.75	42	.83	93	.92
2	1.4	1.0	.62	e.00	.01	.72	.77	.68	1.1	.84	1.4	.90
3	1.4	1.0	.57	e.00	.00	.02	.84	3.4	.87	.85	1.1	1.0
4	1.4	1.0	.52	a.00	.00	.01	.90	.97	.83	.85	.88	.99
5	1.4	1.0	.55	e.00	.00	.00	.92	.46	.93	.86	.91	.95
6	1.4	e1.0	.55	.00	.00	.00	1.0	.54	.98	.80	.91	33
7	1.4	e1.0	.52	.00	.00	.00	1.0	.40	1.0	.80	.93	1.4
8	1.3	e1.0	.55	.00	.00	.00	1.0	.42	1.1	13	.92	.87
9	1.2	e.99	.52	.00	.00	.00	1.0	.52	1.2	3.0	.94	1.4
10	1.2	e.98	.52	.00	.00	.00	1.1	.45	1.2	1.0	1.0	1.1
11	1.2	e.95	.56	.00	.00	.00	1.0	.53	1.3	.70	101	1.1
12	1.2	e.94	.53	.00	.00	.00	1.0	.54	1.3	.78	2.1	1.1
13	1.1	e.93	.48	.00	.00	.00	1.1	.57	1.4	.79	1.2	e1.1
14	1.1	e.93	.51	.00	.01	.02	1.1	.55	1.4	.78	.94	e1.1
15	1.0	.88	.53	.00	.00	.16	1.1	.59	1.4	.80	.88	e1.1
16	1.0	.94	.56	.00	.00	.01	1.0	.61	1.5	.81	.88	e1.1
17	.96	.93	e.54	.00	.33	.00	.99	.64	1.5	.81	.95	1.1
18	.88	.93	e.50	.00	.56	.00	.98	.63	1.6	.81	.99	1.2
19	4.5	.90	e.49	.00	.58	19	.98	.72	1.6	.79	.97	1.2
20	1.9	.87	e.10	.00	.56	24	.95	.78	1.5	.77	.87	1.1
21	.83	.86	e.00	.00	.52	3.6	.94	30	1.6	.77	.82	1.2
22	.82	.84	e.00	.00	.50	.00	.88	8.1	1.6	.81	.76	1.1
23	.82	.86	e.00	.00	.44	.00	.84	.70	1.6	.83	.72	1.2
24	.86	.85	e.00	.00	.44	.00	.84	.79	1.7	.81	.85	1.1
25	.89	.82	e.00	.00	.43	.00	.81	.88	1.6	.83	.87	1.4
26	.93	.82	e.00	.00	.42	.00	.86	1.0	1.6	.87	.93	1.5
27	.96	.77	e.00	.00	.53	163	.81	1.1	1.5	.89	.86	1.5
28	1.0	.77	e.00	.00	116	2.5	.76	1.2	1.4	.91	.77	1.6
29	.95	.81	e.00	.00	---	1.1	.77	1.3	1.0	.92	.85	1.6
30	1.0	.75	e.00	.00	---	.61	.77	1.4	.82	.96	.93	1.6
31	1.3	---	e.00	.00	---	.64	---	1.4	---	16	.93	---
TOTAL	38.60	27.62	10.52	0.00	121.33	274.39	27.74	62.62	80.13	55.27	222.06	67.53
MEAN	1.25	.92	.34	.000	4.33	8.85	.92	2.02	2.67	1.78	7.16	2.25
MAX	4.5	1.3	.80	.00	116	163	1.1	30	42	16	101	33
MIN	.82	.75	.00	.00	.00	.00	.73	.40	.82	.70	.72	.87
AC-FT	.77	.55	.21	.00	.241	.544	.55	.124	.159	.110	.440	.134
†	.20	--	--	--	.88	1.20	.12	.12	.40	.32	.08	--

CAL YR 1990 TOTAL 1030.76 MEAN 2.82 MAX 351 MIN .00 AC-FT 2040
WTR YR 1991 TOTAL 987.81 MEAN 2.71 MAX 163 MIN .00 AC-FT 1960

e Estimated

† Precipitation, in inches

LAS VEGAS VALLEY

09419665 SLOAN CHANNEL AT CHARLESTON BOULEVARD NEAR LAS VEGAS, NV

LOCATION.--Lat 36°09'36", long 115°02'39", in SE 1/4 SE 1/4 sec.33, T.20 S., R.62 E., Clark County, Hydrologic Unit 15010015, on upstream side of box culvert that crosses under Charleston Boulevard, 1.0 mi east of Nellis Boulevard.

DRAINAGE AREA.--144 mi².

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder and recording tipping bucket rain gage with .04 inch increment. Elevation of gage is 1,730 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair, except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 680 ft³/s, July 16, 1990, gage height 11.54 ft, from rating curve extended above 104 ft³/s, on basis of slope-conveyance measurement of peak flow; no flow most days most years. Maximum daily precipitation, 0.88 in., June 10, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum recorded discharge, 128 ft³/s, June 1, gage height 10.42 ft, but may have been higher during estimated peak on Feb. 28; no flow most days. Maximum daily precipitation, 0.48 in., Mar. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	e.00	e3.6	.00	.00	14	.00	.00	.00
2	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	e.00	e.00	e.00	.00	.14	.00	.00	.00	.00
25	.00	.00	.00	e.00	e.00	e.00	.00	.01	.00	.00	.00	.00
26	.00	.00	.00	e.00	e.05	e.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	e.00	e1.1	3.6	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	e.00	e6.8	.00	.00	.00	.00	.00	.00	.00
29	e.00	.00	.00	e.00	---	.00	.00	.00	.00	.00	.00	.00
30	e.00	.00	.00	e.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	e.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	7.95	7.20	0.00	0.15	14.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.28	.23	.000	.005	.47	.000	.000	.000
MAX	.00	.00	.00	.00	6.8	3.6	.00	.14	.14	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	16	14	.00	.3	.28	.00	.00	.00
†	.12	.00	.00	.24	--	--	.00	.16	.24	.12	.20	.00

CAL YR 1990 TOTAL 80.00 MEAN .22 MAX 43 MIN .00 AC-FT 159
WTR YR 1991 TOTAL 29.30 MEAN .080 MAX 14 MIN .00 AC-FT 58

e Estimated

† Precipitation, in inches

LAS VEGAS VALLEY

83

09419673 FLAMINGO WASH NEAR TORREY PINES DRIVE NEAR LAS VEGAS, NV

LOCATION.--Lat 36°06'09", long 115°14'10", in SE 1/4 SW 1/4 sec.23, T.21 S., R.60 E., Clark County, Hydrologic Unit 15010015, .25 mi north of Tropicana Avenue on Torrey Pines Drive. Gage is located on west (upstream) side of concrete box culvert that crosses under road.

DRAINAGE AREA.--93.6 mi².

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder and recording tipping bucket rain gage with .04 inch increment. Elevation of gage is 2,335 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,920 ft³/s July 16, 1990, gage-height 21.41 ft, from rating curve extended above 240 ft³/s, on basis of slope-area measurement of peak flow; no flow most days most years. Maximum daily precipitation, 1.20 in., Sept. 6, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 661 ft³/s Sept. 6, gage-height 12.86 ft, from rating curve extended above 240 ft³/s, on basis of slope-area measurement of peak flow; no flow most days. Maximum daily precipitation, 1.20 in., Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	4.1	.00	.00	.79	.00	3.7	.01
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.46	.00
3	.00	.00	.00	.25	.00	.00	.00	.00	.00	.00	.80	.00
4	.00	.00	.00	.28	.00	.00	.00	.00	.00	.00	.88	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.49	.55
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.68	48
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.73	1.5
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1	.27	.79
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.36	.38
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	1.2	.11
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.1	e.00
12	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.59	e.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.45	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.09	.00
15	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.09	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.35	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.00
19	.64	.00	.00	.00	.00	1.1	.00	.00	.00	.00	.09	.00
20	.00	.00	.00	.00	.00	1.3	.00	.00	.01	.00	.05	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.32	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.13	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.01	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00
27	.00	.00	.00	.00	.26	7.1	.00	.00	.00	e.00	.00	.00
28	.00	.00	.00	.00	6.5	.13	.00	.00	.00	e.00	.03	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	e.00	.12	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.01	e.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	5.9	.02	---
TOTAL	0.64	0.00	0.02	0.53	6.76	13.75	0.00	0.00	0.81	7.06	14.20	51.34
MEAN	.021	.000	.001	.017	.24	.44	.000	.000	.027	.23	.46	1.71
MAX	.64	.00	.02	.28	6.5	7.1	.00	.00	.79	5.9	3.7	48
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	1.3	.00	.04	1.1	13	27	.00	.00	1.6	14	28	102
†	.08	.00	.00	.20	.68	1.52	.00	.00	.20	.64	.48	1.28

CAL YR 1990 TOTAL 507.09 MEAN 1.39 MAX 165 MIN .00 AC-FT 1010 † TOTAL 3.92
WTR YR 1991 TOTAL 95.11 MEAN .26 MAX 48 MIN .00 AC-FT 189 † TOTAL 5.08

e Estimated

† Precipitation, in inches

LAS VEGAS VALLEY

094196781 FLAMINGO WASH AT NELLIS BOULEVARD NEAR LAS VEGAS, NV

LOCATION.--Lat 36°08'32", long 115°03'23", in NE 1/4 NE 1/4 sec.8, T.21 S., R.62 E., Clark County, Hydrologic Unit 15010015, .25 mi north of Sahara Avenue on Nellis Boulevard. Gage is located on west (upstream) side of concrete box culvert that crosses under road.

DRAINAGE AREA.--215 mi².

PERIOD OF RECORD.--March 1988 to current year.

GAGE.--Water-stage recorder and recording tipping bucket rain gage with .04 inch increment. Elevation of gage is 1,730 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,100 ft³/s June 10, 1990, gage height 15.90 ft, on basis of rating curve extended above 494 ft³/s and slope-area measurements of peak flow at gage heights 15.92 ft and 14.42 ft; minimum daily, 4.0 ft³/s, Dec. 30, 1989. Maximum daily precipitation, 1.52 in., June 10, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 575 ft³/s Sept. 6, gage height 11.59 ft, on basis of rating curve extended above 494 ft³/s and slope-area measurements of peak flow; minimum daily, 1.9 ft³/s, Aug. 19, Sept. 17. Maximum daily precipitation, .52 in., Feb. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	4.0	5.8	8.5	2.9	e38	2.9	4.2	17	4.4	47	5.6
2	7.8	5.0	5.1	8.5	2.9	e5.6	2.9	4.7	5.4	4.2	6.1	5.3
3	6.4	3.8	5.2	15	2.9	e3.6	2.9	8.8	5.3	4.2	6.1	4.9
4	6.0	3.9	4.4	e25	2.9	e2.8	2.9	5.3	4.4	4.2	5.8	5.3
5	6.0	3.7	4.7	e5.1	2.9	2.7	2.9	4.4	4.4	4.2	5.5	6.6
6	6.2	5.1	4.5	e4.3	4.1	2.9	2.8	4.6	4.2	4.2	5.4	83
7	5.8	4.1	4.5	e3.7	4.2	2.9	2.6	5.8	4.3	4.4	5.4	8.5
8	5.8	3.7	3.8	e3.2	3.9	2.9	3.7	5.2	4.9	17	5.5	4.2
9	6.0	3.8	3.1	e3.4	3.5	2.9	4.2	4.3	5.3	5.6	5.2	2.0
10	6.0	3.3	3.0	e3.2	3.5	2.8	3.9	4.3	5.6	4.3	28	8.5
11	6.0	4.0	3.0	e3.1	3.0	2.6	4.2	5.8	5.5	5.3	24	8.5
12	6.0	4.3	2.9	e3.0	3.2	2.9	4.2	6.1	4.2	5.7	2.8	6.4
13	6.0	4.9	2.8	e3.1	3.8	2.9	4.2	6.0	4.2	6.1	2.2	4.9
14	6.0	3.9	2.6	e3.1	4.2	2.9	4.2	6.1	4.2	6.1	2.0	3.5
15	6.0	4.3	3.2	e3.1	3.9	2.9	4.2	6.1	4.2	6.1	2.0	2.2
16	6.0	8.0	4.4	e2.9	4.6	2.9	4.2	6.1	4.2	6.1	2.0	2.8
17	6.0	6.9	6.4	e2.8	6.1	2.9	4.2	6.1	4.2	6.1	2.0	1.9
18	6.0	5.4	8.5	e3.0	5.4	2.9	4.2	6.1	4.2	6.1	2.0	2.4
19	17	5.7	5.4	e3.1	e3.7	9.5	4.2	6.1	4.2	6.1	1.9	3.0
20	9.7	5.5	3.7	e3.0	e3.2	11	4.2	6.4	4.2	6.1	3.2	3.1
21	6.0	6.1	3.0	3.0	e2.7	3.8	4.2	28	4.2	6.1	4.2	2.4
22	5.7	6.1	3.0	3.3	e2.7	2.9	4.2	5.8	4.2	6.1	4.2	2.6
23	5.4	6.1	3.1	3.1	e2.7	2.9	4.2	4.2	4.2	6.1	4.2	4.5
24	5.1	6.1	3.3	3.2	e2.8	2.9	4.2	4.2	4.2	6.1	4.2	8.4
25	4.6	6.1	3.7	3.0	e2.8	2.9	4.2	4.2	4.2	6.1	4.2	4.4
26	4.4	4.8	4.2	3.0	e2.7	2.9	4.2	4.2	4.2	6.1	4.2	4.9
27	4.4	5.3	4.2	2.8	e2.7	102	4.2	4.2	4.2	6.1	3.8	11
28	4.4	5.2	4.2	2.5	e3.0	3.4	4.2	4.2	4.2	6.1	4.1	6.1
29	4.4	5.5	4.4	2.1	---	2.9	4.2	4.3	4.2	6.1	4.1	5.7
30	4.4	6.2	5.2	2.0	---	2.9	4.2	4.3	4.2	6.1	4.8	4.3
31	3.6	---	7.9	2.2	---	2.9	---	5.1	---	16	5.2	---
TOTAL	190.0	150.8	133.2	140.3	96.9	242.9	115.7	185.2	146.1	193.5	211.3	226.9
MEAN	6.13	5.03	4.30	4.53	3.46	7.84	3.86	5.97	4.87	6.24	6.82	7.56
MAX	17	8.0	8.5	25	6.1	102	4.2	28	17	17	47	83
MIN	3.6	3.3	2.6	2.0	2.7	2.6	2.6	4.2	4.2	4.2	1.9	1.9
AC-FT	377	299	264	278	192	482	229	367	290	384	419	450
†	.16	.00	.00	.24	.64	.48	.00	.16	.24	.44	.16	.00

CAL YR 1990 TOTAL 2492.3 MEAN 6.83 MAX 239 MIN 2.6 AC-FT 4940 † TOTAL 5.04
WTR YR 1991 TOTAL 2032.8 MEAN 5.57 MAX 102 MIN 1.9 AC-FT 4030 † TOTAL 2.52

e Estimated

† Precipitation, in inches

LAS VEGAS VALLEY

85

09419679 LAS VEGAS WASTEWAY NEAR EAST LAS VEGAS, NV

LOCATION.--Lat 36°06'22", long 115°01'07", in NW 1/4 SE 1/4 sec.23, T.21 S., R.62 E., Clark County, Hydrologic Unit 15010015, on left bank, 500 ft west of Hollywood Blvd., and 1.5 mi northeast of East Las Vegas Civic Center. Gage was moved 500 ft upstream on May 9, 1991.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May 1979 to September 1983, November 1983 to May 1984, and September 1984 to current year.

GAGE.--Water-stage recorder. Prior to May 9, 1991, at site 500 ft downstream at datum 10.0 ft lower. Prior to Apr. 7, 1986, at site 450 ft downstream at datum 8.8 ft lower. Elevation of gage is 1,650 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Flow regulated by sewage treatment plant.

AVERAGE DISCHARGE.--11 years (1980-83, 1985-91), 119 ft³/s, 86,220 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 734 ft³/s, July 2, 1980, gage height, 5.15 ft, datum then in use; maximum gage height, 6.64 ft, Aug. 17, 1989; minimum daily, 45 ft³/s, Aug. 22, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 404 ft³/s, Mar. 27, gage height, 6.97 ft; minimum daily, 84 ft³/s, July 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	e156	142	158	161	274	152	e157	190	159	246	169
2	152	e154	147	157	162	187	151	e158	155	159	163	169
3	153	e150	144	150	163	175	152	e161	154	160	167	168
4	152	e149	141	166	161	168	143	e166	151	160	168	169
5	153	e152	143	150	158	165	141	e163	148	157	169	174
6	153	e158	137	147	157	145	149	e162	148	156	163	e180
7	153	e158	139	143	158	167	156	e144	150	158	139	198
8	150	e156	139	140	156	168	152	e162	151	171	157	e177
9	147	e149	142	145	159	172	149	e161	152	181	159	e171
10	146	e148	143	165	160	173	154	159	152	165	166	e168
11	145	e150	139	165	159	172	151	157	152	162	254	e163
12	150	e150	143	168	161	170	149	160	149	158	173	e162
13	153	e149	139	169	157	165	153	157	149	159	173	e161
14	153	e148	138	167	161	168	153	153	151	155	166	e170
15	150	e147	143	168	159	173	152	154	154	162	165	e174
16	146	e145	138	169	162	176	150	153	151	158	165	e173
17	147	e142	140	166	164	176	150	152	154	159	164	e172
18	146	e140	136	167	160	173	152	153	116	159	164	e172
19	152	e140	131	169	163	207	149	155	172	158	166	e172
20	e156	e147	132	169	156	183	153	149	154	159	165	e171
21	e152	e150	131	172	160	183	152	170	154	161	163	e170
22	e156	e150	136	167	157	156	e157	187	156	170	162	e168
23	e154	e148	140	164	161	159	e160	161	153	96	161	e168
24	e158	139	153	165	162	156	e160	160	156	171	164	e166
25	e158	134	158	166	161	157	e161	158	158	166	165	e165
26	e157	148	157	165	117	154	e162	156	156	162	169	e161
27	e153	146	156	164	153	259	e163	155	156	161	166	e162
28	e152	145	157	165	286	179	e162	152	156	163	167	e170
29	e150	146	162	165	---	159	e161	146	157	171	167	e179
30	e150	141	161	164	---	151	e160	141	158	e84	168	e180
31	e152	---	162	163	---	154	---	144	---	210	170	---
TOTAL	4703	4435	4469	5018	4554	5424	4609	4866	4613	4930	5274	5122
MEAN	152	148	144	162	163	175	154	157	154	159	170	171
MAX	158	158	162	172	286	274	163	187	190	210	254	198
MIN	145	134	131	140	117	145	141	141	116	84	139	161
AC-FT	9330	8800	8860	9950	9030	10760	9140	9650	9150	9780	10460	10160

CAL YR 1990 TOTAL 54883 MEAN 150 MAX 289 MIN 105 AC-FT 108900
WTR YR 1991 TOTAL 58017 MEAN 159 MAX 286 MIN 84 AC-FT 115100

e Estimated

LAS VEGAS VALLEY

09419700 LAS VEGAS WASH NEAR HENDERSON, NV

LOCATION.--Lat 36°05'20", long 114°59'05", in SE 1/4 SW 1/4 sec.30, T.21 S., R.63 E., Clark County, Hydrologic Unit 15010015, on right bank at upstream end of 4.5-ft pipe culvert on road, 3.5 mi north of Henderson, and 6.0 mi upstream from Lake Mead.

DRAINAGE AREA.--2,125 mi², of which 1,518 mi² contribute directly to surface runoff. Prior to Apr. 4, 1961, 2,179 mi², of which 1,571 mi² contributed directly to surface runoff.

PERIOD OF RECORD.--Water years 1957 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1985 to September 1987.

WATER TEMPERATURE: November 1985 to September 1987.

REMARKS.--Discharge includes treated sewage effluent from municipal treatment plants and some wastewater from industrial plants. City and County sewage treatment plants implemented chemical removal of phosphorus from effluent during water year 1981.

COOPERATION.--All water-quality sampling and analyses prior to July 1970, plus nutrient analyses for period July 1970 to September 1972, from U.S. Environmental Protection Agency. Data in addition to those listed under "Period of Record" for January 1964 to June 1970 may exist in files of U.S. Environmental Protection Agency.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,150 microsiemens, Jan. 5, 1987; minimum daily, 1,470 microsiemens, July 23, 1986.

WATER TEMPERATURE: Maximum daily, 29.0°C, Aug. 4, 6, 1987; minimum daily, 11.5°C, Feb. 11, 1986.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT									
15...	0845	E144	2230	7.3	10.5	16.5	1.00	0.990	2.10
NOV									
23...	1115	E157	2150	7.5	17.0	20.0	0.620	0.620	1.70
DEC									
19...	1015	E151	2250	7.4	11.0	16.0	0.480	0.500	1.60
JAN									
10...	1100	E150	2260	7.5	13.0	15.0	0.370	0.360	1.10
FEB									
22...	0845	E160	2420	7.4	11.0	17.0	0.430	0.410	1.40
MAR									
25...	0945	E147	2500	7.4	18.5	18.0	0.350	0.350	1.10
APR									
05...	0845	E98	2510	7.5	22.5	21.0	0.300	0.300	1.20
12...	0900	E130	2480	7.5	14.5	16.5	0.640	0.630	1.70
19...	0900	E132	2650	7.5	18.0	19.0	0.430	0.410	1.50
26...	0915	E137	2420	7.6	16.0	18.0	0.810	0.750	2.00
MAY									
03...	0800	E126	2500	7.4	15.5	18.0	0.840	0.820	1.70
10...	0830	E130	2530	7.5	15.5	18.0	0.940	0.890	2.10
17...	0930	E130	2460	7.5	20.0	21.0	0.980	0.970	2.10
24...	1100	E142	2300	7.6	33.0	26.0	0.970	0.950	2.30
31...	0915	E129	2330	7.5	14.0	18.5	0.690	0.680	2.10
JUN									
07...	0915	E130	2310	7.7	28.0	25.0	0.810	0.800	2.00
14...	0900	E140	2220	7.5	30.0	23.0	0.980	0.970	1.90
21...	0915	E141	2150	7.4	28.0	25.0	0.830	0.820	1.70
28...	1200	E127	2030	7.4	30.0	25.0	1.00	1.00	2.70
JUL									
05...	0815	E137	2200	7.5	33.0	26.5	0.820	0.800	1.80
11...	1030	E153	2090	7.4	38.0	28.0	0.860	0.850	2.20
19...	0845	E145	2160	7.4	26.0	24.0	0.890	0.860	2.40
26...	0715	E137	2210	7.4	20.0	24.0	0.810	0.800	2.00
AUG									
02...	0745	E175	2140	7.7	24.5	26.0	0.650	0.640	1.80
09...	1030	E147	2080	7.7	29.0	25.0	1.10	1.00	2.20
16...	0930	E145	2180	7.5	34.0	27.0	0.850	0.880	1.80
23...	0800	E144	2150	7.5	31.0	26.0	1.30	1.10	2.20
30...	1200	E156	2090	7.5	24.0	26.0	1.40	1.40	2.90
SEP									
06...	0800	E160	2260	7.4	22.0	25.0	1.10	1.20	2.30
13...	0845	E144	2200	7.6	21.0	23.0	0.890	0.880	2.30
20...	0915	E153	2170	7.5	26.0	25.0	0.940	0.910	2.60
27...	0830	E150	2160	7.4	22.0	24.0	0.960	0.940	2.20

LAS VEGAS VALLEY

87

09419700 LAS VEGAS WASH NEAR HENDERSON, NV--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT									
15...	2.00	12.0	11.0	15	14	0.740	0.550	0.460	0.390
NOV									
23...	1.60	16.0	16.0	--	--	0.720	0.400	0.310	0.270
DEC									
19...	1.60	14.0	14.0	16	15	0.730	0.380	0.390	0.310
JAN									
10...	1.10	14.0	14.0	18	15	0.510	0.300	0.310	0.240
FEB									
22...	1.30	15.0	13.0	16	14	0.640	0.510	0.470	0.430
MAR									
25...	1.20	14.0	10.0	15	14	0.770	0.590	0.570	0.510
APR									
05...	0.990	13.0	14.0	32	15	0.400	0.270	0.240	0.210
12...	1.60	13.0	13.0	15	15	0.700	0.460	0.470	0.380
19...	1.40	14.0	13.0	15	13	0.450	0.330	0.270	0.190
26...	1.80	13.0	12.0	17	13	1.00	0.640	0.640	0.560
MAY									
03...	1.70	12.0	11.0	15	14	0.470	0.360	0.310	0.290
10...	2.00	13.0	12.0	15	13	0.700	0.460	0.440	0.370
17...	2.10	13.0	11.0	13	13	0.800	0.500	0.500	0.420
24...	2.30	11.0	12.0	12	15	0.910	0.620	0.630	0.560
31...	2.10	12.0	11.0	12	10	0.430	0.170	0.200	0.110
JUN									
07...	2.00	11.0	11.0	14	13	0.890	0.610	0.580	0.540
14...	1.90	12.0	11.0	15	15	1.40	1.00	1.20	1.00
21...	1.70	12.0	11.0	20	14	0.470	0.290	0.250	0.210
28...	2.70	11.0	11.0	14	14	0.710	0.430	0.400	0.330
JUL									
05...	1.80	11.0	12.0	14	12	0.690	0.460	0.540	0.450
11...	2.20	13.0	12.0	15	14	0.640	0.410	0.430	0.390
19...	2.30	10.0	11.0	15	12	0.510	0.390	0.400	0.320
26...	2.00	12.0	12.0	14	13	0.790	0.530	0.550	0.490
AUG									
02...	1.80	11.0	10.0	12	10	0.480	0.350	0.330	0.290
09...	2.20	12.0	11.0	15	14	0.700	0.450	0.440	0.350
16...	1.70	11.0	11.0	12	13	0.690	0.450	0.430	0.430
23...	2.20	12.0	11.0	15	14	0.570	0.380	0.360	0.290
30...	2.90	10.0	10.0	13	12	0.720	0.550	0.490	0.450
SEP									
06...	2.40	12.0	12.0	13	11	0.660	0.500	0.460	0.400
13...	2.50	11.0	12.0	16	15	0.590	0.400	0.390	0.320
20...	2.40	11.0	12.0	15	15	0.520	0.340	0.330	0.260
27...	2.20	12.0	12.0	15	13	0.560	0.380	0.340	0.290

E: ESTIMATED

LAS VEGAS VALLEY

09419753 LAS VEGAS WASH ABOVE THREE KIDS WASH BELOW HENDERSON, NV

LOCATION.--Lat 36°05'53", long 114°56'42", in NW 1/4 NE 1/4 sec.28, T.21 S., R.63 E., Clark County, Hydrologic Unit 15010015, in Lake Mead National Recreation Area, on left bank, 0.1 mi upstream from Three Kids Wash, 2.7 mi southwest of Northshore Road Bridge, and 3.0 mi northeast of Henderson.

DRAINAGE AREA.--2,180 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,460 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,050 ft³/s, June 10, 1990, gage height, 11.28 ft, from rating curve extended above 200 ft³/s on basis of velocity-area study; minimum daily, 114 ft³/s, June 2, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 366 ft³/s, Feb. 28, gage height, 7.02 ft, from rating curve extended above 200 ft³/s, on basis of velocity-area study; minimum daily, 132 ft³/s, Jan. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	183	167	171	191	241	178	156	180	e152	224	172
2	174	178	172	156	187	210	178	154	159	e158	193	174
3	171	177	174	143	187	185	182	158	159	e164	190	177
4	163	e175	170	153	189	179	177	166	156	e168	184	176
5	165	e175	173	141	189	172	172	160	158	e166	186	179
6	164	e180	172	137	189	159	174	162	159	e164	182	189
7	168	e180	169	134	189	164	173	140	155	e160	172	203
8	168	e180	172	132	189	170	171	165	153	e166	173	177
9	166	e170	173	e156	186	168	168	161	157	e162	174	174
10	166	e170	173	e166	185	167	167	156	158	e164	175	169
11	162	e175	175	e171	185	168	165	155	156	e168	234	169
12	162	e175	177	175	186	169	161	156	156	e164	180	165
13	163	e170	176	176	183	167	161	156	154	163	180	168
14	162	e170	177	177	182	169	162	152	157	160	173	175
15	167	e170	180	179	177	170	162	152	156	162	168	179
16	169	e165	181	178	178	171	160	153	157	162	166	177
17	170	e165	179	178	178	172	161	137	156	163	168	175
18	170	e160	176	178	178	171	160	146	133	164	167	176
19	174	e160	174	179	179	180	160	148	168	162	167	177
20	180	e170	175	179	177	182	159	148	158	162	168	176
21	175	e175	178	181	182	188	159	156	158	162	168	172
22	180	e170	185	180	180	169	161	171	156	168	170	168
23	178	e170	184	180	181	170	160	154	156	139	169	169
24	179	e170	186	184	181	169	161	155	157	170	167	171
25	178	e165	191	184	181	178	161	156	156	167	169	167
26	181	e165	189	185	161	185	161	158	153	163	175	166
27	178	e165	187	186	180	209	162	159	156	162	169	172
28	175	167	185	186	278	199	161	161	153	164	170	174
29	176	172	187	185	---	178	161	159	150	168	169	177
30	175	170	187	188	---	172	161	158	151	136	171	179
31	176	---	185	192	---	177	---	153	---	184	172	---
TOTAL	5308	5137	5529	5290	5208	5528	4959	4821	4691	5037	5493	5242
MEAN	171	171	178	171	186	178	165	156	156	162	177	175
MAX	181	183	191	192	278	241	182	171	180	184	234	203
MIN	162	160	167	132	161	159	159	137	133	136	166	165
AC-FT	10530	10190	10970	10490	10330	10960	9840	9560	9300	9990	10900	10400

CAL YR 1990 TOTAL 63023 MEAN 173 MAX 600 MIN 140 AC-FT 125000
WTR YR 1991 TOTAL 62243 MEAN 171 MAX 278 MIN 132 AC-FT 123500

e Estimated

LAS VEGAS VALLEY

89

09419753 LAS VEGAS WASH ABOVE THREE KIDS WASH BELOW HENDERSON, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to current year.

REMARKS.--Discharge includes treated sewage effluent and wastewater from municipal and industrial sources.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT									
15...	1000	156	2460	7.5	14.0	16.5	0.800	0.790	1.70
NOV									
23...	1215	E170	2380	7.6	16.0	20.5	0.760	0.740	2.00
DEC									
19...	1105	167	2470	7.4	11.0	14.5	0.600	0.600	1.80
JAN									
10...	1215	166	2470	7.4	11.0	14.5	0.500	0.460	1.40
FEB									
22...	1145	174	2580	7.6	16.0	18.0	0.660	0.640	1.80
MAR									
25...	1100	159	2660	7.6	17.0	17.0	0.410	0.390	1.40
APR									
05...	1000	165	2870	7.7	26.0	21.0	0.350	0.330	1.50
12...	1000	150	2760	7.6	16.5	18.5	0.580	0.550	1.90
19...	1100	149	2870	7.7	22.0	20.0	0.890	0.860	2.10
26...	1015	151	2640	7.6	17.5	21.0	1.00	0.970	2.40
MAY									
03...	0845	140	2730	7.7	17.5	18.5	1.00	1.00	2.10
10...	0930	143	2680	7.6	20.0	21.0	1.20	1.10	2.50
17...	1130	144	2560	7.7	22.0	21.0	1.60	1.20	2.80
24...	1300	157	2420	7.8	33.0	30.0	1.30	1.20	2.90
31...	1000	143	2550	7.7	15.5	19.0	0.790	0.800	2.30
JUN									
07...	1045	144	2510	7.8	30.0	26.0	0.980	0.990	2.30
14...	1030	154	2530	7.8	36.0	25.0	1.30	1.20	2.40
21...	1230	156	2150	7.7	31.0	28.0	1.20	1.20	2.60
28...	1030	143	2390	7.6	28.0	23.0	1.10	1.10	2.50
JUL									
05...	1000	150	2330	7.7	38.0	29.0	1.20	1.30	2.40
11...	1125	E168	2290	7.6	33.0	26.0	1.20	1.20	2.50
19...	1030	154	2400	7.6	29.5	24.5	1.30	1.30	2.90
26...	0830	152	2340	7.6	24.0	24.0	1.20	1.00	2.40
AUG									
02...	0915	194	2400	7.7	33.0	26.5	0.700	0.710	2.00
09...	1030	165	2300	7.6	35.0	26.0	1.20	1.20	2.50
16...	1030	161	2290	7.7	37.0	27.0	0.990	0.980	2.10
23...	0915	161	2340	7.6	36.0	26.0	1.50	1.40	2.70
30...	1435	173	2220	7.6	32.0	27.0	1.70	1.60	3.40
SEP									
06...	0900	173	2370	7.5	23.0	24.5	1.40	1.50	2.70
13...	1030	163	2380	7.6	28.0	24.0	1.20	1.20	--
20...	1030	168	2350	7.6	31.0	25.5	1.30	1.20	2.90
27...	1000	165	2330	7.5	22.0	24.0	1.30	1.30	2.80

LAS VEGAS VALLEY

09419753 LAS VEGAS WASH ABOVE THREE KIDS WASH BELOW HENDERSON, NV--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT									
15...	1.70	13.0	13.0	15	16	0.830	0.570	0.510	0.430
NOV									
23...	1.90	15.0	14.0	17	15	0.720	0.370	0.330	0.270
DEC									
19...	1.90	12.0	12.0	15	14	0.670	0.330	0.360	0.280
JAN									
10...	1.40	13.0	12.0	16	12	0.470	0.320	0.320	0.270
FEB									
22...	1.80	14.0	14.0	14	15	0.620	0.440	0.420	0.400
MAR									
25...	1.50	12.0	13.0	14	13	0.670	0.530	0.520	0.460
APR									
05...	1.20	12.0	11.0	14	13	0.350	0.210	0.220	0.180
12...	1.90	13.0	12.0	13	14	0.430	0.230	0.240	0.160
19...	2.10	12.0	12.0	13	12	0.830	0.390	0.440	0.340
26...	2.20	12.0	11.0	14	12	0.880	0.580	0.590	0.500
MAY									
03...	2.00	11.0	10.0	14	14	0.470	0.340	0.300	0.260
10...	2.40	11.0	12.0	13	12	0.670	0.440	0.410	0.350
17...	2.40	11.0	10.0	13	13	0.730	0.460	0.480	0.410
24...	2.90	10.0	10.0	13	10	0.860	0.500	0.540	0.480
31...	2.30	11.0	11.0	15	12	0.430	0.160	0.210	0.130
JUN									
07...	2.30	11.0	9.30	13	12	0.840	0.600	0.540	0.520
14...	2.10	8.70	8.60	14	10	1.20	0.850	1.10	0.810
21...	2.50	9.70	10.0	13	13	0.480	0.280	0.230	0.190
28...	2.50	11.0	11.0	12	13	0.660	0.430	0.400	0.350
JUL									
05...	2.40	10.0	10.0	12	12	0.670	0.420	0.490	0.420
11...	2.50	11.0	11.0	12	12	0.630	0.360	0.400	0.350
19...	2.80	10.0	11.0	14	12	0.480	0.360	0.360	0.300
26...	2.30	12.0	11.0	13	14	0.770	0.500	0.510	0.470
AUG									
02...	2.00	9.50	9.60	14	11	0.430	0.330	0.280	0.250
09...	2.60	11.0	10.0	14	13	0.660	0.410	0.400	0.330
16...	2.10	11.0	10.0	15	11	0.760	0.430	0.440	--
23...	2.80	11.0	10.0	13	11	0.590	0.360	0.340	0.280
30...	3.40	9.60	8.70	13	12	0.790	0.610	0.550	0.510
SEP									
06...	2.70	10.0	11.0	12	10	0.610	0.470	0.440	0.380
13...	3.30	10.0	9.90	14	15	0.560	0.370	0.350	0.300
20...	2.80	10.0	10.0	13	13	0.520	0.310	0.320	0.250
27...	2.80	11.0	12.0	13	12	0.510	0.370	0.330	0.280

E: ESTIMATED

COLORADO RIVER MAIN STEM

91

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV

LOCATION--Lat 36°00'58", long 114°44'13", in NE 1/4 SW 1/4 sec.3, T.30 N., R.23 W., Gila and Salt River meridian, Mohave-Clark Counties, Hydrologic Unit 15010005, in center of Hoover Dam on Colorado River.

DRAINAGE AREA.--171,700 mi², approximately, including 3,959 mi² in Great Divide basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

RESERVOIR-CONTENTS RECORDS

PERIOD OF RECORD.--Contents: February 1935 to current year. Evaporation: March 1952 to current year.
Diversions (monthly totals only): to Boulder City area, since October 1935; to Henderson and Las Vegas areas, since April 1942; combined diversions since October 1968. Prior to 1946 published as "at Boulder Dam."

REVISED RECORDS.--WSP 899: 1935-39.

GAGE.--Water-stage indicator read once daily at midnight, with supplementary water-stage recorder. Datum of gage is 0.00 ft to Local Powerhouse datum and is 0.40 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete arch-gravity dam; storage began Feb. 1, 1935; dam completed Mar. 1, 1936. Total capacity (based on 1963-64 resurvey by Coast and Geodetic Survey; capacity table put into use Apr. 1, 1967), 29,755,000 acre-ft, consisting of the following: Dead storage, 2,378,000 acre-ft below gage height 850.0 ft--gage sills in outlet towers; usable contents, 26,159,000 acre-ft between gage heights 895.0 ft and 1,211.4 ft (top of automatic spillway gates in raised position); uncontrolled storage, 1,218,000 acre-ft between gage heights 1,221.4 ft and 1,229.0 ft (maximum water surface). Reservoir is used to store water for flood control, irrigation, municipal water supply, power development and recreation. Figures given herein represent usable contents.

DIVERSIONS FROM LAKE MEAD.--Diversions to Boulder City area at dam; diversions to Henderson and Las Vegas areas from intakes 6 mi upstream. Diversions measured by Venturi meters. Water used for municipal and industrial purposes.

COOPERATION.--Records of gage height and contents furnished by Bureau of Reclamation. Records of diversions from Lake Mead furnished by Bureau of Reclamation and Colorado River Commission of Nevada.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 27,790,000 acre-ft, July 29, 30, 1941 (on basis of original bathymetry), gage height, 1,220.45 ft; maximum gage height, 1,225.85 ft, July 24, 1983 (equivalent to 26,868,000 acre-ft on basis of resurveyed bathymetry of 1963-64); minimum contents (since 1940), 10,695,000 acre-ft, Apr. 26, 1956, gage height, 1,083.21 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 20,166,000 acre-ft, Feb. 24, gage height, 1,180.17 ft; minimum, 19,193,000 acre-ft, Sept. 24, 25, gage height, 1,172.70 ft.

COLORADO RIVER MAIN STEM

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

RESERVOIR STORAGE (THOU AC-FT) WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20144	19994	19955	19856	20065	20145	20042	19830	19620	19425	19272	19226
2	20137	19984	19955	19851	20070	20141	20038	19824	19626	19402	19278	19230
3	20124	19980	19945	19857	20083	20135	20024	19819	19603	19385	19284	19220
4	20116	19982	19940	19878	20079	20128	20029	19815	19579	19386	19288	19219
5	20112	19976	19929	19895	20082	20123	20029	19809	19577	19384	19284	19212
6	20112	19967	19929	19913	20083	20108	20022	19792	19549	19394	19279	19214
7	20114	19954	19927	19927	20082	20102	20032	19771	19535	19410	19276	19226
8	20106	19952	19928	19945	20088	20102	20025	19751	19535	19412	19270	19234
9	20100	19953	19932	19958	20092	20106	20019	19746	19539	19417	19260	19231
10	20096	19958	19932	19975	20099	20103	20011	19743	19531	19422	19266	19226
11	20091	19965	19925	19994	20090	20096	19996	19749	19523	19421	19267	19221
12	20081	19961	19917	20012	20078	20083	19988	19758	19513	19419	19257	19220
13	20083	19954	19920	20022	20066	20067	19994	19750	19506	19421	19248	19216
14	20083	19948	19919	20020	20063	20063	19997	19749	19500	19413	19244	19217
15	20073	19945	19924	20013	20071	20069	19994	19741	19500	19388	19239	19226
16	20057	19948	19994	20008	20081	20061	19983	19730	19500	19363	19237	19224
17	20041	19953	19912	20015	20094	20055	19974	19725	19488	19344	19243	19217
18	20037	19957	19900	20017	20103	20050	19965	19723	19473	19344	19246	19203
19	20025	19953	19874	20030	20108	20044	19955	19716	19473	19340	19244	19201
20	20028	19958	19875	20042	20111	20028	19953	19695	19471	19352	19238	19198
21	20032	19948	19864	20046	20127	20020	19948	19664	19469	19357	19228	19205
22	20030	19949	19868	20054	20143	20016	19945	19643	19474	19356	19226	19212
23	20033	19953	19864	20055	20149	20020	19955	19634	19479	19350	19216	19205
24	20030	19962	19865	20062	20166	20024	19929	19624	19474	19347	19226	19193
25	20026	19965	19873	20070	20164	20020	19895	19624	19460	19345	19221	19193
26	20025	19958	19875	20083	20161	20013	19887	19624	19440	19343	19229	19198
27	20028	19957	19870	20091	20152	20004	19886	19630	19439	19349	19220	19201
28	20037	19946	19873	20084	20149	20012	19881	19624	19437	19344	19215	19216
29	20024	19949	19877	20073	---	20028	19871	19612	19442	19330	19214	19234
30	20012	19949	19871	20061	---	20037	19852	19597	19446	19293	19212	19233
31	19996	---	19864	20061	---	20050	---	19607	---	19269	19221	---
MAX	20144	19994	19994	20091	20166	20145	20042	19830	19626	19425	19288	19234
MIN	19996	19945	19864	19851	20063	20004	19852	19597	19437	19269	19212	19193
*	1178.90	1178.54	1177.89	1179.39	1180.06	1179.31	1177.80	1175.92	1174.67	1173.29	1172.92	1173.01
#	-148000	-47000	-85000	+197000	+88000	-99000	-198000	-245000	-161000	-177000	-48000	+12000
##	26130	20880	13990	17220	15710	18790	24130	26550	26570	29100	27310	23110
**	5.8	7.0	5.8	2.8	e2.0	4.2	2.5	e5.8	9.5	8.4	11.2	9.6
a	64100	76800	63900	30300	e22500	45800	27800	e62500	102000	89400	119000	102000
CAL YR 1990	MAX 21754	MIN 19864	# -1605000	## 268590	** 71.7	a 801000						
WTR YR 1991	MAX 20166	MIN 19193	# -911000	## 269490	** 74.6	a 806100						
* Gage height, in feet, at end of month. ** Gross evaporation, in inches, from Lake Mead. # Change in contents, in acre-feet. a Gross evaporation, in acre-feet, from Lake Mead. ## Diversions, in acre-feet. e Estimated												

NOTE: Figures of gross evaporation are based on data obtained on Lake Mead by the U.S. Bureau of Reclamation and at Las Vegas by National Weather Service, and are computed by the Geological Survey. Only the mass-transfer method described in Geological Survey Professional Paper 298 is used. "Gross" denotes the total evaporation from the lake without deduction for precipitation on the lake surface for natural losses that would have occurred in the area now occupied by the lake. Starting February 1976, coefficient of 0.00179.

COLORADO RIVER MAIN STEM

93

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 36°00'55", long 114°44'16", in NE 1/4 SW 1/4 sec.3, T.30 N., R.23 W., Gila and Salt River meridian, or SW1/4NE1/4 sec.29, T.22 S., R.65 E., Mount Diablo meridian, Mohave-Clark Counties, Hydrologic Unit 15030101, in powerhouse at downstream side of Hoover Dam.

DRAINAGE AREA.--171,700 mi², approximately, including 3,959 mi² in Great Divide basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year (prior to April 1934, monthly discharge only, published in WSP 1313). Published as "near Willow Beach" 1933-39 and as "below Boulder Dam" 1939-45.

GAGE.--Acoustical velocity meters on each turbine in Hoover Dam. Prior to Nov. 1, 1939, water-stage recorder at site 9 mi downstream at datum 594.8 ft above National Geodetic Vertical Datum of 1929. Nov. 1, 1939, to June 30, 1958, water-stage recorder at site 0.8 mi downstream at datum 600.35 ft, above National Geodetic Vertical Datum of 1929. July 1, 1958, to Nov. 7, 1979, totalizing flowmeter on each turbine.

REMARKS.--Flow regulated by Hoover Dam on Lake Mead since Feb. 1, 1935. Many diversions above station for irrigation, industrial, and municipal use.

COOPERATION.--Records furnished by Bureau of Reclamation.

AVERAGE DISCHARGE.--57 years (water years 1935-91), 14,000 ft³/s, 10,143,000 acre-ft/yr, unadjusted for storage in Lake Mead.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 50,800 ft³/s, July 29, 1983; no flow at Hoover Dam part of Feb. 10, 1935; minimum daily, 152 ft³/s, Feb. 10, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 20,200 ft³/s, May 29; minimum daily, 4,310 ft³/s, Oct. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7750	8070	7200	7570	7700	12400	10100	14300	10100	16900	16800	12200
2	7840	7370	8360	9370	7320	10900	9710	13500	10900	17100	16400	11800
3	9940	6380	11800	9390	5700	12500	9820	14400	17900	18000	12100	17600
4	11400	7570	10500	9710	11300	12500	10300	13100	17800	15700	11300	13900
5	9280	7570	11000	6370	10100	12200	12000	12200	14100	18700	15100	12800
6	6640	9060	11800	6230	9560	14800	10600	15000	16200	13300	15600	14500
7	7410	9280	11500	7980	10100	13500	11400	17000	17600	14000	14900	8590
8	9400	7630	9120	6260	9010	12800	12100	16300	12400	13700	18500	11000
9	8740	7420	9120	8500	7520	9820	15500	16000	12100	17900	17300	13900
10	10800	5570	12200	8100	7880	11900	13900	16900	16000	13800	11700	14400
11	10800	6600	10600	7060	10100	14500	16800	12600	16600	19100	14400	13600
12	12300	7560	10500	6090	11700	15800	16200	10500	15600	20100	18300	14500
13	7060	8840	10800	7140	10900	14400	11100	16800	18600	14700	18700	15500
14	7650	8420	11400	10300	11400	13000	12700	17500	20100	16600	15500	11900
15	10200	7980	8020	8210	10500	14000	15300	19700	16600	17900	16200	10000
16	11800	8490	9780	7530	6810	12100	16300	18200	16300	16000	15800	13600
17	10900	6350	13100	6440	7690	13700	13300	17600	19700	18500	11100	15400
18	11900	8240	12600	8320	8570	15200	15400	16700	17200	16500	12900	15500
19	7980	10300	12300	5620	7720	14600	15700	14900	16600	15800	15400	15500
20	7100	8220	12900	4900	10900	16000	10800	16700	19500	10600	17100	15400
21	6180	11400	16000	8710	8860	16900	13100	19700	20000	13800	17000	11500
22	7410	9880	9850	6810	9010	14000	12900	18800	16100	16700	16900	10200
23	7800	8250	12000	8000	7930	10900	14300	19900	14000	19200	17700	17300
24	8670	8060	7770	7950	8230	9650	15500	19100	15700	18200	9900	16600
25	9350	6420	6850	9210	12400	14400	14300	15100	20100	16500	11600	11900
26	9770	9430	9410	8610	13000	14200	14600	13700	19800	17800	15700	13400
27	5780	9870	11100	8030	16400	13100	9840	12700	18700	14400	14700	12100
28	4310	9960	11200	9150	15400	9680	13600	16400	16800	16300	14800	7590
29	10500	9090	10200	11800	---	8020	14600	20200	13300	17500	15600	6450
30	11100	8330	9610	10400	---	6490	13500	18800	11600	17200	15600	15500
31	10200	---	10600	9480	---	5310	---	14800	---	17400	10400	---
TOTAL	277960	247610	329190	249240	273710	389270	395270	499100	488000	509900	465000	394130
MEAN	8966	8254	10620	8040	9775	12560	13180	16100	16270	16450	15000	13140
MAX	12300	11400	16000	11800	16400	16900	16800	20200	20100	20100	18700	17600
MIN	4310	5570	6850	4900	5700	5310	9710	10500	10100	10600	9900	6450
AC-FT	551300	491100	652900	494400	542900	772100	784000	990000	967900	1011000	922300	781800

CAL YR 1990 TOTAL 4640250 MEAN 12710 MAX 22100 MIN 4310 AC-FT 9204000
WTR YR 1991 TOTAL 4518380 MEAN 12380 MAX 20200 MIN 4310 AC-FT 8962000

COLORADO RIVER MAIN STEM

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1940 to current year.

PERIOD OF DAILY RECORD.--

CHEMICAL ANALYSES: October 1939 to September 1944, October 1950 to September 1957, October 1967 to March 1970.

SPECIFIC CONDUCTANCE: October 1939 to July 1957, October 1977 to September 1987.

WATER TEMPERATURE: October 1941 to July 1957, October 1977 to September 1987.

REMARKS.--Samples collected at gaging station 0.3 mi downstream from Hoover Dam. Unpublished chemical analyses for period October 1939 to September 1940 available from the U.S. Geological Survey in Tucson, Ariz.

COOPERATION.--Instantaneous-discharge data provided by U.S. Bureau of Reclamation.

EXTREMES MEASURED FOR PERIOD OF DAILY RECORD SINCE OCTOBER 1977.--

SPECIFIC CONDUCTANCE: Maximum, 1,180 microsiemens, June 10, 1980; minimum, 787 microsiemens, Apr. 20, 1987.

WATER TEMPERATURE: Maximum, 21.5°C, July 23, 1983; minimum, 9.0°C, Jan. 10, 1978.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH, FIELD (STANDARD UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED SATURATION (PER-CENT)	COLIFORM, FECA, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI, FECA, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CaCO3)
NOV 13...	1130	4580	930	7.8	26.0	13.5	0.40	6.8	67	<1	K4	260
JAN 09...	1100	9020	940	8.1	15.0	12.5	5.0	7.8	75	<1	<1	300
FEB 26...	1200	22200	980	8.7	23.0	11.5	0.40	8.5	101	<1	<1	300
APR 25...	1100	26900	1000	8.2	26.0	12.5	1.2	8.9	86	<1	<1	300
JUN 26...	1200	26900	1010	8.1	34.0	12.5	0.50	8.2	79	K1	K1	310
AUG 27...	1100	23600	900	7.8	38.0	16.0	0.80	8.0	83	<2	K8	300

DATE	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3)	ALKALINITY TOT IT FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV 13...	66	24	79	2	3.8	147	120	250	63	0.40	8.6	630
JAN 09...	73	28	89	2	4.8	165	135	270	80	0.70	9.1	604
FEB 26...	75	28	93	2	4.2	140	115	280	84	0.30	9.0	642
APR 25...	73	28	89	2	4.4	163	134	270	84	0.30	8.7	639
JUN 26...	75	29	93	2	3.9	166	136	270	82	0.30	9.2	600
AUG 27...	74	27	88	2	4.3	182	149	280	83	0.30	8.6	650

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS DIS-SOLVED (MG/L AS P)	PHOSPHORUS ORTHO TOTAL (MG/L AS P)
NOV 13...	570	0.86	<0.010	0.020	0.300	0.300	0.040	0.040	<0.20	<0.010	<0.010	<0.010
JAN 09...	637	0.82	<0.010	0.010	0.300	0.300	0.050	0.030	0.30	<0.010	<0.010	<0.010
FEB 26...	645	0.87	<0.010	<0.010	0.350	0.350	0.020	0.020	0.60	<0.010	<0.010	<0.010
APR 25...	640	0.87	<0.010	0.010	0.440	0.350	0.040	0.030	<0.20	0.010	<0.010	<0.010
JUN 26...	647	0.82	<0.010	<0.010	0.370	0.370	0.040	<0.010	<0.20	<0.010	0.010	<0.010
AUG 27...	658	0.88	<0.010	<0.010	0.370	0.390	<0.010	0.020	0.20	<0.010	<0.010	<0.010

COLORADO RIVER MAIN STEM

95

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)
NOV 13...	<0.010	10	3	97	<0.5	<1.0	<1	<3	2	4	<1	40
JAN 09...	<0.010	--	--	--	--	--	--	--	--	--	--	--
FEB 26...	<0.010	<10	2	120	<0.5	1.0	1	<3	3	3	2	44
APR 25...	<0.010	<10	3	78	<0.5	<1.0	<1	<3	<1	7	1	42
JUN 26...	<0.010	<10	3	110	<0.5	<1.0	1	<3	2	7	1	45
AUG 27...	<0.010	<10	2	110	<0.5	2.0	<1	<3	2	13	<1	44

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 13...	<1	<0.1	<10	<1	2	<1.0	920	<6	6	2	25	56
JAN 09...	--	--	--	--	--	--	--	--	--	7	170	54
FEB 26...	<1	<0.1	<10	1	3	<1.0	1100	<6	<3	--	--	--
APR 25...	<1	<0.1	<10	2	2	<1.0	1100	<6	10	1	73	75
JUN 26...	2	--	<10	<1	2	<1.0	1100	<6	21	1	73	74
AUG 27...	4	<0.1	10	2	3	<1.0	1000	<6	18	1	64	50

K: NON-IDEAL COLONY COUNT

COLORADO RIVER MAIN STEM

09422500 LAKE MOHAVE AT DAVIS DAM, AZ-NV

LOCATION.--Lat 35°11'50", long 114°34'07", in SW 1/4 SW 1/4 sec.18, T.21 N., R.21 W., Gila and Salt River meridian, Mohave County, Arizona, Hydrologic Unit 15030101, on forebay structure on Arizona side of Davis Dam on Colorado River, 29 mi west of Kingman, Az., and 67 mi downstream from Hoover Dam.

DRAINAGE AREA.--173,300 mi², approximately, including 3,959 mi² in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--January 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earthfill and rockfill dam; dam completed in April 1949 and storage began Jan. 17, 1950. Usable capacity, 1,810,000 acre-ft between elevations 533.39 ft - lowest point of penstock outlet - and 647.0 ft - top of spillway gates. A small amount of additional storage is available through use of splashboards on the spillway gates. Dead storage, 8,530 acre-ft below elevation 533.39 ft. Lake is used for power development, reregulation for irrigation demand, and to satisfy requirements of the Treaty of 1944 with Mexico. Figures given herein represent usable contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,811,000 acre-ft May 24, 1958, May 29, 1963, May 29, 1982; maximum elevation, 647.04 ft May 29, 1963, May 29, 1982; minimum contents (since 1952), 1,168,000 acre-ft Sept. 8, 1953, elevation, 622.15 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,790,000 acre-ft, Mar. 21, elevation, 646.28 ft; minimum, 1,383,000 acre-ft, Nov. 17, elevation, 630.98 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

630	1,359,000	641	1,644,000
632	1,409,000	644	1,726,000
635	1,486,000	647	1,810,000
638	1,564,000		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1478000	1427000	1441000	1604000	1688000	1720000	1758000	1606000	1628000	1589000	1515000	1481000
2	1474000	1425000	1443000	1610000	1684000	1732000	1757000	1598000	1623000	1586000	1515000	1475000
3	1475000	1419000	1450000	1619000	1680000	1746000	1754000	1594000	1625000	1583000	1509000	1481000
4	1480000	1414000	1452000	1628000	1683000	1755000	1747000	1588000	1624000	1576000	1506000	1477000
5	1479000	1415000	1457000	1633000	1682000	1760000	1742000	1585000	1619000	1578000	1501000	1475000
6	1474000	1417000	1461000	1639000	1681000	1767000	1732000	1583000	1619000	1567000	1497000	1479000
7	1473000	1415000	1465000	1646000	1681000	1767000	1733000	1586000	1618000	1562000	1491000	1478000
8	1468000	1414000	1465000	1651000	1679000	1762000	1729000	1585000	1612000	1554000	1492000	1479000
9	1464000	1408000	1468000	1657000	1676000	1754000	1727000	1587000	1609000	1550000	1492000	1481000
10	1461000	1400000	1475000	1666000	1676000	1759000	1726000	1586000	1606000	1543000	1485000	1484000
11	1463000	1396000	1480000	1674000	1677000	1763000	1721000	1579000	1604000	1545000	1482000	1486000
12	1466000	1395000	1484000	1679000	1681000	1770000	1723000	1574000	1603000	1549000	1490000	1490000
13	1460000	1392000	1488000	1688000	1685000	1772000	1714000	1573000	1604000	1547000	1496000	1493000
14	1458000	1390000	1497000	1699000	1689000	1768000	1708000	1578000	1610000	1548000	1497000	1491000
15	1456000	1388000	1497000	1705000	1690000	1769000	1706000	1584000	1607000	1552000	1498000	1494000
16	1458000	1386000	1504000	1707000	1686000	1769000	1703000	1587000	1608000	1546000	1499000	1494000
17	1464000	1383000	1511000	1708000	1686000	1775000	1696000	1590000	1609000	1546000	1493000	1495000
18	1468000	1385000	1516000	1707000	1683000	1780000	1692000	1590000	1609000	1541000	1487000	1503000
19	1467000	1390000	1526000	1703000	1680000	1780000	1687000	1594000	1606000	1533000	1484000	1512000
20	1463000	1394000	1538000	1703000	1680000	1784000	1673000	1595000	1605000	1522000	1485000	1522000
21	1457000	1404000	1555000	1705000	1676000	1790000	1672000	1604000	1607000	1517000	1486000	1526000
22	1454000	1410000	1562000	1701000	1667000	1787000	1664000	1612000	1601000	1513000	1486000	1530000
23	1449000	1415000	1578000	1700000	1659000	1781000	1654000	1624000	1595000	1514000	1489000	1543000
24	1445000	1416000	1578000	1699000	1658000	1771000	1647000	1635000	1588000	1512000	1474000	1556000
25	1443000	1419000	1573000	1696000	1661000	1776000	1644000	1638000	1593000	1508000	1470000	1559000
26	1442000	1427000	1572000	1689000	1668000	1779000	1640000	1639000	1599000	1510000	1471000	1564000
27	1437000	1436000	1576000	1686000	1684000	1782000	1629000	1634000	1604000	1504000	1470000	1572000
28	1428000	1445000	1581000	1683000	1703000	1783000	1627000	1635000	1604000	1503000	1473000	1566000
29	1429000	1446000	1588000	1689000	---	1776000	1624000	1641000	1599000	1501000	1478000	1562000
30	1429000	1442000	1597000	1689000	---	1766000	1616000	1648000	1617000	1506000	1484000	1569000
31	1428000	---	1601000	1693000	---	1760000	---	1641000	---	1510000	1479000	---
MAX	1480000	1446000	1601000	1708000	1703000	1790000	1758000	1648000	1628000	1589000	1515000	1572000
MIN	1428000	1383000	1441000	1604000	1658000	1720000	1616000	1573000	1588000	1501000	1470000	1475000
(*)	632.75	633.31	639.39	642.79	643.15	645.23	639.93	640.87	639.98	635.95	634.75	638.19
(**)	-57000	+14000	+159000	+92000	+10000	+57000	-144000	+25000	-24000	-107000	-31000	+90000
CAL YR 1990	MAX	1768000	MIN	1383000	(**)	-36000						
WTR YR 1991	MAX	1790000	MIN	1383000	(**)	+84000						

(*) Elevation, in feet, at end of month.

(**) Change in contents, in acre-feet.

COLORADO RIVER MAIN STEM

97

09423000 COLORADO RIVER BELOW DAVIS DAM, AZ-NV

LOCATION.--Lat 35°11'30", long 114°34'17", in SE 1/4 NE 1/4 sec.1, T.32 S., R.66 E., Mount Diablo meridian, in Clark County, Nevada, Hydrologic Unit 15030101, on right bank 0.5 mi downstream from Davis Dam, 29 mi west of Kingman, Az., and 68 mi downstream from Hoover Dam.

DRAINAGE AREA.--173,300 mi², approximately, including 3,959 mi² in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--June 1905 to September 1907 (published as "at Hardyville"), March 1949 to current year.

REVISED RECORDS.--WDR AZ-86-1: 1981.

GAGE.--Water-stage recorder. Datum of gage is 490.00 ft, National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD since Oct. 1, 1967. 1905-7, nonrecording gage at site 4.8 mi downstream at datum about 3.4 ft lower. Mar. 16 to May 3, 1949, water-stage recorder at site 0.5 mi downstream at datum 10.00 ft higher. May 4, 1949, to Feb. 24, 1956, water-stage recorder at site 400 ft upstream at datum 10.00 ft higher. Feb. 25, 1956, to Sept. 30, 1967, water-stage recorder at present site at datum 10.00 ft higher.

REMARKS.--No estimated daily discharge. Records excellent. Flow regulated by Lake Mead since Feb. 1, 1935, and by Lake Mohave since Jan. 17, 1950. Many diversions upstream for irrigation, industrial, and municipal uses.

EXTREMES FOR PERIOD OF RECORD.--1905-7: Maximum daily discharge, 116,000 ft³/s June 20, 1906; minimum daily, 2,850 ft³/s Jan. 5, 1906. 1949-91: Maximum discharge, 46,200 ft³/s July 2, 1983, elevation, 509.48 ft; maximum elevation, 513.91 ft Apr. 22, 1952; no flow at Davis Dam parts of several days July to September 1950 and Dec. 27, 1950, when gates in dam were closed; minimum daily discharge, 285 ft³/s Aug. 3, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,500 ft³/s Aug. 10, elevation, 505.21 ft; minimum daily, 2,920 ft³/s Jan. 11-13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11100	9200	7900	6020	8660	4130	10300	18100	15900	17200	14200	10600
2	10100	8370	6830	5960	8600	4480	10100	18200	13900	18000	15200	14800
3	9820	8310	8240	5180	8200	4420	10700	15600	16000	18200	15300	14800
4	9040	7970	8200	4380	9430	7150	12700	15500	16800	18300	13100	14900
5	9090	8510	8760	3520	9340	9620	13900	13300	16800	18300	16800	13900
6	9120	8530	8720	3430	9800	11300	14100	15400	16400	18300	17200	12200
7	9110	8640	9050	3600	9860	12600	11700	15400	15700	16600	17800	10300
8	10400	7780	8520	3600	9630	13400	13600	15900	15700	18500	17200	9450
9	11200	9410	7490	4330	9060	13400	15200	15800	14700	18700	16700	12500
10	11000	9220	8060	3260	7620	9970	15700	15800	15600	18500	16500	12500
11	10100	8850	8090	2920	8990	11800	15600	15400	16400	17200	15000	12300
12	10100	8650	8050	2920	9220	12100	14800	13500	16500	16300	14500	12400
13	10100	9350	8030	2920	9160	12500	14800	15900	16300	16100	14700	13000
14	9050	9360	6870	4530	9050	13500	13900	15500	16500	15200	14600	12500
15	10200	9400	6880	4610	9110	13500	15700	15600	16000	15300	14700	9300
16	10100	8760	6110	5780	8950	12200	16900	15600	15200	18600	14700	12400
17	9060	8250	8780	6030	8220	10000	17000	15700	18200	18400	14500	12500
18	9050	6900	8830	6830	9400	11600	17000	15500	15000	18400	14600	12400
19	8990	6840	7580	7280	9350	13500	17100	13200	18600	18100	16300	11000
20	8970	6820	6920	5110	9450	13800	16400	14600	18400	16900	16100	9750
21	7940	6870	6830	7030	11700	13700	13900	14400	18500	16800	16100	9510
22	9470	6330	5730	7910	12300	13700	17100	14400	18500	18600	16100	8440
23	10100	5920	4770	7940	11400	13700	18200	12400	15700	18300	15900	9550
24	10100	5390	6020	8150	9270	13800	18300	12400	18800	19000	16000	9760
25	10100	5070	7930	10700	10500	11900	16500	12900	17800	18200	14600	9680
26	9720	4980	8710	11700	9220	11800	15700	13000	15500	17300	15200	9610
27	9080	5340	7980	8730	7910	11100	15600	14600	15500	16700	15300	9660
28	7850	5450	7250	9900	6000	9720	13500	15600	15600	15400	12900	9600
29	9740	7810	7990	9200	---	10300	16200	15600	15300	17300	12800	8670
30	10700	9050	5170	9110	---	10700	16300	15600	15200	16000	12900	11500
31	10700	---	7930	8600	---	9250	---	16700	---	14400	12900	---
TOTAL	301200	231330	234220	191180	259400	344640	448500	467100	491000	539100	470400	339480
MEAN	9716	7711	7555	6167	9264	11120	14950	15070	16370	17390	15170	11320
MAX	11200	9410	9050	11700	12300	13800	18300	18200	18800	19000	17800	14900
MIN	7850	4980	4770	2920	6000	4130	10100	12400	13900	14400	12800	8440
AC-FT	597400	458800	464600	379200	514500	683600	889600	926500	973900	1069000	933000	673400
CAL YR 1990	TOTAL	4628670	MEAN	12680	MAX	21300	MIN	4770	AC-FT	9181000		
WTR YR 1991	TOTAL	4317550	MEAN	11830	MAX	19000	MIN	2920	AC-FT	8564000		

THE GREAT BASIN

SPRING VALLEY

10243700 CLEVE CREEK NEAR ELY, NV

LOCATION.--Lat 39°12'58", long 114°31'44", in SE 1/4 SE 1/4 sec.27, T.16 N., R.66 E., White Pine County, Hydrologic Unit 16060003, on right bank 2.3 mi downstream from North Fork, 4 mi southwest of Cleveland Ranch headquarters, and 18 mi east of Ely.

DRAINAGE AREA.--31.8 mi².

PERIOD OF RECORD.--June 1914 to December 1916 (published as Cleveland Creek near Osceola), October 1959 to September 1967, October 1976 to September 1981, December 1982 to September 1987, March 1990 to current year. Crest-stage partial-record station October 1967 to September 1976.

GAGE.--Water-stage recorder. Elevation of gage is 6,140 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1967, to Sept. 30, 1976, crest-stage gage at same site and datum. Prior to Sept. 13, 1984, at site 1/4 mi upstream, at different datum. Prior to Apr. 18, 1985, at different datum. Prior to Oct. 4, 1985, at datum 2.00 ft lower. From Nov. 19, 1986, at site 75 ft downstream at datum, 5.2 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion above station. Practically entire flow diverted for irrigation by Cleveland Ranch below station.

AVERAGE DISCHARGE.--20 years (1915-16, 1960-67, 1977-81, 1984-87, 1991), 10.4 ft³/s, 7,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 440 ft³/s, May 30, 1983, on basis of slope-area measurement of peak flow, gage height, unknown; minimum discharge, 2.3 ft³/s, Feb. 27, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 5	0700	*42	2.24	No other peak greater than base discharge.			
Minimum daily, 2.7 ft ³ /s, Dec. 22.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	5.1	5.0	e6.0	e4.7	4.7	4.9	5.4	35	9.2	6.2	5.5
2	4.5	5.1	4.7	e5.6	e4.6	4.6	4.9	5.5	36	8.9	6.4	5.3
3	4.5	5.1	4.9	e5.4	e4.5	4.7	5.1	5.6	35	8.6	7.3	5.2
4	4.5	5.1	5.3	e5.3	e4.5	4.9	5.3	5.7	33	8.4	7.6	5.2
5	4.5	5.1	5.1	e5.3	e4.5	5.1	5.4	5.7	40	8.2	7.5	5.1
6	4.5	5.1	4.9	e5.3	e4.5	4.6	5.4	5.9	38	8.2	7.3	5.5
7	5.1	5.1	5.7	e5.3	e4.6	4.8	5.4	5.9	35	8.1	7.1	5.9
8	5.0	5.2	5.1	e5.3	4.7	4.6	5.2	6.0	34	8.0	6.9	5.5
9	4.9	5.1	5.2	5.3	5.1	4.4	5.3	7.0	33	8.5	6.9	6.8
10	4.8	5.0	5.1	5.3	5.2	4.3	5.2	6.9	32	8.1	6.8	5.8
11	4.8	4.9	e5.0	5.3	5.1	4.4	5.2	6.7	34	7.7	7.4	5.4
12	4.8	4.9	e4.7	5.4	5.1	4.4	5.3	6.5	37	7.6	7.6	5.3
13	4.7	5.1	e4.2	5.4	5.2	4.3	5.2	6.4	38	7.4	7.1	5.3
14	4.7	5.1	e4.5	5.3	5.0	4.3	5.3	7.4	36	7.1	7.2	5.5
15	4.8	5.1	e4.2	5.2	4.9	4.4	5.2	7.3	31	6.9	7.1	5.4
16	4.9	5.1	e4.0	4.8	5.0	4.3	5.1	7.2	26	6.7	6.7	5.4
17	5.0	5.1	e4.3	5.3	4.9	4.3	5.1	7.9	24	6.7	6.6	5.6
18	5.2	5.1	e4.0	5.3	4.9	4.3	5.1	8.1	21	6.6	6.5	e5.6
19	5.7	5.0	e3.6	5.3	5.2	4.5	5.1	7.8	19	6.7	6.5	e5.5
20	5.3	5.1	e3.3	5.3	4.9	4.4	5.0	7.6	17	6.5	6.3	e5.5
21	5.3	5.1	e3.0	5.6	4.8	4.5	4.9	7.6	16	6.6	6.2	e5.4
22	5.2	5.1	e2.7	5.7	4.8	4.6	5.1	9.6	14	6.4	6.0	e5.4
23	5.1	5.1	e3.3	5.7	4.8	4.5	5.1	10	13	6.3	5.9	e5.4
24	5.1	5.1	e4.0	5.5	4.7	4.6	5.1	10	12	6.1	5.9	e5.4
25	5.0	5.0	e4.5	5.4	4.8	4.7	5.3	11	11	6.0	5.8	e5.4
26	4.9	5.0	e4.0	5.5	4.8	4.7	5.2	13	11	6.0	5.8	e5.4
27	4.9	4.6	e5.0	5.5	4.6	4.7	5.3	14	11	5.8	5.7	e5.4
28	4.9	4.8	e6.0	5.5	4.7	4.7	5.4	13	10	5.8	5.8	e5.4
29	4.9	5.3	e5.4	5.5	---	4.8	5.5	13	9.9	5.9	5.5	e5.4
30	4.9	5.2	e4.5	e5.0	---	4.8	5.5	14	9.5	6.0	5.4	e5.4
31	4.9	---	e5.0	e4.8	---	5.0	---	16	---	6.2	5.8	---
TOTAL	151.9	151.8	140.2	166.4	135.1	141.9	156.1	263.7	751.4	221.2	202.8	164.3
MEAN	4.90	5.06	4.52	5.37	4.82	4.58	5.20	8.51	25.0	7.14	6.54	5.48
MAX	5.7	5.3	6.0	6.0	5.2	5.1	5.5	16	40	9.2	7.6	6.8
MIN	4.5	4.6	2.7	4.8	4.5	4.3	4.9	5.4	9.5	5.8	5.4	5.1
AC-FT	301	301	278	330	268	281	310	523	1490	439	402	326

WTR YR 1991 TOTAL 2646.8 MEAN 7.25 MAX 40 MIN 2.7 AC-FT 5250

e Estimated

STEPTOE VALLEY BASIN

99

10244950 STEPTOE CREEK NEAR ELY, NV
(Hydrologic Bench-Mark Station)

LOCATION.--Lat 39°12'05", long 114°41'15", in SW 1/4 SW 1/4 sec.32, T.16 N., R.65 E., White Pine County, Hydrologic Unit 16060008, in Humboldt National Forest, on left bank, 0.1 mi downstream from Clear Creek, 0.8 mi upstream from Cave Creek, and 11 mi east-southeast of Ely.

DRAINAGE AREA.--11.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,440 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--25 years, 7.37 ft³/s, 5,340 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 85 ft³/s, July 21, 1985, gage height, 3.11 ft, from rating curve extended above 49 ft³/s; minimum daily, 1.7 ft³/s, Mar. 7, 8, 12, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 15 ft³/s, June 8, from comparison with nearby streams; minimum daily, 1.7 ft³/s, Mar. 7, 8, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	2.4	2.2	e2.0	2.2	1.9	2.1	2.2	4.0	6.9	4.2	3.4
2	2.4	2.3	2.2	e2.1	2.2	1.8	2.1	2.1	5.4	6.6	4.3	3.3
3	2.4	2.2	2.4	2.1	2.1	1.8	2.1	2.1	e8.8	6.4	4.2	3.3
4	2.3	2.2	2.4	2.2	2.1	1.8	2.2	2.1	e13	6.3	4.2	3.3
5	2.2	2.3	2.5	2.2	2.1	1.9	2.2	2.0	e12	6.1	4.2	3.3
6	2.2	2.3	2.5	2.2	2.2	1.8	2.2	1.9	e13	6.0	4.1	3.4
7	2.3	2.4	2.5	2.2	2.2	1.7	2.4	1.9	e14	5.9	4.1	3.7
8	2.2	2.4	2.5	2.2	2.1	1.7	2.4	1.9	e15	5.9	4.0	3.4
9	2.2	2.5	2.5	2.2	2.1	1.8	2.4	2.1	e13	5.9	4.0	3.5
10	2.3	2.5	2.5	2.2	2.2	1.8	2.4	2.1	e12	5.7	4.0	3.3
11	2.3	2.6	2.5	2.2	2.2	1.8	2.3	2.0	e12	5.6	4.0	3.4
12	2.2	2.6	2.5	2.2	2.2	1.7	2.3	1.9	e12	5.5	4.0	3.3
13	2.3	2.6	e2.5	2.2	2.2	1.8	2.4	2.0	e13	5.5	3.9	3.2
14	2.3	2.6	e2.5	2.3	1.9	1.9	2.5	2.0	e13	5.4	3.9	3.2
15	2.3	2.6	2.5	2.4	1.9	1.9	2.6	1.9	e13	5.3	3.9	3.2
16	2.4	2.5	e2.4	2.4	2.0	2.0	2.7	2.0	e12	5.1	3.9	3.2
17	2.4	2.5	e2.3	2.4	2.0	2.1	2.5	2.5	e12	5.0	3.8	3.3
18	2.4	2.5	e2.1	2.4	1.9	2.1	2.4	2.6	e11	5.0	3.8	3.3
19	2.4	2.6	e2.0	2.5	1.8	2.1	2.4	2.5	e10	4.9	3.8	3.3
20	2.3	2.6	e2.0	2.8	1.8	2.1	2.4	2.4	e9.6	4.8	3.7	3.3
21	2.3	2.3	e2.0	2.8	1.9	2.1	2.5	2.4	e9.0	4.7	3.7	3.3
22	2.4	2.3	e2.0	2.7	1.9	2.2	2.5	2.4	e8.8	4.6	3.7	3.3
23	2.4	2.4	e2.0	2.7	1.9	2.2	2.4	2.3	e8.6	4.6	3.7	3.3
24	2.4	2.4	e2.0	2.8	1.8	2.2	2.4	2.4	e8.4	4.5	3.6	3.4
25	2.4	2.4	e2.0	2.6	1.8	2.1	2.4	2.9	e8.2	4.5	3.4	3.3
26	2.4	2.4	e2.0	2.5	1.8	1.9	2.3	3.9	8.1	4.4	3.5	3.4
27	2.4	2.1	e2.0	2.5	1.8	1.9	2.2	4.0	8.0	4.4	3.4	3.4
28	2.4	2.1	e2.0	2.4	1.8	2.0	2.2	3.5	7.7	4.3	3.5	3.4
29	2.4	2.1	e2.0	2.3	---	2.0	2.2	3.5	7.5	4.3	3.3	3.4
30	2.4	2.2	e2.0	2.2	---	2.0	2.2	3.7	7.2	4.2	3.3	3.4
31	2.4	---	e2.0	2.2	---	2.1	---	3.6	---	4.1	3.4	---
TOTAL	72.5	71.9	69.5	73.1	56.1	60.2	70.3	76.8	309.3	162.4	118.5	100.2
MEAN	2.34	2.40	2.24	2.36	2.00	1.94	2.34	2.48	10.3	5.24	3.82	3.34
MAX	2.4	2.6	2.5	2.8	2.2	2.2	2.7	4.0	15	6.9	4.3	3.7
MIN	2.2	2.1	2.0	2.0	1.8	1.7	2.1	1.9	4.0	4.1	3.3	3.2
AC-FT	144	143	138	145	111	119	139	152	613	322	235	199

CAL YR 1990 TOTAL 1012.3 MEAN 2.77 MAX 5.7 MIN 2.0 AC-FT 2010
WTR YR 1991 TOTAL 1240.8 MEAN 3.40 MAX 15 MIN 1.7 AC-FT 2460

e Estimated

STEPTOE VALLEY BASIN

10244950 STEPTOE CREEK NEAR ELY, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1966 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum daily, 11.0°C, on several days in May 1968, July 31 to Sept. 9, 1969, and July 17, 1979; minimum daily, 2.5°C, Dec. 9, 1972.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CaCO3)
NOV 28...	1100	2.0	324	8.7	0.0	5.0	0.60	10.2	103	<2	<18	180
FEB 01...	1045	2.2	323	8.5	8.0	5.5	1.8	10.2	104	<2	K8	180
MAY 01...	0900	2.2	318	8.6	10.5	6.0	0.50	9.8	105	<2	K4	150
AUG 01...	1030	4.3	316	8.5	19.5	8.5	1.0	9.5	105	K8	55	170

DATE	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)
NOV 28...	54	11	1.8	0.1	0.50	209	5	180	3.7	0.10	0.20	7.0
FEB 01...	54	11	2.1	0.1	0.70	185	6	162	6.5	1.0	<0.10	7.0
MAY 01...	45	8.4	1.5	0.0	0.40	209	7	174	7.2	2.0	<0.10	--
AUG 01...	52	9.4	1.5	0.0	0.50	183	8	162	6.3	0.40	<0.10	6.2

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)
NOV 28...	178	187	0.24	<0.010	<0.010	0.100	0.100	0.030	0.040	<0.20	--	0.030
FEB 01...	185	180	0.25	<0.010	<0.010	--	0.200	<0.010	0.030	0.40	--	0.020
MAY 01...	186	175	0.25	<0.010	<0.010	0.160	0.100	0.010	<0.010	<0.20	--	0.010
AUG 01...	168	175	0.23	<0.010	<0.010	0.110	0.130	0.020	<0.010	0.20	<0.20	<0.010

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (MG/L AS Al)	ARSENIC DIS-SOLVED (UG/L AS As)	BARIUM, DIS-SOLVED (UG/L AS Ba)	BERYL-LIUM, DIS-SOLVED (UG/L AS Be)	CADMIUM DIS-SOLVED (UG/L AS Cd)	CHRO-MIUM, DIS-SOLVED (UG/L AS Cr)	COBALT, DIS-SOLVED (UG/L AS Co)	COPPER, DIS-SOLVED (UG/L AS Cu)	IRON, DIS-SOLVED (UG/L AS Fe)
NOV 28...	<0.010	0.020	<0.010	20	2	43	<0.5	<1.0	<1	<3	1	9
FEB 01...	0.020	<0.010	0.010	<10	1	41	<0.5	<1.0	<1	<3	2	7
MAY 01...	0.010	<0.010	<0.010	<10	1	32	<0.5	<1.0	<1	<3	2	22
AUG 01...	<0.010	<0.010	0.020	10	1	38	<0.5	2.0	1	<3	9	6

STEPTOE VALLEY BASIN

101

10244950 STEPTOE CREEK NEAR ELY, NV--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 28...	<1	6	1	<0.1	<10	<1	<1	<1.0	86	<6	11
FEB 01...	2	6	1	<0.1	<10	<1	<1	<1.0	82	<6	9
MAY 01...	<1	<4	9	<0.1	<10	2	<1	<1.0	69	<6	72
AUG 01...	<1	6	2	<0.1	<10	<1	<1	<1.0	74	<6	<3

DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)	SEDI- MENT, SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 28...	--	--	--	--	--	--	--	--	33	0.18	48
FEB 01...	--	--	--	--	--	--	--	--	17	0.10	32
MAY 01...	0.9	<0.6	0.8	<0.6	0.6	<0.6	0.07	0.51	3	0.02	65
AUG 01...	0.9	<0.6	0.8	<0.6	<0.6	<0.6	0.09	0.04	8	0.09	74

K: NON-IDEAL COLONY COUNT

JAKES VALLEY

10245445 ILLIPAH CREEK NEAR HAMILTON, NV

LOCATION.--Lat 39°19'07", long 115°23'39", in NE 1/4 NW 1/4 sec.25, T.16 N., R.58 E., White Pine County, Hydrologic Unit 16060007, in Humboldt National Forest, on left bank, 4.5 mi southwest of Illipah, 6.7 mi northeast of Hamilton, and 28 mi northwest of Ely.

DRAINAGE AREA.--31.5 mi².

PERIOD OF RECORD.--June 1983 to September 1987, March 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,840 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 13, 1983, at present site at datum 1.0 ft higher.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--5 years (1984-87, 1991), 4.29 ft³/s, 3,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 446 ft³/s, Aug. 22, 1984, gage height, 6.05 ft; minimum daily, 0.10 ft³/s, Dec. 22, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.9 ft³/s, Oct. 21, gage height, 1.11 ft; minimum daily, 0.10 ft³/s, Dec. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.87	e.32	e.48	e.45	.63	.86	.70	1.0	.78	.48	.72
2	1.0	e.86	e.30	e.60	e.47	.65	.87	.81	.93	.68	.51	.74
3	1.0	e.88	e.28	e.52	e.52	.70	.89	.82	.80	.66	.56	.70
4	1.0	.92	e.34	e.60	e.57	.80	.81	.73	.82	.70	.49	.68
5	1.0	.89	e.33	e.70	e.60	.81	.82	.71	.80	.69	.46	.66
6	1.0	e.90	e.30	e.74	.65	e.80	.79	.70	.80	.65	.47	.67
7	1.0	e.92	e.27	e.76	.63	e.76	.77	.70	.79	.63	.47	.89
8	1.0	e.94	e.31	e.78	.66	.74	e.76	.69	.84	.64	.48	.71
9	1.0	.95	e.35	e.78	.65	.73	e.73	.87	.84	.70	.49	.70
10	.96	.92	e.54	e.77	.67	.81	e.70	.89	.81	.62	.50	.63
11	.91	1.0	e.68	.68	.65	e.84	e.69	.83	.78	.57	.52	.68
12	.96	1.0	e.60	.74	.73	e.90	.67	.78	.81	.58	.63	.74
13	.96	1.0	e.50	.71	.85	.93	.66	.74	.83	.54	.56	.60
14	.91	.87	e.25	.73	.68	e.90	.66	.84	.87	.54	.54	.59
15	.91	.87	e.27	.53	.69	e.90	.62	.84	.87	.52	.57	.59
16	.86	.91	e.30	.52	.68	e.89	.63	.73	.81	.48	.57	.58
17	.87	.86	e.27	.48	.63	e.88	.62	.74	.81	.49	.58	.58
18	.95	.82	e.30	.50	.51	e.88	.64	.78	.80	.52	.59	.59
19	.93	.82	e.25	.52	.59	.89	.62	.78	.76	.52	.59	.58
20	.86	.73	e.20	.53	.68	e.88	.62	.78	.75	.47	.59	.58
21	.92	e.66	e.13	.33	.71	.85	.62	.78	.74	.46	.57	.58
22	.93	e.70	e.10	e.32	.76	.87	.62	.99	.75	.49	.56	.56
23	.91	e.75	e.12	e.35	.74	.88	.62	.88	.71	.49	.57	.57
24	.91	e.80	e.15	e.39	.57	e.86	.62	.80	.66	.45	.59	.57
25	.87	e.90	e.17	e.36	.56	e.85	.71	.83	.70	.46	.59	.57
26	.86	e.76	e.20	e.41	.64	e.86	.74	.80	.72	.50	.59	.58
27	.84	e.60	e.26	e.45	.70	.89	.78	.80	.71	.47	.64	.60
28	.86	e.45	e.30	e.38	.70	e.87	.78	.80	.71	.42	.68	.61
29	.82	e.37	e.25	e.35	---	e.87	.72	.78	.70	.47	.70	.61
30	.85	e.34	e.30	e.39	---	.85	.78	.92	.76	.49	.70	.59
31	.87	---	e.40	e.40	---	.88	---	.97	---	.48	.69	---
TOTAL	28.72	24.26	9.34	16.80	17.94	25.85	21.42	24.81	23.68	17.16	17.53	19.05
MEAN	.93	.81	.30	.54	.64	.83	.71	.80	.79	.55	.57	.63
MAX	1.0	1.0	.68	.78	.85	.93	.89	.99	1.0	.78	.70	.89
MIN	.82	.34	.10	.32	.45	.63	.62	.69	.66	.42	.46	.56
AC-FT	57	48	19	33	36	51	42	49	47	34	35	38

WTR YR 1991 TOTAL 246.56 MEAN .68 MAX 1.0 MIN .10 AC-FT 489

e Estimated

MONITOR VALLEY-DIAMOND VALLEY SYSTEM

103

10245900 PINE CREEK NEAR BELMONT, NV

LOCATION.--Lat 38°47'40", long 116°51'13", in NW 1/4 SE 1/4 sec.13, T.11 N., R.45 E., Nye County, Hydrologic Unit 16060005, on right bank 2.9 mi west of Pine Creek Ranch, and 7.2 mi north of Belmont.

DRAINAGE AREA.--12.2 mi².

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage 7,560 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversions above station.

AVERAGE DISCHARGE.--14 years, 5.44 ft³/s, 3,940 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 340 ft³/s, May 29, 1983, gage height, 4.66 ft; minimum daily, 0.56 ft³/s, Nov. 20, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29 ft³/s, June 12, 13, gage height, 2.18 ft; minimum daily, 0.90 ft³/s, May 3, 4, but may have been less during period of ice effect Dec. 13 to Jan. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.4	1.4	e1.2	1.0	.96	1.1	1.0	5.6	6.4	2.4	1.4
2	1.4	1.3	1.4	e1.2	1.0	.96	1.1	.93	6.2	6.0	2.4	1.4
3	1.4	1.1	1.4	e1.1	1.0	.96	1.2	.90	8.2	6.1	2.4	1.4
4	1.4	1.3	1.4	e1.0	1.0	.97	1.2	.90	13	5.9	2.3	1.3
5	1.4	1.4	1.4	e1.0	1.0	1.0	1.3	.96	20	5.4	2.1	1.3
6	1.4	1.4	1.4	e1.0	1.0	1.1	1.4	1.0	20	5.1	2.1	1.3
7	1.4	1.1	1.4	e1.0	.97	.97	1.4	1.1	22	5.1	2.1	1.4
8	1.4	1.2	1.4	1.0	.96	.97	1.3	1.2	23	5.1	2.1	1.6
9	1.4	1.4	1.4	1.0	.96	1.0	1.2	1.2	22	5.1	2.0	1.8
10	1.4	1.4	1.3	1.0	.96	1.0	1.2	1.2	22	5.0	1.8	1.7
11	1.3	1.4	1.3	1.1	.96	1.0	1.1	1.1	25	4.6	1.8	1.7
12	1.3	1.4	1.3	1.0	.96	.92	1.1	1.1	26	4.3	1.9	1.7
13	1.3	1.4	e1.2	1.0	.96	.95	1.1	1.1	26	4.0	1.8	1.6
14	1.3	1.4	e1.2	1.0	.96	.96	1.1	1.1	23	3.8	1.8	1.4
15	1.3	1.4	e1.2	1.0	.96	.96	1.1	1.2	20	3.7	1.8	1.4
16	1.3	1.4	e1.1	1.0	.96	.96	1.1	1.3	18	3.6	1.8	1.4
17	1.3	1.4	e1.1	1.0	.96	1.1	1.1	1.4	16	3.5	1.8	1.4
18	1.3	1.4	e1.1	1.0	.96	1.1	1.0	1.4	15	3.3	1.7	1.4
19	1.4	1.4	e1.0	1.0	.96	1.1	1.1	1.4	14	3.1	1.6	1.4
20	1.4	1.4	e.98	1.0	.96	1.1	1.1	1.5	13	3.1	1.6	1.4
21	1.4	.95	e.94	1.0	.96	1.1	1.1	1.5	12	3.1	1.6	1.4
22	1.4	1.2	e1.0	1.0	.96	1.1	1.1	1.5	11	3.0	1.6	1.4
23	1.4	1.4	e1.1	1.0	.96	1.1	1.1	1.5	10	2.7	1.5	1.3
24	1.4	1.3	e1.2	1.0	.96	1.1	1.1	1.7	9.4	2.7	1.5	1.3
25	1.4	1.3	e1.2	1.0	.96	1.2	1.1	2.1	9.1	2.7	1.4	1.3
26	1.4	1.3	e1.2	1.0	.96	1.1	1.1	2.7	8.8	2.7	1.4	1.3
27	1.4	1.1	e1.2	1.0	.96	1.1	1.1	3.5	8.5	2.5	1.4	1.5
28	1.4	1.1	e1.2	1.0	.96	1.1	1.0	3.5	7.7	2.4	1.4	1.8
29	1.4	1.3	e1.1	1.0	---	1.1	1.0	4.0	7.2	2.4	1.4	1.8
30	1.4	1.4	e1.0	1.0	---	1.1	1.1	4.9	6.7	2.4	1.4	1.7
31	1.4	---	e1.1	1.0	---	1.1	---	5.1	---	2.4	1.4	---
TOTAL	42.6	39.35	37.62	31.6	27.13	32.24	34.1	54.99	448.4	121.2	55.3	44.2
MEAN	1.37	1.31	1.21	1.02	.97	1.04	1.14	1.77	14.9	3.91	1.78	1.47
MAX	1.4	1.4	1.4	1.2	1.0	1.2	1.4	5.1	26	6.4	2.4	1.8
MIN	1.3	.95	.94	1.0	.96	.92	1.0	.90	5.6	2.4	1.4	1.3
AC-FT	84	78	75	63	54	64	68	109	889	240	110	88

CAL YR 1990 TOTAL 821.86 MEAN 2.25 MAX 18 MIN .72 AC-FT 1630
WTR YR 1991 TOTAL 968.73 MEAN 2.65 MAX 26 MIN .90 AC-FT 1920

e Estimated

MONITOR VALLEY-DIAMOND VALLEY SYSTEM

10245910 MOSQUITO CREEK NEAR BELMONT, NV

LOCATION.--Lat 38°48'22", long 116°40'43", in NW 1/4 SW 1/4 sec.10, T.11 N., R.47 E., Nye County, Hydrologic Unit 16060005, 17.9 mi northeast of Belmont, 27.4 mi east of Carvers on State Highway 376, and 59 mi northeast of Tonopah.

DRAINAGE AREA.--15.1 mi².

PERIOD OF RECORD.--October 1977 to September 1982, October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,200 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--13 years (1978-82, 1984-91), 2.14 ft³/s, 1,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92 ft³/s, June 7, 1978, gage height, 3.55 ft; minimum daily, 0.04 ft³/s, Sept. 12-15, 1990.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 29, 1983; discharge, 119 ft³/s, gage height, 5.00 ft. Runoff from snowmelt.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.9 ft³/s, June 12, 13, gage height, 1.53 ft; minimum daily, 0.11 ft³/s, Oct. 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.51	e.26	e.15	e.17	.23	.36	.60	1.8	2.1	.88	.26
2	.13	.51	e.25	e.14	e.18	.24	.38	.52	2.6	2.0	.84	.21
3	.13	.41	e.25	e.15	e.19	.24	.41	.52	2.4	1.9	.88	.20
4	.13	.45	e.25	e.15	e.20	e.23	.46	.52	2.5	1.8	.73	.22
5	.13	.47	e.24	e.14	e.25	e.22	.53	.58	2.5	1.6	.67	.24
6	.11	.47	e.24	e.15	e.22	.24	.59	.71	2.5	1.6	.66	.34
7	.11	.47	e.23	e.15	e.20	.23	.62	1.1	2.6	1.5	.62	.62
8	.13	.48	e.23	e.15	e.18	.24	.59	1.3	2.8	1.5	.60	.61
9	.15	.51	e.24	e.15	e.18	.27	.57	1.2	3.3	1.7	.57	.75
10	.16	.51	e.26	e.16	e.19	.27	.57	.87	3.6	1.9	.54	.78
11	.16	.51	e.24	e.16	e.20	.27	.52	.86	3.7	1.8	.59	.71
12	.16	.51	e.23	e.17	e.26	.24	.54	.86	3.8	1.5	.55	.61
13	.16	.51	e.22	e.18	e.29	.26	.49	.96	3.9	1.4	.53	.55
14	.18	.51	e.20	e.20	e.25	.23	.48	.99	3.7	1.3	.52	.48
15	.21	.51	e.21	e.19	e.28	.24	.48	1.1	3.7	1.2	.49	.44
16	.27	.51	e.21	e.17	e.26	.25	.50	1.5	3.6	1.2	.47	.41
17	.28	.51	e.19	e.19	e.23	.28	.57	1.8	3.5	1.1	.44	.36
18	.31	.51	e.19	e.18	e.21	.29	.57	1.4	3.4	1.1	.46	.34
19	.34	.51	e.18	e.17	e.20	.29	.57	1.3	3.2	1.1	.48	.29
20	.34	.51	e.16	e.15	e.20	.29	.57	1.2	3.1	1.0	.41	.28
21	.34	e.40	e.13	e.14	e.20	.29	.57	1.2	2.8	1.1	.35	.28
22	.40	e.37	e.12	e.13	.20	.29	.57	1.2	2.8	1.0	.30	.28
23	.40	e.35	e.15	e.15	.21	.29	.57	1.4	2.6	.98	.30	.24
24	.40	e.33	e.18	e.16	.21	.29	.57	1.9	2.5	.93	.28	.23
25	.40	e.31	e.19	e.18	.20	.29	.57	1.9	2.5	.91	.26	.21
26	.41	e.29	e.18	e.17	.21	.29	.57	2.0	2.5	.88	.27	.22
27	.45	e.28	e.17	e.17	.21	.29	.57	2.0	2.3	.90	.28	.28
28	.47	e.27	e.17	e.17	.21	.29	.55	1.9	2.4	.88	.32	.35
29	.49	e.27	e.16	e.17	---	.29	.52	2.0	2.3	.88	.30	.35
30	.51	e.26	e.16	e.17	---	.31	.52	2.0	2.3	.79	.26	.32
31	.51	---	e.15	e.15	---	.34	---	1.7	---	.83	.25	---
TOTAL	8.50	13.02	6.24	5.01	5.99	8.31	15.95	39.09	87.2	40.38	15.10	11.46
MEAN	.27	.43	.20	.16	.21	.27	.53	1.26	2.91	1.30	.49	.38
MAX	.51	.51	.26	.20	.29	.34	.62	2.0	3.9	2.1	.88	.78
MIN	.11	.26	.12	.13	.17	.22	.36	.52	1.8	.79	.25	.20
AC-FT	17	26	12	9.9	12	16	32	78	173	80	30	23

CAL YR 1990 TOTAL 227.37 MEAN .62 MAX 3.0 MIN .04 AC-FT 451
WTR YR 1991 TOTAL 256.25 MEAN .70 MAX 3.9 MIN .11 AC-FT 508

e Estimated

MONITOR VALLEY-DIAMOND VALLEY SYSTEM

105

10245925 STONEBERGER CREEK NEAR AUSTIN, NV

LOCATION.--Lat 39°08'24", long 116°43'16", in SE 1/4 NE 1/4 sec.18, T.15 N., R.47 E., Nye County, Hydrologic Unit 16G60005, on left bank, 2 mi southwest of Monitor Ranch, and 42 mi north of Belmont.

DRAINAGE AREA.--35.6 mi².

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,880 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to October 1, 1990, at datum 2.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--14 years, 1.94 ft³/s, 1,410 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 220 ft³/s, Aug. 14, 1991, gage height, 6.64 ft, from rating curve extended above 94.7 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 0.07 ft³/s, Sept. 29-30, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 220 ft³/s, Aug. 14, gage height, 6.64 ft, from rating curve extended above 94.7 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 0.07 ft³/s, Sept. 29-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	.22	.19	e.19	.25	.28	.21	.22	.17	.15	.15	.15
2	.17	.21	.20	e.22	.25	.26	.22	.22	.17	.15	.16	.14
3	.17	.20	.20	e.21	.25	.28	.22	.22	.15	.15	.17	.13
4	.17	.20	.20	e.21	.25	.26	.23	.20	.15	.15	.16	.11
5	.17	.20	.20	e.18	.25	.25	.23	.20	.15	.15	.15	.10
6	.17	.20	.19	e.21	.25	.25	.22	.20	.15	.15	.15	.10
7	.17	.20	.20	e.22	.25	.24	.22	.20	.15	.15	.15	.10
8	.18	.20	.20	e.23	.25	.24	.22	.20	.15	.14	.15	.10
9	.17	.20	.20	e.23	.25	.26	.22	.20	.15	.13	.15	.10
10	.17	.20	.22	e.24	.25	.25	.26	.20	.17	.14	.15	.10
11	.17	.20	.22	.25	.23	.25	.29	.20	.17	.15	.15	.10
12	.17	.20	.22	.25	.24	.25	.31	.20	.17	.13	.15	.10
13	.17	.20	.22	.25	.25	.25	.28	.20	.17	.13	.15	.10
14	.19	.20	.20	.25	.25	.25	.28	.21	.17	.13	.21	.10
15	.21	.20	.21	.25	.25	.25	.28	.20	.17	.14	.37	.10
16	.22	.20	.22	.25	.25	.24	.28	.19	.17	.15	.22	.10
17	.20	.20	.20	.25	.23	.24	.26	.17	.17	.15	.21	.10
18	.20	.20	.20	.25	.22	.22	.25	.17	.16	.15	.19	.10
19	.20	.20	.20	.25	.23	.22	.25	.20	.15	.15	.18	.10
20	.20	.19	.20	.25	.23	.22	.25	.20	.15	.15	.17	.10
21	.21	.16	e.20	.24	.25	.22	.25	.20	.15	.15	.16	.10
22	.20	.17	e.22	.22	.26	.22	.24	.18	.17	.15	.16	.10
23	.20	.18	e.20	.21	.26	.21	.23	.17	.17	.15	.15	.10
24	.21	.19	e.19	.21	.26	.20	.25	.17	.17	.15	.15	.08
25	.22	.19	e.18	.23	.28	.20	.25	.17	.17	.15	.15	.08
26	.22	.19	e.15	.22	.28	.21	.25	.17	.15	.15	.15	.08
27	.22	.16	e.17	.20	.28	.20	.25	.17	.15	.15	.15	.08
28	.22	.18	e.17	.21	.28	.21	.25	.15	.15	.15	.15	.08
29	.22	.19	e.17	.22	---	.21	.25	.15	.13	.15	.15	.07
30	.22	.20	e.17	.22	---	.20	.24	.17	.13	.15	.15	.07
31	.22	---	e.17	.22	---	.20	---	.17	---	.15	.15	---
TOTAL	6.00	5.83	6.08	7.04	7.03	7.24	7.44	5.87	4.75	4.54	26.00	2.97
MEAN	.19	.19	.20	.23	.25	.23	.25	.19	.16	.15	.84	.099
MAX	.22	.22	.22	.25	.28	.28	.31	.22	.17	.15	.21	.15
MIN	.17	.16	.15	.18	.22	.20	.21	.15	.13	.13	.15	.07
AC-FT	12	12	12	14	14	14	15	12	9.4	9.0	52	5.9

CAL YR 1990 TOTAL 68.42 MEAN .19 MAX .26 MIN .11 AC-FT 136
WTR YR 1991 TOTAL 90.79 MEAN .25 MAX 21 MIN .07 AC-FT 180

e Estimated

HOT CREEK AND RAILROAD (NORTHERN PART) VALLEYS

10246846 LITTLE CURRANT CREEK NEAR CURRANT, NV

LOCATION.--Lat 38°50'50", long 115°22'00", in NW 1/4 SW 1/4 sec. 32, T.12 N., R.59 E., Nye County, Hydrologic Unit 16060012, in Humboldt National Forest, on right bank 0.2 mi upstream from reservoir diversion, 2.5 mi upstream from mouth, and 9 mi northeast of Currant.

DRAINAGE AREA.--12.9 mi².

PERIOD OF RECORD.--October 1964 to September 1981, May 1983 to September 1986, March 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,700 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. No diversions above station.

AVERAGE DISCHARGE.--21 years (water years 1965-81, 1984-86, 1991), 3.54 ft³/s, 2,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 366 ft³/s, Dec. 6, 1966, gage height, 4.1 ft, from floodmarks, from rating curve extended above 60 ft³/s on basis of slope-area measurement of peak flow; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 8	0300	*4.0	*1.38				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	1.5	.40	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	1.7	.39	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	1.7	.37	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	1.7	.36	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	2.1	.34	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	3.0	.27	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	3.5	.21	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	3.8	.17	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	3.9	.18	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	3.8	.14	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	3.8	.05	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	3.7	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	3.8	.01	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.07	3.8	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.12	3.7	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.16	3.5	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.30	3.2	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.26	2.8	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.30	2.5	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.26	2.2	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.34	1.8	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.34	1.4	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.34	1.1	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.31	.93	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.31	.80	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.36	.69	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.39	.61	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.43	.53	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.64	.44	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.91	.41	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	1.1	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.94	68.41	2.89	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.22	2.28	.093	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	1.1	3.9	.40	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.41	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	14	136	5.7	.00	.00

WTR YR 1991 TOTAL 78.24 MEAN .21 MAX 3.9 MIN .00 AC-FT 155

107

LOCATION.--Lat 38°34'30", long 116°18'45", in NE 1/4 NW 1/4 sec.11, T.8 N., R.50 E., Nye County, Hydrologic Unit 16060012, on left bank, about 5 mi northeast of mouth of Hot Creek Canyon, 26 mi north of Warm Springs, and about 60 mi northwest of Tonopah.

PERIOD OF RECORD.--September 1967 to June 1968, May 1984 to current year.

REMARKS.--Records good.

AVERAGE DISCHARGE.--7 years (1985-91), 0.67 ft³/s, 485 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD:--Maximum discharge, 104 ft³/s, July 20, 1985, gage height, 3.10 ft, from rating curve extended above 14 ft³/s on basis of slope-conveyance computation of peak flow; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--No flow for entire year.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CAL YR 1990	TOTAL 0.00	MEAN .0000	MAX .00	MIN .00	AC-FT .00							
WTR YR 1991	TOTAL 0.00	MEAN .0000	MAX .00	MIN .00	AC-FT .00							

HOT CREEK AND RAILROAD (NORTHERN PART) VALLEYS

10247200 BIG CREEK NEAR WARM SPRINGS, NV

LOCATION.--Lat 38°11'13", long 115°45'18", in NW 1/4 SE 1/4 sec.23, T.4 N., R.55 E., Nye County, Hydrologic Unit 16060012, in Humboldt National Forest, on left bank, 0.5 mi upstream from abandoned Big Creek Ranch, and 39.8 mi southeast of Warm Springs.

DRAINAGE AREA.--12 mi².

PERIOD OF RECORD.--April to September 1991.

GAGE.--Water-stage recorder. Elevation of gage is 5,630 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19 ft³/s, June 3, 1991, gage height, 2.43 ft, from rating curve extended above 1.7 ft³/s on basis of slope-conveyance study of peak flow; minimum daily, 0.14 ft³/s, Aug. 30, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period April to September, 19 ft³/s, June 3, gage height, 2.43 ft, from rating curve extended above 1.7 ft³/s, on basis of slope-conveyance study of peak flow; minimum daily, 0.14 ft³/s, Aug. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e.33	.99	5.5	e1.4	.61	.19
2	---	---	---	---	---	---	e.34	1.0	8.1	e1.3	.65	.20
3	---	---	---	---	---	---	e.34	.99	e10	e1.2	.63	.19
4	---	---	---	---	---	---	e.35	.99	e8.0	e1.1	.56	.18
5	---	---	---	---	---	---	e.36	.99	e7.0	e1.0	.54	.20
6	---	---	---	---	---	---	e.37	.99	e7.2	e.94	.44	.31
7	---	---	---	---	---	---	e.37	.99	e7.5	e.86	.47	.41
8	---	---	---	---	---	---	e.39	.91	e8.0	e.80	.46	.42
9	---	---	---	---	---	---	e.40	.90	e8.0	e.73	.45	.41
10	---	---	---	---	---	---	e.43	.90	e7.5	e.67	.44	.39
11	---	---	---	---	---	---	.46	.90	e6.0	e.62	.52	.37
12	---	---	---	---	---	---	.51	.90	e4.5	e.59	.56	.38
13	---	---	---	---	---	---	.51	.90	e3.5	e.57	.49	.35
14	---	---	---	---	---	---	.56	.90	e2.9	e.56	.45	.29
15	---	---	---	---	---	---	.58	.90	e2.6	e.56	.45	.28
16	---	---	---	---	---	---	.65	.90	e2.4	e.60	.44	.28
17	---	---	---	---	---	---	.65	1.0	e2.3	.72	.44	.24
18	---	---	---	---	---	---	.66	.99	e2.2	.76	.42	.27
19	---	---	---	---	---	---	.73	1.0	e2.1	.76	.37	.28
20	---	---	---	---	---	---	.73	1.1	e2.0	.74	.38	.30
21	---	---	---	---	---	---	.81	1.2	e2.0	.74	.32	.29
22	---	---	---	---	---	---	.81	1.2	e1.9	.75	.34	.31
23	---	---	---	---	---	---	.81	1.2	e1.9	.73	.37	.29
24	---	---	---	---	---	---	.81	1.3	e1.8	.72	.32	.29
25	---	---	---	---	---	---	.88	1.4	e1.8	.66	.33	.28
26	---	---	---	---	---	---	.90	1.4	e1.7	.68	.33	.29
27	---	---	---	---	---	---	.97	1.6	e1.7	.62	.30	.34
28	---	---	---	---	---	---	.99	1.7	e1.6	.63	.40	.38
29	---	---	---	---	---	---	.99	1.8	e1.5	.56	.30	.39
30	---	---	---	---	---	---	.99	2.1	e1.5	.55	.14	.37
31	---	---	---	---	---	---	---	2.3	---	.62	.18	---
TOTAL	---	---	---	---	---	---	18.68	36.34	124.7	23.74	13.10	9.17
MEAN	---	---	---	---	---	---	.62	1.17	4.16	.77	.42	.31
MAX	---	---	---	---	---	---	.99	2.3	10	1.4	.65	.42
MIN	---	---	---	---	---	---	.33	.90	1.5	.55	.14	.18
AC-FT	---	---	---	---	---	---	37	72	247	47	26	18

e Estimated

STONE CABIN VALLEY

109

10249190 WILLOW CREEK NEAR WARM SPRINGS, NV

LOCATION.--Lat 38°34'35", long 116°35'05", in SE 1/4 SE 1/4 sec.6, T.8 N., R.43 E., Nye County, Hydrologic Unit 16060011, in Toiyabe National Forest, on left bank, about 3 mi north of Toiyabe National Forest boundary, and 30 mi northwest of Warm Springs.

DRAINAGE AREA.--16.4 mi².

PERIOD OF RECORD.--October 1977 to current year.

REVISED RECORDS.--1986: daily discharges.

GAGE.--Water-stage recorder. Elevation of gage is 6,800 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--14 years, 1.22 ft³/s, 884 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92 ft³/s, Mar. 31, 1978, gage height, 2.70 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9.4 ft³/s, July 23, gage height, 1.83 ft; no flow most days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.01	.00	.00	.00	.00	.00	.00	e.39	e.00	.00	.00	.00
2	e.00	.00	.00	.00	.00	.00	.00	.06	e.00	.00	.00	.00
3	e.00	.00	.00	.00	.00	.00	.00	.01	e.00	.00	.00	.00
4	e.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
5	e.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00	.00	.00
6	e.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00	.00	.00
7	e.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00	.00	.00
8	e.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00	.00	.00
9	e.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.02	.00	.00
10	e.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.00
11	e.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.00
12	e.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.00
13	e.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.00
14	e.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.00
15	e.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00
19	.04	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.03	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.63	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.88	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.05	e.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.08	e.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.08	e.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	e.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.11	e.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	e.00	---	.00	.00	---
TOTAL	0.05	0.00	0.00	0.00	0.00	0.00	0.32	0.46	0.00	1.56	0.00	0.00
MEAN	.002	.000	.000	.000	.000	.000	.011	.015	.000	.050	.000	.000
MAX	.04	.00	.00	.00	.00	.00	.11	.39	.00	.88	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.1	.00	.00	.00	.00	.00	.6	.9	.00	3.1	.00	.00

CAL YR 1990 TOTAL 11.73 MEAN .032 MAX 1.0 MIN .00 AC-FT 23
WTR YR 1991 TOTAL 2.39 MEAN .007 MAX .88 MIN .00 AC-FT 4.7

e Estimated

BIG SMOKY VALLEY (NORTHERN PART)

10249280 KINGSTON CREEK BELOW COUGAR CANYON, NEAR AUSTIN, NV

LOCATION.--Lat 39°12'45", long 117°06'45", in NE 1/4 NW 1/4 sec.35, T.16 N., R.43 E., Lander County, Hydrologic Unit 16060004, in Toiyabe National Forest, on left bank, 1.1 mi downstream from Cougar Canyon, and 19 mi southeast of Austin.

DRAINAGE AREA.--23.4 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,480 ft above National Geodetic Vertical Datum of 1929, from topographic map. Aug. 22, 1975 to June 25, 1985 water-stage recorder 40 ft downstream at different datum.

REMARKS.--Records good. Two diversions above station. Flow affected by storage in Groves Reservoir, capacity, 190 acre-ft about 4 mi upstream since January 1970, when installation was completed by Nevada Department of Fish and Game for fishery enhancement and recreation.

AVERAGE DISCHARGE.--25 years, 9.27 ft³/s, 6,720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 385 ft³/s, May 28, 1983, gage height, 3.19 ft, on basis of slope-conveyance determination of peak flow, maximum gage height, 3.58 ft, May 18, 1973; minimum, 1.4 ft³/s, Aug. 24, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19 ft³/s, June 24, gage height, 1.85 ft; minimum daily, 3.7 ft³/s, Mar. 18-20, 23, 24, Apr. 1-2, but may have been lower during period of estimated record Dec. 19-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.7	5.0	4.3	4.5	4.3	3.7	4.4	10	16	10	10
2	4.5	4.7	5.0	4.5	4.5	4.3	3.7	4.3	10	16	11	10
3	4.5	4.7	5.0	4.5	4.5	4.2	3.8	4.3	10	16	11	10
4	4.5	4.7	5.0	4.5	4.5	4.1	4.0	4.3	11	16	11	10
5	4.5	4.7	5.0	4.5	4.5	4.1	4.1	4.3	12	14	11	10
6	4.5	4.7	5.0	4.5	4.5	4.2	4.0	4.3	12	14	11	10
7	4.3	5.0	5.0	4.5	4.5	4.3	4.1	4.4	12	14	11	10
8	4.3	4.9	5.0	4.5	4.5	4.1	4.1	4.5	12	14	11	10
9	4.3	4.7	5.0	4.5	4.5	4.1	4.1	4.6	12	14	11	9.9
10	4.3	4.7	5.0	4.5	4.5	4.1	4.1	4.7	11	14	11	9.7
11	4.3	4.7	5.0	4.5	4.5	4.1	4.2	4.8	11	14	11	9.7
12	4.3	4.7	5.0	4.7	4.5	4.2	4.3	5.0	12	14	11	9.7
13	4.3	4.7	5.0	5.0	4.5	4.1	4.3	5.0	13	14	11	9.7
14	4.3	4.7	5.0	5.0	4.5	4.1	4.3	5.5	13	14	11	9.7
15	4.3	4.9	5.0	5.0	4.5	3.9	4.3	5.8	13	13	11	9.6
16	4.3	5.0	5.0	5.0	4.7	4.1	4.1	5.9	13	12	11	9.3
17	4.3	5.0	5.0	5.0	4.7	4.0	4.1	5.9	14	12	11	9.3
18	4.3	5.0	5.0	5.0	4.7	3.7	4.1	5.9	15	12	11	9.3
19	4.3	5.0	e4.9	5.0	4.7	3.7	4.1	6.1	17	12	11	9.3
20	4.3	5.0	e4.4	5.0	4.7	3.7	4.1	6.7	17	12	10	9.3
21	4.4	5.0	e3.9	4.7	4.7	3.8	4.2	7.0	17	12	10	9.3
22	4.5	5.0	e3.8	4.5	4.5	3.8	4.3	7.0	18	12	10	9.3
23	4.5	5.1	e3.8	4.5	4.5	3.7	4.3	7.1	18	12	10	9.0
24	4.5	5.2	e3.9	4.5	4.5	3.7	4.3	7.5	18	12	10	8.7
25	4.5	5.2	e3.9	4.5	4.6	3.8	4.3	7.8	18	11	10	8.6
26	4.5	5.2	4.0	4.5	4.6	4.0	4.4	8.2	17	11	10	8.6
27	4.5	5.1	4.3	4.5	4.5	4.0	4.5	8.3	16	11	10	8.6
28	4.5	5.0	4.3	4.5	4.3	3.9	4.5	9.0	16	11	10	8.8
29	4.6	5.0	4.3	4.4	---	3.9	4.5	9.2	16	11	10	9.0
30	4.7	5.0	4.3	4.4	---	3.9	4.5	9.5	16	11	10	9.0
31	4.7	---	4.3	4.5	---	3.9	---	9.7	---	11	10	---
TOTAL	137.1	147.0	144.1	143.5	127.2	123.8	125.4	191.0	420	402	328	283.4
MEAN	4.42	4.90	4.65	4.63	4.54	3.99	4.18	6.16	14.0	13.0	10.6	9.45
MAX	4.7	5.2	5.0	5.0	4.7	4.3	4.5	9.7	18	16	11	10
MIN	4.3	4.7	3.8	4.3	4.3	3.7	3.7	4.3	10	11	10	8.6
AC-FT	272	292	286	285	252	246	249	379	833	797	651	562

CAL YR 1990 TOTAL 1939.3 MEAN 5.31 MAX 6.8 MIN 3.7 AC-FT 3850
WTR YR 1991 TOTAL 2572.5 MEAN 7.05 MAX 18 MIN 3.7 AC-FT 5100

e/ Estimated

BIG SMOKY VALLEY (NORTHERN PART)

111

10249300 SOUTH TWIN RIVER NEAR ROUND MOUNTAIN, NV
(Hydrologic Bench-Mark Station)

LOCATION.--Lat 38°53'15", long 117°14'40", in SW 1/4 NE 1/4 sec.22, T.12 N., R.42 E., Nye County, Hydrologic Unit 16060004, in Toiyabe National Forest, on right bank, 600 ft upstream from diversion, 3 mi west of State Highway 376, and 15 mi northwest of Round Mountain.

DRAINAGE AREA.--20 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1964 (miscellaneous site), 1965 (low-flow, partial-record site), August 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,400 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--26 years, 6.50 ft³/s, 4,710 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 510 ft³/s, May 29, 1983, gage height, 4.39 ft; minimum, 0.11 ft³/s, Sept. 4, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	0600	*20	*1.98				
Minimum daily, 0.35 ft ³ /s, Aug. 27.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.6	1.2	e1.1	e1.0	1.4	2.8	3.6	12	6.7	2.2	e.40
2	1.1	1.6	e1.2	e1.1	e1.0	1.4	2.8	3.8	13	6.3	2.1	e.40
3	1.2	1.4	e1.2	e1.0	e1.1	1.5	2.9	3.9	14	5.9	2.4	e.45
4	1.1	1.3	e1.2	e.90	e1.1	1.5	3.1	4.0	15	5.6	2.0	e.40
5	1.1	1.4	e1.2	e.80	e1.1	1.5	3.8	4.4	18	5.3	1.8	.54
6	1.1	1.4	1.2	e.75	e1.1	1.6	4.2	4.9	20	5.0	1.7	.62
7	1.1	1.3	1.2	e.80	e1.0	1.8	4.1	5.5	20	4.9	1.6	.71
8	1.2	1.3	1.1	e.85	e1.0	1.6	3.9	6.2	19	4.8	1.5	.73
9	1.2	1.4	1.3	e.90	e1.0	1.6	3.7	6.8	19	4.8	1.4	1.1
10	1.2	1.4	1.3	e.95	e1.1	1.5	3.6	6.8	18	4.5	1.3	1.7
11	1.2	1.4	1.4	e1.0	e1.1	1.6	3.5	6.6	17	4.3	1.3	1.8
12	1.2	1.4	1.2	e1.0	e1.1	1.7	3.4	6.2	17	4.0	1.3	1.9
13	1.2	1.5	1.1	e1.1	e1.1	1.5	3.2	6.2	16	3.9	1.1	1.7
14	1.2	1.5	e1.0	e1.0	e1.2	1.6	3.1	6.2	16	3.8	1.1	1.5
15	1.3	1.4	e1.0	e.95	e1.2	1.6	3.3	6.3	15	3.6	1.1	1.4
16	1.2	1.4	e1.0	e.90	e1.1	1.5	3.3	6.6	14	3.5	1.0	1.3
17	1.3	1.4	e1.0	e.90	e1.1	1.6	3.3	7.2	13	3.4	.93	1.2
18	1.4	1.5	e1.1	e.90	e1.2	1.6	3.2	7.5	12	3.3	.76	e.94
19	1.5	1.5	e1.0	e.90	e1.3	1.7	3.2	7.7	11	3.2	.68	e.85
20	1.6	1.4	e.90	e.85	1.3	1.7	3.3	8.1	11	3.1	.59	e.80
21	1.7	1.3	e.70	e.90	1.3	1.7	3.2	9.9	10	2.8	e.50	e.75
22	1.7	1.2	e.75	e.90	1.3	1.7	3.3	11	9.8	2.6	e.45	e.70
23	1.8	1.3	e.80	e.90	1.3	1.7	3.2	11	9.2	3.0	e.45	e.70
24	1.7	1.3	e.90	e.90	1.3	1.8	3.3	12	8.9	2.9	e.45	e.65
25	1.6	1.2	e.90	e.90	1.3	1.9	3.5	13	8.8	2.7	e.45	e.65
26	1.6	1.4	e.95	e.90	1.3	2.2	3.5	14	8.4	2.6	e.40	e.85
27	1.6	1.2	e1.0	e.85	1.3	2.1	3.4	14	8.2	2.6	e.35	1.2
28	1.6	.98	e1.0	e.85	1.4	2.1	3.5	14	7.8	2.5	e.45	1.5
29	1.6	1.4	e1.0	e.85	---	2.2	3.5	14	7.6	2.4	e.45	1.6
30	1.6	1.2	e1.0	e.90	---	2.3	3.5	14	7.1	2.2	e.45	1.5
31	1.6	---	e1.0	e1.0	---	2.6	---	13	---	2.4	e.40	---
TOTAL	42.6	40.98	32.80	28.50	32.7	53.8	101.6	258.4	395.8	118.6	32.66	30.54
MEAN	1.37	1.37	1.06	.92	1.17	1.74	3.39	8.34	13.2	3.83	1.05	1.02
MAX	1.8	1.6	1.4	1.1	1.4	2.6	4.2	14	20	6.7	2.4	1.9
MIN	1.1	.98	.70	.75	1.0	1.4	2.8	3.6	7.1	2.2	.35	.40
AC-FT	84	81	65	57	65	107	202	513	785	235	65	61

CAL YR 1990 TOTAL 769.82 MEAN 2.11 MAX 5.2 MIN .49 AC-FT 1530
WTR YR 1991 TOTAL 1168.98 MEAN 3.20 MAX 20 MIN .35 AC-FT 2320

e Estimated

BIG SMOKY VALLEY (NORTHERN PART)

10249300 SOUTH TWIN RIVER NEAR ROUND MOUNTAIN, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 1966 to September 1968, January 1970 to September 1977, September 1978 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum daily, 18.0°C, July 24, 1979; minimum daily, freezing point on several days in many years.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
MAY 30...	2.6	1.7	1.1	0.6	1.0	0.6	--	--
AUG 22...	3.5	<0.4	1.3	<0.4	1.1	<0.4	0.10	1.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)
NOV 27...	1230	1.5	124	7.6	-1.5	0.0	1.5	11.3	97	<1	K11	54
FEB 19...	1200	1.3	120	8.1	11.5	3.0	1.0	--	--	K1	K10	51
MAY 30...	1230	14	95	8.2	10.0	8.0	3.1	9.8	99	K3	K2	40
AUG 07...	1300	1.8	102	8.2	27.0	15.0	0.70	8.0	100	<1	61	43

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD HCO3	ALKA- LINITY WAT DIS TOT IT MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV 27...	19	1.6	6.9	0.4	0.90	73	60	13	1.2	<0.10	20	91
FEB 19...	18	1.4	6.3	0.4	0.70	68	56	6.5	2.3	0.10	18	102
MAY 30...	14	1.1	5.8	0.4	0.50	56	46	4.2	2.3	0.30	20	87
AUG 07...	15	1.2	6.2	0.4	0.80	78	64	3.6	0.70	0.10	21	82

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)
NOV 27...	99	0.12	<0.010	<0.010	<0.100	<0.100	0.020	0.020	0.20	0.030	<0.010
FEB 19...	87	0.14	<0.010	<0.010	<0.100	<0.100	0.030	<0.010	<0.20	<0.010	<0.010
MAY 30...	76	0.12	<0.010	<0.010	<0.050	<0.050	<0.010	<0.010	<0.20	<0.010	0.020
AUG 07...	87	0.11	<0.010	<0.010	0.078	<0.050	0.030	0.010	0.30	<0.010	<0.010

BIG SMOKY VALLEY (NORTHERN PART)

113

10249300 SOUTH TWIN RIVER NEAR ROUND MOUNTAIN, NV--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
NOV 27...	<0.010	<0.010	10	4	5	<0.5	<1.0	<1	<3	<1	8
FEB 19...	<0.010	<0.010	<10	3	4	<0.5	<1.0	<1	<3	1	8
MAY 30...	<0.010	<0.010	60	4	4	<0.5	<1.0	<1	<3	<1	30
AUG 07...	<0.010	<0.010	<10	3	4	<0.5	<1.0	<1	<3	1	12

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 27...	<1	5	1	<0.1	<10	1	<2	<1.0	110	<6	3
FEB 19...	<1	6	<1	<0.1	<10	<1	<1	<1.0	100	<6	4
MAY 30...	<1	6	<1	<0.1	<10	<1	<1	<1.0	85	<6	4
AUG 07...	<1	6	1	<0.1	<10	<1	<1	<1.0	90	<6	<3

DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 27...	--	--	--	--	--	--	--	--	5	0.02	81
FEB 19...	--	--	--	--	--	--	--	--	3	0.01	--
MAY 30...	1.9	<0.6	1.1	1.1	1.0	1.1	0.03	1.2	7	0.26	75
AUG 07...	1.7	<0.6	0.9	0.6	0.8	<0.6	0.03	1.3	2	0.01	81

K: NON-IDEAL COLONY COUNT

PAHRUMP VALLEY

10251890 PEAK SPRING CANYON CREEK NEAR CHARLESTON PEAK, NV

LOCATION.--Lat 36°14'40", long 115°43'09", in SW 1/4 NE 1/4 sec.6, T.20 S., R.56 E., Clark County, Hydrologic Unit 16060015, on left bank, 200 ft upstream of Carpenter Road, 11 mi east of State Highway 160, and 14.5 mi east of Pahump.

DRAINAGE AREA.--3.09 mi².

PERIOD OF RECORD.--November 1977 to September 1983, October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,900 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--12 years (1979-83, 1985-91), 1.74 ft³/s, 1,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 228 ft³/s, Aug. 17, 1983, gage height, 8.68 ft; minimum daily, 0.10 ft³/s, Dec. 22-24, 1990, but may have been lower during periods of estimated discharge.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9.2 ft³/s, Aug. 12, gage height, 7.99 ft; minimum daily, 0.10 ft³/s, Dec. 22-24, but may have been lower during periods of estimated discharge.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	e.32	e.15	e.15	e.15	e.21	e1.2	e2.5	5.4	1.6	.80	.63
2	.32	e.29	e.16	e.15	e.16	e.20	e1.1	e3.0	4.9	1.5	.83	.62
3	.31	e.25	e.16	e.16	e.17	e.22	e.82	e2.9	4.9	1.4	.83	.66
4	.31	e.25	e.17	e.17	e.18	e.29	2.6	e3.1	5.8	1.4	.82	.67
5	.31	e.26	e.17	e.17	e.18	e.28	4.2	e3.5	6.4	1.3	.85	.77
6	.31	e.27	e.16	e.16	e.19	e.24	5.6	e3.4	6.9	1.3	.82	3.3
7	.28	e.28	e.15	e.15	e.19	e.24	5.7	e4.0	7.2	1.4	.80	3.7
8	.29	.34	e.15	e.14	e.19	e.26	4.9	e4.5	7.0	1.6	.76	2.1
9	.31	.33	e.16	e.14	e.19	e.32	4.7	4.1	6.5	1.6	.75	1.6
10	e.30	.34	e.17	e.14	e.18	e.34	e3.7	3.5	6.0	1.6	.72	1.3
11	e.29	.34	e.17	e.14	e.19	e.35	e3.0	2.0	5.4	1.4	.71	1.2
12	e.28	e.37	e.17	e.15	e.19	e.34	e2.0	e1.9	5.0	1.2	2.6	1.1
13	e.29	e.39	e.17	e.16	e.19	e.34	e1.2	3.2	4.8	1.2	1.6	.98
14	e.31	e.38	e.16	e.16	e.20	e.33	e1.4	3.6	4.5	1.1	1.1	.93
15	e.33	e.36	e.15	e.17	e.20	e.31	e1.5	3.2	4.1	1.1	1.0	.88
16	e.34	e.37	e.14	e.18	e.20	e.30	e1.6	3.3	3.7	1.1	.87	.88
17	e.35	e.41	e.13	e.17	e.20	e.30	e1.5	2.2	3.4	1.0	.69	.89
18	e.34	e.41	e.12	e.16	e.20	e.30	e1.2	2.6	3.2	.95	.68	.87
19	e.34	e.37	e.12	e.16	e.20	e.31	e1.2	3.3	3.0	.94	.66	.84
20	e.32	e.31	e.11	e.16	e.20	e.35	e1.1	4.3	2.8	.93	.65	.84
21	e.30	e.27	e.11	e.16	e.20	e.35	e1.0	4.5	2.6	.92	.62	.87
22	e.29	e.23	e.10	e.15	e.20	e.40	e1.0	4.6	2.4	.88	.61	.84
23	e.28	e.20	e.10	e.15	e.21	e.46	e1.0	3.9	2.3	.84	.60	.83
24	e.28	e.19	e.10	e.15	e.21	e.51	e1.1	4.0	2.2	.80	.58	.81
25	e.29	e.19	e.11	e.15	e.20	e.50	e1.2	3.2	2.1	.79	.62	.81
26	e.32	e.19	e.11	e.15	e.20	e.52	e1.1	6.6	2.0	.76	.63	.81
27	e.33	e.17	e.12	e.14	e.22	e.58	e1.0	6.8	2.0	.76	.63	.84
28	e.35	e.16	e.12	e.14	e.22	e.66	e1.0	6.4	1.9	.77	.66	.84
29	e.36	e.15	e.13	e.14	---	e.83	e1.2	5.9	1.8	.74	.66	.84
30	e.37	e.15	e.14	e.14	---	e1.3	e1.9	5.6	1.6	.74	.65	.84
31	e.35	---	e.14	e.15	---	e1.3	---	5.8	---	.82	.64	---
TOTAL	9.77	8.54	4.32	4.76	5.41	13.24	61.72	121.4	121.8	34.44	25.44	33.09
MEAN	.32	.28	.14	.15	.19	.43	2.06	3.92	4.06	1.11	.82	1.10
MAX	.37	.41	.17	.18	.22	1.3	5.7	6.8	7.2	1.6	2.6	3.7
MIN	.28	.15	.10	.14	.15	.20	.82	1.9	1.6	.74	.58	.62
AC-FT	19	17	8.6	9.4	11	26	122	241	242	68	50	66

CAL YR 1990 TOTAL 187.19 MEAN .51 MAX 2.6 MIN .10 AC-FT 371
WTR YR 1991 TOTAL 443.93 MEAN 1.22 MAX 7.2 MIN .10 AC-FT 881

e Estimated

WALKER LAKE BASIN

115

10288500 WALKER LAKE NEAR HAWTHORNE, NV

LOCATION.--Lat 38°40'36", long 118°46'16", in SE 1/4 SE 1/4 sec.27, T.10 N., R.29 E., Mineral County, Hydrologic Unit 16050304, 14.5 mi northwest of Hawthorne.

DRAINAGE AREA.--4,050 mi², approximately.

PERIOD OF RECORD.--August 1928 to current year. Occasional readings prior to August 1928.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Coast and Geodetic Survey bench mark at U.S. Army Depot). Prior to Dec. 6, 1978, at site 5.5 mi northwest of Hawthorne, at same datum.

REMARKS.--Elevations determined from reference points referred to U.S.C.G.S. bench mark. Elevations are given to the nearest 0.1 ft and contents to four significant figures in order to reflect trends of change. Any single observation, however, may be affected by wind and seiche movements on the lake surface.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 6,955,000 acre-ft, Mar. 13, 1928, elevation, 4,051.8 ft, U.S. Bureau of Indian Affairs; minimum observed, 2,372,000 acre-ft, Jan. 25, 1982, elevation, 3,952.9 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 4,078.0 ft, adjustment of 1912, was observed Sept. 27, 1908, by Geological Survey (contents, 8,622,000 acre-ft, table now in use).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 2,527,000 acre-ft, Oct. 2, elevation 3957.3 ft; minimum observed, 2,416,000 acre-ft, Sept. 6, elevation 3954.2 ft.

MONTHEND ELEVATION, IN FEET NGVD, AND CONTENTS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

Date	Elevation (feet)	Contents (acre-feet)	Change in contents acre-feet)
Sept. 30.	3,957.3	2,527,000	--
Oct. 31.	3,956.8	2,509,000	-18,000
Nov. 30.	3,956.5	2,498,000	-11,000
Dec. 31.	3,956.2	2,488,000	-10,000
CAL YR 1990.	--	--	-143,000
Jan. 31.	3,956.1	2,484,000	-4,000
Feb. 28.	3,956.0	2,481,000	-3,000
Mar. 31.	3,955.9	2,477,000	-4,000
Apr. 30.	3,955.7	2,470,000	-7,000
May. 31.	3,955.5	2,463,000	-7,000
June 30.	3,955.2	2,452,000	-11,000
July 31.	3,954.8	2,438,000	-14,000
Aug. 31.	3,954.3	2,421,000	-17,000
Sept. 30.	3,953.8	2,403,000	-18,000
WTR YR 1991.	--	--	-124,000

NOTE: Monthend elevations are interpolated from readings made during the year.

WALKER LAKE BASIN

1029030C UPPER TWIN LAKE NEAR BRIDGEPORT, CA

LOCATION.--Lat 38°09'15", long 119°20'58", in NW 1/4 NE 1/4 sec.5, T.3 N., R.24 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, at outlet of upper lake dam on Robinson Creek, and 10 mi southwest of Bridgeport.

DRAINAGE AREA.--29.5 mi².

PERIOD OF RECORD.--December 1961 to February 1964, September 1964 to current year.

GAGE.--Non-recording gage. Datum of gage is 7,212.86 ft above National Geodetic Vertical Datum of 1929 (project datum of U.S. Indian Irrigation Service).

REMARKS.--Contents regulated by dam at outlet. Figures given herein represent usable contents. Usable contents, 2,070 acre-ft between elevations 7,200 ft, natural rim, and 7,207 ft, spillway crest.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 2,990 acre-ft, July 7, 1983, elevation, 7,209.85 ft; minimum observed, 30 acre-ft, Nov. 1, 1990, elevation, 7,200.11 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--No contents observed Oct. 17, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,470 acre-ft, May 30, elevation, 7,208.26 ft; minimum observed, 30 acre-ft, Nov. 1, elevation, 7,200.11 ft.

MONTHEND ELEVATION AND CONTENTS, IN FEET NGVD, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,200.28	78	--
Oct. 31.	7,200.12	33	-45
Nov. 30.	7,201.78	498	+465
Dec. 31.	7,203.50	985	+487
CAL YR 1990.	--	--	-1,105
Jan. 31.	7,204.72	1,350	+365
Feb. 28.	7,205.79	1,680	+330
Mar. 31.	7,207.03	2,090	+410
Apr. 30.	7,207.32	2,170	+80
May 31.	7,208.20	2,450	+280
June 30.	7,207.34	2,180	-270
July 31.	7,206.06	1,770	-410
Aug. 31.	7,201.16	324	-1,450
Sept. 30.	7,200.53	148	-176
WTR YR 1991.	--	--	+66

NOTE: Monthend elevations and contents are interpolated from readings made during the year.

WALKER LAKE BASIN

117

10290400 LOWER TWIN LAKE NEAR BRIDGEPORT, CA

LOCATION.--Lat 38°10'05", long 119°19'33", in NE 1/4 NE 1/4 sec.33, T.4 N., R.24 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, at outlet of lower lake dam on Robinson Creek, and 8 mi southwest of Bridgeport.

DRAINAGE AREA.--38.9 mi².

PERIOD OF RECORD.--December 1961 to current year.

GAGE.--Non-recording gage. Datum of gage is 7,205.45 ft above National Geodetic Vertical Datum of 1929 (project datum of U.S. Indian Irrigation Service).

REMARKS.--Contents regulated by dam at outlet and by Upper Twin Lake. Figures given herein represent usable contents. Usable contents, 4,010 acre-ft between elevations 7,190 ft, natural rim, and 7,200 ft, spillway crest. One transarea diversion out of Tamarack Creek into Summers Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 5,560 acre-ft, June 19, 1983, elevation, 7,203.58 ft; no contents, Nov. 17, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 3,850 acre-ft, June 27, elevation, 7,199.60 ft; minimum observed, 467 acre-ft, Nov. 1, elevation 7,191.17 ft.

MONTHEND ELEVATION AND CONTENTS, IN FEET NGVD, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,191.78	711	--
Oct. 31.	7,191.19	475	-236
Nov. 30.	7,191.35	540	+65
Dec. 31.	7,191.67	667	+127
CAL YR 1990.	--	--	-2,023
Jan. 31.	7,191.98	791	+124
Feb. 28.	7,192.38	951	+160
Mar. 31.	7,193.98	1,600	+649
Apr. 30.	7,194.62	1,840	+240
May 31.	7,196.08	2,430	+590
June 30.	7,199.51	3,810	+1,380
July 31.	7,198.40	3,360	-450
Aug. 31.	7,194.97	1,990	-1,370
Sept. 30.	7,192.30	920	-1,070
WTR YR 1991.	--	--	+209

NOTE: Monthend elevations and contents are interpolated from readings made during the year.

WALKER LAKE BASIN

10292500 BRIDGEPORT RESERVOIR NEAR BRIDGEPORT, CA

LOCATION.--Lat 38°19'30", long 119°12'40", in SE 1/4 NE 1/4 sec.34, T.6 N., R.25 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, at Bridgeport Dam on East Walker River, and 4.5 mi north of Bridgeport.

DRAINAGE AREA.--358 mi².

PERIOD OF RECORD.--March 1926 to current year. Monthend contents only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1180: 1949. WSP 1927: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,466.44 ft above National Geodetic Vertical Datum of 1929 (project datum).

REMARKS.--Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1923. Dam completed in November 1924. Capacity, 42,460 acre-ft between elevations 6,415 ft, approximate elevation of bottom of reservoir, and 6,461 ft, crest of spillway is at elevation 6,460.75 ft; however, there are four siphons that become operative prior to reaching this spillway. Elevation of sill of outlet gate, 6,412 ft. No dead storage. Figures given herein represent total contents. Water is used for irrigation by Walker River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 44,880 acre-ft, June 16, 1974, elevation, 6,460.78 ft; no contents at times in water years 1929, 1930, 1960, 1977, 1988 and 1989.

EXTREMES FOR CURRENT YEAR.--Maximum recorded contents, 6,060 acre-ft, Mar. 31 and Apr. 1, elevation, 6,439.78 ft; minimum 810 acre-feet, Oct. 10, elevation, 6,428.57 ft.

Capacity table, (elevation, in feet, and contents, in acre-feet)

6,425	334	6,440	6,240
6,430	1,130	6,445	11,380
6,435	2,920	6,450	18,780

RESERVOIR STORAGE (AC-FT) WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1090	869	1260	e1260	1850	2920	6020	5510	4350	4490	2530	2040
2	1070	889	1270	e1250	1870	2940	5990	5520	4370	4430	2500	2040
3	1040	902	1290	e1240	1880	3180	5930	5540	4410	4320	2440	2040
4	1000	951	1330	e1220	1910	4000	5880	5540	4410	4250	2390	2060
5	968	987	1360	1210	1940	4310	5860	5550	4490	4120	2340	2090
6	918	1020	1370	1220	1960	4390	5750	5550	4420	4040	2290	2130
7	877	1030	1390	1250	2000	4490	5680	5550	4330	4040	2230	2160
8	842	1060	1400	1260	2030	4570	5620	5500	4290	4030	2190	2160
9	820	1080	1420	1290	2050	4700	5620	5450	4280	3990	2140	2150
10	820	1090	1480	1320	2080	4700	5580	5460	4320	3890	2100	2140
11	820	1110	1530	1350	2110	4730	5590	5400	4420	3800	2090	2120
12	830	1140	1580	1390	2150	4780	5600	5400	4540	3710	2090	2100
13	834	1160	1590	1460	2200	4830	5590	5340	4620	3630	2090	2060
14	838	1170	1590	1530	2270	4870	5580	5310	4690	3560	2080	2020
15	842	1180	1570	1600	2350	4890	5560	5270	4720	3470	2120	1980
16	836	1210	1550	1640	2390	4910	5560	5290	4710	3380	2160	1930
17	836	1220	1550	1660	2430	4940	5580	5140	4660	3310	2180	1880
18	836	1230	1560	1700	2450	5030	5580	5080	4640	3270	2180	1830
19	832	1240	1550	1740	2500	5100	5580	5050	4540	3240	2170	1810
20	840	1240	1520	1770	2530	5140	5600	5010	4500	3200	2160	1780
21	847	1230	e1490	1780	2580	5210	5620	4970	4450	3140	2140	1780
22	857	1230	e1460	1780	2620	5290	5600	4930	4400	3110	2090	1780
23	869	1230	e1440	1780	2650	5430	5610	4860	4360	3040	2060	1770
24	871	1240	e1420	1800	2670	5540	5610	4830	4330	2940	2050	1760
25	867	1240	e1390	1810	2700	5660	5540	4780	4310	2860	2030	1760
26	867	1250	e1360	1820	2730	5750	5550	4760	4250	2800	2030	1760
27	865	1230	e1340	1830	2770	5820	5540	4750	4320	2750	2040	1750
28	865	1210	e1320	1830	2830	5880	5540	4660	4390	2710	2050	1740
29	865	1220	e1310	1830	---	5950	5530	4550	4460	2660	2060	1730
30	869	1250	e1300	1840	---	6000	5620	4460	4480	2590	2060	1720
31	861	---	e1280	1840	---	6020	---	4420	---	2550	2050	---
MAX	1090	1250	1590	1840	2830	6020	6020	5550	4720	4490	2530	2160
MIN	820	869	1260	1210	1850	2920	5530	4420	4250	2550	2030	1720
#	6428.83	6430.45	6430.56	6432.39	6434.80	6439.73	6439.23	6437.56	6437.65	6434.21	6433.00	6432.03
##	-249	+389	+30	+560	+990	+3190	-400	-1200	+60	-1930	-500	-330
CAL YR 1990	MAX 14830	MIN 810	##	-5530								
WTR YR 1991	MAX 6020	MIN 810	##	+610								

Elevation, in feet NGVD, at end of month.

Change in contents, in acre-feet.

e Estimated

WALKER LAKE BASIN

119

10293000 EAST WALKER RIVER NEAR BRIDGEPORT, CA

LOCATION.--Lat 38°19'40", long 119°12'50", in SW 1/4 NE 1/4 sec.34, T.6 N., R.25 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, on right bank 1,500 ft downstream from Bridgeport Reservoir, 5 mi north of Bridgeport, and 10 mi upstream from Sweetwater Creek.

DRAINAGE AREA.--359 mi².

PERIOD OF RECORD.--July 1911 to September 1914 (gage heights only), October and November 1921, June 1922 to September 1924, March to July 1925, October 1925 to current year.

REVISED RECORDS.--WSP 1927: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,400 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1921, nonrecording gage at site 0.5 mi upstream at different datum. Oct. 1, 1921 to Feb. 21, 1924, water-stage recorder at site 1 mi downstream at different datum. Feb. 22, 1924 to Sept. 30, 1931, water-stage recorder, and Oct. 1, 1931 to May 25, 1939, nonrecording gage at present site at datum 2.34 ft lower. May 26, 1939 to Nov. 27, 1988, water-stage recorder at datum 2.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of meadow pasturelands near Bridgeport. Flow regulated by Bridgeport Reservoir (10292500).

AVERAGE DISCHARGE.--68 years (1923-24, 1926-91), 144 ft³/s, 104,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,390 ft³/s, June 19, 1963, gage height, 4.64 ft; maximum gage height, 4.95 ft, Jan. 22, 1943 (top of surge); minimum daily discharge, 0.2 ft³/s, Nov. 2-29, Dec. 1-22, 25-8, 1955, and Jan. 17-25, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 206 ft³/s, June 16-19, gage height, 3.62 ft; minimum daily, 23 ft³/s, many days in April and May.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	39	29	33	e35	31	62	23	125	136	60	55
2	47	35	29	33	35	25	72	23	125	136	60	55
3	51	33	29	33	35	26	72	23	126	136	60	55
4	51	31	29	33	e35	26	68	23	126	136	60	55
5	51	29	29	33	e35	27	64	23	151	136	58	55
6	50	29	29	33	e35	33	64	23	182	136	54	58
7	50	29	29	33	e35	38	64	29	184	112	52	62
8	50	32	30	33	e35	30	54	51	164	86	48	62
9	48	32	30	33	e34	28	35	51	151	92	45	67
10	41	31	30	33	e34	28	31	51	151	103	42	70
11	38	31	30	34	e34	28	28	47	153	106	38	70
12	38	31	30	34	e34	30	27	43	169	111	36	70
13	38	31	30	e34	e34	34	27	43	192	111	38	70
14	38	31	30	e34	35	34	27	43	197	110	40	70
15	39	31	30	e34	35	34	27	44	197	106	40	70
16	39	31	30	e34	35	34	25	47	199	105	40	69
17	39	30	30	e34	35	34	23	47	205	101	50	68
18	39	30	30	e34	35	34	23	48	204	91	59	64
19	39	30	30	e34	35	34	23	49	196	89	59	55
20	39	30	31	e34	35	34	23	49	159	83	59	48
21	39	30	34	e34	35	34	23	52	137	85	58	42
22	39	30	34	e35	35	34	23	55	121	85	56	42
23	39	30	34	e35	35	34	23	58	112	85	51	42
24	41	30	34	e35	35	34	23	63	112	84	45	42
25	42	30	34	e35	35	38	23	77	112	79	43	42
26	41	30	34	e35	36	43	23	82	112	68	43	42
27	42	29	34	e35	36	43	23	95	112	68	46	42
28	42	29	33	e35	35	43	23	115	112	68	53	42
29	42	29	33	e35	---	48	23	144	112	67	55	42
30	42	29	33	e35	---	57	23	137	116	68	55	42
31	42	---	33	e36	---	57	---	126	---	65	55	---
TOTAL	1320	922	964	1055	977	1087	1069	1784	4514	3044	1558	1668
MEAN	42.6	30.7	31.1	34.0	34.9	35.1	35.6	57.5	150	98.2	50.3	55.6
MAX	51	39	34	36	36	57	72	144	205	136	60	70
MIN	38	29	29	33	34	25	23	23	112	65	36	42
AC-FT	2620	1830	1910	2090	1940	2160	2120	3540	8950	6040	3090	3310

CAL YR 1990 TOTAL 21003 MEAN 57.5 MAX 134 MIN 13 AC-FT 41660
WTR YR 1991 TOTAL 19962 MEAN 54.7 MAX 205 MIN 23 AC-FT 39590

e Estimated

WALKER LAKE BASIN

10293500 EAST WALKER RIVER ABOVE STROSNIDER DITCH, NEAR MASON, NV

LOCATION.--Lat 38°48'45", long 119°02'50", in NW 1/4 SW 1/4 sec.14, T.11 N., R.26 E., Lyon County, Hydrologic Unit 16050303, on right bank, 0.9 mi upstream from head of Strosnider ditch, 12 mi southeast of Mason, and 13.5 mi southeast of Yerington.

DRAINAGE AREA.--1,100 mi², approximately.

PERIOD OF RECORD.--January 1947 to current year (irrigation season only since 1978).

GAGE.--Water-stage recorder. Datum of gage is 4,574.10 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 24, 1957, near present site at datum 0.56 ft higher. Oct. 24, 1957, to Apr. 3, 1974, at site 400 ft downstream at same datum.

REMARKS.--Records fair. Diversions for irrigation above station. Flow regulated by Bridgeport Reservoir (station 10292500).

AVERAGE DISCHARGE.--31 years (1948-78), 142 ft³/s, 102,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,820 ft³/s, June 7, 1986, gage height, 7.49 ft, on basis of rating extension above 2,380 ft³/s; minimum daily, 2.3 ft³/s, Mar. 12, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, April to September, 195 ft³/s, June 20, gage height, 3.60 ft; minimum daily, April to September, 16 ft³/s, Apr. 26-29, May 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	63	18	83	109	60	42
2	---	---	---	---	---	---	66	19	90	117	43	42
3	---	---	---	---	---	---	72	19	89	117	37	42
4	---	---	---	---	---	---	72	18	92	112	42	51
5	---	---	---	---	---	---	68	18	94	107	39	44
6	---	---	---	---	---	---	62	18	106	102	38	41
7	---	---	---	---	---	---	60	17	138	94	35	42
8	---	---	---	---	---	---	60	16	155	72	32	49
9	---	---	---	---	---	---	59	20	144	59	30	51
10	---	---	---	---	---	---	40	25	120	59	27	51
11	---	---	---	---	---	---	33	28	113	64	25	58
12	---	---	---	---	---	---	31	29	107	69	22	55
13	---	---	---	---	---	---	30	25	118	73	20	53
14	---	---	---	---	---	---	28	20	147	78	19	52
15	---	---	---	---	---	---	26	18	163	72	22	50
16	---	---	---	---	---	---	23	19	166	71	23	50
17	---	---	---	---	---	---	22	21	168	70	21	50
18	---	---	---	---	---	---	21	25	181	63	21	49
19	---	---	---	---	---	---	20	27	188	71	25	49
20	---	---	---	---	---	---	19	29	183	69	31	43
21	---	---	---	---	---	---	19	33	142	67	37	39
22	---	---	---	---	---	---	19	35	104	62	39	34
23	---	---	---	---	---	---	19	34	101	59	42	30
24	---	---	---	---	---	---	19	36	91	58	43	28
25	---	---	---	---	---	---	17	37	87	54	40	27
26	---	---	---	---	---	---	16	40	85	54	34	29
27	---	---	---	---	---	---	16	37	88	46	30	30
28	---	---	---	---	---	---	16	47	95	43	32	31
29	---	---	---	---	---	---	16	54	98	42	36	31
30	---	---	---	---	---	---	17	80	95	42	40	31
31	---	---	---	---	---	---	---	85	---	44	41	---
TOTAL	---	---	---	---	---	---	1049	947	3631	2219	1026	1274
MEAN	---	---	---	---	---	---	35.0	30.5	121	71.6	33.1	42.5
MAX	---	---	---	---	---	---	72	85	188	117	60	58
MIN	---	---	---	---	---	---	16	16	83	42	19	27
AC-FT	---	---	---	---	---	---	2080	1880	7200	4400	2040	2530

WALKER LAKE BASIN

121

10296000 WEST WALKER RIVER BELOW LITTLE WALKER RIVER, NEAR COLEVILLE, CA

LOCATION.--Lat 38°22'47", long 119°26'57", in NE 1/4 SE 1/4 sec.9, T.6 N., R.23 E., Mono County, Hydrologic Unit 16050302, in Toiyabe National Forest, on left bank 50 ft downstream from Little Walker River, 160 ft upstream from bridge on U.S. Highway 395, and 13 mi southeast of Coleville.

DRAINAGE AREA.--180 mi².

PERIOD OF RECORD.--April 1938 to current year. Prior to October 1958, published as "below East Fork."

REVISED RECORDS.--WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,591.39 ft above National Geodetic Vertical Datum of 1929, supplementary adjustment of 1958. Prior to Oct. 1, 1939, at site, 125 ft downstream at datum 1.00 ft higher. Oct. 1, 1939, to Sept. 30, 1969, at present site and datum. Oct. 1, 1969, to July 10, 1987, at site 100 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Station is above diversions except for a few small ranch ditches. Flow slightly regulated by Poore Lake Reservoir, capacity, 1,200 acre-ft, 7 mi upstream.

AVERAGE DISCHARGE.--53 years, 257 ft³/s, 186,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,220 ft³/s, Nov. 20, 1950, gage height, 8.10 ft, from rating curve extended above 1,900 ft³/s on basis of slope-area measurement of peak flow; minimum, 4.0 ft³/s, Nov. 18, 1948, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge observed prior to 1938, 5,800 ft³/s, Dec. 11, 1937, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,120 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 25	2400	1270	3.69	June 10	2400	*1730	*4.15

Minimum daily, 12 ft³/s, Dec. 19-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	23	e26	e21	e29	31	58	236	595	412	122	e33
2	22	21	27	e21	27	23	59	187	895	472	104	e32
3	22	21	25	e21	e28	38	63	160	1220	502	96	e35
4	21	24	24	23	e28	100	82	161	1340	487	90	e38
5	21	25	24	23	28	79	132	219	1300	455	89	e38
6	21	22	e25	24	26	60	169	315	1060	418	88	e38
7	21	21	e25	24	e28	52	144	416	982	359	82	93
8	21	e22	e25	23	e28	45	129	602	1070	316	78	59
9	21	22	e26	23	e28	45	134	491	1210	297	74	49
10	21	22	e29	23	e27	48	132	312	1380	269	71	47
11	21	22	23	24	24	49	115	237	1440	244	71	e47
12	21	24	22	26	25	46	105	205	1390	236	67	e44
13	21	23	e23	28	25	43	104	239	1320	230	71	e42
14	21	23	e16	26	25	39	119	211	1010	216	69	e39
15	20	23	e13	26	27	38	127	247	854	188	68	e37
16	20	23	14	29	27	48	116	396	797	170	69	e36
17	20	24	15	e28	24	37	110	454	723	171	65	e34
18	20	24	16	e28	23	41	109	294	679	172	64	e33
19	24	24	e12	e26	23	43	114	232	617	183	58	33
20	24	22	e12	e29	23	36	117	252	490	226	56	32
21	24	23	e13	e29	25	35	119	290	452	179	54	31
22	24	e25	e15	e25	24	36	132	401	447	159	48	30
23	24	e25	e16	e29	23	36	145	714	446	156	e44	29
24	23	e24	e17	e32	23	38	161	994	419	145	e41	29
25	23	e23	e18	e39	24	38	154	1080	361	135	e40	29
26	23	e22	e18	e17	26	46	140	1000	341	129	e39	28
27	23	e24	e19	e20	29	39	152	816	343	126	e38	28
28	22	25	e20	e23	30	37	157	804	318	125	e38	28
29	22	27	e21	e24	---	39	189	818	367	123	e37	28
30	21	26	e21	e24	---	43	224	715	380	113	e35	28
31	22	---	e21	e24	---	49	---	541	---	122	e34	---
TOTAL	677	699	621	782	727	1377	3811	14039	24246	7535	2000	1127
MEAN	21.8	23.3	20.0	25.2	26.0	44.4	127	453	808	243	64.5	37.6
MAX	24	27	29	39	30	100	224	1080	1440	502	122	93
MIN	20	21	12	17	23	23	58	160	318	113	34	28
AC-FT	1340	1390	1230	1550	1440	2730	7560	27850	48090	14950	3970	2240

CAL YR 1990 TOTAL 44872 MEAN 123 MAX 583 MIN 12 AC-FT 89000
WTR YR 1991 TOTAL 57641 MEAN 158 MAX 1440 MIN 12 AC-FT 114300

e Estimated

WALKER LAKE BASIN

10296500 WEST WALKER RIVER NEAR COLEVILLE, CA

LOCATION.--Lat 38°30'55", long 119°27'15", in NW 1/4 NE 1/4 sec.28, T.8 N., R.23 E., Mono County, Hydrologic Unit 16050302, in Toiyabe National Forest, on left bank 0.2 mi downstream from Rock Creek, and 5 mi southeast of Coleville.

DRAINAGE AREA.--250 mi².

PERIOD OF RECORD.--October 1902 to July 1908 (published as West Fork of Walker River near Coleville, 1903, 1905-8 and as Walker River (West Fork) near Coleville, 1904), March 1909 to September 1910, June 1915 to March 1938, May 1957 to current year. Monthly discharge only for some periods published in WSP 1314.

REVISED RECORDS.--WSP 880: 1917 (runoff in acre-ft). WSP 1514: 1918, 1923. WDR NV-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,520 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 31, 1908, nonrecording gage at site 0.5 mi upstream at different datum. Mar. 1, 1909, to Aug. 31, 1910, nonrecording gage, and June 18, 1915, to Aug. 15, 1919, water-stage recorder near present site at different datums. Aug. 16, 1919, to Mar. 31, 1938, water-stage recorder at site 1,000 ft upstream at different datum. May 26, 1957, to Sept. 10, 1963, water-stage recorder at site 10 ft downstream at datum 0.38 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Station is above diversions except for a few small ranch ditches. Flow slightly regulated by Poore Lake Reservoir, capacity, 1,200 acre-ft, 17 mi upstream.

AVERAGE DISCHARGE.--62 years (1903-7, 1910, 1916-37, 1958-91), 273 ft³/s, 197,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft³/s, Dec. 11, 1937, on basis of slope-area measurement of peak flow; minimum, 5 ft³/s, Dec. 3, 1924, and Aug. 27, 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,120 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 26	----	e 1340	unknown	June 11	----	e *1800	unknown

Minimum daily, 21 ft³/s, Jan. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	36	38	e29	e32	44	76	328	e700	e470	130	38
2	29	33	43	e30	e30	32	77	266	e950	e490	111	38
3	29	29	44	e31	e32	51	81	226	e1300	e520	105	42
4	28	34	43	e30	e34	101	97	222	e1450	e500	100	44
5	28	41	43	e32	e34	118	154	294	e1400	e480	98	44
6	28	38	36	e32	e33	81	215	411	e1200	e450	97	45
7	29	29	e35	e32	e33	74	194	554	e1080	e425	89	88
8	29	e30	e34	e29	e33	64	168	790	e1180	e390	86	69
9	30	e31	e34	e29	e34	65	172	680	e1340	e370	81	58
10	31	e34	e32	e30	35	66	175	451	e1500	e340	77	55
11	30	37	e31	e30	34	66	153	360	e1580	e310	77	52
12	31	40	e29	e31	35	62	139	314	e1500	e305	73	49
13	30	39	e28	e32	37	61	133	354	e1480	e300	77	46
14	30	39	28	e29	37	55	153	324	e1180	e290	76	44
15	30	38	e28	e28	38	54	167	348	e1000	e260	75	42
16	29	39	e29	e29	38	57	153	508	e900	e240	73	40
17	29	39	e29	e29	36	54	145	619	e830	e240	70	38
18	29	39	e30	e30	31	55	142	431	e740	e245	68	38
19	35	39	e30	e31	32	58	150	353	e715	e270	62	38
20	35	39	e28	e32	33	49	154	344	e540	e290	61	37
21	35	e30	e24	e34	36	48	155	358	e500	e245	58	36
22	35	e31	e26	e29	35	47	169	411	e510	e220	54	35
23	35	e32	e28	e30	33	50	184	677	434	e220	52	35
24	35	e32	e29	e34	32	53	212	e900	419	e205	49	35
25	35	e34	e30	e37	31	53	208	e1180	385	e192	46	34
26	34	e34	e32	e21	34	60	185	e1080	374	135	45	34
27	34	e30	e36	e22	40	53	202	e950	378	132	43	34
28	34	e28	e29	e23	39	48	207	e940	349	130	43	34
29	34	45	e27	e23	---	53	249	e930	356	128	42	34
30	34	46	e26	e23	---	56	297	e650	368	116	41	34
31	34	---	e25	e24	---	65	---	e640	---	117	39	---
TOTAL	978	1065	984	905	961	1853	4966	16893	26638	9025	2198	1290
MEAN	31.5	35.5	31.7	29.2	34.3	59.8	166	545	888	291	70.9	43.0
MAX	35	46	44	37	40	118	297	1180	1580	520	130	88
MIN	28	28	24	21	30	32	76	222	349	116	39	34
AC-FT	1940	2110	1950	1800	1910	3680	9850	33510	52840	17900	4360	2560

CAL YR 1990 TOTAL 46838 MEAN 128 MAX 550 MIN 24 AC-FT 92900
WTR YR 1991 TOTAL 67756 MEAN 186 MAX 1580 MIN 21 AC-FT 134400

e Estimated

WALKER RIVER BASIN

123

10296650 WEST WALKER RIVER ABOVE TOPAZ LAKE AT TOPAZ, CA

LOCATION.--Lat 38°36'39", long 119°31'00", in NW 1/4 SW 1/4 sec.24, T.9 N., R.22 E., Mono County, Hydrologic Unit 16050302, at bridge 500 ft east of U.S. Highway 395 on Topaz Lane, and about 3 mi northwest of Coleville.

DRAINAGE AREA.--293 mi².

PERIOD OF RECORD.--Water years 1990 to current year.

REMARKS.--In April 1990, quarterly sampling established for Douglas County Network.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
DEC 13...	1200	25	192	4.5	5.0	56	16	4.0	19	1	--
MAR 28...	1225	14	209	10.5	12.0	67	19	4.8	16	0.8	--
JUN 12...	1510	947	40	29.0	14.5	15	4.4	0.96	2.5	0.3	0.60
AUG 14...	1220	38	166	27.0	22.0	54	16	3.4	13	0.8	1.8

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)
DEC 13...	12	7.7	0.20	121	--	--	<0.010	<0.100	0.020	<0.010	41
MAR 28...	13	9.6	0.50	119	--	--	<0.010	0.062	<0.010	0.010	95
JUN 12...	0.50	0.50	0.10	21	21	0.03	<0.010	<0.050	0.040	<0.010	52
AUG 14...	11	5.8	0.30	100	93	0.14	<0.010	<0.050	<0.010	<0.010	33

WALKER LAKE BASIN

10297000 TOPAZ LAKE NEAR TOPAZ, CA

LOCATION.--Lat 38°41'35", long 119°31'10", in NW 1/4 NE 1/4 sec.33, T.10 N., R.22 E., Douglas County, Hydrologic Unit 16050301, at outlet works of Topaz Lake on West Walker River, and 5.5 mi north of Topaz.

PERIOD OF RECORD.--December 1921 to September 1931 (monthly contents only published in WSP 1734), October 1931 to current year.

GAGE.--Water-stage recorder read once daily. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1978, at datum 4.62 ft higher.

REMARKS.--Topaz Lake, formerly known as Alkali Lake and Topaz Reservoir, was formed by the diversion of water from West Walker River through a feeder canal and the construction of an outlet tunnel through a low saddle in rim of lake. Storage began about December 1921. Usable capacity, 59,440 acre-ft, between elevations 4,967.68 ft (lowest practical elevation for diversion through tunnel) and 5,000.38 ft (3 ft below top of levee). Useable capacity of reservoir was increased from about 45,000 acre-ft to 59,440 acre-ft in October 1937 by an earthfill, rock-faced levee at south end. Figures given herein represent usable contents. There is 65,000 acre-ft of lake volume below the point of controllable storage. Water is used for irrigation in Walker River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 60,680 acre-ft, July 3, 1980, elevation, 5,000.92 ft, present datum; no contents Oct. 31, 1924, many days, Sept. to Oct., 1960, Aug. to Dec., 1977, Sept. to Nov., 1988, Sept. 25, 1990, Oct. to Nov., 1990, and Sept., 1991.

EXTREMES FOR CURRENT YEAR.--Maximum contents 21,690 acre-ft, June 18, elevation, 4,985.77 ft; no contents, Oct. 4 to Nov. 8 and Sept. 22-30.

Capacity table (elevation, in feet, and contents, in acre-feet)

4,967	0	4,975	11,520
4,968	490	4,980	19,760
4,970	3,580	4,985	28,310

RESERVOIR STORAGE (AC-FT) WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	e.00	690	2360	4570	6180	7320	7510	10020	19970	9020	1570
2	46	e.00	767	2420	4660	6150	7320	7510	10110	19860	8550	1460
3	31	e.00	813	2480	4710	6250	7340	7460	10840	19800	8150	1310
4	.00	e.00	890	2530	4800	6400	7370	7400	11840	19720	7720	1260
5	.00	e.00	967	2540	4910	6480	7350	7380	12910	19550	7340	1170
6	.00	e.00	1030	2590	5010	6580	7540	7560	13710	19370	7020	1110
7	.00	e.00	1060	2730	5080	6660	7700	7800	14200	19050	6720	1010
8	.00	e.00	1090	2790	5160	6690	7800	8130	14770	18630	6400	921
9	.00	e15	1200	2840	5190	6770	7810	8550	15510	18180	6040	844
10	e.00	e61	1150	2950	5220	6830	7770	8500	16520	17760	5840	782
11	e.00	e76	1320	2990	5270	6820	7730	8340	17750	17430	5590	705
12	e.00	e107	1410	3050	5330	6880	7700	8180	18920	17120	5330	628
13	e.00	e107	1490	3130	5410	6850	7700	8150	19990	16790	5180	582
14	e.00	e92	1480	3240	5490	6850	7620	8020	20680	16440	4940	474
15	e.00	e76	1520	3320	5570	6860	7580	7750	21080	16110	4710	398
16	e.00	e76	1550	3360	5540	6880	7540	7640	21440	15690	4470	337
17	e.00	e76	1640	3470	5630	6860	7510	7770	21570	15330	4250	260
18	e.00	e61	1630	3570	5650	6970	7510	7590	21610	14970	4080	214
19	e.00	e61	1800	3650	5700	6990	7500	7430	21490	14630	3860	168
20	e.00	e76	1830	3710	5760	7020	7480	7270	21340	14310	3660	138
21	e.00	e122	1860	3770	5810	7020	7460	7210	21200	14040	3470	46
22	e.00	e168	1880	3820	5900	7040	7450	7150	21140	13710	3290	.00
23	e.00	e214	1890	3880	5880	7100	7460	7310	21150	13350	3080	.00
24	e.00	e275	1920	3960	5960	7130	7340	7690	21120	12860	2900	.00
25	e.00	e321	1970	4040	6010	7150	7460	8260	21020	12440	2640	.00
26	e.00	e382	2020	4110	6060	7210	7400	8880	20850	12000	2530	.00
27	e.00	382	1800	4140	6100	7240	7420	9180	20650	11580	2330	.00
28	e.00	444	2090	4270	6150	7310	7460	9470	20460	11130	2120	.00
29	e.00	490	2200	4300	---	7370	7510	9740	20140	10580	1970	.00
30	e.00	551	2250	4390	---	7370	7530	9950	20160	9950	1840	.00
31	e.00	---	2290	4520	---	7350	---	10020	---	9520	1710	---
MAX	76	551	2290	4520	6150	7370	7810	10020	21610	19970	9020	1570
MIN	.00	.00	690	2360	4570	6150	7320	7150	10020	9520	1710	.00
#	4967.38	4968.04	4969.17	4970.60	4971.64	4972.40	4972.51	4974.07	4980.24	4973.76	4968.79	4967.45
##	-76	+551	+1740	+2230	+1630	+1200	+180	+2490	+10140	-10640	-7810	-1710
CAL YR 1990	MAX 20090	MIN .00	## -7705									
WTR YR 1991	MAX 21610	MIN .00	## -75									

Elevation, in feet NGVD, at end of month
Change in contents, in acre-feet
e Estimated

WALKER LAKE BASIN

125

10297500 WEST WALKER RIVER AT HOYE BRIDGE, NEAR WELLINGTON, NV

LOCATION.--Lat 38°43'40", long 119°25'40", in NE 1/4 SE 1/4 sec.17, T.10 N., R.23 E., Douglas County, Hydrologic Unit 16050302, on left bank, 20 ft upstream from Hoyer Bridge, 2 mi upstream from head of Saroni Canal, and 4 mi southwest of Wellington.

DRAINAGE AREA.--497 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to August 1910 (published as West Walker River near Wellington), July 1920 to September 1923, March 1924 to August 1925, October 1925 to September 1932, October 1957 to current year. Monthly discharge only for some periods published in WSP 1314.

REVISED RECORDS.--WDR NV-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,980 ft above National Geodetic Vertical Datum of 1929, from topographic map. May to August 1910, nonrecording gage at same site at different datum. July 1, 1920, to Sept. 30, 1923, water-stage recorder at site 3 mi downstream, 1 mi downstream from Saroni Canal, at different datum, and supplemental nonrecording gage at Saroni Canal 1 mi downstream from head. Mar. 1, 1924, to Sept. 30, 1932, water-stage recorder at site at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by off-channel storage in Topaz Lake (station 10297000), since Jan. 30, 1922. Diversions for irrigation of about 10,500 acres above station. Records include releases from Topaz Lake and all return flow from Antelope Valley.

AVERAGE DISCHARGE.--44 years (1921-23, 1926-32, 1958-91), 241 ft³/s, 174,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,310 ft³/s, July 8, 1983, gage height, 8.75 ft; minimum daily, 3.9 ft³/s, Feb. 16, 1990, but may have been less during periods of estimated daily discharge, Feb. 14, 15, and 17-21, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 540 ft³/s, June 13, gage height, 4.86 ft; minimum daily, 16 ft³/s, Dec. 22, but may have been less during periods of estimated daily discharges.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	25	22	e20	26	49	65	112	391	381	269	79
2	26	23	21	e22	21	50	65	112	462	387	235	76
3	25	23	20	e21	21	53	61	113	486	398	221	72
4	25	24	20	e19	21	57	57	113	466	400	216	69
5	24	24	e20	e19	22	49	57	117	498	414	197	69
6	24	24	e19	e20	24	45	56	126	448	411	189	68
7	24	28	e19	e21	23	41	57	186	475	417	169	66
8	24	27	20	e21	24	38	67	257	483	439	156	81
9	24	28	20	e21	30	35	68	302	488	408	147	76
10	26	31	20	e21	31	34	69	310	496	374	137	68
11	25	32	21	e22	30	32	68	294	453	338	129	60
12	24	32	21	e21	29	33	70	262	468	270	132	58
13	24	32	21	e21	29	38	70	190	510	261	133	55
14	24	33	21	e21	29	37	69	195	475	256	152	53
15	23	33	24	e22	28	38	68	283	432	248	156	51
16	23	33	19	e22	27	37	63	315	414	234	153	48
17	23	33	18	e22	27	39	62	330	466	248	152	46
18	22	34	17	e21	27	39	57	334	482	229	142	43
19	23	35	25	e21	27	41	56	308	485	218	135	41
20	22	35	21	22	27	44	55	284	438	218	128	39
21	23	34	e19	25	27	44	57	248	390	233	113	37
22	23	35	e16	26	22	47	57	251	338	222	107	36
23	23	33	e17	25	22	46	58	303	318	232	103	39
24	24	32	e18	24	21	47	61	410	329	260	101	39
25	23	30	e19	24	21	49	63	473	321	254	102	40
26	23	e29	e20	26	21	50	66	450	326	239	93	40
27	23	e28	e20	23	21	52	66	471	355	230	85	42
28	23	28	e20	25	22	52	66	438	346	230	84	44
29	24	27	e18	25	---	49	70	456	331	262	85	44
30	25	23	e18	22	---	50	91	444	362	295	86	44
31	25	---	e19	24	---	63	---	402	---	278	81	---
TOTAL	740	888	613	689	700	1378	1915	8889	12732	9284	4388	1623
MEAN	23.9	29.6	19.8	22.2	25.0	44.5	63.8	287	424	299	142	54.1
MAX	26	35	25	26	31	63	91	473	510	439	269	81
MIN	22	23	16	19	21	32	55	112	318	218	81	36
AC-FT	1470	1760	1220	1370	1390	2730	3800	17630	25250	18410	8700	3220

CAL YR 1990 TOTAL 38162 MEAN 105 MAX 437 MIN 15 AC-FT 75690
WTR YR 1991 TOTAL 43839 MEAN 120 MAX 510 MIN 16 AC-FT 86950

e Estimated

WALKER RIVER BASIN

10297500 WEST WALKER RIVER AT HOYE BRIDGE, NEAR WELLINGTON, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977-84, 1990 to current year.

REMARKS.--In April 1990, quarterly sampling established for Douglas County Network.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
DEC 13...	1400	20	342	5.0	6.5	90	26	6.0	38	2	--
MAR 28...	1435	52	362	12.5	12.5	82	23	6.0	43	2	--
JUN 13...	1145	522	118	30.5	17.0	38	11	2.6	9.4	0.7	1.5
AUG 14...	1545	153	182	22.0	23.5	53	15	3.7	15	0.9	2.1

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUC- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)
DEC 13...	38	24	0.70	186	--	--	<0.010	<0.100	0.030	<0.010	8
MAR 28...	29	21	1.0	222	--	--	<0.010	<0.050	0.020	0.010	47
JUN 13...	3.6	4.4	0.20	69	63	0.09	0.010	<0.050	0.040	0.010	45
AUG 14...	11	8.7	0.50	100	100	0.14	<0.010	<0.050	<0.010	<0.010	23

WALKER LAKE BASIN

127

10300000 WEST WALKER RIVER NEAR HUDSON, NV

LOCATION.--Lat 38°48'35", long 119°13'35", in SE 1/4 SW 1/4 sec.18, T.11 N., R.25 E., Lyon County, Hydrologic Unit 16050302, on left bank, 0.5 mi upstream from Wilson Canyon, and 3 mi southeast of Hudson.

DRAINAGE AREA.--964 mi².

PERIOD OF RECORD.--August 1914 to March 1925, January 1947 to current year (irrigation season only since 1978). August 1914 to May 1921 published as "at Hudson."

GAGE.--Water-stage recorder. Elevation of gage is 4,650 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 1921, nonrecording gage at site 2.5 mi upstream at different datum. May 1921 to March 1925, water-stage recorder at approximately same site at different datum.

REMARKS.--No estimated daily discharge. Records good. Flow regulated by off-channel storage in Topaz Lake (station 10297000) since Jan. 30, 1922. Many diversions above station for irrigation. Station is below return flow from irrigated areas in Smith Valley.

AVERAGE DISCHARGE.--41 years (1915-24, 1948-78), 187 ft³/s, 135,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft³/s, Dec. 24, 1955, gage height, 7.42 ft, from floodmarks; minimum, 3.8 ft³/s, Jan. 22, 1962, but may have been less during periods of ice effect.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period April to September, 396 ft³/s, May 25, gage height, 2.29 ft; minimum daily during period April to September, 32 ft³/s, Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	66	92	280	299	175	73
2	---	---	---	---	---	---	66	94	345	292	169	71
3	---	---	---	---	---	---	66	94	375	309	162	66
4	---	---	---	---	---	---	63	94	328	308	153	60
5	---	---	---	---	---	---	64	94	359	308	151	51
6	---	---	---	---	---	---	61	85	331	288	150	48
7	---	---	---	---	---	---	57	123	340	283	138	46
8	---	---	---	---	---	---	63	173	369	293	130	46
9	---	---	---	---	---	---	68	237	357	279	119	54
10	---	---	---	---	---	---	71	269	368	263	106	54
11	---	---	---	---	---	---	70	280	316	223	97	42
12	---	---	---	---	---	---	73	270	322	161	94	41
13	---	---	---	---	---	---	74	209	352	134	96	41
14	---	---	---	---	---	---	75	162	366	138	114	41
15	---	---	---	---	---	---	73	221	339	133	128	41
16	---	---	---	---	---	---	71	240	304	119	115	40
17	---	---	---	---	---	---	66	287	304	135	106	42
18	---	---	---	---	---	---	65	325	329	121	103	39
19	---	---	---	---	---	---	61	300	348	107	96	38
20	---	---	---	---	---	---	60	272	332	99	94	34
21	---	---	---	---	---	---	59	246	319	109	87	34
22	---	---	---	---	---	---	63	231	296	115	70	33
23	---	---	---	---	---	---	65	237	264	130	67	34
24	---	---	---	---	---	---	66	294	257	154	70	32
25	---	---	---	---	---	---	67	376	248	145	81	40
26	---	---	---	---	---	---	66	335	231	128	80	47
27	---	---	---	---	---	---	67	364	267	114	82	47
28	---	---	---	---	---	---	67	337	283	107	81	49
29	---	---	---	---	---	---	66	328	269	125	80	49
30	---	---	---	---	---	---	71	332	289	182	82	51
31	---	---	---	---	---	---	---	311	---	176	76	---
TOTAL	---	---	---	---	---	---	1990	7312	9487	5777	3352	1384
MEAN	---	---	---	---	---	---	66.3	236	316	186	108	46.1
MAX	---	---	---	---	---	---	75	376	375	309	175	73
MIN	---	---	---	---	---	---	57	85	231	99	67	32
AC-FT	---	---	---	---	---	---	3950	14500	18820	11460	6650	2750

WALKER LAKE BASIN

10301500 WALKER RIVER NEAR WABUSKA, NV
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 39°09'10", long 119°05'50", in SE 1/4 NW 1/4 sec.20, T.15 N., R.26 E., Lyon County, Hydrologic Unit 16050303, on left bank 600 ft upstream from timber bridge at Julian Ranch, 1.8 mi downstream from Southern Pacific Railroad bridge, 4.6 mi east of Wabuska, and 16 mi upstream from Weber Dam.

DRAINAGE AREA.--2,600 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1902 to December 1904, January 1905 to July 1908 (fragmentary), January 1920 to September 1935, January 1939 to current year. Monthly discharge only for some periods published in WSP 1734.

REVISED RECORDS.--WSP 1314: 1923 (M). WSP 1634: 1904.

GAGE.--Water-stage recorder. Elevation of gage is 4,280 ft above National Geodetic Vertical Datum of 1929, from topographic map. July 22, 1902, to July 31, 1908, nonrecording gage at site 2.5 mi upstream at different datum. Jan. 15, 1920, to Sept. 30, 1929, nonrecording gage or water-stage recorder at several sites near present site at various datums; Oct. 1, 1929, to Sept. 30, 1935, water-stage recorder at site 1.5 mi downstream at different datum. January 1939 to September 1958, non-recording gage on bridge 300 ft downstream at datum 1.19 ft higher.

REMARKS.--Records fair, except estimated daily discharges, which are poor. Many diversions for irrigation above station. Flow regulated by Bridgeport Reservoir (station 10292500) and Topaz Lake (station 10297000), combined capacity, 101,900 acre-ft.

AVERAGE DISCHARGE.--66 years (1903-04, 1921-24, 1926-35, 1940-41, 1943, 1945-91), 167 ft³/s, 121,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 3,280 ft³/s, July 10, 11, 1906, gage height, 5.90 ft, site and datum then in use; no flow at times in 1924, 1925, and 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 85 ft³/s, Apr. 13, gage height, 4.03 ft; maximum gage height, 4.77 ft, Jan. 17, backwater from ice; minimum daily discharge, 2.0 ft³/s, Dec. 24-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e20	22	20	e3.0	e12	47	3.8	33	29	50	40	33
2	e18	12	25	e3.4	e15	37	7.7	33	26	56	36	31
3	e16	12	24	e4.0	e20	20	6.8	33	35	52	36	30
4	e14	12	9.6	e4.5	e25	17	5.7	31	46	50	40	32
5	13	13	11	e5.2	e30	15	8.0	33	39	47	41	33
6	11	9.6	15	e6.2	e40	11	13	32	45	41	38	32
7	12	8.7	18	e7.2	e43	11	11	33	27	29	45	30
8	13	9.2	14	e8.8	e45	11	7.7	35	25	26	38	28
9	14	7.8	13	e9.8	e46	8.5	6.5	27	30	31	39	28
10	13	9.1	15	e10	e48	6.4	6.0	30	26	24	39	35
11	12	11	21	e12	47	5.4	5.6	35	21	30	39	38
12	14	11	16	e14	49	5.3	8.5	30	23	22	37	32
13	20	e15	14	e16	50	4.3	70	29	30	22	36	31
14	23	9.7	e14	e20	47	3.1	78	28	36	18	38	30
15	25	9.7	e15	e21	46	4.3	75	29	43	18	47	31
16	25	11	e14	e22	41	3.9	63	34	40	16	40	31
17	21	8.6	e14	e23	39	3.7	57	29	40	17	38	32
18	18	8.4	15	e22	36	3.8	48	32	49	28	36	30
19	18	11	e13	e21	35	3.8	45	39	39	27	34	29
20	18	9.8	e12	e20	35	3.7	42	37	39	22	34	29
21	19	11	e11	e19	47	6.6	38	34	36	21	34	30
22	20	13	e5.0	e18	47	13	35	30	42	24	36	29
23	22	17	e3.0	e17	47	14	35	32	61	19	33	29
24	22	25	e2.0	e16	44	13	34	29	56	20	32	27
25	21	24	e2.0	e15	42	16	34	45	64	30	31	26
26	21	20	e2.0	e15	43	11	35	55	53	34	30	27
27	20	e19	e2.0	e14	46	8.2	34	35	41	29	31	32
28	18	e18	e2.0	e14	46	7.2	34	37	42	30	30	32
29	19	e20	e2.1	e13	---	6.9	34	29	49	31	31	32
30	21	16	e2.4	e13	---	5.6	35	26	46	35	34	34
31	22	---	e2.7	e12	---	4.3	---	28	---	40	33	---
TOTAL	563	403.6	348.8	419.1	1111	331.0	916.3	1022	1178	939	1126	923
MEAN	18.2	13.5	11.3	13.5	39.7	10.7	30.5	33.0	39.3	30.3	36.3	30.8
MAX	25	25	25	23	50	47	78	55	64	56	47	38
MIN	11	7.8	2.0	3.0	12	3.1	3.8	26	21	16	30	26
AC-FT	1120	801	692	831	2200	657	1820	2030	2340	1860	2230	1830

CAL YR 1990 TOTAL 9449.7 MEAN 25.9 MAX 61 MIN 2.0 AC-FT 18740
WTR YR 1991 TOTAL 9280.8 MEAN 25.4 MAX 78 MIN 2.0 AC-FT 18410

e Estimated

WALKER LAKE BASIN

129

10301500 WALKER RIVER NEAR WABUSKA, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960 to current year.

PERIOD OF DAILY RECORD.--

CHEMICAL ANALYSES: October 1968 to September 1969.

SPECIFIC CONDUCTANCE: October 1968 to September 1976.

WATER TEMPERATURE: October 1968 to September 1976.

REMARKS.--Inflow from two drainage ditches occasionally enters stream less than a mile above sampling site. Because inflow and streamflow differ in quality, and because the waters do not mix thoroughly above sampling site, flow at site is not homogenous either chemically or thermally when ditches discharge to the stream. Doubtless, this was responsible for some of the variation shown by daily specific-conductance and temperature data during water years 1969-76. Detailed sampling information is available from U.S. Geological Survey, Carson City, Nev. Pesticide analyses prior to October 1981 from U.S. Environmental Protection Agency.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 792 microsiemens, Dec. 12, 1972; minimum daily, 183 microsiemens, June 26, 1969.

WATER TEMPERATURE: Maximum daily, 34.5°C, July 24, 1975; minimum daily, freezing point on several days during winter months of most years.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML)
OCT 30...	1430	22	412	8.4	22.0	15.5	4.7	8.8	104	K8	--
JAN 15...	1435	E21	380	8.0	11.0	0.0	2.0	9.8	78	K2	1300
FEB 27...	1220	46	403	8.2	15.0	7.5	4.7	10.3	102	K2	K70
APR 24...	1200	33	474	8.3	20.0	17.5	6.5	8.5	105	K18	56
JUN 26...	1245	52	262	8.3	25.0	21.5	6.1	7.9	105	--	--
AUG 28...	1230	31	307	8.3	24.5	19.0	10	8.6	108	39	130

DATE	HARD-NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 30...	120	33	7.9	45	2	4.8	170	1	140	50
JAN 15...	110	31	7.3	41	2	4.3	160	--	131	44
FEB 27...	120	34	7.7	46	2	4.7	143	--	117	54
APR 24...	130	36	8.8	54	2	4.8	193	--	158	56
JUN 26...	77	22	5.3	24	1	3.2	119	--	98	20
AUG 28...	94	27	6.3	29	1	3.5	135	--	111	26

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT 30...	14	0.60	19	251	259	0.34	<0.010	<0.010	<0.100	<0.100
JAN 15...	14	0.30	24	245	246	0.33	0.010	<0.010	0.200	0.200
FEB 27...	15	0.60	20	249	253	0.34	<0.010	<0.010	<0.050	<0.050
APR 24...	21	0.80	17	297	294	0.40	<0.010	<0.010	<0.050	<0.050
JUN 26...	9.9	0.50	13	145	157	0.20	0.010	<0.010	<0.050	<0.050
AUG 28...	10	0.50	16	184	185	0.25	0.020	<0.010	<0.050	<0.050

WALKER LAKE BASIN

10301500 WALKER RIVER NEAR WABUSKA, NV--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
OCT 30...	<0.010	<0.010	<0.20	0.050	0.040	0.040	0.050	<10	12	35
JAN 15...	0.010	0.020	<0.20	0.060	0.050	0.030	0.050	--	--	--
FEB 27...	<0.010	0.010	0.30	0.060	0.040	0.030	0.040	<10	13	36
APR 24...	0.020	0.020	0.40	0.090	0.050	0.050	0.040	<10	14	43
JUN 26...	0.020	0.020	0.50	0.080	0.040	0.050	0.030	--	--	--
AUG 28...	<0.010	<0.010	0.60	0.090	0.050	0.030	0.020	20	13	27

DATE	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)
OCT 30...	<0.5	<1.0	<1	<3	<1	8	<1	33	9	0.1
JAN 15...	--	--	--	--	--	--	--	--	--	--
FEB 27...	0.7	<1.0	<1	<3	1	16	<1	35	31	0.1
APR 24...	<0.5	<1.0	<1	<3	2	9	<1	48	29	0.1
JUN 26...	--	--	--	--	--	--	--	--	--	--
AUG 28...	<0.5	<1.0	<1	<3	1	4	<1	30	6	<0.1

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 30...	<10	<1	<1	<1.0	330	<6	<3	9	0.53	96
JAN 15...	--	--	--	--	--	--	--	4	E0.24	89
FEB 27...	<10	3	<1	<1.0	330	<6	4	16	2.0	69
APR 24...	10	<1	<1	<1.0	370	<6	<3	16	1.4	92
JUN 26...	--	--	--	--	--	--	--	20	2.8	84
AUG 28...	10	<1	<1	<1.0	260	<6	4	29	2.4	92

E: ESTIMATED

K: NON-IDEAL COLONY COUNT

CARSON RIVER BASIN

131

10308200 EAST FORK CARSON RIVER BELOW MARKLEEVILLE CREEK, NEAR MARKLEEVILLE, CA

LOCATION.--Lat 38°42'50", long 119°45'50", in SW 1/4 NE 1/4 sec.15, T.10 N., R.20 E., Alpine County, Hydrologic Unit 16050201, on right bank 0.5 mi downstream from Markleeville Creek, and 1.5 mi north-northeast of Markleeville.

DRAINAGE AREA.--276 mi.²

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,400 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1967, at present site at datum 2.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. A few small diversions for irrigation above station. Flow slightly regulated by several small reservoirs, total capacity, about 5,000 acre-ft.

AVERAGE DISCHARGE.--31 years, 352 ft³/s, 255,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft³/s Jan. 31, 1963, gage height, 10.21 ft, present datum; minimum, 9.5 ft³/s Nov. 19, 1977.

EXTREMES FOR CURRENT PERIOD.--Peak discharges above base of 1,300 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 24	2300	*1350	*4.25	No other peak above base discharge.			
Minimum daily, 30 ft ³ /s, Oct. 16, 17, Nov. 28.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	39	44	e40	e46	49	217	436	649	239	74	67
2	39	36	43	e45	e48	37	186	339	814	244	70	66
3	39	32	39	e38	e45	92	187	297	954	238	70	68
4	38	35	38	e40	e46	460	257	339	1030	222	79	72
5	33	42	43	e43	e52	294	388	474	953	207	81	68
6	32	39	41	e31	e49	166	432	632	809	185	79	71
7	33	33	42	e35	e43	133	337	761	752	165	71	97
8	33	44	43	e41	e43	109	284	1050	764	149	67	63
9	33	42	44	e34	e43	107	275	769	798	141	63	65
10	33	39	45	e36	e44	98	281	525	855	136	59	65
11	33	39	46	e37	e45	94	228	428	878	133	66	63
12	33	41	44	e39	e47	85	204	391	852	123	73	59
13	31	40	41	e40	e47	86	202	477	792	110	72	50
14	31	40	34	e41	e46	79	247	415	666	104	70	45
15	31	38	47	e45	e45	78	269	508	575	97	75	42
16	30	40	e60	e48	47	86	229	741	534	99	60	42
17	30	40	e54	e47	44	78	214	742	486	101	64	40
18	31	40	e50	e47	38	80	210	508	458	101	53	41
19	37	40	e40	e46	39	80	225	423	423	119	44	44
20	38	40	e35	e52	40	73	236	409	361	131	61	43
21	36	35	e31	e80	43	71	224	444	335	106	62	42
22	36	40	e31	e70	42	69	237	578	318	91	64	43
23	35	43	e32	e70	41	78	260	852	303	86	60	53
24	35	45	e31	e79	39	85	309	1060	285	86	58	51
25	34	46	e31	e66	38	80	287	1110	260	80	71	52
26	33	43	e40	e63	41	81	250	995	250	77	75	46
27	34	31	e58	e52	43	92	274	846	249	81	74	49
28	34	30	e50	e58	44	80	290	813	254	92	75	51
29	34	33	e40	e50	---	103	355	814	280	91	72	51
30	34	40	e32	e46	---	136	416	761	245	72	71	56
31	35	---	e34	e45	---	181	---	608	---	76	71	---
TOTAL	1053	1165	1283	1504	1228	3420	8010	19545	17182	3982	2104	1665
MEAN	34.0	38.8	41.4	48.5	43.9	110	267	630	573	128	67.9	55.5
MAX	39	46	60	80	52	460	432	1110	1030	244	81	97
MIN	30	30	31	31	38	37	186	297	245	72	44	40
AC-FT	2090	2310	2540	2980	2440	6780	15890	38770	34080	7900	4170	3300

CAL YR 1990 TOTAL 54953 MEAN 151 MAX 678 MIN 29 AC-FT 109000
WTR YR 1991 TOTAL 62141 MEAN 170 MAX 1110 MIN 30 AC-FT 123300

e Estimated

CARSON RIVER BASIN

10309000 EAST FORK CARSON RIVER NEAR GARDNERVILLE, NV

LOCATION.--Lat 38°50'50", long 119°42'10", in SW 1/4 NE 1/4 sec.2, T.11 N., R.20 E., Douglas County, Hydrologic Unit 16050201, on left bank 0.1 mi downstream from Horseshoe Bend, 2 mi east of Mud Lake Reservoir, 4.5 mi downstream from Bryant Creek, and 7 mi southeast of Gardnerville.

DRAINAGE AREA.--356 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1890 to December 1893, October 1900 to December 1906 (gage heights only August to December 1904 and July 1905 to December 1906), January 1908 to December 1910, June to October 1917, December 1924 to September 1928, June to September 1929, October 1935 to December 1937, and May 1939 to current year. Monthly discharge only for some periods published in WSP 1314.

REVISED RECORDS.--WSP 1214: 1938 (M), 1942-43 (M), 1945 (M). WSP 1514: 1909-10. WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,985.11 ft above National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Prior to May 19, 1939, nonrecording gages at several sites within 2 mi of present site at various datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Station is above all diversions in Carson Valley. Diversions for irrigation above station. Flow slightly regulated by several small reservoirs, total capacity, about 5,000 acre-ft.

AVERAGE DISCHARGE.--65 years (1891-93, 1901-03, 1909-10, 1926-28, 1936-37, 1940-91), 380 ft³/s, 275,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,700 ft³/s (corrected), Dec. 23, 1955, gage height, 11.88 ft, from rating curve extended above 6,000 ft³/s on basis of slope-area measurements at gage heights, 9.66 ft and 11.88 ft; minimum observed, 7.8 ft³/s, Nov. 20, 1977, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 24	2400	*1,360	*3.15	No other peak greater than base discharge.			
Minimum daily, 31 ft ³ /s, Nov. 3, 4, Dec. 21, 22, 24, 25, 26, 30, Sept. 18, but may have been lower during ice periods in Dec.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	40	e40	e37	52	53	248	448	682	266	86	74
2	46	40	42	e48	46	46	214	351	855	257	80	72
3	50	31	47	e40	49	77	199	296	948	252	77	74
4	49	31	44	e38	45	390	249	313	850	236	90	78
5	45	43	43	e45	54	366	384	450	948	215	95	76
6	41	41	38	e32	55	175	446	618	866	194	93	74
7	42	32	39	e33	49	152	361	747	758	175	84	106
8	43	40	45	e42	44	116	296	1020	e730	166	77	76
9	42	44	46	e33	43	115	277	792	e740	160	72	71
10	43	39	44	e33	43	105	291	536	e800	158	65	72
11	41	38	48	e40	43	98	239	436	e830	147	72	70
12	41	40	46	e45	43	91	214	382	e780	133	72	67
13	40	40	42	e54	45	94	203	477	e740	125	93	56
14	39	39	33	e64	45	85	242	411	682	118	85	48
15	38	38	44	e72	47	84	270	488	610	114	97	38
16	37	39	72	e56	48	77	238	719	565	121	78	34
17	36	39	66	e50	48	91	219	754	514	119	62	32
18	36	39	60	e47	43	88	212	516	484	116	73	31
19	41	38	e50	e46	40	88	224	422	444	132	52	39
20	46	40	e35	45	42	83	236	402	386	162	61	42
21	43	32	e31	49	44	79	225	428	359	133	66	39
22	42	33	e31	75	44	74	235	549	340	111	69	37
23	41	34	e32	94	45	85	247	824	324	104	65	46
24	40	37	e31	68	44	96	299	1020	309	100	62	53
25	39	41	e31	82	42	97	289	1160	283	95	72	53
26	37	44	e31	65	44	79	249	1050	272	90	81	49
27	36	32	e60	62	47	99	270	896	277	89	82	48
28	36	e35	e59	62	47	88	281	858	280	105	81	51
29	36	e38	e46	51	---	116	337	860	305	112	79	52
30	36	e39	e31	57	---	154	404	814	270	86	77	56
31	36	---	e33	59	---	200	---	650	---	85	78	---
TOTAL	1262	1136	1340	1624	1281	3641	8098	19687	17231	4476	2376	1714
MEAN	40.7	37.9	43.2	52.4	45.7	117	270	635	574	144	76.6	57.1
MAX	50	44	72	94	55	390	446	1160	948	266	97	106
MIN	36	31	31	32	40	46	199	296	270	85	52	31
AC-FT	2500	2250	2660	3220	2540	7220	16060	39050	34180	8880	4710	3400

CAL YR 1990 TOTAL 55551 MEAN 152 MAX 692 MIN 30 AC-FT 110200
WTR YR 1991 TOTAL 63866 MEAN 175 MAX 1160 MIN 31 AC-FT 126700

e Estimated

CARSON RIVER BASIN

10309000 EAST FORK CARSON RIVER NEAR GARDNERVILLE, NV--Continued

133

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977-84, 1990 to current year.

REMARKS.--In April 1990, quarterly sampling established for Douglas County Network.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
DEC 12...	0950	48	226	1.5	2.5	65	18	4.8	21	1	--
MAR 13...	0950	96	204	4.5	4.5	64	18	4.7	17	0.9	--
JUN 14...	1110	632	49	21.0	12.0	18	4.9	1.4	3.3	0.3	0.80
AUG 15...	1105	81	180	21.0	18.5	47	13	3.6	13	0.8	2.8

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)
DEC 12...	35	13	0.10	147	--	--	<0.010	<0.100	0.020	<0.010	84
MAR 13...	28	7.5	<0.10	151	--	--	<0.010	<0.050	<0.010	0.010	70
JUN 14...	2.6	0.80	0.10	27	29	0.04	0.010	<0.050	0.040	0.010	49
AUG 15...	52	6.0	0.20	125	107	0.17	<0.010	<0.050	<0.010	<0.010	13

CARSON RIVER BASIN

10309025 INDIAN CREEK NEAR WOODFORDS, CA

LOCATION.--Lat 38°44'54", long 119°48'54", in NE 1/4 NE 1/4 sec.6, T.10 N., R.20 E., Alpine County, Hydrologic Unit 16050201, on right bank 2 mi south of Woodfords.

DRAINAGE AREA.--1.7 mi², approximately.

PERIOD OF RECORD.--May 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,880 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Irrigation above the gage can cause considerable fluctuations. Periodic diversions from Millberry Canyon.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12.0 ft³/s, Mar. 4, 1991, gage height, 2.01 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12.0 ft³/s, Mar. 4, gage height, 2.01 ft; no flow several days in July, Aug. and Sept.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.04	.08	e.08	e.25	.27	2.2	.10	.12	.02	.00	.00
2	.03	.03	.08	e.09	e.30	.24	1.8	.10	.36	.01	.00	.00
3	.06	.03	.08	e.09	e.29	1.9	1.8	.10	.42	.00	.00	.00
4	.07	.03	.09	e.09	e.29	5.5	1.9	.11	1.2	.00	.00	.00
5	.07	.03	.08	e.10	e.29	1.3	1.6	.11	1.4	.00	.00	.00
6	.10	.03	.07	e.11	e.28	.81	1.5	.11	.78	.00	.00	.00
7	.11	.03	.07	e.11	e.28	.74	1.2	.10	.75	.00	.00	.00
8	.11	.03	.08	e.11	e.27	.62	.82	.10	.86	.00	.00	.00
9	.12	.03	.09	e.09	e.27	.54	.32	.11	.76	.00	.00	.00
10	.12	.03	.09	e.10	e.27	.49	.26	.11	.89	.00	.00	.00
11	.12	.03	.09	e.11	e.26	.61	.21	.10	.93	.00	.00	.00
12	.12	.03	.09	e.12	e.25	.68	.19	.10	.89	.00	.00	.00
13	.12	.03	.08	e.13	e.25	.74	.17	.10	.70	.00	.00	.00
14	.10	.03	.08	e.14	e.24	.69	.16	.10	.44	.00	.00	.00
15	.05	.02	e.08	e.15	e.22	.59	.14	.09	.08	.00	.00	.00
16	.04	.03	e.07	e.17	e.20	.75	.14	.09	.06	.00	.00	.00
17	.04	.04	e.08	e.18	e.18	.66	.13	.09	.05	.00	.00	.00
18	.04	.05	e.09	e.18	e.20	.67	.13	.09	.04	.00	.00	.00
19	.06	.06	e.09	e.16	e.21	.70	.12	.09	.04	.00	.00	.00
20	.05	.06	e.06	e.13	e.23	.63	.13	.08	.04	.00	.00	.00
21	.04	.06	e.04	e.11	.24	.59	.12	.08	.03	.00	.00	.00
22	.04	.06	e.05	e.11	.23	.68	.12	.08	.03	.00	.00	.00
23	.04	.06	e.06	e.12	.22	.92	.12	.08	.03	.00	.00	.00
24	.04	.07	e.07	e.12	.22	.74	.11	.08	.03	.00	.00	.00
25	.04	.07	e.08	e.12	.22	.68	.12	.21	.02	.00	.00	.00
26	.03	.08	e.09	e.11	.22	.72	.11	.52	.02	.00	.00	.00
27	.03	.08	e.10	e.10	.23	.68	.11	.58	.03	.00	.00	.00
28	.03	.10	e.09	e.10	.26	.82	.11	.55	.03	.00	.00	.00
29	.03	.11	e.07	e.11	---	1.1	.11	.64	.03	.00	.00	.00
30	.03	.09	e.06	e.15	---	1.4	.11	.75	.02	.00	.00	.00
31	.03	---	e.07	e.20	---	1.6	---	.33	---	.00	.00	---
TOTAL	1.91	1.47	2.40	3.79	6.87	29.06	16.06	5.88	11.08	0.03	0.00	0.00
MEAN	.062	.049	.077	.12	.25	.94	.54	.19	.37	.001	.000	.000
MAX	.12	.11	.10	.20	.30	5.5	2.2	.75	1.4	.02	.00	.00
MIN	.00	.02	.04	.08	.18	.24	.11	.08	.02	.00	.00	.00
AC-FT	3.8	2.9	4.8	7.5	14	58	32	12	22	.06	.00	.00

CAL YR 1990 TOTAL 62.14 MEAN .17 MAX 1.3 MIN .00 AC-FT 123
WTR YR 1991 TOTAL 78.55 MEAN .22 MAX 5.5 MIN .00 AC-FT 156

e Estimated

CARSON RIVER BASIN

135

10309030 INDIAN CREEK AT DIAMOND VALLEY NEAR PAYNESVILLE, CA

LOCATION.--Lat 38°46'37", long 119°45'53", in NW 1/4 NE 1/4 sec.32, T.11 N., R.20 E., Alpine County, Calif., Hydrologic Unit 16050201, on left bank 1 mi southwest of Paynesville.

DRAINAGE AREA.--16.2 mi², approximately.

PERIOD OF RECORD.--May 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,440 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73 ft³/s, Mar. 4, 1991, gage height, 3.66 ft; maximum gage height, 5.53 ft, Oct. 3, 1989 (backwater from beaver dam); minimum daily, 0.29 ft³/s, July 19, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 73 ft³/s, Mar. 4, gage height, 3.66 ft; maximum gage height, 3.75 ft, July 15, (backwater from diversion structure); minimum daily, 0.55 ft³/s, Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	e2.5	9.2	e4.4	7.7	16	24	29	30	29	2.0	3.2
2	1.3	e2.2	8.8	e4.8	8.7	10	19	36	21	6.6	2.1	3.2
3	1.2	e2.0	9.2	e5.0	8.0	32	7.1	17	7.6	5.8	2.2	3.3
4	1.1	e1.8	9.7	e5.0	9.1	48	7.2	6.7	13	5.5	2.3	3.4
5	1.0	e1.7	9.9	e5.4	9.7	38	7.3	6.2	10	5.1	2.5	3.4
6	.58	e1.6	8.4	e6.0	9.8	34	6.8	6.3	10	4.4	2.4	3.7
7	.55	e1.5	8.0	e5.8	9.3	31	6.4	4.5	5.7	4.4	1.6	4.6
8	.61	e1.5	7.7	e5.6	9.0	7.2	6.4	3.9	5.7	4.1	1.3	4.0
9	.64	e1.5	7.6	e5.2	9.1	6.8	6.2	5.5	8.1	4.1	1.4	3.9
10	.69	e1.5	7.9	e5.0	9.5	6.8	6.0	5.2	7.6	4.9	1.9	4.1
11	.67	e1.5	9.2	e5.2	10	6.4	5.8	6.7	5.0	5.4	2.9	3.9
12	.67	e1.5	9.5	e5.3	11	6.3	6.1	7.8	6.1	3.4	3.8	3.6
13	e.70	e1.5	8.6	e5.5	12	6.3	7.1	18	7.8	4.6	2.2	3.5
14	e.70	e1.5	6.2	e5.8	13	6.1	6.1	28	8.1	5.3	2.4	3.4
15	e.64	e1.7	6.2	e6.0	14	6.1	6.3	28	15	8.5	2.6	3.4
16	e.60	e2.0	6.0	e6.8	15	6.4	9.6	27	31	3.3	2.3	3.4
17	e.60	e3.0	5.9	e8.1	11	6.4	11	37	26	2.9	2.1	3.5
18	e.64	e4.5	6.8	12	17	6.2	8.3	44	10	2.9	2.0	3.7
19	e.68	e7.0	6.0	13	16	6.3	8.7	41	14	3.2	1.9	3.6
20	e.64	e11	e5.0	13	15	6.4	9.7	37	13	3.3	1.9	3.6
21	e.62	e10	e4.0	6.5	14	6.7	6.3	35	13	3.1	1.7	4.2
22	e.60	12	e3.8	6.1	12	6.3	6.1	33	10	3.0	1.7	4.7
23	e.60	13	e4.4	7.1	13	6.2	6.1	19	9.6	2.7	1.8	5.9
24	e.60	13	e5.0	14	13	6.1	7.8	14	9.4	2.6	2.4	4.2
25	e.60	12	e5.5	12	12	6.1	16	18	24	2.5	2.7	3.9
26	e.60	9.4	e5.8	6.7	12	6.2	26	17	34	2.3	4.0	3.9
27	e.60	7.7	e5.4	6.5	13	6.6	15	6.4	36	3.3	3.6	3.8
28	e.60	8.5	e4.5	6.6	13	7.8	22	7.6	34	5.1	3.5	3.8
29	e.64	12	e3.7	6.3	---	12	28	5.8	37	6.4	3.4	3.8
30	e1.5	12	e3.8	6.4	---	19	27	17	37	2.6	3.4	3.8
31	e2.8	---	e4.0	7.0	---	19	---	21	---	2.1	3.2	---
TOTAL	25.27	162.6	205.7	218.1	325.9	394.7	335.4	588.6	498.7	152.4	75.2	114.4
MEAN	.82	5.42	6.64	7.04	11.6	12.7	11.2	19.0	16.6	4.92	2.43	3.81
MAX	2.8	13	9.9	14	17	48	28	44	37	29	4.0	5.9
MIN	.55	1.5	3.7	4.4	7.7	6.1	5.8	3.9	5.0	2.1	1.3	3.2
AC-FT	50	323	408	433	646	783	665	1170	989	302	149	227

CAL YR 1990 TOTAL 4087.47 MEAN 11.2 MAX 37 MIN .55 AC-FT 8110
WTR YR 1991 TOTAL 3096.97 MEAN 8.48 MAX 48 MIN .55 AC-FT 6140

e Estimated

CARSON RIVER BASIN

10309050 PINE NUT CREEK NEAR GARDNERVILLE, NV

LOCATION.--Lat 38°51'34", long 119°34'02", in NE 1/4 SE 1/4 sec.36, T.11 N., R.22 E., Douglas County, Hydrologic Unit 16050201, on right bank, 11.5 mi southeast of Gardnerville.

DRAINAGE AREA.--10.14 mi².

PERIOD OF RECORD.--April 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,340 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--11 years, 1.38 ft³/s, 1,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 165 ft³/s, Mar. 8, 1986, from rating curve extended above 8.0 ft³/s, gage height, 3.70 ft, maximum gage height, 3.97 ft, Feb. 19, 1986; minimum, 0.02 ft³/s, July 9, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4.0 ft³/s, Sept. 6, gage height, 3.49 ft; minimum daily, 0.05 ft³/s, Aug. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.30	.32	.37	.35	.65	1.3	.62	.68	.22	.07	.06
2	.13	.27	.29	.37	.34	.64	1.2	.68	.58	.20	.06	.06
3	.14	.24	.35	.37	.33	.91	1.4	.68	.39	.18	.06	.06
4	.14	.26	.35	.35	.33	.96	1.5	.64	.40	.17	.08	.06
5	.14	.28	.35	.32	.35	.81	1.5	.56	.51	.15	.09	.06
6	.15	.29	.33	.31	.35	.66	1.3	.57	.40	.14	.08	.31
7	.15	.24	.34	.31	.35	.70	1.3	.53	.44	.13	.06	.13
8	.15	.26	.37	.31	.35	.72	1.2	.48	.45	.12	.06	.10
9	.16	.23	.39	.31	.34	.72	1.1	.72	.41	.10	.06	.17
10	.15	.21	.41	.32	.36	.73	1.1	.75	.37	.10	.06	.17
11	.15	.21	.42	.31	.37	.66	.95	.69	.34	.10	.05	.12
12	.14	.22	.42	.31	.38	.75	1.0	.54	.30	.09	.05	.11
13	.13	.23	.40	.31	.41	.75	.93	.45	e.30	.08	.07	.10
14	.13	.29	.30	.31	.40	.73	.89	.43	e.29	.08	.26	.10
15	.12	.32	.37	.32	.42	.55	.91	.42	e.28	.08	.25	.10
16	.13	.31	.38	.31	.42	.73	.85	.42	e.27	.08	.10	.10
17	.13	.31	.39	.31	.41	.92	.83	.55	e.27	.07	.09	.09
18	.13	.24	.45	.35	.38	.82	.82	.54	e.27	.09	.08	.09
19	.15	.22	.44	.35	.42	.70	.82	.56	e.27	.10	.07	.09
20	.14	.20	.40	.33	.39	.76	.82	.56	e.27	.13	.07	.09
21	.13	.17	.34	.27	.44	.78	.79	.61	e.26	.12	.07	.09
22	.12	.17	e.30	.33	.52	.65	.76	.53	e.26	.11	.07	.09
23	.12	.16	e.27	.38	.52	.86	.77	.49	e.26	.10	.06	.09
24	.12	.15	e.26	.40	.51	.91	.79	.48	e.26	.09	.06	.09
25	.13	.18	e.29	.36	.50	.90	.74	.46	e.26	.08	.06	.09
26	.14	.20	e.33	.35	.55	.61	.68	.46	e.27	.08	.06	.11
27	.16	.23	.35	.35	.62	.66	.68	.49	e.27	.08	.06	.11
28	.20	.29	.35	.35	.63	.95	.69	.56	e.28	.08	.06	.11
29	.22	.36	.35	.33	---	1.1	.70	.58	.35	.07	.06	.11
30	.23	.37	.36	.35	---	1.2	.58	.68	.25	.06	.06	.11
31	.27	---	.39	.35	---	1.3	---	.76	---	.07	.06	---
TOTAL	4.63	7.41	11.06	10.37	11.74	24.79	28.90	17.49	10.21	3.35	2.45	3.17
MEAN	.15	.25	.36	.33	.42	.80	.96	.56	.34	.11	.079	.11
MAX	.27	.37	.45	.40	.63	1.3	1.5	.76	.68	.22	.26	.31
MIN	.12	.15	.26	.27	.33	.55	.58	.42	.25	.06	.05	.06
AC-FT	9.2	15	22	21	23	49	57	35	20	6.6	4.9	6.3

CAL YR 1990 TOTAL 166.06 MEAN .45 MAX 1.7 MIN .09 AC-FT 329
WTR YR 1991 TOTAL 135.57 MEAN .37 MAX 1.5 MIN .05 AC-FT 269

e Estimated

CARSON RIVER BASIN

137

10309070 BUCKEYE CREEK NEAR MINDEN, NV

LOCATION.--Lat 38°58'59", long 119°34'23", in NE 1/4 NW 1/4 sec.24, T.13 N., R.21 E., Douglas County, Hydrologic Unit 16050201, on left bank, 10.5 mi east of Minden.

DRAINAGE AREA.--46.3 mi².

PERIOD OF RECORD.--April 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,640 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor. No diversions above station.

AVERAGE DISCHARGE.--11 years (1981-91), 0.70 ft³/s, 507 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,070 ft³/s, Aug. 29, 1984, gage height, 7.81 ft, from rating curve extended above 20 ft³/s on basis of step-backwater method; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 850 ft³/s, July 31, gage height, 8.13 ft, from rating curve extended above 20 ft³/s on basis of step-backwater method; no flow, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.02	.04	.00	.00	.04	e.05	.06	.07	.06	1.8	.00
2	.00	.01	.02	.00	e.00	.04	e.06	.10	.05	.02	1.1	.00
3	.00	.01	.00	.00	e.00	.17	e.07	.08	.03	.01	.66	.00
4	.00	.02	.01	.00	e.01	.17	.08	.06	.03	.01	.45	.00
5	.00	.01	.03	.00	e.01	.05	.05	.05	.03	.01	.80	.00
6	.00	.01	.04	.00	e.01	.03	.03	.05	.03	.00	.10	2.8
7	.00	.01	.02	.00	e.02	.03	.03	.05	.02	.00	.02	.07
8	.00	.02	.00	.00	e.02	.02	.02	.05	.02	.00	.02	.04
9	.01	.01	.00	.00	e.02	.02	.04	.12	.01	.00	.01	.31
10	.01	.01	.00	e.00	e.02	.02	.04	.10	.01	.00	.01	.28
11	.01	.01	e.00	e.00	e.02	e.02	.02	.10	.00	.00	.01	.06
12	.01	.02	e.00	e.00	e.02	.02	.05	.09	.00	.00	.01	.05
13	.01	.01	e.00	e.00	e.02	.02	.04	.09	.00	.00	.01	.04
14	.01	.01	e.00	e.00	e.02	.02	.04	.10	.00	.00	1.2	.04
15	.01	.02	e.00	e.00	e.03	e.02	.04	.08	.00	.00	1.3	.03
16	.01	.02	e.00	e.00	e.03	e.02	.03	.08	.00	.00	.04	.03
17	.01	.02	.06	.05	e.03	e.02	.04	.14	.00	.00	.03	.03
18	.01	.02	.01	.09	.03	e.02	.04	.17	.00	.00	.02	.03
19	.01	.03	.06	.08	.04	e.02	.05	.13	.00	.00	.01	.03
20	.01	.02	e.00	.04	.03	e.02	.05	.13	.00	.01	.01	.03
21	.01	.01	e.00	.00	.03	e.02	.05	.12	.00	.01	.01	.03
22	.01	.01	e.00	.00	.03	.02	.05	.09	.00	.02	.00	.03
23	.01	.02	e.00	.00	.02	.02	.05	.07	.00	.00	.00	.03
24	.01	.02	e.00	.00	.02	e.02	.04	.07	.00	.00	.00	.03
25	.01	.02	e.00	.00	.02	e.02	.05	.06	.01	.00	.00	.03
26	.01	e.01	e.00	.00	.02	e.03	.05	.07	.01	.00	.00	.04
27	.01	.00	e.00	.00	.03	e.03	.04	.08	.03	.00	.00	.04
28	.01	.04	.00	.00	.05	e.04	.04	.07	1.6	.00	.00	.04
29	.01	.03	.00	.00	---	e.04	.04	.08	1.0	.00	.00	.04
30	.01	.07	.00	.00	---	e.03	.05	.11	.13	.00	.00	.04
31	.01	---	.00	.00	---	e.04	---	.11	---	21	.00	---
TOTAL	0.23	0.54	0.23	0.26	0.60	1.10	1.33	2.76	3.08	21.15	7.62	4.22
MEAN	.007	.018	.007	.008	.021	.035	.044	.089	.10	.68	.25	.14
MAX	.01	.07	.06	.09	.05	.17	.08	.17	1.6	.21	1.8	2.8
MIN	.00	.00	.00	.00	.00	.02	.02	.05	.00	.00	.00	.00
AC-FT	.5	1.1	.5	.5	1.2	2.2	2.6	5.5	6.1	42	15	8.4

CAL YR 1990 TOTAL 19.67 MEAN .054 MAX 3.7 MIN .00 AC-FT 39
WTR YR 1991 TOTAL 43.12 MEAN .12 MAX 21 MIN .00 AC-FT 86

e Estimated

CARSON RIVER BASIN

10310000 WEST FORK CARSON RIVER AT WOODFORDS, CA

LOCATION.--Lat 38°46'10", long 119°49'55", in NW 1/4 SE 1/4 sec.34, T.11 N., R.19 E., Alpine County, Hydrologic Unit 16050201, in Toiyabe National Forest, on left bank 0.3 mi downstream from bridge on State Highway 88-89, 0.6 mi southwest of Woodfords, and 3.8 mi downstream from Willow Creek.

DRAINAGE AREA.--65.4 mi².

PERIOD OF RECORD.--October 1900 to May 1907, 1910-11 (fragmentary), October 1938 to current year. January 1890 to March 1892, June 1907 to September 1920 (except parts of 1910-11), at site 0.7 mi downstream; records not equivalent owing to diversions for irrigation. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,754.5 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1938, nonrecording gage at about the same site at different datum. Oct. 1, 1938, to Nov. 11, 1958, water-stage recorder at same site at datum 1.02 ft lower. Nov. 13, 1958, to Jan. 30, 1963, water-stage recorder at site 150 ft downstream at datum 3.06 ft lower.

REMARKS.--Records good, except estimated daily discharges, which are poor. One small diversion above station for irrigation. Flow slightly regulated by several small reservoirs, total capacity, about 1,500 acre-ft.

AVERAGE DISCHARGE.--60 years (1901-1907, 1939-91), 110 ft³/s, 79,700 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,890 ft³/s, Feb. 1, 1963, gage height, 9.0 ft, on basis of slope-area measurement of peak flow; minimum, about 5 ft³/s, Dec. 28, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 11, 1937, reached a stage of 8.0 ft, present datum, from floodmarks, discharge, 3,500 ft³/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 7	2200	*490	*2.91				
Minimum daily, 8.8 ft ³ /s, Dec. 22.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

1	16	14	14	16	e11	19	38	213	187	59	27	20
2	14	12	15	16	e13	13	38	149	226	57	23	15
3	13	12	14	16	e15	18	42	134	264	55	22	13
4	13	12	14	17	16	59	52	175	256	52	21	e14
5	13	14	15	17	17	65	71	243	230	49	19	e14
6	12	14	14	18	17	58	91	302	184	44	18	e14
7	12	11	14	18	17	54	93	338	173	41	17	18
8	12	15	14	17	17	43	85	415	178	37	17	15
9	12	13	15	17	17	42	89	325	198	36	16	14
10	12	10	e14	17	17	34	94	222	196	34	16	16
11	12	12	e13	17	17	31	71	174	203	32	14	e22
12	12	13	e11	17	17	32	66	163	191	30	e13	e23
13	12	13	e11	18	18	26	78	206	174	29	e15	e23
14	12	13	e10	18	18	26	109	178	144	27	19	e20
15	12	13	e11	18	19	24	120	221	124	26	e20	e17
16	12	13	e11	17	19	25	98	296	113	25	28	e16
17	12	13	e12	17	19	22	87	299	104	24	e34	e14
18	12	13	e14	17	18	21	91	198	99	42	e30	e13
19	13	13	e13	17	18	21	106	159	92	50	16	e13
20	15	13	e11	17	18	21	110	153	79	54	e14	e13
21	14	13	e9.8	e16	18	20	101	163	73	48	e16	e13
22	14	14	e8.8	e15	17	21	125	210	69	26	16	e12
23	13	14	e9.4	e14	17	20	152	289	65	26	17	e12
24	13	14	e10	e13	17	19	176	333	62	22	22	14
25	13	13	e12	e12	17	18	146	342	60	20	22	15
26	13	12	e16	e12	18	20	130	305	57	20	25	14
27	13	12	e15	e12	19	23	148	251	57	21	26	14
28	13	14	e14	e11	19	28	165	243	60	23	23	13
29	13	15	e12	e12	---	27	204	247	81	21	22	13
30	13	15	e11	---	29	223	245	67	31	22	22	13
31	13	---	16	e10	---	33	---	185	---	41	21	---
TOTAL	398	392	398.0	480	480	912	3199	7376	4066	1102	631	460
MEAN	12.8	13.1	12.8	15.5	17.1	29.4	107	238	136	35.5	20.4	15.3
MAX	16	15	16	18	19	65	223	415	264	59	34	23
MIN	12	10	8.8	10	11	13	38	134	57	20	13	12
AC-FT	789	778	789	952	952	1810	6350	14630	8060	2190	1250	912

CAL YR 1990 TOTAL 17402.0 MEAN 47.7 MAX 251 MIN 8.8 AC-FT 34520
WTR YR 1991 TOTAL 19894.0 MEAN 54.5 MAX 415 MIN 8.8 AC-FT 39460

e Estimated

139

LOCATION.--Lat 38°49'38", long 119°47'56", in SE 1/4 SW 1/4 sec.12, T.11 N., R.19 E., Alpine County, Hydrologic Unit 16050201, on left bank 1 mi west of Fredericksburg and 6 mi north of Woodfords.

PERIOD OF RECORD.--December 1988 to current year.

REMARKS.--Records good. No diversions above station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4.8 ft³/s, May 25, gage height 2.31 ft; minimum daily, 1.1 ft³/s, several days in Aug. and Sept.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.6	1.6	1.3	1.2	1.3	1.6	2.0	3.0	1.7	1.3	1.1
2	1.2	1.5	1.5	1.3	1.3	1.4	1.6	1.8	3.0	1.7	1.3	1.2
3	1.1	1.5	1.4	1.3	1.3	1.8	1.6	1.8	3.1	1.7	1.3	1.2
4	1.1	1.6	1.4	1.3	1.3	2.4	1.8	2.0	3.1	1.6	1.3	1.2
5	1.1	1.6	1.4	1.3	1.4	1.9	2.1	2.3	2.9	1.6	1.3	1.2
6	1.2	1.5	1.4	1.3	1.3	1.6	2.1	2.6	2.8	1.6	1.3	1.4
7	1.2	1.5	1.4	1.3	1.2	1.6	2.0	2.9	2.7	1.5	1.3	1.3
8	1.3	1.6	1.4	1.3	1.2	1.6	1.9	3.4	2.6	1.5	1.3	1.2
9	1.2	1.6	1.5	1.3	1.2	1.5	1.9	2.9	2.6	1.5	1.3	1.2
10	1.2	1.7	1.6	1.3	1.2	1.5	1.8	2.6	2.6	1.5	1.3	1.2
11	1.1	1.7	1.6	1.3	1.3	1.4	1.8	2.4	2.6	1.4	1.3	1.2
12	1.2	1.7	1.6	1.3	1.3	1.4	1.7	2.5	2.5	1.4	1.3	1.2
13	1.3	1.7	1.6	1.3	1.3	1.4	1.7	2.5	2.4	1.4	1.4	1.1
14	1.3	1.7	1.5	1.2	1.3	1.4	1.8	2.6	2.3	1.4	1.5	1.1
15	1.3	1.7	1.5	1.2	1.3	1.4	1.7	3.0	2.2	1.3	1.5	1.1
16	1.3	1.7	1.5	1.2	1.3	1.4	1.6	3.3	2.1	1.4	1.4	1.1
17	1.3	1.7	1.5	1.2	1.3	1.4	1.5	2.9	2.0	1.4	1.4	1.1
18	1.3	1.7	1.6	1.2	1.3	1.4	1.5	2.6	2.0	1.5	1.4	1.1
19	1.4	1.6	1.5	1.2	1.2	1.4	1.5	2.4	2.0	1.7	1.4	1.1
20	1.4	1.4	1.6	1.2	1.2	1.3	1.6	2.5	2.0	1.7	1.3	1.1
21	1.4	1.4	1.5	1.1	1.3	1.3	1.5	2.6	1.9	1.6	1.3	1.1
22	1.4	1.5	1.6	1.2	1.3	1.3	1.6	2.9	1.9	1.6	1.3	1.1
23	1.4	1.4	1.6	1.3	1.3	1.4	1.7	3.0	1.9	1.6	1.3	1.1
24	1.4	1.4	1.6	1.3	1.3	1.4	1.7	3.3	1.8	1.5	1.3	1.1
25	1.4	1.5	1.6	1.2	1.3	1.3	1.7	3.7	1.8	1.4	1.3	1.1
26	1.4	1.5	1.5	1.2	1.3	1.3	1.6	3.6	1.8	1.4	1.3	1.1
27	1.4	1.5	1.4	1.2	1.3	1.3	1.7	3.5	1.9	1.4	1.3	1.1
28	1.4	1.6	1.4	1.2	1.3	1.4	1.8	3.5	1.9	1.4	1.3	1.1
29	1.4	1.6	1.4	1.2	---	1.4	1.9	3.3	1.9	1.3	1.3	1.2
30	1.4	1.6	1.3	1.2	---	1.5	2.0	3.2	1.7	1.3	1.2	1.2
31	1.5	---	1.3	1.2	---	1.6	---	3.0	---	1.3	1.1	---
TOTAL	40.2	47.3	46.3	38.6	35.8	45.7	52.0	86.6	69.0	46.3	40.9	34.6
MEAN	1.30	1.58	1.49	1.25	1.28	1.47	1.73	2.79	2.30	1.49	1.32	1.15
MAX	1.5	1.7	1.6	1.3	1.4	2.4	2.1	3.7	3.1	1.7	1.5	1.4
MIN	1.1	1.4	1.3	1.1	1.2	1.3	1.5	1.8	1.7	1.3	1.1	1.1
AC-FT	80	94	92	77	71	91	103	172	137	92	81	69
CAL YR 1990	TOTAL 636.2		MEAN 1.74	MAX 3.3	MIN 1.1	AC-FT 1260						
WTR YR 1991												

CARSON RIVER BASIN

10310350 MILLER SPRING NEAR SHERIDAN, NV

LOCATION.--Lat 38°52'43", long 119°49'07", in NE 1/4 NW 1/4 sec.26, T.12 N., R.19 E., Douglas County, Hydrologic Unit 16050201, on left bank of spring outflow and 1.25 mi south of Sheridan, 3 mi southwest of Centerville, and 6 mi southwest of Minden.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,780 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1.1 ft³/s, July 11, 1990, gage height, 2.26 ft; minimum daily, 0.24 ft³/s, Sept. 16, 17, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 0.69 ft³/s, Aug. 14, gage height 2.12 ft; maximum gage height, 2.15 ft, Oct. 23, 24, 26, 27, (backwater from boards at downstream diversion); minimum daily, 0.24 ft³/s, Sept. 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.37	.41	e.40	e.42	.35	.33	.30	.37	.38	.36	.28	.28
2	.36	.39	e.40	e.42	.36	.34	e.30	.37	.38	.33	.30	.27
3	.35	.39	e.40	e.42	.35	.35	.32	.37	.38	.33	.31	.28
4	.35	.39	e.40	e.42	.35	.34	.30	.37	.37	.33	.31	.28
5	.34	.39	e.40	e.42	.36	.31	.30	.38	.38	.34	.31	.27
6	.36	.39	e.41	e.42	.35	.30	.30	.38	.38	.32	.29	.28
7	.37	.39	e.41	e.43	.35	.30	.31	.40	.38	.33	.29	.28
8	.37	.39	e.41	e.43	.35	.30	.32	.39	.38	.33	.30	.29
9	.37	.39	e.41	e.43	.35	.30	.32	.39	.38	.33	.32	.27
10	.37	.39	e.41	e.43	.35	.30	.32	.39	.38	.32	.33	.26
11	.37	.39	e.42	e.43	.35	.30	.32	.39	.37	.33	.32	.26
12	.37	.39	e.41	.39	.35	.30	.32	.39	.37	.33	.33	.26
13	.37	.39	e.41	.39	.35	.30	.33	.40	.37	.34	.36	.26
14	.37	.39	e.41	.38	.35	.30	.34	.41	.37	.32	.43	.26
15	e.37	.39	e.42	.38	.35	.30	.35	.41	.37	.31	.29	.25
16	e.37	.39	e.42	.37	.35	.30	.34	.42	.37	.32	.28	.24
17	e.37	.39	e.42	.37	.35	.30	.34	.42	.36	.33	.29	.24
18	e.38	.39	e.42	.37	.35	.30	.34	.41	.35	.34	.29	.25
19	e.38	.41	e.42	.37	.35	.31	.34	.41	.35	.32	.29	.25
20	e.38	.43	e.42	.37	.35	.30	.34	.40	.37	.32	.29	.26
21	e.38	.43	e.42	.37	.35	.30	.34	.40	.36	.32	.29	.26
22	e.38	.42	e.42	.37	.34	.30	.35	.39	.37	.33	.29	.26
23	e.38	.41	e.41	.37	.34	.30	.36	.40	.38	.33	.29	.26
24	e.38	.42	e.41	.37	.34	.30	.35	.39	.38	.32	.29	.26
25	e.37	.42	e.41	.37	.34	.30	.35	.39	.38	.32	.28	.26
26	e.39	.41	e.41	.37	.34	.30	.35	.39	.38	.32	.27	.26
27	e.39	.41	e.41	.37	.34	.30	.35	.39	.39	.31	.26	.26
28	.39	e.41	e.41	.37	.34	.30	.35	.38	.39	.31	.27	.26
29	.39	e.41	e.41	.37	---	.30	.37	.38	.38	.29	.27	.26
30	.39	e.41	e.41	.37	---	.30	.37	.39	.38	.29	.27	.26
31	.41	---	e.41	.37	---	.30	---	.38	---	.28	.27	---
TOTAL	11.59	12.03	12.75	12.13	9.75	9.48	9.99	12.15	11.23	10.00	9.26	7.89
MEAN	.37	.40	.41	.39	.35	.31	.33	.39	.37	.32	.30	.26
MAX	.41	.43	.42	.43	.36	.35	.37	.42	.39	.36	.43	.29
MIN	.34	.39	.40	.37	.34	.30	.30	.37	.35	.28	.26	.24
AC-FT	23	24	25	24	19	19	20	24	22	20	18	16
CAL YR 1990	TOTAL 198.21 MEAN .54 MAX .85 MIN .33 AC-FT 393											
WTR YR 1991	TOTAL 128.25 MEAN .35 MAX .43 MIN .24 AC-FT 254											

e Estimated

CARSON RIVER BASIN

141

10310355 WEST FORK CARSON RIVER NEAR DRESSLERVILLE, NV

LOCATION.--Lat 38°53'50", long 119°46'42", in SE 1/4 SW 1/4 sec.18, T.12 N., R.20 E., Douglas County, Hydrologic Unit 16050201, 400 ft downstream from irrigation dam, 200 ft west of State Route 88, and about 4.5 mi south of Minden.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--Water years 1990 to current year.

REMARKS.--In April 1990, quarterly sampling established for Douglas County Network.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
DEC 12...	1315	3.2	207	8.5	6.5	75	20	6.1	12	0.6	--
MAR 13...	1225	21	123	8.5	6.5	44	12	3.5	7.1	0.5	--
JUN 14...	1520	16	128	24.5	18.5	48	13	3.8	7.4	0.5	1.9
AUG 15...	1610	2.2	214	21.0	18.5	78	21	6.3	12	0.6	4.7

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)
DEC 12...	17	12	<0.10	123	--	--	<0.010	<0.100	0.020	<0.010	140
MAR 13...	8.0	6.0	<0.10	95	--	--	<0.010	0.084	0.020	0.010	170
JUN 14...	4.0	5.0	0.10	72	69	0.10	0.020	<0.050	0.050	0.010	370
AUG 15...	11	9.4	0.10	123	120	0.17	<0.010	<0.050	<0.010	0.010	72

CARSON RIVER BASIN

10310400 DAGGETT CREEK NEAR GENOA, NV

LOCATION.--Lat 38°57'55", long 119°50'55", in SW 1/4 NE 1/4 sec.28, T.13 N., R.19 E., Douglas County, Hydrologic Unit 16050201, in Haines Canyon on left bank, 0.55 mi upstream from Foothill Road, and 3.5 mi southwest of Genoa.

DRAINAGE AREA.--3.82 mi².

PERIOD OF RECORD.--1964 (miscellaneous site), 1965 (low-flow, partial-record site). October 1965 to September 1983. December 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,100 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversions above station. Intermittent pumping of effluent from Lake Tahoe basin by Douglas County Sewer Improvement District No. 1, occurred from February 1969 to November 1971.

AVERAGE DISCHARGE.--20 years (1966-83, 1990-91), 1.92 ft³/s, 1,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 63 ft³/s, Aug. 5, 1971, gage height, 2.78 ft, from floodmarks, and rating curve extended above 6 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 0.38 ft³/s, Oct. 9-11, 1979, Aug. 21, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23 ft³/s, Aug. 14, gage height, 1.59 ft; minimum daily, 0.57 ft³/s, Aug. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.3	e.95	e1.2	1.2	1.4	2.1	1.9	.88	.76	.61	.95
2	1.4	e1.3	e.93	e1.1	1.2	1.8	2.0	2.0	.85	.72	.61	.97
3	1.3	e1.4	e.92	e1.1	1.1	2.7	1.9	1.4	.83	.71	.61	1.1
4	1.3	e1.3	e1.1	e1.1	1.1	4.0	2.0	1.0	.83	.69	.64	.88
5	1.4	1.3	e1.0	1.1	e1.1	2.1	2.1	1.0	.83	.67	.66	1.4
6	1.2	1.3	e.98	e1.1	1.1	2.0	2.2	.96	.78	.67	.65	1.1
7	1.1	1.3	e.97	1.1	1.1	1.9	2.0	1.0	.86	.68	.63	1.0
8	1.2	1.3	1.1	.94	1.0	1.9	1.8	1.1	.85	.68	.63	1.0
9	1.1	1.3	1.3	.94	.95	1.8	1.8	1.1	.83	.69	.61	1.1
10	1.1	1.2	1.2	1.0	1.0	1.8	1.8	.93	.80	.69	.60	1.1
11	1.1	1.3	e1.1	1.0	1.1	1.8	1.6	.93	.77	.69	.61	.93
12	1.1	1.3	e1.0	1.1	1.0	1.8	1.5	.91	.77	.67	.59	.94
13	1.1	1.2	e1.0	1.1	1.1	1.8	1.5	.89	.83	.66	.57	1.1
14	1.1	1.2	e.94	1.1	1.0	1.8	1.6	.83	.96	.67	1.9	1.1
15	1.1	1.1	e.98	1.1	1.1	1.8	1.5	.86	.97	.67	1.6	1.1
16	1.2	1.0	e.94	1.0	1.0	1.8	1.5	.87	.86	.68	2.1	1.0
17	1.3	.93	e1.0	.94	1.0	1.9	1.5	1.0	.83	.71	1.7	1.0
18	1.3	.90	e.98	.94	1.1	1.9	1.5	1.1	.79	.76	1.8	.97
19	1.3	.93	e.86	.94	.99	1.9	1.4	1.0	.82	.79	2.0	.94
20	1.2	.93	e.82	e.95	.95	1.8	1.4	1.1	.79	1.1	2.0	.75
21	1.2	.99	e.72	.97	.94	1.9	1.3	1.1	.79	.72	1.6	.73
22	1.2	1.0	e.70	1.0	1.0	1.8	1.3	1.1	.78	.68	1.3	.74
23	1.2	.95	e.78	e.98	.99	1.8	1.3	1.1	.77	.66	1.1	.72
24	1.1	1.0	e.81	e1.1	1.0	e1.8	1.3	1.0	.79	.65	1.4	.71
25	1.0	.99	e.89	e1.0	1.0	e1.8	1.3	1.0	.79	.65	1.7	.74
26	1.0	1.0	e.94	e1.1	.99	1.8	1.3	.93	.81	.64	1.8	.69
27	1.0	e.96	e1.1	e1.0	1.0	2.0	1.2	.91	1.0	.64	1.7	.71
28	1.0	e.90	e1.0	e1.0	1.1	2.0	1.2	.95	1.2	.65	1.5	.68
29	1.1	e.99	e.94	1.1	---	2.0	1.7	1.1	.94	.64	1.3	.75
30	1.1	e.97	e.95	1.3	---	2.0	1.9	1.1	.82	.61	1.1	.75
31	1.3	---	e1.1	1.2	---	2.0	---	.91	---	.61	1.2	---
TOTAL	36.4	33.54	30.00	32.60	29.21	60.6	48.5	33.08	25.42	21.51	36.82	27.65
MEAN	1.17	1.12	.97	1.05	1.04	1.95	1.62	1.07	.85	.69	1.19	.92
MAX	1.4	1.4	1.3	1.3	1.2	4.0	2.2	2.0	1.2	1.1	2.1	1.4
MIN	1.0	.90	.70	.94	.94	1.4	1.2	.83	.77	.61	.57	.68
AC-FT	72	67	60	65	58	120	96	66	50	43	73	55

CAL YR 1990 TOTAL 464.07 MEAN 1.27 MAX 4.0 MIN .59 AC-FT 920
WTR YR 1991 TOTAL 415.33 MEAN 1.14 MAX 4.0 MIN .57 AC-FT 824

e Estimated

CARSON RIVER BASIN

143

10310500 CLEAR CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°06'48", long 119°47'50", in NE 1/4 NW 1/4 sec.1, T.14 N., R.19 E., on left bank, 3 mi upstream from mouth, and 3.5 mi southwest of Carson City.

DRAINAGE AREA.--15.5 mi²

PERIOD OF RECORD.--March 1948 to September 1962, occasional low-flow measurements, water years 1963-1988, and annual maximum, water years 1963-1981, January 1989 to current year.

GAGE.--Water-stage recorder and sharp crested weir. Elevation of gage is 5,000 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for periods of backwater conditions, Nov. 6-19, Apr. 18-24, Apr. 28 to May 16, Sept. 1-18, which are fair, and estimated daily discharges, which are poor. A few small diversions for irrigation above station.

AVERAGE DISCHARGE.--16 years (water years 1949-62, 1990-91), 5.08 ft³/s, 3,680 acre-feet/year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 130 ft³/s, Feb. 20, 1968, gage height, 2.15 ft, datum then in use, maximum gage height since Jan. 1989, 2.64 ft, Apr. 2-4, 1990 (backwater from flashboards); minimum, 0.1 ft³/s, July 29, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14 ft³/s, Mar. 4, gage height, 1.62 ft; maximum gage height, 1.98 ft, Sept. 10, backwater conditions; minimum daily, 0.77 ft³/s, July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.7	2.2	e2.8	e3.4	3.1	4.4	4.0	2.3	1.4	.84	1.5
2	1.4	1.5	2.1	e2.8	3.6	3.4	4.1	2.9	2.1	1.4	.83	2.4
3	1.4	1.6	2.1	e2.7	3.6	7.2	3.9	2.4	2.0	1.4	.83	2.6
4	1.3	1.7	2.3	e3.0	3.5	11	3.9	2.1	1.9	1.3	.85	2.8
5	1.3	1.6	2.3	e2.6	e4.0	6.7	4.2	2.3	1.9	1.2	.94	2.8
6	1.4	1.8	2.3	e2.6	e3.9	4.9	4.5	2.7	2.0	1.2	.97	3.0
7	1.5	2.1	2.5	e3.0	3.8	4.4	4.3	2.7	2.0	1.2	.86	3.2
8	1.7	2.2	2.5	e2.8	3.6	3.7	4.0	2.8	1.9	1.2	.89	3.2
9	1.8	2.2	2.5	e2.7	3.6	3.5	3.9	3.3	1.9	1.3	.84	3.8
10	1.8	2.0	2.6	e2.6	3.6	3.5	3.9	2.8	1.8	1.1	.86	3.5
11	1.8	1.3	3.1	e2.8	3.5	3.6	3.6	2.6	1.8	.88	.86	2.0
12	1.8	1.3	3.2	e3.3	3.4	3.6	3.3	2.5	1.7	.90	.91	1.6
13	1.8	1.4	2.8	e3.4	3.4	3.7	3.1	2.4	1.5	.90	.99	1.6
14	1.4	1.7	2.9	e3.3	3.5	3.5	3.2	2.5	1.5	.91	1.2	1.5
15	1.3	2.2	e3.0	e3.2	3.6	3.7	3.4	2.5	1.4	.97	2.7	1.4
16	1.3	2.4	3.0	e3.0	3.4	3.6	3.2	2.5	1.4	1.0	1.4	1.5
17	1.3	2.8	e3.0	e2.9	3.1	3.7	3.2	2.9	1.4	1.0	1.3	1.5
18	1.3	2.5	3.0	e4.0	2.8	4.0	3.6	2.7	1.4	1.1	1.2	1.4
19	1.8	2.2	e2.8	e3.5	2.8	4.3	3.8	2.5	1.5	1.2	1.2	1.3
20	1.9	2.1	e2.2	e3.0	2.8	3.9	3.7	2.8	1.5	1.4	1.2	1.3
21	1.9	1.9	e1.9	e2.7	2.7	3.5	3.4	2.5	1.4	1.2	1.2	1.3
22	1.9	1.9	e1.2	e3.1	2.7	3.2	3.2	2.4	1.4	1.1	1.2	1.4
23	1.9	2.1	e1.2	e3.5	2.8	3.2	3.0	2.4	1.3	.77	1.2	1.4
24	1.9	2.0	e1.4	e3.5	2.7	3.8	3.1	2.4	1.4	.86	1.2	1.4
25	1.7	1.9	e1.9	e3.0	2.7	3.9	3.2	2.3	1.4	.88	1.2	1.4
26	1.3	1.9	e2.3	e3.3	2.6	3.6	3.1	2.3	1.4	.86	1.2	1.5
27	1.3	e2.1	e2.8	e3.2	2.6	3.7	2.9	2.6	1.4	.90	1.2	1.5
28	1.3	e2.2	e3.0	e3.7	2.9	4.4	3.0	3.3	2.0	.94	1.2	1.3
29	1.4	2.3	e2.5	e3.0	---	4.7	3.9	2.2	1.9	.94	1.2	1.4
30	1.5	2.4	e2.6	e3.2	---	4.4	3.6	2.7	1.6	.88	1.2	1.4
31	1.6	---	e3.0	e3.0	---	4.4	---	2.5	---	.86	1.2	---
TOTAL	48.4	59.0	76.2	95.2	90.6	131.8	107.6	81.5	50.1	33.15	34.87	57.9
MEAN	1.56	1.97	2.46	3.07	3.24	4.25	3.59	2.63	1.67	1.07	1.12	1.93
MAX	1.9	2.8	3.2	4.0	4.0	11	4.5	4.0	2.3	1.4	2.7	3.8
MIN	1.3	1.3	1.2	2.6	2.6	3.1	2.9	2.1	1.3	.77	.83	1.3
AC-FT	96	117	151	189	180	261	213	162	99	66	69	115

CAL YR 1990 TOTAL 969.9 MEAN 2.66 MAX 7.2 MIN 1.0 AC-FT 1920
WTR YR 1991 TOTAL 866.32 MEAN 2.37 MAX 11 MIN .77 AC-FT 1720

e Estimated

CARSON RIVER BASIN

10311000 CARSON RIVER NEAR CARSON CITY, NV

LOCATION.--Lat 39°06'30", long 119°42'40", in SW 1/4 NW 1/4 sec.2, T.14 N., R.20 E., Carson City, Hydrologic Unit 16050201, on left bank 2 mi downstream from Clear Creek, 3 mi upstream from Lloyds Bridge on road to Mexican Dam, and 5 mi southeast of Carson City Post Office.

DRAINAGE AREA.--886 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1939 to current year.

REVISED RECORDS.--WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,620.48 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 23, 1955, water-stage recorder on right bank at datum 1.0 ft higher. Dec. 23, 1955, to Mar. 13, 1956, nonrecording gage at present site at datum 1.0 ft higher. Mar. 14, 1956, to Sept. 30, 1963, water-stage recorder at present site at datum 1.0 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Many diversions above station for irrigation. Flow slightly regulated by several small reservoirs on tributaries.

AVERAGE DISCHARGE.--52 years, 401 ft³/s, 290,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft³/s, Dec. 24, 1955, gage height, 16.0 ft, present datum from floodmarks, from rating curve extended above 6,000 ft³/s on basis of slope-area measurements at gage heights 9.40 ft and 16.0 ft, computation of flow over dam at gage height, 12.40 ft, and float measurement at gage height 10.60 ft, all at present datum; minimum daily, 0.94 ft³/s, Sept. 1, 1989.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 26	1500	*1410	*4.29				
Minimum daily, 4.9 ft ³ /s, Sept. 28.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	60	129	e47	91	77	237	178	479	128	12	25
2	23	61	130	e54	98	101	256	191	543	115	14	31
3	26	60	94	e61	105	146	225	152	689	108	12	42
4	24	69	90	e61	98	417	217	130	767	83	15	22
5	28	66	111	e56	96	892	281	125	794	70	16	11
6	26	66	112	e54	115	342	383	179	670	58	17	17
7	24	72	99	e54	109	186	429	297	527	50	13	34
8	27	80	83	e57	82	154	349	535	486	46	18	21
9	30	76	81	e67	70	134	286	898	499	45	14	9.4
10	31	84	99	e70	61	123	263	666	584	41	15	13
11	33	87	156	e75	54	115	254	440	624	40	10	24
12	32	95	187	e94	54	110	229	317	590	38	9.3	26
13	33	102	173	e98	49	105	202	270	565	36	9.5	16
14	33	106	120	e110	46	109	190	291	440	31	11	22
15	35	110	80	e118	42	115	212	252	348	33	30	26
16	36	130	65	106	41	123	195	270	301	33	34	30
17	38	130	68	84	30	120	180	453	257	33	44	29
18	60	131	e64	75	37	136	145	585	226	26	37	22
19	92	141	e70	77	55	154	119	410	194	24	48	8.8
20	100	167	e42	82	47	178	107	331	174	26	48	6.8
21	82	179	e36	78	47	169	103	275	162	32	42	25
22	97	171	e30	67	48	154	99	271	169	43	39	16
23	86	155	e32	66	44	143	90	337	156	47	15	17
24	60	e148	e34	71	45	156	85	706	142	37	15	30
25	60	e140	e36	76	45	183	109	1010	127	28	12	24
26	74	135	e33	79	48	202	114	1150	124	18	12	30
27	82	141	e40	84	41	190	96	931	114	14	19	7.7
28	76	103	e47	84	57	221	88	678	121	19	13	4.9
29	63	73	e43	82	---	202	94	665	129	22	12	5.8
30	56	100	e41	86	---	198	142	619	134	18	31	11
31	54	---	e42	94	---	216	---	579	---	17	31	---
TOTAL	1545	3238	2467	2367	1755	5871	5779	14191	11135	1359	667.8	607.4
MEAN	49.8	108	79.6	76.4	62.7	189	193	458	371	43.8	21.5	20.2
MAX	100	179	187	118	115	892	429	1150	794	128	48	42
MIN	23	60	30	47	30	77	85	125	114	14	9.3	4.9
AC-FT	3060	6420	4890	4690	3480	11650	11460	28150	22090	2700	1320	1200

CAL YR 1990 TOTAL 41149 MEAN 113 MAX 470 MIN 13 AC-FT 81620
WTR YR 1991 TOTAL 50982.2 MEAN 140 MAX 1150 MIN 4.9 AC-FT 101100

e Estimated

CARSON RIVER BASIN

145

10311000 CARSON RIVER NEAR CARSON CITY, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1977-84, 1990 to current year.

REMARKS.--In April 1990, quarterly sampling established for Douglas County Network.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
DEC 12...	1525	193	344	8.0	5.0	100	30	6.8	32	1	--
MAR 13...	1440	100	368	5.0	10.0	110	31	7.7	33	1	--
JUN 13...	1515	637	120	25.5	20.0	41	11	3.4	8.5	0.6	2.0
AUG 14...	1825	9.3	626	21.0	24.5	170	50	11	61	2	7.1

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)
DEC 12...	54	12	0.40	222	--	--	<0.010	0.100	0.040	0.080	56
MAR 13...	64	16	0.40	257	--	--	0.020	0.250	0.120	0.130	110
JUN 13...	6.5	4.0	0.10	78	66	0.11	0.020	0.060	0.040	0.080	97
AUG 14...	130	23	1.0	410	379	0.56	<0.010	<0.050	<0.010	0.250	7

CARSON RIVER BASIN

10311089 NORTH FORK KINGS CANYON DIVERSION NEAR CARSON CITY, NV

LOCATION.--Lat 39°09'18", long 119°48'58", in NE 1/4 NW 1/4 sec.23, T.15 N., R.19 E., Carson City, Hydrologic Unit 16050201, 2.9 mi west of Carson Street off Kings Canyon Road.

DRAINAGE AREA--1.83 mi².

PERIOD OF RECORD.--March 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,530 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Periodic regulation for municipal use.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3.6 ft³/s, Nov. 13, 1989, gage height 2.86 ft; minimum daily, 0.11 ft³/s, Aug. 2-5, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.6 ft³/s, Oct. 31, gage height 2.34 ft; minimum daily, 0.11 ft³/s, Aug. 2-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	.90	.46	.59	.34	.42	e.55	.33	.22	.29	.36	.19
2	.39	.53	.45	.59	.33	.43	.56	.25	.29	.28	e.11	.19
3	.39	.21	.49	.57	.30	.54	.51	.23	.28	.22	e.11	.25
4	.39	.29	.49	.54	.29	.68	.44	.27	.28	.17	e.11	.28
5	.35	.49	.52	.54	.32	.38	.46	.37	.28	.17	e.11	.27
6	.25	.71	.55	.54	.28	.54	.47	.38	.22	.20	e.24	.26
7	.30	.79	.50	.54	.28	.54	.43	.40	.17	.28	e.24	.20
8	.39	.80	.51	.54	.28	.54	.51	.28	.17	.30	e.24	.20
9	.36	.65	.51	.54	.27	.52	.64	.24	.17	.32	e.24	.25
10	.36	.65	.52	.54	.25	.53	.56	.22	.32	.24	e.14	.31
11	.36	.65	.49	.54	.26	.42	.51	.22	.45	.20	e.12	.28
12	.32	.56	.46	.52	.27	.35	.51	.21	.27	.19	e.12	.27
13	.24	.50	.46	.59	.27	.24	.53	.20	.14	.23	e.24	.25
14	.35	.54	.47	.71	.28	.22	.55	.24	.15	.33	e.27	.21
15	.41	.65	.51	.73	.29	.22	.54	.26	.18	.33	e.27	.22
16	.41	.51	.45	.71	.28	.51	.52	.22	.25	.33	e.25	.37
17	.42	.39	.47	.69	.28	.54	.51	.20	.27	.24	e.20	.42
18	.48	.41	.49	.68	.30	.54	.51	.24	.28	.20	e.20	.42
19	.46	.57	.51	.59	.31	.52	.52	.33	.22	.19	e.20	.42
20	.27	.70	e.50	.43	.32	.54	.53	.34	.18	.19	e.15	.36
21	.36	.55	e.48	.41	.35	.54	.53	.34	.17	.30	e.15	.20
22	.36	.42	e.49	.42	.43	.55	.54	.19	.20	.39	e.15	.20
23	.35	.44	.59	.39	.53	.56	.55	.15	.27	.29	e.28	.34
24	.36	.44	.59	.39	.55	.57	.53	.24	.27	.23	e.28	.43
25	.44	.45	.59	.38	.56	.58	.54	.27	.27	.19	e.28	.43
26	.43	.46	.59	.36	.59	.57	.53	.33	.23	.19	.32	.45
27	.28	.50	.59	.36	.54	e.58	.52	.32	.20	.22	.46	.38
28	.71	.49	.59	.35	.47	e.60	.52	.30	.21	.31	.46	.22
29	1.0	.49	.59	.34	---	e.60	.54	.23	.22	.31	.46	.22
30	1.1	.48	.59	.34	---	e.60	.54	.21	.29	.31	.35	.37
31	1.3	---	.59	.34	---	e.60	---	.20	---	.37	.19	---
TOTAL	13.97	16.22	16.09	15.80	9.82	15.57	15.70	8.21	7.12	8.01	7.30	8.86
MEAN	.45	.54	.52	.51	.35	.50	.52	.26	.24	.26	.24	.30
MAX	1.3	.90	.59	.73	.59	.68	.64	.40	.45	.39	.46	.45
MIN	.24	.21	.45	.34	.25	.22	.43	.15	.14	.17	.11	.19
AC-FT	28	32	32	31	19	31	31	16	14	16	14	18

CAL YR 1990 TOTAL 187.25 MEAN .51 MAX 1.3 MIN .21 AC-FT 371
WTR YR 1991 TOTAL 142.67 MEAN .39 MAX 1.3 MIN .11 AC-FT 283

e Estimated

CARSON RIVER BASIN

147

10311090 NORTH FORK KINGS CANYON CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°09'17" long 119°48'58" in NE 1/4 NW 1/4 sec.23, T.15 N., R.19 E., Carson City, Hydrologic Unit 16050201, 2.9 mi west of Carson Street off Kings Canyon Road.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--March 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,530 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for periods of estimated daily discharges, which are poor. Periodic diversions for municipal use.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2.3 ft³/s, Dec. 12, 1989, gage height, 2.02 ft; minimum daily, no flow, Feb. 25, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.4 ft³/s, Mar. 4, gage height, 1.91 ft; minimum daily, .03 ft³/s, Sept. 17-19, 24-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	.35	.46	.40	.40	.43	.46	.78	.57	.43	.23	.38
2	.37	.31	.46	.40	.40	.46	.46	.90	.45	.43	e.55	.38
3	.40	.66	.46	.40	.39	.51	.57	.90	.44	.52	e.55	.33
4	.39	.59	.46	.40	.33	.86	.76	.86	.43	.53	e.55	.30
5	.43	.59	.39	.40	.33	.99	.75	.71	.43	.53	e.55	.24
6	.53	.70	.38	.40	.33	.65	.75	.69	.49	.51	e.40	.20
7	.47	.73	.43	.40	.37	.46	.75	.70	.56	.41	e.40	.30
8	.40	.55	.40	.40	.40	.46	.53	.84	.56	.40	e.40	.31
9	.40	.11	.42	.40	.40	.46	.33	.89	.55	.40	e.40	.29
10	.40	.11	.45	.40	.40	.46	.42	.83	.33	.48	e.50	.28
11	.42	.09	.46	.40	.40	.46	.46	.84	.16	.55	e.50	.27
12	.50	.19	.46	.40	.40	.46	.46	.83	.39	.54	e.50	.27
13	.58	.30	.45	.40	.40	.64	.46	.82	.56	.51	e.38	.27
14	.47	.26	.42	.36	.40	.79	.46	.78	.57	.38	e.35	.32
15	.40	.14	e.39	.27	.40	.99	.46	.78	.55	.35	e.35	.35
16	.40	.31	e.37	.27	.40	.98	.46	.87	.45	.31	e.35	.15
17	.40	.46	e.36	.27	.40	.98	.46	.79	.41	.42	e.40	.03
18	.37	.46	e.36	.39	.39	.69	.46	.72	.38	.49	e.40	.03
19	.47	.27	e.37	.45	.40	.53	.46	.53	.46	.49	e.40	.03
20	.55	.08	.38	.40	.40	.51	.46	.53	.52	.33	e.55	.10
21	.46	.29	.40	.40	.43	.46	.46	.54	.52	.40	e.55	.30
22	.43	.46	.40	.43	.37	.46	.46	.76	.49	.33	e.55	.31
23	.40	.46	.40	.46	.21	.46	.46	.86	.42	.39	e.30	.14
24	.40	.46	.40	.46	.21	.46	.46	.74	.40	e.50	e.30	.03
25	.42	.44	.40	.46	.21	.46	.46	.69	.40	e.50	e.29	.03
26	.49	.44	.40	.40	.18	.46	.46	.56	.49	e.50	e.20	.03
27	.52	.49	.40	.40	.30	.46	.46	.53	.60	e.40	.06	.10
28	.36	.40	.40	.40	.40	.46	.46	.50	.64	e.40	.06	.31
29	.33	.46	.40	.40	---	.46	.46	.55	.56	.36	.06	.71
30	.33	.46	.40	.40	---	.46	.46	.62	.44	.33	.17	.51
31	.48	---	.40	.40	---	.46	---	.60	---	.23	.38	---
TOTAL	13.36	11.62	12.73	12.22	10.05	17.83	14.98	22.54	14.22	13.35	11.63	7.30
MEAN	.43	.39	.41	.39	.36	.58	.50	.73	.47	.43	.38	.24
MAX	.58	.73	.46	.46	.43	.99	.76	.90	.64	.55	.55	.71
MIN	.33	.08	.36	.27	.18	.43	.33	.50	.16	.23	.06	.03
AC-FT	26	23	25	24	20	35	30	45	28	26	23	14

CAL YR 1990 TOTAL 158.43 MEAN .43 MAX .87 MIN .00 AC-FT 314
WTR YR 1991 TOTAL 161.83 MEAN .44 MAX .99 MIN .03 AC-FT 321

e Estimated

CARSON RIVER BASIN

10311100 KINGS CANYON CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°09'14", long 119°48'24", in NE 1/4 NE 1/4 sec.23, T.15 N., R.19 E., Carson City, Hydrologic Unit 16050201, on right bank, off Kings Canyon Road, 2 mi west of Carson Street.

DRAINAGE AREA.--4.06 mi².

PERIOD OF RECORD.--June 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,180 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion for municipal use above station.

AVERAGE DISCHARGE.--15 years, 1.71 ft³/s, 1,240 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150 ft³/s, Feb. 19, 1986, on basis of slope-conveyance measurement of peak flow, gage height, 5.44 ft, from floodmarks; minimum daily, 0.10 ft³/s, Sept. 10, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.2 ft³/s, Mar. 4, gage height, 4.13 ft; minimum daily, 0.11 ft³/s, Aug. 4-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.47	.37	e.25	.44	.43	.39	.36	.51	.42	e.32	.23
2	.32	.33	.36	e.25	.44	.49	.39	.51	.35	.32	e.38	.22
3	.32	.51	.35	e.25	.44	.90	.39	.65	.30	.36	e.37	.22
4	.32	.53	.35	e.25	.44	1.3	.39	.67	.29	.37	e.11	.21
5	.33	.52	.35	e.25	.47	1.2	.48	.64	.28	.37	e.11	.22
6	.36	.57	.35	e.25	.43	.79	.54	.59	.28	.36	e.11	.22
7	.36	.55	.35	e.25	.44	.64	.54	.59	.29	.27	e.11	.25
8	.34	.52	.35	e.25	.44	.46	.42	.63	.36	.27	e.25	.21
9	.34	.33	.35	e.25	.44	.39	.27	.65	.39	.31	e.25	.24
10	.34	.31	.35	e.25	.44	.39	.27	.65	.28	.35	e.25	.24
11	.34	.29	.36	e.25	.44	.37	.27	.65	.14	.36	e.25	.24
12	.35	.30	.36	e.25	.44	.30	.27	.65	.18	.35	e.15	.24
13	.41	.36	.36	e.30	.44	.38	.28	.65	.24	.35	e.13	.24
14	.39	.36	.37	e.30	.44	.53	.28	.65	.26	.19	e.13	.25
15	.36	.32	.38	e.30	.44	.73	.28	.65	.27	e.24	e.13	.24
16	.36	.32	.39	e.35	.44	.78	.28	.65	.15	e.34	e.26	.21
17	.36	.41	.38	.38	.44	.78	.28	.65	.21	e.34	e.29	.15
18	.37	.42	.39	.38	.44	.70	.28	.64	.23	e.34	e.28	.13
19	.43	.37	.39	.39	.44	.59	.28	.58	.24	e.25	e.27	.12
20	.46	.26	.34	.39	.44	.59	.28	.47	.28	e.21	e.21	.13
21	.43	.31	e.30	.39	.46	.54	.28	.39	.29	e.20	e.21	.23
22	.43	.38	e.30	.39	.45	.54	.28	.51	.27	e.19	e.21	.19
23	.43	.39	e.25	.40	.40	.54	.28	.65	.13	e.30	e.16	.17
24	.43	.40	e.25	.41	.39	.54	.28	.65	.23	e.40	e.16	.16
25	.43	.39	e.25	.41	.39	.54	.28	.63	.24	e.31	e.16	.14
26	.45	.40	e.25	.42	.39	.36	.28	.56	.26	e.25	e.16	.12
27	.46	.38	e.25	.42	.39	.41	.28	.54	.41	e.20	.14	.14
28	.46	.39	e.25	.42	.42	.44	.28	.48	.51	e.20	.13	.24
29	.50	.38	e.25	.42	---	.39	.29	.39	.64	e.23	.12	.20
30	.50	.38	e.25	.42	---	.39	.30	.51	.55	e.32	.12	.16
31	.56	---	e.25	.44	---	.39	---	.54	---	e.32	.22	---
TOTAL	12.27	11.85	10.10	10.33	12.11	17.82	9.69	18.03	9.06	9.29	6.15	5.96
MEAN	.40	.39	.33	.33	.43	.57	.32	.58	.30	.30	.20	.20
MAX	.56	.57	.39	.44	.47	1.3	.54	.67	.64	.42	.38	.25
MIN	.32	.26	.25	.25	.39	.30	.27	.36	.13	.19	.11	.12
AC-FT	24	24	20	20	24	35	19	36	18	18	12	12

CAL YR 1990 TOTAL 143.23 MEAN .39 MAX .92 MIN .10 AC-FT 284
WTR YR 1991 TOTAL 132.66 MEAN .36 MAX 1.3 MIN .11 AC-FT 263

e Estimated

CARSON RIVER BASIN

149

10311200 ASH CANYON CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°10'35", long 119°48'16", in NW 1/4 SW 1/4 sec.12, T.15 N., R.19 E., Carson City, Hydrologic Unit 16050201, on left bank, 2 mi west of intersection of Carson and Bath Streets.

DRAINAGE AREA.--5.20 mi².

PERIOD OF RECORD.--July 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,080 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--15 years (1977-91), 3.38 ft³/s, 2,450 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 58 ft³/s, Feb. 17, 1986, gage height, unknown, on basis of slope-conveyance measurement of peak flow; minimum daily, 0.66 ft³/s, Aug. 29, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11 ft³/s, Mar. 4, gage height, 1.97 ft, maximum gage height, 3.23 ft, backwater from ice; minimum daily, 0.80 ft³/s, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	1.4	1.6	1.7	1.4	1.7	2.4	2.4	2.4	1.5	.90	.90
2	.93	1.3	1.6	1.7	1.6	1.7	2.3	2.3	2.3	1.4	.90	.92
3	.98	1.3	1.7	1.7	1.6	4.2	2.3	2.3	2.2	1.3	.91	.94
4	.99	1.4	1.7	1.7	1.6	e8.0	2.5	2.5	2.1	1.2	1.0	.99
5	1.0	1.4	1.6	1.7	1.7	2.9	2.6	2.6	2.1	1.2	1.0	.96
6	1.0	1.4	1.6	1.7	1.6	2.2	2.8	2.7	2.1	1.1	.96	.96
7	1.1	1.4	1.5	1.7	1.7	2.1	2.5	2.9	2.1	1.1	.96	1.0
8	1.2	1.4	1.5	1.7	1.6	2.0	2.3	2.9	2.0	1.1	.92	.98
9	1.2	1.4	1.6	1.7	1.6	2.0	2.3	2.7	1.9	1.1	.87	1.1
10	1.1	1.3	1.6	1.7	1.6	2.0	2.3	2.5	1.8	1.1	.88	1.3
11	1.1	1.3	1.6	1.7	1.6	1.9	2.2	2.5	1.8	1.0	.88	1.2
12	1.2	1.3	1.6	1.7	1.6	1.9	2.2	2.6	1.8	1.0	.92	1.1
13	1.2	1.3	1.6	1.8	1.6	1.9	2.3	2.6	1.8	.99	.87	1.0
14	1.1	1.3	e1.5	1.7	1.6	1.9	2.4	2.5	1.8	.98	.97	.96
15	1.1	1.3	e1.5	1.7	1.7	1.9	2.3	2.5	1.8	.97	1.2	.97
16	1.1	1.3	1.5	1.7	1.7	2.0	2.3	2.6	1.7	.96	1.0	.95
17	1.2	1.3	e1.5	1.7	1.6	1.9	2.2	2.6	1.7	.95	.90	.91
18	1.2	1.3	1.6	1.7	1.6	1.9	2.2	2.5	1.7	1.0	.85	.87
19	1.6	1.3	1.6	1.7	1.7	1.9	2.3	2.4	1.7	1.1	.87	.85
20	1.3	1.4	e1.5	1.7	1.7	1.9	2.3	2.4	1.7	1.1	.85	.83
21	1.3	1.4	e1.1	e1.5	1.7	1.9	2.3	2.5	1.7	1.0	.85	.84
22	1.3	1.4	e1.1	e1.4	1.7	1.9	2.4	2.5	1.7	.96	.85	.88
23	1.3	1.4	e1.2	e1.5	1.7	2.0	2.5	2.5	1.7	.92	.84	.85
24	1.3	1.3	1.6	e1.6	1.7	2.0	2.5	2.5	1.7	.89	.84	.81
25	1.3	1.4	1.7	e1.7	1.7	2.0	2.4	2.5	1.7	.88	.86	.81
26	1.3	1.4	1.7	e1.7	1.7	2.0	2.4	2.4	1.7	.87	.92	.86
27	1.3	e1.4	1.7	e1.7	1.8	2.0	2.4	2.3	2.0	.88	.97	.85
28	1.3	e1.4	1.7	e1.8	1.8	2.0	2.4	2.3	2.2	.86	.98	.85
29	1.3	1.5	1.7	e1.6	---	2.1	2.5	2.2	1.8	.84	.97	.81
30	1.3	1.6	1.7	e1.5	---	2.2	2.4	2.4	1.6	.85	.93	.80
31	1.3	---	1.7	e1.5	---	2.3	---	2.4	---	.89	.91	---
TOTAL	36.80	41.0	48.4	51.6	46.2	70.3	71.2	77.5	56.3	31.99	28.53	28.05
MEAN	1.19	1.37	1.56	1.66	1.65	2.27	2.37	2.50	1.88	1.03	.92	.93
MAX	1.6	1.6	1.7	1.8	1.8	8.0	2.8	2.9	2.4	1.5	1.2	1.3
MIN	.90	1.3	1.1	1.4	1.4	1.7	2.2	2.2	1.6	.84	.84	.80
AC-FT	73	81	96	102	92	139	141	154	112	63	57	56

CAL YR 1990 TOTAL 584.84 MEAN 1.60 MAX 2.7 MIN .66 AC-FT 1160
WTR YR 1991 TOTAL 587.87 MEAN 1.61 MAX 8.0 MIN .80 AC-FT 1170

e Estimated

CARSON RIVER BASIN

10311260 VICEE CANYON CREEK NEAR SAGEBRUSH RANCH NEAR CARSON CITY, NV

LOCATION.--Lat 39°11'02", long 119°40'53", in NW 1/4 sec.12, T.15 N., R.19 E., Carson City, Hydrologic Unit 16050202, on left bank, 0.7 mi southwest of intersection of W. Ormsby Boulevard and Combs Canyon Road.

DRAINAGE AREA.--1.83 mi².

PERIOD OF RECORD.--December 1983 to September 1984, October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,000 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges, 1991 water year. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1.7 ft³/s, Dec. 27, 1983; no flow many days most years.

EXTREMES FOR CURRENT PERIOD.--Water Year 1990: Maximum discharge, 0.19 ft³/s, Nov. 25, gage height, 5.17 ft, maximum gage height, 5.22 ft, backwater from ice; no flow most days.

Water Year 1991: Maximum discharge, 1.5 ft³/s, May 30, gage height, 4.22 ft, maximum gage height, 5.30 ft, Mar. 5, datum then in use; no flow most days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	e.02	.01	.00	.00	.00	.00	.00
2	.00	.00	e.00	.00	.00	e.03	.01	.00	.00	.00	.00	.00
3	.00	.00	e.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
5	.00	.00	e.06	.00	.00	.03	.00	.00	.00	.00	.00	.00
6	.00	.00	e.02	.00	.00	.03	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
8	.00	.00	e.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
9	.00	.00	e.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
10	.00	.00	e.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.03	.01	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.02	.02	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.02	.02	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.02	.02	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.02	.02	.00	.00	.00	.00	.00
25	.00	.02	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00
26	.00	.02	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
27	.00	e.01	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	e.01	.01	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.02	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.03	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.01	---	.00	---	.00	.00	---
TOTAL	0.00	0.05	0.08	0.00	0.01	0.77	0.12	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.002	.003	.000	.000	.025	.004	.000	.000	.000	.000	.000
MAX	.00	.02	.06	.00	.01	.04	.02	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
AC-FT	.00	.1	.2	.00	.02	1.5	.2	.00	.00	.00	.00	.00

WTR YR 1990 TOTAL 1.03 MEAN .003 MAX .06 MIN .00 AC-FT 2.0

e Estimated

CARSON RIVER BASIN

151

10311260 VICEE CANYON CREEK NEAR SAGEBRUSH RANCH NEAR CARSON CITY, NV--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.01	.00	.79	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	1.1	.00	.00	.00
3	.00	.00	.00	.00	.00	.08	.00	.00	1.2	.00	.00	.00
4	.00	.00	.00	.00	.00	.27	.00	.00	1.1	.00	.00	.00
5	.00	.00	.00	.00	.00	.26	.00	.00	.90	.00	.00	.00
6	.00	.00	.00	.00	.00	.10	.00	.00	.71	.00	.00	.00
7	.00	.00	.00	.00	.00	.02	.00	.00	.73	.00	.00	.00
8	.00	.00	.00	.00	.00	.01	.00	.00	.68	.00	.00	.00
9	.00	.00	.00	.00	.00	.01	.00	.00	.61	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.36	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.17	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.12	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.07	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.07	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.28	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.80	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.02	.00	.63	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.89	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.01	.00	.74	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.57	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	1.0	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	1.0	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.74	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.46	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.86	0.01	7.18	8.54	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.028	.000	.23	.28	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.27	.01	1.0	1.2	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	1.7	.02	14	17	.00	.00	.00
CAL YR 1990	TOTAL 0.90	MEAN .002	MAX .04	MIN .00	AC-FT 1.8							
WTR YR 1991	TOTAL 16.59	MEAN .045	MAX 1.2	MIN .00	AC-FT 33							

CARSON RIVER BASIN

10311300 EAGLE VALLEY CREEK AT CARSON CITY, NV

LOCATION.--Lat 39°09'56", long 119°43'23", in SE 1/4 NW 1/4 sec.15, T.15 N. R.20 E., Carson City, Hydrologic Unit 16050201; on left bank, 100 ft downstream from North Edmonds Drive, and 1.1 mi south of intersection with U. S. Highway 50.

DRAINAGE AREA.--34.4 mi².

PERIOD OF RECORD.--January 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,620 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--6 years, 0.42 ft³/s, 3,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft³/s, Feb. 19, 1986, gage height, 8.85 ft, from rating curve extended above 620 ft³/s; no flow many days from July to Sept., 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 51 ft³/s, Mar. 3, gage height, 5.21 ft; minimum daily, 0.03 ft³/s, Aug. 4, Sept. 21-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.11	.19	e.36	.33	.40	1.5	.38	.36	.19	.04	.06
2	.11	.11	.19	e.36	.39	2.1	.85	.40	.26	.15	.04	.04
3	.10	.11	.20	e.36	.39	15	.44	.41	.21	.15	.04	.04
4	.11	.11	.19	e.33	.35	18	.38	.38	.22	.15	.03	.04
5	.10	.13	.21	.31	1.5	3.4	.39	.35	.18	.14	.06	.05
6	.09	.15	.21	.26	.87	.72	.40	.32	.18	.08	.12	.05
7	.08	.15	.20	.28	.48	.40	.45	.30	.18	.05	.11	.07
8	.08	.14	.19	e.27	.39	.36	.46	.29	.17	.07	.08	.08
9	.07	.14	.20	e.27	.41	.33	.42	1.6	.17	.08	.06	.05
10	.05	.14	.20	.29	.39	.30	.36	.97	.16	.09	.05	1.1
11	.04	.13	4.5	.28	.37	.41	.41	.51	.16	.11	.05	.23
12	.04	.13	1.2	e.30	.38	.35	.42	.41	.15	.11	.04	.16
13	.05	.14	.42	e.34	.37	.31	.45	.39	.14	.08	.04	.11
14	.05	.15	.29	e.36	.39	.31	.46	.36	.13	.08	.27	.09
15	.07	.16	.28	e.35	.38	1.2	.42	.36	.14	.06	1.7	.08
16	.09	.17	.28	e.35	.41	.70	.44	.32	.13	.06	.25	.07
17	.09	.18	.28	e.35	.38	.38	.45	.33	.13	.06	.13	.05
18	.09	.18	.32	.35	.36	.86	.48	.28	.13	.06	.09	.05
19	.12	.17	.30	.35	.35	2.8	.48	.34	.12	.08	.08	.04
20	.13	.18	e.27	e.33	.34	.88	.59	.34	.12	1.4	.06	.04
21	.12	.19	e.21	.32	.35	.44	.54	.70	.13	.15	.05	.03
22	.12	.19	e.19	.29	.31	.36	.54	.32	.13	.11	.06	.03
23	.13	.20	e.19	.30	.34	.36	.71	.27	.13	.10	.05	.03
24	.13	.20	e.20	.31	.31	5.6	.55	.24	.13	.09	.05	.05
25	.13	.59	e.22	.32	.30	2.7	.41	.23	.14	.09	.07	.06
26	.12	2.3	e.24	.31	.32	1.1	.38	.21	.15	.08	.05	.04
27	.10	.21	e.27	.31	.34	.84	.38	.23	.36	.08	.04	.04
28	.10	.18	e.30	.32	.39	.56	.38	.24	.64	.08	.08	.04
29	.10	.18	e.25	.31	---	.44	.38	.23	.34	.07	.08	.04
30	.11	.18	e.30	.31	---	.38	.35	.50	.28	.06	.08	.04
31	.11	---	e.38	.33	---	.39	---	1.4	---	.06	.06	---
TOTAL	2.95	7.30	12.87	9.88	11.89	62.38	14.87	13.61	5.87	4.22	4.01	2.90
MEAN	.095	.24	.42	.32	.42	2.01	.50	.44	.20	.14	.13	.097
MAX	.13	2.3	4.5	.36	1.5	18	1.5	1.6	.64	1.4	1.7	1.1
MIN	.04	.11	.19	.26	.30	.30	.35	.21	.12	.05	.03	.03
AC-FT	5.9	14	26	20	24	124	29	27	12	8.4	8.0	5.8

CAL YR 1990 TOTAL 204.41 MEAN .56 MAX 4.5 MIN .02 AC-FT 405
WTR YR 1991 TOTAL 152.75 MEAN .42 MAX 18 MIN .03 AC-FT 303

e Estimated

CARSON RIVER BASIN

153

10311400 CARSON RIVER AT DEER RUN ROAD NEAR CARSON CITY, NV

LOCATION.--Lat 39°10'52", long 119°41'40", in SW 1/4 NW 1/4 sec.12, T.15 N. R.20 E., Carson City, Hydrologic Unit 16050201, on right bank, just downstream from Deer Run Road, 500 ft south of Brunswick Road, and 4 mi east of Carson City.

DRAINAGE AREA.--958 mi².

PERIOD OF RECORD.--April 1979 to April 1986, August 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,600 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Many diversions above station for irrigation. Flow slightly regulated by several small reservoirs on tributaries.

AVERAGE DISCHARGE.--7 years, (1980-85, 1991), 560 ft³/s, 405,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,650 ft³/s, Jan. 15, 1980, gage height, 13.50 ft; minimum daily, 0.62 ft³/s, Aug. 29, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 1955 is believed to have been approximately 30,000 ft³/s, based on slope-area measurement made at gaging station 5 mi upstream. Flood of Feb. 1986, discharge approximately 13,000 ft³/s, gage height 17.38 ft, from rating extension above 17.01 ft.

EXTREMES FOR CURRENT PERIOD.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Water Year 1990:	Discharge	Gage height		Discharge	Gage height
Date Time	(ft ³ /s)	(ft)	Date Time	(ft ³ /s)	(ft)
Aug. 24 1100	* 79.0	*3.59			

Minimum daily, 2.8 ft³/s, Sept. 10, 1990.

Water Year 1991:	Discharge	Gage height		Discharge	Gage height
Date Time	(ft ³ /s)	(ft)	Date Time	(ft ³ /s)	(ft)
May 26 1800	*1,140	*6.98			

Minimum daily, 3.1 ft³/s, Sept. 6, 1991.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	e10	8.4
2	---	---	---	---	---	---	---	---	---	---	e10	13
3	---	---	---	---	---	---	---	---	---	---	e11	10
4	---	---	---	---	---	---	---	---	---	---	7.6	8.5
5	---	---	---	---	---	---	---	---	---	---	9.6	8.3
6	---	---	---	---	---	---	---	---	---	---	14	9.2
7	---	---	---	---	---	---	---	---	---	---	15	5.6
8	---	---	---	---	---	---	---	---	---	---	14	4.3
9	---	---	---	---	---	---	---	---	---	---	11	3.6
10	---	---	---	---	---	---	---	---	---	---	7.6	2.8
11	---	---	---	---	---	---	---	---	---	---	11	5.5
12	---	---	---	---	---	---	---	---	---	---	10	3.4
13	---	---	---	---	---	---	---	---	---	---	7.4	3.5
14	---	---	---	---	---	---	---	---	---	---	7.4	4.4
15	---	---	---	---	---	---	---	---	---	---	9.0	4.2
16	---	---	---	---	---	---	---	---	---	---	8.8	5.4
17	---	---	---	---	---	---	---	---	---	---	4.9	4.6
18	---	---	---	---	---	---	---	---	---	---	3.3	4.9
19	---	---	---	---	---	---	---	---	---	---	4.5	9.2
20	---	---	---	---	---	---	---	---	---	---	5.9	11
21	---	---	---	---	---	---	---	---	---	---	15	8.8
22	---	---	---	---	---	---	---	---	---	---	18	8.7
23	---	---	---	---	---	---	---	---	---	---	17	9.3
24	---	---	---	---	---	---	---	---	---	---	21	14
25	---	---	---	---	---	---	---	---	---	---	11	8.9
26	---	---	---	---	---	---	---	---	---	---	13	9.7
27	---	---	---	---	---	---	---	---	---	---	12	12
28	---	---	---	---	---	---	---	---	---	---	15	12
29	---	---	---	---	---	---	---	---	---	---	8.6	12
30	---	---	---	---	---	---	---	---	---	---	6.6	11
31	---	---	---	---	---	---	---	---	---	---	5.6	---
TOTAL	---	---	---	---	---	---	---	---	---	---	324.8	236.2
MEAN	---	---	---	---	---	---	---	---	---	---	10.5	7.87
MAX	---	---	---	---	---	---	---	---	---	---	21	14
MIN	---	---	---	---	---	---	---	---	---	---	3.3	2.8
AC-FT	---	---	---	---	---	---	---	---	---	---	644	469

e Estimated

CARSON RIVER BASIN

10311400 CARSON RIVER AT DEER RUN ROAD NEAR CARSON CITY, NV--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	26	64	e44	96	50	253	170	494	131	6.3	7.7
2	12	26	68	e49	96	65	278	198	520	102	5.1	6.1
3	12	27	61	e57	106	97	239	160	647	97	5.9	5.5
4	12	27	61	e54	104	211	212	133	704	75	6.1	6.0
5	9.8	46	66	e51	98	690	282	119	724	56	8.0	4.6
6	9.9	51	71	e51	105	407	404	160	638	46	8.5	3.1
7	9.6	38	66	e51	111	238	449	300	521	39	8.1	5.6
8	9.4	42	65	e53	97	194	390	482	481	29	7.3	8.6
9	10	39	61	e58	78	165	318	787	502	21	8.1	8.9
10	11	39	67	e62	61	151	283	761	557	22	6.4	11
11	14	47	91	e69	67	139	278	539	614	20	5.5	11
12	14	57	113	e87	66	134	249	397	592	19	5.4	15
13	14	46	112	e92	61	129	221	327	581	16	4.6	13
14	17	42	87	e100	56	125	200	340	492	12	3.3	11
15	16	36	73	e100	52	132	223	284	400	9.7	10	9.6
16	16	35	62	e105	49	139	212	331	347	8.1	9.0	9.3
17	16	39	61	125	43	134	196	541	291	9.0	9.2	9.4
18	18	41	e60	107	39	148	153	615	254	8.8	9.5	9.6
19	27	42	e60	104	52	167	124	453	214	7.2	9.2	8.5
20	34	43	e38	102	50	190	113	380	187	7.0	11	8.9
21	19	46	e34	101	48	186	104	319	168	4.5	11	7.5
22	20	46	e29	105	45	166	103	319	186	7.3	9.6	9.9
23	31	47	e31	107	42	154	86	414	170	9.7	8.0	8.5
24	35	45	e33	108	40	167	72	684	152	9.0	5.5	7.9
25	23	51	e31	102	36	191	87	858	126	7.6	5.7	9.2
26	22	64	e32	93	39	213	107	953	110	7.0	7.1	8.9
27	24	73	e35	95	38	201	91	884	98	5.9	3.4	8.9
28	24	72	e43	88	40	232	85	662	105	4.7	5.0	5.5
29	28	53	e37	90	---	220	75	638	127	5.5	5.1	4.3
30	29	53	e37	92	---	211	115	607	136	7.3	5.4	6.5
31	25	---	e40	83	---	227	---	578	---	5.8	7.8	---
TOTAL	574.7	1339	1789	2585	1815	5873	6002	14393	11138	809.1	220.1	249.5
MEAN	18.5	44.6	57.7	83.4	64.8	189	200	464	371	26.1	7.10	8.32
MAX	35	73	113	125	111	690	449	953	724	131	11	15
MIN	9.4	26	29	44	36	50	72	119	98	4.5	3.3	3.1
AC-FT	1140	2660	3550	5130	3600	11650	11900	28550	22090	1600	437	495

WTR YR 1991 TOTAL 46787.4 MEAN 128 MAX 953 MIN 3.1 AC-FT 92800

e Estimated

CARSON RIVER BASIN

155

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 39°17'30", long 119°18'40", in SW 1/4 SE 1/4 sec.32, T.17 N., R.24 E., Lyon County, Hydrologic Unit 16050202, on right bank 400 ft downstream from Buckland ditch, 2 mi west of Fort Churchill, and 4.5 mi upstream from Weeks Bridge on U.S. Highway 95 alternate.

DRAINAGE AREA.--1,302 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1911 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1514: 1917; WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,219.70 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 25, 1924, nonrecording gage at site 7.8 mi upstream at different datum. Apr. 25, 1924, to Dec. 31, 1933, water-stage recorder at site 8 mi upstream at different datum. Jan. 1, 1934, to Sept. 30, 1957, water-stage recorder at present site at datum 1.36 ft higher (levels by Truckee-Carson Irrigation District). July 8, 1986, water-stage recorder at site 50 ft upstream at datum 5.0 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Many diversions for irrigation above station, including diversions for 720 acres between present site and sites used prior to Jan. 1, 1934. Buckland ditch diverts 400 ft upstream for irrigation downstream from station.

AVERAGE DISCHARGE.--80 years, 367 ft³/s, 265,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,600 ft³/s, Feb. 19, 1986, gage height, 8.35 ft; maximum gage height, about 11 ft in December 1955, present datum, from floodmarks (discharge unknown); no flow during some periods in nearly every year since 1923.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 27	0700	*899	*5.58				
No flow, Aug. 2-4, 8, 10-13.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.05	43	e60	e82	35	216	33	468	82	.01	.11
2	.02	.14	48	e60	e100	36	236	62	413	81	.00	.10
3	.02	.24	50	e60	104	45	250	99	479	68	.00	.09
4	.02	.34	46	e61	106	69	203	92	567	58	.00	.09
5	.02	.39	51	e57	105	226	170	79	600	50	.50	.09
6	.02	.30	57	e55	99	549	248	70	614	39	.21	.08
7	.03	.14	59	e54	98	318	347	95	512	29	.01	.07
8	.02	.23	e58	e54	98	216	373	215	441	25	.00	.07
9	.03	.46	e56	e54	88	184	309	454	425	20	.02	1.2
10	.02	.35	54	e58	77	157	260	650	421	17	.00	.24
11	.02	.36	57	e59	66	140	233	517	477	14	.00	.20
12	.02	.66	68	e76	65	121	226	390	500	11	.00	.14
13	.03	3.1	e67	e89	66	109	209	296	474	9.6	.00	.19
14	.03	9.3	e64	e93	64	103	174	266	456	10	.44	.15
15	.03	12	e60	e91	63	103	153	257	383	8.0	.42	.17
16	.03	11	e60	e91	59	111	158	222	325	4.4	.29	.22
17	.03	15	e60	e91	55	121	146	287	284	3.4	.22	.23
18	.03	19	60	e93	50	120	127	488	224	1.9	.20	.16
19	.04	21	e58	e91	45	137	106	466	185	1.5	.14	.15
20	.03	22	e55	e88	45	150	81	358	148	1.3	.12	.10
21	.03	21	e50	e81	44	172	75	308	124	1.5	.12	.08
22	.04	21	e50	e77	42	165	66	251	114	1.3	.11	.07
23	.11	22	e50	e74	40	153	55	250	119	3.3	.09	.08
24	.12	24	e50	e76	38	145	40	351	113	6.9	.09	.09
25	.11	25	e50	e80	37	162	33	581	92	8.4	.12	.09
26	.25	26	e50	e86	31	180	36	744	72	4.0	.16	.09
27	.19	31	e59	e82	26	194	51	819	62	.59	.12	.11
28	.24	37	e65	e90	30	187	48	655	63	.25	.14	.09
29	.15	42	e60	e82	---	213	43	525	63	.13	.12	.08
30	.07	44	e60	e75	---	202	35	541	73	.04	.12	.06
31	.03	---	e60	e72	---	201	---	504	---	.05	.12	---
TOTAL	1.86	409.06	1735	2310	1823	5024	4707	10925	9291	560.56	3.89	4.69
MEAN	.060	13.6	56.0	74.5	65.1	162	157	352	310	18.1	.13	.16
MAX	.25	44	68	93	106	549	373	819	614	82	.50	1.2
MIN	.02	.05	43	54	26	35	33	33	62	.04	.00	.06
AC-FT	3.7	811	3440	4580	3620	9970	9340	21670	18430	1110	7.7	9.3
CAL YR 1990	TOTAL 30199.87	MEAN 82.7	MAX 361	MIN .02	AC-FT 59900							
WTR YR 1991	TOTAL 36795.06	MEAN 101	MAX 819	MIN .00	AC-FT 72980							

e Estimated

CARSON RIVER BASIN

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV-Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960 to current year (published as Carson River near Silver Springs, station 10312020, October 1962 to September 1970).

PERIOD OF DAILY RECORD.--

CHEMICAL ANALYSES: October 1962 to September 1969.

SPECIFIC CONDUCTANCE: October 1962 to June 1970 and February 1972 to September 1982.

WATER TEMPERATURE: October 1962 to June 1970 and February 1972 to September 1982.

REMARKS.--Water-quality data are collected from river at gage, or from Buckland Ditch, which leaves river 400 ft upstream from gage, depending on discharge. Detailed sampling information is available from U.S. Geological Survey, Carson City, Nev. Discharge data do not include ditch flow.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 840 microsiemens, Sept. 13, 1973; minimum daily, 81 microsiemens, July 3, 1967.

WATER TEMPERATURE: Maximum daily, 29.0°C, Aug. 7, 1972; minimum daily, freezing point on many days during winter months of most years.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC 04...	1050	48	514	8.4	13.0	2.5	2.0	11.2	96	K10	63
FEB 12...	1045	63	534	8.4	16.0	6.5	3.5	10.4	100	<4	K12
MAY 15...	1200	264	267	8.2	14.5	16.0	18	8.8	106	36	80
AUG 27...	1000	5.8	620	8.3	22.0	18.0	3.0	7.3	91	K6	53

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC 04...	170	51	10	48	2	4.5	160	3	130	140	17
FEB 12...	160	49	9.4	47	2	4.6	144	3	122	130	17
MAY 15...	81	23	5.7	23	1	3.8	81	--	67	40	9.8
AUG 27...	200	58	14	51	2	6.2	191	2	161	140	23

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
DEC 04...	0.60	25	328	379	0.45	<0.010	<0.010	<0.100	<0.100	0.020
FEB 12...	0.50	20	330	352	0.45	0.020	<0.010	<0.100	<0.100	<0.010
MAY 15...	0.20	21	165	167	0.22	0.030	<0.010	0.050	0.055	0.020
AUG 27...	0.50	27	420	417	0.57	<0.010	<0.010	<0.050	0.056	<0.010

CARSON RIVER BASIN

157

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV-Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
DEC 04...	0.020	0.30	--	0.060	0.050	0.050	0.050	10	5	43
FEB 12...	<0.010	0.40	--	0.040	0.040	0.040	0.040	<10	5	42
MAY 15...	0.020	0.80	--	0.180	0.090	0.120	0.080	20	7	30
AUG 27...	<0.010	0.30	0.20	0.080	0.060	0.030	0.030	<10	6	46

DATE	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)
DEC 04...	<0.5	<1.0	<1	<3	2	15	1	35	38	<0.1
FEB 12...	<0.5	<1.0	<1	<3	2	19	1	35	68	<0.1
MAY 15...	<0.5	<1.0	1	<3	1	79	1	18	25	<0.1
AUG 27...	<0.5	<1.0	<1	<3	2	6	<1	28	220	<0.1

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 04...	<10	1	<1	<1.0	530	<6	<3	8	1.0	77
FEB 12...	<10	<1	<1	<1.0	500	<6	4	10	1.7	--
MAY 15...	<10	1	<1	<1.0	260	<6	6	42	30	98
AUG 27...	<10	1	<1	<1.0	650	<6	18	9	0.14	100

K: NON-IDEAL COLONY COUNT

CARSON RIVER BASIN

10312100 LAHONTAN RESERVOIR NEAR FALLON, NV

LOCATION.--Lat 39°27'45", long 119°04'00", in SW 1/4 SE 1/4 sec.33, T.19 N., R.26 E., Churchill County, Hydrologic Unit 16050202, in outlet control house on upstream side of Lahontan Dam on Carson River, 18 mi west of Fallon.

DRAINAGE AREA.--1,799 mi², (not including inflow from Truckee Canal).

PERIOD OF RECORD.--January 1917 to current year. Monthly contents only for January 1917 to September 1960, published in WSP 1734.

REVISED RECORDS.--WDR NV-79-1: Drainage area.

GAGE.--Float tape with surface contact detector. Prior to 1956, float tape. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to 1966, at datum 3.73 ft lower (Bureau of Reclamation datum).

REMARKS.--Reservoir is formed by earth and gravel-fill dam, constructed by U.S. Bureau of Reclamation. Storage began sometime between the completion of the dam in June 1915 and the beginning of the period of record, January 1917. Capacity, 295,500 acre-ft between elevations, 4,060.0 ft, invert of outlet conduit, and 4,162.0 ft, spillway crest; includes 91 acre-ft of dead storage below elevation, 4,070 ft. Surface area at spillway elevation, 13,470 acres. Water is used for irrigation of 87,500 acres in Newland Project and for power. Figures given herein represent total contents and are computed from 0800 hour readings, based on capacity table dated March 9, 1989. Reservoir stores water from Carson River and from Truckee River via Truckee Canal at Derby Dam. Inflow is regulated by Lake Tahoe (station 10337000), Donner Lake (station 10338400), Prosser Creek (station 10340300), Stampede (station 10344300), Boca (station 10344490), other reservoirs, and Derby Dam. Extensive irrigation above reservoir in Carson and Truckee River basins.

COOPERATION.--Records of daily elevations furnished by Truckee-Carson Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed (20-inch flashboard on weir), 328,600 acre-ft, June 16, 1942, elevation, 4,164.43 ft; minimum observed, 91 acre-ft, Sept. 7-9, 1929, elevation, 4,070.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 108,100 acre-ft, June 17, elevation, 4,137.13 ft; minimum observed, 13,570 acre-ft, Oct. 29, elevation, 4,100.73 ft.

Capacity table (elevation, in feet, contents, in acre-feet)

4,095	7,960	4,120	46,150	4,145	150,800
4,100	12,758	4,125	59,780	4,150	183,600
4,105	18,840	4,130	76,650	4,155	222,800
4,110	26,120	4,135	97,990	4,160	270,700
4,115	34,990	4,140	122,800	4,165	339,900

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26430	14170	---	---	39920	---	79290	94970	102400	97400	66260	32260
2	26570	---	---	---	---	---	80270	93380	102500	97120	---	31170
3	26720	---	---	---	---	---	---	93110	102300	96480	64340	30350
4	26860	---	20400	---	41160	---	82690	92220	102300	95800	63450	---
5	26960	14810	20660	---	41760	52560	83840	91470	102300	94790	62570	28450
6	---	14990	20850	---	42340	---	---	90720	102700	93920	61660	---
7	---	15170	---	---	42920	55870	---	89960	103400	93020	60630	26620
8	27300	15350	---	---	43360	57480	87280	---	103800	91600	59570	25880
9	27380	---	---	---	---	---	88860	88470	104200	90360	58370	25190
10	---	---	21910	---	---	---	---	88000	104800	88900	57160	---
11	---	---	22250	---	44630	60540	91200	87580	105300	87490	55960	---
12	---	---	22590	---	45010	61390	92360	88770	105800	85910	54770	22510
13	---	16260	23020	---	45450	62240	---	88860	---	84380	53540	---
14	---	---	---	---	45810	62970	---	89210	---	83220	---	20320
15	---	16640	---	33250	46220	63730	95890	90010	107400	82700	50310	19540
16	27960	16830	---	33530	---	---	96710	90810	107800	80670	---	19050
17	26900	---	---	34020	---	---	97670	91290	108100	79320	48390	18850
18	23560	---	24840	34450	---	66470	98650	91870	107800	78140	46930	18710
19	21640	17350	25230	34900	47630	67410	99540	92400	107500	---	46170	18570
20	19620	---	25590	35360	47910	68330	---	92840	107100	75860	45330	18450
21	18330	---	25950	35770	48180	69240	101400	93880	106400	75270	44380	18450
22	17110	---	---	36200	48460	70190	101500	---	105200	---	43220	18450
23	---	---	---	---	---	---	101600	94880	104100	74490	41850	18450
24	---	---	---	36900	---	---	101600	95110	103700	73780	40560	18450
25	14440	---	---	37240	---	---	100800	---	102800	73150	39290	18490
26	---	18670	27560	---	49710	73780	100000	---	101600	---	38460	18490
27	13690	18830	27890	---	50000	74710	99210	---	100400	71540	36720	18490
28	13610	---	28300	---	50280	75600	98180	101500	99070	70260	---	18490
29	13570	19560	---	38780	---	76500	97310	102200	98320	69210	35320	18490
30	---	19810	---	39160	---	---	96250	102700	97850	68260	34310	18490
31	13980	---	---	39560	---	---	---	---	---	67280	33230	---
OBS MAX	27960	19810	28300	39560	50280	76500	101600	102700	108100	97400	66260	32260
OBS MIN	13570	14170	20400	33250	39920	52560	79290	87850	97850	67280	33230	18450

CAL YR 1990 OBS MAX 208800 OBS MIN 13570
WTR YR 1991 OBS MAX 108100 OBS MIN 13570

CARSON RIVER BASIN

159

10312150 CARSON RIVER BELOW LAHONTAN RESERVOIR, NEAR FALLON, NV

LOCATION.--Lat 39°27'50", long 119°02'45", in E 1/2 SE 1/4 sec.34, T.19 N., R.26 E., Churchill County, Hydrologic Unit 16050203, on left bank, 1.1 mi downstream from Lahontan Dam, and 15 mi west of Fallon.

DRAINAGE AREA.--1,801 mi², excludes inflow from Truckee Canal.

PERIOD OF RECORD.--October 1966 to current year.

REVISED RECORDS.--WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,040 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair, and flows below 10.0 cfs, which are poor. Flow regulated by Lahontan Reservoir (station 10312100), capacity 295,100 acre-ft, and other upstream regulations. One diversion, approximately 2,500 acre-ft per year, between gage and Lahontan Reservoir.

AVERAGE DISCHARGE.--25 years, 531 ft³/s, 384,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,970 ft³/s, June 28, 1983, gage height, 8.05 ft; minimum daily, 0.81 ft³/s, Feb. 9, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,410 ft³/s, July 6, gage height, 5.69 ft; minimum daily, 0.90 ft³/s, Jan. 22 to Feb. 3, Feb. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	e2.3	1.7	1.3	.90	1.3	1.8	904	867	618	479	478
2	2.2	2.4	1.7	1.2	.90	1.3	1.5	768	812	631	452	476
3	2.2	2.2	1.7	1.1	.90	1.6	1.5	666	787	665	419	471
4	2.2	2.2	1.7	1.0	.98	1.6	1.6	742	843	662	397	457
5	2.0	2.4	1.7	1.0	1.5	1.5	1.6	710	807	662	397	419
6	1.9	2.5	1.8	1.0	1.1	1.6	1.8	662	709	691	512	379
7	1.9	2.5	1.9	1.0	1.0	1.5	1.5	701	638	732	504	338
8	1.9	2.8	2.1	1.0	.92	1.5	1.7	741	543	765	568	334
9	1.9	3.1	1.7	1.0	.90	1.4	1.6	648	397	983	565	332
10	2.0	2.5	1.8	1.0	.90	1.3	1.6	611	350	945	592	350
11	2.0	2.8	2.8	1.0	.92	1.3	1.5	611	351	897	605	591
12	2.0	2.8	2.8	1.0	1.0	1.3	1.5	614	349	844	620	586
13	2.3	2.8	2.8	1.0	1.0	1.3	1.5	490	360	697	697	524
14	26	2.9	2.8	1.0	1.0	1.3	1.6	175	294	638	682	437
15	331	3.1	2.7	1.1	1.0	1.5	1.6	112	407	649	629	349
16	922	3.1	2.5	1.0	1.0	1.4	1.7	144	398	696	595	174
17	1140	3.1	2.5	1.2	1.0	1.3	1.9	175	398	695	554	94
18	975	3.1	2.5	1.0	1.0	1.3	2.1	263	402	695	512	88
19	965	3.1	2.4	1.0	1.0	1.3	2.4	338	442	678	400	87
20	873	3.1	2.2	1.0	1.0	1.2	3.2	371	503	536	391	54
21	709	3.1	2.0	.95	1.0	1.3	134	378	613	445	558	12
22	628	3.1	1.9	.90	1.0	1.1	318	328	622	431	612	11
23	563	3.1	1.9	.90	1.0	1.4	396	277	621	433	613	11
24	410	3.1	1.8	.90	1.1	1.5	542	119	656	446	581	11
25	305	3.1	1.7	.90	1.1	1.6	593	6.7	789	493	493	11
26	229	2.9	1.7	.90	1.2	1.5	692	6.3	814	549	481	10
27	176	3.6	1.5	.90	1.3	1.4	740	6.0	861	571	479	9.8
28	e15	1.5	1.5	.90	1.3	1.4	739	569	861	565	474	14
29	e2.3	1.5	1.5	.90	---	1.5	770	786	746	510	475	28
30	e2.3	1.6	1.3	.90	---	1.6	893	840	639	473	490	7.4
31	e2.3	---	1.3	.90	---	1.6	---	838	---	492	482	---
TOTAL	8300.7	81.4	61.9	30.85	28.92	43.7	5852.2	14600.0	17879	19787	16308	7143.2
MEAN	268	2.71	2.00	1.00	1.03	1.41	195	471	596	638	526	238
MAX	1140	3.6	2.8	1.3	1.5	1.6	893	904	867	983	697	591
MIN	1.9	1.5	1.3	.90	.90	1.1	1.5	6.0	294	431	391	7.4
AC-FT	16460	161	123	61	57	87	11610	28960	35460	39250	32350	14170

CAL YR 1990 TOTAL 127047.21 MEAN 348 MAX 1150 MIN .81 AC-FT 252000
WTR YR 1991 TOTAL 90116.87 MEAN 247 MAX 1140 MIN .90 AC-FT 178700

e Estimated

CARSON RIVER BASIN

10312210 STILLWATER DIVERSION CANAL NEAR FALLON, NV

LOCATION.--Lat 39°28'25", long 118°35'50", in NE 1/4 NE 1/4 sec.34, T.19 N., R.30 E., Churchill County, Hydrologic Unit 16050203, on left bank 0.2 mi downstream from a diversion structure for Stillwater Slough, and 9.8 mi east of Fallon.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1967 to September 1981 (monthly discharge only), October 1990 to September 1991.

GAGE.--Water-stage recorder. Elevation of gage is 3,915 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to September 1981 gage was at the same site and datum on the right bank.

REMARKS.--Records fair except for estimated daily discharges which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 60 ft³/s, Oct. 23, 1990; minimum daily, 2.4 ft³/s, June 19, 1991.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	24	10	e4.3	3.5	5.0	3.4	8.8	3.3	6.2	7.0	7.4
2	13	23	9.6	e4.2	3.6	5.0	3.6	9.9	5.2	8.0	6.4	7.3
3	13	18	9.5	e4.0	3.6	4.7	3.8	11	6.0	6.1	6.4	7.3
4	12	17	9.5	e4.0	3.7	4.9	3.4	12	7.8	5.0	6.3	6.4
5	12	17	9.5	e4.0	4.5	4.3	3.2	10	7.1	4.9	6.3	7.9
6	12	16	9.5	e3.9	5.1	3.2	3.1	8.7	6.9	5.0	6.3	7.3
7	11	16	9.3	e3.7	4.9	3.3	3.0	8.3	6.7	5.1	6.3	6.8
8	11	16	9.4	e3.7	4.6	3.5	2.9	8.8	6.0	5.1	6.5	6.4
9	11	15	9.4	e3.7	4.3	3.5	3.3	6.7	5.0	5.2	6.5	6.4
10	11	14	9.6	e3.7	4.5	3.6	3.4	8.3	6.2	5.6	6.7	7.1
11	11	14	9.7	e3.7	4.3	3.5	3.2	11	5.0	6.1	6.6	6.5
12	11	14	11	e3.7	4.2	3.4	3.4	8.7	3.5	7.9	6.7	7.3
13	11	14	10	e3.7	4.1	3.1	3.2	10	4.0	10	7.9	8.9
14	11	14	9.6	e3.7	4.0	3.6	3.6	15	4.9	11	6.5	8.7
15	10	16	8.9	e3.7	4.4	3.7	4.1	8.8	8.6	9.0	6.9	11
16	10	14	9.0	e3.7	5.3	3.8	4.4	5.8	3.6	8.0	7.3	9.2
17	9.2	14	9.1	e3.8	5.3	3.5	5.7	5.4	3.6	6.1	6.6	8.0
18	16	14	8.9	e3.8	5.3	4.3	6.2	5.2	2.5	6.0	6.1	6.7
19	26	14	8.4	e3.8	5.2	5.2	6.6	5.2	2.4	6.9	6.5	6.1
20	38	14	6.8	3.8	5.3	6.8	6.9	5.8	2.5	6.3	7.3	6.0
21	31	13	6.9	3.8	5.1	7.5	6.7	6.5	2.7	7.0	9.0	5.8
22	33	12	6.6	3.8	4.8	4.2	6.7	6.3	3.8	9.0	6.4	5.0
23	60	11	5.8	3.8	4.8	4.1	8.3	6.4	6.1	6.1	6.5	4.7
24	46	11	5.6	3.8	4.7	e4.2	8.3	4.6	5.2	6.5	6.7	4.6
25	44	11	3.4	3.8	4.8	e4.0	10	3.5	4.1	7.9	7.9	3.9
26	48	11	e2.9	3.8	5.2	e3.9	9.1	3.7	4.0	6.7	8.9	3.8
27	46	11	e3.0	3.8	5.3	3.7	7.5	4.0	4.4	6.3	8.1	3.4
28	39	10	e4.0	3.8	5.1	4.1	7.0	2.8	5.0	6.3	8.3	3.5
29	27	10	e4.5	3.8	---	3.5	7.4	2.9	9.2	6.4	7.7	3.4
30	28	11	e4.5	3.8	---	3.3	7.3	4.2	8.4	10	7.8	3.4
31	25	---	e4.5	3.6	---	3.8	---	3.4	---	9.5	8.1	---
TOTAL	700.2	429	238.4	118.2	129.5	128.2	158.7	221.7	153.7	215.2	218.5	190.2
MEAN	22.6	14.3	7.69	3.81	4.62	4.14	5.29	7.15	5.12	6.94	7.05	6.34
MAX	60	24	11	4.3	5.3	7.5	10	15	9.2	11	9.0	11
MIN	9.2	10	2.9	3.6	3.5	3.1	2.9	2.8	2.4	4.9	6.1	3.4
AC-FT	1390	851	473	234	257	254	315	440	305	427	433	377

WTR YR 1991 TOTAL 2901.5 MEAN 7.95 MAX 60 MIN 2.4 AC-FT 5760

e Estimated

CARSON RIVER BASIN

161

10312210 STILLWATER DIVERSION CANAL NEAR FALLON, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE.--September 1990 to September 1991.

WATER TEMPERATURE.--October 1990 to September 1991.

INSTRUMENTATION.--Water-quality monitor since Sept. 1990, hourly.

REMARKS.--Records represent water temperature at probe within 0.5°C. Interruptions in records due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE.--Maximum, 4,980 microsiemens, Dec. 26, 1990; minimum, 735 microsiemens, May 12, 1991.

WATER TEMPERATURE.--Maximum, 30.5°C, July 5, 1991; minimum freezing point, several days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE.--Maximum, 4,980 microsiemens, Dec. 26; minimum, 735 microsiemens, May 12.

WATER TEMPERATURE.--Maximum, 30.5°C, July 5; minimum, freezing point, several days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	1110	1090	1100	920	860	888	2010	1960	1990	1020	940	968
2	1120	1090	1110	927	810	835	2020	1980	2010	1010	942	972
3	1150	1120	1130	1160	1020	1120	2030	1990	2020	1020	967	995
4	1160	1130	1140	1150	1080	1120	2040	2000	2020	1190	1030	1090
5	1220	1150	1170	1100	1050	1080	2050	1990	2040	1240	1110	1170
6	1230	1210	1220	1070	1010	1040	2070	2030	2050	1280	1160	1210
7	1240	1220	1230	1060	1010	1030	2090	2060	2070	1250	1130	1180
8	1230	1200	1220	1040	990	1010	2110	2080	2100	1270	1120	1190
9	1240	1210	1230	1030	984	1010	2130	2100	2120	1490	1230	1320
10	1260	1230	1240	1030	992	1010	2140	2100	2130	1350	1160	1250
11	1330	1250	1300	1050	1010	1030	2140	2120	2130	1330	1210	1280
12	1380	1330	1350	1060	1030	1050	2170	2130	2150	1410	1230	1330
13	1690	1380	1560	1080	1050	1070	2250	2150	2180	1620	1230	1410
14	1630	1480	1550	1080	1040	1060	2280	2240	2260	1410	1210	1250
15	1530	1440	1490	1940	1070	1790	2300	2280	2290	1260	1230	1240
16	1570	1530	1550	1840	1710	1780	2310	2290	2300	1320	1260	1280
17	1550	1520	1540	1710	1580	1640	2340	2300	2320	1340	1310	1320
18	2120	1540	1760	1590	1480	1520	2350	2330	2340	1400	1330	1350
19	1570	1150	1330	1480	1380	1430	2360	2330	2340	1570	1400	1460
20	1160	1090	1120	1410	1320	1360	2370	2340	2350	1700	1520	1600
21	1110	1080	1090	1470	1420	1450	2580	2380	2490	1700	1270	1460
22	1080	1020	1040	1510	1470	1490	2830	2600	2760	1360	1080	1240
23	1020	900	965	1600	1510	1550	3090	2820	2940	1310	1060	1200
24	960	760	848	1630	1590	1610	3980	3120	3570	1280	1060	1170
25	980	950	963	1640	1610	1620	4790	4020	4380	1260	1060	1160
26	950	890	929	1660	1510	1600	4980	3150	3810	1210	1060	1130
27	900	850	872	1790	1660	1740	2790	1140	1600	1200	1060	1120
28	960	840	880	1970	1790	1900	1290	1000	1120	1220	1060	1140
29	1250	950	1080	1980	1950	1960	1160	933	1000	1220	1060	1150
30	1130	1000	1060	1990	1950	1970	1040	917	952	1240	1060	1140
31	1000	920	954	---	---	---	1050	927	963	1240	1060	1160
MONTH	2120	760	1190	1990	810	1360	4980	917	2220	1700	940	1220

CARSON RIVER BASIN

10312210 STILLWATER DIVERSION CANAL NEAR FALLON, NV--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1320	1060	1170	2580	2460	2520	3480	2910	3310	2430	1890	2240
2	1310	1130	1210	2680	2520	2590	3550	3260	3400	1870	1790	1830
3	1920	1120	1420	2930	2630	2720	3510	3210	3370	1780	1700	1770
4	2570	2030	2400	2920	2800	2860	3490	3190	3310	1690	1620	1650
5	2530	2400	2480	3230	2800	2980	3330	3090	3230	1620	1470	1570
6	2960	2790	2900	3320	2360	2810	3350	2840	3110	1470	1380	1430
7	2970	2760	2880	3030	2140	2690	3320	2820	3000	1380	1160	1330
8	2860	2620	2740	3080	2810	2940	3370	2260	2790	1110	970	1040
9	2880	2680	2820	3430	2810	3130	3450	3100	3290	960	881	920
10	2890	2660	2810	3600	3120	3360	3400	2880	3130	1100	892	954
11	2930	2680	2830	3320	2690	3070	3210	2900	3050	1250	1050	1150
12	2910	2650	2790	2770	2070	2490	3060	2810	2940	1150	735	886
13	2800	2540	2700	3080	2620	2930	3050	2720	2930	1080	816	927
14	2790	2530	2670	3500	3120	3420	3540	3030	3310	1250	988	1160
15	2730	2600	2670	3560	3110	3290	3570	3310	3460	1830	1180	1530
16	2780	2630	2710	3400	3170	3300	3530	3260	3410	1820	1550	1720
17	2890	2720	2800	3400	3300	3360	3450	3300	3380	1660	1480	1550
18	2890	2730	2810	3540	3390	3440	3370	3250	3310	1660	1490	1570
19	2820	2650	2730	3640	3230	3440	3350	3170	3260	1730	1580	1650
20	2790	2570	2670	3450	3210	3330	3420	3310	3350	1630	1470	1580
21	2690	2430	2560	3530	3320	3410	3350	3250	3320	1680	1400	1490
22	2630	2400	2530	3510	3330	3440	3330	3210	3270	1690	1470	1590
23	2730	2520	2640	3560	3400	3480	3210	3100	3160	1950	1560	1810
24	2770	2540	2690	3530	3020	3290	3300	3090	3210	2220	1860	1990
25	2800	2540	2670	3090	2910	2980	3250	3180	3220	2630	2230	2420
26	2740	2500	2630	3470	2870	3190	3180	3100	3130	2660	2290	2500
27	2680	2520	2600	3840	3480	3650	3090	3000	3040	2380	1590	1870
28	2580	2520	2570	3820	3510	3640	3010	2870	2930	1900	1620	1760
29	---	---	---	3660	3040	3330	2870	2660	2760	2300	1690	1980
30	---	---	---	3400	3070	3230	2640	2450	2540	2330	2220	2260
31	---	---	---	3370	3050	3220	---	---	---	2350	2170	2280
MONTH	2970	1060	2540	3840	2070	3150	3570	2260	3160	2660	735	1630

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	2440	2210	2350	1960	1850	1910	1330	1300	1320	1310	1250	1280
2	2430	2190	2260	1930	1820	1860	1380	1290	1330	1330	1260	1290
3	2220	2150	2180	1820	1740	1780	1370	1340	1350	1320	1290	1300
4	2180	2050	2140	1770	1660	1710	1350	1310	1330	1310	1270	1300
5	2020	1810	1940	1660	1610	1640	1360	1310	1340	1310	1280	1300
6	1790	1700	1740	1630	1550	1610	1350	1310	1340	1300	1270	1290
7	1820	1720	1760	1660	1550	1600	1340	1310	1330	1320	1270	1290
8	1860	1680	1760	1660	1580	1640	1350	1300	1330	1320	1290	1310
9	1830	1750	1790	1660	1610	1640	1340	1310	1330	1320	1290	1300
10	1930	1780	1840	1650	1600	1630	1330	1300	1330	1320	1300	1300
11	2060	1920	1970	1630	1580	1610	1330	1300	1320	1360	1130	1310
12	2100	2010	2060	1610	1570	1600	1330	1300	1310	1470	1360	1420
13	2060	1900	1970	1600	1560	1580	1320	1290	1310	1480	1430	1460
14	2070	1870	1950	1570	1540	1560	1310	1280	1300	1490	1450	1480
15	2130	2080	2110	1540	1490	1510	1310	1290	1300	1480	1460	1470
16	2170	1890	2000	1500	1450	1480	1320	1280	1300	1500	1450	1470
17	1910	1780	1830	1480	1440	1460	1330	1280	1310	1490	1450	1470
18	1780	1170	1280	1460	1420	1440	1320	1280	1310	---	---	1470
19	1810	1040	1350	1440	1410	1420	1310	1280	1310	---	---	---
20	1840	1120	1350	1430	1390	1410	1300	1280	1300	---	---	---
21	1780	1110	1280	1420	1380	1400	1320	1280	1300	---	---	---
22	2140	1820	1970	1420	1370	1390	1340	1290	1310	---	---	---
23	2330	2160	2260	1420	1370	1390	1340	1300	1310	---	---	---
24	2280	2120	2190	1410	1340	1370	1320	1290	1310	---	---	---
25	2170	2010	2100	1390	1350	1370	1330	1290	1310	---	---	---
26	2050	1950	2000	1390	1340	1370	1320	1300	1310	---	---	---
27	1950	1900	1930	1390	1340	1360	1310	1290	1300	---	---	---
28	1930	1870	1900	1380	1340	1370	1340	1280	1300	---	---	---
29	1880	1850	1860	1380	1340	1360	1320	1290	1300	---	---	---
30	1870	1820	1840	1370	1340	1350	1310	1280	1300	---	---	---
31	---	---	---	1340	1320	1330	1300	1280	1290	---	---	---
MONTH	2440	1040	1900	1960	1320	1520	1380	1280	1310	---	---	---

CARSON RIVER BASIN

163

10312210 STILLWATER DIVERSION CANAL NEAR FALLON, NV--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	12.0	10.5	11.5	4.0	2.5	3.0	.0	.0	.0
2	---	---	---	10.5	9.0	10.0	4.0	2.0	3.0	.0	.0	.0
3	---	---	---	9.0	7.0	8.5	4.0	2.0	3.0	.0	.0	.0
4	---	---	---	9.0	6.5	8.0	4.0	2.5	3.0	.0	.0	.0
5	---	---	---	9.5	8.0	8.5	4.5	3.0	3.5	.0	.0	.0
6	---	---	---	9.5	7.5	8.5	4.0	2.5	3.5	.0	.0	.0
7	---	---	---	8.0	6.5	7.5	3.5	2.0	3.0	.0	.0	.0
8	---	---	---	8.5	6.5	7.5	3.5	2.0	3.0	.0	.0	.0
9	---	---	---	9.0	7.0	8.0	3.5	2.0	2.5	.0	.0	.0
10	---	---	---	9.5	7.0	8.5	3.5	2.0	3.0	.0	.0	.0
11	---	---	---	8.5	7.0	8.0	3.5	3.0	3.0	.0	.0	.0
12	---	---	---	8.5	6.5	7.5	4.5	3.0	3.5	.0	.0	.0
13	---	---	---	7.5	6.0	7.0	4.0	3.0	3.5	.0	.0	.0
14	---	---	---	8.0	6.5	7.5	4.0	2.5	3.5	.0	.0	.0
15	---	---	---	8.5	7.5	8.0	3.0	2.0	2.5	.0	.0	.0
16	18.0	15.5	16.5	7.5	6.5	7.0	2.5	1.5	2.0	.0	.0	.0
17	16.5	13.5	15.0	8.0	6.0	7.0	2.5	1.5	2.0	.0	.0	.0
18	15.0	14.5	14.5	8.0	6.5	7.5	2.5	1.5	2.0	.5	.0	.5
19	14.5	13.0	14.0	7.5	7.0	7.5	2.0	1.5	1.5	.5	.5	.5
20	13.5	12.0	13.0	7.5	6.5	7.0	2.0	1.5	1.5	.5	.5	.5
21	13.0	11.5	12.0	6.5	5.0	6.0	1.5	1.5	1.5	.5	.5	.5
22	13.5	11.5	12.5	6.0	4.5	5.5	1.5	1.0	1.5	.5	.5	.5
23	14.0	13.5	14.0	5.5	4.0	5.0	1.0	1.0	1.0	.5	.5	.5
24	14.5	13.5	14.0	5.5	3.5	4.5	1.0	.5	1.0	.5	.5	.5
25	15.0	14.0	14.5	5.0	3.0	4.0	.5	.5	.5	.5	.5	.5
26	15.0	14.0	14.5	4.5	3.0	4.0	.5	.0	.5	.5	.5	.5
27	14.5	13.5	14.0	4.0	2.5	3.0	.0	.0	.0	.5	.5	.5
28	14.5	13.0	13.5	3.5	2.5	3.0	.0	.0	.0	.5	.5	.5
29	14.5	13.0	13.5	3.0	2.0	2.5	.0	.0	.0	.5	.5	.5
30	14.5	12.5	13.5	4.0	2.5	3.0	.0	.0	.0	.5	.5	.5
31	13.5	12.0	13.0	---	---	---	.0	.0	.0	.5	.5	.5
MONTH	---	---	---	12.0	2.0	6.7	4.5	.0	2.0	.5	.0	.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.0	.5	.5	11.0	7.5	9.0	14.5	10.0	11.5	16.5	10.0	13.5
2	1.0	.5	1.0	10.5	5.5	8.0	16.0	8.0	11.5	13.5	9.5	12.0
3	3.0	.5	1.5	11.5	6.0	8.0	17.5	8.0	12.5	16.0	9.0	12.5
4	3.5	1.0	1.5	11.0	8.0	9.0	17.5	10.0	13.0	19.5	9.5	14.5
5	4.0	1.0	2.0	9.5	5.0	7.5	18.0	10.0	14.0	20.5	11.5	16.0
6	5.0	1.0	2.5	12.0	2.0	6.5	15.5	9.0	12.5	22.0	14.5	18.0
7	6.0	1.5	3.5	12.5	2.0	7.0	17.0	7.0	11.0	22.0	14.0	18.0
8	7.5	2.5	4.5	12.5	2.5	7.5	18.0	5.5	11.5	20.0	14.5	17.0
9	7.0	2.0	4.5	12.0	4.5	8.0	15.5	7.5	12.0	15.5	9.5	12.5
10	7.5	2.5	5.0	11.5	4.0	7.5	14.0	6.0	9.5	16.0	8.5	12.0
11	7.0	2.5	5.0	13.0	4.5	8.0	13.0	4.0	8.0	16.5	8.5	12.5
12	7.5	2.5	5.0	11.5	4.0	7.5	13.5	6.5	9.5	19.5	10.0	15.0
13	8.5	4.5	6.5	9.5	6.0	7.5	18.5	6.0	12.0	16.5	13.0	14.5
14	9.5	5.0	7.0	12.0	5.5	8.0	18.0	7.5	12.5	17.0	12.0	14.0
15	8.5	5.5	7.0	7.5	5.0	6.5	15.0	8.0	11.5	21.0	11.0	15.5
16	10.5	7.0	8.5	13.0	4.5	8.0	16.0	6.5	11.0	19.5	13.5	16.5
17	10.0	6.5	8.5	9.5	6.0	7.5	16.0	7.5	11.5	16.0	11.0	13.0
18	10.0	5.5	7.5	9.5	5.0	7.0	17.0	8.0	12.5	12.5	9.5	11.0
19	10.0	5.5	7.5	11.0	5.5	7.5	17.5	9.0	13.0	18.0	9.0	13.5
20	10.5	5.5	8.0	7.5	4.5	6.0	15.0	11.0	12.5	15.0	12.5	13.5
21	10.0	6.0	8.0	9.0	4.0	6.5	18.0	8.5	13.0	21.0	11.5	15.5
22	11.5	5.5	8.0	11.0	5.5	8.5	17.5	10.0	13.5	22.0	14.5	18.5
23	12.0	5.5	8.0	12.5	7.0	9.5	19.5	11.5	15.0	24.0	16.5	20.0
24	11.0	4.5	7.5	14.0	7.0	10.5	16.5	12.0	14.0	24.5	17.5	21.0
25	11.0	5.0	7.5	10.5	6.0	8.5	13.0	9.5	11.5	25.0	17.0	20.5
26	11.0	5.5	8.0	11.5	5.0	7.5	14.0	8.5	11.0	24.0	15.0	18.5
27	10.0	5.5	7.5	14.0	6.0	9.5	16.0	8.0	12.0	23.0	13.5	18.0
28	12.0	7.0	9.5	14.5	6.5	10.0	17.0	8.0	13.0	23.5	14.0	18.0
29	---	---	---	15.0	7.0	10.5	18.0	10.5	14.0	20.0	13.5	16.5
30	---	---	---	16.5	6.5	11.0	17.0	9.0	13.0	16.5	12.0	15.0
31	---	---	---	16.5	8.5	12.0	---	---	---	20.5	10.5	15.0
MONTH	12.0	.5	5.7	16.5	2.0	8.2	19.5	4.0	12.1	25.0	8.5	15.5

CARSON RIVER BASIN

10312210 STILLWATER DIVERSION CANAL NEAR FALLON, NV--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.0	13.0	18.0	27.0	19.0	23.0	29.5	20.5	24.5	26.0	17.5	21.5
2	23.5	16.5	20.0	28.0	20.0	24.0	29.0	20.5	24.5	26.0	17.5	22.0
3	25.5	19.0	22.0	29.0	21.5	25.0	29.0	21.5	25.0	25.0	18.0	21.5
4	24.5	19.0	21.5	29.5	21.5	25.5	28.5	19.5	23.5	25.0	17.5	21.5
5	22.5	15.5	19.0	30.5	23.0	26.0	27.5	18.5	23.0	25.0	17.5	21.5
6	22.5	15.0	19.0	29.5	22.0	25.0	28.0	19.0	23.5	24.5	19.0	21.5
7	24.0	16.5	20.5	27.0	21.0	24.0	27.0	19.0	23.0	25.0	19.0	21.5
8	25.0	18.0	21.5	28.0	20.5	24.0	28.0	18.5	23.0	23.0	17.5	20.5
9	26.5	19.0	22.5	27.5	21.0	24.0	28.5	19.5	23.5	19.5	15.5	17.0
10	27.0	20.0	23.5	28.0	20.5	24.0	24.5	19.0	22.5	17.5	13.5	15.0
11	28.5	21.5	24.5	27.5	21.0	24.0	27.5	17.5	22.5	20.5	13.0	16.5
12	29.0	20.5	24.0	28.5	21.5	25.0	26.5	19.0	23.0	21.0	13.5	17.5
13	27.0	18.5	22.0	29.5	22.0	26.0	28.0	20.5	24.0	21.5	14.5	18.0
14	24.5	17.5	21.0	29.0	21.5	25.5	26.5	21.0	23.5	22.0	15.5	18.5
15	24.5	16.5	20.5	28.5	20.5	24.5	27.0	20.5	23.5	19.5	14.0	17.0
16	26.0	18.0	21.5	28.5	20.0	24.0	28.5	19.5	24.0	20.5	13.5	16.5
17	27.0	17.5	22.0	28.0	19.5	24.0	28.5	20.0	24.5	21.5	13.5	17.0
18	27.0	18.0	22.0	29.0	20.0	24.0	28.5	20.5	24.5	22.0	14.5	18.5
19	24.0	16.0	19.5	28.5	20.5	24.0	27.5	20.0	24.0	22.5	15.0	19.0
20	27.0	14.5	20.5	27.0	19.0	23.0	28.0	20.0	24.0	22.5	15.0	19.0
21	26.5	15.5	20.5	28.0	19.0	23.0	28.0	20.5	24.0	20.5	15.5	18.0
22	26.0	15.5	20.5	28.5	21.0	24.5	28.5	20.0	24.0	19.0	13.0	16.0
23	24.0	17.5	20.5	29.5	21.0	25.0	27.5	19.5	23.5	19.0	12.5	15.5
24	24.5	16.0	20.0	28.5	21.0	25.0	26.0	18.5	22.5	19.0	12.5	15.5
25	26.0	18.0	21.0	29.0	21.0	25.0	27.5	19.0	23.0	20.0	12.0	16.0
26	25.0	17.0	20.5	29.0	20.5	25.0	26.0	20.0	23.0	20.5	14.0	16.0
27	20.5	17.5	19.0	29.5	21.0	25.0	23.5	19.0	21.0	21.5	14.0	17.5
28	20.5	17.0	18.0	30.0	21.5	25.5	22.5	14.5	18.5	21.5	12.0	17.0
29	22.5	15.5	19.0	30.0	22.0	26.0	24.0	15.0	19.5	21.0	12.5	16.0
30	25.5	16.0	20.5	29.5	22.0	26.0	25.5	17.0	21.0	21.0	14.0	17.0
31	---	---	---	28.0	22.5	25.0	26.0	17.5	22.0	---	---	---
MONTH	29.0	13.0	20.8	30.5	19.0	24.6	29.5	14.5	23.1	26.0	12.0	18.2

CARSON RIVER BASIN

165

1031221902 S-LINE DIVERSION CANAL NEAR STILLWATER, NV

LOCATION.--Lat 39°22'01", long 118°31'06", in NE 1/4 NE 1/4 sec.8, T.19 N., R.31 E., Churchill County, Hydrologic Unit 16050203, on left bank, off Hunter Road, 250 ft above confluence with West Canal, 1.5 mi north of U.S.F.W.S. Stillwater Headquarters, and 2 mi northeast of Stillwater.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to September 1991.

GAGE.--Water-stage recorder. Elevation of gage is 3,880 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 30 ft³/s, Sept. 13-15, 1991; no flow some days each month.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	.00	.00	.75	21
2	---	---	---	---	---	---	---	---	.00	.00	.08	17
3	---	---	---	---	---	---	---	---	.00	.00	.07	15
4	---	---	---	---	---	---	---	---	.62	.00	.02	17
5	---	---	---	---	---	---	---	---	22	.00	.00	22
6	---	---	---	---	---	---	---	---	17	.00	.00	14
7	---	---	---	---	---	---	---	---	5.2	.00	.00	15
8	---	---	---	---	---	---	---	---	.00	.00	.00	17
9	---	---	---	---	---	---	---	---	.00	.00	.00	21
10	---	---	---	---	---	---	---	---	.00	.00	.00	19
11	---	---	---	---	---	---	---	---	.00	.00	.00	15
12	---	---	---	---	---	---	---	---	.00	.00	.00	14
13	---	---	---	---	---	---	---	---	.00	.00	.00	30
14	---	---	---	---	---	---	---	---	.00	.05	.00	30
15	---	---	---	---	---	---	---	---	.00	6.0	.00	30
16	---	---	---	---	---	---	---	---	.00	14	7.3	29
17	---	---	---	---	---	---	---	---	.00	13	12	28
18	---	---	---	---	---	---	---	---	.00	12	13	29
19	---	---	---	---	---	---	---	---	.00	14	12	29
20	---	---	---	---	---	---	---	---	4.1	23	14	28
21	---	---	---	---	---	---	---	---	16	27	19	29
22	---	---	---	---	---	---	---	---	15	28	16	16
23	---	---	---	---	---	---	---	---	14	31	14	.59
24	---	---	---	---	---	---	---	.00	15	23	14	.00
25	---	---	---	---	---	---	---	.00	16	28	19	.00
26	---	---	---	---	---	---	---	.00	15	20	21	.00
27	---	---	---	---	---	---	---	.00	15	21	20	.00
28	---	---	---	---	---	---	---	.00	9.6	22	16	.00
29	---	---	---	---	---	---	---	.00	4.1	20	14	.00
30	---	---	---	---	---	---	---	.00	.00	25	18	.00
31	---	---	---	---	---	---	---	.00	---	16	21	---
TOTAL	---	---	---	---	---	---	---	---	168.62	343.05	251.22	485.59
MEAN	---	---	---	---	---	---	---	---	5.62	11.1	8.10	16.2
MAX	---	---	---	---	---	---	---	---	22	31	21	30
MIN	---	---	---	---	---	---	---	---	.00	.00	.00	.00
AC-FT	---	---	---	---	---	---	---	---	334	680	498	963

1031221902 S-LINE DIVERSION CANAL NEAR STILLWATER, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE.--June to September 1991.

WATER TEMPERATURE.--June to September 1991

INSTRUMENTATION.--Water-quality monitor since June 1991, hourly.

REMARKS.--Records represent water temperature at probe within 0.5°C. Interruptions in record due to instrument malfunction and periods of no flow, each month.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE.--Maximum recorded, 653 microsiemens, Sept. 22, 1991; minimum recorded, 418 microsiemens, Sept. 10, 1991.

WATER TEMPERATURE.--Maximum recorded, 28.0°C, Aug. 17, 1991; minimum recorded, 16.0°C, Sept. 11, 22, 1991.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE.--Maximum recorded, (more than 20 percent missing record), 653 microsiemens, Sept. 22; minimum recorded, 418 microsiemens, Sept. 10.

WATER TEMPERATURE.--Maximum recorded, (more than 20 percent missing record), 28.0°C, Aug. 17; minimum recorded, 16.0°C, Sept. 11, 22.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

**SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C),
AUGUST TO SEPTEMBER 1991**

TEMPERATURE, WATER (DEG C.),
AUGUST TO SEPTEMBER 1991

[illegible]

CARSON RIVER BASIN

167

10312275 CARSON RIVER AT TARZYN ROAD NEAR FALLON, NV

LOCATION.--Lat 39°33'32", long 118°43'30", in NE 1/4 NE 1/4 sec.33, T.19 N., R.29 E., Churchill County,
Hydrologic Unit 16050203, on right bank, 7 mi north-northeast of Fallon.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,900 ft above National Geodetic Vertical Datum of 1929, from
topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected by
irrigation development above station (Newlands Project) and by storage in Lahontan Reservoir (station
10312100), capacity, 295,100 acre-ft.

AVERAGE DISCHARGE.--6 years, 30.6 ft³/s, 22,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 753 ft³/s, June 4, 1986, gage height, 5.22 ft; minimum daily,
1.2 ft³/s, December 23 and 24, 1990, but may have been less during periods of estimated daily discharge.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31 ft³/s, July 15, gage height, 2.28 ft; minimum daily, 1.2 ft³/s,
Dec. 23, 24, but may have been less during periods of estimated daily discharge.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	3.0	3.1	e1.6	e3.3	2.3	2.3	3.9	2.7	2.8	3.5	9.5
2	4.7	3.0	3.1	e1.6	2.3	2.1	2.2	4.2	2.9	2.3	3.8	9.8
3	4.5	2.9	3.0	e1.8	3.0	2.0	2.4	3.7	3.0	2.0	3.7	16
4	4.6	3.3	2.9	e2.0	2.5	2.0	2.4	3.4	3.0	3.1	3.7	16
5	4.6	e3.4	2.9	e1.8	2.4	1.9	2.3	3.4	4.9	2.8	3.7	11
6	4.4	e3.5	2.9	e1.9	2.2	1.8	2.3	3.3	4.1	2.3	6.6	6.3
7	4.4	3.6	2.8	e1.9	2.1	1.9	2.2	5.0	8.3	2.6	25	5.8
8	4.3	3.0	e2.7	e1.9	2.1	1.9	2.1	6.4	12	4.0	14	5.5
9	4.4	3.1	e2.6	e1.9	2.1	1.8	2.2	3.5	15	2.7	14	5.4
10	4.4	3.1	e2.5	e2.0	2.1	1.8	2.2	3.6	15	2.4	15	5.2
11	4.4	3.1	e2.5	e2.1	e2.3	1.7	2.2	11	13	2.4	19	5.0
12	4.5	3.2	e2.5	2.2	e2.2	1.8	2.1	14	8.4	2.4	23	5.6
13	4.4	5.8	2.5	2.2	2.2	1.8	2.2	11	6.8	11	22	5.4
14	4.4	6.4	2.6	e2.3	2.2	1.8	2.0	12	3.4	16	20	5.3
15	4.3	3.9	e2.6	e2.3	2.2	1.8	2.0	5.9	4.0	27	15	5.2
16	4.3	3.4	2.6	2.4	2.2	1.9	2.0	4.4	4.5	25	10	5.0
17	4.2	3.4	2.6	2.4	2.2	1.7	2.0	3.4	4.3	23	11	5.0
18	4.5	3.3	2.6	3.2	2.1	1.7	2.0	2.9	4.6	3.0	12	4.9
19	3.5	3.2	e2.6	2.6	2.1	1.7	2.0	2.8	7.2	2.4	9.4	4.7
20	3.3	3.3	e2.3	2.7	2.1	1.6	2.0	2.9	5.6	3.3	10	4.5
21	4.0	3.2	e2.0	e2.5	2.1	1.9	2.0	8.2	6.1	2.9	8.2	4.1
22	7.3	3.1	e1.5	e2.8	2.1	1.7	2.0	10	5.0	3.4	12	3.9
23	4.0	3.1	e1.2	3.1	2.1	1.7	2.0	11	7.5	2.8	11	3.7
24	3.2	3.1	e1.2	3.3	2.4	1.8	2.1	3.6	7.4	3.3	9.5	3.6
25	3.1	3.1	e1.3	3.3	2.4	1.9	2.5	2.9	3.4	3.9	7.9	3.4
26	3.3	3.1	e1.3	2.9	2.3	1.8	3.0	2.4	2.7	4.1	7.7	3.2
27	3.3	3.2	e1.3	2.8	2.3	1.8	3.1	2.5	3.5	4.4	7.3	2.8
28	3.2	3.2	e1.7	2.9	2.3	1.8	3.3	2.4	3.9	4.0	7.1	2.7
29	3.1	3.1	e1.5	2.7	---	1.9	3.5	2.3	3.4	3.9	9.3	2.6
30	3.6	3.2	e1.4	3.0	---	2.0	4.1	4.1	3.2	3.8	9.3	2.4
31	3.9	---	e1.5	2.3	---	2.1	---	2.6	---	3.6	8.7	---
TOTAL	129.1	102.3	69.8	74.4	63.9	57.4	70.7	162.7	178.8	182.6	342.4	173.5
MEAN	4.16	3.41	2.25	2.40	2.28	1.85	2.36	5.25	5.96	5.89	11.0	5.78
MAX	7.3	6.4	3.1	3.3	3.3	2.3	4.1	14	15	27	25	16
MIN	3.1	2.9	1.2	1.6	2.1	1.6	2.0	2.3	2.7	2.0	3.5	2.4
AC-FT	256	203	138	148	127	114	140	323	355	362	679	344

CAL YR 1990 TOTAL 2371.4 MEAN 6.50 MAX 39 MIN 1.2 AC-FT 4700
WTR YR 1991 TOTAL 1607.6 MEAN 4.40 MAX 27 MIN 1.2 AC-FT 3190

e Estimated

CARSON RIVER BASIN

10312277 PAIUTE DRAIN BELOW TJ DRAIN NEAR STILLWATER, NV

LOCATION.--Lat 39°36'38", long 118°33'04", in SW 1/4 SW 1/4 sec.7, T.20 N., R.31 E., Churchill County, Hydrologic Unit 16050203, on right bank, 6 mi north of Stillwater.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1990 to September 1991.

GAGE.--Water-stage recorder. Elevation of gage is 3,880 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor. Flow in canal is return flow from irrigated lands and ground water inflows from Fallon Indian Reservation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40 ft³/s, Nov. 1, 1990, gage height, 16.26 ft; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 40 ft³/s, Nov. 1, gage height, 16.26 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	40	.74	e.00	e.00	e.01	e.22	e.40	e.92	4.5	1.6	3.5
2	1.8	39	.71	e.00	e.00	e.01	e.22	e.40	e1.8	3.4	1.3	2.6
3	1.8	10	.74	e.00	e.00	e.01	e.23	e1.7	e1.7	4.8	1.8	1.8
4	1.7	2.3	.69	e.00	e.00	e.01	e.23	e.76	6.2	3.7	2.3	.85
5	1.5	2.4	.57	e.00	e.05	e.01	e.24	e1.4	e1.0	3.6	2.4	.43
6	1.4	3.3	e.44	e.00	e.08	e.02	e.24	e.73	e.87	2.7	1.0	.62
7	1.2	3.5	e.66	e.00	e.10	e.02	e.25	e.55	6.5	e1.1	.39	.68
8	1.2	2.6	e.45	e.00	e.08	e.02	e.25	e1.2	9.4	e.83	e.32	.61
9	1.2	2.0	e.44	e.00	e.05	e.02	e.26	e1.3	12	e.76	e.26	1.1
10	1.1	1.8	e.63	e.00	e.03	e.02	e.26	e2.2	8.9	e.44	e2.4	1.8
11	1.0	1.7	e.47	e.00	e.01	e.03	e.27	e2.3	7.5	e.34	9.2	.67
12	1.0	1.6	e.34	e.00	e.00	e.04	e.27	3.9	6.4	e9.2	5.2	.41
13	.93	1.6	e.26	e.00	e.00	e.05	e.28	2.4	8.7	12	1.8	.41
14	.60	1.4	e.71	e.00	e.00	e.07	e.28	4.2	3.6	3.5	2.3	1.5
15	.34	1.9	.74	e.05	e.00	e.09	e.29	e2.3	e2.0	6.0	1.5	1.2
16	1.3	1.7	.92	e.08	e.00	e.10	e.29	e1.1	e1.0	5.3	5.6	.58
17	.98	1.4	.57	e.10	e.00	e.11	e.30	e.88	e.71	e1.0	2.7	.48
18	.51	1.0	.64	e.20	e.00	e.12	e.31	e1.8	e.75	e.44	1.8	.51
19	1.1	.86	.50	e.10	e.00	e.13	e.32	4.8	e3.2	e.41	1.1	1.8
20	10	.94	e.25	e.20	e.00	e.14	e.32	e2.6	e.82	e.36	.93	2.1
21	12	.88	e.13	e.10	e.00	e.15	e.33	e.60	e.73	e.31	3.9	6.3
22	10	.77	e.06	e.08	e.00	e.16	e.33	e.47	e.80	e.31	6.5	2.9
23	9.3	.69	e.03	e.06	e.00	e.17	e.34	e.30	e.91	e.63	2.1	2.0
24	14	.76	e.02	e.04	e.00	e.18	e.34	e.20	e1.1	e.49	1.7	2.0
25	12	.71	e.01	e.04	e.00	e.18	e.35	e.13	4.2	e.38	3.4	1.3
26	14	.75	e.00	e.02	e.00	e.19	e.36	e.10	e1.4	e.35	6.5	.76
27	13	1.1	e.00	e.02	e.00	e.20	e.37	e.09	e1.8	e.30	9.4	.52
28	15	1.1	e.00	e.00	e.00	e.20	e.37	e.09	3.7	e.24	16	.39
29	19	.79	e.00	e.00	---	e.21	e.38	e.10	e2.1	e.21	8.6	.28
30	28	.75	e.00	e.00	---	e.21	e.39	e.14	e2.5	.75	2.1	.26
31	37	---	e.00	e.00	---	e.22	---	e1.1	---	e.43	1.3	---
TOTAL	216.06	129.30	11.72	1.09	0.40	3.10	8.89	40.24	103.21	68.78	107.40	40.36
MEAN	6.97	4.31	.38	.035	.014	.10	.30	1.30	3.44	2.22	3.46	1.35
MAX	37	40	.92	.20	.10	.22	.39	4.8	12	12	16	6.3
MIN	.34	.69	.00	.00	.00	.01	.22	.09	.71	.21	.26	.26
AC-FT	429	256	23	2.2	.8	6.1	18	80	205	136	213	80

WTR YR 1991 TOTAL 730.55 MEAN 2.00 MAX 40 MIN .00 AC-FT 1450

e Estimated

169

WATER-QUALITY RECORDS

WATER TEMPERATURE.--Maximum recorded, 36.5°C, July 28; minimum recorded, freezing point, on many days during Nov. and Dec.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

[illegible]

10312277 PAIUTE DRAIN BELOW TJ DRAIN NEAR STILLWATER, NV--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	2200	1800	1940	4800	4400	4580	2700	2490	2670
2	---	---	---	2200	2000	2120	4570	4370	4550	2670	2460	2650
3	---	---	---	2200	2000	2170	4540	4340	4460	2650	2430	2620
4	---	---	---	2200	2000	2070	4510	4310	4320	2620	2400	2570
5	6500	4900	5550	2000	2000	2000	4280	4080	4250	---	---	---
6	9110	5910	7750	2200	2000	2000	4250	4050	4120	---	---	---
7	10500	2310	5700	2600	2000	2240	4020	4020	4020	---	---	---
8	2920	1920	2370	4200	2600	3370	4200	4000	4040	---	---	---
9	1920	1320	1590	4400	4200	4240	4370	3970	4190	---	---	---
10	1330	1120	1270	5800	4400	5260	4540	4340	4410	---	---	---
11	1330	1130	1200	6400	5800	6210	4710	4510	4550	---	---	---
12	1340	1130	1260	6600	6200	6450	4680	4480	4600	8810	7800	8260
13	1940	1140	1500	6600	6200	6460	4650	4450	4580	9810	8910	9280
14	1140	1140	1150	6200	6000	6140	4620	4420	4450	9910	9610	9760
15	1950	1150	1570	5800	5400	5680	4390	4190	4380	9610	8420	8930
16	2750	1950	2370	5400	4800	5080	4360	4160	4180	8520	8120	8300
17	5160	2550	3760	4800	4400	4580	4130	3930	4080	8220	7720	7960
18	7160	5160	6380	4400	4200	4330	3900	3900	3900	7730	6530	7140
19	8160	6770	7510	---	---	---	3870	3670	3800	6530	3230	4890
20	6770	6170	6560	---	---	---	3840	3640	3660	3230	2940	3110
21	6170	5770	6020	---	---	---	3610	3610	3610	2740	1840	2050
22	7180	5780	6470	3800	3600	3790	---	---	---	2250	1940	2080
23	6980	6580	6700	3800	3600	3710	---	---	---	3550	2450	2760
24	7190	6780	6920	3800	3600	3700	---	---	---	4150	3650	3940
25	7390	6790	7150	3800	3600	3740	3110	3080	3020	4860	3950	4430
26	7190	6600	6950	3800	3600	3780	3080	3050	3070	7660	4860	6380
27	6600	5600	5970	---	---	---	3050	2820	2980	8560	7060	7700
28	5800	5000	5520	---	---	---	3020	2790	2840	8470	7870	8100
29	5000	3600	4300	4400	4200	4280	2790	2760	2780	8770	7870	8210
30	3800	1800	3280	4600	4200	4450	2760	2540	2710	9180	8770	8910
31	---	---	---	4600	4400	4520	2730	2520	2690	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

171

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	---	---	---	5.0	.0	1.0	---	---	---
2	---	---	---	---	---	---	4.0	.0	1.0	---	---	---
3	---	---	---	---	---	---	3.0	.0	.5	---	---	---
4	---	---	---	---	---	---	4.5	.0	1.5	---	---	---
5	---	---	---	---	---	---	7.5	.0	2.0	---	---	---
6	---	---	---	---	---	---	4.5	.0	1.0	---	---	---
7	---	---	---	---	---	---	2.0	.0	.0	---	---	---
8	---	---	---	---	---	---	1.5	.0	.0	---	---	---
9	---	---	---	---	---	---	1.5	.0	.0	---	---	---
10	---	---	---	---	---	---	2.5	.0	.5	---	---	---
11	---	---	---	---	---	---	4.0	1.5	2.5	---	---	---
12	---	---	---	---	---	---	7.5	1.0	3.0	---	---	---
13	---	---	---	---	---	---	4.5	.0	2.0	---	---	---
14	---	---	---	---	---	---	3.0	.0	.5	---	---	---
15	---	---	---	---	---	---	.0	.0	.0	.5	.5	.5
16	22.5	13.0	17.0	---	---	---	.5	.0	.0	.5	.5	.5
17	21.5	8.0	14.0	---	---	---	2.0	.0	.5	.5	.5	.5
18	16.0	12.0	14.0	---	---	---	2.0	.0	.5	.5	.5	.5
19	19.5	11.5	14.5	---	---	---	.5	.0	.0	.5	.5	.5
20	17.0	8.5	12.5	---	---	---	.0	.0	.0	1.0	.5	.5
21	17.0	8.5	12.5	---	---	---	---	---	---	1.0	.5	.5
22	19.5	11.0	15.0	---	---	---	---	---	---	.5	.5	.5
23	19.0	8.5	14.5	---	---	---	---	---	---	1.0	.5	.5
24	---	---	---	7.0	.0	2.0	---	---	---	2.0	1.0	1.0
25	---	---	---	5.0	.0	1.5	---	---	---	2.0	1.0	1.0
26	---	---	---	5.0	.0	1.0	---	---	---	---	---	---
27	---	---	---	2.5	.0	.0	---	---	---	---	---	---
28	---	---	---	2.0	.0	.0	---	---	---	---	---	---
29	---	---	---	.5	.0	.0	---	---	---	---	---	---
30	---	---	---	6.5	.0	1.5	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	23.0	5.0	13.0
4	---	---	---	---	---	---	---	---	---	27.5	3.5	14.5
5	---	---	---	---	---	---	---	---	---	26.0	8.0	16.0
6	2.5	1.5	1.5	---	---	---	---	---	---	28.5	10.0	17.0
7	4.0	1.5	2.0	---	---	---	---	---	---	26.5	7.5	17.0
8	10.5	1.5	4.0	---	---	---	---	---	---	22.5	9.0	14.5
9	11.5	1.5	4.5	---	---	---	---	---	---	18.0	5.0	10.5
10	12.5	1.5	4.5	---	---	---	---	---	---	17.0	2.5	10.0
11	10.5	1.5	4.5	---	---	---	---	---	---	21.5	7.5	13.0
12	---	---	---	---	---	---	---	---	---	23.5	8.0	15.5
13	---	---	---	---	---	---	---	---	---	16.5	12.0	14.0
14	---	---	---	---	---	---	---	---	---	22.0	9.5	15.0
15	---	---	---	---	---	---	---	---	---	27.0	9.5	17.0
16												

CARSON RIVER BASIN

10312277 PAIUTE DRAIN BELOW TJ DRAIN NEAR STILLWATER, NV--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	29.5	11.0	19.0	30.5	15.0	22.5	32.0	17.5	24.5	29.5	20.0	25.0
2	30.5	10.0	20.0	31.5	16.0	24.0	32.5	20.0	25.5	30.0	22.5	25.5
3	30.0	13.0	22.0	31.5	19.5	25.0	31.0	21.0	25.0	29.0	22.5	25.0
4	27.0	13.0	20.5	31.5	19.5	25.0	31.0	17.5	24.0	29.5	19.5	24.5
5	27.0	8.0	17.0	31.5	20.5	25.5	28.0	17.5	23.0	29.5	19.5	24.5
6	30.5	7.5	18.0	30.5	16.5	23.0	32.0	16.5	23.5	28.5	23.0	25.0
7	28.5	13.0	21.0	31.0	15.5	23.0	32.5	16.5	23.0	28.0	20.5	24.5
8	28.0	17.0	22.0	31.5	15.0	23.0	33.5	16.5	23.5	25.5	19.0	23.0
9	28.5	17.5	23.0	31.5	15.5	22.0	32.5	17.0	23.5	21.0	19.0	20.0
10	30.0	18.0	24.0	34.0	15.0	22.5	27.0	16.0	21.5	21.0	15.5	18.5
11	30.0	20.5	24.5	34.0	15.5	23.0	28.5	17.0	23.0	25.0	16.0	20.5
12	29.0	19.0	23.0	30.0	16.5	23.5	28.5	21.0	24.5	25.5	16.5	20.5
13	28.0	17.0	21.5	31.0	20.0	25.0	31.5	22.0	24.5	25.5	16.5	20.5
14	27.0	13.5	20.0	30.5	16.5	23.5	28.5	21.5	24.0	23.5	17.0	20.0
15	27.5	13.5	20.0	29.5	16.0	22.5	31.5	21.5	24.5	23.0	14.5	18.5
16	27.5	14.5	20.0	29.5	17.0	22.5	28.5	21.5	25.0	24.0	14.5	18.5
17	30.5	13.0	20.5	32.0	15.5	22.5	33.0	22.5	26.0	24.5	15.5	19.5
18	30.5	13.5	20.5	32.0	15.5	23.5	28.5	19.0	24.5	25.0	16.5	20.0
19	24.5	13.0	18.0	32.0	16.0	23.0	31.5	19.0	24.5	25.0	16.5	20.5
20	27.5	9.0	17.5	31.5	15.5	21.5	33.5	18.0	25.0	25.0	17.5	21.0
21	30.5	10.0	19.0	32.5	15.5	23.0	29.5	19.0	25.5	23.0	16.5	19.5
22	31.0	10.5	20.0	32.0	16.0	24.0	29.5	22.0	26.0	21.5	12.0	17.0
23	29.0	12.0	19.0	31.0	16.5	23.5	32.0	19.5	25.0	20.5	13.0	17.0
24	29.0	10.0	18.0	34.5	16.0	24.0	29.0	17.5	23.0	21.0	12.5	17.0
25	27.0	15.5	20.0	32.5	16.0	23.5	33.5	18.0	25.0	23.0	13.5	18.0
26	28.0	12.0	19.0	35.5	16.0	24.5	29.5	23.0	25.5	23.0	15.0	18.5
27	24.0	13.5	17.5	35.5	16.0	24.5	25.0	18.5	23.0	23.5	15.0	18.5
28	21.5	15.5	17.5	36.5	17.0	25.5	25.0	18.0	21.0	23.0	15.0	18.5
29	24.5	14.0	18.5	35.0	17.0	25.0	25.0	18.0	22.0	22.0	13.5	17.5
30	30.5	11.0	21.0	32.5	20.0	25.0	29.5	19.5	24.0	21.5	13.0	17.0
31	---	---	---	31.5	20.0	24.0	30.0	18.5	24.0	---	---	---
MONTH	31.0	7.5	20.0	36.5	15.0	23.6	33.5	16.0	24.1	30.0	12.0	20.4

HUMBOLDT RIVER BASIN

173

10315500 MARYS RIVER ABOVE HOT SPRINGS CREEK, NEAR DEETH, NV

LOCATION.--Lat 41°15'10", long 115°15'20", in NE 1/4 SE 1/4 sec.24, T.39 N., R.59 E., Elko County, Hydrologic Unit 16040101, on right bank, 1 mi upstream from Hot Springs Creek, 7 mi north of Cross Ranch, and 13 mi north of Deeth.

DRAINAGE AREA.--415 mi².

PERIOD OF RECORD.--October 1943 to September 1980, October 1981 to current year. Prior to October 1950, published as "below Hot Springs Creek, near Deeth."

GAGE.--Water-stage recorder. Elevation of gage is 5,500 ft above National Geodetic Vertical Datum of 1929, from river-profile map. Prior to Nov. 3, 1950, at site 1.2 mi downstream at different datum. Nov. 3, 1950, to Sept. 30, 1967, water-stage recorder at datum 1.00 ft higher. Oct. 1, 1967, to Sept. 8, 1982, at site 200 ft downstream at datum, 0.33 ft higher.

REMARKS.--Records good except for periods of estimated daily discharges, which are fair. Several diversions for irrigation of 7,150 acres, Humboldt Decree, above station.

AVERAGE DISCHARGE.--47 years (1944-80, 1982-91), 66.5 ft³/s, 48,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,210 ft³/s, Feb. 12, 1962, gage height, 7.63 ft, from rating curve extended above 1,000 ft³/s on basis of slope-area measurement of peak flow; no flow for part of each day Aug. 27-30, Sept. 2-5, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
June 6	1300	*183	*3.22				
Minimum daily, 0.99 ft ³ /s, Sept. 3, 4.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.1	5.7	4.5	7.1	25	23	50	126	35	1.9	1.2
2	1.5	2.2	5.4	4.6	7.1	26	27	52	116	27	1.8	1.1
3	1.5	2.1	5.1	4.5	7.4	25	31	57	125	23	1.7	.99
4	1.7	2.1	5.4	4.5	7.6	25	35	57	151	22	1.7	.99
5	1.5	2.3	5.3	4.5	8.3	27	36	54	163	20	1.7	1.0
6	1.7	2.0	5.1	4.6	8.9	35	46	54	175	19	1.6	1.1
7	1.7	2.1	5.2	4.5	9.3	30	58	59	160	18	1.5	1.3
8	1.7	2.2	5.1	4.7	9.8	32	58	70	149	16	1.5	1.4
9	1.7	2.3	5.3	4.6	11	31	51	83	149	15	1.5	1.4
10	1.8	2.3	5.4	4.7	12	28	48	90	147	14	1.4	1.6
11	1.8	2.3	6.0	4.8	13	29	46	86	145	11	1.4	1.5
12	1.8	2.4	6.1	4.8	15	28	42	79	145	9.9	1.3	1.5
13	1.9	2.4	6.4	5.2	17	26	42	76	148	8.7	1.2	1.4
14	1.9	2.5	5.8	5.9	18	26	39	80	149	7.6	1.3	1.4
15	2.0	2.5	e5.0	6.9	19	26	37	82	138	7.2	1.4	1.4
16	1.9	2.6	e4.8	6.9	27	25	37	75	122	6.7	1.4	1.4
17	2.0	2.5	e4.7	7.1	26	24	38	80	110	5.8	1.3	1.4
18	1.9	2.5	e4.6	7.9	24	23	38	98	99	5.2	1.2	1.4
19	1.9	2.6	e4.5	8.3	28	23	38	104	83	4.5	1.3	1.4
20	2.0	3.3	e4.5	7.7	24	24	37	100	69	4.0	1.2	1.4
21	2.0	4.2	e4.5	8.5	24	23	40	91	66	3.4	1.1	1.4
22	2.1	4.8	e4.5	8.0	25	22	47	87	63	3.0	1.1	1.4
23	2.1	5.3	e4.5	7.9	25	22	51	98	59	2.7	1.0	1.5
24	2.1	5.3	e4.5	7.7	23	23	54	128	55	2.6	1.0	1.6
25	2.0	5.4	e4.5	7.3	24	24	58	141	42	2.4	1.0	1.6
26	2.0	5.4	e4.5	7.3	23	25	57	152	44	2.4	1.1	1.6
27	2.3	4.9	e4.5	7.4	23	24	57	164	46	2.3	1.1	1.6
28	2.1	5.2	e4.5	7.3	23	23	55	158	44	2.1	1.2	1.7
29	1.9	5.2	e4.5	7.1	---	22	52	147	42	2.0	1.1	1.7
30	2.0	5.8	4.7	6.9	---	22	52	144	38	1.9	1.1	1.7
31	2.1	---	4.5	6.9	---	23	---	141	---	1.9	1.1	---
TOTAL	58.1	98.8	155.1	193.5	489.5	791	1330	2937	3168	306.3	41.2	42.08
MEAN	1.87	3.29	5.00	6.24	17.5	25.5	44.3	94.7	106	9.88	1.33	1.40
MAX	2.3	5.8	6.4	8.5	28	35	58	164	175	35	1.9	1.7
MIN	1.5	2.0	4.5	4.5	7.1	22	23	50	38	1.9	1.0	.99
AC-FT	115	196	308	384	971	1570	2640	5830	6280	608	82	83

CAL YR 1990 TOTAL 8965.1 MEAN 24.6 MAX 113 MIN 1.1 AC-FT 17780

WTR YR 1991 TOTAL 9610.58 MEAN 26.3 MAX 175 MIN .99 AC-FT 19060

e Estimated

HUMBOLDT RIVER BASIN

10316500 LAMOILLE CREEK NEAR LAMOILLE, NV

LOCATION.--Lat 40°41'27", long 115°28'32", in NE 1/4 NE 1/4 sec.6, T.32 N., R.58 E., Elko County, Hydrologic Unit 16040101, in Humboldt National Forest, at mouth of canyon, on right bank, 100 ft upstream from McDermott ditch diversion, and 3 mi south of Lamoille.

DRAINAGE AREA.--25 mi², approximately.

PERIOD OF RECORD.--May 1915 to June 1923, October 1943 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 6,240 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1943, nonrecording gages at various sites nearby at different datums. Oct. 1 to Jan. 16, 1975, water-stage recorder at site 600 ft downstream at datum 4.28 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--55 years (1916-22, 1944-91), 44.1 ft³/s, 31,950 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 838 ft³/s, June 3, 1986, gage height, 6.08 ft, from rating curve extended above 522 ft³/s, on basis of slope area measurement at gage height 6.23 ft, but may have been exceeded in June 1917, when gage washed out; minimum, 0.10 ft³/s, Feb. 24, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 310 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 11	2100	*472	*5.22	No other peak greater than base discharge.			
Minimum daily, 2.1 ft ³ /s, Jan 22, Mar. 7.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	3.3	e3.0	2.9	e2.9	2.6	4.6	14	101	130	19	6.1
2	3.2	3.2	e3.2	3.0	3.1	2.4	4.9	14	122	144	17	5.8
3	3.3	e3.0	e3.1	3.0	3.1	2.6	5.2	14	170	148	16	5.5
4	3.3	e2.8	e3.2	2.9	2.8	e2.5	5.6	14	236	144	16	5.3
5	3.1	e3.0	3.3	2.9	2.5	e2.4	6.6	14	237	136	15	5.3
6	3.2	3.3	e3.3	2.9	2.3	e2.3	7.0	17	184	128	14	5.3
7	3.3	e3.1	e3.0	2.9	2.4	e2.1	7.1	19	197	113	13	6.8
8	3.3	3.3	e3.2	2.9	2.4	e2.3	6.9	26	218	105	12	6.0
9	3.3	3.3	3.5	2.9	2.4	e2.7	7.4	30	247	98	12	7.5
10	3.1	3.3	3.3	2.9	2.4	e2.6	8.8	28	291	90	11	9.9
11	3.1	3.1	3.3	2.9	2.4	e2.5	8.1	26	351	77	11	9.2
12	3.1	3.1	3.3	3.0	2.4	e2.8	8.2	26	374	69	10	9.0
13	3.1	3.1	3.2	3.1	2.4	e3.1	8.4	27	350	65	9.9	8.6
14	3.1	3.1	2.9	2.7	2.6	3.3	8.2	34	307	62	10	8.1
15	2.9	3.1	e2.8	2.7	2.6	3.2	8.8	33	267	57	11	8.1
16	3.3	3.1	3.6	e2.5	3.3	3.2	8.9	38	261	51	12	7.9
17	3.1	3.1	3.2	2.7	2.6	3.3	8.8	46	246	47	10	7.7
18	3.1	3.1	3.0	2.7	e2.5	3.3	8.7	43	235	44	9.8	7.5
19	3.7	3.1	3.0	2.6	2.4	3.5	9.3	42	226	41	9.4	7.4
20	3.0	e3.0	2.9	e2.5	2.4	4.5	10	41	198	38	8.4	7.3
21	2.9	3.2	2.7	e2.3	2.4	3.6	11	42	178	35	7.9	7.1
22	3.0	3.2	e2.6	e2.1	2.5	3.7	10	48	172	33	7.5	7.1
23	3.1	e3.2	e2.5	e2.6	2.5	3.8	11	58	180	31	7.2	7.1
24	3.1	e3.1	e2.3	e2.9	e2.5	3.8	12	82	172	29	7.0	7.0
25	3.1	3.2	e2.4	3.0	e2.4	4.2	13	115	154	27	7.0	6.9
26	3.1	3.4	e2.5	3.0	e2.4	4.7	12	120	133	26	7.0	6.7
27	3.1	e3.2	e2.7	3.1	e2.4	4.6	12	120	122	24	6.5	6.7
28	3.1	e3.1	e2.8	3.0	2.5	4.3	13	123	116	23	6.5	6.8
29	3.1	e3.0	2.8	e2.9	---	4.3	13	131	118	22	6.4	6.8
30	3.1	3.2	2.8	e2.8	---	4.4	13	122	118	20	6.1	6.6
31	3.1	---	2.9	e2.8	---	4.6	---	102	---	19	6.0	---
TOTAL	97.5	94.3	92.3	87.1	71.5	103.2	271.5	1609	6281	2076	321.6	213.1
MEAN	3.15	3.14	2.98	2.81	2.55	3.33	9.05	51.9	209	67.0	10.4	7.10
MAX	3.7	3.4	3.6	3.1	3.3	4.7	13	131	374	148	19	9.9
MIN	2.9	2.8	2.3	2.1	2.3	2.1	4.6	14	101	19	6.0	5.3
AC-FT	193	187	183	173	142	205	539	3190	12460	4120	638	423

CAL YR 1990 TOTAL 9717.0 MEAN 26.6 MAX 304 MIN 2.3 AC-FT 19270
WTR YR 1991 TOTAL 11318.1 MEAN 31.0 MAX 374 MIN 2.1 AC-FT 22450

e Estimated

HUMBOLDT RIVER BASIN

175

10318500 HUMBOLDT RIVER NEAR ELKO, NV

LOCATION.--Lat 40°56'10", long 115°37'25", in SE 1/4 NE 1/4 sec.11, T.35 N., R.56 E., Elko County, Hydrologic Unit 16040101, on right bank, 1 mi southwest of Ryndon, 1.5 mi upstream from Jackson Creek, 5 mi downstream from confluence of North Fork Humboldt River, and 10 mi northeast of Elko.

DRAINAGE AREA.--2,800 mi², approximately.

PERIOD OF RECORD.--June 1895 to October 1902, October 1944 to current year.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,142.32 ft, above National Geodetic Vertical Datum of 1929. June 1895 to October 1902, nonrecording gage at site 11 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of 95,800 acres, above station.

AVERAGE DISCHARGE.--54 years (1896-1902, 1945-91), 255 ft³/s, 184,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,100 ft³/s, Mar. 4, 1983, gage height, 12.18 ft; no flow for many days in August and September 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 717 ft³/s, June 12, gage height, 4.07 ft, maximum gage height, 4.14 ft, June 15; minimum daily, 1.4 ft³/s, Aug. 25, 28 and Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	8.6	13	e5.2	e15	102	85	98	416	294	11	2.0
2	2.5	8.6	e13	e5.9	e15	115	83	97	347	256	10	1.6
3	2.8	8.4	e14	e7.0	14	125	80	95	295	268	9.4	1.5
4	3.0	8.6	e15	e9.0	19	133	76	80	254	267	9.8	1.4
5	3.3	10	16	e6.0	18	127	77	93	274	235	10	1.6
6	3.3	11	e15	e7.0	22	117	77	77	437	169	9.5	1.8
7	3.8	10	e14	e10	37	116	78	87	475	139	8.7	2.7
8	3.8	12	e13	e25	41	114	78	81	399	124	6.9	3.7
9	3.9	13	14	e17	53	108	84	86	386	109	6.0	4.2
10	4.2	12	15	e15	47	101	91	95	450	94	4.6	6.1
11	4.4	12	16	e20	56	109	90	104	631	81	3.5	6.4
12	4.7	12	18	23	65	104	91	116	666	75	3.2	7.6
13	5.2	12	e15	20	75	103	94	120	647	67	2.5	9.2
14	5.4	14	e12	17	89	122	97	137	644	55	2.3	8.6
15	5.5	13	e10	16	e110	132	96	168	675	43	2.6	8.0
16	5.5	12	e12	16	e114	128	98	173	666	36	2.5	7.8
17	5.5	12	e14	13	122	123	93	166	605	30	2.0	7.9
18	5.6	12	15	19	123	104	92	154	580	26	2.0	7.7
19	5.9	e11	15	20	129	96	85	140	540	22	2.3	7.4
20	6.1	e11	e9.0	e20	126	94	79	169	479	20	2.3	6.7
21	6.3	e10	e6.0	e18	124	97	87	192	430	19	1.8	6.1
22	6.8	e10	e4.0	e19	118	98	97	181	387	20	1.7	6.5
23	7.2	e11	e4.0	e20	115	95	98	170	328	19	1.6	6.5
24	7.5	e11	e4.5	e18	108	92	91	154	286	17	1.6	6.6
25	7.5	12	e6.0	e17	98	93	88	142	238	16	1.4	6.5
26	7.5	15	e7.8	e18	95	99	92	142	248	15	1.5	5.8
27	7.6	13	e7.6	e17	92	103	105	181	283	14	1.9	5.2
28	7.7	e12	e7.0	e15	94	107	101	182	382	13	1.4	4.7
29	7.5	e11	e5.0	e13	---	102	103	176	378	12	1.6	4.0
30	8.0	e12	e4.9	e14	---	94	99	183	339	11	1.9	3.9
31	7.9	---	e5.0	e15	---	90	---	286	---	11	2.2	---
TOTAL	168.5	340.2	339.8	475.1	2134	3343	2685	4325	13165	2577	129.7	159.7
MEAN	5.44	11.3	11.0	15.3	76.2	108	89.5	140	439	83.1	4.18	5.32
MAX	8.0	15	18	25	129	133	105	286	675	294	11	9.2
MIN	2.5	8.4	4.0	5.2	14	90	76	77	238	11	1.4	1.4
AC-FT	334	675	674	942	4230	6630	5330	8580	26110	5110	257	317

CAL YR 1990 TOTAL 26145.1 MEAN 71.6 MAX 470 MIN 1.1 AC-FT 51860
WTR YR 1991 TOTAL 29842.0 MEAN 81.8 MAX 675 MIN 1.4 AC-FT 59190

e Estimated

HUMBOLDT RIVER BASIN

10319900 SOUTH FORK HUMBOLDT RIVER ABOVE TENMILE CREEK NEAR ELKO, NV

LOCATION.--Lat 40°37'42", long 115°43'44", in NE 1/4 SW 1/4 sec.25, T.32 N., R.55 E., Elko County, Hydrologic Unit 16040103, on right bank, 5 mi above South Fork Dam, and 19.5 mi southeast of Elko.

DRAINAGE AREA.--898 mi².

PERIOD OF RECORD.--February 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,280 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,090 ft³/s, June 13, 1991, gage height, 4.69 ft; minimum daily, 3.0 ft³/s, Oct. 10, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,090 ft³/s, June 13, gage height, 4.69 ft; minimum daily, 3.0 ft³/s, Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	11	11	e5.2	e14	25	21	33	276	217	24	9.0
2	5.4	11	11	e6.0	e13	25	27	39	306	221	20	7.6
3	4.7	10	9.7	e7.0	e15	22	30	54	323	222	21	5.1
4	4.5	e11	11	e8.6	e18	22	32	47	315	212	22	8.1
5	4.2	12	12	e6.2	e17	22	35	47	398	200	22	11
6	3.9	12	9.0	e7.0	e20	20	44	55	516	186	19	11
7	3.6	9.7	8.1	e15	e27	19	41	55	496	170	11	13
8	3.4	11	11	e25	e35	18	36	66	489	155	9.2	15
9	3.5	11	10	e15	e40	17	33	78	506	152	11	10
10	3.0	11	11	e16	e35	17	34	72	688	142	10	14
11	3.7	11	14	e17	e45	19	31	66	780	128	15	12
12	3.6	10	14	e20	e41	20	33	62	864	116	16	14
13	3.6	10	13	e19	e38	25	30	63	942	100	17	e15
14	3.8	10	7.9	e17	e35	25	27	114	859	97	21	e16
15	4.0	10	10	e15	31	24	21	94	751	92	23	17
16	4.7	11	13	e14	e30	23	23	86	692	84	27	17
17	5.3	11	13	e13	e25	21	22	110	620	74	32	17
18	6.8	11	15	e18	e26	20	21	112	549	69	24	18
19	8.6	e10	13	e19	29	19	18	108	522	67	23	20
20	9.1	e9.6	e9.0	e19	30	19	18	106	496	64	31	22
21	9.0	e9.0	e7.0	e17	28	21	20	105	454	58	28	19
22	8.7	e10	e5.4	e18	27	23	23	111	348	54	27	21
23	9.0	13	e5.0	e19	25	23	26	117	332	47	22	23
24	9.0	e12	e5.2	e17	23	22	27	147	325	38	21	22
25	9.3	e11	e6.0	e16	21	22	34	190	289	28	20	20
26	9.2	e9.0	e7.0	e17	20	23	35	221	282	34	19	18
27	9.4	8.5	e7.6	e16	20	25	33	241	249	32	15	16
28	9.6	9.8	e6.4	e14	21	23	33	245	224	30	13	16
29	10	12	e5.2	e12	---	22	35	236	211	27	13	15
30	10	13	e5.0	e14	---	21	32	308	217	27	10	13
31	10	---	e5.0	e14	---	20	---	316	---	26	8.4	---
TOTAL	199.4	320.6	290.5	456.0	749	667	875	3704	14319	3169	594.6	454.8
MEAN	6.43	10.7	9.37	14.7	26.7	21.5	29.2	119	477	102	19.2	15.2
MAX	10	13	15	25	45	25	44	316	942	222	32	23
MIN	3.0	8.5	5.0	5.2	13	17	18	33	211	26	8.4	5.1
AC-FT	396	636	576	904	1490	1320	1740	7350	28400	6290	1180	902

CAL YR 1990 TOTAL 21504.0 MEAN 58.9 MAX 466 MIN 3.0 AC-FT 42650
WTR YR 1991 TOTAL 25798.9 MEAN 70.7 MAX 942 MIN 3.0 AC-FT 51170

e Estimated

HUMBOLDT RIVER BASIN

177

10320000 SOUTH FORK HUMBOLDT RIVER ABOVE DIXIE CREEK, NEAR ELKO, NV

LOCATION.--Lat 40°41'06", long 115°48'45", in NW 1/4 SW 1/4 sec.5, T.32 N., R.55 E., Elko County, Hydrologic Unit 16040103, on left bank, 1.5 mi upstream from Dixie Creek, and 10.5 mi south of Elko.

DRAINAGE AREA.--1,150 mi², approximately.

PERIOD OF RECORD.--October 1948 to September 1982, July 1988 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 5,140 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of 32,900 acres above station. Flow regulated by South Fork Reservoir, approximately 2.0 mile upstream, since December, 1987. Records not adjusted for storage and are not equivalent.

AVERAGE DISCHARGE.--34 years, (1949-1982), 117 ft³/s, 84,770 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,100 ft³/s, Jan. 12, 1979, gage height, 6.80 ft; minimum daily, 0.10 ft³/s, Sept. 9, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 782 ft³/s, June 16, 17, gage height, 4.13 ft; minimum daily, 2.3 ft³/s, Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	6.5	11	e7.8	e13	41	32	33	288	148	10	8.2
2	2.7	6.4	e11	e7.8	13	41	31	33	285	148	10	8.1
3	2.9	6.2	e11	e7.8	13	39	31	33	250	149	9.2	8.0
4	3.1	6.5	11	e7.8	14	37	31	32	315	162	9.3	8.2
5	3.3	6.9	10	e7.8	23	37	31	31	503	171	9.2	8.3
6	3.4	6.8	e9.5	e7.8	25	36	34	40	604	172	9.5	8.5
7	3.8	6.9	e9.0	e7.8	23	36	49	56	474	170	9.5	8.4
8	3.8	7.0	e8.5	e7.8	32	36	49	56	403	170	9.6	6.8
9	5.8	7.0	8.2	e7.8	52	33	49	57	487	160	9.7	6.5
10	2.5	7.0	8.1	e8.0	53	22	49	57	553	142	10	6.2
11	2.3	7.5	8.2	e8.3	54	21	49	57	639	111	9.8	5.9
12	2.4	7.6	8.0	e8.6	54	20	49	58	759	86	9.9	5.7
13	2.7	7.7	8.0	9.4	54	21	49	58	749	85	9.6	5.9
14	5.0	7.8	7.8	13	54	21	46	92	750	85	9.3	5.7
15	5.1	7.7	e7.8	14	49	21	39	108	759	86	9.7	5.6
16	5.1	7.2	e7.8	13	46	21	39	103	769	88	11	5.7
17	5.1	7.4	e7.9	12	49	21	39	100	770	90	10	5.9
18	5.3	8.0	7.9	13	47	21	37	105	760	91	10	5.9
19	5.2	8.7	7.8	13	47	20	35	105	690	91	11	6.0
20	5.4	9.7	e7.8	e13	47	19	35	104	480	83	10	6.2
21	5.4	11	e7.8	e13	47	19	35	103	481	61	9.2	6.2
22	5.6	10	e7.8	e13	46	19	35	103	486	54	8.7	6.3
23	5.9	10	e7.8	e13	41	17	33	103	437	41	8.9	6.4
24	5.9	10	e7.8	e13	39	14	31	111	401	41	9.0	6.4
25	5.8	11	e7.8	e13	39	16	27	143	349	26	9.3	5.9
26	5.7	10	e7.8	e13	39	15	27	178	262	14	9.2	5.9
27	5.7	10	e7.8	e13	39	14	26	224	246	12	8.7	5.8
28	5.9	11	e7.8	e13	39	14	26	260	226	12	8.1	6.1
29	5.8	11	e7.8	e13	---	13	29	217	218	11	7.8	6.2
30	6.0	10	e7.8	e13	---	19	33	213	177	10	7.9	5.9
31	6.2	---	e7.8	e13	---	32	---	277	---	11	8.0	---
TOTAL	141.2	250.5	262.1	338.5	1091	756	1105	3250	14570	2781	291.1	196.8
MEAN	4.55	8.35	8.45	10.9	39.0	24.4	36.8	105	486	89.7	9.39	6.56
MAX	6.2	11	11	14	54	41	49	277	770	172	11	8.5
MIN	2.3	6.2	7.8	7.8	13	13	26	31	177	10	7.8	5.6
AC-FT	280	497	520	671	2160	1500	2190	6450	28900	5520	577	390

CAL YR 1990 TOTAL 21889.5 MEAN 60.0 MAX 660 MIN 2.1 AC-FT 43420
WTR YR 1991 TOTAL 25033.2 MEAN 68.6 MAX 770 MIN 2.3 AC-FT 49650

e Estimated

HUMBOLDT RIVER BASIN

10320100 DIXIE CREEK ABOVE SOUTH FORK HUMBOLDT RIVER, NEAR ELKO, NV

LOCATION.--Lat 40°39'30", long 115°51'13", in NE 1/4 SE 1/4 sec.14, T.32 N., R.54 E., Elko County, Hydrologic Unit 16040103, on left bank, 2.5 mi upstream from confluence with South Fork Humboldt River, and about 13 mi southwest of Elko.

DRAINAGE AREA.--159 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,206 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair, except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 65 ft³/s, Mar. 3, 1990, gage height, 2.50 ft; minimum daily, 0.01 ft³/s, Aug. 11-13, 23, 24, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26 ft³/s, Feb. 5, gage height, 1.19 ft, and May 14, gage height, 2.11 ft; minimum daily, 0.01 ft³/s, Aug. 11-13, 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	.56	e.47	e.21	e.45	1.1	2.0	4.6	11	.56	.29	.05
2	.24	.47	e.48	e.22	e.45	1.0	2.3	5.0	9.5	.37	.12	.04
3	.25	.48	e.49	e.23	.45	1.1	2.1	5.7	8.6	.28	.12	.04
4	.25	.51	e.48	e.24	.67	1.2	2.1	5.8	7.9	.23	.28	.05
5	.26	.49	e.48	e.25	4.3	1.1	2.3	5.8	7.9	.19	.33	.05
6	.28	.45	e.48	e.27	1.3	.88	2.6	6.2	7.5	.15	.11	.07
7	.33	.42	e.48	e.28	.75	.96	2.6	6.7	6.8	.14	.04	.13
8	.34	.52	e.48	e.29	.78	.88	2.8	7.2	6.6	.15	.04	.11
9	.38	.57	e.48	e.32	.80	.99	3.2	8.4	6.3	.13	.03	.11
10	.45	.59	e.48	e.45	.86	1.1	3.2	8.9	5.6	.12	.02	.15
11	.43	.56	e.48	e.60	.78	1.2	3.0	8.0	5.0	.10	.01	.12
12	.41	.56	e.48	.67	.83	.81	3.6	7.4	4.4	.10	.01	.11
13	.40	.55	.47	.77	.78	1.0	3.2	7.7	4.0	.08	.01	.10
14	.41	.55	e.44	.80	.75	1.0	3.4	17	3.8	.08	.11	.09
15	.44	.55	e.43	.87	.74	.91	3.3	14	3.7	.05	.65	.09
16	.45	.58	e.44	.82	.90	1.3	3.7	14	3.2	.04	.70	.10
17	.37	.54	e.45	.80	1.2	1.5	3.4	14	2.7	.04	.28	.10
18	.49	.53	e.44	.68	.74	1.5	3.4	16	2.6	.04	.25	.10
19	.52	e.50	e.36	.66	.87	1.6	3.4	16	2.4	.07	.35	.10
20	.41	e.51	e.30	.59	1.1	1.2	3.6	16	2.0	.03	.11	.10
21	.41	e.51	e.26	.62	1.1	1.6	3.8	15	2.0	.06	.04	.09
22	.42	e.52	e.23	.62	1.0	1.4	3.6	15	1.8	.06	.03	.10
23	.42	e.54	e.21	.58	1.1	1.7	3.8	14	1.3	.09	.01	.12
24	.41	.55	e.19	.51	.98	1.7	3.9	13	1.0	.13	.01	.12
25	.44	e.53	e.18	.51	.92	1.7	4.5	13	1.3	.12	.02	.12
26	.43	e.50	e.18	.53	.97	1.4	4.7	13	2.0	.22	.05	.12
27	.49	e.49	e.18	.55	1.0	1.7	4.9	12	1.8	.11	.04	.15
28	.47	e.48	e.19	.47	1.1	1.8	4.6	11	1.2	.10	.04	.22
29	.49	e.47	e.19	e.45	---	1.7	4.6	11	.90	.26	.04	.16
30	.47	e.47	e.20	e.45	---	1.8	4.5	13	.85	.14	.04	.14
31	.47	---	e.20	e.45	---	2.0	---	13	---	.15	.04	---
TOTAL	12.27	15.55	11.30	15.76	27.67	40.83	102.1	337.4	125.65	4.39	4.22	3.15
MEAN	.40	.52	.36	.51	.99	1.32	3.40	10.9	4.19	.14	.14	.10
MAX	.52	.59	.49	.87	4.3	2.0	4.9	17	11	.56	.70	.22
MIN	.24	.42	.18	.21	.45	.81	2.0	4.6	.85	.03	.01	.04
AC-FT	24	31	22	31	55	81	203	669	249	8.7	8.4	6.2

CAL YR 1990 TOTAL 729.57 MEAN 2.00 MAX 36 MIN .06 AC-FT 1450
WTR YR 1991 TOTAL 700.29 MEAN 1.92 MAX 17 MIN .01 AC-FT 1390

e Estimated

HUMBOLDT RIVER BASIN

10320100 DIXIE CREEK ABOVE SOUTH FORK HUMBOLDT RIVER, NEAR ELKO, NV --Continued

179

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1990 to September 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	SEDI- MENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 02...	1242	10	--
DEC 12...	1302	5	--
APR 25...	1215	46	--
MAY 23...	1200	137	58
JUL 09...	1015	4	--
SEP 25...	1122	2	--

HUMBOLDT RIVER BASIN

10321000 HUMBOLDT RIVER NEAR CARLIN, NV
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 40°43'40", long 116°00'30", in SE 1/4 SE 1/4 sec.21, T.33 N., R.53 E., Elko County, Hydrologic Unit 16040101, on right bank 1.0 mi downstream from Tonka Creek, 5 mi upstream from Susie Creek, 5.5 mi east of Carlin, and 15 mi southwest of Elko.

DRAINAGE AREA.--4,310 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,931.91 ft above National Geodetic Vertical Datum of 1929 (levels by Nevada State Highway Department).

REMARKS.--Records good except for estimated daily discharges, which are poor. Many diversions for irrigation of about 143,000 acres, above station.

AVERAGE DISCHARGE.--48 years, 378 ft³/s, 273,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,250 ft³/s, May 17, 1984, gage height, 10.04 ft; maximum gage height, 10.21 ft, Feb. 14, 1962; minimum, 0.1 ft³/s, Aug. 16, 1959.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 28, 1910, estimated to have reached 15,000 ft³/s, based on reported stage and comparison with Humboldt River at Palisade.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft³/s, June 17,18, gage height, 4.18 ft; minimum daily, 8.2 ft³/s, Oct. 11, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	14	e17	e14	e24	132	114	119	436	375	33	16
2	9.6	13	e18	e15	e28	131	111	123	557	352	32	15
3	9.3	12	e19	e15	e30	134	107	133	530	327	31	15
4	9.2	12	e18	e16	e34	139	105	133	486	332	29	15
5	10	14	e19	e16	e40	145	102	131	611	347	29	15
6	10	14	e19	e16	e48	145	99	135	812	332	28	16
7	10	13	e18	e16	e58	143	104	150	800	320	26	19
8	11	13	e19	e16	e64	139	114	157	784	302	25	18
9	11	14	e20	e17	e69	137	116	153	783	288	24	18
10	11	13	e19	e18	e81	130	122	159	865	248	24	18
11	8.2	13	e18	e22	98	125	122	158	879	231	23	16
12	9.6	13	e17	e25	100	121	124	164	1030	172	22	15
13	9.4	14	e16	e24	106	121	129	172	1050	155	22	14
14	8.2	16	e16	e22	119	118	129	224	1070	146	22	14
15	9.1	19	e16	e21	123	121	127	271	1120	141	24	13
16	10	19	e16	e22	127	133	129	261	1160	135	22	e13
17	11	20	e15	e21	146	134	125	270	1190	129	21	e13
18	12	21	e14	e21	146	128	125	273	1180	119	20	e12
19	12	23	e13	e20	146	126	119	258	1170	114	20	e13
20	13	e20	e13	e21	150	118	115	248	997	108	20	e13
21	14	e20	e13	e22	147	113	119	248	932	93	20	e12
22	14	e20	e13	e23	149	113	114	261	899	81	19	e12
23	14	e20	e14	e25	140	113	120	256	861	68	18	e13
24	14	e20	e14	e25	136	110	119	240	776	59	17	e14
25	14	e19	e14	e25	132	109	117	238	e680	58	16	e14
26	14	e18	e14	e24	129	113	114	263	e580	52	16	e13
27	14	e18	e14	e23	129	109	113	283	e520	42	16	e13
28	14	e18	e14	e22	127	109	115	351	e490	39	16	e14
29	14	e17	e14	e22	---	110	112	356	478	37	16	e15
30	13	e18	e14	e22	---	109	112	296	471	35	15	e15
31	13	---	e14	e23	---	109	---	369	---	32	15	---
TOTAL	355.2	498	492	634	2826	3837	3493	6853	24197	5269	681	436
MEAN	11.5	16.6	15.9	20.5	101	124	116	221	807	170	22.0	14.5
MAX	14	23	20	25	150	145	129	369	1190	375	33	19
MIN	8.2	12	13	14	24	109	99	119	436	32	15	12
AC-FT	705	988	976	1260	5610	7610	6930	13590	47990	10450	1350	865

CAL YR 1990 TOTAL 51805.6 MEAN 142 MAX 986 MIN 7.2 AC-FT 102800
WTR YR 1991 TOTAL 49571.2 MEAN 136 MAX 1190 MIN 8.2 AC-FT 98320

e Estimated

HUMBOLDT RIVER BASIN

181

10321000 HUMBOLDT RIVER NEAR CARLIN, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949-1952, 1962 to current year (published as Humboldt River at Carlin, station 10321000, October 1965 to September 1968).

PERIOD OF DAILY RECORD.--

CHEMICAL ANALYSES: October 1965 to September 1968.

SPECIFIC CONDUCTANCE: October 1965 to September 1968; May 1981 to September 1983.

WATER TEMPERATURE: October 1965 to September 1968; May 1981 to September 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 677 microsiemens, Dec. 21, 22, 1966; minimum daily, 193 microsiemens, Feb. 16, 1982.

WATER TEMPERATURE: Maximum daily, 29.0°C, July 26, 28, 29, 1968; minimum daily, freezing point on some days during winter months of most years.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED CENT- SATUR- ATION	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV											
01...	1200	14	576	8.6	4.5	7.0	2.5	13.6	135	K5	K19
JAN											
03...	1315	E15	623	7.8	<-5.0	0.0	3.2	13.2	108	K9	K24
FEB											
22...	1245	152	478	7.9	17.0	7.0	20	11.8	116	K4	40
APR											
29...	1330	119	488	8.7	8.5	11.5	14	10.4	114	--	--
JUN											
28...	1330	487	365	8.5	25.5	17.0	18	6.8	86	K29	98
AUG											
28...	1115	16	455	8.5	21.0	17.5	3.2	11.2	140	K20	100

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD HCO3	CAR- BONATE WATER DIS IT FIELD CO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV										
01...	180	50	13	38	1	7.3	241	7	210	30
JAN										
03...	220	63	15	48	1	9.7	324	--	265	52
FEB										
22...	160	46	9.9	39	1	6.3	192	8	170	46
APR										
29...	160	47	10	39	1	6.7	225	5	193	34
JUN										
28...	140	45	7.6	22	0.8	3.8	189	5	163	16
AUG										
28...	160	44	12	34	1	6.8	220	6	190	28

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
NOV										
01...	16	0.20	21	278	302	0.38	<0.010	<0.010	<0.100	<0.100
JAN										
03...	22	0.60	27	370	397	0.50	0.030	<0.010	0.100	0.100
FEB										
22...	14	0.40	25	272	290	0.37	<0.010	<0.010	<0.100	<0.100
APR										
29...	15	0.60	26	280	295	0.38	<0.010	0.010	<0.050	0.060
JUN										
28...	8.0	<0.10	22	222	222	0.30	0.010	<0.010	<0.050	<0.050
AUG										
28...	17	0.60	22	285	279	0.39	<0.010	<0.010	<0.050	<0.050

HUMBOLDT RIVER BASIN

10321000 HUMBOLDT RIVER NEAR CARLIN, NV--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 01...	0.010	<0.010	0.50	0.050	<0.010	<0.010	0.020	10	7	120
JAN 03...	0.050	0.030	0.30	0.010	<0.010	0.010	<0.010	--	--	--
FEB 22...	0.030	0.010	0.60	<0.010	0.020	0.030	0.030	40	6	79
APR 29...	0.020	0.030	0.50	0.030	0.020	<0.010	<0.010	20	6	80
JUN 28...	0.020	0.010	0.60	0.090	0.040	0.030	0.010	--	--	--
AUG 28...	<0.010	<0.010	0.40	0.030	<0.010	<0.010	<0.010	30	6	95

DATE	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)
NOV 01...	<0.5	<1.0	<1	<3	1	6	<1	44	12	<0.1
JAN 03...	--	--	--	--	--	--	--	--	--	--
FEB 22...	<0.5	<1.0	1	<3	3	25	1	30	11	0.4
APR 29...	<0.5	<1.0	<1	<3	2	18	<1	32	15	<0.1
JUN 28...	--	--	--	--	--	--	--	--	--	--
AUG 28...	<0.5	<1.0	<1	<3	1	6	<1	43	14	<0.1

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 01...	<10	<1	<1	<1.0	500	<6	27	17	0.64	61
JAN 03...	--	--	--	--	--	--	--	33	1.34	43
FEB 22...	<10	1	<1	<1.0	330	<6	5	64	26	86
APR 29...	<10	2	<1	<1.0	350	<6	7	27	8.7	99
JUN 28...	--	--	--	--	--	--	--	90	118	83
AUG 28...	<10	1	<1	<1.0	450	<6	13	9	0.38	97

E: ESTIMATED

K: NON-IDEAL COLONY COUNT

HUMBOLDT RIVER BASIN

183

10321860 JACK CREEK BELOW INDIAN CREEK NEAR CARLIN, NV

LOCATION.--Lat 40°57'04", long 116°14'22", in NW 1/4 SE 1/4 sec.4, T.35 N., R.51 E., Elko County, Hydrologic Unit 16040101, on left bank, 1.0 mi downstream from Indian Creek, and 22 mi north of Carlin.

DRAINAGE AREA.--10.47 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to September 1991.

GAGE.--Water-stage recorder. Elevation of gage is 5,640 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2.4 ft³/s, May 23, 1991, gage height, 0.69 ft; minimum daily, 0.22 ft³/s, Sept. 4-6, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period Apr. to Sept., 2.4 ft³/s, May 23, gage height, 0.69 ft; minimum daily, 0.22 ft³/s, Sept. 4-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e.26	.48	1.3	.43	.31	.25
2	---	---	---	---	---	---	e.27	.54	1.1	.43	.29	.25
3	---	---	---	---	---	---	e.27	.52	1.0	.41	.29	.25
4	---	---	---	---	---	---	e.27	.50	.91	.42	.32	.23
5	---	---	---	---	---	---	e.28	.49	.83	.43	.31	.22
6	---	---	---	---	---	---	e.28	.54	.79	.41	.29	.22
7	---	---	---	---	---	---	e.28	.51	.73	.41	.29	.26
8	---	---	---	---	---	---	e.28	.60	.78	.40	.29	.28
9	---	---	---	---	---	---	e.28	.59	.69	.40	.29	.51
10	---	---	---	---	---	---	e.28	.52	.69	.40	.29	.38
11	---	---	---	---	---	---	e.28	.52	.68	.40	.29	.26
12	---	---	---	---	---	---	e.29	.55	.60	.40	.29	.26
13	---	---	---	---	---	---	e.29	.53	.61	.39	.29	.26
14	---	---	---	---	---	---	e.29	.67	.59	.37	.29	.29
15	---	---	---	---	---	---	e.30	.53	.61	.37	.29	.29
16	---	---	---	---	---	---	e.30	.60	.55	.37	.29	.30
17	---	---	---	---	---	---	.31	.80	.54	.35	.28	.32
18	---	---	---	---	---	---	.32	.83	.54	.34	.26	.28
19	---	---	---	---	---	---	.32	.97	.49	.34	.26	.26
20	---	---	---	---	---	---	.32	1.4	.49	.34	.26	.26
21	---	---	---	---	---	---	.32	1.8	.49	.32	.26	.25
22	---	---	---	---	---	---	.32	2.0	.49	.32	.26	.24
23	---	---	---	---	---	---	.33	2.1	.48	.32	.27	.26
24	---	---	---	---	---	---	.34	2.0	.48	.32	.29	.26
25	---	---	---	---	---	---	.43	2.0	.47	.32	.28	.26
26	---	---	---	---	---	---	.39	1.9	.46	.32	.27	.26
27	---	---	---	---	---	---	.40	1.8	.44	.32	.26	.24
28	---	---	---	---	---	---	.38	1.6	.43	.31	.25	.24
29	---	---	---	---	---	---	.44	1.5	.45	.31	.26	.25
30	---	---	---	---	---	---	.41	1.9	.43	.33	.27	.26
31	---	---	---	---	---	---	---	1.5	---	.32	.26	---
TOTAL	---	---	---	---	---	---	9.53	32.79	19.14	11.32	8.70	8.15
MEAN	---	---	---	---	---	---	.32	1.06	.64	.37	.28	.27
MAX	---	---	---	---	---	---	.44	2.1	1.3	.43	.32	.51
MIN	---	---	---	---	---	---	.26	.48	.43	.31	.25	.22
AC-FT	---	---	---	---	---	---	19	65	38	22	17	16

e Estimated

HUMBOLDT RIVER BASIN

10321860 JACK CREEK BELOW INDIAN CREEK NEAR CARLIN, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1990, July to September 1991.

REMARKS.--In August 1990, station was incorporated into the Carlin Trend Network.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JUL 30...	1100	0.34	436	8.3	23.5	23.5	4.5	8.2	119	180	41
SEP 04...	1215	0.23	430	8.1	24.5	22.0	7.1	7.5	105	210	46

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JUL 30...	19	10	0.3	4.1	149	6	132	96	6.7	0.40
SEP 04...	22	11	0.3	4.2	159	--	130	70	6.4	0.20

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (MG/L AS AL)
JUL 30...	20	264	278	0.36	0.010	0.085	0.090	0.40	0.060	20
SEP 04...	23	277	262	0.38	0.010	0.081	0.090	0.30	0.060	110

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
JUL 30...	4	78	<0.5	<1.0	2	<3	2	14	<1	14
SEP 04...	5	82	<0.5	<1.0	1	<3	1	140	<1	14

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	CYANIDE DIS-SOLVED (MG/L AS CN)
JUL 30...	160	<0.1	<10	2	2	<1.0	120	9	28	<0.01
SEP 04...	150	<0.1	<10	2	3	<1.0	130	11	10	--

HUMBOLDT RIVER BASIN

185

10321950 MAGGIE CREEK AT MAGGIE CREEK CANYON NEAR CARLIN, NV

LOCATION.--Lat 40°48'12", long 116°11'57", in NE 1/4 SE 1/4 sec.26, T.34 N., R.51 E., Eureka County, Hydrologic Unit 16040101, on right bank, approximately 8.0 mi northwest of Carlin.

DRAINAGE AREA.--Not determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,085 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 160 ft³/s, occurred sometime during the period Feb. 20 to Mar. 8, 1990, gage height 2.20 ft, from floodmarks, from rating curve extended above 25 ft³/s; no flow many days, July to Sept., 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27 ft³/s, May 14, gage height, 1.11 ft, maximum gage height, 1.52 ft, Nov. 25, backwater from ice; no flow many days, July to Sept.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	7.8	e10	e7.3	e9.3	e15	e8.6	10	18	2.4	.00	.00
2	3.6	e7.8	11	e7.4	e9.7	e15	9.7	11	17	1.9	.00	.00
3	3.6	e7.8	e10	e7.4	e10	e14	9.2	12	16	1.5	.00	.00
4	3.9	e8.0	9.1	e7.6	e10	e13	9.0	13	15	1.2	.00	.00
5	3.9	9.0	9.4	e7.5	e11	e13	8.9	13	14	.83	.00	.00
6	4.2	7.9	e9.2	e7.5	e11	e13	8.9	13	14	.61	.00	.00
7	4.6	e8.0	8.0	e7.4	e12	e12	9.1	14	13	.37	.00	.00
8	4.4	8.3	e8.8	e7.5	e13	e12	9.2	14	13	.27	.00	.00
9	4.7	7.8	e9.8	e7.6	e14	e12	6.9	15	12	.24	.00	.00
10	4.9	7.7	e11	e7.7	e14	e11	5.5	16	12	.15	.00	.42
11	4.9	7.6	e11	e7.8	e15	e11	5.0	16	11	.08	.00	.00
12	5.4	7.3	e10	e8.3	e15	e11	5.1	17	10	.08	.00	.00
13	5.6	7.4	10	e8.9	e16	e10	5.5	17	9.4	.05	.00	.00
14	5.7	7.3	e9.4	e9.0	e16	e10	5.3	24	9.2	.00	.00	.00
15	5.7	7.1	8.7	e8.9	e16	e9.8	5.3	22	8.9	.03	.00	.00
16	5.9	7.1	e8.2	e8.7	e16	e9.6	5.3	21	8.4	.14	.00	.00
17	6.0	7.3	e7.9	e8.6	e16	e9.4	4.9	20	7.5	.11	.00	.00
18	6.4	7.2	e7.6	e8.3	e16	e9.1	5.5	21	7.2	.09	.00	.00
19	6.7	8.2	e7.3	e8.2	e17	e8.9	4.9	21	6.7	.03	.00	.00
20	6.8	11	e7.2	e8.2	e17	e8.7	5.1	21	6.1	.05	.00	.00
21	6.8	9.2	e7.1	e8.2	e18	e8.6	5.4	21	6.2	.08	.00	.00
22	7.0	e9.1	e7.0	e8.2	e18	e8.6	5.5	20	5.9	.02	.00	.00
23	6.9	e9.0	e6.9	e8.1	e17	e8.5	5.7	19	5.4	.00	.00	.00
24	6.8	e8.9	e6.9	e8.2	e17	e8.5	5.8	18	4.7	.00	.00	.00
25	6.8	e8.9	e6.8	e8.3	e17	e8.5	7.8	18	5.9	.00	.00	.00
26	6.8	e8.9	e6.8	e8.4	e17	e8.4	8.5	17	6.4	.00	.00	.00
27	6.8	e8.8	e6.8	e8.4	e16	e8.4	8.8	17	6.0	.00	.00	.05
28	7.0	8.8	e6.8	e8.4	e16	e8.4	8.5	17	5.6	.00	.00	.57
29	6.8	e9.1	e6.8	e8.5	---	e8.4	8.8	17	3.8	.00	.00	.45
30	6.9	9.3	e7.0	e8.7	---	e8.4	9.6	18	3.3	.00	.00	.11
31	7.0	---	e7.2	e9.0	---	e8.4	---	18	---	.00	.00	---
TOTAL	176.1	247.6	259.7	252.2	410.0	320.6	211.3	531	281.6	10.23	0.00	1.60
MEAN	5.68	8.25	8.38	8.14	14.6	10.3	7.04	17.1	9.39	.33	.000	.053
MAX	7.0	11	11	9.0	18	15	9.7	24	18	2.4	.00	.57
MIN	3.6	7.1	6.8	7.3	9.3	8.4	4.9	10	3.3	.00	.00	.00
AC-FT	349	491	515	500	813	636	419	1050	559	20	.00	3.2

CAL YR 1990 TOTAL 4035.2 MEAN 11.1 MAX 50 MIN 1.6 AC-FT 8000
WTR YR 1991 TOTAL 2701.93 MEAN 7.40 MAX 24 MIN .00 AC-FT 5360

e Estimated

HUMBOLDT RIVER BASIN

10321950 MAGGIE CREEK AT MAGGIE CREEK CANYON NEAR CARLIN, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1990.

REMARKS.--In August 1990, station was incorporated into the Carlin Trend Network.

WATER-QUALITY DATA, AUGUST 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
AUG 22...	1200	3.4	526	8.5	21.5	17.5	1.6	10.8	135	170	45
DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3)	CAR-BONATE WATER DIS IT (MG/L AS CO3)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
AUG 22...	15	35	1	11	207	6	179	58	19	0.40	48
DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	
AUG 22...	345	340	0.47	0.010	<0.100	0.040	0.30	0.150	10	10	
DATE	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	
AUG 22...	96	<0.5	<1.0	<1	<3	3	6	1	25	4	
DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CYANIDE DIS-SOLVED (MG/L AS CN)	
AUG 22...	<0.1	10	3	1	<1.0	220	8	3	3.6	<0.01	

HUMBOLDT RIVER BASIN

187

10321970 MAGGIE CREEK NEAR CARLIN, NV

LOCATION.--Lat 40°45'34", long 116°07'42", in NW 1/4 SE 1/4 sec.9, T.33 N., R.52 E., Eureka County, Hydrologic Unit 16040101, on right bank, approximately 3 mi northwest of Carlin.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--December 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,000 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 160 ft³/s, occurred sometime during the period February 20 to March 8, 1990, gage height, 4.0 ft, from floodmarks, from rating curve extended above 20 ft³/s; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15 ft³/s, May 30, gage height, 1.17 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	e1.8	e1.1	e1.4	4.3	3.7	1.2	13	.00	.00	.00
2	.00	.00	e1.8	e1.1	e1.6	4.2	3.5	1.3	12	.00	.00	.00
3	.00	.00	e1.9	e1.2	e1.6	4.1	3.4	1.4	11	.00	.00	.00
4	.00	.00	e1.9	e1.2	e1.6	4.5	3.5	1.5	11	.00	.00	.00
5	.00	.00	e1.5	e1.2	e1.5	4.4	3.6	1.7	9.7	.00	.00	.00
6	.00	.00	e1.3	e1.3	e1.5	4.9	3.5	1.7	8.9	.00	.00	.00
7	.00	.00	e1.2	e1.3	e1.6	4.9	3.3	1.8	7.9	.00	.00	.00
8	.00	.00	e1.2	e1.2	e1.8	4.3	3.0	2.1	7.5	.00	.00	.00
9	.00	.00	e1.1	e1.3	e1.7	4.2	2.9	2.5	6.9	.00	.00	.00
10	.00	.00	e1.1	e1.3	e1.6	4.0	2.1	2.8	6.4	.00	.00	.00
11	.00	.00	e1.1	e1.4	e1.5	3.8	1.7	3.2	5.7	.00	.00	.00
12	.00	.00	e1.1	e1.5	e1.7	3.8	1.4	3.8	4.9	.00	.00	.00
13	.00	.00	e1.0	e1.4	e1.9	3.9	1.5	4.5	4.2	.00	.00	.00
14	.00	.00	e1.1	e1.3	e2.4	3.9	1.4	8.9	3.4	.00	.00	.00
15	.00	.00	e1.1	e1.4	2.9	3.8	1.3	9.4	2.8	.00	.00	.00
16	.00	.00	e1.2	e1.4	3.1	3.6	1.2	8.5	2.3	.00	.00	.00
17	.00	.00	e1.2	e1.3	3.5	3.5	1.1	8.1	1.6	.00	.00	.00
18	.00	.00	e1.1	e1.2	3.6	3.6	1.1	8.7	1.3	.00	.00	.00
19	.00	.00	e1.0	e1.2	3.5	3.8	1.0	9.6	1.0	.00	.00	.00
20	.00	.08	e.98	e1.1	3.5	4.0	.98	9.4	.67	.00	.00	.00
21	.00	.25	e.94	e1.1	3.6	4.0	.97	9.7	.44	.00	.00	.00
22	.00	.31	e.96	e1.2	3.6	3.8	1.0	11	.18	.00	.00	.00
23	.00	.45	e.98	e1.3	3.5	3.8	1.0	12	.00	.00	.00	.00
24	.00	e.48	e1.0	e1.4	3.4	3.9	.95	12	.00	.00	.00	.00
25	.00	e.56	e1.1	e1.5	3.4	4.0	1.2	13	.00	.00	.00	.00
26	.00	.74	e1.1	e1.6	3.5	4.4	1.3	13	.00	.00	.00	.00
27	.00	e.80	e1.2	e1.5	3.6	4.1	1.2	13	.00	.00	.00	.00
28	.00	e.84	e1.2	e1.4	3.8	3.8	1.1	13	.00	.00	.00	.00
29	.00	.97	e1.1	e1.1	---	3.7	1.1	13	.00	.00	.00	.00
30	.00	1.7	e1.1	e1.2	---	3.6	1.2	14	.00	.00	.00	.00
31	.00	---	e1.0	e1.3	---	3.7	---	14	---	.00	.00	---
TOTAL	0.00	7.18	37.36	40.0	71.9	124.3	56.20	229.8	122.79	0.00	0.00	0.00
MEAN	.000	.24	1.21	1.29	2.57	4.01	1.87	7.41	4.09	.000	.000	.000
MAX	.00	1.7	1.9	1.6	3.8	4.9	3.7	14	13	.00	.00	.00
MIN	.00	.00	.94	1.1	1.4	3.5	.95	1.2	.00	.00	.00	.00
AC-FT	.00	14	74	79	143	247	111	456	244	.00	.00	.00

CAL YR 1990 TOTAL 2049.11 MEAN 5.61 MAX 57 MIN .00 AC-FT 4060
WTR YR 1991 TOTAL 689.53 MEAN 1.89 MAX 14 MIN .00 AC-FT 1370

e Estimated

HUMBOLDT RIVER BASIN

10322150 MARYS CREEK AT CARLIN, NV

LOCATION.--Lat 40°42'38", long 116°07'30", in SE 1/4 SE 1/4 sec.28, T.33 N., R.52 E., Elko County, Hydrologic Unit 16040101, on left bank, 0.7 mi above confluence with Humboldt River, and 1.1 mi southeast of Carlin.

DRAINAGE AREA.--Not determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,930 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 24 ft³/s, gage height 0.78 ft, occurred sometime during the period Feb. 25 to Mar. 15, 1990, from floodmarks; minimum daily, 0.60 ft³/s, Aug. 27, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21 ft³/s, Aug. 7, gage height, 1.05 ft; minimum daily, 0.60 ft³/s, Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	3.3	3.7	e2.6	2.6	3.5	6.7	1.6	3.8	1.1	1.8	2.2
2	1.1	3.7	3.6	e2.5	2.4	3.5	5.2	2.3	3.3	1.1	1.7	2.3
3	1.5	3.4	3.5	e2.8	2.4	3.3	3.9	2.2	2.0	2.0	1.4	2.5
4	1.4	3.6	3.4	e2.9	2.5	3.7	3.5	2.0	2.2	2.2	1.8	2.4
5	1.5	3.9	3.2	e2.8	2.7	3.3	4.5	1.7	2.2	1.3	2.9	2.8
6	1.5	3.7	3.1	e3.2	2.8	3.4	5.0	2.1	1.9	1.2	2.7	2.8
7	2.0	3.8	2.5	e3.7	2.8	2.9	5.0	1.9	1.4	1.2	4.3	3.0
8	2.1	3.6	3.1	e3.4	2.7	2.9	4.9	1.8	1.7	1.6	5.3	2.8
9	2.6	4.0	2.6	e3.2	2.9	2.8	5.2	2.1	1.6	2.2	4.5	2.8
10	2.6	3.9	3.1	e3.5	2.9	2.9	5.6	2.0	1.4	1.2	4.3	2.8
11	2.6	3.8	2.9	e4.0	2.9	3.2	4.8	1.8	1.4	1.3	3.7	2.6
12	2.1	4.2	3.1	e4.5	2.9	3.5	5.4	1.6	1.1	1.3	2.6	2.5
13	1.8	4.5	3.4	e4.3	2.9	4.1	5.5	2.3	.79	1.3	5.3	2.3
14	2.4	4.6	3.2	e4.5	3.1	4.8	4.9	3.4	.82	1.4	6.4	2.1
15	2.8	4.3	3.2	e4.0	3.1	4.5	3.9	2.7	.77	1.7	6.0	1.8
16	3.1	4.4	3.1	e3.9	3.2	2.9	4.3	2.4	.64	2.2	6.5	1.9
17	3.0	4.2	3.4	e4.2	3.3	3.6	4.2	2.6	.77	1.5	5.4	2.1
18	3.0	4.7	e3.7	e4.3	3.2	4.7	4.3	2.6	.98	1.4	5.4	2.4
19	3.6	4.7	e3.0	e3.6	3.0	5.9	3.4	2.5	.71	1.5	4.2	2.4
20	3.8	e4.5	e2.3	e3.4	3.1	6.5	3.1	2.7	.79	1.5	2.8	2.3
21	3.4	e4.3	e2.1	e3.4	3.1	8.4	3.9	3.0	.77	1.4	1.7	2.5
22	3.5	e4.5	e1.9	e3.5	3.2	9.4	4.5	3.2	.84	1.3	1.2	2.2
23	4.1	4.6	e1.9	e3.6	3.2	8.5	4.7	2.8	.86	1.3	1.2	2.4
24	4.0	4.1	e1.9	e3.6	3.2	9.3	4.2	1.9	.89	1.9	1.1	2.5
25	3.6	4.0	e2.1	e3.4	3.2	9.9	3.9	2.7	1.3	2.5	.84	2.4
26	3.0	3.8	e2.3	e3.3	3.3	10	3.4	2.6	1.3	2.6	.89	2.2
27	2.6	3.7	e2.5	e3.2	3.4	10	2.6	2.3	1.2	1.7	.60	2.3
28	2.8	4.2	e2.8	e3.1	3.5	9.8	2.0	2.6	1.1	1.9	.97	2.5
29	2.9	3.6	e2.6	3.0	---	11	1.9	3.3	1.2	1.3	.81	2.5
30	2.9	4.0	e2.4	2.9	---	9.4	1.8	3.2	1.1	1.1	1.0	2.2
31	3.2	---	e2.7	2.6	---	6.0	---	3.2	---	2.5	2.0	---
TOTAL	81.5	121.6	88.3	106.9	83.5	177.6	126.2	75.1	40.83	49.7	91.31	72.5
MEAN	2.63	4.05	2.85	3.45	2.98	5.73	4.21	2.42	1.36	1.60	2.95	2.42
MAX	4.1	4.7	3.7	4.5	3.5	11	6.7	3.4	3.8	2.6	6.5	3.0
MIN	1.0	3.3	1.9	2.5	2.4	2.8	1.8	1.6	.64	1.1	.60	1.8
AC-FT	162	241	175	212	166	352	250	149	81	99	181	144

CAL YR 1990 TOTAL 1315.7 MEAN 3.60 MAX 24 MIN 1.0 AC-FT 2610
WTR YR 1991 TOTAL 1115.04 MEAN 3.05 MAX 11 MIN .60 AC-FT 2210

e Estimated

HUMBOLDT RIVER BASIN

189

10322150 MARYS CREEK AT CARLIN, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1990, July to September 1991.

REMARKS.--In August 1990, station was incorporated into the Carlin Trend Network.

WATER-QUALITY DATA, AUGUST 1990 to SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CAO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
AUG 1990 23...	1115	2.5	468	7.8	19.5	15.5	1.5	9.0	109	160	46
JUL 1991 29...	0930	1.2	476	7.8	19.0	15.0	1.5	--	--	170	47
SEP 05...	1215	2.4	469	8.0	19.5	16.5	15	9.0	110	170	49

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WAT DIS IT FIELD MG/L AS HCO3	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CAO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)
AUG 1990 23...	11	27	0.9	9.0	208	170	48	17	0.30	59
JUL 1991 29...	12	30	1	8.7	209	171	53	17	0.40	49
SEP 05...	12	28	0.9	8.9	208	170	48	16	0.30	51

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)
AUG 1990 23...	312	321	0.42	0.010	0.200	0.060	<0.20	0.060	<10	7
JUL 1991 29...	300	321	0.41	<0.010	0.190	0.020	<0.20	0.060	<10	7
SEP 05...	298	317	0.41	<0.010	0.210	0.030	<0.20	0.030	30	8

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
AUG 1990 23...	120	<0.5	<1.0	<1	<3	1	16	<1	35	23
JUL 1991 29...	120	<0.5	<1.0	<1	<3	<1	8	<1	40	46
SEP 05...	120	<0.5	1.0	<1	<3	<1	33	<1	39	90

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CYANIDE DIS- SOLVED (MG/L AS CN)
AUG 1990 23...	<0.1	<10	<1	2	<1.0	260	9	8	1.6	<0.01
JUL 1991 29...	<0.1	<10	<1	2	<1.0	280	7	<3	--	<0.01
SEP 05...	<0.1	<10	<1	2	<1.0	280	11	8	--	--

HUMBOLDT RIVER BASIN

10322500 HUMBOLDT RIVER AT PALISADE, NV

LOCATION.--Lat 40°36'25", long 116°12'05", in SE 1/4 SE 1/4 sec.35, T.32 N., R.51 E., Eureka County, Hydrologic Unit 16040101, on right bank, 0.2 mi downstream from Southern Pacific Railroad bridge, 0.5 mi downstream from Palisade, and 0.8 mi upstream from Pine Creek.

DRAINAGE AREA.--5,010 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1902 to October 1906, and July 1911 to current year. Monthly discharge only for some periods published in WSP 1314.

REVISED RECORDS.--WSP 1514, 1903-4, 1912, 1914.

GAGE.--Water-stage recorder. Datum of gage is 4,825.55 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 1, 1939, nonrecording gages (water-stage recorder Apr. 22 to June 3, 1935) at several sites within 0.5 mi of present site at various datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion for irrigation of 148,000 acres of hay and pastureland above station.

AVERAGE DISCHARGE.--84 years (1903-6, 1912-91), 396 ft³/s, 286,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,870 ft³/s, May 18, 1984, gage height, 10.08 ft; minimum, 2.0 ft³/s, Aug. 25-28, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 17 ft, present datum, about Feb. 28, 1910, from photographs and written statements of resident witnesses; discharge, about 17,000 ft³/s, from rating curve extended above 7,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,090 ft³/s, June 17, gage height, 4.27 ft; minimum daily, 17 ft³/s, Oct. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	27	39	e31	45	157	131	115	430	397	38	24
2	18	27	38	e32	45	157	129	112	535	358	37	24
3	18	26	39	e32	47	157	126	118	548	337	35	23
4	19	26	37	e33	48	163	123	117	490	340	34	23
5	19	27	46	e34	52	169	121	115	561	346	34	23
6	19	28	40	e35	58	170	118	114	709	342	33	24
7	20	27	36	e35	73	169	118	118	757	333	31	27
8	20	27	39	e34	76	161	130	125	742	315	31	28
9	21	27	41	e34	79	160	134	126	726	301	31	27
10	22	27	41	e35	108	156	142	125	785	277	30	29
11	21	27	48	e40	118	149	143	125	801	246	29	28
12	19	27	e45	e50	125	143	141	129	885	211	29	26
13	19	27	e38	e53	127	143	149	138	953	173	28	25
14	18	27	e35	e51	141	141	151	199	957	158	29	24
15	17	29	e33	44	150	138	151	251	1020	153	31	23
16	18	30	e32	43	156	150	150	249	1060	149	32	23
17	19	31	e33	45	163	153	148	255	1080	142	30	23
18	20	32	e33	48	174	150	150	265	1080	133	30	23
19	23	35	e32	47	167	149	142	258	1070	123	29	22
20	21	43	e28	46	172	144	136	245	975	118	28	23
21	22	46	e27	e44	171	135	139	234	875	113	28	22
22	24	43	e26	45	171	133	136	264	837	91	28	22
23	26	44	e26	49	166	132	138	273	806	85	27	22
24	25	43	e26	49	158	130	135	253	725	69	26	23
25	25	43	e27	50	154	129	133	247	692	65	26	24
26	25	45	e29	50	151	135	130	264	586	65	26	23
27	25	40	e30	48	149	130	123	294	523	52	26	23
28	25	38	e30	47	151	127	121	348	500	46	25	24
29	25	35	e29	e45	---	129	119	387	465	43	25	25
30	25	45	e29	e46	---	129	107	345	460	40	25	25
31	25	---	e30	46	---	122	---	364	---	38	24	---
TOTAL	661	999	1062	1321	3395	4510	4014	6572	22633	5659	915	725
MEAN	21.3	33.3	34.3	42.6	121	145	134	212	754	183	29.5	24.2
MAX	26	46	48	53	174	170	151	387	1080	397	38	29
MIN	17	26	26	31	45	122	107	112	430	38	24	22
AC-FT	1310	1980	2110	2620	6730	8950	7960	13040	44890	11220	1810	1440

CAL YR 1990 TOTAL 58496 MEAN 160 MAX 871 MIN 15 AC-FT 116000
WTR YR 1991 TOTAL 52466 MEAN 144 MAX 1080 MIN 17 AC-FT 104100

e Estimated

HUMBOLDT RIVER BASIN

191

10322500 HUMBOLDT RIVER AT PALISADE, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-65, 1977-84, 1990 to current year.

REMARKS.--In August 1990, station was incorporated into the Carlin Trend Network.

WATER-QUALITY DATA, AUGUST 1990 to SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)
AUG 1990 30...	1100	17	526	8.4	23.5	21.0	2.3	7.4	--	170	42
JUL 1991 30...	1130	39	473	8.4	33.0	22.5	1.8	7.7	106	150	42
SEP 04...	1350	24	524	8.4	33.0	23.0	1.4	9.3	130	170	43

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CaCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
AUG 1990 30...	15	47	2	10	237	--	194	48	22	0.60	35
JUL 1991 30...	11	41	1	7.4	222	3	187	47	19	0.50	21
SEP 04...	14	46	2	9.9	217	8	190	47	20	0.50	31

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)
AUG 1990 30...	322	337	0.44	<0.010	<0.100	<0.010	0.30	<0.010	<10	9
JUL 1991 30...	290	302	0.39	<0.010	<0.050	<0.010	0.20	<0.010	<10	7
SEP 04...	322	327	0.44	<0.010	<0.050	0.020	0.30	<0.010	20	9

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
AUG 1990 30...	110	<0.5	1.0	<1	<3	2	5	<1	89	15
JUL 1991 30...	93	<0.5	<1.0	2	<3	1	7	<1	56	8
SEP 04...	110	<0.5	<1.0	<1	<3	<1	9	<1	81	10

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CYANIDE DIS- SOLVED (MG/L AS CN)
AUG 1990 30...	<0.1	<10	1	<1	<1.0	420	<6	<3	2.8	<0.01
JUL 1991 30...	<0.1	<10	<1	<1	<1.0	350	<6	<3	--	<0.01
SEP 04...	<0.1	<10	1	<1	<1.0	430	<6	<3	--	--

HUMBOLDT RIVER BASIN

10323425 HUMBOLDT RIVER AT OLD US HIGHWAY 40 BRIDGE, AT DUNPHY, NV

LOCATION.--Lat 40°42'20", long 116°31'48", in SE 1/4 SE 1/4 sec.26, T.33 N., R.48 E., Eureka County, Hydrologic Unit 16040105, on right downstream bridge abutment, at Dunphy.

DRAINAGE AREA.--Not determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February to September 1991.

GAGE.--Water-stage recorder. Elevation of gage is 4,630 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 973 ft³/s, June 18, 1991, gage height, 5.00 ft; minimum daily, 7.0 ft³/s, Aug. 15, 22-23, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period Feb. to Sept., 973 ft³/s, June 18, gage height, 5.00 ft; minimum daily, 7.0 ft³/s, Aug. 15, 22-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	173	127	137	326	376	19	e7.6
2	---	---	---	---	---	173	136	155	376	321	18	e7.6
3	---	---	---	---	---	173	130	146	427	295	16	e7.6
4	---	---	---	---	---	171	121	137	408	282	15	e8.2
5	---	---	---	---	---	178	118	129	401	283	13	e9.0
6	---	---	---	---	---	190	127	138	454	287	13	e9.1
7	---	---	---	---	---	186	127	131	560	286	12	e9.2
8	---	---	---	---	---	178	121	144	601	279	11	e9.6
9	---	---	---	---	---	175	134	168	588	268	10	e10
10	---	---	---	---	---	173	153	164	591	254	9.8	11
11	---	---	---	---	---	178	158	156	637	234	9.5	11
12	---	---	---	---	---	166	162	155	663	215	8.7	12
13	---	---	---	---	---	164	156	164	757	180	8.3	11
14	---	---	---	---	128	164	157	207	811	162	8.4	11
15	---	---	---	---	149	164	166	228	839	152	7.0	11
16	---	---	---	---	167	151	167	249	871	155	7.6	10
17	---	---	---	---	177	161	166	275	891	158	e7.8	10
18	---	---	---	---	185	e170	158	278	914	153	e7.7	e10
19	---	---	---	---	182	e173	151	271	902	143	e7.4	e9.8
20	---	---	---	---	175	e166	152	281	880	139	e7.2	e10
21	---	---	---	---	186	e164	155	255	769	134	e7.1	e9.9
22	---	---	---	---	181	e160	152	238	728	128	e7.0	e9.7
23	---	---	---	---	188	e158	149	253	694	108	e7.0	e9.4
24	---	---	---	---	181	e154	160	242	655	98	e7.2	e9.5
25	---	---	---	---	177	e148	176	233	624	69	e7.3	e9.8
26	---	---	---	---	169	e146	168	239	578	58	e7.8	e9.8
27	---	---	---	---	161	152	163	256	486	57	8.4	e9.7
28	---	---	---	---	171	142	146	263	457	49	7.9	e9.8
29	---	---	---	---	---	139	150	311	433	40	7.6	e9.8
30	---	---	---	---	---	129	136	360	403	35	7.3	e9.8
31	---	---	---	---	---	128	---	299	---	25	e7.6	---
TOTAL	---	---	---	---	---	5047	4442	6662	18724	5423	298.6	291.9
MEAN	---	---	---	---	---	163	148	215	624	175	9.63	9.73
MAX	---	---	---	---	---	190	176	360	914	376	19	12
MIN	---	---	---	---	---	128	118	129	326	25	7.0	7.6
AC-FT	---	---	---	---	---	10010	8810	13210	37140	10760	592	579

e Estimated

HUMBOLDT RIVER BASIN

193

10323425 HUMBOLDT RIVER AT OLD US HIGHWAY 40 BRIDGE, AT DUNPHY, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July to September 1991.

REMARKS.--In July 1991, station was incorporated into the Carlin Trend Network.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)
JUL 29...	1430	38	509	8.5	30.0	23.5	1.1	9.7	134	140	37
SEP 05...	1220	8.7	622	8.4	29.0	19.0	2.5	9.6	123	170	45

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JUL 29...	11	50	2	7.3	201	4	171	52	27	0.50
SEP 05...	14	72	2	9.4	230	12	208	65	41	0.60

DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (MG/L AS AL)
JUL 29...	22	296	310	0.40	<0.010	<0.050	0.010	0.30	<0.010	<10
SEP 05...	32	388	405	0.53	<0.010	<0.050	0.010	0.30	<0.010	10

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
JUL 29...	7	78	<0.5	<1.0	3	<3	2	6	<1	48
SEP 05...	9	99	<0.5	1.0	<1	<3	<1	4	<1	68

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	CYANIDE DIS-SOLVED (MG/L AS CN)
JUL 29...	6	<0.1	<10	<1	<1	<1.0	310	<6	<3	<0.01
SEP 05...	5	<0.1	<10	<1	<1	<1.0	380	6	<3	--

HUMBOLDT RIVER BASIN

10324500 ROCK CREEK NEAR BATTLE MOUNTAIN, NV

LOCATION.--Lat 40°49'30", long 116°34'45", in SW 1/4 SE 1/4 sec.17, T.34 N., R.48 E., Eureka County, Hydrologic Unit 16040106, at mouth of canyon on left bank, and 22 mi northeast of Battle Mountain.

DRAINAGE AREA.--875 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March to July 1896, March 1918 to September 1925 (fragmentary October 1923 to April 1925), March 1927 to May 1929 (fragmentary), October 1945 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1214: 1950 (M); WSP 1714: 1959; WDR NV-76-1: 1971 (P), 1974 (P).

GAGE.--Water-stage recorder. Elevation of gage is 4,600 ft above National Geodetic Vertical Datum of 1929, estimated from nearby U.S. Coast and Geodetic Survey bench mark. Prior to Mar. 26, 1918, nonrecording gage at site about 11 mi upstream at different datum. Mar. 26, 1918, to Oct. 28, 1970, water-stage recorder at site 0.4 mi upstream, at the following datums: at different datum Mar. 26, 1918, to Jan. 3, 1946; at datum 9.45 ft higher Jan. 4, 1946; to July 23, 1964; at datum 7.35 ft higher July 23, 1964, to Oct. 31, 1968; and at datum 6.34 ft higher Nov. 1, 1968, to Oct. 28, 1970.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Several diversions for irrigation of 4,380 acres, in valleys upstream. Station is above all diversions in Boulder Flat and below tributaries. Flow slightly affected by small reservoir in Squaw Valley, 30 mi upstream, and by Willow Creek Reservoir, usable capacity, 18,000 acre-ft.

AVERAGE DISCHARGE.--51 years (1919-23, 1946-91), 40.2 ft³/s, 29,120 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft³/s, Feb. 11, 1962, gage height, 6.89 ft, from rating curve extended above 2,500 ft³/s on basis of slope-area measurement of peak flow; no flow at times in July to October most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 75 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	1200	*64	*2.77				
No flow many days July to Sept.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.77	2.4	2.7	e1.9	e3.2	6.3	7.4	2.9	36	.62	.00	.00
2	.68	2.4	e2.4	e2.0	e3.3	6.6	7.8	2.9	35	.45	.00	.00
3	.64	2.3	2.6	e2.1	e3.6	6.2	8.2	3.5	32	.27	.00	.00
4	.70	2.3	2.4	e2.1	e3.9	6.0	9.0	3.3	28	.16	.00	.00
5	.73	2.9	4.0	e2.1	e4.3	8.8	9.8	3.2	23	.10	.00	.00
6	.84	3.5	2.8	e2.1	e5.0	22	9.9	2.8	18	.06	.00	.00
7	.95	3.4	2.9	e2.2	e5.4	28	9.8	2.8	14	.03	.00	.00
8	.98	2.8	2.8	e2.3	e5.5	23	7.0	2.7	11	.02	.00	.00
9	1.4	2.8	3.2	e2.4	e5.8	21	5.1	2.8	9.1	.01	.00	.00
10	1.6	3.0	2.9	e2.7	e6.2	17	4.3	2.6	6.9	.00	.00	.00
11	1.6	2.8	3.6	e2.9	e7.0	16	3.9	2.0	4.9	.00	.00	.00
12	1.7	2.6	7.0	e3.4	e6.5	13	4.1	1.7	3.3	.00	.00	.83
13	1.8	2.5	3.5	e3.8	e7.0	11	4.3	1.4	2.5	.00	.00	1.5
14	1.9	2.7	e2.7	e4.4	e6.6	10	3.7	4.7	2.5	.00	.00	1.0
15	2.0	2.8	e2.4	e4.8	e6.2	10	3.6	6.1	2.1	.00	.00	.82
16	2.0	2.8	2.3	e5.1	e5.8	9.6	3.8	5.8	1.6	.00	.00	.60
17	1.9	2.8	2.4	e5.2	e5.6	8.3	3.6	5.7	1.2	.00	.00	.46
18	1.8	3.0	e2.3	e5.1	e5.9	7.2	3.7	6.2	1.1	.00	.00	.36
19	2.0	3.0	e2.3	e5.0	e6.3	7.4	3.5	6.6	.85	.00	.00	.34
20	2.2	3.5	e2.1	e4.8	e6.8	8.1	3.2	36	.67	.00	.00	.36
21	2.3	3.5	e1.9	e4.6	7.4	8.1	3.3	54	.49	.00	.00	.27
22	2.5	3.4	e1.9	e4.4	7.0	7.7	3.4	61	.41	.00	.00	.19
23	2.5	2.9	e1.9	e4.1	6.4	7.7	3.6	57	.34	.00	.00	.19
24	2.3	2.8	e1.9	e3.9	5.9	7.4	3.7	55	.27	.00	.00	.24
25	2.2	2.7	e1.9	e3.6	5.5	7.8	4.8	53	.26	.00	.00	.27
26	2.3	e2.4	e1.9	e3.4	5.1	9.3	4.1	42	.39	.00	.00	.30
27	2.3	2.4	e1.9	e3.2	4.9	9.4	3.9	33	.54	.00	.00	.36
28	2.3	e2.1	e1.9	e3.1	5.1	8.8	3.4	31	.47	.00	.00	.55
29	2.3	2.2	e1.9	e3.0	---	7.7	3.1	32	.56	.00	.00	.57
30	2.2	2.8	e1.9	e3.0	---	7.5	3.1	29	.74	.00	.00	.57
31	2.1	---	e1.9	e3.1	---	7.7	---	27	---	.00	.00	---
TOTAL	53.49	83.5	80.2	105.8	157.2	334.6	152.1	579.7	238.19	1.72	0.00	9.78
MEAN	1.73	2.78	2.59	3.41	5.61	10.8	5.07	18.7	7.94	.055	.000	.33
MAX	2.5	3.5	7.0	5.2	7.4	28	9.9	61	36	.62	.00	1.5
MIN	.64	2.1	1.9	1.9	3.2	6.0	3.1	1.4	.26	.00	.00	.00
AC-FT	106	166	159	210	312	664	302	1150	472	3.4	.00	19

CAL YR 1990 TOTAL 4653.82 MEAN 12.8 MAX 430 MIN .00 AC-FT 9230
WTR YR 1991 TOTAL 1796.28 MEAN 4.92 MAX 61 MIN .00 AC-FT 3560

e Estimated

HUMBOLDT RIVER BASIN

195

10324500 ROCK CREEK NEAR BATTLE MOUNTAIN, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977-84, August 1990.

REMARKS.--In August 1990, station was incorporated into the Carlin Trend Network.

WATER-QUALITY DATA, AUGUST 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
AUG 29...	1145	0.38	458	8.9	30.0	21.0	4.3	8.2	74	16	8.3
DATE		SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
AUG 29...	59		3	9.8	127	8	117	43	40	1.4	9.4
DATE		SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (MG/L AS AL)	ARSENIC DIS-SOLVED (MG/L AS AS)
AUG 29...		257	258	0.35	0.010	<0.100	0.040	0.50	0.010	<10	8
DATE		BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 29...		54	<0.5	<1.0	<1	<3	2	10	<1	31	21
DATE		MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CYANIDE DIS-SOLVED (MG/L AS CN)
AUG 29...		<0.1	<10	2	<1	<1.0	240	<6	<3	5.9	<0.01

HUMBOLDT RIVER BASIN

10324700 BOULDER CREEK NEAR DUNPHY, NV

LOCATION.--Lat 40°57'04", long 116°26'39", in NE 1/4 SE 1/4 sec.33, T.36 N., R.49 E., Eureka County, Hydrologic Unit 16040105, on left bank, approximately 20 mi north of Dunphy.

DRAINAGE AREA.--76.7 mi², approximately.

PERIOD OF RECORD.--February to September 1991.

GAGE.--Water-stage recorder. Elevation of gage is 5,010 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded discharge, 7.5 ft³/s, May 21, 1991, gage height, 0.92 ft; no flow most days.

EXTREMES FOR CURRENT YEAR.--Maximum recorded discharge, 7.5 ft³/s, May 21, gage height, 0.92 ft; no flow most days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	.00	.00	.00	.00	.85	.00	.00	.00
2	---	---	---	---	.00	.00	.00	.00	.30	.00	.00	.00
3	---	---	---	---	.00	.00	.00	.00	.03	.00	.00	.00
4	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
5	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
6	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
7	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
8	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
9	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.43
10	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
11	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
12	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
13	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
14	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
15	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
16	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
17	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
18	---	---	---	---	.00	.00	.00	.55	.00	.00	.00	.00
19	---	---	---	---	.00	.00	.00	2.6	.00	.00	.00	.00
20	---	---	---	---	.00	.00	.00	5.4	.00	.00	.00	.00
21	---	---	---	---	.00	.00	.00	7.0	.00	.00	.00	.00
22	---	---	---	---	.00	.00	.00	6.7	.00	.00	.00	.00
23	---	---	---	---	.00	.00	.00	5.4	.00	.00	.00	.00
24	---	---	---	---	.00	.00	.00	4.8	.00	.00	.00	.00
25	---	---	---	---	.00	.00	.00	4.6	.00	.00	.00	.00
26	---	---	---	---	.00	.00	.00	4.1	.00	.00	.00	.00
27	---	---	---	---	.00	.00	.00	3.6	.00	.00	.00	.00
28	---	---	---	---	.00	.00	.00	2.8	.00	.00	.00	.00
29	---	---	---	---	---	.00	.00	2.1	.00	.00	.00	.00
30	---	---	---	---	---	.00	.00	4.8	.00	.00	.00	.00
31	---	---	---	---	---	.00	---	3.3	---	.00	.00	---
TOTAL	---	---	---	---	0.00	0.00	0.00	57.75	1.18	0.00	0.00	0.43
MEAN	---	---	---	---	.0000	.0000	.0000	1.86	.039	.0000	.0000	.014
MAX	---	---	---	---	.00	.00	.00	7.0	.85	.00	.00	.43
MIN	---	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	---	---	---	---	.00	.00	.00	115	2.3	.00	.00	.9

HUMBOLDT RIVER BASIN

197

10325000 HUMBOLDT RIVER AT BATTLE MOUNTAIN, NV

LOCATION.--Lat 40°40'00", long 116°55'50", in NE 1/4 NW 1/4 sec.8, T.32 N., R.45 E., Lander County, Hydrologic Unit 16040105, on left bank, 30 ft downstream from bridge on State Highway 18A, and 2 mi north of Battle Mountain. Reese River enters Humboldt River several miles below station.

DRAINAGE AREA.--8,870 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1896 to December 1897, March 1921 to April 1924, October 1945 to September 1981, February to September 1991. Monthly discharge only for some periods published in WSP 1314.

REVISED RECORD.--WSP 1564: 1897-98, 1923.

GAGE.--Water-stage recorder. Elevation of gage is 4,500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Mar. 1, 1921, nonrecording gage 1.3 mi upstream and Mar. 1, 1921, to Apr. 19, 1924, nonrecording gage 0.8 mi upstream, both at different datums. Oct. 1945 to Sept. 10, 1972, water-stage recorder at site 1.0 mi upstream at datum 4.79 ft higher.

REMARKS.--Records fair. Records prior to 1969 (except the maximum for the period of record) do not always include flow in secondary channels or ditches at medium-high stages, much of which was used for irrigation. Many diversions above station for irrigation of 194,000 acres Humboldt Decree.

AVERAGE DISCHARGE.--39 years (1897, 1922-23, 1946-81), 347 ft³/s, 251,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,800 ft³/s, May 3, 4, 1952 (includes flow bypassing gage outside of main channel); no flow Sept. 8 to Oct. 22, 1948, Sept. 21-26, 1949, Sept. 21-27, 1959, Aug. 16 to Sept. 30, 1981, Aug. 27 to Sept. 9, 11-13, 20-30, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 989 ft³/s, June 14, gage height, 6.65 ft; no flow Aug. 27 to Sept. 9, 11-13, 20-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	e32	158	138	106	289	444	27	.00
2	---	---	---	---	e38	156	135	105	304	409	18	.00
3	---	---	---	---	e42	155	139	98	332	362	15	.00
4	---	---	---	---	e49	155	137	97	374	336	14	.00
5	---	---	---	---	e62	162	133	99	364	321	11	.00
6	---	---	---	---	e74	166	132	104	364	315	9.2	.00
7	---	---	---	---	e90	171	132	102	428	312	7.9	.00
8	---	---	---	---	e88	172	128	99	519	303	6.9	.00
9	---	---	---	---	e100	171	129	110	541	292	6.0	.00
10	---	---	---	---	e125	168	142	160	547	278	5.3	.30
11	---	---	---	---	e130	169	149	147	571	264	4.8	.00
12	---	---	---	---	e150	163	149	142	631	243	4.4	.00
13	---	---	---	---	e140	160	154	143	676	227	4.0	.00
14	---	---	---	---	127	158	156	156	806	196	3.7	.34
15	---	---	---	---	129	161	160	175	864	173	3.6	1.1
16	---	---	---	---	143	156	163	208	895	155	3.0	1.1
17	---	---	---	---	153	152	161	236	929	146	2.4	.91
18	---	---	---	---	159	157	161	235	963	137	2.0	.60
19	---	---	---	---	166	162	158	238	975	130	1.7	.27
20	---	---	---	---	168	164	157	243	973	118	1.5	.00
21	---	---	---	---	167	163	151	248	933	108	1.3	.00
22	---	---	---	---	170	155	148	237	851	101	1.2	.00
23	---	---	---	---	169	150	149	236	814	96	.98	.00
24	---	---	---	---	169	148	136	249	781	85	.63	.00
25	---	---	---	---	168	148	148	245	723	76	.40	.00
26	---	---	---	---	166	150	147	234	685	61	.16	.00
27	---	---	---	---	164	150	146	231	613	50	.00	.00
28	---	---	---	---	157	148	138	245	535	46	.00	.00
29	---	---	---	---	---	144	135	257	506	43	.00	.00
30	---	---	---	---	---	139	129	297	463	36	.00	.00
31	---	---	---	---	---	138	---	311	---	30	.00	---
TOTAL	---	---	---	---	3495	4869	4340	5793	19249	5893	156.07	4.62
MEAN	---	---	---	---	125	157	145	187	642	190	5.03	.15
MAX	---	---	---	---	170	172	163	311	975	444	27	1.1
MIN	---	---	---	---	32	138	128	97	289	30	.00	.00
AC-FT	---	---	---	---	6930	9660	8610	11490	38180	11690	310	9.2

e Estimated

HUMBOLDT RIVER BASIN

10325000 HUMBOLDT RIVER AT BATTLE MOUNTAIN, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977-81, May to June 1991.

REMARKS.--In May 1991, station was incorporated into the Carlin Trend Network.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	
MAY 03...	1120	97	544	8.7	13.5	10.5	12	180	51	13	
JUN 27...	1300	648	370	8.5	21.5	18.0	6.9	140	41	7.9	
DATE		SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)
MAY 03...	49	2	7.2	240	4	203	51	27	0.60	26	
JUN 27...	25	0.9	4.6	199	--	163	19	7.7	<0.10	24	
DATE		SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)
MAY 03...	349	348	0.47	0.020	<0.050	<0.010	0.40	<0.010	20	7	
JUN 27...	237	227	0.32	<0.010	<0.050	<0.010	2.8	0.030	<10	5	
DATE		BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAY 03...	83	<0.5	<1.0	<1	<3	3	19	5	47	9	
JUN 27...	62	<0.5	<1.0	<1	<3	6	8	<1	19	2	
DATE		MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	CYANIDE DIS- SOLVED (MG/L AS CN)	
MAY 03...	<0.1	<10	2	<1	<1.0	380	<6	52	<0.01		
JUN 27...	<0.1	<10	2	<1	<1.0	240	<6	<3	<0.01		

HUMBOLDT RIVER BASIN

199

10327500 HUMBOLDT RIVER AT COMUS, NV

LOCATION.--Lat 40°59'33", long 117°19'00", in NE 1/2 SE 1/4 sec.14, T.36 N., R.41 E., Humboldt County, Hydrologic Unit 16040105, on left bank, at Comus siding of Southern Pacific Railroad, 1.0 mi upstream from Kelly Creek, 9 mi northeast of Golconda, and 32 mi northwest of Battle Mountain.

DRAINAGE AREA.--12,100 mi², approximately.

PERIOD OF RECORD.--October 1894 to December 1909, September 1910 to September 1926, October 1945 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "near Golconda" prior to October 1917.

REVISED RECORDS.--WSP 1514: 1921-22, 1926. WSP 1314: 1904, 1907-8, 1911-13, 1916-17.

GAGE.--Water-stage recorder. Datum of gage is 4,359.9 ft, above National Geodetic Vertical Datum of 1929 (from Soil Conservation Service reference mark). Prior to Sept. 25, 1917, nonrecording gages at several sites about 10 mi downstream at different datums. Sept. 25, 1917, to June 30, 1923, and May 23, 1925, to May 31, 1926, nonrecording gages at several sites within 0.5 mi of present site at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Many diversions above station for irrigation, 206,000 acres, additional acreage not covered by decree.

AVERAGE DISCHARGE.--77 years (1895-1909, 1911-26, 1946-91), 329 ft³/s, 238,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,900 ft³/s, Apr. 24, 1984, gage height, 12.25 ft, no flow at times some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 765 ft³/s, June 25, gage height, 6.08 ft; minimum daily, 0.07 ft³/s, Sept. 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.11	.15	.15	20	121	109	114	205	360	12	.14
2	.18	.11	.14	.15	19	116	107	115	225	388	8.2	.10
3	.20	.11	.13	.15	24	116	105	102	247	369	6.6	.09
4	.22	.11	.13	.15	28	119	106	96	260	325	5.3	.08
5	.20	.13	.13	.15	31	124	107	89	282	297	4.6	.09
6	.18	.12	.13	.15	37	121	105	91	303	274	3.8	.09
7	.16	.11	.13	.15	51	122	102	93	285	264	3.1	.10
8	.15	.11	.13	.15	56	126	100	94	299	263	2.6	.14
9	.16	.11	.13	.16	68	129	100	90	317	253	1.7	.19
10	.15	.11	.13	.19	66	129	98	83	321	243	1.2	.17
11	.15	.11	e.13	.20	79	126	101	110	312	231	.78	.16
12	.15	.11	e.13	.20	97	124	108	130	353	219	.55	.16
13	.15	.11	e.13	.21	99	124	114	122	352	205	.41	.11
14	.15	.11	e.13	.21	120	122	117	118	376	184	.39	.11
15	.14	.10	e.13	e.22	101	121	118	124	382	162	.37	.11
16	.13	.09	e.13	e.23	90	119	121	133	472	136	.40	.13
17	.13	.09	e.13	e.24	97	120	125	152	498	118	.38	.19
18	.13	.09	e.13	.26	104	116	128	173	529	106	.24	.20
19	.13	.10	e.13	.20	110	118	126	186	497	98	.23	.14
20	.13	.11	e.13	.16	115	122	127	188	496	93	.23	.14
21	.13	.11	e.13	7.3	121	123	128	194	486	86	.22	.13
22	.12	.11	e.13	15	120	123	124	178	501	76	.21	.13
23	.11	.11	.13	17	122	120	122	184	508	69	.14	.15
24	.11	.12	.13	19	122	117	126	182	488	64	.14	.17
25	.11	.13	.13	19	123	114	123	174	583	57	.14	.14
26	.11	.12	.13	21	123	113	117	181	567	48	.16	.07
27	.11	.11	.13	22	122	113	122	163	530	40	.16	.07
28	.11	.11	.13	23	124	112	121	118	484	32	.16	.12
29	.11	.11	.13	e23	---	112	119	142	450	24	.16	.17
30	.11	.14	.13	23	---	112	116	155	415	19	.14	.13
31	.11	---	.15	e22	---	109	---	172	---	15	.14	---
TOTAL	4.41	3.32	4.08	214.98	2389	3703	3442	4246	12023	5118	54.85	3.92
MEAN	.14	.11	.13	6.93	85.3	119	115	137	401	165	1.77	.13
MAX	.22	.14	.15	23	124	129	128	194	583	388	12	.20
MIN	.11	.09	.13	.15	19	109	98	83	205	15	.14	.07
AC-FT	8.7	6.6	8.1	426	4740	7340	6830	8420	23850	10150	109	7.8

CAL YR 1990 TOTAL 39932.62 MEAN 109 MAX 533 MIN .09 AC-FT 79210
WTR YR 1991 TOTAL 31206.56 MEAN 85.5 MAX 583 MIN .07 AC-FT 61900

e Estimated

HUMBOLDT RIVER BASIN

10329000 LITTLE HUMBOLDT RIVER NEAR PARADISE VALLEY, NV

LOCATION.--Lat 41°24'55", long 117°22'22", in NW 1/4 SE 1/4 sec.20, T.41 N., R.41 E., Humboldt County, Hydrologic Unit 16040109, on right bank 3.5 mi downstream from Bull Head Ranch, and 9.5 mi southeast of Paradise Valley.

DRAINAGE AREA.--1,030 mi², approximately.

PERIOD OF RECORD.--October 1921 to June 1928 (fragmentary), October 1943 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 4,470 ft, from river-profile map. Prior to Nov. 21, 1946, water-stage recorder at site 1 mi downstream at different datum. Nov. 21, 1946, to Aug. 16, 1972, at site 250 ft upstream at datum 2.21 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Chimney Dam Reservoir, capacity, 35,000 acre-ft, 10 mi upstream, since 1974. Diversions for irrigation of 4,450 acres, Little Humboldt Decree, above station. Station is above all diversions in Paradise Valley.

AVERAGE DISCHARGE.--53 years (1922-23, 1925-27, 1944-91), 25.4 ft³/s, 18,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,380 ft³/s, Jan. 21, 1969, gage height, 8.40 ft; minimum, 0.46 ft³/s, Aug. 25, 1973, probably result of temporary blockage upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 36 ft³/s, June 8, gage height, 0.97 ft; minimum daily, 6.2 ft³/s, Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	9.1	10	e8.4	8.7	10	7.6	7.8	7.7	e36	8.2	7.1
2	8.8	8.9	10	e8.5	8.7	9.6	12	8.2	8.0	e34	8.1	6.9
3	8.1	8.9	10	e8.5	8.8	9.2	9.2	8.0	8.3	e32	8.5	6.9
4	7.9	9.2	9.7	e8.5	9.1	13	8.2	7.8	8.1	e29	8.6	6.9
5	7.8	9.7	9.7	8.5	9.2	12	8.1	7.9	28	e28	8.3	7.1
6	8.2	9.4	9.5	8.5	9.2	9.9	8.1	7.8	34	e26	8.2	7.1
7	8.2	9.3	9.5	8.5	9.2	9.5	8.1	7.9	35	e24	8.3	7.1
8	8.1	9.9	9.5	8.5	9.2	9.0	7.9	7.8	35	e23	8.3	7.1
9	8.2	9.6	9.5	8.5	9.4	8.8	8.0	8.1	35	e22	8.2	7.2
10	8.3	9.5	9.7	8.4	9.3	8.8	8.0	8.2	35	e21	8.1	7.4
11	8.2	9.6	10	8.5	9.4	8.6	8.2	8.1	36	e20	8.2	7.1
12	8.1	9.5	9.7	8.5	9.3	8.4	8.2	8.3	35	e19	8.1	7.1
13	8.1	9.7	10	9.2	9.4	8.7	8.2	8.0	35	e19	8.1	6.9
14	8.3	9.9	9.8	9.4	9.5	9.0	8.2	8.0	36	e19	8.2	6.9
15	8.3	9.7	9.9	9.9	9.6	8.6	8.2	7.8	36	e19	8.3	6.7
16	8.4	9.7	9.6	9.3	9.6	8.2	8.2	7.8	e36	e19	8.0	6.7
17	8.2	10	9.2	8.9	9.6	8.2	8.1	8.5	e36	19	7.6	6.4
18	8.3	10	e9.0	8.9	9.2	8.1	8.1	8.7	e36	19	7.5	6.3
19	8.5	10	e8.9	9.2	9.4	8.2	7.9	8.2	e36	12	7.5	6.3
20	8.4	10	e8.8	9.1	9.3	8.3	8.0	8.6	e36	8.9	7.5	6.3
21	8.5	9.9	e8.6	8.8	9.2	8.1	8.2	8.4	e36	8.5	7.5	6.2
22	8.6	9.9	e8.5	8.8	9.1	8.0	8.5	8.2	e35	8.5	7.4	6.3
23	8.7	9.9	e8.4	8.8	8.8	7.9	8.2	7.8	e33	8.4	7.4	6.4
24	8.2	10	e8.4	8.8	8.6	7.8	8.0	7.8	e31	8.4	7.2	6.5
25	8.6	10	e8.4	8.8	8.6	7.8	8.2	7.6	e30	8.4	7.0	6.6
26	8.7	10	e8.4	8.8	8.6	7.7	8.0	7.9	e29	8.2	7.1	6.5
27	8.7	10	e8.4	8.6	8.8	7.5	8.0	7.8	e28	8.3	7.2	6.6
28	8.8	10	e8.4	8.7	9.1	7.5	7.9	7.5	e31	8.3	7.2	6.8
29	8.8	10	e8.4	8.6	---	7.4	7.8	7.7	e35	8.2	7.3	6.8
30	9.0	10	e8.4	8.6	---	7.3	7.8	8.2	e36	8.5	7.3	6.8
31	9.0	---	e8.4	8.5	---	7.4	---	7.9	---	8.2	7.1	---
TOTAL	259.6	291.3	284.7	271.5	255.9	268.5	247.1	248.3	916.1	540.8	241.5	203.0
MEAN	8.37	9.71	9.18	8.76	9.14	8.66	8.24	8.01	30.5	17.4	7.79	6.77
MAX	9.0	10	10	9.9	9.6	13	12	8.7	36	36	8.6	7.4
MIN	7.6	8.9	8.4	8.4	8.6	7.3	7.6	7.5	7.7	8.2	7.0	6.2
AC-FT	515	578	565	539	508	533	490	493	1820	1070	479	403

CAL YR 1990 TOTAL 5381.6 MEAN 14.7 MAX 39 MIN 6.0 AC-FT 10670
WTR YR 1991 TOTAL 4028.3 MEAN 11.0 MAX 36 MIN 6.2 AC-FT 7990

e Estimated

HUMBOLDT RIVER BASIN

201

10329500 MARTIN CREEK NEAR PARADISE VALLEY, NV

LOCATION.--Lat 41°32'00", long 117°25'40", in SE 1/4 NW 1/4 (revised) sec.12, T.42 N., R.40 E., Humboldt County, Hydrologic Unit 16040109, on left bank, 0.6 mi upstream from Humboldt County Recreation Park, and 7 mi northeast of Paradise Valley.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1514: 1925-27 (M), 1930 (M), 1933 (M), 1938 (M), 1940, 1945.

GAGE.--Water-stage recorder. Elevation of gage is 4,700 ft above National Geodetic Vertical Datum of 1929, from extension of river-profile map. Prior to Oct. 22, 1946, water-stage recorder at several sites within 400 ft of present site at different datums.

REMARKS.--Records good. Diversion for irrigation of 40 acres above station.

AVERAGE DISCHARGE.--70 years, 34.1 ft³/s, 24,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,000 ft³/s, Jan. 21, 1943, gage height, 11.1 ft, site and datum then in use, on basis of slope-area measurement of peak flow; minimum, 1.5 ft³/s, Feb. 6, 1945.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2100	*288	*2.26	No other peak greater than base discharge.			
Minimum daily, 5.2 ft ³ /s, Aug. 10, 12, 26, Sept. 2, 3.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	9.7	9.3	e7.6	9.1	13	22	42	86	31	5.7	5.3
2	6.4	10	9.9	e7.8	9.2	13	25	48	93	27	5.6	5.2
3	6.7	9.4	8.8	e8.0	9.7	13	25	48	107	24	5.6	5.2
4	7.3	9.9	11	e8.2	10	88	25	45	118	22	6.7	5.3
5	7.3	9.8	10	e8.3	10	71	29	47	109	20	6.2	5.4
6	7.7	9.8	8.7	e8.5	11	29	32	54	96	19	6.0	5.4
7	8.0	9.7	8.1	e8.7	10	22	33	61	87	17	5.6	6.2
8	7.8	9.6	9.2	9.0	10	19	27	68	86	16	5.6	6.0
9	7.8	9.3	9.2	9.2	10	18	25	68	84	15	5.4	6.4
10	7.8	9.6	9.9	9.8	10	17	24	57	83	14	5.2	8.0
11	7.8	9.9	12	9.8	10	16	22	50	84	13	5.3	7.4
12	8.1	9.8	9.0	10	10	15	22	47	84	13	5.2	7.1
13	8.2	9.9	9.3	11	11	16	20	47	78	12	5.4	6.7
14	8.2	10	7.2	12	12	16	21	50	69	11	5.9	6.4
15	7.9	10	e7.0	12	12	15	21	50	61	10	6.4	5.9
16	8.1	9.8	e7.0	11	12	14	21	53	54	9.7	6.6	5.9
17	8.4	9.9	e7.0	11	12	15	21	74	50	9.2	6.3	5.8
18	8.7	10	e7.0	10	11	18	21	79	46	8.8	5.8	5.7
19	9.1	10	e7.3	10	11	19	20	71	42	8.9	5.6	5.7
20	9.1	10	e7.0	9.4	11	20	22	85	39	8.8	5.6	5.6
21	9.1	10	e7.0	8.1	11	19	31	94	36	8.7	5.8	5.5
22	9.3	10	e6.0	9.0	11	18	34	105	34	8.1	5.5	5.5
23	9.3	10	e6.0	9.2	11	17	37	113	32	7.8	5.5	5.8
24	9.2	14	e7.0	9.2	11	17	35	121	30	7.9	5.4	5.8
25	9.3	9.9	e7.0	8.8	10	17	38	128	29	7.4	5.4	5.8
26	9.3	9.3	e7.0	8.9	10	16	37	121	28	7.3	5.2	5.8
27	9.5	7.6	e7.0	8.9	11	15	37	110	27	7.0	5.4	5.8
28	9.5	9.8	e7.4	8.7	11	15	35	103	33	6.5	5.6	6.0
29	9.5	10	e6.6	7.7	---	15	39	97	35	6.3	5.7	6.2
30	9.4	11	e7.0	8.4	---	15	39	102	40	5.9	5.5	6.1
31	9.6	---	e7.3	9.3	---	17	---	89	---	5.7	5.4	---
TOTAL	259.9	297.7	249.2	287.5	297.0	648	840	2327	1880	388.0	176.1	178.9
MEAN	8.38	9.92	8.04	9.27	10.6	20.9	28.0	75.1	62.7	12.5	5.68	5.96
MAX	9.6	14	12	12	12	88	39	128	118	31	6.7	8.0
MIN	6.4	7.6	6.0	7.6	9.1	13	20	42	27	5.7	5.2	5.2
AC-FT	516	590	494	570	589	1290	1670	4620	3730	770	349	355

CAL YR 1990 TOTAL 6284.5 MEAN 17.2 MAX 83 MIN 4.3 AC-FT 12470
WTR YR 1991 TOTAL 7829.3 MEAN 21.5 MAX 128 MIN 5.2 AC-FT 15530

e Estimated

HUMBOLDT RIVER BASIN

10333000 HUMBOLDT RIVER NEAR IMLAY, NV

LOCATION.--Lat 40°41'30", long 118°12'10", in SW 1/4 SE 1/4 sec.25, T.33 N., R.33 E., Pershing County, Hydrologic Unit 16040108, on right bank, 1 mi upstream from Callahan bridge, and 4 mi northwest of Imlay.

DRAINAGE AREA.--15,700 mi², approximately.

PERIOD OF RECORD.--June 1935 to December 1941, April 1945 to current year. Monthly discharge only October to December 1941, published in WSP 1314.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,130 ft above National Geodetic Vertical Datum of 1929, from Geological Survey vertical-angle bench mark. Prior to Apr. 28, 1945, at site 1 mi downstream at different datum. Apr. 28, 1945, to Aug. 20, 1947, at present site at datum 1 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Humboldt-Lovelock Irrigation, Light and Power Co.'s feeder canal diverts water at times from river above station to Pitt-Taylor Reservoirs. Flow affected by many diversions above station for irrigation.

AVERAGE DISCHARGE.--52 years (1936-41, 1946-91), 266 ft³/s, 192,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,270 ft³/s, May 27, 1984, gage height, 13.20 ft; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 430 ft³/s, July 1, gage height, 4.87 ft; minimum daily, 4.7 ft³/s, Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991												
DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	9.9	14	e14	e40	93	e98	37	108	409	64	10
2	7.3	10	16	e13	e49	95	e97	35	99	365	59	9.3
3	7.5	10	20	e13	e49	116	96	35	96	346	56	8.6
4	7.8	9.4	22	e15	e52	114	95	33	102	349	53	8.0
5	7.8	11	19	e14	e61	109	93	31	106	336	49	7.5
6	7.6	10	e19	e14	e62	107	91	30	117	255	46	7.0
7	7.8	10	19	e15	68	108	91	30	121	231	43	7.1
8	8.1	9.0	23	e15	72	108	93	28	126	225	40	7.1
9	8.8	12	24	e14	65	106	93	25	128	218	36	8.2
10	8.9	11	24	e15	63	104	91	24	94	213	34	10
11	8.9	11	24	e16	65	105	90	23	68	208	32	12
12	9.4	11	23	e16	65	109	92	23	58	206	30	11
13	9.3	11	19	e16	45	113	89	23	42	201	28	9.2
14	9.1	11	19	e16	43	120	70	23	38	195	27	7.8
15	9.1	11	e18	e16	44	124	65	23	36	189	28	7.0
16	9.1	12	18	e16	52	121	62	24	32	181	27	6.5
17	9.3	12	e18	e19	57	114	54	27	42	170	25	6.4
18	9.6	12	e16	e18	59	111	51	31	73	161	24	6.1
19	9.5	12	e14	e19	63	110	53	30	76	153	22	5.9
20	9.9	12	e13	e23	67	110	49	29	81	145	20	6.2
21	10	12	e12	e28	69	112	49	26	101	135	19	5.7
22	12	12	e11	e30	71	111	52	24	133	126	18	5.3
23	11	11	e11	e35	74	110	52	22	161	119	17	5.8
24	11	11	e11	e33	75	111	49	21	213	111	16	5.0
25	11	12	e12	e34	79	114	51	20	219	102	14	5.1
26	11	13	e13	e34	81	111	55	20	225	95	13	5.0
27	11	12	e12	e30	83	108	58	25	241	88	14	4.7
28	11	12	e13	e35	88	105	56	29	244	83	13	4.8
29	11	14	e14	e40	---	101	45	54	306	78	12	4.9
30	10	15	e12	e30	---	e100	40	102	359	72	12	5.0
31	10	---	e13	e40	---	e99	---	107	---	68	11	---
TOTAL	291.5	341.3	516	686	1761	3379	2120	1014	3845	5833	902	212.2
MEAN	9.40	11.4	16.6	22.1	62.9	109	70.7	32.7	128	188	29.1	7.07
MAX	12	15	24	40	88	124	98	107	359	409	64	12
MIN	7.3	9.0	11	13	40	93	40	20	32	68	11	4.7
AC-FT	578	677	1020	1360	3490	6700	4210	2010	7630	11570	1790	421

CAL YR 1990 TOTAL 27248.4 MEAN 74.7 MAX 403 MIN 5.9 AC-FT 54050
WTR YR 1991 TOTAL 20901.0 MEAN 57.3 MAX 409 MIN 4.7 AC-FT 41460

e Estimated

HUMBOLDT RIVER BASIN

203

10334500 RYE PATCH RESERVOIR NEAR RYE PATCH, NV

LOCATION--Lat 40°28'15", long 118°18'24", in NE 1/4 NE 1/4 sec.18, T.30 N., R.33 E., Pershing County, Hydrologic Unit 16040108, at control works on east side of Rye Patch Dam on Humboldt River, and 2 mi northwest of Rye Patch.

DRAINAGE AREA.--16,100 mi², approximately.

PERIOD OF RECORD.--February 1936 to current year.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Staff gage on dam read daily. Datum of gage is National Geodetic Vertical Datum of 1929 (Southern Pacific Railroad datum).

REMARKS.--Reservoir is formed by earthfill, rock-faced dam; storage began Feb. 20, 1936. Capacity, 194,300 acre-ft between elevations, 4,072.5 ft, sill of trashrack structure, and 4,136.0 ft, top of spillway gates (since June 1976). Dead storage negligible. Elevation of spillway (gate sill) is 4,119 ft. Figures given herein represent usable contents and are based on capacity table No. 2, developed by U.S. Bureau of Reclamation, in use since Oct. 1, 1971. Water is used for irrigation in the Lovelock area. Daily contents below 4,116.0 ft are not direct readings from staff gage but are based on releases from the reservoir.

COOPERATION.--Records of daily elevation furnished by Pershing County Water Conservation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 196,900 acre-ft, Apr. 9, 1946, elevation, 4,134.62 ft, capacity table then in use; maximum elevation, 4,135.9 ft, July 27 to Aug. 3, 1983, and July 11-15, 1984; no contents, Aug. 7-11, 1955, May 12 to June 13, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 18,600 acre-ft, Apr. 30, elevation, 4,110.8 ft; minimum observed, 1,270 acre-ft, Nov. 2-5, elevation, 4,089.2 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)

4,072	0	4,095	3,460	4,120	53,200
4,075	10	4,100	6,340	4,125	82,700
4,080	70	4,105	10,480	4,130	123,200
4,085	370	4,110	17,000	4,135	182,400
4,090	1,510	4,115	31,700	4,140	244,400

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4672	1840	1510	2020	2638	7430	12900	15330	7050	5482	14190	10100
2	4672	1270	1510	2056	2638	7506	13020	15500	7050	5680	14190	9808
3	3304	1270	1543	2056	2686	7582	13270	15660	6837	5878	14190	8548
4	3265	1270	1543	2092	2686	7658	13400	15830	6624	6076	14330	8220
5	3187	1270	1576	2092	2734	7734	13650	16000	4730	6274	14470	7892
6	3148	1300	1576	2128	2734	7810	13770	16160	4556	6482	14470	7582
7	3109	1300	1609	2128	2782	7892	14040	16160	4336	6695	14470	7278
8	3070	1300	1609	2164	2782	7974	14190	16330	4180	6908	14470	6979
9	2974	1300	1642	2164	2830	8056	14470	16330	3972	7120	14610	6340
10	2878	1330	1642	2200	2830	8138	14610	16500	3874	11210	14610	6274
11	2782	1330	1675	2200	2878	8220	14900	16500	4024	11520	14610	6142
12	2686	1330	1675	2239	2878	8302	15040	16670	4180	11860	14470	6010
13	2638	1330	1708	2239	2926	8384	15330	16670	4232	12200	14470	5878
14	2551	1360	1708	2278	2926	8466	15500	16330	4232	12540	14470	5746
15	2473	1360	1741	2278	2974	8548	15830	16160	4284	12900	14470	5548
16	2434	1360	1741	2317	2974	8630	16000	15330	4284	13150	14470	5350
17	2434	1360	1774	2317	3022	8719	16160	15040	4336	13400	14470	5086
18	2434	1390	1774	2356	3022	8808	16330	14900	4336	13650	14470	4846
19	2434	1390	1807	2356	3070	8897	16500	14610	4388	13900	14610	4614
20	2434	1390	1807	2395	3109	8986	16670	14330	4388	14190	14610	4388
21	2434	1420	1840	2395	3109	9075	16830	14040	4440	14470	14190	4180
22	2434	1420	1840	2434	3148	9164	17000	13770	4498	13520	13770	4024
23	2317	1420	1876	2434	3187	9253	17200	13400	4556	13650	13400	2830
24	2200	1450	1876	2473	3187	9342	17400	13150	4614	13650	13020	2830
25	2128	1450	1912	2473	3226	9431	17600	12770	4730	13770	12650	2830
26	1984	1450	1912	2512	3304	9520	17800	12540	4846	13770	12200	2830
27	1840	1480	1948	2512	3343	9616	18000	12200	4962	13900	11860	2830
28	1840	1480	1948	2551	3421	9712	18200	11970	5086	13900	11420	2830
29	1840	1480	1984	2551	---	9808	18400	11630	5218	14040	11100	2830
30	1840	1510	1984	2590	---	9904	18600	11210	5350	14040	10790	2830
31	1840	---	2020	2590	---	10000	---	11100	---	14040	10480	---
MAX	4672	1840	2020	2590	3421	10000	18600	16670	7050	14470	14610	10100
MIN	1840	1270	1510	2020	2638	7430	12900	11100	3874	5482	10480	2830
#	4091.0	4090.0	4091.5	4093.0	4094.9	4104.5	4110.8	4105.6	4098.5	4108.1	4105.0	4093.5
##	-2950	-330	+510	+570	+830	+6580	+8600	-7500	-5750	+8690	-3560	-7650

CAL YR 1990 MAX 38470 MIN 1270 ## -9840

WTR YR 1991 MAX 18600 MIN 1270 ## -1960

Elevation, in feet NGVD, at end of month.

Change in contents, in acre-feet.

Note: Some monthend elevations are interpolated from readings made during the month.

HUMBOLDT RIVER BASIN

10335000 HUMBOLDT RIVER NEAR RYE PATCH, NV

LOCATION.--Lat 40°28'00", long 118°18'20", in SE 1/4 NE 1/4 sec.18, T.30 N., R.33 E., Pershing County, Hydrologic Unit 16040108, on left bank, 1,000 ft downstream from Rye Patch Dam, and 1.5 mi northwest of Rye Patch.

DRAINAGE AREA.--16,100 mi², approximately.

PERIOD OF RECORD.--January 1896 to June 1898, June 1899 to December 1909, September 1910 to June 1917, September 1917 to September 1922, September 1924 to September 1930 (fragmentary), October 1930 to September 1932, October 1935 to September 1941, October 1943 to current year. Monthly discharge only for some periods, published in WSP 1314. Prior to October 1935, published as "near Oreana."

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,063.53 ft, above National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Prior to Oct. 1, 1935, water-stage recorder or nonrecording gages at several sites about 7 mi downstream at different datum. Oct. 1, 1935, to Oct. 13, 1945, water-stage recorder at site 0.5 mi upstream at different datum. Oct. 14, 1945 to Apr. 9, 1991, water-stage recorder at site 75 ft downstream at datum 5.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow completely regulated by Rye Patch Reservoir, capacity 194,300 acre-ft since June 1976. Many diversions above station for irrigation.

AVERAGE DISCHARGE.--77 years (1900-1909, 1911-16, 1918-22, 1931-32, 1936-41, 1944-91), 241 ft³/s, 174,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,960 ft³/s, May 28, 1984, gage height, 13.65 ft; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 538 ft³/s, May 28, gage height, 7.27 ft; minimum daily, 0.11 ft³/s, April 25, 26 and 27, but may have been less during periods of estimated daily discharges.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	e.17	e.17	e.17	e.14	e.17	e.18	.19	365	1.1	1.9	280
2	96	e.17	e.17	e.17	e.14	e.17	e.17	.23	424	1.1	1.9	255
3	96	e.17	e.17	e.17	e.14	e.17	e.17	.19	456	1.3	2.0	183
4	96	e.17	e.17	e.17	e.14	e.17	e.17	.20	377	1.4	2.1	156
5	72	e.17	e.17	e.17	e.14	e.17	e.17	.22	281	1.4	2.1	211
6	e1.1	e.17	e.17	e.17	e.14	e.17	e.17	.24	225	1.5	2.2	301
7	e.20	e.17	e.17	e.14	e.14	e.17	e.16	.25	167	1.5	2.1	270
8	91	e.17	e.17	e.14	e.14	e.17	e.15	.24	123	1.5	2.2	222
9	88	e.17	e.17	e.14	e.14	e.17	e.14	.20	125	1.4	2.1	151
10	47	e.17	e.17	e.14	e.14	e.17	.14	.24	122	1.4	2.1	81
11	43	e.17	e.17	e.12	e.14	e.17	.14	.24	54	1.4	2.2	69
12	45	e.17	e.17	e.12	e.14	e.17	.16	.25	19	1.4	1.5	68
13	44	e.17	e.17	e.12	e.16	e.17	.15	.27	.97	1.4	.81	69
14	43	e.17	e.17	e.12	e.16	e.17	.16	.27	.95	1.4	.86	70
15	16	e.17	e.17	e.12	e.16	e.18	.14	.27	1.2	1.4	.84	90
16	e.17	e.17	e.17	e.12	e.16	e.18	.13	197	1.3	1.4	.79	122
17	e.17	e.17	e.17	e.12	e.16	e.18	.13	154	1.4	1.5	.76	149
18	e.17	e.17	e.17	e.12	e.16	e.18	.13	47	1.4	1.4	.82	174
19	e.17	e.17	e.17	e.12	e.16	e.18	.13	235	1.4	1.5	.84	194
20	e.17	e.17	e.17	e.12	e.16	e.18	.14	364	1.2	1.6	176	251
21	e.17	e.17	e.17	e.12	e.16	e.18	.12	415	1.2	1.6	267	242
22	50	e.17	e.17	e.12	e.16	e.18	.13	439	1.2	1.7	313	199
23	139	e.17	e.17	e.12	e.16	e.18	.13	438	1.2	1.7	305	119
24	128	e.17	e.17	e.12	e.16	e.18	.12	488	1.0	1.7	195	.55
25	126	e.17	e.17	e.12	e.16	e.18	.11	487	1.1	1.8	234	.53
26	134	e.17	e.17	e.12	e.16	e.18	.11	450	1.1	1.8	363	.52
27	127	e.17	e.17	e.12	e.16	e.18	.11	468	1.1	1.8	454	.54
28	e.17	e.17	e.17	e.12	e.17	e.18	.14	497	1.1	1.9	278	.61
29	e.17	e.17	e.17	e.14	---	e.18	.14	511	1.2	1.9	256	.49
30	e.17	e.17	e.17	e.14	---	e.18	.17	464	1.1	1.9	257	.52
31	e.17	---	e.17	e.14	---	e.18	---	392	---	1.9	271	---
TOTAL	1575.00	5.10	5.27	4.16	4.25	5.44	4.31	6049.50	2759.12	47.7	3399.12	3929.76
MEAN	50.8	.17	.17	.13	.15	.18	.14	195	92.0	1.54	110	131
MAX	139	.17	.17	.17	.17	.18	.18	511	456	1.9	454	301
MIN	.17	.17	.17	.12	.14	.17	.11	.19	.95	1.1	.76	.49
AC-FT	3120	10	10	8.3	8.4	11	8.5	12000	5470	95	6740	7790

CAL YR 1990 TOTAL 29177.51 MEAN 79.9 MAX 627 MIN .17 AC-FT 57870
WTR YR 1991 TOTAL 17788.73 MEAN 48.7 MAX 511 MIN .11 AC-FT 35280

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

205

10336500 PYRAMID LAKE NEAR NIXON, NV

LOCATION.--Lat 39°59'05", long 119°30'00", in NE 1/4 NW 1/4 sec.3 T.24 N., R.22 E., Washoe County, Hydrologic Unit 16050103, in Pyramid Lake Indian Reservation, 0.25 mi north of the Pyramid, 1.6 mi northeast of Anaho Island, and 13 mi northwest of Nixon.

DRAINAGE AREA.--2,730 mi².

PERIOD OF RECORD.--1867-1925 (occasional elevations in some years), June 1926 to current year (occasional elevations in each year).

REVISED RECORDS.--WSP 880: 1934-38 (bench mark). WSP 1090: 1926 (M). WDR NV-67-1: 1966.

GAGE.--Nonrecording gage. Datum of gage is 3,940.29 ft, above National Geodetic Vertical Datum of 1929 (U.S. Coast and Geodetic Survey Bench Mark N-21), supplementary adjustment of 1956. Prior to January 1934, elevations were determined from Bench Mark No. 1 of General Lake Office using elevation of 3,882.26 ft, adjustment of 1912; to convert these records to present datum, add 0.81 ft. January 1934 to September 1955, elevations were determined from Bench Mark N-21 using elevations of 3,940.04 ft, datum of 1929; to convert these records to present datum, add 0.25 ft. October 1955 to August 1968, nonrecording gages along southwest lake shore at present datum.

REMARKS.--Truckee Canal diverts water out of the basin to Lahontan Reservoir (station 10312100). Elevations are given to the nearest 0.1 ft and contents to four significant figures in order to reflect trends of change. Any single observation, however, may be affected by wind and seiche movements on the lake surface. Elevations published in WSP 1314 for 1867 and 1871 (3,875.9 and 3,884.9 ft, respectively) have been revised to 3,867 and 3,876 ft, respectively, on the basis the data and conclusions of Hardman and Venstrom (American Geophysical Union Transactions, 1941, p. 71-90), and Harding (University of California Archives Report 16, 1965).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 3,877.9 ft in 1891 (see REMARKS paragraph); minimum observed, 3,783.9 ft, Feb. 6, and Mar. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 22,120,000 acre-ft, elevation 3803.5, Nov. 2; minimum contents observed, 21,880,000 acre-ft, elevation, 3801.5 ft., Sept. 4.

MONTHEND ELEVATION, IN FEET NGVD, AND TOTAL CONTENTS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	3,804.0	22,170,000	--
Oct. 31.	3,803.6	22,130,000	-40,000
Nov. 30.	3,803.2	22,080,000	-50,000
Dec. 31.	3,803.0	22,060,000	-20,000
CAL YEAR 1990.	--	--	-389,000
Jan. 31.	3,802.9	22,050,000	-10,000
Feb. 28.	3,803.0	22,060,000	+10,000
Mar. 31.	3,803.0	22,060,000	0
Apr. 30.	3,802.8	22,040,000	-20,000
May 31.	3,802.7	22,020,000	-20,000
June 30.	3,802.4	21,990,000	-30,000
July 31.	3,802.1	21,950,000	-40,000
Aug. 31.	3,801.5	21,880,000	-70,000
Sept. 30.	3,801.2	21,850,000	-30,000
WTR YEAR 1991.	--	--	-320,000

NOTE.--Monthend elevations are interpolated from readings made during the month.

PYRAMID AND WINNEMUCCA LAKES BASIN

10336580 UPPER TRUCKEE RIVER AT SOUTH UPPER TRUCKEE ROAD NEAR MEYERS, CA

LOCATION.--Lat 38°47'47", long 120°01'05", in NW 1/4 SW 1/4 sec.17, T.11 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank, upstream side of bridge, 0.4 mi upstream of confluence of Big Meadow and Grass Lake Creeks, 0.5 mi west of State Highway 89, and 4.0 mi south of Meyers, Calif.

DRAINAGE AREA.--14.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,490 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 308 ft³/s, June 4, 1991, gage height, 5.93 ft; minimum daily, 0.76 ft³/s, Sept. 1, 1990.

EXTREMES FOR CURRENT PERIOD.--May to September, 1990: Maximum discharge, 117 ft³/s, June 2, gage height, 4.79 ft; minimum daily, 0.76 ft³/s, Sept. 1.

Water Year 1991: Maximum discharge, 308 ft³/s, June 4, gage height, 5.93 ft; minimum daily, 1.0 ft³/s, Dec. 22, Sept. 19-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	63	16	2.9	.76
2	---	---	---	---	---	---	---	---	83	17	3.1	.95
3	---	---	---	---	---	---	---	---	81	17	2.9	.94
4	---	---	---	---	---	---	---	---	74	17	2.6	1.1
5	---	---	---	---	---	---	---	---	71	16	2.1	1.2
6	---	---	---	---	---	---	---	---	65	15	1.9	1.4
7	---	---	---	---	---	---	---	---	64	14	1.8	1.5
8	---	---	---	---	---	---	---	---	71	14	2.9	1.4
9	---	---	---	---	---	---	---	---	68	14	3.4	2.0
10	---	---	---	---	---	---	---	---	63	14	3.2	2.1
11	---	---	---	---	---	---	---	---	51	14	2.7	1.4
12	---	---	---	---	---	---	---	82	44	12	2.3	1.6
13	---	---	---	---	---	---	---	81	39	11	2.5	1.8
14	---	---	---	---	---	---	---	75	39	10	2.3	2.0
15	---	---	---	---	---	---	---	70	38	9.8	2.2	1.7
16	---	---	---	---	---	---	---	72	37	9.1	2.1	2.0
17	---	---	---	---	---	---	---	68	35	8.1	2.1	1.5
18	---	---	---	---	---	---	---	60	33	7.5	2.3	1.6
19	---	---	---	---	---	---	---	52	32	7.1	2.5	1.6
20	---	---	---	---	---	---	---	45	34	6.5	2.4	1.5
21	---	---	---	---	---	---	---	42	33	5.4	2.6	1.7
22	---	---	---	---	---	---	---	48	32	4.7	2.0	2.0
23	---	---	---	---	---	---	---	52	29	4.3	2.0	2.1
24	---	---	---	---	---	---	---	49	26	4.3	1.7	2.1
25	---	---	---	---	---	---	---	42	24	4.3	1.5	1.9
26	---	---	---	---	---	---	---	45	22	4.0	1.5	1.6
27	---	---	---	---	---	---	---	50	20	4.2	1.4	1.9
28	---	---	---	---	---	---	---	46	18	3.8	1.3	1.7
29	---	---	---	---	---	---	---	40	18	3.7	1.2	2.2
30	---	---	---	---	---	---	---	46	17	3.4	.93	2.4
31	---	---	---	---	---	---	---	55	---	3.0	.91	---
TOTAL	---	---	---	---	---	---	---	---	1324	294.2	67.24	49.65
MEAN	---	---	---	---	---	---	---	---	44.1	9.49	2.17	1.65
MAX	---	---	---	---	---	---	---	---	83	17	3.4	2.4
MIN	---	---	---	---	---	---	---	---	17	3.0	.91	.76
AC-FT	---	---	---	---	---	---	---	---	2630	584	133	98

PYRAMID AND WINNEMUCCA LAKES BASIN

207

10336580 UPPER TRUCKEE RIVER AT SOUTH UPPER TRUCKEE ROAD NEAR MEYERS, CA--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.7	2.7	e1.2	e2.1	e7.4	5.2	30	118	32	3.9	1.5
2	2.7	2.2	2.6	e1.2	e2.3	e9.6	5.2	22	160	31	3.6	1.4
3	2.7	2.3	2.5	e1.3	e2.5	e12	5.6	19	192	28	3.5	1.4
4	2.8	2.3	2.4	e1.2	e2.7	20	8.0	31	205	25	3.4	1.8
5	2.7	2.4	2.4	e1.2	e2.9	26	13	62	183	22	3.2	1.6
6	2.8	2.2	e2.3	e1.2	e2.6	11	17	87	148	19	3.1	1.5
7	2.9	2.0	e2.3	e1.3	e2.3	8.2	12	99	142	17	2.9	1.6
8	2.6	2.2	e2.2	e1.4	e2.2	7.1	11	120	147	15	2.7	1.6
9	2.7	2.1	e2.1	e1.4	e2.0	6.6	12	82	155	14	2.4	1.5
10	2.6	2.1	e2.0	e1.4	e2.0	6.1	14	51	154	13	2.4	1.5
11	2.7	2.1	e1.7	e1.3	e2.1	6.1	12	36	144	12	2.3	1.5
12	2.7	2.0	e1.6	e1.2	e2.1	5.8	11	36	136	11	2.2	1.5
13	2.6	2.0	e1.6	e1.2	e2.1	5.7	12	52	111	11	2.1	1.4
14	2.7	1.9	e1.5	e1.3	e2.1	5.0	17	50	88	10	2.2	1.3
15	2.5	1.8	e1.7	e1.4	e2.2	4.7	18	76	77	9.4	2.3	1.3
16	2.3	2.0	e1.7	e1.4	e2.3	4.4	e17	105	72	8.6	2.4	1.2
17	2.2	2.0	e1.6	e1.4	e2.4	4.2	e13	88	69	8.3	2.0	1.1
18	2.4	2.1	e1.5	e1.6	e2.5	4.4	e13	57	65	7.9	1.9	1.1
19	2.3	2.1	e1.4	e1.7	e2.8	4.3	e14	46	54	8.0	1.8	1.0
20	1.9	2.1	e1.2	e1.8	e3.0	4.0	e14	45	45	9.4	1.8	1.0
21	1.8	1.7	e1.1	e1.7	e3.2	3.7	e14	54	41	9.2	1.6	1.0
22	1.8	1.7	e1.0	e1.8	e3.5	3.5	e16	108	38	8.4	1.5	1.0
23	1.6	1.8	e1.1	e1.9	e4.0	3.4	e19	171	35	8.5	1.6	1.1
24	1.4	2.0	e1.1	e2.0	e4.5	3.9	24	180	32	7.0	1.5	1.1
25	1.6	2.2	e1.1	e2.1	e5.0	4.2	20	188	30	6.2	1.4	1.1
26	1.7	2.0	e1.3	e2.0	e5.4	4.7	18	150	28	5.9	1.4	1.1
27	1.8	2.1	e1.5	e2.0	e6.0	4.2	e18	130	28	5.2	1.5	1.2
28	2.1	2.4	e1.6	e2.0	e6.8	3.6	e18	131	33	5.4	1.7	1.2
29	2.3	2.6	e1.4	e2.0	---	3.6	29	125	50	5.6	1.6	1.2
30	2.3	2.7	e1.1	e2.0	---	3.8	32	118	35	4.7	1.7	1.3
31	2.4	---	e1.2	e2.1	---	4.7	---	82	---	4.1	1.6	---
TOTAL	72.2	63.8	52.5	48.7	85.6	205.9	452.0	2631	2815	381.8	69.2	39.1
MEAN	2.33	2.13	1.69	1.57	3.06	6.64	15.1	84.9	93.8	12.3	2.23	1.30
MAX	2.9	2.7	2.7	2.1	6.8	26	32	188	205	32	3.9	1.8
MIN	1.4	1.7	1.0	1.2	2.0	3.4	5.2	19	28	4.1	1.4	1.0
AC-FT	143	127	104	97	170	408	897	5220	5580	757	137	78

WTR YR 1991 TOTAL 6916.8 MEAN 19.0 MAX 205 MIN 1.0 AC-FT 13720

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

10336580 UPPER TRUCKEE RIVER AT SOUTH UPPER TRUCKEE ROAD NEAR MEYERS, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to current year.

REMARKS.--In November 1989, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT									
24...	1300	1.8	52	7.1	16.0	6.0	10.5	--	0.003
NOV									
21...	1240	2.4	--	--	2.5	0.5	--	--	--
29...	1400	2.8	52	8.2	5.0	0.0	11.2	99	0.026
DEC									
10...	1040	2.1	--	--	8.0	0.0	--	--	--
JAN									
17...	1045	1.5	--	--	6.0	0.0	--	--	--
23...	1210	1.1	52	8.0	5.5	0.5	11.6	102	0.045
FEB									
20...	1330	3.0	47	8.2	15.0	1.0	--	--	0.040
MAR									
04...	0935	16	39	--	3.5	0.5	--	--	0.063
06...	1040	15	--	--	--	--	--	--	--
08...	1400	9.1	37	7.9	9.0	0.5	10.8	97	0.051
APR									
16...	1240	17	29	8.3	4.5	1.0	12.4	113	0.014
MAY									
01...	1405	32	22	8.0	5.0	2.5	10.3	97	0.011
08...	1200	105	17	7.8	15.5	3.0	10.7	102	0.014
15...	1220	55	21	7.7	20.0	4.0	10.8	105	0.011
15...	2015	123	17	8.1	7.5	2.5	10.8	100	0.012
21...	1350	47	23	8.0	17.0	6.5	10.8	112	0.005
22...	2200	145	16	8.0	10.0	2.0	--	--	0.010
23...	1715	240	15	--	20.0	3.0	--	--	0.011
24...	2020	226	--	--	8.0	3.0	--	--	--
31...	1215	79	20	8.0	15.0	4.5	10.0	100	0.008
JUN									
04...	1300	142	19	7.9	18.5	7.5	9.5	101	0.012
04...	1725	286	--	--	--	--	--	--	--
04...	1915	262	16	8.0	13.5	6.0	9.7	100	0.014
11...	1300	113	20	7.8	27.0	10.0	8.9	100	0.004
11...	1915	178	16	7.9	17.0	10.0	8.8	100	0.005
17...	1750	76	22	7.7	17.0	10.5	8.6	98	0.003
JUL									
02...	1300	29	27	7.9	26.5	13.0	8.2	99	0.005
10...	1000	15	--	--	--	--	--	--	--
22...	1200	8.1	38	8.1	27.0	11.5	9.2	107	0.011
AUG									
06...	1045	3.9	44	8.2	21.0	7.5	9.2	97	0.024
27...	1145	1.7	50	8.2	16.0	7.5	10.0	106	0.033
30...	1135	2.2	--	--	18.5	10.5	--	--	--
SEP									
18...	1150	1.5	55	8.3	23.0	10.0	--	--	0.023

PYRAMID AND WINNEMUCCA LAKES BASIN

209

10336580 UPPER TRUCKEE RIVER AT SOUTH UPPER TRUCKEE ROAD NEAR MEYERS, CA--Continued

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 24...	0.017	0.13	0.038	0.020	170	135	1	<0.01	--
NOV 21...	--	--	--	--	--	--	--	--	--
29...	<0.004	0.12	0.024	0.012	40	100	1	0.01	--
DEC 10...	--	--	--	--	--	--	--	--	--
JAN 17...	--	--	--	--	--	--	--	--	--
23...	<0.004	0.04	0.045	0.012	--	135	<1	--	--
FEB 20...	<0.004	0.09	0.019	0.013	--	149	1	0.01	--
MAR 04...	0.007	1.0	0.100	0.015	--	1340	58	2.5	70
06...	--	--	--	--	--	--	--	--	--
08...	0.005	0.16	0.028	0.008	--	222	3	0.07	48
APR 16...	<0.004	0.12	0.013	0.005	--	117	1	0.05	--
MAY 01...	<0.004	0.11	0.014	0.004	--	114	7	0.60	--
08...	<0.004	0.17	0.020	0.006	--	161	9	2.6	--
15...	0.005	0.10	0.020	0.006	--	120	4	0.60	--
15...	0.004	0.27	0.045	0.007	--	536	29	9.6	--
21...	0.007	0.10	0.018	0.007	--	130	4	0.51	--
22...	0.006	0.25	0.038	0.008	--	496	24	9.4	--
23...	<0.004	0.88	0.147	0.002	--	4560	155	100	39
24...	--	--	--	--	--	--	--	--	--
31...	<0.004	0.14	0.032	0.004	--	139	3	0.64	--
JUN 04...	<0.004	0.14	0.043	0.006	--	282	12	4.6	--
04...	--	--	--	--	--	--	--	--	--
04...	0.005	0.48	0.118	0.006	--	1790	94	66	55
11...	0.005	0.17	0.023	0.005	--	164	6	1.8	--
11...	0.004	0.25	0.055	0.004	--	527	28	13	--
17...	<0.004	0.12	0.021	0.007	--	192	5	1.0	--
JUL 02...	0.005	0.10	0.025	0.012	--	117	4	0.31	--
10...	--	--	--	--	--	--	--	--	--
22...	0.006	0.12	0.030	0.012	--	102	1	0.02	--
AUG 06...	<0.004	0.07	0.033	0.019	--	93	1	0.01	--
27...	<0.004	0.05	0.043	0.027	--	62	1	<0.01	--
30...	--	--	--	--	--	--	--	--	--
SEP 18...	<0.004	0.07	0.048	0.026	--	75	1	<0.01	--

PYRAMID AND WINNEMUCCA LAKES BASIN

103366092 UPPER TRUCKEE RIVER AT HIGHWAY 50 ABOVE MEYERS, CA

LOCATION.--Lat 38°50'55", long 120°01'34", in NE 1/4 NE 1/4 sec.31, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank, 500 ft downstream of U.S. Highway 50 bridge, 1 mi southwest of Meyers, Calif., and 7.5 mi upstream of Lake Tahoe.

DRAINAGE AREA.--14.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,310 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 511 ft³/s, May 25, 1991, gage height, 3.68 ft; minimum daily, 1.2 ft³/s, Dec. 22, 1990.

EXTREMES FOR CURRENT PERIOD.--June to September 1990: Maximum discharge, 127 ft³/s, June 10, gage height, 2.58 ft; minimum daily, 1.8 ft³/s, Sept. 4.

Water Year 1991: Maximum discharge 511 ft³/s, May 25, gage height, 3.68 ft; minimum daily, 1.2 ft³/s, Dec.22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	e115	23	7.6	2.0
2	---	---	---	---	---	---	---	---	e120	23	7.4	2.1
3	---	---	---	---	---	---	---	---	e118	22	6.8	1.9
4	---	---	---	---	---	---	---	---	e110	20	6.9	1.8
5	---	---	---	---	---	---	---	---	e100	20	6.4	1.9
6	---	---	---	---	---	---	---	---	e96	18	6.4	2.1
7	---	---	---	---	---	---	---	---	e95	17	6.1	2.3
8	---	---	---	---	---	---	---	---	100	17	7.0	2.7
9	---	---	---	---	---	---	---	---	102	15	11	2.9
10	---	---	---	---	---	---	---	---	114	15	8.7	3.6
11	---	---	---	---	---	---	---	---	110	16	7.1	2.4
12	---	---	---	---	---	---	---	---	83	15	6.1	3.5
13	---	---	---	---	---	---	---	---	63	14	5.6	3.1
14	---	---	---	---	---	---	---	---	60	14	5.2	2.8
15	---	---	---	---	---	---	---	---	60	14	5.3	2.8
16	---	---	---	---	---	---	---	---	67	15	4.7	3.5
17	---	---	---	---	---	---	---	---	64	14	4.6	4.5
18	---	---	---	---	---	---	---	---	62	13	4.6	5.1
19	---	---	---	---	---	---	---	---	57	13	4.6	5.4
20	---	---	---	---	---	---	---	---	55	13	4.4	5.1
21	---	---	---	---	---	---	---	---	52	12	3.9	4.7
22	---	---	---	---	---	---	---	---	52	11	3.3	5.9
23	---	---	---	---	---	---	---	---	49	10	2.8	7.4
24	---	---	---	---	---	---	---	---	44	10	2.5	10
25	---	---	---	---	---	---	---	---	41	10	2.3	11
26	---	---	---	---	---	---	---	---	36	9.6	2.3	12
27	---	---	---	---	---	---	---	---	31	9.4	2.1	e12
28	---	---	---	---	---	---	---	---	26	9.3	2.1	e13
29	---	---	---	---	---	---	---	---	26	8.5	1.9	e13
30	---	---	---	---	---	---	---	---	24	8.0	1.9	e13
31	---	---	---	---	---	---	---	---	---	8.0	1.9	---
TOTAL	---	---	---	---	---	---	---	---	2132	436.8	153.5	163.5
MEAN	---	---	---	---	---	---	---	---	71.1	14.1	4.95	5.45
MAX	---	---	---	---	---	---	---	---	120	23	11	13
MIN	---	---	---	---	---	---	---	---	24	8.0	1.9	1.8
AC-FT	---	---	---	---	---	---	---	---	4230	866	304	324

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

211

103366092 UPPER TRUCKEE RIVER AT HIGHWAY 50 ABOVE MEYERS, CA--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e12	4.7	e4.3	e3.3	4.7	24	29	97	202	58	11	4.3
2	e12	3.6	e3.8	e3.2	4.9	32	28	75	245	48	9.9	4.0
3	e11	3.0	e3.9	e3.8	5.3	37	28	66	278	44	9.5	4.0
4	e11	2.8	e4.2	e4.3	5.2	107	33	80	300	41	8.9	4.5
5	e10	2.8	e4.6	e3.7	5.7	106	44	122	241	39	9.3	5.6
6	e9.8	2.8	e4.3	e3.4	4.8	69	58	171	186	36	8.9	4.9
7	e9.4	2.6	e3.9	e5.0	4.5	56	52	212	197	32	8.5	5.1
8	e8.8	2.8	e4.0	e3.3	4.3	47	48	260	221	30	8.0	4.8
9	e8.6	2.8	e4.4	e3.8	4.2	40	48	193	309	29	7.6	4.3
10	e8.0	2.7	e4.9	e4.0	4.6	36	49	135	324	27	7.3	4.3
11	e7.6	2.6	e4.7	e4.5	4.3	35	44	104	289	26	7.1	4.5
12	e7.2	2.4	e4.0	e5.4	4.4	31	40	90	253	24	6.5	4.3
13	e7.0	2.4	e3.0	e4.8	4.6	32	41	110	211	23	6.5	4.0
14	e6.5	2.3	e2.5	e4.5	4.3	31	47	101	182	21	7.0	3.8
15	e6.2	2.4	e2.8	e5.0	4.3	29	50	121	165	20	7.6	3.7
16	e6.0	2.5	e3.2	e3.7	4.7	27	46	155	138	18	7.6	3.5
17	e5.6	2.6	e2.8	e4.2	4.9	26	39	144	113	17	6.7	3.5
18	e5.2	2.8	e3.7	e4.7	4.9	27	37	92	100	17	6.8	3.3
19	e4.8	3.1	e3.0	4.9	5.1	28	38	79	88	16	6.0	3.1
20	e4.8	4.4	e2.0	4.9	6.1	28	40	82	76	18	5.9	3.3
21	e4.7	3.8	e1.5	4.3	7.4	27	40	89	73	19	5.5	3.1
22	e4.5	4.0	e1.2	4.6	8.1	26	42	136	71	17	5.5	2.8
23	e4.3	4.2	e1.5	4.9	9.0	25	47	224	68	17	5.5	2.8
24	e4.1	4.0	e1.7	5.0	11	37	62	290	65	15	5.2	2.8
25	e3.9	4.3	e2.1	4.6	11	88	59	358	62	14	5.1	2.8
26	3.8	e4.2	e2.7	4.8	13	87	52	313	59	13	4.9	3.0
27	3.7	e4.0	e3.0	4.7	15	52	51	255	57	12	4.9	3.1
28	3.4	e4.2	e3.2	4.6	17	28	52	237	78	13	4.6	3.0
29	3.3	e4.6	e2.4	4.5	---	26	77	231	119	14	4.5	2.9
30	3.1	e4.5	e1.8	4.4	---	26	94	238	84	12	4.3	2.8
31	4.0	---	e2.5	4.6	---	27	---	173	---	11	4.3	---
TOTAL	204.3	99.9	97.6	135.4	187.3	1297	1415	5033	4854	741	210.9	111.9
MEAN	6.59	3.33	3.15	4.37	6.69	41.8	47.2	162	162	23.9	6.80	3.73
MAX	12	4.7	4.9	5.4	17	107	94	358	324	58	11	5.6
MIN	3.1	2.3	1.2	3.2	4.2	24	28	66	57	11	4.3	2.8
AC-FT	405	198	194	269	372	2570	2810	9980	9630	1470	418	222

WTR YR 1991 TOTAL 14387.3 MEAN 39.4 MAX 358 MIN 1.2 AC-FT 28540

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

103366092 UPPER TRUCKEE RIVER AT HIGHWAY 50 ABOVE MEYERS, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to current year.

REMARKS.--In November 1989, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT									
24...	0950	4.1	102	7.6	13.5	6.0	9.0	91	0.012
NOV									
29...	1100	4.6	105	8.1	6.0	1.5	11.6	105	0.014
DEC									
10...	1320	4.9	--	--	8.0	3.0	--	--	--
JAN									
18...	0955	4.7	--	--	0.5	0.0	--	--	--
23...	1050	4.3	108	7.9	5.0	0.5	10.6	93	0.020
FEB									
20...	1110	6.2	88	8.0	12.0	3.0	--	--	0.016
MAR									
04...	1040	105	67	--	4.5	0.5	--	--	0.022
08...	1120	51	52	8.0	7.0	2.0	--	--	0.065
APR									
16...	1030	46	66	8.2	8.5	2.0	11.3	105	0.024
17...	0950	37	62	--	--	--	--	--	--
MAY									
01...	1140	95	48	7.9	5.5	2.5	10.6	99	0.021
08...	1000	223	33	7.9	13.0	3.0	10.4	99	0.019
15...	1000	117	38	7.9	13.0	3.5	10.5	99	0.019
15...	2130	172	37	7.7	7.0	7.0	--	--	0.013
21...	1145	80	48	7.8	13.0	5.0	10.5	105	0.014
22...	2245	230	28	7.9	6.0	5.0	--	--	0.009
23...	1915	370	25	--	13.5	5.0	--	--	0.010
31...	1020	162	30	7.8	10.5	3.0	10.3	97	0.013
JUN									
04...	1100	198	26	7.8	21.0	6.0	10.3	105	0.014
04...	2015	406	21	7.8	12.0	9.5	--	--	0.007
11...	1100	226	24	7.8	26.0	8.5	9.4	101	0.007
11...	2000	334	19	7.7	17.0	12.5	8.3	99	0.005
17...	1600	91	31	8.1	20.5	12.5	8.5	101	0.007
JUL									
02...	1045	49	41	8.0	22.0	11.5	8.6	99	0.008
22...	1100	17	65	8.0	27.0	11.5	9.1	105	0.012
AUG									
06...	0900	8.7	83	8.1	19.0	9.5	9.3	103	0.020
27...	1000	4.9	102	8.0	16.0	7.5	9.5	101	0.030
30...	0945	4.3	--	--	21.0	13.0	--	--	--
SEP									
18...	0945	3.3	110	8.3	18.0	12.5	--	--	0.013

PYRAMID AND WINNEMUCCA LAKES BASIN

103366092 UPPER TRUCKEE RIVER AT HIGHWAY 50 ABOVE MEYERS, CA--Continued

213

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 24...	<0.004	0.10	0.023	0.007	330	324	1	0.01	--
NOV 29...	<0.004	0.06	0.012	0.004	220	259	1	0.01	--
DEC 10...	--	--	--	--	--	--	--	--	--
JAN 18...	--	--	--	--	--	--	--	--	--
23...	<0.004	0.06	0.036	0.005	--	246	<1	--	--
FEB 20...	0.004	0.09	0.010	0.004	--	212	<1	--	--
MAR 04...	<0.004	0.77	0.078	0.005	--	1600	48	14	73
08...	<0.004	0.15	0.019	0.005	--	165	2	0.28	--
APR 16...	<0.004	0.14	0.015	0.003	--	167	1	0.12	--
17...	--	--	--	--	--	--	--	--	--
MAY 01...	<0.004	0.15	0.016	<0.001	--	211	4	1.0	--
08...	<0.004	0.21	0.034	0.006	--	536	25	15	--
15...	0.005	0.12	0.020	0.006	--	153	6	1.9	--
15...	0.013	0.40	0.058	0.006	--	948	78	36	--
21...	0.010	0.11	0.014	0.007	--	175	4	0.86	--
22...	0.005	0.33	0.051	0.007	--	881	34	21	--
23...	<0.004	0.87	0.150	0.003	--	3250	158	158	44
31...	<0.004	0.19	0.021	0.003	--	230	5	2.2	--
JUN 04...	<0.004	0.27	0.048	0.005	--	522	23	12	--
04...	<0.004	0.72	0.089	0.005	--	1290	92	101	46
11...	0.017	0.15	0.017	0.004	--	196	11	6.7	--
11...	<0.004	0.20	0.024	0.005	--	584	23	21	--
17...	<0.004	0.16	0.017	0.004	--	200	5	1.2	--
JUL 02...	0.009	0.10	0.023	0.008	--	173	7	0.92	--
22...	0.006	0.07	0.022	0.005	--	192	1	0.05	--
AUG 06...	<0.004	0.11	0.023	0.005	--	232	2	0.05	--
27...	<0.004	0.08	0.026	0.006	--	219	1	0.01	--
30...	--	--	--	--	--	--	--	--	--
SEP 18...	<0.004	0.08	0.027	0.006	--	239	4	0.04	--

PYRAMID AND WINNEMUCCA LAKES BASIN

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA

LOCATION.--Lat 38°55'22", long 119°59'23", in NW 1/4 SE 1/4 sec.4, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, near center of bridge span on downstream side of U.S. Highway 50 bridge, 1.0 mi northeast of South Lake Tahoe Post Office, and 1.4 mi upstream from Lake Tahoe.

DRAINAGE AREA.--54.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1971 to September 1974, October 1976 to June 1977, October 1977 to June 1978, March 1980 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 6,229.04 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 26, 1984, at datum 2.00 ft higher.

REMARKS.--Records good April to August and fair the remainder of the year. Two small dams may cause slight regulation at times. Some small diversions for domestic use upstream from station. Echo Lake Conduit (station 11434500) diverts from Echo Lake, capacity 1,900 acre-ft, to South Fork American River basin.

AVERAGE DISCHARGE.--14 years (water years 1972-74, 1981-91), 99.0 ft³/s, 71,730 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,740 ft³/s, Mar. 8, 1986, gage height, 9.08 ft; maximum gage height, 10.12 ft, present datum, Feb. 16, 1982; minimum daily, 0.94 ft³/s, Oct. 5, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	1700	384	*5.02	June 5	0145	376	4.86
May 8	0145	317	4.51	June 10	0045	344	4.69
May 26	0130	*402	4.97				

Minimum daily, 2.8 ft³/s, Sept. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	7.9	e8.4	e8.0	e8.0	13	45	111	195	63	10	3.7
2	4.3	6.7	e8.5	e8.0	e8.0	18	46	93	241	52	9.9	3.7
3	4.8	6.7	e8.5	e8.0	e8.0	39	50	83	256	48	9.4	3.9
4	4.8	6.5	e8.6	e8.0	e8.0	221	59	87	283	44	8.9	4.3
5	4.2	6.3	e8.5	e8.0	e8.5	151	86	121	265	40	9.1	6.9
6	4.7	6.0	e8.4	e8.0	e8.7	91	129	166	203	39	8.9	5.9
7	4.8	6.0	e8.2	e8.0	e9.0	74	102	212	199	33	7.9	6.7
8	4.8	5.8	e8.0	e8.0	e9.5	65	83	277	218	29	7.7	5.0
9	5.4	6.3	e8.0	e8.0	e10	58	80	243	263	27	7.5	5.2
10	4.8	6.7	7.6	e8.0	e11	51	81	180	291	26	6.7	5.3
11	5.6	6.9	7.8	e8.0	11	49	69	148	269	24	6.2	4.8
12	5.7	7.2	8.0	e8.0	11	45	62	129	245	24	6.0	4.9
13	5.1	7.2	7.7	e8.0	12	44	62	147	221	22	5.9	4.6
14	4.4	6.7	e8.0	e8.0	12	42	69	139	192	21	6.5	4.1
15	5.2	7.1	e8.0	e8.0	13	41	75	149	174	19	7.8	3.7
16	4.7	7.1	e8.0	e8.0	13	40	70	178	154	18	8.3	3.7
17	4.6	7.5	e8.0	e8.0	12	35	64	195	132	17	7.0	3.6
18	5.2	7.5	e8.0	e8.0	12	35	60	135	114	17	6.3	3.1
19	7.1	7.8	e8.0	e8.0	11	35	61	e114	99	17	5.7	3.2
20	6.8	8.6	e8.0	e8.0	11	33	64	e103	84	16	5.4	3.1
21	6.7	8.1	e8.0	e8.0	11	31	64	e100	78	18	5.1	2.9
22	6.9	e8.1	e8.0	e8.0	11	29	65	132	75	16	4.8	3.0
23	6.7	e8.1	e8.0	e8.0	11	29	71	212	73	16	4.0	3.0
24	6.3	e8.2	e8.0	e8.0	11	32	83	284	66	15	3.8	2.9
25	5.5	e8.2	e8.0	e8.0	10	29	84	328	63	14	3.9	2.8
26	5.5	e8.2	e8.0	e8.0	10	e30	80	317	60	14	3.5	3.0
27	5.4	e8.3	e8.0	e8.0	11	e32	80	264	58	13	3.4	3.2
28	5.3	e8.3	e8.0	e8.0	11	e34	77	245	71	13	4.0	3.4
29	4.9	e8.3	e8.0	e8.0	---	35	89	247	113	13	4.1	3.5
30	5.3	e8.4	e8.0	e8.0	---	37	103	258	94	13	3.9	3.3
31	6.5	---	e8.0	e8.0	---	40	---	201	---	11	3.8	---
TOTAL	167.3	220.7	250.2	248.0	292.7	1538	2213	5598	4849	752	195.4	120.4
MEAN	5.40	7.36	8.07	8.00	10.5	49.6	73.8	181	162	24.3	6.30	4.01
MAX	7.1	8.6	8.6	8.0	13	221	129	328	291	63	10	6.9
MIN	4.2	5.8	7.6	8.0	8.0	13	45	83	58	11	3.4	2.8
AC-FT	332	438	496	492	581	3050	4390	11100	9620	1490	388	239

CAL YR 1990 TOTAL 15339.2 MEAN 42.0 MAX 195 MIN 2.8 AC-FT 30430
WTR YR 1991 TOTAL 16444.7 MEAN 45.1 MAX 328 MIN 2.8 AC-FT 32620

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

215

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972-74, 1978, 1980 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1981 to September 1983.

WATER TEMPERATURE: October 1971 to June 1974, October 1977 to June 1978, March 1980 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1971 to June 1974, October 1977 to June 1978, March 1980 to current year.

REMARKS.--Sediment samples were collected during most days where a water temperature is published.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 416 mg/L, Mar. 4, 1991; minimum daily mean, 0 mg/L, several days during most years.

SEDIMENT LOAD: Maximum daily, 781 tons, Mar. 8, 1986; minimum daily, 0 ton, several days during most years.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily mean, 416 mg/L, Mar. 4; minimum daily mean, 1 mg/L, several days.

SEDIMENT LOAD: Maximum daily, 301 tons, Mar. 4; minimum daily, 0.01 ton, several days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
MAR									
04...	1245	286	3.0	640	494	59	84	97	100
04...	1400	337	3.0	616	560	57	83	97	100
05...	0950	165	0.5	107	48	68	88	97	100
MAY									
14...	1650	132	11.0	13	4.6	62	--	--	--
23...	0710	215	4.5	29	17	65	--	--	--
29...	0745	269	4.0	32	23	71	--	--	--
JUN									
10...	1015	292	9.5	21	17	66	--	--	--

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	11.0	---	---	---
2	15.0	---	---	---	---	---	---	---	10.0	---	---	---
3	---	---	---	.0	.0	.0	5.0	---	---	---	---	---
4	---	---	---	---	---	3.0	---	---	---	---	---	17.0
5	---	---	1.5	---	---	.5	---	9.0	---	---	22.5	---
6	---	---	---	---	---	---	---	---	12.5	---	---	17.0
7	---	---	---	---	---	---	2.0	2.5	---	15.0	---	---
8	---	---	---	---	---	5.0	---	---	---	15.5	---	---
9	---	4.5	---	---	---	---	---	1.5	9.0	---	---	---
10	---	---	---	---	---	---	---	---	9.5	---	---	---
11	---	6.0	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	8.0	10.0	---	---	21.0	---
13	---	---	---	.0	---	---	---	---	15.0	---	---	---
14	---	---	---	---	---	---	---	11.0	---	---	---	---
15	10.5	---	---	---	---	---	---	3.5	9.0	---	---	---
16	---	---	.0	.5	---	---	---	---	---	---	---	---
17	---	---	.5	---	---	1.0	---	2.0	---	---	---	---
18	10.0	---	---	---	---	---	---	2.0	13.0	---	---	14.5
19	---	---	---	---	---	---	5.0	---	---	---	---	---
20	---	---	---	---	5.5	---	---	7.0	15.5	---	---	---
21	---	3.5	---	---	---	2.5	9.0	8.0	---	17.0	---	---
22	---	---	---	---	---	---	---	12.5	8.0	---	---	---
23	---	---	.0	---	---	---	---	4.5	---	18.0	---	---
24	---	---	---	---	---	---	---	---	---	---	---	14.5
25	---	2.0	---	---	---	---	---	5.5	---	---	---	---
26	---	---	---	---	---	---	7.0	---	14.0	---	---	---
27	---	---	---	---	---	---	---	---	---	---	14.5	---
28	---	---	---	---	---	---	---	9.0	---	---	---	---
29	10.5	---	---	---	---	---	---	8.0	9.0	---	---	17.5
30	---	---	---	.5	---	---	---	---	9.0	---	---	---
31	---	---	---	---	---	2.0	---	---	---	---	---	---

PYRAMID AND WINNEMUCCA LAKES BASIN

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	5.3	1	.01	7.9	2	.04	e8.4	5	.11
2	4.3	1	.01	6.7	2	.04	e8.5	5	.11
3	4.8	1	.01	6.7	2	.04	e8.5	4	.09
4	4.8	1	.01	6.5	2	.04	e8.6	4	.09
5	4.2	1	.01	6.3	2	.03	e8.5	4	.09
6	4.7	1	.01	6.0	2	.03	e8.4	4	.09
7	4.8	1	.01	6.0	2	.03	e8.2	4	.09
8	4.8	1	.01	5.8	4	.06	e8.0	4	.09
9	5.4	1	.01	6.3	6	.10	e8.0	4	.09
10	4.8	1	.01	6.7	7	.13	7.6	4	.08
11	5.6	1	.02	6.9	7	.13	7.8	4	.08
12	5.7	1	.02	7.2	7	.14	8.0	4	.09
13	5.1	1	.01	7.2	7	.14	7.7	4	.08
14	4.4	1	.01	6.7	7	.13	e8.0	4	.09
15	5.2	2	.03	7.1	7	.13	e8.0	4	.09
16	4.7	3	.04	7.1	7	.13	e8.0	4	.09
17	4.6	4	.05	7.5	7	.14	e8.0	4	.09
18	5.2	5	.07	7.5	7	.14	e8.0	4	.09
19	7.1	3	.06	7.8	7	.15	e8.0	4	.09
20	6.8	2	.04	8.6	7	.16	e8.0	4	.09
21	6.7	2	.04	8.1	7	.15	e8.0	4	.09
22	6.9	2	.04	e8.1	7	.15	e8.0	4	.09
23	6.7	2	.04	e8.1	7	.15	e8.0	4	.09
24	6.3	2	.03	e8.2	7	.15	e8.0	4	.09
25	5.5	2	.03	e8.2	7	.15	e8.0	4	.09
26	5.5	2	.03	e8.2	7	.15	e8.0	4	.09
27	5.4	2	.03	e8.3	6	.13	e8.0	4	.09
28	5.3	2	.03	e8.3	6	.13	e8.0	4	.09
29	4.9	2	.03	e8.3	6	.13	e8.0	4	.09
30	5.3	2	.03	e8.4	5	.11	e8.0	5	.11
31	6.5	2	.04	---	---	---	e8.0	5	.11
TOTAL	167.3	---	0.82	220.7	---	3.33	250.2	---	2.84
JANUARY			FEBRUARY			MARCH			
1	e8.0	5	.11	e8.0	3	.06	13	6	.21
2	e8.0	5	.11	e8.0	3	.06	18	6	.29
3	e8.0	5	.11	e8.0	3	.06	39	67	10
4	e8.0	5	.11	e8.0	3	.06	221	416	301
5	e8.0	5	.11	e8.5	3	.07	151	128	57
6	e8.0	5	.11	e8.7	3	.07	91	25	6.1
7	e8.0	5	.11	e9.0	3	.07	74	15	3.0
8	e8.0	5	.11	e9.5	3	.08	65	13	2.3
9	e8.0	5	.11	e10	6	.16	58	12	1.9
10	e8.0	6	.13	e11	6	.18	51	12	1.7
11	e8.0	6	.13	11	6	.18	49	11	1.5
12	e8.0	6	.13	11	6	.18	45	11	1.3
13	e8.0	6	.13	12	6	.19	44	10	1.2
14	e8.0	6	.13	12	6	.19	42	10	1.1
15	e8.0	6	.13	13	6	.21	41	9	1.0
16	e8.0	6	.13	13	6	.21	40	9	.97
17	e8.0	6	.13	12	6	.19	35	8	.76
18	e8.0	6	.13	12	6	.19	35	8	.76
19	e8.0	6	.13	11	6	.18	35	7	.66
20	e8.0	5	.11	11	6	.18	33	7	.62
21	e8.0	5	.11	11	6	.18	31	7	.59
22	e8.0	5	.11	11	6	.18	29	7	.55
23	e8.0	5	.11	11	6	.18	29	7	.55
24	e8.0	5	.11	11	6	.18	32	6	.52
25	e8.0	5	.11	10	6	.16	29	6	.47
26	e8.0	4	.09	10	6	.16	e30	6	.49
27	e8.0	4	.09	11	6	.18	e32	6	.52
28	e8.0	4	.09	11	6	.18	e34	6	.55
29	e8.0	4	.09	---	---	---	35	5	.47
30	e8.0	4	.09	---	---	---	37	5	.50
31	e8.0	4	.09	---	---	---	40	5	.54
TOTAL	248.0	---	3.49	292.7	---	4.17	1538	---	399.12

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

217

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	45	7	.85	111	16	4.8	195	29	15
2	46	8	.99	93	12	3.0	241	44	29
3	50	9	1.2	83	10	2.2	256	52	37
4	59	11	1.8	87	12	2.8	283	66	52
5	86	16	3.7	121	22	7.2	265	62	46
6	129	25	9.5	166	41	18	203	68	37
7	102	15	4.1	212	45	27	199	54	29
8	83	13	2.9	277	53	40	218	44	26
9	80	12	2.6	243	40	26	263	35	25
10	81	11	2.4	180	22	11	291	34	28
11	69	9	1.7	148	16	6.4	269	41	31
12	62	7	1.2	129	13	4.5	245	30	21
13	62	7	1.2	147	15	6.0	221	21	13
14	69	6	1.1	139	13	4.9	192	18	9.3
15	75	6	1.2	149	15	6.0	174	11	5.2
16	70	6	1.1	178	23	11	154	9	3.7
17	64	6	1.0	195	22	12	132	8	2.9
18	60	5	.81	135	8	2.9	114	7	2.2
19	61	5	.82	e114	5	1.5	99	5	1.3
20	64	5	.86	e103	3	.83	84	2	.45
21	64	4	.69	e100	6	1.6	78	2	.42
22	65	4	.70	132	15	5.3	75	4	.81
23	71	4	.77	212	27	15	73	4	.79
24	83	5	1.1	284	49	39	66	5	.89
25	84	5	1.1	328	59	53	63	6	1.0
26	80	5	1.1	317	54	47	60	7	1.1
27	80	5	1.1	264	46	33	58	7	1.1
28	77	5	1.0	245	41	27	71	9	1.7
29	89	9	2.2	247	35	23	113	12	3.7
30	103	11	3.1	258	36	25	94	8	2.0
31	---	---	---	201	26	14	---	---	---
TOTAL	2213	---	53.89	5598	---	480.93	4849	---	427.56
JULY			AUGUST			SEPTEMBER			
1	63	6	1.0	10	5	.13	3.7	1	.01
2	52	5	.70	9.9	5	.13	3.7	1	.01
3	48	4	.52	9.4	5	.13	3.9	1	.01
4	44	4	.48	8.9	5	.12	4.3	1	.01
5	40	4	.43	9.1	5	.12	6.9	4	.07
6	39	4	.42	8.9	5	.12	5.9	4	.06
7	33	4	.36	7.9	4	.09	6.7	4	.07
8	29	4	.31	7.7	4	.08	5.0	4	.05
9	27	4	.29	7.5	3	.06	5.2	4	.06
10	26	4	.28	6.7	3	.05	5.3	4	.06
11	24	4	.26	6.2	2	.03	4.8	4	.05
12	24	4	.26	6.0	2	.03	4.9	4	.05
13	22	4	.24	5.9	2	.03	4.6	5	.06
14	21	4	.23	6.5	2	.04	4.1	5	.06
15	19	4	.21	7.8	2	.04	3.7	5	.05
16	18	4	.19	8.3	2	.04	3.7	5	.05
17	17	4	.18	7.0	2	.04	3.6	5	.05
18	17	4	.18	6.3	2	.03	3.1	5	.04
19	17	4	.18	5.7	2	.03	3.2	5	.04
20	16	4	.17	5.4	2	.03	3.1	5	.04
21	18	4	.19	5.1	2	.03	2.9	5	.04
22	16	4	.17	4.8	2	.03	3.0	5	.04
23	16	5	.22	4.0	2	.02	3.0	5	.04
24	15	5	.20	3.8	2	.02	2.9	5	.04
25	14	5	.19	3.9	2	.02	2.8	5	.04
26	14	5	.19	3.5	2	.02	3.0	5	.04
27	13	5	.18	3.4	6	.06	3.2	5	.04
28	13	5	.18	4.0	2	.02	3.4	5	.05
29	13	5	.18	4.1	2	.02	3.5	5	.05
30	13	5	.18	3.9	2	.02	3.3	5	.04
31	11	5	.15	3.8	2	.02	---	---	---
TOTAL	752	---	8.92	195.4	---	1.65	120.4	---	1.32
YEAR	16444.7		1388.04						

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

10336625 FALLEN LEAF LAKE NEAR CAMP RICHARDSON, CA

LOCATION.--Lat 38°54'00", long 120°04'14", in NE 1/4 SW 1/4 sec.11, T.12 N., R.17 E., El Dorado County, Hydrologic Unit 16050101, Eldorado National Forest, 200 ft north of Cathedral Creek, 1.5 mi south of Fallen Leaf Dam, 2.9 mi southwest of Camp Richardson, and 3.7 mi west of South Lake Tahoe Post Office.

DRAINAGE AREA.--16.7 mi².

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1973, published as "near Tahoe Valley."

GAGE.--Water-stage recorder. Datum of gage is 6,372.30 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Lake levels regulated by a concrete dam at the outlet constructed in 1934. Regulation is for maintenance of lake level and enhancement of fishery.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 5.85 ft, Jan. 13, 1980; minimum, 1.31 ft, Feb. 2, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.25 ft, July 12, 13; minimum, 1.31 ft, Feb. 2.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.07	2.43	1.89	1.56	1.32	1.54	2.76	3.05	3.89	4.14	4.12	3.57
2	3.06	2.39	1.88	1.55	1.37	1.60	2.75	3.05	3.98	4.16	4.10	3.56
3	3.05	2.37	1.87	1.54	1.36	1.85	2.74	3.05	4.10	4.18	4.08	3.54
4	3.03	2.35	1.84	1.54	1.38	2.58	2.75	3.06	4.19	4.21	4.06	3.54
5	2.98	2.32	1.84	1.54	1.41	2.73	2.78	3.11	4.23	4.22	4.05	3.53
6	2.97	2.28	1.83	1.51	1.41	2.74	2.90	3.20	4.21	4.23	4.03	3.51
7	2.94	2.27	1.82	1.51	1.41	2.72	2.92	3.33	4.19	4.23	4.00	3.49
8	2.92	2.26	1.81	1.51	1.41	2.69	2.92	3.47	4.19	4.23	3.98	3.46
9	2.90	2.24	1.79	1.50	1.41	2.67	2.93	3.52	4.20	4.24	3.96	3.45
10	2.88	2.22	1.75	1.49	1.41	2.72	2.93	3.50	4.21	4.24	3.94	3.44
11	2.86	2.21	1.76	1.48	1.41	2.71	2.92	3.45	4.22	4.24	3.92	3.43
12	2.83	2.20	1.75	1.47	1.41	2.72	2.90	3.41	4.19	4.24	3.90	3.42
13	2.81	2.16	1.74	1.46	1.41	2.75	2.89	3.41	4.16	4.23	3.89	3.39
14	2.78	2.12	1.71	1.45	1.41	2.76	2.89	3.39	4.12	4.22	4.01	3.38
15	2.76	2.11	1.70	1.43	1.43	2.74	2.88	3.40	4.06	4.21	4.00	3.37
16	2.73	2.09	1.69	1.42	1.43	2.72	2.89	3.51	4.00	4.19	3.98	3.35
17	2.70	2.08	1.68	1.41	1.43	2.74	2.88	3.57	3.96	4.19	3.97	3.34
18	2.71	2.06	1.67	1.39	1.43	2.75	2.87	3.56	3.93	4.20	3.95	3.32
19	2.69	2.05	1.74	1.39	1.43	2.73	2.86	3.51	3.92	4.20	3.93	3.31
20	2.67	2.03	1.74	1.39	1.42	2.71	2.88	3.48	3.93	4.19	3.92	3.29
21	2.66	2.02	1.73	1.38	1.42	2.69	2.88	3.45	3.94	4.18	3.90	3.28
22	2.63	2.01	1.71	1.36	1.42	2.66	2.90	3.54	3.95	4.17	3.88	3.27
23	2.62	1.99	1.69	1.36	1.42	2.71	2.91	3.76	3.96	4.16	3.85	3.25
24	2.60	1.98	1.68	1.35	1.42	2.75	2.94	3.98	3.96	4.14	3.80	3.24
25	2.57	1.98	1.66	1.35	1.41	2.83	2.97	4.11	3.97	4.13	3.75	3.22
26	2.55	1.97	1.64	1.36	1.41	2.83	2.96	4.13	3.97	4.12	3.71	3.21
27	2.52	1.96	1.63	1.36	1.41	2.83	2.95	4.08	3.99	4.14	3.66	3.19
28	2.49	1.94	1.60	1.35	1.42	2.80	2.95	4.04	4.04	4.17	3.64	3.18
29	2.45	1.92	1.58	1.35	---	2.78	2.97	4.01	4.09	4.16	3.62	3.16
30	2.41	1.91	1.57	1.35	---	2.76	3.02	3.99	4.12	4.15	3.61	3.15
31	2.45	---	1.56	1.34	---	2.76	---	3.89	---	4.14	3.59	---
MEAN	2.75	2.13	1.73	1.43	1.41	2.63	2.89	3.55	4.06	4.19	3.90	3.36
MAX	3.07	2.43	1.89	1.56	1.43	2.83	3.02	4.13	4.23	4.24	4.12	3.57
MIN	2.41	1.91	1.56	1.34	1.32	1.54	2.74	3.05	3.89	4.12	3.59	3.15

CAL YR 1990 MEAN 3.16 MAX 4.48 MIN 1.56
WTR YR 1991 MEAN 2.84 MAX 4.24 MIN 1.32

PYRAMID AND WINNEMUCCA LAKES BASIN

219

10336626 TAYLOR CREEK NEAR CAMP RICHARDSON, CA

LOCATION.--Lat 38°55'18", long 120°03'37", in NE 1/4 NW 1/4 sec.2, T.12 N., R.17 E., El Dorado County, Hydrologic Unit 16050101, Eldorado National Forest, on left bank, 0.1 mi downstream from Fallen Leaf Lake outlet, and 1.4 mi southwest of Camp Richardson.

DRAINAGE AREA.--16.7 mi².

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1973, published as "near Tahoe Valley."

GAGE.--Water-stage recorder. Datum of gage is 6,361.08 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for discharges less than 2 ft³/s, which are fair. Flow regulated by Fallen Leaf Lake (station 10336625).

AVERAGE DISCHARGE (unadjusted).--23 years, 43.8 ft³/s, 31,730 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,530 ft³/s, Jan. 14, 1980, gage height, 6.33 ft; minimum daily, 0.13 ft³/s, Sept. 12, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 192 ft³/s, May 26, gage height, 4.37 ft; minimum daily, 0.45 ft³/s, Jan. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	8.3	7.3	7.1	2.8	7.3	25	46	107	15	6.3	5.3
2	2.6	8.2	7.5	7.1	3.5	8.0	25	47	90	15	6.1	5.0
3	3.3	8.2	7.3	7.1	2.9	11	24	47	102	14	6.0	4.9
4	3.3	8.1	7.3	7.1	2.5	23	25	47	115	12	5.8	4.9
5	4.6	8.2	7.3	7.1	2.1	43	27	50	126	11	5.7	5.1
6	6.5	8.1	7.3	7.1	2.0	49	33	57	127	10	5.6	5.5
7	6.5	8.1	7.3	7.1	1.9	48	36	66	124	9.3	5.3	5.8
8	6.5	8.2	7.3	6.9	1.9	39	37	77	124	8.5	5.1	5.8
9	7.5	8.1	7.3	6.5	2.0	22	37	88	126	8.0	4.8	5.8
10	8.2	7.9	7.1	6.5	2.0	22	37	90	127	6.6	4.6	5.7
11	8.2	7.9	7.1	6.5	2.0	23	36	87	129	4.9	4.6	5.5
12	8.2	7.6	7.1	6.2	2.0	24	34	81	129	3.6	6.8	5.4
13	8.2	7.8	7.1	5.9	2.0	25	34	79	122	1.9	8.6	5.3
14	8.4	8.1	7.1	5.6	2.0	25	34	75	107	1.4	8.0	5.4
15	8.4	8.2	7.1	5.3	2.0	25	35	73	100	1.1	7.6	5.1
16	8.5	8.2	7.1	5.0	2.1	24	34	78	93	.99	7.8	5.1
17	8.5	7.9	7.1	4.8	2.2	23	34	89	71	.92	7.9	5.1
18	8.6	7.9	7.1	4.6	2.5	24	33	90	53	.81	7.1	5.0
19	8.9	7.9	7.4	4.3	2.5	25	33	86	38	4.5	6.7	4.6
20	8.9	7.7	7.6	4.1	2.5	24	34	82	21	9.8	6.2	4.1
21	8.7	7.3	7.6	3.8	2.5	22	34	79	18	9.1	6.1	3.6
22	8.8	7.0	7.6	3.6	2.4	21	34	46	16	8.4	6.9	3.3
23	8.9	7.1	7.4	3.3	2.4	21	36	35	16	8.2	7.1	3.4
24	8.9	7.1	7.5	3.2	2.4	23	38	53	15	7.7	6.7	3.6
25	8.9	7.2	7.6	2.6	2.4	28	40	127	15	7.4	6.2	3.5
26	8.2	7.6	7.5	1.0	2.5	30	40	171	15	7.4	5.7	3.8
27	8.2	7.5	7.3	.49	5.5	31	39	185	15	7.2	5.4	e3.7
28	8.2	7.3	7.3	.45	7.1	29	39	177	15	6.9	5.5	e3.7
29	8.2	7.3	7.1	.46	---	27	40	172	15	6.2	5.5	e3.7
30	8.2	7.2	7.1	1.2	---	26	42	169	15	6.3	5.5	e3.7
31	8.4	---	7.1	2.5	---	25	---	155	---	6.4	5.5	---
TOTAL	229.7	233.2	225.9	144.50	72.6	797.3	1029	2804	2186	220.52	192.7	140.4
MEAN	7.41	7.77	7.29	4.66	2.59	25.7	34.3	90.5	72.9	7.11	6.22	4.68
MAX	8.9	8.3	7.6	7.1	7.1	49	42	185	129	15	8.6	5.8
MIN	2.3	7.0	7.1	.45	1.9	7.3	24	35	15	.81	4.6	3.3
AC-FT	456	463	448	287	144	1580	2040	5560	4340	437	382	278

CAL YR 1990 TOTAL 7638.80 MEAN 20.9 MAX 186 MIN .46 AC-FT 15150
WTR YR 1991 TOTAL 8275.82 MEAN 22.7 MAX 185 MIN .45 AC-FT 16420

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

10336645 GENERAL CREEK NEAR MEEKS BAY, CA

LOCATION.--Lat 39°03'07", long 120°07'03", in NE 1/4 NE 1/4 sec.20, T.14 N., R.17 E., El Dorado County, Hydrologic Unit 16050101, on right bank, 200 ft upstream from State Highway 89, 0.4 mi upstream from Lake Tahoe, and 1.1 mi north of Meeks Bay.

DRAINAGE AREA.--7.44 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,250.38 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for estimated daily discharges and discharges less than 0.5 ft³/s, which are poor. No known diversion or regulation upstream from station.

AVERAGE DISCHARGE.--11 years, 16.6 ft³/s, 12,030 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 765 ft³/s, Dec. 20, 1981, gage height, 5.43 ft, from rating curve extended above 180 ft³/s on basis of computation of flow through culvert; minimum daily, 0.36 ft³/s, Sept. 19-22, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 23	2130	*154	*2.35				

Minimum daily, 0.36 ft³/s, Sept. 19-22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	1.3	e.92	e.88	e.91	e1.2	6.1	32	51	4.7	.84	.39
2	.66	1.1	e.92	e.88	e.91	e1.2	6.0	24	64	3.8	.76	.38
3	.65	1.1	e.92	e.88	e.91	4.1	6.5	19	64	3.3	.72	.39
4	.65	.98	e.92	e.88	e.91	29	8.1	20	58	2.9	.69	.50
5	.65	1.0	e.92	e.88	e.91	30	12	33	46	2.6	.73	.58
6	.66	1.1	e.92	e.90	e.91	e15	19	52	33	2.3	.74	.50
7	.67	1.1	e.92	e.90	e.91	e10	19	64	30	2.0	.72	.48
8	.67	1.1	e.90	e.90	e.91	e9.0	17	80	29	1.7	.71	.47
9	.68	1.0	e.90	e.90	e.91	e8.1	15	56	28	1.6	.66	.49
10	.71	.98	e.90	e.90	e.91	6.9	16	34	26	1.5	.61	.66
11	.70	.98	e.90	e.91	e.91	e7.0	15	28	23	1.3	.58	.62
12	.72	.98	e.90	e.91	e.91	6.0	13	25	19	1.2	.59	.61
13	.72	.98	e.90	e.91	e.91	5.6	13	37	16	1.1	.65	.62
14	.72	.98	e.90	e.91	e.91	e5.4	16	31	13	1.0	1.0	.62
15	.70	.98	e.90	e.91	.91	e5.1	18	47	11	.96	1.3	.55
16	.64	.98	e.90	e.91	.98	e4.8	16	69	9.3	.93	.96	.55
17	.66	.98	e.90	e.91	1.0	4.4	13	63	8.0	.89	.80	.48
18	.78	.98	e.90	e.91	1.1	4.5	13	34	7.1	.83	.65	.48
19	1.1	.99	e.88	e.91	1.1	4.4	14	27	6.3	1.0	.62	.36
20	.88	1.1	e.86	e.91	1.1	4.0	17	28	5.8	1.3	.57	.36
21	.87	.98	e.86	e.91	1.1	e4.0	16	33	5.2	1.3	.49	.36
22	.79	.98	e.86	e.91	1.1	e3.8	17	58	4.7	1.0	.45	.36
23	.79	1.0	e.86	e.91	1.1	3.7	21	90	4.3	.94	.43	.42
24	.79	e1.0	e.86	e.91	1.1	e3.7	25	93	4.0	.89	.42	.42
25	.79	e1.0	e.86	e.91	1.1	e3.8	21	95	3.8	.83	.47	.48
26	.79	e.95	e.86	e.91	1.1	e4.0	17	75	3.6	.80	.50	.55
27	.79	e.92	e.86	e.91	1.1	e4.2	18	59	3.7	.76	.56	.62
28	.79	e.92	e.86	e.91	1.2	e4.4	18	56	5.0	.75	.55	.70
29	.79	e.92	e.86	e.91	---	4.4	23	55	7.9	.87	.51	.70
30	.79	e.92	e.86	e.91	---	4.4	29	52	6.1	.86	.48	.62
31	1.2	---	e.86	e.91	---	5.1	---	37	---	.83	.44	---
TOTAL	23.45	30.28	27.54	28.01	27.83	211.2	477.7	1506	595.8	46.74	20.20	15.32
MEAN	.76	1.01	.89	.90	.99	6.81	15.9	48.6	19.9	1.51	.65	.51
MAX	1.2	1.3	.92	.91	1.2	30	29	95	64	4.7	1.3	.70
MIN	.64	.92	.86	.88	.91	1.2	6.0	19	3.6	.75	.42	.36
AC-FT	47	60	55	56	55	419	948	2990	1180	93	40	30

CAL YR 1990 TOTAL 3192.65 MEAN 8.75 MAX 65 MIN .51 AC-FT 6330
WTR YR 1991 TOTAL 3010.07 MEAN 8.25 MAX 95 MIN .36 AC-FT 5970

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

221

10336645 GENERAL CREEK NEAR MEEKS BAY, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1980 to September 1983.

WATER TEMPERATURE: October 1980 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1980 to current year.

REMARKS.--Sediment samples were collected during most days where a water temperature is published.

COOPERATION.--Selected sediment samples and water-temperature observations provided by University of California at Davis.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 266 mg/L, Dec. 20, 1981; minimum daily mean, 0 mg/L, many days during most years.

SEDIMENT LOAD: Maximum daily, 457 tons, Dec. 20, 1981; minimum daily, 0 ton, many days during most years.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily mean, 26 mg/L, Mar. 4; minimum daily mean, 0 mg/L, many days.

SEDIMENT LOAD: Maximum daily, 2.2 tons, Mar. 4; minimum daily, 0 ton, many days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR 04...	1235	29	0.5	38	3.0	51

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	.0	---	3.0	---	---	---	---	---
2	---	---	---	.0	---	---	---	---	9.0	---	---	---
3	7.5	---	---	---	---	.0	---	3.0	6.0	---	---	---
4	---	---	---	---	---	0.5	---	5.0	10.0	---	---	---
5	8.5	3.0	---	---	---	0	---	5.5	---	---	---	---
6	---	---	---	---	---	.0	---	2.5	5.0	---	---	14.0
7	---	---	---	---	---	---	---	4.5	---	---	---	---
8	---	---	---	---	---	---	---	2.0	---	17.5	---	---
9	---	---	---	---	---	---	2.0	---	11.0	---	---	---
10	---	---	.5	---	---	---	---	3.0	13.0	---	---	---
11	---	---	---	---	---	---	---	---	10.0	---	---	---
12	---	---	---	---	.5	---	---	---	---	---	---	---
13	---	---	---	---	---	.5	---	---	---	---	14.0	12.0
14	---	---	---	---	---	---	6.5	5.5	---	---	13.0	---
15	5.5	---	---	1.0	---	---	---	4.5	---	---	14.0	---
16	---	4.0	---	---	---	---	---	2.0	---	---	---	---
17	---	---	---	---	---	---	1.5	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	1.0	1.0	---	---	---	14.0	---	---
20	---	---	---	---	---	---	---	5.0	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	.0	.0	---	---	---	8.0	---	---	---	---
23	---	---	---	---	---	---	5.0	3.5	---	---	---	---
24	---	---	---	---	---	---	---	2.5	---	---	---	---
25	5.5	---	---	---	---	---	---	7.5	---	---	---	---
26	---	---	---	---	---	---	---	6.0	---	---	16.0	---
27	---	---	.0	---	---	---	---	5.5	---	---	---	11.5
28	---	.5	---	---	---	---	6.0	---	---	---	---	---
29	---	---	---	---	---	---	4.5	---	---	13.0	---	---
30	4.5	---	---	---	---	---	---	5.0	---	---	---	---
31	---	---	---	---	---	---	---	---	---	16.0	---	---

PYRAMID AND WINNEMUCCA LAKES BASIN

10336645 GENERAL CREEK NEAR MEEKS BAY, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	.65	1	.00	1.3	0	.00	e.92	0	.00
2	.66	0	.00	1.1	0	.00	e.92	0	.00
3	.65	0	.00	1.1	0	.00	e.92	0	.00
4	.65	0	.00	.98	0	.00	e.92	0	.00
5	.65	0	.00	1.0	0	.00	e.92	0	.00
6	.66	0	.00	1.1	0	.00	e.92	0	.00
7	.67	0	.00	1.1	0	.00	e.92	0	.00
8	.67	0	.00	1.1	0	.00	e.90	0	.00
9	.68	0	.00	1.0	0	.00	e.90	0	.00
10	.71	0	.00	.98	0	.00	e.90	0	.00
11	.70	0	.00	.98	0	.00	e.90	0	.00
12	.72	0	.00	.98	0	.00	e.90	0	.00
13	.72	0	.00	.98	0	.00	e.90	0	.00
14	.72	0	.00	.98	0	.00	e.90	0	.00
15	.70	0	.00	.98	0	.00	e.90	0	.00
16	.64	0	.00	.98	0	.00	e.90	0	.00
17	.66	0	.00	.98	0	.00	e.90	0	.00
18	.78	0	.00	.98	0	.00	e.90	0	.00
19	1.1	1	.00	.99	0	.00	e.88	0	.00
20	.88	1	.00	1.1	0	.00	e.86	0	.00
21	.87	0	.00	.98	0	.00	e.86	0	.00
22	.79	0	.00	.98	0	.00	e.86	0	.00
23	.79	0	.00	1.0	0	.00	e.86	0	.00
24	.79	0	.00	e1.0	0	.00	e.86	0	.00
25	.79	0	.00	e1.0	0	.00	e.86	0	.00
26	.79	0	.00	e.95	0	.00	e.86	0	.00
27	.79	0	.00	e.92	0	.00	e.86	0	.00
28	.79	0	.00	e.92	0	.00	e.86	0	.00
29	.79	0	.00	e.92	0	.00	e.86	0	.00
30	.79	0	.00	e.92	0	.00	e.86	0	.00
31	1.2	0	.00	---	---	---	e.86	0	.00
TOTAL	23.45	---	0.00	30.28	---	0.00	27.54	---	0.00
JANUARY			FEBRUARY			MARCH			
1	e.88	0	.00	e.91	0	.00	e1.2	0	.00
2	e.88	0	.00	e.91	0	.00	e1.2	0	.00
3	e.88	0	.00	e.91	0	.00	4.1	8	.13
4	e.88	0	.00	e.91	0	.00	29	26	2.2
5	e.88	0	.00	e.91	0	.00	30	7	.57
6	e.90	0	.00	e.91	0	.00	e15	2	.08
7	e.90	0	.00	e.91	0	.00	e10	2	.05
8	e.90	0	.00	e.91	0	.00	e9.0	2	.05
9	e.90	1	.00	e.91	0	.00	e8.1	2	.04
10	e.90	1	.00	e.91	0	.00	6.9	2	.04
11	e.91	1	.00	e.91	0	.00	e7.0	3	.06
12	e.91	1	.00	e.91	0	.00	6.0	3	.05
13	e.91	1	.00	e.91	0	.00	5.6	3	.05
14	e.91	1	.00	e.91	0	.00	e5.4	3	.04
15	e.91	1	.00	.91	0	.00	e5.1	3	.04
16	e.91	1	.00	.98	0	.00	e4.8	2	.03
17	e.91	1	.00	1.0	0	.00	4.4	2	.02
18	e.91	1	.00	1.1	0	.00	4.5	1	.01
19	e.91	1	.00	1.1	0	.00	4.4	1	.01
20	e.91	1	.00	1.1	0	.00	4.0	1	.01
21	e.91	1	.00	1.1	0	.00	e4.0	1	.01
22	e.91	1	.00	1.1	0	.00	e3.8	1	.01
23	e.91	1	.00	1.1	0	.00	3.7	2	.02
24	e.91	1	.00	1.1	0	.00	e3.7	2	.02
25	e.91	1	.00	1.1	0	.00	e3.8	2	.02
26	e.91	1	.00	1.1	0	.00	e4.0	2	.02
27	e.91	1	.00	1.1	0	.00	e4.2	2	.02
28	e.91	0	.00	1.2	0	.00	e4.4	3	.04
29	e.91	0	.00	---	---	---	4.4	3	.04
30	e.91	0	.00	---	---	---	4.4	3	.04
31	e.91	0	.00	---	---	---	5.1	4	.06
TOTAL	28.01	---	0.00	27.83	---	0.00	211.2	---	3.78

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

223

10336645 GENERAL CREEK NEAR MEEKS BAY, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL				MAY			JUNE		
1	6.1	4	.07	32	4	.35	51	3	.41
2	6.0	4	.06	24	3	.19	64	4	.69
3	6.5	4	.07	19	2	.10	64	3	.52
4	8.1	4	.09	20	3	.16	58	3	.47
5	12	4	.13	33	4	.36	46	2	.25
6	19	4	.21	52	6	.84	33	2	.18
7	19	4	.21	64	6	1.2	30	3	.24
8	17	4	.18	80	8	1.8	29	3	.23
9	15	6	.24	56	3	.45	28	4	.30
10	16	7	.30	34	1	.09	26	4	.28
11	15	6	.24	28	1	.08	23	4	.25
12	13	5	.18	25	2	.13	19	4	.21
13	13	5	.18	37	4	.40	16	4	.17
14	16	4	.17	31	4	.33	13	4	.14
15	18	4	.19	47	5	.63	11	4	.12
16	16	5	.22	69	5	.93	9.3	4	.10
17	13	5	.18	63	5	.85	8.0	4	.09
18	13	5	.18	34	1	.09	7.1	4	.08
19	14	5	.19	27	1	.07	6.3	4	.07
20	17	5	.23	28	1	.08	5.8	4	.06
21	16	6	.26	33	1	.09	5.2	4	.06
22	17	6	.28	58	2	.31	4.7	4	.05
23	21	6	.34	90	6	1.5	4.3	4	.05
24	25	6	.40	93	6	1.5	4.0	4	.04
25	21	6	.34	95	5	1.3	3.8	4	.04
26	17	5	.23	75	3	.61	3.6	4	.04
27	18	5	.24	59	2	.32	3.7	4	.04
28	18	5	.24	56	1	.15	5.0	5	.07
29	23	7	.43	55	1	.15	7.9	5	.11
30	29	6	.47	52	1	.14	6.1	4	.07
31	---	---	---	37	1	.10	---	---	---
TOTAL	477.7	---	6.75	1506	---	15.30	595.8	---	5.43
JULY				AUGUST			SEPTEMBER		
1	4.7	4	.05	.84	0	.00	.39	0	.00
2	3.8	4	.04	.76	0	.00	.38	0	.00
3	3.3	4	.04	.72	0	.00	.39	0	.00
4	2.9	4	.03	.69	0	.00	.50	0	.00
5	2.6	4	.03	.73	0	.00	.58	0	.00
6	2.3	4	.02	.74	0	.00	.50	0	.00
7	2.0	4	.02	.72	1	.00	.48	0	.00
8	1.7	3	.01	.71	1	.00	.47	0	.00
9	1.6	2	.01	.66	1	.00	.49	0	.00
10	1.5	2	.01	.61	1	.00	.66	1	.00
11	1.3	2	.01	.58	1	.00	.62	1	.00
12	1.2	2	.01	.59	1	.00	.61	1	.00
13	1.1	1	.00	.65	1	.00	.62	1	.00
14	1.0	1	.00	1.0	1	.00	.62	1	.00
15	.96	1	.00	1.3	0	.00	.55	1	.00
16	.93	1	.00	.96	0	.00	.55	1	.00
17	.89	1	.00	.80	0	.00	.48	1	.00
18	.83	1	.00	.65	0	.00	.48	1	.00
19	1.0	1	.00	.62	0	.00	.36	1	.00
20	1.3	1	.00	.57	0	.00	.36	1	.00
21	1.3	1	.00	.49	0	.00	.36	1	.00
22	1.0	1	.00	.45	0	.00	.36	1	.00
23	.94	1	.00	.43	0	.00	.42	1	.00
24	.89	1	.00	.42	0	.00	.42	1	.00
25	.83	1	.00	.47	0	.00	.48	1	.00
26	.80	1	.00	.50	0	.00	.55	2	.00
27	.76	1	.00	.56	0	.00	.62	2	.00
28	.75	1	.00	.55	0	.00	.70	1	.00
29	.87	1	.00	.51	0	.00	.70	1	.00
30	.86	1	.00	.48	0	.00	.62	1	.00
31	.83	0	.00	.44	0	.00	---	---	---
TOTAL	46.74	---	0.28	20.20	---	0.00	15.32	---	0.00
YEAR	3010.07		31.54						

PYRAMID AND WINNEMUCCA LAKES BASIN

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA

LOCATION.--Lat 39°06'27", long 120°09'40", in NW 1/4 NE 1/4 sec.36, T.15 N., R.16 E., Placer County, Hydrologic Unit 16050101, on right bank, 300 ft upstream from bridge on State Highway 89, 1,000 ft upstream from Lake Tahoe, and 4.6 mi south of Tahoe City.

DRAINAGE AREA.--11.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 6,234.59 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1960, to Sept. 30, 1964, at datum 10.25 ft lower and Oct. 1, 1964, to Aug. 27, 1970, at datum 12 ft lower, at site 400 ft downstream.

REMARKS.--Records good except for estimated daily discharges, which are fair. No known diversion or regulation upstream from station.

AVERAGE DISCHARGE.--31 years, 36.5 ft³/s, 26,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s, Dec. 22 or 24, 1964, on basis of computation of flow through culvert; maximum gage height, 9.90 ft, site and datum then in use, Dec. 22, 1964; minimum discharge, 0.30 ft³/s, Sept. 19, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	1430	ice jam	*3.35	May 25	1915	*177	2.37

Minimum daily, 1.7 ft³/s, several days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	2.4	e2.0	e2.0	e2.0	e2.3	12	53	90	26	3.4	2.0
2	2.0	2.0	e2.1	e2.0	e2.2	e2.3	12	44	105	24	3.3	2.0
3	2.0	2.0	e2.1	e2.0	e2.2	e2.5	13	41	116	23	3.4	2.0
4	2.0	2.0	e2.1	e2.0	e2.2	e150	17	50	114	21	3.3	2.1
5	2.0	2.0	2.1	e2.0	e2.2	e72	26	65	101	19	3.3	2.2
6	2.1	2.1	e2.1	e2.0	e2.2	e40	37	77	88	17	3.1	2.0
7	2.0	2.1	e2.1	e2.0	e2.2	e30	32	91	85	15	3.0	2.1
8	1.9	1.9	e2.1	e2.0	e2.3	e25	29	101	89	14	2.8	1.9
9	1.9	1.9	e2.1	e2.0	e2.3	e21	29	80	95	13	2.6	1.9
10	1.9	1.9	e2.1	e2.0	e2.3	e20	31	61	98	12	2.5	2.6
11	2.0	1.9	e2.1	e2.0	e2.3	e18	28	53	98	11	2.4	2.3
12	2.0	1.8	e2.1	e2.0	e2.3	e16	25	50	91	10	2.4	2.0
13	2.0	1.9	e2.1	e2.0	e2.3	e14	28	60	81	9.7	2.4	1.7
14	2.0	1.9	e2.1	e2.0	e2.3	e12	34	57	69	8.9	3.7	1.7
15	2.0	1.9	e2.1	e2.0	e2.3	e10	35	71	61	8.3	3.6	1.8
16	2.1	1.9	e2.0	e2.0	e2.3	e9.9	30	89	55	7.6	2.9	1.7
17	2.0	1.9	e2.0	e2.0	e2.3	e9.9	28	89	52	7.1	2.7	1.9
18	2.4	2.0	e2.0	e2.0	e2.3	e9.9	27	65	48	6.7	2.5	1.9
19	2.6	e2.0	e2.0	e2.0	e2.3	e9.9	29	57	44	6.6	2.5	1.7
20	1.9	e2.0	e2.0	e2.0	e2.3	9.8	35	57	39	6.7	2.5	1.8
21	1.8	e2.0	e2.0	e2.0	e2.3	9.6	36	63	35	6.4	2.4	1.7
22	1.9	e2.0	e2.0	e2.0	e2.3	e9.6	41	82	32	5.8	2.3	1.8
23	1.8	e2.0	e2.0	e2.0	e2.3	9.6	44	114	30	5.3	2.2	1.8
24	1.8	e2.0	e2.0	e2.0	e2.3	e9.6	45	124	28	5.1	2.2	1.8
25	1.8	e1.9	e2.0	e2.0	e2.3	e9.6	38	136	26	4.9	2.1	1.7
26	1.7	e1.9	e2.0	e2.0	e2.3	e9.8	34	118	24	4.5	2.2	1.9
27	1.8	e1.9	e2.0	e2.0	e2.3	e9.8	34	101	24	4.3	2.2	1.9
28	1.8	e1.9	e2.0	e2.0	e2.3	e9.6	37	96	32	4.1	2.2	1.9
29	1.7	e2.0	e2.0	e2.0	---	10	46	93	37	4.7	2.2	1.9
30	1.8	e2.0	e2.0	e2.0	---	11	51	97	28	4.1	2.3	1.7
31	2.6	---	e2.0	e2.0	---	12	---	80	---	3.9	2.1	---
TOTAL	61.3	59.1	63.4	62.0	63.5	617.2	943	2415	1915	319.7	82.7	57.4
MEAN	1.98	1.97	2.05	2.00	2.27	19.9	31.4	77.9	63.8	10.3	2.67	1.91
MAX	2.6	2.4	2.1	2.0	2.3	150	51	136	116	26	3.7	2.6
MIN	1.7	1.8	2.0	2.0	2.0	2.3	12	41	24	3.9	2.1	1.7
AC-FT	122	117	126	123	126	1220	1870	4790	3800	634	164	114

CAL YR 1990 TOTAL 7174.2 MEAN 19.7 MAX 107 MIN 1.7 AC-FT 14230
WTR YR 1991 TOTAL 6659.3 MEAN 18.2 MAX 150 MIN 1.7 AC-FT 13210

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

225

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975-78, 1980 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1980 to September 1983.

WATER TEMPERATURE: October 1974 to June 1978 (1977-78 storm season only), October 1979 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1974 to June 1978 (1977-78 storm season only), October 1979 to current year.

REMARKS.--Sediment samples were collected during most days where a water temperature is published.

COOPERATION.--Selected sediment samples and water-temperature observations provided by University of California at Davis.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 1,200 mg/L, Jan. 13, 1980; minimum daily mean, 0 mg/L, many days during most years.

SEDIMENT LOAD: Maximum daily, 2,710 tons, Mar. 8, 1986; minimum daily, 0 ton, many days during most years.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily mean, 250 mg/L, Mar. 4; minimum daily mean, 0 mg/L, Dec. 2-5.

SEDIMENT LOAD: Maximum daily, 101 tons, Mar. 4; minimum daily, 0 ton, many days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR SEPTEMBER 1990 TO OCTOBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, CHARGE, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
MAR										
04...	1115	e150	0.0	427	173	59	81	94	100	--
04...	1215	e150	0.0	665	269	53	77	91	99	100
05...	1010	e72	1.0	64	12	67	--	--	--	--
05...	1105	e72	1.0	64	12	72	--	--	--	--

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR SEPTEMBER 1990 TO OCTOBER 1991
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	1.0	---	5.5	---	---	---	---	---
2	---	---	---	.0	---	---	---	---	7.5	---	---	---
3	11.0	---	---	---	---	.0	---	5.0	6.5	---	---	---
4	---	---	1.5	---	---	.0	---	9.0	11.5	---	---	---
5	11.0	6.0	---	---	---	1.0	---	9.0	---	---	---	---
6	---	---	---	---	---	3.0	4.5	7.5	3.0	---	---	14.5
7	---	---	---	---	---	---	---	8.0	---	---	19.0	---
8	---	---	---	---	---	---	---	4.0	---	19.0	---	---
9	---	---	---	---	---	---	7.0	---	---	14.0	---	---
10	---	---	2.0	---	---	---	---	5.5	13.0	---	---	---
11	---	---	---	---	---	---	---	---	9.0	---	---	---
12	---	---	---	---	3.0	---	---	---	---	---	---	10.0
13	---	---	---	---	---	.5	---	---	---	---	---	12.0
14	---	---	---	---	---	---	7.5	9.0	10.0	---	16.0	---
15	8.0	---	---	1.0	---	---	---	9.0	---	---	16.0	---
16	---	4.0	---	---	---	---	---	7.0	---	---	---	---
17	---	---	---	---	---	---	2.5	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	3.0	3.5	---	---	---	15.0	---	---
20	---	---	---	---	---	---	---	8.0	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	.5	---	---	---	11.0	---	---	---	---
23	---	---	---	---	---	---	9.5	7.5	---	---	---	---
24	---	---	---	---	---	---	---	8.0	---	---	---	---
25	9.0	---	---	---	---	---	---	10.0	---	---	---	---
26	---	---	.0	---	---	---	---	5.0	---	---	12.0	---
27	---	---	---	---	---	---	---	8.0	---	---	---	9.5
28	---	---	---	---	---	---	10.0	---	9.5	---	---	---
29	---	---	---	---	---	---	7.5	---	---	---	---	---
30	7.0	---	---	---	---	---	7.0	6.5	---	---	---	---
31	6.5	---	---	---	---	---	---	---	---	16.0	---	---

PYRAMID AND WINNEMUCCA LAKES BASIN

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	2.0	1	.01	2.4	2	.01	e2.0	1	.01
2	2.0	1	.01	2.0	2	.01	e2.1	0	.00
3	2.0	1	.01	2.0	1	.01	e2.1	0	.00
4	2.0	1	.01	2.0	1	.01	e2.1	0	.00
5	2.0	1	.01	2.0	1	.01	2.1	0	.00
6	2.1	1	.01	2.1	1	.01	e2.1	1	.01
7	2.0	1	.01	2.1	1	.01	e2.1	1	.01
8	1.9	1	.01	1.9	1	.01	e2.1	2	.01
9	1.9	1	.01	1.9	1	.01	e2.1	2	.01
10	1.9	1	.01	1.9	1	.01	e2.1	2	.01
11	2.0	1	.01	1.9	1	.01	e2.1	2	.01
12	2.0	1	.01	1.8	1	.00	e2.1	2	.01
13	2.0	1	.01	1.9	1	.01	e2.1	2	.01
14	2.0	1	.01	1.9	1	.01	e2.1	2	.01
15	2.0	1	.01	1.9	1	.01	e2.1	2	.01
16	2.1	1	.01	1.9	1	.01	e2.0	2	.01
17	2.0	1	.01	1.9	1	.01	e2.0	1	.01
18	2.4	1	.01	2.0	1	.01	e2.0	1	.01
19	2.6	2	.01	e2.0	1	.01	e2.0	1	.01
20	1.9	1	.01	e2.0	1	.01	e2.0	1	.01
21	1.8	1	.00	e2.0	1	.01	e2.0	1	.01
22	1.9	1	.01	e2.0	1	.01	e2.0	1	.01
23	1.8	1	.00	e2.0	2	.01	e2.0	1	.01
24	1.8	1	.00	e2.0	2	.01	e2.0	1	.01
25	1.8	1	.00	e1.9	2	.01	e2.0	1	.01
26	1.7	1	.00	e1.9	2	.01	e2.0	1	.01
27	1.8	1	.00	e1.9	2	.01	e2.0	1	.01
28	1.8	1	.00	e1.9	2	.01	e2.0	1	.01
29	1.7	1	.00	e2.0	2	.01	e2.0	1	.01
30	1.8	1	.00	e2.0	1	.01	e2.0	1	.01
31	2.6	2	.01	---	---	---	e2.0	2	.01
TOTAL	61.3	---	0.22	59.1	---	0.29	63.4	---	0.27
JANUARY			FEBRUARY			MARCH			
1	e2.0	2	.01	e2.0	2	.01	e2.3	2	.01
2	e2.0	2	.01	e2.2	2	.01	e2.3	2	.01
3	e2.0	2	.01	e2.2	2	.01	e25	9	.61
4	e2.0	2	.01	e2.2	2	.01	e150	250	101
5	e2.0	2	.01	e2.2	2	.01	e72	56	11
6	e2.0	2	.01	e2.2	2	.01	e40	17	1.8
7	e2.0	2	.01	e2.2	2	.01	e30	14	1.1
8	e2.0	2	.01	e2.3	2	.01	e25	12	.81
9	e2.0	2	.01	e2.3	2	.01	e21	11	.62
10	e2.0	2	.01	e2.3	2	.01	e20	9	.49
11	e2.0	2	.01	e2.3	2	.01	e18	8	.39
12	e2.0	2	.01	e2.3	2	.01	e16	7	.30
13	e2.0	2	.01	e2.3	2	.01	e14	6	.23
14	e2.0	2	.01	e2.3	2	.01	e12	6	.19
15	e2.0	2	.01	e2.3	2	.01	e10	5	.13
16	e2.0	2	.01	e2.3	2	.01	e9.9	5	.13
17	e2.0	2	.01	e2.3	2	.01	e9.9	5	.13
18	e2.0	2	.01	e2.3	2	.01	e9.9	4	.11
19	e2.0	2	.01	e2.3	2	.01	e9.9	4	.11
20	e2.0	2	.01	e2.3	2	.01	9.8	4	.11
21	e2.0	2	.01	e2.3	2	.01	9.6	4	.10
22	e2.0	2	.01	e2.3	2	.01	e9.6	4	.10
23	e2.0	2	.01	e2.3	2	.01	9.6	5	.13
24	e2.0	2	.01	e2.3	2	.01	e9.6	5	.13
25	e2.0	2	.01	e2.3	2	.01	e9.6	5	.13
26	e2.0	2	.01	e2.3	2	.01	e9.8	5	.13
27	e2.0	2	.01	e2.3	2	.01	e9.8	5	.13
28	e2.0	2	.01	e2.3	2	.01	e9.6	5	.13
29	e2.0	2	.01	---	---	---	10	5	.13
30	e2.0	2	.01	---	---	---	11	6	.18
31	e2.0	2	.01	---	---	---	12	6	.19
TOTAL	62.0	---	0.31	63.5	---	0.28	617.2	---	120.76

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

227

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	12	6	.19	53	7	1.0	90	13	3.2
2	12	6	.19	44	4	.48	105	19	6.2
3	13	6	.21	41	3	.33	116	23	8.1
4	17	7	.32	50	5	.67	114	19	6.6
5	26	10	.70	65	14	2.8	101	11	3.0
6	37	16	1.6	77	30	6.8	88	5	1.2
7	32	11	.95	91	35	9.2	85	5	1.1
8	29	6	.47	101	22	6.0	89	8	1.9
9	29	5	.39	80	15	3.2	95	11	2.8
10	31	4	.33	61	8	1.3	98	11	2.9
11	28	4	.30	53	6	.86	98	9	2.4
12	25	4	.27	50	7	.94	91	7	1.7
13	28	5	.38	60	7	1.1	81	6	1.3
14	34	5	.46	57	9	1.4	69	5	.93
15	35	4	.38	71	17	3.3	61	5	.82
16	30	4	.32	89	28	6.7	55	4	.59
17	28	3	.23	89	24	5.8	52	4	.56
18	27	3	.22	65	12	2.1	48	4	.52
19	29	4	.31	57	9	1.4	44	3	.36
20	35	4	.38	57	8	1.2	39	3	.32
21	36	4	.39	63	12	2.0	35	3	.28
22	41	5	.55	82	19	4.7	32	3	.26
23	44	5	.59	114	53	20	30	3	.24
24	45	5	.61	124	34	12	28	3	.23
25	38	5	.51	136	40	16	26	4	.28
26	34	5	.46	118	26	8.3	24	4	.26
27	34	4	.37	101	18	4.9	24	4	.26
28	37	5	.56	96	16	4.1	32	6	.52
29	46	8	1.0	93	14	3.5	37	8	.80
30	51	9	1.3	97	12	3.1	28	6	.45
31	---	---	---	80	9	1.9	---	---	---
TOTAL	943	---	14.94	2415	---	137.08	1915	---	50.08
JULY			AUGUST			SEPTEMBER			
1	26	5	.35	3.4	2	.02	2.0	2	.01
2	24	5	.32	3.3	2	.02	2.0	2	.01
3	23	5	.31	3.4	2	.02	2.0	2	.01
4	21	5	.28	3.3	2	.02	2.1	2	.01
5	19	5	.26	3.3	2	.02	2.2	2	.01
6	17	4	.18	3.1	1	.01	2.0	3	.02
7	15	4	.16	3.0	1	.01	2.1	3	.02
8	14	4	.15	2.8	1	.01	1.9	3	.02
9	13	4	.14	2.6	1	.01	1.9	3	.02
10	12	4	.13	2.5	1	.01	2.6	3	.02
11	11	4	.12	2.4	1	.01	2.3	3	.02
12	10	4	.11	2.4	2	.01	2.0	3	.02
13	9.7	4	.10	2.4	2	.01	1.7	3	.01
14	8.9	3	.07	3.7	16	.19	1.7	3	.01
15	8.3	3	.07	3.6	3	.03	1.8	3	.01
16	7.6	3	.06	2.9	2	.02	1.7	3	.01
17	7.1	3	.06	2.7	2	.01	1.9	3	.02
18	6.7	3	.05	2.5	2	.01	1.9	3	.02
19	6.6	3	.05	2.5	2	.01	1.7	3	.01
20	6.7	3	.05	2.5	2	.01	1.8	2	.01
21	6.4	3	.05	2.4	2	.01	1.7	2	.01
22	5.8	3	.05	2.3	2	.01	1.8	2	.01
23	5.3	3	.04	2.2	2	.01	1.8	2	.01
24	5.1	3	.04	2.2	2	.01	1.8	2	.01
25	4.9	2	.03	2.1	2	.01	1.7	2	.01
26	4.5	2	.02	2.2	2	.01	1.9	2	.01
27	4.3	2	.02	2.2	2	.01	1.9	2	.01
28	4.1	2	.02	2.2	2	.01	1.9	2	.01
29	4.7	2	.03	2.2	2	.01	1.9	2	.01
30	4.1	2	.02	2.3	2	.01	1.7	2	.01
31	3.9	2	.02	2.1	2	.01	---	---	---
TOTAL	319.7	---	3.36	82.7	---	0.57	57.4	---	0.39
YEAR	6659.3		328.55						

PYRAMID AND WINNEMUCCA LAKES BASIN

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA

LOCATION.--Lat 39°07'56", long 120°09'24", in NW 1/4 SE 1/4 sec.24, T.15 N., R.16 E., Placer County, Hydrologic Unit 16050101, Tahoe National Forest, on right bank, 165 ft downstream from State Highway 89 bridge, 2.1 mi north of Tahoe Pines, and 2.6 mi southwest of Tahoe City.

DRAINAGE AREA.--9.70 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,230 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Minor diversion for local water supply upstream from station.

AVERAGE DISCHARGE.--19 years, 25.6 ft³/s, 18,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,800 ft³/s, Dec. 19, 1981, gage height, 8.05 ft, from rating curve extended above 800 ft³/s; no flow for many days during 1977-78, 1981, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	1315	*Unknown	6.52	June 3	1730	102	5.30
May 25	1715	119	5.38				

(a) Backwater from ice.

Minimum daily, 0.21 ft³/s, Sept. 3.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.80	1.7	e1.0	e1.1	e1.1	e1.3	e6.8	29	59	16	1.3	.25
2	e.71	e1.2	e1.0	e1.1	e1.2	e1.3	e7.0	25	69	16	1.2	.23
3	e.71	e1.1	e1.0	e1.1	e1.2	e20	e7.2	25	78	15	1.1	.21
4	.66	e1.1	e1.0	e1.1	e1.2	e120	e12	30	75	14	.96	.32
5	.66	1.1	e1.0	e1.1	e1.2	e50	e17	39	66	13	.94	.39
6	.66	1.1	e1.0	e1.1	e1.2	e25	e25	49	57	12	.93	.36
7	.61	e1.1	e1.0	e1.1	e1.2	e14	21	58	55	10	.85	.34
8	.60	e1.1	e1.0	e1.1	e1.2	e10	20	65	57	9.3	.80	.31
9	.62	e1.1	e1.0	e1.1	e1.2	e8.0	21	46	63	8.6	.68	.29
10	.66	e1.1	e1.0	e1.1	e1.2	e7.0	21	34	66	8.0	.59	.64
11	.66	e1.1	e1.0	e1.1	e1.2	e6.0	18	29	65	7.3	.57	.55
12	.66	e1.1	e1.0	e1.1	e1.2	e6.0	17	31	60	6.5	.50	.43
13	.66	e1.1	e1.0	e1.1	e1.2	e6.0	19	36	53	5.7	.56	.36
14	.66	1.1	e1.0	e1.1	e1.2	e5.5	23	35	45	5.3	2.0	.33
15	.66	1.1	e1.0	e1.1	e1.2	e5.5	23	44	39	5.0	1.6	.31
16	.66	1.1	e1.0	e1.1	e1.2	e5.5	19	56	35	4.5	1.1	.32
17	.60	1.1	e1.0	e1.1	e1.3	e5.2	16	50	33	4.1	.74	.32
18	.84	1.1	e1.0	e1.1	e1.3	e5.2	16	35	30	3.9	.61	.33
19	2.1	1.1	e1.1	e1.1	e1.3	e5.2	19	32	28	3.8	.56	.33
20	1.4	e1.1	e1.1	e1.1	e1.3	e5.2	21	33	25	3.9	.51	.30
21	1.1	e1.1	e1.1	e1.1	e1.3	e5.2	21	39	23	3.6	.44	.29
22	.94	e1.1	e1.1	e1.1	e1.3	e5.2	24	53	21	3.2	.35	.29
23	.91	e1.1	e1.1	e1.1	e1.3	e5.2	27	73	20	2.8	.32	.29
24	.91	e1.1	e1.1	e1.1	e1.3	e5.2	27	79	19	2.5	.27	.28
25	.89	e1.0	e1.1	e1.1	e1.3	e5.2	22	88	18	2.3	.23	.28
26	.78	e1.0	e1.1	e1.1	e1.3	e5.4	21	75	17	2.1	.26	.28
27	.78	e1.0	e1.1	e1.1	e1.3	e5.6	21	65	17	1.9	.28	.30
28	.78	e1.0	e1.1	e1.1	e1.3	e5.8	23	61	21	1.9	.31	.30
29	.78	e1.0	e1.1	e1.1	---	e6.1	28	57	20	1.8	.32	.39
30	.78	e1.0	e1.1	e1.1	---	e6.4	30	69	17	1.5	.31	.33
31	1.3	---	e1.1	e1.1	---	e6.6	---	54	---	1.4	.28	---
TOTAL	25.54	33.1	32.3	34.1	34.7	373.8	593.0	1494	1251	196.9	21.47	9.95
MEAN	.82	1.10	1.04	1.10	1.24	12.1	19.8	48.2	41.7	6.35	.69	.33
MAX	2.1	1.7	1.1	1.1	1.3	120	30	88	78	16	2.0	.64
MIN	.60	1.0	1.0	1.1	1.1	1.3	6.8	25	17	1.4	.23	.21
AC-FT	51	66	64	68	69	741	1180	2960	2480	391	43	20

CAL YR 1990 TOTAL 4845.23 MEAN 13.3 MAX 76 MIN .18 AC-FT 9610
WTR YR 1991 TOTAL 4099.86 MEAN 11.2 MAX 120 MIN .21 AC-FT 8130

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

229

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973-78, 1980 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1980 to September 1983.

WATER TEMPERATURE: October 1972 to June 1978 (storm season only for water years 1977-78), October 1979 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1972 to June 1978 (storm season only for water years 1977-78), October 1979 to current year.

REMARKS.--Sediment samples were collected during most days where a water temperature is published.

COOPERATION.--Selected sediment samples and water-temperature observations provided by University of California at Davis.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 1,510 mg/L, Dec. 19, 1981; minimum daily mean, 0 mg/L, many days during each year.

SEDIMENT LOAD: Maximum daily, 3,720 tons, Dec. 19, 1981; minimum daily, 0 ton, many days during each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily mean, 107 mg/L, Aug. 14; minimum daily mean, 0 mg/L, many days.

SEDIMENT LOAD: Maximum daily, 19 tons, Mar. 4; minimum daily, 0 ton, many days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR						
04...	0910	e48	0.5	34	4.4	85
04...	1005	e48	0.5	37	4.8	77
05...	1225	e50	0.5	140	19	52
05...	1455	e50	0.0	90	12	61

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	.0	---	2.5	---	---	---	---	---
2	---	---	---	.0	---	---	---	7.0	7.0	---	---	---
3	13.5	---	---	---	---	.0	4.5	3.5	8.0	---	---	---
4	---	---	.5	---	---	.5	---	8.0	11.5	---	---	---
5	13.0	4.0	---	---	---	.5	---	8.0	---	---	---	---
6	---	---	---	---	---	.0	2.5	9.5	3.0	---	---	15.0
7	---	---	---	---	---	.5	---	7.0	---	---	18.5	---
8	---	---	---	---	---	---	---	3.0	---	---	---	---
9	---	---	---	---	---	---	6.5	---	8.0	12.0	---	---
10	---	---	.0	---	---	---	---	4.0	11.5	11.0	---	---
11	---	---	---	---	---	---	---	---	11.0	---	---	---
12	---	---	---	---	.0	---	---	---	---	---	---	8.0
13	---	---	---	---	---	.0	---	4.0	---	---	---	13.0
14	---	---	---	---	---	---	6.0	8.0	9.5	---	15.5	---
15	10.0	---	---	.0	---	---	---	10.5	---	---	14.0	---
16	---	2.0	---	---	---	---	3.0	7.0	---	---	---	---
17	---	---	---	---	---	---	---	---	---	19.0	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	.5	1.0	---	---	---	---	---	---
20	---	---	---	---	---	---	---	7.5	---	---	---	12.5
21	---	---	.0	---	.5	---	---	---	13.0	---	---	---
22	---	---	---	.0	---	---	---	11.5	---	---	---	---
23	---	---	---	.0	---	---	8.0	9.0	---	---	---	---
24	---	---	---	---	---	---	---	8.0	---	---	---	---
25	8.5	---	---	---	---	---	---	9.0	---	---	---	---
26	---	---	.0	---	---	---	---	4.5	---	---	17.5	---
27	---	---	---	---	---	---	---	7.0	---	---	---	9.5
28	---	---	---	---	---	---	8.5	10.0	8.0	---	---	---
29	---	---	---	---	---	---	8.5	4.0	---	---	---	---
30	6.5	---	---	---	---	---	6.5	6.0	---	---	---	---
31	5.0	---	---	---	---	---	---	11.0	---	16.0	---	---

PYRAMID AND WINNEMUCCA LAKES BASIN

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	e.80	2	.00	1.7	2	.01	e1.0	1	.00
2	e.71	1	.00	e1.2	2	.01	e1.0	1	.00
3	e.71	0	.00	e1.1	2	.01	e1.0	0	.00
4	.66	0	.00	e1.1	2	.01	e1.0	0	.00
5	.66	0	.00	1.1	2	.01	e1.0	0	.00
6	.66	0	.00	1.1	2	.01	e1.0	0	.00
7	.61	0	.00	e1.1	2	.01	e1.0	1	.00
8	.60	0	.00	e1.1	2	.01	e1.0	1	.00
9	.62	0	.00	e1.1	2	.01	e1.0	1	.00
10	.66	0	.00	e1.1	1	.00	e1.0	1	.00
11	.66	0	.00	e1.1	1	.00	e1.0	1	.00
12	.66	0	.00	e1.1	1	.00	e1.0	1	.00
13	.66	0	.00	e1.1	1	.00	e1.0	1	.00
14	.66	0	.00	1.1	1	.00	e1.0	1	.00
15	.66	0	.00	1.1	1	.00	e1.0	1	.00
16	.66	0	.00	1.1	1	.00	e1.0	0	.00
17	.60	0	.00	1.1	1	.00	e1.0	0	.00
18	.84	1	.00	1.1	1	.00	e1.0	0	.00
19	2.1	2	.01	1.1	1	.00	e1.1	0	.00
20	1.4	2	.01	e1.1	1	.00	e1.1	0	.00
21	1.1	2	.01	e1.1	1	.00	e1.1	0	.00
22	.94	2	.01	e1.1	1	.00	e1.1	0	.00
23	.91	2	.00	e1.1	2	.01	e1.1	0	.00
24	.91	2	.00	e1.1	2	.01	e1.1	0	.00
25	.89	2	.00	e1.0	2	.01	e1.1	0	.00
26	.78	2	.00	e1.0	2	.01	e1.1	1	.00
27	.78	2	.00	e1.0	2	.01	e1.1	1	.00
28	.78	1	.00	e1.0	2	.01	e1.1	1	.00
29	.78	0	.00	e1.0	2	.01	e1.1	1	.00
30	.78	0	.00	e1.0	2	.01	e1.1	2	.01
31	1.3	2	.01	---	---	---	e1.1	2	.01
TOTAL	25.54	---	0.05	33.1	---	0.17	32.3	---	0.02
JANUARY			FEBRUARY			MARCH			
1	e1.1	2	.01	e1.1	2	.01	e1.3	1	.00
2	e1.1	2	.01	e1.2	4	.01	e1.3	1	.00
3	e1.1	2	.01	e1.2	2	.01	e20	7	.38
4	e1.1	2	.01	e1.2	2	.01	e120	60	19
5	e1.1	2	.01	e1.2	2	.01	e50	50	6.7
6	e1.1	2	.01	e1.2	2	.01	e25	10	.67
7	e1.1	1	.00	e1.2	2	.01	e14	9	.34
8	e1.1	1	.00	e1.2	2	.01	e10	9	.24
9	e1.1	1	.00	e1.2	2	.01	e8.0	8	.17
10	e1.1	1	.00	e1.2	2	.01	e7.0	7	.13
11	e1.1	0	.00	e1.2	2	.01	e6.0	7	.11
12	e1.1	0	.00	e1.2	2	.01	e6.0	6	.10
13	e1.1	0	.00	e1.2	2	.01	e6.0	6	.10
14	e1.1	0	.00	e1.2	2	.01	e5.5	5	.07
15	e1.1	0	.00	e1.2	1	.00	e5.5	4	.06
16	e1.1	0	.00	e1.2	1	.00	e5.5	3	.04
17	e1.1	0	.00	e1.3	1	.00	e5.2	3	.04
18	e1.1	0	.00	e1.3	1	.00	e5.2	2	.03
19	e1.1	0	.00	e1.3	1	.00	e5.2	2	.03
20	e1.1	0	.00	e1.3	1	.00	e5.2	2	.03
21	e1.1	0	.00	e1.3	1	.00	e5.2	2	.03
22	e1.1	0	.00	e1.3	1	.00	e5.2	2	.03
23	e1.1	0	.00	e1.3	1	.00	e5.2	2	.03
24	e1.1	0	.00	e1.3	1	.00	e5.2	2	.03
25	e1.1	0	.00	e1.3	1	.00	e5.2	2	.03
26	e1.1	1	.00	e1.3	1	.00	e5.4	2	.03
27	e1.1	1	.00	e1.3	1	.00	e5.6	3	.05
28	e1.1	1	.00	e1.3	1	.00	e5.8	3	.05
29	e1.1	2	.01	---	---	---	e6.1	3	.05
30	e1.1	2	.01	---	---	---	e6.4	3	.05
31	e1.1	2	.01	---	---	---	e6.6	3	.05
TOTAL	34.1	---	0.09	34.7	---	0.14	373.8	---	28.67

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

231

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	e6.8	3	.06	29	5	.39	59	7	1.1
2	e7.0	3	.06	25	4	.27	69	12	2.2
3	e7.2	3	.06	25	8	.54	78	13	2.7
4	e12	3	.10	30	11	.89	75	11	2.2
5	e17	5	.23	39	24	3.3	66	8	1.4
6	e25	14	.94	49	36	5.4	57	6	.92
7	21	7	.40	58	34	6.7	55	6	.89
8	20	2	.11	65	11	1.9	57	5	.77
9	21	1	.06	46	5	.62	63	5	.85
10	21	1	.06	34	2	.18	66	5	.89
11	18	1	.05	29	2	.16	65	6	1.1
12	17	2	.09	31	5	.42	60	5	.81
13	19	4	.21	36	3	.29	53	4	.57
14	23	4	.25	35	6	.57	45	3	.36
15	23	3	.19	44	7	.83	39	3	.32
16	19	2	.10	56	7	1.1	35	2	.19
17	16	2	.09	50	4	.54	33	2	.18
18	16	3	.13	35	1	.09	30	2	.16
19	19	4	.21	32	2	.17	28	1	.08
20	21	3	.17	33	2	.18	25	1	.07
21	21	5	.28	39	7	.74	23	0	.00
22	24	5	.32	53	10	1.4	21	0	.00
23	27	10	.73	73	35	8.9	20	0	.00
24	27	7	.51	79	28	6.0	19	0	.00
25	22	4	.24	88	30	7.1	18	0	.00
26	21	3	.17	75	17	3.4	17	0	.00
27	21	3	.17	65	12	2.1	17	0	.00
28	23	5	.31	61	10	1.6	21	1	.06
29	28	8	.60	57	6	.92	20	1	.05
30	30	6	.49	69	8	1.5	17	1	.05
31	---	---	---	54	5	.73	---	---	---
TOTAL	593.0	---	7.39	1494	---	58.93	1251	---	17.92
JULY			AUGUST			SEPTEMBER			
1	16	1	.04	1.3	1	.00	.25	0	.00
2	16	1	.04	1.2	1	.00	.23	0	.00
3	15	1	.04	1.1	1	.00	.21	0	.00
4	14	1	.04	.96	1	.00	.32	0	.00
5	13	1	.04	.94	1	.00	.39	0	.00
6	12	1	.03	.93	1	.00	.36	0	.00
7	10	1	.03	.85	1	.00	.34	0	.00
8	9.3	1	.03	.80	1	.00	.31	0	.00
9	8.6	1	.02	.68	1	.00	.29	0	.00
10	8.0	1	.02	.59	1	.00	.64	0	.00
11	7.3	1	.02	.57	1	.00	.55	0	.00
12	6.5	1	.02	.50	1	.00	.43	0	.00
13	5.7	1	.02	.56	2	.00	.36	0	.00
14	5.3	1	.01	2.0	107	1.1	.33	0	.00
15	5.0	1	.01	1.6	4	.02	.31	0	.00
16	4.5	1	.01	1.1	1	.00	.32	0	.00
17	4.1	1	.01	.74	1	.00	.32	0	.00
18	3.9	1	.01	.61	1	.00	.33	0	.00
19	3.8	1	.01	.56	1	.00	.33	0	.00
20	3.9	1	.01	.51	1	.00	.30	0	.00
21	3.6	1	.01	.44	0	.00	.29	0	.00
22	3.2	1	.01	.35	0	.00	.29	0	.00
23	2.8	1	.01	.32	0	.00	.29	0	.00
24	2.5	1	.01	.27	0	.00	.28	0	.00
25	2.3	1	.01	.23	0	.00	.28	0	.00
26	2.1	1	.01	.26	0	.00	.28	0	.00
27	1.9	1	.01	.28	0	.00	.30	0	.00
28	1.9	1	.01	.31	0	.00	.30	0	.00
29	1.8	1	.00	.32	0	.00	.39	0	.00
30	1.5	1	.00	.31	0	.00	.33	0	.00
31	1.4	1	.00	.28	0	.00	---	---	---
TOTAL	196.9	---	0.54	21.47	---	1.12	9.95	---	0.00
YEAR	4099.86		115.04						

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

10336688 FIRST CREEK NEAR CRYSTAL BAY, NV

LOCATION.--Lat 39°15'00", long 119°59'18", in NE 1/4 SW 1/4 sec.17, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, on left bank, 20 ft upstream of culvert on State Highway 28, 400 ft upstream of mouth, 1.6 mi northeast of Crystal Bay, and 2.2 mi west of Incline Village.

DRAINAGE AREA.--1.09 mi².

PERIOD OF RECORD.--Water years 1970-73, 1980-81, April to September 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
APR									
11...	1250	0.41	83	--	3.0	1.0	--	--	
30...	1240	0.43	80	8.2	15.0	5.0	9.7	96	
MAY									
07...	2055	0.41	72	8.0	12.0	6.5	--	--	
14...	1320	0.41	71	8.2	12.5	6.5	9.6	100	
20...	1840	--	67	8.2	7.0	4.0	10.3	101	
23...	1240	0.41	70	8.0	18.0	9.0	8.9	97	
30...	1345	0.89	59	8.0	3.0	3.0	10.6	100	
JUN									
03...	1820	0.57	65	8.1	16.5	4.5	8.7	86	
07...	1330	0.55	63	8.1	18.5	10.0	8.8	99	
13...	1815	0.74	63	8.2	17.0	11.0	--	--	
20...	1850	0.80	59	8.3	17.0	9.0	--	--	
AUG									
15...	1330	0.29	--	--	--	--	--	--	
SEP									
24...	1350	0.09	94	8.3	21.0	10.5	--	--	
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
APR									
11...	0.006	<0.004	0.13	0.034	0.008	360	5	0.01	
30...	0.005	0.007	0.15	0.030	0.007	409	10	0.01	
MAY									
07...	0.004	<0.004	0.19	0.056	0.011	655	73	0.08	
14...	0.006	<0.004	0.15	0.033	0.011	481	22	0.02	
20...	0.007	0.008	0.23	0.063	0.016	734	25	--	
23...	0.005	<0.004	0.20	0.036	0.008	472	13	0.01	
30...	0.002	<0.004	0.18	0.058	0.009	571	21	0.05	
JUN									
03...	0.003	<0.004	0.18	0.046	0.010	670	38	0.06	
07...	0.006	<0.004	0.17	0.041	0.009	456	18	0.03	
13...	0.004	0.006	0.11	0.032	0.008	463	11	0.02	
20...	0.007	0.005	0.19	0.042	0.008	636	17	0.04	
AUG									
15...	--	--	--	--	--	--	--	--	--
SEP									
24...	0.009	<0.004	0.12	0.065	0.021	499	10	<0.01	

PYRAMID AND WINNEMUCCA LAKES BASIN

233

10336691 SECOND CREEK AT LAKESHORE DRIVE NEAR CRYSTAL BAY, NV

LOCATION.--Lat 39°14'58", long 119°58'35", in NE 1/4 SE 1/4 sec.17, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, on right bank, 20 ft upstream of culvert on Lakeshore Drive, 600 ft upstream of mouth, 2.0 mi northeast of Crystal Bay, and 1.6 mi west of Incline Village.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--April to September 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
APR									
11...	1200	0.78	74	--	1.0	0.5	--	--	0.007
30...	1040	0.45	61	8.3	12.0	3.5	11.1	106	0.004
MAY									
07...	2015	1.3	45	8.0	14.0	7.0	--	--	0.004
14...	1145	0.78	59	8.1	15.0	5.5	10.2	102	0.004
20...	1705	0.58	59	8.1	8.0	5.0	10.1	100	0.006
23...	1410	1.1	56	8.4	17.5	13.0	8.0	96	0.005
30...	1245	0.81	46	7.9	1.5	2.5	10.6	100	0.004
JUN									
03...	1745	0.95	44	8.1	18.5	11.0	8.6	99	0.015
07...	1210	0.74	49	8.0	19.0	9.5	8.9	98	0.005
13...	1620	0.43	54	8.1	22.0	15.0	--	--	0.004
20...	1710	0.43	58	8.4	20.0	12.0	--	--	0.004
AUG									
15...	1305	0.20	--	--	--	--	--	--	--
SEP									
24...	1445	0.20	81	8.2	16.0	13.0	--	--	0.009

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, BIO- REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR								
11...	<0.004	0.35	0.136	0.014	2500	55	0.12	--
30...	0.006	0.20	0.070	0.013	1130	24	0.03	--
MAY								
07...	<0.004	0.71	0.203	0.021	2760	175	0.63	49
14...	<0.004	0.12	0.040	0.016	362	10	0.02	--
20...	0.006	0.20	0.071	0.021	814	20	0.03	--
23...	0.020	0.63	0.162	0.018	3570	97	0.29	73
30...	<0.004	0.12	0.054	0.016	513	13	0.03	--
JUN								
03...	<0.004	0.25	0.091	0.019	1220	41	0.11	69
07...	<0.004	0.17	0.056	0.015	487	15	0.03	--
13...	<0.004	0.13	0.054	0.019	611	13	0.02	--
20...	<0.004	0.11	0.044	0.019	517	9	0.01	--
AUG								
15...	--	--	--	--	--	--	--	--
SEP								
24...	<0.004	0.16	0.156	0.033	1950	40	0.02	--

PYRAMID AND WINNEMUCCA LAKES BASIN

10336692 WOOD CREEK ABOVE JENNIFER STREET NEAR INCLINE VILLAGE, NV

LOCATION.--Lat 39°15'46", long 119°57'38", in NE 1/4 SE 1/4 sec.9, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, on right bank, 100 ft upstream of culvert on dirt logging road, 0.2 mi upstream of culverts on Jennifer Street, and 1.4 mi northwest of Incline Village.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--April to September 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
APR									
11...	1430	1.1	56	--	1.0	0.5	--	--	0.085
30...	1415	1.6	58	8.2	15.5	6.0	10.9	114	0.073
MAY									
07...	1605	2.9	45	8.0	16.5	8.0	9.1	99	0.048
14...	1430	1.5	54	8.1	13.0	7.0	9.4	100	0.048
20...	1750	--	53	8.1	7.0	3.5	10.1	100	0.026
23...	1750	3.3	45	7.9	13.0	9.0	--	--	0.035
30...	1455	1.8	46	8.0	2.5	3.5	--	--	0.032
JUN									
03...	1545	2.1	45	8.1	20.0	12.0	8.1	98	0.014
07...	1715	1.7	46	8.2	17.5	10.0	--	--	0.014
13...	1710	1.4	48	8.2	16.0	12.0	--	--	0.003
20...	1750	1.0	53	8.2	18.0	10.5	--	--	0.013
SEP									
24...	1215	0.61	69	8.4	22.0	9.0	--	--	0.024

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR								
11...	<0.004	0.26	0.103	0.020	1460	59	0.18	--
30...	0.007	0.22	0.064	0.019	645	34	0.15	--
MAY								
07...	<0.004	1.9	0.848	0.024	5180	584	4.6	80
14...	<0.004	0.25	0.088	0.023	741	42	0.17	--
20...	0.006	0.23	0.101	0.033	783	44	--	--
23...	<0.004	1.2	0.625	0.026	8350	443	3.9	87
30...	<0.004	0.18	0.080	0.021	679	31	0.15	--
JUN								
03...	<0.004	0.38	0.137	0.023	1600	106	0.60	77
07...	<0.004	0.15	0.064	0.020	606	41	0.18	--
13...	<0.004	0.15	0.061	0.020	573	23	0.09	--
20...	<0.004	0.12	0.048	0.020	340	14	0.04	--
SEP								
24...	<0.004	0.13	0.091	0.024	877	83	0.14	--

PYRAMID AND WINNEMUCCA LAKES BASIN

235

10336694 WOOD CREEK AT MOUTH NEAR CRYSTAL BAY, NV

LOCATION.--Lat 39°14'35", long 119°57'30", in NE 1/4 NE 1/4 sec.21, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, on right bank, 20 ft upstream of culvert on Lakeshore Drive, 600 ft upstream of mouth, 0.6 mi west of Incline Village, and 2.6 mi northeast of Crystal Bay.

DRAINAGE AREA.--2.05 mi².

PERIOD OF RECORD.--Water years 1970-73 (at site 600 ft downstream of current site), April to September 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
APR									
11...	1035	0.45	62	8.4	0.0	0.5	--	--	0.045
30...	0915	0.96	53	8.4	8.0	1.5	10.8	98	0.057
MAY									
07...	1930	2.8	46	7.9	12.0	9.0	--	--	0.027
14...	1050	1.3	53	8.2	14.0	4.0	10.4	100	0.031
20...	1625	1.4	60	8.0	8.5	4.5	10.4	102	0.021
30...	1140	1.7	49	7.6	7.0	3.5	10.3	99	0.006
JUN									
03...	1700	1.9	49	8.0	16.0	12.5	8.3	99	0.006
07...	1040	1.6	48	8.0	16.5	6.5	9.6	101	0.012
13...	1530	1.2	48	8.2	22.0	12.0	--	--	0.002
20...	1630	0.77	54	8.2	21.0	11.0	--	--	0.007
AUG									
15...	1220	0.93	--	--	--	--	--	--	--
SEP									
24...	1530	0.39	71	8.2	17.0	12.0	--	--	0.017

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR								
11...	<0.004	0.13	0.041	0.014	396	8	0.01	--
30...	<0.004	0.14	0.049	0.010	508	12	0.03	--
MAY								
07...	<0.004	1.1	0.576	0.014	4440	305	2.3	79
14...	<0.004	0.15	0.061	0.013	417	20	0.07	--
20...	0.006	0.38	0.145	0.028	1640	91	0.34	--
30...	<0.004	0.13	0.056	0.017	587	16	0.07	--
JUN								
03...	<0.004	0.72	0.221	0.022	3560	87	0.44	68
07...	<0.004	0.17	0.063	0.016	538	19	0.08	--
13...	<0.004	0.23	0.076	0.020	955	25	0.08	--
20...	<0.004	0.15	0.055	0.019	624	15	0.03	--
AUG								
15...	--	--	--	--	--	--	--	--
SEP								
24...	<0.004	0.50	0.280	0.030	3970	207	0.22	95

PYRAMID AND WINNEMUCCA LAKES BASIN

103366958 THIRD CREEK BELOW UNNAMED TRIBUTARY NEAR INCLINE VILLAGE, NV

LOCATION.--Lat 39°16'47", long 119°56'46", in NW 1/4 SE 1/4 sec.3, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, Toiyabe National Forest, on left bank, 10 ft upstream of pipe crossing, 200 ft northwest of end of Mercury Court, 800 ft downstream of unnamed tributary, 0.3 mi upstream of bridge on State Highway 431, and 2.3 mi north of Incline Village.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--August 1989, April to September 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED CENT SATUR- ATION	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
APR									
11...	1645	2.5	50	--	0.0	1.5	--	--	0.065
29...	1620	6.0	45	8.4	17.0	3.5	11.1	110	0.038
MAY									
06...	1650	8.5	39	8.0	13.5	3.5	10.2	101	0.034
14...	1540	4.1	41	8.1	13.0	6.0	9.5	100	0.024
20...	1130	4.5	39	8.3	5.5	3.0	10.2	100	0.018
23...	1600	19	32	8.2	14.5	4.5	--	--	0.021
30...	1640	12	30	8.0	1.5	3.5	--	--	0.013
JUN									
02...	1715	26	25	7.8	15.0	6.5	--	--	0.007
06...	1600	19	28	8.0	17.0	9.0	8.7	99	0.007
10...	1515	26	25	7.9	23.0	13.0	--	--	0.005
18...	1645	5.6	34	8.2	20.0	12.5	--	--	0.009
AUG									
15...	1415	1.1	--	--	--	--	--	--	--
15...	1715	12	48	--	15.0	11.5	--	--	0.033
SEP									
24...	1100	0.57	55	8.3	20.0	10.5	--	--	0.018

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR								
11...	<0.004	0.11	0.030	0.012	346	27	0.18	--
29...	0.006	0.49	0.140	0.009	1950	164	2.7	--
MAY								
06...	<0.004	0.77	0.438	0.009	4540	451	10	--
14...	<0.004	0.19	0.039	0.011	444	29	0.32	--
20...	0.007	0.10	0.029	0.012	362	15	0.18	--
23...	<0.004	1.8	0.930	0.010	12900	1540	78	35
30...	<0.004	0.18	0.029	0.007	439	32	1.1	--
JUN								
02...	<0.004	0.65	0.191	0.007	2690	337	24	30
06...	<0.004	0.21	0.082	0.007	1010	107	5.5	21
10...	<0.004	0.33	0.119	0.004	1660	177	12	30
18...	<0.004	0.16	0.031	0.009	383	13	0.20	--
AUG								
15...	--	--	--	--	--	--	--	--
15...	0.006	1.7	2.00	0.030	18000	2480	80	59
SEP								
24...	0.013	<0.04	0.053	0.025	194	14	0.02	--

PYRAMID AND WINNEMUCCA LAKES BASIN

237

103366965 THIRD CREEK AT VILLAGE BOULEVARD AT INCLINE VILLAGE, NV

LOCATION.--Lat 39°15'47", long 119°56'39", in NW 1/4 SE 1/4 sec.10, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, on right bank, 1 foot downstream of culvert on Village Boulevard, 0.8 mi downstream of bridge on State Highway 431, 1.1 mi north of Incline Village.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--August 1989, April to September 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
APR									
11...	1745	2.5	62	--	4.0	2.0	--	--	0.049
29...	1500	5.1	50	8.4	20.0	8.0	9.5	104	0.025
MAY									
06...	1845	8.5	41	7.9	10.0	3.5	10.1	98	0.033
14...	1655	5.2	47	8.1	17.0	6.0	9.2	95	0.019
20...	1340	5.0	44	7.8	8.5	3.5	10.3	100	0.015
24...	1530	19	34	7.8	22.5	6.5	9.5	100	0.015
30...	1840	12	32	8.0	3.5	2.5	10.4	98	0.011
JUN									
02...	1830	25	26	7.9	15.5	6.5	--	--	0.003
06...	1710	17	29	7.8	22.0	10.0	--	--	0.007
10...	1650	25	26	7.8	26.0	13.0	--	--	0.003
18...	1745	7.1	38	8.2	16.5	12.0	--	--	0.006
AUG									
15...	1600	3.0	52	--	22.5	13.5	--	--	0.035
SEP									
24...	1015	0.80	66	8.3	14.5	8.0	--	--	0.019

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR								
11...	<0.004	0.15	0.038	0.010	902	35	0.23	--
29...	0.009	0.28	0.065	0.005	1150	81	1.1	--
MAY								
06...	<0.004	1.4	1.12	0.009	12100	1080	25	48
14...	<0.004	0.15	0.051	0.011	882	24	0.34	--
20...	0.008	0.13	0.052	0.012	650	43	0.58	--
24...	<0.004	0.85	0.407	0.005	4620	864	44	28
30...	<0.004	0.19	0.076	0.007	747	114	3.8	--
JUN								
02...	<0.004	0.39	0.220	0.008	4020	323	22	33
06...	<0.004	0.18	0.096	0.007	1230	139	6.5	26
10...	<0.004	0.31	0.197	0.006	2970	268	18	29
18...	<0.004	0.14	0.029	0.008	480	18	0.35	--
AUG								
15...	<0.004	1.1	1.30	0.030	14300	818	6.6	--
SEP								
24...	<0.004	0.08	0.065	0.017	658	10	0.02	--

PYRAMID AND WINNEMUCCA LAKES BASIN

10336698 THIRD CREEK NEAR CRYSTAL BAY, NV

LOCATION.--Lat 39°14'26", long 119°56'41", in SW 1/4 NE 1/4 sec.22, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, on right bank 50 ft upstream from bridge on Lakeshore Boulevard, 600 ft upstream from mouth, and 3 mi east of Crystal Bay.

DRAINAGE AREA.--6.05 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to September 1973, February to September 1975, and October 1977 to current year.

REVISED RECORDS.--WDR NV-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,234.03 ft above National Geodetic Vertical Datum of 1929, published datum for data reports 1983-89 were incorrect.

REMARKS.--Records good except for estimated daily discharges, which are poor. One transmountain diversion to Washoe Valley.

AVERAGE DISCHARGE.--18 years (1970-73, 1978-91), 7.87 ft³/s, 5,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150 ft³/s, June 18, 1982, gage height, 3.40 ft; maximum gage height, 3.77 ft, Jan. 23, 1973, backwater from ice; minimum discharge, 0.66 ft³/s, Oct. 13, 14, 16-19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 25	1615	34	2.65	July 20	1800	32	2.52
June 3	2045	37	2.51	Aug. 15	0100	*63	*2.80

Minimum daily, 1.3 ft³/s, Aug. 4, 11, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	3.0	2.5	2.5	2.8	2.5	4.4	7.5	18	4.3	1.4	1.3
2	1.8	2.7	2.3	2.5	2.8	2.7	4.3	6.9	25	3.8	1.4	1.5
3	1.7	2.7	2.3	2.5	3.1	3.5	4.4	6.6	30	3.5	1.4	1.5
4	1.7	2.9	2.3	e2.5	3.0	11	4.6	6.3	25	3.3	1.3	1.5
5	1.7	2.9	2.4	2.5	3.4	5.6	5.1	7.6	20	3.0	1.4	1.5
6	1.8	3.1	2.2	2.5	3.2	e5.2	5.5	9.4	17	2.9	1.4	1.5
7	1.8	3.0	2.2	2.7	2.9	e4.8	4.6	12	19	2.8	1.4	1.6
8	1.7	3.0	2.2	2.8	2.8	4.2	4.4	13	22	2.6	1.5	1.5
9	1.7	2.8	2.3	2.8	2.8	3.6	4.4	12	24	2.5	1.5	1.8
10	1.7	2.7	2.4	2.8	2.8	3.5	4.2	9.0	26	2.4	1.4	2.4
11	1.7	2.7	2.6	2.8	2.8	3.6	e4.2	8.0	25	2.3	1.3	1.8
12	1.6	2.5	2.7	2.8	2.7	3.4	4.2	7.8	19	2.3	1.4	1.7
13	1.6	2.3	2.6	2.7	2.7	3.4	4.8	8.5	17	2.1	1.5	1.6
14	1.6	2.3	e2.6	2.7	2.8	3.3	5.5	7.8	14	2.1	3.0	1.5
15	1.6	2.4	2.4	2.6	2.9	e3.3	5.7	9.5	12	2.0	5.9	1.4
16	1.7	2.3	e2.4	2.7	2.8	e3.1	5.3	12	11	2.0	2.4	1.5
17	1.7	2.3	e2.4	2.6	3.0	2.9	5.0	11	9.8	1.8	2.3	1.5
18	1.7	2.3	e2.3	2.5	2.7	3.0	4.8	9.5	9.8	1.9	1.9	1.5
19	2.0	2.4	e2.5	2.5	2.6	2.9	5.1	8.4	8.6	2.1	1.9	1.5
20	1.9	2.3	e2.7	e2.1	2.6	2.8	5.1	8.6	7.5	5.1	1.9	1.5
21	1.9	2.4	e2.9	e2.2	2.6	2.8	5.1	8.5	6.5	4.2	1.7	1.5
22	1.9	2.4	e3.2	e2.4	2.7	e2.7	5.5	12	6.0	2.8	1.6	1.4
23	1.8	2.3	3.3	e2.3	2.4	2.6	5.8	17	5.9	2.3	1.7	1.4
24	1.7	2.2	3.0	e2.2	2.3	3.6	5.9	20	5.7	1.9	1.7	1.4
25	1.7	2.1	2.6	e2.1	2.3	3.4	5.7	22	5.4	1.7	1.7	1.4
26	1.7	2.2	2.5	e2.3	2.2	e3.3	5.4	19	5.3	1.7	1.7	1.5
27	1.8	e2.5	2.5	e2.2	2.2	e3.4	5.5	18	5.6	1.6	1.6	1.5
28	2.0	2.7	2.5	e2.2	2.3	e3.5	6.0	20	7.0	1.6	1.5	1.4
29	2.3	2.6	e2.5	e2.3	---	3.6	7.2	19	6.0	1.6	1.5	1.4
30	2.4	2.5	e2.5	e2.2	---	4.0	7.8	15	4.7	1.5	1.5	1.5
31	2.9	---	2.5	2.6	---	4.5	---	12	---	1.5	1.5	---
TOTAL	56.6	76.5	78.3	77.1	76.2	115.7	155.5	363.9	417.8	77.2	55.3	46.0
MEAN	1.83	2.55	2.53	2.49	2.72	3.73	5.18	11.7	13.9	2.49	1.78	1.53
MAX	2.9	3.1	3.3	2.8	3.4	11	7.8	22	30	5.1	5.9	2.4
MIN	1.6	2.1	2.2	2.1	2.2	2.5	4.2	6.3	4.7	1.5	1.3	1.3
AC-FT	112	152	155	153	151	229	308	722	829	153	110	91

CAL YR 1990 TOTAL 1279.4 MEAN 3.51 MAX 11 MIN 1.5 AC-FT 2540
WTR YR 1991 TOTAL 1596.1 MEAN 4.37 MAX 30 MIN 1.3 AC-FT 3170

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

10336698 THIRD CREEK NEAR CRYSTAL BAY, NV--Continued

239

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-73, 1978-1984, 1988 to current year.

REMARKS.--In November 1987, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
OCT												
19...	1345	1.9	90	--	7.5	9.0	--	--	--	--	--	--
26...	1245	1.8	79	7.4	18.0	9.0	8.8	95	0.006	<0.004	<0.004	0.13
DEC												
05...	1430	2.0	75	8.1	7.5	4.5	10.2	99	0.004	--	<0.004	0.11
14...	1330	4.3	81	--	--	--	--	--	--	--	--	--
JAN												
14...	1535	2.8	--	--	6.5	4.5	--	--	--	--	--	--
29...	1420	2.3	74	7.8	5.0	2.0	10.7	98	0.023	0.015	<0.004	0.29
FEB												
22...	1445	2.0	73	8.1	10.5	6.0	9.7	99	0.009	--	0.007	0.12
MAR												
03...	2155	4.1	91	8.0	7.0	2.0	--	--	0.056	--	<0.004	0.50
04...	0530	6.2	81	7.9	6.0	2.5	--	--	0.054	--	<0.004	2.5
04...	1145	18	86	7.7	6.0	2.0	--	--	0.056	--	<0.004	4.2
05...	1145	5.3	76	7.9	3.0	2.5	--	--	0.035	0.013	<0.004	0.49
08...	1055	4.2	--	--	--	--	--	--	--	--	--	--
19...	1535	2.9	128	8.3	1.0	3.0	10.2	98	0.022	--	0.008	0.14
APR												
04...	1200	4.1	94	7.4	12.0	7.0	--	--	0.058	--	<0.004	0.18
04...	1600	5.1	100	7.5	14.5	7.0	--	--	0.064	--	0.006	0.51
10...	1910	3.8	92	8.2	0.0	2.5	--	--	0.049	--	<0.004	0.17
15...	1427	5.5	82	--	--	--	--	--	--	--	--	--
17...	1540	4.9	84	8.4	8.5	5.0	10.1	100	0.034	0.010	<0.004	0.17
29...	1750	7.0	68	8.3	12.0	7.5	9.5	100	0.028	--	0.005	0.38
MAY												
06...	1420	7.3	60	8.0	19.5	10.0	9.8	110	0.015	0.024	0.018	0.31
06...	2320	11	52	7.8	10.0	4.5	--	--	0.030	--	<0.004	0.93
07...	2130	17	45	8.0	11.5	5.0	--	--	0.031	--	<0.004	2.4
09...	1640	11	66	8.2	5.5	4.5	9.8	97	0.021	--	0.009	0.47
14...	0950	7.3	62	8.2	9.5	3.5	10.5	100	0.020	--	<0.004	0.12
17...	1210	11	56	8.0	6.0	2.5	10.6	99	0.017	0.020	0.005	0.18
23...	2145	21	38	7.7	9.5	4.0	10.5	101	0.022	--	<0.004	1.4
29...	1135	13	37	7.9	16.0	5.0	10.0	99	0.011	--	<0.004	0.23
31...	1005	11	41	--	--	--	--	--	--	--	--	--
JUN												
02...	1950	30	30	7.8	13.0	6.5	9.4	97	0.010	0.030	<0.004	0.40
03...	1910	35	27	7.9	13.5	6.5	9.6	99	0.010	--	0.005	2.2
06...	1040	14	36	8.1	17.0	5.5	9.4	95	0.005	--	<0.004	0.21
06...	1840	21	34	8.1	15.5	8.5	9.5	102	0.007	0.016	<0.004	0.25
10...	1300	22	34	8.2	25.0	12.0	7.8	91	0.004	--	<0.004	0.20
10...	1900	26	29	8.0	20.0	11.0	8.5	99	0.005	--	<0.004	0.50
13...	1420	14	39	8.0	22.0	13.0	8.0	96	0.003	0.008	<0.004	0.15
18...	1100	10	57	8.1	18.0	9.5	9.7	108	0.004	--	<0.004	0.19
JUL												
03...	1330	3.2	63	7.8	25.0	15.5	7.9	99	0.004	--	<0.004	0.13
16...	1001	2.0	80	--	13.0	12.0	--	--	--	--	--	--
24...	1045	2.0	77	8.1	18.5	11.0	8.2	94	0.016	0.009	0.008	0.08
AUG												
08...	0940	1.8	81	8.1	10.0	9.0	8.9	96	0.015	--	<0.004	0.09
14...	1800	6.2	74	7.9	16.5	11.5	8.1	94	0.040	--	<0.004	2.0
15...	1025	3.2	--	--	--	--	--	--	--	--	--	--
15...	1445	2.5	75	--	21.5	14.5	--	--	0.439	--	<0.004	2.0
29...	1240	1.7	81	8.3	22.0	14.0	--	--	0.014	0.005	<0.004	0.11
SEP												
23...	0930	1.6	83	8.4	11.5	11.0	--	--	0.008	0.004	<0.004	0.16

PYRAMID AND WINNEMUCCA LAKES BASIN

10336698 THIRD CREEK NEAR CRYSTAL BAY, NV--Continued

DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS HYDRO. + ORTHO DIS. (MG/L AS P)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	IRON, BIO. REACTIVE DIS- SOLVED (UG/L AS FE)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT											
19...	--	--	--	--	--	--	--	--	--	--	--
26...	0.09	0.043	0.036	0.017	0.011	0.01	519	378	15	0.07	--
DEC											
05...	--	0.030	--	--	0.009	--	633	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
JAN											
14...	--	--	--	--	--	--	--	--	--	--	--
29...	0.04	0.104	0.032	0.048	0.010	<0.01	2300	142	123	E1.2	--
FEB											
22...	--	0.027	--	--	0.009	--	561	--	34	0.18	--
MAR											
03...	--	0.139	--	--	0.008	--	3490	--	118	1.3	77
04...	--	1.20	--	--	0.018	--	20800	--	1100	18	67
04...	--	2.53	--	--	0.033	--	33300	--	3830	182	38
05...	0.15	0.128	0.031	0.066	0.010	0.01	2730	134	331	4.7	21
08...	--	--	--	--	--	--	--	--	--	--	--
19...	--	0.034	--	--	0.006	--	1240	--	61	0.48	--
APR											
04...	--	0.050	--	--	0.008	--	1310	--	545	6.0	4
04...	--	0.167	--	--	0.012	--	2840	--	572	7.9	20
10...	--	0.038	--	--	0.008	--	1110	--	56	0.58	--
15...	--	--	--	--	--	--	--	--	--	--	--
17...	0.08	0.034	0.016	0.019	0.008	0.01	1040	338	252	3.3	--
29...	--	0.136	--	--	0.007	--	3300	--	562	11	--
MAY											
06...	0.14	0.112	0.018	0.025	<0.001	<0.01	1940	188	366	7.2	12
06...	--	0.564	--	--	0.006	--	9290	--	1890	56	--
07...	--	1.22	--	--	0.009	--	8650	--	1130	52	49
09...	--	0.174	--	--	0.009	--	2380	--	760	23	--
14...	--	0.040	--	--	0.010	--	858	--	214	4.2	--
17...	0.10	0.068	0.016	0.012	0.009	<0.01	1250	227	1800	53	--
23...	--	0.819	--	--	0.008	--	13300	--	1270	72	46
29...	--	0.080	--	--	0.004	--	2010	--	2240	79	2
31...	--	--	--	--	--	--	--	--	--	--	--
JUN											
02...	0.11	0.270	0.027	0.098	0.007	0.01	4340	113	1140	92	14
03...	--	0.739	--	--	0.010	--	12200	--	1040	98	42
06...	--	0.068	--	--	0.005	--	1680	--	432	16	11
06...	0.11	0.144	0.023	0.016	0.010	0.01	2670	124	716	41	9
10...	--	0.052	--	--	0.005	--	1170	--	337	20	--
10...	--	0.235	--	--	0.007	--	3170	--	371	26	33
13...	0.06	0.046	0.014	0.009	0.005	<0.01	732	183	231	8.7	--
18...	--	0.056	--	--	0.003	--	1260	--	191	5.2	17
JUL											
03...	--	0.051	--	--	0.010	--	646	--	12	0.10	--
16...	--	--	--	--	--	--	--	--	--	--	--
24...	0.06	0.045	0.030	0.014	0.013	0.02	653	315	13	0.07	--
AUG											
08...	--	0.029	--	--	0.009	--	505	--	10	0.05	--
14...	--	0.674	--	--	0.037	--	10200	--	684	11	68
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	1.38	--	--	0.027	--	11300	--	850	5.7	96
29...	0.07	0.062	0.023	0.019	0.008	0.02	855	267	25	0.11	--
SEP											
23...	0.09	0.068	0.039	0.020	0.018	0.02	1070	275	184	0.79	--

E: ESTIMATED

PYRAMID AND WINNEMUCCA LAKES BASIN

241

103366993 INCLINE CREEK ABOVE TYROL VILLAGE NEAR INCLINE VILLAGE, NV

LOCATION.--Lat 39°15'32', long 119°55'20", in SE 1/4 SE 1/4 sec.11, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, on right bank, 900 ft upstream from Tirol Drive, and about 1.5 mi northeast of Incline Village.

DRAINAGE AREA.--2.78 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,920 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water-discharge records for period May to Sept. 1990, good, except for estimated daily discharges, which are fair. Water-discharge records for water year 1991, good, except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 6.92 ft³/s, May 7, 1991, gage height 1.60 ft; minimum daily, 0.30 ft³/s, Sept. 24, 1991.

EXTREMES FOR CURRENT PERIOD.--May to September 1990: Maximum discharge during period, 4.3 ft³/s, June 1, gage height 1.49 ft; minimum daily, 0.54 ft³/s, Sept. 5.

Water Year 1991: Maximum discharge observed, 6.92 ft³/s, May 7, gage height 1.60 ft; minimum daily, 0.30 ft³/s, Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e2.8	3.1	1.1	.71	.60
2	---	---	---	---	---	---	---	e2.8	2.8	1.1	.68	.55
3	---	---	---	---	---	---	---	e2.7	2.4	1.1	.64	.55
4	---	---	---	---	---	---	---	e2.7	2.1	1.1	.65	.55
5	---	---	---	---	---	---	---	e2.7	2.0	1.2	.64	.54
6	---	---	---	---	---	---	---	e2.7	1.9	1.1	.65	.55
7	---	---	---	---	---	---	---	e2.7	1.8	1.1	.64	.57
8	---	---	---	---	---	---	---	2.7	1.6	1.0	.71	.56
9	---	---	---	---	---	---	---	2.6	1.6	.92	.69	.55
10	---	---	---	---	---	---	---	2.8	1.6	.95	.62	.56
11	---	---	---	---	---	---	---	2.6	1.6	.92	.58	.56
12	---	---	---	---	---	---	---	2.5	1.5	.91	.59	.55
13	---	---	---	---	---	---	---	2.5	1.6	1.3	.57	e.57
14	---	---	---	---	---	---	---	2.5	1.7	1.4	.60	.57
15	---	---	---	---	---	---	---	2.4	1.7	1.2	.60	.57
16	---	---	---	---	---	---	---	2.4	1.7	1.4	.58	.57
17	---	---	---	---	---	---	---	2.3	1.6	1.3	.62	.59
18	---	---	---	---	---	---	---	2.2	1.5	1.1	.67	.63
19	---	---	---	---	---	---	---	2.2	1.5	1.1	1.2	.63
20	---	---	---	---	---	---	---	2.2	1.3	1.0	1.0	.58
21	---	---	---	---	---	---	---	2.1	1.3	.98	.88	.58
22	---	---	---	---	---	---	---	2.0	1.3	.96	.79	.61
23	---	---	---	---	---	---	---	2.1	1.2	.96	.73	.75
24	---	---	---	---	---	---	---	2.1	1.2	.96	.69	.68
25	---	---	---	---	---	---	---	2.1	1.2	.95	.72	.61
26	---	---	---	---	---	---	---	2.2	1.2	.94	.76	.71
27	---	---	---	---	---	---	---	2.4	1.1	.92	.74	.75
28	---	---	---	---	---	---	---	2.4	1.2	.88	.68	.70
29	---	---	---	---	---	---	---	2.3	1.1	.83	.66	.57
30	---	---	---	---	---	---	---	2.4	1.1	.74	.67	.55
31	---	---	---	---	---	---	---	2.6	---	.72	.66	---
TOTAL	---	---	---	---	---	---	---	75.7	48.5	32.14	21.62	17.91
MEAN	---	---	---	---	---	---	---	2.44	1.62	1.04	.70	.60
MAX	---	---	---	---	---	---	---	2.8	3.1	1.4	1.2	.75
MIN	---	---	---	---	---	---	---	2.0	1.1	.72	.57	.54
AC-FT	---	---	---	---	---	---	---	150	96	64	43	36

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

103366993 INCLINE CREEK ABOVE TYROL VILLAGE NEAR INCLINE VILLAGE, NV--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.54	1.0	1.3	e.70	e.71	.64	1.6	e2.8	4.3	1.6	.59	.38
2	.54	.97	1.3	e.70	e.71	.74	1.5	e2.2	4.2	1.5	.58	.42
3	.53	.97	1.3	e.70	e.71	.72	1.8	e2.0	4.1	1.4	.58	.44
4	.54	1.0	1.3	e.70	e.71	3.5	2.6	e2.5	4.1	1.3	.77	.47
5	.59	1.0	1.2	e.70	e.76	2.5	3.2	e4.0	3.8	1.2	.77	.42
6	.67	.93	1.2	e.70	.83	1.8	2.7	e5.7	3.6	1.1	.66	.46
7	.74	1.1	1.1	e.70	.88	1.0	2.3	e6.0	3.5	1.2	.61	.51
8	.74	1.2	1.1	e.70	.90	.88	2.3	5.0	3.6	1.1	.61	.46
9	.69	1.2	1.0	e.70	1.0	.94	2.4	4.1	3.7	1.1	.60	.60
10	.63	1.2	1.0	e.70	1.0	.94	2.2	3.3	3.5	1.1	.56	1.2
11	.64	1.1	1.1	e.70	1.1	.94	1.8	2.8	3.3	.91	.57	.76
12	.65	1.1	.99	.70	1.1	1.0	1.7	3.3	3.0	.84	.57	.58
13	.66	1.1	.93	.70	1.1	1.0	2.2	3.1	2.8	.82	.61	.52
14	.71	1.1	e.76	.72	1.3	1.0	2.4	2.9	2.6	.79	.88	.50
15	.73	1.2	e.72	.71	1.3	1.0	2.4	3.6	2.4	.77	1.0	.47
16	.73	1.2	e.70	.71	1.3	1.0	2.4	4.0	2.2	.71	.80	.44
17	.75	1.2	e.70	.76	1.3	1.0	2.1	3.5	2.0	.68	.60	.38
18	.80	1.1	e.70	.76	1.1	.96	2.3	2.9	1.8	.73	.49	.37
19	.97	1.1	e.70	.77	1.1	.94	2.5	2.8	1.8	.94	.48	.38
20	.93	1.1	e.70	e.75	1.1	.94	2.4	2.8	1.8	1.1	.47	.36
21	.93	1.3	e.70	e.75	1.2	.91	2.6	3.3	1.8	.87	.45	.32
22	.93	1.3	e.70	e.75	.96	.87	2.8	3.8	1.7	.71	.41	.31
23	.92	1.3	e.70	e.75	.74	.87	3.8	4.6	1.6	.63	.39	.31
24	.91	1.3	e.70	e.75	.73	.89	3.2	4.7	1.6	.68	.37	.30
25	.90	1.1	e.70	e.75	.76	.87	2.6	5.0	1.6	.66	.36	.31
26	.94	e1.0	e.70	e.69	.79	.81	2.5	4.9	1.6	.63	.38	.35
27	.96	e1.0	e.70	e.67	.74	.83	e2.9	4.6	2.0	.61	.43	.36
28	.99	e1.0	e.70	e.70	.76	1.1	e3.7	4.6	2.4	.63	.44	.36
29	.96	1.3	e.70	e.67	---	1.4	e3.9	4.3	2.0	.62	.44	.35
30	.91	1.3	e.70	e.72	---	1.9	e4.1	4.2	1.8	.59	.43	.34
31	.99	---	e.70	e.75	---	2.0	---	4.2	---	.63	.40	---
TOTAL	24.12	33.77	27.50	22.23	26.69	35.89	76.9	117.5	80.2	28.15	17.30	13.43
MEAN	.78	1.13	.89	.72	.95	1.16	2.56	3.79	2.67	.91	.56	.45
MAX	.99	1.3	1.3	.77	1.3	3.5	4.1	6.0	4.3	1.6	1.0	1.2
MIN	.53	.93	.70	.67	.71	.64	1.5	2.0	1.6	.59	.36	.30
AC-FT	48	67	55	44	53	71	153	233	159	56	34	27

WTR YR 1991 TOTAL 503.68 MEAN 1.38 MAX 6.0 MIN .30 AC-FT 999

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

103366993 INCLINE CREEK ABOVE TYROL VILLAGE NEAR INCLINE VILLAGE, NV--Continued

243

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to current year.

REMARKS.--In November 1989, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
OCT												
19...	1020	0.94	--	--	--	--	--	--	--	--	--	--
26...	0900	0.97	42	--	5.0	3.5	10.2	97	0.002	--	<0.000	0.07
DEC												
05...	1000	1.1	39	7.9	4.0	0.5	11.1	99	0.018	--	<0.004	0.08
13...	1250	0.92	--	--	-1.5	1.5	--	--	--	--	--	--
JAN												
14...	1035	0.69	--	--	4.5	2.0	--	--	--	--	--	--
29...	1045	0.67	41	8.0	0.0	0.0	11.4	101	0.058	--	0.005	0.10
FEB												
22...	1045	0.70	40	8.0	8.0	0.5	12.1	108	0.060	--	0.005	0.12
MAR												
04...	1030	3.3	35	7.6	2.0	0.5	--	--	0.060	--	<0.004	1.0
08...	1330	0.84	--	--	--	--	--	--	--	--	--	--
APR												
04...	1400	1.5	39	7.4	12.0	3.0	--	--	0.089	--	0.006	0.15
11...	1845	1.6	39	--	4.0	1.0	--	--	0.066	--	<0.004	0.16
15...	0919	2.2	--	--	0.5	1.0	--	--	--	--	--	--
30...	1815	4.1	36	8.0	9.0	4.0	10.2	101	0.071	--	<0.004	0.56
MAY												
02...	0910	2.2	--	--	7.0	2.0	--	--	--	--	--	--
06...	1000	3.5	33	8.0	11.5	2.5	10.4	98	0.066	--	<0.004	0.43
06...	2110	5.5	32	8.0	6.5	3.0	--	--	0.056	--	<0.004	0.67
13...	1530	3.0	35	7.9	4.5	2.5	10.4	100	0.050	--	0.004	0.16
20...	0900	2.4	35	8.2	4.5	1.5	10.6	98	0.044	--	0.006	0.13
29...	1440	4.0	32	7.9	12.0	5.5	9.7	100	0.026	--	<0.004	0.19
30...	0918	3.9	--	--	0.5	2.0	--	--	--	--	--	--
JUN												
03...	1300	3.8	31	7.9	16.5	8.5	9.6	106	0.026	--	0.004	0.16
06...	1415	3.5	32	7.9	17.5	8.5	8.9	99	0.019	--	<0.004	0.14
10...	1350	3.5	34	7.9	27.5	11.5	8.3	98	0.012	--	<0.004	0.15
18...	1500	1.7	35	7.7	21.5	10.5	8.5	99	0.003	0.009	<0.004	0.16
19...	1000	2.1	--	--	11.0	6.0	--	--	--	--	--	--
JUL												
03...	1520	1.3	38	8.0	27.0	12.0	8.4	102	0.013	--	0.006	0.13
15...	1038	0.93	--	--	22.0	9.5	--	--	--	--	--	--
24...	1530	0.51	40	8.0	24.0	9.0	8.0	89	0.016	--	0.007	0.09
AUG												
08...	1300	0.68	42	8.0	23.0	6.0	8.8	90	0.014	--	<0.004	0.07
29...	0910	0.55	43	8.2	11.0	7.0	10.9	115	0.034	--	<0.004	0.10
SEP												
23...	1200	0.39	44	8.4	19.0	7.0	--	--	0.020	--	<0.004	0.10

PYRAMID AND WINNEMUCCA LAKES BASIN

103366993 INCLINE CREEK ABOVE TYROL VILLAGE NEAR INCLINE VILLAGE, NV--Continued

DATE	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS HYDRO. + ORTHO DIS. (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT										
19...	--	--	--	--	--	--	--	--	--	--
26...	0.035	--	--	0.009	--	140	105	1	<0.01	--
DEC										
05...	0.019	--	--	0.009	--	70	83	2	0.01	--
13...	--	--	--	--	--	--	--	--	--	--
JAN										
14...	--	--	--	--	--	--	--	--	--	--
29...	0.029	--	--	0.013	--	--	113	10	E0.02	--
FEB										
22...	0.023	--	--	0.011	--	--	111	2	<0.01	--
MAR										
04...	0.127	--	--	0.029	--	--	2050	57	0.50	55
08...	--	--	--	--	--	--	--	--	--	--
APR										
04...	0.025	--	--	0.012	--	--	177	5	0.02	77
11...	0.027	--	--	0.011	--	--	200	3	0.01	--
15...	--	--	--	--	--	--	--	--	--	--
30...	0.068	--	--	0.008	--	--	824	25	0.28	--
MAY										
02...	--	--	--	--	--	--	--	--	--	--
06...	0.046	--	--	0.010	--	--	364	8	0.08	--
06...	0.141	--	--	0.011	--	--	1860	48	0.71	56
13...	0.036	--	--	0.008	--	--	211	5	0.04	--
20...	0.036	--	--	0.011	--	--	187	14	0.09	--
29...	0.039	--	--	0.015	--	--	279	6	0.06	--
30...	--	--	--	--	--	--	--	--	--	--
JUN										
03...	0.041	--	--	0.017	--	--	248	7	0.07	--
06...	0.042	--	--	0.014	--	--	223	4	0.04	--
10...	0.034	--	--	0.011	--	--	225	6	0.06	--
18...	0.033	0.018	0.012	0.005	0.01	--	255	5	0.02	--
19...	--	--	--	--	--	--	--	--	--	--
JUL										
03...	0.037	--	--	0.014	--	--	173	5	0.02	--
15...	--	--	--	--	--	--	--	--	--	--
24...	0.034	--	--	0.014	--	--	135	3	<0.01	--
AUG										
08...	0.030	--	--	0.011	--	--	141	5	0.01	--
29...	0.034	--	--	0.013	--	--	112	2	<0.01	--
SEP										
23...	0.045	--	--	0.013	--	--	139	2	<0.01	--

E: ESTIMATED

PYRAMID AND WINNEMUCCA LAKES BASIN

245

103366995 INCLINE CREEK AT HIGHWAY 28 AT INCLINE VILLAGE, NV

LOCATION.--Lat 39°14'44", long 119°58'17", in SE 1/4 SE 1/4 sec.15, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, on left bank 200 ft downstream from culverts on State Highway 28, 0.6 mi upstream from Lake Tahoe, and 1.8 mi southeast of intersection of State Highways 431 and 28.

DRAINAGE AREA.--4.47 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,320 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9.9 ft³/s, Mar. 4, 1991, gage height 1.88 ft; maximum gage height, 2.30 ft, Feb. 8, 1990, backwater from ice; minimum daily, 0.59 ft³/s, Sept. 9, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9.9 ft³/s, Mar. 4, gage height 1.88 ft; maximum gage height, 1.93 ft, Dec. 22, backwater from ice; minimum daily, 0.70 ft³/s, Aug. 25 and Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	e1.2	1.4	1.4	1.3	1.4	2.8	3.9	4.1	1.9	1.0	.74
2	.96	e1.2	1.4	1.4	1.3	1.4	2.7	3.5	4.1	1.7	1.0	.73
3	.93	e1.2	1.4	1.4	1.3	2.4	3.1	3.2	4.1	1.7	1.0	.81
4	.92	1.2	1.3	1.3	1.3	7.6	3.8	3.6	3.9	1.7	1.2	.89
5	.96	1.2	1.2	1.5	1.4	3.8	4.4	4.2	3.6	1.6	1.2	.74
6	1.0	1.1	1.4	1.5	1.4	3.1	4.3	4.8	3.5	1.5	1.1	.75
7	1.0	e1.3	e1.3	1.5	1.4	2.2	3.7	5.2	3.3	1.5	1.1	.81
8	1.0	1.2	1.3	1.4	1.4	2.1	3.6	5.5	3.2	1.5	1.1	.76
9	1.1	1.2	1.2	e1.4	1.4	2.0	3.8	5.0	3.0	1.5	1.0	.93
10	1.0	1.2	1.3	1.4	1.4	1.8	3.5	4.3	2.9	1.4	.96	1.7
11	1.1	1.1	1.4	1.3	1.4	1.9	4.1	3.9	2.9	1.4	.90	1.1
12	1.0	1.1	1.5	1.3	1.4	1.8	3.2	4.0	2.7	1.3	.90	.89
13	1.0	1.1	1.5	1.3	1.4	1.8	3.8	4.1	2.6	1.3	.96	.86
14	1.0	1.1	1.5	1.3	1.4	1.8	4.0	3.8	2.6	1.3	1.2	.82
15	1.0	1.2	1.5	1.3	1.4	1.8	3.6	4.3	2.5	1.3	1.9	.79
16	1.0	1.2	1.5	e1.3	1.5	1.7	3.5	4.6	2.4	1.3	1.8	.77
17	1.0	1.2	1.5	e1.3	1.5	1.8	3.2	4.3	2.3	1.2	1.4	.75
18	1.5	1.2	1.5	1.3	1.5	1.7	3.3	3.7	2.2	1.3	.87	.73
19	1.7	1.2	e1.4	1.4	1.4	1.7	3.4	3.5	2.2	1.5	.81	.74
20	1.6	1.2	e1.3	1.4	1.4	e1.7	3.3	3.6	2.1	1.6	.79	.74
21	1.4	e1.4	e.90	e1.4	1.4	e1.7	3.6	3.8	2.1	1.4	.79	.73
22	1.2	1.3	e.95	1.4	1.5	e1.6	3.6	4.2	2.0	1.3	.73	.72
23	1.2	1.3	e1.1	1.4	1.5	1.6	4.4	4.7	1.9	1.2	.72	.72
24	1.1	1.3	e1.2	1.4	1.5	e1.7	3.9	4.9	1.9	1.1	.71	.72
25	1.1	1.2	e1.3	1.4	1.5	e1.8	3.3	5.0	1.9	1.1	.70	.72
26	1.1	e1.3	e1.4	1.4	1.4	e2.0	3.1	4.7	1.9	1.1	.72	.70
27	1.1	e1.3	e1.3	1.4	1.3	2.1	3.5	4.5	2.4	1.1	.73	.73
28	1.0	e1.3	e1.4	e1.3	1.5	e2.5	3.9	4.4	2.9	1.2	.79	.72
29	1.0	1.4	e1.2	e1.3	---	2.8	4.3	4.3	2.4	1.1	.79	.71
30	1.0	1.3	1.4	1.3	---	3.2	4.3	4.4	2.1	1.1	.71	.71
31	1.3	---	1.5	e1.3	---	3.2	---	4.1	---	1.1	.79	---
TOTAL	34.19	36.7	41.45	42.4	39.5	69.7	109.0	132.0	81.7	42.3	30.37	24.23
MEAN	1.10	1.22	1.34	1.37	1.41	2.25	3.63	4.26	2.72	1.36	.98	.81
MAX	1.7	1.4	1.5	1.5	1.5	7.6	4.4	5.5	4.1	1.9	1.9	1.7
MIN	.92	1.1	.90	1.3	1.3	1.4	2.7	3.2	1.9	1.1	.70	.70
AC-FT	68	73	82	84	78	138	216	262	162	84	60	48

CAL YR 1990 TOTAL 748.84 MEAN 2.05 MAX 5.5 MIN .59 AC-FT 1490
WTR YR 1991 TOTAL 683.54 MEAN 1.87 MAX 7.6 MIN .70 AC-FT 1360

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

103366995 INCLINE CREEK AT HIGHWAY 28 AT INCLINE VILLAGE, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to current year.

REMARKS.--In November 1989, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT									
26...	1005	1.2	58	7.4	7.5	4.5	9.7	95	0.005
30...	1255	1.0	--	--	14.0	5.5	--	--	--
DEC									
05...	1215	1.2	59	8.0	7.5	1.5	11.5	103	0.026
14...	1000	1.5	--	--	-1.0	3.0	--	--	--
JAN									
14...	1220	1.3	--	--	9.0	3.0	--	--	--
29...	1155	1.3	64	8.1	3.0	2.5	10.8	100	0.036
FEB									
22...	1230	1.4	58	8.1	10.0	4.0	10.4	100	0.037
MAR									
03...	2335	5.1	82	7.8	6.5	2.0	--	--	0.049
04...	0800	6.0	86	7.8	4.5	2.0	--	--	0.048
04...	1500	9.9	66	7.7	3.0	2.0	--	--	0.056
05...	1410	3.4	84	8.0	0.5	2.0	--	--	0.055
08...	1440	1.9	--	--	--	--	--	--	--
APR									
04...	1510	3.3	66	7.4	15.5	6.0	--	--	0.054
11...	1930	3.1	64	--	3.5	1.5	--	--	0.049
15...	1057	3.4	--	--	5.0	2.0	--	--	--
30...	2015	5.1	49	7.8	6.5	4.5	10.3	102	0.063
MAY									
06...	1105	4.2	50	8.1	14.0	4.5	10.3	100	0.062
06...	2200	6.0	42	8.0	15.0	4.0	--	--	0.062
13...	1740	3.8	46	8.1	6.0	4.0	10.0	98	0.050
20...	1530	3.6	49	7.7	9.5	4.5	10.0	99	0.038
29...	1650	4.0	42	8.0	9.0	6.0	9.7	100	0.025
30...	1125	4.4	--	--	2.0	4.0	--	--	--
JUN									
03...	1435	3.6	41	8.0	22.5	11.0	8.5	99	0.024
06...	1340	3.2	42	8.1	20.0	8.5	9.2	100	0.019
10...	1745	2.8	45	8.4	22.0	13.5	8.1	98	0.010
18...	1320	2.4	47	8.2	23.0	10.5	9.1	103	0.006
18...	1340	2.4	48	8.0	23.0	10.5	9.1	103	0.009
JUL									
03...	1415	1.6	52	8.0	26.0	14.0	8.2	100	0.024
15...	1154	1.4	--	--	22.5	12.5	--	--	--
24...	1430	1.1	56	8.0	26.0	12.0	8.3	97	0.027
AUG									
08...	1520	0.99	59	8.1	24.5	11.0	8.4	96	0.027
29...	1010	0.92	60	8.3	13.0	9.0	--	--	0.045
SEP									
23...	1300	0.80	62	8.3	25.0	10.0	--	--	0.026

PYRAMID AND WINNEMUCCA LAKES BASIN

247

103366995 INCLINE CREEK AT HIGHWAY 28 AT INCLINE VILLAGE, NV--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT									
26...	<0.004	0.06	0.027	0.010	610	530	5	0.02	--
30...	--	--	--	--	--	--	--	--	--
DEC									
05...	0.006	0.15	0.023	0.008	550	586	3	0.01	--
14...	--	--	--	--	--	--	--	--	--
JAN									
14...	--	--	--	--	--	--	--	--	--
29...	0.007	0.11	0.034	0.008	--	742	4	E0.01	--
FEB									
22...	0.004	0.14	0.027	0.007	--	710	3	0.01	--
MAR									
03...	0.007	0.24	0.066	0.012	--	1740	16	0.22	74
04...	<0.004	1.7	1.02	0.041	--	19400	525	8.4	57
04...	<0.004	1.7	0.810	0.030	--	13400	593	16	47
05...	<0.004	0.30	0.073	0.019	--	1540	38	0.35	--
08...	--	--	--	--	--	--	--	--	--
APR									
04...	0.009	0.36	0.116	0.011	--	2670	69	0.61	52
11...	0.007	0.20	0.037	0.009	--	960	13	0.11	--
15...	--	--	--	--	--	--	--	--	--
30...	0.004	0.41	0.080	0.005	--	1720	103	1.4	--
MAY									
06...	<0.004	0.29	0.049	0.009	--	891	32	0.36	--
06...	<0.004	0.75	0.139	0.008	--	2710	98	1.6	39
13...	0.004	0.16	0.040	0.010	--	787	16	0.13	--
20...	0.011	0.17	0.049	0.012	--	838	21	0.20	--
29...	0.009	0.21	0.041	0.014	--	843	11	0.12	--
30...	--	--	--	--	--	--	--	--	--
JUN									
03...	0.008	0.23	0.047	0.017	--	737	11	0.11	--
06...	<0.004	0.15	0.040	0.010	--	748	228	2.0	2
10...	<0.004	0.15	0.039	0.011	--	839	11	0.08	--
18...	<0.004	0.14	0.032	0.006	--	755	8	0.05	--
18...	<0.004	0.64	0.114	0.009	--	1820	30	0.19	--
JUL									
03...	<0.004	0.14	0.055	0.015	--	1060	13	0.06	--
15...	--	--	--	--	--	--	--	--	--
24...	0.011	0.09	0.041	0.013	--	716	5	0.02	--
AUG									
08...	0.008	0.13	0.044	0.014	--	800	15	0.04	--
29...	0.007	0.11	0.041	0.009	--	658	4	0.01	--
SEP									
23...	0.004	0.10	0.060	0.014	--	1090	11	0.02	--

E: ESTIMATED

PYRAMID AND WINNEMUCCA LAKES BASIN

103366997 INCLINE CREEK TRIBUTARY AT COUNTRY CLUB DRIVE NEAR INCLINE VILLAGE, NV

LOCATION.--Lat 39°15'52", long 119°56'32", in NW 1/4 SE 1/4 sec.10, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, on right bank, 20 feet upstream of culvert on Country Club Drive, 300 ft upstream of junction of Country Club Drive and Village Boulevard, and 1.2 mi north of Incline Village.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--August 1989, April to September 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
APR									
11...	1545	1.9	154	--	4.0	4.0	--	--	0.151
30...	1600	1.1	140	8.2	20.5	8.5	9.7	108	0.071
MAY									
06...	1545	1.1	139	8.1	17.0	9.5	8.5	96	0.054
13...	1640	1.3	135	8.1	6.0	5.5	9.9	102	0.056
20...	1030	1.0	138	8.0	8.5	4.5	10	100	0.055
20...	1435	1.6	130	7.9	9.0	7.0	--	--	0.050
29...	1540	0.96	131	8.2	12.0	8.5	8.6	96	0.036
30...	1740	1.2	142	8.0	6.0	7.0	--	--	0.051
JUN									
03...	1345	0.84	131	8.2	23.0	13.0	7.9	97	0.042
06...	1500	0.98	144	8.1	21.5	12.0	8.6	104	0.040
10...	1430	0.69	128	8.1	26.0	14.5	8.1	102	0.036
18...	1550	0.76	125	8.3	23.0	12.0	8.2	98	0.025
AUG									
15...	1515	0.66	--	--	--	--	--	--	--
SEP									
24...	0930	0.43	110	8.1	11.0	8.0	--	--	0.038

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR								
11...	<0.004	0.14	0.029	0.009	525	7	0.04	--
30...	0.006	0.13	0.035	0.005	518	18	0.05	--
MAY								
06...	<0.004	0.15	0.050	0.008	502	8	0.02	--
13...	0.004	0.12	0.035	0.007	426	7	0.02	--
20...	0.008	0.10	0.051	0.008	491	11	0.03	--
20...	0.008	0.53	0.147	0.011	2950	271	1.1	50
29...	0.004	0.14	0.052	0.014	522	6	0.02	--
30...	<0.004	0.42	0.115	0.018	1930	36	0.12	82
JUN								
03...	<0.004	0.14	0.058	0.016	611	9	0.02	--
06...	<0.004	1.1	0.069	0.010	689	10	0.03	--
10...	<0.004	0.14	0.034	0.010	552	11	0.02	--
18...	<0.004	0.12	0.031	0.008	483	3	0.01	--
AUG								
15...	--	--	--	--	--	--	--	--
SEP								
24...	<0.004	0.10	0.050	0.016	267	3	<0.01	--

PYRAMID AND WINNEMUCCA LAKES BASIN

249

10336700 INCLINE CREEK NEAR CRYSTAL BAY, NV

LOCATION.--Lat 39°14'25", long 119°56'38", in SW 1/4 NE 1/4 sec.22, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, on right bank 500 ft upstream from culvert on Lakeshore Boulevard, 1,000 ft upstream from mouth, just below confluence with major tributary, and 3 mi east of Crystal Bay.

DRAINAGE AREA.--7.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to September 1975, November 1987 to current year (low flow, partial-record site only, October 1966 to September 1969, October 1973 to February 1975).

GAGE.--Water-stage recorder. Datum of gage is 6,246.90 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for estimated daily discharges, which are poor. No regular diversion above station. Possibly some light pumping or diversion of water for construction or irrigation.

AVERAGE DISCHARGE.--7 years (1970-73, 1989-91), 5.88 ft³/s, 4,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 87 ft³/s, Jan. 21, 1970, gage height, 2.60 ft; maximum gage height, 3.42 ft, Dec. 7, 1972, backwater from ice; minimum daily, 0.87 ft³/s, July 20, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 23 ft³/s, Mar. 4, gage height, 2.11 ft; maximum gage height, 2.26 ft, Mar. 24 (backwater from ice); minimum daily, 1.1 ft³/s, several days in Aug. and Sept.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.2	2.4	e2.5	2.5	2.7	5.1	5.4	5.4	2.7	1.5	1.1
2	1.8	e2.2	2.3	e2.5	2.5	2.6	4.9	5.2	5.4	2.5	1.4	1.1
3	1.7	2.2	2.5	e2.5	2.5	3.6	5.5	4.9	5.3	2.4	1.4	1.2
4	1.7	2.0	2.3	2.6	2.5	13	6.8	5.3	5.2	2.3	1.6	1.3
5	1.7	2.0	2.2	2.9	2.8	6.2	7.9	5.9	5.0	2.2	1.7	1.1
6	1.8	2.0	2.3	2.9	2.8	4.7	7.5	6.5	4.7	2.1	1.6	1.2
7	1.8	e2.2	2.6	2.9	2.8	4.0	6.4	6.9	4.6	2.0	1.5	1.3
8	1.8	2.1	2.3	2.7	2.8	4.1	6.1	7.2	4.5	2.0	1.5	1.2
9	1.8	2.1	2.2	2.8	2.7	4.1	6.2	6.9	4.3	2.0	1.4	1.6
10	1.8	2.0	2.3	2.7	2.7	3.7	5.7	5.9	4.1	2.0	1.3	2.9
11	1.9	2.0	2.4	2.6	2.6	3.8	5.1	5.5	3.9	1.9	1.3	1.8
12	1.8	2.0	2.5	2.6	2.6	3.6	5.0	5.8	3.8	1.9	1.3	1.5
13	1.8	2.0	2.5	2.6	2.7	3.7	5.7	5.6	3.7	1.8	1.4	1.4
14	1.8	1.9	2.6	2.6	2.7	3.6	6.1	5.1	3.7	1.8	2.3	1.4
15	1.8	2.0	2.6	2.6	2.8	3.6	5.7	5.6	3.5	1.8	3.8	1.4
16	1.8	2.0	2.6	2.7	2.8	3.6	5.3	5.9	3.4	1.8	2.5	1.3
17	1.8	2.0	2.5	2.6	2.9	3.6	5.0	5.7	3.2	1.8	2.0	1.1
18	2.3	2.0	2.5	2.6	2.7	3.3	5.0	5.2	3.1	2.0	1.5	1.1
19	2.6	2.1	e2.4	2.7	2.7	3.3	5.2	5.1	3.0	2.2	1.4	1.1
20	2.4	2.1	e2.0	2.6	2.7	3.5	5.2	5.4	3.0	2.6	1.4	1.2
21	2.2	2.2	e1.7	2.9	2.6	3.4	5.4	5.5	2.9	2.2	1.3	1.3
22	1.9	2.2	e2.0	2.6	2.6	3.3	5.6	5.8	2.9	1.8	1.2	1.3
23	1.9	2.1	e2.4	2.6	2.5	3.2	6.1	6.4	2.8	1.8	1.2	1.2
24	1.8	2.1	e2.3	2.5	2.5	e2.8	5.6	6.4	2.8	1.7	1.1	1.1
25	1.8	2.1	e2.3	2.5	2.5	3.0	4.9	6.6	2.8	1.6	1.1	1.1
26	1.8	e2.1	e2.4	2.5	2.5	e2.9	4.9	6.1	2.8	1.6	1.1	1.3
27	1.8	e2.2	e2.4	2.6	2.4	3.3	5.1	5.8	3.5	1.6	1.2	1.4
28	1.8	e2.2	e2.4	2.6	2.6	3.6	5.5	5.8	4.4	1.6	1.2	1.4
29	1.8	e2.2	e2.5	2.5	---	4.1	5.9	5.6	3.5	1.6	1.2	1.4
30	1.8	2.3	e2.5	2.5	---	5.0	5.8	5.9	3.0	1.5	1.2	1.4
31	2.0	---	e2.5	2.5	---	5.5	---	5.4	---	1.5	1.1	---
TOTAL	58.3	62.8	73.4	81.5	74.0	124.4	170.2	180.3	114.2	60.3	46.7	40.2
MEAN	1.88	2.09	2.37	2.63	2.64	4.01	5.67	5.82	3.81	1.95	1.51	1.34
MAX	2.6	2.3	2.6	2.9	2.9	13	7.9	7.2	5.4	2.7	3.8	2.9
MIN	1.7	1.9	1.7	2.5	2.4	2.6	4.9	4.9	2.8	1.5	1.1	1.1
AC-FT	116	125	146	162	147	247	338	358	227	120	93	80

CAL YR 1990 TOTAL 1129.6 MEAN 3.09 MAX 7.3 MIN 1.2 AC-FT 2240
WTR YR 1991 TOTAL 1086.3 MEAN 2.98 MAX 13 MIN 1.1 AC-FT 2150

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

10336700 INCLINE CREEK NEAR CRYSTAL BAY, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-73, 1978-79, 1988 to current year.

REMARKS.--In November 1987, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT									
19...	1245	2.5	87	--	5.0	8.0	--	--	--
26...	1130	1.9	81	7.3	14.5	6.0	9.5	96	0.005
DEC									
05...	1345	2.2	80	7.9	7.5	3.0	12.5	116	0.021
14...	1155	2.7	96	--	2.0	2.0	--	--	--
JAN									
14...	1355	2.5	--	--	--	--	--	--	--
29...	1315	3.1	87	8.2	4.5	1.5	10.9	99	0.042
FEB									
22...	1345	2.7	79	8.2	15.0	5.5	10.2	102	0.017
MAR									
03...	2245	4.1	125	8.0	7.0	2.0	--	--	0.066
04...	0650	9.9	106	7.9	5.5	2.0	--	--	0.055
04...	1250	22	104	7.7	6.0	2.0	--	--	0.047
05...	1310	5.5	94	7.9	1.5	2.5	--	--	0.088
08...	0915	3.8	--	--	--	--	--	--	--
19...	1440	3.5	120	8.1	0.0	2.5	10.5	99	0.037
APR									
04...	1115	5.0	112	7.3	10.5	4.5	--	--	0.074
04...	1640	8.4	113	7.6	13.0	6.5	--	--	0.069
04...	1840	11	99	7.5	8.0	6.0	--	--	0.070
10...	1830	5.5	105	8.2	2.5	2.5	--	--	0.076
15...	1241	5.1	94	--	--	--	--	--	--
17...	1440	5.0	93	8.3	11.0	4.5	10.7	106	0.057
29...	1905	7.4	67	8.3	7.5	6.0	9.5	96	0.053
MAY									
06...	1330	5.5	70	8.3	20.0	8.5	9.6	104	0.048
06...	2245	7.8	61	8.0	11.0	5.5	--	--	0.057
07...	2220	9.1	56	8.2	9.0	6.5	--	--	0.061
08...	1020	6.3	--	--	11.5	5.0	--	--	--
13...	1830	5.5	74	8.1	4.5	4.5	10.0	99	0.042
17...	1300	5.7	69	8.0	6.5	3.5	10.8	104	0.037
23...	2045	8.4	56	7.9	10.5	8.5	9.2	99	0.037
29...	1320	5.2	60	7.9	16.0	7.5	9.6	101	0.025
30...	1315	5.7	64	--	--	--	--	--	--
JUN									
03...	2020	5.7	57	7.9	11.0	10.0	8.8	99	0.019
06...	1210	4.8	62	8.1	19.0	8.0	9.8	104	0.020
10...	1130	4.3	66	8.0	24.0	10.5	8.3	94	0.013
18...	1200	3.3	68	8.1	19.0	9.5	9.2	102	0.014
27...	1015	3.9	70	8.0	11.0	7.0	9.7	102	0.017
JUL									
15...	1422	1.7	77	--	--	--	--	--	--
24...	1255	1.9	78	8.0	22.0	11.0	8.6	98	0.029
AUG									
08...	1100	1.7	84	8.0	18.5	7.5	9.3	97	0.030
14...	1930	3.9	77	7.6	14.5	10.0	8.5	96	0.044
29...	1130	1.3	83	8.3	18.0	10.5	--	--	0.034
SEP									
23...	1030	1.6	85	7.4	15.0	9.5	--	--	0.018

PYRAMID AND WINNEMUCCA LAKES BASIN

10336700 INCLINE CREEK NEAR CRYSTAL BAY, NV--Continued

251

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT								
19...	--	--	--	--	--	--	--	--
26...	0.013	<0.004	0.14	0.07	0.045	0.066	0.014	0.009
DEC								
05...	--	0.005	0.09	--	0.024	--	--	0.008
14...	--	--	--	--	--	--	--	--
JAN								
14...	--	--	--	--	--	--	--	--
29...	0.009	0.004	0.21	0.06	0.044	0.021	0.019	0.010
FEB								
22...	--	0.005	0.13	--	0.028	--	--	0.008
MAR								
03...	--	<0.004	0.33	--	0.090	--	--	0.014
04...	--	<0.004	3.0	--	0.916	--	--	0.027
04...	--	<0.004	2.5	--	1.12	--	--	0.041
05...	0.017	0.006	0.37	0.20	0.068	0.031	0.035	0.018
08...	--	--	--	--	--	--	--	--
19...	--	0.004	0.11	--	0.032	--	--	0.010
APR								
04...	--	<0.004	0.13	--	0.032	--	--	0.008
04...	--	0.007	0.67	--	0.145	--	--	0.014
04...	--	0.005	1.0	--	0.208	--	--	0.012
10...	--	<0.004	0.18	--	0.034	--	--	0.009
15...	--	--	--	--	--	--	--	--
17...	0.016	<0.004	0.17	0.11	0.028	0.019	0.016	0.008
29...	--	0.012	0.43	--	0.090	--	--	0.005
MAY								
06...	0.013	0.005	0.30	0.14	0.045	0.020	0.016	0.009
06...	--	<0.004	0.64	--	0.111	--	--	0.005
07...	--	<0.004	0.96	--	0.195	--	--	0.009
08...	--	--	--	--	--	--	--	--
13...	--	<0.004	0.20	--	0.040	--	--	0.008
17...	0.012	0.005	0.16	0.09	0.040	0.025	0.013	0.008
23...	--	0.011	0.63	--	0.161	--	--	0.015
29...	--	0.005	0.18	--	0.051	--	--	0.013
30...	--	--	--	--	--	--	--	--
JUN								
03...	0.016	0.005	0.28	0.09	0.048	0.028	0.012	0.011
06...	--	<0.004	0.25	--	0.057	--	--	0.007
10...	--	<0.004	0.23	--	0.037	--	--	0.008
18...	0.015	<0.004	0.17	0.09	0.029	0.018	0.007	0.009
27...	--	0.004	0.23	--	0.064	--	--	0.010
JUL								
15...	--	--	--	--	--	--	--	--
24...	0.016	0.011	0.08	0.06	0.047	0.036	0.015	0.014
AUG								
08...	--	0.008	0.17	--	0.046	--	--	0.011
14...	--	0.005	0.97	--	0.250	--	--	0.028
29...	0.006	0.006	0.10	0.07	0.042	0.042	0.015	0.009
SEP								
23...	0.013	<0.004	0.11	0.07	0.042	0.030	0.013	0.012

PYRAMID AND WINNEMUCCA LAKES BASIN
10336700 INCLINE CREEK NEAR CRYSTAL BAY, NV--Continued

DATE	PHOS- PHORUS HYDRO. + ORTHO DIS. (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	IRON, BIO. REACTIVE DIS- SOLVED (UG/L AS FE)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT								
19...	--	--	--	--	--	--	--	--
26...	0.01	560	330	488	286	4	0.02	--
DEC								
05...	--	490	--	554	--	3	0.02	--
14...	--	--	--	--	--	--	--	--
JAN								
14...	--	--	--	--	--	--	--	--
29...	0.01	--	--	979	142	12	0.10	--
FEB								
22...	--	--	--	550	--	198	1.4	--
MAR								
03...	--	--	--	1970	--	35	0.39	72
04...	--	--	--	20400	--	714	19	49
04...	--	--	--	17600	--	752	45	51
05...	0.02	--	--	1300	259	34	0.50	--
08...	--	--	--	--	--	--	--	--
19...	--	--	--	680	--	4	0.04	--
APR								
04...	--	--	--	948	--	26	0.35	29
04...	--	--	--	3360	--	1840	42	3
04...	--	--	--	5700	--	949	27	10
10...	--	--	--	871	--	7	0.10	--
15...	--	--	--	--	--	--	--	--
17...	<0.01	--	--	709	326	4	0.05	--
29...	--	--	--	2570	--	185	3.7	--
MAY								
06...	0.01	--	--	902	296	11	0.16	--
06...	--	--	--	1670	--	59	1.2	56
07...	--	--	--	3860	--	85	2.1	62
08...	--	--	--	--	--	--	--	--
13...	--	--	--	705	--	98	1.5	--
17...	0.01	--	--	629	239	12	0.18	--
23...	--	--	--	3170	--	96	2.2	46
29...	--	--	--	834	--	19	0.27	--
30...	--	--	--	--	--	--	--	--
JUN								
03...	0.02	--	--	1120	222	37	0.57	--
06...	--	--	--	1070	--	13	0.17	--
10...	--	--	--	702	--	15	0.17	--
18...	<0.01	--	--	730	283	9	0.08	--
27...	--	--	--	1200	--	21	0.22	--
JUL								
15...	--	--	--	--	--	--	--	--
24...	0.02	--	--	717	328	6	0.03	--
AUG								
08...	--	--	--	851	--	10	0.05	--
14...	--	--	--	4000	--	91	0.95	--
29...	0.02	--	--	632	276	3	0.01	--
SEP								
23...	0.02	--	--	568	250	7	0.03	--

PYRAMID AND WINNEMUCCA LAKES BASIN

253

10336710 MARLETTE LAKE NEAR CARSON CITY, NV

LOCATION.--Lat 39°10'22", long 119°54'15", in SW 1/4 SE 1/4 sec.12, T.15 N., R.18 E., Washoe County, Hydrologic Unit 16050101, in Toiyabe National Forest, on west shore, about 1,000 ft east from left side of dam on Marlette Creek, and 7.5 mi west of Carson City.

DRAINAGE AREA.--2.86 mi².

PERIOD OF RECORD.--November 1973 to current year.

REVISED RECORDS.--WDR NV-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is National Geodetic Vertical Datum of 1929 (spillway elevation furnished in written communication, 1971).

REMARKS.--Lake is formed by earthfill dam across the outlet of a small natural lake (at one time called Goodwin Lake) on Marlette Creek, built in 1873 to provide water for fluming lumber from Spooner Summit to Carson City. The dam was built higher in 1876 and used to divert water by flume and siphon to Virginia City, until the flume was abandoned prior to 1963. The dam was raised to its present elevation in 1959. Present capacity, 11,780 acre-ft at spillway; elevation, 7,838.0 ft. Figures given herein represent total contents. Stored water is used for spawning Cutthroat Trout and in dry years is pumped over the mountain to the Hobart system for municipal and domestic use outside the basin in Virginia City and Carson City. Lake freezes over in winter.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded contents, 12,320 acre-ft, Feb. 19, 1986, elevation, 7,839.23 ft; minimum, 10,970 acre-ft, Nov. 10-13, 1976, elevation, 7,835.8 ft.

EXTREMES FOR CURRENT YEAR.--Maximum recorded contents, 11,870 acre-ft, June 3, elevation, 7,838.21 ft; minimum recorded, 10,980 acre-ft, Nov. 25, elevation, 7,835.87 ft.

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
INSTANTANEOUS OBSERVATION AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11150	11050	11040	11020	11060	11200	11620	11670	11860	11790	11630	11440
2	11150	11040	11030	11020	11080	11220	11620	11680	11860	11790	11620	11430
3	11140	11040	11030	11030	11080	11280	11620	11690	11850	11790	11610	11420
4	11140	11040	11030	11030	11090	11320	11620	11690	11840	11780	11610	11410
5	11120	11030	11030	11030	11100	11340	11620	11690	11840	11780	11600	11410
6	11120	11030	e11030	11040	11100	11340	11630	11710	11840	11770	11590	11400
7	11090	11030	e11030	11050	11110	11340	11630	11710	11840	11770	11580	11390
8	11100	11030	e11030	11050	11110	11350	11630	11720	11840	11760	11580	11380
9	11110	11030	e11030	11060	11110	11340	11620	11730	11840	11760	11570	11370
10	11110	11040	e11030	11060	11110	11360	11620	11760	11840	11760	11560	11380
11	11110	11040	e11030	11060	11110	11360	11620	11780	11830	11760	11550	11380
12	11100	11040	e11030	11060	11110	11370	11630	11790	11820	11750	11550	11370
13	11090	11020	e11020	11060	11110	11380	11630	11790	11810	11740	11550	11360
14	11090	11020	e11020	11060	11110	11390	11610	11800	11820	11730	11550	11350
15	11090	11020	e11020	11060	11110	11400	11610	11810	11810	11730	11560	11340
16	11080	11030	e11020	11060	11120	11410	11610	11810	11800	11720	11560	11340
17	11070	11020	e11020	11060	11120	11420	11610	11820	11800	11720	11550	11330
18	11080	11020	e11020	11060	11120	11440	11610	11830	11790	11720	11540	11330
19	11080	11010	e11020	11060	11130	11450	11600	11830	11780	11710	11540	11320
20	11080	11020	e11020	11060	11130	11460	11610	11840	11780	11710	11530	11310
21	11080	11030	e11020	11060	11130	11460	11610	11850	11780	11710	11520	11300
22	11080	11030	e11020	11060	11140	11470	11610	11850	11770	11700	11510	11300
23	11080	11030	e11020	11060	11140	11480	11600	11850	11760	11690	11500	11280
24	11080	11030	e11020	11060	11130	11540	11620	11860	11770	11680	11490	11280
25	11070	11050	11020	11060	11130	11580	11640	11850	11760	11680	11470	11280
26	11080	11050	11010	11060	11140	11590	11650	11850	11760	11680	11470	11270
27	11070	11050	11010	11060	11140	11600	11650	11850	11770	11660	11460	11270
28	11060	11050	11020	11060	11160	11600	11660	11850	11780	11660	11460	11260
29	11060	11040	11020	11060	---	11600	11660	11840	11790	11650	11460	11250
30	11050	11050	11020	11060	---	11610	11670	11850	11790	11650	11450	11240
31	11060	---	11020	11060	---	11610	---	11850	---	11630	11440	---
MAX	11150	11050	11040	11060	11160	11610	11670	11860	11860	11790	11630	11440
MIN	11050	11010	11010	11020	11060	11200	11600	11670	11760	11630	11440	11240
#	7836.07	7836.04	7835.98	7836.08	7836.33	7837.52	7837.68	7838.16	7838.00	7837.59	7837.09	7836.56
##	-90	-10	-30	+40	+100	+450	+60	+180	-60	-160	-190	-200

CAL YR 1990 MAX 11940 MIN 11010 ## -610
WTR YR 1991 MAX 11860 MIN 11010 ## +90

Elevation, in feet, NGVD, at month end at 2400 hours
Change in contents in acre-feet
e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

10336715 MARLETTE CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°10'20", long 119°54'25", in SE 1/4 SW 1/4 sec.12, T.15 N., R.18 E., Washoe County, Hydrologic Unit 16050101, in Toiyabe National Forest, on left bank, about 300 ft below dam on Marlette Lake (station 10336710), 0.7 mi upstream from Marlette Reservoir, and 7 mi west of Carson City.

DRAINAGE AREA.--2.86 mi².

PERIOD OF RECORD.--October 1973 to current year.

REVISED RECORDS.--WDR NV-80-1.

GAGE.--Water-stage recorder. Elevation of gage is 7,760 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. Flow regulated at Marlette Lake 300 ft upstream.

AVERAGE DISCHARGE.--18 years, 2.54 ft³/s, 1,840 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70 ft³/s, Feb. 20, 1986, gage height, 3.20 ft, from rating curve extended above 26 ft³/s; no flow July 12-15, 1975, Aug. 31, 1988 to Sept. 5, 1988, and July 14, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.3 ft³/s, Mar. 4, gage height, 1.86 ft; minimum daily, 0.01 ft³/s, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.06	.06	.02	.02	.01	.03	.12	1.5	.10	.05	.02
2	.03	.06	.03	.02	.02	.01	.03	.16	1.4	.08	.04	.02
3	.03	.06	.03	.02	.02	.01	.02	.18	1.3	.08	.04	.02
4	.03	.06	.02	.02	.02	1.2	.02	.23	1.3	.09	.04	.02
5	.04	.05	.02	.02	.02	.49	.01	.01	1.2	.08	.03	.02
6	.04	.04	.02	.02	.02	.07	.01	.02	1.0	.07	.03	.02
7	.07	.03	.02	.02	.02	.03	.01	.03	.86	.06	.04	.02
8	.07	.03	.02	.02	.02	.02	.01	.12	.80	.04	.04	.02
9	.07	.04	.02	.02	.02	.01	.01	.02	.76	.04	.04	.02
10	.07	.03	.02	.02	.02	.01	.01	.02	.69	.04	.04	.02
11	.07	.02	.02	.02	.02	.01	.01	.02	.65	.04	.04	.02
12	.08	.02	.02	.02	.02	.01	.01	.06	.62	.04	.03	.02
13	.08	.02	.02	.02	.02	.01	.01	.09	.49	.04	.03	.02
14	.12	.01	.02	.02	.02	.01	.01	.08	.33	.04	.03	.02
15	.07	.02	.02	.02	.01	.01	.01	.21	.31	.04	.03	.02
16	.05	.02	.02	.02	.01	.01	.01	.60	.30	.04	.03	.02
17	.04	.02	.02	.02	.01	.01	.01	.71	.19	.04	.03	.02
18	.05	.02	.02	.02	.01	.01	.01	.92	.18	.04	.03	.02
19	.11	.02	.02	.02	.01	.01	.01	1.0	.32	.04	.03	.02
20	.11	.02	.02	.02	.01	.02	.01	1.2	.06	.04	.03	.02
21	.12	.02	.02	.02	.01	.02	.01	1.6	.05	.04	.03	.02
22	.08	.02	.02	.02	.01	.02	.02	1.5	.04	.04	.02	.02
23	.09	.01	.02	.02	.01	.02	.02	1.3	.06	.04	.02	.02
24	.09	.02	.02	.02	.01	.02	.02	1.5	.04	.04	.02	.02
25	.08	.03	.02	.02	.01	.02	.02	1.8	.04	.04	.02	.03
26	.08	.03	.02	.02	.01	.02	.03	1.5	.05	.04	.02	.03
27	.06	.02	.02	.02	.01	.02	.04	1.5	.08	.04	.02	.03
28	.06	.02	.02	.02	.01	.02	.05	1.4	.05	.04	.02	.03
29	.05	.03	.02	.02	---	.02	.03	1.6	.05	.04	.02	.03
30	.04	.05	.02	.02	---	.03	.07	1.9	.07	.04	.02	.04
31	.05	---	.02	.02	---	.03	---	1.8	---	.05	.02	---
TOTAL	2.05	0.90	0.68	0.62	0.42	2.21	0.57	23.20	14.79	1.53	0.93	0.67
MEAN	.066	.030	.022	.020	.015	.071	.019	.75	.49	.049	.030	.022
MAX	.12	.06	.06	.02	.02	1.2	.07	1.9	1.5	.10	.05	.04
MIN	.02	.01	.02	.02	.01	.01	.01	.01	.04	.04	.02	.02
AC-FT	4.1	1.8	1.3	1.2	.8	4.4	1.1	46	29	3.0	1.8	1.3

CAL YR 1990 TOTAL 357.82 MEAN .98 MAX 5.2 MIN .00 AC-FT 710
WTR YR 1991 TOTAL 48.57 MEAN .13 MAX 1.9 MIN .01 AC-FT 96

PYRAMID AND WINNEMUCCA LAKES BASIN

255

10336725 GLENBROOK CREEK AT OLD HIGHWAY 50 NEAR GLENBROOK, NV

LOCATION.--Lat 39°05'12", long 119°55'51", in SW 1/4 SW 1/4 sec.11, T.14 N., R.18 E., Douglas County, Hydrologic Unit 16050101, on left bank, 300 ft upstream of culvert on Old Highway 50, 0.5 mi east of Glenbrook, and 1.6 mi southwest of Spooner Lake.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--Water years 1972-74, August 1989, April to September 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
APR								
12...	1450	0.71	616	--	11.5	6.0	--	--
29...	0920	0.84	492	8.4	13.0	5.0	10.7	106
MAY								
07...	1145	0.84	501	8.3	19.0	8.5	9.3	101
13...	1110	0.86	450	8.4	5.5	6.5	9.6	100
17...	1015	0.84	404	8.3	5.0	4.0	10.2	100
22...	1740	0.74	443	8.3	20.0	12.0	--	--
28...	1850	0.53	459	8.3	12.5	11.5	--	--
JUN								
05...	1050	0.45	512	8.3	15.0	10.5	8.5	98
12...	1120	0.36	546	8.3	23.0	14.5	7.9	98
19...	1000	0.27	580	8.4	15.0	9.0	8.6	95
SEP								
20...	1050	0.07	506	8.3	21.0	11.5	--	--

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
APR								
12...	0.013	<0.004	0.10	0.016	0.007	253	1	<0.01
29...	0.007	<0.004	0.15	0.021	0.007	146	2	<0.01
MAY								
07...	0.013	<0.004	0.26	0.028	0.007	210	3	0.01
13...	0.006	0.004	0.12	0.025	0.006	118	3	0.01
17...	0.007	0.005	0.23	0.032	0.005	445	4	0.01
22...	0.004	0.005	0.18	0.035	0.004	174	3	0.01
28...	0.004	<0.004	0.13	0.033	0.008	136	2	<0.01
JUN								
05...	0.002	<0.004	0.10	0.042	0.009	130	1	<0.01
12...	0.010	<0.004	0.15	0.033	0.013	183	2	<0.01
19...	0.014	0.006	0.13	0.034	0.015	206	4	<0.01
SEP								
20...	0.013	<0.004	0.10	0.051	0.021	157	3	<0.01

PYRAMID AND WINNEMUCCA LAKES BASIN

10336730 GLENBROOK CREEK AT GLENBROOK, NV

LOCATION.--Lat 39°05'15", long 119°56'20", in NE 1/4 SE 1/4 sec.10, T.14 N., R.18 E., Douglas County, Hydrologic Unit 16050101, on left bank, 50 ft upstream from culvert, 100 ft upstream from mouth at Glenbrook, and 1.8 mi southwest of Spooner Lake.

DRAINAGE AREA.--4.07 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1967-1971. October 1971 to September 1975, November 1987 to current year,

GAGE.--Water-stage recorder. Elevation of gage is 6,240 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to November 16, 1987, at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow may be affected by pumping or diverting for irrigation above station.

AVERAGE DISCHARGE.--7 years (1972-75, 1989-91), 1.21 ft³/s, 877 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25 ft³/s, May 14, 1975, gage height, 2.32 ft; minimum daily, 0.02 ft³/s, many days in August and September 1990.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5.0 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	1115	*5.0	*1.79				

Minimum daily, 0.04 ft³/s, Aug. 1-7, 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.17	e.30	e.43	e.21	.35	.49	.92	.83	.46	.17	.04	.07
2	e.17	e.33	e.38	e.21	.38	.48	.84	.80	.40	.15	.04	.07
3	e.17	e.27	e.35	e.21	.41	1.1	.85	.71	.40	.11	.04	.07
4	e.17	e.25	e.33	e.22	.40	2.9	1.0	.70	.37	.10	.04	.07
5	e.18	e.35	e.33	e.23	.51	1.2	1.2	.84	.35	.08	.04	.06
6	e.18	e.40	e.33	e.24	.49	.76	1.3	.88	.35	.07	.04	.06
7	e.18	e.35	e.35	e.25	.43	.67	1.1	.99	.33	.06	.04	.06
8	e.18	e.26	e.40	e.27	.41	.58	.93	1.0	.30	.06	.05	.06
9	e.18	e.31	e.39	e.29	.41	.56	.86	.91	.27	.07	.05	.07
10	e.18	e.35	e.43	e.31	.40	.53	.83	.72	.26	.07	.04	.11
11	e.19	e.36	e.51	e.34	.38	.57	.71	.64	.25	.07	.04	.10
12	e.19	e.35	e.48	e.36	.37	.55	.68	.59	.25	.07	.04	.09
13	e.19	e.40	e.48	e.38	.35	.56	.71	.68	.24	.06	.04	.10
14	e.19	e.45	e.42	e.40	.39	.54	.78	.67	.24	.06	.43	.09
15	e.19	e.54	e.45	e.42	.41	.53	.77	.70	.24	.06	.73	.08
16	e.19	e.45	e.42	e.42	.40	.50	.75	.78	.22	.05	.20	.10
17	e.20	e.40	e.39	.44	.39	.43	.68	.80	.22	.05	.14	.10
18	e.20	e.54	e.43	.54	.36	.43	.67	.68	.21	.06	.11	.08
19	e.25	e.52	e.43	.43	.40	.48	.69	.62	.18	.07	.11	.05
20	e.22	e.45	e.52	.37	.40	.48	.72	.68	.18	.11	.09	.07
21	e.22	e.35	e.32	.32	.42	.48	.75	.68	.18	.12	.09	.08
22	e.22	e.32	e.21	.31	.40	.49	.77	.67	.18	.09	.10	.09
23	e.23	e.40	e.21	.34	.40	.48	.86	.71	.18	.08	.08	.10
24	e.23	e.48	e.21	.32	.41	.51	.85	.74	.18	.07	.08	.11
25	e.23	e.52	e.21	.31	.40	.53	.78	.68	.20	.06	.07	.11
26	e.23	e.45	e.21	.30	.41	.51	.70	.62	.18	.06	.07	.12
27	e.23	e.40	e.21	.28	.43	.51	.70	.57	.25	.06	.09	.11
28	e.23	e.32	e.21	.28	.48	.52	.74	.53	.33	.06	.09	.11
29	e.23	e.38	e.21	.27	---	.60	.80	.52	.35	.06	.09	.11
30	e.23	e.40	e.21	.26	---	.69	.83	.55	.24	.06	.09	.12
31	e.25	---	e.21	.31	---	.83	---	.51	---	.05	.08	---
TOTAL	6.30	11.65	10.67	9.84	11.39	20.49	24.77	22.00	7.99	2.37	3.28	2.62
MEAN	.20	.39	.34	.32	.41	.66	.83	.71	.27	.076	.11	.087
MAX	.25	.54	.52	.54	.51	2.9	1.3	1.0	.46	.17	.73	.12
MIN	.17	.25	.21	.21	.35	.43	.67	.51	.18	.05	.04	.05
AC-FT	12	23	21	20	23	41	49	44	16	4.7	6.5	5.2

CAL YR 1990 TOTAL 190.31 MEAN .52 MAX 2.4 MIN .02 AC-FT 377
WTR YR 1991 TOTAL 133.37 MEAN .37 MAX 2.9 MIN .04 AC-FT 265

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN
10336730 GLENBROOK CREEK AT GLENBROOK, NV--Continued

257

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971-74, July 1987, water years 1988 to current year.

REMARKS.--In November 1987, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT									
25...	1435	E0.23	606	8.0	18.0	9.0	8.8	97	0.006
30...	1012	0.23	--	--	13.0	--	--	--	--
DEC									
04...	0820	E0.33	569	8.0	-0.5	0.0	10.8	93	0.006
13...	1020	0.45	590	--	0.0	2.0	--	--	--
JAN									
16...	1502	0.42	536	--	3.0	1.0	--	--	--
25...	1100	0.38	600	7.9	4.0	0.0	10.6	92	0.007
FEB									
21...	0955	0.43	552	8.2	13.0	1.5	11.3	101	0.003
MAR									
04...	0300	0.61	567	7.9	5.0	2.0	--	--	0.062
04...	1630	4.1	685	7.8	3.0	1.5	--	--	0.161
07...	1630	0.74	614	7.9	7.0	2.5	--	--	0.036
19...	1045	0.48	594	8.0	3.0	1.5	10.3	95	0.008
APR									
12...	0815	0.68	619	--	4.0	0.5	--	--	0.006
16...	0913	0.77	560	--	5.0	2.0	--	--	--
17...	0930	0.68	587	8.2	6.0	2.5	10.5	98	0.004
29...	1055	0.83	488	8.4	13.0	6.0	9.6	97	0.004
MAY									
07...	1250	0.91	501	8.1	18.0	10.0	8.5	95	0.005
13...	1215	0.68	445	8.0	6.5	6.0	9.4	96	0.005
17...	1055	0.75	410	8.0	9.0	5.5	9.6	97	0.005
22...	1745	0.61	447	8.0	19.0	12.5	8.0	95	0.004
28...	1900	0.48	460	8.0	12.5	10.5	8.2	94	0.005
31...	1246	0.51	449	--	18.5	8.5	--	--	--
JUN									
05...	1140	0.38	506	8.0	17.0	10.0	8.6	97	0.005
12...	1210	0.29	547	8.0	23.5	13.5	8.0	98	0.005
19...	1050	0.18	561	8.2	17.0	9.0	8.6	94	0.003
28...	1615	0.38	550	8.2	9.5	8.5	9.1	99	0.004
JUL									
16...	1244	0.05	577	--	19.0	12.0	--	--	--
23...	1230	0.09	536	8.1	22.0	11.0	8.0	92	0.032
AUG									
07...	1515	0.03	495	7.9	20.5	9.5	8.3	91	0.032
14...	0940	0.04	491	8.0	16.5	9.0	8.1	88	0.030
14...	1345	0.24	483	8.0	15.5	9.0	8.1	88	0.020
14...	1500	0.38	428	8.0	14.5	8.5	--	--	0.012
26...	0845	0.07	503	8.0	14.0	5.0	9.6	95	0.027
SEP									
20...	1140	0.09	510	8.0	22.0	11.0	--	--	0.014

PYRAMID AND WINNEMUCCA LAKES BASIN
 10336730 GLENBROOK CREEK AT GLENBROOK, NV--Continued
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT								
25...	<0.004	<0.004	0.08	0.08	0.085	0.067	0.021	0.019
30...	--	--	--	--	--	--	--	--
DEC								
04...	--	0.004	0.12	--	0.023	--	--	0.015
13...	--	--	--	--	--	--	--	--
JAN								
16...	--	--	--	--	--	--	--	--
25...	<0.004	<0.004	0.10	0.06	0.039	0.045	0.013	0.012
FEB								
21...	--	<0.004	0.08	--	0.020	--	--	0.011
MAR								
04...	--	<0.004	0.25	--	0.053	--	--	0.023
04...	--	<0.004	0.91	--	0.233	--	--	0.011
07...	0.008	<0.004	0.14	0.10	0.020	0.015	0.012	0.011
19...	--	0.005	0.10	--	0.022	--	--	0.014
APR								
12...	--	<0.004	0.10	--	0.016	--	--	0.006
16...	--	--	--	--	--	--	--	--
17...	0.005	<0.004	0.07	0.07	0.018	0.014	0.009	0.007
29...	--	0.006	0.28	--	0.042	--	--	0.009
MAY								
07...	<0.004	<0.004	0.17	0.14	0.029	0.018	0.012	0.008
13...	--	<0.004	0.13	--	0.032	--	--	0.009
17...	--	0.004	0.20	--	0.029	--	--	0.008
22...	--	0.004	0.17	--	0.045	--	--	0.010
28...	0.004	<0.004	0.15	0.11	0.049	0.035	0.016	0.012
31...	--	--	--	--	--	--	--	--
JUN								
05...	--	<0.004	0.15	--	0.052	--	--	0.012
12...	--	<0.004	0.17	--	0.039	--	--	0.014
19...	--	<0.004	0.17	--	0.038	--	--	0.012
28...	--	<0.004	0.22	--	0.069	--	--	0.015
JUL								
16...	--	--	--	--	--	--	--	--
23...	0.016	0.013	0.14	0.10	0.058	0.035	0.027	0.019
AUG								
07...	--	<0.004	0.10	--	0.055	--	--	0.017
14...	--	<0.004	0.20	--	0.072	--	--	0.035
14...	--	0.007	1.9	--	0.366	--	--	0.057
14...	--	0.015	6.0	--	1.98	--	--	0.060
26...	--	0.005	0.08	--	0.049	--	--	0.010
SEP								
20...	0.005	<0.004	0.11	0.08	0.055	0.042	0.031	0.021

PYRAMID AND WINNEMUCCA LAKES BASIN

259

10336730 GLENBROOK CREEK AT GLENBROOK, NV--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	PHOS- PHORUS + ORTHO DIS. (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	IRON, BIO. REACTIVE DIS- SOLVED (UG/L AS FE)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT								
25...	0.02	470	310	410	279	8	E<0.01	--
30...	--	--	--	--	--	--	--	--
DEC								
04...	--	400	--	432	--	4	E<0.01	--
13...	--	--	--	--	--	--	--	--
JAN								
16...	--	--	--	--	--	--	--	--
25...	0.01	--	--	387	244	4	<0.01	--
FEB								
21...	--	--	--	290	--	1	<0.01	--
MAR								
04...	--	--	--	492	--	4	0.01	--
04...	--	--	--	5950	--	175	2.0	78
07...	<0.01	--	--	276	158	3	0.01	--
19...	--	--	--	254	--	1	<0.01	--
APR								
12...	--	--	--	221	--	1	<0.01	--
16...	--	--	--	--	--	--	--	--
17...	<0.01	--	--	217	130	1	<0.01	--
29...	--	--	--	775	--	7	0.02	--
MAY								
07...	0.01	--	--	302	113	2	<0.01	--
13...	--	--	--	480	--	4	0.01	--
17...	--	--	--	279	--	11	0.02	--
22...	--	--	--	389	--	4	0.01	--
28...	0.01	--	--	407	117	5	0.01	--
31...	--	--	--	--	--	--	--	--
JUN								
05...	--	--	--	437	--	4	<0.01	--
12...	--	--	--	481	--	4	<0.01	--
19...	--	--	--	409	--	5	<0.01	--
28...	--	--	--	859	--	12	0.01	--
JUL								
16...	--	--	--	--	--	--	--	--
23...	0.02	--	--	490	32.2	6	<0.01	--
AUG								
07...	--	--	--	653	--	4	<0.01	--
14...	--	--	--	721	--	6	<0.01	--
14...	--	--	--	4620	--	83	0.05	83
14...	--	--	--	27700	--	606	0.62	90
26...	--	--	--	513	--	3	<0.01	--
SEP								
20...	0.02	--	--	443	107	3	<0.01	--

E: ESTIMATED

PYRAMID AND WINNEMUCCA LAKES BASIN

10336735 NORTH LOGAN HOUSE CREEK AT HIGHWAY 50 NEAR GLENBROOK, NV

LOCATION.--Lat 30°04'08", long 119° 56'24", in NW 1/4 NE 1/4 sec.22, T.14 N., R.18 E., Douglas County, Hydrologic Unit 16050101, on left bank, 200 ft upstream of culvert on U.S. Highway 50, 600 ft upstream of mouth, and 1.4 mi south of Glenbrook.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--April to September 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
APR								
12...	1400	0.86	89	--	6.0	1.5	--	--
29...	1315	1.1	88	8.4	12.5	4.0	10.3	100
MAY								
07...	1445	1.1	85	8.2	16.0	7.0	9.7	101
13...	1350	0.96	86	8.2	3.5	3.0	--	--
16...	1700	1.0	87	8.2	12.0	7.5	9.4	100
22...	1630	0.78	88	8.2	16.5	8.0	--	--
28...	1750	0.40	91	8.2	13.5	8.5	--	--
JUN								
05...	1810	0.32	93	8.3	16.0	8.0	8.7	94
12...	1900	0.35	96	8.3	22.0	12.0	--	--
19...	1750	0.03	108	8.3	16.0	9.0	--	--
SEP								
20...	1350	0.14	100	8.3	24.5	10.0	--	--

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
APR								
12...	0.050	<0.004	0.21	0.025	0.003	474	9	0.02
29...	0.053	0.005	0.32	0.025	0.004	394	9	0.03
MAY								
07...	0.041	<0.004	0.29	0.034	0.005	394	30	0.09
13...	0.038	<0.004	0.21	0.040	0.004	570	11	0.03
16...	0.030	0.006	0.24	0.040	0.004	359	25	0.07
22...	0.025	0.009	0.22	0.038	0.005	371	7	0.02
28...	0.014	<0.004	0.18	0.042	0.009	202	4	<0.01
JUN								
05...	0.015	<0.004	0.18	0.038	0.004	179	4	<0.01
12...	0.015	<0.004	0.18	0.024	0.004	218	4	<0.01
19...	0.008	<0.004	0.11	0.015	0.002	73	2	<0.01
SEP								
20...	0.026	<0.004	0.08	0.029	0.005	107	3	<0.01

PYRAMID AND WINNEMUCCA LAKES BASIN

261

10336740 LOGAN HOUSE CREEK NEAR GLENBROOK, NV

LOCATION.--Lat 39°04'00", long 119°56'04", in NW 1/4 NW 1/4 sec.23, T.14 N., R.18 E., Douglas County, Hydrologic Unit 16050101, Toiyabe National Forest, on right bank, 0.1 mi downstream from unnamed tributary, 0.3 mi upstream from U.S. Highway 50, and 1.6 mi south of Glenbrook.

DRAINAGE AREA.--2.08 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,640 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for periods of estimated daily discharges, which are poor. One small diversion 50 ft upstream from station for domestic use.

AVERAGE DISCHARGE.--8 years 0.48 ft³/s, 348 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6.4 ft³/s, Apr. 22, 1986, gage height, 4.60 ft; maximum gage height, 5.49 ft, Dec. 30, 1990 (backwater from ice on weir); no flow many days July to Oct. 1988 and Jan., July to Sept., 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 30	1300	(a)	*5.49	Apr. 23	1815	*.84	4.19

(a) Backwater from ice on weir.

No flow many days Jan., July to Sept.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.07	.08	e.04	e.05	.06	.22	.41	.05	.04	.00	.00
2	.12	.07	e.08	e.04	e.05	.06	.14	.29	.04	.03	.00	.00
3	.12	.07	e.07	e.04	.05	.07	.20	.27	.04	.01	.00	.00
4	.10	.07	e.08	.00	.10	.27	.28	.38	.04	.01	.00	.00
5	.06	.07	.07	.00	.09	.23	.43	.44	.05	.01	.00	.00
6	.06	.07	.07	.00	.08	.16	.44	.52	.04	.01	.00	.00
7	.06	.07	.07	.00	.07	.11	.35	.46	.04	.01	.00	.00
8	.08	.07	.07	.00	.07	.09	.30	.47	.04	.01	.00	.00
9	.09	.07	.07	.03	.07	.09	.33	.32	.03	.01	.00	.00
10	.11	.07	.07	.09	.07	.09	.33	.25	.03	.00	.00	.04
11	.07	.07	.07	.09	.07	.08	.28	.18	.04	.02	.00	.06
12	.06	.07	.07	.09	.07	.08	.26	.17	.03	.01	.00	.04
13	.06	.07	.07	.09	.07	.09	.32	.19	.03	.01	.00	.03
14	.06	.07	e.05	.09	.07	.07	.40	.19	.03	.02	.00	.03
15	.08	.07	e.06	.09	.06	.07	.37	.17	.04	.02	.01	.03
16	.10	.07	e.07	.09	.07	.06	.31	.20	.04	.01	.00	.03
17	.08	.07	e.06	.09	.06	.06	.31	.20	.05	.00	.00	.03
18	.07	.07	e.08	.09	.06	.06	.34	.16	.06	.00	.00	.03
19	.05	.07	e.07	.09	.06	.06	.40	.14	.06	.01	.00	.03
20	.05	.07	e.05	.09	.06	.06	.39	.14	.06	.02	.00	.03
21	.05	.07	e.03	.07	.07	.06	.34	.14	.05	.01	.00	.03
22	.05	.07	e.02	e.07	.09	.07	.51	.13	.05	.00	.00	.03
23	.05	.07	e.02	e.06	.07	.07	.61	.13	.05	.00	.00	.03
24	.05	.07	e.03	e.07	.07	.07	.44	.12	.05	.00	.00	.03
25	.05	.14	e.04	e.06	.06	.07	.35	.11	.05	.00	.00	.03
26	.05	.14	e.05	e.06	.06	.07	.32	.09	.05	.00	.02	.03
27	.05	e.12	e.06	e.06	.06	.07	.39	.06	.06	.00	.02	.03
28	.05	e.10	e.05	e.06	.06	.07	.44	.05	.08	.00	.00	.04
29	.05	e.13	e.06	e.06	---	.08	.53	.05	.07	.00	.00	.06
30	.05	.12	e.03	e.05	---	.13	.46	.06	.05	.00	.00	.06
31	.07	---	e.03	e.05	---	.20	---	.06	---	.00	.00	---
TOTAL	2.13	2.43	1.80	1.81	1.89	2.88	10.79	6.55	1.40	0.27	0.05	0.75
MEAN	.069	.081	.058	.058	.067	.093	.36	.21	.047	.009	.002	.025
MAX	.12	.14	.08	.09	.10	.27	.61	.52	.08	.04	.02	.06
MIN	.05	.07	.02	.00	.05	.06	.14	.05	.03	.00	.00	.00
AC-FT	4.2	4.8	3.6	3.6	3.7	5.7	21	13	2.8	.5	.1	1.5

CAL YR 1990 TOTAL 48.25 MEAN .13 MAX .83 MIN .01 AC-FT 96
WTR YR 1991 TOTAL 32.75 MEAN .090 MAX .61 MIN .00 AC-FT 65

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

10336740 LOGAN HOUSE CREEK NEAR GLENBROOK, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983 to current year.

REMARKS.--In November 1987, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)
OCT												
25...	1340	0.05	149	8.0	20.5	5.0	9.8	97	0.002	<0.004	<0.004	0.06
30...	0835	0.06	--	--	1.0	2.5	--	--	--	--	--	--
DEC												
04...	1440	0.08	150	8.3	4.0	0.5	11.2	98	0.033	--	0.005	0.13
13...	0910	0.08	160	--	--	--	--	--	--	--	--	--
JAN												
16...	1346	0.10	145	--	--	--	--	--	--	--	--	--
23...	1530	0.06	149	8.3	3.5	0.5	11.8	104	0.051	0.006	<0.004	0.09
FEB												
21...	1545	0.06	142	8.3	7.5	1.0	10.6	95	0.039	--	<0.004	0.07
MAR												
04...	1730	0.36	134	--	1.0	1.5	--	--	0.070	--	<0.004	0.66
07...	1530	0.11	139	8.2	3.5	0.5	--	--	0.059	0.006	<0.004	0.20
APR												
10...	1700	0.28	127	8.3	3.0	1.0	--	--	0.035	--	<0.004	0.17
16...	1100	0.27	123	--	--	--	--	--	--	--	--	--
17...	1330	0.28	124	8.4	8.0	1.5	11.2	102	0.032	<0.004	<0.004	0.16
24...	1640	0.36	117	--	4.0	2.0	10.9	102	0.038	--	<0.004	0.21
MAY												
02...	1620	0.28	121	8.3	6.5	2.0	9.9	93	0.023	--	<0.004	0.25
08...	1800	0.51	104	8.0	10.0	3.5	10.3	100	0.022	0.005	<0.004	0.32
16...	1620	0.21	115	8.3	12.5	6.0	9.0	93	0.013	--	0.006	0.23
22...	1640	0.16	126	8.3	22.5	6.5	9.3	97	0.009	--	0.007	0.21
28...	1740	0.06	132	8.2	12.5	7.0	9.5	100	0.006	0.003	<0.004	0.15
31...	1402	0.06	131	--	--	--	--	--	--	--	--	--
JUN												
05...	1730	0.05	142	8.2	19.0	8.0	8.6	94	0.006	--	<0.004	0.13
12...	1840	0.0	--	--	--	--	--	--	--	--	--	--
13...	1245	0.04	155	8.2	20.0	10.0	--	--	0.002	--	<0.004	0.13
19...	1700	0.01	148	8.2	16.0	9.0	--	--	0.007	0.003	<0.004	0.09
JUL												
03...	1130	0.03	160	8.1	19.5	10.0	--	--	0.011	--	<0.004	0.12
16...	1340	0.02	163	--	--	--	--	--	--	--	--	--
24...	0950	0.0	--	--	--	--	--	--	--	--	--	--
25...	1650	0.0	--	--	--	--	--	--	--	--	--	--
AUG												
06...	1620	0.0	--	--	--	--	--	--	--	--	--	--
07...	0922	0.0	--	--	--	--	--	--	--	--	--	--
26...	1350	0.03	157	8.2	20.5	5.0	9.5	95	0.012	--	<0.004	0.06
29...	0935	0.0	--	--	--	--	--	--	--	--	--	--
SEP												
20...	1300	0.04	158	8.3	25.0	9.0	--	--	0.010	0.004	<0.004	0.06

PYRAMID AND WINNEMUCCA LAKES BASIN

263

10336740 LOGAN HOUSE CREEK NEAR GLENBROOK, NV--Continued

DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS HYDRO. + ORTHO DIS. (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	IRON, BIO. REACTIVE DIS- SOLVED (UG/L AS FE)	SEDI- MENT, CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT												
25...	<0.04	0.047	0.034	0.002	0.002	0.00	60	55	35	14.1	1	<0.01
30...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
04...	--	0.050	--	--	0.003	--	100	--	119	--	4	E<0.01
13...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
16...	--	--	--	--	--	--	--	--	--	--	--	--
23...	0.04	0.016	0.017	0.005	0.003	0.00	--	--	23	6.80	<1	E<0.01
FEB												
21...	--	0.010	--	--	0.004	--	--	--	28	--	1	<0.01
MAR												
04...	--	0.050	--	--	0.010	--	--	--	537	--	20	0.02
07...	0.15	0.018	0.017	0.003	0.002	0.00	--	--	50	19.7	2	<0.01
APR												
10...	--	0.012	--	--	0.003	--	--	--	76	--	2	<0.01
16...	--	--	--	--	--	--	--	--	--	--	--	--
17...	0.16	0.018	0.009	0.003	0.003	0.00	--	--	36	15.3	1	<0.01
24...	--	0.013	--	--	0.001	--	--	--	72	--	<1	--
MAY												
02...	--	0.019	--	--	0.001	--	--	--	50	--	2	<0.01
08...	0.27	0.033	0.021	0.003	0.002	0.01	--	--	131	30.8	6	0.01
16...	--	0.028	--	--	0.002	--	--	--	76	--	2	<0.01
22...	--	0.027	--	--	0.003	--	--	--	65	--	4	<0.01
28...	0.14	0.029	0.028	0.003	0.003	0.00	--	--	40	11.3	1	<0.01
31...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
05...	--	0.036	--	--	0.004	--	--	--	47	--	1	<0.01
12...	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	0.021	--	--	0.004	--	--	--	130	--	1	<0.01
19...	0.09	0.013	0.011	0.003	0.003	0.00	--	--	42	21.2	2	<0.01
JUL												
03...	--	0.026	--	--	0.002	--	--	--	109	--	4	<0.01
16...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
06...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	0.021	--	--	0.005	--	--	--	64	--	2	<0.01
29...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
20...	0.06	0.029	0.030	0.002	0.004	0.00	--	--	38	20.5	<1	--

E: ESTIMATED

PYRAMID AND WINNEMUCCA LAKES BASIN

10336750 EDGEWOOD CREEK BELOW SOUTH BENJAMIN DRIVE NEAR DAGGETT PASS, NV

LOCATION.--Lat 38°58'00", long 119°53'37", in NW 1/4 NW 1/4 sec.30, T.13 N., R.19 E., Douglas County, Hydrologic Unit 16050101, Toiyabe National Forest, on left bank, 10 ft downstream of junction of two channels, 800 ft downstream of culvert on South Benjamin Drive and parking lot of Boulder section of Heavenly Valley Ski Area, 0.7 mi south of Daggett Pass, and 2.4 mi east of Stateline.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--August 1989, April to September 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
APR								
12...	0940	0.31	156	--	3.0	1.5	--	--
24...	1430	0.51	118	--	2.0	4.0	--	--
MAY								
02...	1405	0.36	112	8.0	6.5	3.0	9.7	95
09...	1350	0.57	88	7.9	6.5	4.0	9.5	95
16...	1415	0.57	91	8.0	19.0	10.0	8.3	97
22...	1430	0.70	88	8.0	19.5	11.0	--	--
28...	1520	0.42	92	8.1	18.0	9.5	8.8	101
JUN								
05...	1615	0.23	105	8.0	17.5	10.0	8.7	98
12...	1720	0.22	116	8.0	17.0	11.0	--	--
19...	1600	0.13	118	8.1	18.5	8.5	--	--
28...	1900	--	117	8.1	13.0	7.0	--	--
SEP								
19...	1530	0.07	115	8.0	27.0	7.0	--	--

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)
APR								
12...	0.074	<0.004	0.13	0.016	0.004	427	1	<0.01
24...	0.087	0.006	0.29	0.056	0.005	2250	16	0.02
MAY								
02...	0.074	0.005	0.20	0.027	0.006	781	22	0.02
09...	0.053	<0.004	0.22	0.041	0.008	791	6	0.01
16...	0.026	0.006	0.29	0.065	0.007	2000	12	0.02
22...	0.023	0.006	0.39	0.050	0.009	1760	16	0.03
28...	0.020	<0.004	0.16	0.040	0.014	1160	10	0.01
JUN								
05...	0.040	<0.004	0.15	0.033	0.007	577	6	<0.01
12...	0.021	<0.004	0.17	0.031	0.009	417	5	<0.01
19...	0.015	<0.004	0.10	0.019	0.003	369	7	<0.01
28...	0.040	<0.004	0.22	0.061	0.012	1380	28	--
SEP								
19...	0.022	<0.004	0.07	0.033	0.008	316	6	<0.01

PYRAMID AND WINNEMUCCA LAKES BASIN

265

10336756 EDGEWOOD CREEK TRIBUTARY NEAR DAGGETT PASS, NV

LOCATION.--Lat 38°58'32", long 119°54'00", in SE 1/4 NE 1/4 sec.24, T.13 N., R.18 E., Douglas County, Hydrologic Unit 16050101, on right bank, 300 ft upstream of culvert on Kingsbury Grade, 1.2 mi upstream of mouth with Edgewood Creek, 0.7 mi west of Daggett Pass, and 2.4 mi northeast of Stateline.

DRAINAGE AREA.--0.80 mi².

PERIOD OF RECORD.--Water years 1981-83, April to September 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
APR								
12...	1040	0.07	240	--	1.0	0.5	--	--
24...	1545	0.19	205	--	2.0	1.5	--	--
MAY								
02...	1510	0.06	200	7.6	5.5	1.5	10.2	95
09...	1455	0.04	199	7.7	11.5	2.5	9.3	90
16...	1515	0.02	197	7.5	13.5	3.0	8.1	79
22...	1530	0.02	200	7.8	20.0	3.5	--	--
28...	1600	0.0	--	--	--	--	--	--
JUN								
05...	1705	0.0	--	--	--	--	--	--
12...	1800	0.0	--	--	--	--	--	--
19...	1700	0.0	--	--	--	--	--	--
28...	2000	0.0	--	--	--	--	--	--
AUG								
23...	1300	0.0	--	--	--	--	--	--
SEP								
19...	1630	0.0	--	--	--	--	--	--

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)
APR								
12...	0.011	<0.004	0.16	0.015	0.002	21	<1	--
24...	0.005	<0.004	0.17	0.016	0.005	18	<1	--
MAY								
02...	0.006	<0.004	0.21	0.025	0.007	23	<1	--
09...	0.004	<0.004	0.19	0.023	0.007	45	2	<0.01
16...	0.006	0.006	0.16	0.020	0.007	423	1	<0.01
22...	0.005	0.004	0.17	0.022	0.008	34	1	<0.01
28...	--	--	--	--	--	--	--	--
JUN								
05...	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
AUG								
23...	--	--	--	--	--	--	--	--
SEP								
19...	--	--	--	--	--	--	--	--

PYRAMID AND WINNEMUCCA LAKES BASIN

103367585 EDGEWOOD CREEK AT PALISADES DRIVE NEAR KINGSBURY, NV

LOCATION.--Lat 38°58'00", long 119°54'54", in NW 1/4 NW 1/4 sec.25, T.13 N., R.18 E., Douglas County, Hydrologic Unit 16050101, on left bank, 50 ft downstream from culvert at Palisades Drive, and 1.2 mi east of intersection of U.S. Highway 50 and State Highway 207 at Kingsbury.

DRAINAGE AREA.--1.77 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,640 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 57 ft³/s, Aug. 14, 1991, gage height 2.61 ft; minimum daily, 0.13 ft³/s, Aug. 8, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 57 ft³/s, Aug. 14, gage height 2.61 ft; minimum daily, 0.13 ft³/s, Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	.36	.46	e.52	.42	.39	.75	.86	.68	.35	.17	.17
2	.34	.37	.43	.54	.43	.39	.73	.68	.64	.31	.16	.16
3	.29	.42	.43	e.54	.43	.70	.78	.73	.55	.30	.14	.17
4	.29	.49	.44	e.52	.40	2.0	.96	.78	.51	.31	.15	.18
5	.31	.50	.54	.50	.45	1.1	1.1	.95	.45	.29	.16	.18
6	.32	.53	.55	.49	.43	.70	1.3	1.1	.38	.27	.15	.17
7	.36	.53	.55	.49	.43	.61	1.1	1.1	.38	.26	.15	.19
8	.38	.55	.55	.49	.43	.61	1.0	1.2	.38	.26	.13	.17
9	.40	.54	.55	.49	.43	.57	1.0	1.1	.38	.27	.14	.20
10	.37	.53	.55	.49	.43	.54	.96	.85	.36	.27	.14	.26
11	.40	.53	.55	.49	.43	.52	.82	.76	.38	.26	.14	.21
12	.38	.55	.55	.53	.43	.53	.82	.81	.35	.25	.15	.19
13	.34	.52	.55	.53	.43	.55	.93	.88	.30	.23	.19	.18
14	.32	.49	e.55	.49	.43	.52	1.1	.81	.30	.21	5.8	.17
15	.32	.49	e.55	.49	.43	.49	1.1	.90	.30	.21	1.3	.16
16	.31	.49	.55	.49	.43	e.49	.95	.99	.28	.21	.39	.16
17	.29	.45	e.55	.50	.44	.49	.88	1.0	.27	.21	.29	.16
18	.33	.43	e.55	.49	e.43	e.50	.95	.77	.28	.22	.27	.15
19	.36	.41	e.54	.49	.44	e.53	.95	.76	.28	.24	.26	.17
20	.35	.39	e.54	.48	.41	e.55	.88	.76	.30	.34	.29	.19
21	.34	.44	e.54	e.51	.38	.56	.88	.79	.30	.32	.24	.20
22	.34	.44	e.54	.51	.38	e.55	1.0	.84	.30	.24	.26	.22
23	.32	.44	e.54	.49	.38	.54	1.2	.96	.29	.22	.22	.22
24	.30	.45	e.53	.49	.37	e.54	1.0	1.0	.33	.20	.23	.20
25	.28	.46	e.53	.44	.40	e.54	.85	1.0	.34	.20	.22	.23
26	.26	.43	e.53	.38	.39	.55	.76	.89	.34	.18	.24	.26
27	.28	.48	e.53	.37	.38	.57	.79	.86	.49	.19	.23	.27
28	.30	.50	e.53	.37	.38	.59	.81	.76	.76	.21	.20	.29
29	.31	.55	.52	.34	---	.64	.95	.76	.56	.19	.19	.28
30	.30	.54	.53	.34	---	.70	.97	.71	.40	.18	.18	.26
31	.37	---	.50	.38	---	.73	---	.68	---	.17	.18	---
TOTAL	10.20	14.30	16.35	14.67	11.64	19.29	28.27	27.04	11.86	7.57	12.96	6.02
MEAN	.33	.48	.53	.47	.42	.62	.94	.87	.40	.24	.42	.20
MAX	.40	.55	.55	.54	.45	2.0	1.3	1.2	.76	.35	5.8	.29
MIN	.26	.36	.43	.34	.37	.39	.73	.68	.27	.17	.13	.15
AC-FT	20	28	32	29	23	38	56	54	24	15	26	12

CAL YR 1990 TOTAL 221.14 MEAN .61 MAX 2.6 MIN .15 AC-FT 439
WTR YR 1991 TOTAL 180.17 MEAN .49 MAX 5.8 MIN .13 AC-FT 357

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

267

103367585 EDGEWOOD CREEK AT PALISADES DRIVE NEAR KINGSBURY, NV-Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to current year.

REMARKS.--In October 1989, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT									
25...	1215	0.30	108	8.0	19.0	5.5	9.2	94	0.004
29...	1100	0.34	--	--	16.0	5.0	--	--	--
DEC									
04...	1320	0.49	107	8.1	7.0	2.0	10.6	97	0.006
12...	1120	0.56	--	--	1.0	2.5	--	--	--
JAN									
15...	1125	0.55	--	--	5.0	3.0	--	--	--
25...	1445	0.38	108	8.1	5.5	1.5	10.5	96	0.040
FEB									
21...	1430	0.38	108	8.2	12.0	3.5	10.0	97	0.034
MAR									
04...	1535	2.4	161	--	1.5	1.0	--	--	0.066
07...	1345	0.75	128	8.1	4.0	1.5	--	--	0.229
APR									
12...	1120	0.76	129	--	4.0	1.5	--	--	0.034
18...	1234	0.92	140	--	--	--	--	--	--
24...	1315	0.92	142	--	12.0	4.5	11.5	114	0.041
MAY									
02...	1310	0.68	122	8.1	7.0	3.0	10.6	102	0.045
09...	1300	1.0	107	8.2	7.5	2.5	10.1	95	0.043
16...	1330	0.76	108	8.1	19.0	8.0	8.7	95	0.026
22...	1245	0.77	108	8.0	20.5	8.5	8.5	94	0.019
28...	1420	0.78	107	8.1	23.0	9.0	8.8	98	0.014
JUN									
04...	0915	0.54	110	--	--	--	--	--	--
05...	1530	0.43	110	8.1	15.5	10.5	8.2	95	0.013
12...	1630	0.30	120	8.1	23.0	12.5	7.9	96	0.004
19...	1500	0.25	116	8.2	16.0	9.5	8.5	96	0.004
28...	1730	1.8	107	8.1	18.5	6.5	9.0	94	0.015
JUL									
08...	1023	0.30	--	--	--	--	--	--	--
20...	1630	0.55	110	--	14.5	10.5	--	--	0.048
AUG									
07...	1320	0.12	120	8.3	21.0	7.0	8.9	94	0.024
15...	1200	0.68	127	--	14.0	8.5	--	--	0.042
15...	1530	0.68	127	8.1	16.0	5.5	9.4	95	0.043
26...	1230	0.24	118	8.1	23.0	5.0	10.1	101	0.012
28...	0905	0.27	--	--	7.5	6.0	--	--	--
SEP									
19...	1310	0.15	120	8.2	25.0	10.0	--	--	0.010

PYRAMID AND WINNEMUCCA LAKES BASIN

103367585 EDGEWOOD CREEK AT PALISADES DRIVE NEAR KINGSBURY, NV-Continued

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTH- O, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, BIO- REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT									
25...	<0.004	0.09	0.050	0.009	1100	850	5	<0.01	--
29...	--	--	--	--	--	--	--	--	--
DEC									
04...	<0.004	0.08	0.020	0.006	220	247	2	<0.01	--
12...	--	--	--	--	--	--	--	--	--
JAN									
15...	--	--	--	--	--	--	--	--	--
25...	0.008	0.15	0.041	0.004	--	643	5	0.01	--
FEB									
21...	0.006	0.16	0.023	0.008	--	428	4	<0.01	--
MAR									
04...	<0.004	1.8	0.244	0.026	--	9820	194	1.3	58
07...	<0.004	0.24	0.037	0.009	--	696	8	0.02	67
APR									
12...	<0.004	0.13	0.021	0.006	--	457	11	0.02	--
18...	--	--	--	--	--	--	--	--	--
24...	0.007	0.20	0.027	0.004	--	636	8	0.02	--
MAY									
02...	<0.004	0.19	0.056	0.005	--	608	9	0.02	--
09...	<0.004	0.28	0.046	0.007	--	731	15	0.04	--
16...	<0.004	0.23	0.050	0.007	--	732	10	0.02	--
22...	0.010	0.21	0.037	0.007	--	734	9	0.02	--
28...	<0.004	0.20	0.038	0.013	--	757	10	0.02	--
JUN									
04...	--	--	--	--	--	--	--	--	--
05...	<0.004	0.17	0.045	0.010	--	816	8	0.01	--
12...	<0.004	0.19	0.038	0.006	--	785	6	<0.01	--
19...	<0.004	0.12	0.032	0.008	--	699	6	<0.01	--
28...	<0.004	5.9	1.43	0.017	--	41400	900	4.3	48
JUL									
08...	--	--	--	--	--	--	--	--	--
20...	0.027	1.5	0.677	0.010	--	9830	277	0.41	90
AUG									
07...	0.006	0.08	0.044	0.014	--	792	13	<0.01	--
15...	<0.004	0.88	0.293	0.015	--	2700	65	0.12	--
15...	<0.004	0.53	0.171	0.025	--	1730	38	0.07	--
26...	0.006	0.07	0.038	0.014	--	357	1	<0.01	--
28...	--	--	--	--	--	--	--	--	--
SEP									
19...	0.004	0.10	0.051	0.015	--	775	12	--	--

PYRAMID AND WINNEMUCCA LAKES BASIN

269

103367592 EAGLE ROCK CREEK NEAR STATELINE, NV

LOCATION.--Lat 38°57'24", long 119°55'36", in SE 1/4 SE 1/4 sec.26, T.13 N., R.18 E., Douglas County, Hydrologic Unit 16050101, on right bank, 0.2 mi upstream from confluence of Edgewood Creek, and 0.7 mi east of Stateline.

DRAINAGE AREA.--0.59 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,480 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2.3 ft³/s, Mar. 2, 1991, gage height 5.05 ft; maximum gage height, 5.22 ft, Mar. 24, 1991, backwater from ice; minimum daily, 0.19 ft³/s, Sept. 16-25, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.3 ft³/s, Mar. 2, gage height 5.05 ft; maximum gage height, 5.22 ft, Mar. 24, backwater from ice; minimum daily, 0.19 ft³/s, Sept. 16-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.37	.30	.35	e.38	.40	.33	.30	.41	.38	.35	.24	.24
2	.37	.30	.37	e.40	.40	.82	.30	.40	.35	.34	.27	.24
3	.37	.30	.37	e.40	.40	.36	.31	.40	.35	.35	.26	.23
4	.33	.30	.37	e.40	.40	.51	.34	.40	.40	.32	.27	.23
5	.37	.30	.37	e.38	.40	.38	.35	.44	.44	.31	.26	.23
6	.37	.30	.37	e.39	.40	.48	.39	.47	.44	.28	.26	.23
7	.37	e.29	.37	e.40	.40	.40	.38	.47	.44	.27	.28	.25
8	.33	.30	.37	e.40	.40	.37	.37	.47	.42	.25	.28	.23
9	.37	.31	.37	e.38	.40	.37	.37	.44	.41	.25	.27	.23
10	.37	.30	.38	e.37	.40	.37	.37	.40	.40	.25	.26	.25
11	.33	.31	.40	e.40	.40	.40	e.35	.40	.40	.25	.26	.24
12	.32	.31	.40	e.44	.40	.37	.33	.41	.40	.25	.27	.23
13	.33	.31	.41	e.43	.40	.37	.36	.43	.40	.24	.27	.23
14	.33	.31	.41	e.42	.40	.37	.37	.43	.40	.25	.36	.23
15	.33	.32	.40	e.40	.40	e.42	.37	.43	.40	.25	.36	.22
16	.33	.33	e.37	.37	.40	e.45	.37	.43	.40	.24	.32	.19
17	.31	.32	e.34	.37	.37	.39	.37	.47	.40	.24	.32	.19
18	.34	.30	e.37	.37	.37	e.38	.37	.47	.40	.24	.31	.19
19	.37	.30	e.35	.37	.37	e.37	.37	.44	.40	.25	.31	.19
20	.37	.30	e.33	e.38	.37	.37	.37	.44	.40	.26	.31	.19
21	.32	.30	e.32	e.40	.37	.37	.37	.44	.40	.25	.32	.19
22	.32	.30	e.30	e.42	.36	.40	.38	.46	.39	.25	.30	.19
23	.32	.30	e.34	.41	.33	.40	.38	.46	.39	.25	.31	.19
24	.30	.30	e.37	.40	.33	e.35	.40	.45	.40	.25	.30	.19
25	.30	.30	e.40	.42	.33	e.33	.40	.43	.39	.25	.30	.19
26	.30	.72	e.40	.41	.33	.33	.39	.40	.40	.25	.32	.20
27	.30	.54	e.40	.42	.33	.30	.40	.40	.40	.25	.30	.20
28	.30	.41	e.38	.42	.33	.30	.41	.40	.42	.26	.24	.20
29	.30	.33	e.35	.40	---	.30	.42	.40	.37	.25	.24	.20
30	.30	.33	e.33	.40	---	.30	.41	.40	.36	.25	.24	.20
31	.30	---	e.35	.40	---	.30	---	.40	---	.25	.24	---
TOTAL	10.34	9.94	11.41	12.35	10.59	11.96	11.07	13.29	11.95	8.20	8.85	6.41
MEAN	.33	.33	.37	.40	.38	.39	.37	.43	.40	.26	.29	.21
MAX	.37	.72	.41	.44	.40	.82	.42	.47	.44	.35	.36	.25
MIN	.30	.29	.30	.37	.33	.30	.30	.40	.35	.24	.24	.19
AC-FT	21	20	23	24	21	24	22	26	24	16	18	13

CAL YR 1990 TOTAL 153.56 MEAN .42 MAX .72 MIN .29 AC-FT 305
WTR YR 1991 TOTAL 126.36 MEAN .35 MAX .82 MIN .19 AC-FT 251

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

103367592 EAGLE ROCK CREEK NEAR STATELINE, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to current year.

REMARKS.--In November 1989, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT									
25...	1130	0.30	51	8.1	19.0	5.0	9.8	97	0.002
29...	1435	0.29	--	--	13.0	5.0	--	--	--
DEC									
04...	1215	0.37	48	8.2	7.0	1.5	11.0	100	0.007
12...	0950	0.37	--	--	-1.0	2.0	--	--	--
JAN									
15...	1410	0.40	--	--	5.0	3.0	--	--	--
25...	1345	0.44	50	8.2	3.5	0.5	--	--	0.019
FEB									
21...	1330	0.37	50	8.2	13.0	3.0	--	--	0.016
MAR									
07...	0955	0.47	53	7.8	-0.5	0.5	--	--	0.042
APR									
16...	1630	0.37	50	8.4	2.0	1.5	9.6	88	0.023
18...	1034	0.37	53	--	--	--	--	--	--
24...	1130	0.40	52	--	11.5	3.0	10.4	99	0.046
MAY									
02...	1215	0.40	53	8.1	9.0	3.5	10.4	100	0.041
09...	1130	0.44	52	8.3	5.0	2.0	10.5	97	0.075
16...	1210	0.40	53	8.1	18.0	6.5	9.5	99	0.047
22...	1115	0.47	52	8.0	17.0	5.5	9.6	97	0.032
28...	1330	0.40	51	8.0	20.0	7.5	9.0	95	0.015
JUN									
04...	1045	0.40	--	--	--	--	--	--	--
05...	1440	0.44	52	8.2	20.5	7.5	8.8	94	0.010
12...	1530	0.40	53	8.0	25.0	11.0	--	--	0.002
JUL									
03...	0945	0.34	53	8.0	22.0	8.0	9.7	102	0.009
08...	1322	0.24	--	--	--	--	--	--	--
23...	1550	0.23	53	8.3	26.0	11.0	--	--	0.011
AUG									
07...	1150	0.26	52	8.2	24.0	5.0	9.6	95	0.012
26...	1045	0.36	51	7.8	18.0	8.5	--	--	0.007
28...	1120	0.28	--	--	13.0	6.0	--	--	--
SEP									
19...	1300	0.20	54	8.4	25.0	9.5	--	--	0.008

PYRAMID AND WINNEMUCCA LAKES BASIN

271

103367592 EAGLE ROCK CREEK NEAR STATELINE, NV--Continued

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT									
25...	<0.004	0.09	0.039	0.009	190	178	3	<0.01	--
29...	--	--	--	--	--	--	--	--	--
DEC									
04...	<0.004	0.08	0.022	0.010	100	124	4	<0.01	--
12...	--	--	--	--	--	--	--	--	--
JAN									
15...	--	--	--	--	--	--	--	--	--
25...	<0.004	0.10	0.033	0.009	--	197	5	0.01	--
FEB									
21...	0.005	0.15	0.027	0.013	--	179	3	<0.01	--
MAR									
07...	<0.004	0.13	0.034	0.010	--	457	6	0.01	51
APR									
16...	<0.004	0.12	0.025	0.012	--	244	2	<0.01	--
18...	--	--	--	--	--	--	--	--	--
24...	<0.004	0.11	0.025	0.011	--	265	5	0.01	--
MAY									
02...	<0.004	0.13	0.030	0.008	--	250	5	0.01	--
09...	<0.004	0.13	0.038	0.009	--	174	4	<0.01	--
16...	0.005	0.12	0.038	0.009	--	247	4	<0.01	--
22...	<0.004	0.12	0.035	0.011	--	257	5	0.01	--
28...	<0.004	0.11	0.029	0.013	--	210	4	<0.01	--
JUN									
04...	--	--	--	--	--	--	--	--	--
05...	<0.004	0.10	0.035	0.010	--	240	3	<0.01	--
12...	<0.004	0.12	0.030	0.010	--	181	4	<0.01	--
JUL									
03...	<0.004	0.12	0.035	0.007	--	234	6	0.01	--
08...	--	--	--	--	--	--	--	--	--
23...	<0.004	0.10	0.038	0.010	--	161	4	<0.01	--
AUG									
07...	<0.004	0.08	0.035	0.010	--	242	7	<0.01	--
26...	<0.004	0.10	0.030	0.016	--	233	6	0.01	--
28...	--	--	--	--	--	--	--	--	--
SEP									
19...	0.004	0.11	0.041	0.014	--	182	4	<0.01	--

PYRAMID AND WINNEMUCCA LAKES BASIN

10336765 EDGEWOOD CREEK AT LAKE TAHOE NEAR STATELINE, NV

LOCATION.--Lat 38°58'05", long 119°56'54", in NE 1/4 NW 1/4 sec.27, T.13 N., R.18 E., Douglas County, Hydrologic Unit 16050101, on right bank, 800 ft above mouth, on Edgewood Golf Course at Stateline.

DRAINAGE AREA.--5.50 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1989 to current year. Discharge measurements only 1984-1985.

GAGE.--Water-stage recorder. Elevation of gage is 6,240 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor. Flow is periodically regulated for commercial use.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35 ft³/s, Sept. 18, 1989, gage height, 5.31 ft; maximum gage height, 5.83 ft, Mar. 4, 1991; no flow, June 22, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27 ft³/s, Mar. 4, gage height 5.83 ft; minimum daily, 0.03 ft³/s, July 7, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	.55	1.6	e1.4	1.1	2.6	2.5	2.0	1.5	.93	.46	.87
2	1.8	.42	1.7	e1.4	1.2	2.8	1.8	2.9	1.4	.31	.37	.28
3	1.6	.20	1.7	e1.3	1.1	2.5	1.7	3.2	1.3	.22	.37	.17
4	1.7	.25	1.7	e1.3	1.8	8.7	1.9	1.9	1.0	.32	.27	.25
5	1.2	1.7	1.7	e1.3	3.1	6.1	2.0	3.9	.84	.28	.29	1.0
6	2.8	1.1	e1.6	e1.3	2.3	4.6	1.8	3.8	.91	.09	.27	.52
7	1.7	e.90	e1.6	e1.3	2.0	3.4	1.4	3.0	.85	.03	.25	.94
8	1.9	e.80	1.5	e1.3	1.9	2.1	1.5	3.2	.98	.05	.27	.32
9	3.5	.58	1.5	1.3	1.9	2.0	2.6	4.4	.85	.05	.27	.36
10	4.0	.83	e1.7	1.6	1.9	2.0	3.4	3.5	.84	.03	.25	.86
11	2.4	.94	1.9	1.7	1.9	2.2	3.2	3.3	.90	.42	.26	.66
12	2.0	.96	2.7	1.8	1.9	2.2	2.6	2.9	.52	.82	.23	.60
13	1.9	1.8	2.5	1.8	1.9	2.3	2.6	2.2	.34	.48	.15	.36
14	1.8	1.1	2.5	1.9	1.7	2.2	2.7	2.6	.41	.40	.10	.32
15	1.7	.81	1.6	1.9	1.2	2.2	2.7	1.8	.51	.52	.63	.25
16	.72	.45	1.6	1.9	1.8	2.2	1.8	1.6	.26	.28	.45	.20
17	1.0	.67	1.6	1.9	2.0	2.3	1.6	1.8	.47	.24	.50	.17
18	.51	.86	e1.5	2.0	1.9	2.6	2.6	1.6	.45	.23	.23	.14
19	.87	e.88	e1.5	1.8	1.9	2.7	2.8	1.4	.15	.34	.19	.17
20	.75	e.91	e1.5	1.8	1.9	2.2	2.5	1.2	.10	.53	.30	.20
21	.73	.94	e1.5	1.8	1.9	2.0	2.7	.44	.08	.51	.32	.17
22	.59	.97	e1.5	1.8	1.9	1.9	3.1	.33	.10	.33	.30	.17
23	.22	1.0	e1.5	1.8	1.9	1.9	3.0	.58	.15	.24	.42	.17
24	.46	1.1	e1.5	1.8	1.6	e1.8	2.7	.69	.21	.24	.19	.21
25	.11	1.3	e1.5	1.8	1.5	e1.8	2.5	.93	.36	.24	.12	.24
26	.11	1.4	e1.4	1.8	1.2	1.7	2.3	1.0	.57	.28	.11	.20
27	.54	1.4	e1.4	1.7	1.4	e1.6	2.5	1.3	.68	.17	.29	.22
28	.55	1.4	e1.4	1.6	1.9	1.6	2.7	1.7	1.2	.11	.27	.19
29	.18	1.5	e1.4	1.2	---	1.5	1.9	1.7	1.2	.14	.35	.19
30	.39	1.6	e1.4	.87	---	1.6	2.0	1.7	1.1	.34	.60	.19
31	.64	---	e1.4	1.1	---	2.1	---	1.9	---	.51	.82	---
TOTAL	40.07	29.32	51.1	49.27	49.7	79.4	71.1	64.47	20.23	9.68	9.90	10.59
MEAN	1.29	.98	1.65	1.59	1.77	2.56	2.37	2.08	.67	.31	.32	.35
MAX	4.0	1.8	2.7	2.0	3.1	8.7	3.4	4.4	1.5	.93	.82	1.0
MIN	.11	.20	1.4	.87	1.1	1.5	1.4	.33	.08	.03	.10	.14
AC-FT	79	58	101	98	99	157	141	128	40	19	20	21

CAL YR 1990 TOTAL 609.82 MEAN 1.67 MAX 16 MIN .00 AC-FT 1210
 WTR YR 1991 TOTAL 484.83 MEAN 1.33 MAX 8.7 MIN .03 AC-FT 962

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

10336765 EDGEWOOD CREEK AT LAKE TAHOE NEAR STATELINE, NV--Continued

273

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1984-85, 1988 to current year.

REMARKS.--In Dec. 1988, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT									
25...	1015	0.09	104	8.5	18.0	10.0	8.1	90	0.009
29...	1312	0.19	--	--	15.0	11.0	--	--	--
DEC									
04...	1000	1.7	110	8.1	4.0	4.5	10.4	100	0.025
12...	1350	6.3	105	--	6.5	3.0	--	--	--
JAN									
15...	0945	1.9	112	--	5.0	3.5	--	--	--
25...	1220	1.8	95	8.1	5.5	2.5	10.9	102	0.023
FEB									
21...	1130	1.9	98	8.6	11.5	5.5	10.6	105	0.003
MAR									
04...	0100	5.0	103	8.0	3.0	3.0	--	--	0.035
04...	0400	13	91	7.9	4.0	2.5	--	--	0.039
04...	1410	20	100	--	5.5	3.5	--	--	0.031
06...	1510	4.7	--	--	--	--	--	--	--
07...	1130	3.5	147	7.9	3.0	3.0	--	--	0.050
19...	1215	3.2	195	8.5	2.0	4.5	10.5	104	0.023
APR									
12...	1245	2.5	142	--	8.0	7.0	--	--	0.008
17...	1100	1.8	135	9.1	8.0	8.5	10.4	113	0.011
18...	0900	2.7	135	--	0.0	7.0	--	--	--
24...	0930	2.7	124	--	11.0	10.0	9.5	107	0.007
MAY									
02...	1000	2.2	131	9.0	4.5	9.0	9.6	105	0.017
09...	0955	3.6	105	9.4	5.0	11.5	8.5	99	0.011
16...	1015	1.8	108	9.5	17.5	13.0	9.4	114	0.009
22...	0955	0.18	112	9.8	19.0	12.5	10.4	124	0.008
28...	1630	2.0	110	10.1	13.5	16.0	10.3	133	0.008
JUN									
04...	1220	1.0	104	--	--	--	--	--	--
05...	1240	0.88	101	10.1	15.5	17.0	8.0	105	0.007
12...	1330	0.55	118	10.3	26.0	21.0	11.0	157	0.008
19...	1400	0.10	124	10.6	16.5	20.0	--	--	0.007
28...	2015	1.4	112	10.1	9.0	15.5	--	--	0.052
JUL									
09...	0915	0.04	--	--	18.0	17.0	--	--	--
20...	1740	0.60	141	--	14.5	20.5	--	--	0.010
23...	1410	0.23	123	10.3	27.5	22.0	9.7	141	0.008
AUG									
07...	1030	0.24	122	10.4	21.5	13.5	--	--	0.008
15...	0300	1.2	109	8.9	13.5	19.0	--	--	0.045
26...	0945	0.08	121	9.5	17.0	11.5	8.8	102	0.008
28...	1300	0.29	--	--	20.5	19.0	--	--	--
SEP									
06...	1820	0.56	268	8.0	14.0	18.0	--	--	0.184
19...	1110	0.16	112	9.3	23.0	17.0	--	--	0.006

PYRAMID AND WINNEMUCCA LAKES BASIN
10336765 EDGEWOOD CREEK AT LAKE TAHOE NEAR STATELINE, NV--Continued

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT								
25...	0.065	0.018	0.28	0.22	0.067	0.042	0.028	0.020
29...	--	--	--	--	--	--	--	--
DEC								
04...	--	0.044	0.32	--	0.063	--	--	0.018
12...	--	--	--	--	--	--	--	--
JAN								
15...	--	--	--	--	--	--	--	--
25...	0.012	0.011	0.15	0.08	0.040	0.044	0.018	0.012
FEB								
21...	--	<0.004	0.27	--	0.043	--	--	0.011
MAR								
04...	--	0.012	0.36	--	0.080	--	--	0.021
04...	--	0.020	0.45	--	0.114	--	--	0.028
04...	--	0.015	0.65	--	0.123	--	--	0.039
06...	--	--	--	--	--	--	--	--
07...	0.055	<0.004	0.58	0.35	0.104	0.030	0.061	0.009
19...	--	0.009	0.32	--	0.063	--	--	0.012
APR								
12...	--	<0.004	0.33	--	0.052	--	--	0.007
17...	0.007	<0.004	0.26	0.16	0.041	0.021	0.017	0.008
18...	--	--	--	--	--	--	--	--
24...	--	0.013	0.29	--	0.016	--	--	0.008
MAY								
02...	--	<0.004	0.30	--	0.055	--	--	0.009
09...	0.009	<0.004	0.24	0.16	0.043	0.023	0.013	0.007
16...	--	<0.004	0.16	--	0.041	--	--	0.009
22...	0.009	0.007	0.18	0.15	0.035	0.027	0.010	0.009
28...	--	<0.004	0.27	--	0.038	--	--	0.015
JUN								
04...	--	--	--	--	--	--	--	--
05...	--	<0.004	0.25	--	0.045	--	--	0.010
12...	--	<0.004	0.33	--	0.043	--	--	0.011
19...	--	0.004	0.33	--	0.050	--	--	0.013
28...	0.024	0.005	0.35	0.33	0.119	0.049	0.025	0.013
JUL								
09...	--	--	--	--	--	--	--	--
20...	--	0.012	0.41	--	0.067	--	--	0.016
23...	0.027	0.011	0.42	0.33	0.052	0.040	0.015	0.014
AUG								
07...	--	0.010	0.48	--	0.060	--	--	0.014
15...	--	<0.004	0.90	--	0.115	--	--	0.023
26...	--	0.011	0.37	--	0.047	--	--	0.007
28...	--	--	--	--	--	--	--	--
SEP								
06...	--	0.161	2.0	--	0.763	--	--	0.243
19...	0.087	<0.004	0.38	0.22	0.074	0.043	0.017	0.008

PYRAMID AND WINNEMUCCA LAKES BASIN

10336765 EDGEWOOD CREEK AT LAKE TAHOE NEAR STATELINE, NV--Continued

275

DATE	PHOS- PHORUS HYDRO. + ORTHO DIS. (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	IRON, BIO. REACTIVE DIS- SOLVED (UG/L AS FE)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT								
25...	0.02	330	170	316	140	3	<0.01	--
29...	--	--	--	--	--	--	--	--
DEC								
04...	--	760	--	705	--	19	0.09	--
12...	--	--	--	--	--	--	--	--
JAN								
15...	--	--	--	--	--	--	--	--
25...	0.01	--	--	349	130	3	0.02	--
FEB								
21...	--	--	--	369	--	2	0.01	--
MAR								
04...	--	--	--	771	--	27	0.36	88
04...	--	--	--	1200	--	40	1.4	85
04...	--	--	--	1150	--	32	1.7	95
06...	--	--	--	--	--	--	--	--
07...	0.01	--	--	1240	208	12	0.11	99
19...	--	--	--	748	--	10	0.09	--
APR								
12...	--	--	--	558	--	--	--	--
17...	0.01	--	--	499	163	3	0.02	--
18...	--	--	--	--	--	--	--	--
24...	--	--	--	454	--	3	0.02	--
MAY								
02...	--	--	--	511	--	7	0.04	--
09...	<0.01	--	--	427	213	4	0.04	--
16...	--	--	--	388	--	4	0.02	--
22...	0.01	--	--	364	440	4	<0.01	--
28...	--	--	--	502	--	10	0.05	--
JUN								
04...	--	--	--	--	--	--	--	--
05...	--	--	--	548	--	3	0.01	--
12...	--	--	--	318	--	2	<0.01	--
19...	--	--	--	442	--	4	<0.01	--
28...	0.03	--	--	1110	250	17	0.06	--
JUL								
09...	--	--	--	--	--	--	--	--
20...	--	--	--	700	--	6	0.01	--
23...	0.02	--	--	419	230	4	<0.01	--
AUG								
07...	--	--	--	520	--	4	<0.01	--
15...	--	--	--	641	--	9	0.03	--
26...	--	--	--	282	--	4	<0.01	--
28...	--	--	--	--	--	--	--	--
SEP								
06...	--	--	--	1510	--	37	0.06	97
19...	0.01	--	--	260	80.9	2	<0.01	--

PYRAMID AND WINNEMUCCA LAKES BASIN

10336770 TROUT CREEK AT U.S. FOREST SERVICE ROAD 12N01 NEAR MEYERS, CA

LOCATION.--Lat 38°51'48", long 119°57'26", in NE 1/4 NW 1/4 sec.26, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on right bank 50 ft downstream from U.S. Forest Service Road 12N01, about 2.2 mi upstream from confluence of Saxon Creek, and 2.6 mi northeast of Meyers.

DRAINAGE AREA.--7.40 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,850 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37 ft³/s, June 3, 1991, gage height, 5.17 ft; minimum daily, 1.9 ft³/s, Dec. 21, 1990, result of freezeup.

EXTREMES FOR CURRENT PERIOD.--May to September 1990: Maximum discharge, 13 ft³/s, July 18, gage height 4.81 ft; minimum daily, 2.9 ft³/s, Sept. 13, 17.

Water Year 1991: Maximum discharge, 37 ft³/s, June 3, gage height, 5.17 ft; minimum daily, 1.9 ft³/s, Dec. 21, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	9.8	4.9	3.8	3.3
2	---	---	---	---	---	---	---	---	9.6	4.9	3.8	3.2
3	---	---	---	---	---	---	---	---	9.2	4.9	3.9	3.1
4	---	---	---	---	---	---	---	---	9.3	4.8	4.0	3.1
5	---	---	---	---	---	---	---	---	9.8	4.6	3.8	3.1
6	---	---	---	---	---	---	---	---	10	4.6	3.7	3.1
7	---	---	---	---	---	---	---	---	9.7	4.6	3.8	3.1
8	---	---	---	---	---	---	---	---	9.4	4.6	4.0	3.1
9	---	---	---	---	---	---	---	---	9.9	4.6	4.0	3.1
10	---	---	---	---	---	---	---	---	9.4	4.6	3.8	3.1
11	---	---	---	---	---	---	---	---	8.7	4.6	3.8	3.1
12	---	---	---	---	---	---	---	---	8.3	4.5	3.6	3.0
13	---	---	---	---	---	---	---	---	8.3	4.3	3.4	2.9
14	---	---	---	---	---	---	---	---	8.5	4.6	3.4	3.0
15	---	---	---	---	---	---	---	---	7.7	5.6	3.3	3.1
16	---	---	---	---	---	---	---	---	7.8	6.5	3.3	3.0
17	---	---	---	---	---	---	---	---	7.2	5.9	3.3	2.9
18	---	---	---	---	---	---	---	---	6.8	6.5	3.3	3.1
19	---	---	---	---	---	---	---	---	6.7	6.5	3.9	3.5
20	---	---	---	---	---	---	---	---	6.2	5.6	4.5	3.5
21	---	---	---	---	---	---	---	---	6.2	4.9	4.0	3.5
22	---	---	---	---	---	---	---	7.4	6.1	4.9	3.7	3.5
23	---	---	---	---	---	---	---	8.6	5.9	4.7	3.5	4.3
24	---	---	---	---	---	---	---	8.4	5.8	4.3	3.5	4.5
25	---	---	---	---	---	---	---	7.7	5.5	4.3	3.5	3.8
26	---	---	---	---	---	---	---	7.9	5.4	4.7	3.5	3.8
27	---	---	---	---	---	---	---	8.4	5.2	4.5	3.5	3.5
28	---	---	---	---	---	---	---	8.7	5.2	4.3	3.3	3.5
29	---	---	---	---	---	---	---	7.9	5.2	4.2	3.3	3.5
30	---	---	---	---	---	---	---	9.2	5.1	4.0	3.3	3.3
31	---	---	---	---	---	---	---	11	---	3.8	3.3	---
TOTAL	---	---	---	---	---	---	---	---	227.9	150.3	112.8	99.6
MEAN	---	---	---	---	---	---	---	---	7.60	4.85	3.64	3.32
MAX	---	---	---	---	---	---	---	---	10	6.5	4.5	4.5
MIN	---	---	---	---	---	---	---	---	5.1	3.8	3.3	2.9
AC-FT	---	---	---	---	---	---	---	---	452	298	224	198

PYRAMID AND WINNEMUCCA LAKES BASIN

277

10336770 TROUT CREEK AT U.S. FOREST SERVICE ROAD 12N01 NEAR MEYERS, CA--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	3.8	e3.2	2.3	2.5	e2.7	3.8	7.9	16	9.2	4.2	3.3
2	3.3	e3.5	e3.1	2.4	2.5	e2.5	3.5	7.0	21	8.5	4.0	3.3
3	3.2	e3.2	e3.2	2.6	2.5	e4.0	3.6	6.6	24	7.8	4.0	3.2
4	3.1	3.8	2.9	2.7	2.5	e11	4.9	8.2	24	7.4	4.0	3.2
5	3.1	3.8	3.0	2.5	2.5	e5.0	5.9	10	22	7.3	4.0	3.4
6	3.1	3.6	2.9	2.5	2.5	e3.5	5.7	12	20	6.5	4.0	4.1
7	3.1	e3.2	2.9	2.5	2.5	e3.0	5.3	16	20	6.2	4.0	4.4
8	3.1	4.1	2.9	2.5	2.5	e3.0	5.0	e12	21	5.6	4.1	3.9
9	3.1	3.9	2.8	2.5	2.5	e3.0	5.2	e11	22	5.5	4.0	3.8
10	3.1	3.8	2.9	2.5	2.5	e2.9	5.3	e9.0	24	5.4	4.0	3.9
11	3.1	3.8	2.9	2.5	2.5	e2.7	e4.8	e7.0	23	5.2	4.0	4.0
12	2.9	3.8	2.9	2.5	2.5	e2.8	4.4	e6.4	22	5.2	3.8	3.8
13	2.9	3.8	2.9	2.5	2.5	e2.8	5.0	e6.0	21	5.1	3.8	3.6
14	2.9	3.8	e2.5	2.5	2.7	e2.7	5.5	e8.0	19	4.9	3.9	3.3
15	2.9	3.8	e2.8	2.5	2.9	e2.7	5.3	e10	17	4.8	4.3	3.3
16	2.9	3.8	e3.0	2.5	2.9	e2.8	5.0	e13	16	4.7	4.2	3.3
17	2.9	3.8	e2.5	2.5	2.9	e2.8	e4.6	e12	16	4.9	4.0	3.3
18	3.0	3.8	2.7	2.5	e2.8	e2.9	4.4	e12	15	5.0	3.8	3.2
19	4.0	3.8	e2.5	2.7	2.8	e2.9	4.7	e11	14	5.4	3.8	3.1
20	3.5	e3.5	e2.2	e2.6	2.7	e2.9	4.9	e11	13	5.9	3.8	3.1
21	3.3	e3.3	e1.9	e2.4	2.7	e2.9	4.7	e11	13	6.0	3.7	3.1
22	3.3	e3.7	e2.3	e2.6	2.7	e2.9	5.0	11	12	5.1	3.4	3.1
23	3.3	e3.7	e2.5	e2.8	2.7	2.9	5.6	14	12	4.6	3.4	3.1
24	3.2	e3.6	2.7	e3.1	2.7	3.0	5.5	16	11	4.6	3.3	3.1
25	3.2	e3.4	2.7	e2.8	2.7	e2.7	4.9	18	11	4.5	3.3	3.3
26	3.3	e3.4	2.7	e2.9	2.7	e2.5	4.7	17	11	4.3	3.3	3.3
27	3.3	e3.3	2.7	e2.8	2.9	e2.7	5.3	16	11	4.3	3.3	3.3
28	3.3	e3.2	2.5	e2.7	2.9	e2.8	6.4	17	11	4.3	3.3	3.3
29	3.3	e3.3	2.5	2.7	---	2.9	7.9	17	11	4.3	3.3	3.3
30	3.3	3.5	2.3	2.6	---	3.2	8.5	15	10	4.3	3.3	3.3
31	3.5	---	2.3	2.5	---	3.5	---	14	---	4.3	3.3	---
TOTAL	98.8	108.8	83.8	80.2	74.2	100.6	155.3	362.1	503	171.1	116.6	102.7
MEAN	3.19	3.63	2.70	2.59	2.65	3.25	5.18	11.7	16.8	5.52	3.76	3.42
MAX	4.0	4.1	3.2	3.1	2.9	11	8.5	18	24	9.2	4.3	4.4
MIN	2.9	3.2	1.9	2.3	2.5	2.5	3.5	6.0	10	4.3	3.3	3.1
AC-FT	196	216	166	159	147	200	308	718	998	339	231	204

WTR YR 1991 TOTAL 1957.2 MEAN 5.36 MAX 24 MIN 1.9 AC-FT 3880

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

10336770 TROUT CREEK AT U. S. FOREST SERVICE ROAD 12N01 NEAR MEYERS, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to current year.

REMARKS.--In November 1989, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT									
24...	1500	3.1	54	7.1	16.5	4.5	9.7	95	0.002
25...	1415	3.1	--	--	18.0	5.0	--	--	--
DEC									
03...	1330	3.2	55	8.0	2.5	0.5	11.5	103	0.009
11...	1000	2.9	--	--	0.0	1.5	--	--	--
JAN									
24...	1110	3.1	63	7.9	3.5	0.5	--	--	0.022
MAR									
21...	1020	2.9	57	8.3	-2.0	0.5	--	--	0.010
APR									
17...	1308	4.2	51	--	1.5	1.0	--	--	--
MAY									
01...	1630	6.2	46	8.2	2.0	2.0	--	--	0.015
08...	1420	14	36	8.0	7.5	4.5	9.8	100	0.017
15...	1440	10	40	8.0	14.0	6.5	9.5	100	0.011
21...	1540	11	38	8.0	13.0	6.5	9.3	99	0.008
22...	1945	14	35	8.1	12.5	6.0	9.6	100	0.010
24...	1920	19	28	--	10.0	6.0	--	--	0.010
31...	1420	14	28	8.1	15.0	6.0	9.6	101	0.004
JUN									
04...	1710	26	21	8.1	15.0	8.0	8.9	99	0.003
05...	1118	21	22	--	--	--	--	--	--
11...	1630	22	23	8.0	23.0	10.5	8.4	99	0.002
17...	1440	16	26	8.0	20.5	10.0	8.6	99	0.003
JUL									
02...	1450	8.8	35	8.1	26.0	11.5	8.0	95	0.006
09...	1255	5.7	--	--	20.0	10.0	--	--	--
22...	1345	5.2	43	8.2	21.0	8.0	8.8	95	0.005
AUG									
06...	1310	4.0	47	8.0	21.0	6.0	9.6	100	0.007
27...	1355	3.3	50	8.3	15.0	6.0	10.4	109	0.012
29...	1310	3.6	--	--	23.5	8.0	--	--	--
SEP									
18...	1350	3.3	55	8.1	27.0	9.0	--	--	0.010

PYRAMID AND WINNEMUCCA LAKES BASIN

279

10336770 TROUT CREEK AT U. S. FOREST SERVICE ROAD 12N01 NEAR MEYERS, CA--Continued

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT									
24...	<0.004	0.05	0.034	0.010	80	58	4	0.03	--
25...	--	--	--	--	--	--	--	--	--
DEC									
03...	<0.004	0.07	0.016	0.011	40	56	--	--	--
11...	--	--	--	--	--	--	--	--	--
JAN									
24...	<0.004	0.12	0.047	0.012	--	94	4	0.03	--
MAR									
21...	0.005	0.10	0.018	0.008	--	56	5	0.04	--
APR									
17...	--	--	--	--	--	--	--	--	--
MAY									
01...	<0.004	0.17	0.024	0.008	--	135	2	0.03	--
08...	<0.004	0.38	0.043	0.011	--	476	23	0.87	--
15...	0.006	0.23	0.031	0.010	--	298	12	0.32	--
21...	0.009	0.22	0.036	0.012	--	394	22	0.64	--
22...	0.009	0.43	0.051	0.012	--	776	21	0.82	--
24...	<0.004	0.68	0.077	0.005	--	1680	64	3.3	30
31...	<0.004	0.19	0.037	0.007	--	230	7	0.26	--
JUN									
04...	<0.004	0.33	0.069	0.006	--	795	32	2.3	--
05...	--	--	--	--	--	--	--	--	--
11...	<0.004	0.22	0.028	0.008	--	253	18	1.1	--
17...	<0.004	0.13	0.021	0.007	--	218	5	0.22	--
JUL									
02...	0.010	0.12	0.031	0.012	--	133	4	0.09	--
09...	--	--	--	--	--	--	--	--	--
22...	<0.004	0.10	0.023	0.007	--	91	3	0.04	--
AUG									
06...	<0.004	0.05	0.024	0.010	--	82	2	0.02	--
27...	<0.004	0.08	0.026	0.013	--	86	2	0.02	--
29...	--	--	--	--	--	--	--	--	--
SEP									
18...	<0.004	0.06	0.030	0.012	--	82	2	0.02	--

PYRAMID AND WINNEMUCCA LAKES BASIN

10336775 TROUT CREEK AT PIONEER TRAIL NEAR SOUTH LAKE TAHOE, CA

LOCATION.--Lat 38°54'13", long 119°58'04", in SE 1/4 NE 1/4 sec.10, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank 200 ft upstream of Pioneer Trail Road, 0.6 mi upstream of confluence of Cold Creek, and 2.8 mi south of South Lake Tahoe.

DRAINAGE AREA.--23.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,270 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60 ft³/s, Mar. 4, 1991, gage height, 3.93 ft; minimum daily, 2.0 ft³/s, Dec. 22, 1990.

EXTREMES FOR CURRENT PERIOD.--June to September 1990: Maximum discharge, 18 ft³/s, June 2, gage height 1.66 ft; minimum daily, 3.8 ft³/s, Sept. 4.

Water Year 1991: Maximum discharge, 60 ft³/s, Mar. 4, gage height, 3.93 ft; minimum daily, 2.0 ft³/s, Dec. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	17	8.6	5.6	4.4
2	---	---	---	---	---	---	---	---	17	8.5	5.5	4.2
3	---	---	---	---	---	---	---	---	16	8.2	5.3	4.0
4	---	---	---	---	---	---	---	---	16	8.2	5.5	3.8
5	---	---	---	---	---	---	---	---	16	8.0	5.4	4.0
6	---	---	---	---	---	---	---	---	16	7.9	5.5	4.0
7	---	---	---	---	---	---	---	---	16	7.8	5.5	4.0
8	---	---	---	---	---	---	---	---	15	7.9	5.9	4.0
9	---	---	---	---	---	---	---	---	16	7.6	6.3	4.0
10	---	---	---	---	---	---	---	---	16	7.7	6.0	4.1
11	---	---	---	---	---	---	---	---	16	7.8	5.8	4.2
12	---	---	---	---	---	---	---	---	15	7.6	5.6	4.1
13	---	---	---	---	---	---	---	---	14	7.6	6.4	4.1
14	---	---	---	---	---	---	---	---	15	7.6	5.5	4.0
15	---	---	---	---	---	---	---	---	15	8.8	4.7	4.1
16	---	---	---	---	---	---	---	---	15	13	4.7	4.2
17	---	---	---	---	---	---	---	---	14	10	4.8	4.6
18	---	---	---	---	---	---	---	---	13	8.9	4.9	4.6
19	---	---	---	---	---	---	---	---	13	11	5.3	5.0
20	---	---	---	---	---	---	---	---	12	9.1	6.7	4.5
21	---	---	---	---	---	---	---	---	12	8.2	5.8	4.4
22	---	---	---	---	---	---	---	---	11	8.1	5.3	4.5
23	---	---	---	---	---	---	---	---	11	7.5	5.1	4.9
24	---	---	---	---	---	---	---	---	10	7.7	5.0	6.7
25	---	---	---	---	---	---	---	---	10	7.4	4.9	5.7
26	---	---	---	---	---	---	---	---	9.7	7.3	4.8	e5.2
27	---	---	---	---	---	---	---	---	9.4	6.5	4.8	e5.0
28	---	---	---	---	---	---	---	---	9.2	6.0	4.5	e4.8
29	---	---	---	---	---	---	---	---	9.0	6.0	4.3	e4.8
30	---	---	---	---	---	---	---	---	8.8	5.7	4.4	e4.5
31	---	---	---	---	---	---	---	---	---	5.7	4.4	---
TOTAL	---	---	---	---	---	---	---	---	403.1	247.9	164.2	134.4
MEAN	---	---	---	---	---	---	---	---	13.4	8.00	5.30	4.48
MAX	---	---	---	---	---	---	---	---	17	13	6.7	6.7
MIN	---	---	---	---	---	---	---	---	8.8	5.7	4.3	3.8
AC-FT	---	---	---	---	---	---	---	---	800	492	326	267

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

281

10336775 TROUT CREEK AT PIONEER TRAIL NEAR SOUTH LAKE TAHOE, CA--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4.5	6.3	e4.6	e3.5	e5.7	4.7	8.8	15	27	15	6.7	4.4
2	e4.5	5.6	e4.8	e3.4	e6.4	5.0	8.5	13	34	14	6.4	4.4
3	e4.5	5.1	e4.9	e4.3	e5.7	11	8.8	13	39	13	6.2	4.6
4	e4.3	5.0	e5.0	e4.5	e5.4	34	10	13	40	12	6.3	5.1
5	e4.3	5.5	e5.0	e4.2	e5.6	17	13	17	39	12	6.7	5.9
6	e4.3	5.5	e4.9	e3.9	e5.3	10	17	21	35	11	6.1	5.3
7	e4.3	4.5	e4.8	e5.3	e5.1	9.5	15	22	35	11	5.9	6.4
8	e4.3	5.5	e4.6	e4.5	e5.0	8.4	13	27	36	10	5.8	4.8
9	e4.3	5.2	e4.9	e4.0	e5.0	8.4	13	24	38	10	5.6	4.5
10	e4.3	4.8	e5.2	e4.6	e5.0	7.0	13	19	40	10	5.4	5.3
11	e4.3	4.5	e5.3	e5.0	e5.2	6.5	11	17	42	10	5.4	5.3
12	e4.2	4.5	e5.0	e5.6	e5.6	7.6	11	16	39	9.7	5.3	4.9
13	e4.2	4.8	e4.6	e5.3	e6.0	6.6	12	18	36	9.6	5.6	4.7
14	e4.2	4.7	e3.9	e5.0	e6.4	6.6	13	17	32	9.1	6.1	4.5
15	e4.2	5.0	e4.3	e5.3	e7.0	6.5	13	20	29	8.9	6.4	4.4
16	e4.2	5.0	e4.0	e5.6	e7.4	6.7	12	24	27	9.0	6.2	4.4
17	e4.2	5.2	e4.4	e5.8	e7.7	7.1	11	25	26	8.6	5.6	4.3
18	e4.4	5.5	e4.8	e5.9	e7.8	7.0	10	19	24	8.9	5.4	4.3
19	e5.6	5.6	e4.9	e5.8	e7.6	7.1	11	18	23	9.5	5.1	4.2
20	e5.2	5.8	e3.5	e5.5	e7.2	6.6	12	17	21	10	5.0	4.1
21	e5.0	4.8	e2.5	e5.2	5.9	6.6	11	17	20	12	5.0	4.1
22	e4.8	5.5	e2.0	e4.7	5.9	5.5	12	21	19	9.0	4.7	4.1
23	e4.6	5.5	e2.3	e4.0	5.7	6.5	13	27	18	9.2	4.7	4.0
24	e4.5	5.4	e2.7	e4.4	5.3	5.0	14	30	18	8.3	4.5	3.9
25	e4.3	4.8	e3.0	e4.6	4.8	5.1	12	34	18	8.0	4.4	4.0
26	3.9	4.9	e3.5	e4.3	4.8	6.3	12	35	17	7.8	4.7	4.0
27	4.0	e4.3	e3.3	e3.9	5.1	6.4	12	31	17	7.7	4.7	4.1
28	4.4	e3.7	e3.7	e4.1	5.4	7.1	13	31	18	7.8	4.9	4.2
29	4.7	e4.0	e3.3	e4.4	---	7.3	15	31	18	7.8	4.7	4.0
30	4.9	e4.4	e2.8	e4.2	---	7.6	16	31	16	7.1	4.6	4.0
31	5.7	---	e3.1	e5.0	---	8.8	---	26	---	6.7	4.5	---
TOTAL	139.1	150.9	125.6	145.8	165.0	255.5	366.1	689	841	302.7	168.6	136.2
MEAN	4.49	5.03	4.05	4.70	5.89	8.24	12.2	22.2	28.0	9.76	5.44	4.54
MAX	5.7	6.3	5.3	5.9	7.8	34	17	35	42	15	6.7	6.4
MIN	3.9	3.7	2.0	3.4	4.8	4.7	8.5	13	16	6.7	4.4	3.9
AC-FT	276	299	249	289	327	507	726	1370	1670	600	334	270

WTR YR 1991 TOTAL 3485.5 MEAN 9.55 MAX 42 MIN 2.0 AC-FT 6910

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

10336775 TROUT CREEK AT PIONEER TRAIL NEAR SOUTH LAKE TAHOE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to current year.

REMARKS.--In November 1989, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT									
24...	1615	4.7	56	7.4	16.5	7.5	10.0	105	0.003
29...	0905	4.6	--	--	13.5	3.5	--	--	--
DEC									
03...	1140	5.2	57	8.0	3.5	0.5	11.5	99	0.003
11...	1315	5.4	--	--	1.0	0.0	--	--	--
JAN									
18...	1300	6.0	--	--	7.0	0.5	--	--	--
23...	1400	4.0	59	8.0	6.0	0.0	11.7	101	0.019
FEB									
20...	1510	7.3	59	7.9	14.5	1.5	--	--	0.010
MAR									
04...	1250	48	41	--	5.0	0.5	--	--	0.113
08...	0920	10	60	7.9	3.5	0.0	11.2	97	0.056
APR									
16...	1415	12	56	8.4	5.0	3.0	12.1	116	0.013
17...	1527	13	58	--	5.0	2.0	--	--	--
MAY									
01...	0915	16	51	7.9	5.0	2.0	11.6	107	0.016
08...	1550	24	42	7.9	10.0	9.5	9.9	111	0.022
15...	1630	18	46	7.9	16.0	11.0	9.2	106	0.011
21...	1720	16	45	8.0	16.5	11.0	9.0	104	0.006
22...	2040	24	44	7.9	9.0	9.0	--	--	0.006
23...	1315	22	--	--	--	--	--	--	--
24...	1310	27	--	--	--	--	--	--	--
24...	1740	27	34	--	14.0	10.0	--	--	0.011
31...	1530	25	33	7.9	13.5	9.5	9.1	102	0.008
JUN									
04...	1540	35	27	7.8	17.0	11.0	8.8	102	0.008
04...	2120	40	26	8.0	11.0	9.5	--	--	0.006
05...	0930	39	25	--	13.5	5.0	--	--	--
11...	1500	39	24	8.0	24.0	13.0	8.3	100	0.004
17...	1230	26	29	8.0	20.0	11.0	9.0	103	0.005
JUL									
02...	1615	14	37	7.9	26.0	17.5	7.5	99	0.006
09...	1036	11	--	--	19.0	12.5	--	--	--
22...	1445	9.5	45	8.0	20.0	13.5	7.9	95	0.005
AUG									
06...	1450	6.4	55	8.1	20.0	15.5	8.1	103	0.005
27...	1515	5.2	53	8.0	14.5	13.0	9.2	111	0.005
29...	1030	4.7	--	--	19.5	8.5	--	--	--
SEP									
18...	1510	4.5	54	8.1	24.0	13.0	--	--	0.003

PYRAMID AND WINNEMUCCA LAKES BASIN

283

10336775 TROUT CREEK AT PIONEER TRAIL NEAR SOUTH LAKE TAHOE, CA--Continued

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, BIO. REACT- IVE TOTAL (UG/L AS FE)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT									
24...	<0.004	0.08	0.023	0.009	190	166	7	0.09	--
29...	--	--	--	--	--	--	--	--	--
DEC									
03...	<0.004	0.08	0.015	0.007	70	123	--	--	--
11...	--	--	--	--	--	--	--	--	--
JAN									
18...	--	--	--	--	--	--	--	--	--
23...	0.005	0.06	0.025	0.010	--	120	<1	E<0.01	--
FEB									
20...	0.006	0.14	0.019	0.006	--	265	6	0.12	--
MAR									
04...	<0.004	1.2	0.161	0.015	--	4170	116	15	63
08...	<0.004	0.19	0.026	0.010	--	350	2	0.05	--
APR									
16...	<0.004	0.15	0.020	0.008	--	338	1	0.03	--
17...	--	--	--	--	--	--	--	--	--
MAY									
01...	<0.004	0.22	0.022	0.002	--	298	1	0.04	--
08...	<0.004	0.24	0.030	0.010	--	299	4	0.26	--
15...	0.006	0.20	0.024	0.010	--	235	13	0.62	--
21...	0.009	0.14	0.019	0.011	--	234	10	0.44	--
22...	0.007	0.18	0.025	0.010	--	272	6	0.39	--
23...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	0.002	0.24	0.039	0.004	--	782	15	1.1	--
31...	<0.004	0.19	0.029	0.008	--	321	7	0.47	--
JUN									
04...	<0.004	0.22	0.044	0.006	--	465	14	1.3	--
04...	<0.004	0.31	0.063	0.008	--	869	132	14	12
05...	--	--	--	--	--	--	--	--	--
11...	0.004	0.20	0.032	0.007	--	469	11	1.2	--
17...	<0.004	0.12	0.022	0.008	--	249	6	0.43	--
JUL									
02...	0.008	0.14	0.033	0.012	--	264	9	0.35	--
09...	--	--	--	--	--	--	--	--	--
22...	0.007	0.15	0.027	0.009	--	247	2	0.05	--
AUG									
06...	<0.004	0.08	0.028	0.010	--	249	1	0.02	--
27...	0.004	0.10	0.031	0.010	--	297	2	0.03	--
29...	--	--	--	--	--	--	--	--	--
SEP									
18...	<0.004	0.06	0.032	0.023	--	264	1	0.01	--

E: ESTIMATED

PYRAMID AND WINNEMUCCA LAKES BASIN

10336780 TROUT CREEK NEAR TAHOE VALLEY, CA

LOCATION.--Lat 38°55'12", long 119°58'17", in NW 1/4 SE 1/4 sec.3, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank, 5 ft upstream from Martin Avenue Bridge, 500 ft upstream from Heavenly Valley Creek, and 1.8 mi east of Tahoe Valley.

DRAINAGE AREA.--36.7 mi².

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and sharp-crested weir in culvert at bridge. Datum of gage is 6,241.57 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except for estimated daily discharges, which are fair. Minor diversions for local water supply upstream from station.

AVERAGE DISCHARGE.--31 years, 35.9 ft³/s, 26,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 535 ft³/s, Feb. 1, 1963, gage height, 11.14 ft, from rating curve extended above 250 ft³/s on basis of computation of peak flow (weir formula); no flow for part of Sept. 11, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	1645	*91	*7.22				

Minimum daily, 5.7 ft³/s, Oct. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	9.3	e8.3	e8.0	e8.0	8.4	18	25	34	23	9.8	5.9
2	5.9	6.9	e8.3	e8.0	e8.0	7.2	17	21	39	21	9.5	5.9
3	5.8	e7.1	8.3	e8.0	e8.0	16	17	19	45	19	8.2	6.0
4	5.8	e7.5	8.2	e8.0	e8.0	53	20	20	51	18	8.2	6.6
5	5.7	7.7	8.5	e8.0	e8.0	35	25	25	52	17	9.5	7.6
6	6.0	7.3	e8.5	e8.0	e8.0	e24	30	29	47	16	9.3	7.3
7	6.3	e7.3	e8.5	e8.0	e8.0	e19	26	34	44	15	9.0	13
8	6.3	e7.3	e8.4	e8.0	e8.0	e17	23	41	45	15	8.8	9.2
9	6.6	e7.4	e8.4	e8.0	e8.0	e15	22	36	47	14	8.5	8.8
10	6.7	e7.4	e8.4	e8.0	e8.0	e14	23	28	50	14	8.2	10
11	6.7	e7.4	8.3	e8.0	e8.0	e13	19	25	51	13	8.1	10
12	6.7	7.4	e8.3	e8.0	e8.0	e13	18	24	51	12	7.3	9.3
13	6.7	7.4	e8.3	e8.0	e8.0	e13	19	27	50	12	7.7	8.9
14	6.5	7.3	e8.2	e8.0	e8.0	13	21	25	47	11	9.7	8.7
15	6.5	7.3	e8.2	e8.0	e8.0	e13	21	29	44	11	12	8.4
16	6.5	7.4	8.1	e8.0	e8.0	e13	20	33	41	11	10	8.1
17	6.3	7.3	8.1	e8.0	e8.0	e12	19	35	38	10	8.3	6.5
18	6.9	7.2	e8.1	e8.0	e8.0	12	17	28	36	11	7.9	6.3
19	9.6	7.5	e8.1	e8.0	e8.0	e12	18	25	34	16	7.4	6.1
20	8.9	7.3	e8.1	e8.0	e8.0	e12	19	25	32	17	7.3	6.1
21	8.8	e7.3	e8.1	e8.0	e8.0	13	18	25	30	20	7.1	5.9
22	8.1	e7.5	e8.0	e8.0	e8.0	e13	19	28	29	15	6.8	6.1
23	7.2	e7.6	e8.0	e8.0	e8.0	14	20	35	28	15	6.5	5.9
24	7.1	e7.7	e8.0	e8.0	e8.0	12	22	41	27	12	6.2	5.8
25	7.2	e7.8	e8.0	e8.0	e8.0	12	20	43	26	10	5.9	5.8
26	8.2	e7.9	e8.0	e8.0	e8.0	e12	18	42	25	11	5.9	6.0
27	8.1	e8.0	e8.0	e8.0	8.1	e13	20	40	26	11	6.0	5.9
28	6.6	8.1	e8.0	e8.0	8.4	e13	20	39	29	12	6.4	6.3
29	6.7	8.1	e8.0	e8.0	---	e13	23	38	29	12	6.5	6.3
30	6.6	8.3	e8.0	e8.0	---	15	25	41	26	11	6.4	6.3
31	8.3	---	e8.0	e8.0	---	16	---	34	---	10	6.2	---
TOTAL	215.3	227.0	253.7	248.0	224.5	480.6	617	960	1153	435	244.6	219.0
MEAN	6.95	7.57	8.18	8.00	8.02	15.5	20.6	31.0	38.4	14.0	7.89	7.30
MAX	9.6	9.3	8.5	8.0	8.4	53	30	43	52	23	12	13
MIN	5.7	6.9	8.0	8.0	8.0	7.2	17	19	25	10	5.9	5.8
AC-FT	427	450	503	492	445	953	1220	1900	2290	863	485	434

CAL YR 1990 TOTAL 5030.6 MEAN 13.8 MAX 37 MIN 3.6 AC-FT 9980
WTR YR 1991 TOTAL 5277.7 MEAN 14.5 MAX 53 MIN 5.7 AC-FT 10470

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

285

10336790 TROUT CREEK AT SOUTH LAKE TAHOE, CA

LOCATION.--Lat 38°55'56", long 119°58'40", in SE 1/4 NW 1/4 sec. 3, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, near center of bridge span on downstream side of U.S. Highway 50 bridge, 1.2 mi upstream from Lake Tahoe, and 1.9 mi northeast of South Lake Tahoe Post Office.

PERIOD OF RECORD.--Water years 1972-74, 1989 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1971 to June 1974, October 1988 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1971 to June 1974, October 1988 to current year.

REMARKS.--Sediment samples were collected during most days where a water temperature is published. Discharge record used to compute sediment based on sum of Trout Creek near Tahoe Valley (station 10336780) and Heavenly Valley Creek near Tahoe Valley.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 300 mg/L, Jan. 15, 1974; minimum daily mean, 0 mg/L, at times in most years.

SEDIMENT LOAD: Maximum daily, 52 tons, Jan. 15, 1974; minimum daily, 0 ton, at times in most years.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily mean, 80 mg/L, Mar. 4; minimum daily mean, 1 mg/L, many days.

SEDIMENT LOAD: Maximum daily, 13 ton, Mar. 4; minimum daily, .02 ton, many days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR 04...	1430	74	2.0	127	25	72
MAY 23...	0620	36	7.0	6	0.58	96

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	11.0	---	---	---
2	11.0	---	---	---	---	---	---	---	12.0	---	---	---
3	---	---	---	---	.0	.0	---	---	---	---	---	---
4	---	---	---	---	---	2.0	---	---	---	---	---	14.0
5	---	---	1.0	---	---	---	---	11.0	---	---	15.0	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	1.0	4.5	---	13.0	---	---
8	---	---	---	---	---	1.5	---	---	---	13.5	---	---
9	---	---	---	---	---	---	---	3.0	8.0	---	---	---
10	---	---	---	---	---	---	---	---	10.5	---	---	---
11	---	2.0	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	4.5	11.0	---	---	19.0	---
13	---	---	---	.0	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	6.5	---	---	---	---	---	---	5.5	8.5	---	---	---
16	---	---	.0	.5	---	---	---	---	---	---	---	---
17	---	---	---	---	---	.0	---	4.0	---	---	---	---
18	8.0	---	---	---	---	---	---	3.0	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	1.0	---	---	7.5	14.0	---	---	---
21	---	1.0	---	---	---	1.0	9.0	8.0	---	12.0	---	---
22	---	---	---	---	---	---	---	13.0	7.0	---	---	---
23	---	---	.0	---	---	---	---	7.0	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	1.0	---	---	---	---	---	5.5	---	---	---	---
26	---	---	---	---	---	---	8.0	---	13.0	---	---	---
27	---	---	.0	---	---	.5	---	---	---	---	15.5	---
28	---	---	---	---	---	---	---	9.5	---	---	---	---
29	6.0	---	---	---	---	---	---	5.5	7.5	---	---	14.0
30	---	---	---	---	---	---	---	---	7.5	---	---	---
31	---	---	---	---	---	1.0	---	---	---	---	---	---

PYRAMID AND WINNEMUCCA LAKES BASIN

10336790 TROUT CREEK AT SOUTH LAKE TAHOE, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER				NOVEMBER			DECEMBER		
1	6.0	1	.02	9.3	2	.05	8.3	2	.04
2	5.9	1	.02	6.9	2	.04	8.3	2	.04
3	5.8	1	.02	7.1	2	.04	8.3	1	.02
4	5.8	1	.02	7.5	1	.02	8.2	1	.02
5	5.7	1	.02	7.7	1	.02	8.5	1	.02
6	6.0	1	.02	7.3	1	.02	8.5	1	.02
7	6.3	1	.02	7.3	1	.02	8.5	1	.02
8	6.3	1	.02	7.3	1	.02	8.4	1	.02
9	6.6	1	.02	7.4	1	.02	8.4	1	.02
10	6.7	1	.02	7.4	1	.02	8.4	1	.02
11	6.7	1	.02	7.4	1	.02	8.3	2	.04
12	6.7	1	.02	7.4	1	.02	8.3	2	.04
13	6.7	1	.02	7.4	1	.02	8.3	2	.04
14	6.5	1	.02	7.3	2	.04	8.2	2	.04
15	6.5	1	.02	7.3	2	.04	8.2	2	.04
16	6.5	1	.02	7.4	2	.04	8.1	2	.04
17	6.3	1	.02	7.3	2	.04	8.1	2	.04
18	6.9	3	.06	7.2	3	.06	8.1	2	.04
19	9.6	4	.10	7.5	3	.06	8.1	2	.04
20	8.9	2	.05	7.3	4	.08	8.1	1	.02
21	8.8	2	.05	7.3	4	.08	8.1	1	.02
22	8.1	2	.04	7.5	4	.08	8.0	1	.02
23	7.2	2	.04	7.6	4	.08	8.0	1	.02
24	7.1	2	.04	7.7	5	.10	8.0	1	.02
25	7.2	2	.04	7.8	5	.11	8.0	2	.04
26	8.2	2	.04	7.9	5	.11	8.0	3	.06
27	8.1	2	.04	8.0	4	.09	8.0	3	.06
28	6.6	2	.04	8.1	4	.09	8.0	3	.06
29	6.7	2	.04	8.1	3	.07	8.0	3	.06
30	6.6	2	.04	8.3	3	.07	8.0	3	.06
31	8.3	2	.04	---	---	---	8.0	3	.06
TOTAL	215.3	---	1.00	227.0	---	1.57	253.7	---	1.10
JANUARY				FEBRUARY			MARCH		
1	8.0	3	.06	8.0	2	.04	8.4	4	.09
2	8.0	3	.06	8.0	2	.04	7.2	4	.08
3	8.0	3	.06	8.0	2	.04	16	37	2.0
4	8.0	3	.06	8.0	2	.04	54	80	13
5	8.0	3	.06	8.0	2	.04	36	42	4.1
6	8.0	3	.06	8.0	2	.04	24	20	1.3
7	8.0	3	.06	8.0	2	.04	19	14	.72
8	8.0	3	.06	8.0	2	.04	17	11	.50
9	8.0	3	.06	8.0	2	.04	15	8	.32
10	8.0	3	.06	8.0	3	.06	14	7	.26
11	8.0	3	.06	8.0	3	.06	13	7	.25
12	8.0	3	.06	8.0	3	.06	13	7	.25
13	8.0	3	.06	8.0	3	.06	13	7	.25
14	8.0	3	.06	8.0	3	.06	13	7	.25
15	8.0	2	.04	8.0	4	.09	13	6	.21
16	8.0	2	.04	8.0	4	.09	13	6	.21
17	8.0	2	.04	8.0	4	.09	12	6	.19
18	8.0	2	.04	8.0	4	.09	12	5	.16
19	8.0	2	.04	8.0	4	.09	12	5	.16
20	8.0	2	.04	8.0	4	.09	12	4	.13
21	8.0	2	.04	8.0	4	.09	13	5	.18
22	8.0	2	.04	8.0	4	.09	13	5	.18
23	8.0	2	.04	8.0	4	.09	14	5	.19
24	8.0	2	.04	8.0	4	.09	12	4	.13
25	8.0	2	.04	8.0	4	.09	12	4	.13
26	8.0	2	.04	8.0	4	.09	12	4	.13
27	8.0	2	.04	8.1	4	.09	13	3	.11
28	8.0	2	.04	8.4	4	.09	13	2	.07
29	8.0	2	.04	---	---	---	13	3	.11
30	8.0	2	.04	---	---	---	15	3	.12
31	8.0	2	.04	---	---	---	16	4	.17
TOTAL	248.0	---	1.52	224.5	---	1.92	482.6	---	25.95

PYRAMID AND WINNEMUCCA LAKES BASIN

287

10336790 TROUT CREEK AT SOUTH LAKE TAHOE, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	18	4	.19	25	7	.47	34	7	.64
2	17	5	.23	21	7	.40	39	7	.74
3	17	5	.23	19	8	.41	45	6	.73
4	20	5	.27	20	10	.54	51	8	1.1
5	25	5	.34	25	12	.81	52	9	1.3
6	30	6	.49	29	10	.78	47	9	1.1
7	26	6	.42	34	10	.92	44	9	1.1
8	23	8	.50	41	11	1.2	45	9	1.1
9	22	10	.59	36	8	.78	47	10	1.3
10	23	12	.75	28	7	.53	50	9	1.2
11	19	14	.72	25	7	.47	51	9	1.2
12	18	16	.78	24	6	.39	52	8	1.1
13	19	16	.82	27	5	.36	51	7	.96
14	21	16	.91	25	5	.34	47	6	.76
15	21	15	.85	29	6	.47	44	5	.59
16	20	14	.76	33	8	.71	41	5	.55
17	19	13	.67	35	7	.66	38	5	.51
18	17	12	.55	28	3	.23	36	4	.39
19	18	10	.49	25	3	.20	34	4	.37
20	19	9	.46	25	3	.20	32	4	.35
21	18	9	.44	25	4	.27	30	4	.32
22	19	8	.41	28	3	.23	29	4	.31
23	20	8	.43	35	8	.76	28	3	.23
24	22	7	.42	41	11	1.2	27	2	.15
25	20	7	.38	43	10	1.2	26	1	.07
26	18	7	.34	42	11	1.2	25	2	.13
27	20	7	.38	40	8	.86	26	3	.21
28	20	7	.38	39	7	.74	30	3	.24
29	23	7	.43	38	6	.62	30	2	.16
30	25	7	.47	41	8	.89	26	1	.07
31	---	---	---	34	8	.73	---	---	---
TOTAL	617	---	15.10	960	---	19.57	1157	---	18.98
JULY			AUGUST			SEPTEMBER			
1	23	1	.06	9.8	5	.13	5.9	3	.05
2	21	1	.06	9.5	5	.13	5.9	2	.03
3	19	1	.05	8.2	5	.11	6.0	2	.03
4	18	1	.05	8.2	5	.11	6.6	2	.04
5	17	1	.05	9.5	5	.13	7.6	3	.06
6	16	1	.04	9.3	5	.13	7.3	5	.10
7	15	2	.08	9.0	4	.10	13	8	.28
8	15	3	.12	8.8	3	.07	9.2	5	.12
9	14	3	.11	8.5	2	.05	8.8	4	.10
10	14	3	.11	8.2	2	.04	10	3	.08
11	13	3	.11	8.1	1	.02	10	3	.08
12	12	3	.10	7.3	1	.02	9.3	3	.08
13	12	3	.10	7.7	1	.02	8.9	3	.07
14	11	3	.09	9.7	4	.10	8.7	3	.07
15	11	3	.09	12	2	.06	8.4	3	.07
16	11	3	.09	10	2	.05	8.1	3	.07
17	10	3	.08	8.3	2	.04	6.5	3	.05
18	11	4	.12	7.9	2	.04	6.3	3	.05
19	16	4	.17	7.4	2	.04	6.1	3	.05
20	17	4	.18	7.3	2	.04	6.1	3	.05
21	20	4	.22	7.1	2	.04	5.9	3	.05
22	15	4	.16	6.8	2	.04	6.1	3	.05
23	15	4	.16	6.5	3	.05	5.9	3	.05
24	12	4	.13	6.2	3	.05	5.8	3	.05
25	10	4	.11	5.9	3	.05	5.8	3	.05
26	11	4	.12	5.9	4	.06	6.0	3	.05
27	11	5	.15	6.0	4	.06	5.9	3	.05
28	12	5	.16	6.4	4	.07	6.3	3	.05
29	12	5	.16	6.5	3	.05	6.3	3	.05
30	11	5	.15	6.4	3	.05	6.3	3	.05
31	10	5	.13	6.2	3	.05	---	---	---
TOTAL	435	---	3.51	244.6	---	2.00	219.0	---	2.03
YEAR	5283.7		94.25						

PYRAMID AND WINNEMUCCA LAKES BASIN
10337000 LAKE TAHOE AT TAHOE CITY, CA

LOCATION.--Lat 39°10'51", long 120°07'06", in NE 1/4 NE 1/4 sec.5, T.15 N., R.17 E., Placer County, Hydrologic Unit 16050101, on U.S. Coast Guard pier at Lake Forest, 1.1 mi northeast of Tahoe City, and 1.8 mi northeast of Lake Tahoe outlet dam on Truckee River at Tahoe City.

DRAINAGE AREA.--506 mi², at lake outlet.

PERIOD OF RECORD.--April 1900 to current year. Monthend elevations only for October 1943 to September 1957, published in WSP 1734. Prior to October 1961, published as "at Tahoe."

CHEMICAL DATA: Water year 1969, bimonthly; 1978, biannually; 1979, annually.

REVISED RECORDS.--WDR CA-78-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,220.00 ft above U.S. Bureau of Reclamation datum, 6,218.86 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1957, nonrecording gages at several sites near outlet of lake at same datum. Oct. 1, 1957, to May 8, 1958, water-stage recorder on left wingwall of dam at outlet of lake at same datum. May 9, 1958, to Sept. 30, 1968, water-stage recorder on pier, 1,000 ft east of dam at lake outlet.

REMARKS.--Lake levels regulated by a 17-gate concrete dam at outlet of lake; storage began about 1874. Monthly figures given represent usable contents. Usable capacity, 744,600 acre-ft between elevations 6,223 ft, natural rim of lake, and 6,229.1 ft, maximum permissible elevation by Federal Court decree. Lake elevations are referred to U.S. Bureau of Reclamation datum because that datum is used as the official reference point by all local, State, and Federal agencies. There are minor diversions for domestic purposes, irrigation, and power.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 6,231.26 ft, July 14, 15, 17, 18, 1907; minimum, 6,221.65 ft, Feb. 1, 2, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 6,222.84 ft, Oct. 2; minimum, 6,221.65 ft, Feb. 1, 2.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on topographic information available in April 1959)

6,223	0	6,227	486,800
6,224	121,400	6,228	609,300
6,225	243,000	6,229.1	744,600
6,226	364,800		

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.82	2.37	2.08	1.85	1.68	1.80	2.32	2.34	2.59	2.67	2.57	2.31
2	2.81	2.36	2.07	1.87	1.72	1.81	2.32	2.33	2.60	2.69	2.56	2.31
3	2.79	2.33	2.05	1.83	1.72	1.92	2.31	2.34	2.62	2.69	2.55	2.31
4	2.78	2.33	2.03	1.85	1.73	2.07	2.32	2.35	2.63	2.68	2.55	2.29
5	2.75	2.30	2.03	1.85	1.74	2.09	2.33	2.33	2.63	2.68	2.53	2.28
6	2.74	2.30	2.03	1.83	1.73	2.11	2.34	2.35	2.63	2.67	2.50	2.28
7	2.72	2.29	2.02	1.83	1.76	2.11	2.34	2.35	2.65	2.67	2.50	2.25
8	2.69	2.27	2.02	1.84	1.75	2.10	2.35	2.38	2.66	2.66	2.49	2.24
9	2.67	2.25	2.02	1.83	1.76	2.10	2.33	2.39	2.67	2.66	2.48	2.20
10	2.65	2.25	2.00	1.84	1.74	2.12	2.33	2.39	2.68	2.65	2.47	2.24
11	2.64	2.24	2.04	1.79	1.74	2.09	2.30	2.40	2.69	2.65	2.46	2.21
12	2.64	2.24	2.01	1.84	1.74	2.09	2.32	2.39	2.69	2.65	2.45	2.23
13	2.64	2.20	2.01	1.82	1.75	2.13	2.31	2.40	2.70	2.63	2.46	2.18
14	2.61	2.21	2.00	1.79	1.74	2.13	2.29	2.40	2.71	2.63	2.53	2.20
15	2.60	2.18	2.00	1.81	1.73	2.14	2.30	2.43	2.71	2.60	2.54	2.20
16	2.58	2.16	1.98	1.81	1.74	2.13	2.30	2.43	2.69	2.59	2.54	2.18
17	2.56	2.17	1.96	1.79	1.73	2.15	2.30	2.44	2.69	2.59	2.52	2.18
18	2.57	2.15	2.04	1.77	1.71	2.17	2.30	2.45	2.70	2.62	2.52	2.16
19	2.55	2.14	1.99	1.77	1.71	2.17	2.30	2.46	2.67	2.63	2.51	2.16
20	2.54	2.12	1.96	1.75	1.73	2.17	2.31	2.47	2.69	2.64	2.50	2.15
21	2.51	2.11	1.96	1.76	1.71	2.16	2.31	2.47	2.67	2.63	2.50	2.14
22	2.51	2.12	1.95	1.74	1.72	2.15	2.32	2.48	2.66	2.63	2.49	2.13
23	2.50	2.11	1.92	1.74	1.70	2.21	2.30	2.49	2.65	2.62	2.47	2.12
24	2.50	2.11	1.93	1.73	1.70	2.26	2.30	2.51	2.65	2.60	2.44	2.11
25	2.47	2.11	1.92	1.72	1.70	2.31	2.32	2.51	2.64	2.61	2.44	2.08
26	2.48	2.11	1.91	1.70	1.69	2.31	2.33	2.54	2.64	2.60	2.39	2.07
27	2.47	2.09	1.92	1.71	1.69	2.32	2.33	2.54	2.66	2.60	2.37	2.07
28	2.44	2.11	1.88	1.69	1.71	2.32	2.33	2.54	2.67	2.59	2.34	2.07
29	2.44	2.09	1.87	1.69	---	2.31	2.33	2.55	2.68	2.59	2.35	2.06
30	2.43	2.08	1.87	1.70	---	2.31	2.36	2.57	2.68	2.59	2.33	2.05
31	2.41	---	1.87	1.70	---	2.29	---	2.59	---	2.57	2.32	---
MEAN	2.60	2.20	1.98	1.78	1.72	2.15	2.32	2.44	2.66	2.63	2.47	2.18
MAX	2.82	2.37	2.08	1.87	1.76	2.32	2.36	2.59	2.71	2.69	2.57	2.31
MIN	2.41	2.08	1.87	1.69	1.68	1.80	2.29	2.33	2.59	2.57	2.32	2.05
a	0	0	0	0	0	0	0	0	0	0	0	0
b	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR 1990	MEAN 3.15	MAX 3.81	MIN 1.87	b -26700								
WTR YR 1991	MEAN 2.26	MAX 2.82	MIN 1.68	b	0							

a Usable contents, in acre-feet, at end of month.

b Change in contents, in acre-feet.

NOTE.--Add 6,220 ft to obtain elevation, U.S. Bureau of Reclamation datum, at 2400 hours.

PYRAMID AND WINNEMUCCA LAKES BASIN

289

10337500 TRUCKEE RIVER AT TAHOE CITY, CA

LOCATION.--Lat 39°09'59", long 120°08'36", in NE 1/4 NW 1/4 sec.7, T.15 N., R.17 E., Placer County, Hydrologic Unit 16050102, on left bank, 510 ft downstream from dam at outlet of Lake Tahoe at Tahoe City, and at mi 116.20, upstream from Marble Bluff Dam.

DRAINAGE AREA.--507 mi².

PERIOD OF RECORD.--July 1895 to February 1896, March 1900 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734. Prior to October 1961, published as "at Tahoe."
CHEMICAL DATA: Water years 1978 to 1981, monthly.

REVISED RECORDS.--WDR CA-78-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,216.59 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 12, 1912, nonrecording gage at site 370 ft upstream at different datum. Nov. 12, 1912, to Sept. 30, 1937, nonrecording gage; Oct. 1, 1937, to Aug. 21, 1957, water-stage recorder at datum 2.26 ft higher; and Aug. 22, 1957, to July 10, 1960, at datum 2.42 ft higher; all at site 270 ft upstream.

REMARKS.--Records poor. Stage-discharge relation affected by beaver dams, ice, and bridge construction. Flow completely regulated by dam at outlet of Lake Tahoe (station 10337000), 510 ft upstream. There are several diversions for irrigation, power, and domestic water supply. In addition, sewer effluent is pumped from the Lake Tahoe basin.

AVERAGE DISCHARGE (unadjusted).--91 years (water years 1901-91), 252 ft³/s, 182,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,630 ft³/s, June 19, 1969, gage height, 9.32 ft; no flow for parts of many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown, Mar. 4, gage height, 2.57 ft; maximum gage height, 2.67 ft, July 8-10, 12, backwater from bridge construction; no flow Oct. 1-18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e.10	e.10	e.20	e.20	e.20	e.90	e.20	e.20	e.20	e.20	e.20
2	e.00	e.10	e.10	e.20	e.20	e.20	e.90	e.20	e.20	e.20	e.20	e.20
3	e.00	e.10	e.10	e.20	e.20	e.2.5	e.90	e.20	e.20	e.20	e.20	e.20
4	e.00	e.10	e.10	e.20	e.20	e.10	e.90	e.20	e.20	e.20	e.20	e.20
5	e.00	e.10	e.10	e.20	e.20	e.2.0	e.80	e.20	e.20	e.20	e.20	e.20
6	e.00	e.10	e.10	e.20	e.20	e.70	e.80	e.20	e.20	e.20	e.20	e.20
7	e.00	e.10	e.10	e.20	e.20	e.70	e.80	e.20	e.20	e.20	e.20	e.20
8	e.00	e.10	e.10	e.20	e.20	e.70	e.80	e.20	e.20	e.20	e.20	e.20
9	e.00	e.10	e.10	e.20	e.20	e.70	e.70	e.20	e.20	e.20	e.20	e.20
10	e.00	e.10	e.30	e.20	e.20	e.70	e.70	e.20	e.20	e.20	e.20	e.20
11	e.00	e.10	e.2.4	e.20	e.20	e.70	e.70	e.20	e.20	e.20	e.20	e.20
12	e.00	e.10	e.1.8	e.20	e.20	e.1.5	e.70	e.20	e.20	e.20	e.20	e.20
13	e.00	e.10	e.1.0	e.20	e.20	e.1.1	e.60	e.20	e.20	e.20	e.20	e.20
14	e.00	e.10	e.1.0	e.20	e.20	e.90	e.60	e.20	e.20	e.20	e.50	e.20
15	e.00	e.10	e.1.0	e.20	e.20	e.90	e.60	e.20	e.20	e.20	e.1.0	e.20
16	e.00	e.10	e.1.0	e.20	e.20	e.90	e.60	e.20	e.20	e.20	e.20	e.20
17	e.00	e.10	e.1.0	e.20	e.20	e.90	e.50	e.20	e.20	e.20	e.20	e.20
18	e.00	e.10	e.1.0	e.20	e.20	e.90	e.50	e.20	e.20	e.20	e.20	e.20
19	e.10	e.10	e.30	e.20	e.20	e.90	e.50	e.20	e.20	e.20	e.20	e.20
20	e.10	e.10	e.20	e.20	e.20	e.90	e.50	e.20	e.20	e.20	e.20	e.20
21	e.10	e.10	e.20	e.20	e.20	e.90	e.40	e.20	e.20	e.20	e.20	e.20
22	e.10	e.10	e.20	e.20	e.20	e.90	e.40	e.20	e.20	e.20	e.20	e.20
23	e.10	e.10	e.20	e.20	e.20	e.90	e.40	e.20	e.20	e.20	e.20	e.20
24	e.10	e.10	e.20	e.20	e.20	e.90	e.40	e.20	e.20	e.20	e.20	e.20
25	e.10	e.10	e.20	e.20	e.20	e.90	e.30	e.20	e.20	e.20	e.20	e.20
26	e.10	e.10	e.20	e.20	e.20	e.90	e.30	e.20	e.20	e.20	e.20	e.20
27	e.10	e.10	e.20	e.20	e.20	e.90	e.30	e.20	e.20	e.20	e.20	e.20
28	e.10	e.10	e.20	e.20	e.20	e.90	e.30	e.20	e.20	e.20	e.20	e.20
29	e.10	e.10	e.20	e.20	---	e.90	e.20	e.20	e.20	e.20	e.20	e.20
30	e.10	e.10	e.20	e.20	---	e.90	e.20	e.20	e.20	e.20	e.20	e.20
31	e.10	---	e.20	e.20	---	e.90	---	e.20	---	e.20	e.20	---
TOTAL	1.30	3.00	14.10	6.20	5.60	37.90	17.20	6.20	6.00	6.20	7.30	6.00
MEAN	.042	.10	.45	.20	.20	1.22	.57	.20	.20	.20	.24	.20
MAX	.10	.10	2.4	.20	.20	10	.90	.20	.20	.20	1.0	.20
MIN	.00	.10	.10	.20	.20	.20	.20	.20	.20	.20	.20	.20
AC-FT	2.6	6.0	28	12	11	75	34	12	12	12	14	12

CAL YR 1990 TOTAL 13227.83 MEAN 36.2 MAX 144 MIN .00 AC-FT 26240
WTR YR 1991 TOTAL 117.00 MEAN .32 MAX 10 MIN .00 AC-FT 232

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

10338400 DONNER LAKE NEAR TRUCKEE, CA

LOCATION.--Lat 39°19'30", long 120°16'53", in SE 1/4 NW 1/4 sec.14, T.17 N., R.15 E., Nevada County, Hydrologic Unit 16050102, on north shore, 2.5 mi upstream from outlet gates, and 4.9 mi west of Truckee.

DRAINAGE AREA.--14.0 mi².

PERIOD OF RECORD.--January 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Westpac Utilities).

REMARKS.--Lake levels regulated by a concrete dam at the outlet constructed in 1928. Usable capacity, 9,490 acre-ft between elevations 5,923.8 and 5,935.8 ft, maximum storage level. Water is used for irrigation and power development downstream. Records, including extremes, represent usable contents.

COOPERATION.--Selected gage-height readings provided by Westpac Utilities.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 9,490 acre-ft, May 5, June 7-9, 1989, elevation, 5,935.8 ft; minimum, 2,510 acre-ft, Jan. 24, 28-31, 1991, elevation, 5,927.23 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 9,450 acre-ft, July 3, elevation, 5,935.75 ft; minimum, 2,510 acre-ft, Jan. 24, 28-31, elevation, 5,927.23 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Westpac Utilities, dated Aug. 22, 1980)

5,923.8	0	5,932	6,310
5,926.0	1,600	5,934	7,970
5,928.0	3,120	5,936	9,670
5,930.0	4,690		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5540	2920	2630	2580	2540	2880	5290	7550	9010	e9320	9110	6250
2	5470	2880	2640	2590	2610	2960	5320	7620	8990	e9430	9090	6230
3	5400	2860	2650	2550	2600	3160	5370	7690	8920	9450	9000	6210
4	5340	2870	2660	2550	2660	4000	5460	7850	8930	9440	8930	6080
5	5250	2820	2690	2540	2670	4120	5530	8010	8970	9430	8840	5930
6	5180	2770	2610	2540	2670	4210	5690	8200	9020	9410	8770	5760
7	5080	2790	2630	2570	2670	4250	5700	8420	9100	9400	8650	5610
8	5050	2760	2600	2580	2660	4300	5770	8650	9170	9360	8490	5420
9	5010	2740	2620	2580	2680	4320	5780	8820	9260	9340	8330	5290
10	4970	2730	2630	2580	2680	4380	5770	8860	9310	9310	8170	5170
11	4920	2740	2640	2590	2680	4420	5770	8880	9370	9280	8030	5090
12	4900	2730	2630	2580	2700	4500	5770	8910	9400	9280	7880	5020
13	4770	2740	2600	2580	2680	4560	5770	8920	9340	9270	7690	4930
14	4550	2720	2600	2600	2680	4580	5860	8990	9300	9270	7540	4860
15	4380	2700	2610	2560	2710	4610	5940	9070	9250	9250	7330	4800
16	4150	2710	2590	2600	2700	4650	6020	9170	9200	9240	7190	4740
17	4010	2700	2590	2550	2670	4710	6100	9210	9170	9220	7020	4680
18	3850	2650	2580	2590	2690	4730	6180	9150	9150	9220	6880	4620
19	3690	2670	e2580	2560	2700	4750	6280	9080	9140	9230	6730	4570
20	3580	2670	e2580	2530	2700	4790	6360	9010	9160	9230	6600	4480
21	3510	2650	e2580	2520	2710	4800	6440	9000	9160	9210	6480	4380
22	3410	2660	2580	2520	2710	4830	6590	9050	9180	9210	6400	4320
23	3350	2640	2550	2530	2700	4930	6730	9130	9170	9210	6400	4220
24	3290	2660	2610	2510	2720	5020	6830	9220	9170	9200	6370	4160
25	3230	2690	2600	2520	2700	5070	6940	9260	9170	9180	6360	4090
26	3180	2640	2570	2520	2700	5120	7040	9230	9190	9180	6350	4030
27	3140	2670	2620	2520	2730	5130	7120	9220	9200	9160	6330	3970
28	3090	2670	2610	2510	2770	5150	7220	9160	9260	9170	6300	3930
29	3030	2660	2570	2510	---	5180	7310	9100	9300	9150	6290	3870
30	2990	2660	2580	2510	---	5220	7450	9070	9330	9140	6280	3810
31	2990	---	2580	2510	---	5260	---	9040	---	9140	6270	---
MAX	5540	2920	2690	2600	2770	5260	7450	9260	9400	9450	9110	6250
MIN	2990	2640	2550	2510	2540	2880	5290	7550	8920	9140	6270	3810
a	5927.85	5927.43	5927.33	5927.23	5927.58	5930.72	5933.39	5935.27	5935.61	5935.39	5931.95	5928.90
b	-2620	-330	-80	-70	+260	+2490	+2190	+1590	+290	-190	-2870	-2460

CAL YR 1990 MAX 9460 MIN 2550 b -250
WTR YR 1991 MAX 9450 MIN 2510 b -1800

e Estimated.

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

PYRAMID AND WINNEMUCCA LAKES BASIN

291

10338500 DONNER CREEK AT DONNER LAKE, NEAR TRUCKEE, CA

LOCATION.--Lat 39°19'25", long 120°14'00", in SW 1/4 NW 1/4 sec.17, T.17 N., R.16 E., Nevada County, Hydrologic Unit 16050102, in Donner Memorial State Park, on left bank, 10 ft downstream from bridge on Donner Memorial State Park Road, 0.2 mi downstream from outlet of Donner Lake, 0.7 mi upstream from Cold Creek, and 2.5 mi west of Truckee.

DRAINAGE AREA.--14.3 mi².

PERIOD OF RECORD.--November 1909 to August 1910, January 1929 to October 1935, January 1936 to March 1938, July to October 1938, January 1939 to February 1943, June 1943 to December 1953, May 1955 to December 1957, October 1958 to current year. Monthly discharge only prior to October 1958, published in WSP 1314 and 1734.

REVISED RECORDS.--WDR CA-79-3: Drainage area.

GAGE.--Water-stage recorder and concrete control, completed Oct. 3, 1989. Datum of gage is 5,924.40 ft above National Geodetic Vertical Datum of 1929. Nov. 1, 1909, to Aug. 31, 1910, nonrecording gage at different datum. January 1929 to December 1957, water-stage recorder at same site at unknown datum.

REMARKS.--Records good. Flow completely regulated at dam at outlet of Donner Lake (station 10338400) since 1928.

AVERAGE DISCHARGE (unadjusted).--54 years (water years 1930-35, 1937, 1940-42, 1944-52, 1956-57, 1959-91), 34.5 ft³/s, 25,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 707 ft³/s, Feb. 19, 1986; gage height, 4.83 ft; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 129 ft³/s, Oct. 13, gage height, 3.97 ft; minimum daily, 0.28 ft³/s, Aug. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	15	3.4	2.3	1.8	3.2	15	3.9	106	2.2	1.8	1.4
2	32	13	3.3	2.2	1.4	4.1	15	3.9	102	2.0	14	1.7
3	32	11	3.3	2.2	1.3	4.5	15	3.9	99	1.8	40	26
4	32	11	3.2	2.2	1.5	4.7	15	3.9	69	e1.7	36	68
5	32	9.6	3.1	2.2	1.9	3.9	31	3.9	35	1.7	36	67
6	32	8.0	3.1	1.8	2.0	3.9	50	3.9	19	1.7	36	78
7	30	7.4	3.0	.86	2.0	3.9	50	3.9	6.4	1.7	60	86
8	28	6.9	2.9	2.4	2.1	3.8	51	3.9	6.4	e1.7	78	83
9	24	6.5	2.9	2.4	2.1	3.8	51	4.2	6.4	1.8	77	74
10	24	6.4	2.7	2.4	2.1	3.7	50	27	6.4	1.7	75	56
11	17	5.9	3.0	2.4	2.1	3.6	48	49	6.4	e1.7	74	38
12	9.6	5.5	3.0	2.4	2.1	3.5	46	50	22	1.7	73	38
13	60	4.7	3.1	2.3	2.1	3.4	46	52	47	1.8	94	37
14	117	4.4	3.0	2.4	2.2	3.3	21	54	47	1.7	108	36
15	105	4.1	3.0	2.3	2.2	3.3	1.5	54	47	1.7	99	35
16	101	3.8	2.9	2.2	2.2	3.3	1.1	53	48	1.7	79	31
17	92	3.8	2.8	2.2	2.3	3.2	.73	73	34	e1.7	78	25
18	78	3.6	2.8	2.3	2.2	3.3	.60	95	6.9	e1.7	76	25
19	68	3.5	2.2	2.2	2.2	3.3	.43	95	3.9	e1.6	75	29
20	59	3.7	2.8	2.1	2.2	3.3	.38	94	3.5	1.6	65	38
21	52	3.5	3.1	2.0	2.3	3.2	.29	94	2.6	1.6	58	42
22	46	3.4	3.0	2.0	2.1	3.2	2.8	94	2.4	1.7	30	40
23	40	3.3	2.9	2.0	2.1	3.2	4.6	93	2.4	1.9	1.1	39
24	36	3.1	e2.8	1.9	2.1	3.2	5.0	94	2.4	2.0	.52	38
25	31	3.3	e2.8	1.9	2.1	3.3	4.2	97	2.4	2.2	.28	38
26	27	3.7	e2.7	1.9	2.1	3.4	3.9	103	2.4	2.0	1.7	30
27	24	3.6	e2.7	1.9	2.1	3.4	3.9	102	2.3	2.0	2.8	25
28	21	3.5	2.7	1.9	2.3	3.4	3.9	105	2.3	2.0	1.9	24
29	18	3.5	2.6	1.8	---	3.5	3.9	107	2.3	1.8	1.5	24
30	16	3.5	2.5	1.9	---	11	3.9	107	2.4	1.9	1.3	23
31	15	---	2.3	1.8	---	15	---	107	---	1.9	1.2	---
TOTAL	1330.6	172.2	89.6	64.76	57.2	128.8	545.13	1834.4	745.2	55.9	1375.10	1196.1
MEAN	42.9	5.74	2.89	2.09	2.04	4.15	18.2	59.2	24.8	1.80	44.4	39.9
MAX	117	15	3.4	2.4	2.3	15	51	107	106	2.2	108	86
MIN	9.6	3.1	2.2	.86	1.3	3.2	.29	3.9	2.3	1.6	.28	1.4
AC-FT	2640	342	178	128	113	255	1080	3640	1480	111	2730	2370

CAL YR 1990 TOTAL 7101.03 MEAN 19.5 MAX 143 MIN .45 AC-FT 14080
WTR YR 1991 TOTAL 7594.99 MEAN 20.8 MAX 117 MIN .28 AC-FT 15060

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

10339250 MARTIS CREEK AT STATE HIGHWAY 267, NEAR TRUCKEE, CA

LOCATION.--Lat 39°18'08", long 120°07'13", in SW 1/4 SW 1/4 sec.20, T.17 N., R.17 E., Placer County, Hydrologic Unit 16050102, 4.0 mi southeast of Truckee. Water-quality samples are collected 300 ft upstream from State Highway 267.

DRAINAGE AREA.--25.8 mi².

PERIOD OF RECORD.--Water years 1975 to current year.

CHEMICAL DATA: Water years 1975 to current year.

WATER TEMPERATURE: Water years 1975 to September 1988.

SEDIMENT DATA: Water years 1975, 1977 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October to November 1974, August 1975 to September 1988.

REVISED RECORDS.--WDR CA-80-3: Drainage area.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, SATURATION	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3
OCT 10...	0950	2.5	144	7.8	5.5	2.5	620	10.2	100	74
APR 09...	1030	19	109	8.0	5.0	4.6	620	10.8	104	39
AUG 12...	1200	1.7	145	8.1	16.0	3.5	620	8.3	104	88

DATE	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS DIS-SOLVED (MG/L AS P)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)
OCT 10...	60	0.800	0.030	0.47	0.50	1.3	0.020	<0.010	--	1
APR 09...	32	0.160	0.010	0.19	0.20	0.36	0.020	0.040	--	2
AUG 12...	72	<0.050	0.020	0.28	0.30	--	0.040	0.030	2	<1

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 10...	--	190	--	<1	<4	--	18	--	18
APR 09...	380	170	3	1	<4	20	14	<10	7
AUG 12...	890	570	3	<1	<4	70	51	<10	4

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	TEMPERATURE WATER (DEG C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT 10...	0950	2.5	5.5	1	0.01
APR 09...	1030	19	5.0	6	0.31
AUG 12...	1200	1.7	16.0	6	0.03

PYRAMID AND WINNEMUCCA LAKES BASIN

293

10339380 MARTIS CREEK LAKE NEAR TRUCKEE, CA

LOCATION.--Lat 39°19'38", long 120°06'48", in NE 1/4 NW 1/4 sec.17, T.17 N., R.17 E., Nevada County, Hydrologic Unit 16050102, near intake structure at Martis Creek Dam, 2.0 mi upstream from mouth, and 3.5 mi east of Truckee.

DRAINAGE AREA.--39.6 mi².

PERIOD OF RECORD.--

WATER-CONTENT DATA: Water years 1972-90.

CHEMICAL DATA: Water years 1975 to current year.

SEDIMENT DATA: Water years 1975-76, 1978 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
OCT 10...	1015	141	9.3	12.0	3.1	620	7.3	84	58	12
APR 09...	1200	117	8.2	10.5	10	620	9.5	105	41	--
AUG 12...	1230	144	9.7	21.0	1.0	620	9.3	129	37	23

DATE	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)
OCT 10...	68	3.40	0.120	0.88	1.0	4.4	0.040	<0.010	--	1
APR 09...	33	0.320	0.010	0.39	0.40	0.72	0.030	<0.010	2	1
AUG 12...	69	<0.050	0.020	0.68	0.70	--	0.040	0.020	4	1

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 10...	--	61	--	1	<4	--	9	--	16
APR 09...	570	190	2	1	<4	20	11	<10	7
AUG 12...	80	33	--	<1	<4	10	3	20	5

SUSPENDED-SEDIMENT CONCENTRATION, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)
OCT 10...	1015	12.0	2
APR 09...	1200	10.5	6
AUG 12...	1230	21.0	4

PYRAMID AND WINNEMUCCA LAKES BASIN

10339400 MARTIS CREEK NEAR TRUCKEE, CA

LOCATION.--Lat 39°19'44", long 120°07'00", in NE 1/4 NW 1/4 sec.17, T.17 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank, 0.2 mi downstream from Martis Creek Lake Dam, 1.8 mi upstream from mouth, and 3.5 mi east of Truckee.

DRAINAGE AREA.--39.9 mi².

PERIOD OF RECORD.--

WATER-DISCHARGE DATA: Water years 1959-90.

CHEMICAL DATA: Water years 1975 to current year.

WATER TEMPERATURE: Water years 1975 to current year.

SEDIMENT DATA: Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1974 to current year.

INSTRUMENTATION.--Digital water-temperature recorder since October 1974.

REMARKS.--Water temperature is affected by regulation from Martis Creek Lake Dam. Unpublished chemical-quality, water temperature, and sediment data prior to October 1974, available at U.S. Geological Survey office in Carson City, NV.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 24.0°C, on several days in 1977, 1979 and July 26, 1991; minimum recorded, 0.0°C, Feb. 16, 17, 1982.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 24.0°C, July 26; minimum recorded, 2.0°C, on several days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)	SATUR- ATION	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
OCT 10...	1215	4.0	140	9.1	12.5	2.4	620	9.5	110		66	8
APR 09...	1330	26	117	8.3	9.5	10	620	9.7	105		41	--
AUG 12...	1430	2.3	143	9.5	22.5	3.3	620	9.3	133		47	17

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)
OCT 10...	68	1.20	0.040	0.66	0.70	1.9	0.030	<0.010	--	3
APR 09...	33	<0.050	0.010	0.39	0.40	--	0.030	0.010	2	2
AUG 12...	67	<0.050	0.030	0.67	0.70	--	0.060	0.040	3	<1

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 10...	--	73	--	1	<4	--	18	--	13
APR 09...	560	160	3	2	<4	30	15	<10	13
AUG 12...	440	75	3	<1	<4	90	14	<10	3

PYRAMID AND WINNEMUCCA LAKES BASIN

295

10339400 MARTIS CREEK NEAR TRUCKEE, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 10...	1215	4.0	12.5	1	0.01
APR 09...	1330	26	9.5	8	0.56
AUG 12...	1430	2.3	22.5	5	0.03

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	11.5	9.5	7.0	5.0	3.0	4.0	2.0	5.5	3.0	6.0	4.5
2	16.0	11.5	9.0	6.0	4.5	2.5	4.0	2.0	5.0	3.5	5.0	3.5
3	16.0	11.0	9.0	5.5	5.0	3.0	4.0	2.5	5.0	3.5	4.5	4.0
4	16.0	11.5	9.0	5.5	5.5	3.0	4.5	2.5	6.0	3.5	4.5	3.5
5	15.5	12.0	9.0	6.0	5.5	3.5	4.5	2.0	5.5	3.5	3.5	2.5
6	15.5	11.5	8.0	5.0	5.5	3.0	4.0	2.0	6.0	3.5	4.0	2.0
7	14.5	10.5	7.5	4.5	5.0	3.0	4.5	3.0	6.0	3.5	4.5	2.5
8	14.0	10.0	8.5	5.0	5.5	3.0	4.5	2.5	6.0	3.5	5.0	3.0
9	14.5	9.5	8.0	4.5	5.5	3.0	4.0	2.5	6.5	3.5	5.5	3.5
10	14.0	9.5	8.0	4.5	6.5	3.5	4.0	2.5	7.0	3.5	4.5	3.0
11	14.0	9.5	7.0	4.5	4.5	4.0	4.5	3.0	6.5	4.0	5.5	3.0
12	14.0	9.5	7.5	4.5	5.0	4.0	4.5	3.0	6.0	3.5	6.0	3.5
13	14.0	9.5	7.5	4.5	5.0	3.0	5.0	3.0	7.0	3.5	5.0	3.5
14	14.0	9.5	6.5	5.0	4.5	2.5	5.0	2.5	7.0	4.0	5.5	3.5
15	14.0	9.5	7.5	5.0	4.5	3.0	5.0	2.5	6.0	4.0	5.0	3.5
16	13.5	10.0	6.5	4.5	4.5	2.5	5.0	2.5	7.0	4.5	6.0	3.0
17	13.0	9.0	7.5	5.5	5.0	2.5	5.0	2.5	6.0	4.0	5.0	4.0
18	11.5	10.0	7.5	5.0	5.0	2.5	5.0	2.5	7.0	3.5	5.0	3.5
19	12.0	9.0	6.0	5.0	3.5	2.5	5.0	2.5	7.0	3.5	5.5	3.5
20	12.0	8.0	6.0	4.0	4.0	2.0	4.5	2.5	7.0	3.5	5.5	3.5
21	12.0	8.0	6.5	4.0	3.5	2.0	5.0	2.5	6.0	3.5	6.0	3.5
22	12.0	8.5	6.0	4.0	3.5	2.0	5.0	2.5	7.0	3.5	7.0	3.5
23	12.0	8.5	6.0	3.5	4.0	2.0	5.5	2.5	7.0	3.5	6.5	3.0
24	12.0	8.5	6.0	3.5	4.0	2.0	5.5	3.0	7.0	3.0	4.5	3.5
25	11.5	8.0	5.5	2.5	4.5	2.5	5.5	2.5	7.0	3.5	4.0	3.0
26	12.0	8.5	4.5	2.5	4.0	2.0	5.5	3.0	7.5	3.5	4.5	3.0
27	11.5	8.0	4.0	2.0	4.0	2.5	5.5	3.0	6.0	4.0	5.5	2.5
28	11.5	8.0	4.5	2.5	4.5	2.0	5.5	3.0	7.5	5.0	6.5	3.0
29	11.5	8.0	5.0	3.0	3.5	2.0	5.5	2.5	---	---	6.5	4.0
30	11.0	8.0	5.0	3.0	4.0	2.0	5.5	2.5	---	---	6.5	4.0
31	10.0	8.0	---	---	4.5	2.0	5.5	3.0	---	---	7.5	5.0
MONTH	16.0	8.0	9.5	2.0	6.5	2.0	5.5	2.0	7.5	3.0	7.5	2.0

PYRAMID AND WINNEMUCCA LAKES BASIN

10339400 MARTIS CREEK NEAR TRUCKEE, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	5.5	11.0	9.5	16.0	11.5	20.0	14.0	23.0	16.5	20.5	14.0
2	8.5	6.0	10.5	9.5	16.5	12.0	21.0	14.5	23.5	16.5	20.5	14.5
3	9.0	6.5	10.5	8.5	17.0	12.5	21.5	14.5	22.0	16.5	20.5	15.0
4	10.0	7.0	12.0	8.5	18.0	13.0	21.0	15.0	22.0	16.5	20.0	14.5
5	9.0	7.0	12.5	9.5	18.0	13.0	21.5	15.0	23.0	16.5	20.5	14.5
6	9.0	7.5	13.0	10.0	18.5	13.0	21.5	15.0	23.0	16.0	18.0	14.5
7	8.5	7.0	17.5	11.0	19.0	13.5	22.0	15.0	22.0	16.5	19.0	14.5
8	10.0	7.0	14.0	11.5	19.5	14.0	22.5	15.5	23.0	15.5	19.0	14.5
9	9.5	8.0	12.5	10.5	19.5	14.5	22.5	15.5	22.5	15.5	15.5	12.5
10	9.0	7.5	11.0	10.0	19.5	14.5	23.0	15.5	23.0	16.5	16.5	10.5
11	8.5	7.0	11.0	9.5	20.0	15.0	23.0	16.0	23.0	15.5	18.0	10.0
12	8.5	6.5	12.5	9.5	20.5	15.0	23.5	16.5	23.5	16.0	17.5	14.0
13	9.5	6.5	11.5	10.0	21.0	15.5	23.5	16.5	21.5	17.0	18.0	13.5
14	10.5	7.5	12.0	10.0	21.5	15.5	23.5	16.0	21.0	17.0	18.5	13.0
15	9.5	8.0	13.5	9.5	21.5	15.0	23.0	16.0	19.5	17.5	18.5	13.0
16	9.0	7.5	14.0	11.0	21.5	15.0	23.5	16.0	21.5	17.5	18.5	12.5
17	9.0	7.5	12.5	11.0	21.0	15.0	23.5	16.0	21.5	17.0	19.0	13.0
18	9.5	7.0	12.0	10.5	21.5	15.0	23.5	16.0	21.0	16.5	19.0	12.5
19	10.0	7.5	13.0	10.5	20.5	15.0	21.5	16.5	21.5	16.5	18.5	13.0
20	9.5	8.0	12.0	10.5	20.5	14.5	22.5	17.0	22.0	16.5	19.0	13.0
21	10.0	8.0	13.0	10.5	20.5	14.0	22.5	17.0	22.5	16.5	18.5	12.5
22	10.5	8.0	13.5	10.5	20.5	14.0	21.5	17.0	22.5	16.0	18.5	12.5
23	11.5	8.5	14.5	11.0	19.5	14.0	22.5	16.5	21.5	16.0	18.5	12.5
24	11.0	9.5	15.0	12.0	18.5	14.0	22.5	16.0	21.5	15.5	18.5	12.5
25	10.0	8.5	16.0	12.5	20.0	13.5	23.0	16.0	21.5	16.0	18.5	12.5
26	10.0	8.5	15.5	12.5	19.0	13.5	24.0	16.5	21.5	15.5	17.5	13.5
27	10.5	8.0	16.0	12.5	16.5	15.0	22.5	16.5	20.0	15.0	18.0	13.0
28	10.5	8.0	16.0	13.0	16.5	15.0	22.5	17.0	21.0	14.0	18.0	13.0
29	10.5	8.5	15.5	13.0	18.0	14.5	22.5	17.0	21.0	14.0	18.0	13.0
30	11.5	8.5	14.0	12.0	19.5	14.0	23.0	17.0	21.0	14.5	18.0	12.5
31	---	---	14.5	11.5	---	---	23.0	17.0	20.5	14.0	---	---
MONTH	11.5	5.5	17.5	8.5	21.5	11.5	24.0	14.0	23.5	14.0	20.5	10.0

PYRAMID AND WINNEMUCCA LAKES BASIN

297

10340300 PROSSER CREEK RESERVOIR NEAR TRUCKEE, CA

LOCATION.--Lat 39°22'46", long 120°08'12", in NW 1/4 SW 1/4 sec.30, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, in control house on Prosser Creek Dam on Prosser Creek, 1.4 mi upstream from mouth, and 4.2 mi northeast of Truckee.

DRAINAGE AREA.--50.3 mi².

PERIOD OF RECORD.--January 1963 to current year. January 1963 to September 1987 (monthend elevations and contents only). Prior to October 1976, published as "near Boca."

GAGE.--Nonrecording gage read five times weekly. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REVISED RECORDS.--WDR CA-76-3: 1975. WDR CA-79-3: Drainage area.

REMARKS.--Reservoir is formed by rolled-earth and rockfill dam. Storage began Jan. 30, 1963. Usable capacity, 28,641 acre-ft between elevations 5,660.6 ft, top of inactive contents, and 5,741.2 ft, crest of spillway. Inactive contents, 1,201 acre-ft, includes 83 acre-ft dead contents below elevation 5,637.0 ft. Figures given represent total contents at 0800 hours. Reservoir is used for flood control, enhancement of fishery, and recreation.

COOPERATION.--Gage readings and capacity table were provided by U.S. Bureau of Reclamation, not rounded to U.S. Geological Survey standards.

EXTREMES (at 0800) FOR PERIOD OF RECORD.--Maximum contents, 32,269 acre-ft, June 1, 1973, elevation, 5,744.33 ft; minimum since reservoir first filled, 66 acre-ft, Oct. 10-12, 1983, elevation, 5,635.75 ft.

EXTREMES (at 0800) FOR CURRENT YEAR.--Maximum contents observed, 11,061 acre-ft, Mar. 6, elevation, 5,707.17 ft; minimum observed, 9,444 acre-ft, May 13, elevation, 5,702.54 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by U.S. Bureau of Reclamation, dated August 1962)

5,630	17	5,680	3,791	5,720	16,643
5,640	143	5,690	5,901	5,730	22,220
5,650	491	5,700	8,636	5,740	28,949
5,660	1,148	5,710	12,147	5,750	37,046
5,670	2,230				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9811	9757	---	---	9865	9771	9891	9784	---	9851	9828	---
2	9804	9764	---	9733	---	---	9925	9784	---	9811	9824	---
3	9804	---	9845	9737	---	---	9875	9737	9622	9767	---	9757
4	9797	---	9848	9744	9925	9939	9824	---	9757	---	---	9757
5	9797	9767	9851	---	9960	10841	9800	---	9767	9784	9811	9761
6	---	9771	9855	---	9987	11061	---	9649	9689	---	9804	9764
7	---	9764	9858	9761	10008	11020	---	9804	9682	---	9797	---
8	9784	9767	---	9767	10022	10918	10167	9845	---	9733	9787	---
9	9777	9767	---	9774	---	---	10085	9915	---	9744	9777	9764
10	9774	---	9865	9784	---	---	9987	9790	10043	9757	---	9790
11	9777	---	9878	9790	9994	10498	9878	---	10085	9761	---	9804
12	9771	9771	9891	---	9981	10338	9757	---	10085	9764	9747	9804
13	---	9774	9895	---	9967	10195	---	9444	10018	---	9744	9797
14	---	9774	9891	9821	9960	10029	---	9451	9925	---	9744	---
15	9764	---	---	9831	9953	9865	9649	9451	---	9730	9771	---
16	9761	9777	---	9838	---	---	9703	9549	---	9737	9790	9764
17	9754	---	9891	9845	---	---	9737	9723	9797	9747	---	9757
18	9754	---	9895	9851	---	9689	9710	---	9771	9757	---	9757
19	9757	9787	9901	---	9918	9730	9669	---	9790	9767	9800	9757
20	---	9790	9912	---	9905	9774	---	9562	9797	---	9797	9757
21	---	9794	9915	9862	9885	9821	---	9523	9790	---	9797	---
22	9761	---	---	9865	9872	9851	9831	9682	---	9865	9797	---
23	9764	---	---	9865	---	---	9878	9824	---	9898	9787	9757
24	9761	---	9868	9865	---	---	9939	10022	9716	9925	---	9750
25	9761	---	---	9865	9824	9811	9831	---	9672	9872	---	9750
26	9757	9824	9831	---	9804	9790	9669	---	9716	9804	9774	9750
27	---	9824	9814	---	9787	9771	---	---	9784	---	9771	9757
28	---	9828	9794	9865	9771	9784	---	9994	9845	---	9764	---
29	9750	9834	---	9865	---	9800	9595	9891	---	9824	9761	---
30	9750	9838	---	9865	---	---	9682	9811	---	9831	9757	9777
31	9747	---	9733	9865	---	---	---	9710	---	9831	---	---

PYRAMID AND WINNEMUCCA LAKES BASIN

10340500 PROSSER CREEK BELOW PROSSER CREEK DAM, NEAR TRUCKEE, CA

LOCATION.--Lat 39°22'24", long 120°07'50", in NW 1/4 NE 1/4 sec.31, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank, 300 ft downstream from Station Creek, 0.5 mi downstream from Prosser Creek Dam, 0.9 mi upstream from mouth, and 4.2 mi northeast of Truckee.

DRAINAGE AREA.--52.9 mi².

PERIOD OF RECORD.--October 1902 to June 1903 (gage heights only), October 1942 to December 1950, June 1951 to current year. Prior to October 1976, published as "near Boca." Monthly discharge only for October 1942 to December 1950, published in WSP 1734. Records for April 1889 to November 1890, published in the 11th and 12th Annual Reports, Part 2, have been found to be unreliable and should not be used.

REVISED RECORDS.--WDR CA-79-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,602.31 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). See WSP 2127 for history of changes prior to September 1956. October 1956 to May 1976, water-stage recorder at site 0.8 mi downstream at datum 29.69 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Prosser Creek Reservoir (station 10340300) since Jan. 30, 1963.

AVERAGE DISCHARGE (adjusted for change in contents in Prosser Creek Reservoir since 1963).--48 years (water years 1943-50, 1952-91), 86.8 ft³/s, 62,890 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (water years 1943-91).--Maximum discharge, 4,560 ft³/s, Dec. 23, 1955, gage height, 10.13 ft, present datum, from rating curve extended above 910 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 11.0 ft from floodmarks, present datum, Nov. 20, 1950; minimum discharge, 0.4 ft³/s, July 18, 1961, result of work on dam upstream. Maximum discharge since construction of Prosser Creek Dam in 1963, 1,790 ft³/s, Feb. 20-22, 1986, gage height, 6.66 ft, from rating curve extended above 880 ft³/s on basis of valve setting at Prosser Creek Dam; minimum daily, 0.02 ft³/s, Jan. 2, 1975, result of temporary closing of Prosser Creek Dam for spillway maintenance.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 204 ft³/s, May 9, gage height, 3.71 ft; minimum daily, 2.6 ft³/s, Sept. 28-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	9.0	8.6	8.4	11	20	44	90	133	80	10	4.2
2	8.5	9.0	8.4	8.4	12	20	81	106	137	80	10	4.2
3	8.4	9.0	8.4	8.4	12	21	99	107	126	62	10	4.2
4	8.4	9.0	8.4	8.4	11	42	99	105	146	47	10	4.2
5	8.4	9.0	8.4	8.4	11	30	91	104	175	47	10	4.2
6	8.4	9.0	8.4	8.6	10	87	83	86	151	47	10	4.2
7	8.4	9.0	8.4	9.0	10	111	82	115	96	47	9.9	4.2
8	8.4	9.0	8.4	9.0	13	111	119	141	83	37	9.9	4.2
9	8.4	8.7	8.4	9.0	20	111	153	177	83	26	9.9	4.2
10	7.4	8.4	8.4	9.0	20	111	143	170	122	26	9.9	4.4
11	8.3	8.4	8.4	8.8	20	111	139	136	149	26	9.9	7.1
12	8.4	8.4	8.9	8.4	20	111	129	141	165	26	9.3	9.9
13	8.7	8.4	9.4	8.4	20	111	111	120	175	26	8.4	9.9
14	9.0	8.4	9.4	7.9	20	111	110	105	143	26	9.0	9.9
15	9.0	8.4	9.4	7.9	20	109	85	95	119	19	9.0	9.9
16	8.9	8.4	9.4	7.9	20	49	67	77	119	11	9.0	8.4
17	8.4	8.4	9.4	8.2	20	48	84	103	110	11	8.8	4.9
18	8.4	8.4	9.4	8.9	20	26	95	141	87	11	8.4	4.9
19	8.4	8.4	9.4	9.4	20	9.9	72	145	73	11	8.4	5.1
20	8.4	8.4	9.4	9.4	20	9.9	61	122	72	11	8.4	5.6
21	8.4	8.4	12	9.4	20	9.9	59	55	72	12	8.4	5.6
22	8.4	8.4	16	9.6	20	29	78	59	72	11	8.2	6.2
23	8.4	8.4	16	9.9	20	39	92	102	74	11	6.9	6.4
24	8.4	8.4	16	10	20	39	138	149	73	30	6.5	5.7
25	8.4	8.6	16	10	20	40	165	183	44	47	6.4	3.9
26	8.6	9.0	16	10	20	40	120	179	23	28	6.1	2.9
27	9.0	9.0	16	10	20	31	93	179	23	11	6.1	2.8
28	9.0	9.0	16	10	20	23	92	178	58	11	5.9	2.6
29	9.0	9.0	16	11	---	27	70	163	81	11	5.3	2.6
30	9.0	9.0	16	11	---	31	60	182	80	11	4.7	2.6
31	9.0	---	12	11	---	31	---	167	---	11	4.2	---
TOTAL	264.9	260.3	344.7	283.7	490	1699.7	2914	3982	3064	871	256.9	159.1
MEAN	8.55	8.68	11.1	9.15	17.5	54.8	97.1	128	102	28.1	8.29	5.30
MAX	9.0	9.0	16	11	20	111	165	183	175	80	10	9.9
MIN	7.4	8.4	8.4	7.9	10	9.9	44	55	23	11	4.2	2.6
AC-FT	525	516	684	563	972	3370	5780	7900	6080	1730	510	316

CAL YR 1990 TOTAL 19487.1 MEAN 53.4 MAX 278 MIN 7.2 AC-FT 38650 MEAN a 41.9 AC-FT a 30340
WTR YR 1991 TOTAL 14590.3 MEAN 40.0 MAX 183 MIN 2.6 AC-FT 28940 MEAN a 39.9 AC-FT a 28910

a Adjusted for change in contents in Prosser Creek Reservoir.

PYRAMID AND WINNEMUCCA LAKES BASIN

299

10342900 INDEPENDENCE LAKE NEAR TRUCKEE, CA

LOCATION.--Lat 39°27'07", long 120°17'23", in NW 1/4 SW 1/4 sec.35, T.19 N., R.15 E., Sierra County, Hydrologic Unit 16050102, on right bank of outlet channel, 60 ft upstream from outlet gates, and 10.5 mi northwest of Truckee.

DRAINAGE AREA.--7.51 mi².

PERIOD OF RECORD.--November 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Sierra Pacific Power Co.).

REMARKS.--Lake levels regulated by an earthfill dam at the outlet constructed in 1939. Usable capacity, 17,300 acre-ft between elevations 6,921.0 ft, invert of outlet gate and 6,949.0 ft, normal maximum storage level. Water is used for irrigation and power development downstream. Records, including extremes, represent usable contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 17,400 acre-ft, June 7-13, 1989, elevation, 6,949.19 ft; minimum, 4,750 acre-ft, Nov. 10, 11, 1988, elevation, 6,929.39 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 16,400 acre-ft, Apr. 25 to May 3, elevation, 6,947.78 ft; minimum, 13,500 acre-ft, Sept. 26-30, elevation, 6,943.43 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Sierra Pacific Power Co., dated Nov. 5, 1941)

6,921	0	6,940	11,240
6,925	2,220	6,945	14,530
6,930	5,110	6,950	18,000
6,935	8,110		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14600	14300	14200	14200	14300	14600	15800	16400	16100	14900	14200	13900
2	14600	14300	14200	14200	14300	14600	15800	16400	16200	14800	14200	13900
3	14600	14300	14200	14200	14300	14800	15800	16400	16200	14700	14100	13900
4	14600	14300	14200	14200	14400	15100	15800	16300	16300	14600	14100	13900
5	14600	14300	14200	14200	14400	15200	15900	16200	16300	14600	14100	13900
6	14500	14300	14200	14200	14400	15200	15900	16200	16300	14500	14100	13900
7	14500	14300	14200	14300	14400	15200	15900	16200	16300	14400	14100	13800
8	14500	14300	14200	14300	14400	15200	16000	16200	16200	14300	14100	13800
9	14500	14300	14200	14300	14400	15200	16000	16200	16300	14300	14100	13800
10	14500	14300	14200	14300	14400	15300	16000	16100	16300	14300	14000	13800
11	14500	14300	14200	14300	14400	15300	16000	16100	16200	14300	14000	13800
12	14500	14300	14200	14300	14400	15300	16000	16000	16200	14300	14000	13800
13	14500	14300	14200	14300	14400	15400	16000	16000	16200	14300	14000	13700
14	14500	14300	14200	14300	14400	15400	16100	15900	16200	14300	14100	13700
15	14500	14300	14200	14300	14400	15400	16100	15900	16100	14300	14100	13700
16	14400	14300	14200	14300	14400	15400	16100	16000	16000	14300	14100	13700
17	14500	14300	14200	14300	14400	15500	16100	16000	16000	14200	14100	13700
18	14400	14300	14200	14300	14400	15500	16100	15900	15900	14200	14100	13700
19	14400	14300	14300	14300	14400	15500	16200	15900	15800	14200	14100	13700
20	14400	14300	14300	14300	14400	15500	16200	15900	15700	14200	14100	13600
21	14400	14300	14300	14300	14400	15500	16200	15800	15700	14200	14100	13600
22	14400	14200	14300	14300	14400	15500	16200	15900	15600	14200	14000	13600
23	14400	14200	14300	14300	14400	15600	16300	15900	15500	14200	14000	13600
24	14400	14200	14300	14300	14400	15700	16300	16000	15400	14200	14000	13600
25	14400	14200	14200	14300	14400	15700	16400	16100	15300	14200	14000	13600
26	14400	14300	14200	14300	14400	15800	16400	16100	15200	14200	14000	13500
27	14400	14300	14300	14300	14400	15800	16400	16100	15100	14200	13900	13500
28	14400	14300	14200	14300	14500	15800	16400	16100	15100	14200	13900	13500
29	14400	14300	14200	14300	---	15800	16400	16100	15100	14200	13900	13500
30	14400	14200	14200	14300	---	15800	16400	16100	15000	14200	13900	13500
31	14400	---	14200	14300	---	15800	---	16100	---	14200	13900	---
MAX	14600	14300	14300	14300	14500	15800	16400	16400	16300	14900	14200	13900
MIN	14400	14200	14200	14200	14300	14600	15800	15800	15000	14200	13900	13500
a	6944.74	6944.56	6944.54	6944.58	6944.90	6946.84	6947.78	6947.30	6945.64	6944.45	6944.03	6943.43
b	-200	-200	0	+100	+200	+1300	+600	-300	-1100	-800	-300	-400

CAL YR 1990 MAX 16800 MIN 14200 b 0
WTR YR 1991 MAX 16400 MIN 13500 b -1100

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

PYRAMID AND WINNEMUCCA LAKES BASIN

10343000 INDEPENDENCE CREEK NEAR TRUCKEE, CA

LOCATION.--Lat 39°27'24", long 120°17'10", in SW 1/4 NW 1/4 sec.35, T.19 N., R.15 E., Sierra County, Hydrologic Unit 16050102, on left bank, 0.4 mi downstream from Independence Lake outlet, and 10.5 mi northwest of Truckee.

DRAINAGE AREA.--8.10 mi².

PERIOD OF RECORD.--November 1902 to September 1907, November 1909 to June 1910, August 1968 to current year.

REVISED RECORDS.--WDR CA-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,920 ft above National Geodetic Vertical Datum of 1929, from topographic map. July 1, 1904, to June 30, 1910, nonrecording gage 75 ft downstream from Independence Lake outlet; prior to July 1, 1904, nonrecording gage 600 ft downstream at approximately same datum.

REMARKS.--Records good. Flow regulated by Independence Lake (station 10342900) since 1939.

AVERAGE DISCHARGE (unadjusted).--28 years (water years 1903-7, 1969-91), 25.4 ft³/s, 18,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 291 ft³/s, Dec. 20, 1981, gage height, 6.12 ft; no flow Sept. 28 to Nov. 10, 1905, June 1, 1906.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 69 ft³/s, May 3, gage height, 3.52 ft; minimum daily, 1.1 ft³/s, Feb. 6-11, 27, 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.2	1.9	e1.9	1.4	1.2	1.6	27	46	56	3.3	1.7
2	2.5	2.1	2.1	e1.9	1.3	1.3	1.6	27	46	56	3.4	1.7
3	2.4	2.1	2.1	e1.9	1.3	1.4	1.6	47	46	56	3.2	1.9
4	2.5	2.1	2.1	e1.9	1.3	2.3	1.6	64	46	56	3.5	1.9
5	2.6	2.1	2.1	e1.9	1.2	1.4	1.7	61	46	55	3.3	1.9
6	2.6	2.1	2.1	e1.8	1.1	1.4	2.0	59	49	55	3.3	4.9
7	2.6	2.1	2.1	e1.8	1.1	1.2	2.2	57	55	55	2.9	7.6
8	2.6	2.1	2.1	e1.8	1.1	1.3	2.4	57	59	41	2.8	7.2
9	2.6	1.9	2.1	e1.8	1.1	1.3	2.3	57	60	7.7	3.2	7.2
10	2.5	1.9	2.2	e1.8	1.1	1.4	2.3	54	62	6.9	3.3	7.0
11	2.4	1.9	2.3	e1.8	1.1	1.4	2.1	52	62	6.1	3.0	6.8
12	2.3	1.9	2.1	e1.8	1.3	1.4	2.0	50	62	6.0	2.7	6.5
13	2.3	1.9	2.1	1.8	1.3	1.4	2.1	49	62	6.0	2.4	6.5
14	2.2	1.9	2.1	1.6	1.3	1.4	2.2	48	61	5.0	2.4	6.5
15	2.4	2.0	2.1	1.4	1.3	1.4	2.2	47	61	4.6	2.1	5.9
16	2.3	2.1	2.1	1.4	1.3	1.4	2.1	47	60	4.4	1.9	5.5
17	2.1	2.1	2.1	1.4	1.3	1.5	1.8	46	59	4.8	2.1	5.4
18	2.1	1.9	e2.1	1.4	1.3	1.5	1.7	45	59	5.2	2.3	5.4
19	2.1	1.9	e2.1	1.4	1.2	1.5	1.9	44	58	4.7	2.4	5.1
20	2.2	1.9	e2.1	1.4	1.3	1.5	2.0	44	58	5.1	2.2	5.2
21	2.3	1.9	e2.1	1.4	1.3	1.6	2.1	44	58	5.0	2.3	5.9
22	2.4	2.0	e2.1	1.4	1.2	1.6	2.3	44	58	4.9	2.2	5.4
23	2.4	2.1	e2.1	1.4	1.2	1.7	2.5	44	58	4.7	2.0	5.4
24	2.4	2.1	e2.0	1.4	1.3	1.6	2.3	44	57	4.3	1.9	5.4
25	2.6	2.1	e2.0	1.4	1.3	1.7	2.1	45	57	4.6	2.0	6.0
26	2.6	2.1	e2.0	1.4	1.3	1.7	2.7	46	57	4.3	2.1	6.0
27	2.4	2.1	e2.0	1.4	1.1	1.6	8.3	46	57	4.1	1.8	5.6
28	2.4	2.1	e2.0	1.4	1.1	1.6	9.9	47	57	3.7	2.0	5.5
29	2.4	2.1	e2.0	1.4	---	1.6	16	46	57	3.3	2.1	5.7
30	2.4	1.9	e1.9	1.4	---	1.6	23	46	56	3.0	2.1	6.0
31	2.3	---	e1.9	1.4	---	1.6	---	46	---	3.0	2.0	---
TOTAL	74.5	60.7	64.2	49.3	34.5	46.5	110.6	1480	1689	541.4	78.2	158.7
MEAN	2.40	2.02	2.07	1.59	1.23	1.50	3.69	47.7	56.3	17.5	2.52	5.29
MAX	2.6	2.2	2.3	1.9	1.4	2.3	23	64	62	56	3.5	7.6
MIN	2.1	1.9	1.9	1.4	1.1	1.2	1.6	27	46	3.0	1.8	1.7
AC-FT	148	120	127	98	68	92	219	2940	3350	1070	155	315

CAL YR 1990 TOTAL 3753.9 MEAN 10.3 MAX 89 MIN 1.9 AC-FT 7450
WTR YR 1991 TOTAL 4387.6 MEAN 12.0 MAX 64 MIN 1.1 AC-FT 8700

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

301

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA
(Hydrologic bench-mark station)

LOCATION.--Lat 39°25'54", long 120°14'13", in NE 1/4 NE 1/4 sec.7, T.18 N., R.16 E., Nevada County, Hydrologic Unit 16050102, on left bank, 2.2 mi upstream from bridge on State Highway 89, and 7.5 mi north of Truckee.

DRAINAGE AREA.--10.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1953 to current year.

REVISED RECORDS.--WDR CA-79-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,320 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 2, 1953, nonrecording gage at site 100 ft upstream at different datum.

REMARKS.--Records excellent. No storage or diversion upstream from station.

AVERAGE DISCHARGE.--38 years, 12.3 ft³/s, 8,910 acre-ft/yr.EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 765 ft³/s, Feb. 1, 1963, gage height, 4.64 ft from floodmarks, from rating curve extended above 160 ft³/s on basis of slope-area measurement at gage height 4.28 ft; minimum, 0.6 ft³/s, Aug. 8, 1960, Aug. 7, 1961, result of temporary regulation.EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	1430	*85	*2.91				

Minimum daily, 1.3 ft³/s, on several days.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.2	2.0	2.1	2.0	2.9	5.3	13	10	3.2	1.6	1.3
2	1.7	2.0	2.0	2.1	2.3	2.7	5.4	12	10	3.0	1.6	1.3
3	1.7	1.9	2.0	2.1	2.5	6.2	5.8	12	10	2.8	1.6	1.3
4	1.6	2.0	2.0	2.2	2.4	4.7	6.6	13	10	2.7	1.7	1.4
5	1.7	2.0	2.1	2.2	2.7	19	8.3	14	9.4	2.5	1.7	1.4
6	1.7	2.0	2.0	2.2	2.5	9.4	17	16	8.6	2.4	1.6	1.3
7	1.7	1.9	2.0	2.2	2.4	6.2	12	18	8.1	2.3	1.6	1.3
8	1.7	2.0	2.0	2.2	2.4	5.2	9.7	21	8.1	2.3	1.6	1.3
9	1.7	2.0	2.0	2.2	2.3	4.7	9.8	19	8.2	2.2	1.5	1.7
10	1.7	2.0	2.1	2.1	2.5	4.3	9.1	15	8.2	2.2	1.5	2.3
11	1.7	2.0	2.1	2.1	2.4	3.9	7.7	13	8.0	2.2	1.5	1.6
12	1.7	2.0	2.1	2.2	2.5	3.6	7.8	13	7.5	2.1	1.4	1.5
13	1.7	2.0	2.2	2.2	2.7	3.6	9.2	14	6.8	2.1	1.5	1.5
14	1.7	2.0	2.2	2.2	2.9	3.4	11	14	6.2	2.0	2.3	1.4
15	1.7	2.1	2.2	2.2	3.0	3.3	10	15	5.6	1.9	2.9	1.4
16	1.7	2.1	2.2	2.1	3.0	3.2	8.9	17	5.2	1.9	2.1	1.5
17	1.7	2.1	2.2	2.1	2.8	3.2	7.9	17	4.8	1.9	1.8	1.4
18	1.8	2.1	2.2	2.1	2.7	3.1	8.2	14	4.4	1.9	1.7	1.4
19	2.1	2.0	e2.2	2.1	2.7	3.1	9.3	12	4.3	1.9	1.6	1.4
20	1.9	2.0	2.2	2.1	2.7	3.0	11	13	4.1	2.4	1.5	1.4
21	1.9	2.0	e2.2	2.1	2.7	2.9	11	14	3.8	2.4	1.5	1.4
22	1.8	1.9	e2.2	2.0	2.8	2.9	12	15	3.6	2.1	1.4	1.4
23	1.8	1.9	e2.2	2.0	2.8	2.8	13	16	3.5	2.1	1.4	1.4
24	1.8	1.9	e2.2	2.0	2.6	3.2	13	16	3.5	1.9	1.4	1.4
25	1.8	1.9	e2.2	2.0	2.6	3.0	11	16	3.5	1.8	1.3	1.4
26	1.8	2.0	e2.2	2.0	2.7	2.9	11	14	3.5	1.8	1.3	1.5
27	1.8	2.1	2.2	2.0	2.7	2.9	11	13	3.6	1.8	1.3	1.5
28	1.8	2.1	2.2	2.0	3.0	3.1	12	12	4.6	1.8	1.4	1.5
29	1.8	2.1	2.2	1.9	---	3.4	14	11	4.3	1.9	1.4	1.5
30	1.8	2.1	e2.1	2.0	---	4.0	14	12	3.6	1.7	1.4	1.5
31	2.4	---	2.1	2.0	---	4.8	---	11	---	1.6	1.3	---
TOTAL	55.1	60.4	66.0	65.0	73.3	176.9	302.0	445	185.0	66.8	49.4	43.6
MEAN	1.78	2.01	2.13	2.10	2.62	5.71	10.1	14.4	6.17	2.15	1.59	1.45
MAX	2.4	2.2	2.2	2.2	3.0	4.7	17	21	10	3.2	2.9	2.3
MIN	1.6	1.9	2.0	1.9	2.0	2.7	5.3	11	3.5	1.6	1.3	1.3
AC-FT	109	120	131	129	145	351	599	883	367	132	98	86

CAL YR 1990 TOTAL 1754.3 MEAN 4.81 MAX 29 MIN 1.4 AC-FT 3480
WTR YR 1991 TOTAL 1588.5 MEAN 4.35 MAX 47 MIN 1.3 AC-FT 3150

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--December 1990 to September 1991.

INSTRUMENTATION.--Recording weighing rain gage since Dec 1, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 3.36 in., Mar. 4; no precipitation for many days.

PRECIPITATION ACCUMULATED (INCHES), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	.00	.00	.03	1.25	.00	.09	.00	.00	.00	.00
2	---	---	.04	.00	.82	.73	.00	.22	.00	.00	.00	.00
3	---	---	.00	.00	.05	2.43	.00	.00	.05	.00	.00	.00
4	---	---	.00	.00	.23	3.36	.00	.00	.00	.00	.32	.00
5	---	---	.00	.00	.15	.22	.05	.00	.00	.00	.00	.00
6	---	---	.00	.07	.00	.00	.49	.05	.00	.00	.00	.00
7	---	---	.00	.29	.00	.00	.00	.00	.00	.00	.00	.00
8	---	---	.00	.00	.00	.00	.00	.51	.00	.00	.00	.00
9	---	---	.00	.00	.00	.00	.04	.20	.00	.00	.00	.55
10	---	---	.05	.00	.00	.27	.00	.00	.00	.00	.00	.18
11	---	---	.30	.00	.00	.15	.00	.00	.00	.00	.00	.00
12	---	---	.00	.00	.00	.26	.00	.00	.00	.00	.00	.10
13	---	---	.06	.00	.00	.70	.00	.12	.00	.00	.00	.00
14	---	---	.00	.00	.00	.08	.00	.00	.00	.00	.71	.00
15	---	---	.11	.00	.00	.31	.04	.00	.00	.00	.40	.00
16	---	---	.00	.00	.02	.02	.00	.21	.00	.00	.00	.00
17	---	---	.00	.00	.02	.24	.00	.21	.00	.00	.00	.00
18	---	---	.14	.00	.00	.33	.00	.04	.00	.08	.00	.00
19	---	---	.49	.00	.00	.29	.00	.00	.00	.17	.00	.00
20	---	---	.11	.00	.00	.25	.02	.11	.00	.59	.00	.00
21	---	---	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00
22	---	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	---	---	.00	.00	.00	.28	.02	.00	.00	.00	.00	.00
24	---	---	.00	.00	.00	1.70	.19	.00	.00	.00	.00	.00
25	---	---	.00	.00	.00	.23	.16	.00	.00	.00	.00	.00
26	---	---	.00	.00	.00	1.00	.00	.00	.00	.00	.00	e.15
27	---	---	.00	.00	.00	.98	.00	.00	.17	.17	.00	.00
28	---	---	.00	.00	.18	.12	.00	.00	.29	.08	.00	.00
29	---	---	.00	.00	---	.02	.00	.07	.00	.04	.00	.00
30	---	---	.00	.00	---	.04	.11	.28	.00	.00	.00	.00
31	---	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	---	---	1.30	0.36	1.50	15.30	1.12	2.11	0.51	1.13	1.43	0.98

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA--Continued

303

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968-75, 1981 to current year.

CHEMICAL DATA: Water years 1968-72, October 1985 to current year.

WATER TEMPERATURE: Water years 1970-74.

SEDIMENT DATA: Water years 1968-75, 1981 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1969 to September 1974.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
MAY 01...	1030	13	4.0	0.5	<0.4	1.0	<0.4	0.9	<0.4	0.09	0.12
AUG 09...	1115	1.9	10.5	0.9	<0.4	2.1	<0.4	1.7	<0.4	0.06	0.59

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 29...	1250	2.0	128	8.0	1.5	2.3	610	11.3	101	K2	K12
FEB 11...	1045	2.3	123	8.3	2.5	4.1	605	11.3	105	K1	K5
MAY 08...	1145	18	54	7.8	6.0	2.9	605	9.9	100	K1	K2
AUG 08...	1030	1.7	132	8.3	8.5	0.40	610	9.3	100	K13	64

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 29...	55	0	14	4.7	6.6	20	0.4	2.3	93	76	<1.0
FEB 11...	54	0	14	4.7	6.3	19	0.4	2.1	78	64	<1.0
MAY 08...	24	1	6.3	2.1	3.1	21	0.3	0.80	28	23	<0.10
AUG 08...	62	0	16	5.2	6.7	18	0.4	2.4	85	70	0.10

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
NOV 29...	1.2	<0.10	32	88	--	--	0.001	0.052	0.005	0.006	0.30
FEB 11...	0.50	<0.10	31	88	--	--	0.004	0.022	0.016	0.010	<0.20
MAY 08...	0.70	<0.10	22	52	--	--	0.002	0.015	0.026	0.009	<0.20
AUG 08...	0.20	<0.10	33	91	106	0.12	0.001	0.014	0.007	0.002	<0.20

PYRAMID AND WINNEMUCCA LAKES BASIN

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)
NOV 29...	0.028	0.029	0.013	40	<1	24	<0.5	<1.0	<1	<3	<1
FEB 11...	0.016	0.025	0.013	80	<1	23	<0.5	<1.0	<1	<3	1
MAY 08...	0.015	0.015	0.002	130	<1	12	<0.5	<1.0	<1	<3	2
AUG 08...	0.023	0.015	0.008	<10	<1	26	<0.5	<1.0	<1	<3	1

DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
NOV 29...	55	1	<4	3	<0.1	<10	<1	<1	<1.0	150
FEB 11...	60	<1	<4	3	<0.1	<10	1	<1	<1.0	140
MAY 08...	54	1	<4	2	<0.1	<10	1	<1	<1.0	74
AUG 08...	57	<1	<4	4	<0.1	<10	<1	<1	<1.0	170

DATE	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
NOV 29...	<6	<3	--	--	--	--	--	--	--	--
FEB 11...	<6	4	--	--	--	--	--	--	--	--
MAY 08...	<6	7	<0.6	<0.6	1.0	<0.6	0.9	<0.6	0.02	0.10
AUG 08...	<6	4	1.3	<0.6	2.2	<0.6	1.8	<0.6	<0.02	0.63

K: NON-IDEAL COLONY COUNT

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SEDI- MENT, SUS- PENDE (MG/L)
MAY 08...	1200	1.34	0.90	55	7.9	7.5	605	8.9	94	4
08...	1205	1.20	3.30	55	7.8	7.5	605	8.9	94	4
08...	1210	1.42	5.70	55	7.8	7.5	605	8.9	94	5
08...	1215	1.50	7.70	55	7.8	7.5	605	9.0	95	4
08...	1220	1.48	9.70	55	7.8	7.5	605	9.1	96	4
AUG 08...	1035	0.60	0.40	130	8.2	8.5	610	9.3	100	7
08...	1040	0.65	1.20	128	8.2	8.5	610	9.3	100	5
08...	1045	0.70	2.40	128	8.2	8.5	610	9.3	100	6
08...	1050	0.65	3.60	131	8.2	8.5	610	9.3	100	4
08...	1055	0.55	5.40	129	8.2	8.5	610	9.3	100	5

* Instantaneous discharge at the time of cross-sectional measurement: May 8, 18 ft³/s; Aug 8, 1.7 ft³/s.

PYRAMID AND WINNEMUCCA LAKES BASIN

305

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV 29...	1250	2.0	1.5	2	0.01
FEB 11...	1045	2.3	2.5	1	0.01
MAY 08...	1145	18	6.0	4	0.19
AUG 08...	1030	1.7	8.5	5	0.02

PYRAMID AND WINNEMUCCA LAKES BASIN

10344300 STAMPEDE RESERVOIR NEAR TRUCKEE, CA

LOCATION.--Lat 39°28'14", long 120°06'11", in SE 1/4 NE 1/4 sec.29, T.19 N., R.17 E., Sierra County, Hydrologic Unit 16050102, Tahoe National Forest, in control house near base of spillway of Stampede Dam on Little Truckee River, 0.2 mi upstream from Worn Mill Canyon, and 11.0 mi northeast of Truckee.

DRAINAGE AREA.--136 mi².

PERIOD OF RECORD.--August 1969 to current year. August 1969 to September 1977 (monthend elevations and contents only). October 1977 to September 1987 (daily contents). Prior to October 1976, published as "near Boca."

GAGE.--Nonrecording gage read five times weekly. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Reservoir is formed by rolled-earth and rockfill dam. Storage began Aug. 1, 1969. Total capacity, 226,500 acre-ft at elevation 5,948.7 ft, spillway crest. Inactive contents, 5,010 acre-ft, includes 660' acre-ft dead contents below elevation 5,798.3 ft. Figures given, including extremes, represent total contents at 0800 hours. Reservoir is used for flood control, municipal water supply, enhancement of fishery, and recreation.

COOPERATION.--Records and capacity table were provided by U.S. Bureau of Reclamation, not rounded to U.S. Geological Survey standards.

EXTREMES (at 0800) FOR PERIOD OF RECORD.--Maximum contents, 254,493 acre-ft, June 1, 1983, elevation, 5,956.55 ft; minimum since reservoir first filled, 30,772 acre-ft, Jan. 31, Feb. 1, 1978, elevation, 5,853.60 ft.

EXTREMES (at 0800) FOR CURRENT YEAR.--Maximum contents observed, 90,611 acre-ft, Oct. 1, elevation, 5,898.00 ft; minimum observed, 80,382 acre-ft, Sept. 30, elevation, 5,892.50 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by U.S. Bureau of Reclamation, dated July 1971)

5,850	27,915	5,880	60,185	5,910	115,865	5,940	197,630
5,860	36,470	5,890	76,008	5,920	140,141	5,950	231,005
5,870	47,204	5,900	94,535	5,930	167,355	5,960	267,386

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90611	88996	---	---	85729	85599	89724	88443	---	86121	83420	---
2	90573	88919	---	86759	---	---	89724	88348	---	85991	83365	---
3	90495	---	87702	86665	---	---	89763	88214	87570	85823	---	81603
4	90457	---	87702	86646	85748	86178	89801	---	87645	---	---	81548
5	90399	88786	87645	---	85823	87324	89821	---	87854	85320	83218	81512
6	---	88748	87589	---	85785	87589	---	87930	87930	---	83164	81458
7	---	88633	87551	86571	85785	87835	---	88043	87835	---	83091	---
8	90129	88595	---	86534	85785	87949	90225	88062	---	84431	82999	---
9	90071	88576	---	86496	---	---	90206	88290	---	84283	82963	81296
10	90032	---	87475	86440	---	---	90167	88290	87683	84209	---	81386
11	89994	---	87494	86421	85767	88252	---	---	87702	84173	---	81332
12	89936	88443	87475	---	85711	88328	89994	---	87721	84117	82762	81296
13	---	88424	87475	---	85729	88462	---	87778	87683	---	82726	81260
14	---	88424	87400	86327	85729	88576	---	87589	87608	---	82671	---
15	89801	---	---	86290	85748	88614	90129	87419	---	83915	82726	---
16	89763	88290	---	86271	---	---	90129	87305	---	83841	82708	81099
17	89686	---	87249	86215	---	---	90206	87343	86985	83750	---	81063
18	89667	---	87230	86196	---	88786	89974	---	86703	83695	---	81009
19	89609	88214	87211	---	85636	88881	89821	---	86646	83786	82580	80973
20	---	88157	87249	---	85636	88900	---	87098	86571	---	82562	80937
21	---	88119	87173	86103	85617	88919	---	86909	86571	---	82508	---
22	89475	---	---	86047	85617	88900	89436	86778	---	83823	82453	---
23	89417	---	---	86009	---	---	89340	86778	---	83786	82399	80740
24	89379	---	87004	85991	---	---	89340	86928	86496	83731	---	80686
25	89340	---	---	85953	85524	89226	---	---	86477	83658	---	80633
26	89283	88024	86947	---	85487	89283	89034	---	86440	83621	82163	80597
27	---	87930	86909	---	85524	89321	---	---	86365	---	82109	80561
28	---	87892	86947	85860	85543	89340	---	87645	86290	---	81982	---
29	89130	87854	---	85804	---	89398	88481	87683	---	83566	81928	---
30	89092	87854	---	85767	---	---	88443	87683	---	83530	81855	80382
31	89053	---	86759	85729	---	---	---	87702	---	83511	---	---

PYRAMID AND WINNEMUCCA LAKES BASIN

307

10344400 LITTLE TRUCKEE RIVER ABOVE BOCA RESERVOIR, NEAR TRUCKEE, CA

LOCATION.--Lat 39°26'09", long 120°05'00", in SW 1/4 SW 1/4 sec.3, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank, 1 mi upstream from Boca Reservoir, 1.5 mi upstream from Dry Creek, 3.0 mi downstream from Stampede Dam, and 5.5 mi northeast of Truckee.

DRAINAGE AREA.--146 mi².

PERIOD OF RECORD.--June 1903 to October 1910, September 1939 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734. Published as "at Pine Station", June 1903 to December 1907, as "at Starr," January 1908 to October 1910, and as "near Boca," September 1939 to September 1976.

REVISED RECORDS.--WSP 1564: 1903-4, 1906-7, 1910, drainage area at site used in 1903-7.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,618.67 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation bench mark). June 1903 to October 1910, nonrecording gages at different sites and datums.

REMARKS.--Records excellent except for estimated daily discharges, which are good. Flow regulated by Independence Lake (station 10342900) since 1939, one transbasin diversion to Sierra Valley, and Stampede Reservoir (station 10344300) since 1969.

AVERAGE DISCHARGE (adjusted for change in contents in Stampede Reservoir since 1969).--59 years (water years 1904-10, 1940-91), 186 ft³/s, 134,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft³/s, Feb. 1, 1963, gage height, 9.00 ft, from rating curve extended above 1,600 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 0.30 ft³/s, Sept. 16-21, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 290 ft³/s, May 8, gage height, 1.64 ft; minimum daily, 28 ft³/s, many days in October and February.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	30	29	34	29	29	65	201	281	144	30	30
2	28	29	29	34	30	29	91	201	280	156	30	30
3	28	29	29	34	29	33	104	228	279	184	30	30
4	28	29	29	34	29	47	115	226	279	204	30	30
5	28	29	29	34	30	34	115	226	280	204	30	30
6	28	29	29	e34	29	31	116	224	279	203	30	31
7	28	29	29	34	29	30	115	258	280	203	30	30
8	28	29	29	34	29	30	152	283	280	164	30	30
9	28	29	29	34	29	30	185	285	278	81	29	32
10	28	29	29	34	29	30	167	278	279	33	29	32
11	28	29	30	34	29	30	157	281	278	32	29	30
12	28	29	31	34	29	30	131	281	278	31	29	30
13	28	29	33	34	29	31	115	281	278	31	30	30
14	28	30	32	34	29	31	115	281	279	31	31	30
15	28	30	33	34	30	31	115	281	278	31	31	30
16	29	30	32	34	29	31	116	281	278	31	31	30
17	31	30	33	e33	29	30	163	281	277	31	30	30
18	30	29	33	33	28	30	215	281	215	34	30	30
19	30	29	e33	33	28	31	189	281	143	34	30	30
20	30	29	e33	33	28	31	173	281	117	38	30	30
21	30	29	e33	e33	28	30	172	281	98	34	30	30
22	30	29	e33	e33	28	30	172	281	99	31	30	30
23	30	29	e33	e33	28	32	172	281	98	31	30	30
24	30	29	e33	e31	28	33	196	281	97	30	30	30
25	29	30	e34	e31	28	32	211	281	96	30	30	30
26	29	29	e34	e31	28	33	202	281	116	30	30	30
27	29	29	e34	e31	28	33	196	281	133	30	30	30
28	29	29	e34	e31	28	33	196	280	134	30	30	30
29	29	29	e34	e31	---	35	176	279	133	30	30	30
30	29	29	e34	e30	---	36	164	281	132	30	30	30
31	30	---	e34	e30	---	37	---	281	---	30	30	---
TOTAL	894	876	983	1021	804	993	4571	8308	6352	2236	929	905
MEAN	28.8	29.2	31.7	32.9	28.7	32.0	152	268	212	72.1	30.0	30.2
MAX	31	30	34	34	30	47	215	285	281	204	31	32
MIN	28	29	29	30	28	29	65	201	96	30	29	30
AC-FT	1770	1740	1950	2030	1590	1970	9070	16480	12600	4440	1840	1800

CAL YR 1990 TOTAL 31108 MEAN 85.2 MAX 376 MIN 28 AC-FT 61700 MEAN a 69.2 AC-FT a 50130
WTR YR 1991 TOTAL 28872 MEAN 79.1 MAX 285 MIN 28 AC-FT 57270 MEAN a 64.8 AC-FT a 46900

e Estimated.

a Adjusted for change in contents in Stampede Reservoir.

PYRAMID AND WINNEMUCCA LAKES BASIN

10344490 BOCA RESERVOIR NEAR TRUCKEE, CA

LOCATION.--Lat 39°23'20", long 120°05'43", in NE 1/4 NW 1/4 sec.28, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, in control house at Boca Dam on Little Truckee River, 1,800 ft upstream from mouth, and 6.3 mi northeast of Truckee.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--December 1938 to current year. Prior to October 1976 published as "at Boca." Monthend contents only for December 1938 to September 1957, published in WSP 1734.

REVISED RECORDS.--WSP 1634: Drainage area.

GAGE.--Pressure gage with mercury column read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1938. Usable capacity, 40,868 acre-ft between elevations 5,521 ft, outlet sill, and 5,605 ft, top of spillway gates. Elevation of spillway (gate open) is 5,589.01 ft. Dead contents, 241 acre-ft. Records, including extremes, represent usable contents at 0800 hours. Water is used for irrigation in the State of Nevada and for power development.

COOPERATION.--Records and capacity table were provided by U.S. Bureau of Reclamation; not rounded to U.S. Geological Survey standards.

EXTREMES (at 0800) FOR PERIOD OF RECORD.--Maximum contents, 41,440 acre-ft, Dec. 23, 1955, elevation, 5,605.55 ft; minimum, 37 acre-ft, Mar. 4-9, 1955, elevation, 5,521.65 ft.

EXTREMES (at 0800) FOR CURRENT YEAR.--Maximum contents, 27,084 acre-ft, June 18, elevation, 5,589.50 ft; minimum, 4,396 acre-ft, Sept. 4, elevation, 5,548.15 ft.

Capacity table (elevation, in feet, and contents in acre-feet)
(Based on table provided by U.S. Bureau of Reclamation, dated November 1970)

5,540	2,356	5,570	13,768
5,545	3,513	5,580	20,002
5,550	4,970	5,590	27,488
5,555	6,725	5,600	36,128
5,560	8,778	5,605	40,868

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5116	6898	8612	9225	9912	10386	6859	7310	18788	22626	6332	4593
2	5181	6960	8655	9225	9936	10362	6821	7430	19289	22298	6258	4502
3	5231	7014	8704	9225	9959	10338	6782	7450	19797	21972	6185	4411
4	5297	7069	8778	9225	9982	10410	6782	7470	20347	21649	6131	4396
5	5364	7124	8858	9202	10029	10676	6782	7470	20905	21364	6077	4456
6	5421	7179	8915	9179	10053	10749	6782	7673	21364	21046	6023	4517
7	5479	7226	8964	9157	10076	10773	6936	7880	21900	20695	5970	4578
8	5537	7282	9013	9134	10100	10822	7132	8344	22407	20347	5916	4640
9	5588	7338	9049	9134	10124	10847	7470	8933	22883	19797	5863	4701
10	5643	7386	9089	9157	10147	10896	7817	9474	23402	19121	5793	4780
11	5699	7438	9125	9179	10195	10872	8110	9889	23927	18392	5740	4843
12	5758	7498	9152	9248	10195	10872	8301	10195	24382	17646	5688	4890
13	5814	7567	9161	9293	10219	10847	8258	10482	24956	16885	5619	4938
14	5870	7620	9157	9361	10242	10822	8237	10724	25460	16112	5568	4986
15	5923	7673	9166	9406	10266	10798	8280	10946	25969	15328	5516	5035
16	5980	7727	9157	9429	10266	10579	8194	11169	26444	14536	5482	5083
17	6041	7788	9157	9429	10266	10362	8068	11573	26763	13712	5550	5132
18	6102	7846	9175	9451	10266	10124	7921	11985	27084	12886	5516	5198
19	6164	7905	9193	9474	10266	9866	7838	12404	27043	12063	5482	5247
20	6222	7959	9193	9520	10290	9588	7653	12805	26843	11294	5482	5297
21	6280	8013	9179	9542	10290	9293	7511	13131	26523	10530	5465	5347
22	6336	8064	9116	e9565	10290	9022	7350	13489	26206	9773	5465	5381
23	6391	8123	9094	9588	10314	8712	7270	14021	25812	9000	5431	5415
24	6447	8178	9089	9657	10314	8451	7230	14536	25421	8194	5364	5465
25	6506	8233	9080	9680	10338	8237	7470	15120	24956	7410	5281	5516
26	6559	8288	9071	9726	10338	8026	7673	15657	24458	6649	5152	5568
27	6619	8361	9071	9749	10362	7813	7633	16173	23965	6611	5041	5602
28	6676	8438	9112	9773	10362	7571	7571	16667	23514	6574	4948	5654
29	6733	8503	9157	9796	---	7330	7511	17168	23216	6536	e4861	5706
30	6786	8564	9202	9819	---	7132	7390	17742	22920	6480	4773	5740
31	6844	---	9248	9866	---	6975	---	18294	---	6406	4686	---
MAX	6844	8564	9248	9866	10362	10896	8301	18294	27084	22626	6332	5740
MIN	5116	6898	8612	9134	9912	6975	6782	7310	18788	6406	4686	4396
a	5555.31	5559.51	5561.05	5562.40	5563.45	5555.65	5556.70	5577.45	5584.10	5554.15	5549.10	5552.30
b	+1793	+1720	+684	+618	+496	-3387	+415	+10904	+4626	-16514	-1720	+1054

CAL YR 1990 MAX 28223 MIN 2967 b +5130
WTR YR 1991 MAX 27084 MIN 4396 b +689

e Estimated.

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

PYRAMID AND WINNEMUCCA LAKES BASIN

309

10344500 LITTLE TRUCKEE RIVER BELOW BOCA DAM, NEAR TRUCKEE, CA

LOCATION.--Lat 39°23'13", long 120°05'40", in NE 1/4 NW 1/4 sec.28, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on right bank, 800 ft upstream from mouth, 1,000 ft downstream from Boca Dam, and 6.2 mi northeast of Truckee.

DRAINAGE AREA.--173 mi².

PERIOD OF RECORD.--April to October 1890 (monthly discharge only), January 1911 to September 1915, January 1939 to current year. Prior to October 1976 published as "at Boca." Monthly discharge only for January 1939 to September 1957, published in WSP 1734.

REVISED RECORDS.--WDR CA-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Jan. 1, 1911, to Sept. 30, 1915, nonrecording gage at site 650 ft downstream at different datum. January 1939 to September 1957, records computed from daily log of rated settings of needle valve in dam, and from computed flow over spillway.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Boca Reservoir (station 10344490) since 1938, Independence Lake (station 10342900) since 1939, and Stampede Reservoir (station 10344300) since 1969. There is one transmountain diversion to Sierra Valley of about 6,000 acre-ft per year.

AVERAGE DISCHARGE (unadjusted).--56 years (water years 1912-15, 1940-91), 186 ft³/s, 134,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,800 ft³/s, Dec. 24, 1955, from records of Washoe County Water Conservation District; no flow for many days in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 467 ft³/s, July 16, gage height, 3.35 ft; minimum daily, 0.02 ft³/s, Oct. 28 to Dec. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.05	e.02	e.02	e42	e29	41	123	163	e.05	295	66	72
2	e.05	e.02	e.02	44	20	48	123	169	e.05	301	61	72
3	e.05	e.02	e.02	43	20	48	122	204	e.05	327	59	65
4	e.05	e.02	e.02	43	18	19	122	216	e.05	344	59	e.10
5	e.05	e.02	e.02	43	18	e.05	122	150	e.05	344	58	e.05
6	e.04	e.02	e.02	43	18	e.05	80	114	e.05	355	49	e.05
7	e.04	e.02	7.2	43	18	e.05	11	50	13	376	50	e.05
8	e.04	e.02	12	43	18	11	e.05	e.05	28	393	56	e.05
9	e.04	e.02	12	22	18	25	e.05	e.05	9.9	408	56	e.05
10	e.04	e.02	12	11	18	35	e.05	39	e.05	412	56	e.05
11	e.04	e.02	18	11	24	45	43	101	e.05	410	56	1.2
12	e.04	e.02	27	11	27	56	116	118	e.05	419	56	2.6
13	e.04	e.02	31	11	27	66	139	144	e.05	423	56	2.6
14	e.04	e.02	31	14	27	66	96	158	e.05	428	56	2.7
15	e.04	e.02	31	18	27	105	127	158	27	437	56	2.8
16	e.04	e.02	31	19	27	154	172	97	58	448	21	2.8
17	e.03	e.02	31	19	27	153	230	62	100	449	25	2.8
18	e.03	e.02	31	17	28	169	254	63	152	451	43	3.7
19	e.03	e.02	41	17	28	181	265	63	190	450	33	e3.7
20	e.03	e.02	44	17	28	180	241	100	234	450	27	e3.7
21	e.03	e.02	44	17	28	172	238	102	251	432	27	e3.7
22	e.03	e.02	44	17	28	173	222	33	268	428	39	e3.6
23	e.03	e.02	44	17	28	180	192	e.05	293	441	68	e3.6
24	e.03	e.02	44	18	28	156	111	e.05	304	441	60	e3.6
25	e.03	e.02	44	19	28	139	94	e.05	322	438	83	e3.6
26	e.03	e.02	44	18	28	155	183	e.05	347	162	85	e3.6
27	e.03	e.02	43	18	32	163	220	e.05	354	48	77	e3.6
28	e.02	e.02	40	18	34	162	220	e.05	319	49	73	e3.5
29	e.02	e.02	40	18	---	154	220	e.05	270	55	73	e3.5
30	e.02	e.02	40	e18	---	138	202	e.05	270	59	73	e3.5
31	e.02	---	e41	e18	---	123	---	e.05	---	64	72	---
TOTAL	1.10	0.60	827.32	727	699	3117.15	4288.15	2304.55	3810.45	10537	1729	273.80
MEAN	.035	.020	26.7	23.5	25.0	101	143	74.3	127	340	55.8	9.13
MAX	.05	.02	44	44	34	181	265	216	354	451	85	72
MIN	.02	.02	.02	11	18	.05	.05	.05	.05	48	21	.05
AC-FT	2.2	1.2	1640	1440	1390	6180	8510	4570	7560	20900	3430	543

CAL YR 1990 TOTAL 30805.00 MEAN 84.4 MAX 370 MIN .02 AC-FT 61100
WTR YR 1991 TOTAL 28315.12 MEAN 77.6 MAX 451 MIN .02 AC-FT 56160

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

10346000 TRUCKEE RIVER AT FARAD, CA

LOCATION.--Lat 39°25'41", long 120°01'59", in SE 1/4 NE 1/4 sec.12, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank, 0.5 mi upstream from Mystic Canyon, 0.7 mi downstream from Farad powerplant, 2.5 mi north of Floriston, 3.5 mi upstream from California-Nevada State line, and at mi 81.89, upstream from Marble Bluff Dam.

DRAINAGE AREA.--932 mi².

PERIOD OF RECORD.--March to October 1890 (monthly discharge only), September 1899 to current year. Monthly discharge only for January 1944 to July 1957, published in WSP 1734. Published as "near Boca", March to October 1890, "at or near Nevada-California State line," September 1899 to August 1912, and as "at Iceland" August 1912 to December 1937.

CHEMICAL DATA: Water years 1951-61, 1964-81. Published as Truckee River at Floriston (station 10345900) January 1964 to September 1971.

BIOLOGICAL DATA: Water years 1975-77.

SPECIFIC CONDUCTANCE: Water years 1964-80.

WATER TEMPERATURE: Water years 1964-81.

SUSPENDED SEDIMENT: Water years 1974, 1978.

REVISED RECORDS.--WSP 1714: Drainage area. WDR CA-88-3: 1906-07 (monthly runoff).

GAGE.--Water-stage recorder. Datum of gage is 5,153.21 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation bench mark). See WSP 2127 for history of changes prior to Aug. 26, 1957.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Lake Tahoe and Donner, Martis Creek, and Independence Lakes, and Prosser Creek, Stampede, and Boca Reservoirs (stations 10337000, 10338400, 10339380, 10342900, 10340300, 10344300, and 10344490), and by several powerplants.

AVERAGE DISCHARGE.--92 years (water years 1900-91), 801 ft³/s, 580,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft³/s, Nov. 21, 1950, gage height, 14.5 ft, present datum, from floodmarks, from slope-area measurement of peak flow; minimum, 28 ft³/s, Dec. 18, 1930.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,510 ft³/s, Mar. 4, gage height, 5.53 ft; minimum daily, 47 ft³/s, Nov. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	67	55	e90	79	121	353	509	562	502	119	114
2	95	62	55	e90	79	131	386	495	640	506	120	113
3	91	60	67	e90	86	157	410	503	704	507	135	121
4	83	60	57	e90	82	1090	430	521	713	503	153	96
5	82	60	56	e90	88	752	465	519	672	496	154	92
6	84	64	54	e90	89	378	553	508	573	494	142	98
7	83	57	57	e90	84	326	492	519	485	503	140	122
8	81	58	70	e90	81	291	434	590	500	507	194	132
9	78	57	71	e80	89	294	452	563	520	501	194	128
10	74	56	67	e62	90	287	447	519	560	502	193	128
11	74	55	72	e64	93	292	437	520	598	494	191	92
12	71	54	82	e66	96	290	461	521	577	496	188	87
13	61	52	97	e68	97	302	480	555	595	498	193	85
14	156	54	89	e70	98	287	465	543	519	498	246	86
15	166	53	91	e72	101	312	442	555	466	499	287	88
16	154	53	92	e75	101	314	447	559	472	496	201	86
17	159	54	92	e75	101	312	481	590	487	496	163	75
18	142	53	90	e75	99	309	512	582	480	497	186	69
19	137	58	91	e75	98	300	514	536	480	518	174	68
20	122	54	e91	e75	97	291	505	545	490	519	169	73
21	112	47	e91	e75	97	288	487	513	496	505	134	81
22	103	49	e91	e75	97	282	509	492	498	488	139	82
23	93	49	e91	e75	97	321	523	609	513	493	134	81
24	89	49	e91	75	96	310	513	727	519	504	104	79
25	84	54	e91	e75	96	288	492	806	506	521	123	77
26	76	55	e90	e75	96	288	503	779	499	308	132	78
27	73	52	e90	e76	98	304	513	683	516	110	128	74
28	70	57	e90	e76	105	292	508	665	532	109	120	71
29	67	56	e90	e76	---	300	519	656	537	112	119	69
30	65	59	e90	e77	---	308	512	667	492	105	117	69
31	64	---	e90	e77	---	324	---	593	---	109	115	---
TOTAL	2978	1668	2491	2409	2610	10141	14245	17942	16201	13396	4907	2714
MEAN	96.1	55.6	80.4	77.7	93.2	327	475	579	540	432	158	90.5
MAX	166	67	97	90	105	1090	553	806	713	521	287	132
MIN	61	47	54	62	79	121	353	492	466	105	104	68
AC-FT	5910	3310	4940	4780	5180	20110	28250	35590	32130	26570	9730	5380

CAL YR 1990 TOTAL 114189 MEAN 313 MAX 1220 MIN 47 AC-FT 226500
WTR YR 1991 TOTAL 91702 MEAN 251 MAX 1090 MIN 47 AC-FT 181900

e Estimated.

PYRAMID AND WINNEMUCCA LAKES BASIN

311

10348000 TRUCKEE RIVER AT RENO, NV

LOCATION.--Lat 39°31'53", long 119°47'07", in NW 1/4 NW 1/4 sec.7, T.19 N., R.20 E., Washoe County, Hydrologic Unit 16050102, on left bank 400 ft downstream from Kietzke Lane bridge, 0.5 mi downstream from Scott Island, 1.5 mi east of Reno Post Office, 5 mi upstream from Steamboat Creek, and at mi 59.07, upstream from Marble Bluff Dam.

DRAINAGE AREA.--1,067 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1906 to September 1921, June 1925 to September 1926, January 1930 to December 1934, January to December 1943, January 1946 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,431.97 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Army Corps of Engineers). July 1906 to September 1946, nonrecording gage at site 1 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor, and days below 25 ft³/s, which are fair. Flow regulated by Lake Tahoe (station 10337000), Martis Creek Lake (station 10339380), Prosser Creek (station 10340300), Stampede (station 10344300), and Boca (station 10344490) Reservoirs, Donner and Independence Lakes, and by several powerplants. Many diversions above station.

AVERAGE DISCHARGE.--65 years (1907-21, 1926, 1931-34, 1947-91), 689 ft³/s, 499,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,800 ft³/s, Dec. 23, 1955, gage height 13.63 ft; maximum gage height, 13.83 ft, Nov. 21, 1950; no flow Sept. 12, 14-24, 26-30, 1926.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,510 ft³/s, Mar. 4, gage height, 6.15 ft; minimum daily, 17 ft³/s, Sept. 19-21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	46	60	e77	68	96	318	340	332	278	37	44
2	28	51	54	e91	85	112	334	321	395	249	36	54
3	33	49	61	e104	85	149	360	332	472	237	44	51
4	25	49	65	e99	87	838	380	336	508	229	63	49
5	26	48	57	e91	87	1100	409	351	465	216	90	38
6	27	45	63	e94	93	442	474	343	357	204	67	34
7	28	48	67	e96	81	346	510	344	262	206	58	50
8	33	43	70	e92	74	277	375	372	245	232	59	63
9	41	43	76	e99	75	272	388	444	267	209	98	77
10	38	39	80	e83	91	266	386	371	291	208	95	96
11	33	35	95	e72	93	268	354	348	349	211	90	65
12	36	42	88	e70	91	270	379	359	303	231	99	42
13	24	41	80	e85	88	283	425	370	338	237	98	41
14	33	41	97	e86	98	277	416	382	290	244	122	32
15	133	40	87	e89	94	272	369	358	210	273	178	33
16	130	40	97	e86	102	306	381	386	209	253	179	42
17	129	39	91	e90	101	279	391	392	228	252	90	40
18	130	37	92	e85	95	286	441	428	207	258	99	19
19	120	42	88	e75	96	282	435	374	198	338	112	17
20	104	49	e84	e72	93	269	432	375	190	365	92	17
21	94	47	e80	e66	95	266	375	370	218	350	80	17
22	81	45	e58	e64	93	251	410	298	216	280	41	22
23	75	45	e54	e66	94	280	424	355	220	283	49	29
24	63	43	e53	e84	91	313	429	514	261	256	46	31
25	61	52	e52	e76	95	264	399	594	244	271	32	34
26	59	55	e52	79	83	260	377	611	214	273	56	27
27	55	43	e52	80	80	281	383	489	262	96	62	27
28	52	46	e53	79	81	278	363	438	310	51	54	25
29	54	70	e54	76	---	275	368	433	372	67	47	21
30	54	61	e56	71	---	281	351	445	281	53	46	21
31	52	---	e64	74	---	291	---	419	---	39	51	---
TOTAL	1891	1374	2180	2551	2489	9730	11836	12292	8714	6949	2370	1158
MEAN	61.0	45.8	70.3	82.3	88.9	314	395	397	290	224	76.5	38.6
MAX	133	70	97	104	102	1100	510	611	508	365	179	96
MIN	24	35	52	64	68	96	318	298	190	39	32	17
AC-FT	3750	2730	4320	5060	4940	19300	23480	24380	17280	13780	4700	2300

CAL YR 1990 TOTAL 79397 MEAN 218 MAX 1030 MIN 12 AC-FT 157500
WTR YR 1991 TOTAL 63534 MEAN 174 MAX 1100 MIN 17 AC-FT 126000

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

10348000 TRUCKEE RIVER NEAR RENO, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1989 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1989 to current year.

INSTRUMENTATION.--Water temperature recorder since July 1989, hourly.

REMARKS.--Records represent water temperature at probe within 0.5°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 27.5°C, Aug. 1, 1991; minimum, freezing point on many days during winter months in most years.

EXTREMES FOR CURRENT YEAR.--Maximum, 27.5°C, Aug. 1; minimum, freezing point, several days in Nov. and Dec.

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	18.5	16.0	17.5	9.0	7.0	8.0	3.0	.5	2.0	.5	.5	.5
2	18.0	16.0	17.0	7.5	5.0	6.5	3.5	.0	1.5	.5	.5	.5
3	17.5	14.5	16.0	6.5	4.0	5.5	3.0	.0	1.5	.5	.5	.5
4	18.0	14.5	16.0	7.0	4.5	6.0	3.0	.5	2.0	.5	.5	.5
5	17.0	16.0	16.5	8.5	6.5	7.5	4.5	1.5	3.5	.5	.5	.5
6	16.5	14.0	15.0	7.5	6.0	6.5	3.5	1.0	2.5	.5	.5	.5
7	15.5	13.0	14.5	6.0	4.0	5.0	3.5	.5	2.0	.5	.5	.5
8	14.5	11.5	13.0	7.5	4.5	6.0	3.0	.5	1.5	.5	.5	.5
9	14.0	10.5	12.5	8.0	5.5	7.0	3.0	.5	1.5	.5	.5	.5
10	14.0	11.5	13.0	7.5	5.0	6.5	4.0	1.0	2.5	.5	.5	.5
11	14.5	11.5	13.0	7.0	5.0	6.0	5.5	3.5	4.5	.5	.5	.5
12	15.5	11.5	13.0	7.0	4.5	6.0	5.0	3.0	4.0	.5	.5	.5
13	15.5	11.0	13.5	7.5	5.0	6.0	4.5	2.5	3.5	.5	.5	.5
14	16.0	11.0	13.5	7.5	6.0	7.0	2.5	.5	1.5	1.0	.5	.5
15	14.5	11.5	13.5	9.0	6.0	7.0	1.0	.0	.5	1.5	.5	1.0
16	14.5	11.5	13.0	6.5	4.0	5.5	1.5	.0	.5	1.5	.5	.5
17	12.5	9.5	11.5	8.5	5.5	7.0	1.5	.5	.5	2.0	.5	1.0
18	12.5	11.0	11.5	8.5	6.0	7.5	3.0	.0	1.0	2.5	.5	1.0
19	12.0	10.5	11.5	7.0	5.0	6.0	1.0	.0	.5	3.5	.5	1.5
20	10.5	7.5	9.5	6.0	3.0	4.5	1.0	.0	.5	3.0	.5	1.5
21	11.0	8.0	9.5	6.0	2.0	4.0	.5	.0	.0	3.0	.5	1.0
22	12.5	9.5	11.0	6.0	1.5	3.5	.5	.0	.0	2.5	.5	1.0
23	13.0	10.0	11.5	5.5	1.5	3.5	.5	.0	.0	2.0	.5	1.0
24	13.0	10.5	12.0	5.5	1.0	3.0	.5	.0	.0	2.5	.5	1.0
25	12.5	10.0	11.5	6.0	1.0	3.5	.5	.0	.0	2.5	.5	1.0
26	13.0	10.0	11.5	5.0	1.0	3.0	.5	.0	.0	2.5	.5	1.0
27	12.5	9.5	11.0	4.0	.0	1.5	.5	.0	.5	2.5	.5	1.0
28	12.5	9.5	11.0	3.5	.0	1.5	.5	.0	.5	3.0	.5	1.5
29	12.0	10.0	11.0	1.5	.0	.5	.5	.5	.5	3.5	.5	1.5
30	12.0	9.5	10.5	3.5	.5	2.0	.5	.5	.5	2.5	.5	1.5
31	11.5	9.0	10.0	---	---	---	.5	.5	.5	2.0	.5	1.0
MONTH	18.5	7.5	12.7	9.0	.0	5.1	5.5	.0	1.3	3.5	.5	.8

PYRAMID AND WINEMUCCA LAKES BASIN

10348200 TRUCKEE RIVER NEAR SPARKS, NV

LOCATION.--Lat 39°31'11", long 119°44'27", in NW 1/4 NE 1/4 sec.16, T.19 N., R.20 E., Washoe County, Hydrologic Unit 16050102, on left bank 400 ft upstream from McCarren Boulevard bridge, 1 mi south of Southern Pacific Railroad in Sparks, 2.5 mi upstream from Steamboat Creek, and at mi 56.15, upstream from Marble Bluff Dam.

DRAINAGE AREA.--1,070 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,382.41 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers Benchmark).

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Lake Tahoe (station 10337000), Martis Creek Lake (station 10339380), Prosser Creek (station 10340300), Stampede (station 10344300) and Boca (station 10344490) Reservoirs, Donner and Independence Lakes, and by several powerplants. Many diversions above station.

AVERAGE DISCHARGE.--14 years, 733 ft³/s, 531,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft³/s, Feb. 17, 1986, gage height, 15.22 ft; minimum, 2.0 ft³/s, Nov. 17, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,890 ft³/s, Mar. 4, gage height, 7.89 ft; minimum daily, 5.1 ft³/s, Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	36	32	e68	e58	90	297	278	318	265	8.0	10
2	8.7	39	34	e80	e73	97	318	260	375	232	8.3	17
3	12	35	33	e90	e74	138	345	275	461	217	13	16
4	6.3	29	41	e84	66	867	352	265	490	211	17	21
5	7.1	31	31	e79	74	1250	405	277	442	199	47	8.0
6	10	38	38	e82	79	453	471	276	338	190	29	8.7
7	13	39	35	e82	53	335	510	266	251	190	23	18
8	12	32	35	e81	52	253	361	286	236	218	15	31
9	12	32	43	e85	52	249	372	369	251	201	55	50
10	11	27	41	e73	65	243	365	305	272	192	59	90
11	8.0	22	66	e62	67	239	332	276	330	186	44	43
12	10	29	79	e59	65	243	357	280	284	197	67	16
13	13	29	65	e74	65	255	394	291	312	191	51	15
14	6.9	30	85	e76	73	256	378	303	270	189	100	10
15	89	27	e77	e78	69	254	328	277	194	217	e170	7.8
16	94	27	e84	e77	76	288	337	301	194	192	e170	13
17	93	28	e80	e79	75	276	338	300	210	189	61	14
18	97	29	e80	e78	68	283	393	335	190	193	61	7.6
19	89	29	e78	e65	82	272	384	293	181	270	88	6.1
20	77	37	e72	e62	83	241	387	299	172	319	66	5.5
21	66	35	e69	e58	67	241	325	293	200	287	49	5.1
22	53	32	e52	e55	65	221	365	222	197	215	24	5.3
23	50	33	e48	e60	65	250	381	271	200	219	20	6.7
24	41	31	e47	e74	63	305	360	450	240	189	19	6.9
25	38	36	e46	e66	66	245	321	547	225	202	8.2	9.5
26	36	48	e45	e68	52	226	298	589	194	213	20	6.1
27	32	33	e46	e70	46	251	305	492	250	62	28	9.2
28	28	39	e46	e69	67	264	288	419	302	20	21	8.9
29	32	58	e46	e64	---	243	292	419	375	33	14	5.5
30	33	46	e48	e60	---	247	285	434	284	23	12	6.0
31	31	---	e59	e62	---	261	---	405	---	13	24	---
TOTAL	1117.8	1016	1681	2220	1860	9336	10644	10353	8238	5734	1391.5	476.9
MEAN	36.1	33.9	54.2	71.6	66.4	301	355	334	275	185	44.9	15.9
MAX	97	58	85	90	83	1250	510	589	490	319	170	90
MIN	6.3	22	31	55	46	90	285	222	172	13	8.0	5.1
AC-FT	2220	2020	3330	4400	3690	18520	21110	20540	16340	11370	2760	946

CAL YR 1990 TOTAL 67913.0 MEAN 186 MAX 1040 MIN 6.3 AC-FT 134700
WTR YR 1991 TOTAL 54068.2 MEAN 148 MAX 1250 MIN 5.1 AC-FT 107200

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN
10348200 TRUCKEE RIVER NEAR SPARKS, NV--Continued

315

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1988 to current year.

INSTRUMENTATION.--Water-temperature recorder since June 1988, hourly.

REMARKS.--Records represent water temperature at probe within 0.5°C. Interruptions in record due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 30.5°C, Aug. 12, 1991; minimum, freezing point on several days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 30.5°C, Aug. 12; minimum, freezing point on several days during winter.

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	20.5	15.5	18.0	10.0	6.0	7.5	3.5	.0	1.5	.5	.0	.5
2	19.5	14.5	17.0	7.5	3.5	5.5	2.0	.0	1.0	.5	.0	.5
3	19.0	13.5	17.0	7.5	3.0	5.0	2.0	.0	1.0	.5	.0	.5
4	18.0	14.0	16.0	8.0	3.0	5.5	3.0	.0	1.5	.5	.0	.5
5	17.5	15.5	16.5	10.0	6.5	8.0	5.0	1.5	3.0	.5	.0	.5
6	16.5	12.5	14.5	8.5	5.0	6.5	4.0	1.0	2.5	.5	.0	.5
7	16.5	11.5	14.0	6.0	2.5	4.5	3.0	.0	1.5	.5	.0	.5
8	15.0	9.0	12.0	9.0	4.0	6.0	2.5	.0	1.0	.5	.0	.5
9	15.0	8.0	11.5	9.5	5.0	7.0	3.0	.0	1.5	.5	.0	.5
10	16.0	9.0	12.5	9.0	4.5	6.5	4.5	1.0	2.5	.5	.0	.5
11	15.0	10.0	13.0	7.5	4.0	6.0	4.5	3.5	4.0	.5	.0	.5
12	15.5	9.5	13.0	9.0	4.0	6.0	5.0	3.0	4.0	.5	.0	.5
13	16.0	10.0	13.5	8.5	4.5	6.5	4.0	2.5	3.5	.5	.0	.5
14	15.5	11.0	13.5	8.0	5.5	7.0	2.5	.0	1.5	.5	.5	.5
15	15.0	11.5	14.0	9.0	6.0	7.5	1.0	.0	.5	.5	.0	.5
16	15.0	11.5	13.5	7.5	4.5	6.0	.5	.0	.5	.5	.0	.5
17	13.0	9.0	11.5	9.5	5.5	7.5	.5	.0	.5	.5	.5	.5
18	12.5	11.0	12.0	9.5	6.5	7.5	1.0	.0	.5	.5	.5	.5
19	12.0	10.0	11.0	7.5	6.0	6.5	.5	.0	.5	.5	.5	.5
20	11.0	6.5	9.0	6.0	3.5	5.0	.5	.0	.5	.5	.5	.5
21	11.5	7.0	9.5	6.0	2.0	4.0	.5	.0	.5	.5	.5	.5
22	14.5	9.0	11.5	6.0	2.0	4.0	.5	.0	.5	.5	.5	.5
23	14.5	10.0	12.5	5.5	1.5	3.5	.5	.0	.5	.5	.5	.5
24	15.0	9.5	12.0	5.0	1.0	3.0	.5	.0	.5	.5	.5	.5
25	14.5	9.5	12.0	5.5	1.0	3.0	.5	.0	.5	.5	.5	.5
26	15.0	9.5	12.0	4.0	1.5	3.0	.5	.0	.5	.5	.5	.5
27	14.5	9.0	11.5	2.0	.0	1.0	.5	.0	.5	.5	.5	.5
28	14.5	9.0	11.5	2.0	.0	.5	.5	.0	.5	.5	.5	.5
29	14.0	9.0	11.5	1.0	.0	.5	.5	.0	.5	.5	.0	.5
30	13.5	9.0	11.0	3.5	.0	1.5	.5	.0	.5	.5	.0	.5
31	12.5	8.5	10.5	---	---	---	.5	.0	.5	.5	.0	.5
MONTH	20.5	6.5	12.9	10.0	.0	5.0	5.0	.0	1.2	.5	.0	.5

PYRAMID AND WINNEMUCCA LAKES BASIN

10348200 TRUCKEE RIVER NEAR SPARKS, NV--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	.5	.0	.5	---	---	---	11.5	8.0	9.5	12.5	7.5	10.0
2	---	.5	---	---	---	---	11.5	6.5	9.0	9.5	7.0	8.5
3	---	---	---	---	---	---	12.0	7.0	9.5	12.0	6.0	9.0
4	---	---	---	---	---	---	11.5	7.5	9.5	15.0	8.5	11.5
5	---	---	---	---	---	---	12.5	7.0	10.0	14.5	10.5	12.5
6	---	---	---	---	---	---	13.0	8.0	10.0	16.0	10.5	13.0
7	---	---	---	---	---	---	10.5	6.0	8.0	16.0	10.5	13.5
8	---	---	---	---	---	---	11.5	5.5	8.5	14.5	11.0	12.5
9	---	---	---	---	---	---	11.5	7.0	9.0	11.0	7.5	9.5
10	---	---	---	---	---	---	10.0	5.5	8.0	10.0	6.5	8.5
11	---	---	---	---	---	---	8.5	4.5	6.5	10.5	6.5	8.5
12	---	---	---	---	---	---	11.0	5.0	8.0	14.0	7.0	10.5
13	---	---	---	---	---	---	12.5	7.0	9.5	11.5	9.5	10.5
14	---	---	---	---	---	---	12.0	8.0	9.5	14.5	8.0	11.5
15	---	---	---	---	---	---	10.5	7.0	9.0	16.0	10.0	13.0
16	---	---	---	---	---	---	10.0	5.5	8.0	15.0	11.5	12.5
17	---	---	---	---	---	---	9.5	6.0	7.5	13.0	9.0	10.5
18	---	---	---	---	---	---	11.0	6.0	8.5	9.5	7.5	8.5
19	---	---	---	---	---	---	11.0	7.0	9.0	13.5	7.0	10.0
20	---	---	---	6.5	---	---	9.5	8.5	9.0	13.0	9.0	10.5
21	---	---	---	7.0	3.5	5.5	13.0	7.0	10.0	15.5	9.5	12.5
22	---	---	---	8.5	3.0	6.0	12.5	8.5	10.5	18.5	11.5	14.5
23	---	---	---	8.5	4.5	6.5	13.0	8.5	10.5	18.5	13.0	15.5
24	---	---	---	7.0	4.5	5.5	11.0	8.5	9.5	16.5	12.5	14.5
25	---	---	---	6.5	3.0	5.0	9.0	6.0	8.0	16.0	11.5	14.0
26	---	---	---	5.0	2.0	4.0	11.0	6.0	8.5	14.5	10.5	12.5
27	---	---	---	8.5	2.5	5.5	12.5	7.0	9.5	15.0	8.5	11.5
28	---	---	---	10.5	4.0	7.0	14.0	7.5	10.5	15.5	10.5	13.0
29	---	---	---	11.0	5.5	8.5	14.5	9.0	12.0	13.5	10.5	11.5
30	---	---	---	11.5	6.0	9.0	12.5	8.5	10.5	11.5	9.0	10.0
31	---	---	---	12.0	7.0	9.5	---	---	---	14.5	7.5	11.0
MONTH	---	---	---	---	---	---	14.5	4.5	9.2	18.5	6.0	11.5
JUNE				JULY			AUGUST			SEPTEMBER		
1	18.0	11.0	14.0	21.5	15.0	18.0	25.0	20.5	22.5	22.0	18.0	19.5
2	18.0	12.5	15.5	23.0	16.0	19.5	24.0	19.5	21.5	---	17.5	---
3	18.0	13.0	15.5	24.0	17.0	20.5	24.0	19.0	21.5	---	---	---
4	17.5	12.5	15.0	23.5	17.5	20.5	23.5	19.0	22.5	---	---	---
5	16.0	11.0	13.5	24.0	17.5	20.5	25.5	18.0	21.5	---	---	---
6	16.5	10.5	13.5	23.0	16.5	20.0	25.5	18.0	21.5	---	---	---
7	18.5	11.5	15.0	22.0	16.0	19.0	24.5	17.5	21.0	---	---	---
8	20.5	13.5	17.0	22.5	16.5	19.5	26.5	17.5	21.0	---	---	---
9	20.5	14.5	17.5	22.5	16.0	19.5	25.0	18.5	21.5	---	---	---
10	21.0	15.0	18.0	23.0	16.0	19.5	25.0	17.0	21.0	---	---	---
11	20.0	15.0	17.5	23.0	16.5	20.0	26.5	18.5	22.0	---	---	---
12	20.0	14.5	17.0	23.5	17.0	20.0	30.5	15.5	22.0	---	---	---
13	19.0	13.5	16.5	23.5	17.0	20.0	24.5	19.0	21.5	---	---	---
14	19.0	13.0	16.0	22.5	16.0	19.5	22.0	19.0	20.5	---	---	---
15	20.5	13.5	17.0	22.0	16.0	19.0	20.5	18.5	19.5	---	---	---
16	20.5	13.5	17.0	22.5	15.5	19.0	22.5	16.0	19.0	---	---	---
17	20.5	13.5	17.0	22.5	15.5	19.0	26.5	19.0	22.5	---	---	---
18	20.5	14.0	17.0	23.5	16.0	19.5	26.0	19.5	22.5	---	---	---
19	19.5	13.5	16.5	22.5	16.0	19.0	23.5	18.5	21.0	---	---	---
20	19.0	12.0	15.5	21.0	16.5	18.5	24.5	18.5	21.5	---	---	---
21	19.0	12.5	15.5	22.0	16.0	19.0	24.0	18.5	21.5	---	---	---
22	19.5	12.0	15.5	23.5	18.0	20.5	24.0	19.5	21.5	---	---	---
23	18.5	12.5	15.5	23.5	17.0	20.0	23.0	19.0	21.0	---	---	---
24	17.0	12.0	14.5	24.0	18.0	21.0	21.0	17.5	19.5	---	---	---
25	18.0	11.5	14.5	24.0	17.5	20.5	20.5	18.0	19.0	---	---	---
26	17.5	12.0	15.0	24.0	18.5	21.5	22.0	18.0	20.0	20.0	17.5	19.0
27	15.5	13.5	14.5	26.0	19.5	22.5	20.5	17.0	18.5	20.5	15.0	18.0
28	14.0	12.5	13.0	25.5	19.0	22.5	19.5	12.5	16.0	19.5	15.0	17.5
29	16.0	11.0	13.5	26.0	18.5	22.5	19.5	15.5	17.5	20.5	17.0	18.5
30	19.5	12.5	16.0	28.0	19.5	23.5	20.0	17.5	18.5	21.0	17.0	19.0
31	---	---	---	25.5	21.0	23.5	22.0	17.5	19.5	---	---	---
MONTH	21.0	10.5	15.6	28.0	15.0	20.2	30.5	12.5	20.6	---	---	---

PYRAMID AND WINEMUCCA LAKES BASIN

317

10348460 FRANKTOWN CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°12'12", long 119°52'17", in SW 1/4 SE 1/4 sec.32, T.16 N., R.19 E., Washoe County, Hydrologic Unit 16050102, in Toiyabe National Forest, on right bank, 300 ft upstream from Red House diversion dam, 0.2 mi upstream from Red House, and 6.1 mi northwest of Carson City.

DRAINAGE AREA.--3.24 mi².

PERIOD OF RECORD.--June 1974 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,380 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good, except for estimated daily discharges which are poor. Flow regulated by Hobart Reservoir, and by pumping from Marlette Lake (station 10336710) during dry years.

AVERAGE DISCHARGE.--17 years, 3.40 ft³/s, 2,460 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 89 ft³/s, Feb. 16, 1986, gage height, 3.64 ft, from rating curve extended above 20 ft³/s on basis of slope-conveyance measurement of peak flow; minimum daily, 0.48 ft³/s, Sept. 9-11, and Sept. 13-17, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5.0 ft³/s, May 7, gage height, 1.64 ft, maximum gage height, 2.51 ft, Dec. 19, backwater from ice; minimum daily, 0.74 ft³/s, Nov. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	.94	1.0	1.3	1.2	e1.6	1.3	3.0	2.6	1.2	1.7	1.6
2	1.6	.87	1.0	1.3	1.3	e1.5	1.3	2.4	2.4	1.2	1.9	1.7
3	1.5	.77	1.0	1.3	1.2	1.3	1.4	2.0	2.4	1.2	1.9	1.7
4	1.4	.74	1.0	1.3	1.2	2.0	1.5	2.5	2.2	1.3	2.0	1.7
5	1.4	.75	1.0	1.3	1.3	1.4	1.7	3.4	2.0	1.4	1.9	1.7
6	1.4	.75	1.0	1.3	1.2	e1.3	1.7	4.0	1.7	1.3	1.8	1.7
7	1.3	e.86	1.0	1.3	1.2	e1.2	1.6	4.3	1.6	1.3	1.8	1.7
8	1.3	.92	1.0	1.3	1.2	e1.2	1.6	4.6	1.5	1.4	1.8	1.7
9	1.3	1.0	1.0	1.3	1.2	1.2	1.8	3.9	1.5	1.4	1.9	1.7
10	1.3	1.0	1.0	1.4	1.2	1.2	e1.7	2.9	1.4	1.4	1.9	1.9
11	1.2	1.0	1.1	1.4	1.2	1.2	e1.7	2.4	1.4	1.3	1.9	1.9
12	1.2	.97	1.1	1.4	1.2	1.2	1.6	2.7	1.3	1.4	1.9	1.9
13	1.2	.97	1.1	1.4	1.2	1.2	1.9	2.6	1.2	1.3	1.8	1.9
14	1.2	1.0	1.1	1.4	1.2	1.2	2.3	2.6	1.3	1.3	2.0	1.9
15	1.1	1.0	1.1	1.4	1.2	1.2	2.3	2.6	1.2	1.3	2.2	1.9
16	1.1	1.0	1.2	1.4	1.2	e1.2	2.0	3.0	1.2	1.3	2.0	1.8
17	1.0	1.0	1.2	1.4	1.1	1.2	1.9	3.3	1.2	1.3	2.0	1.8
18	1.0	.94	1.2	1.3	1.1	1.2	1.9	2.8	1.2	1.3	2.0	1.8
19	1.1	.94	e1.2	1.3	1.1	e1.2	2.1	2.4	1.1	1.3	1.9	1.8
20	1.1	.94	1.2	1.3	1.1	1.3	2.1	2.2	1.1	1.3	2.2	1.8
21	1.1	.94	1.2	1.3	1.1	1.3	2.4	2.3	1.2	1.3	2.0	1.8
22	1.1	.94	1.2	1.3	1.1	1.3	2.6	2.6	1.2	1.4	1.8	1.8
23	1.1	.94	1.2	1.3	1.1	1.3	3.1	3.3	1.3	1.4	1.8	1.8
24	1.1	.94	1.2	1.3	1.2	e1.3	3.1	3.7	1.2	1.4	1.8	1.8
25	1.1	1.2	1.2	1.3	1.3	e1.3	2.6	3.6	1.3	1.4	1.8	1.8
26	1.0	1.0	1.2	1.3	1.3	e1.3	2.2	3.3	1.3	1.4	1.5	1.8
27	.94	1.0	1.2	1.3	1.3	1.2	2.3	2.8	1.2	1.5	1.1	1.8
28	.94	1.0	1.2	1.3	1.3	e1.2	2.6	2.6	1.4	1.6	1.1	1.8
29	.94	1.0	1.3	1.3	---	1.2	3.1	2.4	1.4	1.4	1.3	1.8
30	.94	1.0	1.3	1.3	---	1.2	3.2	3.1	1.2	1.4	1.4	1.8
31	.94	---	1.3	1.3	---	1.3	---	2.7	---	1.4	1.4	---
TOTAL	36.60	28.32	35.0	41.1	33.5	39.9	62.6	92.0	44.2	41.8	55.5	53.6
MEAN	1.18	.94	1.13	1.33	1.20	1.29	2.09	2.97	1.47	1.35	1.79	1.79
MAX	1.7	1.2	1.3	1.4	1.3	2.0	3.2	4.6	2.6	1.6	2.2	1.9
MIN	.94	.74	1.0	1.3	1.1	1.2	1.3	2.0	1.1	1.2	1.1	1.6
AC-FT	73	56	69	82	66	79	124	182	88	83	110	106

CAL YR 1990 TOTAL 638.42 MEAN 1.75 MAX 4.0 MIN .74 AC-FT 1270
WTR YR 1991 TOTAL 564.12 MEAN 1.55 MAX 4.6 MIN .74 AC-FT 1120

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

10348700 WASHOE LAKE NEAR CARSON CITY, NV

LOCATION.--Lat 39°14'09", long 119°14'09", in NW 1/4 SE 1/4 sec.19, T.16 N., R.20 E., Washoe County, Hydrologic Unit 16050102, at Washoe Lake State Park, and about 4.75 mi north of Carson City.

DRAINAGE AREA.--83.8 mi², including Little Washoe Lake.

PERIOD OF RECORD.--April 1963 to September 1982, July 1988 to January 1989, July and August 1989, October 1989, March to September 1991 (monthend contents only), October 1982 to June 30 1988, February 19 to July 17, and September 1-30 1989, November 17, 1989 to February 21, 1990, (daily elevations).

GAGE.--Water-stage recorder. Datum of gage is 5,020.00 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1982, nonrecording gage at different site but same datum.

REMARKS.--Lake is formed by a natural basin whose natural rim falls below the control works on Little Washoe Lake allowing storage regulation. Total capacity 55,700 acre-ft between elevations 5,017.5 ft and 5,032.0 ft. Figures given herein represent total contents including Scripps Wildlife Management Area Marsh. Two transarea diversions enter the lakes, one from Galena Creek and one from Third Creek into Ophir Creek. Franktown Creek is diverted into the Virginia City-Carson City pipeline and during dry years additional water is pumped from Marlette Lake into Hobart Reservoir and released into Franktown Creek for diversion into the Virginia City-Carson City pipeline at Red House. Beginning August 24, 1990 elevations have been obtained by levels from Reference Mark-N at the north end of Washoe Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation recorded, 5,031.97 ft, Mar. 13, 1986; minimum observed, 5,018.69 ft, May 15, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 5,020.15 ft, Mar. 28; no contents June 1 to Sept. 30.

Capacity table (elevation, in feet, and volume, in acre-feet)

5,017.5	0	5,020	2,200
5,018	100	5,021	4,300
5,019	800		

MONTHEND ELEVATION, IN FEET NGVD, AND CONTENTS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	5,019.55	1,430	--
Oct. 31.	5,018.90	700	-730
Nov. 30.	5,018.80	600	-100
Dec. 31.	5,018.70	510	-90
CAL YR 1990.	--	--	-7,590
Jan. 31.	5,018.70	510	0
Feb. 28.	5,019.10	900	+390
Mar. 31.	5,020.00	2,200	+1,300
Apr. 30.	5,019.00	800	-1,400
May 31.	5,017.60	10	-790
June 30.	--	0	-10
July 31.	--	0	0
Aug. 31.	--	0	0
Sept. 30.	--	0	0
WTR YR 1991.	--	--	-1,430

NOTE: Monthend elevations and contents are interpolated from readings made during the month.

PYRAMID AND WINNEMUCCA LAKES BASIN

319

10348800 LITTLE WASHOE LAKE NEAR STEAMBOAT, NV

LOCATION.--Lat 39°19'45", long 119°48'00", in NE 1/4 NW 1/4 sec.24, T.17 N., R.19 E., Washoe County, Hydrologic Unit 16050102, at outlet (head of Steamboat Creek), and 5.5 mi southwest of Steamboat.

DRAINAGE AREA.--83.8 mi².

PERIOD OF RECORD.--April 1963 to September 1970, October 1982 to current year (monthly observations only), October 1970 to September 1982 (daily elevations).

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. From October 1970 to September 1982, recording gage at same site and datum.

REMARKS.--Lake is formed by a natural basin supplemented by a control works downstream from the natural rim which provides storage regulation for both Little Washoe Lake and Washoe Lake. See additional remarks under "Washoe Lake (station 10348700)."

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 5,031.8 ft, Apr. 1, 1986; no contents Sept. 13 to Dec. 3, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 5,026.6 ft, Mar. 7, Apr. 19; minimum observed, 5,022.5 ft, Oct. 22.

MONTHEND ELEVATION, IN FEET NGVD, AND CONTENTS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	5,022.7	38	--
Oct. 31.	5,022.8	42	+4
Nov. 30.	5,023.7	102	+60
Dec. 31.	5,024.7	178	+76
CAL YR 1990.	--	--	-132
Jan. 31.	5,025.6	260	+82
Feb. 28.	5,026.4	340	+80
Mar. 31.	5,026.6	360	+20
Apr. 30.	5,026.4	340	-20
May 31.	5,026.2	320	-20
June 30.	5,025.5	250	-70
July 31.	5,024.6	170	-80
Aug. 31.	5,023.8	110	-60
Sept. 30.	5,023.2	65	-45
WTR YR 1991.	--	--	+27

NOTE: Monthend elevations and contents are interpolated from readings made during the year.

PYRAMID AND WINNEMUCCA LAKES BASIN

10348850 GALENA CREEK AT GALENA STATE PARK, NV

LOCATION.--Lat 39°21'16", long 119°51'27", in SE 1/4 NW 1/4 sec.9, T.17 N., R.19 E., Washoe County, Hydrologic Unit 16050102, on right bank, at Galena State Park, 0.2 mi west of State Highway 431, and 3.5 mi northwest of Washoe City.

DRAINAGE AREA.--7.69 mi².

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,320 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--7 years, 9.13 ft³/s, 6,610 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78 ft³/s, June 3, 1986, gage height, 1.63 ft, from rating curve extended above 60 ft³/s; minimum daily, 2.6 ft³/s, Sept. 4, 14-16, 18-20, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	--	unknown	unknown				
Minimum daily, 2.6 ft ³ /s, Sept. 4, 14-16, 18-20.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	4.0	4.5	4.4	e4.5	e4.5	4.7	5.7	13	e7.5	4.4	2.9
2	4.3	3.6	4.6	4.2	e4.5	e4.5	4.5	5.1	15	e7.5	4.1	2.9
3	4.3	4.0	4.5	4.2	e4.5	e6.0	4.8	4.9	16	e7.0	3.9	2.7
4	4.2	4.6	4.6	4.2	e4.5	e22	5.3	5.3	16	e7.0	4.5	2.6
5	4.3	4.5	4.6	4.2	e5.0	e9.0	5.7	6.4	15	e7.0	4.6	2.7
6	4.5	4.1	4.5	4.2	e5.0	e5.5	5.7	7.8	14	e6.5	4.2	2.7
7	4.5	e4.4	4.5	4.2	e5.0	e5.0	4.9	9.2	15	e6.0	4.1	2.8
8	4.3	4.7	4.5	4.2	e5.0	e5.0	4.9	9.9	15	e6.5	3.9	2.7
9	4.4	4.6	4.6	4.2	e4.5	e5.0	4.8	8.7	17	e6.0	3.7	2.9
10	4.7	4.6	4.8	4.2	e4.5	e4.5	4.6	7.4	18	e6.0	3.7	4.0
11	4.6	4.6	4.8	4.2	e4.5	e4.5	e4.5	6.7	18	e6.0	3.7	3.2
12	4.4	4.6	4.7	4.3	e4.5	4.4	4.5	6.9	19	6.0	3.6	3.0
13	4.3	4.7	4.7	4.2	e4.5	4.4	4.8	7.4	17	5.9	3.6	2.7
14	4.3	4.7	e4.6	4.2	e4.5	4.3	5.0	7.2	15	5.7	4.2	2.6
15	4.5	4.7	e4.5	4.2	e5.0	e4.3	4.9	8.7	11	5.4	4.2	2.6
16	4.5	4.7	e4.4	4.3	e5.0	e4.3	4.8	10	12	5.5	4.0	2.6
17	4.3	4.7	e4.4	e4.5	e5.0	4.3	4.6	9.1	15	5.4	3.7	2.7
18	4.5	4.7	e4.4	4.5	e4.5	4.3	4.6	8.2	13	5.4	3.6	2.6
19	4.8	4.6	e4.3	4.4	e4.5	4.3	5.0	7.7	e11	5.7	3.5	2.6
20	4.6	4.3	e4.3	e4.4	e4.5	4.2	5.0	7.7	e11	5.9	3.3	2.6
21	4.6	4.7	e4.3	e4.4	e4.5	4.2	4.9	8.6	e10	5.6	3.3	2.7
22	4.7	4.7	4.3	e4.4	e4.5	e4.2	5.2	10	e9.5	5.4	3.3	2.9
23	4.6	e4.7	4.3	e4.5	e4.5	e4.3	5.6	14	e7.0	5.1	3.3	3.4
24	4.5	e4.7	4.4	e4.3	e4.5	e4.3	5.6	16	e6.5	5.1	3.2	3.4
25	4.4	4.6	4.5	e4.3	e4.5	e4.3	5.2	16	e6.5	5.1	3.1	3.5
26	4.3	e4.6	4.5	e4.3	e4.5	e4.3	5.0	15	e6.5	5.1	3.2	3.9
27	4.3	e4.7	4.5	e4.5	e4.0	e4.4	4.9	14	e7.5	5.0	3.2	4.0
28	4.3	e4.7	4.5	e4.5	e4.5	e4.4	5.3	15	e8.5	4.9	3.2	3.6
29	4.2	e4.6	4.5	e4.5	---	4.4	5.9	14	e8.0	4.7	3.2	3.6
30	4.2	4.5	4.5	e4.5	---	4.5	6.1	13	e8.0	4.4	3.0	3.8
31	4.2	---	4.5	e4.5	---	4.7	---	12	---	4.3	3.0	---
TOTAL	136.9	135.9	139.6	134.1	129.0	162.3	151.3	297.6	374.0	178.6	113.5	90.9
MEAN	4.42	4.53	4.50	4.33	4.61	5.24	5.04	9.60	12.5	5.76	3.66	3.03
MAX	4.8	4.7	4.8	4.5	5.0	22	6.1	16	19	7.5	4.6	4.0
MIN	4.2	3.6	4.3	4.2	4.0	4.2	4.5	4.9	6.5	4.3	3.0	2.6
AC-FT	272	270	277	266	256	322	300	590	742	354	225	180

CAL YR 1990 TOTAL 2210.0 MEAN 6.05 MAX 14 MIN 3.4 AC-FT 4380
WTR YR 1991 TOTAL 2043.7 MEAN 5.60 MAX 22 MIN 2.6 AC-FT 4050

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

321

10348900 GALENA CREEK NEAR STEAMBOAT, NV

LOCATION.--Lat 39°21'43", long 119°49'37", in SW 1/4 SW 1/4 sec.2, T.17 N., R.19 E., Washoe County, Hydrologic Unit 16050102, on right bank, 1 mi upstream from Jones Creek, 3.5 mi upstream from mouth, 4.5 mi west-southwest of Steamboat, and 12 mi south of Reno.

DRAINAGE AREA.--8.5 mi², approximately.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,592.0 ft above National Geodetic Vertical Datum of 1929, supplementary adjustment of 1956. Prior to Oct. 8, 1965, at same site at datum 3.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Two small diversions above station, one for irrigation and one diverts to Little Washoe Lake (station 10348800) during winter months.

AVERAGE DISCHARGE.--30 years, 9.07 ft³/s, 6,570 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,670 ft³/s, Aug. 15, 1965, gage height not determined, on basis of slope-area measurement of peak flow; no flow for parts of many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 31	0700	Ice jam	*3.58	June 9	1800	*35	3.30

Minimum daily, 0.07 ft³/s, Nov. 10, Mar. 2, but may have been less during periods of ice effect Nov. 19 to Feb. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	1.5	e.38	e.26	.31	.11	.38	7.4	15	8.2	5.0	2.6
2	3.6	1.2	e.36	e.27	e.27	.07	.33	6.9	18	7.5	4.5	2.5
3	3.6	.18	e.36	e.26	e.25	2.1	.31	6.4	21	7.0	4.2	2.3
4	3.6	.29	e.39	e.28	.23	8.0	.33	6.7	22	6.8	5.2	2.2
5	3.6	.10	e.42	e.30	.24	1.9	.45	8.0	20	6.7	5.6	2.5
6	3.4	.08	e.45	e.25	.20	1.0	.54	9.6	20	6.4	5.0	2.5
7	3.2	.12	e.46	e.26	.17	.47	.37	12	20	6.1	4.7	2.7
8	3.4	.11	e.44	e.25	.16	.48	.28	12	22	6.2	4.3	2.8
9	3.6	.08	.46	e.24	.15	.40	.29	11	24	6.0	3.6	3.1
10	3.6	.07	.50	e.22	.15	.30	.27	9.2	25	5.9	3.2	5.1
11	3.6	.09	.54	e.20	.14	.31	.20	8.7	25	5.9	2.8	4.0
12	3.6	.21	.54	e.22	.13	.29	.19	8.3	24	5.9	2.8	3.6
13	3.6	.21	e.51	e.21	.13	.29	.16	8.6	23	5.9	3.6	3.6
14	3.4	.21	e.47	e.20	.14	.26	.24	8.3	21	5.8	4.5	3.4
15	2.0	.21	e.44	e.18	.14	.23	.25	9.6	20	5.7	4.3	2.9
16	.44	.24	e.39	e.17	.13	.31	.20	11	18	6.4	4.7	3.0
17	.34	.29	e.42	e.16	.12	.26	.17	11	18	6.3	4.5	3.0
18	.34	.34	e.38	e.14	.10	.25	1.6	9.1	17	6.4	3.6	2.8
19	.42	e.34	e.34	e.14	.11	.29	4.8	8.6	15	6.9	3.8	2.8
20	1.1	e.33	e.32	.09	.08	.29	5.0	8.9	14	6.9	2.8	2.9
21	2.0	e.34	e.31	e.35	.09	.24	5.0	9.8	13	6.7	2.4	2.8
22	1.9	e.35	e.29	e.46	.10	.24	5.3	13	12	5.8	2.6	2.8
23	1.9	e.37	e.25	e.69	.08	.23	6.1	17	8.8	5.6	2.5	2.9
24	1.7	e.38	e.26	.68	.09	.23	6.3	19	8.3	5.4	2.5	2.9
25	1.6	e.41	e.31	.25	.10	.27	6.0	19	8.3	5.2	2.6	2.8
26	1.7	.51	e.35	.19	.09	.27	5.7	17	8.2	5.8	2.8	3.2
27	1.5	.51	e.38	.17	.08	.29	5.9	16	9.7	5.9	2.8	3.9
28	1.7	e.44	e.37	.16	.10	.33	6.2	18	11	6.1	3.0	3.4
29	1.5	e.40	e.30	.18	---	.29	7.4	15	9.7	6.4	2.8	3.1
30	1.6	e.41	e.24	.18	---	.30	7.7	14	8.7	5.9	2.9	2.8
31	1.5	---	e.24	e.22	---	.34	---	12	---	5.6	2.6	---
TOTAL	72.74	10.32	11.87	7.83	4.08	20.64	77.96	351.1	499.7	193.3	112.2	90.9
MEAN	2.35	.34	.38	.25	.15	.67	2.60	11.3	16.7	6.24	3.62	3.03
MAX	3.7	1.5	.54	.69	.31	8.0	7.7	19	25	8.2	5.6	5.1
MIN	.34	.07	.24	.09	.08	.07	.16	6.4	8.2	5.2	2.4	2.2
AC-FT	144	20	24	16	8.1	41	155	696	991	383	223	180

CAL YR 1990 TOTAL 1141.46 MEAN 3.13 MAX 10 MIN .07 AC-FT 2260
WTR YR 1991 TOTAL 1452.64 MEAN 3.98 MAX 25 MIN .07 AC-FT 2880

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

10349300 STEAMBOAT CREEK AT STEAMBOAT, NV

LOCATION.--Lat 39°22'40", long 119°44'33", in SE 1/4 SW 1/4 sec.33, T.18 N., R.20 E., Washoe County, Hydrologic Unit 16050102, on left bank, 250 ft upstream from Steamboat Ditch, 0.2 mi southwest of Steamboat Post Office, and 11 mi southeast of Reno.

DRAINAGE AREA.--123 mi².

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,600 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for daily discharges less than 0.15 ft³/s, which are poor. Many diversions for irrigation above station. Flow partly regulated by Washoe Lake (station 10348700).

AVERAGE DISCHARGE.--30 years, 19.3 ft³/s, 14,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,600 ft³/s, Feb. 17, 1986, gage height, 6.79 ft, from rating curve extended above 954 ft³/s on basis of slope-area measurement of peak flow; minimum, no flow, Sept. 9-15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 68 ft³/s, July 1, gage height, 2.26 ft, minimum daily, 0.09 ft³/s, Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.54	2.1	2.2	3.0	2.1	4.5	6.5	7.6	9.6	1.1	.57
2	.11	.72	2.0	2.2	3.7	2.3	3.4	3.0	8.8	5.0	1.1	.90
3	.10	.90	2.1	2.3	3.6	10	3.2	1.8	11	1.5	.99	.43
4	.11	1.6	2.5	2.8	3.3	30	3.1	1.7	13	1.4	2.7	.68
5	.09	1.5	2.5	2.9	3.9	11	3.3	1.7	11	.98	2.3	.71
6	.10	.93	2.4	2.7	3.4	5.4	3.1	1.8	7.7	.98	1.4	.61
7	.11	.73	2.4	2.8	3.1	4.5	1.7	3.4	7.3	.77	1.6	1.2
8	.13	.77	2.4	3.1	2.8	4.1	1.8	4.0	9.5	.60	1.2	.74
9	.17	.79	2.1	3.7	2.5	3.6	1.9	8.9	11	.60	.92	1.2
10	.14	.76	2.2	3.8	2.0	3.4	1.5	5.4	14	.54	.53	3.2
11	.15	.76	2.9	3.7	1.9	3.5	1.7	4.4	14	.54	.58	1.9
12	.17	.80	2.9	3.9	1.8	4.3	1.8	3.6	15	.78	.57	1.3
13	.18	.83	2.5	4.5	1.8	3.1	1.7	3.8	13	.86	.87	.94
14	.16	.87	2.3	3.9	1.9	3.0	1.7	3.0	7.0	.81	1.8	.60
15	.14	.77	2.3	3.8	1.9	3.0	1.8	3.0	7.7	1.1	4.3	.31
16	.15	.92	2.5	3.3	1.6	4.0	1.7	2.8	4.8	1.7	2.6	.28
17	.15	.94	2.5	3.0	1.6	5.0	1.6	3.3	4.2	1.7	1.9	.56
18	.17	.87	2.9	3.3	1.6	3.7	2.8	2.7	4.3	1.1	1.9	.45
19	.22	.92	3.2	3.1	1.4	4.0	2.5	2.8	4.6	1.3	1.7	.70
20	.24	.95	2.5	2.9	1.7	3.6	3.0	3.5	4.4	1.3	1.4	.23
21	.26	1.1	2.0	2.6	1.8	3.0	2.9	3.1	4.8	.87	1.4	.37
22	.26	1.1	1.5	2.7	1.7	2.8	2.2	3.4	4.4	.71	1.4	.57
23	.21	1.3	1.4	3.2	1.7	2.9	2.2	7.1	3.0	.99	1.5	.99
24	.20	1.3	1.3	3.3	1.5	4.1	1.9	7.8	2.3	1.2	1.0	.90
25	.19	1.3	1.4	2.9	1.5	4.1	1.8	6.8	1.6	.67	.41	.72
26	.19	1.5	1.7	2.9	1.4	3.6	1.8	6.0	1.3	.52	.88	.74
27	.25	1.4	2.1	2.9	1.6	3.7	2.1	6.5	5.2	.43	.57	1.3
28	.23	2.2	2.1	2.9	1.9	3.5	2.1	7.4	7.1	.51	1.1	1.0
29	.37	2.3	2.1	2.8	---	3.3	2.1	8.8	8.7	.58	.96	1.1
30	.37	2.3	2.1	2.7	---	3.3	2.4	9.0	7.8	.70	.95	.95
31	.39	---	2.2	2.8	---	3.4	---	7.0	---	1.1	.52	---
TOTAL	5.81	33.67	69.1	95.6	61.6	151.3	69.3	144.0	226.1	41.44	42.15	26.15
MEAN	.19	1.12	2.23	3.08	2.20	4.88	2.31	4.65	7.54	1.34	1.36	.87
MAX	.39	2.3	3.2	4.5	3.9	30	4.5	9.0	15	9.6	4.3	3.2
MIN	.09	.54	1.3	2.2	1.4	2.1	1.5	1.7	1.3	.43	.41	.23
AC-FT	12	67	137	190	122	300	137	286	448	82	84	52

CAL YR 1990 TOTAL 713.63 MEAN 1.96 MAX 7.4 MIN .01 AC-FT 1420
WTR YR 1991 TOTAL 966.22 MEAN 2.65 MAX 30 MIN .09 AC-FT 1920

PYRAMID AND WINNEMUCCA LAKES BASIN

323

10350000 TRUCKEE RIVER AT VISTA, NV

LOCATION.--Lat 39°31'05", long 119°40'58", in NW 1/4 NE 1/4 sec.13, T.19 N., R.20 E., Washoe County, Hydrologic Unit 16050102, on left bank 800 ft downstream from Southern Pacific Railroad bridge, 0.9 mi southeast of Vista, 1.5 mi downstream from Steamboat Creek, 4 mi southeast of Sparks, and at mi 52.23, upstream from Marble Bluff Dam.

DRAINAGE AREA.--1,431 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1899 to December 1907, January 1932 to December 1954, October 1958 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734.

REVISED RECORDS.--WSP 1634: 1904. WSP 1734: 1907 (M). WDR NV-75-1: 1963 (M). WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,368.59 ft above National Geodetic Vertical Datum of 1929, supplementary adjustment of 1956. Prior to Apr. 16, 1907, nonrecording gages at several sites in vicinity of present site at various datums. May to December 1907 reference point on railroad bridge. January 1932 to December 1954, October 1958 to Aug. 17, 1959, water-stage recorder at site 1,200 ft upstream at datum 5.59 ft higher.

REMARKS.--Records fair, except for periods of estimated daily discharges, which are poor. Flow regulated by Lake Tahoe (station 10337000), Prosser Creek (station 10340300), Stampede (station 10344300), and Boca (station 10344490) Reservoirs, and other lakes, combined capacity 1,070,000 acre-ft. Several powerplants and many diversions above station.

AVERAGE DISCHARGE.--63 years (1900-07, 1933-54, 1959-91), 819 ft³/s, 593,400 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (revised), 18,900 ft³/s, Feb. 1, 1963, gage height, 16.76 ft, from rating curve extended above 5,000 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 7.0 ft³/s, Aug. 26, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height known, 17.04 ft from floodmarks, December 1955, at site and datum used 1958-59, discharge about 15,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,740 ft³/s, Mar. 5, gage height, 6.69 ft; minimum daily, 36 ft³/s, Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	87	99	113	107	143	458	418	512	421	75	73
2	50	89	97	134	130	153	459	405	551	368	e70	78
3	45	95	91	159	156	192	490	420	650	340	81	78
4	39	81	109	143	141	840	499	413	689	322	82	84
5	36	82	97	130	163	1330	572	427	645	300	108	e65
6	48	94	103	135	164	521	641	417	517	286	101	e65
7	54	99	99	136	131	400	722	401	397	283	92	78
8	58	89	105	133	115	322	536	427	363	314	87	91
9	56	94	116	147	120	308	527	618	375	294	129	107
10	50	90	116	124	122	303	522	508	403	280	139	192
11	41	89	164	99	139	295	478	452	474	270	126	118
12	47	93	170	98	131	303	512	468	417	279	138	84
13	58	93	120	125	124	311	550	479	447	281	134	78
14	47	89	144	128	128	321	534	515	389	281	162	72
15	134	92	133	132	125	315	464	453	311	322	242	e70
16	169	89	139	125	130	356	480	482	305	292	288	74
17	164	87	134	133	127	339	487	471	314	287	145	77
18	176	93	146	130	116	349	573	549	295	288	126	e70
19	167	93	131	109	121	348	561	501	282	401	148	e65
20	150	99	121	107	128	311	575	497	273	614	137	e60
21	140	98	115	95	99	304	487	509	295	540	117	e55
22	121	91	84	91	97	278	528	389	303	405	90	e55
23	111	95	e80	100	95	306	568	430	302	385	82	e55
24	99	95	e75	130	95	380	544	650	345	314	81	e60
25	94	93	e75	109	95	329	492	780	336	310	e70	e70
26	92	135	e75	114	85	293	455	827	306	371	e75	e65
27	87	97	e75	123	85	316	470	725	393	156	90	e65
28	82	83	e75	120	115	333	440	612	491	100	83	72
29	86	122	e80	118	---	313	439	610	642	103	79	e60
30	88	119	80	113	---	314	434	618	464	96	72	e60
31	83	---	96	142	---	326	---	635	---	85	86	---
TOTAL	2721	2845	3344	3795	3384	11252	15497	16106	12486	9388	3535	2296
MEAN	87.8	94.8	108	122	121	363	517	520	416	303	114	76.5
MAX	176	135	170	159	164	1330	722	827	689	614	288	192
MIN	36	81	75	91	85	143	434	389	273	85	70	55
AC-FT	5400	5640	6630	7530	6710	22320	30740	31950	24770	18620	7010	4550

CAL YR 1990 TOTAL 97925 MEAN 268 MAX 1140 MIN 36 AC-FT 194200
WTR YR 1991 TOTAL 86649 MEAN 237 MAX 1330 MIN 36 AC-FT 171900

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN
10350000 TRUCKEE RIVER AT VISTA, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--June 1988 to current year.

WATER TEMPERATURE: June 1988 to current year.

INSTRUMENTATION.--Water temperature recorder since June 1988, hourly.

REMARKS.--Records represent water temperature at probe within 0.5°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 26.5°C, July 3-5, Aug. 1, 2, 1991; minimum recorded, 0.5°C, Jan. 26, 27, 1989.

EXTREMES FOR CURRENT PERIOD.--

WATER TEMPERATURE: Maximum recorded, 26.5°C, July 3-5, Aug. 1, 2; minimum recorded, 2.5°C, March 5, 6.

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	21.0	16.0	19.0	13.5	12.0	13.0	8.5	7.0	8.0	6.5	4.5	5.5
2	20.5	16.0	18.5	12.0	10.5	11.0	8.5	7.0	8.0	6.0	3.5	4.5
3	21.5	16.5	19.0	11.5	9.0	10.5	9.0	8.0	8.5	4.5	4.0	4.5
4	22.0	17.5	19.5	13.0	10.0	11.5	8.5	6.0	7.5	6.0	3.5	4.5
5	20.0	18.5	19.5	14.0	12.5	13.0	9.5	8.0	8.5	5.5	3.5	4.5
6	19.5	17.0	18.0	12.5	11.0	11.5	9.0	7.0	8.0	5.0	3.5	4.0
7	18.5	15.5	17.0	11.0	9.5	10.5	9.0	6.5	7.5	5.5	3.5	4.5
8	18.0	15.0	16.5	13.0	10.5	11.5	8.5	6.5	7.5	5.0	4.0	4.5
9	18.0	14.5	16.0	13.0	10.5	12.0	8.0	5.5	7.0	4.5	4.0	4.5
10	18.5	15.0	16.5	12.5	11.0	12.0	8.5	6.5	7.5	6.0	4.5	5.0
11	19.0	15.5	17.0	12.5	11.0	12.0	9.0	7.0	8.0	6.0	5.0	5.5
12	18.5	15.0	16.5	12.5	11.0	12.0	8.5	6.0	7.0	7.0	5.5	6.5
13	18.0	15.5	17.0	12.5	11.0	12.0	8.0	6.5	7.5	7.0	5.5	6.5
14	19.0	15.5	17.5	12.0	11.0	12.0	6.5	5.0	6.0	7.5	5.5	6.5
15	18.0	14.5	16.5	12.5	11.5	12.0	5.5	4.5	5.0	7.0	5.0	6.0
16	16.0	14.5	15.5	12.0	11.0	11.5	6.0	4.0	5.0	7.0	5.0	5.5
17	15.0	12.5	14.0	13.0	11.5	12.5	6.5	4.0	5.5	6.5	5.0	5.5
18	14.0	13.5	13.5	13.0	12.0	13.0	6.0	4.0	5.0	7.0	4.5	5.5
19	14.0	12.5	13.5	12.5	11.5	12.0	4.5	4.0	4.5	7.5	5.5	6.5
20	13.0	10.5	12.0	11.5	10.0	10.5	6.0	3.0	4.5	7.0	6.0	6.5
21	14.0	10.5	12.5	10.5	9.0	10.0	5.0	3.0	3.5	7.5	5.5	6.5
22	16.0	13.0	14.5	10.5	9.0	10.0	5.5	3.0	4.0	8.0	5.5	7.0
23	16.5	13.5	15.0	10.5	8.5	9.5	5.0	3.0	4.0	8.0	5.0	6.5
24	16.5	13.5	15.5	10.0	8.5	9.5	5.5	3.5	4.5	7.5	4.5	5.5
25	16.0	14.0	15.0	10.0	9.0	9.5	5.5	3.5	4.5	7.5	4.5	6.0
26	16.5	14.0	15.5	9.0	7.0	8.0	5.0	3.0	4.0	7.5	4.5	6.5
27	16.0	13.5	15.0	8.5	6.0	7.5	5.5	3.0	4.0	7.5	4.0	6.0
28	16.0	14.0	15.0	9.5	7.0	8.0	6.0	3.5	4.5	7.5	4.0	6.0
29	16.0	14.0	15.0	7.0	5.5	6.5	6.5	4.0	5.5	7.0	4.0	5.5
30	15.5	13.5	15.0	8.5	6.0	7.0	7.5	4.5	6.0	8.0	4.0	6.0
31	14.5	13.0	14.0	---	---	---	7.0	5.0	6.0	5.5	4.5	5.0
MONTH	22.0	10.5	16.0	14.0	5.5	10.7	9.5	3.0	6.0	8.0	3.5	5.6

325

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.5	4.5	6.0	10.5	9.0	9.5	12.0	9.5	11.0	12.5	9.0	11.0
2	6.5	5.5	6.0	9.0	7.0	8.5	12.0	8.5	10.5	11.0	8.5	9.5
3	7.5	5.0	6.0	9.0	8.0	8.5	13.0	8.5	11.0	12.5	7.5	10.0
4	7.5	6.0	7.0	8.5	5.5	7.5	12.5	9.0	11.0	16.0	9.5	12.5
5	9.0	7.5	8.0	5.0	2.5	4.0	12.5	8.5	10.5	15.5	12.0	14.0
6	9.5	8.0	8.5	6.5	2.5	4.5	13.0	9.5	10.5	16.0	11.5	14.0
7	10.0	8.0	9.0	8.0	4.0	6.0	11.5	7.0	9.5	16.5	12.5	14.5
8	10.0	8.5	9.5	9.0	5.0	7.0	12.0	7.0	9.5	15.5	13.0	14.5
9	10.5	7.5	9.0	8.5	6.0	7.5	12.5	8.0	10.5	13.0	9.5	11.0
10	10.5	8.0	9.5	9.0	6.0	7.5	10.5	7.0	9.0	11.5	8.0	10.0
11	10.0	8.0	9.0	8.0	5.0	7.0	10.0	6.0	8.0	11.5	8.0	10.0
12	9.5	7.5	9.0	8.5	5.5	7.0	12.0	6.0	9.0	15.0	8.0	11.0
13	11.0	8.5	10.0	8.0	6.5	7.5	13.0	8.0	10.5	13.5	10.5	12.0
14	11.5	9.0	10.5	8.0	6.0	7.0	12.5	9.0	11.0	15.0	9.5	12.0
15	11.5	10.0	10.5	7.5	5.0	6.0	12.0	8.5	10.5	17.0	11.0	14.0
16	11.5	10.0	11.0	8.0	3.5	6.0	11.0	7.0	9.0	15.5	12.0	14.0
17	11.0	9.5	10.0	7.5	6.0	7.0	10.5	7.5	9.0	12.0	11.0	11.5
18	10.0	7.0	8.5	7.5	6.0	7.0	12.0	7.0	9.5	11.0	8.0	9.5
19	10.5	8.0	9.5	8.5	5.5	7.0	12.0	8.0	10.5	14.0	8.0	11.0
20	10.5	8.0	9.5	8.5	6.5	7.5	11.0	9.5	10.0	13.0	10.5	12.0
21	10.5	9.0	10.0	8.0	5.5	7.0	13.5	8.5	11.0	16.5	11.0	13.5
22	10.5	9.0	10.0	9.5	5.0	7.5	13.5	10.0	11.5	19.0	13.0	16.0
23	10.5	8.0	9.5	10.0	6.5	8.5	14.0	10.0	12.0	19.0	15.0	17.0
24	10.0	8.0	9.5	8.5	6.0	7.0	11.5	10.0	11.0	17.5	14.0	16.0
25	10.5	8.0	9.5	7.5	5.5	6.5	10.5	8.0	9.5	17.0	13.0	15.0
26	11.0	8.0	9.5	6.5	4.5	6.0	13.0	7.5	10.0	14.5	11.5	13.5
27	10.5	9.5	10.0	9.5	4.5	7.0	13.5	8.5	11.0	15.5	10.0	12.5
28	11.5	9.5	10.5	11.0	5.5	8.5	14.5	9.0	11.5	16.0	12.0	14.0
29	---	---	---	12.0	7.5	10.0	15.5	10.5	13.0	14.5	11.5	12.5
30	---	---	---	12.5	8.0	10.5	13.5	10.0	12.0	12.0	10.0	10.5
31	---	---	---	12.5	9.0	11.0	---	---	---	14.0	8.0	11.0
MONTH	11.5	4.5	9.1	12.5	2.5	7.4	15.5	6.0	10.4	19.0	7.5	12.6
	JUNE			JULY			AUGUST			SEPTEMBER		
1	18.0	11.5	14.5	24.5	19.5	22.0	26.5	21.5	24.0	25.0	19.5	22.0
2	21.5	16.5	19.0	26.0	20.5	23.0	26.5	21.0	23.5	25.0	20.5	22.5
3	22.0	17.5	19.5	26.5	21.5	24.0	25.0	22.0	23.0	25.0	21.0	2

PYRAMID AND WINNEMUCCA LAKES BASIN

10350400 TRUCKEE RIVER BELOW TRACY, NV

LOCATION.--Lat 39°33'52", long 119°31'02", in NW 1/4 NE 1/4 sec.33, T.20 N., R.22 E., Washoe County, Hydrologic Unit 16050102, on left bank, upstream side of bridge, 200 ft downstream from Tracy powerplant, 13 mi east of Sparks, and at mi 40.62, upstream from Marble Bluff Dam.

DRAINAGE AREA.--1,590 mi².

PERIOD OF RECORD.--May 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,238.15 ft above National Geodetic Vertical Datum of 1929 (levels by S.E.A. Engineers, Sparks, Nev.).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Lake Tahoe (station 10337000), Prosser Creek (station 10340300), Stampede (station 10344300) and Boca (station 10344490) Reservoirs, other lakes, powerplants, and many diversions for irrigation.

AVERAGE DISCHARGE.--19 years, 836 ft³/s, 605,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft³/s, Feb. 19, 1986, from rating curve extended above 8,800 ft³/s, gage height, 15.2 ft, from floodmarks; minimum, 22 ft³/s, Oct. 24, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,350 ft³/s, Mar. 5, gage height, 7.08 ft; minimum daily, 49 ft³/s, Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	91	122	e100	130	155	372	396	435	436	79	63
2	79	93	116	e120	129	163	397	387	441	392	70	62
3	74	102	111	e140	151	176	422	379	509	393	67	71
4	76	93	e120	e160	146	470	435	384	549	364	65	68
5	67	89	e110	144	155	1440	457	383	524	358	81	65
6	69	92	e100	137	160	580	488	375	461	350	97	57
7	74	95	e100	144	154	426	563	369	389	351	85	57
8	75	97	e100	144	138	358	471	355	364	384	75	65
9	77	94	e110	144	139	311	444	474	370	394	87	86
10	74	94	e120	144	130	322	438	453	406	382	118	144
11	70	91	e120	123	146	310	426	409	442	378	109	133
12	66	91	e170	119	146	313	429	402	432	382	102	90
13	70	95	e170	129	140	312	450	394	429	388	116	75
14	74	96	e130	139	141	337	445	437	412	380	116	69
15	87	95	e140	137	145	320	418	392	344	405	174	65
16	132	97	e140	141	142	366	422	401	304	413	267	65
17	126	95	e140	138	145	344	418	395	308	399	169	70
18	131	99	e140	142	142	359	459	440	310	384	113	66
19	142	100	e150	129	140	364	469	428	280	418	122	58
20	131	102	e130	124	151	328	460	390	278	617	129	54
21	123	108	e120	119	137	316	453	421	280	504	106	50
22	119	107	e120	109	133	302	435	344	296	471	88	51
23	112	106	e80	114	130	303	475	344	291	403	73	49
24	109	107	e80	125	128	362	468	484	308	364	67	55
25	104	104	e80	130	125	360	443	576	330	323	e60	59
26	100	130	e80	122	124	314	417	616	301	340	e55	63
27	97	125	e80	130	115	318	422	565	321	242	e65	58
28	93	107	e80	131	127	344	408	498	411	121	e65	60
29	92	120	e80	128	---	327	395	491	627	98	65	58
30	95	133	e80	120	---	326	406	481	495	98	e60	51
31	92	---	e80	139	---	336	---	505	---	91	e60	---
TOTAL	2911	3048	3499	4065	3889	11362	13205	13368	11647	11023	3005	2037
MEAN	93.9	102	113	131	139	367	440	431	388	356	96.9	67.9
MAX	142	133	170	160	160	1440	563	616	627	617	267	144
MIN	66	89	80	100	115	155	372	344	278	91	55	49
AC-FT	5770	6050	6940	8060	7710	22540	26190	26520	23100	21860	5960	4040

CAL YR 1990 TOTAL 96766 MEAN 265 MAX 1140 MIN 64 AC-FT 191900
WTR YR 1991 TOTAL 83059 MEAN 228 MAX 1440 MIN 49 AC-FT 164700

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

327

10350500 TRUCKEE RIVER AT CLARK, NV

LOCATION--Lat 39°33'56", long 119°29'08", in SE 1/4 SW 1/4 sec.26, T.20 N., R.22 E., Storey County, Hydrologic Unit 16050102, on left bank, about 250 ft downstream from Clark Bridge, about 2 mi downstream from cooling pond outlet at Tracy powerplant, about 0.2 mi west of Clark, and at mi 38.60, upstream from Marble Bluff Dam. Prior to Jan. 16, 1985, at site about 200 ft upstream on right bank.

DRAINAGE AREA.--1,600 mi², approximately.

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1983 to September 1988.

WATER TEMPERATURE: June 1972 to September 1977; June 1978 to current year.

INSTRUMENTATION.--Specific-conductance recorder from October 1983 to September 1988, hourly. Temperature recorder from June 1972 to September 1977, continuous; June 1978 to February 1980, four times per hour; March 1980 to May 1982, two times per hour; June 1982 to May 1990, hourly, June to October 1990, four times per hour, November 1990 to September 1991, hourly.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 626 microsiemens, Sept. 25, 1988; minimum, 62 microsiemens, Feb. 17, 1986.

WATER TEMPERATURE: Maximum recorded, 29.5°C, June 4, 1977 (temperature presumably higher during period of recorder malfunction in June 1977); minimum, freezing point on several days during winter months of some years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 26.5°C, July 4, 27, 30, Aug. 1, 18; minimum, 0.5°C, several days during December and January.

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.5	17.0	19.0	12.0	9.0	10.0	6.0	3.5	4.5	1.0	.5	.5
2	20.0	16.5	18.5	9.5	6.5	8.0	5.5	3.0	4.5	1.0	.5	.5
3	19.0	15.5	17.5	9.5	6.0	7.5	6.0	3.5	4.5	1.5	.5	1.0
4	19.0	15.0	17.0	10.0	6.0	8.0	7.0	4.0	5.5	3.5	1.5	2.5
5	17.5	16.0	16.5	11.0	8.5	9.5	7.5	5.0	6.0	3.0	1.5	2.5
6	15.5	13.5	14.5	9.5	7.5	8.5	6.5	4.0	5.5	2.5	2.0	2.0
7	15.0	11.5	13.0	8.5	5.5	7.0	6.0	3.5	4.5	2.5	1.5	2.0
8	14.0	10.5	12.5	11.0	7.0	9.0	6.0	3.5	4.5	3.0	2.0	2.5
9	14.5	10.0	12.5	11.5	8.0	9.5	6.0	3.5	5.0	3.5	2.5	3.0
10	15.5	11.0	13.5	11.0	7.5	9.5	7.0	4.5	5.5	4.0	3.0	3.5
11	15.5	12.0	14.0	10.0	7.0	8.5	7.0	6.5	7.0	3.5	3.0	3.0
12	15.5	11.5	13.5	11.0	7.0	9.0	7.5	6.5	7.0	5.5	3.0	4.0
13	16.5	12.5	14.5	10.0	8.0	9.0	6.5	5.5	6.0	7.0	4.5	6.0
14	17.0	13.0	15.0	10.0	8.0	9.0	5.5	4.0	4.5	7.0	5.5	6.0
15	17.5	13.5	15.5	10.0	8.0	9.0	4.0	2.5	3.5	6.5	5.0	5.5
16	16.5	14.0	15.0	8.5	7.0	8.0	4.5	3.0	3.5	6.0	4.0	5.0
17	14.5	11.5	13.0	11.5	8.0	9.5	4.5	2.5	3.5	5.5	3.0	4.0
18	13.5	12.5	13.0	11.5	9.0	10.0	5.0	3.0	4.0	6.0	3.0	4.5
19	13.5	11.5	12.5	10.0	8.5	9.5	4.0	1.5	2.5	6.0	3.5	4.5
20	12.5	9.5	11.0	8.5	6.5	7.5	1.5	.5	1.0	5.0	3.0	4.0
21	12.5	9.0	11.0	8.5	6.0	7.5	1.0	.5	.5	4.0	1.5	3.0
22	15.0	11.0	13.0	8.5	5.5	7.0	.5	.5	.5	4.5	1.5	3.0
23	15.5	12.0	14.0	8.5	5.5	7.0	.5	.5	.5	4.5	2.0	3.5
24	16.0	12.5	14.0	8.0	5.0	6.5	.5	.5	.5	5.5	2.5	4.0
25	15.5	12.0	14.0	7.5	5.0	6.0	.5	.5	.5	4.5	2.0	3.5
26	15.5	12.0	13.5	6.5	4.5	5.5	1.0	.5	.5	5.5	2.0	3.5
27	15.0	11.5	13.5	5.0	3.0	4.0	1.0	.5	.5	5.0	2.0	3.5
28	15.0	11.5	13.0	5.5	2.5	4.0	1.0	.5	.5	4.5	2.5	3.5
29	15.0	11.5	13.0	5.0	3.5	4.0	1.0	.5	.5	4.5	2.0	3.5
30	14.5	11.0	13.0	6.0	3.5	5.0	.5	.5	.5	4.0	1.5	3.0
31	12.5	11.0	11.5	---	---	---	1.0	.5	.5	4.0	3.0	3.5
MONTH	20.5	9.0	14.0	12.0	2.5	7.7	7.5	.5	3.2	7.0	.5	3.4

PYRAMID AND WINNEMUCCA LAKES BASIN

329

10351300 TRUCKEE CANAL NEAR WADSWORTH, NV

LOCATION.--Lat 39°36'25", long 119°18'35", in NW 1/4 NE 1/4 sec.17, T.20 N., R.24 E., Storey County, Hydrologic Unit 16050102, on left bank, at upstream end of Tunnel No. 3, 2 mi southwest of Wadsworth, and at mi 22.94, upstream from terminal weir at Lahontan Reservoir.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1966 to current year.

REVISED RECORDS.--WDR NV-77-1: 1975.

GAGE.--Water-stage recorder. Elevation of gage is 4,200 ft above National Geodetic Vertical Datum of 1929, from topographic map. Since Feb. 13, 1967, auxiliary water-stage recorder on left bank 0.3 mi downstream from base gage.

REMARKS.--Records fair. Flow is regulated by Derby Dam (including two wasteways between gage and Derby Dam) and many reservoirs, powerplants, and diversions above Derby Dam.

AVERAGE DISCHARGE.--25 years, 265 ft³/s, 192,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 955 ft³/s, June 10, 1970; no flow at times in some years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	75	104	e95	119	e155	343	261	416	365	82	33
2	58	83	96	e110	98	e163	402	263	358	321	41	26
3	53	93	e95	e130	136	e176	418	253	446	282	29	43
4	46	91	e100	e150	136	367	436	259	511	248	33	55
5	e43	77	e100	e140	134	930	457	244	511	228	36	53
6	e41	79	112	e130	153	722	504	271	451	219	65	30
7	e39	88	119	e130	150	460	593	283	343	225	93	18
8	e43	97	115	e130	118	366	521	258	270	233	76	17
9	48	86	116	e130	114	298	422	346	297	246	57	54
10	53	91	125	e130	104	309	426	389	331	210	94	101
11	54	84	123	e120	123	292	424	319	363	200	93	170
12	49	80	208	e110	134	294	408	297	383	196	85	115
13	51	85	174	e120	126	292	436	287	357	203	90	82
14	58	87	e140	e130	125	319	442	318	376	192	87	69
15	52	84	e150	124	135	290	425	289	310	204	132	70
16	122	85	e150	121	130	341	373	287	234	223	233	70
17	147	91	e150	114	138	339	391	308	238	209	204	65
18	120	89	e150	125	136	341	415	348	248	202	105	66
19	133	92	e160	110	131	352	373	369	232	213	102	59
20	115	94	e140	91	144	318	338	365	224	325	119	54
21	109	100	e130	86	138	297	347	402	215	327	99	46
22	120	101	e110	73	e133	287	279	336	245	333	77	31
23	105	101	e80	77	e130	270	359	278	251	259	64	25
24	109	104	e75	87	e128	328	394	393	263	250	48	16
25	101	106	e75	110	e125	375	373	547	307	213	37	23
26	97	106	e75	92	e124	298	314	593	283	227	28	38
27	94	78	e75	101	e115	294	309	561	266	221	12	60
28	93	43	e75	104	e127	324	293	476	376	132	19	63
29	74	46	e75	102	---	309	258	427	512	105	37	67
30	74	83	e75	97	---	301	285	439	470	96	42	48
31	79	---	e80	106	---	314	---	482	---	92	35	---
TOTAL	2447	2599	3552	3475	3604	10521	11758	10948	10087	6999	2354	1667
MEAN	78.9	86.6	115	112	129	339	392	353	336	226	75.9	55.6
MAX	147	106	208	150	153	930	593	593	512	365	233	170
MIN	39	43	75	73	98	155	258	244	215	92	12	16
AC-FT	4850	5160	7050	6890	7150	20870	23320	21720	20010	13880	4670	3310

CAL YR 1990 TOTAL 85451 MEAN 234 MAX 917 MIN 39 AC-FT 169500
WTR YR 1991 TOTAL 70011 MEAN 192 MAX 930 MIN 12 AC-FT 138900

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

10351400 TRUCKEE CANAL NEAR HAZEN, NV

LOCATION (REVISED).--Lat 39°30'14", long 119°02'39", in NE 1/4 NE 1/4 sec.22, T.19 N., R.26 E., Churchill County, Hydrologic Unit 16050203, on left bank, 500 ft downstream from Bango check dam, 4.0 mi southwest of Hazen, and at mi 3.35, upstream from terminal weir at Lahontan Reservoir.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1966 to current year. Records since Oct. 1, 1980, equivalent if records for the KX lateral are added to flow past station.

GAGE.--Water-stage recorder. Datum of gage is 4,166.53 ft above National Geodetic Vertical Datum of 1929, Bureau of Reclamation datum. Since Oct. 1, 1980, at site 500 ft downstream from Bango check dam. From Mar. 17, 1972, to Sept. 30, 1980, gage on left bank 0.1 mi downstream from Hazen check dam and auxiliary water-stage recorder 20 ft upstream from KX lateral diversion canal. Oct. 1, 1967, to Mar. 17, 1972, auxiliary water-stage recorder on right bank, approximately 6 mi downstream from base gage.

REMARKS.--Records fair. Flow regulated by Derby Dam, diversions, and spillways between Derby Dam and station.

AVERAGE DISCHARGE.--25 years, 198 ft³/s, 143,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 916 ft³/s, Feb. 3, 1967; no flow at times in some years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	64	75	e90	116	115	315	276	364	332	5.9	2.3
2	56	63	92	e100	102	146	369	266	300	322	6.2	2.7
3	52	66	89	e120	107	149	391	256	357	241	2.6	2.2
4	50	71	83	e150	126	312	401	227	414	190	1.9	2.3
5	48	71	91	e140	123	687	401	233	431	198	1.0	2.7
6	46	65	89	e130	131	814	439	192	423	165	.88	2.1
7	44	67	86	e130	129	526	496	243	335	81	.72	1.4
8	45	73	91	e130	119	414	514	249	292	166	.67	2.0
9	47	73	92	e130	108	331	413	243	221	170	2.5	1.5
10	49	72	96	e130	114	318	403	305	276	138	.57	1.8
11	50	71	101	e120	105	307	407	282	271	117	1.9	2.9
12	50	70	118	e110	121	300	385	258	337	121	1.0	5.6
13	23	68	144	e110	119	306	402	258	303	106	.56	2.4
14	28	72	116	e120	114	316	423	268	284	79	1.1	7.0
15	40	71	118	e120	115	340	418	286	233	86	2.0	2.7
16	30	71	121	e120	120	326	390	219	172	89	6.6	1.9
17	32	71	122	e120	118	367	371	237	159	130	34	1.0
18	17	71	122	e120	120	344	397	241	114	113	25	.67
19	57	72	127	e110	117	353	397	308	153	110	5.8	.71
20	47	73	121	e100	119	348	362	309	133	150	3.2	1.0
21	45	73	93	e100	127	313	349	310	88	229	3.5	2.5
22	46	78	e80	93	113	298	319	304	117	265	3.9	2.7
23	83	76	e70	92	109	278	297	225	168	223	2.6	2.2
24	78	75	e70	99	107	293	338	212	160	200	2.6	2.3
25	65	76	e70	112	107	357	353	353	130	138	2.9	1.9
26	62	e80	e70	108	106	322	294	446	152	90	3.4	1.4
27	66	e80	e70	102	102	291	246	489	155	110	2.9	.82
28	61	e50	e70	107	94	306	285	433	237	55	3.0	1.4
29	64	e25	e70	105	---	321	288	353	358	16	2.6	3.2
30	60	26	e70	104	---	301	248	349	437	18	2.7	2.7
31	63	---	e80	98	---	298	---	353	---	9.1	2.4	---
TOTAL	1571	2034	2907	3520	3208	10497	11111	8983	7574	4457.1	136.60	166.10
MEAN	50.7	67.8	93.8	114	115	339	370	290	252	144	4.41	5.54
MAX	83	80	144	150	131	814	514	489	437	332	34	56
MIN	17	25	70	90	94	115	246	192	88	9.1	.56	.67
AC-FT	3120	4030	5770	6980	6360	20820	22040	17820	15020	8840	271	329

CAL YR 1990 TOTAL 64806.71 MEAN 178 MAX 797 MIN .00 AC-FT 128500
WTR YR 1991 TOTAL 56164.80 MEAN 154 MAX 814 MIN .56 AC-FT 111400

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

331

10351600 TRUCKEE RIVER BELOW DERBY DAM, NEAR WADSWORTH, NV

LOCATION.--Lat 39°35'05", long 119°26'25", in NW 1/4 SE 1/4 sec.19, T.20 N., R.23 E., Storey County, Hydrologic Unit 16050102, on right bank 1,500 ft downstream from Derby Dam, 3.2 mi downstream from Clark, 9 mi southwest of Wadsworth, and at mi 34.49, upstream from Marble Bluff Dam.

DRAINAGE AREA.--1,676 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1909 to December 1910, January to December 1916, January 1918 to July 1958, October 1958 to current year. Monthly discharge only for some periods, published in WSP 1734.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,200 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Lake Tahoe (station 10337000), Prosser Creek (station 10340300), Stampede (station 10344300) and Boca (station 10344490) Reservoirs, other lakes, powerplants, many diversions for irrigation, and by Derby Dam. Truckee Canal diverts water at Derby Dam out of basin to Lahontan Reservoir.

AVERAGE DISCHARGE.--72 years (1919-57, 1959-91), 376 ft³/s, 272,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft³/s, Feb. 1, 1963, gage height, 14.26 ft, from rating curve extended above 1,500 ft³/s on basis of slope-area measurement of peak flow; no flow Aug. 8-11, 1924, Sept. 1-7, 10, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,210 ft³/s, Mar. 5, gage height, 4.70 ft; minimum daily, 2.8 ft³/s, Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	7.2	2.9	e9.0	e5.5	e5.1	e3.9	80	33	23	40	e24
2	3.8	7.2	3.1	e9.2	e5.2	e5.6	e4.0	80	31	23	41	e24
3	3.5	7.0	3.3	e9.4	e4.8	e6.8	e4.2	80	33	23	34	e25
4	3.0	6.3	3.6	e9.4	e4.7	e10	e4.5	81	36	24	34	e20
5	2.8	5.7	3.5	e9.4	e4.6	475	e5.2	81	35	24	33	17
6	3.1	5.3	3.2	e9.4	e4.6	27	e6.0	82	33	23	33	16
7	3.4	5.0	3.3	e9.4	e4.6	e15	10	84	31	23	28	16
8	3.6	4.7	3.4	e9.4	e4.6	e10	16	84	29	24	28	17
9	3.5	4.2	3.8	e9.3	e4.6	e6.0	21	91	27	26	28	17
10	3.4	4.2	3.9	e9.1	e4.6	e4.9	16	91	27	34	30	14
11	3.3	4.0	4.0	e8.9	e4.6	e4.8	14	88	26	35	29	e7.6
12	2.9	4.0	5.0	e8.6	e4.6	e4.9	13	87	26	35	29	e5.1
13	2.9	3.7	4.6	e8.4	e4.6	e4.9	13	86	26	36	28	e4.4
14	2.9	3.6	4.6	e8.0	e4.6	e5.2	13	89	25	36	27	e4.1
15	2.9	3.8	4.8	e7.8	e4.6	e20	13	87	24	37	21	e3.6
16	4.8	3.5	4.7	e7.4	e4.6	e5.8	36	87	23	40	22	e4.0
17	10	3.6	4.5	e7.1	e4.6	e5.4	16	86	23	39	20	e4.7
18	14	3.9	4.3	e6.8	e4.5	e4.6	42	90	23	40	19	e5.1
19	14	4.1	4.7	e6.5	e4.3	e4.0	86	70	22	43	22	e4.8
20	13	3.6	4.6	e6.3	e4.2	e3.7	84	36	22	47	e23	e4.5
21	11	3.7	e5.0	e6.0	e4.2	e3.7	85	33	22	45	e24	e4.6
22	11	3.7	e5.4	e5.9	e4.2	e3.8	83	31	22	44	e24	e4.5
23	10	3.7	e5.8	e5.8	e4.2	e3.8	85	30	22	43	e24	e4.7
24	6.4	3.7	e6.2	e5.8	e4.2	e3.9	85	34	22	43	e23	e5.3
25	4.9	3.4	e6.7	e5.8	e4.2	e3.9	84	38	22	43	e22	e5.1
26	4.0	3.2	e7.2	e5.8	e4.3	e3.8	82	42	21	44	e22	e5.2
27	3.7	3.8	e7.6	e5.8	e4.5	e3.8	83	42	22	44	e23	e5.1
28	5.1	3.6	e8.0	e5.8	e4.8	e3.8	82	36	24	41	e22	e5.3
29	8.3	3.4	e8.3	e5.8	---	e3.8	81	35	26	40	e22	e5.4
30	8.0	3.3	e8.5	e5.8	---	e3.8	82	35	24	40	e23	e5.2
31	7.4	---	e8.8	e5.6	---	e3.8	---	35	---	40	e23	---
TOTAL	185.0	130.1	157.3	232.7	127.6	670.6	1252.8	2031	782	1102	821	288.3
MEAN	5.97	4.34	5.07	7.51	4.56	21.6	41.8	65.5	26.1	35.5	26.5	9.61
MAX	14	7.2	8.8	9.4	5.5	475	86	91	36	47	41	25
MIN	2.8	3.2	2.9	5.6	4.2	3.7	3.9	30	21	23	19	3.6
AC-FT	367	258	312	462	253	1330	2480	4030	1550	2190	1630	572

CAL YR 1990 TOTAL 8932.0 MEAN 24.5 MAX 189 MIN 2.8 AC-FT 17720
WTR YR 1991 TOTAL 7780.4 MEAN 21.3 MAX 475 MIN 2.8 AC-FT 15430

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

10351600 TRUCKEE RIVER BELOW DERBY DAM NEAR WADSWORTH, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1988 to current year.

INSTRUMENTATION.--Water-temperature recorder since June 1988, hourly.

REMARKS.--Records represent water temperature at probe within 0.5°C. Interruptions in record due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 28.0°C, July 19, 1989, July 11, 1990, August 2, 1991; minimum, freezing point on many days in winter months in most years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 28.0°C, Aug 2; minimum, freezing point on many days in winter.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	11.5	6.0	8.5	6.5	.0	2.0	.0	.0	.0
2	---	---	---	10.5	3.5	6.0	4.5	.0	1.5	.0	.0	.0
3	---	---	---	10.0	2.5	5.5	5.0	.5	2.0	.0	.0	.0
4	21.5	12.5	16.5	11.0	3.0	6.5	7.0	1.0	3.0	.5	.0	.0
5	18.5	13.5	15.5	9.5	5.5	7.0	8.0	1.5	3.0	.0	.0	.0
6	16.5	11.0	13.5	10.5	4.0	6.0	6.5	.5	2.0	.0	.0	.0
7	16.5	8.5	11.5	9.0	2.0	5.0	6.0	.5	1.5	.5	.0	.0
8	16.5	7.0	11.0	12.0	4.0	7.0	5.5	.5	1.5	.5	.0	.0
9	17.0	7.0	11.0	13.5	5.0	8.0	6.0	.5	1.5	.5	.5	.5
10	18.0	8.0	12.0	12.0	4.0	7.0	6.5	1.0	3.5	.5	.5	.5
11	17.5	9.0	12.5	11.0	3.5	6.0	6.0	4.5	5.0	.5	.0	.5
12	17.0	7.5	12.0	12.0	4.0	6.5	9.0	4.0	5.5	.5	.0	.5
13	18.0	9.5	13.0	11.0	4.5	6.5	7.0	2.5	4.0	.5	.5	.5
14	19.0	9.0	13.0	10.0	5.0	7.0	5.5	.5	2.0	2.5	.5	1.5
15	19.0	10.5	14.0	11.0	5.0	7.0	4.0	.5	1.5	5.0	2.5	3.5
16	18.5	11.0	14.0	7.5	3.5	5.5	4.0	.5	1.5	4.5	2.0	3.0
17	15.5	8.5	11.5	13.0	6.0	8.5	4.5	.5	1.5	4.5	2.0	2.5
18	13.0	11.5	12.0	13.0	6.5	8.5	4.5	.5	2.0	5.5	2.0	3.0
19	15.0	9.5	11.5	9.0	6.0	7.0	1.5	.0	1.0	6.5	2.0	3.5
20	14.0	7.5	10.0	9.5	3.0	5.5	1.0	.0	.5	5.5	1.5	2.5
21	14.0	7.0	10.0	10.0	2.5	5.0	1.0	.0	.5	4.0	1.0	1.5
22	17.0	9.5	12.0	10.0	2.5	4.5	.5	.0	.0	4.5	1.0	2.0
23	17.0	10.0	13.0	9.0	1.5	4.0	.0	.0	.0	4.5	1.0	2.0
24	18.0	9.5	13.0	9.0	1.5	3.5	.0	.0	.0	6.0	1.0	2.5
25	17.0	9.5	12.5	7.5	1.5	3.5	.0	.0	.0	5.5	1.0	2.0
26	17.5	9.0	12.5	5.5	1.0	3.0	.0	.0	.0	5.5	1.0	2.0
27	17.5	8.0	11.5	5.0	.0	1.5	.0	.0	.0	5.5	1.0	2.0
28	16.5	8.5	11.5	5.0	.0	1.5	.0	.0	.0	5.5	.5	2.0
29	16.5	9.0	11.5	3.5	.5	1.5	.0	.0	.0	5.5	1.0	2.0
30	16.0	9.0	11.0	7.5	.5	2.5	.0	.0	.0	4.5	1.0	1.5
31	14.0	8.5	10.5	---	---	---	.0	.0	.0	4.0	1.5	2.5
MONTH	---	---	---	13.5	.0	5.5	9.0	.0	1.5	6.5	.0	1.4

PYRAMID AND WINNEMUCCA LAKES BASIN

333

10351600 TRUCKEE RIVER BELOW DERBY DAM NR WADSWORTH, NV--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	6.0	1.0	2.5	11.0	5.0	8.0	15.0	7.5	10.0	14.0	10.0	12.0
2	6.5	2.0	3.5	11.0	4.0	6.5	17.0	5.5	10.5	12.0	9.5	10.5
3	8.0	3.0	4.5	11.0	6.0	7.5	18.0	7.0	12.0	14.0	8.5	11.0
4	8.0	2.0	4.5	10.0	6.5	8.0	18.0	8.0	12.0	16.0	9.5	13.0
5	9.0	4.5	6.0	7.5	3.5	5.0	16.5	8.0	11.0	17.5	12.5	15.0
6	10.0	4.0	6.0	8.0	2.5	5.0	16.0	8.0	11.0	18.0	12.5	15.0
7	12.0	3.5	6.5	10.0	2.5	5.5	15.5	6.0	10.0	18.5	13.0	16.0
8	11.5	4.0	6.5	11.5	3.5	7.0	16.0	5.5	10.5	16.5	13.0	15.0
9	12.0	3.5	7.0	11.5	4.5	7.0	14.0	7.5	10.0	14.0	11.0	12.0
10	12.5	3.5	7.0	12.0	4.5	7.0	12.5	6.0	9.0	12.0	8.5	10.5
11	11.0	4.0	6.5	11.5	2.5	6.0	13.0	4.5	8.5	13.0	8.5	10.5
12	10.5	3.5	6.5	11.0	3.5	6.5	14.5	6.5	10.0	15.5	9.0	12.0
13	14.0	5.5	8.5	9.0	4.0	6.5	16.5	7.0	11.0	13.5	11.5	12.5
14	14.5	5.0	8.5	11.5	4.0	6.5	16.0	8.0	11.0	15.5	10.0	12.5
15	13.5	7.0	9.5	7.0	2.5	5.0	15.0	7.5	10.5	18.0	11.5	14.5
16	15.0	7.0	10.0	12.5	2.5	7.0	12.5	6.0	9.5	18.0	13.5	15.5
17	11.0	5.5	7.5	8.0	5.0	6.5	14.0	6.5	10.0	14.0	10.5	11.5
18	13.5	3.5	7.0	8.5	5.0	6.0	14.5	7.5	11.0	11.0	9.0	10.5
19	14.5	4.0	8.0	10.0	4.5	6.5	13.5	9.0	11.5	14.5	8.5	11.5
20	14.5	4.0	8.5	8.5	4.0	6.0	13.0	10.0	11.5	15.0	11.0	13.0
21	12.0	5.0	8.0	12.0	2.5	6.5	14.0	8.5	11.5	18.5	11.0	14.5
22	12.0	4.5	7.5	13.5	1.5	7.0	14.5	10.5	12.5	20.5	13.0	16.5
23	13.0	3.5	7.5	13.5	4.5	8.0	16.0	11.0	13.0	21.5	15.5	18.5
24	13.0	3.0	7.0	11.5	4.0	7.0	13.5	11.0	12.0	21.5	15.5	18.5
25	13.0	3.0	7.0	10.5	2.5	6.0	11.0	8.5	10.0	20.0	14.5	17.0
26	13.5	3.5	7.5	10.0	1.5	5.0	12.5	7.5	10.0	18.0	13.0	15.0
27	11.0	4.5	7.5	14.0	1.5	7.0	14.5	9.0	11.5	18.5	11.0	14.5
28	12.0	7.0	9.0	16.0	2.0	8.0	15.0	9.5	12.5	18.5	12.0	15.0
29	---	---	---	15.5	4.5	9.5	17.0	11.5	14.0	15.5	12.0	13.5
30	---	---	---	17.5	4.5	10.5	15.0	11.5	13.0	14.0	10.5	12.0
31	---	---	---	17.5	5.5	11.0	---	---	---	17.0	9.0	13.0
MONTH	15.0	1.0	7.0	17.5	1.5	6.9	18.0	4.5	11.0	21.5	8.5	13.6
JUNE				JULY			AUGUST			SEPTEMBER		
1	20.0	11.5	15.5	24.5	17.0	20.5	27.5	20.0	23.5	25.0	18.0	21.0
2	22.0	14.0	18.0	26.5	18.5	22.5	28.0	19.5	23.0	25.5	18.0	21.5
3	22.5	15.5	18.5	27.5	20.0	23.5	25.5	18.5	22.0	24.5	19.0	21.5
4	21.5	15.0	17.5	27.5	20.5	24.0	26.0	19.5	22.5	25.0	18.0	21.0
5	20.5	13.5	16.5	27.0	20.5	23.5	26.5	19.5	22.0	25.0	17.0	21.0
6	20.5	13.0	16.5	26.0	20.0	22.5	26.5	19.5	22.5	23.0	17.0	19.5
7	22.0	13.5	17.5	25.5	18.5	22.0	25.0	18.5	21.5	22.5	16.0	19.0
8	24.0	16.5	20.0	26.0	19.5	22.0	27.0	18.5	22.5	21.5	16.0	18.5
9	24.5	17.5	21.0	25.5	18.0	21.5	25.5	19.0	22.0	16.5	14.0	15.5
10	25.5	18.0	21.5	26.0	19.0	22.0	26.0	18.5	22.0	17.0	13.0	14.5
11	25.0	18.0	21.0	26.0	20.0	22.5	26.5	19.5	23.0	21.0	13.0	16.5
12	24.0	17.0	20.0	26.5	20.0	23.0	26.0	19.5	22.5	22.0	12.5	17.5
13	23.0	16.5	19.5	26.5	20.5	23.0	25.5	19.5	22.0	22.0	12.5	17.0
14	22.5	15.5	18.5	26.0	20.0	22.5	26.0	21.5	23.0	23.0	13.0	17.5
15	23.0	16.0	19.0	24.5	19.5	22.0	23.0	20.0	21.5	21.5	11.5	16.5
16	23.0	16.0	19.0	24.0	19.0	21.5	26.0	19.0	22.0	22.5	11.5	17.0
17	23.5	16.5	19.5	25.0	19.0	22.0	26.5	20.0	23.0	22.5	12.5	17.5
18	22.5	17.0	19.5	25.5	19.5	22.0	27.5	19.5	23.0	23.5	13.5	18.5
19	22.0	16.5	18.5	24.5	20.0	21.5	26.5	19.5	22.5	24.0	14.5	19.0
20	22.0	15.0	18.0	24.0	18.5	20.5	27.0	18.5	22.5	23.0	14.5	18.5
21	22.0	15.0	18.0	23.5	17.0	20.0	27.5	19.0	23.0	21.5	13.5	17.0
22	22.5	14.5	18.0	24.0	19.5	22.0	27.0	19.0	22.5	19.5	11.0	15.5
23	20.5	15.0	17.5	26.0	19.5	22.5	25.5	18.5	22.0	20.5	10.5	15.5
24	21.5	14.0	17.0	25.5	20.0	22.5	23.5	18.5	21.0	21.0	11.0	15.5
25	21.5	14.0	17.5	25.5	19.0	22.0	24.0	18.5	21.0	22.0	11.5	16.5
26	21.5	14.5	17.5	26.5	20.5	23.5	25.0	17.5	21.0	21.5	14.5	17.5
27	19.5	15.5	17.0	27.0	21.5	24.0	20.0	15.5	18.0	22.5	14.0	18.0
28	17.0	14.5	16.0	27.5	20.5	23.0	22.0	13.5	17.5	22.0	14.0	18.0
29	18.5	13.5	16.0	27.5	20.5	23.5	24.5	16.0	20.0	22.0	14.0	18.0
30	22.5	14.0	18.0	27.5	21.0	24.0	25.5	18.0	21.0	22.0	13.5	18.0
31	---	---	---	26.0	21.5	23.5	25.0	18.0	21.5	---	---	---
MONTH	25.5	11.5	18.2	27.5	17.0	22.4	28.0	13.5	21.8	25.5	10.5	17.9

PYRAMID AND WINNEMUCCA LAKES BASIN

10351700 TRUCKEE RIVER NEAR NIXON, NV
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 39°46'40", long 119°20'10", in SW 1/4 NW 1/4 sec.18, T.22 N., R.24 E., Washoe County, Hydrologic Unit 16050103, in Pyramid Lake Indian Reservation, on right bank 1.0 mi upstream from Numana Dam, 4 mi south of Nixon, and at mi 9.42, upstream from Marble Bluff Dam.

DRAINAGE AREA.--1,827 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to current year. Records kept by Federal Court Watermaster April to June 1926, May 1928 to Sept. 1957 at site 1.0 mi downstream (Truckee River below Pyramid Dam, near Nixon, Nev.) not equivalent, but would be equivalent by adding flow of Indian Canal, both of which are available in files of Federal Court Watermaster. Currently, these records are kept only at times of diversion to the canal. At other times, the records are equivalent.

REVISED RECORDS.--WDR NV-83-1: 1980 (monthly runoff).

GAGE.--Water-stage recorder. Elevation of gage is 3,940 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Lake Tahoe (station 10337000), Prosser Creek (station 10340300), Stampede (station 10344300) and Boca (station 10344490) Reservoirs, other lakes, powerplants, and many diversions for irrigation. Truckee Canal often diverts much of the flow at Derby Dam, about 25 mi upstream, out of basin to Lahontan Reservoir (station 10312100). Several diversions for irrigation between station and Truckee Canal. One irrigation canal diverts between station and mouth of river.

AVERAGE DISCHARGE.--34 years, 520 ft³/s, 376,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,300 ft³/s, Feb. 19, 1986, from rating curve extended above 12,000 ft³/s, gage height, 13.01 ft; minimum daily, 3.3 ft³/s, July 9, 1991.

EXTREMES FOR OUTSIDE PERIOD OF RECORD.--Flood of Dec. 24, 1955, reached a stage of 14.1 ft, from floodmarks, discharge, 14,000 ft³/s, by flow-over-dam measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 748 ft³/s, Mar. 5, gage height, 4.76 ft; minimum daily, 3.3 ft³/s, July 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	19	22	e22	26	20	21	72	47	30	30	17
2	22	19	22	e24	21	20	22	74	43	23	34	16
3	21	21	22	e26	22	21	22	76	29	21	40	17
4	21	23	21	e25	21	24	22	72	20	21	40	21
5	20	22	22	e27	23	269	22	67	24	18	39	21
6	19	21	21	e29	22	158	22	73	19	15	41	19
7	20	21	21	e28	22	56	23	69	16	8.9	40	23
8	20	21	20	e32	22	42	24	65	24	4.3	37	23
9	21	22	21	e31	22	37	26	70	26	3.3	37	26
10	21	21	21	e32	22	31	35	79	26	3.4	37	23
11	21	21	22	e37	22	28	32	79	27	8.8	28	23
12	20	20	24	e35	21	26	32	71	22	13	24	27
13	20	21	23	e36	21	25	29	67	25	15	25	27
14	20	21	23	e37	21	24	29	72	22	19	30	25
15	20	19	23	e37	21	27	30	76	24	21	29	22
16	19	18	22	e36	20	28	28	79	21	26	34	17
17	18	20	22	35	20	28	41	78	23	28	29	16
18	17	19	23	33	20	26	31	76	24	28	31	20
19	17	22	24	32	20	29	45	73	26	30	25	21
20	19	23	23	30	19	28	71	57	25	30	22	20
21	19	22	e20	29	19	27	79	40	27	27	19	19
22	19	22	e19	27	19	25	81	30	29	31	20	21
23	19	22	e18	26	19	24	79	31	25	37	21	20
24	22	21	e21	24	19	23	87	41	28	33	17	19
25	22	22	e22	23	19	23	89	46	28	29	16	15
26	21	24	e23	22	19	23	88	49	27	25	17	12
27	21	22	e23	22	19	22	85	50	24	24	17	16
28	20	22	e22	22	20	22	83	49	28	25	17	15
29	19	22	e21	22	---	21	73	50	28	27	18	15
30	19	22	e21	26	---	21	77	50	31	27	16	15
31	21	---	e21	22	---	20	---	47	---	26	17	---
TOTAL	618	635	673	889	581	1198	1428	1928	788	677.7	847	591
MEAN	19.9	21.2	21.7	28.7	20.7	38.6	47.6	62.2	26.3	21.9	27.3	19.7
MAX	22	24	24	37	26	269	89	79	47	37	41	27
MIN	17	18	18	22	19	20	21	30	16	3.3	16	12
AC-FT	1230	1260	1330	1760	1150	2380	2830	3820	1560	1340	1680	1170

CAL YR 1990 TOTAL 12242.3 MEAN 33.5 MAX 181 MIN 6.2 AC-FT 24280
WTR YR 1991 TOTAL 10853.7 MEAN 29.7 MAX 269 MIN 3.3 AC-FT 21530

e Estimated

PYRAMID AND WINNEMUCCA LAKES BASIN

335

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1980 to September 1983.

WATER TEMPERATURE: May 1980 to September 1983, July 1988 to current year.

INSTRUMENTATION.--Water-temperature recorder since July 1988, hourly.

REMARKS.--Records represent water temperature at probe within 0.5°C. Interruptions in record due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum daily, 30.0°C, July 10, 1991; minimum daily, freezing point on many days during winter months of most years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 30.0°C, July 10; minimum, freezing point Jan. 29, 30, Feb. 1, and probably equaled during periods of missing record.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC 06...	1400	21	1300	8.3	4.0	5.0	5.0	14.8	133	<2	<2
FEB 07...	1130	22	1150	8.5	11.0	7.0	2.5	11.0	104	K3	K8
MAY 14...	1230	88	502	8.3	17.0	13.0	6.1	11.2	125	9	66
AUG 16...	1200	36	847	8.5	25.0	21.5	1.2	9.9	133	K7	K17

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC 06...	290	66	29	130	3	9.7	181	--	148	160	200
FEB 07...	280	65	28	130	3	9.2	167	7	148	170	190
MAY 14...	130	31	12	53	2	5.0	94	--	77	59	71
AUG 16...	200	45	21	94	3	8.7	68	1	56	110	120

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
DEC 06...	<0.10	23	704	708	0.96	<0.010	<0.010	<0.100	<0.100	<0.010
FEB 07...	0.10	19	684	702	0.93	0.010	<0.010	<0.100	<0.100	<0.010
MAY 14...	0.10	18	274	296	0.37	0.020	<0.010	<0.050	<0.050	0.020
AUG 16...	0.20	17	490	451	0.67	<0.010	<0.010	<0.050	<0.050	<0.010

PYRAMID AND WINNEMUCCA LAKES BASIN

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
DEC 06...	0.010	0.20	--	0.010	0.010	0.010	<0.010	<10	5	94
FEB 07...	0.020	0.40	--	0.050	0.030	0.020	0.020	10	7	91
MAY 14...	0.010	0.30	--	0.030	0.020	0.020	<0.010	<10	8	52
AUG 16...	0.020	0.40	0.30	0.020	0.020	<0.010	0.020	<10	8	76
DATE	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)
DEC 06...	<0.5	2.0	<1	<3	1	10	<1	45	77	<0.1
FEB 07...	<0.5	<1.0	2	<3	1	26	1	43	290	<0.1
MAY 14...	<0.5	<1.0	1	<3	1	29	<1	47	60	<0.1
AUG 16...	<0.5	1.0	<1	<3	2	6	<1	43	21	<0.1
DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 06...	<10	2	<1	<1.0	630	<6	10	6	0.34	--
FEB 07...	<10	<1	<2	<1.0	650	<6	6	6	0.36	--
MAY 14...	<10	1	<1	<1.0	290	<6	<3	14	3.3	98
AUG 16...	<10	1	<1	<1.0	490	<6	<3	6	0.58	85

K: NON-IDEAL COLONY COUNT

PYRAMID AND WINNEMUCCA LAKES BASIN

337

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	21.0	14.0	17.5	11.5	9.0	10.5	6.5	4.0	5.0	---	---	---
2	20.5	15.5	17.0	9.5	7.0	8.0	7.0	4.5	6.0	---	---	---
3	19.0	12.5	16.0	8.0	2.0	6.0	7.5	4.5	6.0	---	---	---
4	19.0	15.5	17.5	8.5	2.5	6.0	7.0	2.0	5.0	---	---	---
5	18.0	16.5	17.5	11.0	8.0	9.0	7.0	4.5	5.5	---	---	---
6	17.0	14.5	15.5	9.0	7.5	8.0	6.0	2.0	4.0	---	---	---
7	15.5	12.5	14.0	9.0	3.5	7.5	6.5	1.0	4.0	---	---	---
8	15.0	12.0	13.5	10.0	4.5	8.5	6.0	2.0	4.5	---	---	---
9	15.5	12.0	13.5	10.5	6.5	9.0	6.0	2.0	5.0	---	---	---
10	15.5	12.0	14.0	10.0	5.5	8.0	7.0	2.5	5.0	---	---	---
11	15.5	13.0	14.0	9.0	4.0	7.0	---	---	---	---	---	---
12	15.0	12.0	13.5	9.0	4.5	8.0	---	---	---	---	---	---
13	15.5	13.0	14.0	8.0	4.5	6.5	---	---	---	---	---	---
14	16.0	12.5	14.5	9.5	6.5	8.0	---	---	---	---	---	---
15	17.0	13.5	15.0	9.5	7.0	8.5	---	---	---	---	---	---
16	16.0	14.0	15.0	9.0	5.5	8.0	---	---	---	---	---	---
17	14.5	11.5	13.0	10.5	6.0	8.0	---	---	---	---	---	---
18	13.0	12.5	13.0	10.5	8.5	10.0	---	---	---	---	---	---
19	13.5	11.0	12.5	9.5	8.0	8.5	---	---	---	---	---	---
20	13.0	9.5	11.5	8.5	5.0	7.5	---	---	---	---	---	---
21	13.0	9.5	11.5	8.5	4.0	7.0	---	---	---	---	---	---
22	14.5	11.0	12.5	8.5	5.0	7.0	---	---	---	---	---	---
23	15.0	11.5	13.0	8.5	5.0	7.0	---	---	---	---	---	---
24	15.0	12.0	13.5	8.5	4.5	6.5	---	---	---	---	---	---
25	15.0	11.5	13.5	7.5	4.5	6.0	---	---	---	---	---	---
26	15.0	12.0	13.5	8.0	3.0	7.0	---	---	---	3.5	.5	2.0
27	14.5	11.5	13.0	8.0	2.5	7.0	---	---	---	3.5	.5	2.0
28	14.5	11.5	13.0	7.0	1.0	5.5	---	---	---	3.5	.5	2.0
29	14.5	11.5	13.0	6.0	1.0	5.0	---	---	---	3.0	.0	1.0
30	14.5	11.5	13.0	8.0	4.5	6.5	---	---	---	2.0	.0	.5
31	12.5	11.5	12.0	---	---	---	---	---	---	1.5	.5	1.0
MONTH	21.0	9.5	14.0	11.5	1.0	7.5	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	2.5	.0	1.0	11.0	8.0	9.0	15.0	11.0	12.5	16.0	10.5	13.5
2	4.0	1.5	2.5	10.0	7.0	8.5	15.0	9.5	13.0	14.0	9.5	11.5
3	5.5	2.5	4.0	10.5	6.5	8.0	16.0	9.5	13.0	16.5	9.0	12.5
4	5.0	3.0	4.0	10.0	8.0	8.5	17.0	11.5	14.0	18.5	11.0	14.5
5	7.0	4.5	6.0	8.5	5.5	7.0	18.5	12.0	15.5	18.5	13.5	16.0
6	9.5	4.5	6.5	7.5	3.0	5.5	17.5	13.0	15.0	19.0	13.5	16.5
7	9.5	5.0	7.0	9.5	3.5	6.5	14.5	9.0	11.5	20.0	13.5	17.0
8	9.0	5.0	7.0	10.5	5.0	8.0	14.5	7.5	11.5	20.0	15.0	17.0
9	9.0	5.5	7.0	9.5	5.5	7.5	16.0	9.5	12.5	14.5	10.0	12.5
10	10.0	5.5	7.5	10.5	6.0	8.5	11.5	7.0	9.5	12.5	9.0	11.0
11	9.0	5.0	7.0	9.5	4.5	7.5	10.5	5.0	8.0	13.5	9.0	11.0
12	7.5	5.5	6.5	9.5	5.5	8.0	12.5	7.0	9.5	17.0	9.5	13.0
13	11.0	6.0	8.0	9.5	7.5	8.5	16.5	9.0	13.0	15.0	12.0	13.5
14	11.5	6.0	9.0	9.0	6.0	7.5	15.0	11.5	13.5	16.5	10.0	13.0
15	11.0	8.0	9.5	7.0	3.0	5.0	16.0	10.0	13.0	20.0	12.0	16.0
16	12.5	9.0	10.0	10.5	4.5	7.5	14.5	9.5	12.0	17.5	14.5	16.0
17	11.0	6.5	8.5	9.0	7.0	8.0	13.0	9.0	11.0	15.0	9.5	12.0
18	9.5	4.0	6.5	7.5	6.0	7.0	16.0	9.0	13.0	12.0	8.0	10.0
19	11.5	5.0	7.5	9.0	5.5	7.0	16.5	10.5	14.0	16.5	9.0	12.5
20	12.5	6.0	8.5	8.0	5.5	6.5	14.5	12.0	13.0	16.5	12.0	14.0
21	10.5	5.5	8.0	10.0	4.0	7.0	16.5	9.5	12.0	19.5	12.0	15.5
22	11.0	6.0	8.0	12.0	6.0	9.0	17.5	12.0	11.0	22.0	14.0	18.0
23	10.5	5.5	7.5	12.5	8.0	10.0	17.5	12.5	13.0	23.0	17.0	20.0
24	10.0	4.0	7.0	10.5	7.0	8.5	15.0	12.0	14.0	22.5	16.5	19.5
25	10.0	3.5	7.0	10.5	7.0	8.5	13.0	---	---	22.0	15.5	18.5
26	10.5	4.0	7.0	9.5	6.0	8.0	15.0	9.0	12.0	18.0	14.0	16.5
27	8.5	5.5	7.0	12.0	6.0	9.0	14.5	9.0	12.0	20.0	12.5	16.0
28	10.5	7.0	8.5	13.0	6.5	9.5	16.0	9.5	13.0	20.0	14.0	17.0
29	---	---	---	14.5	8.5	10.5	17.0	10.0	13.5	17.5	14.0	15.5
30	---	---	---	15.5	8.5	12.0	15.0	10.5	13.0	14.5	11.0	13.5
31	---	---	---	15.5	10.0	12.0	---	---	---	18.0	9.5	13.5
MONTH	12.5	.0	6.9	15.5	3.0	8.2	18.5	---	---	23.0	8.0	14.7

PYRAMID AND WINNEMUCCA LAKES BASIN

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	21.5	13.5	17.5	26.5	19.0	22.5	27.0	20.5	23.5	24.0	18.5	21.0
2	23.0	16.0	19.5	28.0	21.5	24.5	26.0	20.5	23.5	24.0	19.0	21.5
3	25.0	18.5	21.5	28.5	22.0	25.0	25.5	21.0	23.0	22.5	19.5	21.0
4	24.0	16.5	20.5	28.5	22.0	25.5	24.5	20.0	22.0	24.5	18.5	21.0
5	20.5	13.0	17.0	29.0	22.0	25.5	25.5	19.0	22.5	24.0	19.0	21.5
6	22.0	14.5	18.0	27.5	21.0	24.5	25.5	20.0	22.5	23.5	20.5	22.0
7	23.5	15.5	19.5	28.5	20.5	24.0	24.5	19.0	21.5	23.0	19.5	21.0
8	24.5	18.5	21.0	29.0	19.0	23.5	26.0	18.5	22.0	22.5	19.0	20.5
9	25.5	18.5	22.0	29.0	18.0	23.0	26.5	20.5	23.5	19.5	15.5	17.0
10	27.0	20.0	23.5	30.0	16.5	23.0	25.0	20.0	22.5	18.0	15.0	16.0
11	26.5	20.5	23.5	27.0	18.5	23.0	26.5	20.5	23.5	20.0	15.5	17.5
12	26.0	19.5	22.5	27.5	21.0	24.0	25.5	20.0	23.0	20.5	16.0	18.5
13	24.0	18.5	21.0	27.0	22.0	24.0	22.5	20.0	20.5	21.5	17.0	19.5
14	22.0	15.5	19.0	26.0	20.5	23.0	24.0	---	---	21.5	18.0	19.5
15	23.5	16.0	19.5	26.0	20.0	23.0	22.0	20.0	21.0	21.0	16.5	19.0
16	24.0	17.0	20.5	26.0	20.5	23.0	26.0	19.0	22.5	21.0	16.0	18.5
17	24.5	18.0	21.0	25.0	20.0	22.5	28.0	21.0	24.0	21.5	16.5	19.0
18	24.0	18.5	21.5	26.0	21.0	23.5	27.0	21.5	24.5	22.0	17.5	20.0
19	23.5	18.5	21.0	26.0	22.0	23.5	26.0	21.0	23.0	22.5	18.0	20.5
20	23.0	16.5	19.5	24.5	20.5	22.5	26.5	20.0	23.0	23.0	19.0	21.0
21	22.0	17.0	19.5	25.5	20.0	23.0	27.0	20.0	23.5	21.5	18.0	19.5
22	23.5	16.0	19.5	27.0	22.0	24.5	26.5	20.5	23.5	20.0	16.0	18.0
23	21.0	16.5	19.0	26.0	22.5	24.0	25.0	20.0	22.5	20.5	16.0	18.0
24	22.0	15.5	18.5	26.5	22.0	24.0	24.0	19.0	21.5	21.0	16.0	18.5
25	21.5	15.5	18.5	26.0	21.5	24.0	25.0	19.5	22.0	22.0	17.0	19.5
26	21.5	16.0	18.5	26.5	22.0	24.5	24.5	19.5	22.0	23.0	19.0	20.5
27	19.5	16.0	17.5	27.0	23.0	24.5	21.0	17.5	19.5	22.0	18.5	20.5
28	17.5	16.0	16.5	26.5	23.5	24.5	21.5	15.0	18.0	22.5	18.5	20.5
29	21.0	15.0	17.5	27.0	22.0	24.5	23.5	17.5	20.5	22.0	18.0	20.0
30	24.0	16.0	20.0	27.5	21.5	24.5	23.5	18.5	21.0	22.5	18.5	20.5
31	---	---	---	25.5	22.0	24.0	23.5	19.0	21.0	---	---	---
MONTH	27.0	13.0	19.8	30.0	16.5	23.8	28.0	---	---	24.5	15.0	19.7

PYRAMID AND WINNEMUCCA LAKES BASIN

339

10351775 TRUCKEE RIVER AT MARBLE BLUFF DAM, NV

LOCATION.--Lat 39°51'20", long 119°23'32", in NW 1/4 NW 1/4 sec.22, T.23 N., R.23 E., Washoe County, Hydrologic Unit 16050103, in Pyramid Lake Indian Reservation, on right bank of inflow to Pyramid Lake, 9.42 mi downstream from Nixon gage, and 3 mi northwest of Nixon.

DRAINAGE AREA.--2,730 mi².

PERIOD OF RECORD.--Water years 1988 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 1988 to current year.

INSTRUMENTATION.--Water-temperature recorder since July 1988, hourly.

REMARKS.--Records represent water temperature at probe within 0.5°C. Interruptions in record due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 31.0°C, July 21, 1990, July 5, 1991; minimum, freezing point on many days during winters.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 31.0°C, July 5; minimum, freezing point on many days during winter.

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	21.0	14.0	17.5	11.0	---	---	4.5	1.5	3.0	.0	.0	.0
2	20.5	15.5	17.0	9.5	---	---	4.0	1.5	2.5	.0	.0	.0
3	19.0	12.5	15.5	9.0	4.5	6.5	4.5	1.5	3.0	.0	.0	.0
4	19.0	15.5	17.0	9.5	5.0	7.0	5.0	2.0	3.5	.0	.0	.0
5	18.0	16.0	17.0	10.0	7.5	9.0	5.5	2.5	4.0	.0	.0	.0
6	17.0	14.0	15.5	9.0	5.5	7.0	4.5	2.0	3.0	.0	.0	.0
7	15.5	12.5	14.0	7.5	3.5	5.5	4.5	1.0	3.0	.0	.0	.0
8	15.0	11.5	13.5	10.5	5.5	7.5	4.5	1.0	2.5	.0	.0	.0
9	15.0	11.5	13.5	10.5	6.0	8.5	4.5	1.0	2.5	.5	.0	.0
10	15.5	12.0	13.5	10.0	5.5	8.0	5.0	2.0	3.5	.5	.0	.0
11	15.5	12.5	14.0	9.0	5.0	7.0	5.0	4.5	5.0	.5	.0	.0
12	14.5	12.0	13.5	9.5	5.0	7.0	6.5	4.0	5.0	.5	.0	.5
13	15.5	12.5	14.0	7.5	5.5	7.0	5.0	3.0	4.5	---	---	---
14	15.5	12.5	14.0	8.0	6.0	7.0	4.0	1.5	2.5	---	---	---
15	16.5	13.0	15.0	9.5	6.0	7.5	2.5	.5	1.5	---	---	---
16	16.0	13.5	15.0	7.0	5.0	6.5	3.5	.5	2.0	---	---	---
17	14.0	11.0	12.5	10.0	6.5	8.0	3.5	1.0	2.0	---	---	---
18	13.0	12.0	12.5	10.0	7.0	8.5	3.5	1.0	2.0	---	---	---
19	13.5	11.0	12.0	8.0	6.5	7.5	2.0	.0	.5	---	---	---
20	12.5	---	---	7.0	4.0	5.5	.0	.0	.0	---	---	---
21	12.5	---	---	7.5	4.0	5.5	.5	.0	.0	---	---	---
22	14.0	11.0	12.0	7.5	3.5	5.5	.0	.0	.0	---	---	---
23	14.5	11.0	13.0	7.0	3.0	5.0	.0	.0	.0	---	---	---
24	14.5	11.5	13.0	6.0	2.5	4.5	.0	.0	.0	---	---	---
25	14.5	11.5	13.0	7.0	2.5	4.5	.0	.0	.0	---	---	---
26	15.0	12.0	13.5	3.5	1.5	3.0	.0	.0	.0	4.5	.5	2.0
27	14.0	11.0	12.5	4.5	1.0	3.0	.0	.0	.0	4.5	.5	2.5
28	14.0	11.0	12.5	3.5	1.0	2.5	.0	.0	.0	4.5	.5	2.5
29	14.0	11.5	13.0	2.5	1.5	2.0	.0	.0	.0	4.0	.5	2.0
30	14.0	11.0	12.5	5.0	1.5	3.0	.0	.0	.0	4.0	.5	2.0
31	12.5	11.0	12.0	---	---	---	.0	.0	.0	2.5	1.5	2.0
MONTH	21.0	---	---	11.0	---	---	6.5	.0	1.8	---	---	---

PYRAMID AND WINNEMUCCA LAKES BASIN

10351775 TRUCKEE RIVER AT MARBLE BLUFF DAM, NV--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	4.5	.0	2.0	10.0	7.5	8.5	15.5	10.0	12.0	16.5	10.5	13.0
2	4.5	2.0	3.0	10.5	5.5	7.5	15.5	8.0	12.0	14.5	10.0	12.0
3	6.0	3.0	4.0	10.0	6.5	8.0	14.5	10.5	12.5	17.0	9.5	13.0
4	5.0	3.0	4.0	9.5	7.5	8.5	15.0	11.5	13.0	19.5	11.5	15.0
5	7.5	4.5	5.5	8.0	5.5	6.5	17.0	11.5	13.5	20.0	13.5	16.5
6	8.0	3.5	5.5	8.0	4.0	6.0	16.5	12.5	14.5	21.0	14.0	17.0
7	9.0	4.0	6.5	10.0	2.5	6.5	13.5	10.0	12.0	21.0	14.5	17.5
8	8.5	4.5	6.5	11.0	4.0	7.5	14.0	9.0	11.0	19.5	15.0	17.0
9	9.0	4.5	6.5	9.5	5.5	7.5	15.0	11.0	13.0	17.0	11.5	14.0
10	9.5	4.5	6.5	10.5	5.0	7.5	12.5	8.5	10.5	14.5	10.0	12.5
11	8.0	5.0	6.5	10.0	3.5	7.0	11.5	6.0	9.0	15.0	9.0	12.0
12	8.0	4.5	6.5	10.0	5.5	8.0	13.5	8.0	10.5	18.0	9.5	13.0
13	11.0	6.0	8.0	9.5	7.0	8.0	15.0	10.0	12.0	15.0	12.5	13.5
14	11.5	6.5	9.0	10.0	5.5	7.5	14.5	11.0	13.0	18.0	11.0	14.5
15	11.0	8.0	9.5	8.5	3.5	6.0	14.0	10.0	12.0	20.5	12.0	16.0
16	12.0	9.0	10.0	12.0	4.5	8.5	13.5	9.0	11.5	19.0	15.0	17.0
17	11.0	6.5	8.5	9.0	6.5	8.0	14.0	9.5	11.5	15.5	11.0	12.5
18	10.0	5.0	7.0	8.0	6.0	7.0	15.0	10.0	12.5	13.5	9.0	11.0
19	11.0	5.5	8.0	10.5	6.0	8.0	15.5	11.5	13.0	17.5	9.0	13.0
20	11.0	5.5	8.5	9.0	5.5	7.5	14.5	12.0	13.5	17.5	12.0	15.0
21	9.5	6.0	8.0	11.5	4.0	7.5	17.0	10.0	13.5	20.0	13.0	16.0
22	11.0	6.0	8.0	12.5	5.5	9.0	18.5	12.0	15.0	21.0	15.5	17.5
23	10.5	5.5	7.5	13.5	7.5	10.0	19.5	13.0	16.0	21.0	17.5	19.0
24	10.5	4.5	7.5	10.5	6.5	8.5	15.0	12.0	13.5	21.0	17.0	19.0
25	11.0	5.0	8.0	12.5	6.5	9.0	13.5	10.0	12.0	20.5	17.0	18.5
26	11.0	5.0	8.0	10.5	5.5	8.0	16.5	10.0	12.5	19.0	15.0	17.0
27	8.5	6.0	7.0	13.0	5.5	9.0	16.0	8.5	12.5	19.5	14.5	16.5
28	10.0	7.0	8.5	14.0	6.0	10.0	17.0	9.5	13.0	19.5	15.5	17.5
29	---	---	---	15.0	7.5	11.0	16.5	11.5	14.0	18.5	15.0	16.0
30	---	---	---	16.5	8.0	12.0	15.5	11.5	13.5	15.5	12.0	14.0
31	---	---	---	16.0	9.5	12.5	---	---	---	18.0	11.0	13.5
MONTH	12.0	.0	6.9	16.5	2.5	8.3	19.5	6.0	12.6	21.0	9.0	15.1
JUNE			JULY			AUGUST			SEPTEMBER			
1	20.5	14.5	17.0	28.0	18.0	23.0	26.0	18.5	22.5	24.0	18.5	21.5
2	22.0	16.0	18.5	30.0	20.0	25.0	25.0	19.0	21.5	24.0	19.5	22.0
3	---	---	---	30.5	20.5	25.5	24.0	19.0	21.5	23.5	20.5	21.5
4	---	---	---	30.5	20.5	25.5	24.0	19.5	21.5	24.5	19.0	21.5
5	---	---	---	31.0	21.5	25.5	26.0	18.5	22.0	24.0	19.0	21.5
6	---	---	---	27.5	20.0	24.0	25.5	19.0	21.5	24.5	20.0	21.5
7	---	---	---	28.5	19.0	23.5	24.0	17.0	20.5	24.5	20.0	21.5
8	---	---	---	27.0	19.5	23.0	25.0	18.5	21.5	22.0	19.0	20.5
9	---	---	---	26.0	17.0	21.0	26.0	19.5	22.5	19.0	16.0	17.5
10	---	---	---	27.0	18.5	22.5	25.0	19.0	22.0	19.0	15.5	17.0
11	---	---	---	28.0	19.5	23.5	25.5	19.5	22.5	20.5	16.0	18.5
12	---	---	---	30.0	20.0	24.0	26.0	19.5	22.5	21.0	16.5	19.0
13	---	---	---	29.5	20.0	23.5	23.0	19.0	21.0	22.5	17.5	19.5
14	---	---	---	28.0	18.5	22.5	23.5	20.0	21.5	21.5	17.5	19.5
15	---	---	---	27.5	18.0	22.0	21.5	19.5	20.5	22.0	17.0	19.5
16	---	---	---	28.0	18.0	22.0	25.0	18.0	21.5	21.5	16.5	19.5
17	---	---	---	27.0	18.0	22.0	26.5	20.5	23.0	21.5	17.0	19.5
18	---	---	---	28.5	19.0	23.0	26.5	20.0	23.5	22.5	17.5	20.0
19	---	---	---	29.0	19.5	22.0	24.0	19.5	22.0	23.0	18.0	20.5
20	---	---	---	26.5	18.5	21.0	25.0	19.5	22.0	23.0	18.5	20.5
21	---	---	---	27.0	17.5	22.0	26.0	20.0	22.5	21.5	18.0	19.5
22	---	---	---	29.0	20.5	24.0	25.0	20.0	22.5	21.0	16.5	18.5
23	---	---	---	29.0	20.5	24.5	24.0	19.5	21.5	20.5	16.0	18.5
24	---	---	---	29.5	21.0	25.0	24.0	19.0	21.5	21.5	16.5	19.0
25	---	---	---	28.5	20.0	24.5	25.0	19.5	22.0	21.5	17.0	19.0
26	---	---	---	29.5	22.5	26.0	24.0	19.0	21.5	21.0	18.0	20.0
27	20.5	15.5	18.0	30.0	22.5	25.5	20.5	17.0	18.5	20.5	17.5	19.5
28	18.0	15.5	16.5	28.0	22.5	24.5	22.5	15.0	18.5	21.5	18.0	19.5
29	23.5	15.0	18.5	27.5	21.0	24.0	23.5	18.0	21.0	21.5	18.0	19.5
30	26.0	16.5	21.0	28.0	21.5	24.5	24.0	19.0	21.5	22.0	18.0	19.5
31	---	---	---	26.0	21.5	24.0	23.5	18.5	21.5	---	---	---
MONTH	---	---	---	31.0	17.0	23.6	26.5	15.0	21.6	24.5	15.5	19.8

BLACK ROCK DESERT

341

10352500 McDERMITT CREEK NEAR McDERMITT, NV

LOCATION.--Lat 41°58'00", long 117°50'01", in SE 1/4 SE 1/4 sec.8, T.47 N., R.37 E., Humboldt County, Hydrologic Unit 16040201, on left bank, approximately 100 feet upstream from highway bridge on Cordero Mine Road, and 6.5 mi southwest of McDermitt.

DRAINAGE AREA.--225 mi².

PERIOD OF RECORD.--October 1948 to September 1984, March 1985 to current year.

REVISED RECORDS.--WSP 1214: 1949-50 (P).

GAGE.--Water-stage recorder. Elevation of gage is 4,545 ft above National Geodetic Vertical Datum of 1929, from topographic map. October 1948 to May 11, 1972, at site approximately 500 ft upstream from highway bridge, on left bank. May 11, 1972, to April 1983, at site approximately 800 ft upstream from highway bridge, on right bank, at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. One diversion for about 1,500 acres above station.

AVERAGE DISCHARGE.--42 years (1949-84, 1986-91), 32.6 ft³/s, 23,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,970 ft³/s, about Feb. 1, 1963, gage height, 8.64 ft; in gage well, from rating curve extended above 250 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 8.70 ft about Mar. 17, 1983; no flow for several days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 13	1200	ice jam	*7.11	Aug. 16	2400	*207	4.26

Minimum daily, 1.9 ft³/s, Aug. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	5.4	e5.2	e3.6	e6.5	7.7	e11	e12	36	18	2.4	2.1
2	3.7	5.5	e4.8	e3.9	e6.8	8.4	e11	e13	33	12	2.4	2.1
3	3.8	e5.6	e5.5	e3.5	e6.6	9.1	e10	e12	34	8.8	2.9	2.2
4	4.0	5.3	e5.8	e3.3	e6.3	11	e11	e11	36	8.2	2.9	2.3
5	4.2	5.9	e5.4	e3.2	e6.0	19	e11	e11	36	7.4	2.6	2.3
6	4.7	6.1	e5.6	e3.5	e7.0	12	e14	e12	36	6.1	2.5	2.2
7	4.7	e6.1	e5.8	e3.9	e7.7	8.0	e12	e13	34	5.3	2.4	2.0
8	4.7	5.5	e6.1	e4.0	e8.0	8.1	e10	e14	31	5.0	2.2	2.1
9	4.9	6.4	e6.2	e3.6	e8.4	7.9	e10	e13	29	4.9	2.1	2.3
10	4.9	6.0	e6.0	e4.0	e8.7	8.9	e10	e13	28	4.6	2.0	5.8
11	4.9	5.6	e4.9	e4.3	e7.1	9.6	e12	e14	26	4.3	2.0	5.2
12	5.1	5.9	e5.0	e4.4	e6.8	9.2	e9.6	e16	25	3.8	1.9	3.4
13	5.0	6.1	e4.5	e4.6	e8.0	12	e8.6	e17	25	3.5	1.9	2.7
14	4.9	e5.0	e3.0	e4.3	e8.5	13	e8.6	e18	24	3.1	2.0	2.5
15	5.0	e4.5	e3.3	e4.3	e8.1	11	e8.6	e19	24	2.7	2.2	2.4
16	4.7	e4.3	e3.6	e4.3	e6.9	9.2	e8.6	e22	20	2.5	13	2.3
17	4.9	e5.4	e3.8	e4.3	e5.9	9.0	e8.6	29	17	2.4	19	2.3
18	5.0	e4.7	e4.0	e4.3	e5.8	10	e8.2	44	16	2.3	4.9	2.2
19	5.2	e4.9	e2.9	e4.3	e7.5	10	e7.5	65	14	2.2	4.0	2.2
20	5.3	e4.2	e2.7	e4.5	e8.3	11	e8.0	57	13	2.1	3.9	2.2
21	5.4	e4.5	e2.4	e4.8	8.3	8.7	e10	65	13	2.4	3.2	2.2
22	5.4	e4.6	e2.0	e5.0	8.3	e8.9	e10	50	13	2.3	3.0	2.1
23	5.7	e5.0	e2.3	e5.4	7.5	e8.9	e10	42	12	2.2	2.7	2.1
24	5.6	e4.8	e2.5	e5.0	7.9	e9.2	e11	39	12	3.7	2.6	2.2
25	5.6	e4.5	e2.8	e5.2	e7.7	e10	e12	40	11	3.1	2.5	2.1
26	5.5	e4.2	e3.1	e5.6	6.7	e8.9	e11	40	10	2.9	2.4	2.2
27	5.4	e3.8	e3.5	e5.9	6.8	e8.8	e10	40	11	3.3	2.3	2.2
28	5.3	e3.6	e3.8	e5.0	7.2	e8.8	e10	39	15	3.2	2.2	2.5
29	5.3	e4.2	e3.2	e4.2	---	e8.8	e10	43	22	3.0	2.2	2.7
30	5.3	e5.1	e3.4	e5.6	---	e9.0	e10	50	28	2.8	2.1	2.5
31	5.2	---	e3.5	e6.0	---	e10	---	43	---	2.6	2.1	---
TOTAL	153.1	152.7	126.6	137.8	205.3	304.1	302.3	916	684	140.7	106.5	75.6
MEAN	4.94	5.09	4.08	4.45	7.33	9.81	10.1	29.5	22.8	4.54	3.44	2.52
MAX	5.7	6.4	6.2	6.0	8.7	19	14	65	36	18	19	5.8
MIN	3.7	3.6	2.0	3.2	5.8	7.7	7.5	11	10	2.1	1.9	2.0
AC-FT	304	303	251	273	407	603	600	1820	1360	279	211	150

CAL YR 1990 TOTAL 2466.79 MEAN 6.76 MAX 49 MIN .03 AC-FT 4890
WTR YR 1991 TOTAL 3304.7 MEAN 9.05 MAX 65 MIN 1.9 AC-FT 6550

e Estimated

BLACK ROCK DESERT

10353600 KINGS RIVER NEAR OROVADA, NV

LOCATION.--Lat 41°54'25", long 118°18'30", in SW 1/4 SE 1/4 sec.31, T.47 N., R.33 E., Humboldt County, Hydrologic Unit 16040201, on left bank 2.8 mi downstream from Little Creek, 5 mi upstream from Kings River Ranch, and 36 mi northwest of Orovada.

DRAINAGE AREA.--20.5 mi².

PERIOD OF RECORD.--October 1962 to September 1968 and October 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,680 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion or regulation above station.

AVERAGE DISCHARGE.--21 years (1963-68, 1977-91), 6.48 ft³/s, 4,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 770 ft³/s, Feb. 1, 1963, gage height, 4.00 ft, from rating curve extended above 24 ft³/s on basis of estimate by slope-area method; no flow Aug. 9, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24 ft³/s, June 2, 3, gage height, 2.23 ft; maximum gage height, 2.43 ft Jan. 5, 6, backwater from ice; minimum daily, 0.71 ft³/s, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991												
DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.9	e2.5	e1.0	e1.6	2.1	2.8	3.1	13	5.7	1.1	.71
2	1.1	1.9	2.4	e1.1	e1.7	1.9	2.7	3.1	17	4.9	.99	.73
3	1.2	1.9	e2.5	e1.0	e1.6	1.9	2.6	3.0	19	4.4	.93	.72
4	1.2	2.2	e2.5	e1.1	e1.6	3.0	2.7	3.0	21	3.9	.98	.73
5	1.2	2.3	2.2	e1.0	e1.6	2.6	2.7	3.0	18	3.7	1.1	.77
6	1.4	1.8	e2.3	e1.0	e1.6	2.8	3.4	3.2	17	3.4	1.1	.89
7	1.4	1.8	e2.5	e1.0	e1.9	2.6	2.8	3.2	16	3.1	.91	.95
8	1.5	2.4	e2.6	e1.0	e1.8	2.5	2.6	3.6	16	2.9	.88	.94
9	1.5	2.2	e2.7	e1.0	e1.9	2.3	2.6	3.4	16	2.6	.81	1.1
10	1.5	1.9	e2.4	e1.0	e2.0	2.1	2.6	3.5	16	2.6	.84	2.3
11	1.5	1.8	2.1	e1.1	e2.1	2.2	3.1	3.6	17	2.6	.84	1.9
12	1.5	1.8	e2.4	e1.2	2.2	2.2	2.5	3.9	15	2.3	.74	1.4
13	1.4	1.8	e2.5	e1.5	3.0	2.3	2.4	4.4	13	2.1	.76	1.3
14	1.4	1.9	e2.5	e1.4	2.5	2.2	2.3	4.4	11	2.0	1.0	1.2
15	1.4	1.9	e2.2	e1.4	2.4	2.1	2.3	4.6	9.1	1.9	1.2	1.2
16	1.4	2.1	e2.2	e1.4	2.7	2.2	2.3	5.1	8.4	1.9	1.3	1.0
17	1.5	2.0	2.2	e1.6	2.3	2.1	2.4	7.1	7.6	1.8	1.1	.97
18	1.6	1.9	e2.2	e1.5	2.2	2.2	2.3	7.6	6.9	1.6	.97	.94
19	1.7	1.9	2.1	e1.4	2.1	2.4	2.2	7.9	6.6	1.4	1.1	.92
20	1.6	2.1	e1.7	1.4	2.0	2.3	2.3	11	6.2	1.5	1.0	.90
21	1.6	2.1	e1.3	e1.3	1.9	2.3	2.7	13	5.7	1.5	1.1	.86
22	2.1	2.1	e1.2	e1.4	1.9	2.2	2.6	15	5.3	1.4	.84	.99
23	1.8	2.0	e1.2	e1.5	1.9	2.2	2.7	15	4.9	1.4	.83	1.0
24	1.7	2.1	e1.2	e1.4	1.9	2.3	2.8	16	4.8	1.4	.87	1.0
25	1.6	2.1	e1.3	e1.5	1.8	2.5	3.0	17	4.8	1.3	.80	.96
26	1.6	e2.1	e1.3	e1.6	1.8	2.2	3.0	16	4.8	1.2	.77	.94
27	1.6	e2.1	e1.1	e1.6	1.7	2.2	2.8	15	5.2	1.2	.76	1.0
28	1.6	2.1	e1.2	e1.6	2.0	2.2	2.8	14	6.2	1.1	.91	1.4
29	1.7	e2.3	e1.1	e1.6	---	2.2	2.9	13	11	1.0	.90	1.2
30	1.7	2.4	e1.0	e1.6	---	2.3	2.9	13	7.5	1.1	.77	1.1
31	1.8	---	e1.0	e1.6	---	2.5	---	11	---	1.0	.72	---
TOTAL	46.8	60.9	59.6	40.8	55.7	71.1	79.8	249.7	330.0	69.9	28.92	32.02
MEAN	1.51	2.03	1.92	1.32	1.99	2.29	2.66	8.05	11.0	2.25	.93	1.07
MAX	2.1	2.4	2.7	1.6	3.0	3.0	3.4	17	21	5.7	1.3	2.3
MIN	1.0	1.8	1.0	1.0	1.6	1.9	2.2	3.0	4.8	1.0	.72	.71
AC-FT	93	121	118	81	110	141	158	495	655	139	57	64

CAL YR 1990 TOTAL 838.24 MEAN 2.30 MAX 7.6 MIN .29 AC-FT 1660
WTR YR 1991 TOTAL 1125.24 MEAN 3.08 MAX 21 MIN .71 AC-FT 2230

e Estimated

SUMMIT LAKE VALLEY

343

10353750 MAHOGANY CREEK NEAR SUMMIT LAKE, NV

LOCATION.--Lat 41°32'42", long 119°00'34", in SE 1/4 NE 1/4 sec.21, T.42 N., R.26 E., Humboldt County, Hydrologic Unit 16040202, on right bank 2.8 mi northeast of Summit Lake, and 75 mi north of Gerlach.

DRAINAGE AREA.--13.3 mi², approximately.

PERIOD OF RECORD.--July 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,080 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13.0 ft³/s, May 10, 1989, gage height, 4.46 ft, maximum gage height, 4.88 ft, Jan. 18, 1988, backwater from ice; minimum daily, 0.66 ft³/s, Aug. 5, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9.6 ft³/s, June 14, gage height, 4.41 ft, maximum gage height, 4.76 ft, Dec. 24, backwater from ice; minimum daily, 0.71 ft³/s, Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.84	1.4	e1.1	e.96	1.1	1.4	2.1	2.2	6.9	3.4	.83	.72
2	.82	e1.2	.96	e.95	1.1	1.3	2.0	2.2	7.4	3.3	.80	.72
3	.85	e1.1	e1.0	e.94	1.1	1.5	1.9	2.2	8.1	3.2	.81	.71
4	.85	1.2	1.1	e.99	1.3	2.5	2.2	2.3	8.3	3.1	.86	.73
5	.85	1.4	1.1	e.95	1.4	1.6	2.2	2.4	8.2	3.0	.88	.82
6	.88	1.3	e1.1	e.86	1.3	1.5	3.5	2.6	8.8	2.7	.80	.84
7	.97	e1.3	1.1	e.98	1.3	1.4	2.4	2.7	8.3	2.7	.76	.80
8	1.1	e1.4	1.1	e.99	1.3	1.4	2.2	3.2	8.0	2.7	.76	.80
9	1.1	1.4	1.1	e.95	1.3	1.3	2.2	2.6	7.5	2.5	.74	.92
10	1.0	1.4	e1.1	e.93	1.3	1.3	1.8	2.5	7.0	2.3	.78	1.9
11	1.1	1.3	e1.2	e.97	1.3	1.3	1.9	2.4	7.7	2.2	.77	1.3
12	1.1	1.4	e1.3	e.98	1.3	1.3	2.1	2.5	8.3	2.2	.76	.97
13	1.0	1.4	e1.3	e1.1	1.3	1.4	2.0	2.9	8.5	2.2	.75	.93
14	1.0	1.3	e1.1	e1.0	1.4	1.3	2.1	3.0	8.2	2.0	.77	.88
15	.98	1.2	e1.0	e1.2	1.4	1.3	2.0	3.0	7.7	1.9	.81	.92
16	.98	1.3	e1.0	e1.1	1.4	e1.3	1.9	3.2	7.3	1.9	.86	.90
17	1.1	1.4	e1.0	e1.1	1.3	1.3	1.9	3.2	7.5	1.8	.83	.84
18	1.2	1.3	e1.0	e1.2	1.3	1.4	1.9	3.2	6.3	1.7	.80	.83
19	.98	1.3	e1.0	e1.2	1.3	1.3	2.0	3.4	4.8	1.4	.78	.81
20	1.0	1.1	e.98	e1.0	1.3	1.3	2.1	4.4	4.8	1.4	.77	.78
21	1.1	1.2	e.85	e1.1	1.3	1.3	2.3	6.0	4.7	1.4	.78	.79
22	1.1	1.3	e.84	e1.1	1.3	1.3	2.7	7.0	4.3	1.1	.77	.84
23	1.1	1.3	e.84	e1.1	1.3	1.3	2.5	7.5	4.3	1.1	.74	.85
24	1.0	1.3	e.84	e1.2	1.3	1.4	2.6	8.1	4.0	1.0	.74	.89
25	.98	1.3	e.84	e1.1	1.3	1.3	2.4	8.4	4.0	.96	.74	.86
26	.98	1.0	e.92	e1.1	1.4	1.4	2.3	8.2	4.1	.90	.73	.84
27	1.0	e1.1	e.87	e1.1	1.4	1.3	2.3	7.9	3.7	.88	.74	.88
28	.98	e1.2	e.94	e1.2	1.3	1.4	2.2	7.4	3.6	.88	.75	.90
29	.98	1.3	e.87	e1.0	---	1.4	2.2	7.0	3.7	.88	.76	.91
30	1.0	1.3	e.82	e1.0	---	1.6	2.2	7.5	3.4	.86	.75	.90
31	1.3	---	e.89	1.0	---	1.8	---	6.4	---	.83	.72	---
TOTAL	31.22	38.4	31.16	32.35	36.4	43.9	66.1	137.5	189.4	58.39	24.14	26.78
MEAN	1.01	1.28	1.01	1.04	1.30	1.42	2.20	4.44	6.31	1.88	.78	.89
MAX	1.3	1.4	1.3	1.2	1.4	2.5	3.5	8.4	8.8	3.4	.88	1.9
MIN	.82	1.0	.82	.86	1.1	1.3	1.8	2.2	3.4	.83	.72	.71
AC-FT	62	76	62	64	72	87	131	273	376	116	48	53

CAL YR 1990 TOTAL 525.15 MEAN 1.44 MAX 3.2 MIN .68 AC-FT 1040
WTR YR 1991 TOTAL 715.74 MEAN 1.96 MAX 8.8 MIN .71 AC-FT 1420

e Estimated

HUALAPAI FLAT

10353770 SOUTH WILLOW CREEK NEAR GERLACH, NV

LOCATION.--Lat 41°01'00", long 119°21'00", in SE 1/4 NE 1/4 sec.11, T.36 N., R.23 E., Washoe County, Hydrologic Unit 16040203, on left bank, 150 ft east of State Highway 34, and 25 mi north of Gerlach.

DRAINAGE AREA.--31 mi², approximately.

PERIOD OF RECORD.--Water years 1963-73 (annual maximum), August 1973 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,500 ft above National Geodetic Vertical Datum of 1929, from topographic map. July 1, 1963, to Aug. 16, 1973, operated as a crest-stage gage only, at datum 1.00 ft lower.

REMARKS.--No estimated daily discharges. Records good. No diversion or regulation above station.

AVERAGE DISCHARGE.--18 years (1974-91), 0.86 ft³/s, 623 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,730 ft³/s, Jan. 31, 1963, gage height, 7.30 ft, on basis of slope-area measurement of peak flow; no flow many days each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of unknown date reached a stage of 9.4 ft, present datum, from floodmarks, estimated discharge, 3,100 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4.0 ft³/s, Mar. 26, 27, gage height, 0.79 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.01	.18	.04	.04	.00	.00	.00
2	.00	.00	.00	.00	.00	.01	.12	.04	.04	.00	.00	.00
3	.00	.00	.00	.00	.00	.01	.11	.04	.04	.00	.00	.00
4	.00	.00	.00	.00	.00	.03	.22	.04	.04	.00	.00	.00
5	.00	.00	.00	.00	.00	.04	.24	.04	.04	.00	.00	.00
6	.00	.00	.00	.00	.00	.04	.23	.04	.04	.00	.00	.00
7	.00	.00	.00	.00	.00	.04	.16	.04	.04	.00	.00	.00
8	.00	.00	.00	.00	.00	.04	.14	.04	.04	.00	.00	.00
9	.00	.00	.00	.00	.00	.04	.08	.04	.04	.00	.00	.00
10	.00	.00	.00	.00	.00	.04	.05	.04	.03	.00	.00	.00
11	.00	.00	.00	.00	.00	.04	.03	.04	.02	.00	.00	.00
12	.00	.00	.00	.00	.00	.04	.03	.04	.02	.00	.00	.00
13	.00	.00	.00	.00	.00	.06	.03	.04	.02	.00	.00	.00
14	.00	.00	.00	.00	.00	.07	.04	.04	.02	.00	.00	.00
15	.00	.00	.00	.00	.01	.07	.05	.04	.02	.00	.00	.00
16	.00	.00	.00	.00	.01	.07	.04	.04	.02	.00	.00	.00
17	.00	.00	.00	.00	.01	.07	.04	.04	.01	.00	.00	.00
18	.00	.00	.00	.00	.01	.07	.04	.04	.01	.00	.00	.00
19	.00	.00	.00	.00	.01	.07	.04	.04	.01	.00	.00	.00
20	.00	.00	.00	.00	.01	.47	.04	.04	.01	.00	.00	.00
21	.00	.00	.00	.00	.01	.46	.04	.04	.01	.00	.00	.00
22	.00	.00	.00	.00	.01	.68	.03	.04	.00	.00	.00	.00
23	.00	.00	.00	.00	.01	.42	.03	.04	.00	.00	.00	.00
24	.00	.00	.00	.00	.01	.31	.02	.04	.00	.00	.00	.00
25	.00	.00	.00	.00	.01	.61	.02	.04	.00	.00	.00	.00
26	.00	.00	.00	.00	.01	1.5	.04	.04	.00	.00	.00	.00
27	.00	.00	.00	.00	.01	2.0	.04	.04	.00	.00	.00	.00
28	.00	.00	.00	.00	.01	.66	.04	.04	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.74	.04	.04	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.32	.04	.04	.00	.00	.00	.00
31	.00	---	.00	.00	---	.20	---	.04	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.14	9.23	2.25	1.24	0.56	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.005	.30	.075	.040	.019	.000	.000	.000
MAX	.00	.00	.00	.00	.01	2.0	.24	.04	.04	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.01	.02	.04	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.3	18	4.5	2.5	1.1	.00	.00	.00
CAL YR 1990	TOTAL 18.82	MEAN .052	MAX 1.6	MIN .00	AC-FT 37							
WTR YR 1991	TOTAL 13.42	MEAN .037	MAX 2.0	MIN .00	AC-FT 27							

SMOKE CREEK DESERT

345

10353800 SMOKE CREEK BELOW RESERVOIR NEAR SMOKE CREEK, NV

LOCATION.--Lat 40°30'33", long 119°52'24", in NE 1/4 NW 1/4 sec.5, T.30 N., R.19 E., Washoe County, Hydrologic Unit 16040203, on left bank, 11.2 miles south of Buffalo Creek Ranch, and 38.1 miles southwest of Gerlach.

DRAINAGE AREA.--50.1 mi², approximately.

PERIOD OF RECORD.--December 15, 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,980 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 860 ft³/s, February 24, 1989, gage height, 6.65 ft; no flow many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of February 1989 reached a stage of 9.00 ft, present datum, from floodmarks, discharge 2,270 ft³/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 87 ft³/s, Mar. 5, gage height, 4.97 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	e1.7	e5.7	4.5	6.2	2.1	1.1	.00	.00	.00
2	.00	.00	.00	e1.8	e5.4	4.4	5.5	2.3	.95	.00	.00	.00
3	.00	.00	.00	e1.9	5.2	6.2	5.1	2.3	.93	.00	.00	.00
4	.00	.00	.00	e1.8	6.4	31	4.0	1.9	.74	.00	.00	.00
5	.00	.00	.00	e1.7	8.4	75	3.4	1.8	.68	.00	.00	.00
6	.00	.00	1.4	e1.7	9.8	34	4.1	1.9	.61	.00	.00	.00
7	.00	.00	10	e1.7	7.2	17	3.4	1.9	.44	.00	.00	.00
8	.00	.00	18	e1.6	6.8	12	3.4	2.0	.36	.00	.00	.00
9	.00	.00	16	1.6	6.1	8.9	3.1	2.1	.25	.00	.00	.00
10	.00	.00	19	e1.7	5.6	7.0	2.5	2.1	.16	.00	.00	.00
11	.00	.00	5.3	e1.9	5.4	7.5	5.4	2.1	.08	.00	.00	.00
12	.00	.00	3.0	2.1	4.8	4.6	2.3	2.0	.04	.00	.00	.00
13	.00	.00	6.7	2.1	4.7	6.4	1.8	2.1	.02	.00	.00	.00
14	.00	.00	3.5	4.9	4.6	9.8	1.8	2.4	.01	.00	.00	.00
15	.00	.00	e3.0	e6.4	4.8	7.5	2.1	2.3	.01	.00	.00	.00
16	.00	.00	e3.0	e5.7	4.8	6.5	2.3	2.1	.01	.00	.00	.00
17	.00	.00	e3.0	e5.5	4.6	5.6	3.6	2.3	.00	.00	.00	.00
18	.00	.00	e3.3	e5.4	3.9	5.4	3.8	3.5	.00	.00	.00	.00
19	.00	.00	e3.5	e5.7	3.7	6.4	3.0	3.9	.00	.00	.00	.00
20	.00	.00	2.4	e6.0	3.3	6.0	2.6	4.3	.00	.00	.00	.00
21	.00	.00	e1.9	e5.0	3.3	8.1	2.5	4.2	.00	.00	.00	.00
22	.00	.00	e1.7	e5.0	3.4	7.5	2.6	3.1	.00	.00	.00	.00
23	.00	.00	e1.7	e5.2	3.0	8.1	3.0	2.5	.00	.00	.00	.00
24	.00	.00	e1.7	e5.9	2.6	7.2	2.6	1.8	.00	.00	.00	.00
25	.00	.00	e1.9	e6.2	3.3	11	3.5	1.5	.00	.00	.00	.00
26	.00	.00	e1.8	e5.4	2.5	14	4.1	1.3	.00	.00	.00	.00
27	.00	.00	e2.0	e5.2	2.7	21	3.0	1.2	.00	.00	.00	.00
28	.00	.00	e1.8	e5.6	3.4	20	2.4	.99	.00	.00	.00	.00
29	.00	.00	e1.9	e6.2	---	14	2.1	1.1	.00	.00	.00	.00
30	.00	.00	e1.6	e5.0	---	8.2	2.0	1.3	.00	.00	.00	.00
31	.00	---	e1.6	e5.0	---	5.6	---	1.4	---	.00	.00	---
TOTAL	0.00	0.00	120.70	122.6	135.4	390.4	97.2	67.79	6.39	0.00	0.00	0.00
MEAN	.000	.000	3.89	3.95	4.84	12.6	3.24	2.19	.21	.000	.000	.000
MAX	.00	.00	19	6.4	9.8	75	6.2	4.3	1.1	.00	.00	.00
MIN	.00	.00	.00	1.6	2.5	4.4	1.8	.99	.00	.00	.00	.00
AC-FT	.00	.00	239	243	269	774	193	134	13	.00	.00	.00

CAL YR 1990 TOTAL 797.34 MEAN 2.18 MAX 22 MIN .00 AC-FT 1580
WTR YR 1991 TOTAL 940.48 MEAN 2.58 MAX 75 MIN .00 AC-FT 1870

e Estimated

SNAKE RIVER BASIN

SALMON FALLS CREEK BASIN

346

13105000 SALMON FALLS CREEK NEAR SAN JACINTO, NV

LOCATION.--Lat 41°56'40", long 114°41'15", in NE 1/4 SW 1/4 sec.23, T. 47 N., R. 64 E., Elko County, Hydrologic Unit 17040213, on right bank in canyon, 630 ft downstream from bridge on U.S. Highway 93, 550 ft downstream from Shoshone Creek, and 5 mi north of San Jacinto.

DRAINAGE AREA.--1,450 mi², approximately. Mean elevation, 6,350 ft.

PERIOD OF RECORD.--September 1909 to June 1910 (gage heights only), June 1910 to September 1916, October 1918 to current year. Monthly discharge only for some periods published in WSP 1317. Prior to October 1910, published as "Salmon Falls River".

REVISED RECORDS.--WSP 1934: 1943(M).

GAGE.--Water-stage recorder. Elevation of gage is 5,120 ft, by barometer. Prior to June 6, 1910, nonrecording gage at nearby site at different datum. June 6, 1910 to Sept. 30, 1916, Oct. 1, 1918 to Aug. 28, 1964, water-stage recorder at site 35 ft upstream at same datum.

REMARKS.--Records good. Diversions above station for irrigation of about 18,200 acres (1966 determination). Salmon Dam of Salmon River Canal Co. is 15 mi downstream.

AVERAGE DISCHARGE.--79 years (1911-16, 1919-91), 144 ft³/s, 104,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,860 ft³/s May 16, 1984, gage height, 14.27 ft; minimum, 2.6 ft³/s Sept. 4, 1961, gage height, 3.37 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 344 ft³/s June 6, gage height, 6.87 ft; minimum daily, 13.0 ft³/s Aug. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	49	45	39	53	84	83	177	246	84	32	15
2	40	49	42	39	57	87	94	188	223	73	30	15
3	40	48	43	39	60	86	111	215	224	67	28	17
4	41	50	49	40	63	87	114	212	249	62	29	22
5	42	52	55	40	67	111	115	202	312	60	31	20
6	43	52	45	42	71	149	129	202	330	57	31	22
7	43	50	43	44	75	129	141	224	295	51	29	24
8	45	51	47	45	80	127	143	244	263	50	29	26
9	45	53	51	46	77	110	136	286	240	49	27	29
10	46	53	51	47	78	103	132	327	233	50	24	32
11	46	51	56	48	83	105	125	319	221	49	20	34
12	46	51	52	51	92	97	120	299	225	46	19	33
13	46	51	52	54	88	94	121	277	211	44	18	35
14	46	52	45	56	128	93	115	267	205	46	20	31
15	46	51	37	59	130	89	115	282	183	44	20	32
16	47	51	36	58	126	85	122	266	172	40	21	32
17	47	51	49	60	130	83	124	267	152	38	22	31
18	47	52	52	58	114	80	120	294	134	37	24	36
19	48	53	51	58	99	80	120	318	125	37	24	37
20	49	55	43	55	91	83	115	292	116	34	24	37
21	48	55	35	52	89	84	123	273	104	36	21	36
22	49	52	33	48	89	82	144	244	104	41	18	34
23	50	52	33	50	87	82	156	226	101	40	18	34
24	50	52	35	51	86	84	159	253	91	41	18	34
25	49	51	35	52	82	88	171	276	93	39	17	34
26	48	51	36	49	81	91	182	296	100	39	17	34
27	48	41	39	50	80	89	176	303	109	38	14	34
28	48	53	40	52	81	85	183	285	108	35	14	37
29	48	48	41	49	---	83	180	261	100	33	15	39
30	48	53	39	47	---	81	184	253	94	34	13	39
31	48	---	39	48	---	81	---	278	---	33	14	---
TOTAL	1427	1533	1349	1526	2437	2892	4053	8106	5363	1427	681	915
MEAN	46.0	51.1	43.5	49.2	87.0	93.3	135	261	179	46.0	22.0	30.5
MAX	50	55	56	60	130	149	184	327	330	84	32	39
MIN	40	41	33	39	53	80	83	177	91	33	13	15
AC-FT	2830	3040	2680	3030	4830	5740	8040	16080	10640	2830	1350	1810

CAL YR 1990 TOTAL 29186 MEAN 80.0 MAX 246 MIN 16 AC-FT 57890
WTR YR 1991 TOTAL 31709 MEAN 86.9 MAX 330 MIN 13 AC-FT 62890

BRUNEAU RIVER BASIN

347

13161500 BRUNEAU RIVER AT ROWLAND, NV

LOCATION.--Lat 41°56'00", long 115°40'25", in NW 1/4 SE 1/4 sec.29, T.47 N., R.56 E., Elko County, Hydrologic Unit 17050102, Humboldt National Forest, on left bank 2 mi upstream from McDonald Creek, and 0.5 mi south of Rowland.

DRAINAGE AREA.--382 mi².

PERIOD OF RECORD.--June 1913 to September 1918 (published as "near Rowland"), water years 1962-66 (annual maximum), October 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,500 ft above National Geodetic Vertical Datum of 1929, from topographic map. June 1913 to September 1918, nonrecording gage at different site and datum. October 1961 to September 1966, crest-stage gage at site 3 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--30 years (1914-18, 1967-91), 117 ft³/s, 84,770 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,140 ft³/s, May 14, 1984, gage height, 12.01 ft; minimum daily, 2.5 ft³/s, Sept. 18, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 8	1900	210	3.88	May 25	2300	*239	*4.02

Minimum daily, 5.2 ft³/s, Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	14	14	e11	e15	44	52	111	167	56	10	5.4
2	6.9	14	e14	e11	e15	44	60	117	166	53	9.7	5.7
3	6.7	12	e14	e11	e16	40	63	121	185	48	9.3	5.5
4	7.2	13	e13	e11	e17	56	68	111	202	44	11	5.3
5	7.2	15	e12	e11	e18	113	88	111	219	41	11	5.2
6	7.4	15	12	e11	e19	74	100	132	198	39	9.2	5.5
7	8.2	12	e12	e11	e20	61	96	150	179	36	8.0	5.9
8	8.6	15	e12	e11	19	56	75	181	175	36	7.4	6.9
9	8.9	16	e14	e11	20	49	67	191	176	33	7.0	7.8
10	9.7	16	17	e12	21	50	69	160	179	30	6.6	11
11	9.8	15	17	e12	21	50	60	142	186	28	6.7	15
12	9.6	15	14	e13	22	44	61	129	195	27	6.5	12
13	9.8	15	e13	e14	24	45	58	124	189	24	6.3	9.7
14	9.9	16	e12	e15	29	45	62	167	171	24	6.8	8.4
15	10	16	e12	e16	32	41	65	161	148	22	7.3	7.8
16	10	14	e12	e16	38	39	67	162	133	19	8.9	7.7
17	10	16	e12	e16	38	41	65	197	122	17	9.6	7.6
18	10	16	e11	e16	31	40	66	199	113	15	8.5	7.2
19	11	16	e11	e15	36	40	65	182	106	15	8.6	7.2
20	11	18	e11	e14	31	40	66	174	99	17	7.9	6.6
21	11	17	e11	e14	32	39	83	170	91	16	7.3	6.4
22	12	16	e11	e14	36	39	94	177	84	15	6.8	6.4
23	13	15	e11	e14	35	39	101	200	79	15	6.2	6.6
24	12	15	e11	e14	33	41	109	221	73	15	5.8	6.7
25	12	e15	e11	e14	34	42	113	233	75	14	5.4	6.9
26	12	e15	e11	e14	35	40	106	233	73	15	5.3	6.7
27	12	15	e11	e14	35	37	104	214	71	14	5.8	6.6
28	12	e15	e11	e14	38	39	107	197	65	12	6.0	7.0
29	12	15	e11	e14	---	40	112	184	61	12	6.2	7.8
30	12	e14	e11	e14	---	39	109	206	61	11	5.9	7.8
31	12	---	e11	e14	---	42	---	190	---	11	5.4	---
TOTAL	310.8	451	380	412	760	1449	2411	5247	4041	774	232.4	222.3
MEAN	10.0	15.0	12.3	13.3	27.1	46.7	80.4	169	135	25.0	7.50	7.41
MAX	13	18	17	16	38	113	113	233	219	56	11	15
MIN	6.7	12	11	11	15	37	52	111	61	11	5.3	5.2
AC-FT	616	895	754	817	1510	2870	4780	10410	8020	1540	461	441

CAL YR 1990 TOTAL 15677.1 MEAN 43.0 MAX 178 MIN 4.4 AC-FT 31100
WTR YR 1991 TOTAL 16690.5 MEAN 45.7 MAX 233 MIN 5.2 AC-FT 33110

e Estimated

OWYHEE RIVER BASIN

13174000 WILD HORSE RESERVOIR NEAR GOLD CREEK, NV

LOCATION.--Lat 41°41'15", long 115°50'37", in NE 1/4 NW 1/4 sec.25, T.44 N., R.54 E., Elko County, Hydrologic Unit 17050104, in Humboldt National Forest, at Wild Horse Dam on Owyhee River, 8 mi west of Gold Creek, and 13 mi southeast of Mountain City.

DRAINAGE AREA.--209 mi².

PERIOD OF RECORD.--March 1938 to current year. Monthend contents for some periods, published in WSP 1317.

REVISED RECORDS.--NV-WDR-80:

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Bureau of Indian Affairs).

REMARKS.--Reservoir is formed by concrete-arch dam; storage began Mar. 18, 1938. New dam completed in June 1969, capacity, 71,500 acre-ft between elevations 6,138.50 ft, sill of outlet gate, and 6,205 ft spillway crest. No dead storage. Water is used for irrigation on Duck Valley project.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents recorded, 80,020 acre-ft, May 15, 1984, elevation, 6,207.68 ft; minimum observed, no contents at times in each year (1938-41), 1964-65, 1968-69.

EXTREMES FOR CURRENT YEAR.--Maximum contents recorded, 20,520 acre-ft, June 10, elevation, 6,181.37 ft; minimum, 7,580 acre-ft, Sept. 28, 30, elevation, 6,168.80 ft.

Capacity table (elevation, in feet, and contents, in acre-ft)

6,168	7,020	6,178	16,170	6,188	31,110	6,198	52,310
6,170	8,440	6,180	18,670	6,190	34,820	6,200	57,390
6,172	10,040	6,182	21,400	6,192	38,780	6,202	62,780
6,174	11,860	6,184	24,390	6,194	43,010	6,204	68,510
6,176	13,900	6,186	27,630	6,196	47,520	6,206	74,590

MONTHEND ELEVATION, IN FEET NGVD, AND CONTENTS AT 2400, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	6,175.74	13,630	--
Oct. 31.	6,175.05	12,900	-730
Nov. 30.	6,174.92	12,770	-130
Dec. 31.	6,175.12	12,980	+210
CAL YR 1990.	--	--	-14,190
Jan. 31.	6,175.42	13,290	+310
Feb. 28.	6,175.83	13,720	+430
Mar. 31.	6,176.90	14,900	+1,180
Apr. 30.	6,178.84	17,200	+2,300
May 31.	6,181.17	20,240	+3,040
June 30.	6,178.35	16,600	-3,640
July 31.	6,173.08	10,990	-5,610
Aug. 31.	6,169.49	8,070	-2,920
Sept. 30.	6,168.80	7,580	-490
WTR YR 1991.	--	--	-6,050

NOTE: Monthend elevations and contents are interpolated from readings made during the month.

OWYHEE RIVER BASIN

349

13174500 OWYHEE RIVER NEAR GOLD CREEK, NV

LOCATION.--Lat 41°41'20", long 115°50'38", in NE 1/4 NW 1/4 sec.25, T.44 N., R.54 E., Elko County, Hydrologic Unit 17050104, in Humboldt National Forest, on left bank, 500 ft downstream from Wild Horse Dam, 0.1 mi upstream from Beaver Creek, 8 mi west of Gold Creek, and 12 mi southeast of Mountain City.

DRAINAGE AREA.--209 mi².

PERIOD OF RECORD.--March to November 1916, April 1917 to September 1925, October 1936 to current year. Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1317: 1939-42 (M).

GAGE.--Water-stage recorder. Datum of gage is 6,118.75 ft, Bureau of Reclamation datum. Prior to Oct. 1, 1936, at site 0.3 mi upstream at different datum. Nov. 17, 1936, to Oct. 18, 1967, at site 0.1 mi upstream at different datum. Oct. 19, 1967, to Sept. 30, 1971, temporary gage, 250 ft downstream at different datum, while new dam was being constructed 300 ft downstream from old dam.

REMARKS.--Records fair. Small diversions for irrigation above station. Flow regulated by Wild Horse Reservoir (station 13174500), capacity, 71,660 acre-ft, 0.1 mi upstream beginning Mar. 18, 1938.

AVERAGE DISCHARGE.--63 years (1918-25, 1937-91), 45.4 ft³/s, 32,890 acre-ft/yr, unadjusted for storage or diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,819 ft³/s, May 5, 1922, gage height, 10.11 ft, site and datum then in use; no flow at times when reservoir gates were closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 122 ft³/s, July 8, gage height, 1.82 ft; minimum daily, 2.3 ft³/s, many days, but may have been lower during period of estimated daily discharge, Dec. 14 to Feb. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	7.3	e3.0	e2.3	e2.3	2.6	2.4	2.4	2.7	102	30	7.0
2	25	7.3	2.7	e2.3	e2.3	2.5	2.4	2.4	2.7	101	30	7.2
3	16	7.3	e2.7	e2.3	e2.3	2.4	2.4	2.4	2.7	101	30	7.3
4	2.6	7.3	e2.7	e2.3	e2.3	2.5	2.4	2.4	2.7	100	30	7.3
5	2.7	7.3	e2.7	e2.3	e2.3	2.4	2.4	2.4	2.7	100	36	7.3
6	2.8	7.3	e2.7	e2.3	e2.3	2.4	2.4	2.4	2.7	100	43	7.5
7	3.1	7.3	e2.7	e2.3	e2.3	2.4	2.4	2.4	2.7	100	55	7.7
8	3.2	7.3	e2.7	e2.3	e2.3	2.4	2.4	2.4	2.7	109	72	7.7
9	6.7	7.3	2.6	e2.3	e2.3	2.4	2.4	2.4	2.7	118	72	8.2
10	12	7.3	2.6	e2.3	e2.3	2.4	2.3	2.4	2.7	118	72	8.3
11	11	7.3	2.6	e2.3	e2.3	2.5	2.3	2.4	34	118	72	8.3
12	11	7.3	2.6	e2.3	e2.3	2.6	2.3	2.4	72	118	71	8.3
13	12	7.3	2.6	e2.3	e2.3	2.6	2.3	2.4	72	117	71	8.3
14	12	7.3	e2.6	e2.3	2.3	2.6	2.3	2.4	71	117	71	8.0
15	12	7.3	e2.6	e2.3	2.3	2.6	2.3	2.4	72	117	71	8.1
16	12	7.3	e2.5	e2.3	2.3	2.6	2.3	2.4	72	117	71	8.3
17	12	7.3	e2.5	e2.3	2.4	2.6	2.3	2.5	71	e117	71	8.3
18	12	7.3	e2.5	e2.3	2.5	2.6	2.3	2.6	83	e117	71	8.3
19	9.2	7.3	e2.5	e2.3	2.6	2.6	2.3	2.6	97	e83	70	8.3
20	7.2	7.3	e2.5	e2.3	2.6	2.6	2.3	2.6	96	42	70	8.3
21	7.3	7.3	e2.5	e2.3	2.6	2.6	2.3	2.6	96	42	43	8.3
22	7.3	7.3	e2.5	e2.3	2.6	2.6	2.3	2.6	96	42	7.3	8.3
23	7.3	7.3	e2.5	e2.3	2.6	2.5	2.3	2.6	97	41	7.3	8.3
24	7.3	7.3	e2.5	e2.3	2.6	2.4	2.4	2.6	97	42	7.0	8.3
25	7.3	7.3	e2.5	e2.3	2.6	2.3	2.4	2.6	96	37	7.0	8.3
26	7.3	4.8	e2.4	e2.3	2.6	2.3	2.4	2.6	107	31	7.0	8.0
27	7.3	3.2	e2.4	e2.3	2.6	2.3	2.4	2.6	117	31	7.0	8.0
28	7.3	3.1	e2.4	e2.3	2.6	2.4	2.4	2.7	108	31	7.0	8.1
29	7.3	3.0	e2.4	e2.3	---	2.4	2.4	2.6	102	31	7.0	8.3
30	7.3	3.2	e2.4	e2.3	---	2.4	2.4	2.7	102	31	7.0	8.3
31	7.3	---	e2.4	e2.3	---	2.4	---	2.7	---	30	7.0	---
TOTAL	289.8	199.8	79.5	71.3	67.7	76.9	70.6	77.6	1785.0	2501	1292.6	240.2
MEAN	9.35	6.66	2.56	2.30	2.42	2.48	2.35	2.50	59.5	80.7	41.7	8.01
MAX	25	7.3	3.0	2.3	2.6	2.6	2.4	2.7	117	118	72	8.3
MIN	2.6	3.0	2.4	2.3	2.3	2.3	2.3	2.4	2.7	30	7.0	7.0
AC-FT	575	396	158	141	134	153	140	154	3540	4960	2560	476

CAL YR 1990 TOTAL 11742.5 MEAN 32.2 MAX 152 MIN 2.0 AC-FT 23290
WTR YR 1991 TOTAL 6752.0 MEAN 18.5 MAX 118 MIN 2.3 AC-FT 13390

e Estimated

OWYHEE RIVER BASIN

13175100 OWYHEE RIVER NEAR MOUNTAIN CITY, NV

LOCATION.--Lat 41°51'38", long 115°59'18", in SE 1/4 NW 1/4 sec.26, T.46 N., R.53 E., Elko County, Hydrologic Unit 17050104, on left bank, 2.1 mi northwest of Mountain City.

DRAINAGE AREA.--391 mi².

PERIOD OF RECORD.--April to September 1991.

GAGE.--Water-stage recorder. Elevation of gage is 5,560 ft, above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189 ft³/s, May 9, 1991, gage height, 5.23 ft, from rating curve extended above 139 ft³/s; minimum daily, 8.2 ft³/s Sept. 7, 8, 27, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period April to September, 189 ft³/s, May 9, gage height 5.23 ft, from rating curve extended above 139 ft³/s; minimum daily 8.2 ft³/s, Sept. 7, 8, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	118	134	134	44	8.9
2	---	---	---	---	---	---	---	123	125	130	36	9.2
3	---	---	---	---	---	---	---	117	117	128	37	9.1
4	---	---	---	---	---	---	---	114	116	125	42	8.9
5	---	---	---	---	---	---	---	115	113	124	42	8.6
6	---	---	---	---	---	---	---	141	111	122	50	8.5
7	---	---	---	---	---	---	---	152	104	121	54	8.2
8	---	---	---	---	---	---	---	170	94	123	72	8.2
9	---	---	---	---	---	---	---	176	83	135	77	8.4
10	---	---	---	---	---	---	---	149	81	133	79	10
11	---	---	---	---	---	---	---	133	74	133	73	11
12	---	---	---	---	---	---	---	126	113	132	73	10
13	---	---	---	---	---	---	---	120	128	133	77	10
14	---	---	---	---	---	---	---	139	131	132	80	9.6
15	---	---	---	---	---	---	---	137	127	132	83	9.9
16	---	---	---	---	---	---	---	135	123	134	85	10
17	---	---	---	---	---	---	---	159	121	139	75	12
18	---	---	---	---	---	---	---	163	115	134	75	12
19	---	---	---	---	---	---	---	159	133	76	77	12
20	---	---	---	---	---	---	---	156	135	77	80	12
21	---	---	---	---	---	---	---	151	134	72	79	12
22	---	---	---	---	---	---	77	157	129	69	43	11
23	---	---	---	---	---	---	79	164	127	66	17	11
24	---	---	---	---	---	---	86	164	129	65	14	11
25	---	---	---	---	---	---	97	166	134	63	12	9.1
26	---	---	---	---	---	---	94	169	137	57	11	8.5
27	---	---	---	---	---	---	99	156	157	53	9.9	8.2
28	---	---	---	---	---	---	112	140	160	52	9.7	8.9
29	---	---	---	---	---	---	136	131	146	51	9.2	9.1
30	---	---	---	---	---	---	113	158	144	47	9.6	9.1
31	---	---	---	---	---	---	---	155	---	44	8.7	---
TOTAL	---	---	---	---	---	---	---	4513	3675	3136	1534.1	294.4
MEAN	---	---	---	---	---	---	---	146	122	101	49.5	9.81
MAX	---	---	---	---	---	---	---	176	160	139	85	12
MIN	---	---	---	---	---	---	---	114	74	44	8.7	8.2
AC-FT	---	---	---	---	---	---	---	8950	7290	6220	3040	584

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LOCATION OF GROUND-WATER QUALITY SAMPLING SITES (Figure 18)

Site Number	Local Number	Latitude	Longitude	Site Identification
1	153 N24 E52 23DAC 1	395638	1160421	SHIPLEY HOT SPRING
2	153 N23 E54 03DBD 1	395403	1155204	THOMPSON RANCH SPRING
3	184 N20 E66 30DCC 1	393350	1143530	KALAMAZOO CREEK
4	139 N19 E50 16BCCA1	393133	1162122	BARTINE RANCH
5	139 N19 E50 16BCCC1	393129	1162129	BARTINE RANCH
6	139 N19 E50 17ADDC1	393127	1162135	BARTINE RANCH
7	179 N19 E63 05CDC 1	393108	1145623	CAMBELLS EMBAYMENT
8	179 N18 E64 21BDDC1	392446	1144643	MCGILL SPRINGS
9	155A N16 E53 08BCBB1	391637	1160218	FISH CREEK SPRINGS
10	173B N13 E56 32BACD1	385700	1154200	BIG WARM SPRINGS
11	173B N12 E56 05ABCB1	385613	1154148	LITTLE WARM SPRING
12	207 N12 E61 02DBCB1	385542	1150458	INDIAN RANCH SPRING
13	207 N12 E61 02ACAB1	385601	1150450	PRESTON BIG SPRING
14	207 N12 E61 12DCCD1	385433	1150345	ARNOLDSON SPRING
15	207 N12 E61 12DBDD1	385445	1150337	NICHOLAS SPRINGS
16	207 N12 E61 12BDAD1	385505	1150357	COLD SPRINGS
17	207 N11 E62 04AABA1	385100	1150009	LUND SPRINGS
18	183 N10 E65 34CDAD1	384048	1143957	GEYSER SPRING
19	207 N09 E62 19DB 1	383726	1150251	EMIGRANT SPRINGS
20	207 N09 E61 32DABC1	383541	1150818	MORMON SPRING
21	173B N08 E57 11DDB 1	383347	1153139	BLUE EAGLE SPRINGS
22	173B N08 E55 15AAAA1	383337	1154551	NORTH SPRING
23	173B N08 E55 15ACBD1	383321	1154614	BIG SPRING
24	173B N08 E55 15ADDB1	383317	1154556	REYNOLDS SPRINGS
25	173B N08 E55 14BCBB1	383325	1154547	HAY CORRAL
26	173B N08 E57 27DACC1	383116	1153247	BUTTERFIELD SPRING
27	207 N07 E62 28ABDC1	382623	1150039	BUTTERFIELD SPRINGS
28	207 N07 E62 33BCAB1	382526	1150114	FLAG SPRING 1
29	207 N07 E62 33BCCB1	382522	1150120	FLAG SPRING 2
30	207 N07 E62 33BCCC1	382517	1150120	FLAG SPRING 3
31	207 N06 E61 18AADA1	382259	1150909	HOT CREEK SPRING
32	207 N06 E60 25BDAD1	382106	1151051	MOON RIVER SPRINGS
33	203 S02 E68 04BADD1	374827	1142251	PANACA SPRING
34	209 S04 E60 14DBAB1	373554	1151252	HICO SPRING
35	209 S05 E60 10ADBB1	373154	1151358	CRYSTAL SPRINGS
36	209 S06 E61 06BBBB1	372749	1151130	ASH SPRINGS
37	219 S14 E65 16BBB 1	364333	1144338	MUDDY RIVER 9
38	219 S14 E65 16AB 1	364329	1144311	MUDDY RIVER MAIN
39	219 S14 E65 16ABB 1	364327	1144308	MUDDY RIVER 10
40	219 S14 E65 16ABDD1	364319	1144255	MUDDY RIVER 18
41	219 S14 E65 16ACA 1	364319	1144258	MUDDY RIVER 4
42	219 S14 E65 16BD 1	364316	1144319	MUDDY RIVER WEST
43	219 S14 E65 16BCA 1	364314	1144330	MUDDY RIVER 6
44	219 S14 E65 16BDBC1	364314	1144327	MUDDY RIVER 3
45	219 S14 E65 16BDBD1	364314	1144324	MUDDY RIVER 5
46	219 S14 E65 16ACCA1	364311	1144304	MUDDY RIVER 2
47	219 S14 E65 16ACCD1	364310	1144304	MUDDY RIVER 1
48	219 S14 E65 16DCB 1	364254	1144306	MUDDY RIVER 17
49	219 S14 E65 21AAAB2	364238	1144244	MUDDY RIVER 16
50	219 S14 E65 21AABB2	364237	1144254	MUDDY RIVER 12
51	219 S14 E65 21AABB3	364236	1144254	MUDDY RIVER 13
52	219 S14 E65 21AAAA1	364238	1144242	MUDDY RIVER 15
53	219 S14 E65 21AABB1	364238	1144252	MUDDY RIVER 11
54	230 S17 E50 15ABDA1	362846	1161932	ROGERS SPRING
55	230 S17 E50 22ABAB1	362803	1161932	LONGSTREET SPRING
56	230 S18 E50 03ADBA1	362513	1161927	CRYSTAL POOL
57	215 S18 E67 12DDAD1	362238	1142636	ROGERS SPRING

LOCATION OF HIGH-ELEVATION PRECIPITATION SITES

No.	Station Name	Latitude	Longitude
58	CHERRY CREEK RANGE	400726	1145247
59	MT. HAMILTON	391436	1153239
60	MT. WASHINGTON	385409	1141854
61	MT. WILSON	381438	1142333
62	NW OF MT. MORIAH	391913	1141431
63	CAVE MOUNTAIN	390946	1143649
64	POTOSI PEAK	355641	1152946
65	HAYFORD PEAK	363929	1151158
66	SHEEP PEAK	363500	1151443
67	TROUGH SPRING	362240	1154621
68	KYLE CANYON	361457	1153733
69	LEE CANYON	361822	1154025

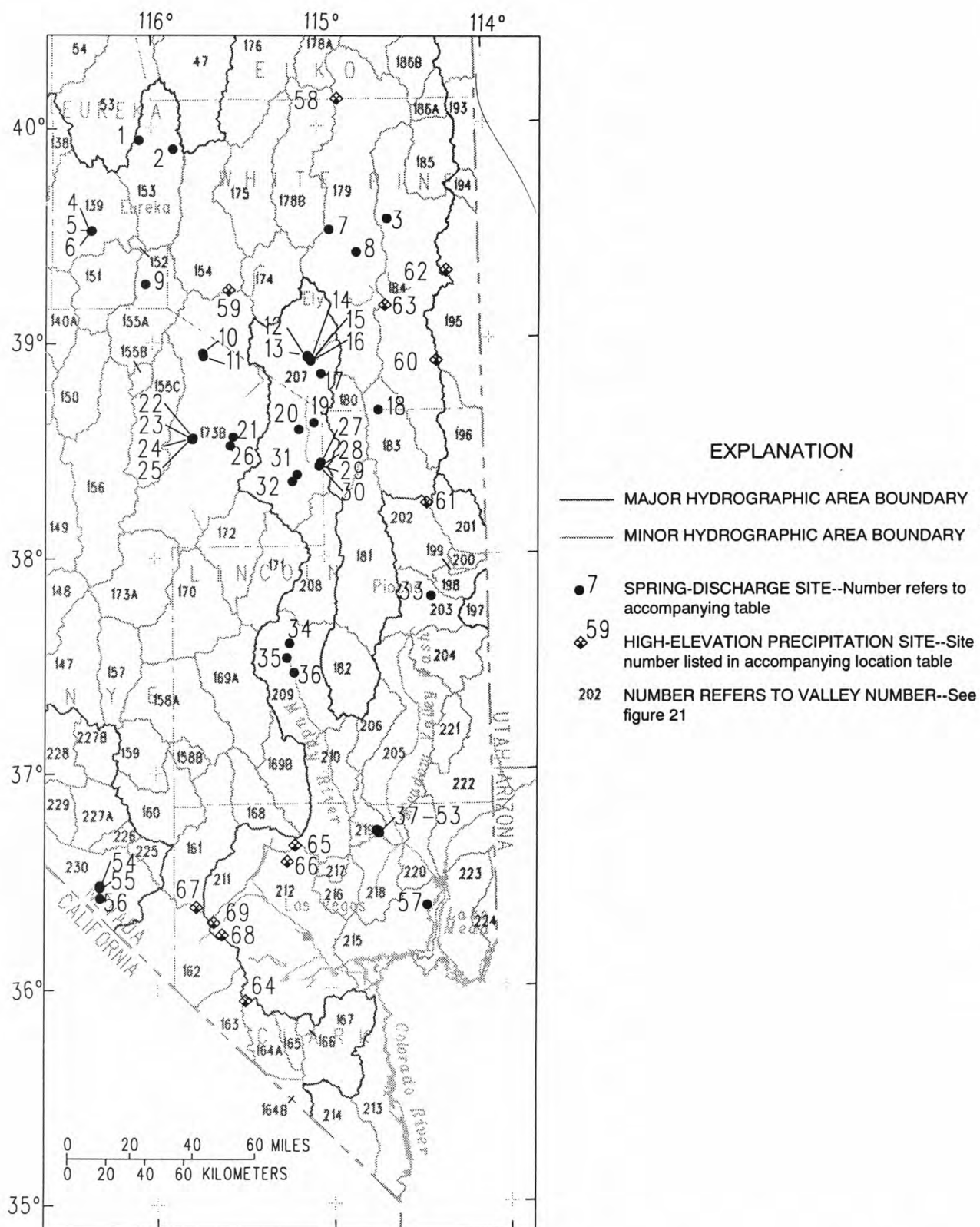


FIGURE 18.--Springs and high-elevation precipitation sites within carbonate-rock study area, eastern Nevada.

SPRING DISCHARGE

SPRING NUMBER	SITE IDENTIFICATION	SPRING NAME	OWNER	USE ¹	LAND SURFACE ELEVATION (FEET)	DISCHARGE			
						DATE	FT ³ /S	MEASURE- MENT METHOD ²	
139	N19 E50 16BCCA1	393133116212201 BARTINE RANCH	EUREKA RANCH CO	I	6102	11/15/90 03/07/91	0.29 0.13	C C	
139	N19 E50 16BCCC1	393129116212901 BARTINE RANCH	EUREKA RANCH CO	I	6102	11/15/90 03/07/91	0.69 0.29	C C	
139	N19 E50 17ADDC1	393127116213501 BARTINE RANCH	EUREKA RANCH CO	I	6102	11/15/90 03/07/91	0.29 0.22	C C	
153	N23 E54 03DBD 1	395415115524301 THOMPSON RANCH SPRING	T M THOMPSON	I	5840	11/15/90 03/08/91 06/04/91	0.11 1 0.29	F E F	
153	N24 E52 23DAC 1	395628116042801 SHIPLEY HOT SPRING	GUY WEATHERLY	I	5812	11/15/90 03/08/91	8 5.79	E C	
155A	N16 E53 08BCBB1	391637116021801 FISH CREEK SPRINGS		I	6100	11/15/90 03/07/91	7 11.14	E C	
173B	N08 E55 14BCBB1	383256115453301 HAY CORRAL	FISH CREEK RANCH	I	4770	11/14/90 03/06/91	0.85 1	C E	
173B	N08 E55 15AAAA1	383323115454401 NORTH SPRING	FISH CREEK RANCH	I	4805	11/14/90 03/06/91	<1 0.36	E C	
173B	N08 E55 15ACBD1	383311115461501 BIG SPRING	FISH CREEK RANCH	I	4820	11/14/90 03/06/91	1.11 1.11	C C	
173B	N08 E55 15ADDB1	383259115460301 REYNOLDS SPRINGS	FISH CREEK RANCH	I	4770	11/14/90 03/06/91	0.78 0.49	C C	
173B	N08 E57 11DDB 1	383346115313801 BLUE EAGLE SPRINGS	HOWARD SHARP	I	4765	11/14/90 03/07/91	5.35 6	C E	
173B	N08 E57 27DACC1	383103115325301 BUTTERFIELD SPRING	CARL HANKS	I	4750	11/14/90 03/07/91	<1 0.06	E C	
173B	N12 E56 05ABC1	385552115421001 LITTLE WARM SPRING		I	5590	11/14/90 03/05/91	2.45 1.56	C C	
173B	N13 E56 32BACD1	385650115421301 BIG WARM SPRINGS		I	5605	11/14/90 03/05/91	8.91 7.58	C C	
179	N18 E64 21BDDC1	392502114464901 MCGILL SPRINGS	KENNECOTT COPPER	I	6100	11/05/90 03/01/91	11.14 11.14	C C	
179	N19 E63 05CDC 1	393108114562301 CAMBELLS EMBAYMENT	WILLIAM G DAVIDSON	I	6100	11/05/90 03/01/91	5.57 4.90	C C	
183	N10 E65 34CDAD1	383953114005801 GEYSER SPRING		I	6480	11/07/90 03/02/91	0.51 0.40	C C	
184	N20 E66 30DCC 1	393347114361801 KALAMAZOO CREEK		I	7200	11/06/90 03/02/91	0.31 0.29	C C	
203	S02 E68 04BADD1	374827114225101 PANACA SPRING		I	4770	11/06/90 03/21/91	0.36 1.11	C C	
207	N06 E60 25BDAD1	382105115104801 MOON RIVER SPRINGS	DON HUTCHINGS	I	5220	11/08/90	4.01	C	
207	N06 E61 18AADA1	382259115090801 HOT CREEK SPRING	WHIPPLE BROTHERS	I	5225	11/08/90 03/04/91	11.14 13.37	C C	
207	N07 E62 28ABDC1	382624115004001 BUTTERFIELD SPRINGS	WHIPPLE BROTHERS	I	5320	11/08/90 03/04/91	2.45 2.45	C C	
207	N07 E62 33BCAB1	382526115011401 FLAG SPRING 1		I	5290	11/09/90 03/04/91	2.23 2.90	C C	
207	N07 E62 33BCCB1	382522115012001 FLAG SPRING 2		I	5280	11/08/90 03/04/91	2.23 2.23	C C	
207	N07 E62 33BCCC1	382517115012001 FLAG SPRING 3		I	5290	11/08/90 03/04/91	1.78 2.01	C C	
207	N09 E61 32DABC1	383540115081801 MORMON SPRING	DON ELDRIDGE	I	5295	11/08/90 03/05/91	0.67 0.69	C C	
207	N09 E62 19DB 1	383726115025101 EMIGRANT SPRINGS		I	5480	11/08/90 03/05/91	1 2	E E	
207	N11 E62 04AABA1	385158115000401 LUND SPRINGS	LUND IRRIGATION CO	I	5500	11/09/90 03/03/91	7.13 9.80	C C	

SPRING NUMBER	SITE IDENTIFICATION	SPRING NAME	OWNER	USE ¹	LAND SURFACE ELEVATION (FEET)	DISCHARGE			
						DATE	FT ³ /S	MEASURE-MENT METHOD ²	
207	N12 E61 02ACAB1	385540115045701	PRESTON BIG SPRING	PRESTON & LUND IRRIGATION CO	I	5700	11/06/90 03/03/91	8.91 7.80	C C
207	N12 E61 02DBC1	385542115045801	INDIAN RANCH SPRING		I	5720	11/09/90 03/05/91	<1 <1	E E
207	N12 E61 12BDAD1	385507114574801	COLD SPRINGS	LUND IRRIGATION CO	I	6020	11/09/90 03/05/91	0.85 1.34	C C
207	N12 E61 12DBDD1	385530115044601	NICHOLAS SPRINGS	LUND IRRIGATION CO	I	5700	11/06/90 03/03/91	2.90 3.34	C C
207	N12 E61 12DCCD1	385539115045702	ARNOLDSON SPRING	PRESTON IRRIGATION CO	I	5700	11/06/90 03/03/91	1.11 0.89	C C
209	S04 E60 14DBAB1	373554115125201	HIKO SPRING		I	3875	11/05/90 04/03/91	6.68 4.90	C C
209	S05 E60 10ADBB1	373155115135801	CRYSTAL SPRINGS		I	3810	11/15/90	11.14	C
209	S06 E61 06BBBB1	372749115113401	ASH SPRINGS		I	3615	11/05/90 03/19/91	17.82 22.28	C C
215	S18 E67 12DDAD1	362239114263501	ROGERS SPRING		R	1590	11/15/90	2.01	C
219	S14 E65 16AB 1	364329114431101	MUDDY RIVER MAIN	CHURCH OF LATTER DAY SAINTS	I	1791	03/14/91	5.12	C
219	S14 E65 16ABB 1	364327114430801	MUDDY RIVER 10	CHURCH OF LATTER DAY SAINTS	I	1650	11/07/90 03/14/91	3.12 2.23	C C
219	S14 E65 16ABDD1	364319114425501	MUDDY RIVER 18	CHURCH OF LATTER DAY SAINTS	I	1620	11/07/90	6.24	C
219	S14 E65 16ACA 1	364317114425801	MUDDY RIVER 4		I	1620	11/07/90 03/13/91	0.31 0.31	F F
219	S14 E65 16ACCA1	364311114430401	MUDDY RIVER 2	CHURCH OF LATTER DAY SAINTS	I	1620	11/07/90 03/13/91	0.18 0.22	F F
219	S14 E65 16ACCD1	364310114430401	MUDDY RIVER 1	CHURCH OF LATTER DAY SAINTS	I	1620	11/07/90 03/13/91	0.29 0.22	F F
219	S14 E65 16BBB 1	364333114433801	MUDDY RIVER 9	CHURCH OF LATTER DAY SAINTS	I	1650	11/07/90	0.01	F
219	S14 E65 16BCA 1	364314114433001	MUDDY RIVER 6	CHURCH OF LATTER DAY SAINTS	I	1650	11/07/90 03/13/91	0.18 0.11	F C
219	S14 E65 16BD 1	364316114431901	MUDDY RIVER WEST	CHURCH OF LATTER DAY SAINTS	I	1794	03/14/91	1.78	C
219	S14 E65 16BDBC1	364314114432701	MUDDY RIVER 3	CHURCH OF LATTER DAY SAINTS	I	1650	11/07/90 03/13/91	0.33 0.49	F F
219	S14 E65 16BDBD1	364314114432401	MUDDY RIVER 5	CHURCH OF LATTER DAY SAINTS	I	1650	11/07/90 03/13/91	0.03 0.07	F F
219	S14 E65 16DCB 1	364251114430401	MUDDY RIVER 17	FREDRICK APCAR	I	1620	11/07/90	1.34	C
219	S14 E65 21AAAA1	364236114424301	MUDDY RIVER 15	WARM SPRINGS LEISURE PARK	I	1620	11/07/90 11/13/90 03/13/91	2.01 2.01 2.67	C C C
219	S14 E65 21AAAB2	364238114424401	MUDDY RIVER 16	WARM SPRINGS LEISURE PARK	I	1620	11/07/90 03/13/91	0.22 0.20	F F
219	S14 E65 21AABB1	364235114425201	MUDDY RIVER 11	U.S. FISH & WILDLIFE SERVICE	I	1650	11/07/90 03/13/91	1.11 1.56	C C
219	S14 E65 21AABB2	364237114425401	MUDDY RIVER 12	U.S. FISH & WILDLIFE SERVICE	I	1650	11/07/90 03/13/91	0.20 0.08	F C
219	S14 E65 21AABB3	364236114425401	MUDDY RIVER 13	U.S. FISH & WILDLIFE SERVICE	I	1650	11/07/90 03/13/91	0.53 0.29	C C
230	S17 E50 15ABDA1	362835116192101	ROGERS SPRING	CALVADA CORP	I	2275	11/16/90 04/03/91	1.11 1.56	C C
230	S17 E50 22ABAB1	362751116192701	LONGSTREET SPRING		I	2335	11/16/90 04/03/91	1.34 1.56	C C
230	S18 E50 03ADBA1	362502116192301	CRYSTAL POOL	CALVADA CORP	I	2195	11/16/90 04/03/91	5.57 8.47	C C

¹Uses: I, irrigation; R, recreation.²Measurement method: C, current meter; E, estimated; F, flume.

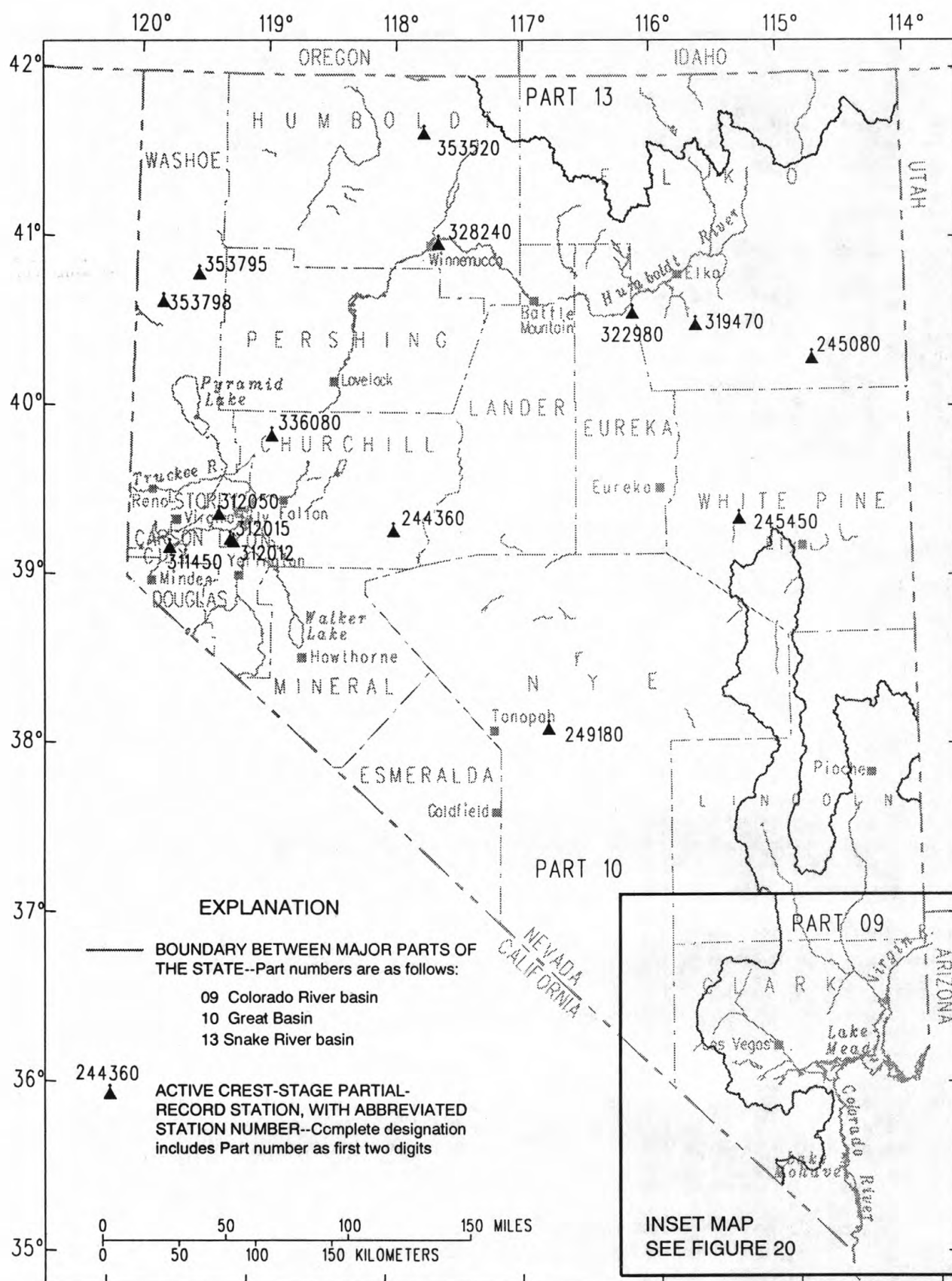
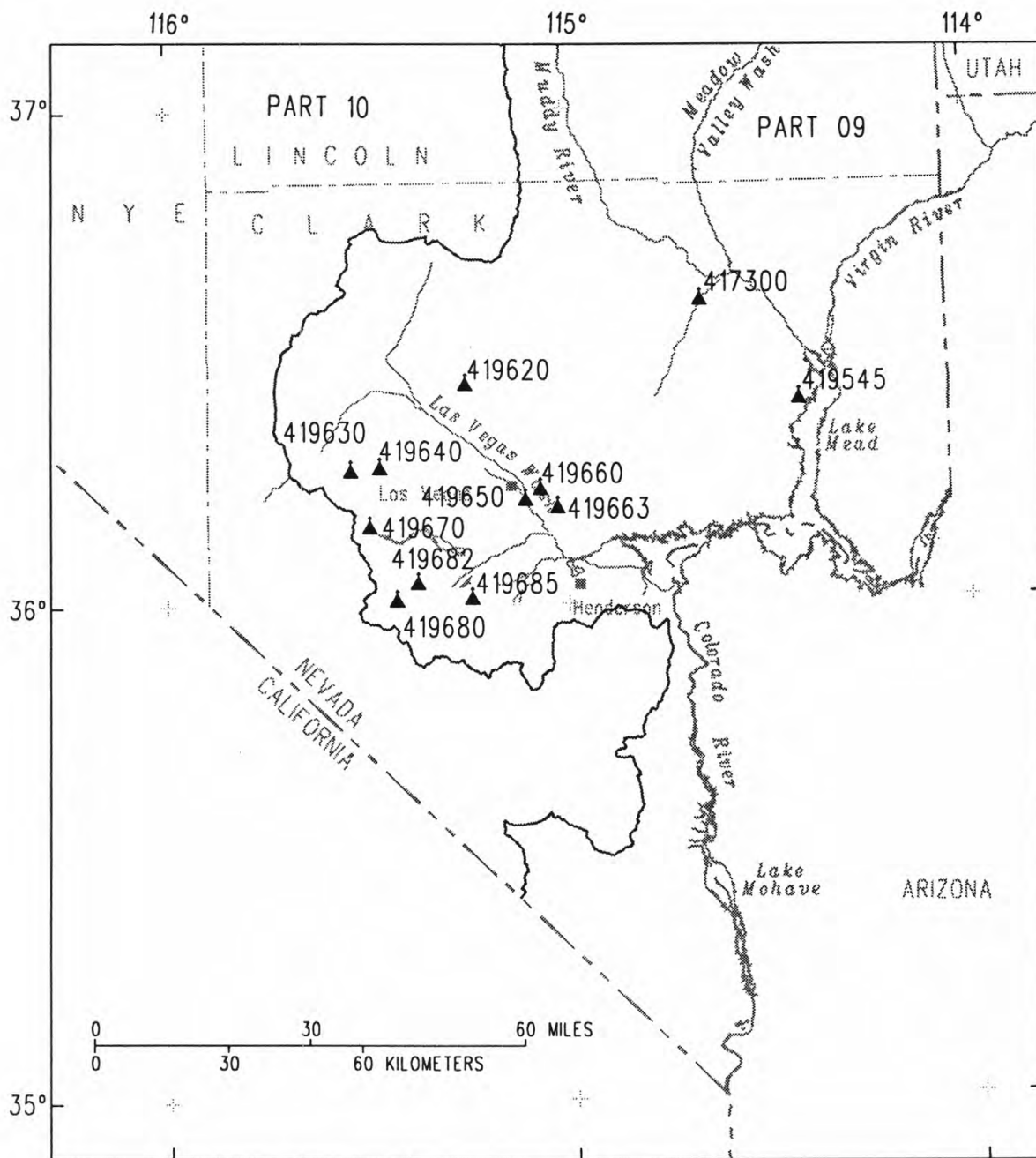


FIGURE 19.--Crest-stage partial-record stations listed in this report.



EXPLANATION

- BOUNDARY BETWEEN MAJOR PARTS OF THE STATE--Part numbers are as follows:
- 09 Colorado River basin
 - 10 Great Basin
- ▲ 419680 ACTIVE CREST-STAGE PARTIAL- RECORD STATION, WITH ABBREVIATED STATION NUMBER--Complete designation includes Part number as first two digits

FIGURE 20.--Crest-stage partial-record stations, southeastern Nevada

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Crest-Stage Partial-Record Stations

The following table contains annual maximum discharges at crest-stage stations during water year 1991. A crest-stage gage is a device that registers the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharges determined on the basis of current-meter or indirect measurements. The date of maximum discharge, which is usually determined by comparison with data for nearby continuous-record stations, weather records, or by local inquiry, is not always certain. Only the maximum discharge for the water year is given below. Information on peaks of lesser magnitude may have been obtained but is not published herein. "Period of record" indicates the water years for which the annual maximums have been determined.

Station name and number	Location and drainage area	Period of record	1991 Measurements			Period of record maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
Colorado River basin								
California Wash near Moapa, Nev. (09417300)	Lat 36°36'37", long 114°39'37", in SE1/4SE1/4 sec.24, T.15 S., R.65 E., Clark County, Hydrologic Unit 15010012, 1.6 miles northwest of Byron Interchange on Interstate Highway 15.	1987-91	7-07-91	35.47	E ⁷⁷⁰	6-10-90	35.68	1,400
Valley of Fire Wash near Overton, Nev. (09419545)	Lat 36°24'18", long 114°25'05", in SE1/4SW1/4 sec.32, T.17 S., R.68 E., Clark County, Hydrologic Unit 15010005, on Northshore Road, 1.1 miles west of Fire Bay.	1984, 1987-91	3-15-91	40.95	E ¹⁰⁰	8-16-90	55.65	4,940
Mormon Wells Wash near Las Vegas, Nev. (09419620)	Lat 36°26'45", long 115°15'10", in NE1/4SW1/4 sec.27, T.17 S., R.60 E., Clark County, Hydrologic Unit 15010015, above Mormon Wells Road crossing, 6 miles east of Corn Creek Springs Headquarters of U.S. Fish and Wildlife Service, and 20 miles north of Las Vegas. Drainage area is 115 mi ² .	1962-91	1991	--	*	8-84	--	480
Telephone Canyon near Charleston Park, Nev. (09419630)	Lat 36°16'20", long 115°32'30", in SE1/4NW1/4 sec.25, T.19 S., R.57 E., Clark County, Hydrologic Unit 15010015, at culvert on State Highway 157, and 5.8 miles east of Charleston Park. Drainage area is 7.20 mi ² .	1962-91	1991	--	*	12-06-66	7.78	2,500
Kyle Canyon near Charleston Park, Nev. (09419640)	Lat 36°16'40", long 115°28'10", in SE1/4SW1/4 sec.22, T.19 S., R.58 E., Clark County, Hydrologic Unit 15010015, 650 feet below culvert on State Highway 157, and 10 miles east of Charleston Park. Drainage area is 35.9 mi ² .	1961-91	1991	--	*	12-06-66	6.00	1,660
Las Vegas Wash at North Las Vegas, Nev. (09419650)	Lat 36°12'40", long 115°06'20", in SW1/4NE1/4 sec.13, T.20 S., R.61 E., Clark County, Hydrologic Unit 15010015, on right bank 100 feet upstream from State Highway 604, and 3.5 miles northeast of Fremont Street in Las Vegas. Estimated drainage area is 720 mi ² .	1963-78, 1982-91	2-28-91	--	E ⁵³	7-03-75	9.64	12,010
Las Vegas Wash tributary near Nellis Air Force Base, Nev. (09419660)	Lat 36°11'55", long 115°04'05", in NW1/4NE1/4 sec.8, T.20 S., R.62 E., Clark County, Hydrologic Unit 15010015, at culvert on Alt. State Highway 604, 1.5 miles southwest of Nellis Air Force Base. Drainage area is 18.1 mi ² .	1961-84, 1986-91	2-28-91	--	E ^{3.0}	10-09-72	4.73	618
Las Vegas Wash tributary south of Nellis Air Force Base, Nev. (09419663)	Lat 36°11'40", long 115°01'30", near section line common to secs. 22 and 23, T.20 S., R.62 E., Clark County, Hydrologic Unit 15010015, 0.1 mile south of Lake Mead Boulevard, and 3.7 miles south of main gate of Nellis Air Force Base. Drainage area is approximately 1.2 mi ² .	1963-81, 1983-91	1991	--	*	9-04-63	--	296

E Estimated.

* No evidence of any flow during the water year.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

359

Crest-Stage Partial-Record Stations--Continued

Station name and number	Location and drainage area	Period of record	1991 Measurements			Period of record maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
Colorado River basin--Continued								
Red Rock Wash near Blue Diamond, Nev. (09419670)	Lat 36°09'30", long 115°29'45", in NE1/4NW1/4 sec.4, T.21 S., R.58 E., Clark County, Hydrologic Unit 15010015, 0.2 mile southeast of Willow Spring, and 9.3 miles north west of Blue Diamond. Drainage area is 8.09 mi ² .	1962-91	1991	--	*	1-25-69	6.60	7,470
Cottonwood Valley near Blue Diamond, Nev. (09419680)	Lat 36°00'35", long 115°25'50", in NE1/4NW1/4 sec.25, T.22 S., R.58 E., Clark County, Hydrologic Unit 15010015, at culverts on Cottonwood Valley Road, 3 miles southwest of Blue Diamond. Drainage area is 18.3 mi ² .	1961-91	1991	--	*	1-25-69	8.53	1,100
Oak Creek Wash near Blue Diamond, Nev. (09419682)	Lat 36°02'41", long 115°22'38", in SW1/4SW1/4 sec.9, T.22 S., R.59 E., Clark County, Hydrologic Unit 15010015, on Blue Diamond Boulevard, and 1.4 miles east of Blue Diamond.	1987-91	9-06-91	--	E 20	8-16-90	3.42	820
Bird Spring Wash near Arden, Nev. (09419685)	Lat 36°00'44", long 115°14'33", in NW1/4NW1/4 sec.26, T.22 S., R.60 E., Clark County, Hydrologic Unit 15010015, 0.5 mile southwest of Arden.	1987-91	9-06-91	3.34	E 2.0	7-16-90	--	18
Central Region								
Dixie Valley tributary near Eastgate, Nev. (10244360)	Lat 39°17'30", long 117°59'00", in SE1/4 sec.36, T.17 N., R.35 E., Churchill County, Hydrologic Unit 16060001, at culvert on U.S. Highway 50, and 6 miles west of Eastgate. Drainage area is approximately 11 mi ² .	1961-91	9-91	4.01	E 1.0	8-61	15.00	1,480
Nelson Creek tributary near Currie, Nev. (10245080)	Lat 40°18'00", long 114°46'20", in SE1/4 sec.17, T.28 N., R.64 E., Elko County, Hydrologic Unit 16060008, at culvert on former U.S. Highway 93, and 2.5 miles NW of Currie. Drainage area is approximately 0.7 mi ² .	1961-78, 1980-87, 1990-91	1991	--	*	8-77	5.43	52
Illipah Creek tributary near Hamilton, Nev. (10245450)	Lat 39°21'35", long 115°21'05", in NW1/4NE1/4 sec.8, T.17 N., R.59 E., White Pine County, Hydrologic Unit 16060007, at culvert on U.S. Highway 50. 100 feet upstream from Illipah Creek, and 10.5 miles northeast of Hamilton. Drainage area is 5.47 mi ² .	1962-87, 1990-91	10-06-90	4.04	E 15.0	8-09-83	--	1,120
Saulsbury Wash near Tonopah, Nev. (10249180)	Lat 38°07'30", long 116°48'30", in SE1/4SW1/4 sec.10, T.3 N., R.46 E., Nye County, Hydrologic Unit 16060011, at culvert on U.S. Highway 6, and 23 miles east of Tonopah. Drainage area is approximately 56 mi ² .	1962-81, 1985, 1987-91	1991	--	*	3-27-69	4.56	340

E Estimated.

* No evidence of any flow during the water year.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Crest-Stage Partial-Record Stations--Continued

Station name and number	Location and drainage area	Period of record	1991 Measurements			Period of record maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
Carson River basin								
Brunswick Canyon near New Empire, Nev. (10311450)	Lat 39°10'20", long 119°41'10", in NW1/4NE1/4 sec.13, T.15 N., R.20 E., Carson City, Hydrologic Unit 16050202, 0.3 mile upstream from mouth, and 2.5 miles east of New Empire. Drainage area is 12.7 mi ² .	1966-78, 1980-91	7-91	3.38	E 36	2-19-86	--	180
Adrian Valley tributary near Wabuska, Nev. (10312012)	Lat 39°12'55", long 119°12'25", in NE1/4SE1/4 sec.31, T.16 N., R.25 E., Lyon County, Hydrologic Unit 16050202, at culvert on former Alt. U.S. Highway 95, and 4.8 miles northwest of Wabuska. Drainage area is 5.75 mi ² .	1968-81, 1987-91	9-91	4.31	E 1.0	7-90	10.28	320
Adrian Valley tributary near Weeks, Nev. (10312015)	Lat 39°13'45", long 119°13'40", in NW1/4NW1/4 sec.30, T.16 N., R.25 E., Lyon County, Hydrologic Unit 16050202, at abandoned culvert on former Alt. U.S. Highway 95, and 4.6 miles southeast of Weeks. Drainage area is 0.12 mi ² .	1968-81, 1987-91	9-91	5.08	E 0.5	5-10-87	--	8.0
Lahontan Reservoir tributary near Silver Springs, Nev. (10312050)	Lat 39°22'40", long 119°19'00", in SE1/4SW1/4 sec.32, T.18 N., R.24 E., Lyon County, Hydrologic Unit 16050202, at culvert on private road, 0.3 mile south of U.S. Highway 50, and 5.5 miles southwest of Silver Springs. Drainage area is 4.39 mi ² .	1962-78, 1981-91	1991	--	*	8-05-74	--	920
Humboldt River basin								
Willow Creek tributary near Jiggs, Nev. (10319470)	Lat 40°30'47", long 115°39'42", in SW1/4NW1/4 sec.3, T.30 N., R.56 E., Elko County, Hydrologic Unit 16040103, at culvert on State Highway 228, and 6 miles north of Jiggs. Drainage area is 0.82 mi ² .	1962-78, 1982-91	4-91	--	E 5.0	3-83	3.80	15.0
Cole Creek near Palisade, Nev. (10322980)	Lat 40°35'05", long 116°08'55", in SE1/4NE1/4 sec.7, T.31 N., R.52 E., Eureka County, Hydrologic Unit 16040104, at culvert on State Highway 278, and 3.2 miles southeast of Palisade. Drainage area is 11.4 mi ² .	1962-83, 1985-91	5-91	--	E 4.0	6-83	--	1,090
Humboldt River tributary near Bliss, Nev. (10328240)	Lat 40°59'55", long 117°39'30", in SE1/4NE1/4 sec.14, T.36 N., R.38 E., Humboldt County, Hydrologic Unit 16040108, at culvert on Interstate Highway 80, and 5 miles northeast of Winnemucca. Drainage area is approximately 1.90 mi ² .	1968-78, 1980-91	1991	--	*	7-18-73	5.96	113
Humboldt Slough tributary near Bradys Hot Springs, Nev. (10336080)	Lat 39°51'05", long 118°55'40", in NE1/4NE1/4 sec.22, T.23 N., R.27 E., Churchill County, Hydrologic Unit 16040108, at culvert on Interstate Highway 80 and Alt. U.S. Highway 95, and 6.5 miles northeast of Bradys Hot Springs. Drainage area is 11.0 mi ² .	1962-81, 1984-85, 1987-91	1991	--	*	8-84	10.29	710

E Estimated.

* No evidence of any flow during the water year.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

361

Crest-Stage Partial-Record Stations--Continued

Station name and number	Location and drainage area	Period of record	1991 Measurements			Period of record maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
Black Rock Desert basin								
Eagle Creek near Orovada, Nev. (10353520)	Lat 41°39'05", long 117°46'40", in SW1/4NE1/4 sec.35, T.44 N., R.37 E., Humboldt County, Hydrologic Unit 16040201, at culvert on U.S. Highway 95, and 5.6 miles north of Orovada. Drainage area is 3.44 mi ² .	1962-78, 1981-91	1-15-91	--	E 0.1	6-84	6.26	10
Squaw Creek near Gerlach, Nev. (10353795)	Lat 40°47'52", long 119°30'54", in SE1/4SW1/4 sec.29, T.34 N., R.22 E., Washoe County, Hydrologic Unit 16040203, 1.5 miles southeast of Fisk Ranch and 15 miles west of Gerlach. Drainage area is 74.0 mi ² .	1989-91	3-13-91	--	E 4.2	2-24-89	12.72	1,450
Buffalo Creek near Gerlach, Nev. (10353798)	Lat 40°37'40", long 119°27'05", in NE1/4NE1/4 sec.25, T.32 N., R.19 E., Washoe County, Hydrologic Unit 16040203, 2.5 miles upstream of old Heller Ranch and 31 miles southwest of Gerlach. Drainage area is 206 mi ² .	1989-91	3-13-91	14.66	E 78	2-24-89	16.30	850

E Estimated.

* No evidence of any flow during the water year.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Miscellaneous Sites

The following table contains streamflow data for sites that were measured during the water year.

Stream	Tributary to	Location	Period of record (water years)	Measurements	
				Date	Discharge (ft ³ /s)
Great Salt Lake basin					
Hendrys Creek near Baker, Nev.	Snake Valley	Lat 39°12'38", long 114°04'44", in SE1/4NE1/4 sec.34, T.16 N., R.70 E., White Pine County, Hydrologic Unit 16020301, about 1.7 mi west of Nevada-Utah border, and about 13.8 mi northeast from Baker.	1991	7-17-91	2.57
Lexington Creek near Baker, Nev.	Snake Valley	Lat 38°51'29", long 114°07'36", in SE1/4NW1/4 sec.4, T.11 N., R.70 E., White Pine County, Hydrologic Unit 16020301, about 7.7 mi southwest of Garrison, Utah, and about 10.6 mi south of Baker.	1991	7-17-91	0
Baker Creek at Narrows, near Baker, Nev. (10243240)	Snake Valley	Lat 38°59'25", long 114°13'04", in NE1/4NW1/4 sec.22, T.13 N., R.69 E., White Pine County, Hydrologic Unit 16020301, about 1.1 mi south of Lehman Caves, and about 5.5 mi southwest of Baker.	1991	7-17-91	14.6
Lehman Creek near Baker, Nev. (10243260)	Snake Valley	Lat 39°00'42", long 114°12'50", in NW1/4SE1/4 sec.10, T.13 N., R.69 E., White Pine County, Hydrologic Unit 16020301, about 0.5 mi northeast from Lehman Caves, and about 4.8 mi west from Baker. Drainage area is 11 mi ² , approximately.	1948-55 ⁺ , 1977, 1987-88, 1990-91	7-17-91	10.4
Big Spring Creek at Big Springs Ranch near Garrison, Ut.	Snake Valley	Lat 38°41'57", long 114°07'48", in NW1/4NE1/4 sec.33, T.10 N., R.70 E., White Pine County, Hydrologic Unit 16020301, about 16 mi north of White Pine and Lander County Line, and about 17.5 mi southwest of Garrison.	1991	7-17-91	7.68
Central Region					
Odgers Creek near McGill, Nev. (10243745)	Spring Valley	Lat 39°24'08", long 114°31'40", in NE1/4NE1/4 sec.27, T.18 N., R.66 E., White Pine County, Hydrologic Unit 16060008, at canyon mouth, about 1.2 mi west of State Highway 893, and about 13.4 mi east of McGill.	1973-80, 1991	7-16-91	2.51
Bassett Creek near McGill, Nev. (10243750)	Spring Valley	Lat 39°26'31", long 114°32'00", in SW1/4NE1/4 sec.10, T.18 N., R.66 E., White Pine County, Hydrologic Unit 16060008, about 1.8 mi west of State Highway 893, and about 13.0 mi northeast of McGill.	1968-80, 1991	7-16-91	4.65
Kalamazoo Creek near McGill, Nev. (10243800)	Spring Valley	Lat 39°33'48", long 114°33'13", in SE1/4SW1/4 sec.28, T.20 N., R.66 E., White Pine County, Hydrologic Unit 16060008, at canyon mouth, about 1.2 mi west of State Highway 893 and about 17 mi northeast of McGill.	1983-85, 1991	7-12-91	4.42
McCoy Creek near McGill, Nev.	Spring Valley	Lat 39°22'27", long 114°31'39", in NE1/4NE1/4 sec.3, T.17 N., R.66 E., White Pine County, Hydrologic Unit 16060008, at canyon mouth, about 1.7 mi west of State Highway 893, and about 13.8 mi southeast of McGill.	1991	7-16-91	7.58

⁺ Operated as a continuous record station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

363

Miscellaneous Sites--Continued

Stream	Tributary to	Location	Period of record (water years)	Measurements	
				Date	Discharge (ft ³ /s)
Central Region--Continued					
Taft Creek near McGill, Nev.	Spring Valley	Lat 39°20'29", long 114°31'46", in NE1/4NE1/4 sec.15, T.17 N., R.66 E., White Pine County, Hydrologic Unit 16060008, about 2.3 mi south of McCoy Creek, about 2.4 mi west of State Highway 893, and about 14 mi southeast of McGill.	1991	7-16-91	2.51
Cooper Canyon Creek near Ely, Nev.	Spring Valley	Lat 39°06'02", long 114°34'15", in SE1/4SW1/4 sec.4, T.14 N., R.66 E., White Pine County, Hydrologic Unit 16060008, about 2.2 mi west of State Highway 893, about 5.2 mi north of junction for U.S. Highways 6, 50 and 93, and about 18.4 mi southeast of Ely.	1991	7-16-91	0
Willard Creek near Baker, Nev.	Spring Valley	Lat 39°01'45", long 114°22'36", in SW1/4SE1/4 sec.31, T.14 N., R.68 E., White Pine County, Hydrologic Unit 16060008, about 2.6 mi southeast of Hogum, about 10.8 mi east of junction for U.S. Highways 6, 50 and 93, and about 14.6 mi west of Baker.	1991	7-18-91	0.46
Water Canyon Creek near Nyala, Nev.	Railroad Valley	Lat 38°06'31", long 115°50'28", in NW1/4NW1/4 sec.19, T.3 N., R.55 E., Nye County, Hydrologic Unit 16060012, about 4 mi north of Nye and Lincoln County line, about 9.8 mi southeast from Nyala, and about 35 mi east of Warm Springs.	1991	7-19-91	0
Willow Creek near Nyala, Nev.	Railroad Valley	Lat 38°12'49", long 115°43'59", in SE1/4SE1/4 sec.12, T.4 N., R.55 E., Nye County, Hydrologic Unit 16060012, about 2.4 mi south of Nyala and about 35 mi east of Warm Springs.	1991	7-19-91	0
Carson River basin					
Luther Creek near Fredericksburg, Calif. (10310330)	West Fork Carson River	Lat 38°51'26", long 119°48'32", in SW1/4SE1/4 sec.35, T.12 N., R.19 E., Alpine County, Hydrologic Unit 16050201, about 2.4 mi northwest of Fredericksburg. Drainage area is 4.42 mi ² .	1976-77 1981-83 1989-91	9- 9-91	1.16
Jobs Canyon Creek near Minden, Nev. (10310360)	West Fork Carson River	Lat 38°53'26", long 119°50'20", in SW1/4NW1/4 sec.22, T.12 N. R.19 E., Douglas County, Hydrologic Unit 16050201, about 3.6 mi southwest of Centerville. Drainage area is 2.97 mi ² .	1976 1981-83 1989-91	3-28-91 9- 9-91	1.02 0.51
Sheridan Creek near Minden, Nev. (10310370)	West Fork Carson River	Lat 38°53'46", long 119°50'49", in SE1/4SE1/4 sec.16, T.12 N., R.19 E., Douglas County, Hydrologic Unit 16050201, about 3.8 mi west of Centerville. Drainage area is 0.23 mi ² .	1981-83 1989-91	3-28-91 9- 9-91	0.76 0.54
Mott Canyon Creek near Minden, Nev. (10310385)	West Fork Carson River	Lat 38°55'44", long 119°50'57", in NW1/4SE1/4 sec.4, T.12 N., R.19 E., Douglas County, Hydrologic Unit 16050201, 0.8 mi upstream from Foothill Road and 5.5 mi southwest of Minden. Drainage area is 2.0 mi ² , approximately.	1969 1971-73 1976-77 1981-83 1987-91	3-28-91 9- 9-91	1.89 1.49

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Miscellaneous Sites--Continued

Stream	Tributary to	Location	Period of record (water years)	Measurements	
				Date	Discharge (ft ³ /s)
Carson River basin--Continued					
Genoa Canyon Creek at Genoa, Nev. (10310410)	Carson River	Lat 39°00'02", long 119°51'00", in SE1/4SW1/4 sec.9, T.13 N., R.19 E., Douglas County, Hydrologic Unit 16050201, 0.5 mi southwest of Genoa. Drainage area is 2.24 mi ² .	1969,	3-28-91	1.01
			1972,	9- 9-91	0.42
			1976-77		
			1981-82		
			1988-91		
Sierra Canyon Creek near Genoa, Nev. (10310415)	Carson River	Lat 39°01'01", long 119°50'52", in NW1/4SE1/4 sec.4, T.13 N., R.19 E., Douglas County, Hydrologic Unit 16050201, 0.9 mi north of Genoa. Drainage area is 3.15 mi ² .	1969,	3-28-91	0.91
			1972,	9- 9-91	0.45
			1976-77		
			1981-83		
			1989-91		
Humboldt River basin					
Tenmile Creek above South Fork Humboldt River near Elko, Nev. (10319950)	South Fork Humboldt River	Lat 40°41'17", long 115°42'33", in SW1/4NW1/4 sec.4, T.32 N., R.55 E., Elko County, Hydrologic Unit 16040103, about 1000 ft upstream of confluence of South Fork Humboldt River, 0.5 mi northwest of South Fork Dam, and 10 mi south of Elko.	1990-91 ⁺	10-18-90	2.49
				12- 5-90	5.66
				2-25-91	4.56
				4- 8-91	3.54
				5-16-91	4.22
				6-24-91	0.38
				8- 5-91	0.38
				9-10-91	1.74
				Pyramid and Winnemucca Lakes basin	
Truckee River at Tahoe City, Calif. (10337500)	Pyramid Lake	Lat 39°09'59", long 120°08'36", in NE1/4NW1/4 sec.7, T.15 N., R.17 E., Placer County, Hydrologic Unit 16050102, about 500 ft downstream of Lake Tahoe at Tahoe City. Drainage area is 507 mi ² .	1895-96,	11-19-90	0.10
			1900-91 ⁺		
Truckee River at Rampart, near Tahoe City, Calif. (390954120103700)	Pyramid Lake	Lat 39°09'54", long 120°10'37", in SW1/4NE1/4 sec.11, T.15 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 2 mi downstream of Lake Tahoe and about 2.2 mi southwest of Tahoe City.	1991	11-19-90	0.68
Truckee River above Bear Creek, near Alpine Meadows, Calif. (391108120113900)	Pyramid Lake	Lat 39°11'08", long 120°11'39", in SW1/4SW1/4 sec.34, T.16 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 1.7 mi southeast of Squaw Valley, and about 3.1 mi northwest of Tahoe City.	1991	11-19-90	1.01
Bear Creek at mouth, near Alpine Meadows, Calif. (391125120114900)	Truckee River	Lat 39°11'25", long 120°11'49", in NW1/4SW1/4 sec.34, T.16 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 1.5 mi southeast of Squaw Valley, and about 3.3 mi northwest of Tahoe City.	1991	11-19-90	0.45
Truckee River at Highway 89 Bridge, near Squaw Valley, Calif. (391146120115000)	Pyramid Lake	Lat 39°11'46", long 120°11'50", in NE1/4NE1/4 sec.33, T.16 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 1.1 mi southeast of Squaw Valley, and about 3.5 mi northwest of Tahoe City.	1991	11-19-90	2.01
Truckee River above Squaw Creek, near Squaw Valley, Calif. (391240120115000)	Pyramid Lake	Lat 39°12'40", long 120°11'50", in NW1/4NW1/4 sec.27, T.16 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 1 mi northeast of Squaw Valley and about 4.2 mi northwest of Tahoe City.	1991	11-19-90	2.26

⁺ Operated as a continuous record station.

Miscellaneous Sites--Continued

Stream	Tributary to	Location	Period of record (water years)	Measurements	
				Date	Discharge (ft ³ /s)
Pyramid and Winnemucca Lakes basin--Continued					
Squaw Creek at Highway 89, near Squaw Valley, Calif. (10337855)	Truckee River	Lat 39°12'42", long 120°11'57", in NE1/4NE1/4 sec.28, T.16 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 1 mi northeast of Squaw Valley and about 4.2 mi northwest of Tahoe City.	1991	11-19-90	0.47
Deer Creek 200 ft above mouth, near Squaw Valley, Calif. (391319120115500)	Truckee River	Lat 39°13'19", long 120°11'55", in SE1/4NE1/4 sec.21, T.16 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 1.3 mi northeast of Squaw Valley, and about 4.7 mi northwest of Tahoe City.	1991	11-19-90	0.89
Silver Creek at Highway 89, near Squaw Valley, Calif. (391326120120900)	Truckee River	Lat 39°13'26", long 120°12'09", in SW1/4NE1/4 sec.21, T.16 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 1.4 mi northeast of Squaw Valley and about 4.9 mi northwest of Tahoe City.	1991	11-19-90	0.15
Truckee River tributary 0.4 mi upstream Pole Creek, near Squaw Valley, Calif. (391352120121300)	Pyramid Lake	Lat 39°13'52", long 120°12'13", in SW1/4SE1/4 sec.16, T.16 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 1.9 mi northeast of Squaw Valley, and about 5.4 mi northwest of Tahoe City.	1991	11-19-90	^E 0.04
Pole Creek at mouth, near Squaw Valley, Calif. (391402120122100)	Truckee River	Lat 39°14'02", long 120°12'21", in SW1/4NE1/4 sec.16, T.16 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 2.1 mi northeast of Squaw Valley, and about 5.7 mi northwest of Tahoe City.	1991	11-19-90	0.26
Deep Creek above mouth, near Truckee, Calif. (391529120123300)	Truckee River	Lat 39°15'29", long 120°12'33", in SE1/4SW1/4 sec.4, T.16 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 400 ft upstream from Truckee River, and about 5 mi southwest of Truckee.	1991	11-19-90	0.57
Truckee River above Rocky Wash, near Truckee, Calif. (391551120123200)	Pyramid Lake	Lat 39°15'51", long 120°12'32", in SE1/4NW1/4 sec.4, T.16 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 500 ft upstream from Rocky Wash, and about 4.6 mi southwest of Truckee.	1991	11-19-90	5.7
Rocky Wash at mouth, near Truckee, Calif. (391557120123200)	Truckee River	Lat 39°15'57", long 120°12'32", in SE1/4NW1/4 sec.4, T.16 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 200 ft upstream from Truckee River, and about 4.5 mi southwest of Truckee.	1991	11-19-90	0.08
Cabin Creek at Highway 89, near Truckee, Calif. (391642120122100)	Truckee River	Lat 39°16'42", long 120°12'21", in NW1/4SE1/4 sec.33, T.17 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 200 ft upstream from Truckee River, and about 3.6 mi southwest of Truckee.	1991	11-19-90	0.14
Truckee River tributary near Truckee, Calif. (10337900)	Truckee River	Lat 39°16'48", long 120°12'21", in SW1/4NE1/4 sec.33, T.17 N., R.16 E., Placer County, Hydrologic Unit 16050102, about 200 ft upstream from Truckee River, and about 3.5 mi southwest of Truckee.	1991	11-19-90	0.08
Truckee River above Donner Creek, near Truckee, Calif. (10338010)	Pyramid Lake	Lat 39°18'58", long 120°12'00", in SE1/4SE1/4 sec.16, T.17 N., R.16 E., Nevada County, Hydrologic Unit 16050102, about 0.4 mi upstream from Donner Creek, and about 1.2 mi southwest of Truckee.	1991	11-19-90	5.80

^E Estimated.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Miscellaneous Sites--Continued

Stream	Tributary to	Location	Period of record (water years)	Measurements	
				Date	Discharge (ft ³ /s)
Pyramid and Winnemucca Lakes basin--Continued					
Donner Creek at mouth, near Truckee, Calif. (10339003)	Truckee River	Lat 39°18'59", long 120°12'02", in SE1/4SE1/4 sec.16, T.17 N., R.16 E., Nevada County, Hydrologic Unit 16050102, about 50 ft upstream from Truckee River, and about 1.2 mi southwest of Truckee.	1991	11-19-90	3.89
Truckee River at Highway 267, at Truckee, Calif. (10339010)	Pyramid Lake	Lat 39°19'36", long 120°11'00", in NE1/4NE1/4 sec.15, T.17 N., R.16 E., Nevada County, Hydrologic Unit 16050102, at California State Highway 267 bridge at Truckee.	1991	11-19-90	10.4
Truckee River above Trout Creek, near Truckee, Calif. (391950120100200)	Pyramid Lake	Lat 39°19'50", long 120°10'02", in SW1/4SE1/4 sec.11, T.17 N., R.16 E., Nevada County, Hydrologic Unit 16050102, about 0.2 mi upstream from Trout Creek, and about 0.9 mi east of Truckee.	1991	11-19-90	14.0
Trout Creek at mouth, near Truckee, Calif. (391956120095200)	Truckee River	Lat 39°19'56", long 120°09'52", in SE1/4SE1/4 sec.16, T.17 N., R.16 E., Nevada County, Hydrologic Unit 16050102, about 50 ft upstream from Truckee River, and about 1.0 mi northeast of Truckee.	1991	11-19-90	0.02
Truckee River at Polaris, near Truckee, Calif. (392018120080300)	Pyramid Lake	Lat 39°20'18", long 120°08'03", in SE1/4NW1/4 sec.7, T.17 N., R.17 E., Nevada County, Hydrologic Unit 16050102, at Polaris, about 0.2 mi south of old U.S. Highway 40, and about 2.7 mi northeast of Truckee.	1991	11-19-90	17.7
Martis Creek near mouth, at Truckee River, near Truckee, Calif. (10339405)	Truckee River	Lat 39°20'56", long 120°07'02", in NE1/4SW1/4 sec.5, T.17 N., R.17 E., Nevada County, Hydrologic Unit 16050102, about 350 ft upstream from Truckee River, and about 3.8 mi northeast from Truckee.	1991	11-19-90	5.67
Truckee River at Old U.S. Highway 40 Bridge, below Truckee, Calif. (10339498)	Pyramid Lake	Lat 39°21'11", long 120°07'17", in SW1/4NW1/4 sec.5, T.17 N., R.17 E., Nevada County, Hydrologic Unit 16050102, at upstream side of old U.S. Highway 40 bridge, and about 3.5 mi northeast of Truckee.	1991	11-19-90	27.5
Union Valley Creek at mouth, near Truckee, Calif. (392133120064000)	Truckee River	Lat 39°21'33", long 120°07'17", in NW1/4NE1/4 sec.5, T.17 N., R.17 E., Nevada County, Hydrologic Unit 16050102, about 300 ft upstream from Truckee River, and about 4.2 mi northeast of Truckee.	1991	11-19-90	0.02
Juniper Creek at mouth, near Hirschdale, Calif. (392152120041700)	Truckee River	Lat 39°21'52", long 120°04'17", in NW1/4SE1/4 sec.34, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, about 400 ft upstream from Truckee River, and about 0.4 mi southeast of Hirschdale.	1991	11-19-90	0.36
Truckee River below Juniper Creek, near Hirschdale, Calif. (892156120041400)	Pyramid Lake	Lat 39°21'56", long 120°04'14", in NE1/4SE1/4 sec.34, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, about 300 ft downstream from Juniper Creek, and about 0.4 mi southeast of Hirschdale.	1991	11-19-90	45.6
Prosser Creek at mouth, near Truckee, Calif. (392213120065800)	Truckee River	Lat 39°22'13", long 120°06'58", in SE1/4NW1/4 sec.32, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, about 200 ft upstream from Truckee River and about 4.6 mi northeast of Truckee.	1991	11-19-90	9.53

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

367

Miscellaneous Sites--Continued

Stream	Tributary to	Location	Period of record (water years)	Measurements	
				Date	Discharge (ft ³ /s)
Pyramid and Winnemucca Lakes basin--Continued					
Truckee River below Prosser Creek, near Truckee, Calif. (392215120065600)	Pyramid Lake	Lat 39°22'15", long 120°06'56", in NE1/4NW1/4 sec.32, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, about 300 ft downstream from Prosser Creek, and about 4.7 mi northeast of Truckee.	1991	11-20-90	44.8
Gray Creek at mouth, near Floriston, Calif. (392224120014600)	Truckee River	Lat 39°22'24", long 120°01'46", in NE1/4NE1/4 sec.36, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, about 400 ft upstream from Truckee River, and about 1.6 mi southwest of Floriston.	1991	11-19-90	5.24
Truckee River above Bronco Creek, near Floriston, Calif. (392257120011100)	Pyramid Lake	Lat 39°22'57", long 120°01'11", in SE1/4NW1/4 sec.31, T.18 N., R.18 E., Nevada County, Hydrologic Unit 16050102, about 400 ft upstream from Bronco Creek, and about 0.9 mi south of Floriston.	1991	11-20-90	48.1
Bronco Creek at mouth, near Floriston, Calif. (392303120011000)	Truckee River	Lat 39°23'03", long 120°01'10", in SE1/4NW1/4 sec.31, T.18 N., R.18 E., Nevada County, Hydrologic Unit 16050102, about 300 ft upstream from Truckee River, and about 0.7 mi south of Floriston.	1991	11-20-90	3.74
Truckee River below Little Truckee River, near Truckee, Calif. (392304120053400)	Pyramid Lake	Lat 39°23'04", long 120°05'34", in SW1/4NE1/4 sec.28, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, about 200 ft downstream from Little Truckee River, about 0.4 mi south of Boca Reservoir, and about 6.3 mi northeast of Truckee.	1991	11-19-90	41.8
Truckee River at Floriston Dam, near Floriston, Calif. (10345909)	Pyramid Lake	Lat 39°23'48", long 120°01'24", in SE1/4NW1/4 sec.30, T.18 N., R.18 E., Nevada County, Hydrologic Unit 16050102, at Floriston Dam, about 0.2 mi northwest of Floriston.	1991	11-20-90	51.1
Canyon 24 at mouth, near Floriston, Calif. (392555120014800)	Truckee River	Lat 39°25'55", long 120°01'48", in NE1/4NE1/4 sec.12, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, about 100 ft upstream from Truckee River, about 0.8 mi north of Farad Powerhouse, and about 2.6 mi northwest of Floriston.	1991	11-20-90	0.04
Mystic Canyon Creek at mouth, near Floriston, Calif. (392556120013000)	Truckee River	Lat 39°25'56", long 120°01'30", in SW1/4SW1/4 sec.7, T.18 N., R.18 E., Nevada County, Hydrologic Unit 16050102, about 200 ft upstream from Truckee River, about 0.9 mi northeast of Farad Powerhouse, and about 2.6 mi northwest of Floriston.	1991	11-20-90	0.35
Puny Dip Canyon at mouth, near Floriston, Calif. (392639120002600)	Truckee River	Lat 39°26'39", long 120°00'26", in NE1/4NE1/4 sec.7, T.19 N., R.18 E., Nevada County, Hydrologic Unit 16050102, about 150 ft upstream from Truckee River, and about 3.5 mi northeast of Floriston.	1991	11-20-90	0.29
Truckee River above Fleish Power Diversion, near Verdi, Nev. (392706120001500)	Pyramid Lake	Lat 39°27'06", long 120°00'15", in NE1/4SE1/4 sec.6, T.18 N., R.18 E., Nevada County, Hydrologic Unit 16050102, about 0.4 mi upstream from Deep Canyon Creek, and about 4.5 mi southwest of Verdi.	1991	11-20-90	61.9
Deep Canyon Creek at mouth, near Verdi, Nev. (392724120002300)	Truckee River	Lat 39°27'24", long 120°00'23", in NE1/4NE1/4 sec.6, T.18 N., R.18 E., Nevada County, Hydrologic Unit 16050102, about 100 ft upstream from Truckee River, and about 4.8 mi southwest of Verdi.	1991	11-20-90	0.77

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Miscellaneous Sites--Continued

Stream	Tributary to	Location	Period of record (water years)	Measurements	
				Date	Discharge (ft ³ /s)
Pyramid and Winnemucca Lakes basin--Continued					
McCrays Canyon near Carson City, Nev. (10348480)	Franktown Creek	Lat 39°12'13", long 119°52'48", in SW1/4SW1/4 sec.32, T.16 N., R.19 E., Washoe County, Hydrologic Unit 16050101, 0.5 mi upstream from mouth and 6.5 mi northwest of Carson City. Drainage area is 0.64 mi ² .	1974-81, 1985-91	10-30-90	0.08
Truckee River at Marble Bluff Dam near Nixon, Nev. (10351775)	Pyramid Lake	Lat 39°51'20", long 119°23'32", in NW1/4NW1/4 sec.22, T.23 N., R.23 E., Washoe County, Hydrologic Unit 16050103, about 3 mi northwest of Nixon. Drainage area is 2,730 mi ² .	1991	7-31-91	8.61

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Water-quality partial-record stations are sites where chemical-quality, biological, or sediment data are collected systematically over a period of years for use in hydrologic analyses. These data are usually collected less than quarterly. Locations of following sites are shown in Figures 14 and 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

STATION	NUMBER	STATION NAME	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)
09418670		MEADOW VALLEY WASH BELOW LYMAN CROSSING	12-09-90	1200	--	1190
09418685		MEADOW VALLEY WASH BELOW HOYA SIDING NEAR ROX, NV	03-01-91	1730	E0.30	815
09418690		MEADOW VALLEY WASH 1.1 MILES ABOVE ROX, NV	03-01-91	1600	--	18500
09418692		MEADOW VALLEY WASH SEEP WEST SIDE RR .6 MI ABOVE ROX	03-01-91	1615	--	10200
09418693		MEADOW VALLEY WASH ABOVE ROX, NV	12-05-90	1200	--	1420
			03-01-91	1630	--	2510
09423050		COLORADO R LAGOON NORTH OF RIVIERA, AZ	11-19-90	1610	--	940
09423060		COLORADO R BL LAGOON NORTH OF RIVIERA, AZ	11-19-90	1430	--	910

STATION	NUMBER	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
09418670		--	--	23.5	--	--	--	--	--	--	--
09418685		--	--	--	--	--	--	--	--	--	--
09418690		--	--	--	--	--	--	--	--	--	--
09418692		--	--	--	2400	260	430	1700	15	210	4700
09418693		--	--	23.5	--	--	--	--	--	--	--
		--	--	--	670	120	90	330	6	40	950
09423050		8.2	17.0	18.0	300	71	30	95	2	4.6	250
09423060		8.1	23.0	17.5	290	70	28	91	2	3.8	260

STATION	NUMBER	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
09418670		--	--	--	628	--	--	--	--	--	--
09418685		--	--	--	487	--	--	--	--	--	--
09418690		--	--	--	15500	--	--	--	--	--	--
09418692	1000	--	2.5	31	8500	8620	11.6	--	--	--	--
09418693		--	--	--	2570	--	--	--	--	--	--
	200	--	1.6	28	1750	1900	2.38	--	--	--	--
09423050	73	--	0.50	5.8	--	610	0.83	<0.010	<0.100	0.130	<0.010
09423060	72	--	0.50	8.8	--	614	0.84	<0.010	0.200	0.040	<0.010

E: ESTIMATED

LOW-FLOW INVESTIGATION OF THE TRUCKEE RIVER AND SELECTED TRIBUTARIES

Miscellaneous sites measured to evaluate gains and losses of streamflow along the river. The estimated water-quality values indicate concentration of anions in unfiltered sample water.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

STATION NUMBER	STATION NAME
10337500	TRUCKEE RIVER AT TAHOE CITY, CA
390954120103700	TRUCKEE RIVER AT RAMPART, NEAR TAHOE CITY, CA
391108120113900	TRUCKEE RIVER ABOVE BEAR CREEK, NEAR ALPINE MEADOWS, CA
391125120114900	BEAR CREEK AT MOUTH, NEAR ALPINE MEADOWS, CA
391146120115000	TRUCKEE RIVER AT HIGHWAY 89 BRIDGE, NEAR SQUAW VALLEY, CA
391240120115000	TRUCKEE RIVER ABOVE SQUAW CREEK, NEAR SQUAW VALLEY, CA
10337855	SQUAW CREEK AT HIGHWAY 89, NEAR SQUAW VALLEY, CA
391319120115500	DEER CREEK 200 FEET ABOVE MOUTH, NEAR SQUAW VALLEY, CA
391326120120900	SILVER CREEK AT HIGHWAY 89, NEAR SQUAW VALLEY, CA
391352120121300	TRUCKEE RIVER TRIBUTARY .4 MILE UPSTREAM POLE CREEK, NEAR SQUAW VALLEY, CA
391402120122100	POLE CREEK AT MOUTH, NEAR SQUAW VALLEY, CA
391513120123400	UNNAMED TRIBUTARY RIGHT BANK UPSTREAM DEEP CREEK, NEAR TRUCKEE, CA
391529120123300	DEEP CREEK ABOVE MOUTH, NEAR TRUCKEE, CA
391551120123200	TRUCKEE RIVER ABOVE ROCKY WASH, NEAR TRUCKEE, CA
391557120123200	ROCKY WASH AT MOUTH, NEAR TRUCKEE, CA
391642120122100	CABIN CREEK AT HIGHWAY 89, NEAR TRUCKEE, CA
10337900	TRUCKEE RIVER TRIBUTARY NEAR TRUCKEE, CA
10338010	TRUCKEE RIVER ABOVE DONNER CREEK, NEAR TRUCKEE, CA
10339003	DONNER CREEK AT MOUTH, NEAR TRUCKEE, CA
10339010	TRUCKEE RIVER AT HIGHWAY 267, AT TRUCKEE, CA
391950120100200	TRUCKEE RIVER ABOVE TROUT CREEK, NEAR TRUCKEE, CA
391956120095200	TROUT CREEK AT MOUTH, NEAR TRUCKEE, CA
392018120080300	TRUCKEE RIVER AT POLARIS, NEAR TRUCKEE, CA
10339405	MARTIS CREEK NEAR MOUTH, AT TRUCKEE RIVER, NEAR TRUCKEE, CA
10339498	TRUCKEE RIVER AT OLD US 40 BRIDGE, BELOW TRUCKEE, CA
392133120064000	UNION VALLEY CREEK AT MOUTH, NEAR TRUCKEE, CA
392152120041700	JUNIPER CREEK AT MOUTH, NEAR HIRSHDALE, CA
392156120041400	TRUCKEE RIVER BELOW JUNIPER CREEK, NEAR HIRSCHDALE, CA
392213120065800	PROSSER CREEK AT MOUTH, NEAR TRUCKEE, CA
392215120065600	TRUCKEE RIVER BELOW PROSSER CREEK, NEAR TRUCKEE, CA
392224120014600	GRAY CREEK AT MOUTH, NEAR FLORISTON, CA
392257120011100	TRUCKEE RIVER ABOVE BRONCO CREEK, NEAR FLORISTON, CA
392303120011000	BRONCO CREEK AT MOUTH, NEAR FLORISTON, CA
392304120053400	TRUCKEE RIVER BELOW LITTLE TRUCKEE RIVER, NEAR TRUCKEE, CA
10345909	TRUCKEE RIVER AT FLORISTON DAM, NEAR FLORISTON, CA
392555120014800	CANYON 24 AT MOUTH, NEAR FLORISTON, CA
392556120013000	MYSTIC CANYON CREEK AT MOUTH, NEAR FLORISTON, CA
392639120002600	PUNY DIP CANYON AT MOUTH, NEAR FLORISTON, CA
392706120001500	TRUCKEE RIVER ABOVE FLEISH POWER DIVERSION, NEAR VERDI, NV
392724120002300	DEEP CANYON CREEK AT MOUTH, NEAR VERDI, NV

LOW-FLOW INVESTIGATION OF THE TRUCKEE RIVER AND SELECTED TRIBUTARIES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	SULFATE (MG/L AS SO4)	CHLO- RIDE, (MG/L AS CL)	FLUO- RIDE, (MG/L AS F)
11-19-90	1400	E0.10	122	--	4.5	E 3.1	E 5.2	E0.1
11-19-90	1400	0.68	140	--	3.5	E 1.9	E12	E .1
11-19-90	1300	1.0	135	--	4.0	E 1.4	E13	E .1
11-19-90	1100	0.45	99	--	3.0	E 1.6	E 2.4	E .1
11-19-90	1300	2.0	123	--	3.5	E 1.8	E11	E .1
11-19-90	1100	2.3	135	--	4.0	E 8.2	E11	E .1
11-19-90	1200	0.47	218	--	3.0	E 60	E 4.5	E .1
11-19-90	1220	0.89	149	--	2.0	E 29	E 2.9	E .1
11-19-90	1235	0.15	280	0.0	0.5	E110	E 1.3	E .3
11-19-90	1300	0.04	81	--	2.5	E 5.7	E 0.6	E .1
11-19-90	0905	0.26	102	--	0.5	E 8.6	E .1	E .1
11-19-90	1130	--	106	--	--	E 1.0	E .1	E .1
11-19-90	1540	0.57	88	--	1.5	E 1.8	E .1	E .1
11-19-90	1200	5.7	161	--	2.0	E 29	E 8.5	E .1
11-19-90	1055	0.08	133	--	--	E 2.5	E .1	E .1
11-19-90	1050	0.14	106	--	2.0	E 1.0	E .1	E .1
11-19-90	0940	0.08	105	--	1.5	E 1.0	E .1	E .1
11-18-90	1126	5.8	164	--	--	E 15	E 6.4	E .1
11-19-90	1028	3.9	142	--	--	E 1.2	E21	E .1
11-19-90	1315	10	156	--	--	E 10	E13	E .1
11-19-90	1005	14	156	6.0	4.0	E 9.7	E13	E .1
11-19-90	1100	0.02	215	6.0	11.0	E 1.4	E24	E .1
11-19-90	1340	18	153	6.0	5.0	E 9.6	E14	E .1
11-19-90	1515	5.7	158	4.5	6.5	E 1.9	E 8.4	E .1
11-19-90	1225	28	228	7.0	5.0	E 28	E29	E .2
11-19-90	1017	0.02	146	3.5	3.0	E 2.2	E 6.9	E .1
11-19-90	1333	0.36	126	6.0	2.0	E 7.4	E .1	E .1
11-19-90	1350	46	159	--	5.0	E 6.4	E17	E .1
11-20-90	1258	9.5	76	--	--	E 1.0	E 1.2	E .1
11-20-90	1105	56	210	8.0	4.0	E 8.1	E26	E .1
11-19-90	1550	5.2	136	--	--	E 11	E .2	E .1
11-20-90	1502	48	183	--	--	E 5.8	E15	E .1
11-20-90	1610	3.7	89	--	--	E 1.0	E .1	E .1
11-19-90	1315	42	189	--	--	E 6.8	E22	E .1
11-20-90	1108	51	157	--	--	E 6.4	E16	E .1
11-20-90	1048	0.04	309	--	5.0	E 30	E 1.0	E .2
11-20-90	1015	0.35	126	1.5	0.5	E 1.8	E .1	E .1
11-20-90	1248	0.29	102	5.0	3.0	E 2.8	E .1	E .1
11-20-90	1412	62	179	3.0	4.5	E 6.6	E19	E .1
11-20-90	1200	0.77	109	--	--	E 9.4	E .1	E .1

E: ESTIMATED

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GROUND-WATER RECORDS

STATE OF NEVADA -- HYDROGRAPHIC AREAS

1-NORTHWEST REGION

1. Pueblo V.
2. Continental Lake V.
3. Gridley Lake V.
4. Virgin V.
5. Sage Hen V.
6. Guano V.
7. Swan Lake V.
8. Massacre Lake V.
9. Long V.
10. Macy Flat
11. Coleman V.
12. Mosquito V.
13. Warner V.
14. Surprise V.
15. Boulder V.
16. Duck Lake V.

2-BLACK ROCK DESERT REGION

17. Pilgrim Flat
18. Painter Flat
19. Dry V.
20. Sano V.
21. Smoke Creek Desert
22. San Emidio Desert
23. Granite Basin
24. Hualapai Flat
25. High Rock Lake V.
26. Mud Meadow
27. Summit Lake V.
28. Black Rock Desert
29. Pine Forest V.
30. Kings River V.
- (A) Rio King Subarea
- (B) Sod House Subarea
31. Desert V.
32. Silver State V.
33. Quinn River V.
- (A) Orvada Subarea
- (B) McDermitt Subarea

3-SNAKE RIVER BASIN

34. Little Owyhee River Area
35. South Fork Owyhee River Area
36. Independence V.
37. Owyhee River Area
38. Bruneau River Area
39. Jarbidge River Area
40. Salmon Falls Creek Area
41. Goose Creek Area

4-HUMBOLDT RIVER BASIN

42. Marys River Area
43. Starr V. Area
44. North Fork Area
45. Lamolite V.
46. South Fork Area
47. Huntington V.
48. Dixie Creek -- Tenmile Creek Area
49. Elko Segment
50. Susie Creek Area
51. Maggie Creek Area
52. Marys Creek Area
53. Pine V.
54. Crescent V.
55. Carico Lake V.
56. Upper Reese River V.
57. Antelope V.
58. Middle Reese River V.
59. Lower Reese River V.
60. Whirlwind V.
61. Boulder Flat
62. Rock Creek V.
63. Willow Creek V.
64. Clovers Area
65. Pumpnickel V.
66. Kelly Creek Area
67. Little Humboldt V.
68. Hardscrabble Area
69. Paradise V.
70. Winnemucca Segment
71. Grass V.
72. Imlay Area
73. Lovelock V.
- (A) Oreana Subarea
74. White Plains

5-WEST CENTRAL REGION

75. Bradys Hot Springs Area
76. Fernley Area
77. Fireball V.
78. Granite Springs V.
79. Kurniva V.

6-TRUCKEE RIVER BASIN

80. Winnemucca Lake V.
81. Pyramid Lake V.
82. Dodge Flat
83. Tracy Segment
84. Warm Springs V.

85. Spanish Springs V.
86. Sun V.
87. Truckee Meadows
88. Pleasant V.
89. Washoe V.
90. Lake Tahoe Basin
91. Truckee Canyon Segment

7-WESTERN REGION

92. Lemmon V.
- (A) Western Part
- (B) Eastern Part
93. Antelope V.
94. Bedell Flat
95. Dry V.
96. Newcomb Lake V.
97. Honey Lake V.
98. Skedaddle Creek V.
99. Red Rock V.
100. Cold Spring V.
- (A) Long V.

8-CARSON RIVER BASIN

101. Carson Desert
- (A) Packard V.
102. Churchill V.
103. Dayton V.
104. Eagle V.
105. Carson Valley

9-WALKER RIVER BASIN

106. Antelope V.
107. Smith V.
108. Mason V.
109. East Walker Area
110. Walker Lake V.
- (A) Schurz Subarea
- (B) Lake Subarea
- (C) Whisky Flat -- Hawthorne Subarea

10-CENTRAL REGION

111. Alkali V. (Mineral)
- (A) Northern Part
- (B) Southern Part
112. Mono V.
113. Huntoon V.
114. Teels Marsh V.
115. Adobe V.
116. Queen V.
117. Fish Lake V.
118. Columbus Salt Marsh V.
119. Rhodes Salt Marsh V.
120. Garfield Flat
121. Soda Spring V.
- (A) Eastern Part
- (B) Western Part
122. Gabbs V.
123. Rawhide Flats
124. Fairview V.
125. Stingaree V.
126. Cowkick V.
127. Eastgate V. Area
128. Dixie V.
129. Buena Vista V.
130. Pleasant V.
131. Buffalo V.
132. Jersey V.
133. Edwards Creek V.
134. Smith Creek V.
135. Ione V.
136. Monte Cristo V.
137. Big Smoky V.
- (A) Tonopah Flat
- (B) Northern Part
138. Grass V.
139. Kobeh V.
140. Monitor V.
- (A) Northern Part
- (B) Southern Part
141. Raiston V.
142. Alkali Spring V. (Esmeralda)
143. Clayton V.
144. Lida V.
145. Stonewall Flat
146. Sarcobatus Flat
147. Gold Flat
148. Cactus Flat
149. Stone Cabin V.
150. Little Fish Lake V.
151. Antelope V. (Eureka & Nye)
152. Stevens Basin
153. Diamond V.
154. Newark V.
155. Little Smoky V.
- (A) Northern Part
- (B) Central Part
- (C) Southern Part
156. Hot Creek V.
157. Kawich V.
158. Emigrant V.
- (A) Groom Lake V.
- (B) Papoose Lake V.

159. Yucca Flat
160. Frenchman Flat
161. Indian Springs V.
162. Pahrump V.
163. Mesquite V. (Sandy V.)
164. Ivanpah V.
- (A) Northern Part
- (B) Southern Part
165. Jean Lake V.
166. Hidden V. (South)
167. Eldorado V.
168. Three Lakes V. (Northern Part)
169. Tikapoo V. (Tickaboo V.)
- (A) Northern Part
- (B) Southern Part
170. Penoyer V. (Sand Spring V.)
171. Coal V.
172. Garden V.
173. Railroad V.
- (A) Southern Part
- (B) Northern Part
174. Jakes V.
175. Long V.
176. Ruby V.
177. Clover V.
178. Butte V.
- (A) Northern Part (Round V.)
- (B) Southern Part
179. Steptoe V.
180. Cave V.
181. Dry Lake V.
182. Delamar V.
183. Lake V.
184. Spring V.
185. Tippet V.
186. Antelope V. (White Pine & Elko)
- (A) Southern Part
- (B) Northern Part
187. Goshute V.
188. Independence V. (Pequop V.)

11-GREAT SALT LAKE BASIN

189. Thousand Springs V.
- (A) Herrill Siding--Brush Creek Area
- (B) Toano--Rock Spring Area
- (C) Rocky Butte Area
- (D) Montello--Crittenden Creek Area (Montello V.)
190. Grouse Creek V.
191. Pilot Creek V.
192. Great Salt Lake Desert
193. Deep Creek V.
194. Pleasant V.
195. Snake V.
196. Hamlin V.

12-ESCALANTE DESERT

197. Escalante Desert

13-COLORADO RIVER BASIN

198. Dry V.
199. Rose V.
200. Eagle V.
201. Spring V.
202. Patterson V.
203. Panaca V.
204. Clover V.
205. Lower Meadow Valley Wash
206. Kane Springs V.
207. White River V.
208. Pahroc V.
209. Pahrangat V.
210. Coyote Spring V.
211. Three Lakes V. (Southern Part)*
212. Las Vegas V.
213. Colorado V.
214. Plute V.
215. Black Mountains Area
216. Garnet V. (Dry Lake V.)*
217. Hidden V. (North)*
218. California Wash
219. Muddy River Springs Area (Upper Moapa V.)
220. Lower Moapa V.
221. Tule Desert
222. Virgin River V.
223. Gold Butte Area
224. Greasewood Basin

*Noncontributing part of the Colorado River Basin

14-DEATH VALLEY BASIN

225. Mercury V.
226. Rock V.
227. Fortymile Canyon
- (A) Jackass Flats
- (B) Buckboard Mesa
228. Oasis V.
229. Crater Flat
230. Amargosa Desert
231. Grapevine Canyon
232. Oriental Wash

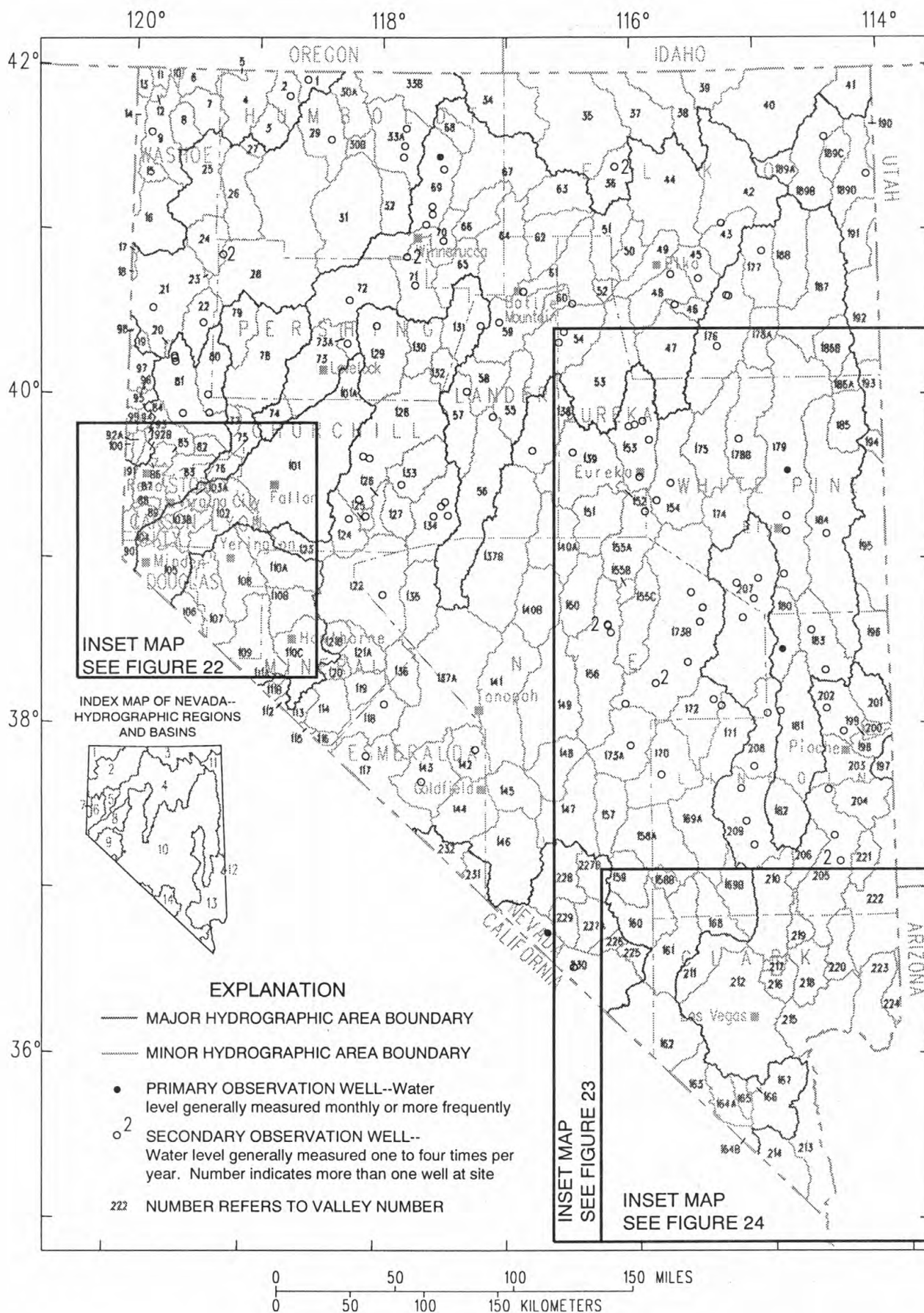
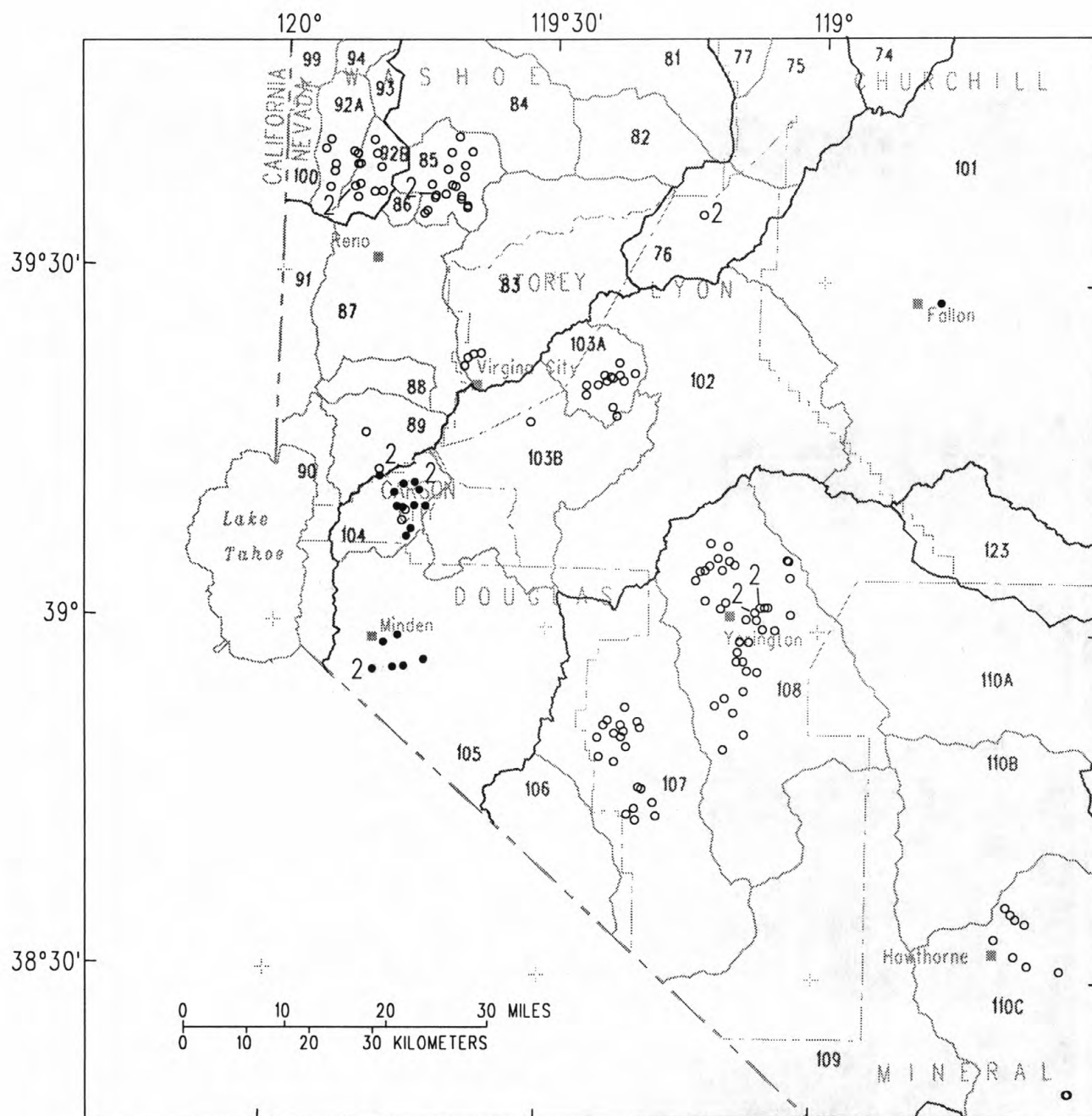


FIGURE 21.--Observation wells listed in this report.



EXPLANATION

- MAJOR HYDROGRAPHIC AREA BOUNDARY
- MINOR HYDROGRAPHIC AREA BOUNDARY
- PRIMARY OBSERVATION WELL--Water level generally measured monthly or more frequently
- ² SECONDARY OBSERVATION WELL--Water level generally measured one to four times per year. Number indicates more than one well at site
- 109 NUMBER REFERS TO VALLEY NUMBER--See figure 21

FIGURE 22.--Observation wells, west-central Nevada.

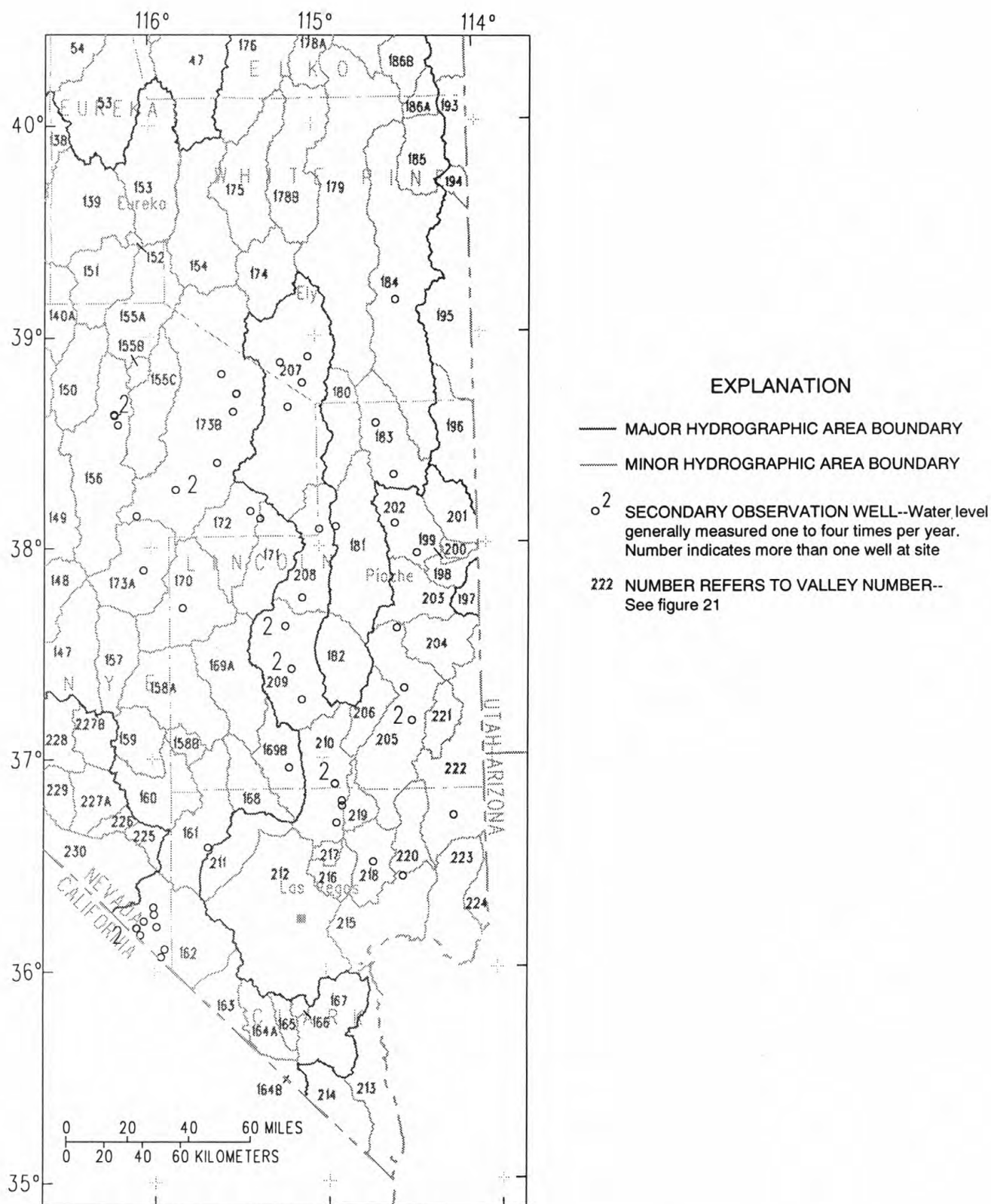
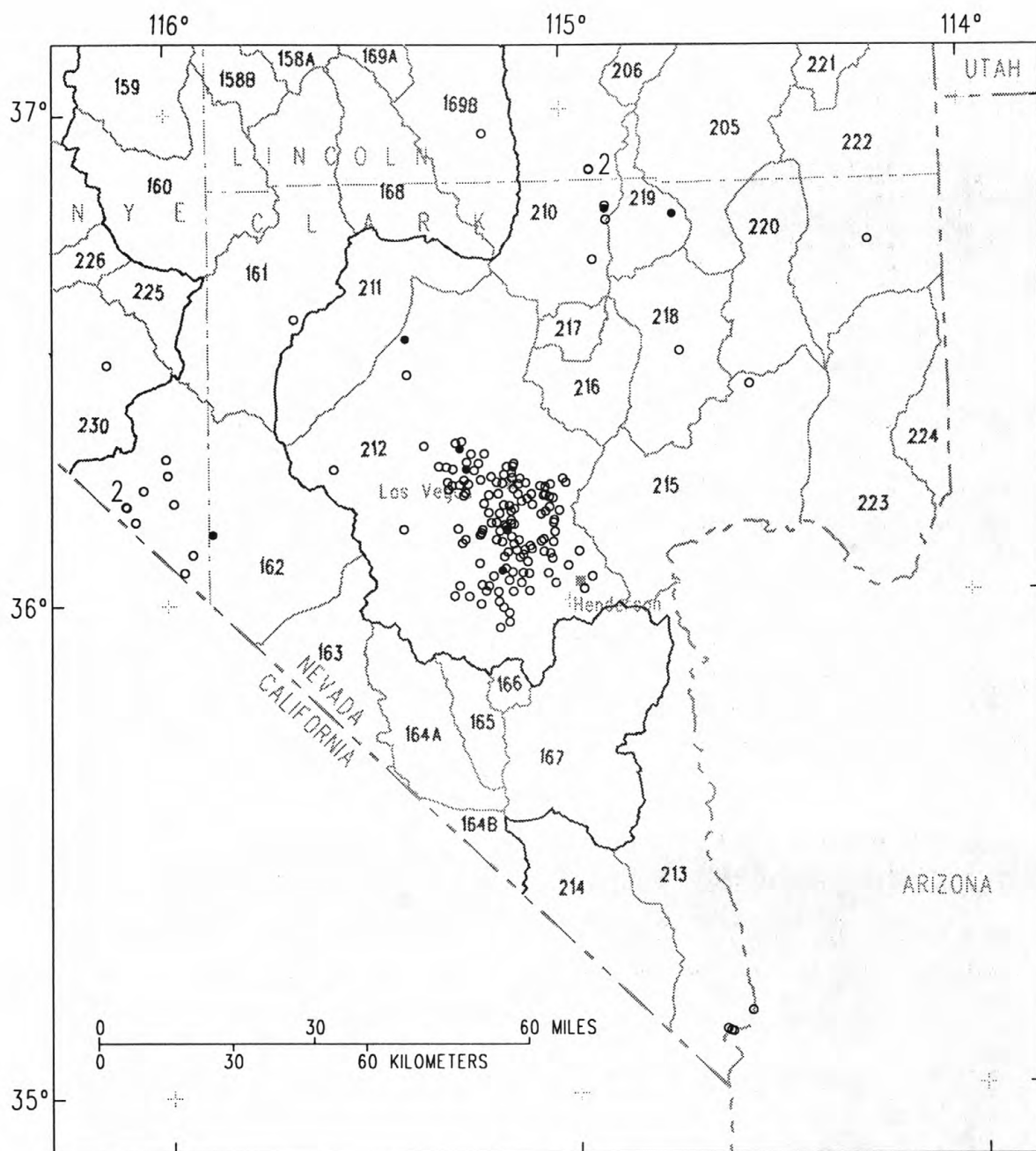


FIGURE 23.--Selected observation wells within carbonate-rock study area, eastern Nevada.



EXPLANATION

- MAJOR HYDROGRAPHIC AREA BOUNDARY
- - - MINOR HYDROGRAPHIC AREA BOUNDARY
- PRIMARY OBSERVATION WELL--Water level generally measured monthly or more frequently
- ² SECONDARY OBSERVATION WELL--Water level generally measured one to four times per year. Number indicates more than one well at site
- 214 NUMBER REFERS TO VALLEY NUMBER--See figure 21

FIGURE 24.--Observation wells, southeastern Nevada.

PARADISE VALLEY

412910117321001. Local number, 69 N42 E39 25CAC1.
 LOCATION.--Lat 41°29'10", long 117°32'10", Hydrologic Unit 16040109, in Humboldt County.
 Owner: R. Day and T. Boggio.
 AQUIFER.--Alluvium of Quaternary age.
 WELL CHARACTERISTICS.--Dug unused well, diameter 6 ft, depth 17.4 ft, cased with iron.
 INSTRUMENTATION.--Water-level recorder since June 1986, hourly.
 DATUM.-- Elevation of land-surface datum is 4,523 ft. Measuring point: Top of concrete floor, 5.2 ft below land-surface datum.
 REMARKS.-- In Paradise Valley.
 PERIOD OF RECORD.--1945 to current year.
 REVISED RECORDS.--WDR-NV-86-1: 1984-85.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.80 ft below land-surface datum, Sept. 23, 1955; lowest measured, 11.03 ft below land-surface datum, Nov. 16, 1961.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.87	8.98	8.98	8.99	8.99	8.74	8.83	7.36	6.30	6.06	7.13	8.24
10	8.91	8.98	8.98	9.00	8.99	8.87	8.76	7.40	6.46	5.36	7.34	8.34
15	8.94	8.97	8.98	8.90	9.00	8.83	8.57	7.13	6.65	5.76	7.54	8.45
20	8.96	8.97	8.97	8.96	9.00	8.84	7.92	6.88	6.50	6.15	7.72	8.55
25	8.96	8.97	8.98	8.98	9.00	8.85	7.43	6.05	6.51	6.50	7.90	8.64
EOM	8.97	8.97	8.98	8.98	8.98	8.85	7.34	6.12	6.47	6.89	8.09	8.71

WATER YEAR 1991 HIGHEST 5.32 July 9 LOWEST 9.01 Jan. 11, 12.

WASHOE VALLEY

391233119484501. Local number, 89 N16 E19 35ACD1.
 LOCATION.--Lat 39°12'33", long 119°48'45", Hydrologic Unit 16050201, in Washoe County.
 Owner: Pete Kelley.
 AQUIFER.--Alluvium of Quaternary age.
 WELL CHARACTERISTICS.--Drilled domestic well, diameter 8 in., depth 76 ft, cased to 76 ft, perforated 52 to 72 ft.
 DATUM.--Elevation of land-surface datum is 5,240 ft. Measuring point: Top of casing, 0.4 ft above land-surface datum.
 REMARKS.--Monthly measurements supplied by Office of Nevada State Engineer.
 PERIOD OF RECORD.--May 1960, May 1976 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.00 ft below land-surface datum, May 25, 1960; lowest measured, 41.70 ft below land-surface datum, Aug. 7, 1987.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	16.00	Dec. 3	7.72	Feb. 6	7.10	Apr. 5	6.02	June 4	14.93	Aug. 6	15.73
Nov. 5	21.34	Jan. 4	9.48	Mar. 5	6.13	May 3	6.40	July 3	32.41	Sept. 5	20.29

WATER YEAR 1991 HIGHEST 6.02 Apr. 5, 1991 LOWEST 32.41 July 3, 1991

CARSON DESERT

392825118470501. Local number, 101 N19 E28 36AABC1.
 LOCATION.--Lat 39°28'25", long 118°47'05", Hydrologic Unit 16050203, in Churchill County.
 Owner: City of Fallon.
 AQUIFER.--Volcanic rocks of Quaternary age.
 WELL CHARACTERISTICS.--Drilled unused well, diameter 14 in., depth 813 ft, cased to 540 ft, perforated 505 to 540 ft.
 INSTRUMENTATION.--Water-level recorder since Aug. 1983, hourly.
 DATUM.--Elevation of land-surface datum is 3,962 ft. Measuring point: Edge of recorder shelf, 0.31 ft above land-surface datum.
 REMARKS.--Mori Well.
 PERIOD OF RECORD.--1971 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.30 ft below land-surface datum, Oct. 29, 1972; lowest measured, 46.93 ft below land-surface datum, Sept. 8, 1991.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	46.15	45.51	44.82	44.53	44.34	44.62	44.35	44.82	44.90	45.71	46.57	46.90
10	46.10	45.38	44.71	44.51	44.31	44.56	44.40	44.87	45.05	45.91	46.65	46.90
15	46.01	45.24	44.64	44.50	44.29	44.50	44.42	44.84	45.30	46.05	46.72	46.72
20	45.94	45.11	44.55	44.44	44.48	44.44	44.59	44.77	45.43	46.20	46.69	46.71
25	45.81	44.97	44.58	44.40	44.85	44.37	44.64	44.69	45.55	46.30	46.80	46.70
EOM	45.66	44.92	44.55	44.35	44.70	44.36	44.79	44.76	45.60	46.50	46.85	46.66

WATER YEAR 1991 HIGHEST 44.28 Feb. 15-18. LOWEST 46.93 Sept. 8, 9.

GROUND-WATER LEVELS, PRIMARY OBSERVATION WELLS

EAGLE VALLEY

391126119441901. Local number, 104 N15 E20 04DBDC1.

LOCATION.--Lat 39°11'26", long 119°44'19", Hydrologic Unit 16050201, in Carson City.

Owner: Nevada Division of Water Resources.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 89 ft, cased to 89 ft, perforated 68 to 88 ft.

DATUM.--Elevation of land-surface datum is 4,682 ft. Measuring point: Top of casing, 0.3 ft above land-surface datum.

REMARKS.--Monthly measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.10 ft below land-surface datum, July 14, 1986; lowest measured, 24.87 ft below land-surface datum, Jan. 6, 1975.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	19.68	Dec. 3	19.57	Feb. 6	19.22	Apr. 5	19.58	June 4	19.65	Aug. 6	19.65
Nov. 9	19.63	Jan. 4	19.32	Mar. 5	18.79	May 3	19.65	July 3	19.71	Sept. 5	19.66

WATER YEAR 1991 HIGHEST 18.79 Mar. 5, 1991 LOWEST 19.71 July 3, 1991

391126119441902. Local number, 104 N15 E20 04DBDC2.

LOCATION.--Lat 39°11'26", long 119°44'19", Hydrologic Unit 16050201, in Carson City.

Owner: U.S. Geological Survey.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 33 ft, cased to 33 ft, perforated 30 to 32 ft.

DATUM.--Elevation of land-surface datum is 4,682 ft. Measuring point: Top of casing, which is at land-surface datum.

REMARKS.--Monthly measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--July 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.90 ft below land-surface datum, July 14, 1986; lowest measured, 30.01 ft below land-surface datum, July 25, 1977.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	19.90	Dec. 3	19.66	Feb. 6	18.96	Apr. 5	19.72	June 4	19.97	Aug. 6	19.95
Nov. 5	19.85	Jan. 4	19.77	Mar. 5	19.72	May 3	19.95	July 3	20.05	Sept. 5	19.98

WATER YEAR 1991 HIGHEST 18.96 Feb. 6, 1991 LOWEST 20.05 July 3, 1991

391155119460401. Local number, 104 N15 E20 05BBCA1.

LOCATION.--Lat 39°11'55", long 119°46'04", Hydrologic Unit 16050201, in Carson City.

Owner: Nevada Division of Water Resources.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 102 ft, cased to 102 ft, perforated 82 to 102 ft.

DATUM.--Elevation of land-surface datum is 4,737 ft. Measuring point: Top of casing, 0.7 ft above land-surface datum.

REMARKS.--Monthly measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.38 ft below land-surface datum, Feb. 12, 1975; lowest measured, 51.37 ft below land-surface datum, June 24, 1981.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	33.81	Dec. 3	28.40	Feb. 4	30.55	Apr. 5	30.25	June 4	34.24	Aug. 6	37.66
Nov. 5	30.09	Jan. 4	27.62	Mar. 5	30.42	May 3	29.08	July 3	36.84	Sept. 5	38.95

WATER YEAR 1991 HIGHEST 27.62 Jan. 4, 1991 LOWEST 38.95 Sept. 5, 1991

GROUND-WATER LEVELS, PRIMARY OBSERVATION WELLS

381

EAGLE VALLEY--Continued

391155119460402. Local number, 104 N15 E20 05BBCA2.

LOCATION.--Lat 39°11'55", long 119°46'04", Hydrologic Unit 16050201, in Carson City.

Owner: U.S. Geological Survey.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 62 ft, cased to 62 ft.

DATUM.--Elevation of land-surface datum is 4,737 ft. Measuring point: Top of casing, which is at land-surface datum.

REMARKS.--Monthly measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--September 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.97 ft below land-surface datum, Feb. 17, 1978; lowest measured, 46.80 ft below land-surface datum, Aug. 7, 1987.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	37.93	Dec. 3	31.00	Feb. 6	34.91	Apr. 5	34.32	June 4	39.84	Aug. 6	43.59
Nov. 5	33.62	Jan. 4	30.74	Mar. 5	34.39	May 3	32.49	July 3	42.70	Sept. 5	45.48

WATER YEAR 1991 HIGHEST 30.74 Jan. 4, 1991 LOWEST 45.48 Sept. 5, 1991

391110119470501. Local number, 104 N15 E20 07BBAB1.

LOCATION.--Lat 39°11'10", long 119°47'05", Hydrologic Unit 16050201, in Carson City.

Owner: Nevada Division of Water Resources.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 150 ft, cased to 150 ft.

DATUM.--Elevation of land-surface datum is 4,800 ft. Measuring point: Hole in casing cap, 0.5 ft below land-surface datum.

REMARKS.--Monthly measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.74 ft below land-surface datum, April 21, 1975; lowest measured, 96.70 ft below land-surface datum, Sept. 5, 1991.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	95.74	Dec. 3	96.12	Mar. 5	93.59	May 3	93.05	July 3	95.94	Sept. 5	96.70
Nov. 5	96.15	Feb. 6	94.88	Apr. 5	92.62	June 4	94.32	Aug. 6	96.65		

WATER YEAR 1991 HIGHEST 92.62 Apr. 5, 1991 LOWEST 96.70 Sept. 5, 1991

391004119433301. Local number, 104 N15 E20 15BDBA1.

LOCATION.--Lat 39°10'04", long 119°43'33", Hydrologic Unit 16050201, in Carson City.

Owner: Nevada Division of Water Resources.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 105 ft, cased to 105 ft, perforated 85 to 105 ft.

DATUM.--Elevation of land-surface datum is 4,620 ft. Measuring point: Top of casing, 4.2 ft above land-surface datum.

REMARKS.--Monthly measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.36 ft below land-surface datum, March 21, 1986; lowest measured, 13.99 ft below land-surface datum, May 16, 1975.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	9.42	Dec. 3	9.50	Feb. 6	9.26	Apr. 5	9.03	June 4	9.23	Aug. 6	9.38
Nov. 5	9.24	Jan. 4	9.20	Mar. 5	9.12	May 3	9.10	July 3	9.43	Sept. 5	9.35

WATER YEAR 1991 HIGHEST 9.03 Apr. 5, 1991 LOWEST 9.50 Dec. 3, 1990

GROUND-WATER LEVELS, PRIMARY OBSERVATION WELLS

EAGLE VALLEY--Continued

391004119444901. Local number, 104 N15 E20 16BCAA1.

LOCATION.--Lat 39°10'04", long 119°44'49", Hydrologic Unit 16050201, in Carson City.

Owner: Nevada Division of Water Resources.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 105 ft, cased to 105 ft, perforated 82 to 102 ft.

DATUM.--Elevation of land-surface datum is 4,641 ft. Measuring point: Top of casing, 0.1 ft below land-surface datum.

REMARKS.--Monthly measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.76 ft below land-surface datum, March 23, 1983; lowest measured, 17.41 ft below land-surface datum, Oct. 9, 1990.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	17.41	Dec. 3	13.20	Feb. 6	9.15	Apr. 5	6.30	June 4	8.89	Aug. 6	12.78
Nov. 5	14.60	Jan. 4	12.78	Mar. 5	7.63	May 3	7.05	July 3	12.38	Sept. 5	13.43

WATER YEAR 1991 HIGHEST 6.30 Apr. 5, 1991 LOWEST 17.41 Oct. 9, 1990

390954119460401. Local number, 104 N15 E20 17BCCD1.

LOCATION.--Lat 39°09'54", long 119°46'04", Hydrologic Unit 16050201, in Carson City.

Owner: Nevada Division of Water Resources.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 102 ft, cased to 102 ft, perforated 82 to 102 ft.

DATUM.--Elevation of land-surface datum is 4,680 ft. Measuring point: Top of casing, which is at land-surface datum.

REMARKS.--Monthly measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--April 1961, January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.90 ft below land-surface datum, April 11, 1983; lowest measured, 27.45 ft below land-surface datum, July 24, 1979.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	26.31	Dec. 3	25.65	Feb. 6	23.68	Apr. 5	22.50	June 4	22.40	Aug. 6	24.35
Nov. 5	26.00	Jan. 4	25.53	Mar. 5	22.99	May 3	22.16	July 3	24.79	Sept. 5	24.19

WATER YEAR 1991 HIGHEST 22.16 May 3, 1991 LOWEST 26.31 Oct. 9, 1990

390958119464301. Local number, 104 N15 E20 18BDDA1.

LOCATION.--Lat 39°09'58", long 119°46'43", Hydrologic Unit 16050201, in Carson City.

Owner: Nevada Division of Water Resources.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 102 ft, cased to 102 ft, perforated 82 to 102 ft.

DATUM.--Elevation of land-surface datum is 4,738 ft. Measuring point: Top of casing, 0.1 ft below land-surface datum.

REMARKS.--Monthly measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.34 ft below land-surface datum, Jan. 6, 1975; lowest measured, 23.85 ft below land-surface datum, Sept. 5, 1991.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	20.92	Dec. 3	20.95	Feb. 6	21.73	Apr. 5	21.57	June 4	21.20	Aug. 6	23.46
Nov. 5	21.22	Jan. 4	21.43	Mar. 5	21.77	May 3	21.26	July 3	21.95	Sept. 5	23.85

WATER YEAR 1991 HIGHEST 20.92 Oct. 9, 1990 LOWEST 23.85 Sept. 5, 1991

GROUND-WATER LEVELS, PRIMARY OBSERVATION WELLS

383

EAGLE VALLEY--Continued

390807119450901. Local number, 104 N15 E20 29DAAB1.

LOCATION.--Lat 39°08'07", long 119°45'09", Hydrologic Unit 16050201, in Carson City.

Owner: Nevada Division of Water Resources.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 105 ft, cased to 105 ft, perforated 80 to 100 ft.

DATUM.--Elevation of land-surface datum is 4,698 ft. Measuring point: Top of casing, 0.7 ft below land-surface datum.

REMARKS.--Monthly measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.70 ft below land-surface datum, March 12, 1975; lowest measured, 54.33 ft below land-surface datum, Aug. 1, 1989.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	54.12	Dec. 3	50.39	Feb. 6	46.30	Apr. 5	43.07	June 4	49.05	Aug. 6	52.68
Nov. 5	50.68	Jan. 4	51.36	Mar. 5	44.42	May 3	45.17	July 3	49.04	Sept. 5	53.17

WATER YEAR 1991 HIGHEST 43.07 Apr. 5, 1991 LOWEST 54.12 Oct. 9, 1990

390728119453801. Local number, 104 N15 E20 32BDAA1.

LOCATION.--Lat 39°07'28", long 119°45'38", Hydrologic Unit 16050201, in Carson City.

Owner: Nevada Division of Water Resources.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 105 ft, cased to 105 ft, perforated 82 to 102 ft.

DATUM.--Elevation of land-surface datum is 4,720 ft. Measuring point: Top of casing, 0.1 ft below land-surface datum.

REMARKS.--Monthly measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.03 ft below land-surface datum, Feb. 12, 1975; lowest measured, 47.87 ft below land-surface datum, Sept. 5, 1991.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	45.03	Dec. 3	42.87	Feb. 6	41.77	Apr. 5	41.57	June 4	44.02	Aug. 6	45.67
Nov. 5	43.35	Jan. 4	42.78	Mar. 5	40.19	May 3	43.15	July 3	44.09	Sept. 5	47.87

WATER YEAR 1991 HIGHEST 40.19 Mar. 5, 1991 LOWEST 47.87 Sept. 5, 1991

391205119444901. Local number, 104 N16 E20 33CCDD1.

LOCATION.--Lat 39°12'05", long 119°44'49", Hydrologic Unit 16050201, in Carson City.

Owner: Nevada Division of Water Resources.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 118 ft, cased to 118 ft, perforated 94 to 118 ft.

DATUM.--Elevation of land-surface datum is 4,732 ft. Measuring point: Top of casing, which is at land-surface datum.

REMARKS.--Monthly measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.10 ft below land-surface datum, March 21, 1986; lowest measured, 49.24 ft below land-surface datum, Sept. 17, 1981.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	46.75	Dec. 3	46.62	Feb. 6	45.37	Apr. 5	45.72	July 3	46.25
Nov. 5	46.50	Jan. 4	47.03	Mar. 5	45.42	May 3	45.86		

WATER YEAR 1991 HIGHEST 45.37 Feb. 6, 1991 LOWEST 47.03 Jan. 4, 1991

GROUND-WATER LEVELS, PRIMARY OBSERVATION WELLS

CARSON VALLEY

385559119485701. Local number, 105 N12 E19 02BDDD1.

LOCATION.--Lat 38°55'59", long 119°48'57", Hydrologic Unit 16050201, in Douglas County.

Owner: John C. Feil.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled artesian domestic well, diameter 3 in., depth 262 ft.

DATUM.--Elevation of land-surface datum is 4,696 ft. Measuring point: Lay pressure gage on ground, which is at land-surface datum.

REMARKS.--Weekly measurements supplied by U.S. Geological Survey personnel.

PERIOD OF RECORD.--March 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.2 ft above land-surface datum, March 21, 1990; lowest measured, 3.0 ft above land-surface datum, May 7, 1991.

WATER LEVELS IN FEET ABOVE LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 2	9.9	Dec. 4	10.6	Feb. 5	10.4	Apr. 2	4.9	June 6	6.5	Aug. 6	6.5
9	10.2	11	10.4	19	10.4	16	3.5	11	10.9	13	7.2
16	8.6	18	10.4	Mar. 6	11.3	30	3.5	18	4.8	20	9.5
23	7.4	Jan. 2	9.9	21	4.8	7	3.0	25	5.1	27	7.9
30	10.4	8	6.2	May 14	5.1	July 2	10.2	Sept. 3	6.5		
Nov. 6	9.9	15	7.6	21	4.9	9	9.7	10	7.2		
13	8.8	22	8.6	28	5.5	16	8.3	17	7.9		
20	9.5					23	8.8	24	7.4		
27	10.4					30	8.3				

WATER YEAR 1991 HIGHEST 11.3 Mar. 6, 1991 LOWEST 3.0 May 7, 1991

385620119453101. Local number, 105 N12 E20 04BAAA2.

LOCATION.--Lat 38°56'20", long 119°45'31", Hydrologic Unit 16050201, in Douglas County.

Owner: U.S. Geological Survey.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 21 ft, cased to 21 ft, perforated 11 to 21 ft.

INSTRUMENTATION.--Water-level recorder since July 1990, hourly.

DATUM.--Elevation of land-surface datum is 4,759 ft. Measuring point: Top of recorder shelf, 2.0 ft above land-surface datum.

REMARKS.--Weekly measurements supplied by U.S. Geological Survey personnel.

PERIOD OF RECORD.--September 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.33 ft below land-surface datum, June 6, 1978; lowest measured, 9.07 ft below land-surface datum, March 28, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.45	7.44	7.66	7.72	7.37	7.85	7.62	6.87	5.13	4.96	6.21	7.36
10	7.50	7.42	7.69	7.67	7.45	7.94	7.57	6.53	5.29	5.15	6.46	7.36
15	7.57	7.48	7.71	7.60	7.48	8.13	7.59	6.43	4.84	5.44	5.58	7.61
20	7.63	7.56	7.73	7.54	7.64	7.93	7.46	6.25	5.04	5.39	6.10	7.65
25	7.60	7.61	7.70	7.46	7.83	7.73	7.18	6.02	5.34	5.71	6.44	7.78
EOM	7.46	7.60	7.74	7.41	7.91	7.58	7.03	5.57	4.82	6.08	7.14	7.47

WATER YEAR 1991 HIGHEST 4.75 June 17 LOWEST 8.16 Mar. 16

385612119464401. Local number, 105 N12 E20 06BADD1.

LOCATION.--Lat 38°56'12", long 119°46'44", Hydrologic Unit 16050201, in Douglas County.

Owner: Erica Valley Ranch.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled used irrigation well, diameter 16 in., depth 430 ft, cased to 430 ft, perforated 96 ft to 430 ft.

DATUM.--Elevation of land-surface datum is 4,716 ft. Measuring point: End of 2 in. access pipe, 2.0 ft above land-surface datum.

REMARKS.--Weekly measurements supplied by U.S. Geological Survey personnel.

PERIOD OF RECORD.--March 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.70 ft below land-surface datum, Feb. 24, 1983; lowest measured, 10.95 ft below land-surface datum, Aug. 13, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 2	6.53	Dec. 4	5.28	Feb. 5	4.82	Apr. 2	4.28	June 6	3.11	Aug. 6	10.37
9	6.26	11	5.27	19	4.85	16	4.65	11	3.17	13	10.95
16	5.98	18	5.25	Mar. 6	4.42	30	4.23	18	3.29	20	7.23
23	5.76	Jan. 2	5.38	21	4.24	7	4.16	25	3.30	27	9.69
30	5.69	8	5.18	May 14	3.69	July 2	3.27	Sept. 3	10.64		
Nov. 6	5.70	15	5.01	21	3.43	9	5.58	10	7.90		
13	5.46	22	4.43	28	3.38	16	7.18	17	7.55		
20	5.43					23	7.88	24	8.32		
27	5.36					30	8.77				

WATER YEAR 1991 HIGHEST 3.11 June 6, 1991 LOWEST 10.95 Aug. 13, 1991

CARSON VALLEY--Continued

385821119475001. Local number, 105 N13 E19 24CADD1.

LOCATION.--Lat 38°58'21", long 119°47'50", Hydrologic Unit 16050201, in Douglas County.

Owner: Dangberg.

AQUIFER.--Alluvium of Quarternary age.

WELL CHARACTERISTICS.--Drilled artesian stock well, diameter 3 in., depth 401 ft.

DATUM.--Elevation of land-surface datum is 4,685 ft. Measuring point: Lay pressure gage on top of trough, which is 2.1 ft above land-surface datum.

REMARKS.--Weekly measurements supplied by U.S. Geological Survey personnel.

PERIOD OF RECORD.--March 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.8 ft above land-surface datum, March 21, 1990; lowest measured, 3.4 ft above land-surface datum, Aug. 17, 1988.

WATER LEVELS, IN FEET ABOVE LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 2	10.2	Dec. 4	13.0	Feb. 5	13.4	Apr. 2	13.0	June 6	12.0	Aug. 6	4.2
9	9.7	11	13.0	19	11.9	16	11.6	11	12.0	13	4.0
16	9.7	18	13.4	Mar. 6	11.9	30	10.4	18	12.0	20	8.6
23	10.7	Jan. 2	13.0	21	12.5	May 7	11.8	25	11.8	27	5.8
30	11.3	8	12.0	14	12.5	July 2	11.6	Sept. 3	3.5		
Nov. 6	12.0	15	12.5	21	11.8	9	10.7	10	5.3		
13	11.1	22	12.5	28	12.3	16	7.6	17	7.4		
20	12.0					23	7.2	24	7.2		
27	12.3					30	7.0				

WATER YEAR 1991 HIGHEST 13.4 Dec. 18, 1990, Feb. 5, 1991 LOWEST 3.5 Sept. 3, 1991

385859119461501. Local number, 105 N13 E20 19AAAB1.

LOCATION.--Lat 38°58'59", long 119°46'15", Hydrologic Unit 16050201, in Douglas County.

Owner: Dangberg.

AQUIFER.--Alluvium of Quarternary age.

WELL CHARACTERISTICS.--Drilled artesian stock well, diameter 3 in., depth 318 ft.

DATUM.--Elevation of land-surface datum is 4,696 ft. Measuring point: Lay pressure gage on cement pad, which is at land-surface datum.

REMARKS.--Weekly measurements supplied by U.S. Geological Survey personnel.

PERIOD OF RECORD.--March 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.2 ft above land-surface datum, March 12, 1986; lowest measured, 22.52 ft below land-surface datum, Sept. 3, 1991.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND SURFACE INDICATED BY "--"),
WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 2	7.73	Dec. 4	-2.03	Feb. 5	-4.4	Apr. 2	-3.2	June 6	-3.0	Aug. 6	17.52
9	5.33	11	-2.10	19	-3.9	16	-3.0	11	-3.2	13	17.40
16	2.56	18	-.97	Mar. 6	-4.6	30	-1.67	18	-3.5	20	14.74
26	1.09	Jan. 2	-2.56	21	-3.5	May 7	-1.49	25	-2.5	27	18.59
30	2.50	15	-2.45	14	-2.54	July 2	-2.5	Sept. 3	22.52		
Nov. 6	.36	22	-2.56	21	-2.3	9	.87	10	17.63		
13	-.62			28	-3.7	16	10.19	17	14.91		
20	-1.06					23	12.09	24	13.96		
27	-1.69					30	16.82				

WATER YEAR 1991 HIGHEST -4.6 Mar. 6, 1991 LOWEST 22.52 Sept. 3, 1991

385655119432101. Local number, 105 N13 E20 34ACBC1.

LOCATION.--Lat 38°56'55", long 119°43'21", Hydrologic Unit 16050201, in Douglas County.

Owner: Dangberg.

AQUIFER.--Alluvium of Quarternary age.

WELL CHARACTERISTICS.--Drilled irrigation well.

DATUM.--Elevation of land-surface datum is 4,791 ft. Measuring point: Top of casing on north side, 0.3 ft above land-surface datum.

REMARKS.--Weekly measurements supplied by U.S. Geological Survey personnel.

PERIOD OF RECORD.--March 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.80 ft below land-surface datum, July 21, 1983; lowest measured, 12.89 ft below land-surface datum, March 8, 1988.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 9	11.06	Nov. 6	10.13	Dec. 4	10.65	Jan. 2	11.00	Feb. 5	11.46	Mar. 6	12.29
16	10.08	13	10.14	11	10.75	8	11.01	19	11.86	21	12.71
23	9.99	20	10.32	18	10.86	15	11.15				
30	9.98	27	10.50			22	11.09				

WATER YEAR 1991 HIGHEST 9.98 Oct. 30, 1990 LOWEST 12.71 Mar. 21, 1991

GROUND-WATER LEVELS, PRIMARY OBSERVATION WELLS

CARSON VALLEY--Continued

385658119432001. Local number, 105 N13 E20 34ACBC2.

LOCATION.--Lat 38°56'58", long 119°43'20", Hydrologic Unit 16050201, in Douglas County.

Owner: Bill Jontey.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled domestic well, diameter 8 in., depth 90 ft.

DATUM.--Elevation of land-surface datum is 4,790 ft. Measuring point: Top of casing on north side, 1.5 ft above land-surface datum.

REMARKS.--Weekly measurements supplied by U.S. Geological Survey personnel.

PERIOD OF RECORD.--July 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.13 ft below land-surface datum, July 9, 1991; lowest measured, 8.99 ft below land-surface datum, Aug. 27, 1991.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
July 9	6.13	Aug. 6	8.41	Sept. 3	7.98
16	6.42	13	7.34	10	8.23
23	6.58	20	7.50	17	8.39
30	6.78	27	8.99	24	8.65

WATER YEAR 1991	HIGHEST	6.13	July 9, 1991	LOWEST	8.99	Aug. 27, 1991
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PAHRUMP VALLEY

360836115531701. Local number, 162 S21 E54 10AAC1.

LOCATION.--Lat 36°08'36", long 115°53'17", Hydrologic Unit 16060015, in Clark County.

Owner: E. S. Bowman.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 14 in., depth 800 ft, cased to 472 ft, perforated 100 to 450 ft.

INSTRUMENTATION.--Noon daily graphic recorder.

DATUM.--Elevation of land-surface datum is 2,885 ft. Measuring point: Edge of recorder shelf, 1.2 ft above land-surface datum.

REMARKS.--Measurements supplied by Office of the Nevada State Engineer.

PERIOD OF RECORD.--October 1944, April 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.34 ft below land-surface datum, Oct. 13, 1944; lowest measured, 112.25 ft below land-surface datum, Sept. 5, 1980.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	101.75	98.67	96.29	93.48	95.84	95.97	98.60	99.38	100.13	100.76	101.80	102.29
10	101.43	98.66	96.02	94.86	95.78	96.72	98.70	99.09	100.56	101.45	101.84	102.37
15	101.82	98.10	95.80	95.02	95.89	97.60	99.12	99.86	100.53	101.40	102.11	102.18
20	101.91	97.50	94.38	94.91	96.37	96.71	99.52	99.01	99.96	101.39	101.70	102.21
25	101.60	97.02	94.17	95.52	96.40	96.76	99.70	99.93	100.03	101.07	102.06	101.78
EOM	101.49	96.12	93.94	95.59	96.33	95.83	98.67	99.36	100.38	101.70	102.22	102.07

WATER YEAR 1991	HIGHEST	93.48	Jan. 5, 1991	LOWEST	102.37	Sept. 10, 1991
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STEPTOE VALLEY

393310114475001. Local number, 179 N20 E64 32C2

LOCATION.--Lat 39°33'10" long 114°47'50", Hydrologic Unit 16060008, in White Pine County.

Owner: U.S. Geological Survey.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled test well, diameter 10 in., depth 110 ft, cased to 122 ft, perforated 20 to 120 ft.

INSTRUMENTATION.--Water-level recorder since Aug. 1983, hourly.

DATUM.--Elevation of land-surface datum is 6,037 ft. Measuring point: Top of casing, 1.0 ft above land-surface datum.

REMARKS.--In Steptoe Valley.

PERIOD OF RECORD.--1918, 1949-57, 1959, 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.03 ft below land-surface datum, May 5, 1988; lowest measured, 17.87 ft below land-surface datum, Dec. 17, 1964.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.06	8.62	8.34	---	7.88	7.70	7.52	7.40	7.19	8.10	8.98	9.43
10	8.98	8.57	8.29	8.05	7.85	7.67	7.49	7.36	7.25	8.28	9.08	9.34
15	8.90	8.52	8.26	8.01	7.81	7.64	7.46	7.32	7.40	8.44	9.16	9.29
20	8.83	8.48	---	7.97	7.79	7.61	7.45	7.27	7.59	8.62	9.24	9.28
25	8.75	8.42	---	7.94	7.76	7.58	7.43	7.23	7.77	8.76	9.32	9.26
EOM	8.68	8.38	---	7.91	7.71	7.55	7.42	7.23	7.92	8.91	9.39	9.23

WATER YEAR 1991	HIGHEST	7.19	June 4-6	LOWEST	9.44	Sept. 5, 6
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CAVE VALLEY

382807114521001. Local number, 180 N07 E63 14BADD1.

LOCATION.--Lat 28°28'07", long 114°52'10", Hydrologic Unit 16060009, in Lincoln County.

Owner: U.S. Air Force.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 17 in., depth 460 ft, cased to 460 ft, perforated 210 to 250 ft, 375 to 435 ft.

INSTRUMENTATION.--Water-level recorder since Oct. 1983, hourly.

DATUM.--Elevation of land-surface datum is 6,008 ft. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--In Cave Valley.

PERIOD OF RECORD.--1983 to Apr. 29, 1986, Sept. 20, 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 222.19 ft below land-surface datum, Nov. 26, 1990; lowest measured, 226.9 ft below land-surface datum, Oct. 24, 1983.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	222.72	222.66	222.78	222.76	222.66	222.55	222.59	222.78	222.61	222.60	222.61	222.44
10	222.68	222.86	222.70	222.81	222.67	222.51	222.43	222.61	222.70	222.64	222.60	222.44
15	222.73	222.86	222.63	222.65	222.61	222.55	222.41	222.72	222.73	222.64	222.62	222.57
20	222.84	222.65	222.59	222.70	222.81	222.56	222.56	222.62	222.64	222.65	222.64	222.42
25	222.83	222.52	222.76	222.72	222.76	222.37	222.50	222.57	222.61	222.60	222.58	222.47
EOM	222.66	222.72	222.90	222.84	222.29	222.65	222.64	222.54	222.75	222.68	222.58	222.58

WATER YEAR 1991 HIGHEST 222.19 Nov. 26 LOWEST 223.07 Nov. 28

COYOTE SPRING VALLEY

364743114533101. Local number, 210 S13 E63 23DDDC1.

LOCATION.--Lat 36°47'43", long 114°53'31", Hydrologic Unit 15010012, in Clark County.

Owner: U.S.G.S. - MX

AQUIFER.--Paleozoic carbonate rock.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 10 in., depth 669 ft, cased to 669 ft.

INSTRUMENTATION.--Water-level recorder, July 1986 to Sept. 1988, Dec. 1990 to Sept. 1991, hourly.

DATUM.--Elevation of land-surface datum is 2,173 ft. Measuring point: Top of casing, 1.3 ft above land-surface datum.

REMARKS.--CE-DT-4 Well.

PERIOD OF RECORD.--December 1980 to 1981, 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 350.00 ft below land-surface datum, Dec. 4, 1985; lowest measured, 352.95 ft below land-surface datum, Mar. 29, 1990.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	352.16	352.16	352.05	352.04	352.05	352.05	---	351.77	351.75	352.34
10	---	---	352.12	352.28	352.07	352.04	351.95	351.87	---	351.78	351.89	352.37
15	---	---	352.08	352.16	352.06	352.03	351.87	351.90	---	351.77	351.98	352.47
20	---	---	352.02	352.16	352.28	351.97	351.94	351.80	---	351.76	352.12	352.40
25	---	---	352.29	352.07	352.23	351.94	351.88	351.76	---	351.67	352.18	352.45
EOM	---	---	352.40	352.14	351.87	352.14	351.98	---	---	351.74	352.35	352.52

WATER YEAR 1991 HIGHEST 351.61 July 25 LOWEST 352.59 Sept. 30

LAS VEGAS VALLEY

363212115240301. Local number, 212 S16 E58 24BB 1.

LOCATION.--Lat 36°32'12", long 115°24'03", Hydrologic Unit 15010015, in Clark County.

Owner: Dept. of Interior, Fish and Wildlife Service.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 8 in., depth 720 ft, cased to 693 ft, perforated 665 to 695 ft.

INSTRUMENTATION.--Water-level recorder, since Oct. 1990, hourly.

DATUM.--Elevation of land-surface datum is 3,475 ft. Measuring point: 1.04 ft above land-surface datum.

REMARKS.--SBH-1 Well.

PERIOD OF RECORD.--February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 579.55 ft below land-surface datum, Mar. 19, 1991; lowest measured, 581.81 ft below land-surface datum, Feb. 25, 1987.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	579.95	579.94	579.99	580.00	580.00	579.79	580.09	580.17	580.10	580.06	580.06	580.32
10	579.97	580.05	579.95	580.03	579.95	579.72	580.08	580.11	580.11	580.08	580.12	580.39
15	---	580.00	579.88	579.96	579.89	579.71	580.05	580.14	---	580.08	580.14	580.42
20	---	579.90	579.87	579.98	579.96	579.66	580.08	580.09	---	580.08	580.17	580.37
25	580.09	---	580.03	580.00	579.90	579.97	580.09	580.08	---	580.07	580.19	580.41
EOM	579.95	---	580.05	580.07	579.69	580.08	580.13	580.10	---	580.12	580.25	580.44

WATER YEAR 1991 HIGHEST 579.55 Mar. 19 LOWEST 580.50 Sept. 30

GROUND-WATER LEVELS, PRIMARY OBSERVATION WELLS

LAS VEGAS VALLEY--Continued

361843115161001. Local number 212 S19 E60 09BCC1.

LOCATION.--Lat 36°18'43", long 115°16'10", Hydrologic Unit 15010015, in Clark County.

Owner: J. P. Goumond.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 10 in., depth 830 ft, cased to 140 ft.

INSTRUMENTATION.--Noon graphic daily recorder.

DATUM.--Elevation of land-surface datum is 2,510 ft. Measuring point: Top of casing, 0.5 ft above land-surface datum.

REMARKS.--Measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--May 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.30 ft below land-surface datum, May 15, 1944; lowest measured, 178.86 ft below land-surface datum, July 5, 1991.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	177.18	177.42	174.42	173.87	174.93	171.06	174.27	175.16	174.66	178.86	177.18	178.34
10	176.76	173.46	174.52	174.93	171.20	173.88	172.66	174.64	174.66	177.06	177.35	178.58
15	177.42	173.42	174.09	174.93	171.48	173.89	173.46	174.64	178.02	177.08	177.22	178.48
20	177.42	173.08	174.10	174.93	171.48	173.58	172.83	174.64	178.28	177.49	177.48	---
25	177.42	172.76	174.00	174.93	171.32	174.03	174.78	174.66	178.37	177.20	177.63	---
EOM	177.42	172.84	173.92	174.93	171.00	173.66	175.13	174.66	178.69	177.49	178.34	---

WATER YEAR 1991 HIGHEST 171.00 Feb. 28, 1991 LOWEST 178.86 July 5, 1991

361611115151301. Local number, 212 S19 E60 27BDC1.

LOCATION.--Lat 36°16'11", long 115°15'13", Hydrologic Unit 15010015, in Clark County.

Owner: U.S. Geological Survey.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused artesian observation well, diameter 6 in., depth 905 ft, cased to 84 ft.

DATUM.--Elevation of land-surface datum is 2,360 ft. Measuring point: Hole on west side of casing, 1.2 ft above land-surface datum.

REMARKS.--Weekly measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.

PERIOD OF RECORD.--June 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.90 ft above land-surface datum, June 3, 1946; lowest measured, 105.59 ft below land-surface datum, July 30, 1991.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 1	100.54	Dec. 3	93.99	Feb. 5	90.93	Apr. 1	90.26	June 3	99.06	Aug. 5	103.59
9	100.50	6	93.54	11	91.88	8	92.29	5	98.75	12	103.60
15	99.90	10	93.22	19	91.10	16	92.62	12	100.79	19	103.95
22	98.40	17	92.28	25	91.57	22	93.98	18	101.78	26	105.13
29	98.10	24	92.83	Mar. 4	91.38	29	94.66	24	102.30	Sept. 4	105.35
Nov. 5	96.93	31	92.08	6	90.06	May 6	95.39	July 1	103.13	9	103.64
15	95.93	Jan. 7	91.99	11	91.84	13	96.14	8	104.06	16	104.59
19	95.50	14	91.88	18	92.02	20	97.38	14	104.28	24	104.95
26	95.00	22	90.78	25	91.00	28	99.07	22	105.00	30	104.23
		30	90.87					30	105.59		

WATER YEAR 1991 HIGHEST 90.06 Mar. 6, 1991 LOWEST 105.59 July 30, 1991

360846115091401. Local number, 212 S21 E61 04DDBA1.

LOCATION.--Lat 36°08'46", long 115°09'14", Hydrologic Unit 15010015, in Clark County.

Owner: Boulder Dam Inc.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 8 in., depth 500 ft, cased to 500 ft.

DATUM.--Elevation of land-surface datum is 2,042 ft. Measuring point: Top of casing, 1.5 in. nipple on southwest side, 1.3 ft above land-surface datum.

REMARKS.--Weekly measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.

PERIOD OF RECORD.--February 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.58 ft below land-surface datum, March 2, 1979; lowest measured, 38.35 ft below land-surface datum, Sept. 4, 1990.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 1	35.54	Dec. 3	26.12	Feb. 5	21.90	Apr. 1	22.66	June 3	26.79	Aug. 5	32.50
9	34.73	10	25.88	11	21.74	8	23.24	5	26.74	12	32.63
15	31.87	17	25.68	19	22.50	16	24.18	12	27.24	19	32.74
22	31.23	24	25.13	25	23.05	22	24.72	18	27.80	26	33.90
29	30.51	31	24.14	Mar. 4	23.07	29	24.51	24	28.61	Sept. 4	34.09
Nov. 5	30.06	Jan. 7	23.23	6	22.47	May 6	25.09	July 1	30.24	9	33.52
15	28.57	9	22.91	11	23.46	13	25.67	8	31.29	16	34.10
19	27.74	14	22.17	18	23.39	20	26.16	14	31.50	24	33.43
26	26.79	22	22.78	25	22.94	28	26.61	22	32.37	30	32.60
		30	22.07					30	32.76		

WATER YEAR 1991 HIGHEST 21.74 Feb. 11, 1991 LOWEST 35.54 Oct. 1, 1990

LAS VEGAS VALLEY --Continued

360349115100001. Local number, 212 S22 E61 04BCB1.

LOCATION.--Lat 36°03'49", long 115°10'00", Hydrologic Unit 15010015, in Clark County.

Owner: Fitzpatrick.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 8 in., depth 355 ft.

DATUM.--Elevation of land-surface datum is 2,225 ft. Measuring point: Hole in top of casing, 0.8 ft above land-surface datum.

REMARKS.--Weekly measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.

PERIOD OF RECORD.--January 1939, February 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.40 ft below land-surface datum, Jan. 25, 1939; lowest measured, 171.20 ft below land-surface datum, Aug. 27, 1990.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 1	169.22	Dec. 3	168.04	Feb. 5	166.71	Apr. 1	166.41	June 3	167.78	Aug. 5	169.42
9	169.43	10	167.70	11	166.68	8	166.73	11	168.20	12	169.56
18	168.99	12	167.55	19	166.83	16	166.53	12	168.28	19	169.54
22	168.83	17	167.44	25	166.73	22	166.84	18	168.51	26	169.68
29	168.59	24	167.55	Mar. 4	166.51	29	167.29	24	168.70	Sept. 4	169.83
Nov. 5	168.38	31	167.38	5	166.29	May 6	167.43	July 1	168.98	9	169.26
15	168.17	Jan. 7	166.56	11	166.55	13	167.52	8	169.22	16	169.72
19	168.04	14	166.88	18	167.34	20	167.54	14	169.38	24	169.84
26	167.58	22	166.77	25	166.38	28	167.98	22	169.63	30	169.81
		30	166.74					30	169.74		

WATER YEAR 1991 HIGHEST 166.29 Mar. 5, 1991 LOWEST 169.84 Sept. 24, 1991

UPPER MOAPA VALLEY

364650114432001 Local number 219 S13 E65 28BDBA1

LOCATION.--Lat 36°46'50", long 114°43'20", Hydrologic Unit 15010012, in Clark County.

Owner: U.S.G.S. - MX.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 10 in., depth 478 ft, cased to 478 ft.

INSTRUMENTATION.--Water-level recorder since Feb. 1991, hourly.

DATUM.--Elevation of land-surface datum is 2,186 ft. Measuring point: top of casing, 1.30 ft above land-surface datum.

REMARKS.--CSV-2 Well.

PERIOD OF RECORD.--February 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 390.21 ft below land-surface datum, Dec. 30, 1985; lowest recorded, 392.4 ft below land-surface datum, Sept. 28, 1990.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	391.36	391.35	391.45	---	---	---	392.01
10	---	---	---	---	391.41	391.31	391.27	391.35	---	---	391.62	392.11
15	---	---	---	---	391.41	391.41	391.20	391.38	---	---	391.63	392.24
20	---	---	---	---	391.59	391.36	391.29	391.26	---	---	391.71	392.14
25	---	---	---	---	391.58	391.27	391.29	391.21	---	---	391.73	392.17
EOM	---	---	---	---	391.19	391.43	391.37	---	---	---	391.85	392.30

WATER YEAR 1991 HIGHEST 391.01 May 1 LOWEST 392.34 Sept. 16, 21, 29

AMARGOSA DESERT

364556116413501. Local number, 230 S13 E47 35BDBA1.

LOCATION.--Lat 36°45'56", long 116°41'35", Hydrologic Unit 18090202, in Nye County.

Owner: U.S. Geological Survey.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused observation well, diameter 6 in., depth 404 ft, cased to 404 ft, perforated 364 to 404 ft.

DATUM.--Elevation of land-surface datum is 4,777 ft. Measuring point: Top of metal casing, 0.9 ft above land-surface datum.

REMARKS.--Monthly measurements supplied by U.S. Geological Survey personnel.

PERIOD OF RECORD.--February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 366.8 ft below land-surface datum, April 24, 1990; lowest measured, 369.8 ft below land-surface datum, March 17, 1987.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 15	367.5	Jan. 15	367.5	Mar. 6	367.5	May 15	367.6	July 2	367.3	Aug. 27	367.5
Nov. 16	367.7	Feb. 7	367.5	Apr. 17	367.5	June 5	367.6	Sept. 27	367.5		

WATER YEAR 1991 HIGHEST 367.3 July 2, 1991 LOWEST 367.7 Nov. 16, 1990

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

County codes: 001, Churchill; 003, Clark; 007, Elko; 009, Esmeralda; 011, Eureka; 013, Humboldt; 015, Lander; 017, Lincoln; 019, Lyon; 021, Mineral; 023, Nye; 027, Pershing; 029, Storey; 031, Washoe; 033, White Pine.
Independent City code: 510, Carson City.
Water-use codes: C, commercial; F, fire; H, domestic; I, irrigation; N, industrial; P, public supply; R, recreation; S, stock; U, unused.
Geologic-unit codes: 100VLFL, Cenozoic valley fill deposits; 110LSVG, Quaternary Las Vegas Formation; 110VLFL, Quaternary valley fill, undifferentiated; 111ALVM, Holocene alluvium; 111FLDP, Holocene flood-plain deposits; 121MDCK, Pliocene Muddy Creek Formation; 122ALTA, Miocene ALTA Formation; 300CRBN, Paleozoic carbonate rocks.
Aquifer codes: A, artesian; U, unknown; W, water table.

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
1	N47 E30 15CDCD1	415800118370001	PINE FOREST FARMS	013	I	110VLFL	U	200.
2	N45 E28 10CAB 1	415000118440001	ADLER CREEK RANCH	013	S	110VLFL	U	48.
9	N43 E19 33BB 1	413630119520001		031	S	110VLFL	U	70.
21	N31 E19 27ADA 1	403200119490001	USBLM	031	S	110VLFL	U	111.
22	N30 E23 29B 1	402700119250001		031	U	110VLFL	U	109.
24	N35 E24 32DDC 2	405208119161502	USGS	027	U	110VLFL	A	66.
29	N43 E32 20DCDD1	413500118250001	C-2 CATTLE CO	013	I		U	69.
33A	N41 E37 32AAAC1	412854117495001	E F RUNOW	013	I	110VLFL	U	250.
33A	N42 E37 04BDCA1	413300117494001	DONALD MORRIS	013	I	110VLFL	U	360.
33A	N44 E37 33AAAA1	412934117483001	ALBISU	013	I	110VLFL	U	550.
36	N41 E52 28AADA2	412534116072602	ELLISON	007	U	110VLFL	U	200.
42	N37 E59 25BCBC1	410400115164001	MARBLE RANCH	007	H	110VLFL	W	14.
45	N33 E58 19ADD1	404350115281001	H CONRAD	007	H	110VLFL	W	16.
46	N31 E56 16ADDA1	403400115400001		007	S	110VLFL	U	193.
48	N33 E56 08CAAD1	404521115395801	MOFAT	007	H	110VLFL	W	12.
54	N29 E48 03BDCB1	402450116324001	DEAN RANCH	011	S	110VLFL	A	53.
54	N29 E48 29CACC2	402100116352001	BEOVAWE FARMS	011	I	110VLFL	U	300.
54	N31 E49 05CACC1	403500116284501	WILLIAM CONNELLY	011	H	110VLFL	W	10.
56	N24 E43 35CC 1	395335117062401	STIENEN RANCH	015	I	110VLFL	U	202.
57	N25 E41 12BCC 1	400320117190101	USGS	015	U	110VLFL	W	68.
59	N30 E44 18ADBD1	402831117034201	COPPER CYN MINING	015	I	110VLFL	U	264.
61	N32 E45 11DACC1	403920116520001	USGS	015	U	110VLFL	U	197.
69	N37 E38 24ACC 1	410415117384701	USGS	013	U	110VLFL	W	38.
69	N38 E39 09CCAB1	411056117354901	DWIGHT C VEDDER	013	S	110VLFL	U	58.
69	N38 E39 28CDD1	410806117353501	W G LONG	013	I	110VLFL	U	256.
69	N41 E40 30AABB1	412421117303301	SHELTON SCHOOL	013	U	110VLFL	W	27.
70	N36 E40 30AACA1	405810117302801	DIAMOND S RANCH	013	U	110VLFL	U	101.
71	N33 E38 32BABB1	404138117441501	USBLM	027	U		W	54.
71	N35 E37 34AACC2	405130117480002		013	U		U	83.
72	N32 E33 33AAAA1	403620118153001	C & C CAMPBELL	027	I	110VLFL	U	288.
73A	N29 E33 33AAAC1	402000118160001	LOVELOCK MEADOWS	027	P	110VLFL	U	395.
76	N20 E25 18CCC 1	393539119133001	JOE GARBARINO	019	U	110VLFL	U	28.
76	N20 E25 18CCC 2	393539119133002	JOE GARBARINO	019	U	110VLFL	U	155.
80	N24 E23 36CBA 1	395422119210701	W J CERESOLA	031	U	110VLFL	U	73.
80	N25 E23 23CDBA1	400100119220001		031	U	110VLFL	W	12.
81	N24 E22 31CCC 2	395357119333401	USBIA	031	U	110VLFL	U	226.
81	N27 E21 09BDA 1	401352119380201	USGS	031	U	110VLFL	U	47.
81	N27 E21 16ABD 1	401245119374401	USGS	031	U	110VLFL	U	44.

Depths, diameter, and elevation: Depths are referenced to land-surface datum (LSD). Well depth, perforated interval, and elevation are rounded to nearest foot. Well diameter is rounded to nearest inch. Elevation is that of LSD, with reference to sea level.

Period of record: Interval shown spans period from earliest measurement to latest measurement, and may include intervals with no record.

Water levels: Levels above LSD are listed as negative values.

DIAMETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
16.		4380.	1968-	40.67	03/11/86	58.73	03/19/91	58.73	03/19/91
8.		4228.	1968-	3.49	03/11/86	13.76	03/22/77	7.71	03/19/91
6.		5200.	1968-	10.22	03/13/72	16.15	06/13/90	12.74	02/27/91
6.		4000.	1966-	37.91	09/15/66	55.31	07/14/88	53.48	02/28/91
6.		4013.	1966-	45.20	04/09/69	55.93	02/28/91	55.93	02/28/91
2.		4031.	1967-	-2.25	06/14/67	17.85	02/27/91	17.85	02/27/91
6.		4105.	1976-	21.07	04/24/84	29.13	03/18/80	26.77	03/19/91
16.	150.- 250.	4200.	1971-	46.06	04/10/85	78.11	04/29/71	59.32	03/19/91
16.		4235.	1973-	88.02	03/18/74	108.39	03/23/77	101.54	03/19/91
16.	175.- 545.	4280.	1972-	105.69	04/06/78	144.57	04/06/82	135.88	03/19/91
2.		5700.	1970-	45.25	04/16/86	47.80	03/06/91	47.80	03/06/91
48.		5350.	1938-	.32	04/28/69	20.80	02/26/45	8.67	03/01/91
48.		5950.	1934-	.09	04/28/46	18.00	11/01/40	14.30	03/07/91
6.		5650.	1964-	70.78	04/02/86	90.92	03/17/70	81.00	03/08/91
42.		5500.	1944-	4.30	06/28/58	11.48	09/12/60	7.32	03/08/91
8.		4740.	1973-	-1.50	04/12/88	.40	03/18/81	-0.90	03/12/91
14.		4800.	1958-	54.07	04/12/88	69.28	09/28/66	54.43	03/12/91
48.		4698.	1948-	4.46	04/26/84	8.33	09/22/54	7.60	03/12/91
12.		5220.	1961-	-1.83	03/26/85	3.06	03/15/90	2.72	02/26/91
2.	65.- 67.	4948.	1964-	38.83	04/15/70	58.54	08/05/64	54.47	02/26/91
		4609.	1947-	5.25	03/16/51	6.91	03/29/82	6.82	03/13/91
6.		4520.	1949-	4.08	07/10/52	10.88	10/04/61	10.10	03/18/91
1.		4317.	1960-	19.20	11/14/72	28.22	11/19/75	24.50	04/05/91
10.	20.- 75.	4317.	1968-	8.10	11/08/71	32.21	04/05/91	32.21	04/05/91
16.		4317.	1968-	9.86	04/18/72	28.33	04/05/91	28.33	04/05/91
8.		4414.	1970-	.69	04/23/71	9.01	11/12/81	7.45	03/19/91
6.		5200.	1949-	20.17	09/01/58	46.10	03/15/64	39.82	03/18/91
6.		4432.	1939-	28.40	07/24/46	39.46	03/28/79	34.34	03/20/91
		4301.	1946-	17.68	05/16/46	29.00	03/28/79	24.19	03/20/91
14.		4150.	1954-	26.39	04/11/85	45.85	03/25/70	33.12	03/18/91
12.	100.- 395.	4300.	1968-	119.10	04/23/69	126.15	04/06/83	125.86	03/18/91
6.		4134.	1953-	1.96	07/07/55	8.85	02/28/91	8.85	02/28/91
10.		4135.	1953-	3.33	09/02/53	25.06	02/28/89	24.41	02/28/91
6.		3845.	1969-	20.39	04/03/85	27.14	07/14/70	25.57	02/28/91
48.		3800.	1968-	2.47	04/18/73	4.40	03/22/88	4.38	02/28/91
8.		3988.	1970-	10.25	03/09/72	24.28	03/12/84	17.64	02/25/91
2.	45.- 47.	3845.	1967-	5.90	07/28/67	12.83	02/25/91	12.83	02/25/91
2.	42.- 44.	3810.	1967-	16.63	07/28/67	19.50	02/25/91	19.50	02/25/91

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
81	N28 E21 33CCD 1	401443119381201	USGS	031	U	110VLFL	U	60.
83	N17 E21 06ADCA1	392212119394101	CARLSBURG DEVELOPMENT	029	U	122ALTA	U	290.
83	N18 E21 32ABCD1	392313119384201	JOHN CHOATE	029	H	122ALTA	U	300.
83	N18 E21 32CBBD1	392254119392001	MICHEAL DEVANY	029	H	122ALTA	U	180.
83	N18 E21 33BABC2	392320119375302	MERAK DEVELOPMENT CO	029	F		U	200.
85	N20 E20 01CBAB1	393743119413601	CUSTOM BUILDERS	031	H		U	130.
85	N20 E20 01DACB1	393737119411501	CUSTOM BUILDERS	031	H		U	125.
85	N20 E20 03BCDC1	393744119435101	JIM PATTERSON	031	H		U	
85	N20 E20 10CDAB1	393637119432901	DAVID KILEY	031	S		U	105.
85	N20 E20 10DBBC1	393649119432301	DAVID KILEY	031	S		U	300.
85	N20 E20 10DBBC2	393649119432302	DAVID KILEY	031	S		U	250.
85	N20 E20 11BDDA1	393655119421901	JOE GASPARI	031	S		U	199.
85	N20 E20 21AABC1	393529119441601	DEAN SMITH	031	P		U	194.
85	N20 E20 21BDDA1	393513119443501		031	U		U	215.
85	N20 E21 07CBCB1	393648119403301	JIM SWEGER	031	U		U	350.
85	N20 E21 07CCCC1	393631119403401	JIM SWEGER	031	U		U	44.
85	N20 E21 18DABD1	393558119395001	TUCKER	031	I		U	262.
85	N20 E21 18DDBA1	393548119395101	TUCKER	031	I		U	250.
85	N21 E20 12DACD1	394154119405401	WILLIAM L WARDRUP	031	H		U	500.
85	N21 E20 24BCBA1	394032119414601	RICHARD T DONOVAN	031	I		U	217.
85	N21 E20 26DDCC1	393904119420701	NORTH AMERICAN AVIATION	031	N		U	787.
85	N21 E21 20BBDC1	394038119392601	CHARLES WILTSIE	031	H		U	480.
85	N21 E21 30CAAA1	393927119401301	STEPHEN & CHER MACK	031	H		U	350.
85	N21 E21 31CACA1	393828119401601	BUD MAY	031	H		U	421.
89	N16 E19 10BBDA1	391617119502101	FLYING ME RANCH	031	U	110VLFL	U	94.
89	N16 E19 26DBDC1	391308119484801	KENNETH PIERCE	031	H		U	138.
92A	N20 E18 02DDDD1	393718119550601	ANDERSON FIRE DEPT	031	H		U	170.
92A	N21 E18 23AADD1	394034119554301	JIM SWEGER	031	U		U	570.
92A	N21 E18 36ADDD1	393839119544101	USGS	031	U		U	150.
92A	N21 E19 18BCBA1	394120119550901	LEARENO	031	H		U	810.
92A	N21 E19 20BDCD1	394022119541201	USGS	031	U		U	67.
92A	N21 E19 20DBDA1	394013119521001	USGS	031	U		U	87.
92A	N21 E19 30CACC1	393916119543701	USGS	031	U		U	22.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

393

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
2.	58.- 60.	3865.	1967-	15.31	07/28/67	23.85	02/25/91	23.85	02/25/91
6.	60.- 290.	6355.	1977-	67.44	03/04/87	74.93	04/09/82	69.80	02/25/91
6.	265.- 295.	5980.	1973-	63.65	05/01/84	110.06	02/26/91	110.06	02/26/91
6.	160.- 180.	6242.	1976-	75.60	03/11/86	100.00	11/10/76	98.24	02/25/91
9.	80.- 200.	5785.	1980-	10.47	05/01/84	23.93	03/31/90	23.58	02/26/91
6.	101.- 130.	4490.	1979-	7.99	03/13/86	14.56	02/25/91	14.56	02/25/91
6.	105.- 125.	4504.	1979-	11.74	03/13/86	22.84	07/18/80	13.67	02/25/91
		4642.	1964-	67.67	04/20/83	103.06	07/11/79	83.14	02/25/91
8.	59.- 105.	4497.	1977-	25.19	09/20/80	32.47	02/25/91	32.47	02/25/91
12.	100.- 300.	4485.	1979-	18.64	07/10/79	32.70	04/20/83	25.84	02/25/91
10.	50.- 250.	4485.	1979-	19.36	07/10/79	26.62	02/25/91	26.62	02/25/91
6.	80.- 160.	4463.	1951-	.64	03/13/86	8.00	11/23/51	3.76	02/25/91
12.	152.- 194.	4497.	1977-	90.80	01/19/81	120.79	02/25/91	120.79	02/25/91
8.		4540.	1979-	89.54	01/19/81	110.90	09/01/88	104.14	02/25/91
8.	100.- 350.	4490.	1979-	4.06	03/04/87	5.91	07/18/80	5.13	02/26/91
11.		4514.	1979-	25.89	10/17/80	28.51	06/23/81	26.89	02/26/91
9.	86.- 126.	4528.	1979-	31.58	02/26/91	36.99	07/23/79	31.58	02/26/91
8.		4538.	1977-	25.00	08/14/77	46.11	02/26/91	46.11	02/26/91
6.	310.- 494.	4875.	1979-	340.36	07/03/79	344.72	03/13/86	342.07	02/25/91
12.	137.- 217.	4569.	1976-	90.00	11/24/76	107.52	09/01/88	96.99	02/25/91
24.	37.- 787.	4550.	1957-	63.09	03/18/81	69.06	04/21/81	65.12	02/25/91
6.	330.- 480.	4918.	1978-	228.83	07/16/79	287.96	02/25/91	287.96	02/25/91
7.		4750.	1979-	209.48	03/29/90	219.40	02/25/91	219.40	02/25/91
8.	141.- 291.	4668.	1979-	107.00	03/20/79	144.04	03/14/88	132.71	02/26/91
12.		5065.	1968-	5.03	03/11/86	7.20	04/25/84	7.08	02/25/91
8.	73.- 138.	5120.	1960-	6.79	03/11/86	22.00	08/07/81	17.97	02/25/91
7.	100.- 170.	5222.	1963-	19.16	03/10/83	44.08	06/23/81	41.20 39.40 36.96 39.92	10/12/90 01/11/91 04/03/91 07/09/91
10.	280.- 570.	5130.	1972-	80.00	05/02/72	175.24	10/12/90	175.24 171.99 168.74 174.36	10/12/90 01/11/91 04/03/91 07/09/91
1.	148.- 150.	4968.	1971-	.79	09/18/72	25.00	10/04/71	2.07 2.35 2.46	10/12/90 01/11/91 07/09/91
12.		5041.	1971-	82.32	03/14/72	111.44	10/12/90	111.44 103.52 99.18 106.03	10/12/90 01/11/91 04/03/91 07/09/91
2.	65.- 67.	5025.	1971-	50.69	01/07/88	59.64	06/27/80	52.59 52.57 52.62 52.67	10/12/90 01/11/91 04/03/91 07/09/91
2.	85.- 87.	5040.	1971-	53.16	01/07/88	67.54	10/06/80	56.35 56.35 56.25 56.30	10/12/90 01/11/91 04/03/91 07/09/91
2.	20.- 22.	4970.	1971-	1.75	04/01/86	11.31	02/12/80	10.38 9.80 9.50 9.88	10/12/90 01/11/91 04/03/91 07/09/91

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
92B N20 E19 05CDAD2	393725119522402	J CAVANAUGH	031	U		U	
92B N20 E19 05DAAD1	393737119514801		031	U		U	
92B N20 E19 08DDCB1	393630119520201	GLANCY PEARSON	031	U		U	387.
92B N20 E19 10BCAD1	393700119501101		031	C		U	
92B N20 E19 10BCAD1	393700119501101		031	C		U	
92B N20 E19 11BCAA1	393704119491801	TRIGG WARD	031	H		U	
92B N21 E19 15BACD1	394126119502101		031	U		U	
92B N21 E19 22DBAA1	394017119500201	USGS	031	U		U	150.
92B N21 E19 26CCDB1	393907119493101	USGS	031	U		U	62.
92B N21 E19 28CBCB1	393921119515001	USGS	031	U		U	53.
92B N21 E19 29DACB1	393920119520701	USGS	031	U		U	84.
103 N17 E22 32CADA1	391733119321001	GERALDINE SMITH	019	U	110VLFL	U	101.
103 N17 E23 01DDBA1	392129119205301	STAGECOACH UTILITIES	019	U		U	276.
103 N17 E23 02CDCC1	392143119222401	USGS	019	U	110VLFL	U	86.
103 N17 E23 04DDCC1	392141119240601	DUTCH HUGHES	019	U	110VLFL	U	339.
103 N17 E23 07DDDD1	392047119260501	UTAH MINE & CONSTRUCTION	019	U	110VLFL	U	386.
103 N17 E23 09CCDC1	392050119244701	USGS	019	U	110VLFL	U	82.
103 N17 E23 09DAAA1	392110119235001	USGS	019	U	110VLFL	U	84.
103 N17 E23 10ABCD1	392126119230901	USGS	019	U	110VLFL	U	88.
103 N17 E23 10BABD1	392132119232501	TERRY WEATHERMAN	019	I	110VLFL	U	300.
103 N17 E23 11DBAB1	392112119215801	MCBEAN	019	H		U	87.
103 N17 E23 18DDDD1	391954119260601	UTAH MINE & CONSTRUCTION	019	U	110VLFL	U	822.
103 N17 E23 26CCCC1	391812119224001	KATHLEEN HOLMAN	019	H		U	176.
103 N17 E23 27ABAC1	391857119230701	STEELE HOLMAN	019	H	110VLFL	U	220.
103 N18 E23 35CBDD1	392246119222901	CARL MCHENRY	019	H		U	215.
104 N15 E20 17CACD1	390940119454701	NV DEPT OF BLDGS & GRNDS	510	P		U	595.
104 N15 E20 20CCBB1	391235119521501	PHILIP HARPER	510	I	110VLFL	W	38.
107 N10 E24 08CBCA1	384426119194601	FRED FULSTONE JR	019	I		U	504.
107 N10 E24 09BA 1	384459119174401	LOUIS GORDONE	019	I		U	652.
107 N10 E24 16ACCC1	384350119172301	JOSEPH ACCAIRI	019	I		U	486.
107 N10 E24 17CCAA1	384326119193701	WILLIAM M WEAVER JR	019	I		U	490.
107 N10 E24 18BACD1	384356119203501	FRED FULSTONE JR	019	I		U	536.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

395

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
8.		5060.	1983-	8.08	04/01/86	28.52	07/09/91	25.02 26.06 25.03 28.52	10/12/90 01/11/91 04/03/91 07/09/91
8.		5020.	1966-	27.11	04/01/86	57.10	06/14/77	44.12 44.15 43.43 46.65	10/12/90 01/11/91 04/03/91 07/09/91
		5170.	1974-	10.42	04/17/75	22.00	10/12/90	22.00 17.30	10/12/90 01/11/91
6.		5070.	1971-	35.00	11/05/71	107.95	04/07/88	96.88 90.82	10/12/90 01/11/91
6.		5070.	1971-	35.00	11/05/71	107.95	04/07/88	90.65 102.62	04/03/91 07/09/91
		5125.	1982-	90.07	04/06/84	108.00	01/11/91	104.37 108.00 98.75	10/12/90 01/11/91 04/03/91
6.		5025.	1971-	133.28	06/13/72	179.01	07/09/91	177.15 170.37 179.01	10/12/90 04/03/91 07/09/91
2.	148.- 150.	4919.	1971-	17.36	04/20/72	47.90	07/09/91	47.13 42.19 43.80 47.90	10/12/90 01/11/91 04/03/91 07/09/91
2.	60.- 62.	4919.	1971-	12.80	03/16/72	41.53	07/09/91	41.21 37.36 36.58 41.53	10/12/90 01/11/91 04/03/91 07/09/91
2.	51.- 53.	4930.	1971-	9.91	04/01/86	17.03	10/12/90	17.03 15.72 15.63 16.90	10/12/90 01/11/91 04/03/91 07/09/91
2.	82.- 84.	5035.	1971-	38.54	06/23/81	53.11	06/27/80	45.02 47.35 47.98 49.95	10/12/90 01/11/91 04/03/91 07/09/91
8.		4347.	1970-	53.58	06/03/70	57.60	09/22/77	56.47	02/27/91
8.	240.- 276.	4455.	1972-	224.19	07/14/72	232.62	02/27/91	232.62	02/27/91
2.	83.- 86.	4286.	1977-	50.00	07/20/77	67.17	09/11/89	65.41	02/27/91
12.	287.- 395.	4314.	1976-	75.00	02/02/76	96.06	12/20/79	93.29	02/27/91
12.	12.-	4324.	1970-	73.98	08/05/70	89.02	09/11/89	88.68	02/27/91
2.	52.- 82.	4271.	1977-	25.76	09/21/77	41.93	02/27/91	41.93	02/27/91
2.		4282.	1977-	53.63	03/02/78	60.24	08/17/79	58.23	02/27/91
2.		4277.	1977-	48.51	04/11/78	58.09	03/11/86	56.19	02/27/91
12.	234.- 300.	4286.	1969-	48.00	05/12/69	68.15	02/27/91	68.15	02/27/91
8.		4288.	1981-	59.54	04/17/81	64.73	04/01/90	64.42	02/27/91
17.	137.- 265.	4286.	1970-	34.84	08/05/70	47.98	02/27/91	47.98	02/27/91
7.	156.- 176.	4298.	1978-	56.61	02/25/91	64.23	12/20/79	56.61	02/25/91
9.	180.- 220.	4286.	1970-	51.14	06/05/70	58.45	03/31/90	58.28	02/27/91
8.	191.- 211.	4401.	1977-	160.00	09/19/77	188.03	04/01/90	182.54	02/27/91
18.		4662.	1946-	1.84	03/13/52	23.80	09/17/64	11.41	02/25/91
48.		4685.	1962-	19.81	03/26/86	31.14	02/25/91	31.14	02/25/91
16.	100.- 504.	4950.	1973-	55.47	04/04/84	99.75	02/26/91	99.75	02/26/91
18.	78.- 574.	4960.	1978-	103.55	11/20/81	137.98	02/25/91	137.98	02/25/91
14.	196.- 486.	5000.	1972-	101.40	04/02/87	148.25	02/26/91	148.25	02/26/91
16.	150.- 490.	4980.	1976-	107.15	04/02/87	187.34	07/27/76	156.10	02/26/91
16.	198.- 536.	5000.	1974-	79.00	11/22/74	218.60	08/02/77	170.83	02/26/91

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
107	N11 E23 02ADDD1	385040119212301	DR MAURICE BLISS	019	I		U	537.
107	N11 E23 02BBCC1	385057119220701	JOHN NEILL	019	I		U	412.
107	N11 E23 03CBBC1	385035119240001	NORMAN ANNETTE	019	I		U	580.
107	N11 E23 12CBBB1	384949119204901	WILLIAM G WALKER	019	U		U	585.
107	N11 E23 15CBAA1	384855119234801	MARVIN BERRINGTON	019	I		U	510.
107	N11 E23 23BCBB1	384830119220501	SAM STRIEBE	019	I		U	420.
107	N11 E24 32CBAD1	384619119192301	RALPH NUTTI	019	U		U	140.
107	N11 E24 32DC 1	384610119190001	A NUTTI	019	I	110VLFL	U	390.
107	N12 E23 24CB 1	385314119205901	THREE DOUBLE BAR RANCH	019	U	110VLFL	U	287.
107	N12 E23 34ACCC1	385834119322301	LESTER FARRIS	019	I		U	400.
107	N12 E23 34BACB1	385205119225401	THREE 2-BAR RANCH	019	I		U	423.
107	N12 E23 36DBBD1	385141119212701	SWEETWATER RANCH CO	019	I		U	270.
107	N12 E23 36DCDC1	385109119210701	SWEETWATER RANCH CO	019	I		U	495.
107	N12 E24 31BACB1	385201119193601	WILLIAM G WALKER	019	I		U	540.
107	N12 E24 31DBBA1	385130119192001	DALE HUSBOE	019	I		U	587.
108	N11 E25 01ABDD1	385102119075301	HAVSIS RANCH	019	I		U	400.
108	N11 E25 10DBCD1	384942119100801	LOUIS G SCAETENA	019	I		U	597.
108	N12 E25 12CDAA1	385447119075901	ALBERT MACKENZIE	019	H		U	102.
108	N12 E25 15DB 1	385410119100401	DAVE MENESINI	019	I		U	310.
108	N12 E25 21ACA 1	385332119110601	KAY BUNN	019	H		U	100.
108	N12 E25 23DCC 1	385255119090501	NAT LOMMORI	019	I		U	325.
108	N13 E25 01DBDD1	390100119075201	BILL BARTELS	019	I		U	505.
108	N13 E25 13CCCD1	385904119083001	LUIGI LOMMORI	019	I		U	306.
108	N13 E25 13DDDD1	385903119073001	JOHN CONNELLY	019	I		U	280.
108	N13 E25 23DDDC1	385809119084401	WILBUR SEYDEN	019	I		U	308.
108	N13 E25 25CDDA1	385722119080701	GEORGI BROS	019	S		U	45.
108	N13 E25 26DDCC1	385720119085001	FRAZIER	019	I		U	160.
108	N13 E25 36DCCA1	385633119074201	LOUIE MENESINI	019	I		U	255.
108	N13 E26 02BBCC1	390127119030001	CARROL HASKINS	019	I		U	203.
108	N13 E26 06DBDC1	390059119064301	VAUGHN B SILVA	019	I		U	241.
108	N13 E26 08CACA1	390011119060201	BARBARA DILLARD	019	I		U	130.
108	N13 E26 09DBCC1	390006119043901	H H THURSTON	019	I		U	166.
108	N13 E26 31DDCD1	385628119063301	SAM JOHNSON	019	I		U	172.
108	N14 E25 03DDDC1	390558119094701	ROBERT M BROWN	019	I		U	85.
108	N14 E25 04DACC1	390611119110301	LARRY MASINI	019	I		U	451.
108	N14 E25 08ADDC1	390531119115901	TED FABER	019	I		U	523.
108	N14 E25 08CCCC1	390501119130001	LARRY MASINI	019	I		U	200.
108	N14 E25 08DCCC1	390507119122801	LARRY MASINI	019	I		U	348.
108	N14 E25 10CCDA1	390509119103401	LARRY MASINI	019	I		U	460.
108	N14 E25 11BDAC1	390538119091301	HERB PENROSE	019	S		U	60.
108	N14 E25 18DCBB1	390415119132801		019	U		U	73.
108	N14 E25 27ACCD1	390225119100801	TWAMBLEY POLI RANCH	019	I		U	320.
108	N14 E25 29DCBC1	390233119122401	C J SIMMONS	019	H		U	150.
108	N14 E25 34CB 1	390154119104001	ANTONE FARIAS	019	I		U	358.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

397

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
14.	147.- 537.	4780.	1969-	10.00	09/09/69	45.84	02/25/91	45.84	02/25/91
14.	96.- 412.	4797.	1960-	18.38	10/22/81	44.46	02/25/91	44.46	02/25/91
16.	165.- 580.	4881.	1976-	100.96	04/04/84	186.25	08/05/77	146.94	02/25/91
14.	230.- 585.	4790.	1972-	15.62	04/04/84	51.72	02/25/91	51.72	02/25/91
16.	130.- 510.	8420.	1973-	20.03	11/03/83	115.70	06/02/76	47.08	02/26/91
14.	100.- 420.	4800.	1961-	23.81	11/03/83	85.00	05/11/61	49.07	02/26/91
3.		4855.	1980-	17.80	03/12/85	64.14	02/25/91	64.14	02/25/91
16.		4865.	1948-	23.62	03/03/48	89.21	06/22/61	85.39	02/25/91
16.		4745.	1972-	4.50	06/23/72	12.62	02/25/91	12.62	02/25/91
14.	100.- 400.	4795.	1960-	18.00	05/15/60	50.44	02/25/91	50.44	02/25/91
16.	100.- 423.	4795.	1961-	7.00	04/22/82	48.50	02/25/91	48.50	02/25/91
15.	94.- 252.	4766.	1956-	3.00	05/01/56	35.85	02/25/91	35.85	02/25/91
12.	147.- 495.	4782.	1960-	20.00	09/25/60	58.58	02/25/91	58.58	02/25/91
14.	270.- 534.	4790.	1968-	40.00	08/10/68	80.60	02/25/91	80.60	02/25/91
14.	197.- 587.	4810.	1971-	61.03	03/29/73	88.70	02/25/91	88.70	02/25/91
16.	156.- 382.	4538.	1960-	48.07	11/06/84	76.69	03/01/91	76.69	03/01/91
16.	183.- 575.	4568.	1961-	68.87	10/26/65	92.21	03/01/91	92.21	03/01/91
6.		4470.	1978-	18.00	06/28/78	64.04	03/01/91	64.04	03/01/91
14.	42.- 310.	4440.	1965-	9.77	11/09/65	19.18	03/01/91	19.18	03/01/91
6.		4460.	1965-	12.92	03/01/91	32.00	03/19/90	12.92	03/01/91
16.	104.- 325.	4460.	1965-	7.05	10/20/65	17.67	03/01/91	17.67	03/01/91
16.	240.- 505.	4364.	1977-	6.26	03/10/80	12.10	02/27/91	12.10	02/27/91
16.	103.- 306.	4380.	1961-	1.54	10/14/80	14.00	05/31/61	12.18	03/01/91
16.	115.- 280.	4370.	1977-	5.40	03/24/81	26.00	03/20/90	16.56	03/01/91
14.	100.- 308.	4394.	1963-	5.62	10/28/65	20.46	03/01/91	20.46	03/01/91
6.		4425.	1965-	14.68	11/01/65	38.20	03/01/91	38.20	03/01/91
14.	102.-	4405.	1981-	6.22	11/06/84	23.78	03/01/91	23.78	03/01/91
14.	40.- 255.	4434.	1965-	10.22	10/28/65	51.57	03/01/91	51.57	03/01/91
12.	64.- 203.	4408.	1961-	65.00	11/04/61	82.92	03/01/91	82.92	03/01/91
14.	95.- 241.	4358.	1961-	5.01	11/07/84	11.31	02/27/91	11.31	02/27/91
13.	50.- 120.	4350.	1973-	8.00	03/01/73	21.64	03/01/91	21.64	03/01/91
12.	60.- 160.	4380.	1956-	43.00	12/15/56	59.57	04/06/87	57.39	03/01/91
13.	90.- 172.	4460.	1960-	37.00	08/04/60	94.00	03/08/79	83.32	03/01/91
16.	91.- 258.	4323.	1977-	7.35	01/20/83	24.26	04/06/87	15.75	02/27/91
16.	97.- 451.	4320.	1981-	4.98	02/01/83	12.50	02/27/91	12.50	02/27/91
16.	89.- 523.	4320.	1981-	6.48	04/02/84	13.50	02/27/91	13.50	02/27/91
		4323.	1983-	6.46	11/07/84	18.34	02/27/91	18.34	02/27/91
16.	107.- 348.	4410.	1976-	6.22	11/07/84	20.00	08/18/76	18.15	02/27/91
16.	448.- 460.	4332.	1974-	8.76	11/07/84	17.93	02/27/91	17.93	02/27/91
6.		4330.	1965-	6.02	10/27/65	15.24	02/27/91	15.24	02/27/91
10.		4345.	1965-	19.70	10/27/65	37.79	02/27/91	37.79	02/27/91
16.	91.- 320.	4351.	1960-	8.90	03/08/77	14.99	02/27/91	14.99	02/27/91
10.	110.- 150.	4390.	1960-	45.00	12/06/60	54.56	02/27/91	54.56	02/27/91
16.	103.- 358.	4360.	1961-	10.00	03/30/61	21.12	02/27/91	21.12	02/27/91

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
108	N14 E26 03DCBC1	390606119032901	GENE BINGHAM	019	I		U	160.
108	N14 E26 03DCDD1	390601119031701	GENE BINGHAM	019	I		U	160.
108	N14 E26 15ADBB1	390436119030701	ARTHUR BURGESS	019	I		U	158.
108	N14 E26 31DCCC1	390137119065401	JOHN RITTER	019	I		U	239.
108	N14 E26 31DCCC2	390137119065402	JOHN RITTER	019	I		U	400.
108	N14 E26 32ADCA1	390204119052801	JOE MENESINI JR	019	I		U	308.
108	N14 E26 32BCCC1	390201119062001	O D GABLE	019	I		U	120.
108	N14 E26 32BCCC2	390201119062002	O D GABLE	019	I		U	249.
108	N14 E26 32BDDD1	390203119055101	JOSEPH MANHA	019	S		U	104.
108	N15 E25 33AADD1	390727119115301	ALFRED PALMER	019	I		U	428.
108	N15 E25 34ACDD1	390715119095901	LARRY MASINI	019	I		U	370.
110C	N06 E31 33BAB 1	382031118315901	SWEETWATER RANCH CO	021	U		U	86.
110C	N06 E31 33BAB 2	382033118315501	SWEETWATER RANCH CO	021	U		U	126.
110C	N08 E30 03DA 1	383440118365001	U.S. ARMY AMMUNITION	021	N	110VLFL	U	850.
110C	N08 E30 04AAA 1	383525118375101	USGS	021	U	110VLFL	U	62.
110C	N08 E30 18AAD 1	383310118401001	U.S. ARMY AMMUNITION	021	N	110VLFL	U	345.
110C	N08 E30 21DDB 1	383150118380001	U.S. ARMY AMMUNITION	021	N	110VLFL	U	394.
110C	N08 E30 26DDA 1	383100118355001	U.S. ARMY AMMUNITION	021	N	110VLFL	U	423.
110C	N08 E31 29CDC 1	383100118330001	U.S. ARMY AMMUNITION	021	N	110VLFL	U	452.
110C	N09 E30 29DDD 1	383624118385801	USGS	021	U	110VLFL	W	18.
110C	N09 E30 33CAA 1	383550118382201	USGS	021	U	110VLFL	W	41.
117	S01 E35 28A 1	374950118051001	REX CLARK	009	S	110VLFL	U	624.
118	N03 E36 02BCB 1	380854117565601		009	U	110VLFL	U	145.
122	N11 E36 18DB 1	384850117581001		023	U	110VLFL	U	87.
124	N16 E33 02DC 1	391620118143001	C B STARK	001	U	110VLFL	U	441.
125	N17 E34 36CCA1	390234118070701	STATE OF NEVADA	001	U		U	365.
128	N18 E34 28CCD 1	392323118095001		001	U	110VLFL	U	482.
128	N21 E34 27CD 1	393920118084001	GREGORY HOMESTEAD	001	U	110VLFL	U	112.
128	N21 E35 31D 1	393840118050001	USBLM	001	S	110VLFL	U	50.
129	N30 E35 27BBAA2	402640118015002	BERGENDAHL COND CO	027	I	110VLFL	U	208.
131	N30 E42 24CCAD1	402710117124001	USBLM	015	S	110VLFL	U	54.
133	N19 E37 28BCC 1	392903117495001	CHERRY CREEK RANCH	001	U	110VLFL	U	260.
134	N17 E39 34DBBD1	391649117344701		015	S		U	8.
134	N17 E40 08CBAB1	392100117310001	SMITH CREEK RANCH	015	S	110VLFL	W	55.
134	N17 E40 34ACAC1	391754117271401	BROWN	015	U		U	40.
134	N18 E40 33DBCC1	392248117290701	USGS	015	U	110VLFL	U	44.
138	N21 E46 09D 1	394200116480001	GRASS VALLEY RANCH	015	H	110VLFL	W	185.
139	N21 E49 16C 1	394059116282901	FRED ETCHEGARAY	011	S	110VLFL	U	60.
142	S01 E42 10AAA 2	375300117150002	ESMERALDA COUNTY	009	S		U	400.
143	S03 E39 16CA 1	374036117392901	FOOTE MINERAL CO	009	S	110VLFL	U	60.
153	N19 E53 12C 1	393143115572701	IRENE ANDERSON	011	U	111FLDP	W	8.
153	N22 E54 27CA 1	394520115524001	ROBERT STUCKI	011	H	110VLFL	W	94.
153	N23 E53 27BB 1	395100115593001	USGS	011	U	110VLFL	W	22.
153	N23 E53 30DD 1	395020116030001	USGS	011	U	110VLFL	W	22.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

399

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
12.	87.- 123.	4330.	1959-	1.80	04/02/84	7.80	11/29/77	5.77	03/01/91
12.	87.- 123.	4333.	1983-	4.83	04/02/84	8.80	03/01/91	8.80	03/01/91
12.	58.- 158.	4328.	1961-	2.48	03/16/66	11.31	03/01/91	11.31	03/01/91
16.	87.- 239.	4349.	1977-	6.34	11/07/84	11.81	03/01/91	11.81	03/01/91
16.	120.- 400.	4342.	1981-	7.44	01/23/83	17.00	10/13/81	13.70	02/27/91
14.	100.- 308.	4350.	1961-	5.07	10/28/65	15.79	02/27/91	15.79	02/27/91
12.	40.- 120.	4345.	1960-	4.00	07/03/60	13.25	11/29/77	11.18	02/27/91
14.	47.- 247.	4345.	1977-	5.31	01/19/83	21.00	08/01/77	13.63	02/27/91
6.	94.- 103.	4350.	1949-	4.00	07/16/49	13.78	02/27/91	13.78	02/27/91
16.	114.- 428.	4304.	1981-	1.38	04/02/84	7.00	02/27/91	7.00	02/27/91
16.	123.- 370.	4310.	1976-	1.71	04/02/84	10.40	11/29/77	8.49	02/27/91
		5566.	1948-	34.79	05/11/48	67.78	05/01/90	53.96	02/25/91
10.	32.- 132.	5566.	1966-	36.43	02/15/66	67.68	05/01/90	67.67	02/25/91
18.	441.- 696.	4125.	1954-	33.30	03/19/86	117.86	09/27/65	58.84	02/26/91
2.	60.- 62.	4056.	1968-	31.69	03/18/68	36.82	02/26/91	36.82	02/26/91
18.	328.- 345.	4140.	1952-	95.10	11/21/52	110.10	04/06/88	109.64	02/26/91
18.	336.- 350.	4261.	1952-	199.90	11/21/52	232.69	04/23/73	214.69	02/26/91
18.	276.- 408.	4341.	1952-	245.00	11/21/52	280.23	04/23/73	260.22	02/26/91
18.	264.- 436.	4372.	1952-	242.60	11/21/52	264.47	03/19/86	249.94	02/26/91
2.	16.- 18.	4010.	1968-	8.54	04/23/73	10.58	02/26/91	10.58	02/26/91
2.	39.- 41.	4039.	1968-	18.75	03/18/68	23.13	02/26/91	23.13	02/26/91
16.	150.- 600.	4900.	1948-	25.45	01/21/48	45.56	04/13/89	43.32	03/29/91
16.		4580.	1968-	41.23	04/14/78	42.73	03/01/72	41.55	02/27/91
10.		4570.	1961-	36.68	12/13/61	40.08	05/03/83	39.50	02/27/91
8.		4160.	1955-	216.68	01/13/55	224.94	03/23/64	218.73	02/27/91
8.		4388.	1962-	256.70	02/27/91	266.16	07/10/62	256.70	02/27/91
8.		4100.	1981-	206.91	03/30/82	221.02	04/08/81	209.40	02/27/91
11.		3500.	1955-	28.04	06/07/56	35.27	04/10/88	32.74	02/27/91
8.		3480.	1955-	32.33	03/23/64	35.93	03/17/66	34.65	02/27/91
16.		4240.	1963-	12.64	03/12/86	21.57	03/21/65	17.63	03/18/91
6.		4634.	1947-	10.30	03/16/49	13.25	09/21/55	12.80	03/13/91
6.		5360.	1974-	147.85	03/16/90	176.56	03/16/74	148.29	02/27/91
6.		6051.	1964-	6.02	03/20/87	8.78	08/31/66	7.05	02/26/91
6.		6054.	1966-	6.96	03/21/77	13.36	12/02/81	10.57	02/26/91
8.		6059.	1964-	24.23	03/20/87	26.19	12/03/81	24.36	02/26/91
1.		6075.	1966-	32.23	07/11/67	33.07	12/02/81	32.90	02/26/91
48.		6000.	1968-	21.74	06/20/84	36.92	03/19/68	25.72	02/26/91
6.		6230.	1953-	35.02	03/25/85	46.35	03/24/64	40.65	02/26/91
10.	120.- 400.	4960.	1969-	120.00	09/14/69	213.26	04/22/87	204.60	03/28/91
6.		4325.	1967-	44.75	01/19/67	52.65	03/20/69	52.06	03/29/91
30.		6500.	1962-	3.94	03/20/79	7.41	03/24/64	6.45	02/25/91
12.		5858.	1949-	5.49	08/11/49	60.10	02/25/91	60.10	02/25/91
2.	20.- 22.	5820.	1964-	11.60	04/22/69	13.75	02/25/91	13.75	02/25/91
2.	20.- 22.	5821.	1964-	14.05	04/22/70	16.16	04/22/69	14.94	02/25/91

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
153	N23 E54 18DB 1	395220115561001	USGS	011	U	110VLFL	U	32.
154	N18 E55 31CACC1	392300115493001	FERA	033	S	110VLFL	U	43.
154	N19 E56 30D 2	392850115421002	DON ELDRIDGE	033	S	110VLFL	U	37.
155A	N17 E54 29CABB1	391858115550201	USBLM	011	S	110VLFL	U	60.
156	N08 E51 01BCBC1	383510116112901		023	U		U	
156	N09 E51 15DDCD1	383806116125951		023	U		U	2734.
156	N09 E51 22ADDB1	383734116124502		023	U		U	1000.
161	S16 E56 08BAAD1	363447115404601	USAF	003	P		U	437.
162	S19 E53 15DB 1	361753116000901	DAWSON STARVER	023	U		U	395.
162	S19 E53 27DD 1	361554115595501	GUY T ALEXANDER	023	P		U	500.
162	S20 E52 22AA 1	361209116061401	H D TUDOR	023	I		U	300.
162	S20 E52 23BBA 1	361204116060301	W M TURNER	023	U	110VLFL	A	500.
162	S20 E52 36BD 1	361012116044701	JOHN A WHITE	023	I		U	253.
162	S20 E53 06CDA 1	361405116033201	ROOKRIDGE & CARRADO	023	U	110VLFL	U	200.
162	S20 E53 14DCB 1	361225115590301	WILLIAMS & CREWS	023	H	110VLFL	A	254.
162	S21 E54 19DD 2	360611115561802	TURNER	023	U	110VLFL	W	76.
162	S22 E53 01DA 1	360359115573201	CAROLE A MORRIS	023	I		U	325.
169B	S11 E60 36AAAD1	365711115115201	USGS-MX	017	U		U	420.
170	S03 E55 05BDD 1	374256115485501	USBLM	017	S	110VLFL	W	29.
171	N03 E59 10BD 1	380758115204601	USGS	023	U		U	
172	N04 E58 36A 1	381000115240001	USBLM	023	S	110VLFL	U	27.
173A	N01 E53 07ADC 1	375751116030201	FALLINI BROS	023	S		U	136.
173B	N03 E52 02DADB1	380906116050501	FUGRO NATIONAL	023	U		U	452.
173B	N05 E54 24DCBA1	381635115355701	ED CASEY	023	U		U	87.
173B	N06 E57 06DD 1	382404115355601	GULF OIL	023	U		U	150.
173B	N09 E58 18BC 1	383836115295701		023	S		U	

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

401

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
2.	30.- 32.	5800.	1964-	16.45	11/18/66	18.25	02/25/91	18.25	02/25/91
36.		5930.	1946-	22.67	03/24/87	43.96	09/11/63	36.69	02/25/91
42.		5900.	1947-	22.11	04/20/71	39.01	11/12/64	33.79	02/25/91
48.		5987.	1962-	46.03	04/20/89	64.75	03/24/87	54.98	02/25/91
10.		5765.	1990-	328.50	11/14/90	392.39	03/06/91	392.39	03/06/91
20.	1148.-2790.	6085.	1968-	774.00	03/06/91	2338.90	04/11/70	799.20 774.00 779.50 774.70	11/13/90 03/06/91 06/26/91 09/19/91
13.	504.-1000.	6025.	1968-	441.50	01/20/68	561.90	01/19/68	550.10 553.20 552.80	03/06/91 06/26/91 09/19/91
14.	133.- 418.	5135.	1984-	65.85	12/06/90	75.88	08/20/90	65.85 67.40 70.70 67.96	12/06/90 04/08/91 06/11/91 09/16/91
16.		2668.	1952-	62.00	07/18/52	120.60	11/07/84	107.83 107.85	11/09/90 03/27/91
14.		2640.	1967-	90.00	01/23/67	141.92	08/01/78	109.79 109.68	11/09/90 03/27/91
14.	36.- 300.	2560.	1955-	36.00	08/29/55	67.75	03/27/91	67.28 67.75	11/09/90 03/27/91
14.	32.- 500.	2531.	1954-	30.00	07/16/54	55.39	11/09/90	55.39 50.12 49.14 54.12	11/09/90 03/27/91 06/11/91 09/16/91
12.	25.- 125.	2520.	1951-	24.00	09/28/51	49.64	05/10/88	44.67 44.78	11/09/90 03/27/91
14.	30.- 168.	2558.	1952-	15.43	02/02/59	35.89	04/12/89	35.38	03/27/91
8.		2679.	1945-	-23.20	03/06/45	90.61	02/27/75	70.16 64.22 69.18 72.14	11/09/90 03/27/91 06/11/91 09/16/91
10.		2684.	1947-	32.20	05/28/53	52.53	09/16/91	52.13 50.62 52.04 52.53	11/09/90 03/27/91 06/11/91 09/16/91
16.	75.- 325.	2580.	1965-	36.00	03/17/65	66.42	07/08/87	64.57 64.04	11/09/90 03/27/91
		3208.	1986-	158.38	05/17/88	167.66	09/13/91	158.60 160.70 165.70 167.66	11/28/90 04/08/91 06/12/91 09/13/91
8.		5080.	1968-	18.73	01/18/77	26.80	03/19/91	26.72 26.40 26.80 26.80	12/04/90 02/20/91 03/19/91 06/13/91
10.		5600.	1980-	797.05	08/17/87	803.00	12/08/80	801.60 802.10 802.00 802.00 802.10	11/06/90 03/04/91 03/22/91 06/17/91 09/18/91
10.		5260.	1963-	22.49	06/06/91	26.62	04/22/71	23.70 23.30 22.85 22.49 24.38	11/08/90 02/26/91 03/02/91 06/06/91 09/05/91
6.		4900.	1968-	78.48	02/09/71	82.42	03/19/91	79.88 82.42 81.64	12/04/90 03/19/91 09/19/91
22.	320.- 460.	5005.	1980-	229.90	07/16/91	233.60	05/14/84	229.90	07/16/91
6.		4825.	1971-	54.85	10/09/71	55.30	07/19/91	55.30	07/19/91
6.	130.- 150.	4760.	1967-	9.44	03/07/90	22.00	11/06/67	9.75	07/16/91
6.		4840.	1984-	47.87	03/06/90	50.57	06/06/84	48.52	07/16/91

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
173B N10 E58 17BD 1	384342115284101	USGS-MX	023	U		U	580.
173B N10 E58 17BD 2	384348115283701	USGS-MX	023	U		U	600.
173B N11 E57 09CD 1	384920115343001	USBLM	023	S	110VLFL	U	354.
176 N28 E59 09C 1	401900115200001	RUBY VALLEY NO 1	007	S	110VLFL	U	44.
176 N32 E60 29C 1	403639115133001	USGS	007	U	110VLFL	U	202.
176 N32 E60 29C 2	403730115134002	USGS	007	U	110VLFL	W	15.
177 N35 E62 27B 1	405310114574001	USGS	007	U	110VLFL	U	286.
178B N22 E60 26AAB 1	394507115102501	PARIS	033	S	110VLFL	U	130.
179 N12 E63 12AB 1	385521114503601	USGS	033	U		U	640.
179 N15 E64 07A 1	391100114492001	LLOYD SORENSON	033	I	110VLFL	U	200.
179 N16 E64 06CBDC1	391634114484901	USBLM	033	U		U	306.
181 N03 E63 27CAA 1	380531114534201	USGS-MX	017	U		U	2395.
183 N06 E66 35C 1	382003114322501	USBLM	017	U		U	161.
183 N08 E65 02D 1	383502114383201	NEVADA HWY DEPT	017	U		U	130.
184 N15 E66 13D 1	390940114302001	J P JOHANSON	033	H		U	82.
189B N43 E66 25D 1	413444114261701	ECCLES RANCH	007	U	110VLFL	W	28.
189D N40 E69 13D 1	412100114060001	GAMBLE RANCH	007	S	110VLFL	U	
202 N01 E67 12DAC 1	375733114245101	TOWN OF PIOCHE	017	P		U	595.
202 N03 E66 23DAC 1	380608114322601	USBLM	017	U		U	45.
205 S04 E67 18B 1	373627114315301	EMORY CONAWAY	017	I	110VLFL	U	165.
205 S07 E67 21C 1	371928114300001	JAMES BRADSHAW	017	I		U	115.
205 S09 E67 14BDBA2	371012114280302	JENSEN PALISADE RANCH	017	I		U	55.
207 N09 E61 07B 1	382432115095801	LLOYD SORENSON	023	S	110VLFL	W	43.
207 N11 E61 35A 1	384640115045001	PUBLIC DOMAIN	033	S	110VLFL	U	44.
207 N12 E60 27ACBD1	385226115124201	USBLM	033	S		U	300.
207 N12 E62 18D 1	385400115024001	USGS	033	U	110VLFL	U	108.
208 N03 E62 35B 1	380450114594201	USBLM	017	S		U	
208 S02 E61 23D 1	374525115061801		017	S		U	480.
209 S04 E60 02A 2	373806115125102	NEIL STEWART	017	U	110VLFL	U	255.
209 S06 E61 18DC 2	372500115104002	KENT WHIPPLE	017	U	110VLFL	W	41.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

403

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
10.		5120.	1980-	272.36	07/16/91	281.00	11/30/80	272.36	07/16/91
3.		5135.	1984-	268.44	03/06/90	291.56	06/27/91	291.56	06/27/91
6.		5072.	1948-	159.40	06/07/91	177.61	09/16/49	159.40	06/07/91
48.		6150.	1948-	14.61	04/24/73	42.11	04/03/81	36.95	03/08/91
6.		6000.	1949-	.35	04/22/83	5.08	03/07/91	5.08	03/07/91
2.		6000.	1960-	.75	03/31/70	7.48	09/21/61	7.31	03/07/91
6.		5650.	1941-	5.45	04/20/83	11.95	03/01/91	11.95	03/01/91
6.		6160.	1950-	59.85	04/21/69	66.18	08/07/84	65.16	02/25/91
		7320.	1980-	409.72	08/05/86	425.40	02/27/91	423.50 425.40 425.25	11/27/90 02/27/91 06/03/91
16.		6520.	1948-	30.25	06/12/84	41.83	03/10/61	41.07	02/26/91
6.	270.- 306.	6407.	1951-	224.25	07/26/85	270.00	06/10/51	258.70 261.50 262.00	11/27/90 02/28/91 06/03/91
10.		5560.	1980-	846.20	04/29/86	869.45	04/13/84	850.00 852.20 850.00 850.20 850.20	11/06/90 03/22/91 06/18/91 08/02/91 09/18/91
8.		5950.	1946-	13.03	07/26/46	136.63	07/18/91	136.63	07/18/91
		5975.	1964-	32.60	03/02/91	37.90	11/07/90	37.90 32.60 36.60	11/07/90 03/02/91 06/05/91
		5760.	1952-	8.07	04/21/69	23.81	03/10/61	15.50	03/02/91
60.		5250.	1950-	7.07	04/25/85	15.21	02/28/68	12.15	02/27/91
6.		4800.	1968-	5.69	03/13/74	9.30	03/28/68	7.00	02/26/91
10.	264.- 595.	5480.	1965-	91.08	03/15/85	95.80	04/06/90	93.31 93.40	12/03/90 03/21/91
72.		5674.	1946-	38.99	07/18/91	42.50	04/12/46	38.99	07/18/91
14.		4360.	1963-	11.83	03/13/85	26.26	11/18/65	13.65 12.59 13.44 15.32	11/07/90 03/20/91 06/14/91 09/17/91
		3200.	1965-	12.93	02/22/67	20.62	11/18/65	15.20 15.09	03/21/91 06/14/91
16.		2670.	1977-	25.04	03/13/84	33.50	06/14/91	33.03 31.70 33.50	12/05/90 03/20/91 06/14/91
48.		5400.	1948-	28.99	03/31/88	31.83	03/24/65	29.97 30.10	11/09/90 06/05/91
6.		5400.	1953-	3.20	03/16/76	15.85	11/09/90	15.85 10.73 11.38	11/09/90 02/26/91 06/05/91
8.	130.- 300.	6237.	1957-	105.99	03/20/90	120.00	12/24/57	110.56 115.71	03/06/91 06/07/91
6.		5600.	1962-	44.21	03/27/85	55.97	02/26/91	55.97	02/26/91
		4870.	1963-	252.80	05/08/63	268.88	06/05/91	267.40 268.38 268.88	11/07/90 03/04/91 06/05/91
12.		4255.	1985-	363.70	03/10/85	379.74	12/04/90	379.74	12/04/90
12.		4200.	1973-	88.60	03/23/73	212.90	11/05/90	212.90 189.20	11/05/90 03/19/91
6.		3550.	1960-	5.85	02/23/63	11.76	01/18/77	10.28 9.50 9.18 9.06	11/05/90 03/19/91 06/13/91 09/19/91

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
209	S08 E61 02C 1	371640115072001	LAMB	017	I	110VLFL	U	92.
210	S12 E63 29DABC1	365232114554401	USGS-MX	017	U		U	714.
210	S12 E63 29DABC2	365227114554401	USGS-MX	017	U		U	1221.
210	S13 E63 26AAAA1	364741114532801	USGS-MX	003	U	300CRBN	U	628.
210	S13 E64 31DAAD1	364601114514301	USGS-MX	003	U		U	765.
210	S14 E63 28ACDC1	364127114553001	USGS-MX	003	U		U	780.
212	S17 E59 20BD 1	362750115244001	USBLM	003	S		U	300.
212	S19 E57 28ADA 1	361622115350501	PAUL KINGSTON	003	H		U	
212	S19 E59 10ABCA1	361907115212801	BROWNING	003	H		U	860.
212	S19 E59 25ABBA1	361636115191801	PICCOLE	003	H		U	545.
212	S19 E60 04DAB 1	361939115154801	NEVADA DIV OF FORESTRY	003	I	110VLFL	U	780.
212	S19 E60 05ABD 1	361926115164501	KEN DOWDY	003	H	110VLFL	U	265.
212	S19 E60 12DB 1	361806115122701	ELMER LAUB	003	H	110VLFL	U	240.
212	S19 E60 14BCB 1	361804115142401	JOHN KOWAL	003	H		U	350.
212	S19 E60 22BDD 1	361703115150601	BOOKER REID	003	P		U	400.
212	S19 E60 24CBC 1	361655115132101	DOUGLAS O'HAIR	003	H		U	380.
212	S19 E60 26CAD 1	361604115140001	RUSSELL IRBY	003	H		U	320.
212	S19 E60 29BDD 1	361613115171401	PATRICK EDMUNDSON	003	H	100VLFL	U	303.
212	S19 E60 30ABCA1	361629115181101		003	H		U	500.
212	S19 E60 33DDD 1	361451115153401	W S MILLIKEN	003	H		U	325.
212	S19 E60 36CBB 1	361453115130301	SNMRE	003	P		U	330.

405

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
10.		3020.	1952-	14.82	04/13/83	28.59	11/05/90	28.59	11/05/90
								25.00	03/19/91
								26.07	06/12/91
								28.34	09/13/91
	2464.	1986-	542.70	02/06/86	549.10	01/31/89	548.90	11/13/90	
							548.40	03/26/91	
							548.60	06/13/91	
							549.00	09/12/91	
10.		2467.	1981-	602.00	11/25/85	612.00	07/11/81	609.70	11/13/90
								609.70	03/26/91
								610.00	06/13/91
								610.10	09/12/91
20.	121.-	2169.	1981-	347.84	03/14/85	352.00	05/06/81	349.02	11/13/90
								349.00	03/26/91
								348.80	06/13/91
								349.03	09/12/91
4.		2159.	1985-	343.90	11/11/85	345.10	11/13/90	345.10	11/13/90
								344.44	03/26/91
								344.80	06/13/91
								344.07	09/12/91
10.		2414.	1985-	585.00	12/20/85	589.90	09/12/91	589.60	11/13/90
								589.30	03/19/91
								589.60	06/18/91
								589.90	09/12/91
6.	80.-	2950.	1940-	26.01	02/14/72	30.88	02/14/45	27.51	12/06/90
								27.20	03/06/91
								27.19	06/05/91
								27.22	09/09/91
8.		5660.	1978-	379.70	07/25/80	559.70	03/06/91	554.20	12/11/90
								559.70	03/06/91
								556.60	06/05/91
								519.70	09/09/91
9.	760.-	3298.	1990-	697.80	02/26/90	712.14	03/06/91	710.60	12/11/90
								712.14	03/06/91
9.	505.-	2836.	1990-	475.04	03/07/91	480.46	12/11/90	480.46	12/11/90
								475.04	03/07/91
								476.68	06/06/91
								478.59	09/09/91
16.	2454.	1946-	-30.40	04/05/46	95.70	09/09/91	86.56	03/06/91	
							95.70	09/09/91	
	185.-	2570.	1973-	165.07	02/21/73	219.80	09/09/91	211.13	12/11/90
								210.52	03/06/91
219.80								09/09/91	
9.	80.- 240.	2350.	1975-	103.19	03/02/76	135.65	06/06/91	129.46	12/11/90
								133.75	03/06/91
								135.65	06/06/91
								133.66	09/10/91
7.	90.- 350.	2365.	1975-	66.00	02/27/75	119.55	12/11/90	119.55	12/11/90
								109.08	03/06/91
9.	200.- 400.	2360.	1976-	76.00	01/23/76	177.00	09/10/86	143.12	03/06/91
								159.85	06/06/91
								169.43	09/09/91
9.	210.- 380.	2315.	1977-	85.00	07/21/77	173.52	09/10/91	135.05	12/11/90
								128.61	03/06/91
								140.68	06/06/91
								173.52	09/10/91
7.	200.- 320.	2315.	1979-	118.01	03/02/82	156.07	09/07/90	135.19	03/06/91
								145.90	06/06/91
8.		2530.	1968-	137.00	06/01/68	199.70	06/06/91	193.58	12/11/90
								199.70	06/06/91
8.		2660.	1990-	326.10	02/27/90	335.14	09/09/91	331.42	12/11/90
								330.97	03/07/91
								333.04	06/06/91
								335.14	09/09/91
	2360.	1972-	136.00	02/24/72	223.12	09/12/90	191.23	01/10/91	
							178.91	03/07/91	
							192.85	06/06/91	
							196.14	09/09/91	
8.		2290.	1971-	127.15	03/05/71	193.73	09/10/91	177.38	12/11/90
								170.73	03/06/91
								177.34	06/06/91
								193.73	09/10/91

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
212	S19 E61 21DDB 1	361626115090701	CITY NLV	003	U	110VLFL	U	1300.
212	S19 E61 23CBCC1	361649115080101		003	H		U	
212	S19 E61 27AABD1	361629115081201		003	H		U	250.
212	S19 E61 27DCDC1	361542115082501		003	U		U	
212	S19 E61 31ADCD1	361514115112901	WILLIAM STYRES	003	H		U	300.
212	S19 E61 33ABCC1	361531115093201	CITY NLV	003	R		U	700.
212	S19 E61 34DBDA1	361507115082001	JOHN SEELY	003	H		U	
212	S19 E61 35DDB 1	361459115070901	JERRY H BRADFORD	003	H		U	200.
212	S19 E62 35DCDC1	361451115004401	LK MEAD B	003	P		U	838.
212	S20 E60 03DBBA1	361423115145401		003	H		U	
212	S20 E60 04CAD 1	361417115161301	EDWARD TOMSIK	003	H		U	500.
212	S20 E60 05CADC1	361415115172101		003	H		U	580.
212	S20 E60 06ADBB1	361439115180001		003	H		U	
212	S20 E60 07ADAB1	361345115175401		003	H		U	
212	S20 E60 09DCC 1	361259115153901	LAWRENCE MONTELLO	003	U		U	450.
212	S20 E60 10CBDD1	361320115152101		003	H		U	550.
212	S20 E60 13DCCD1	361201115123701	MIKE TOMASELLI	003	H		U	157.
212	S20 E61 01ACCD1	361425115061901	USGS	003	U	110LSVG	U	84.
212	S20 E61 02DBB 1	361419115072201	HARTWELL & LOWE	003	U	110VLFL	U	785.
212	S20 E61 03DAD 2	361412115080801	NELLIS AFB	003	P	110VLFL	U	913.
212	S20 E61 04BDCA1	361426115095001		003	U	110VLFL	U	270.

407

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)													
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE								
9.	50.-1300.	2160.	1971-	23.00	04/08/71	38.41	09/11/91	37.24	12/20/90								
								36.90	03/04/91								
								37.23	06/03/91								
								38.41	09/11/91								
9.	2057.	1990-	86.40	02/28/90	88.39	12/26/90	88.39	12/26/90									
							87.80	03/04/91									
							9.	2060.	1990-	84.69	02/28/90	93.59	09/11/91	86.73	12/26/90		
														86.06	03/04/91		
91.40	06/03/91																
93.59	09/11/91																
9.	2050.	1990-	87.49	09/04/90	95.34	02/28/90	87.53	12/26/90									
							87.50	03/04/91									
							88.60	06/03/91									
							88.95	09/11/91									
9.	180.- 300.	2200.	1977-	123.74	02/24/81	155.38	06/08/87	146.05	12/03/90								
								144.38	03/04/91								
								148.34	06/03/91								
								149.10	09/11/91								
8.	300.- 700.	2117.	1989-	120.82	03/13/89	122.48	06/03/91	122.24	12/26/90								
								122.04	03/04/91								
								122.48	06/03/91								
								9.	2035.	1990-	85.80	02/28/90	87.76	06/03/91	86.95	12/26/90	
85.98	03/04/91																
87.76	06/03/91																
9.	70.- 200.	1960.	1978-	42.00	03/12/78	60.10	02/28/90								57.96	12/26/90	
								57.94	03/04/91								
								59.94	06/03/91								
								14.	370.-	1867.	1972-	95.22	03/19/90	139.05	02/24/72	103.96	12/27/90
104.14	03/06/91																
106.75	06/05/91																
110.60	09/11/91																
9.	285.- 500.	2380.	1973-	285.00	02/22/73	393.88	03/01/90	105.07	06/06/91								
								178.16	09/10/91								
								9.	540.-	2453.	1990-	410.93	06/06/91	462.17	03/01/90	363.56	01/10/91
																374.95	06/06/91
375.16	09/10/91																
9.	2520.	1990-	390.68	09/12/90	396.32	09/09/91	412.60									01/10/91	
							412.08	03/07/91									
							410.93	06/06/91									
							412.15	09/09/91									
8.	360.-	2400.	1970-	330.00	07/22/70	449.00	06/27/84	393.68	01/10/91								
								394.90	06/06/91								
								396.32	09/09/91								
								8.	2342.	1990-	356.22	06/06/91	375.45	09/11/90	508.00	01/10/91	
507.80	03/07/91																
506.90	06/06/91																
507.90	09/09/91																
8.	2224.	1971-	23.47	09/24/85	87.30	02/22/72	415.60	12/10/90									
							418.68	03/07/91									
							408.70	06/06/91									
							418.86	09/09/91									
8.	90.- 430.	1900.	1949-	-17.00	03/27/50	61.57	10/09/87	362.57	01/10/91								
								356.22	06/06/91								
								367.90	09/10/91								
								4.	80.- 84.	1919.	1979-	60.94	05/01/81	65.31	09/17/87	41.78	03/06/91
43.00	06/10/91																
8.	90.- 430.	1900.	1949-	-17.00	03/27/50	61.57	10/09/87									62.01	12/03/90
																61.74	03/04/91
								61.49	06/03/91								
								63.79	09/11/91								
8.	90.- 430.	1900.	1949-	-17.00	03/27/50	61.57	10/09/87	49.09	12/03/90								
								46.67	03/04/91								
								46.75	06/03/91								
								12.	150.- 900.	1973.	1974-	39.50	03/01/77	150.94	08/30/88	70.71	12/27/90
71.84	03/06/91																
67.96	06/05/91																
98.82	09/11/91																
12.	2103.	1976-	75.70	03/04/76	96.91	09/11/91	96.64	12/03/90									
							96.45	03/04/91									
							96.61	06/03/91									
							96.91	09/11/91									

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
212	S20 E61 05ACBB1	361434115104201		003	H		U	300.
212	S20 E61 07CCB 1	361301115115401	ROGERS	003	U	110VLFL	U	300.
212	S20 E61 08DCDA1	361309115102701		003	U		U	
212	S20 E61 11CDDC1	361305115073201	USGS	003	U	121MDCK	U	62.
212	S20 E61 13ABDB1	361232115061001	CITY NLV	003	P	110VLFL	U	1230.
212	S20 E61 14CCCC1	361212115065901	USGS	003	U		U	46.
212	S20 E61 21BAAB1	361147115094001	CITY NLV	003	P	110VLFL	U	397.
212	S20 E61 22BCDD1	361141115085001	CITY NLV	003	P	110VLFL	U	1000.
212	S20 E61 22DACD1	361120115080401	CITY NLV	003	P	110VLFL	U	1105.
212	S20 E61 27BDAA1	361102115083601	USGS	003	U	110VLFL	U	15.
212	S20 E61 29DABD2	361046115101901		003	H	110VLFL	U	105.
212	S20 E61 30BDC 1	361053115120501	USGS	003	U		U	31.
212	S20 E61 31DCD 1	360937115113401	USGS	003	U		U	18.
212	S20 E61 32CDC 1	360941115104801	KENNETH SEARLES	003	H	110VLFL	A	665.
212	S20 E61 34CAA 1	360837115095501	USGS	003	U		U	22.
212	S20 E62 01BBC 1	361421115001601	LK MEAD B	003	P	110VLFL	U	1026.
212	S20 E62 04ADD 1	361412115023501	NELLIS AFB	003	P		U	800.
212	S20 E62 04CBC 1	361354115032401	CENTRAL TEL CO	003	C	110VLFL	U	250.
212	S20 E62 05CAAA1	361400115040901	CITY NLV	003	P	110VLFL	U	1000.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

409

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
9.	140.-	2150.	1990-	132.01	03/01/90	135.87	09/11/91	132.69 132.52 132.80 135.87	12/20/90 03/04/91 06/03/91 09/11/91
10.		2228.	1970-	40.14	09/10/91	78.88	11/07/79	41.76 41.22 40.70 40.14	12/20/90 03/04/91 06/03/91 09/10/91
9.		2194.	1990-	110.50	12/20/90	144.65	03/02/90	110.50	12/20/90
4.	58.- 62.	1920.	1979-	1.15	03/04/91	46.99	03/14/86	12.78 1.15 1.63 2.98	12/04/90 03/04/91 06/03/91 09/10/91
30.	102.-1039.	1857.	1973-	47.86	03/04/91	82.64	09/12/84	59.34 47.86 57.68 63.52	12/29/90 03/04/91 06/03/91 09/10/91
4.	43.- 46.	1910.	1981-	25.76	12/05/89	32.97	11/14/88	29.63 29.11 29.11 29.95	12/04/90 03/05/91 06/03/91 09/09/91
10.	200.- 395.	2064.	1973-	48.58	02/14/73	84.66	10/13/87	72.87 78.49 69.70 77.51 74.89	12/04/90 12/20/90 03/05/91 06/03/91 09/09/91
14.	500.- 925.	2019.	1973-	53.55	06/03/91	74.40	09/18/87	67.09 54.48 53.55 66.50	12/20/90 03/05/91 06/03/91 09/09/91
30.	249.-1019.	1911.	1973-	7.33	03/05/91	51.70	09/25/85	12.10 7.33 9.57 17.83	12/20/90 03/05/91 06/03/91 09/09/91
4.	11.- 15.	2010.	1979-	9.05	11/14/88	13.06	06/14/85	11.16 10.35 11.49 11.86	12/04/90 03/05/91 06/03/91 09/09/91
		2079.	1978-	20.17	06/03/91	28.35	10/25/78	23.00 21.94 20.17 21.64	12/27/90 03/05/91 06/03/91 09/09/91
4.	27.- 31.	2000.	1981-	7.93	01/07/87	11.92	03/02/81	8.98 8.94 8.58 8.21	12/04/90 03/05/91 06/03/91 09/09/91
4.	14.- 18.	2155.	1981-	6.86	08/15/88	13.21	03/02/81	9.85 10.11 9.89 9.50	12/04/90 03/06/91 06/05/91 09/09/91
10.	570.- 650.	2102.	1946-	-81.30	02/27/46	108.19	08/07/75	51.84 46.72 51.24 54.69	12/04/90 03/06/91 06/05/91 09/09/91
4.	18.- 22.	2010.	1981-	5.23	03/16/87	8.77	07/20/83	7.19 6.46 6.75 6.88	01/09/91 03/06/91 06/05/91 09/09/91
14.	96.-1026.	1865.	1972-	108.28	09/12/90	149.99	02/27/75	118.57 143.69 124.97	12/27/90 03/06/91 09/11/91
16.	90.- 784.	1871.	1973-	56.74	03/06/91	81.88	03/02/76	59.92 56.74 58.42 72.64	12/27/90 03/06/91 06/05/91 09/11/91
9.	175.- 245.	1865.	1972-	56.30	03/04/91	79.14	02/21/72	65.14 56.30 60.98 74.57	12/27/90 03/04/91 06/04/91 09/11/91
14.	500.- 940.	1869.	1973-	87.68	03/02/82	144.82	09/16/86	124.00 88.42	12/27/90 03/04/91

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
212	S20 E62 09CCC 1	361258115032101	NELLIS AFB	003	P		U	650.
212	S20 E62 15BBAB1	361233115021501	NELLIS AFB	003	P	110VLFL	U	1000.
212	S20 E62 16ACC 1	361241115024801	NELLIS AFB	003	P	110VLFL	U	694.
212	S20 E62 17AAA 1	361250115033901	EVANS	003	H	110VLFL	U	250.
212	S20 E62 18BABA1	361243115052501	CITY NLV	003	P	110VLFL	U	700.
212	S20 E62 19BBD 1	361147115052301	WILLIAM E COOK	003	H		U	205.
212	S20 E62 21DBA 1	361125115024801		003	U		U	150.
212	S20 E62 26BBCC1	361100115011901	FORREST PURDY	003	H	110VLFL	U	330.
212	S20 E62 28BCD 1	361059115032501	A C OWENS	003	H		U	115.
212	S20 E62 29DCAB1	361036115040401		003	U	110VLFL	W	98.
212	S20 E62 34CABB1	360952115020701		003	I		U	100.
212	S21 E59 06DBAC1	360859115244201		003	H		U	
212	S21 E60 01DBB 1	360847115125301		003	U		U	190.
212	S21 E60 04CBDA1	360857115163301		003	H		U	850.
212	S21 E60 12BABA1	360825115130301	DEAN & NICK DALACAS	003	U		U	165.
/ 212	S21 E60 12CBAB1	360810115131701		003	H		U	359.
212	S21 E60 15BBDC1	360739115152701	WELLS CARGO	003	N	110VLFL	U	680.
212	S21 E60 16BDDb1	360712115155501	CLEAR GRAVEL INC	003	U		U	750.
212	S21 E60 35ADAB1	360444115132301	FRANK KIM	003	H	110VLFL	U	500.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

411

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
14.	290.- 630.	1827.	1973-	77.27	03/06/91	243.70	09/22/89	87.20 77.27 97.34 190.10	12/27/90 03/06/91 06/05/91 09/11/91
14.	320.- 980.	1816.	1973-	88.50	03/06/91	137.05	09/12/90	102.52 88.50 127.84 115.10	12/27/90 03/06/91 06/05/91 09/11/91
14.	274.- 675.	1811.	1973-	84.16	03/06/91	151.66	09/12/90	92.48 84.16 119.10 116.94	12/27/90 03/06/91 06/05/91 09/11/91
8.	82.- 250.	1826.	1971-	66.52	06/04/91	96.00	02/21/72	68.32 67.65 66.52 73.12	12/27/90 03/04/91 06/04/91 09/10/91
9.	350.- 550.	1847.	1974-	47.29	03/04/91	92.51	03/05/74	64.30 47.29	12/27/90 03/04/91
		1822.	1972-	22.42	06/04/91	61.79	02/21/72	23.47 25.47 22.42 23.78	12/27/90 03/05/91 06/04/91 09/10/91
		1780.	1973-	72.63	06/04/91	88.99	03/01/77	74.93 73.28 72.63 73.48	12/17/90 03/05/91 06/04/91 09/10/91
9.	160.- 330.	1900.	1969-	138.88	09/10/91	154.34	02/26/86	147.22 139.15 139.98 138.88	12/17/90 03/05/91 06/04/91 09/10/91
		1765.	1973-	47.29	06/04/91	78.27	02/19/73	48.80 47.30 47.29 47.78	12/17/90 03/05/91 06/04/91 09/10/91
8.		1766.	1971-	31.13	09/10/91	75.06	10/12/77	33.74 33.04 31.49 31.13	12/06/90 03/05/91 06/03/91 09/10/91
		1740.	1972-	32.75	06/03/91	53.45	03/07/75	34.01 33.01 32.75 33.35	12/17/90 03/05/91 06/03/91 09/10/91
		3590.	1990-	107.99	06/10/91	144.60	08/29/90	113.08 116.25 107.99 108.90	01/09/91 03/07/91 06/10/91 09/10/91
8.		2261.	1974-	84.83	01/10/91	148.16	02/27/75	84.83 89.59 89.19 87.06	01/10/91 03/07/91 06/14/91 09/10/91
	310.-	2648.	1990-	645.60	09/10/91	656.50	06/10/91	648.30 647.10 656.50 645.60	01/10/91 03/07/91 06/10/91 09/10/91
8.		2270.	1973-	82.25	09/10/91	154.56	03/02/77	86.95 84.96 84.15 82.25	12/10/90 03/07/91 06/10/91 09/10/91
		2283.	1990-	79.95	12/10/90	85.87	03/05/90	79.95	12/10/90
10.	380.- 680.	2480.	1969-	362.30	09/13/84	467.97	01/07/86	434.40 439.00 437.45 433.28	01/10/91 03/08/91 06/10/91 09/10/91
8.	405.- 750.	2545.	1974-	443.05	03/08/74	492.20	03/09/89	489.92 492.18 488.80 487.73	01/10/91 03/08/91 06/10/91 09/10/91
8.	230.- 295.	2359.	1971-	257.88	03/04/71	338.23	09/13/84	314.16 314.00	01/10/91 03/07/91

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
212	S21 E61 03AAAD1	360924115081101	USGS	003	U	110VLFL	U	15.
212	S21 E61 03ABAB1	360930115083401	USGS	003	U	110VLFL	U	25.
212	S21 E61 03ABB 2	360931115083802	W PARK	003	U	110VLFL	U	807.
212	S21 E61 04AAD 1	360910115092001	HOME LUMBER	003	U	110VLFL	U	793.
212	S21 E61 04ABC 1	360921115093601	USGS	003	U		U	17.
212	S21 E61 04DDBA2	360846115091402	USGS	003	U	110VLFL	U	20.
212	S21 E61 09BBBB1	360838115101801	USGS	003	U	110VLFL	U	25.
212	S21 E61 10CDA 1	360754115083301	LV INT COUNTRY CLUB	003	I		U	270.
212	S21 E61 14ACA 1	360728115072901	SAHARA COUNTRY CLUB	003	I		U	750.
212	S21 E61 15DDDD1	360701115081301	USGS	003	U		U	24.
212	S21 E61 16CA 3	360719115095903	SANDS HOTEL	003	P		U	840.
212	S21 E61 17BADD1	360735115105201	USGS	003	U	110LSVG	U	45.
212	S21 E61 22CCC 1	360600115091001	A P BAKER	003	U	110VLFL	A	500.
212	S21 E61 23CBC 1	360614115075001		003	U		U	340.
212	S21 E61 24CAD 1	360617115063801	USGS	003	U		U	24.
212	S21 E61 25BDA 1	360542115065001	DAVID MCCOIG	003	H	110VLFL	U	120.
212	S21 E61 26DDBB1	360522115072101	USGS	003	U		U	30.
212	S21 E61 28CABB1	360528115094201		003	U		U	93.
212	S21 E61 36ADC 3	360449115061201	USGS	003	U	110VLFL	U	26.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

413

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
4.	11.- 15.	1990.	1979-	6.96	06/20/85	8.67	06/27/84	7.53 7.39 7.43 7.46	12/06/90 03/06/91 06/05/91 09/09/91
4.	21.- 25.	2008.	1979-	9.58	03/06/91	11.32	11/09/82	9.74 9.58 10.20 10.70	01/09/91 03/06/91 06/05/91 09/09/91
12.		2014.	1944-	-38.11	03/06/44	72.98	09/05/80	52.87 46.82 49.77 62.79	01/09/91 03/06/91 06/05/91 09/09/91
10.	642.- 770.	2039.	1944-	-46.70	02/08/50	88.03	08/30/90	66.75 57.88 58.92 77.66	01/09/91 03/06/91 06/05/91 09/09/91
4.	13.- 14.	2047.	1981-	8.27	03/07/88	10.02	09/10/86	8.70 8.72 8.44 8.88	01/09/91 03/06/91 06/05/91 09/09/91
4.	16.- 20.	2042.	1979-	6.69	09/09/91	9.23	10/22/79	6.98 6.80 6.93 6.69	01/09/91 03/06/91 06/05/91 09/09/91
4.	21.- 25.	2075.	1979-	7.08	09/09/91	17.15	09/14/79	9.65 10.23 9.14 7.08	01/09/91 03/06/91 06/05/91 09/09/91
		2029.	1971-	52.49	02/21/73	91.99	02/23/81	72.66 72.25	12/26/90 03/07/91
16.	500.- 746.	1930.	1961-	20.61	02/08/88	82.94	09/09/91	21.49 26.31 77.50 82.94	12/26/90 03/07/91 06/05/91 09/09/91
4.	21.- 24.	2000.	1981-	14.19	08/28/90	16.75	11/09/82	15.00 15.81 15.22	12/21/90 03/07/91 06/05/91
13.	260.- 820.	2090.	1968-	95.46	03/03/82	176.43	08/16/88	164.64 165.38	12/21/90 09/09/91
4.	41.- 45.	2120.	1979-	7.32	09/09/91	26.69	02/26/80	9.62 9.96 9.71 7.32	12/06/90 03/07/91 06/05/91 09/09/91
6.		2072.	1940-	-35.60	12/20/42	93.72	07/10/78	54.10 47.68 59.83 67.02	12/21/90 03/05/91 06/05/91 09/09/91
8.		2010.	1971-	18.83	03/05/91	79.49	03/05/71	21.91 18.83 23.45 28.06	12/21/90 03/05/91 06/05/91 09/09/91
4.	20.- 24.	1950.	1981-	10.61	11/15/88	14.30	03/02/81	12.19 13.16 13.27 12.45	12/05/90 03/05/91 06/06/91 09/09/91
8.	31.- 94.	1988.	1953-	25.39	03/06/90	47.00	06/30/53	27.59 25.96 27.18 26.71	12/21/90 03/05/91 06/13/91 09/10/91
4.	26.- 30.	2010.	1981-	13.62	09/16/87	16.90	02/26/86	15.83 16.12 16.03 15.86	12/21/90 03/05/91 06/11/91 09/09/91
		2125.	1970-	24.12	09/09/91	40.06	03/11/74	25.56 26.43 26.25 24.12	12/05/90 03/05/91 06/11/91 09/09/91
2.	23.- 26.	1948.	1977-	15.58	03/05/91	25.39	09/11/86	16.20 15.58 15.85 15.97	12/05/90 03/05/91 06/11/91 09/09/91

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
212	S21 E62 03ABBB1	360931115021201		003	H		U	
212	S21 E62 08DBDA2	360733115034402	RONALD OKELBERRY	003	H		U	200.
212	S21 E62 10ACAA1	360826115020001	NEVADA POWER CO	003	U	110VLFL	U	715.
212	S21 E62 15BCD 1	360712115021501	LDS FARM	003	U		U	205.
212	S21 E62 17DAB 1	360744115050801	USGS	003	U		U	11.
212	S21 E62 19BAC 1	360644115054801	USGS	003	U		U	34.
212	S21 E62 19CADA1	360622115053401	J SIEGRIST	003	H		U	300.
212	S21 E62 20DDD 1	360601115034401	L BILLMAN	003	U		U	500.
212	S21 E62 27CCCB1	360509115023001	NEVADA POWER CO	003	U		U	360.
212	S21 E62 28AAC 1	360548115024601	USGS	003	U		U	27.
212	S21 E62 36DCCC1	360416115000601	BUREAU OF RECLAMATION	003	U	110VLFL	U	17.
212	S21 E63 30AAAA1	360832115060201	USGS	003	U		U	80.
212	S22 E60 13CABA1	360204115130801	BREEDING	003	H		U	
212	S22 E60 16BCDD1	360201115162701	AMINO	003	H		U	
212	S22 E60 20CACA1	360047115171401	MOFFAT & LILLIS	003	U	110VLFL	U	710.
212	S22 E60 24ADA 1	360120115123001	GEORGE SHIROKY	003	U		U	400.
212	S22 E60 27ABB 1	360042115150501	JUAN VILLEGAS	003	H		U	600.
212	S22 E60 36BBCA1	355947115132001		003	H		U	570.
212	S22 E61 01CCC 1	360328115065501	USGS	003	U		U	55.
212	S22 E61 03DCA 2	360334115082901		003	U	110VLFL	U	210.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

415

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
		1730.	1989-	39.89	03/05/91	44.09	03/06/90	39.89 40.09	03/05/91 09/10/91
9.	50.- 200.	1731.	1971-	11.76	03/11/88	28.59	06/13/89	13.38 12.69 12.37 13.35	12/06/90 03/05/91 06/04/91 09/10/91
13.	50.- 80.	1705.	1972-	11.69	03/22/85	19.97	02/22/72	16.38 15.95 16.37 17.40	12/06/90 03/05/91 06/04/91 09/10/91
		1685.	1971-	5.06	02/26/79	14.21	08/29/90	13.90 12.65 12.34	12/17/90 03/05/91 06/04/91
4.	7.- 11.	1730.	1981-	3.80	06/25/81	9.70	09/11/84	7.90 6.62 6.32 8.20	12/06/90 03/05/91 06/04/91 09/10/91
4.	30.- 34.	1890.	1981-	14.48	03/06/90	23.86	03/02/81	15.25 15.40 15.75 16.04	01/08/91 03/05/91 06/06/91 09/09/91
8.	200.- 295.	1910.	1966-	20.79	01/08/91	38.84	03/07/91	20.79 38.84	01/08/91 03/07/91
		1720.	1973-	-62.50	08/27/90	-42.00	07/14/77	-61.00 -62.00	01/08/91 03/08/91
		1665.	1946-	18.00	03/15/83	24.72	11/28/47	19.06 18.85 18.82 19.08	01/08/91 03/05/91 06/06/91 09/10/91
4.	23.- 27.	1665.	1981-	16.76	09/11/84	19.85	03/02/81	19.43 19.54 19.24	12/05/90 03/05/91 06/06/91
2.	11.- 21.	1618.	1980-	9.37	08/22/84	11.52	06/23/87	11.32 10.95 10.64 11.35	01/08/91 03/07/91 06/06/91 09/10/91
4.	76.- 80.	1590.	1980-	14.80	04/09/85	31.06	06/26/80	23.20 24.09 24.40 23.68	01/02/91 03/07/91 06/11/91 09/10/91
		2437.	1990-	334.47	03/08/91	335.80	06/12/91	335.11 334.47 335.80	01/09/91 03/08/91 06/12/91
		2720.	1990-	636.36	01/09/91	637.20	08/21/90	636.36 636.80 637.20 636.50	01/09/91 03/08/91 06/14/91 09/10/91
8.	610.- 710.	2810.	1963-	473.00	02/25/63	498.04	03/14/83	479.58 479.50 479.36 479.90	01/10/91 03/08/91 06/13/91 09/11/91
8.		2388.	1979-	261.07	03/05/79	298.62	03/14/90	284.40 283.36 296.55	03/08/91 06/12/91 09/11/91
7.	540.- 600.	2580.	1979-	428.00	11/12/79	463.07	12/28/90	463.07 443.32 452.40 444.60	12/28/90 03/08/91 06/12/91 09/11/91
	530.-	2475.	1990-	323.73	06/12/91	347.93	03/16/90	329.92 338.58 323.73 346.55	12/28/90 03/08/91 06/12/91 09/11/91
4.	51.- 55.	2032.	1981-	46.22	03/26/85	53.61	09/21/89	49.92	12/12/90
8.		2081.	1979-	50.28	02/28/79	65.20	08/28/90	56.43 57.34 61.18 63.66	01/08/91 03/05/91 06/11/91 09/10/91

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
212	S22 E61 04ACAD1	360400115092401		003	U		U	113.
212	S22 E61 07BCB 1	360307115112301	TOSCO HOUSTON	003	H		U	400.
212	S22 E61 10CCD 1	360235115090301	LEWIS J DEATCH	003	H		U	300.
212	S22 E61 12AAAD1	360321115060001	JOSEPHINE G BROWN	003	P	110VLFL	U	500.
212	S22 E61 14ADBA1	360217115071201		003	H		U	
212	S22 E61 18CACD1	360156115120501	JAMES KNEZ	003	U		U	360.
212	S22 E61 20BAD 1	360112115104301	ED CLOVER	003	U		U	210.
212	S22 E61 22DBA 1	360114115082701	ROY SOWER	003	H	111ALVM	U	300.
212	S22 E61 24ADD 1	360115115060201	NEVA COTLEY	003	H		U	300.
212	S22 E61 29DCDB1	360002115103801		003	U		U	300.
212	S22 E61 33CACC1	355918115100001		003	H		U	
212	S22 E62 04DCCC1	360322115030801	CITY OF HENDERSON	003	U		U	780.
212	S22 E62 15ACDB1	360209115020401		003	H		U	
212	S22 E63 09DABD1	360251114563201	OVERTON	003	H		U	460.
212	S22 E63 20ABC 1	360122114574801	CITY OF HENDERSON	003	U	110VLFL	U	750.
212	S23 E61 03BCC 1	361136115101401	SKY HARBOR AIRPORT	003	C	110VLFL	U	650.
212	S23 E61 10CCBA1	355731115090601		003	H		U	660.
212	S23 E61 17DABB1	355650115103301		003	H		U	600.
213	S32 E66 13AB 1	350931114341601	BIG BEND WATER DISTRICT	003	P		U	111.
213	S32 E66 32AA 2	350721114380302	BIG BEND WATER DISTRICT	003	U		U	100.
213	S32 E66 33AAA 1	350723114364201	JOHN B KNIGHT	003	I		U	50.
213	S32 E66 33BBB 1	350726114375501	GEORGE CROMER	003	H		U	96.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

417

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
		2165.	1955-	40.00	07/01/55	104.17	12/14/83	100.56 100.65 102.81 101.09	12/06/90 03/05/91 06/11/91 09/09/91
9.	220.- 400.	2365.	1981-	285.40	02/25/81	327.37	08/28/90	325.71 322.39 320.06 325.20	01/09/91 03/08/91 06/12/91 09/11/91
8.	168.- 300.	2160.	1970-	90.00	06/13/70	129.09	08/28/90	121.36 118.94 126.37	12/06/90 03/11/91 09/09/91
9.	160.- 500.	2020.	1977-	27.67	01/08/91	66.00	09/11/86	27.67 28.79 39.63 48.69	01/08/91 03/05/91 06/11/91 09/09/91
		2140.	1990-	103.60	03/13/90	107.00	06/11/91	104.20 107.00	01/08/91 06/11/91
8.		2356.	1972-	228.30	02/24/72	272.56	03/11/91	269.22 272.56	01/09/91 03/11/91
		2287.	1975-	179.39	03/04/77	206.54	06/12/91	206.54	06/12/91
9.	200.- 300.	2205.	1974-	118.27	03/06/79	170.00	08/10/74	142.04 142.88	06/11/91 09/10/91
9.	200.- 300.	2190.	1979-	155.07	02/27/80	205.00	02/22/79	172.71 172.35	12/12/90 06/11/91
8.		2275.	1979-	116.79	03/08/79	130.97	09/09/91	129.96 130.09 130.64 130.97	12/12/90 03/11/91 06/12/91 09/09/91
		2336.	1990-	185.80	03/12/90	190.48	09/10/91	188.05 185.92 188.90 190.48	01/08/91 03/11/91 06/12/91 09/10/91
	430.-	1798.	1973-	-5.50	02/26/78	3.26	06/07/90	.55 .24 .44	01/08/91 03/07/91 06/11/91
		1884.	1990-	78.00	03/13/90	82.76	09/10/91	82.47 82.31 82.76	01/02/91 06/13/91 09/10/91
		1980.	1991-	288.21	09/10/91	288.90	03/11/91	288.90 288.38 288.21	03/11/91 06/13/91 09/10/91
14.	460.- 630.	2030.	1971-	309.36	09/09/91	346.30	02/21/84	310.23 310.34 309.75 309.36	12/05/90 03/07/91 06/06/91 09/09/91
10.	220.- 650.	2375.	1969-	193.30	02/22/72	221.27	03/12/90	214.51	12/12/90
9.	540.-	2474.	1990-	288.75	03/12/90	290.80	09/10/91	289.66 290.04 290.30 290.80	01/08/91 03/11/91 06/13/91 09/10/91
	520.-	2570.	1990-	408.10	03/12/90	409.49	09/10/91	408.72 409.11 409.49	01/08/91 06/13/91 09/10/91
16.	69.- 111.	520.	1985-	20.25	05/21/86	41.14	05/15/87	33.59 30.47 27.50	11/20/90 05/07/91 08/06/91
5.	70.- 100.	510.	1983-	6.00	09/24/83	19.35	05/30/90	16.77 16.68 18.60 15.57	11/20/90 02/07/91 05/07/91 08/06/91
6.		507.	1967-	17.02	07/11/85	26.42	01/27/67	21.74 21.00 19.97 19.06	11/19/90 02/06/91 05/06/91 08/05/91
7.	95.-	511.	1973-	15.40	12/04/85	25.67	04/07/76	19.49 19.60 18.02 18.17	11/19/90 02/06/91 05/06/91 08/05/91

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
215	S17 E67 30ABB 2	362556114322401	NV STATE PARKS	003	P		U	500.
218	S16 E65 33AACA1	363010114424701	USBLM	003	U		U	400.
222	S14 E69 13CB 1	364304114140501	CLIVEN BUNDY	003	H		U	234.
230	S16 E49 18DCCA1	363310116294001	USBLM	023	U	110VLFL	U	348.
230	S17 E52 08CDB 1	362929116085701	HERSHEL & ETAL CLARK	023	I	110VLFL	U	246.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

419

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
10.	330.- 488.	2130.	1978-	336.00	04/03/78	425.00	12/03/82	364.66 366.13 363.38 363.01	11/27/90 03/18/91 06/10/91 09/12/91
6.	360.- 400.	1978.	1949-	311.50	03/28/90	340.00	02/11/49	322.78 321.03 311.52 311.55	11/27/90 03/18/91 06/10/91 09/12/91
8.	206.- 212.	1440.	1958-	65.54	11/11/67	83.14	09/12/91	82.46 82.86 83.14	11/27/90 03/18/91 09/12/91
12.		2375.	1955-	103.10	02/12/55	121.24	07/26/90	118.34 118.14	03/28/91 04/09/91
12.		2395.	1960-	33.23	04/09/91	37.75	03/24/83	34.65 33.23 33.99	03/28/91 04/09/91 08/31/91

LOCATION OF GROUND-WATER QUALITY SAMPLING SITES (Figure 25)

Site Number	Local Number				Latitude	Longitude	Site Identification
1	61	N36	E50	31DDB 1	415702	1162130	415702116213001
2	30B	N43	E34	13BBCA1	413617	1180703	413617118070301
3	31	N42	E34	15CACC1	413035	1180909	413035118090901
4	31	N41	E33	04BAAC1	412739	1181700	412725118170701
5	33A	N41	E36	17DDDB1	412539	1175647	412538117564701
6	31	N41	E35	20AADD1	412511	1180336	412510118024801
7	31	N40	E33	22D 1	411921	1181512	411921118151201
8	31	N39	E35	07DCDA1	411541	1180509	411606118050901
9	31	N39	E34	31BDAD1	411311	1181228	411311118122801
10	31	N39	E32	35DDBB1	411226	1182108	411225118210801
11	31	N38	E32	17DDBB1	410948	1182502	410949118245601
12	31	N37	E34	04ACDD1	410645	1190945	410644118094501
13	62	N37	E49	08ACC 1	410557	1162745	410557116274501
16	31	N36	E33	04CD 1	410105	1181656	410109118165601
23	31	N36	E32	22BABD1	405820	1182300	405813118230501
25	31	N36	E34	30DACD1	405726	1181219	405726118121901
27	70	N35	E35	09BBDC1	405538	1180328	405538118032801
32	31	N35	E32	30BCBB1	405230	1182634	405250118263401
33	61	N34	E49	06AAA 1	405131	1162930	405131116290001
35	61	N34	E49	07ADD 1	405016	1162901	405016116290101
37	61	N34	E49	30BADB1	404752	1162934	404752116293401
47	61	N33	E47	26CCDC1	404157	1163900	404157116390001
135	213	S32	E66	13AB 1	350931	1143416	350931114341601
136	213	S32	E66	14DBDB1	350930	1143511	350930114351101
137	213	S32	E66	33BBB 1	350708	1143734	350726114375501
138	213	S32	E66	33AAA 1	350704	1143711	350723114364201
139	213	S32	E66	32AA 1	350721	1143803	350721114380301

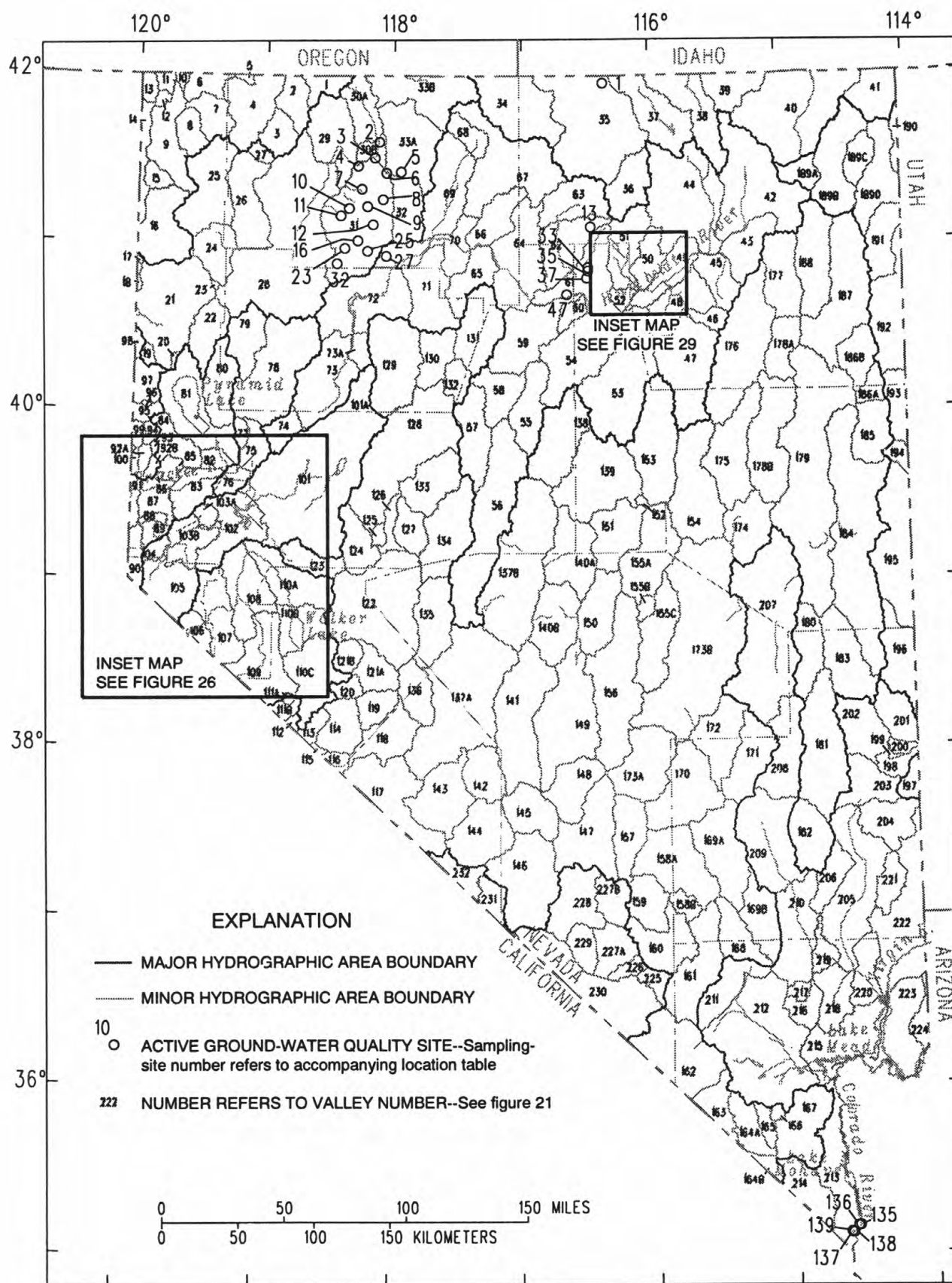


FIGURE 25.--Ground-water quality sites listed in this report.

QUALITY OF GROUND WATER

LAUGHLIN WELLS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

STATION NUMBER	LOCAL IDENTIFIER	STATION NAME	COUNTY	GEOLOGIC UNIT	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)
350721114380301	213 S32 E66 32AA 1	BIG BEND WELL 1 AREA 2	CLARK	FLOOD-PLAIN DEPOSITS	108	510
350723114364201	213 S32 E66 33AAA 1	B. LAUGHLIN (KNIGHT) WELL	CLARK	FLOOD-PLAIN DEPOSITS	50	507
350726114375501	213 S32 E66 33BBB 1	CROMER WELL	CLARK	FLOOD-PLAIN DEPOSITS	96	511
350930114351101	213 S32 E66 14DBDB1	MONITOR WELL 116	CLARK	VALLEY FILL	300	620
350931114341601	213 S32 E66 13AB 1	BIG BEND WELL 1 AREA 1	CLARK	FLOOD-PLAIN DEPOSITS	111	520

STATION	NUMBER	DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH, FIELD (STANDARD UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE WATER (DEG C)	HARDNESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)
350721114380301		11-20-90	16.77	1140	8.0	19.0	20.0	380	100
		02-07-91	16.68	1130	7.9	20.5	21.0	370	99
		05-07-91	18.60	1160	7.8	29.5	22.0	380	100
		08-06-91	15.57	1050	7.7	24.0	21.0	440	120
350723114364201		11-19-90	21.74	1370	7.4	21.0	19.5	450	120
		02-06-91	21.00	1220	7.7	25.0	20.0	440	120
		05-06-91	19.97	1370	7.6	35.0	20.0	410	110
		08-05-91	19.06	1220	7.5	40.0	21.0	410	110
350726114375501		11-19-90	19.49	1190	7.7	26.5	21.5	420	110
		02-06-91	19.60	1060	7.4	23.5	22.0	360	95
		05-06-91	18.02	1110	7.8	34.5	22.0	360	94
		08-05-91	18.17	1040	7.8	40.5	22.5	420	110
350930114351101		11-20-90	--	3350	7.6	18.0	27.5	880	230
		02-07-91	--	3450	7.4	21.5	28.0	910	240
		05-07-91	--	3310	7.3	32.0	29.0	840	210
		08-06-91	--	3300	7.3	28.0	29.0	860	220
350931114341601		11-20-90	33.59	1440	7.8	18.0	19.0	420	110
		02-07-91	21.69	1180	7.8	22.0	18.5	400	110
		05-07-91	30.47	1460	7.8	29.0	18.0	420	110
		08-06-91	27.50	860	7.7	24.0	18.0	330	88

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)
11-20-90	31	100	2	3.8	280	76	0.40
02-07-91	30	94	2	4.0	310	77	0.20
05-07-91	32	100	2	4.4	300	84	0.30
08-06-91	35	100	2	4.0	300	82	0.30
11-19-90	37	140	3	4.2	410	96	0.50
02-06-91	33	130	3	4.6	460	110	0.30
05-06-91	33	140	3	5.4	400	100	0.30
08-05-91	34	130	3	4.4	390	98	0.30
11-19-90	35	110	2	4.8	340	68	0.30
02-06-91	31	100	2	3.3	300	67	0.30
05-06-91	31	110	3	3.5	280	68	0.30
08-05-91	36	100	2	3.1	290	76	0.30
11-20-90	75	310	5	7.4	430	580	0.80
02-07-91	76	310	4	8.6	540	730	0.80
05-07-91	76	340	5	8.2	540	610	0.80
08-06-91	75	350	5	8.3	570	600	1.0
11-20-90	35	140	3	4.5	350	160	0.30
02-07-91	30	110	2	4.4	330	140	0.30
05-07-91	35	140	3	4.7	350	170	0.30
08-06-91	26	93	2	3.4	270	84	0.30

QUALITY OF GROUND WATER

423

LAUGHLIN WELLS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
11-20-90	19	728	750	0.99	<0.010	<0.100	0.140
02-07-91	18	696	704	0.95	<0.010	<0.050	0.120
05-07-91	19	802	772	1.09	--	<0.050	--
08-06-91	20	796	803	1.08	--	0.160	--
11-19-90	18	954	949	1.30	<0.010	<0.100	0.140
02-06-91	17	930	938	1.26	<0.010	<0.050	0.120
05-06-91	18	938	927	1.28	--	<0.050	--
08-05-91	18	906	904	1.23	--	0.077	--
11-19-90	19	800	833	1.09	<0.010	<0.100	0.090
02-06-91	18	744	755	1.01	<0.010	<0.050	0.060
05-06-91	19	740	746	1.01	--	<0.050	--
08-05-91	19	782	780	1.06	--	<0.050	--
11-20-90	28	2190	1960	2.98	0.050	52.0	0.130
02-07-91	27	2230	2190	3.03	<0.010	41.0	<0.010
05-07-91	29	2030	2060	2.76	--	37.0	--
08-06-91	28	2090	2090	2.84	--	32.0	--
11-20-90	14	908	914	1.23	<0.010	<0.100	0.050
02-07-91	13	818	810	1.11	<0.010	0.066	0.020
05-07-91	14	934	922	1.27	--	0.130	--
08-06-91	13	660	666	0.90	--	0.130	--

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	CARBON, ORGANIC TOTAL (MG/L AS C)
11-20-90	<0.010	3	140	21	730	--	2.9
02-07-91	<0.010	5	130	11	730	--	2.3
05-07-91	--	4	150	66	770	<0.1	2.3
08-06-91	--	3	140	35	800	--	2.5
11-19-90	<0.010	4	190	220	920	--	2.7
02-06-91	<0.010	6	180	170	890	--	2.5
05-06-91	--	5	190	180	870	<0.1	2.4
08-05-91	--	4	180	180	850	--	2.5
11-19-90	<0.010	3	130	10	450	--	2.7
02-06-91	<0.010	--	130	21	410	--	2.4
05-06-91	--	4	140	60	400	<0.1	2.4
08-05-91	--	3	130	19	450	--	2.7
11-20-90	0.020	<1	760	<10	<10	--	1.9
02-07-91	<0.010	2	770	20	<10	--	1.7
05-07-91	--	1	850	10	10	<0.1	1.9
08-06-91	--	<1	820	20	<10	--	2.1
11-20-90	<0.010	2	170	<3	310	--	1.9
02-07-91	<0.010	4	130	35	260	--	1.4
05-07-91	--	3	170	23	280	<0.1	1.7
08-06-91	--	2	130	30	170	--	1.6

MISCELLANEOUS SITES

DESERT VALLEY NETWORK

The following table contains streamflow data for sites that were measured as part of the Desert Valley Network in northwestern Nevada.

Stream	Tributary to	Location	Period of record (water years)	Measurements	
				Date	Discharge (ft ³ /s)
Trout Creek near Quinn River Crossing, Nev.	Desert Valley	Lat 41°16'34", long 118°26'56", in NE1/4NE1/4 sec.12, T.39 N., R.31 E., Humboldt County, Hydrologic Unit 16040201, about 0.1 mi upstream of cabin, about 8.5 mi northwest of Trout Creek Ranch, and about 21.2 mi southwest of Quinn River Crossing.	----	3-28-90	0.37
				4-12-90	.43
				5-10-90	.64
Bottle Creek at bedrock contact at canyon mouth, near Quinn River Crossing, Nev.	Desert Valley	Lat 41°19'18", long 118°20'08", in NE1/4NE1/4 sec.25, T.40 N., R.32 E., Humboldt County, Hydrologic Unit 16040201, about 4.1 mi west of Bottle Creek Ranch, and about 18.5 mi southeast of Quinn River Crossing.	----	3-28-90	2.03
				4-12-90	2.96
				5-10-90	4.54
Big Creek at bedrock contact at canyon mouth, near Quinn River Crossing, Nev.	Desert Valley	Lat 41°15'56", long 118°21'55", in SW1/4SW1/4 sec.11, T.39 N., R.32 E., Humboldt County, Hydrologic Unit 16040201, about 6.7 mi southwest of Bottle Creek Ranch, and about 21.0 mi southeast of Quinn River Crossing.	----	3-28-90	1.65
				4-12-90	1.94
				5-10-90	1.57
Clover Creek at bedrock contact, near Jungo, Nev.	Desert Valley	Lat 41°13'23", long 118°29'07", in SW1/4SW1/4 sec.26, T.39 N., R.31 E., Humboldt County, Hydrologic Unit 16040201, about 5.8 mi northwest of Trout Creek Ranch, and about 22.5 mi northwest of Jungo.	----	3-29-90	0.64
				4-12-90	.55
				5-10-90	.19
Big Cedar Creek below King Lear Peak, near Jungo, Nev.	Desert Valley	Lat 41°11'17", long 118°29'44", in NW1/4NE1/4 sec.10, T.38 N., R.31 E., Humboldt County, Hydrologic Unit 16040201, about 10 feet below confluence, about 4.5 mi northwest of Trout Creek Ranch, and about 18.0 mi northwest of Jungo.	----	3-29-90	0.12
				4-13-90	E.61
				5-10-90	.1
Bull Creek below Navajo Peak, near Jungo, Nev.	Desert Valley	Lat 41°08'29", long 118°30'52", in SE1/4NE1/4 sec.28, T.38 N., R.31 E., Humboldt County, Hydrologic Unit 16040201, about 5.3 mi southwest of Trout Creek Ranch, and about 16.5 mi northwest of Jungo.	----	3-29-90	0.04
				4-13-90	.08
				5-10-90	0
Quinn River near Sod House, near Quinn River Crossing, Nev.	Black Rock Desert	Lat 41°24'51", long 118°00'58", in NW1/4SW1/4 sec.23, T.41 N., R.35 E., Humboldt County, Hydrologic Unit 16040201, about 1.9 mi east of Sod House, and about 23.8 mi southeast of Quinn River Crossing.	----	3-27-90	0
				4-12-90	0
				5-09-90	0
Quinn River near Denio, Nev. (10353650)	Black Rock Desert	Lat 41°27'50", long 118°16'50", in SW1/4SE1/4 sec.33, T.42 N., R.33 E., Humboldt County, Hydrologic Unit 16040201, about 8 mi downstream from confluence with Kings River, and about 42 mi southeast of Denio. Drainage area is 3,520 mi ² , approximately.	1964-67, 1978-81 ⁺	3-27-90	1.80
				4-12-90	.19
				5-09-90	0

^E Estimated.

⁺ Operated as a continuous record station.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

DESERT VALLEY

Water-quality samples collected at sites other than gaging stations and partial-record stations are referred to as miscellaneous. Data are collected once only, intermittently, or systematically but on limited frequency for use in hydrologic analysis. Locations of following sites are shown in Figure 14.

WATER-QUALITY DATA, WATER YEARS OCTOBER 1989 TO SEPTEMBER 1991

STATION	NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE,	SPE-	PH,	TEMPER-	TEMPER-	HARD-	
					INST. CUBIC FEET PER SECOND	CIFIC CONDUCT-ANCE (US/CM)					FIELD (STAND-ARD UNITS)
411308118293501		LOUISE CREEK	09-25-90	1300	0.25	928	8.7	--	19.0	220	
411559118215201		BIG CREEK	09-25-90	0815	0.20	312	7.5	13.0	14.0	110	
411919118195701		BOTTLE CREEK	09-24-90	1315	0.50	424	8.1	19.0	14.5	170	
DATE	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	SULFATE	CHLO-	FLUO-	SOLIDS,	SOLIDS,	H-2 /
	DIS-	SIUM,	SODIUM,	AD-	SIUM,	DIS-	RIDE,	RIDE,	SUM OF	DIS-	H-1
	SOLVED	DIS-	DIS-	SORP-	DIS-	DIS-	DIS-	DIS-	CONSTI-	SOLVED	STABLE
	(MG/L AS CA)	SOLVED (MG/L AS MG)	SOLVED (MG/L AS NA)	TION RATIO	SOLVED (MG/L AS K)	SOLVED (MG/L AS SO4)	SOLVED (MG/L AS CL)	SOLVED (MG/L AS F)	TUENTS, DIS-SOLVED (MG/L)	(TONS PER AC-FT)	ISOTOPE RATIO PER MIL
09-25-90	56	19	100	3	5.2	87	140	0.30	511	0.70	-114.0
09-25-90	31	8.1	24	1	1.3	14	12	0.20	174	0.24	-118.0
09-24-90	43	15	23	0.8	1.4	28	15	0.20	229	0.31	-116.0

GROUND-WATER LEVELS

DESERT VALLEY

Water-Use: H, domestic; I, irrigation; N, industrial; S, stock; U, unused.

Water-Level Status: R, the same site had been pumped recently.

Water-Level Method: C, measured by Sleeper Mine personnel; R, reported; S, steel tape; T, electric tape.

LOCAL WELL NO	STATION NAME	SITE ID	WATER USE	WELL DEPTH, (FT)	ELEVATION, (FT AB LSD)	WATER- LEVEL DATE	WATER- LEVEL, (FT BLW LSD)	WATER- LEVEL STATUS	WATER- LEVEL METHOD
30A N44 E34 35DDBC1	THACKER WELL NO. 3	413835118065801	S	76	4156	11/14/89 08/01/90 04/03/91	34.14 34.62 34.72	- - R	S S S
30B N42 E33 10DDBA1	QUINN RVR NO. 1 RADAR WELL	413123118151901	S	202	4143	11/14/89 08/01/90 04/03/91	35.26 35.95 35.9	R - R	S S T
30B N42 E34 04BABC1	THACKER WELL NO. 4	413253118101401	U	22	4114	11/14/89 05/08/90 07/31/90 04/03/91	3.48 3.24 3.62 3.94	- - - -	S S S S
30B N42 E35 19ACDD1	CLETO WELL	413017118050801	S	182	4132	11/14/89 07/31/90 04/03/91	17.67 18.29 18.87	- - -	S S S
30B N43 E33 35AAAD1	THACKER WELL NO. 1	413347118140101	S	--	4175	11/14/89 05/08/90 08/01/90 04/03/91	49.79 49.91 50.00 50.35	- - - -	S S S S
30B N43 E34 13BBCA1	THACKER WELL NO. 2	413617118070301	S	76	4135	11/14/89 02/13/90 08/01/90 04/03/91	16.60 16.53 16.91 16.93	- - - -	S S S S
30B N43 E34 28DBBB1	COYOTE POINT WELL	413412118100201	S	--	4125	11/14/89 05/08/90 08/01/90 04/03/91	7.93 8.11 8.41 8.56	- R - -	S S S S
30B N43 E35 31CDDC1	RIMROCK WELL	413320118052501	S	236	4135	11/14/89 02/13/90 05/08/90 07/31/90 04/03/91	15.18 15.25 15.32 15.52 16.01	- - R - -	S S S S S
31 N34 E32 11CBCC1	ALPHA MTN WELL NO. 2	404934118220101	S	153	4178	11/16/89 02/14/90 05/07/90 07/31/90	87.32 87.17 87.19 87.35	- - - -	S S S S
31 N34 E32 16ABDC1	HAYSTACK BUTTE WELL	404901118223601	U	152	4210	11/11/90 04/03/91 04/04/91	83.20 111.75 111.75	- - -	S S S
31 N35 E32 10ACAD1	JUNGO CITY WELL	405508118224801	U	98	4164	04/03/91	47.94	-	S
31 N35 E32 30BCBB1	JUNGO WELL NO. 1	405250118263401	I	260	4195	11/16/89 05/07/90 04/03/91	113.14 114.91 114.44	- - -	S S S
31 N35 E33 20ADAA1	BERG WELL	405346118172701	U	91	4174	08/26/90 08/27/90 04/05/91	83.00 68.95 58.95	- - -	S S S
31 N36 E32 22BABD1	JUNGO POINT WELL	405813118230501	S	140	4169	11/14/89 05/10/90 08/01/90 04/03/91	57.48 57.29 57.54 57.60	R R - R	S S S S
31 N36 E33 04CD 1	JUNGO HILLS WELL	410109118165601	S	86	4160	11/16/89 05/10/90 08/02/90	45.43 45.43 45.51	- - -	S S S
31 N36 E34 05DCDB1	DELONG WINDMILL	410114118111101	S	75	4166	11/15/89 05/07/90 07/31/90 04/04/91	52.29 52.32 52.33 52.55	- - - R	S S S S
31 N36 E34 21DACD1	GASKEL WELL NO. 5	405838118094401	S	--	4186	11/15/89 05/07/90 07/31/90 04/04/91	71.29 71.32 71.31 71.7	- - - R	S S S T

GROUND-WATER LEVELS
DESERT VALLEY--Continued

427

LOCAL WELL NO	STATION NAME	SITE ID	WATER USE	WELL DEPTH, (FT)	ELEVATION, (FT AB LSD)	WATER-LEVEL DATE	WATER-LEVEL, (FT BLW LSD)	WATER-LEVEL STATUS	WATER-LEVEL METHOD
31 N36 E34 30DACD1	CORRAL WINDMILL	405726118121901	S	--	4175	11/15/89 05/07/90 07/31/90	60.45 60.42 60.45	- - -	S S S
31 N36 E34 34CBBC1	GASKEL WELL NO. 1	405703118092701	N	--	4194	11/15/89 01/17/90 06/04/90 08/02/90 04/03/91	76.53 76.54 76.55 76.67 76.66	- - - - R	S S S S S
31 N37 E33 14ACCA1	SAND DUNES WELL NO. 2	410458118143201	S	--	4156	11/16/89 02/15/90 05/10/90 08/02/90 04/04/91	42.77 43.77 42.80 42.87 42.89	- - - - -	S S S S S
31 N37 E33 33AAAD1	MCNINCH WELL	410237118162101	S	--	4149	11/16/89 05/10/90 08/02/90 04/04/91	34.38 34.44 34.50 34.51	- - - -	S S S S
31 N37 E34 04ACDD1	MORMON DAN WELL	410644118094501	S	--	4132	11/15/89 01/18/90 05/08/90 07/31/90 04/04/91	17.88 17.76 17.85 17.79 17.83	- - - - R	S S S S S
31 N37 E34 14CCCC1	BANKS WINDMILL	410423118075601	S	50	4139	11/15/89 05/08/90 07/16/90 04/04/91	25.88 25.93 25.94 26.14	- - - R	S S S S
31 N38 E32 17DDBB1	TROUT CREEK RANCH WELL 1	410949118245601	I	300	4207	11/14/89 08/24/90	69.67 73.63	- -	S S
31 N38 E33 16DCAA1	SAND DUNES WELL NO. 1	410943118170101	S	--	4150	11/16/89 05/10/90 08/01/90 04/04/91	36.94 36.85 37.10 37.09	- - - -	S S S S
31 N38 E34 01BCCD1	GABICA WELL	411209118070101	S	--	4167	11/15/89 05/08/90 07/31/90	54.83 54.90 54.91	- - -	S S S
31 N38 E34 16CCCC1	PRESNEL WELL	410957118103001	S	55	4147	11/15/89 07/16/90 04/04/91	34.82 34.82 35.02	- - R	S S S
31 N38 E34 24ACBB1	CORBEAL WELL	410935118064101	S	116	4179	11/15/89 05/08/90 07/31/90 04/04/91	68.02 68.20 68.16 68.60	- - - R	S S S S
31 N38 E35 27DCBC1	CRESCENT WELL	411205118071001	S	360	4579	11/15/89 04/04/91	302.07 302.3	- -	S T
31 N39 E32 35DDBB1	WILLOW CREEK RANCH WELL	411225118210801	H	156	4196	11/14/89 04/03/91	65.32 63.56	- -	S S
31 N39 E33 20AACD1	ALTA WELL NO. 2	411445118173401	S	130	4149	11/14/89 05/08/90 08/01/90 04/03/91	40.38 43.51 44.22 40.25	R - R -	S S S S
31 N39 E34 31BDAD1	PRESNEL WELL NO. 2	411311118122801	U	59	4140	08/24/90 04/04/91 06/26/91	30.00 29.53 29.87	- - -	S S S
31 N39 E35 07DCDA1	JACKSON WELL	411606118050901	S	--	4218	11/15/89 05/08/90 07/31/90 04/04/91	111.21 112.13 112.30 114.28	- - R R	S S S S
31 N40 E33 02BABD1	BOTTLE CREEK SLOUGH NO. 2	412240118144001	S	--	4146	11/14/89 05/08/90 04/03/91	50.03 48.42 48.62	- - -	S S S
31 N40 E33 23DACC1	HERBS WELL	411929118141401	S	--	4134	05/08/90 08/01/90 04/03/91	40.35 44.62 32.88	- - -	S S S

GROUND-WATER LEVELS
DESERT VALLEY--Continued

LOCAL WELL NO	STATION NAME	SITE ID	WATER USE	WELL DEPTH, (FT)	ELEVATION, (FT AB LSD)	WATER- LEVEL DATE	WATER- LEVEL, (FT BLW LSD)	WATER- LEVEL STATUS	WATER- LEVEL METHOD
31 N40 E35 30DDBA1	AUSTIN WELL	411838118050001	S	--	4143	11/15/89 05/08/90 07/31/90 04/04/91	47.26 49.82 51.72 56.28	- - - -	S S S S
31 N41 E33 04BAAC1	BOTTLE CREEK WELL NO. 1	412725118170701	U	30	4105	11/13/89 02/14/90 05/08/90 08/01/90 04/03/91	9.21 8.94 8.36 9.45 8.86	- - - - -	S S S S S
31 N41 E33 10BBBD1	BOTTLE CREEK WELL NO. 2	412636118152101	U	39	4115	11/13/89 05/08/90 08/01/90 04/03/91	19.45 18.70 19.63 19.23	- - - -	S S S S
31 N41 E33 15DCDD1	BOTTLE CREEK WELL NO. 3	412453118151701	S	--	4127	04/03/91	30.35	-	S
31 N41 E34 02CDDA1	SOD HOUSE WELL NO. 3	412710118073801	U	80	4114	08/22/90 09/13/90 04/03/91 06/06/91	21 14 14.32 15	- - - -	R R S R
31 N41 E34 08BCCC1	BOTTLE CREEK SLOUGH NO. 1	412644118112701	U	166	4117	11/13/89 02/14/90 05/09/90 07/31/90 04/03/91	17.75 17.24 17.03 17.82 17.34	- - - - -	S S S S S
31 N41 E34 13DDAD1	BOTTLE CREEK SLOUGH NO. 3	412518119192201	U	248	4121	05/09/90 07/31/90 09/13/90 04/03/91	15.46 16.10 17.0 16.64	- - - -	S S C S
31 N42 E34 15CACCC1	QUINN RIVER LAKES WELL	413035118090901	S	--	4113	11/13/89 05/09/90 07/31/90 04/03/91	10.53 10.76 12.88 12.98	- - - -	S S S S
31 N42 E34 30ABCC1	HOG JOHN RANCH WINDMILL	412916118122201	S	--	4113	11/14/89 05/09/90 04/03/91	13.33 10.82 12.13	R - -	S S S
31 N42 E34 36BBBB1	SOD HOUSE-QUINN RIVER WELL	412835118071001	S	229	4118	05/09/90 08/01/90 08/22/90 04/03/91	13.20 13.47 13.60 14.00	- - - -	S S S S
32 N41 E36 31ACBB1	CORRAL WELL	412331117581901	S	--	4154	11/14/89 05/09/90 04/03/91	42.77 43.40 45.23	R - -	S S S
33A N41 E35 23DCCD1	SOD HOUSE WELL NO. 2	412436118003401	U	32	4123	11/13/89 02/14/90 05/08/90 07/31/90 09/13/90 04/03/91	14.54 14.88 15.19 15.78 16.1 17.16	- - - - - -	S S S S C S
33A N41 E36 17DDDB1	GALLAGHER WELL	412538117564701	S	105	4127	11/14/89 04/03/91	12.75 13.67	R -	S S
70 N35 E34 01ACDB1	PRONTO WELL NO. 2	405620118061501	U	52	4232	11/09/90 11/10/90 11/11/90 04/04/91	22 24.06 20.30 19.80	- - - -	R S S S
70 N35 E35 09BBDC1	PRONTO WELL NO. 1	405538118032801	U	58	4232	11/08/90 11/11/90 04/04/91 06/25/91	40 28.26 28.10 28.23	- - - -	R S S S
70 N36 E36 30AABB1	ABEL FLAT WELL	405820117580601	S	147	4342	11/15/89 05/07/90 04/04/91	125.89 125.83 125.50	- - R	S S S

QUALITY OF GROUND WATER

429

DESERT VALLEY

Water-quality measurements in the following table were made during a basin study throughout the Desert Valley. Data for these sites covers both the 1990 and 1991 water years. Locations of following sites are shown in Figure 25.

WATER-QUALITY DATA, WATER YEARS OCTOBER 1989 TO SEPTEMBER 1991

STATION	NUMBER	LOCAL WELL NUMBER	DATE	TIME	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)
413617118070301		30B N43 E34 13BBCA1	02-14-90	1115	76.00	473	8.1	--
405250118263401		31 N35 E32 30BCBB1	07-25-90	0845	260.00	1890	7.6	22.0
			06-25-91	1050	260.00	2120	7.7	--
405726118121901		31 N36 E34 30DACD1	02-15-90	0950	--	703	7.9	--
405813118230501		31 N36 E32 22BABD1	02-16-90	0945	140.00	3700	7.6	--
410109118165601		31 N36 E33 04CD 1	02-15-90	1400	86.00	1620	7.7	--
410644118094501		31 N37 E34 04ACDD1	02-12-90	1630	--	1040	7.8	--
410949118245601		31 N38 E32 17DDBB1	07-24-90	1300	300.00	938	7.5	26.0
411225118210801		31 N39 E32 35DDBB1	07-24-90	1120	156.00	394	7.2	--
411311118122801		31 N39 E34 31BDAD1	06-26-91	1030	59.00	1020	7.7	--
411606118050901		31 N39 E35 07DCDA1	07-24-90	1800	--	975	7.7	28.0
411921118151201		31 N40 E33 22D 1	07-24-90	0900	425.00	787	7.5	21.0
412510118024801		31 N41 E35 20AADD1	02-13-90	1515	112.00	744	7.8	--
412725118170701		31 N41 E33 04BAAC1	02-14-90	1530	30.00	628	7.9	--
413035118090901		31 N42 E34 15CACCC1	06-26-91	1500	--	7290	--	--
412538117564701		33A N41 E36 17DDDB1	02-13-90	0930	105.00	3050	8.2	--
405538118032801		70 N35 E35 09BBDC1	06-25-91	1430	58.00	821	7.5	23.0

DATE	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
02-14-90	9.5	2.3	--	180	46	15	34	1	4.0
07-25-90	6.0	--	--	480	75	72	210	4	3.2
06-25-91	17.0	--	--	--	--	--	--	--	--
02-15-90	14.0	4.1	--	150	40	11	100	4	8.4
02-16-90	13.0	0.8	--	1200	200	170	290	4	20
02-15-90	14.0	0.8	--	240	64	19	240	7	16
02-12-90	11.0	0.5	--	150	45	9.2	150	5	9.5
07-24-90	14.0	--	--	290	89	16	87	2	2.7
07-24-90	13.0	5.2	58	140	38	11	26	1	4.0
06-26-91	14.0	--	--	190	51	14	120	4	13
07-24-90	20.0	3.0	--	150	44	9.4	140	5	12
07-24-90	12.5	--	--	330	91	25	37	0.9	1.9
02-13-90	21.0	3.5	--	79	22	5.9	130	6	14
02-14-90	8.5	0.8	--	--	25	7.1	100	--	13
06-26-91	12.0	--	--	1000	190	130	1200	16	39
02-13-90	11.0	1.5	--	340	100	22	530	13	1.3
06-25-91	14.0	--	--	87	22	7.7	150	7	10

QUALITY OF GROUND WATER
DESERT VALLEY--Continued

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
02-14-90	177	145	51	48	0.20	58	345	0.47
07-25-90	201	165	320	370	0.30	21	1180	1.61
06-25-91	--	--	--	--	--	--	--	--
02-15-90	227	186	89	76	0.50	31	470	0.64
02-16-90	189	155	330	890	0.40	55	2150	2.92
02-15-90	259	212	200	270	0.40	55	994	1.35
02-12-90	221	181	140	97	1.0	49	652	0.89
07-24-90	301	274	83	120	0.20	22	575	0.78
07-24-90	183	150	26	24	0.20	39	261	0.36
06-26-91	155	127	34	210	0.60	48	568	0.77
07-24-90	187	153	87	160	0.30	63	614	0.83
07-24-90	330	271	46	72	0.20	20	464	0.63
02-13-90	243	119	79	88	0.90	71	532	0.72
02-14-90	216	177	30	90	0.50	67	--	--
06-26-91	630	517	1600	1400	2.0	12	4900	6.66
02-13-90	182	149	270	730	0.60	52	1800	2.44
06-25-91	308	252	98	42	0.50	21	503	0.68

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	RADON 222 TOTAL (PC/L)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL
02-14-90	0.260	0.040	11	100	38	26	<1	740	-124.0
07-25-90	2.40	0.010	3	480	13	<1	2	500	-131.0
06-25-91	--	--	--	--	--	--	--	--	-129.0
02-15-90	0.300	0.060	10	600	97	2	2	900	-121.0
02-16-90	22.0	0.020	4	630	120	370	36	1100	-125.0
02-15-90	<0.100	0.070	29	1100	98	340	<1	350	-122.5
02-12-90	9.30	0.070	22	700	37	39	10	760	-123.5
07-24-90	1.60	0.030	3	270	9	2	<1	910	-118.0
07-24-90	0.700	0.010	3	90	6	<1	<1	730	-121.0
06-26-91	--	--	--	300	310	940	--	--	-121.0
07-24-90	1.20	0.020	<1	720	86	5	2	1000	-121.0
07-24-90	1.90	0.020	2	110	5	<1	1	500	-118.0
02-13-90	0.300	0.020	26	530	6	<1	1	1000	-125.0
02-14-90	<0.100	0.100	22	460	160	240	<1	600	-126.5
06-26-91	--	--	--	3100	7900	2900	--	--	-108.0
02-13-90	0.100	0.080	70	720	40	140	<1	1000	-121.5
06-25-91	--	--	--	350	99	270	--	--	-122.0

GROUND-WATER LEVELS

431

DOUGLAS COUNTY

Water-Use: H, domestic; I, irrigation; P, public supply; S, stock; U, unused.

Water-Level: Levels above LSD (land-surface datum) are listed as negative values.

Water-Level Status: R, the same site had been pumped recently; S, a nearby site that taps the same aquifer was being pumped; V, foreign substance present on the surface of the water; X, water-level affected by stage in nearby surface-water site.

Water-Level Method: E, estimated; G, pressure gage; S, steel tape; T, electric tape.

LOCAL WELL NO	STATION NAME	SITE ID	WATER USE	WELL DEPTH, (FT)	ELEVATION, (FT AB LSD)	WATER-LEVEL DATE	WATER-LEVEL, (FT BLW LSD)	WATER-LEVEL STATUS	WATER-LEVEL METHOD
105 N12 E19 23CDBC1	USGS - SCOSSA	385304119460601	U	27	4795	11/26/90 03/12/91 06/13/91 08/08/91	5.05 4.90 4.60 5.40	- - - S	S S S S
105 N12 E19 24CCAA1	WAYNE CURRIE	385303119480201	H	82	4731	03/12/91	-1.	-	E
105 N12 E19 24CDCB1	LUCEN	385300119480501	S	--	4733	06/13/91 08/12/91	-15.0 -13.9	- -	G G
105 N12 E19 36ADDA1	LEWALLEN LAND & CATTLE CO	385138119471801	U	198	4794	11/26/90 03/11/91 06/13/91 08/08/91	4.44 5.28 4.02 4.58	X - X X	S S S S
105 N12 E20 09BCAD1	JOHN H WHITE	385512119444801	I	450	4769	03/11/91	26.94	-	S
105 N12 E20 13DDBB1	BARBARA LEE	385413119405001	H	250	5005	11/26/90 03/07/91 06/12/91 08/06/91	149.78 144.07 149.44 150.20	- - - -	S S S S
105 N12 E20 20ABAB1	RANCHOS WELL 5	385343119452301	P	450	4793	11/20/90 03/11/91 08/08/91	60.7 61.59 56.48	- - R	T S S
105 N12 E20 24AAAA1	MCBRYDE	385340119403601	H	195	4986	11/07/90 03/06/91 06/12/91 08/06/91	137.7 136.50 136.93 137.80	- - - -	T S S S
105 N12 E20 24ADCC2	BLUMENTHAL	385321119405002	H	145	4980	03/06/91 06/13/91 08/07/91	93.18 99.02 100.61	- - -	S S S
105 N12 E20 24BAAB1	GREENWOOD	385344119411401	H	--	4972	11/07/90 03/07/91 06/12/91 08/06/91	91.9 90.80 91.75 92.52	- - - -	T S S S
105 N12 E20 24BDCA1	TIANO	385325119412001	H	150	4960	11/07/90 03/06/91 06/12/91 08/06/91	58.4 55.75 57.78 59.54	- - - -	T S S S
105 N12 E20 24CDAD1	SELIGMAN	385301119411301	H	150	4964	11/07/90 03/07/91 06/12/91 08/07/91	77.7 75.06 77.43 79.27	R - - -	T S S S
105 N12 E20 24DDAB1	SEYMOUR	385305119404001	H	--	5010	05/24/91 06/10/91 08/06/91 08/07/91	152.38 153.45 154.14 155.81	R - - -	S S S S
105 N12 E21 05AADD1	LONGUEVAN	385612119382701	H	120	5131	11/02/90 03/06/91 08/06/91	21.5 19.19 22.11	- - -	T S S
105 N12 E21 05BCAA1	DOUGLAS CO FIRE	385610119391801	H	--	5077	11/07/90 03/06/91 06/11/91 08/06/91	21.3 19.82 24.45 22.48	R - R -	T S S S
105 N12 E21 05DBDD1	SANDERS	385548119385001	H	70	5122	11/20/90 03/06/91 06/11/91 08/06/91	28.2 27.99 28.40 28.89	- - - -	T S S S
105 N12 E21 06BDCA1	BROWN	385602119401301	H	96	5005	11/20/90 03/06/91	15.6 15.39	- -	T S
105 N12 E21 10BCD 1	SNAVELY	385507119370301	H	190	5360	11/02/90 03/06/91 06/11/91 08/06/91	56.5 57.25 78.04 69.74	- - - -	T S S S

GROUND-WATER LEVELS
DOUGLAS COUNTY--Continued

LOCAL WELL NO	STATION NAME	SITE ID	WATER USE	WELL DEPTH, (FT)	ELEVATION, (FT AB LSD)	WATER-LEVEL DATE	WATER-LEVEL, (FT BLW LSD)	WATER-LEVEL STATUS	WATER-LEVEL METHOD
105 N13 E19 04DACD1	GERHARD/JANSEN	390058119504601	U	373	4920	11/26/90 03/12/91 06/14/91 08/12/91	216.90 215.24 217.69 223.28	- - - -	S S S S
105 N13 E19 22DCAC2	USGS - MULLER BROOK EAST	385815119500202	U	18	4677	11/26/90 03/12/91 06/13/91 08/08/91	6.62 6.15 4.69 5.68	- - X -	S S S S
105 N13 E19 33DADD1	ALLERMAN	385637119503701	U	80	4755	11/26/90 03/12/91 06/13/91 08/08/91	31.26 26.69 26.61 28.73	- - - -	S S S S
105 N13 E20 02CBB 1	HASTIE	390106119424301	H	176	4860	03/05/91 06/10/91	112.14 109.00	- -	S S
105 N13 E20 03BCBB1	HECKMAN	390122119424701	U	108	4756	11/26/90 03/05/91 08/05/91	33.40 33.26 34.16	- - -	S S S
105 N13 E20 08ACBC1	USGS - HEYBURN AIRPORT	390024119453501	U	21	4692	11/26/90 03/05/91 06/10/91 08/05/91	6.38 6.22 5.91 5.79	- - - -	S S S S
105 N13 E20 14AADA1	NEVIS - NORTH	385944119414501	U	301	4890	11/26/90 03/05/91 06/10/91 08/06/91	93.69 94.97 94.72 94.08	- - - -	S S S S
105 N13 E20 23DDDA1	NEVIS - SOUTH	385815119413101	I	392	4885	11/26/90 03/05/91 06/10/91 08/06/91	79.69 79.99 80.32 80.26	- - - -	S S S S
105 N13 E20 32CAAA1	MACK LAND & CATTLE CO	385630119452001	I	420	4733	03/11/91	12.79	-	S
105 N13 E21 19CBBA1	BUCKEY CREEK WELL	385834119395901	U	140	4960	11/26/90 03/05/91 06/10/91 08/06/91	93.37 93.42 93.38 97.99	- - - -	S S S S
105 N13 E21 28CCBC1	BLM - FISH SPRING WINDMILL	385724119382301	S	95	5160	11/02/90 03/06/91 06/11/91 08/06/91	58.14 58.39 58.73 59.01	- - - -	S S S S
105 N13 E21 32BDAD1	ANITA C JONES	385657119385801	I	608	5141	11/26/90 03/06/91 06/11/91 08/06/91	30.77 30.97 31.29 31.61	- - - -	S S S S
105 N14 E19 15BBAB1	JOHN ASCUAGA	390501119502401	I	290	5138	03/11/91	28.83	-	S
105 N14 E19 26ABBC1	HARVEY GROSS	390315119485001	I	--	4776	11/26/90 03/13/91 08/12/91	17.82 16.76 17.96	- - -	S S S
105 N14 E19 34DBAD1	HARVEY GROSS	390156119495401	I	248	4715	03/13/91	43.21	-	S
105 N14 E20 07ADCB1	INDIAN HILLS E WELL	390538119462401	P	365	4799	11/20/90 03/05/91 06/10/91 08/05/91	108.3 115.29 105.14 104.52	- - - -	T S S S
105 N14 E20 07CBAD1	DOUGLAS COUNTY	390525119465901	U	246	4835	03/05/91	101.23	-	S
105 N14 E20 28CBAB1	PAUL UNRUH - TURF NORTH	390254119445101	U	420	4680	11/26/90 03/05/91 06/10/91 08/05/91	13.65 12.29 12.90 14.40	- - V V	S S S S
105 N14 E20 29ACCC1	USGS - HEYBURN RAILROAD	390307119452201	U	17	4657	11/26/90 03/05/91 06/10/91 08/05/91	9.00 7.73 7.43 8.61	- - - X	S S S S
105 N14 E20 33BCDA1	PAUL UNRUH - TURF SOUTH	390208119444601	U	220	4683	11/26/90 03/05/91 06/10/91 08/05/91	3.60 2.94 2.94 4.33	- V - -	S S S S

GROUND-WATER LEVELS
DOUGLAS COUNTY--Continued

433

LOCAL WELL NO		STATION NAME	SITE ID	WATER USE	WELL DEPTH, (FT)	ELEVATION, (FT AB LSD)	WATER- LEVEL DATE	WATER- LEVEL, (FT BLW LSD)	WATER- LEVEL STATUS	WATER- LEVEL METHOD
105	N14 E20 34BAAA1	EVELYN SLAUGHTER	390228119432501	U	126	4782	11/26/90	61.04	-	S
							03/05/91	60.76	-	S
							06/10/91	61.03	-	S
							08/05/91	62.60	-	S
105	N14 E20 34BDBD1	AVEY	390208119433201	H	100	4750	03/05/91	28.75	-	S
105	N14 E20 34DAAD1	HOFFMAN	390156119435801	H	125	4728	11/02/90	19.5	-	T
							03/05/91	18.35	-	S
							06/10/91	20.09	-	S
							08/05/91	21.07	-	S
105	N14 E20 34DADA1	KAUDMAN	390152119435801	H	--	4728	11/02/90	17.7	-	T
							03/05/91	16.77	-	S
							06/10/91	17.87	-	S
							08/06/91	18.36	R	S
105	N14 E20 35BABC1	MERRIFIELD	390222119423001	H	241	4900	11/02/90	150.7	R	T
							03/05/91	147.59	-	S
							06/10/91	148.95	-	S

LOCATION OF GROUND-WATER QUALITY SAMPLING SITES (Figure 26)

Site Number	Local Number	Latitude	Longitude	Site Identification
62	105 N14 E19 01DADA1	390619	1194716	390619119471601
63	104 N14 E19 12ADAB1	390542	1194720	390542119472001
67	105 N14 E20 18ABAB1	390503	1194635	390503119463501
68	105 N14 E19 14BBD 1	390457	1194913	390457119491301
69	105 N14 E20 17ADCA1	390446	1194514	390446119451401
72	105 N14 E20 28CDC 1	390232	1194432	390232119443201
73	105 N14 E20 34BDBD1	390208	1194332	390208119433201
77	105 N13 E20 02CBB 1	390106	1194243	390106119424301
78	105 N13 E19 10BDBB1	390028	1195015	390028119501501
80	105 N13 E19 09ADCA1	390021	1195043	390021119504301
81	105 N13 E20 08CAA 1	390017	1194539	390017119453901
82	105 N13 E19 09DAAB1	390016	1195041	390016119504101
83	105 N13 E19 10DBB 1	390015	1195001	390015119500101
84	105 N13 E19 10CACB1	390009	1195017	390009119501701
85	105 N13 E19 13BCC 1	385925	1194833	385926119481601
90	105 N13 E20 26ABBB1	385801	1194215	385801119421501
92	105 N13 E20 29BDDD1	385742	1194538	385742119453801
93	105 N13 E20 29CDC 1	385719	1194547	385719119454701
95	105 N13 E20 34ACC 1	385654	1194318	385654119431801
99	105 N12 E20 4ADA 1	385604	1194356	385604119435601
102	105 N12 E20 11ADD 1	385509	1194148	385509119414801
104	105 N12 E20 15ADD 1	385414	1194254	385414119425401
105	105 N12 E20 13DDBB1	385357	1193848	385413119405001
107	105 N12 E20 17CCD 1	385352	1194554	385352119455401
127	105 N12 E19 23DDD 1	385255	1194823	385255119482301
132	106 N10 E22 15DCB 1	384333	1193017	384333119301701
133	106 N10 E22 29CADA1	384156	1193233	384156119323301
134	106 N10 E22 32BAAB2	384136	1193239	384136119323901

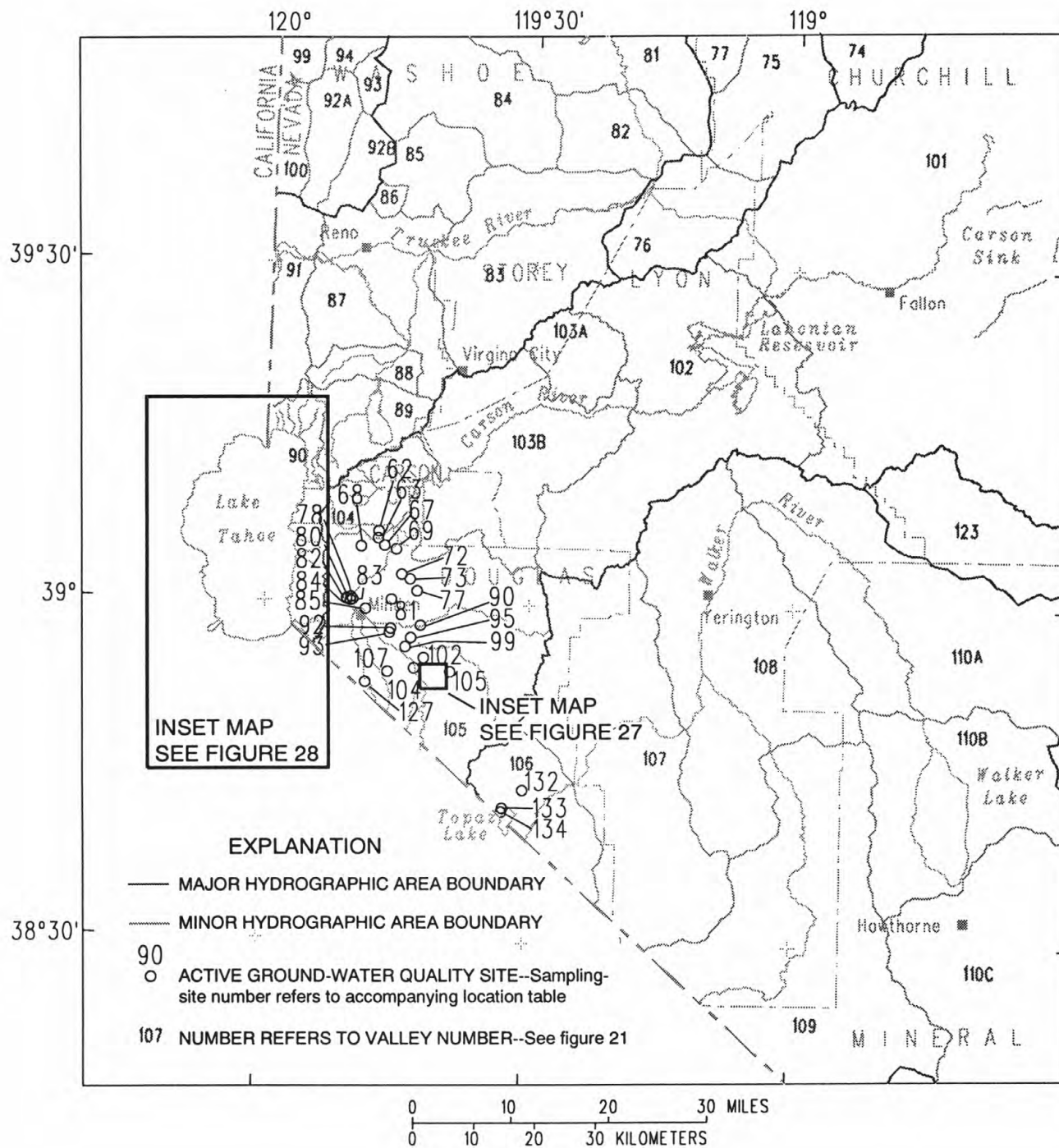
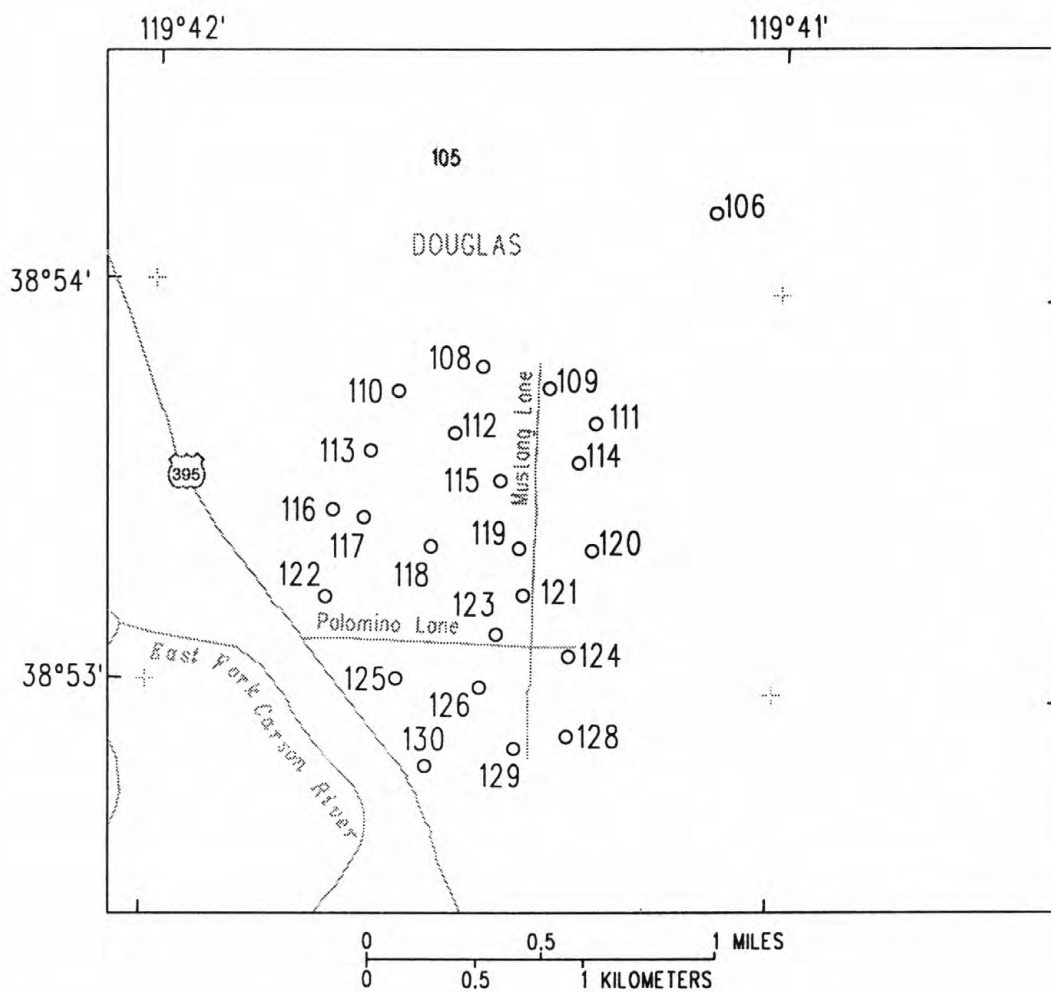


FIGURE 26.--Ground-water quality sites, west-central Nevada.

LOCATION OF GROUND-WATER QUALITY SAMPLING SITES (Figure 27)

Site Number	Local Number	Latitude	Longitude	Site Identification
106	105 N12 E21 18CAB 1	385412	1194014	385412119401401
108	105 N12 E20 13DCDC1	385348	1194058	385348119405801
109	105 N12 E20 24AABA1	385345	1194045	385345119404501
110	105 N12 E20 24BAAB1	385344	1194114	385344119411401
111	105 N12 E20 24AAAA1	385340	1194036	385340119403601
112	105 N12 E20 24ABCA1	385338	1194103	385338119410301
113	105 N12 E20 24BACD1	385335	1194119	385335119411901
114	105 N12 E20 24AADC1	385334	1194039	385333119404201
115	105 N12 E20 24ACAA1	385331	1194054	385331119405401
116	105 N12 E20 24BCDA1	385326	1194126	385326119412601
117	105 N12 E20 24BDCA1	385325	1194120	385325119412001
118	105 N12 E20 24ACCC1	385321	1194107	385321119410701
119	105 N12 E20 24ADCC2	385321	1194050	385321119405002
120	105 N12 E20 24ADDD1	385321	1194036	385321119403601
121	105 N12 E20 24DABC1	385314	1194049	385314119404901
122	105 N12 E20 24CBDA1	385313	1194127	385313119412701
123	105 N12 E20 24DBDD1	385308	1194054	385308119405401
124	105 N12 E20 24DDAB1	385305	1194040	385305119404001
125	105 N12 E20 24CDAD1	385301	1194113	385301119411301
126	105 N12 E20 24DCDB2	385300	1194057	385300119405702
128	105 N12 E20 25AAAB1	385253	1194040	385253119404001
129	105 N12 E20 25AABB1	385251	1194050	385251119405001
130	105 N12 E20 25ABBC1	385248	1194107	385248119410701



EXPLANATION

106

○ ACTIVE GROUND-WATER QUALITY SITE--Sampling-site number refers to accompanying location table

105 NUMBER REFERS TO VALLEY NUMBER--See figure 21

FIGURE 27.--Ground-water quality sites, south-central Douglas County.

QUALITY OF GROUND WATER

DOUGLAS COUNTY

Depths and Water Levels: Depths are referenced to land-surface datum (LSD). Water levels above land-surface datum (LSD) are listed as negative values.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

STATION NUMBER	LOCAL WELL NUMBER	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
390542119472001	104 N14 E19 12ADAB1	11-28-90	0940	45.07	155	225
		03-13-91	1010	39.87		256
		06-12-91	0910	55.15		256
		08-12-91	1515	--		255
385255119482301	105 N12 E19 23DDD 1	11-30-90	1125	--	141	102
		03-12-91	1150	--		112
		06-13-91	1400	--		110
		08-08-91	1115	--		110
385321119405002	105 N12 E20 24ADCC2	11-29-90	1247	94.78	145	523
		03-07-91	1230	93.18		566
		06-13-91	1135	99.02		558
		08-07-91	1130	100.61		556
385352119455401	105 N12 E20 17CCD 1	11-30-90	1000	22.01	91	212
		03-11-91	1500	22.69		228
		06-13-91	1315	15.85		228
		08-07-91	1540	16.53		233
385412119401401	105 N12 E21 18CAB 1	11-28-90	1451	--	--	330
		03-07-91	1100	248.10		426
		06-11-91	1200	248.54		402
		08-06-91	1345	248.89		360
385509119414801	105 N12 E20 11ADD 1	11-27-90	1435	62.47	125	271
		03-07-91	0950	64.30		308
		06-11-91	1115	60.63		284
		08-06-91	1240	60.77		280
385654119431801	105 N13 E20 34ACC 1	11-29-90	1350	11.70	80	321
		03-07-91	1400	13.82		340
		06-12-91	1045	6.80		355
		08-08-91	0945	8.67		356
385742119453801	105 N13 E20 29BDDD1	11-29-90	1436	7.29	118	460
		03-11-91	1255	6.26		489
385801119421501	105 N13 E20 26ABBB1	11-28-90	1333	54.65	130	297
		03-06-91	1440	56.17		328
385926119481601	105 N13 E19 13BCC 1	11-30-90	1253	--	500	212
		03-12-91	1310	--		230
		06-14-91	1230	--		237
		08-13-91	1015	--		229
390015119500101	105 N13 E19 10DBB 1	12-03-90	0930	--	115	188
		03-12-91	1400	-0.56		221
		06-14-91	1120	--		219
		08-08-91	1410	4.08		224
390017119453901	105 N13 E20 08CAA 1	11-27-90	0915	--	130	168
		03-05-91	1020	--		192
		06-10-91	1130	--		189
		08-05-91	1105	--		194
390021119504301	105 N13 E19 09ADCA1	12-03-90	1030	139.72	180	267
		03-12-91	1500	133.46		287
		06-14-91	1025	132.90		287
		08-12-91	1115	136.76		292
390106119424301	105 N13 E20 02CBB 1	11-27-90	1300	108.63	176	324
		03-05-91	1400	112.14		351
		06-10-91	1445	109.00		342
		08-06-91	0850	--		346
390208119433201	105 N14 E20 34BDBD1	11-27-90	1153	29.25	100	354
		03-05-91	1240	28.75		393
		06-10-91	1315	--		394
		08-05-91	1400	--		397
390232119443201	105 N14 E20 28CDC 1	11-27-90	1044	12.13	88	525
		03-05-91	1130	--		585
		06-10-91	1210	--		597
		08-05-91	1230	--		610
390446119451401	105 N14 E20 17ADCA1	11-28-90	1122	4.30	27	3740
		03-06-91	1245	3.06		--
		06-12-91	1245	3.16		4190
		08-07-91	1340	5.52		4160

QUALITY OF GROUND WATER

439

DOUGLAS COUNTY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
11-28-90	13.0	50	17	1.9	33	2	--	24	11
03-13-91	12.5	50	17	1.8	33	2	--	19	11
06-12-91	15.0	54	18	2.1	33	2	1.4	20	11
08-12-91	16.5	50	17	1.8	31	2	1.5	20	15
11-30-90	14.5	14	5.2	0.31	17	2	--	20	1.8
03-12-91	14.0	14	5.1	0.38	17	2	--	19	1.2
06-13-91	15.0	14	5.2	0.34	17	2	0.70	20	1.6
08-08-91	15.0	14	5.1	0.36	16	2	0.80	17	0.60
11-29-90	13.0	240	75	13	26	0.7	--	69	19
03-07-91	12.0	230	72	13	25	0.7	--	66	18
06-13-91	14.5	240	76	13	25	0.7	2.3	73	20
08-07-91	14.0	230	72	13	26	0.7	2.5	55	17
11-30-90	13.5	93	22	9.3	11	0.5	--	18	6.7
03-11-91	13.5	92	22	8.9	11	0.5	--	14	6.8
06-13-91	14.5	90	21	9.0	10	0.5	2.6	14	6.5
08-07-91	14.5	92	22	9.1	11	0.5	2.8	19	7.0
11-28-90	20.0	86	28	4.0	46	2	--	33	12
03-07-91	21.0	95	31	4.3	51	2	--	31	14
06-11-91	21.5	93	30	4.5	47	2	2.3	33	17
08-06-91	21.5	84	27	4.1	45	2	2.2	28	15
11-27-90	14.0	110	34	6.1	15	0.6	--	24	9.9
03-07-91	12.0	120	36	6.6	17	0.7	--	21	11
06-11-91	15.0	110	33	6.0	15	0.6	2.3	22	9.8
08-06-91	15.0	110	33	6.1	15	0.6	2.4	20	11
11-29-90	12.5	130	37	8.2	25	1	--	25	8.6
03-07-91	13.0	120	34	7.5	24	1	--	21	9.0
06-12-91	15.5	130	39	8.4	24	0.9	1.5	22	8.9
08-08-91	15.0	120	35	8.0	24	1	1.6	21	8.9
11-29-90	9.0	220	63	15	19	0.6	--	22	7.0
03-11-91	10.0	220	63	15	17	0.5	--	18	7.5
11-28-90	13.5	120	33	9.1	25	1	--	32	8.4
03-06-91	15.0	110	31	8.6	23	0.9	--	28	9.3
11-30-90	15.0	63	18	4.5	19	1	--	20	6.5
03-12-91	15.0	66	19	4.6	18	1	--	20	6.4
06-14-91	15.5	72	20	5.4	19	1	4.4	22	6.5
08-13-91	17.5	65	18	4.9	18	1	4.5	23	7.1
12-03-90	10.0	86	26	5.2	10	0.5	--	2.8	3.6
03-12-91	10.5	89	27	5.3	10	0.5	--	2.0	3.0
06-14-91	12.5	96	29	5.7	10	0.4	1.2	2.6	3.6
08-08-91	13.0	88	26	5.5	9.8	0.5	1.3	2.1	2.2
11-27-90	7.0	31	11	0.82	29	2	--	20	6.3
03-05-91	16.0	27	10	0.61	28	2	--	17	4.9
06-10-91	17.0	28	10	0.80	28	2	2.8	17	5.2
08-05-91	18.0	30	11	0.67	28	2	3.0	20	5.5
12-03-90	13.0	120	39	5.4	14	0.6	--	17	2.7
03-12-91	11.5	120	39	5.1	14	0.6	--	12	2.7
06-14-91	14.5	130	42	5.5	14	0.5	2.9	13	0.60
08-12-91	14.5	120	38	5.1	13	0.5	2.8	12	0.50
11-27-90	17.5	36	9.5	2.9	62	5	--	36	9.3
03-05-91	14.0	35	9.6	2.7	62	5	--	34	11
06-10-91	20.5	39	10	3.4	61	4	4.1	39	11
08-06-91	20.0	39	10	3.5	59	4	4.5	35	12
11-27-90	14.0	68	18	5.7	59	3	--	51	18
03-05-91	12.0	61	16	5.0	56	3	--	47	15
06-10-91	16.0	66	17	5.7	57	3	3.8	56	20
08-05-91	17.0	65	17	5.5	58	3	3.9	55	20
11-27-90	14.0	130	44	5.1	66	3	--	78	17
03-05-91	14.0	130	45	5.1	68	3	--	84	17
06-10-91	15.5	150	49	5.9	75	3	4.4	95	22
08-05-91	18.0	150	49	6.0	71	3	4.0	90	19
11-28-90	13.5	850	330	6.7	600	9	--	1900	210
03-06-91	13.0	850	330	6.7	640	10	--	1500	220
06-12-91	14.0	850	330	6.7	650	10	7.0	2000	220
08-07-91	16.0	840	330	6.5	670	10	7.4	1800	190

QUALITY OF GROUND WATER

DOUGLAS COUNTY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)
11-28-90	1.7	162	--	--	<0.010	0.200	0.020	0.040	58
03-13-91	1.4	168	--	--	<0.010	0.290	<0.010	0.040	36
06-12-91	1.3	156	141	0.21	<0.010	0.470	0.010	0.030	35
08-12-91	1.4	177	142	0.24	<0.010	0.360	0.020	0.040	24
11-30-90	0.50	73	--	--	<0.010	0.100	0.030	0.010	34
03-12-91	0.80	76	--	--	<0.010	0.120	0.020	0.020	12
06-13-91	0.90	77	64	0.10	<0.010	0.120	0.030	0.010	54
08-08-91	0.70	68	59	0.09	<0.010	0.120	0.020	0.020	25
11-29-90	<0.10	351	--	--	<0.010	2.70	0.020	0.040	<3
03-07-91	0.10	351	--	--	<0.010	2.90	<0.010	0.050	6
06-13-91	<0.10	357	337	0.49	<0.010	3.00	0.010	0.050	11
08-07-91	0.10	345	309	0.47	<0.010	2.80	0.010	0.050	<3
11-30-90	<0.10	162	--	--	<0.010	1.70	0.010	0.070	9
03-11-91	0.10	161	--	--	<0.010	1.90	<0.010	0.090	9
06-13-91	<0.10	164	125	0.22	<0.010	2.20	0.010	0.070	10
08-07-91	0.10	166	133	0.23	<0.010	2.10	<0.010	0.080	13
11-28-90	0.10	244	--	--	<0.010	3.30	0.020	0.010	13
03-07-91	0.10	269	--	--	<0.010	4.10	<0.010	0.020	22
06-11-91	0.20	244	232	0.33	<0.010	4.00	0.010	0.010	17
08-06-91	0.20	242	210	0.33	<0.010	3.50	<0.010	0.020	7
11-27-90	<0.10	179	--	--	<0.010	1.00	0.020	0.060	5
03-07-91	0.10	193	--	--	<0.010	1.30	<0.010	0.070	6
06-11-91	0.10	171	158	0.23	<0.010	1.10	0.020	0.060	4
08-06-91	0.10	169	155	0.23	<0.010	1.00	<0.010	0.070	8
11-29-90	0.20	221	--	--	<0.010	1.90	0.010	0.130	6
03-07-91	0.20	225	--	--	<0.010	1.90	<0.010	0.150	6
06-12-91	0.20	211	202	0.29	<0.010	2.40	0.010	0.130	<3
08-08-91	0.20	230	196	0.31	<0.010	2.20	0.010	0.150	<3
11-29-90	0.20	296	--	--	<0.010	1.90	0.020	0.020	<3
03-11-91	<0.10	292	--	--	<0.010	2.00	<0.010	0.030	<3
11-28-90	0.30	225	--	--	<0.010	0.700	0.010	0.050	23
03-06-91	0.20	227	--	--	<0.010	0.760	<0.010	0.060	11
11-30-90	<0.10	162	--	--	0.020	0.300	0.080	0.090	44
03-12-91	0.30	157	--	--	0.010	0.520	0.060	0.090	40
06-14-91	0.30	171	132	0.23	<0.010	0.570	0.060	0.080	57
08-13-91	0.30	170	125	0.23	<0.010	<0.050	0.060	0.070	170
12-03-90	<0.10	144	--	--	<0.010	1.40	0.010	0.070	6
03-12-91	<0.10	140	--	--	<0.010	1.60	<0.010	0.070	10
06-14-91	0.10	136	123	0.18	<0.010	1.70	0.010	0.060	8
08-08-91	<0.10	136	117	0.18	<0.010	1.60	<0.010	0.080	4
11-27-90	0.30	153	--	--	<0.010	<0.100	<0.010	0.010	<3
03-05-91	0.70	154	--	--	<0.010	<0.050	<0.010	0.010	4
06-10-91	0.70	162	106	0.22	<0.010	0.073	0.020	0.030	10
08-05-91	0.70	157	110	0.21	<0.010	<0.050	<0.010	0.030	8
12-03-90	0.20	169	--	--	<0.010	0.200	<0.010	0.010	16
03-12-91	0.20	176	--	--	<0.010	0.120	<0.010	0.020	11
06-14-91	0.20	181	163	0.25	<0.010	0.110	0.010	<0.010	11
08-12-91	0.20	187	157	0.25	<0.010	0.100	0.020	0.020	11
11-27-90	1.5	264	--	--	<0.010	1.30	0.010	<0.010	17
03-05-91	1.4	268	--	--	<0.010	1.40	<0.010	0.010	11
06-10-91	1.5	247	207	0.34	<0.010	1.50	0.010	<0.010	5
08-06-91	1.5	267	202	0.36	<0.010	1.50	<0.010	0.020	7
11-27-90	1.5	285	--	--	<0.010	1.30	<0.010	0.030	6
03-05-91	1.4	274	--	--	<0.010	1.40	<0.010	0.040	10
06-10-91	1.5	274	232	0.37	<0.010	1.50	0.010	0.030	5
08-05-91	1.6	296	232	0.40	<0.010	1.50	0.010	0.040	6
11-27-90	1.6	395	--	--	<0.010	1.50	0.020	0.010	<3
03-05-91	1.6	399	--	--	<0.010	1.80	<0.010	0.020	4
06-10-91	1.7	405	367	0.55	<0.010	2.20	0.010	0.020	41
08-05-91	1.6	433	358	0.59	<0.010	2.40	<0.010	0.020	8
11-28-90	5.3	3270	--	--	0.030	0.200	0.110	0.130	14000
03-06-91	5.5	3300	--	--	<0.010	<0.050	0.110	<0.010	12000
06-12-91	5.6	3290	3310	4.47	<0.010	<0.050	0.130	<0.010	14000
08-07-91	5.5	3310	3090	4.50	<0.010	<0.050	0.100	<0.010	12000

QUALITY OF GROUND WATER

441

DOUGLAS COUNTY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

STATION NUMBER	LOCAL WELL NUMBER	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
390457119491301	105 N14 E19 14BBD 1	12-03-90	1320	--	100	121
		03-13-91	0900	--		128
		06-14-91	0830	--		126
		08-12-91	1430	--		128
384136119323901	106 N10 E22 32BAAB2	11-29-90	1044	105.69	105	491
		03-11-91	1150	--		461
		06-13-91	1015	98.12		404
		08-07-91	1010	99.84		450
384156119323301	106 N10 E22 29CADA1	11-29-90	0944	--	183	416
		03-11-91	1140	78.44		477
		06-13-91	0912	92.04		503
		08-07-91	0910	89.51		506

DATE	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
12-03-90	14.0	33	13	0.11	14	1	--	1.4	0.70
03-13-91	12.5	33	13	0.05	14	1	--	<1.0	1.3
06-14-91	15.0	--	13	<0.01	14	--	0.80	0.90	0.60
08-12-91	14.5	35	14	0.09	14	1	0.80	0.50	0.60
11-29-90	11.0	260	66	22	16	0.4	--	17	17
03-11-91	12.5	200	52	17	14	0.4	--	12	12
06-13-91	15.0	190	49	16	13	0.4	5.2	13	13
08-07-91	16.0	200	52	17	14	0.4	6.0	10	14
11-29-90	14.0	200	57	15	22	0.7	--	71	6.4
03-11-91	12.5	200	55	14	22	0.7	--	70	6.6
06-13-91	17.0	230	64	16	22	0.6	1.6	87	6.9
08-07-91	17.0	210	60	15	23	0.7	1.8	78	7.6

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)
12-03-90	<0.10	81	--	--	<0.010	1.00	0.010	0.010	8
03-13-91	<0.10	76	--	--	<0.010	1.00	<0.010	<0.010	3
06-14-91	0.10	70	--	--	<0.010	1.00	0.010	<0.010	3
08-12-91	<0.10	92	71	0.13	<0.010	0.910	0.020	<0.010	<3
11-29-90	<0.10	352	--	--	<0.010	6.70	0.040	0.040	12
03-11-91	0.10	274	--	--	<0.010	5.00	<0.010	0.080	13
06-13-91	<0.10	272	233	0.37	<0.010	4.10	0.010	0.080	10
08-07-91	<0.10	283	250	0.38	<0.010	5.10	<0.010	0.100	10
11-29-90	0.10	318	--	--	<0.010	2.90	0.010	0.100	17
03-11-91	0.10	322	--	--	<0.010	3.30	<0.010	0.110	14
06-13-91	0.10	319	310	0.43	<0.010	3.40	0.020	0.120	16
08-07-91	0.10	314	297	0.43	<0.010	3.10	<0.010	0.130	16

QUALITY OF GROUND WATER

DOUGLAS COUNTY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

STATION	NUMBER	LOCAL WELL NO.			DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
385248119410701	105	N12	E20	25ABBC1	08-05-91	1440	146.60	212	455	16.5
385251119405001	105	N12	E20	25AABB1	08-06-91	1150	136.24	--	437	16.5
385253119404001	105	N12	E20	25AAAB1	08-06-91	0950	200.92	300	421	19.0
385300119405702	105	N12	E20	24DCDB2	08-08-91	1015	120.90	180	652	15.0
385301119411301	105	N12	E20	24CDAD1	08-06-91	1320	79.38	150	473	14.0
385305119404001	105	N12	E20	24DDAB1	08-06-91	1045	154.84	--	517	19.5
385308119405401	105	N12	E20	24BDD1	08-07-91	1225	93.38	180	755	15.0
385313119412701	105	N12	E20	24CBDA1	08-07-91	1330	58.94	116	339	15.0
385314119404901	105	N12	E20	24DABC1	08-09-91	0900	--	220	600	13.0
385321119403601	105	N12	E20	24ADDD1	08-07-91	1120	154.80	208	402	16.0
385321119410701	105	N12	E20	24ACCC1	08-05-91	1145	77.66	139	667	16.0
385325119412001	105	N12	E20	24BDCA1	08-05-91	1025	59.27	150	572	15.0
385326119412601	105	N12	E20	24BCDA1	08-05-91	0925	49.20	100	544	14.5
385331119405401	105	N12	E20	24ACAA1	08-08-91	1235	123.80	180	516	17.0
385333119404201	105	N12	E20	24AADC1	08-05-91	1305	146.42	200	442	15.5
385335119411901	105	N12	E20	24BACD1	08-09-91	1030	--	110	492	14.5
385338119410301	105	N12	E20	24ABCA1	08-08-91	1340	114.25	180	556	17.0
385340119403601	105	N12	E20	24AAAA1	08-07-91	1000	137.98	195	419	15.0
385344119411401	105	N12	E20	24BAAB1	08-08-91	1640	92.80	--	373	15.0
385345119404501	105	N12	E20	24AABA1	08-09-91	0945	--	--	552	15.0
385348119405801	105	N12	E20	13DCDC1	08-08-91	1120	--	185	516	14.0
385413119405001	105	N12	E20	13DDBB1	08-06-91	0850	--	250	373	16.0
390009119501701	105	N13	E19	10CACB1	08-12-91	0920	--	--	201	14.0
390016119504101	105	N13	E19	09DAAB1	08-12-91	0835	--	159	231	14.0
390028119501501	105	N13	E19	10DBBB1	08-12-91	1020	--	--	215	12.0
390619119471601	105	N14	E19	01DADA1	08-12-91	1155	29.21	120	158	14.5
	DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	
	08-05-91	70	11	0.10	327	<0.010	1.00	<0.010	0.010	
	08-06-91	60	11	<0.10	285	<0.010	1.90	0.030	0.030	
	08-06-91	26	33	<0.10	294	<0.010	5.99	0.030	<0.010	
	08-08-91	31	41	0.30	424	<0.010	1.00	0.010	0.090	
	08-06-91	62	9.1	0.10	284	<0.010	1.70	0.030	0.010	
	08-06-91	15	13	<0.10	317	0.010	3.80	0.040	0.020	
	08-07-91	51	43	<0.10	484	<0.010	13.1	0.010	0.050	
	08-07-91	22	13	0.10	211	<0.010	1.50	<0.010	0.020	
	08-09-91	38	16	<0.10	383	<0.010	3.40	<0.010	0.050	
	08-07-91	50	11	0.10	260	<0.010	1.40	<0.010	0.020	
	08-05-91	62	17	0.10	428	<0.010	2.50	<0.010	0.030	
	08-05-91	53	19	0.10	380	<0.010	3.40	<0.010	0.020	
	08-05-91	57	18	0.10	365	<0.010	2.80	<0.010	0.020	
	08-08-91	56	14	0.10	344	<0.010	2.50	<0.010	0.040	
	08-05-91	46	11	0.10	287	<0.010	1.30	<0.010	0.020	
	08-09-91	46	24	0.10	334	<0.010	2.60	0.030	0.040	
	08-08-91	69	17	0.10	390	<0.010	3.00	<0.010	0.050	
	08-07-91	50	13	0.20	269	<0.010	1.60	<0.010	<0.010	
	08-08-91	33	16	0.10	233	<0.010	1.80	<0.010	0.040	
	08-09-91	74	27	0.10	355	<0.010	3.60	0.030	0.020	
	08-08-91	76	35	0.10	335	<0.010	2.80	<0.010	0.020	
	08-06-91	40	15	0.20	246	<0.010	1.40	<0.010	<0.010	
	08-12-91	2.6	0.90	<0.10	117	<0.010	1.10	<0.010	0.020	
	08-12-91	5.0	2.2	0.10	149	<0.010	2.10	<0.010	0.010	
	08-12-91	2.1	1.0	<0.10	127	<0.010	1.50	<0.010	0.020	
	08-12-91	3.1	2.2	0.40	119	<0.010	2.40	<0.010	0.030	

QUALITY OF GROUND WATER

443

DOUGLAS COUNTY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

STATION	NUMBER	LOCAL WELL NUMBER			DATE	TIME	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)
385414119425401		105	N12	E20 15ADD 1	08-20-91	1420	375	232	7.2	14.0	78
385604119435601		105	N12	E20 4ADA 1	08-20-91	1000	300	464	7.1	12.5	190
385719119454701		105	N13	E20 29CDC 1	08-21-91	0950	400	304	7.5	13.5	210
390503119463501		105	N14	E20 18ABAB1	08-28-91	1000	425	251	9.2	20.0	21
384333119301701		106	N10	E22 15DCB 1	08-19-91	1220	--	519	7.6	17.5	230
DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
08-20-91	21	6.2	12	0.6	1.8	25	6.6	<0.10	30	170	155
08-20-91	53	14	22	0.7	3.4	33	11	<0.10	28	289	287
08-21-91	59	16	24	0.7	3.2	15	6.4	0.10	29	181	229
08-28-91	8.1	0.30	47	4	0.50	13	12	0.40	19	160	159
08-19-91	69	14	21	0.6	1.0	77	6.0	<0.10	26	328	335
DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
08-20-91	0.23	<0.010	0.590	0.010	0.020	3	58	<10	2	<10	5
08-20-91	0.39	<0.010	1.50	0.040	<0.010	2	140	<10	<1	<10	6
08-21-91	0.25	<0.010	0.960	0.010	0.010	5	180	<10	<1	<10	4
08-28-91	0.22	<0.010	0.890	<0.010	0.030	11	17	<10	2	<10	7
08-19-91	0.45	<0.010	0.970	<0.010	0.050	2	67	<10	2	<10	6
DATE	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	RADON 222 TOTAL (PC/L)	PCB, TOTAL (UG/L)
08-20-91	<100	<1	<0.1	<1	<1.0	7	<0.6	2.4	1.8	930	<0.1
08-20-91	<100	<1	<0.1	<1	<1.0	8	3.9	5.5	4.1	910	<0.1
08-21-91	<100	10	<0.1	<1	<1.0	11	4.6	5.8	4.3	620	<0.1
08-28-91	<100	<1	0.4	<1	<1.0	7	4.8	2.1	1.6	790	<0.1
08-19-91	<100	<1	<0.1	<1	<1.0	5	1.5	2.5	1.9	760	<0.1
DATE	ALDRIN, TOTAL (UG/L)	BENZENE TOTAL (UG/L)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)	CHLORO- ETHANE TOTAL (UG/L)	CHLORO- FORM TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L)	DDD, TOTAL (UG/L)
08-20-91	<0.010	<3.0	<3.0	<3.0	<0.1	<3.0	<3.0	<3.0	<3.0	<3.0	<0.010
08-20-91	<0.010	<3.0	<3.0	<3.0	<0.1	<3.0	<3.0	<3.0	<3.0	<3.0	<0.010
08-21-91	<0.010	<3.0	<3.0	<3.0	<0.1	<3.0	<3.0	<3.0	<3.0	<3.0	<0.010
08-28-91	<0.010	<3.0	<3.0	<3.0	<0.1	<3.0	<3.0	<3.0	<3.0	<3.0	<0.010
08-19-91	<0.010	<3.0	<3.0	<3.0	<0.1	<3.0	<3.0	<3.0	<3.0	<3.0	<0.010
DATE	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHYL- BENZENE TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	
08-20-91	<0.010	<0.010	<0.010	<3.0	<0.010	<0.010	<3.0	<0.010	<0.010	<0.010	
08-20-91	<0.010	<0.010	<0.010	<3.0	<0.010	<0.010	<3.0	<0.010	<0.010	<0.010	
08-21-91	<0.010	<0.010	<0.010	<3.0	<0.010	<0.010	<3.0	<0.010	<0.010	<0.010	
08-28-91	<0.010	<0.010	<0.010	<3.0	<0.010	<0.010	<3.0	<0.010	<0.010	<0.010	
08-19-91	<0.010	<0.010	<0.010	<3.0	<0.010	<0.010	<3.0	<0.010	<0.010	<0.010	

QUALITY OF GROUND WATER

DOUGLAS COUNTY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	METH- OXY- CHLOR, TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	METHYL- CHLO- RIDE TOTAL (UG/L)	METHYL- ENE CHLO- RIDE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)
08-20-91	<0.01	<3.0	<3.0	<3.0	<0.01	<0.10	<3.0	<3.0	<3.0	<3.0
08-20-91	<0.01	<3.0	<3.0	<3.0	<0.01	<0.10	<3.0	<3.0	<3.0	<3.0
08-21-91	<0.01	<3.0	<3.0	<3.0	<0.01	<0.10	<3.0	<3.0	<3.0	<3.0
08-28-91	<0.01	<3.0	<3.0	<3.0	<0.01	<0.10	<3.0	<3.0	<3.0	<3.0
08-19-91	<0.01	<3.0	<3.0	<3.0	<0.01	<0.10	<3.0	<3.0	<3.0	<3.0

DATE	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	STYRENE TOTAL (UG/L)	VINYL CHLO- RIDE TOTAL (UG/L)
08-20-91	<0.1	<1	<3.0	<3.0	<0.01	<0.01	<0.01	<0.01	<3.0	<1.0
08-20-91	<0.1	<1	<3.0	<3.0	<0.01	<0.01	<0.01	<0.01	<3.0	<1.0
08-21-91	<0.1	<1	<3.0	<3.0	<0.01	<0.01	<0.01	<0.01	<3.0	<1.0
08-28-91	<0.1	<1	<3.0	<3.0	<0.01	<0.01	<0.01	<0.01	<3.0	<1.0
08-19-91	<0.1	<1	<3.0	<3.0	<0.01	<0.01	<0.01	<0.01	<3.0	<1.0

GROUND-WATER LEVELS

445

LAKE TAHOE BASIN

Water-Use: H, domestic; U, unused.Water-Level Status: R, the same site had been pumped recently; S, a nearby site that taps the same aquifer was being pumped.Water-Level Method: S, steel tape.

LOCAL WELL NO	STATION NAME	SITE ID	WATER USE	WELL DEPTH, (FT)	ELEVATION, (FT AB LSD)	WATER- LEVEL DATE	WATER- LEVEL, (FT BLW LSD)	WATER- LEVEL STATUS	WATER- LEVEL METHOD
90 N13 E18 10BDBD1	ZEPHYR4	390022119565201	U	31	6240	08/27/87 09/09/87 09/30/87 10/02/87 11/02/89 08/07/90 11/19/90 02/27/91 07/23/91	15.71 15.73 16.01 16.11 17.73 18.03 18.92 19.57 18.89	- S S S S S S S S	S S S S S S S S S
90 N13 E18 22BAA 1	LADY OF TAHOE	385857119564201	H	200	6275	04/09/86 11/11/86 12/05/89 08/20/90 11/19/90 04/02/91 07/18/91	14.63 20.73 27.62 28.69 28.26 31.99 28.82	R R R R R R R	S S S S S S S
90 N13 E18 22DCA 1	EDGEWOOD4	385816119563001	U	24	6260	08/03/87 08/05/87 03/04/88 06/28/90 08/13/90 11/06/90 02/27/91 07/23/91	15.50 15.23 16.67 13.73 14.00 16.17 16.67 15.18	S S S S S S S S	S S S S S S S S
90 N13 E18 27BDA 1	EDGEWOOD1	385742119565701	U	23	6245	06/24/87 07/15/87 03/04/88 11/02/89 08/13/90 11/06/90 02/27/91 07/23/91	14.76 14.39 16.17 14.79 14.52 14.00 14.77 13.08	S S S S S S S S	S S S S S S S S
90 N14 E18 10ABD 1	GLENBROOK2	390541119562501	U	28	6235	08/03/87 08/20/87 11/09/87 11/19/87 04/06/89 11/01/89 08/07/90 11/13/90 02/27/91 07/24/91	16.35 16.12 17.14 17.25 18.39 18.74 18.94 20.02 20.74 19.87	S S S S S S S S S S	S S S S S S S S S S
90 N14 E18 10ADA 1	GLENBROOK3	390539119561001	U	27	6270	08/06/87 08/20/87 11/09/87 04/06/89 11/01/89 08/07/90 11/13/90 02/27/91 07/24/91	10.71 10.85 10.36 9.55 11.15 12.48 12.90 12.21 11.49	S S S S S S S S S	S S S S S S S S S

LOCATION OF GROUND-WATER QUALITY SAMPLING SITES (Figure 28)

Site Number		Local Number		Latitude	Longitude	Site Identification
51	90	N16 E17 15CCAA1		391552	1200451	391552120045101
52	90	N16 E17 14BBCB1		391425	1200353	391425120035301
53	90	N16 E18 19BCA 1		391406	1195956	391406119595601
54	90	N16 E18 23CDC 1		391322	1195550	391322119555001
55	90	N15 E18 02BBDA1		391158	1195550	391158119555001
56	90	N15 E17 06BCC 1		391038	1200900	391038120090001
57	90	N15 E17 06CAB 1		391033	1200843	391033120084301
58	90	N15 E17 05ABBC1		391031	1200759	391031120075901
59	90	N15 E17 07CADB1		390935	1200840	390935120084001
60	90	N15 E17 18BCB 1		390902	1200903	390902120090301
61	90	N15 E16 24BCDD1		390748	1201007	390748120100701
64	90	N14 E18 10ABD 1		390541	1195625	390541119562501
65	90	N14 E18 10ADA 1		390539	1195610	390539119561001
66	90	N14 E16 01CADD1		390510	1200941	390510120094101
70	90	N14 E17 18AADB1		390354	1200807	390354120080701
71	90	N14 E17 18BBCA1		390352	1200902	390352120090201
74	90	N14 E17 29ACB 1		390203	1200727	390203120072701
75	90	N14 E17 29ADC 1		390157	1200705	390157120070501
76	90	N14 E18 34CDD 1		390148	1195641	390148119564101
79	90	N13 E18 10BDBD1		390022	1195652	390022119565201
86	90	N13 E18 16CCC 1		385902	1195713	385902119571301
87	90	N13 E18 22BAA 1		385857	1195642	385857119564201
88	90	N13 E18 23CBB 1		385824	1195604	385824119560401
89	90	N13 E18 22DCA 1		385816	1195630	385816119563001
91	90	N13 E18 27BDA 1		385748	1195642	385742119565701
94	90	N12 E18 33ADB 1		385658	1195725	385658119572501
96	90	N12 E18 03ABA 1		385651	1195817	385651119581701
97	90	N13 E18 33CAD 1		385644	1195746	385644119574601
98	90	N13 E17 25CDA 1		385623	1200302	385623120030201
100	90	N12 E18 05AADD1		385559	1200013	385559120001301
101	90	N12 E18 03BCC 1		385538	1195850	385538119585001
103	90	N12 E18 09ABC 1		385423	1195936	385423119593601
131	90	N12 E18 29CBD 1		385118	1200106	355118120010601

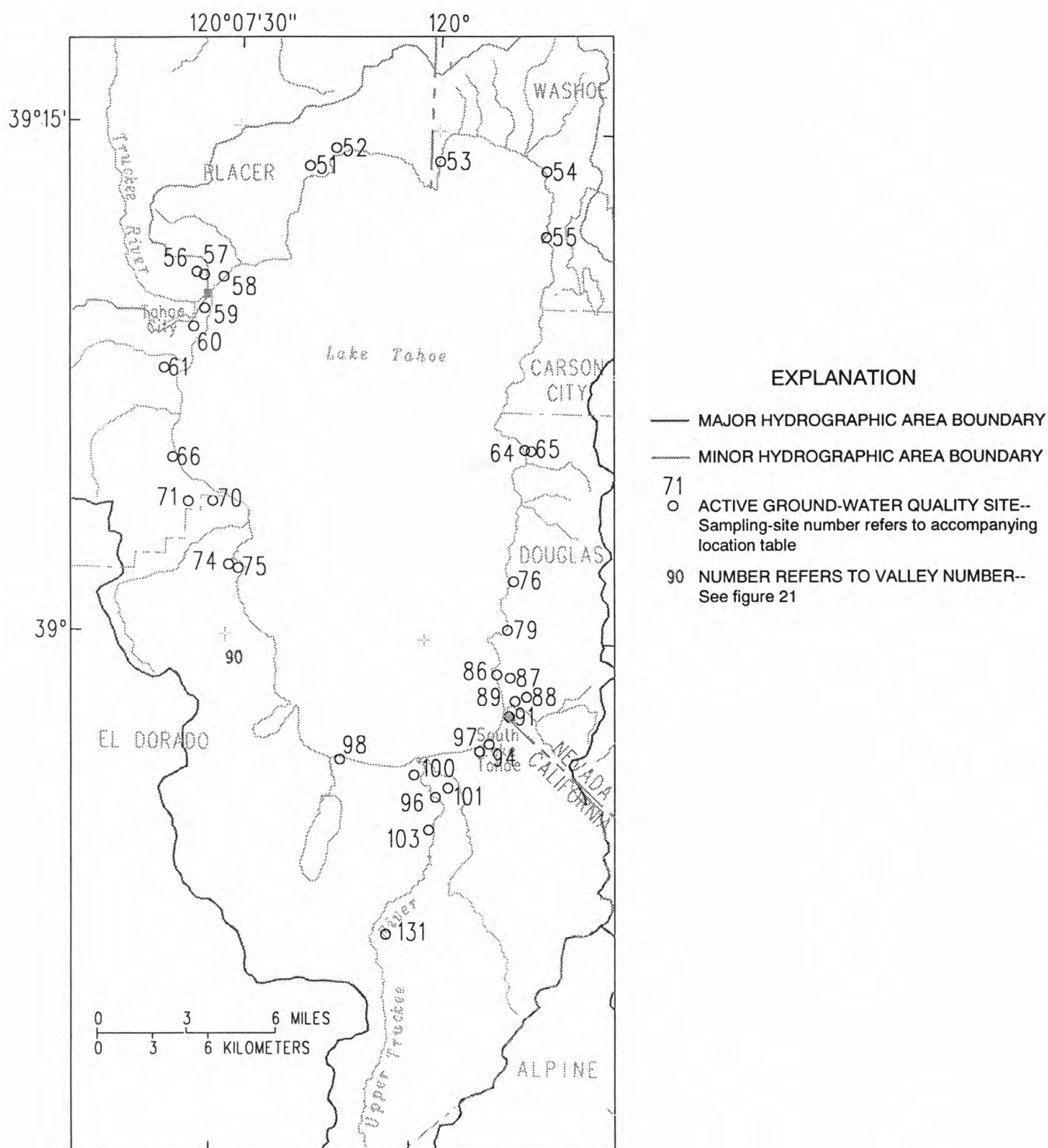


FIGURE 28.--Ground-water quality sites, Lake Tahoe basin.

QUALITY OF GROUND WATER

LAKE TAHOE BASIN

Water-quality measurements in the following table were made during a groundwater study throughout the Lake Tahoe Basin. Data for these sites covers both the 1990 and 1991 water years. The data collected for the first sample at all sites was analyzed by the U.S. Geological Survey National Water Quality Laboratory in Arvada, Colorado. All other samples were analyzed by the University of California, Davis.

WATER-QUALITY DATA, WATER YEARS OCTOBER 1989 TO SEPTEMBER 1991

STATION NUMBER	LOCAL WELL NUMBER	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)
385118120010601	90 N12 E18 29CBD 1	11-30-89	1110	--	268	--	151	9.0	14.0
		08-06-90	1020	--		--	158	8.3	23.5
		11-21-90	0930	--		--	139	8.8	1.5
		02-28-91	1130	--		--	117	8.3	2.5
		07-09-91	1030	--		--	161	8.0	22.0
385423119593601	90 N12 E18 09ABC 1	11-30-89	1300	--	380	--	102	8.9	14.0
		08-06-90	1130	--		--	111	8.6	29.0
		11-21-90	0840	--		--	110	9.0	-3.5
		02-28-91	1020	--		--	102	9.0	6.5
		07-09-91	0920	--		--	114	8.2	21.0
385538119585001	90 N12 E18 03BCC 1	07-20-90	0945	--	--	--	162	6.4	21.5
		08-15-90	1300	--		--	169	6.5	23.5
		12-05-90	1000	--		--	153	6.8	5.0
		04-02-91	1030	--		--	168	6.2	5.0
		07-09-91	1130	--		--	168	6.3	21.0
385559120001301	90 N12 E18 05AADD1	12-04-89	1130	--	318	--	96	8.3	9.0
		08-06-90	1300	--		--	104	8.2	28.5
		12-05-90	1200	--		--	98	8.1	5.5
		04-02-91	0820	--		--	102	6.9	12.0
		07-18-91	1315	--		--	103	7.5	20.5
385623120030201	90 N13 E17 25CDA 1	01-03-90	1330	--	80	--	82	7.1	1.0
		08-15-90	1030	--		--	92	7.0	21.5
		12-05-90	1400	--		--	92	7.0	7.5
385644119574601	90 N13 E18 33CAD 1	08-13-90	1215	--	76	--	173	7.0	21.5
		12-05-90	1500	--		--	277	6.9	11.0
		07-09-91	1600	--		--	201	6.9	24.0
385651119581701	90 N12 E18 03ABA 1	12-05-89	1050	--	125	--	85	6.6	14.0
		08-15-90	1430	--		--	89	6.6	27.5
		12-05-90	1100	--		--	88	7.0	6.0
		04-02-91	0930	--		--	90	6.4	11.5
		07-18-91	1115	--		--	91	6.8	18.0
385658119572501	90 N12 E18 33ADB 1	12-04-89	1400	--	142	--	88	8.2	12.0
385742119565701	90 N13 E18 27BDA 1	11-02-89	1110	14.79	23	--	443	6.6	12.0
		08-13-90	1345	14.52		--	464	6.7	24.5
		11-06-90	1030	14.00		--	389	6.7	4.5
		02-27-91	1020	14.77		--	335	6.7	9.5
		07-23-91	1145	13.08		--	323	6.7	18.0
385816119563001	90 N13 E18 22DCA 1	06-28-90	0910	13.73	24	--	195	6.2	17.0
		08-13-90	1500	14.00		--	217	6.3	28.5
		11-06-90	1145	16.17		--	222	6.4	6.5
		02-27-91	1110	16.67		--	247	6.3	7.0
		07-23-91	1345	15.18		--	231	6.6	24.5
385824119550401	90 N13 E18 23CBB 1	07-03-90	1430	--	--	0.40	150	7.0	23.0
		08-08-90	0930	--		0.40	162	7.2	20.0
		11-06-90	1330	--		--	143	7.4	7.0
		02-28-91	1400	--		--	144	6.9	11.5
		07-17-91	1300	--		--	155	7.0	26.0
385857119564201	90 N13 E18 22BAA 1	12-05-89	1420	27.62	200	--	263	6.4	11.0
		08-20-90	1030	28.69		--	268	6.4	19.0
		11-19-90	1430	28.26		--	275	6.4	2.5
		04-02-91	1230	31.99		--	274	6.5	9.5
		07-18-91	1520	28.82		--	288	6.4	23.5
385902119571301	90 N13 E18 16CCC 1	07-03-90	1030	--	58	--	152	6.8	16.5
		08-20-90	1150	--		--	161	7.0	11.0
		11-19-90	1330	--		--	169	7.0	8.0
		04-02-91	1140	--		--	165	6.7	7.0
		07-18-91	1440	--		--	172	6.8	23.0
390022119565201	90 N13 E18 10BDBD1	11-02-89	1350	17.73	31	--	358	6.4	10.0
		08-07-90	1000	18.03		--	318	6.3	21.5
		11-19-90	1145	18.92		--	360	6.3	8.5
		02-27-91	0850	19.57		--	353	6.3	4.5
		07-23-91	1430	18.89		--	396	6.3	24.0

QUALITY OF GROUND WATER
LAKE TAHOE BASIN--Continued

449

DATE	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3
11-30-89	11.5	3.4	23	8.4	0.45	24	1.6	58	48
08-06-90	15.0	--	--	--	--	--	--	61	50
11-21-90	13.5	--	--	--	--	--	--	--	--
02-28-91	10.0	--	--	--	--	--	--	--	--
07-09-91	14.5	--	--	--	--	--	--	--	--
11-30-89	12.5	1.0	11	4.1	0.27	20	0.40	52	43
08-06-90	11.0	--	--	--	--	--	--	51	42
11-21-90	10.0	--	--	--	--	--	--	--	--
02-28-91	7.0	--	--	--	--	--	--	--	--
07-09-91	12.0	--	--	--	--	--	--	--	--
07-20-90	12.0	8.8	52	15	3.6	9.0	0.80	55	45
08-15-90	12.0	--	--	--	--	--	--	55	45
12-05-90	8.5	--	--	--	--	--	--	--	--
04-02-91	9.5	--	--	--	--	--	--	--	--
07-09-91	12.0	--	--	--	--	--	--	--	--
12-04-89	10.5	3.9	28	9.2	1.3	11	0.70	58	48
08-06-90	11.5	--	--	--	--	--	--	56	46
12-05-90	9.5	--	--	--	--	--	--	--	--
04-02-91	9.5	--	--	--	--	--	--	--	--
07-18-91	10.5	--	--	--	--	--	--	--	--
01-03-90	9.0	9.2	37	11	2.4	3.9	1.1	54	44
08-15-90	8.0	--	--	--	--	--	--	56	46
12-05-90	9.0	--	--	--	--	--	--	--	--
08-13-90	11.0	--	60	16	4.9	7.2	0.90	80	66
12-05-90	10.0	--	--	--	--	--	--	--	--
07-09-91	11.0	--	--	--	--	--	--	--	--
12-05-89	9.0	7.4	32	9.2	2.3	6.2	0.90	54	44
08-15-90	10.0	--	--	--	--	--	--	56	46
12-05-90	8.0	--	--	--	--	--	--	--	--
04-02-91	9.5	--	--	--	--	--	--	--	--
07-18-91	9.5	--	--	--	--	--	--	--	--
12-04-89	9.5	4.4	34	13	0.29	7.8	1.1	55	45
11-02-89	14.0	0.9	190	52	14	23	1.2	220	180
08-13-90	14.5	0.6	--	--	--	--	--	178	146
11-06-90	10.5	--	--	--	--	--	--	--	--
02-27-91	10.5	--	--	--	--	--	--	--	--
07-23-91	12.0	--	--	--	--	--	--	--	--
06-28-90	11.0	3.8	52	15	3.6	9.9	2.6	46	38
08-13-90	14.5	4.8	--	--	--	--	--	44	36
11-06-90	11.0	--	--	--	--	--	--	--	--
02-27-91	10.5	--	--	--	--	--	--	--	--
07-23-91	11.5	--	--	--	--	--	--	--	--
07-03-90	10.0	3.0	49	15	2.7	9.4	2.4	88	72
08-08-90	11.0	3.0	--	--	--	--	--	90	74
11-06-90	10.0	--	--	--	--	--	--	--	--
02-28-91	9.5	--	--	--	--	--	--	--	--
07-17-91	9.0	--	--	--	--	--	--	--	--
12-05-89	7.0	5.2	99	28	7.1	13	2.6	82	67
08-20-90	8.5	--	--	--	--	--	--	85	70
11-19-90	7.5	--	--	--	--	--	--	--	--
04-02-91	9.0	--	--	--	--	--	--	--	--
07-18-91	9.0	--	--	--	--	--	--	--	--
07-03-90	12.0	3.6	33	11	1.4	22	1.0	66	54
08-20-90	14.0	--	--	--	--	--	--	65	53
11-19-90	10.0	--	--	--	--	--	--	--	--
04-02-91	10.5	--	--	--	--	--	--	--	--
07-18-91	12.5	--	--	--	--	--	--	--	--
11-02-89	9.5	1.2	140	41	10	16	2.4	145	119
08-07-90	13.5	1.2	--	--	--	--	--	152	125
11-19-90	9.0	--	--	--	--	--	--	--	--
02-27-91	8.0	--	--	--	--	--	--	--	--
07-23-91	9.5	--	--	--	--	--	--	--	--

QUALITY OF GROUND WATER
LAKE TAHOE BASIN--Continued

DATE	SULFATE DIS- SOLVED (MG/L AS SO ₄)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO ₂)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)
11-30-89	10	12	0.10	21	121	107	<0.001	0.136	<0.002	2.1
08-06-90	--	--	--	--	--	--	--	0.109	0.009	<0.04
11-21-90	--	--	--	--	--	--	<0.001	0.092	<0.004	<0.04
02-28-91	--	--	--	--	--	--	<0.001	0.460	<0.004	<0.04
07-09-91	--	--	--	--	--	--	<0.001	0.097	<0.004	<0.04
11-30-89	8.0	3.0	0.30	18	59	80	0.005	0.016	0.009	<0.20
08-06-90	--	--	--	--	--	--	--	0.009	0.015	<0.04
11-21-90	--	--	--	--	--	--	<0.001	0.012	0.016	0.06
02-28-91	--	--	--	--	--	--	<0.001	0.012	0.013	<0.04
07-09-91	--	--	--	--	--	--	<0.001	0.011	0.010	<0.04
07-20-90	2.6	18	<0.10	28	112	114	0.001	2.30	<0.002	0.30
08-15-90	--	--	--	--	--	--	--	1.87	0.006	0.05
12-05-90	--	--	--	--	--	--	<0.001	3.00	<0.004	<0.04
04-02-91	--	--	--	--	--	--	<0.001	2.10	<0.004	<0.04
07-09-91	--	--	--	--	--	--	<0.001	2.02	<0.004	0.05
12-04-89	3.0	1.9	0.10	25	89	82	0.002	0.245	<0.002	<0.20
08-06-90	--	--	--	--	--	--	--	0.251	0.006	<0.04
12-05-90	--	--	--	--	--	--	<0.001	0.357	<0.004	<0.04
04-02-91	--	--	--	--	--	--	<0.001	0.338	<0.004	<0.04
07-18-91	--	--	--	--	--	--	<0.001	0.416	<0.004	<0.04
01-03-90	1.0	0.80	<0.10	28	75	75	0.007	0.108	0.022	<0.20
08-15-90	--	--	--	--	--	--	--	0.053	<0.004	<0.04
12-05-90	--	--	--	--	--	--	<0.001	0.046	<0.004	<0.04
08-13-90	2.2	11	<0.10	32	116	117	0.001	0.635	0.002	<0.20
12-05-90	--	--	--	--	--	--	<0.001	1.32	<0.004	0.05
07-09-91	--	--	--	--	--	--	<0.001	0.771	<0.004	0.05
12-05-89	<1.0	1.2	0.10	29	64	--	0.002	0.271	<0.002	0.20
08-15-90	--	--	--	--	--	--	--	0.211	0.004	<0.04
12-05-90	--	--	--	--	--	--	<0.001	0.245	<0.004	0.05
04-02-91	--	--	--	--	--	--	<0.001	0.245	<0.004	<0.04
07-18-91	--	--	--	--	--	--	<0.001	0.251	<0.004	<0.04
12-04-89	5.0	1.2	<0.10	15	67	71	0.003	0.092	<0.002	<0.20
11-02-89	4.0	3.6	0.10	30	264	236	0.002	0.020	0.007	<0.20
08-13-90	--	--	--	--	--	--	--	0.009	0.005	0.10
11-06-90	--	--	--	--	--	--	<0.001	0.006	<0.004	0.06
02-27-91	--	--	--	--	--	--	<0.001	<0.004	<0.004	0.08
07-23-91	--	--	--	--	--	--	<0.001	<0.004	<0.004	0.10
06-28-90	7.5	7.8	<0.10	21	143	113	0.001	5.20	0.005	1.0
08-13-90	--	--	--	--	--	--	--	10.8	0.005	0.04
11-06-90	--	--	--	--	--	--	<0.001	11.9	<0.004	0.07
02-27-91	--	--	--	--	--	--	<0.001	16.3	<0.004	0.05
07-23-91	--	--	--	--	--	--	<0.001	12.1	<0.004	<0.04
07-03-90	1.3	4.4	<0.10	21	86	100	0.017	0.183	0.004	<0.20
08-08-90	--	--	--	--	--	--	--	0.119	0.008	<0.04
11-06-90	--	--	--	--	--	--	<0.001	0.142	<0.004	<0.04
02-28-91	--	--	--	--	--	--	<0.001	0.150	<0.004	<0.04
07-17-91	--	--	--	--	--	--	<0.001	0.158	<0.004	<0.04
12-05-89	<1.0	47	<0.10	37	180	--	0.001	0.030	<0.002	<0.20
08-20-90	--	--	--	--	--	--	--	0.028	<0.004	<0.04
11-19-90	--	--	--	--	--	--	<0.001	0.028	0.004	<0.04
04-02-91	--	--	--	--	--	--	<0.001	0.042	<0.004	<0.04
07-18-91	--	--	--	--	--	--	<0.001	0.040	<0.004	<0.04
07-03-90	5.9	16	0.40	26	114	118	0.003	0.375	0.007	<0.20
08-20-90	--	--	--	--	--	--	--	0.320	<0.004	0.05
11-19-90	--	--	--	--	--	--	<0.001	0.352	0.005	<0.04
04-02-91	--	--	--	--	--	--	<0.001	0.409	<0.004	<0.04
07-18-91	--	--	--	--	--	--	<0.001	0.487	<0.004	<0.04
11-02-89	6.0	17	<0.10	45	240	253	0.002	10.0	0.005	0.40
08-07-90	--	--	--	--	--	--	--	8.37	0.046	0.15
11-19-90	--	--	--	--	--	--	0.001	9.04	0.009	0.04
02-27-91	--	--	--	--	--	--	<0.001	7.61	<0.004	0.05
07-23-91	--	--	--	--	--	--	<0.001	8.61	<0.004	0.11

QUALITY OF GROUND WATER
LAKE TAHOE BASIN--Continued

451

DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS HYDRO. + ORTHO DIS. (MG/L AS P)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, BIO. REACTIVE DIS- SOLVED (UG/L AS FE)
11-30-89	0.009	0.011	<0.01	1.0	<1	<1	1	4	--
08-06-90	0.066	0.021	0.02	--	--	--	--	<1	--
11-21-90	0.055	0.016	0.02	--	--	--	--	10	6
02-28-91	0.022	0.014	0.01	--	--	--	--	--	<5
07-09-91	0.040	0.012	0.02	--	--	--	--	--	<5
11-30-89	0.061	0.066	0.05	<1.0	<1	<1	2	24	--
08-06-90	0.100	0.071	0.07	--	--	--	--	<1	--
11-21-90	0.087	0.042	0.05	--	--	--	--	41	34
02-28-91	0.048	0.041	0.04	--	--	--	--	--	19
07-09-91	0.096	0.081	0.08	--	--	--	--	--	29
07-20-90	0.011	0.009	0.01	<1.0	2	<1	6	17	--
08-15-90	0.062	0.016	0.02	--	--	--	--	31	--
12-05-90	0.027	0.013	0.01	--	--	--	--	--	10
04-02-91	0.019	0.014	0.02	--	--	--	--	--	8
07-09-91	0.039	0.016	0.02	--	--	--	--	--	14
12-04-89	0.014	0.016	0.01	<1.0	1	<1	<1	<3	--
08-06-90	0.027	0.020	0.02	--	--	--	--	<1	--
12-05-90	0.019	0.017	0.02	--	--	--	--	10	<5
04-02-91	0.025	0.018	0.02	--	--	--	--	--	<5
07-18-91	0.029	0.019	0.02	--	--	--	--	--	<5
01-03-90	0.045	<0.001	0.04	<1.0	<1	<3	<10	23	--
08-15-90	0.097	0.044	0.04	--	--	--	--	81	--
12-05-90	0.089	0.045	0.05	--	--	--	--	71	51
08-13-90	0.019	0.021	0.02	<1.0	4	1	2	5	--
12-05-90	0.024	0.021	0.02	--	--	--	--	71	15
07-09-91	0.053	0.023	0.03	--	--	--	--	--	<5
12-05-89	0.012	0.014	<0.01	1.0	<1	<1	2	39	--
08-15-90	0.069	0.016	0.02	--	--	--	--	56	--
12-05-90	0.015	0.013	0.02	--	--	--	--	--	<5
04-02-91	0.023	0.015	0.02	--	--	--	--	--	<5
07-18-91	0.028	0.016	0.02	--	--	--	--	--	<5
12-04-89	0.006	0.006	<0.01	<1.0	<1	<1	<1	7	--
11-02-89	0.017	0.013	<0.01	<1.0	<1	1	1	18	--
08-13-90	0.058	0.015	0.01	--	--	--	--	76	--
11-06-90	0.069	0.014	0.02	--	--	--	--	27	10
02-27-91	0.028	0.015	0.02	--	--	--	--	--	10
07-23-91	0.050	0.014	0.02	--	--	--	--	--	8
06-28-90	0.022	0.014	0.02	<1.0	<1	<1	1	9	--
08-13-90	0.041	0.010	<0.01	--	--	--	--	51	--
11-06-90	0.057	0.010	0.01	--	--	--	--	83	6
02-27-91	0.019	0.008	0.01	--	--	--	--	--	<5
07-23-91	0.024	<0.001	0.01	--	--	--	--	--	7
07-03-90	0.015	0.012	0.02	1.0	<1	<1	1	5	--
08-08-90	0.051	0.018	0.02	--	--	--	--	<1	--
11-06-90	0.047	0.018	0.02	--	--	--	--	27	7
02-28-91	0.025	0.017	0.02	--	--	--	--	--	<5
07-17-91	0.027	0.018	0.02	--	--	--	--	--	<5
12-05-89	0.005	0.005	<0.01	<1.0	<1	<1	2	33	--
08-20-90	0.043	0.015	0.02	--	--	--	--	31	--
11-19-90	0.009	0.004	<0.01	--	--	--	--	71	66
04-02-91	0.015	0.010	0.01	--	--	--	--	--	22
07-18-91	0.026	0.014	0.02	--	--	--	--	--	15
07-03-90	0.009	0.002	<0.01	<1.0	2	<1	1	5	--
08-20-90	0.031	0.008	<0.01	--	--	--	--	31	--
11-19-90	0.069	0.007	<0.01	--	--	--	--	160	165
04-02-91	0.014	0.008	0.01	--	--	--	--	--	161
07-18-91	0.017	0.008	0.01	--	--	--	--	--	35
11-02-89	0.024	0.022	0.01	<1.0	<1	<1	1	6	--
08-07-90	0.042	0.031	0.03	--	--	--	--	<1	--
11-19-90	0.091	0.024	0.02	--	--	--	--	--	9
02-27-91	0.036	0.022	0.02	--	--	--	--	--	<5
07-23-91	0.050	0.016	0.03	--	--	--	--	--	<5

[illegible]

QUALITY OF GROUND WATER
LAKE TAHOE BASIN--Continued

453

STATION NUMBER	LOCAL WELL NUMBER	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)
390148119564101	90 N14 E18 34CDD 1	07-20-90	1245	82.69	180	241	6.8
		08-07-90	1230	--		245	6.8
		11-19-90	1530	--		225	6.9
		04-02-91	1400	--		228	6.6
		07-17-91	1415	--		240	6.8
390157120070501	90 N14 E17 29ADC 1	10-17-89	1345	--	320	99	6.6
		08-02-90	1030	--		119	6.5
		11-13-90	1100	--		105	6.7
		03-13-91	1200	--		109	6.6
		07-16-91	1050	--		116	6.6
390203120072701	90 N14 E17 29ACB 1	03-13-91	1300	--	365	125	7.1
		07-16-91	1245	--		122	7.0
390352120090201	90 N14 E17 18BBCA1	11-06-89	1020	--	323	108	6.9
		07-31-90	1045	--		117	6.9
		11-08-90	1030	--		110	6.9
		02-26-91	0915	--		111	6.8
		07-11-91	1120	--		119	6.7
390354120080701	90 N14 E17 18AADB1	11-07-89	1315	--	--	103	7.2
		07-31-90	0930	--		114	6.8
		11-08-90	0930	--		111	7.0
		02-26-91	1020	--		109	6.6
		07-11-91	1030	--		118	6.5
390510120094101	90 N14 E16 01CADD1	10-25-89	1330	--	114	106	6.5
		07-31-90	1200	--		115	6.3
		11-08-90	1145	--		104	6.5
		02-26-91	1150	--		108	6.5
		07-11-91	1225	--		121	6.4
390539119561001	90 N14 E18 10ADA 1	11-01-89	1145	11.15	27	234	6.5
		08-07-90	1345	12.48		250	6.8
		11-13-90	1545	12.90		246	6.7
		02-27-91	1300	12.21		244	6.6
		07-24-91	1200	11.49		241	6.7
390541119562501	90 N14 E18 10ABD 1	11-01-89	1515	18.74	28	237	6.5
		08-07-90	1545	18.94		266	6.4
		11-13-90	1430	20.02		228	6.7
		02-27-91	1420	20.74		258	6.5
		07-24-91	1400	19.87		266	6.5
390748120100701	90 N15 E16 24CBCD1	11-09-89	0850	--	--	166	7.9
		08-10-90	0930	--		176	7.7
		07-11-91	0930	--		178	7.3
390902120090301	90 N15 E17 18BCB 1	10-17-89	1130	--	445	147	7.1
		08-02-90	1145	--		169	6.7
		03-13-91	1050	--		158	6.9
		07-16-91	1000	--		168	6.7
390935120084001	90 N15 E17 07CADB1	10-17-89	1610	--	265	172	7.3
		11-08-90	1345	--		182	7.3
		07-16-91	1330	--		159	6.7
391031120075901	90 N15 E17 05ABBC1	10-18-89	1230	--	160	151	7.8
		07-31-90	1420	--		164	7.4
		11-20-90	1200	--		146	7.8
		02-26-91	1400	--		166	6.7
		07-11-91	1440	--		171	6.8
391033120084301	90 N15 E17 06CAB 1	03-13-91	0930	--	--	144	7.2
391038120090001	90 N15 E17 06BCC 1	10-17-89	0945	--	223	113	7.3
		08-02-90	1300	--		122	7.0
		11-13-90	0900	--		111	7.0
		03-13-91	1000	--		108	7.5
		07-16-91	0850	--		119	7.0
391158119555001	90 N15 E18 02BBDA1	11-07-89	0930	--	110	147	6.3
		08-14-90	0900	--		159	6.1
		11-20-90	0930	--		148	6.6
		03-12-91	1330	--		174	6.2
		07-18-91	0945	--		166	6.4

QUALITY OF GROUND WATER
LAKE TAHOE BASIN--Continued

DATE	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3
07-20-90	23.5	13.0	5.1	80	17	9.1	9.7	3.4	134
08-07-90	27.0	9.0	--	--	--	--	--	--	135
11-19-90	2.0	8.5	--	--	--	--	--	--	--
04-02-91	12.5	9.0	--	--	--	--	--	--	--
07-17-91	23.5	8.5	--	--	--	--	--	--	--
10-17-89	14.5	9.0	6.8	39	12	2.3	6.7	1.7	54
08-02-90	18.5	8.5	6.2	--	--	--	--	--	56
11-13-90	15.5	8.0	--	--	--	--	--	--	--
03-13-91	0.5	7.5	--	--	--	--	--	--	--
07-16-91	20.5	7.5	--	--	--	--	--	--	--
03-13-91	1.5	9.5	--	--	--	--	--	--	--
07-16-91	21.0	13.5	1.4	43	12	3.1	8.4	1.6	77
11-06-89	5.0	6.0	6.2	51	13	4.4	4.5	0.70	74
07-31-90	19.5	6.0	--	--	--	--	--	--	76
11-08-90	8.5	6.0	--	--	--	--	--	--	--
02-26-91	3.5	5.0	--	--	--	--	--	--	--
07-11-91	20.5	6.5	--	--	--	--	--	--	--
11-07-89	8.0	7.5	5.8	46	14	2.8	5.5	1.4	76
07-31-90	18.0	7.5	6.3	--	--	--	--	--	73
11-08-90	7.5	6.5	--	--	--	--	--	--	--
02-26-91	4.5	6.5	--	--	--	--	--	--	--
07-11-91	20.0	6.5	--	--	--	--	--	--	--
10-25-89	1.5	8.0	7.8	49	14	3.3	4.4	1.1	71
07-31-90	19.0	7.0	7.5	--	--	--	--	--	71
11-08-90	10.0	6.5	--	--	--	--	--	--	--
02-26-91	5.0	6.5	--	--	--	--	--	--	--
07-11-91	22.5	7.5	--	--	--	--	--	--	--
11-01-89	7.5	8.0	5.3	96	27	7.0	14	1.8	140
08-07-90	26.0	10.5	3.3	--	--	--	--	--	142
11-13-90	12.5	10.0	--	--	--	--	--	--	--
02-27-91	9.0	8.0	--	--	--	--	--	--	--
07-24-91	20.5	9.0	--	--	--	--	--	--	--
11-01-89	12.5	10.0	1.2	110	32	8.4	11	2.6	142
08-07-90	22.5	13.5	1.6	--	--	--	--	--	137
11-13-90	15.5	9.0	--	--	--	--	--	--	--
02-27-91	12.5	9.0	--	--	--	--	--	--	--
07-24-91	21.5	10.0	--	--	--	--	--	--	--
11-09-89	4.5	6.0	7.6	77	17	8.5	5.5	2.5	120
08-10-90	19.0	9.0	--	--	--	--	--	--	117
07-11-91	21.0	8.0	--	--	--	--	--	--	--
10-17-89	11.0	6.5	8.1	75	18	7.4	5.1	1.7	104
08-02-90	24.5	7.5	8.4	--	--	--	--	--	105
03-13-91	2.0	6.5	--	--	--	--	--	--	--
07-16-91	20.5	6.5	--	--	--	--	--	--	--
10-17-89	14.0	12.5	0.3	71	12	10	7.5	5.2	112
11-08-90	14.0	9.5	--	--	--	--	--	--	--
07-16-91	22.5	14.5	--	--	--	--	--	--	--
10-18-89	18.0	10.0	4.3	69	14	8.2	5.5	3.4	100
07-31-90	19.0	10.0	4.6	--	--	--	--	--	102
11-20-90	3.0	9.5	--	--	--	--	--	--	--
02-26-91	14.5	8.5	--	--	--	--	--	--	--
07-11-91	26.5	9.5	--	--	--	--	--	--	--
03-13-91	2.0	7.0	--	--	--	--	--	--	--
10-17-89	8.5	8.0	8.0	49	10	5.8	4.5	2.8	70
08-02-90	24.5	8.0	8.4	--	--	--	--	--	73
11-13-90	10.0	7.0	--	--	--	--	--	--	--
03-13-91	2.0	6.0	--	--	--	--	--	--	--
07-16-91	19.5	6.5	--	--	--	--	--	--	--
11-07-89	6.5	9.0	1.0	61	17	4.5	6.8	1.9	74
08-14-90	18.0	9.5	1.1	--	--	--	--	--	77
11-20-90	0.5	9.0	--	--	--	--	--	--	--
03-12-91	2.5	9.0	--	--	--	--	--	--	--
07-18-91	17.0	9.5	--	--	--	--	--	--	--

QUALITY OF GROUND WATER
LAKE TAHOE BASIN--Continued

455

DATE	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
07-20-90	110	1.3	11	<0.10	30	144	149	0.003	0.348	0.005
08-07-90	111	--	--	--	--	--	--	--	0.207	0.015
11-19-90	--	--	--	--	--	--	--	<0.001	0.258	0.005
04-02-91	--	--	--	--	--	--	--	<0.001	0.243	<0.004
07-17-91	--	--	--	--	--	--	--	<0.001	0.247	<0.004
10-17-89	44	<1.0	6.2	0.10	32	92	--	0.001	0.092	0.005
08-02-90	46	--	--	--	--	--	--	--	0.070	<0.004
11-13-90	--	--	--	--	--	--	--	<0.001	0.071	<0.004
03-13-91	--	--	--	--	--	--	--	<0.001	0.086	<0.004
07-16-91	--	--	--	--	--	--	--	<0.001	0.077	<0.004
03-13-91	--	--	--	--	--	--	--	<0.001	0.003	0.108
07-16-91	63	0.90	2.0	0.10	41	85	--	0.029	0.057	0.104
11-06-89	61	<1.0	0.20	<0.10	32	81	--	0.003	0.040	0.003
07-31-90	62	--	--	--	--	--	--	--	0.036	<0.004
11-08-90	--	--	--	--	--	--	--	<0.001	0.032	<0.004
02-26-91	--	--	--	--	--	--	--	<0.001	0.036	<0.004
07-11-91	--	--	--	--	--	--	--	<0.001	0.034	<0.004
11-07-89	62	<1.0	0.30	<0.10	32	107	--	0.002	0.097	<0.002
07-31-90	60	--	--	--	--	--	--	--	0.080	<0.004
11-08-90	--	--	--	--	--	--	--	<0.001	0.063	<0.004
02-26-91	--	--	--	--	--	--	--	<0.001	0.084	<0.004
07-11-91	--	--	--	--	--	--	--	<0.001	0.080	<0.004
10-25-89	78	<1.0	1.0	<0.10	40	81	--	0.002	0.082	<0.002
07-31-90	78	--	--	--	--	--	--	--	0.080	<0.004
11-08-90	--	--	--	--	--	--	--	<0.001	0.058	<0.004
02-26-91	--	--	--	--	--	--	--	<0.001	0.063	<0.004
07-11-91	--	--	--	--	--	--	--	<0.001	0.077	<0.004
11-01-89	115	14	18	0.10	33	153	184	0.004	0.052	0.009
08-07-90	116	--	--	--	--	--	--	--	0.013	<0.004
11-13-90	--	--	--	--	--	--	--	0.002	0.043	<0.004
02-27-91	--	--	--	--	--	--	--	<0.001	0.008	<0.004
07-24-91	--	--	--	--	--	--	--	<0.001	0.003	0.004
11-01-89	116	10	3.0	<0.10	30	157	174	0.003	1.60	0.011
08-07-90	112	--	--	--	--	--	--	--	2.62	<0.004
11-13-90	--	--	--	--	--	--	--	0.002	2.90	<0.004
02-27-91	--	--	--	--	--	--	--	<0.001	2.89	<0.004
07-24-91	--	--	--	--	--	--	--	<0.001	3.49	<0.004
11-09-89	98	<1.0	0.20	<0.10	32	124	--	0.002	0.029	<0.002
08-10-90	96	--	--	--	--	--	--	--	0.019	0.005
07-11-91	--	--	--	--	--	--	--	<0.001	0.021	<0.004
10-17-89	85	<1.0	0.70	<0.10	48	130	--	0.001	0.248	0.010
08-02-90	86	--	--	--	--	--	--	--	0.181	<0.004
03-13-91	--	--	--	--	--	--	--	0.001	0.168	0.005
07-16-91	--	--	--	--	--	--	--	0.001	0.165	0.007
10-17-89	92	2.0	0.60	0.10	53	134	147	0.002	0.018	0.495
11-08-90	--	--	--	--	--	--	--	0.002	0.585	0.007
07-16-91	--	--	--	--	--	--	--	<0.001	0.110	0.005
10-18-89	82	3.0	0.60	<0.10	38	123	122	0.002	0.057	0.006
07-31-90	84	--	--	--	--	--	--	--	0.047	<0.004
11-20-90	--	--	--	--	--	--	--	<0.001	0.042	0.005
02-26-91	--	--	--	--	--	--	--	<0.001	0.034	0.008
07-11-91	--	--	--	--	--	--	--	<0.001	0.041	<0.004
03-13-91	--	--	--	--	--	--	--	<0.001	0.112	<0.004
10-17-89	58	1.0	1.1	<0.10	37	94	98	0.002	0.268	0.005
08-02-90	60	--	--	--	--	--	--	--	0.182	<0.004
11-13-90	--	--	--	--	--	--	--	<0.001	0.154	<0.004
03-13-91	--	--	--	--	--	--	--	<0.001	0.247	<0.004
07-16-91	--	--	--	--	--	--	--	<0.001	0.106	<0.004
11-07-89	61	<1.0	13	0.10	23	112	--	0.002	0.021	0.009
08-14-90	63	--	--	--	--	--	--	--	0.018	0.009
11-20-90	--	--	--	--	--	--	--	<0.001	0.013	0.008
03-12-91	--	--	--	--	--	--	--	<0.001	0.016	0.007
07-18-91	--	--	--	--	--	--	--	<0.001	0.017	0.007

QUALITY OF GROUND WATER
LAKE TAHOE BASIN--Continued

DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS HYDRO. + ORTHO DIS. (MG/L AS P)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, BIO. REACTIVE DIS- SOLVED (UG/L AS FE)
07-20-90	<0.20	0.003	0.001	<0.01	<1.0	<1	1	2	12	--
08-07-90	<0.04	0.039	0.006	<0.01	--	--	--	--	<1	--
11-19-90	0.05	0.043	0.004	<0.01	--	--	--	--	10	47
04-02-91	<0.04	0.011	0.004	<0.01	--	--	--	--	--	37
07-17-91	<0.04	0.015	0.007	<0.01	--	--	--	--	--	21
10-17-89	<0.20	0.111	0.102	0.11	<1.0	<1	<1	1	4	--
08-02-90	<0.04	0.132	0.108	0.11	--	--	--	--	23	--
11-13-90	<0.04	0.154	0.103	0.10	--	--	--	--	10	10
03-13-91	<0.04	0.109	0.095	0.09	--	--	--	--	--	69
07-16-91	<0.04	0.118	0.110	0.11	--	--	--	--	--	<5
03-13-91	0.13	0.548	0.480	0.32	--	--	--	--	--	427
07-16-91	0.11	0.418	0.357	0.38	<1.0	<1	<1	3	110	97
11-06-89	<0.20	0.026	0.026	0.02	<1.0	2	1	2	4	--
07-31-90	<0.04	0.099	0.029	0.03	--	--	--	--	78	--
11-08-90	<0.04	0.072	0.039	0.03	--	--	--	--	--	5
02-26-91	--	0.033	0.028	0.03	--	--	--	--	--	<5
07-11-91	0.05	0.063	0.031	0.03	--	--	--	--	--	<5
11-07-89	0.50	0.028	0.031	0.03	<1.0	1	<1	1	<3	--
07-31-90	<0.04	0.060	0.033	0.03	--	--	--	--	50	--
11-08-90	<0.04	0.088	0.033	0.03	--	--	--	--	10	6
02-26-91	<0.04	0.036	0.032	0.03	--	--	--	--	--	<5
07-11-91	<0.04	0.058	0.032	0.04	--	--	--	--	--	<5
10-25-89	0.30	0.021	0.021	0.01	<1.0	<1	<1	<1	<3	--
07-31-90	<0.04	0.093	0.025	0.03	--	--	--	--	23	--
11-08-90	<0.04	0.078	0.024	0.03	--	--	--	--	10	8
02-26-91	<0.04	0.030	0.025	0.03	--	--	--	--	--	<5
07-11-91	<0.04	0.057	0.026	0.03	--	--	--	--	--	<5
11-01-89	0.50	0.070	0.065	0.05	<1.0	1	1	<1	3	--
08-07-90	0.13	0.081	0.085	0.06	--	--	--	--	<1	--
11-13-90	0.14	0.139	0.108	0.10	--	--	--	--	10	7
02-27-91	<0.04	0.092	0.078	0.08	--	--	--	--	--	18
07-24-91	0.06	0.092	0.052	0.08	--	--	--	--	--	14
11-01-89	0.20	0.047	0.044	0.03	<1.0	1	1	2	35	--
08-07-90	0.15	0.074	0.045	0.02	--	--	--	--	26	--
11-13-90	0.12	0.092	0.040	0.03	--	--	--	--	400	358
02-27-91	0.09	0.048	0.041	0.04	--	--	--	--	--	<5
07-24-91	0.10	0.065	0.037	0.05	--	--	--	--	--	<5
11-09-89	<0.20	0.095	0.091	0.09	<1.0	2	1	<1	4	--
08-10-90	<0.04	0.135	0.096	0.08	--	--	--	--	<1	--
07-11-91	<0.04	0.127	0.088	0.10	--	--	--	--	--	<5
10-17-89	<0.20	0.032	0.032	0.05	<1.0	1	<1	<1	5	--
08-02-90	<0.04	0.076	0.037	0.04	--	--	--	--	23	--
03-13-91	<0.04	0.106	0.096	0.09	--	--	--	--	--	129
07-16-91	<0.04	0.175	0.165	0.17	--	--	--	--	--	86
10-17-89	0.30	0.163	0.164	0.17	<1.0	<1	<1	1	7	--
11-08-90	<0.04	0.140	0.063	0.07	--	--	--	--	10	15
07-16-91	<0.04	0.081	0.066	0.07	--	--	--	--	--	5
10-18-89	<0.20	0.060	0.060	0.08	<1.0	<1	<1	2	4	--
07-31-90	<0.04	0.093	0.063	0.06	--	--	--	--	50	--
11-20-90	0.04	0.125	0.060	0.06	--	--	--	--	--	16
02-26-91	<0.04	0.031	0.026	0.03	--	--	--	--	--	272
07-11-91	<0.04	0.089	0.050	0.06	--	--	--	--	--	25
03-13-91	<0.04	0.054	0.043	0.04	--	--	--	--	--	34
10-17-89	<0.20	0.048	0.048	0.06	<1.0	1	1	1	6	--
08-02-90	<0.04	0.076	0.052	0.05	--	--	--	--	50	--
11-13-90	<0.04	0.110	0.047	0.05	--	--	--	--	41	40
03-13-91	<0.04	0.062	0.049	0.05	--	--	--	--	--	<5
07-16-91	<0.04	0.063	0.051	0.05	--	--	--	--	--	<5
11-07-89	<0.20	0.260	0.255	0.24	<1.0	<1	1	2	200	--
08-14-90	0.07	0.061	0.028	0.03	--	--	--	--	76	--
11-20-90	0.06	0.063	0.027	0.02	--	--	--	--	130	125
03-12-91	0.05	0.038	0.027	0.02	--	--	--	--	--	135
07-18-91	0.05	0.034	0.028	0.03	--	--	--	--	--	84

457

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	ZINC, DIS- SOLVED (UG/L AS ZN)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL	RADON 222 TOTAL (PC/L)	TRITIUM TOTAL (PCT/L)	CARBON, ORGANIC TOTAL (MG/L AS C)
07-20-90	<1	2	<1	<1	34	-114.0	-15.50	2900	16	0.5
08-07-90	--	--	--	--	--	--	--	--	--	--
11-19-90	--	--	--	--	--	--	--	--	--	--
04-02-91	--	--	--	--	--	--	--	--	--	--
07-17-91	--	--	--	--	--	--	--	--	--	--
10-17-89	<1	<1	1	<1	3	-102.0	-14.35	630	31	0.3
08-02-90	--	--	--	--	--	--	--	--	--	--
11-13-90	--	--	--	--	--	--	--	--	--	--
03-13-91	--	--	--	--	--	--	--	--	--	--
07-16-91	--	--	--	--	--	--	--	--	--	--
03-13-91	--	--	--	--	--	--	--	--	--	--
07-16-91	<1	180	<1	--	18	-105.0	-14.55	630	--	0.2
11-06-89	1	<1	1	<1	17	-98.9	-13.90	610	40	<0.1
07-31-90	--	--	--	--	--	--	--	--	--	--
11-08-90	--	--	--	--	--	--	--	--	--	--
02-26-91	--	--	--	--	--	--	--	--	--	--
07-11-91	--	--	--	--	--	--	--	--	--	--
11-07-89	1	<1	<1	<1	8	-101.0	-14.05	980	34	0.2
07-31-90	--	--	--	--	--	--	--	--	--	--
11-08-90	--	--	--	--	--	--	--	--	--	--
02-26-91	--	--	--	--	--	--	--	--	--	--
07-11-91	--	--	--	--	--	--	--	--	--	--
10-25-89	1	<1	<1	<1	<3	-99.0	-13.80	460	53	0.3
07-31-90	--	--	--	--	--	--	--	--	--	--
11-08-90	--	--	--	--	--	--	--	--	--	--
02-26-91	--	--	--	--	--	--	--	--	--	--
07-11-91	--	--	--	--	--	--	--	--	--	--
11-01-89	<1	10	1	<1	<3	-96.5	-12.20	360	16	--
08-07-90	--	--	--	--	--	--	--	--	--	--
11-13-90	--	--	--	--	--	--	--	--	--	--
02-27-91	--	--	--	--	--	--	--	--	--	--
07-24-91	--	--	--	--	--	--	--	--	--	--
11-01-89	<1	2	2	<1	4	-92.0	-11.75	1400	23	1.1
08-07-90	--	--	--	--	--	--	--	--	--	--
11-13-90	--	--	--	--	--	--	--	--	--	--
02-27-91	--	--	--	--	--	--	--	--	--	--
07-24-91	--	--	--	--	--	--	--	--	--	--
11-09-89	<1	<1	<1	<1	<3	-104.0	-14.45	1200	18	0.2
08-10-90	--	--	--	--	--	--	--	--	--	--
07-11-91	--	--	--	--	--	--	--	--	--	--
10-17-89	<1	<1	1	<1	4	-102.0	-14.40	620	56	0.3
08-02-90	--	--	--	--	--	--	--	--	--	--
03-13-91	--	--	--	--	--	--	--	--	--	--
07-16-91	--	--	--	--	--	--	--	--	--	--
10-17-89	<1	3	<1	<1	6	-108.0	-14.80	480	<2.5	0.2
11-08-90	--	--	--	--	--	--	--	--	--	--
07-16-91	--	--	--	--	--	--	--	--	--	--
10-18-89	<1	<1	<1	<1	43	-109.5	-14.95	890	4.8	0.3
07-31-90	--	--	--	--	--	--	--	--	--	--
11-20-90	--	--	--	--	--	--	--	--	--	--
02-26-91	--	--	--	--	--	--	--	--	--	--
07-11-91	--	--	--	--	--	--	--	--	--	--
03-13-91	--	--	--	--	--	--	--	--	--	--
10-17-89	<1	<1	<1	<1	4	-107.0	-14.75	<80	35	0.3
08-02-90	--	--	--	--	--	--	--	--	--	--
11-13-90	--	--	--	--	--	--	--	--	--	--
03-13-91	--	--	--	--	--	--	--	--	--	--
07-16-91	--	--	--	--	--	--	--	--	--	--
11-07-89	1	55	<1	<1	18	-106.5	-14.25	5800	13	1.5
08-14-90	--	--	--	--	--	--	--	--	--	--
11-20-90	--	--	--	--	--	--	--	--	--	--
03-12-91	--	--	--	--	--	--	--	--	--	--
07-18-91	--	--	--	--	--	--	--	--	--	--

QUALITY OF GROUND WATER
LAKE TAHOE BASIN--Continued

STATION NUMBER	LOCAL WELL NUMBER	DATE	TIME	DEPTH OF WELL, TOTAL (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH, FIELD (STANDARD UNITS)	TEMPERATURE AIR (DEG C)
391322119555001	90 N16 E18 23CDC 1	06-26-90	1100	163	112	5.7	24.0
		08-14-90	1230		117	5.7	25.0
391406119595601	90 N16 E18 19BCA 1	06-27-90	1040	96	215	5.8	24.5
		08-14-90	1030		206	6.3	23.5
		12-06-90	1100		189	6.4	5.0
		04-04-91	1300		198	6.2	9.5
		07-19-91	1100		204	6.4	22.0
391425120035301	90 N16 E17 14BBCB1	06-27-90	1400	415	185	7.9	26.0
		08-21-90	1215		187	7.9	24.0
		07-25-91	0920		192	8.1	16.0
391552120045101	90 N16 E17 15CCAA1	11-09-89	1345	218	160	7.0	9.5
		08-16-90	1400		159	7.3	22.0
		11-20-90	1350		164	7.1	1.0
		04-03-91	1030		165	6.9	7.5
		07-19-91	1215		170	7.2	22.5

DATE	TEMPERATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARDNESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE WATER DIS-IT FIELD (MG/L AS HCO3)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3)
06-26-90	11.0	5.3	36	11	2.0	9.7	1.6	56	46
08-14-90	11.0	6.6	--	--	--	--	--	61	50
06-27-90	11.0	6.9	63	12	7.9	8.6	3.3	78	64
08-14-90	11.5	6.7	--	--	--	--	--	80	66
12-06-90	8.5	--	--	--	--	--	--	--	--
04-04-91	9.0	--	--	--	--	--	--	--	--
07-19-91	12.5	--	--	--	--	--	--	--	--
06-27-90	12.0	6.6	66	15	6.9	8.2	4.4	124	102
08-21-90	11.5	6.5	--	--	--	--	--	124	102
07-25-91	10.5	--	--	--	--	--	--	--	--
11-09-89	7.0	7.8	75	17	7.9	5.7	3.0	118	97
08-16-90	7.5	--	--	--	--	--	--	112	92
11-20-90	7.0	--	--	--	--	--	--	--	--
04-03-91	8.0	--	--	--	--	--	--	--	--
07-19-91	8.5	--	--	--	--	--	--	--	--

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
06-26-90	3.4	5.6	0.20	29	86	93	0.003	0.668	0.004	0.50
08-14-90	--	--	--	--	--	--	--	0.623	0.005	<0.04
06-27-90	<1.0	24	<0.10	37	139	--	0.003	0.378	0.004	<0.20
08-14-90	--	--	--	--	--	--	--	0.353	0.013	<0.04
12-06-90	--	--	--	--	--	--	<0.001	0.308	<0.004	<0.04
04-04-91	--	--	--	--	--	--	<0.001	0.374	<0.004	0.08
07-19-91	--	--	--	--	--	--	<0.001	0.449	<0.004	<0.04
06-27-90	1.8	0.50	<0.10	37	125	136	0.001	0.114	0.002	0.50
08-21-90	--	--	--	--	--	--	--	0.043	<0.004	<0.04
07-25-91	--	--	--	--	--	--	<0.001	0.043	<0.004	<0.04
11-09-89	<1.0	0.30	<0.10	41	110	--	0.002	0.058	<0.002	0.30
08-16-90	--	--	--	--	--	--	--	0.035	0.017	<0.04
11-20-90	--	--	--	--	--	--	<0.001	0.039	0.004	<0.04
04-03-91	--	--	--	--	--	--	<0.001	0.043	<0.004	<0.04
07-19-91	--	--	--	--	--	--	<0.001	0.040	<0.004	<0.04

459

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS HYDRO. + ORTHO DTS. (MG/L AS P)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, BIO. REACTIVE DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
06-26-90	0.110	0.102	0.10	<1.0	<1	<1	5	13	--	<1
08-14-90	0.267	0.211	0.20	--	--	--	--	26	--	--
06-27-90	0.019	0.017	0.02	2.0	<1	1	9	23	--	<1
08-14-90	0.060	0.009	<0.01	--	--	--	--	100	--	--
12-06-90	0.017	0.005	<0.01	--	--	--	--	71	56	--
04-04-91	0.021	0.016	0.02	--	--	--	--	--	59	--
07-19-91	0.023	0.008	0.01	--	--	--	--	--	54	--
06-27-90	0.035	0.030	0.03	1.0	<1	<1	1	4	--	<1
08-21-90	0.083	0.038	0.04	--	--	--	--	31	--	--
07-25-91	0.057	0.036	0.04	--	--	--	--	--	<5	--
11-09-89	0.024	0.023	0.02	<1.0	2	<1	1	6	--	1
08-16-90	0.074	0.026	0.03	--	--	--	--	--	--	--
11-20-90	0.144	0.024	0.03	--	--	--	--	41	5	--
04-03-91	0.029	0.024	0.03	--	--	--	--	--	<5	--
07-19-91	0.039	0.027	0.03	--	--	--	--	--	<5	--

[illegible]

MISCELLANEOUS SITES

CARLIN TREND

Discharge measurements in the following table were made at Carlin Trend Network sites in northeastern Nevada.

Stream	Tributary to	Location	Period of record (water years)	Measurements	
				Date	Discharge (ft ³ /s)
Humboldt River above Susie Creek, near Carlin, Nev. (10321250)	---	Lat 40°43'02", long 116°04'17", in SE1/4SW1/4 sec.20, T.33 N., R.53 E., Elko County, Hydrologic Unit 16040101, about 0.2 mi southeast of confluence of Susie Creek, and about 1.7 mi east of Carlin.	1988-91	7-26-91 7-26-91 8-29-91	61.4 49.6 19.4
Beaver Creek above Maggie Creek, near Tuscarora, Nev.	Maggie Creek	Lat 41°02'08", long 116°07'23", in SW1/4SW1/4 sec.3, T.36 N., R.52 E., Elko County, Hydrologic Unit 16040101, about 200 ft upstream of Maggie Creek, and about 19.0 mi southeast of Tuscarora.	1991	6-18-91	0.74
Maggie Creek below Beaver Creek, near Tuscarora, Nev.	Humboldt River	Lat 41°01'11", long 116°07'34", in SW1/4SW1/4 sec.10, T.36 N., R.52 E., Elko County, Hydrologic Unit 16040101, about 1.1 mi downstream of confluence of Beaver Creek, about 1.8 mi northeast of Red House Ranch, and about 20.0 mi southeast of Tuscarora.	1991	6-18-91	3.23
Haskell Creek at Maggie Creek Road, near Tuscarora, Nev.	Maggie Creek	Lat 40°59'51", long 116°09'38", in SW1/4NW1/4 sec.20, T.36 N., R.52 E., Elko County, Hydrologic Unit 16040101, about 0.5 mi southwest of Red House Ranch, and about 21.5 mi southeast of Tuscarora.	1991	6-18-91	.07
Maggie Creek tributary below Haskell Creek, near Carlin, Nev.	Maggie Creek	Lat 40°59'00", long 116°10'00", in SW1/4NE1/4 sec.30, T.36 N., R.52 E., Eureka County, Hydrologic Unit 16040101, about 0.2 mi upstream of Maggie Creek, about 1.4 mi southwest of Red House Ranch, and about 18.5 mi northwest of Carlin.	1991	6-18-91	.08
Maggie Creek above Coyote Creek, near Carlin, Nev.	Humboldt River	Lat 40°58'01", long 116°10'08", in SW1/4NE1/4 sec.31, T.36 N., R.52 E., Eureka County, Hydrologic Unit 16040101, about 1.6 mi upstream of confluence of Coyote Creek, and about 17.4 mi northwest of Carlin.	1991	6-18-91	2.68
Spring Creek at Maggie Creek Road, near Carlin, Nev.	Maggie Creek	Lat 39°57'18", long 116°10'14", in SE1/4NW1/4 sec.6, T.35 N., R.52 E., Eureka County, Hydrologic Unit 16040101, about 0.5 mi upstream of confluence of Maggie Creek, and about 16.7 mi northwest of Carlin.	1991	6-18-91	.31
Coyote Creek at Maggie Creek Road, near Carlin, Nev.	Maggie Creek	Lat 39°57'09", long 116°10'19", in SE1/4NW1/4 sec.6, T.35 N., R.52 E., Eureka County, Hydrologic Unit 16040101, at Maggie Creek Road, about 0.7 mi upstream of Maggie Creek, and about 16.5 mi northwest of Carlin.	1991	6-18-91	0
Jack Creek above Maggie Creek, near Carlin, Nev.	Maggie Creek	Lat 40°55'01", long 116°10'48", in SE1/4SE1/4 sec.13, T.35 N., R.51 E., Eureka County, Hydrologic Unit 16040101, at Maggie Creek Road, about 0.7 mi upstream of Maggie Creek, and about 13.5 mi northwest of Carlin.	1991	6-18-91	0
Maggie Creek above Cottonwood Creek near Carlin, Nev.	Humboldt River	Lat 40°53'37", long 116°10'29", in SW1/4NW1/4 sec.30, T.35 N., R.52 E., Eureka County, Hydrologic Unit 16040101, about 0.3 mi upstream of confluence of Cottonwood Creek, and about 11.9 mi northwest of Carlin.	1991	6-18-91	4.61

MISCELLANEOUS SITES
CARLIN TREND--Continued

Stream	Tributary to	Location	Period of record (water years)	Measurements	
				Date	Discharge (ft ³ /s)
Cottonwood Creek above Maggie Creek, near Carlin, Nev.	Maggie Creek	Lat 40°53'33", long 116°10'40", in NW1/4SW1/4 sec.30, T.35 N., R.52 E., Eureka County, Hydrologic Unit 16040101, about 100 ft upstream of Maggie Creek, and about 11.8 mi northwest of Carlin.	1991	6-18-91	0
Simon Creek above Maggie Creek, near Carlin, Nev.	Maggie Creek	Lat 40°50'36", long 116°13'25", in SW1/4SE1/4 sec.10, T.34 N., R.51 E., Eureka County, Hydrologic Unit 16040101, about 0.4 mi upstream of Maggie Creek, and about 10.8 mi northwest of Carlin.	1991	6-18-91	.49
Maggie Creek above Maggie Canyon, near Carlin, Nev. (10321940)	Humboldt River	Lat 40°49'30", long 116°13'22", in SE1/4NE1/4 sec.22, T.34 N., R.51 E., Eureka County, Hydrologic Unit 16040101, about 1.0 mi south of confluence of Simon Creek, and about 9.8 mi northwest of Carlin.	1988-91	6-18-91 6-19-91	7.13 6.68
Maggie Creek in Maggie Creek Canyon, near Carlin, Nev. (10321945)	Humboldt River	Lat 40°48'29", long 116°12'22", in SW1/4NE1/4 sec.26, T.34 N., R.51 E., Eureka County, Hydrologic Unit 16040101, in Maggie Creek Canyon along Maggie Creek Road, about 3.1 mi from Elko-Eureka County line, and about 8.4 mi northwest of Carlin.	1988-91	6-19-91	5.57
Maggie Creek at Maggie Creek Canyon, near Carlin, Nev. (10321950)	Humboldt River	Lat 40°48'08", long 116°11'53", in NE1/4SE1/4 sec.26, T.34 N., R.51 E., Eureka County, Hydrologic Unit 16040101, in Maggie Creek Canyon along Maggie Creek Road, about 2.6 mi from Elko-Eureka County line, and about 8.3 mi northwest of Carlin.	1988-91	6-19-91	5.36
Maggie Creek near Eureka-Elko County Line near Carlin, Nev. (10321955)	Humboldt River	Lat 40°47'31", long 116°09'33", in SW1/4NW1/4 sec.32, T.34 N., R.52 E., Eureka County, Hydrologic Unit 16040101, about 0.1 mi west of Elko-Eureka County line, and about 5.8 mi northwest of Carlin.	1988-91	6-19-91	4.43
Maggie Creek at Huntsman Ranch Road, near Carlin, Nev. (10321965)	Humboldt River	Lat 40°46'10", long 116°08'13", in SW1/4SW1/4 sec.4, T.33 N., R.52 E., Eureka County, Hydrologic Unit 16040101, at Huntsman Ranch Road crossing, about 4.0 mi northwest of Carlin.	1988-91	6-19-91	1.55
Maggie Creek, near Carlin, Nev. (10321970)	Humboldt River	Lat 40°45'36", long 116°07'47", in NW1/4SE1/4 sec.9, T.33 N., R.52 E., Eureka County, Hydrologic Unit 16040101, about 0.8 mi southeast of Huntsman Ranch Road, and about 3.2 mi northwest of Carlin.	1988-91	6-19-91	1.02
Maggie Creek at Pipeline Road, near Carlin, Nev. (10321975)	Humboldt River	Lat 40°44'20", long 116°06'11", in NE1/4NE1/4 sec.22, T.33 N., R.52 E., Eureka County, Hydrologic Unit 16040101, at Pipeline Road, about 1.7 mi north of Carlin.	1988-91	6-19-91	0
Maggie Creek at Carlin, Nev. (10322000)	Humboldt River	Lat 40°43'10", long 116°05'40", in SW1/4NE1/4 sec.26, T.33 N., R.52 E., Elko County, Hydrologic Unit 16040101, 100 ft upstream from highway bridge, 0.5 mi upstream from mouth and 0.5 mi east of Carlin.	1913-24, 1962 1988-91 ⁺	6-19-91	.13

⁺ Operated as a continuous record station.

MISCELLANEOUS SITES
CARLIN TREND--Continued

Stream	Tributary to	Location	Period of record (water years)	Measurements	
				Date	Discharge (ft ³ /s)
Humboldt River below Marys Creek, at Carlin, Nev. (10322200)	---	Lat 40°42'06", long 116°07'40", in NW1/4SE1/4 sec.33, T.33 N., R.52 E., Elko County, Hydrologic Unit 16040101, about 0.5 mi downstream of confluence of Marys Creek, and about 1.5 mi southwest of Carlin. Drainage area is 400 mi ² , approximately.	1988-91	7-26-91 8-29-91	69.4 21.9
Humboldt River above Palisade Canyon, near Carlin, Nev. (10322425)	---	Lat 40°38'54", long 116°09'28", in SW1/4NW1/4 sec.20, T.32 N., R.52 E., Eureka County, Hydrologic Unit 16040101, about 0.6 mi southwest of Elko-Eureka County line, and about 5.4 mi southwest of Carlin.	1988-91	7-26-91 8-29-91	68.7 25.8
Humboldt River below Pine Creek near Palisade, Nev. (10323025)	---	Lat 40°34'47", long 116°13'41", in SW1/4SE1/4 sec.9, T.31 N., R.51 E., Eureka County, Hydrologic Unit 16040105, about 2.5 mi southwest of confluence of Pine Creek, and about 2.6 mi southwest of Palisade.	1991	7-26-91 8-29-91	76.5 26.5
Humboldt River above Buck Rake Jack Creek Creek, near Beowawe, Nev. (10323030)	---	Lat 40°34'47", long 116°16'40", in SE1/4SE1/4 sec.1, T.31 N., R.50 E., in Eureka County, Hydrologic Unit 16040105, about 0.2 mi upstream of confluence of Buck Rake Jack Creek, and about 4.5 mi southwest of Palisade.	1991	7-26-91 8-29-91	78.2 26.1
Humboldt River at Rose Ranch near Beowawe, Nev. (10323080)	---	Lat 40°34'14", long 116°21'40", in SE1/4SW1/4 sec.8, T.31 N., R.50 E., in Eureka County, Hydrologic Unit 16040105, about 0.5 mi below confluence of Emigrant Canyon, and about 9.1 mi southwest of Palisade.	1991	7-26-91 8-29-91	74.2 23.1
Rose Canal near Dunphy, Nev.	---	Lat 40°41'57", long 116°30'00", in SE1/4SE1/4 sec.25, T.33 N., R.48 E., Eureka County, Hydrologic Unit 16040105, about 300 ft south of Old U.S. Highway 40, and about 1.4 mi southeast of Dunphy.	1991	5-29-91 6-20-91 6-20-91	7.82 8.57 8.97
Whitehouse Canal near Dunphy, Nev.	---	Lat 40°42'16", long 116°31'08", in NE1/4SE1/4 sec.26, T.33 N., R.48 E., Eureka County, Hydrologic Unit 16040105, about 100 ft north of Humboldt River, and about 0.3 mi southeast of Dunphy.	1991	5-29-91 6-20-91 8-23-91	10.6 38.2 3.38
Humboldt River near Argenta, Nev. (10323500)	---	Lat 40°40'45", long 116°38'45", in SE1/4NW1/4 sec.2, T.32 N., R.47 E., Lander County, Hydrologic Unit 16040105, about 3.0 mi east of Argenta, and about 15.5 mi east of Battle Mountain. Drainage area is 7490 mi ² , approximately.	1946-82 ⁺ 1990-91	7-29-91 8-30-91	40.7 .81
Humboldt River below Slaven Ditch, near Argenta, Nev. (10323600)	---	Lat 40°39'19", long 116°45'17", in NW1/4SE1/4 sec.11, T.32 N., R.46 E., Lander County, Hydrologic Unit 16040105, about 2.3 mi southwest of Argenta, and about 7.6 mi northeast of Battle Mountain.	1980-83 ⁺ 1990-91	7-29-91 8-30-91	43.6 2.56
Rock Creek irrigation Diversion above Rock Creek Ranch, near Midas, Nev.	Humboldt River	Lat 41°04'44", long 116°43'08", in SW1/4SW1/4 sec.18, T.37 N., R.47 E., Elko County, Hydrologic Unit 16040106, about 0.7 mi northeast of Rock Creek Ranch, and about 12.2 mi southeast of Midas.	1991	6-19-91	4.35

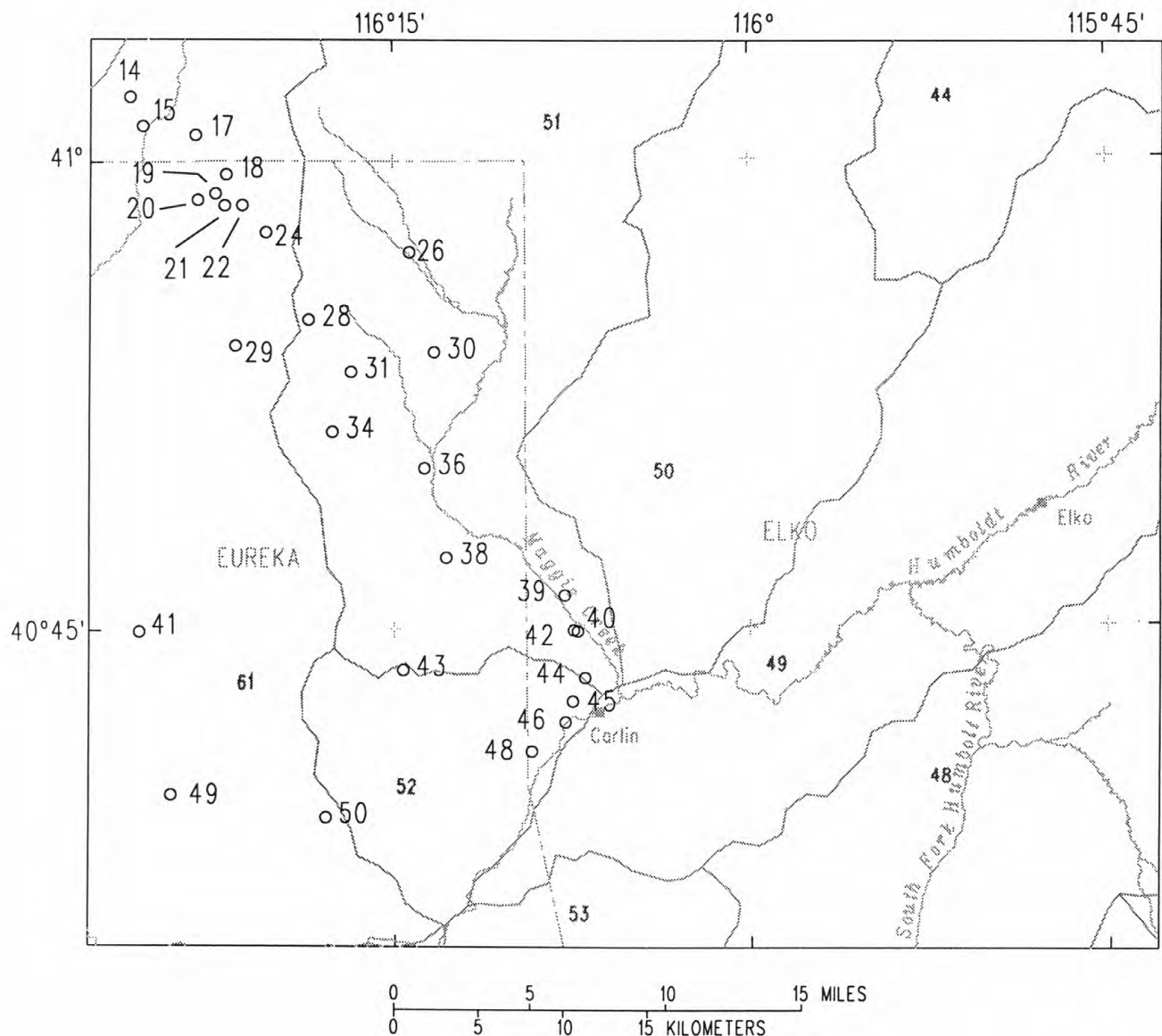
⁺ Operated as a continuous record station.

MISCELLANEOUS SITES
CARLIN TREND--Continued

Stream	Tributary to	Location	Period of record (water years)	Measurements	
				Date	Discharge (ft ³ /s)
Rock Creek above Rock Creek Ranch, near Midas, Nev. (10324000)	Humboldt River	Lat 41°04'41", long 116°43'10", in SW1/4SW1/4 sec.18, T.37 N., R.47 E., Elko County, Hydrologic Unit 16040106, about 0.6 mi northeast of Rock Creek Ranch, and about 12.2 mi southeast of Midas.	1991	6-19-91	1.43
Rock Creek below Antelope Creek near Battle Mountain, Nev.	Humboldt River	Lat 40°57'32", long 116°42'40", in NW1/4NE1/4 sec.31, T.36 N., R.47 E., Lander County, Hydrologic Unit 16040106, at round crossing, about 0.6 mi downstream of confluence of Antelope Creek, about 12.4 mi northeast of Izzenhood Ranch, and about 24 mi northeast of Battle Mountain.	1991	6-19-91	0
Rock Creek above the lower narrows near Battle Mountain, Nev.	Humboldt River	Lat 40°53'08", long 116°40'50", in NW1/4NE1/4 sec.28, T.35 N., R.57 E., Lander County, Hydrologic Unit 16040106, about 6.2 mi downstream of confluence of Antelope Creek, and about 21 mi northeast of Battle Mountain.	1991	6-19-91	.88
Rock Creek above Rock Creek gage, near Battle Mountain, Nev.	Humboldt River	Lat 40°50'05", long 116°35'26", in NE1/4SW1/4 sec.8, T.34 N., R.48 E., Eureka County, Hydrologic Unit 16040106, about 0.4 mi upstream of of Rock Creek gage, and about 22.0 mi northeast of Battle Mountain.	1991	6-19-91	1.04

LOCATION OF GROUND-WATER QUALITY SAMPLING SITES (Figure 29)

Site Number	Local Number	Latitude	Longitude	Site Identification
14	61 N37 E49 33DDAD1	410206	1162600	410206116260001
15	61 N36 E49 03CDD 1	410110	1162529	410110116252901
17	61 N36 E49 12BDB 1	410052	1162316	410052116231601
18	61 N36 E50 18DCB 1	405936	1162159	405936116215901
19	61 N36 E50 19BCC 1	405859	1162226	405859116222601
20	61 N36 E49 24CAD 1	405847	1162311	405847116231101
21	61 N36 E50 19CDD 1	405836	1162203	405836116220301
22	61 N36 E50 20CCC 1	405836	1162119	405836116211901
24	61 N36 E50 29DDC 1	405744	1162019	405744116201901
26	51 N35 E51 04DABB1	405704	1161418	405704116141801
28	51 N35 E50 13BBAC1	405456	1161832	405456116183201
29	61 N35 E50 21ABB 1	405406	1162137	405406116213701
30	51 N35 E51 27AACC1	405352	1161316	405352116131601
31	61 N35 E51 30DDCB1	405314	1161646	405314116164601
34	51 N34 E51 07BBB 1	405120	1161733	405120116173301
36	51 N34 E51 15BDD 1	405010	1161341	405010116134101
38	51 N34 E51 35CACB1	404718	1161247	404718116124701
39	51 N33 E52 04DCCD1	404605	1160749	404605116074901
40	51 N33 E52 15BCBA1	404455	1160716	404459116071601
41	61 N33 E49 10ACDD1	404458	1162542	404458116254201
42	51 N33 E52 16ADD 1	404457	1160726	404457116072601
43	52 N33 E51 21DCAA1	404342	1161438	404342116143801
44	51 N33 E52 27BAB 1	404325	1160658	404325116065801
45	52 N33 E52 28DDC 1	404240	1160730	404240116073001
46	49 N33 E52 33DBDC1	404200	1160748	404200116074801
48	52 N32 E52 05CDBA1	404104	1160914	404104116091401
49	61 N32 E49 11ADAC1	403944	1162424	403945116242101
50	61 N32 E50 14AABC1	403859	1161755	403859116175501



EXPLANATION

..... MINOR HYDROGRAPHIC AREA BOUNDARY

49
○ ACTIVE GROUND-WATER QUALITY SITE--Sampling-site number refers to accompanying location table

50 NUMBER REFERS TO VALLEY NUMBER--See figure 21

FIGURE 29.--Ground-water quality sites in Carlin area, northeastern Nevada.

ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

CARLIN TREND

Water-quality partial-record stations are sites where chemical-quality, biological, or sediment data are collected systematically over a period of years for use in hydrologic analyses. These data are usually collected less than quarterly. Samples collected at sites other than gaging stations and partial-record stations are referred to as miscellaneous sites. Water-quality measurements in the following table were made as part of a Water-Resources Investigation in six basins north of the Humboldt River in northeastern Nevada, along the Carlin Trend.

WATER-QUALITY DATA, WATER YEARS OCTOBER 1989 TO SEPTEMBER 1990

STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)
10321250	HUMBOLDT RIVER ABOVE SUSIE CREEK NEAR CARLIN, NV	11-15-89	1630	--	--
10321590	SUSIE CREEK AT HIGHWAY 40 NEAR CARLIN, NV	11-15-89	1600	--	--
10321790	MAGGIE CREEK ABOVE COYOTE CREEK NEAR CARLIN, NV	09-05-90	1215	0.60	431
10321840	LITTLE JACK CREEK NEAR CARLIN, NV	08-25-90	1500	--	412
10321850	INDIAN CREEK ABOVE JACK CREEK NEAR CARLIN, NV	08-30-90	1615	--	463
10321910	LYNN CREEK NEAR CARLIN, NV	09-04-90	1115	0.16	284
10322000	MAGGIE CREEK AT CARLIN, NV	11-16-89	0930	--	--
10322190	MARYS CREEK AT RAILROAD Y AT CARLIN, NV	11-16-89	1145	--	--
10322400	HUMBOLDT RIVER BELOW WOODRUFF CREEK NEAR CARLIN, NV	11-16-89	1115	--	--
10323600	HUMBOLDT RIVER BELOW SLAVEN DITCH NEAR ARGENTA, NV	08-28-90	1410	2.4	812
10324000	ROCK CREEK ABOVE ROCK CREEK RANCH NEAR MIDAS, NV	09-05-90	1300	0.39	348

DATE	PH, FIELD (STANDARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
11-15-89	--	--	--	--	--	--	--	--	--	--
11-15-89	--	--	--	--	--	--	--	--	--	--
09-05-90	8.1	19.5	17.5	1.8	9.4	150	38	14	30	1
08-25-90	7.1	--	19.0	0.40	2.4	210	46	22	7.9	0.2
08-30-90	7.8	--	17.0	0.80	8.6	230	49	25	8.5	0.2
09-04-90	8.1	27.0	21.0	1.3	7.2	120	27	12	7.6	0.3
11-16-89	--	--	--	--	--	--	--	--	--	--
11-16-89	--	--	--	--	--	--	--	--	--	--
11-16-89	--	--	--	--	--	--	--	--	--	--
08-28-90	8.4	29.0	26.0	1.0	11.0	220	59	18	84	2
09-05-90	8.6	29.5	23.0	2.1	12.8	91	26	6.3	34	2

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
11-15-89	--	--	--	--	--	21	--	--	--	--
11-15-89	--	--	--	--	--	20	--	--	--	--
09-05-90	4.9	201	--	165	37	19	0.10	24	265	267
08-25-90	3.6	173	--	102	72	4.1	0.30	19	256	260
08-30-90	2.7	188	--	154	91	5.7	0.40	17	272	293
09-04-90	3.7	85	--	70	61	6.2	0.50	16	177	176
11-16-89	--	--	--	--	--	22	--	--	--	--
11-16-89	--	--	--	--	--	15	--	--	--	--
11-16-89	--	--	--	--	--	21	--	--	--	--
08-28-90	8.4	233	3	196	100	75	0.60	41	494	504
09-05-90	7.3	141	9	115	29	22	0.40	37	229	241

ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

CARLIN TREND--Continued

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)
11-15-89	--	--	--	--	--	--	--	--	--	--
11-15-89	--	--	--	--	--	--	--	--	--	--
09-05-90	0.36	<0.010	<0.100	0.020	0.30	0.240	20	3	83	<0.5
08-25-90	0.35	--	--	--	--	--	<10	<1	110	<0.5
08-30-90	0.37	<0.010	0.100	0.010	<0.20	0.130	<10	2	54	<0.5
09-04-90	0.24	<0.010	<0.100	<0.010	0.40	0.040	<10	17	37	<0.5
11-16-89	--	--	--	--	--	--	--	--	--	--
11-16-89	--	--	--	--	--	--	--	--	--	--
11-16-89	--	--	--	--	--	--	--	--	--	--
08-28-90	0.67	<0.010	<0.100	0.010	<0.20	0.020	<10	10	93	<0.5
09-05-90	0.31	<0.010	<0.100	0.020	0.50	0.040	<10	7	48	<0.5
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)
11-15-89	--	--	--	--	--	--	--	--	--	--
11-15-89	--	--	--	--	--	--	--	--	--	--
09-05-90	<1.0	<1	<3	2	6	1	10	56	<0.1	<10
08-25-90	<1.0	<1	<3	1	<3	<1	14	1	<0.1	<10
08-30-90	<1.0	<1	<3	1	7	<1	12	12	<0.1	<10
09-04-90	<1.0	<1	<3	1	9	<1	14	13	<0.1	<10
11-16-89	--	--	--	--	--	--	--	--	--	--
11-16-89	--	--	--	--	--	--	--	--	--	--
11-16-89	--	--	--	--	--	--	--	--	--	--
08-28-90	<1.0	<1	<3	1	<3	1	54	30	<0.1	<10
09-05-90	<1.0	<1	<3	4	23	<1	29	49	<0.1	<10
DATE	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CYANIDE DIS- SOLVED (MG/L AS CN)
11-15-89	--	--	--	--	--	--	-117.0	-15.00	--	--
11-15-89	--	--	--	--	--	--	-125.0	-15.40	--	--
09-05-90	1	1	<1.0	190	<6	4	--	--	2.4	<0.01
08-25-90	1	2	<1.0	130	<6	5	--	--	0.9	0.01
08-30-90	1	3	<1.0	130	<6	9	--	--	1.2	<0.01
09-04-90	8	<1	<1.0	57	<6	20	--	--	1.2	<0.01
11-16-89	--	--	--	--	--	--	-126.0	-15.60	--	--
11-16-89	--	--	--	--	--	--	-129.0	-16.20	--	--
11-16-89	--	--	--	--	--	--	-124.0	-15.20	--	--
08-28-90	1	1	<1.0	440	7	<3	--	--	2.3	<0.01
09-05-90	3	<1	<1.0	220	7	4	--	--	2.2	<0.01

GROUND-WATER LEVELS

CARLIN TREND

Water-Use: I, irrigation; N, industrial; P, public supply; S, stock; U, unused.

Water-Level: Levels above LSD (land-surface datum) are listed as negative values.

Water-Level Status: R, the same site had been pumped recently; T, a nearby site that taps the same aquifer had been pumped recently.

Water-Level Method: G, pressure gage; R, reported; S, steel tape; T, electric tape.

LOCAL WELL NO	STATION NAME	SITE ID	WATER USE	WELL DEPTH, (FT)	ELEVATION, (FT AB LSD)	WATER-LEVEL DATE	WATER-LEVEL, (FT BLW LSD)	WATER-LEVEL STATUS	WATER-LEVEL METHOD
51 N33 E52 04DCCD1	USGS - 5	404605116074901	U	175	4995	11/05/90 03/24/91 06/18/91 08/20/91	67 65.1 67.37 68.6	- - - -	R T S T
51 N33 E52 15BCBA1	MAGGIE CR - NORTH IRR	404459116071601	I	130	4970	03/23/89 05/11/89 06/13/89 10/18/89 04/14/90 09/11/90	38.28 36.88 37.70 37.71 36.40 38.50	- - - - - -	S S S S S S
51 N33 E52 16ADD 1	USGS-1A	404457116072601	U	100	4970	09/13/89 09/22/89 10/18/89 04/12/90 09/11/90 06/18/91	38 37.77 37.19 35.88 37.94 39.05	- - - - - T	R S S S S S
51 N33 E52 27BAB 1	CARLIN CITY WELL	404325116065801	P	654	5080	08/24/88 09/23/88 10/27/88 03/15/89 05/11/89 10/19/89 04/12/90	165 162.15 160.60 159.66 158.84 159.50 158.38	- - - - - - -	R S S S S S S
51 N34 E51 07BBB 1	T LAZYS RANCH - RICH NORTH	405120116173301	S	301	5510	10/17/89 06/11/90 09/12/90	212.5 215.1 219.8	- - -	T T T
51 N34 E51 10DC 1	SIMON CK FLOWING - DEEP	405036116133001	U	755	5165	03/14/89 10/16/89 06/11/90 09/13/90	-5.7 -5.3 -4.9 -4.3	- - - -	G G G G
51 N34 E51 10DC 2	SIMON CK FLOWING - SHALLOW	405036116133002	U	163	5166	03/14/89	-5.1	-	G
51 N34 E51 15BDD 1	NEWMONT NMC2	405010116134101	U	1000	5150	03/14/89 10/16/89 06/11/90 09/13/90	-9.1 -8.1 -8 -8	- - - -	G G R R
51 N34 E51 26DDD 1	NEWMONT WELL MC2	405753116120401	N	--	5206	03/14/89 10/16/89	113.7 145.3	R -	T T
51 N35 E51 04DABB1	NEWMONT GOLD CO	405704116141801	U	318	5542	08/21/91	31.78	-	S
51 N35 E51 27AACC1	REB1	405352116131601	S	--	5340	04/14/90	58.50	-	S
61 N32 E49 11ADAC1	TS RANCH - BOBS FLAT	403945116242101	S	350	5074	07/29/91	216.43	-	S
61 N34 E49 07ADD 1	BCFS	405016116290101	I	480	4685	09/10/90	52.9	R	T
61 N34 E49 30BADB1	GRAVEL PIT	404752116293401	S	83	4652	08/01/91	22.00	-	S
61 N36 E50 18DCB 1	PPW3	405936116215901	N	1210	5400	05/06/89	43	-	R
61 N36 E50 29DDC 1	GEN 6	405744116201901	N	968	5670	05/14/88	44	-	R
61 N37 E49 33DDAD1	DEE 1	410206116260001	N	191	5540	03/21/89	167	-	R

QUALITY OF GROUND WATER

469

CARLIN TREND

Water-quality measurements in the following table were made as part of a Water-Resources Investigation in six basins north of the Humboldt River in northeastern Nevada, along the Carlin Trend. Data for these sites covers both the 1990 and 1991 water years.

WATER-QUALITY DATA, WATER YEARS OCTOBER 1989 TO SEPTEMBER 1991

STATION NUMBER	LOCAL WELL NUMBER	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH, FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)
404325116065801	51 N33 E52 27BAB 1	11-15-99	1200	--	654	455	7.1	--
404457116072601	51 N33 E52 16ADD 1	08-20-91	1600	--	100	495	7.5	35.0
404459116071601	51 N33 E52 15BCBA1	06-12-90	1100	--	130	466	7.3	--
404605116074901	51 N33 E52 04DCCD1	08-20-91	1230	68.65	175	610	7.7	33.0
404718116124701	51 N34 E51 35CACB1	08-25-90	1000	--	--	476	7.1	--
405010116134101	51 N34 E51 15BDD 1	11-17-89	1430	--	1000	--	--	--
405120116173301	51 N34 E51 07BBB 1	08-28-90	1830	--	301	379	7.4	--
405314116164601	51 N35 E51 30DDCB1	08-30-90	1345	--	--	108	6.6	--
405352116131601	51 N35 E51 27AACC1	08-28-90	1630	--	--	382	6.9	--
405456116183201	51 N35 E50 13BBAC1	08-30-90	1145	--	--	1740	6.6	--
405704116141801	51 N35 E51 04DABB1	08-21-91	1130	--	318	409	9.6	33.0
404104116091401	52 N32 E52 05CDBA1	06-13-90	1100	--	--	406	7.5	--
404200116074801	52 N33 E52 33DBDC1	11-16-89	--	--	--	--	--	--
404242116074001	52 N33 E52 28DC 1	09-01-90	1700	--	--	456	7.0	--
404342116143801	52 N33 E51 21DCAA1	11-16-89	1500	--	--	--	--	--
404449116141301	52 N33 E51 15BCC 1	11-16-89	1545	--	--	--	--	--
403859116175501	61 N32 E50 14AABC1	08-22-91	1300	--	--	542	7.1	33.0
403945116242101	61 N32 E49 11ADAC1	08-21-91	1730	--	350	418	7.6	36.0
404157116390001	61 N33 E47 26CCDC1	08-21-91	1545	--	--	610	7.3	34.0
404458116254201	61 N33 E49 10ACDD1	08-24-90	1130	--	565	554	7.3	--
404752116293401	61 N34 E49 30BADB1	08-24-90	1400	--	83	1030	7.4	--
405016116290101	61 N34 E49 07ADD 1	09-01-90	1100	--	480	567	7.1	--
405131116290001	61 N34 E49 06AAA 1	08-25-90	1830	--	636	624	6.8	--
405406116213701	61 N35 E50 21ABB 1	08-26-90	1630	--	700	339	7.5	--
405744116201901	61 N36 E50 29DDC 1	08-28-90	1200	--	968	456	7.1	--
405836116211901	61 N36 E50 20CCC 1	08-29-90	1630	--	720	389	6.6	--
405836116220301	61 N36 E50 19CDD 1	08-29-90	1145	--	341	860	6.7	--
405847116231101	61 N36 E49 24CAD 1	08-29-90	1430	--	1282	1000	6.4	--
405859116222601	61 N36 E50 19BCC 1	08-29-90	1345	--	1320	976	6.2	--
405936116215901	61 N36 E50 18DCB 1	08-28-90	1330	--	1210	--	--	--
410052116231601	61 N36 E49 12BDB 1	08-31-90	1330	--	400	682	7.8	--
410110116252901	61 N36 E49 03CDD 1	08-27-90	1530	--	--	981	6.4	--
410206116260001	61 N37 E49 33DDAD1	08-27-90	1400	--	191	948	6.5	--
415702116213001	61 N36 E50 31DDDB 1	08-28-90	1030	--	--	336	6.8	--
410557116274501	62 N37 E49 08ACC 1	08-26-90	1200	--	--	675	7.3	--

QUALITY OF GROUND WATER
CARLIN TREND--Continued

DATE	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
11-15-89	12.0	--	3.2	--	170	46	13	32	1	10
08-20-91	14.5	83	2.6	30	170	45	13	35	1	15
06-12-90	12.0	--	5.0	--	160	43	12	30	1	8.8
08-20-91	13.5	--	2.6	30	--	--	--	--	--	--
08-25-90	29.0	1.9	0.5	--	190	48	16	32	1	8.7
11-17-89	--	--	--	--	--	--	--	--	--	--
08-28-90	16.0	0.50	6.1	--	160	34	18	24	0.8	2.1
08-30-90	18.5	12	4.7	--	29	8.5	1.9	10	0.8	2.3
08-28-90	14.0	4.5	5.6	--	110	27	9.8	34	1	4.3
08-30-90	16.0	2.0	1.1	--	650	160	60	120	2	7.2
08-21-91	14.5	110	--	--	100	34	4.3	51	2	12
06-13-90	22.0	--	--	--	140	43	8.8	27	1	7.6
11-16-89	--	--	--	--	--	--	--	--	--	--
09-01-90	18.5	0.30	3.4	--	160	46	12	28	1	8.4
11-16-89	--	--	--	--	--	--	--	--	--	--
11-16-89	--	--	--	--	--	--	--	--	--	--
08-22-91	17.0	0.50	6.5	82	180	52	13	38	1	4.5
08-21-91	17.5	0.90	3.1	39	110	30	7.4	40	2	7.7
08-21-91	14.5	0.40	0.9	11	200	61	12	46	1	6.8
08-24-90	26.0	0.30	1.5	--	190	56	11	47	2	13
08-24-90	14.5	0.30	4.3	--	260	74	19	110	3	12
09-01-90	15.0	0.30	4.9	--	190	54	13	39	1	9.6
08-25-90	15.5	0.40	5.7	--	190	56	12	39	1	11
08-26-90	22.5	1.0	3.0	--	150	29	18	14	0.5	3.6
08-28-90	18.0	0.40	3.1	--	190	45	20	18	0.6	3.5
08-29-90	18.0	3.5	1.6	--	150	37	14	27	1	5.5
08-29-90	28.0	52	0.4	--	350	95	26	58	1	12
08-29-90	49.0	0.60	--	--	330	94	23	81	2	23
08-29-90	51.5	3.0	--	--	330	96	22	80	2	23
08-28-90	--	0.30	--	--	200	46	20	23	0.7	7.8
08-31-90	22.0	25	--	--	290	48	42	32	0.8	2.9
08-27-90	>45.0	1.0	--	--	350	100	25	77	2	22
08-27-90	35.0	0.70	0.5	--	360	100	27	72	2	21
08-28-90	19.5	2.0	1.4	--	120	30	10	26	1	6.0
08-26-90	15.5	2.0	1.8	--	220	51	22	44	1	6.6

QUALITY OF GROUND WATER

471

CARLIN TREND--Continued

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
11-15-89	185	0	152	53	16	0.40	46	--	308	0.42
08-20-91	205	--	168	56	27	0.50	50	345	347	0.47
06-12-90	196	--	161	51	19	0.50	50	--	311	0.42
08-20-91	210	--	172	--	--	--	--	--	--	--
08-25-90	244	--	200	46	11	1.2	19	288	303	0.39
11-17-89	--	--	--	--	11	--	--	--	--	--
08-28-90	226	--	185	6.3	7.3	0.20	47	230	255	0.31
08-30-90	51	--	42	5.7	3.9	<0.10	26	96	87	0.13
08-28-90	116	--	95	46	23	0.30	38	233	248	0.32
08-30-90	270	--	221	400	180	0.60	17	1240	1090	1.69
08-21-91	81	--	174	38	7.0	0.40	42	237	230	0.32
06-13-90	180	--	148	38	17	0.50	67	--	298	0.41
11-16-89	--	--	--	--	--	--	--	--	--	--
09-01-90	200	--	164	45	18	0.20	53	293	311	0.40
11-16-89	--	--	--	--	6.2	--	--	--	--	--
11-16-89	--	--	--	--	11	--	--	--	--	--
08-22-91	195	--	160	20	58	0.50	53	344	341	0.47
08-21-91	168	--	138	31	23	0.60	60	290	289	0.39
08-21-91	273	--	224	49	34	0.40	30	362	374	0.49
08-24-90	234	--	192	84	19	0.50	51	379	399	0.52
08-24-90	268	--	220	180	92	1.0	58	662	682	0.90
09-01-90	239	--	196	41	35	1.0	57	357	373	0.49
08-25-90	251	--	206	44	24	1.7	60	364	377	0.50
08-26-90	160	--	131	34	9.8	0.40	19	192	207	0.26
08-28-90	184	--	151	73	12	0.60	26	280	293	0.38
08-29-90	152	--	125	57	18	0.40	51	281	287	0.38
08-29-90	381	--	312	100	32	0.60	36	559	576	0.76
08-29-90	525	--	430	73	16	1.3	37	561	610	0.76
08-29-90	548	--	449	67	14	1.2	41	589	617	0.80
08-28-90	--	--	--	85	12	0.20	52	321	343	0.44
08-31-90	299	--	245	75	38	0.50	5.3	379	391	0.52
08-27-90	537	--	440	64	14	1.1	34	582	604	0.79
08-27-90	573	--	470	62	14	1.0	23	571	604	0.78
08-28-90	131	--	107	40	18	0.40	56	241	254	0.33
08-26-90	271	--	222	82	15	1.2	21	366	378	0.50

QUALITY OF GROUND WATER
CARLIN TREND--Continued

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)
11-15-89	--	--	--	--	--	--	--	140	<0.5	<1.0
08-20-91	<0.010	0.790	0.060	0.90	0.230	20	12	81	0.9	3.0
06-12-90	--	--	--	--	--	--	--	110	<0.5	<1.0
08-20-91	<0.010	0.620	0.120	1.5	0.310	--	--	--	--	--
08-25-90	0.010	<0.100	0.040	0.20	<0.010	<10	52	110	<0.5	2.0
11-17-89	--	--	--	--	--	--	--	--	--	--
08-28-90	<0.010	0.900	<0.010	<0.20	0.010	<10	7	100	<0.5	<1.0
08-30-90	<0.010	0.600	0.010	<0.20	0.090	150	17	170	<0.5	<1.0
08-28-90	<0.010	1.60	<0.010	<0.20	0.240	10	15	100	<0.5	<1.0
08-30-90	0.540	2.90	0.020	0.30	<0.010	10	17	48	<0.5	1.0
08-21-91	<0.010	<0.050	0.120	0.50	0.250	30	4	99	0.9	<1.0
06-13-90	--	--	--	--	--	--	--	100	<0.5	<1.0
11-16-89	--	--	--	--	--	--	--	--	--	--
09-01-90	<0.010	0.400	<0.010	0.30	0.070	<10	8	120	<0.5	<1.0
11-16-89	--	--	--	--	--	--	--	--	--	--
11-16-89	--	--	--	--	--	--	--	--	--	--
08-22-91	<0.010	1.20	<0.010	<0.20	0.020	10	5	33	0.7	<1.0
08-21-91	<0.010	1.30	0.010	<0.20	0.020	10	7	69	<0.5	3.0
08-21-91	<0.010	0.054	<0.010	<0.20	0.030	<10	5	150	<0.5	<1.0
08-24-90	0.040	0.200	0.250	0.30	0.020	<10	3	56	<0.5	<1.0
08-24-90	<0.010	0.800	0.040	<0.20	0.020	<10	22	31	<0.5	<1.0
09-01-90	<0.010	1.30	<0.010	<0.20	0.010	<10	6	98	<0.5	<1.0
08-25-90	<0.010	1.20	0.040	0.20	0.010	<10	6	84	<0.5	<1.0
08-26-90	0.010	<0.100	0.040	<0.20	0.020	<10	70	89	<0.5	<1.0
08-28-90	0.010	0.901	0.010	0.20	0.021	<10	32	29	<0.5	<1.0
08-29-90	<0.010	0.400	<0.010	0.50	0.030	<10	86	32	<0.5	6.0
08-29-90	0.080	5.90	1.30	1.6	0.060	20	400	87	<0.5	<1.0
08-29-90	<0.010	<0.100	1.20	1.2	<0.010	<10	30	150	<0.5	1.0
08-29-90	<0.010	<0.100	1.30	1.3	0.010	<10	13	170	<0.5	<1.0
08-28-90	<0.010	0.200	<0.010	<0.20	<0.010	<10	6	44	<0.5	2.0
08-31-90	<0.010	<0.100	0.010	<0.20	<0.010	<10	<1	53	<0.5	<1.0
08-27-90	<0.010	<0.100	1.00	1.2	<0.010	<10	2	170	<0.5	<1.0
08-27-90	<0.010	<0.100	0.680	0.70	<0.010	<10	11	110	<0.5	<1.0
08-28-90	<0.010	0.600	<0.010	<0.20	0.030	<10	60	34	<0.5	<1.0
08-26-90	<0.010	0.300	0.040	<0.20	<0.010	<10	1	32	<0.5	<1.0

QUALITY OF GROUND WATER

CARLIN TREND--Continued

473

DATE	CHROMIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYBDENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)
11-15-89	<5	<3	<10	53	10	48	90	--	<10	<10
08-20-91	<1	<3	4	17	<1	54	9	<0.1	10	1
06-12-90	<5	<3	<10	4	<10	49	<1	--	<10	<10
08-20-91	--	--	--	--	--	--	--	--	--	--
08-25-90	<1	4	<1	97	<1	110	60	<0.1	<10	11
11-17-89	--	--	--	--	--	--	--	--	--	--
08-28-90	3	<3	1	19	<1	13	<1	0.2	<10	<1
08-30-90	<1	<3	1	120	1	<4	38	<0.1	<10	2
08-28-90	1	<3	3	16	1	10	<1	<0.1	<10	1
08-30-90	<1	<3	<1	18	<1	34	180	<0.1	<10	59
08-21-91	3	<3	2	13	<1	29	70	<0.1	50	<1
06-13-90	<5	<3	<10	4	<10	28	<1	--	<10	<10
11-16-89	--	--	--	--	--	--	--	--	--	--
09-01-90	<1	<3	<1	3	<1	39	<1	<0.1	<10	1
11-16-89	--	--	--	--	--	--	--	--	--	--
11-16-89	--	--	--	--	--	--	--	--	--	--
08-22-91	1	<3	<1	15	<1	24	27	0.2	<10	<1
08-21-91	1	<3	2	18	<1	24	4	0.3	<10	<1
08-21-91	<1	<3	<1	34	<1	45	32	<0.1	20	<1
08-24-90	<1	<3	<1	9	<1	88	110	<0.1	<10	<1
08-24-90	1	<3	1	4	<1	82	<1	<0.1	10	<1
09-01-90	2	<3	<1	5	<1	67	<1	<0.1	<10	1
08-25-90	<1	<3	1	5	<1	81	<1	<0.1	<10	<1
08-26-90	<1	<3	<1	50	<1	23	2	<0.1	10	1
08-28-90	1	<3	<1	150	<1	11	45	<0.1	<10	<1
08-29-90	<1	<3	3	92	2	15	49	<0.1	<10	5
08-29-90	1	4	1	110	<1	150	29	3.3	20	24
08-29-90	<1	<3	<1	540	1	350	64	<0.1	<10	2
08-29-90	<1	<3	<1	370	<1	350	17	<0.1	<10	1
08-28-90	2	<3	<1	23	<1	25	2	<0.1	<10	1
08-31-90	<1	<3	1	5	<1	20	160	<0.1	<10	1
08-27-90	<1	<3	<1	180	1	330	13	<0.1	<10	<1
08-27-90	<1	<3	<1	320	<1	290	28	<0.1	<10	4
08-28-90	<1	<3	<1	380	<1	6	51	<0.1	<10	5
08-26-90	<1	<3	<1	26	<1	43	<1	<0.1	<10	<1

QUALITY OF GROUND WATER
CARLIN TREND--Continued

DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL	TRITIUM TOTAL (PCI/L)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CYANIDE DIS- SOLVED (MG/L AS CN)
11-15-89	--	<1.0	260	8	12	-128.0	-16.20	49	--	--
08-20-91	1	<1.0	280	11	78	-128.0	-16.20	--	--	<0.01
06-12-90	--	<1.0	260	9	4	-127.0	-16.15	33	--	--
08-20-91	--	--	--	--	--	-123.0	-16.05	--	--	<0.01
08-25-90	19	<1.0	240	<6	160	-132.0	-16.65	--	0.3	<0.01
11-17-89	--	--	--	--	--	-141.0	-18.00	--	--	--
08-28-90	<1	<1.0	150	11	190	-131.0	-16.55	--	0.4	<0.01
08-30-90	<1	<1.0	59	<6	610	-123.0	-15.55	--	1.5	<0.01
08-28-90	4	<1.0	160	7	210	-125.0	-15.95	--	0.7	<0.01
08-30-90	<1	<1.0	680	<6	23	-123.0	-15.70	--	1.9	<0.01
08-21-91	<1	<1.0	520	13	<3	-144.0	-18.50	--	--	<0.01
06-13-90	--	<1.0	270	8	<3	--	--	<0.3	--	--
11-16-89	--	--	--	--	--	-133.0	-16.40	--	--	--
09-01-90	2	<1.0	280	8	<3	-128.0	-16.15	--	0.4	<0.01
11-16-89	--	--	--	--	--	-128.0	-16.50	--	--	--
11-16-89	--	--	--	--	--	-127.0	-16.20	--	--	--
08-22-91	<1	<1.0	410	15	31	-125.0	-15.85	--	--	<0.01
08-21-91	<1	<1.0	250	16	400	-125.0	-15.65	--	--	<0.01
08-21-91	<1	<1.0	370	<6	14	-122.0	-15.60	--	--	<0.01
08-24-90	1	<1.0	600	16	3	-132.0	-16.70	--	0.7	<0.01
08-24-90	2	<1.0	530	17	<3	-123.0	-13.65	--	0.7	<0.01
09-01-90	<1	<1.0	350	<6	11	-129.0	-16.10	--	0.4	<0.01
08-25-90	<1	<1.0	330	<6	<3	-130.0	-16.35	--	0.3	<0.01
08-26-90	<1	<1.0	150	<6	<3	-129.0	-16.55	--	0.2	<0.01
08-28-90	1	<1.0	160	<6	10	-125.0	-15.50	--	0.4	0.01
08-29-90	2	<1.0	230	<6	64	-125.0	-16.00	--	0.3	<0.01
08-29-90	5	<1.0	530	8	39	-128.0	-15.85	--	0.7	<0.01
08-29-90	<1	<1.0	680	<6	<3	-131.0	-16.20	--	0.6	<0.01
08-29-90	<1	<1.0	680	<6	4	-130.0	-16.45	--	0.6	<0.01
08-28-90	1	<1.0	250	12	31	-129.0	-15.95	--	0.3	<0.01
08-31-90	<1	<1.0	370	<6	9	-124.0	-14.95	--	--	<0.01
08-27-90	<1	<1.0	660	<6	<3	-132.0	-16.25	--	0.5	<0.01
08-27-90	<1	<1.0	620	<6	18	-130.0	-15.90	--	0.5	<0.01
08-28-90	1	<1.0	150	<6	12	-125.0	-15.50	--	0.2	<0.01
08-26-90	<1	<1.0	200	<6	<3	-129.0	-16.35	--	0.3	<0.01

NEVADA HIGH-ELEVATION PRECIPITATION NETWORK

475

High-elevation precipitation data are collected at sites in eastern and southeastern Nevada. Locations of following sites are shown in Figure 18.

STATION NAME	SITE ID	LATITUDE	LONGITUDE	ELEVATION (FEET)	PERIOD	PRECIPITATION (INCHES)
CAVE MOUNTAIN	390946114364901	390946	1143649	10,650	11/28/90 TO 05/28/91 05/28/91 TO 10/17/91	11.31 9.37
CHERRY CREEK RANGE	400726114524701	400726	1145247	9,700	11/28/90 TO 05/28/91 05/28/91 TO 10/17/91	11.68 4.13
HAYFORD PEAK	363929115115801	363929	1151158	9,840	11/29/90 TO 06/03/91 06/03/91 TO 10/21/91	--- 13.25
KYLE CANYON	361457115373301	361457	1153733	7,760	10/30/90 TO 06/04/91 06/04/91 TO 10/23/91	19.25 8.00
LEE CANYON	361822115402501	361822	1154025	8,510	10/30/90 TO 06/04/91 06/04/91 TO 10/23/91	16.50 ---
MT. HAMILTON	391436115323901	391436	1153239	10,600	11/28/90 TO 05/28/91 05/28/91 TO 10/17/91	11.32 5.18
MT. WASHINGTON	385409114185401	385409	1141854	10,440	12/11/90 TO 07/11/91 07/11/91 TO 10/23/91	18.38 6.00
MT. WILSON	381438114233301	381438	1142333	9,200	11/28/90 TO 05/28/91 05/28/91 TO 10/17/91	18.93 ---
NW OF MT. MORIAH	391913114143101	391913	1141431	9,300	11/28/90 TO 05/28/91 05/28/91 TO 10/17/91	8.44 8.37
POTOSI PEAK	355641115294601	355641	1152946	8,080	11/29/90 TO 06/03/91 06/03/91 TO 10/21/91	11.00 5.25
SHEEP PEAK	363500115144301	363500	1151443	9,600	11/29/90 TO 06/03/91 06/03/91 TO 10/21/91	--- ---
TROUGH SPRING	362240115462101	362240	1154621	8,240	10/30/90 TO 06/04/91 06/04/91 TO 10/22/91	12.75 4.25

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	Page		Page
Access to WATSTORE data	22	Charleston Park, Lee Canyon near	76
Accuracy of records	18	Charleston Peak, Peak Spring Canyon Creek near	114
Acre-foot, definition of	23	Chemical oxygen demand, definition of	23
Adenosine triphosphate, definition of	23	Chlorophyll, definition of	24
Alamo, White River above Upper		Clark, Truckee River at	327,328
Pahranagat Lake near	52,53	Classification of records	18
Algae, definition of	23	Clear Creek, near Carson City	143
Algal growth potential, definition of	23	Cleve Creek near Ely	98
Aquifer, definition of	23	Coleville, West Walker River below Little	
Arrangement of records	18	Walker River near	121
Artesian, definition of	23	West Walker River near	122
Artificial substrate, definition of	27	Color unit, definition of	24
Ash Canyon Creek near Carson City	149	Colorado River, below Davis Dam	97
Ash mass, definition of	23	below Hoover Dam	93-95
Austin, Kingston Creek below Cougar Canyon near	110	Colorado River basin, crest-stage	
Stoneberger Creek near	105	partial-record stations in	358,359
Bacteria, definition of	23	gaging-station records in	46-97
Battle Mountain, Rock Creek near	194,195	Colorado River main stem, gaging-station	
Humboldt River at	197,198	records in	91-97
Bed load, definition of	26	Comus, Humboldt River at	199
Bed-load discharge, definition of	26	Contents, definition of	24
Bed material, definition of	23	Control, definition of	24
Belmont, Mosquito Creek near	104	Control structure, definition of	24
Pine Creek near	103	Conversion factors, U.S. customary units to	
Big Creek near Warm Springs	108	International System (SI) units	Back cover
Big Smoky Valley (Northern Part),		Cooperation	1
gaging-station records in	110-113	Corn Creek Spring at National Fish & Wildlife	
Biochemical oxygen demand, definition of	23	Headquarters	77
Blomass, definition of	23	Crest-stage partial-record stations,	
Black Rock Desert basin,		discharge at	358-361
crest-stage partial-record stations in	361	Crystal Bay, First Creek near	232
gaging station records in	342,343	Incline Creek near	249-252
Blackwood Creek, near Tahoe City	224-227	Second Creek at Lakeshore Drive near	233
Blue-green algae, definition of	25	Third Creek near	238-240
Boca Reservoir near Truckee	308	Wood Creek at mouth near	235
Bottom material, definition of	23	Crystal Spring near Hiko	51
Boulder Creek near Dunphy	196	Cubic foot per second, definition of	24
Bridgeport, Bridgeport Reservoir near	118	Cubic foot per second per day, definition of	24
East Walker River near	119	Cubic foot per second per square mile,	
Lower Twin Lake near	117	definition of	24
Upper Twin Lake near	116	Currant, Little Currant Creek near	106
Bridgeport Reservoir near Bridgeport	118	Daggett Creek, near Genoa	142
Bruneau River at Rowland	347	Daggett Pass, Edgewood Creek below	
Bruneau River basin, gaging-station records in	347	South Benjamin Drive near	264
Buckeye Creek near Minden	137	Edgewood Creek Tributary near	265
Caliente, Meadow Valley Wash near	65	Data collection and computation	15,21,22
Camp Richardson, Fallen Leaf Lake near	218	Data presentation	16,20,21,22
Taylor Creek near	219	Davis Dam, Colorado River below	
Carlin, Humboldt River near	180-182	Lake Mohave at	96
Jack Creek below Indian Creek near	183,184	Deer Run Road near Carson City	152,153
Maggie Creek at Maggie Creek Canyon, near	185,186	Deeth, Marys River above Hot Springs Creek	
Maggie Creek, near	187	near	173
Marys Creek at	188,189	Definition of terms	23-28
Carlin Trend,		Desert Valley,	
discharge measurements in	460-463	discharge measurements in	424
ground-water levels in	468	ground-water records in	426-428
quality of ground water in	469-474	quality of ground water in	429,430
quality of surface water in	466,467	quality of surface water in	425
Carson City, Ash Canyon Creek near	149	Diatoms, definitions of	25
Carson River near	144,145	Discharge at partial-record stations and	
Clear Creek near	143	miscellaneous sites	358-368
Deer Run Road near	153,154	Discharge, definition of	24
Eagle Valley Creek at	152	Discontinued Surface-Water Quality Stations	xvi
Franktown Creek near	317	Discontinued Surface-Water Stations	xi-xv
Kings Canyon Creek near	148	Dissolved, definition of	24
Marlette Creek near	254	Dissolved-solids concentration, definition of	24
Marlette Lake near	253	Dixie Creek above South Fork Humboldt River	
North Fork Kings Canyon near	147	near Elko	178,179
North Fork Kings Canyon Diversion near	146	Donner Creek, at Donner Lake near Truckee	291
Vicee Canyon Creek near		Donner Lake near Truckee	290
Sagebrush Ranch near	150,151	Douglas County,	
Washoe Lake near	318	Ground Water	14
Carson River, at Deer Run Road		ground-water records in	431-433
near Carson City	153,154	quality of ground water in	438-444
at Tarzyn Road near Fallon	167	Downstream order system	14
below Lahontan Reservoir near Fallon	159	Drainage area, definition of	24
Carson City near	144,145	Drainage basin, definition of	24
East Fork below Markleeville Creek near		Dresslerville, West Fork Carson River near	141
Markleeville	131	Dry mass, definition of	23
near Fort Churchill	155-157	Dunphy, Boulder Creek near	196
West Fork at Woodfords	138	Humboldt River at Old U. S. Highway 40	
Carson River basin, crest-stage partial-record		Bridge at	192,193
stations in	360	Eagle Rock Creek near Stateline	269-271
discharge measurements at		Eagle Valley Creek at Carson City	152
miscellaneous sites	363,364	East Fork Carson River, below	
gaging-station records in	131-172	Markleeville Creek, near Markleeville	131
Cells/volume, definition of	23	near Gardnerville	132,133
Central Region, crest-stage partial-record		East Las Vegas, Las Vegas Wasteway near	85
stations in	359	East Walker River, above Strosnider ditch,	
discharge measurements		near Mason	120
at miscellaneous sites in	362,363	near Bridgeport	119

	Page		Page
Edgewood Creek, at Lake Tahoe, near Stateline	272-275	Humboldt River,--Continued	
at Palisades Drive, near Stateline	266-268	at Palisade	190,191
below South Benjamin Drive, near Daggett Pass	264	near Carlin	180-182
Tributary near Daggett Pass	265	near Elko	175
Elko, Dixie Creek above South Fork		near Imlay	202
Humboldt River near	178,179	near Rye Patch	204
Humboldt River near	175	Humboldt River basin, crest-stage	
South Fork Humboldt River above		partial-record stations in	300,360
Dixie Creek near	177	discharge measurements at	
South Fork Humboldt River above Tenmile		miscellaneous sites	364,460-463
Creek near	176	gaging-station records in	173-204
Ely, Cleve Creek near	98	Hydrographic areas, list of	374
Steptoe Creek near	99-101	Hydrologic Bench-Mark Network	14
Explanation of records	14	Hydrologic conditions during current year	2-1
Fallen Leaf Lake near Camp Richardson	218	Hydrologic unit, definition of	24
Fallon, Carson River at Tarzyn Road near	167	Identifying estimated daily discharges	18
Carson River below Lahontan Reservoir near	159	Illipah Creek near Hamilton	102
Lahontan Reservoir near	158	Imlay, Humboldt River near	202
Stillwater Diversion Canal near	160-164	Incline Creek, above Tyrol Village	
Farad, Truckee River at	310	near Incline Village	241-244
Fecal coliform bacteria, definition of	23	at Highway 28, at Incline Village	245-247
Fecal streptococcal bacteria, definition of	23	near Crystal Bay	249-252
First Creek near Crystal Bay	232	Incline Creek Tributary at Country Club Drive	
Flamingo Wash at Nellis Blvd	84	near Incline Village	248
near Torrey Pines Drive near Las Vegas	83	Incline Village, Incline Creek	
Fort Churchill, Carson River near	155-157	above Tyrol Village, near	241-244
Franktown Creek near Carson City	317	Incline Creek at Highway 28, at	245-247
Fredericksburg Creek, near Fredericksburg	139	Incline Creek Tributary at	
Gage height, definition of	24	Country Club Drive near	248
Gaging station, definition of	24	Third Creek below Unnamed Tributary near	236,237
Gaging stations, in downstream order, for which		Wood Creek above Jennifer Street near	234
records are published	vii-ix	Independence Creek near Truckee	300
Gaging-station records	46-350	Independence Lake near Truckee	299
Galena Creek, at Galena Creek State Park	320	Indian Creek, at Diamond Valley near Paynesville	135
near Steamboat	321	near Woodfords	134
Gardnerville, East Fork Carson River near	132,133	Instantaneous discharge, definition of	24
Pine Nut Creek near	136	Introduction	1
General Creek near Meeks Bay	220-223	Jack Creek below Indian Creek near Carlin	183,184
Genoa, Daggett Creek near	142	Jakes Valley, gaging stations in	102
Gerlach, South Willow Creek near	344	Kingsbury, Edgewood Creek at	
Glenbrook, Glenbrook Creek at		Palisades Drive near	266-268
Old Highway 50 near	255	Kings Canyon Creek near Carson City	148
North Logan House at Highway 50 near	260	North Fork near Carson City	147
Glenbrook Creek, at Glenbrook	256-259	North Fork Diversion near Carson City	146
at Old Highway 50 near Glenbrook	255	Kings River near Oroville	342
Logan House Creek near	261-263	Kingston Creek below Cougar Canyon, near Austin	110
North Logan House Creek		Laboratory measurements	19
at Highway 50 near	260	Lahontan Reservoir near Fallon	158
Glendale, Muddy River near	71	Lake Mead, at Hoover Dam	91,92
Gold Creek, Owyhee River near	349	Lake Mohave at Davis Dam	96
Wild Horse Reservoir near	348	Lake Tahoe Basin Study	14
Great Basin, gaging-station records in	98-345	Lake Tahoe basin, gaging station records in	206-288
Great Salt Lake basin,	298	ground-water levels in	445
discharge measurements at		quality of ground water in	448-457
miscellaneous sites	362	Lakes and reservoirs:	
Green algae, definition of	26	Boca Reservoir near Truckee	308
Ground water	8	Bridgeport Reservoir near Bridgeport	118
Ground-water levels	21	Donner Lake near Truckee	290
Ground-water quality	22	Fallen Leaf Lake near Camp Richardson	218
Ground-water records	377-419	Independence Lake near Truckee	299
Ground-water levels, data		Lahontan Reservoir near Fallon	158
in Carlin Trend	468	Lake Mead, at Hoover Dam	91,92
in Desert Valley	426-428	Lake Mohave at Davis Dam	96
in Douglas County	431-433	Lake Tahoe at Tahoe City	288
in Lake Tahoe Basin	445	Little Washoe Lake near Steamboat	319
Primary observation wells	379-389	Lower Twin Lake near Bridgeport	117
Secondary observation wells	390-419	Marlette Lake near Carson City	253
Ground-water quality, data	422,423	Martis Creek Lake near Truckee	293
in Carlin Trend	469-474	Prosser Creek Reservoir near Truckee	297
in Desert Valley	429,430	Pyramid Lake near Nixon	205
in Douglas County	438-444	Rye Patch Reservoir near Rye Patch	203
in Lake Tahoe Basin	448-459	Stampede Reservoir near Truckee	306
Hamilton, Illipah Creek near	102	Topaz Lake near Topaz	124
Hardness, definition of	24	Upper Twin Lake near Bridgeport	116
Hawthorne, Walker Lake near	115	Walker Lake near Hawthorne	115
Hazen, Truckee Canal near	330	Washoe Lake near Carson City	318
Henderson, Las Vegas Wash above		Wild Horse Reservoir near Gold Creek	348
Three Kids Wash below	88-90	Lamoille Creek near Lamoille	174
Las Vegas Wash near	86,87	Land-surface datum, definition of	24
High-Elevation Precipitation Network	14,475	Las Vegas, Flamingo Wash at Nellis Blvd, near	84
Hiko, Crystal Spring near	51	Flamingo Wash near Torrey Pines Drive near	83
Hoover Dam, Colorado River below	93-95	Las Vegas Creek at Lamb Boulevard near	80
Lake Mead at	91,92	Las Vegas Wash near Sahara Avenue at	81
Hot Creek and Railroad (Northern Part) Valleys,		Sloan Channel at Charleston Boulevard near	82
gaging-station records in	106-108	Las Vegas Creek at Lamb Boulevard near Las Vegas	80
Hualapai Flat, gaging-station records in	344	Las Vegas Valley, gaging station records in	76-90
Hudson, West Walker River near	127	Las Vegas Wash, above Detention Basin	
Humboldt River, at Battle Mountain	197,198	near North Las Vegas	78,79
at Comus	199	above Three Kids Wash below	88-90
at Old U.S. Highway 40 Bridge at Dunphy	192,193	near Henderson	86,87

Page	Page
Las Vegas Wash,--Continued	National Trends Network 14
near Sahara Avenue 81	Natural substrate, definition of 27
Las Vegas Wasteway near East Las Vegas 85	Nixon, Pyramid Lake near 205
Latitude-longitude system 15	Truckee River near 334-338
Lee Canyon near Charleston Park 76	North Las Vegas, Las Vegas Wash
Little Currant Creek near Currant 106	above Detention Basin, near 78-79
Little Humboldt River near Paradise Valley 200	North Logan House Creek
Little Truckee River, above Boca Reservoir,	at Highway 50 near Glenbrook 260
near Truckee 307	Numbers, station identification 14
below Boca Dam near Truckee 309	On-site measurements and sample collection 19
Little Washoe Lake near Steamboat 319	Organic mass, definition of 23
Littlefield, Virgin River at 46-48	Organism count/area, definition of 25
Local site numbers 15	Organism count/volume, definition of 25
Logan House Creek near Glenbrook 261-263	Organism, definition of 25
Lower Twin Lake near Bridgeport, 117	Orovada, Kings River near 342
Lund, White River near 50	Other records available 18
McDermitt, McDermitt Creek near 341	Overton, Muddy River above Lake Mead near 72-74
Maggie Creek,	Overton Beach, Rogers Spring near 75
at Maggie Creek Canyon near Carlin 185,186	Owyhee River basin,
near Carlin 187	gaging-station records in 348-350
Mahogany Creek near Summit Lake 343	Owyhee River near Gold Creek 349
Marble Bluff Dam, Truckee River at 339,340	near Mountain City 350
Markleeville, East Fork Carson River below	Pahranaagat Wash near Moapa 54-56
Markleeville Creek near 131	Pahrump Valley, gaging station records in 114
Marlette Creek near Carson City 254	Paiute Drain below TJ Drain near Stillwater 168-172
Marlette Lake near Carson City 253	Palisade, Humboldt River at 190,191
Martin Creek near Paradise Valley 201	Paradise Valley, Little Humboldt River near 200
Martis Creek,	Martin Creek near 201
at State Highway 267, near Truckee 292	Parameter code, definition of 25
near Truckee 294-296	Partial-record station, definition of 25
Martis Creek Lake near Truckee 293	Particle-size classification, definition of 25
Marys Creek at Carlin 188,189	Particle size, definition of 25
Marys River above Hot Springs Creek near Deeth 173	Paynesville, Indian Creek at Diamond
Mason, East Walker River above Strosnider	Valley near 135
Ditch near 120	Peak Spring Canyon Creek near Charleston Peak 114
Meadow Valley Wash, near Caliente 65	Pederson Spring near Moapa 58
near Rox 66-70	Percent composition, definition of 25
Mean concentration, definition of 26	Periphyton, definition of 25
Mean discharge, definition of 24	Pesticides, definition of 25
Measuring point, definition of 24	Phytoplankton, definition of 25
Meeks Bay, General Creek near 220-223	Picocurie, definition of 25
Metamorphic stage, definition 24	Pine Creek near Belmont 103
Methylene blue active substances, definition of 24	Pine Nut Creek near Gardnerville 136
Meyers,	Plankton, definition of 25
Trout Creek at U. S. Forest Service	Precipitation network, Nevada
Road 12 N01, near 276-279	high-elevation 475
Upper Truckee River at Highway 50, above 210-213	Cave Mountain 475
Upper Truckee River at	Cherry Creek Range 475
South Upper Truckee Road, near 206-209	Hayford Peak 475
Micrograms per gram, definition of 25	Kyle Canyon 475
Micrograms per liter, definition of 25	Lee Canyon 475
Miller Spring, near Sheridan 140	Mt. Hamilton 475
Milligrams of carbon per area or volume per unit	Mt. Washington 475
time [mg C/(m ² .time)] for periphyton and	Mt. Wilson 475
macrophytes and [mg C/(m ² .time)] for	NW of Mt. Moriah 475
phytoplankton 26	Potosi Peak 475
Milligrams of oxygen per area or volume per	Sheep Peak 475
unit time (mgO ₂ /(m ² .time)] for periphyton	Trough Spring 475
and macrophytes and [mgO ₂ /(m ² .time)] for	Preston, Water Canyon Creek near 49
phytoplankton 26	Primary productivity, definition of 26
Milligrams per liter, definition of 25	Prosser Creek below Prosser Creek Dam
Minden, Buckeye Creek near 137	near Truckee 298
Miscellaneous data:	Prosser Creek Reservoir near Truckee 297
Crest-stage partial-record stations 358-361	Publications, techniques of water-resources
Discharge measurements at	investigations 32-34
miscellaneous sites 362-368	water-related reports for Nevada
in Carlin Trend 460-463	completed by the Geological Survey
in Desert Valley 424	during calendar year 1991 29-31
Water-quality partial-record stations	Pyramid Lake near Nixon 205
and miscellaneous sites 369-371	Pyramid and Winnemucca Lakes basin,
Moapa, Muddy River near 60-64	discharge measurements at
Muddy Spring at L.D.S. Farm near 57	miscellaneous sites 364-368
Pahranaagat Wash near 54-56	gaging-station records in 205-340
Pederson Spring near 58	Records of ground-water levels 21
Warm Springs West near 59	Records of ground-water quality 22
Monitor Valley-Diamond Valley system,	Records of stage and water discharge 15
gaging station records in 103-105	Records of surface-water quality 18
Mosquito Creek near Belmont 104	Recoverable from bottom material, definition of 26
Mountain City, Owyhee River near 350	References Cited 28
Muddy River, above Lake Mead near Overton 72-74	Remarks code 20
near Glendale 71	Reno, Truckee River at 311-313
near Moapa 60-64	Reservoirs. See Lakes and reservoirs
Muddy Spring at LDS Farm, near Moapa 57	Return period, definition of 26
National Fish & Wildlife Headquarters,	Rock Creek near Battle Mountain 194,195
Corn Creek Spring at 77	Rogers Spring, near Overton Beach 75
National Geodetic Vertical Datum, definition of 25	Round Mountain, South Twin River near 111-113
National Stream-Quality Accounting Network 14	Rowland, Bruneau River at 347

	Page		Page
Rox, Meadow Valley Wash near	66-70	Total coliform bacteria, definition of	23
Runoff, in inches, definition of	26	Total, definition of	28
Rye Patch, Humboldt River near	204	Total discharge, definition of	28
Rye Patch Reservoir near Rye Patch	203	Total organism count, definition of	25
S-Line Diversion Canal near Fallon	165,166	Total, recoverable, definition of	28
Sagehen Creek near Truckee	301-305	Total-sediment discharge, definition of	26
Salmon Falls Creek basin, gaging station records in	346	Total-sediment load, definition of	26
Salmon Falls Creek near San Jacinto	346	Tracy, Truckee River below	326
San Jacinto, Salmon Falls Creek near	346	Trout Creek, at Pioneer Trail, near South Lake Tahoe	280-283
Second Creek at Lakeshore Drive near Crystal Bay	233	at South Lake Tahoe	285-287
Sediment	19	at U. S. Forest Service Road 12 N01, near Meyers	276-279
Sediment, definition of	26	near Tahoe Valley	284
Seven-day 10-year low flow, definition of	26	Truckee, Boca Reservoir near	308
Sheridan, Miller Spring near	140	Donner Creek at Donner Lake near	291
Sixmile Creek near Warm Springs	107	Donner Lake near	290
Sloan Channel at Charleston Boulevard near Las Vegas	82	Independence Creek near	300
Smoke Creek below Reservoir near Smoke Creek	345	Independence Lake	299
Smoke Creek Desert, gaging station records in	345	Little Truckee River, above Boca Reservoir, near	307
Sodium-adsorption-ratio, definition of	27	Truckee, Little Truckee River, below Boca Dam near	309
Solute, definition of	27	Martis Creek at State Highway 267	292
South Fork Humboldt River above Dixie Creek near Elko	177	Martis Creek near	294-296
above Tenmile Creek near Elko	176	Martis Creek Lake near	293
South Lake Tahoe, Trout Creek at	285-287	Prosser Creek below Prosser Creek Dam, near	298
Trout Creek at Pioneer Trail, near	280-283	Prosser Creek Reservoir, near	297
Upper Truckee River at	214-217	Sagehen Creek, near	301-305
South Twin River near Round Mountain	111-113	Stampede Reservoir, near	306
South Willow Creek near Gerlach	344	Truckee Canal, near Hazen	330
Sparks, Truckee River near	314-316	near Wadsworth	329
Special networks and programs	14	Truckee River at Clark	327,328
Specific conductance, definition of	27	at Farad	310
Spring discharge	354,355	at Marble Bluff Dam	339,340
Spring Valley, gaging stations in,	98	at Reno	311-313
Stage and water discharge data, explanation of	15-18	at Tahoe City	289
Stage-discharge relation, definition of	27	at Vista	323-325
Stampede Reservoir near Truckee	306	below Derby Dam near Wadsworth	331-333
Stateline, Eagle Rock Creek, near	269-271	below Tracy	326
Edgewood Creek at Lake Tahoe, near	272-275	near Nixon	334-338
Station identification numbers	14	near Sparks	314-316
Steamboat, Galena Creek near	321	Upper Truckee River, at Hwy 50 above Meyers	210-213
Little Washoe Lake near	319	at South Lake Tahoe	214-217
Steamboat Creek at	322	at South Upper Truckee Road near Meyers	206-209
Steptoe Creek near Ely	99-101	Truckee River Low Flow Investigation	14
Steptoe Valley, gaging-station records in	99-101	Upper Twin Lake near Bridgeport	116
Stillwater, Paiute Drain below TJ Drain near	168-172	Vicee Canyon Creek near Sagebrush Ranch near Carson City	150,151
S-Line Diversion Canal near	165,166	Virgin River, at Littlefield	46-48
Stillwater Diversion Canal near Fallon	160-164	Virgin River basin, gaging-station records in	46-75
Stone Cabin Valley, gaging-station records in	109	Vista, Truckee River at	323-325
Stoneberger Creek near Austin	105	WATSTORE data, access to	22
Streamflow, definition of	27	WDR, definition of	28
Substrate, definition of	27	WSP, definition of	28
Summary of hydrologic conditions	2	Wabuska, Walker River near	128-130
Summit Lake, Mahogany Creek near	343	Wadsworth, Truckee Canal near	329
Summit Lake Valley, gaging-station records in	343	Truckee River below Derby Dam near	331-333
Surface area, definition of	27	Walker Lake near Hawthorne	115
Surface water	2	Walker Lake Basin, gaging-station records in	115-130
Surface-water quality	5	Walker River near Wabuska	128-130
Surficial bed material, definition of	27	Ward Creek at State Highway 89, near Tahoe Pines	228-231
Suspended, definition of	27	Warm Springs, Big Creek near	108
Suspended, recoverable, definition of	27	Sixmile Creek near	107
Suspended sediment, definition of	26	Warm Springs West near Moapa	59
Suspended-sediment concentration, definition of	26	Warm Springs, Willow Creek near	109
Suspended-sediment discharge, definition of	26	Washoe Lake near Carson City	318
Suspended-sediment load, definition of	26	Water Canyon Creek near Preston	49
Suspended, total, definition of	27	Water-quality data, explanation of	18-20
Tahoe City, Blackwood Creek near	224-227	Water-quality, ground water in Carlin Trend	422-423
Lake Tahoe at	288	in Carlin Trend	469-474
Truckee River at	289	in Desert Valley	429,430
Tahoe Pines, Ward Creek at State Highway 89, near	228-231	Water-quality, partial-record stations and miscellaneous sites, analyses of samples	369-371
Tahoe Valley, Trout Creek near	284	in Carlin Trend	466,467
Taxonomy, definition of	27	in Desert Valley	425
Taylor Creek, near Camp Richardson	219	Water-related reports for Nevada completed by the Geological Survey during calendar year 1991	29-31
Terms, definition of	23-28	Water temperature	19
Thermograph, definition of	27	Water Use	11
Third Creek below Unnamed Tributary near Incline Village	236,237	Water year, definition of	28
Third Creek near Crystal Bay	238-240	Weighted average, definition of	28
Time-weighted average, definition of	28	Wellington, West Walker River at Hoye bridge near,	125,126
Tons per acre-foot, definition of	28	West Fork Carson River, at Woodrords	138
Tons per day, definition of	28		
Topaz Lake near Topaz	124		
Topaz, Topaz Lake near	124		
West Walker River above Topaz Lake at	123		

	Page		Page
West Fork Carson River,--Continued		Wild Horse Reservoir near Gold Creek	348
near Dresslerville	141	Willow Creek near Warm Springs	109
West Walker River, above Topaz Lake	123	Winnemucca Lake basin. See Pyramid and	
at Hoyer bridge, near Wellington	125,126	Winnemucca Lakes basin.	
below Little Walker River near Coleville	121	Woodfords, Indian Creek near	134
near Coleville	122	West Fork Carson River at	138
near Hudson	127	Wood Creek above Jennifer Street near	
Wet mass, definition of	23	Incline Village	234
White River, above		Wood Creek at mouth near Crystal Bay	235
Upper Pahranaagat Lake near Alamo	52,53	Zooplankton, definition of	26
near Lund	50		

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI):

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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