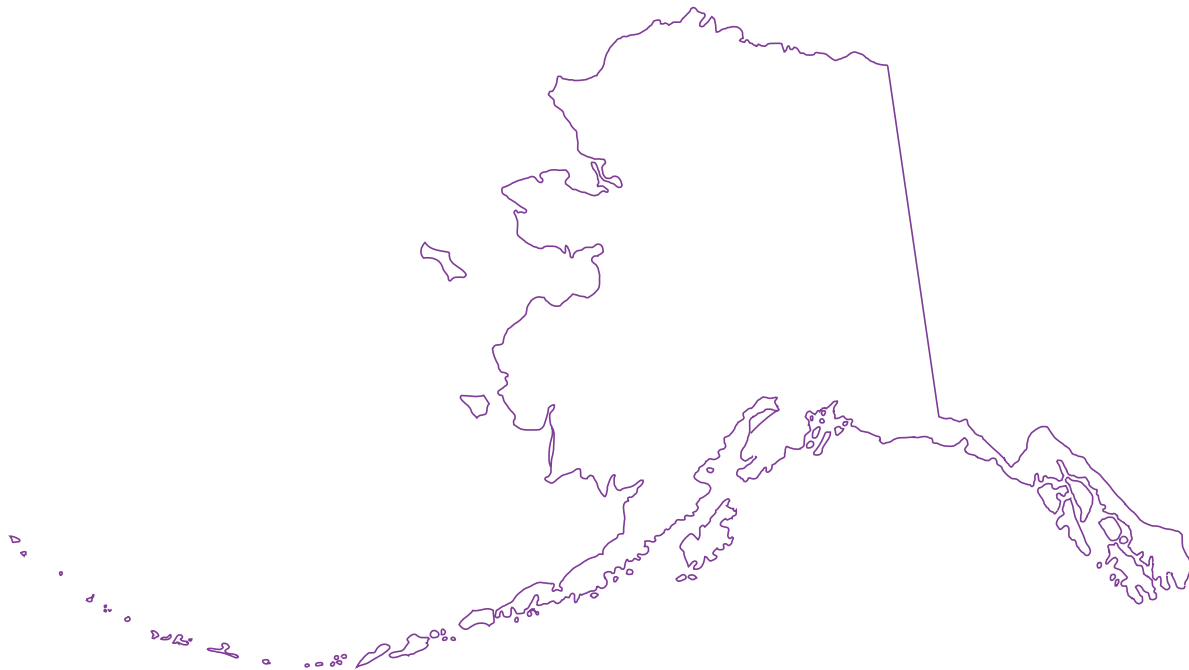




Water Resources Data Alaska Water Year 2004



Water-Data Report AK-04-1

**U.S. Department of the Interior
U.S. Geological Survey**



**Prepared in cooperation with the
State of Alaska
and with other agencies**

U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data Alaska Water Year 2004

D.F. Meyer, H.R. Best, R.H. Host, R.P. Murray, G.L. Solin

Water Data Report AK-04-1



Prepared in cooperation with the State of Alaska
and with other agencies



UNITED STATES DEPARTMENT OF THE INTERIOR

GALE A. NORTON, Secretary

U.S. GEOLOGICAL SURVEY

Charles G. Groat, Director

For additional information write to:
Chief, Water Resources Office, Alaska Science Center
U.S. Geological Survey
4230 University Drive -- Suite 201
Anchorage, Alaska 99508 - 4664
Electronic mail: ak_dc@usgs.gov

See additional USGS information on water resources
of Alaska
on the World Wide Web at
<http://ak.water.usgs.gov>

PREFACE

This volume of the annual hydrologic data report of Alaska is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each state, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and water quality 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.

The report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey (USGS) who collected, compiled, analyzed, verified, and organized the data, and who revised, edited, typed, illustrated, and assembled the report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines. Most of the data were collected, computed, and processed from field offices. Chiefs-in-charge of the field offices are:

Dan Hess, Juneau
 Matt Schellekens, Fairbanks
 Ronald L. Rickman, Anchorage

The data were collected, computed, and processed by the following personnel:

D.P. Bartu	J.M. Goetz	R.S. March	C.M. Severtson
H.R. Best	L.L. Harris	J.A. McIntire	C.W. Smith
J.A. Bjorholm**	S.G. Herman**	D.F. Meyer	R.L. Snyder**
B.B. Bigelow	R.H. Host	E.H. Moran	G.L. Solin
T.P. Brabets	G.R. Jackson	R.P. Murray	F.W. Sondrud
C.P. Breen	M.L. Jackson	E.G. Neal	P.M. Strelakos
B.A. Carr**	M.C. Kane	O.O. Orwick	N.D. Stucki**
M.R. Carr	R.T. Kemnitz**	R.T. Ourso	W.C. Swanner**
M.E. Castor	B.W. Kennedy	E.M. Parvin**	W.A. Swenson
C.H. Coffeen	E.L. Kletka	L.D. Patrick	A.H. Thomas
J.S. Conaway	A.E. Knust	K.A. Peck**	D.S. Thomas
C.S. Couvillion	R.E. Kyle	F.S. Peters	D.C. Trabant
D.G. Dowling	D.E. Langley	L.J. Pickrell	N.C. Wardwell
J.S. Drewel	D. LaValley	A.L. Riutta	M.S. Whitman**
J.D. Eash	D.A. Long	T.C. Schwarz	J.M. Wiles
Z.A. Frederick	J.G. Luna		

** Volunteer

This report was prepared in cooperation with the State of Alaska and with other agencies under the general supervision of Steven A. Frenzel, Chief, Water Resources Office, and William Sexton, Regional Hydrologist, Western Region.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE May 2005	3. REPORT TYPE AND DATES COVERED Annual -- October 1, 2003 to September 30, 2004	
4. TITLE AND SUBTITLE Water Resources Data for Alaska, Water Year 2004		5. FUNDING NUMBERS	
6. AUTHOR(S) D.F. Meyer, H.R. Best, R.H. Host, R.P. Murray, G.L. Solin U.S. Geological Survey, Water Resources Office		8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WRD-AK-04-1	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Office 4230 University Drive, Suite 201 Anchorage, Alaska 99508-4664		10. SPONSORING / MONITORING AGENCY REPORT NUMBER USGS-WRD-AK-04-1	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division 4230 University Drive, Suite 201 Anchorage, AK 99508-4664		11. SUPPLEMENTARY NOTES Prepared in cooperation with the State of Alaska and with other agencies	
12a. DISTRIBUTION / AVAILABILITY STATEMENT No restriction on distribution. This report may be purchased from National Technical Information Service, Springfield, Virginia 22161		12b. DISTRIBUTION CODE 452	
13. ABSTRACT (Maximum 200 words) Water resources data for the 2004 water year for Alaska consist of records of stage, discharge, and water quality of streams; stages of lakes; and water levels and water quality of ground water. This volume contains records for water discharge at 115 gaging stations; stage or contents only at 3 gaging stations; water quality at 39 gaging stations; and water levels for 26 observation wells. Also included are data for 55 crest-stage partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. Some data collected during 2004 will be published in subsequent reports. 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 Alaska.			
14. SUBJECT TERMS *Alaska, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses, Partial records		15. NUMBER OF PAGES 452	16. PRICE CODE Unclassified
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT

CONTENTS

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 subregion, for which records are published in this volume . . .	xii
List of discontinued surface-water discharge or stage-only stations.	xiii
List of discontinued surface-water-quality stations	xxv
Introduction	1
Cooperation	2
Acknowledgments.	3
Summary of hydrologic conditions	4
Surface water	4
Ground water	6
Water quality	6
General overview	6
Dissolved trace-element concentrations.	7
Water quality-control data	8
Water use	9
Special networks and programs.	12
Explanation of the records	13
Station identification numbers	13
Downstream order system	13
Latitude-longitude system	14
Local number	14
Records of stage and water discharge.	15
Explanation of Stage- and Water-Discharge Records.	15
Data collection and computation.	15
Data presentation.	17
Station manuscript.	17
Peak discharge greater than base discharge	18
Data table of daily mean values	18
Statistics of monthly mean data	18
Summary statistics	19
Identifying estimated daily discharge.	21
Accuracy of field data and computed results	21
Other data records available	21
Explanation of Water-Quality Records.	21
Collection and Examination of Data.	21
Water Analysis	22
Surface-water quality records.	22
Classification of records.	22
Accuracy of records	23
Arrangement of records	23
On-site measurements and sample collection.	23
Water temperature.	24

Sediment	24
Laboratory measurements.	24
Data Presentations.	25
Remark Codes.	26
Water-Quality Control Data	26
Blank Samples	27
Reference Samples	27
Replicate Samples.	27
Spike Samples.	28
Explanation of Ground-Water-Level Records	28
Site Identification Numbers	28
Data Collection and Computation.	28
Data Presentation	29
Ground-Water-Quality Data	30
Data Collection and Computation.	30
Laboratory Measurements	30
Access to USGS Water Data.	31
Definition of Terms.	31
Station records, surface water	34
Discharge at partial-record stations and miscellaneous sites	322
Crest-stage partial record stations	322
Miscellaneous sites.	334
Analyses of samples collected at miscellaneous sites	348
Ground Water Level Data	390
Index	438

MAPS

Map 1. Map showing locations of gaging stations	32
Map 2. Map showing locations of crest-stage partial-record stations	324
Map 3. Map showing locations of ground-water wells.	392

FIGURES

Figure 1. Maximum, minimum, and median daily mean discharge for the period of record and 2004 daily mean discharge for A-Chena River and B-Phelan Creek.	5
Figure 2. Monthly mean water withdrawal rate for public supply in the Anchorage, Fairbanks, and Juneau area.	11

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 quantity and quality are published in separate sections of the data report. See end of this list for page numbers for these sections.

[Letters after station name designate type of data: (d) discharge, (c) chemical, (t) water temperature, (s) sediment, (e) elevation, gage height, (b) biological or contents]

	Station number
SOUTHEAST ALASKA	
MAINLAND STREAMS	
Unuk River Below Blue River Near Wrangell (d, t, c, s)	15015595 . . . 34
Tyee Lake Outlet near Wrangell (d, e)	15019990 . . . 41
Harding River near Wrangell (d)	15022000 . . . 44
Stikine River near Wrangell (d)	15024800 . . . 46
Taku River near Juneau (d, t)	15041200 . . . 48
Gold Creek at Juneau (d)	15050000 . . . 52
Salmon Creek near Juneau (d)	15051010 . . . 54
Lemon Creek near Juneau (d)	15052000 . . . 55
Jordan Creek below Egan Drive near Auke Bay (d, t)	15052475 . . . 56
Mendenhall River near Auke Bay (d)	15052500 . . . 60
Montana Creek near Auke Bay (d)	15052800 . . . 62
Duck Creek below Nancy Street near Auke Bay (d)	15053200 . . . 64
Antler River below Antler Lake near Auke Bay (d)	15055500 . . . 65
Kakuhan Creek near Haines (d, t)	15056030 . . . 66
Taiya River near Skagway (d, t, c, s)	15056210 . . . 70
Kahtaheena River above Upper Falls near Gustavus (d, t)	15057580 . . . 75
STREAMS ON REVILLAGIGEDO ISLAND	
Swan Lake near Ketchikan (d, e)	15070000 . . . 80
Fish Creek near Ketchikan (d)	15072000 . . . 81
STREAMS ON PRINCE OF WALES ISLAND	
Staney Creek near Klawock (d, t)	15081497 . . . 83
Halfmile Creek above diversion near Klawock (d, t)	15081614 . . . 87
Old Tom Creek near Kasaan (d, t)	15085100 . . . 90
Maybeso Creek near Hollis (t)	15085800 . . . 94
STREAMS ON WRANGELL ISLAND	
Upper Earl West Creek near Wrangell (t)	15087080 . . . 96
STREAMS ON MITKOF ISLAND	
Falls Creek near Petersburg (t)	15087300 . . . 98
East Fork Hobo Creek near Petersburg (t)	15087500 . . . 100
STREAMS ON BARANOF ISLAND	
Starrigavin Creek at upper bridge near Sitka (d)	15087618 . . . 102

Indian River near Sitka (d)	15087690 . . .	103
Sawmill Creek near Sitka (d)	15088000 . . .	105
Silver Bay Tributary at Bear Cove near Sitka (d)	15088200 . . .	107
Green Lake near Sitka (d, e)	15090000 . . .	109
STREAMS ON ADMIRALTY ISLAND		
Greens Creek at Greens Creek Mine near Juneau (d)	15101490 . . .	111
STREAMS ON CHICHAGOF ISLAND		
Kadashan River above Hook Creek near Tenakee (d, t)	15106920 . . .	113
Middle Basin Creek near Tenakee (d, t)	15106970 . . .	117
STREAMS ON DOUGLAS ISLAND		
Peterson Creek below North Fork near Auke Bay (d)	15109048 . . .	121
MAINLAND STREAMS		
Alsek River near Yakutat (d)	15129000 . . .	122
Situk River near Yakutat (d, t)	15129500 . . .	123
Old Situk River near Yakutat (d, t)	15129510 . . .	127
Ophir Creek near Yakutat (d)	15129600 . . .	130
SOUTH-CENTRAL ALASKA		
MAINLAND STREAMS		
Copper River		
Chistochina River		
Sinona Creek near Chistochina (d)	15199500 . . .	131
Gulkana River at Sourdough (d)	15200280 . . .	133
Nicolet Creek near Cordova (d)	15215990 . . .	135
Solomon Lake (head of Solomon Gulch) near Valdez (e)	15225990 . . .	137
Solomon Gulch tailrace near Valdez (d)	15225996 . . .	138
Solomon Gulch at top of falls near Valdez (d)	15225997 . . .	139
Solomon Gulch near Valdez (d)	15226000 . . .	140
Nellie Juan River		
Wolverine Creek near Lawing (d)	15236900 . . .	142
Resurrection River		
Salmon Creek		
Lost Creek		
Grouse Creek at Grouse Lake Outlet near Seward (d)	15237730 . . .	144
Spruce Creek near Seward (d)	15238600 . . .	146
Upper Nuka River near park boundary near Homer (d)	15238648 . . .	148
Battle Creek		
Battle Creek diversion above Bradley Lake near Homer (d)	15238978 . . .	150
Bradley River		
Upper Bradley River near Nuka Glacier near Homer (d)	15238990 . . .	152
Bradley River near Homer (d, e)	15239000 . . .	154
Bradley River below dam near Homer (d)	15239001 . . .	155
Middle Fork Bradley River near Homer (d)	15239050 . . .	156
Middle Fork Bradley River below North Fork Bradley River near Homer (d)	15239060 . . .	158

Bradley River near Tidewater near Homer (d)	15239070	160
Kenai River		
Snow River near Seward (d)	15243900	162
Kenai River at Cooper Landing (d, t)	15258000	163
Cooper Creek at mouth near Cooper Landing (d, t)	15261000	167
Kenai River below Skilak Lake Outlet near Sterling (d)	15266110	171
Kenai River below mouth of Killey River near Sterling (d)	15266150	172
Kenai River at Soldotna (d)	15266300	173
Sixmile Creek near Hope (d)	15271000	175
Portage Creek at Portage Lake outlet near Whittier (d)	15272280	177
Twentymile River below Glacier River near Portage (d, t)	15272380	179
Ship Creek near Anchorage (d)	15276000	182
Ship Creek below Fish Hatchery near Anchorage (d)	15276320	184
Eklutna Lake (head of Eklutna River) near Palmer (e)	15278000	186
Eklutna River at Old Glenn Highway at Eklutna (d)	15280200	187
Knik River near Palmer (d, s)	15281000	188
Matanuska River		
Camp Creek near Sheep Mountain Lodge (d, t)	15281500	191
Matanuska River at Palmer (d, s)	15284000	195
Little Susitna River near Palmer (d)	15290000	198
Susitna River at Gold Creek (d)	15292000	200
Talkeetna River near Talkeetna (d)	15292700	201
Willow Creek near Willow (d)	15294005	203
Johnson River above Lateral Glacier near Tuxedni Bay (d, c, t)	15294700	205
STREAMS ON KODIAK ISLAND		
Terror River at mouth near Kodiak (d, t)	15295700	211
SOUTHWEST ALASKA		
MAINLAND STREAMS		
Russell Creek near Cold Bay (d, t)	15297610	216
Kvichak River		
Upper Talarik Creek near Iliamna (d)	15300250	220
Iliamna River near Pedro Bay (d)	15300300	221
Nushagak River		
Nuyakuk Rver near Dillingham (d)	15302000	223
Mulchatna River		
Koktuli River near Iliamna (d)	15302200	225
North Fork Koktuli River near Iliamna (d)	15302250	226
Kuskokwim River		
Takotna River		
Tatalina River near Takotna (d, t)	15303700	227
Kuskokwim River at Liskys Crossing near Stony River (e)	15303900	230
Kuskokwim River at Crooked Creek (d)	15304000	231
Ninglick River		
Takikchak River near Newtok (d, c, s)	15304400	233

YUKON ALASKA

Yukon River

Fortymile River

South Fork Fortymile River

Walker Fork

Wade Creek

Wade Creek Tributary near Chicken (d) 15320100 . . . 236

Yukon River at Eagle (d, c, s) 15356000 . . . 237

Porcupine River near International Boundary, Yukon Territory (d) 15388960 . . . 241

Birch Creek above Twelvemile Creek near Miller House (d) 15392000 . . . 242

Yukon River near Stevens Village (d, c, s) 15453500 . . . 246

Tanana River

Goodpaster River

Liese Creek near Big Delta (d) 15477730 . . . 250

Goodpaster River near Big Delta (d) 15477740 . . . 251

Central Creek

Sonora Creek above tributary near Big Delta (d) 15477768 . . . 253

Sonora Creek near Big Delta (d) 15477770 . . . 254

Central Creek near Big Delta (d) 15477790 . . . 255

Delta River

Phelan Creek near Paxson (d) 15478040 . . . 256

Salcha River near Salchaket (d) 15484000 . . . 258

Tanana River at Fairbanks (d) 15485500 . . . 260

Chena River near Two Rivers (d) 15493000 . . . 261

Little Chena River near Fairbanks (d) 15511000 . . . 262

Chena River at Fairbanks (d) 15514000 . . . 263

Tanana River at Nenana (d, c, s) 15515500 . . . 264

Nenana River at Healy (d) 15518040 . . . 269

Lignite Creek above mouth near Healy (d, s) 15518080 . . . 270

Koyukuk River

Middle Fork Koyukuk River

Slate Creek at Coldfoot (d, t) 15564879 . . . 277

Anvik River near Anvik (d, t) 15565400 . . . 282

Yukon River at Pilot Station (d, c, s) 15565447 . . . 285

NORTHWEST ALASKA

Unalakleet River above Chiroskey River near Unalakleet (d, t) 15565700 . . . 290

Solomon River

East Fork Solomon River

Etta Creek near Council (d) 15583500 . . . 294

Sinuk River

Stewart River 0.1 mile below Boulder Creek mouth near Nome (d, c, t, s) 15625850 . . . 298

Stewart River 0.2 mile below Durrant Creek mouth near Nome (d, c, t, s). 15625900 . . . 302

Kobuk River

Dahl Creek near Kobuk (d) 15743850 . . . 306

Wulik River

Ikalukrok Creek below Red Dog Creek near Kivalina (d)	15746991 . . .	308
Wulik River below Tutak Creek near Kivalina (d)	15747000 . . .	309

ARCTIC SLOPE ALASKA

Nunavak Creek near Barrow (d)	15798700 . . .	310
Colville River at Umiat (d, t)	15875000 . . .	311
Kuparuk River near Deadhorse (d)	15896000 . . .	315
Sagavanirktok River		
Sagavanirktok River Tributary near Pump Station 3 (d)	15908000 . . .	316
Sagavanirktok River near Pump Station 3 (d)	15906000 . . .	317

* * * * *

Discharge at partial-record stations and miscellaneous sites		322
Crest-stage partial-record stations		322
Miscellaneous sites		334
Analyses of samples collected at water-quality miscellaneous sites.		348
Analyses of samples collected at water-quality miscellaneous lake sites.		369
Ground-water Level Data		390

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

GROUND-WATER LEVELS

SOUTHEAST ALASKA

Juneau

WELL 582359134352103. Local number, CD04006618CBCA3019 85177 390

SOUTH-CENTRAL ALASKA

Municipality of Anchorage

WELL 611725149335401. Local number, SB01400223BCCD1003 391

YUKON ALASKA

Fairbanks North Star Borough

WELL 644321147163801. Local number, FD00200223DDBA1003 392

WELL 644331147183901. Local number, FD00200222DABD1006 393

WELL 644345147172101. Local number, FD00200223BDAD1002 394

WELL 644400147151501. Local number, FD00200224ABBB1001 51659 395

WELL 644401147193801. Local number, FD00200222BABA1005 396

WELL 644402147132801. Local number, FD00200319BAAB1001 397

WELL 644402147150401. Local number, FD00200224ABBA1002 398

WELL 644402147182601. Local number, FD00200222AAAA1004 399

WELL 644403147112901. Local number, FD00200317CDDD1005 400

WELL 644408147162001. Local number, FD00200214DDDA1003 401

WELL 644423147124601. Local number, FD00200318DABC1006 402

WELL 644435147141901. Local number, FD00200213ADAD1007 403

WELL 644435147141902. Local number, FD00200213ADAD2007 404

WELL 644435147172001. Local number, FD00200214ACBC1002 405

WELL 644444147143901. Local number, FD00200213AACD1005 406

WELL 644446147120901. Local number, FD00200317BBCA1001 407

WELL 644450147131201. Local number, FD00200318ABBD1005 408

WELL 644454147151701. Local number, FD00200213ABBB1006 409

WELL 644528147131201. Local number, FD00200307ACBD1001 51660 410

WELL 644531147130801. Local number, FD00200307ACBA1007 411

WELL 644547147141801. Local number, FD00200306CCCC1002 412

WELL 644603147131401. Local number, FD00200306DBCA1001 413

WELL 644603147151801. Local number, FD00200201DBCB1002 414

WELL 645434147385101. Local number, FB00100113DDBC2001 50673 415

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Alaska 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. Short-term, seasonal, and fragmented records for data collected at 190 sites in Alaska west of 141 degrees longitude during water years 1906-14 have not been entered into NWIS and are not included in this list. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only)]

* Currently operated as a crest-stage partial-record station

Discontinued surface-water discharge or stage-only stations

[Footnotes at end of table on page xxiv]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTHEAST ALASKA			
Salmon River near Hyder (d)	15008000	a94	1963-73
Davis River near Hyder (d)	15010000	a80	1930-40
Red River near Metlakatla (d)	15011500	45.3	1963-78
White Creek near Ketchikan (d)	15011870	2.70	1977-84
Keta River near Ketchikan (d)	15011880	74.2	1977-84
Blossom River near Ketchikan (d)	15011894	68.1	1981-84
Winstanley Creek near Ketchikan (d)	15012000	15.5	1936-38 1947-75
Punchbowl Lake Outlet near Ketchikan (d)	15014000	a12	1924-30
Klahini River near Bell Island (d)	15015600	58.0	1967-73
Short Creek near Bell Island at Short Bay (d)	15016000	a20	1922-26
Shelokum Lake Outlet near Bell Island (d)	15018000	15.6	b1915-25
Tyee Creek near Wrangell (d)	15020000	ar15.2	c1922-27
Tyee Creek at Mouth near Wrangell (d)	15020100	16.1	1963-69
East Fork Bradfield River near Wrangell (d)	15020500	63.3	1979-81
Mill Creek near Wrangell (d)	15024000	a37	1915-17 c1923-28
Goat Creek near Wrangell (d)	15024750	17.3	1976-86
Cascade Creek near Petersburg (d)	15026000	23.0	1918-29 1947-73
Scenery Creek near Petersburg (d)	15028000	30.0	1949-52
Farragut River near Petersburg (d)	15028300	151	1977-93
Sweetheart Falls Creek near Juneau (d)	15030000	r36.3	b1915-27
Long Lake near Juneau (e)	15031700	30.2	1965-75
Long Lake Outlet near Juneau (d)	15032000	30.2	1913-16
Long River near Juneau (d)	15034000	32.5	1916-24 b1927-33 1952-68 R1969-73
Speel River near Juneau (d)	15036000	226	1916-18 1960-75
Crater Creek near Juneau (d)	15038000	11.4	b1913-21 c1923-24 1927-33
Dorothy Lake Outlet (head of Dorothy Creek) near Juneau (d)	15039900	11.0	1986-2003

Discontinued surface-water discharge or stage-only stations--Continued

[Footnotes at end of table on page xxiv]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTHEAST ALASKA—Continued			
Dorothy Creek near Juneau (d)	15040000	15.2	1929-67 2001-03
Carlson Creek at Sunny Cove near Juneau (d)	15042000	22.3	c1914 b1916-21
Carlson Creek near Juneau (d)	15044000	24.3	1951-61
Grindstone Creek near Juneau (d)	15046000	r3.75	1916-21
Sheep Creek near Juneau (d)	15048000	4.57	1911-14 1916-21 1947-73
Gold Creek near Juneau (d)**	15049900	8.41	1984-97
Salmon Creek above Canyon Mouth near Juneau (d)	15051008	9.50	R1982-90
Lemon Creek near Mouth near Juneau (d)	15052009	22.9	1983-86
Nugget Creek above Diversion near Auke Bay (d)	15052495	15.8	2000-03
Montana Creek near Auke Bay (d)	15052800*	15.5	1965-75 1983-87
Lake Creek at Auke Bay (d)	15053800	2.50	1964-73
Auke Creek at Auke Bay (d)	15054000	3.96	1947-50 1962-75
Herbert River near Auke Bay (d)	15054200	56.9	1967-71
Bridget Cove Tributary near Auke Bay (d)	15054600	0.95	1971-73
Davies Creek near Auke Bay (d)	15054990	15.2	1970-72
Sherman Creek at Comet (d)	15056000	3.65	1914-17
Dayebas Creek near Haines (d)	15056070	9.33	1980-81
Goat Lake Outlet near Skagway (d)	15056095	2.92	1991-97
Skagway River at Skagway (d)	15056100	a145	1964-86
West Creek near Skagway (d)	15056200	43.2	1962-77
Taiya River near Skagway (d)	15056210*	179	1970-78
Upper Chilkoot Lake Outlet near Haines (d)	15056280	4.59	1993-97
Chilkat River at Gorge near Klukwan (d)	15056400	a190	1962-68
Chilkat River near Klukwan (d)	15056500	a760	1959-61
Klehini River near Klukwan (d)	15056560	284	1982-93
Kahtaheena River near Gustavus	15057590	10.7	1998-2001
Purple Lake Outlet near Metlakatla (d)	15058000	6.67	1947-56
Whipple Creek near Ward Cove (d)	15059500	5.29	1968-80
Perseverance Creek near Wacker (d)	15060000	2.81	b1932-39 1947-69
Ward Creek near Wacker (d)	15062000	14.0	1949-53 R1954-58
Ketchikan Creek at Ketchikan (d)	15064000	13.5	R1910-12 bR1915-20 R1965-67

WATER RESOURCES DATA FOR ALASKA, 2004

Discontinued surface-water discharge or stage-only stations--Continued

[Footnotes at end of table on page xxiv]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTHEAST ALASKA—Continued			
Beaver Falls Creek near Ketchikan (d)	15066000	5.8	c1917 1920-26 1928-32
Upper Mahoney Lake Outlet near Ketchikan (d)	15067900	2.03	1977-89
Mahoney Creek near Ketchikan (d)	15068000	5.70	b1920-34 1948-58 1978-81
Swan Lake (Falls Creek) near Ketchikan (d)	15070000#	36.5	b1916-34 1947-59
Ella Creek near Ketchikan (d)	15074000	19.7	1928-38 1947-58
Manzanita Creek near Ketchikan (d)	15076000	33.9	1928-37 1947-67
Grace Creek near Ketchikan (d)	15078000	30.2	1928-37 1964-69
Orchard Creek near Bell Island (d)	15080000	a59	1915-27
Traitors River near Bell Island (d)	15080500	20.8	1964-68
North Fork Staney Creek near Klawock (d)	15081495	3.07	1990-2003
Staney Creek near Craig (d)	15081500	51.6	1965-81
Bonnie Creek near Klawock (d)	15081510	2.72	1981
Black Bear Lake Outlet near Klawock (d)	15081580	1.82	1980-91
Threemile Creek near Klawock (d)	15081610	6.63	1999-2003
Klawak River near Klawock (d)	15081620	46.1	1977
North Branch Trocadero Creek near Hydaburg (d)	15081800	17.4	1967-73
Reynolds Creek below Lake Mellen near Hydaburg (d)	15081995	5.20	1982-85 1997-2003
Reynolds Creek near Hydaburg (d)	15082000	a5.7	1951-56
Perkins Creek near Metlakatla (d)	15083500	3.38	1976-93
Myrtle Creek at Niblack (d)	15084000	--	1917-21
Saltery Creek near Kasaan (d)	15085000	5.53	1962-64
Cabin Creek near Kasaan (d)	15085300	8.83	1962-64
Virginia Creek near Kasaan (d)	15085400	3.08	1962-64
Indian Creek near Hollis (d)	15085600	8.82	1949-64
Harris River near Hollis (d)	15085700	28.7	1949-64
Maybeso Creek at Hollis (d)	15085800	15.1	1949-63
Wolf Lake Outlet near Hollis (d)	15085900	1.64	1995-98
Karta River near Kasaan (d)	15086000	49.5	1915-23
Neck Creek near Point Baker (d)	15086500	17.0	1960-67
Big Creek near Point Baker (d)	15086600	11.2	1964-81
Sunrise Lake Outlet near Wrangell	150086960	1.17	1976-80 1997-2001

Discontinued surface-water discharge or stage-only stations--Continued

[Footnotes at end of table on page xxiv]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTHEAST ALASKA—Continued			
Mill Creek at Wrangell (d)	15087000	0.09	1965-67
Hammer Slough at Petersburg (d)	15087200	1.46	1965-67
Municipal Watershed Creek near Petersburg (d)	15087545	2.20	1979-88
No Name Creek near Petersburg (d)	15087560	3.17	1971-73
Hamilton Creek near Kake (d)	15087570	65.0	1977-86 1988-96
Rocky Pass Creek near Point Baker (d)	15087590	2.72	1977-88
Nakwasina River near Sitka (d)	15087610	31.9	1977-82
Indian River at Sitka (d)	15087700	12.0	1998-2003
Green Lake (outlet) near Sitka (d)	15090000#	r22.8	1915-25
Maksoutof River near Port Alexander (d)	15092000	a26	1951-56
Betty Lake Outlet near Port Armstrong (d)	15093200	2.66	1978-81
Sashin Creek near Big Port Walter (d)	15093400	3.72	1965-73 1975-80
East Branch Lovers Cove Creek Diversion near Big Port Walter (d)	15093600	--	1965-71
Deer Lake Outlet near Port Alexander (d)	15094000	7.41	1951-68
Coal Creek near Baranof (d)	15096000	28.5	b1922-27
Baranof River at Baranof (d)	15098000	32.0	1915-28 1958-74
Takatz Creek near Baranof (d)	15100000	17.5	1951-69
Nichols Creek near Angoon (d)	15100500	a0.12	1981
Stephens Creek near Angoon (d)	15100510	a0.14	1981
Kalinin Bay Tributary near Sitka (d)	15101200	2.28	1976-80
Greens Creek near Juneau (d)	15101500	22.8	1979-92
Hasselborg Creek near Angoon (d)	15102000	56.2	1951-68
Favorite Creek near Angoon (d)	15102200	2.52	2000-03
Porcupine River near Chichagof (d)	15104000	7.12	1918-20
Falls Creek near Chichagof (d)	15106000	6.48	1918-20
Black River near Pelican (d)	15106100	24.7	1978-82
Hook Creek above Tributary near Tenakee (d)	15106940	4.48	1967-80
Hook Creek near Tenakee (d)	15106960	8.00	1966-80
Tonalite Creek near Tenakee (d)	15106980	14.5	1968-88
Kadashan River near Tenakee (d)	15107000	37.7	1964-79
West Fork Indian River near Tenakee (d)	15107910	3.02	1979-81
Indian River near Tenakee (d)	15107920	12.9	1976-82
Pavlof River near Tenakee (d)	15108000	24.3	1957-81
Hilda Creek near Douglas (d)	15108600	2.62	1967-71
Lawson Creek at Douglas (d)	15108800	2.98	1967-71
Fish Creek near Auke Bay (d)	15109000	13.6	1959-78

Discontinued surface-water discharge or stage-only stations--Continued

[Footnotes at end of table on page xxiv]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTH-CENTRAL ALASKA			
Dick Creek near Cordova (d)	15195000	7.95	1970-81
Gakona River at Gakona (d)	15200000	a620	c1970
Tazlina River near Glennallen (d)	15202000	a2670	1949-50 1952-72
Klutina River at Copper Center (d)	15206000	a880	c1913 1949-67 c1970
Little Tonsina River near Tonsina (d)	15207800	22.7	1972-78
Tonsina River at Tonsina (d)	15208000	a420	b1950-82
Squirrel Creek at Tonsina (d)	15208100	70.5	1965-75
West Fork Kennicott River at McCarthy (d)	15209700	---	c1992-95
East Fork Kennicott River at McCarthy (d)	15209800	---	c1991-92
Tebay River near Chitina (d)	15211500	a55.4	1962-65
Copper River near Chitina (d)	15212000	a20600	c1950 c1952-53 1956-90
Copper River at Million Dollar Bridge near Cordova (d)	15214000	24200	b1907-10 c1913 1988-95
Heney Creek at canyon mouth near Cordova (d)	15215992	1.53	1992-93
Power Creek near Cordova (d)	15216000	20.5	c1913 1947-95
Middle Arm Eyak Lake Tributary near Cordova (d)	15216003	2.90	1992-93
Murchison Creek near Cordova (d)	15216008	a0.37	1992-93
Humpback Creek near Cordova (d)	15216100	4.37	c1913 1974-75
West Fork Olsen Bay Creek near Cordova (d)	15219000	4.78	1964-81
Duck River at Silver Lake Outlet near Valdez (d)	15223900	25.1	1982-85
Duck River near Tidewater near Valdez (d)	15224000	26.7	c1913-14 1982-85
Solomon Gulch Bypass near Valdez (d)	15225998	---	c1986-94
Lowe River near Valdez (d)	15226500	201	1971-74
Lowe River in Keystone Canyon near Valdez (d)	15226600	222	1975-76
Hobo Creek near Whittier (d)	15236000	5.53	c1913 1990-2000
Nellie Juan River near Hunter (d)	15237000	133	1961-65
Main Bay Creek near Port Nellie Juan (d)	15237020	5.93	1981-84
San Juan River near Seward (d)	15237360	12.4	1986-96
Resurrection River at Seward (d)	15237700	169	1965-68
Bear Creek Tributary near Seward (d)	15237800	1.63	1967-68
Lost Creek near Seward (d)	15238000	8.42	1948-50

Discontinued surface-water discharge or stage-only stations--Continued

[Footnotes at end of table on page xxiv]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTH-CENTRAL ALASKA--Continued			
Lowell Creek above city wells at Seward (d)	1523849020	3.73	1993-95
Lowell Creek at Seward (d)	15238500	4.02	1965-68 1991-93
Nuka River near Tidewater near Homer (d)	15238653	a38	1984-85
Seldovia River near Seldovia (d)	15238795	26.2	1979-80
Barabara Creek near Seldovia (d)	15238820	20.7	1972-92
Tutka Lagoon Creek near Homer (d)	15238860	10.8	1973-76
Battle Creek below Glacier near Homer (d)	15238982	g11.8	1991-93
South Fork Battle Creek near Homer (d)	15238984	a6.5	1991-93
Battle Creek near Tidewater near Homer (d)	15238985	ag21	1991-93
Fritz Creek near Homer (d)	15239500*	10.4	1967-70 1986-92
Twitter Creek near Homer (d)	15239880	16.1	1971-73
Anchor River near Anchor Point (d)	15239900*	137	1965-73 1979-86 1991-92
Anchor River at Anchor Point (d)	15240000	224	1953-66
Ninilchik River at Ninilchik (d)	15241600	135	1963-85 1998-2003
Kasilof River near Kasilof (d)	15242000	738	1949-70
Snow River near Divide (d)	15243500	a99.8	1961-65
Ptarmigan Creek at Lawing (d)	15244000	32.6	1947-58
Grant Creek near Moose Pass (d)	15246000	44.2	1947-58
Trail River near Lawing (d,e)	15248000	181	d1947-74 e1975-77
Crescent Creek near Moose Pass (d)	15253000	21.4	1957-60
Crescent Creek near Cooper Landing (d)	15254000	31.7	1949-66
Cooper Creek near Cooper Landing (d)	15260000	31.8	1949-59
Stetson Creek near Cooper Landing (d)	15260500	a8.6	1958-63
Russian River near Cooper Landing (d)	15264000	61.8	1947-54
Beaver Creek near Kenai (d)	15266500	a51	1968-78
Bernice Lake near Kenai (e)	15266895	--	1977-79
Bishop Creek near Kenai (d)	15267000	a24.2	1977-79
Resurrection Creek near Hope (d)	15267900	149	1968-86
Resurrection Creek at Hope (d)	15268000	162	1950-51
Glacier Creek at Girdwood (d)	15272550	r58.2	1965-78
Rabbit Creek at Anchorage (d)	15273050	a15	1979-80 1984-85
Little Rabbit Creek above Goldenview Drive at Anchorage (d)	15273095	5.06	1981-85

WATER RESOURCES DATA FOR ALASKA, 2004

Discontinued surface-water discharge or stage-only stations--Continued

[Footnotes at end of table on page xxiv]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTH-CENTRAL ALASKA--Continued			
Little Rabbit Creek at Anchorage (d)	15273102	5.94	1979-80
Rabbit Creek at New Seward Highway at Anchorage (d)	15273105	a24.5	1984-86
South Fork Campbell Creek at Canyon Mouth near Anchorage (d)	15273900	25.2	1967-79
South Fork Campbell Creek near Anchorage (d)	15274000	29.2	1947-71 1999-2001
North Fork Campbell Creek near Anchorage (d)	15274300	13.4	1974-84
Little Campbell Creek at Nathan Drive near Anchorage (d)	15274550	a15	c1981 1986-92
Campbell Creek near Spenard (d)	15274600	69.7	1966-93
Sand Lake near Spenard (e)	15274700	--	c1967-74
South Branch South Fork Chester Creek near East 20th Ave. at Anchorage (d)	15274798	9.39	1981-84
Chester Creek at Anchorage (d)	15275000	20.0	1958-76
Chester Creek at Arctic Boulevard near Anchorage (d)	15275100	27.4	1966-86 1987-93 1999-2001
Ship Creek at Glenn Highway near Anchorage (d)	15276200	103	2002-03
Ship Creek at Elmendorf Air Force Base near Anchorage (d)	15276500	113	1963-71
Ship Creek below Power Plant at Elmendorf Air Force Base (d)	15276570	115	1971-81
Ditch on Elmendorf Air Force Base (d)	15276650	3.73	1973-75
Eagle River at Eagle River (d)	15277100	a192	1966-81
Peters Creek near Birchwood (d)	15277410	87.8	1973-83
East Fork Eklutna Creek near Palmer (d)	15277600	538.2	1960-62 1985-89
West Fork Eklutna Creek near Palmer (d)	15277800	25.4	1960-62 1985-89
Eklutna Creek near Palmer (d)	15280000	119	1947-54 R1955-62
Knik River near Palmer (d)	15281000	a1180	1960-88 1992
Caribou Creek near Sutton (d)	15282000	289	1955-78
Moose Creek near Palmer	15283700	47.3	1997-2001
Palmer Hayflat at railroad near Palmer (e)	15284500		1992-97
Cottonwood Creek near Wasilla (d)	15286000	28.5	1949-54 1998-2000
Susitna River near Denali (d)	15291000	a950	1957-66 1968-86
Maclaren River near Paxson (d)	15291200	a280	1958-86
Susitna River near Cantwell (d)	15291500	a4140	1961-72 1980-86
Chulitna River near Talkeetna (d)	15292400	a2570	1958-72 1980-86

Discontinued surface-water discharge or stage-only stations--Continued

[Footnotes at end of table on page xxiv]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTH-CENTRAL ALASKA--Continued			
Susitna River at Sunshine (d)	15292780	a11100	1981-86
Deception Creek near Willow (d)	15294010	48.0	1978-85
Deshka River near Willow (d)	15294100	591	1979-86 1999-2001
Skwentna River near Skwentna (d)	15294300	a2250	1960-82
Yentna River near Susitna Station (d)	15294345	a6180	1981-86
Susitna River at Susitna Station (d)	15294350	a19400	1975-93
Capps Creek below North Capps Creek near Tyonek (d)	15294410	10.5	1979-85
Chuitna River near Tyonek (d)	15294450	131	1976-86
Chakachatna River near Tyonek (d)	15294500	a1120	1959-72
Montana Bill Creek at pipeline near Kenai (d)	15294585	--	c1991-92
Paint River near Kamishak (d)	15294900	205	1983-85 1989 1991-95
Little Kitoi Creek near Afognak (d)	15295500	2.63	1960-61
Terror River near Kodiak (d)	15295600	15.0	1962-68 1978-82 R1983-86
Uganik River near Kodiak (d)	15296000	123	1951-78
Spiridon Lake Outlet near Larsen Bay (d)	15296300	23.3	1962-65
Larsen Bay Creek near Larsen Bay (d)	15296480	3.92	1980-84
Falls Creek near Larsen Bay (d)	15296500	5.67	1974-75
Canyon Creek near Larsen Bay (d)	15296520	8.82	1974-76
Upper Thumb River near Larsen Bay (d)	15296550	18.8	1974-82
Karluk River at Outlet near Larsen Bay (d)	15296600	100	1975-76 1979-82
Akalura Creek at Olga Bay (d)	15296950	18.4	1975-76
Dog Salmon Creek near Ayakulik (d)	15297000	72.9	1960-61
Hidden Basin Creek near Port Lions (d)	15297100	3.01	1982-84
Hidden Basin Creek near Mouth near Kodiak (d)	15297110	11.9	1983-84
Myrtle Creek near Kodiak (d)	15297200*	4.74	1963-86
Middle Fork Pillar Creek near Kodiak (d)	15297450	2.02	1969-70
Monashka Creek near Kodiak (d)	15297470	5.51	1972 R1973-76
Falls Creek near Port Lions (d)	15297482	a4.3	1981-83
Kizhuyak River near Port Lions (d)	15297485	42.5	1980-94
SOUTHWEST ALASKA			
Whiskey Bills Creek near Sand Point (d)	15297602	a0.30	1983-84
Humboldt Creek at Sand Point (d)	15297603	a5.2	1983-84

WATER RESOURCES DATA FOR ALASKA, 2004

Discontinued surface-water discharge or stage-only stations--Continued

[Footnotes at end of table on page xxiv]

Station name	Station number	Drainage area (mi ²)	Period of record
SOUTHWEST ALASKA--Continued			
Sweeper Creek at Adak (d)	15297617	1.0	1992-96
Moffett Creek at Adak (d)	15297625	4.5	1993-96
Limpet Creek on Amchitka Island (d)	15297640	1.69	1968-72
Falls Creek on Amchitka Island (d)	15297650	0.86	1968-72
Clevenger Creek on Amchitka Island (d)	15297655	0.28	1968-74
Constantine Spring Creek on Amchitka Island (d)	15297660	--	1968-73
Bridge Creek on Amchitka Island (d)	15297680	3.03	1968-74
White Alice Creek on Amchitka Island (d)	15297690	0.79	1968-74
Lake Creek at Shemya Air Force Base (d)	15297767	a1.0	1971-73
Gallery Spring at Shemya Air Force Base (d)	15297771	--	1971-72
Gallery Creek at Shemya Air Force Base (d)	15297773	a1.0	1971-73
Eskimo Creek at King Salmon (d)	15297900	16.1	1973-76 1978-84
Tanalian River near Port Alsworth (d)	15298000	a200	1951-56
Tazimina River near Nondalton (d)	15299900	327	1981-86
Newhalen River near Iliamna (d)	15300000	3478	1951-67 1982-86
Kvichak River at Igiugig (d)	15300500	a6500	1967-87
Allen River near Aleknagik (d)	15301500	278	1963-66
Nushagak River at Ekwok (d)	15302500	a9850	1978-93
Grant Lake Outlet near Aleknagik (d)	15302800	r34.3	1959-65
Elva Lake Outlet near Aleknagik (d)	15302840	9.00	1980-82
Wood River near Aleknagik (d)	15303000	a1110	1957-70
Silver Salmon Creek near Aleknagik (d)	15303010	4.46	1985-86 c1988-89
Wood River Tributary near Aleknagik (d)	15303011	3.35	c1990 c1992-93
East Creek near Dillingham (d)	15303100	2.12	1973-75
Snake River near Dillingham (d)	15303150	113	1973-83
Kuskokwim River at McGrath (d)	15303600	a11700	1963-73
Kuskokwim River at Aniak (e)	15304060	--	1996-2003
Kisaralik River near Akiak (d)	15304200	265	1980-87
Browns Creek near Bethel (d)	15304293	4.79	c1985-94
Browns Creek at Bethel (d)	15304298	10.5	c1985
YUKON ALASKA			
King Creek near Dome Creek (d)	15344000*	5.87	1983-90
Fortymile River near Steele Creek (d)	15348000	a5880	c1910-12 1976-82
Nation River near Nation (d)	15388030	931	1991-2003

Discontinued surface-water discharge or stage-only stations--Continued

[Footnotes at end of table on page xxiv]

Station name	Station number	Drainage area (mi ²)	Period of record
YUKON ALASKA--Continued			
Kandik River near Nation (d)	15388060	1084	1991-2000
Kandik River below Threemile Creek near Nation (d)	15388070	1176	2002
Porcupine River at Old Crow, Yukon Territory, Canada (d)	15388950	a21400	f1980-89
Porcupine River near Fort Yukon (d)	15389000	a29500	1964-79
Chandalar River near Venetie (d)	15389500	a9330	1963-73
Boulder Creek near Central (d)	15439800*	31.3	1966-82 1984-86
Hess Creek near Livengood (d)	15457800	662	1970-78 1982-86
Yukon River at Rampart (d)	15468000	a199400	1955-67
Chisana River at Northway Junction (d)	15470000	a3280	1949-71
Tanana River near Tok Junction (d)	15472000	a6800	1950-53
Tok River near Tok Junction (d)	15474000	a930	1952-54
Tanana River near Tanacross (d)	15476000	a8550	1953-90
Berry Creek near Dot Lake (d)	15476300*	65.1	1971-81
Dry Creek near Dot Lake (d)	15476400	57.6	1966-69
Clearwater Creek near Delta Junction (d)	15477500	a360	1977-79
Upper West Creek near Big Delta (d)	15477761	1.64	1999-2002
Tanana River at Big Delta (d)	15478000	a13500	1949-52 1954-57
Tanana River near Harding Lake (e)	15481000	17240	c1968-82
Moose Creek at Eielson Air Force Base (d)	15485000	136	1964-65
Garrison Slough at Eielson Air Force Base (d)	15485200	6.24	1964-65
Chena River near North Pole (d)	15493500	r1445	1972-80
Chena River below Moose Creek Dam (d)	15493700	1,460	1979-96
Wood River near Fairbanks (d)	15514500	855	1968-78
Seattle Creek near Cantwell (d)	15515800	36.2	1966-75
Nenana River near Windy (d)	15516000	a710	1950-56
Nenana River near Healy (d)	15518000	a1910	1951-79
Healy Creek at Suntrana	15518020	a110	1998-2001
Nenana River at Healy (d)	15518040	a2100	1990-91
Nenana River near Rex (d)	15518300	a2450	1965-68
Teklanika River near Lignite (d)	15518350	490	1965-74
Chatanika River above Poker Creek near Chatanika (d)	15534800	419	1996
Poker Creek near Chatanika (d)	15534900	23.1	1971-78
Caribou Creek near Chatanika (d)	15535000	9.19	1970-84
Long Creek at Long near Ruby	15564450	25.4	1995-97
Melozitna River near Ruby (d)	15564600	2693	1961-73
Yukon River at Ruby (d)	15564800	a259000	1957-78

Discontinued surface-water discharge or stage-only stations--Continued

[Footnotes at end of table on page xxiv]

Station name	Station number	Drainage area (mi ²)	Period of record
YUKON ALASKA--Continued			
Middle Fork Koyukuk River near Wiseman (d)	15564875	a1200	1970-78 1984-87
Wiseman Creek at Wiseman (d)	15564877	49.2	1970-78
Jim River near Bettles (d)	15564885	465	1970-77
Koyukuk River at Hughes (d)	15564900	a18400	1960-82
Yukon River near Kaltag (d)	15565200	a296000	1957-66
Ophir Creek near Takotna (d)	15565235	6.19	1975-80
NORTHWEST ALASKA			
Snake River near Nome (d)	15621000	85.7	1965-81 1982-91
Eldorado Creek near Teller (d)	15635000	5.83	1988-90 1992-98
Gold Run Creek near Teller (d)	15637000*	24.2	c1986-88
Crater Creek near Nome (d)	15668200	21.9	1975-85
Kuzitrin River near Nome (d)	15712000	a1720	c1908-10 1962-73
Humboldt Creek near Serpentine Hot Springs near Nome (d)	15716010	8.15	c1992-93
June Creek near Kotzebue (d)	15743000	10.9	1965-67
Kobuk River at Ambler (d)	15744000	a6570	1965-78
Kobuk River near Kiana (d)	15744500	9520	1976-2003
Noatak River at Noatak (d)	15746000	a12000	c1965-71
Wilik River above Ferric Creek near Kivalina (d)	15746900	191	2000-2003
Ikalukrok Creek above Red Dog Creek near Kivalina(d)	15746980	59.2	1991-92
Red Dog Mine clean water ditch near Kivalina(d)	15746983	4.74	1991-92
North Fork Red Dog Creek near Kivalina (d)	15746988*	15.9	1991-92
Red Dog Creek above mouth near Kivalina(d)	15746990	24.6	1991-92
Ogotoruk Creek near Point Hope (d)	15748000	a35	c1958-62
ARCTIC SLOPE ALASKA			
Esatkuat Creek near Barrow (d)	15799000	a1.46	c1972-73
Esatkuat Lagoon Outlet at Barrow (d)	15799300	a3.52	c1972-73
Meade River at Atkasuk (d)	15803000	a1800	c1977
Teshkepuk Lake Outlet near Lonely (e)	15829995	a1400	c1977
Miguakiak River near Teshkepuk Lake near Lonely (d)	15830000	a1460	c1977
Colville River near Nuiqsut (d)	15880000	20670	c1977
Putuligayuk River near Deadhorse (d)	15896700	a176	1970-79 c1980 1982-86 c1987-95

Discontinued surface-water discharge or stage-only stations--Continued

[Footnotes at end of table on page xxiv]

Station name	Station number	Drainage area (mi ²)	Period of record
ARCTIC SLOPE ALASKA--Continued			
Atigun River near Pump Station 4 (d)	15904800	48.7	1991-94
Atigun River Tributary near Pump Station 4 (d)	15904900*	32.6	1977-86
Sagavanirktok River near Sagwon (d)	15910000	2208	1970-78
Chamberlin Creek near Barter Island (d)	15975000	1.46	c1958
Neruokpukkoonga Creek near Barter Island (d)	15976000	123	c1958
Footnotes			
* Currently operated as a water-quality partial record station			
# Currently operated as a monthly discharge and reservoir elevation station			
a Approximately			
b Break in record			
c Fragmentary or seasonal			
f Additional record for water years 1961-79 available from discharge records of Water Survey of Canada			
g Prior to diversion upstream			
r Revised			
R Regulated			

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following continuous-record surface-water-quality stations in Alaska have been discontinued. Daily records of temperature, specific conductance, or sediment were collected and published for the period of record shown for each station. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

[Type of record: Temp. (temperature), S.C. (specific conductance), Sed. (sediment)]

Discontinued continuous record surface-water-quality stations

[Footnotes at end of table on page xxix]

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record (water years)
SOUTHEAST ALASKA				
White Creek near Ketchikan	15011870	2.70	Temp., S.C.	1978-83
Keta River near Ketchikan	15011880	74.2	Temp., S.C.	1978-81, 1983-84
Blossom River near Ketchikan	15011894	68.1	Temp., S.C.	1981-84
Stikine River near Wrangell	15024800	a19,920	Temp. Sed.	1976-82 1982
Speel River near Juneau	15036000	226	Temp., Sed.	1960
Dorothy Lake Outlet (head of Dorothy Creek) near Juneau	15039900	11.0	Temp	1996-99
Duck Creek below Nancy Street near Auke Bay	15053200	--	Temp	1997-99
Lake Creek at Auke Bay	15053800	2.50	Temp	1963-73
Auke Creek at Auke Bay	15054000	3.96	Temp.	1962-75
Davies Creek near Auke Bay	15054990	15.2	Temp.	1969-72
Skagway River at Skagway	15056100	a145	Temp., S.C.	1979-82 1980-82
Taiya River near Skagway	15056210	149	Temp.	1971-74, 1977
Chilkat River at Gorge near Klukwan	15056400	a190	Temp.	1962-67
Chilkat River near Klukwan	15056500	a760	Temp., Sed., S.C.	1960
Kahtaheena River near Gustavus	15057590	10.7	Temp.	1999-2001
Grace Creek near Ketchikan	15078000	30.2	Temp.	1965-69
Traitors River near Bell Island	15080500	20.8	Temp.	1965-68
North Fork Stanley Creek near Klawock	15081495	3.07	Temp.	1990-2003
Staney Creek near Craig	15081500	51.6	Temp.	1966-79
Klawak River near Klawock	15081620	46.1	Temp.	1976-77
Perkins Creek near Metlakatla	15083500	3.38	Temp.	1976-93
Saltery Creek near Kasaan	15085000	5.53	Temp.	1962-64
Cabin Creek near Kasaan	15085300	8.83	Temp.	1962-64
Virginia Creek near Kasaan	15085400	3.08	Temp.	1962-64
Big Creek near Point Baker	15086600	11.2	Temp.	1963-80
Sunrise Lake Outlet near Wrangell	15086960	1.17	Temp.	1978, 1980, 1998-2001
Zarembo Creek near Point Baker	15087110	1.27	Temp.	1979-80
Hamilton Creek near Kake	15087570	65.0	Temp.	1982-86, 1989-96
Rocky Pass Creek near Point Baker	15087590	2.72	Temp.	1978-79, 1981-82
Nakwasina River near Sitka	15087610	31.9	Temp.	1976-82

Discontinued continuous record surface-water-quality stations--Continued
 [Footnotes at end of table on page xxix]

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record (water years)
SOUTHEAST ALASKA—Continued				
Indian River near Sitka	15087690	--	Temp., S.C.	2001-2002
Indian River at Sitka	15087700	--	Temp., S.C.	2001-2002
Betty Lake outlet at Port Armstrong	15093200	2.66	Temp.	1978-81
Sashin Creek near Big Port Walter	15093400	3.72	Temp.	1966-77
East Branch Lovers Cove Creek Diversion near Big Port Walter	15093600	--	Temp.	1965-71
Kalinin Bay tributary near Sitka	15101200	2.28	Temp.	1976-79
Greens Creek near Juneau	15101500	22.8	Temp. S.C.	1978-84 1979-85
Wheeler Creek near Douglas	15101600	57.1	Temp.	1970-73
North Arm Creek near Angoon	15102350	8.64	Temp.	1971-78
Hood Bay Creek near Angoon	15102400	--	Temp.	1970-71
Hook Creek above tributary near Tenakee	15106940	4.48	Temp.	1967-80
Hook Creek near Tenakee	15106960	8.00	Temp.	1966-78
Tonalite Creek near Tenakee	15106980	14.5	Temp. S.C., Sed.	1968-84, 1986-88 1972
Kadashan River near Tenakee	15107000	37.7	Temp.	1966-79
SOUTH-CENTRAL ALASKA				
Dick Creek near Cordova	15195000	7.95	Temp.	1971-79
Gakona River at Gakona	15200000	a620	Temp., S.C.	1953-54
Gulkana River at Sourdough	15200280	1,770	Temp.	1972-78
Klutina River at Copper Center	15206000	a880	Temp, S.C.	1953
Little Tonsina River near Tonsina	15207800	22.7	Temp.	1973-78
Tonsina River at Tonsina	15208000	a420	Temp., S.C.	1953, 1959-66
Copper River near Chitina	15212000	a20,600	Temp Sed. S.C.	1957, 1964-65, 1979-81 1957, 1963-65
Humpback Creek near Cordova	15216100	4.37	Temp.	1973-75
West Fork Olsen Bay Creek near Cordova	15219000	4.78	Temp.	1964-79
Duck River at Silver Lake outlet near Valdez	15223900	25.1	Temp.	1982-84
Duck River near tidewater near Valdez	15224000	26.7	Temp.	1982-84
Duck River above the Lagoon near Valdez	15224002	--	Temp.	1982-84
Lowe River in Keystone Canyon near Valdez	15226600	222	Temp.	1975-76
Tutka Lagoon Creek near Homer	15238860	10.8	Temp.	1973-76
Upper Bradley River near Homer	15238990	a10.0	Temp.	1979-90
Bradley River below dam near Homer	15239001	a66.0	Temp	1990-99
Bradley River near Tidewater near Homer	15239070	--	Temp	1986-99
Anchor River at Anchor Point	15240000	224	Temp., S.C.	1954, 1959-66

Discontinued continuous record surface-water-quality stations--Continued
 [Footnotes at end of table on page xxix]

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record (water years)
SOUTH-CENTRAL ALASKA—Continued				
Ninilchik River at Ninilchik	15241600	131	Temp. Sed.	1963, 1965, 1999-2003 1963-65
Trail River near Lawing	15248000	181	Temp.	1959-67
Kenai River at Cooper Landing	15258000	634	Temp., S.C.	1950
Kenai River below Skilak Lake Outlet near Sterling	15266110	1206	Temp.	1999-2001
Kenai River at Soldotna	15266300	1,950	Temp. Sed.	1999-2001 1979-80, 1999-2001
Beaver Creek near Kenai	15266500	a51	Temp.	1970-75
Bishop Creek near Kenai	15267000	a24.2	S.C.	1977-79
Rabbit Creek at Anchorage	15273050	a15	Temp.	1984-86
Little Rabbit Creek above Goldenview Drive at Anchorage	15273095	5.06	Temp.	1983-86
Rabbit Creek at New Seward Highway at Anchorage	15273105	a24.5	Temp.	1984-86
South Fork Campbell Creek near Anchorage	15274000	29.2	Temp.	1999-2001
Little Campbell Creek at Nathan Drive near Anchorage	15274550	a15.0	Temp. Sed.	1986-87 b1988-91
Campbell Creek near Spenard	15274600	69.7	Sed.	1986, 1988
Middle Fork Chester Creek at Nichols Street at Anchorage	611207149483600	--	Temp.	1982
Chester Creek at Anchorage	15275000	20.0	Temp.	1982
Chester Creek at Arctic Boulevard at Anchorage	15275100	27.4	Temp. Sed. S.C.	1981-86, 1999-2001 b1988-91 1981-86, 2000-01
Ship Creek near Anchorage	15276000	90.5	Temp.	1949-50
Ship Creek below powerplant at Elmendorf Air Force Base	15276570	115	Temp.	1970-80
Eagle River at Eagle River	15277100	a192	Temp. Sed., S.C.	1968-69, 1971 1967-69, 1971
East Fork Eklutna Creek near Palmer	15277600	38.2	Sed.	1985-87
West Fork Eklutna Creek near Palmer	15277800	25.4	Sed.	1985-87
Eklutna Creek near Palmer	15280000	119	Temp.	1950
Knik River near Palmer	15281000	a1,180	Temp. Sed. S.C.	1963, 1965 1962-66 1972
Chickaloon River near Sutton	15282800	--	Temp.	1953-54
Matanuska River at Palmer	15284000	a2,070	Temp. Sed. S.C.	1952-53, 1959-66 1953-54, 1959-66 1965-67, 1972
Susitna River near Denali	15291000	a950	Temp.	1974-82
Susitna River near Cantwell	15291500	a4,140	Temp.	1980, b1982-86
Susitna River at Gold Creek	15292000	a6,160	Temp. Sed.	1957, 1974-80, 1982-85 1952, 1957
Chulitna River near Talkeetna	15292400	a2,570	Temp.	b1982-86

Discontinued continuous record surface-water-quality stations--Continued
 [Footnotes at end of table on page xxix]

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record (water years)
SOUTH-CENTRAL ALASKA—Continued				
Talkeetna River near Talkeetna	15292700	2,006	Temp.	1954
Susitna River at Sunshine	15292780	a11,100	Temp.	b1981-85
Willow Creek near Willow	15294005	166	Temp.	b1978-90
Deception Creek near Willow	15294010	48.0	Temp.	b1978-85
Deshka River near Willow	15294100	591	Temp.	1999-2001
Yentna River near Susitna Station	15294345	a6,180	Temp.	b1981-86
Susitna River at Susitna Station	15294350	a19,400	Temp.	1975-80, b1983-86
Chuitna River near Tyonek	15294450	131	Temp.	1976-78
Falls Creek near Larsen Bay	15296500	5.67	Temp.	1974-75
Canyon Creek near Larsen Bay	15296520	8.82	Temp.	1974-76
East Fork Upper Thumb River near Larsen Bay	15296545	8.99	Temp.	1979-82
Upper Thumb River near Larsen Bay	15296550	18.8	Temp.	1974-82
Thumb River near Larsen Bay	15296554	25.3	Temp.	1979-82
Karluk River at outlet near Larsen Bay	15296600	100	Temp.	1975-76, 1978-82
Akalura Creek at Olga Bay	15296950	18.4	Temp.	1975-76
Kizhuyak River near Port Lions	15297485	c42.5	Temp.	b1980-86, 1987-94
SOUTHWEST ALASKA				
Tazimina River near Nondalton	15299900	327	Temp.	1982-86
Nushagak River at Ekwok	15302500	a9,850	Temp.	1979-80, 1982
East Creek near Dillingham	15303100	2.12	Temp.	1973-76
Snake River near Dillingham	15303150	113	Temp.	1974-80
Kuskokwim River at Medfra	630615154424500	--	Temp.	1954
Kuskokwim River at Crooked Creek	15304000	a31,100	Temp. S.C.	1957-67, 1977-79 1957-67
YUKON ALASKA				
Yukon River at Eagle	15356000	a113,500	Temp. Sed.	1951-52, 1962-63, 1965-66 1962-66
Hess Creek near Livengood	15457800	662	Temp.	1971-72, 1976-77
Yukon River at Rampart	15468000	a199,400	Temp., S.C.	1954-56, 1961-64
Tanana River near Tok Junction	15472000	a6,800	Temp., S.C.	1951-53
Tanana River near Tanacross	15476000	a8,550	Temp., S.C. Sed.	1954, 1957-66
Tanana River at Big Delta	15478000	13,500	Temp. S.C.	1949-51 1949-52
Chena River near North Pole	15493500	1,430	Temp.	1972-79
Little Chena River near Fairbanks	15511000	372	Temp.	1972-81

Discontinued continuous record surface-water-quality stations--Continued
 [Footnotes at end of table on page xxix]

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record (water years)
YUKON ALASKA—Continued				
Chena River at Fairbanks	15514000	a1,980	Temp. Sed. S.C.	1953, 1962-66, 1969-71 1962-71 1968-71
Tanana River at Nenana	15515500	a25,600	Temp. S.C.	1954-56 1954-57
Nenana River near Healy	15518000	a1,910	Temp. Sed., S.C.	1957-66 1953-66
Nenana River at Healy	15518040	a2,100	Temp.	1949
Caribou Creek near Chatanika	15535000	9.19	Temp.	1972-73
Long Creek at Long near Ruby	15564450	25.4	Temp.	1995-97
Yukon River at Ruby	15564800	a259,000	Temp. S.C.	1966-67, 1969-74 1966-74
Yukon River at Galena	15564860	--	Temp., S.C.	1954
Middle Fork Koyukuk River near Wiseman	15564875	a1,200	Temp.	1971-72, 1976-79
Wiseman Creek at Wiseman	15564877	49.2	Temp.	1973, 1976
Jim River near Bettles	15564885	11.7	Temp.	1971-76
Yukon River at Pilot Station	15565447	a321,000	Temp.	1976, 1978
NORTHWEST ALASKA				
Eldorado Creek near Teller	15635000	5.83	Temp.	b1995-98
Kobuk River near Kiana	15744500	a9,520	Temp.	1978-81
Ogotoruk Creek near Hope	15748000	a35	Temp., Sed.	1959
ARCTIC SLOPE ALASKA				
Kuparuk River near Deadhorse	15896000	3,130	Temp.	1971-72, 1976, 1978-79
Putligayuk River near Deadhorse	15896700	a176	Temp.	1976
Sagavanirktok River near Sagwon	15910000	229	Temp.	1971

- a Approximately
 b Seasonal
 c After diversion upstream beginning 1985

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State and other agencies, obtains a large amount of data pertaining to the water resources of Alaska each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Alaska."

Water resources data for the 2004 water year for Alaska consist of records of stage, discharge, and water quality of streams; stages of lakes; and water levels and water quality of ground water. This volume contains records for water discharge at 115 gaging stations; stage or contents only at 3 gaging stations; water quality at 39 gaging stations; and water levels for 26 observation wells. Also included are data for 55 crest-stage partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. Some data collected during 2004 will be published in subsequent reports. 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 Alaska.

Records of discharge and stage of streams, stage of lakes, chemical quality, water temperatures, and suspended sediment were first published in U.S. Geological Survey Water-Supply Papers. Through September 30, 1960, these data were published in seven Water-Supply Papers entitled "Quantity and Quality of Surface Waters of Alaska" (through 1950, 1951-53, 1954-56, 1957, 1958, 1959, 1960). Since 1960, streamflow records and related data were published in a five-year series of Water-Supply Papers for 1961-65 and 1966-70 entitled "Surface Water Supply of the United States." Water-quality records were published in a Water-Supply Paper entitled "Quality of Surface Waters of Alaska, 1961-63" and after then until 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 from 1949 to 1974 in a series of Water-Supply Papers entitled "Ground-Water Levels in the United States." Water-Supply Papers may be consulted in the libraries of the principal cities in the United States or may be purchased from U.S. Geological Survey, Branch of Information Services, Box 25286, Denver, CO 80225.

For water years 1961 through 1970, streamflow data were also released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey 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 report is identified as "U.S. Geological Survey Water-Data Report AK-04-1." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. Additional information, including current prices, for ordering specific reports may be obtained from the Water Resources Office Chief at the address given on the back of the title page or by telephone (907) 786-7000.

The USGS is continually updating the availability of its information on the World Wide Web. Current streamflow conditions (via satellite) for Alaska and other Alaskan water resource information can be found at <http://ak.water.usgs.gov/>

Nationwide information on water resources, including real-time and historic streamflow data, water-use data, publications and USGS program activities, can be found at <http://water.usgs.gov/>

COOPERATION

The U.S. Geological Survey and organizations of the State of Alaska have had cooperative agreements since 1958 for the systematic collection of streamflow records, water-quality records, and ground-water levels. Organizations that assisted in collecting data contained in this report through cooperative agreements with the USGS are:

Alaska Department of Community and Economic Development, Edgar Blatchford, Commissioner
Alaska Industrial Development and Export Authority, Alaska Energy Authority,
Ronald W. Miller, Executive Director
Alaska Department of Environmental Conservation, Ernesta Ballard, Commissioner
Alaska Department of Fish and Game, Kevin C. Duffy, Commissioner
Alaska Department of Natural Resources, Division of Mining and Water Management,
Tom Irwin, Commissioner
Alaska Department of Transportation and Public Facilities, Mike Barton,
Commissioner, in cooperation with the U.S. Department of Transportation,
Federal Highway Administration
Central Council of Tlingit and Haida Indian Tribes of Alaska, Desiree Welch, Native Lands and
Resources Manager
City and Borough of Juneau, Sally Smith, Mayor
City and Borough of Sitka, Valorie Nelson, Mayor
City and Borough of Yakutat, Tom Maloney, Mayor
City of Klawock, Donna Williams, Mayor
City of Wrangell, Fern Neimeyer, Mayor
Alaska Native Tribal Health Consortium, Paul Sherry, President/CEO
Haida Corporation, John Bruns, Resource Manager
Cheesh-na Tribal Council, Elaine Sinyon, Chief Executive Officer
Native Village of Eklutna, Lee Stephan, Chief Executive Officer
Kenai Peninsula Borough, Dale Bagley, Mayor
Municipality of Anchorage, Mark Begich, Mayor
University of Alaska Southeast, John Pugh, Chancellor

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

U.S. Army Corps of Engineers
U.S. Army Corps of Engineers, Cold Regions Research & Engineering Laboratory
U.S. Department of Agriculture, Forest Service
U.S. Department of the Interior, Bureau of Land Management
U.S. Department of the Interior, National Park Service

ACKNOWLEDGMENTS

Assisting in the collection of the data were the following gage observers:

Richard Kemnitz, Colville River at Umiat
Ed LaChapelle, McCarthy Creek near McCarthy
Dick Levitt, Kahtaheena River near Gustavus
Brian Omann, Sawmill Creek and Blue Lake near Sitka
Dean Orbison, Sawmill Creek and Green Lake near Sitka
Steve Paustian, Kadashan River near Tenakee
Alan Peck, Moody Creek near Aleknagik
Eric Sundberg, Greens Creek at Greens Creek Mine near Juneau
Tom Walters, Terror River near Kodiak
Bob Walworth, Tatalina River near Takotna
Ray Williams, Iliamna River near Pedro Bay
John Borg, Yukon River at Eagle
Rob Gieck, Sagavanirktok River Tributary near Pump Station 3
John Martinisko, Ikalukrok River below Red Dog Creek near Kivalina

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Alaska contains more than 40 percent of the Nation's surface-water resources. The highest runoff rates per unit area are in southeast Alaska and in other areas influenced by the maritime climate of the Northern Pacific Ocean and the Gulf of Alaska. In the interior and northern parts of the State, runoff rates are markedly lower than in the maritime-influenced areas. Runoff generally increases with altitude throughout the State, and year-to-year runoff variability increases from south to north.

Seasonal runoff characteristics differ from southern to northern Alaska. Areas influenced by maritime climates usually have two periods with high runoff: a spring snowmelt period and a fall rainfall period. High water can occur throughout the year, but the highest instantaneous peak discharges are more prevalent in the fall months; low-water periods usually occur in late spring and mid-summer, prior to the rainy fall period. Farther north, most of the total runoff and floods occur in the period from May through September; low-flow periods usually occur during late winter, shortly before spring snowmelt.

2004 was remarkable for lack of streamflow. After major flooding in Southcentral Alaska at the end of 2002, and again in the spring of 2003, what began as a welcome relief quickly became a serious deficit.

Winter streamflow was generally above average, although this is probably more a result of relatively mild temperatures than precipitation. A probable shift in the Pacific Decadal Oscillation (PDO) in 2002 has generally produced warmer fall and winter temperatures resulting in more rain, less snow, and later freeze up. However, winter snowpack was near normal throughout most of the state. Breakup was relatively uneventful. Central and northern Alaska streams contained unusually thick ice at the end of the winter, but slow warming during May and June precluded significant flooding or ice jams. Flood warnings issued periodically during the snowmelt season were generally not born out, except in isolated distributary channels, such as Delta Junction and Colville Delta.

Wetter than normal weather in May was followed by a remarkably hot and dry summer. Record high temperatures and low rainfall produced record low streamflow throughout the entire state (Figure 1A). These same conditions resulted in the worst wildfire season in Alaska's history. Over 6 million acres burned during the summer, an area greater than the size of New Hampshire. Fires destroyed one streamgage and limited access throughout interior Alaska. Some streamgages were inaccessible for most of the summer.

Glacier-fed streams showed the opposite response to hot, dry conditions. Many long-term glacier-fed streams experienced the highest average streamflow of record in July through September (Figure 1B). Preliminary analysis of mass balance measurements indicate that most monitored glaciers are continuing to shrink in aerial extent and volume.

In a state the size of Alaska, conditions often vary from one area to another. However, 2004 was remarkably consistently warm and dry throughout the state. Only rivers on the North Slope experienced close to normal flows.

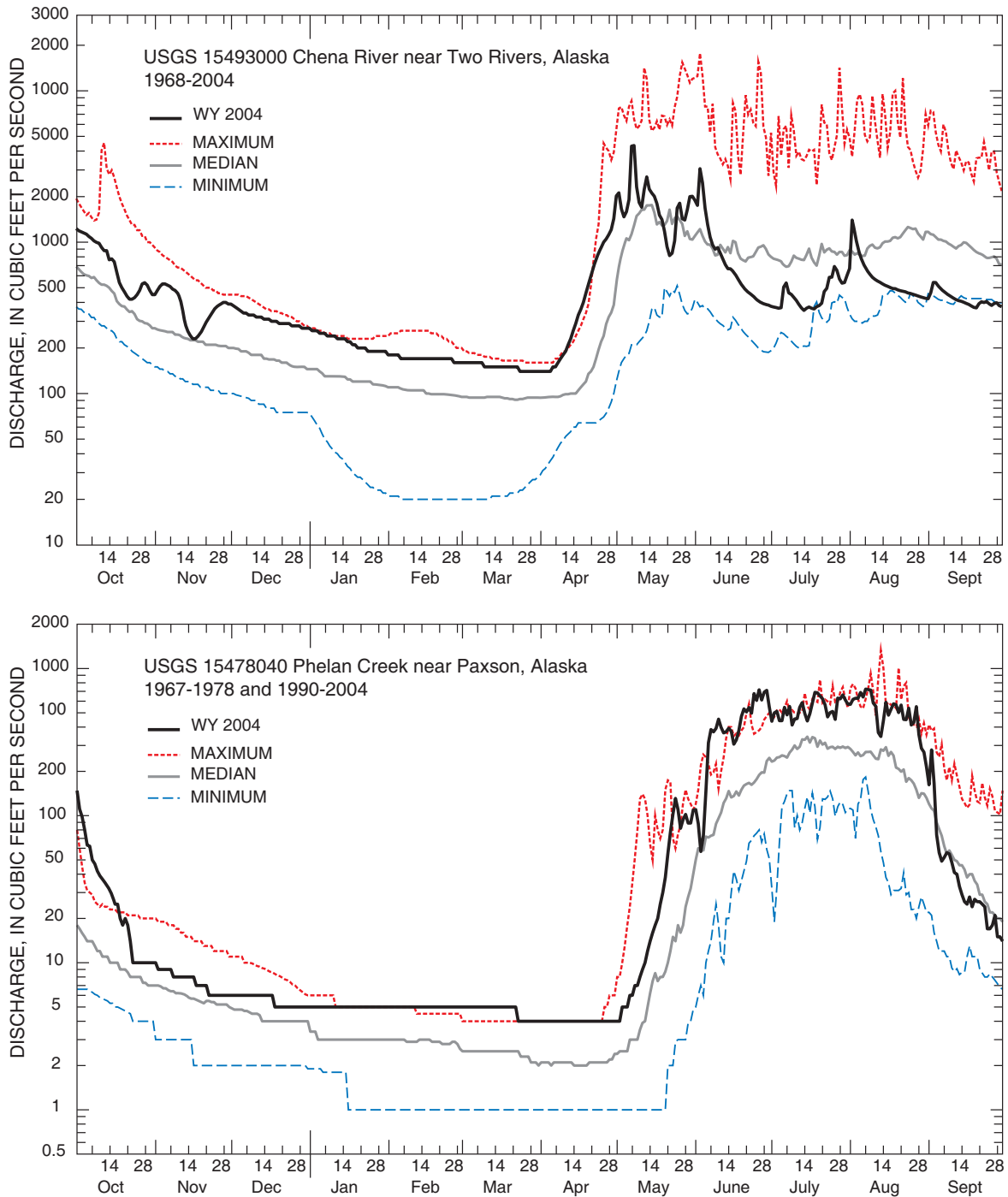


Figure 1. Maximum, minimum, and median daily mean discharge for the period of record, and 2004 daily mean discharge for A-Chena River near Two Rivers (station 15493000, period of record 1968-2004) and B-Phelan Creek near Paxson (station 15478040, period of record 1967-1978 and 1990-2004).

Ground Water

Alaska's vast area and small population preclude a comprehensive evaluation of its ground-water resources. Throughout much of the State, aquifers are poorly defined. In many areas, wells have not been drilled and little is known about seasonal and long-term changes in ground-water storage. During water-year 2004, long-term monitoring of water levels continued in one well in Juneau, one well in Anchorage, and three wells in Fairbanks. Additionally, water levels were measured in 19 wells in Fairbanks to monitor ground-water levels in the vicinity of the Chena River dam.

Water levels in the long-term monitoring wells in Juneau, Anchorage, and Fairbanks were within the range of historic values. Water levels in seven of the 19 short-term wells in Fairbanks recorded the lowest levels since July 2001.

Water Quality

General Overview

Information on the concentration and composition of constituents in Alaska's surface water is markedly variable in coverage. Some subregions have had regular or periodic sampling for many years at many stream points and at a number of lakes. Information in other subregions consists of only a few miscellaneous samples. Although the chemical characteristics of water in the streams and lakes of Alaska seem variable, the ranges in concentration are not as great as those found in the conterminous United States. Most Alaskan streams above tidal reaches contain water of a calcium bicarbonate type, generally containing less than 200 mg/L dissolved solids. In these streams, the hardness generally increases with increased dissolved-solids content. The streams draining lowlands and intermontane basins usually contain harder water than the streams in the higher mountains. Some streams, especially those draining areas overlain by organic-rich deposits, can have excessive iron content.

In Alaska, the mineral content of water in lakes is more variable than that in rivers. The water in some mountain lakes is very low in dissolved-solids content and is little more concentrated than rainwater. Other lakes occupying lowlands near the sea, including many near the Arctic coastal plain, have become mineralized periodically by salts brought in from the sea either by overland flooding during storms or as ocean spray. The water in lakes in the lowlands remote from the sea is commonly very similar in chemical character to water in the larger rivers adjacent to them.

The character and distribution of suspended sediment are relatively complex in Alaska because glaciers contribute large amounts of very fine material (glacial flour) to many streams. In general, during the summer, suspended-sediment concentrations in nonglacial streams seldom exceed 100 mg/L, but can be greater than 2,000 mg/L for glacial streams. Nonglacial streams often transport the highest sediment loads during the spring breakup or during periods of high rainfall, whereas glacial streams transport the greatest sediment loads during periods of maximum glacial melting, usually in middle or late summer. The normal suspended-sediment concentration between January and April is usually less than 20 mg/L for most nonurban streams. Thus, less than 15 percent of the annual suspended-sediment load is carried during this period. The percentage of material finer than 0.062 millimeter (the silt-clay fraction as generally defined) transported by nonglacial streams is less than 50 percent in contrast to more than 50 percent for glacial streams.

Outside of the major urban areas, almost all ground water is obtained from unconsolidated aquifers. Most sampled water contains less than the State's recommended limit of 500 mg/L dissolved solids. Calcium and magnesium, which along with bicarbonate contribute to the hardness of water, are the major

dissolved ions. In most wells, hardness concentrations are about 60 to 80 percent of dissolved-solids concentrations. Water of sodium bicarbonate or sodium chloride type is present in numerous community wells drilled near the coast.

Iron is present in high concentrations in a large number of shallow wells in most areas of the State. Concentrations in excess of 1.0 mg/L are common. Iron concentrations of more than about 0.3 mg/L can cause staining of laundry and plumbing fixtures and impart an unpleasant taste to the water.

The bedrock aquifers in most of Alaska are undeveloped and very little is known about their water quality. In general, the concentration of dissolved solids in water from bedrock aquifers is higher than that found in the unconsolidated aquifers and the chemical quality of water in bedrock aquifers is more variable.

Most of the State's ground-water resources have, for the present, been unaffected by humans. However, in the major urban areas and in some outlying villages, ground-water quality has been locally degraded, primarily from septic systems, landfills, and abandoned fuel storage tanks. Most ground-water contamination problems in Alaska are caused by petroleum products, primarily from leaky fuel tanks.

In 2004 as part of the Clean Water Action Plan, water-quality, and bed-material samples were collected at sites in Lake Clark National Park and Preserve.

In 2004 sampling at 5 stations in the Yukon Basin continued as part of the National Stream-Quality Assessment Program (NASQAN), the third year of a five year monitoring program. The Alaska Water Resources Office is also collecting samples for personnel from the National Research Program to help extend the normal NASQAN data and assisted on 2 synoptic sampling trips from Yukon River near Stevens Village to Yukon River near Pilot Station.

The record high temperatures and low rainfall produced record high water temperatures throughout the state. Nearly half of the water temperature stations had new record maximum water temperatures during the period of statewide clear skies in mid-August.

Water-quality sampling is also done for projects throughout Alaska. The analyses for these samples are published in reports discussing these projects. For more information on reports published in 2004, contact the Chief, Water Resources Office (see p. ii) or the Alaska Water Resources Office webpage at <http://ak.water.usgs.gov>.

Dissolved Trace-Element Concentrations

Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (mg/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's and 100's of nanograms per liter (ng/L). Present data above the mg/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes. However, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994. Full implementation of the protocols took place during the 1995 water year.

Water Quality-control data

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this office are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

BLANK SAMPLES – blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank samples for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collected in the Alaska Water Resources Office are:

Source solution blank – a blank solution that is transferred to a sample bottle in an area of the office laboratory with an atmosphere that is relatively clean and protected with respect to target analytes.

Ambient blank – a blank solution that is put in the same type of bottle used for an environmental sample, kept with the set of sample bottles before sample collection, and opened at the site and exposed to the ambient conditions.

Field blank – a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank – a blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank – a blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office.)

Sampler blank – a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Pump blank – a blank solution that is processed through the same pump-and-tubing system used for an environmental sample.

Standpipe blank – a blank solution that is poured from the containment vessel (stand-pipe) before the pump is inserted to obtain the pump blank.

Filter blank – a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank - a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank – a blank solution that is treated with the sampler preservatives used for an environmental sample.

Canister blank – a blank solution that is taken directly from a stainless steel canister just before the VOC sampler is submerged to obtain a field blank sample.

REFERENCE SAMPLES – Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

REPLICATE SAMPLES – Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in The Alaska Water Resources Office are:

Concurrent sample – a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

Sequential sample – a type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample – a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

SPIKE SAMPLES – Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

Concurrent sample – a type of spike sample that is collected at the same time with the same sampling and compositing devices then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Split sample – a type of spike sample in which a sample is split into subsamples contemporaneous in time and space then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Water Use

Water use in the broad sense deals with man's interaction with and influence on the hydrologic cycle. In a technical sense, water use refers to water that is actually used for a specific purpose, such as domestic use, commercial needs, or industrial processing. The offstream water use for the state of Alaska was estimated for the year 2000. Fewer water use categories were estimated in 2000 than in previous surveys.

The largest water uses are probably instream uses for hydroelectric power generation, and fish and wildlife resources. The Alaska Water Use Act was amended in 1980 to include instream flow as a use. The amendments provide the opportunity for private individuals, and local, State, and Federal governments to legally acquire instream flow water rights. Either one or a combination of the four following types of uses can be acquired: 1) protection of fish and wildlife habitat, migration, and propagation; 2) recreation and parks; 3) navigation and transportation; and 4) sanitation and water quality. Eleven instream flow rights applications have been granted.

From 1990-2004, Alaska's population increased 19 percent, which was one of the Nation's larger percentage increases. In 2004, Alaska's population increased by 1 percent. In 2004, about 60 percent of the State's population lived in the Anchorage, Fairbanks, and Juneau areas.

Because of the population increase and building water supply distribution systems in many villages in rural Alaska, public-supply use of water is also increasing. In 2000, 67 percent of the State's population received their water from a public-supply utility; the remainder supplied their own water. Mining was the largest category of water use in 2000 when including saline water use. This use was mostly production of hard rock minerals and fossil fuels.

In 2000, the water utilities in the Anchorage, Fairbanks, and Juneau areas used 61 percent of all water withdrawn in the State for public supply. The monthly mean rate of water withdrawn by the principal public-supply utilities servicing these three areas from January 1990 to September 2004 is shown in figure 2. (Data are from Municipality of Anchorage, Fort Richardson, City of Fairbanks, and City and Borough of Juneau.) The higher usage shown during the summer months in Anchorage and Fairbanks is probably due to tourism and other commercial activity, increased industrial activity, and seasonal climatic effects.

The State's 2000 average use from public supply was 190 gallons per day per person, while the nation's average is 180 gallons per day. One of the nation's lowest per capita use of all public-supply customers of 10 gallons per day has been reported on the North Slope.

Surface water is the source for around 60 percent of the 2004 State's public-water supply in these three cities, while ground water is the source for the remainder. Anchorage receives 82 percent of its water from surface-water sources. Surface water became the primary source when water from Eklutna Lake was brought into production in 1988. Juneau obtained 60 percent of public-supply water from ground-water sources in 2004. Juneau has reduced using its surface-water source because of cost to meet water-quality regulations. Fairbanks obtains 100 percent of public-supply water from ground-water sources. Of the water withdrawn in Fairbanks, about two-thirds is treated to be suitable for domestic use, and the other one-third is for thermoelectric power use.

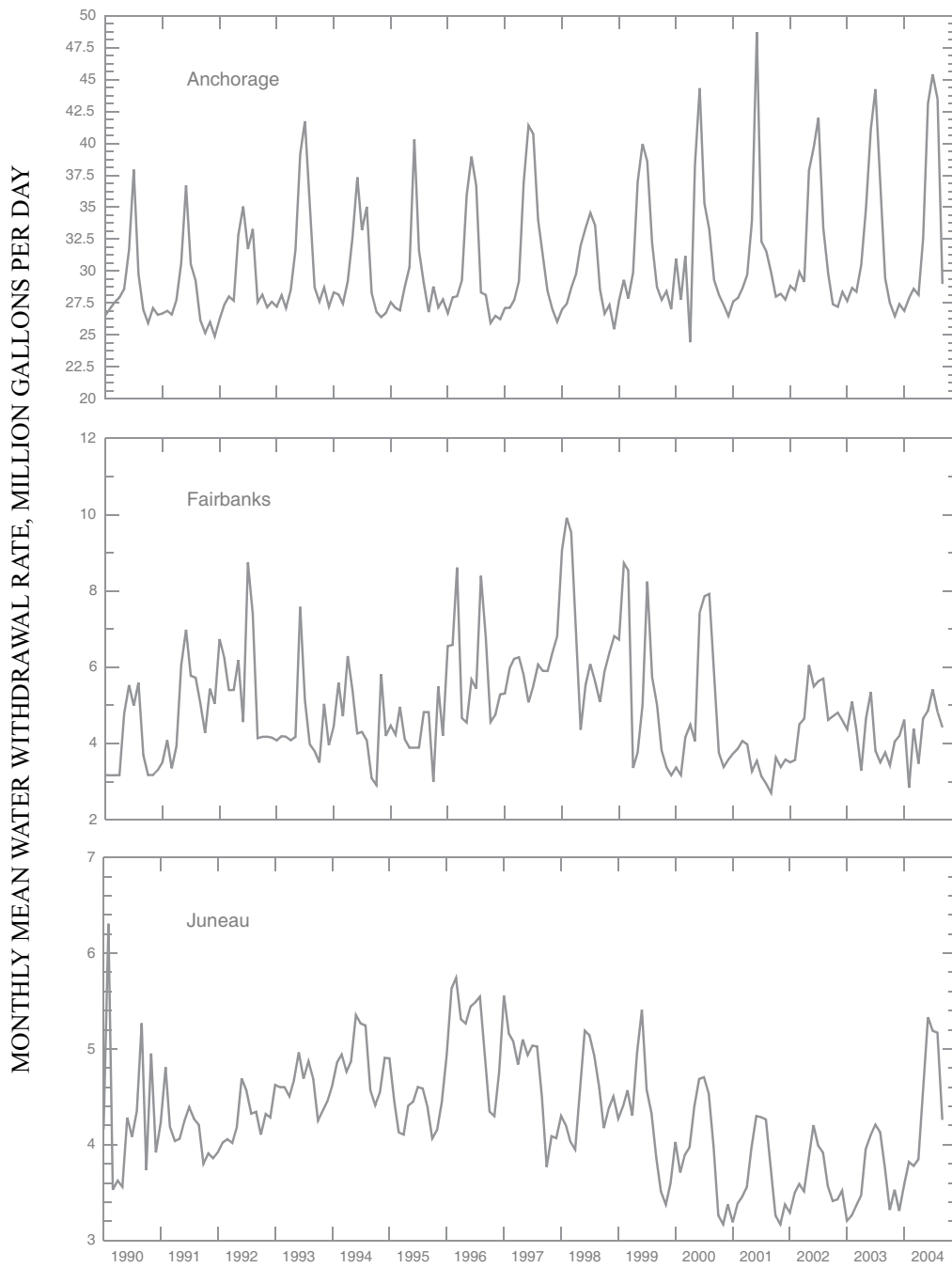


Figure 2. Monthly mean water withdrawal rate for public supply in the Anchorage, Fairbanks, and Juneau area, 1990 to 2004.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 61 sites in small drainage basins in 39 States that was established in 1963 to provide consistent streamflow data representative of undeveloped watersheds nationwide, and from which data could be analyzed on a continuing basis for use in comparison and contrast with conditions observed in basins more obviously affected by human activities. At selected sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program may be accessed from <http://water.usgs.gov/hbn/>.

National Stream-Quality Accounting Network (NASQAN) is a network of sites used to monitor the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande River basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia Rivers so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment (NAWQA) Program; (3) to characterize processes unique to large-river systems such as storage and remobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program may be accessed from <http://water.usgs.gov/nasqan/>.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a network of monitoring sites that provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from this network of 250 precipitation-chemistry monitoring sites. The USGS supports 74 of these 250 sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as data from the individual sites, may be accessed from <http://bqs.usgs.gov/acidrain/>.

The USGS National Water-Quality Assessment (NAWQA) Program is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; to provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and to provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 42 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents is measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for water-resources managers to use in

making decisions and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and Federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key Federal, State, and local water-resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program may be accessed from <http://water.usgs.gov/nawqa/>.

The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from <http://water.usgs.gov/nsip/>.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 2004 water year that began October 1, 2003, and ended September 30, 2004. 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 1, 2 and 3. 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 stream site, lake, reservoir, spring, 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, lakes, reservoirs, springs, and for surface-water stations where only miscellaneous measurements and/or water-quality samples are collected.

Downstream Order System

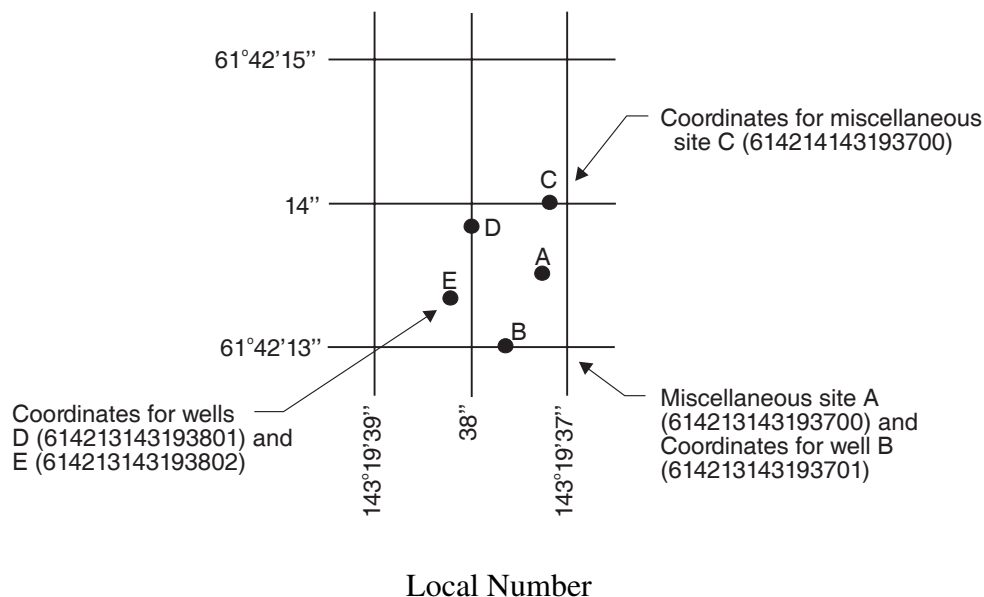
Since October 1, 1950, hydrologic-station records in USGS reports have been listed in order of downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary entering between two main-stream stations is listed between those stations. 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 located with respect to the stream to which it is immediately tributary is indicated by an indentation in that list of stations in the front of this report. Each indentation represents one rank. This downstream order and system of indentation indicates which stations are on tributaries between any two stations and the rank of the tributary on which each station is located. Stations located on islands in Alaska are in downstream order starting at the most

westerly point on the island and moving around the island in a counter-clockwise direction (stations on Kodiak Island start at the most northerly point).

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These station numbers are in the same downstream order used in this report. In assigning a station number, 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 composed of both types of stations. Water-quality stations located at or near regular stations or partial-record stations have the same number as the regular or partial-record station. 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 eight-digit number for each station, such as 15303600, which appears just to the left of the station name, includes the two-digit Part number "15" plus the six-digit downstream order number "303600." The Part number designates the State of Alaska. Occasionally, the downstream order number consists of eight digits.

Latitude-Longitude System

The identification numbers for miscellaneous surface-water sites, wells, springs, lakes, and reservoirs 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 and also stored in the computerized data base files. See the accompanying diagram.



In addition to the well number that is based on the latitude and longitude for each well, another well number may be provided which in many States is based on the Public Land Survey System, a set of rectangular surveys that is used to identify land parcels. This well number is familiar to the water users of Alaska. The first two letters indicate the principal meridian and the quadrant formed by the intersection of the base line and the principal meridian. The first three digits indicate the township in which the well or spring is located, the next three digits the range, and the last two digits the section. The letters following the

section number indicate the quarter section, the quarter-quarter section, and so forth to the fourth order subdivision. Each of these subdivisions is lettered counter-clockwise, from the northeast corner. Each site within the smallest order of subdivision is then given a sequential number. Finally, each well within a section is assigned a sequential map number indicated by the last three digits. Thus, SB00601115BCAD1001 denotes the Seward meridian (S), the northwest quadrant (B), township 6 north, range 11 west, section 15; and the site is in the SE1/4 of NE1/4 of the SW1/4 of the NW1/4 (BCAD) of the section. It was the first site in the 2.5 acre "D" subdivision assigned a sequential number (1). The next space is left blank. The next three digits, 001, indicate the sequence in which a site was located on a map. Thus, 001 indicates the first site plotted in the one-square-mile section. The next space is left blank. The last five digits, such as 00114, are the Alaska (AK) register number. Therefore, the local number is SB00601115BCAD1 001 00114. The local number for springs is the same, except for the last three digits and the Alaska (AK) register number, as indicated by the following example: SB00601115BCAD1S 4065S. Note: Public-land surveys have not been completed for a large portion of Alaska, therefore, some "local numbers" reflect this in an abbreviated form, e.g., SB00601115.

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those at which daily mean discharges can be computed or estimated with reasonable accuracy from the supporting data and information. Because the daily mean discharges commonly are published, the stations are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements 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 from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Periodic lake-level measurements are also presented separately. Locations of all complete-record and crest-stage partial record stations for which data are given in this report are shown in figures 3 and 4, respectively.

EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

Data Collection and Computation

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and volume of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that is either downloaded electronically in the field to a laptop computer or similar device or is transmitted using telemetry such as GOES satellite, land-line or cellular-phone modems, or by radio transmission. Measurements of discharge are made with a current meter or acoustic Doppler current profiler, using the general methods adopted by the USGS. These methods are described in standard textbooks, USGS Water-Supply Paper 2175, and the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRIs), Book 3, Chapters A1 through A19 and Book 8, Chapters A2 and B2, which may be accessed from <http://water.usgs.gov/pubs/twri/>. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standardization (ISO).

For stream-gaging stations, discharge-rating tables for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, the extensions are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features of the stream channel, the daily mean discharge is computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by engineers and observers are used when applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the controlling section, the daily mean discharge is computed by the shifting-control method.

The stage-discharge relation at some stream-gaging stations is affected by backwater from reservoirs, tributary streams, or other sources. Such an occurrence 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 at some distance from the base gage.

An index velocity is measured using ultrasonic or acoustic instruments at some stream-gaging stations and this index velocity is used to calculate an average velocity for the flow in the stream. This average velocity along with a stage-area relation is then used to calculate average discharge.

At some stations, 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.

At most stream-gaging stations in Alaska, the stage-discharge relation is affected by ice in the winter; therefore, computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter-discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge from other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the volume or contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly changes are computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some stream-gaging stations, periods of time occur when no gage-height record is obtained or the recorded gage height is faulty and cannot be used to compute daily discharge or contents. Such a situation can happen when the recorder stops or otherwise fails to operate properly, the intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records from other stations in the same or nearby basins. Likewise, lake or reservoir volumes may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Data Presentation

The records published for each continuous-record surface-water discharge station (stream-gaging station) consist of four parts: (1) the station manuscript or description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; and (4) a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station Manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; 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 follow that clarify information presented under the various headings of the station description.

LOCATION.—Location information is obtained from the most accurate maps available. The location of the gaging station 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 term indicates the time period for which records have been published 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 its flow reasonably can be considered equivalent to flow at the present station.

REVISED RECORDS.—If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

GAGE.—The type of gage in current use, the datum of the current gage referred to a standard datum, 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 either will be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See section titled Identifying Estimated Daily Discharge.) Information is presented relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, the outlet works and spillway, and the purpose and use of the reservoir.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.—Information here documents 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 USGS.

REVISIONS.—Records are revised if errors in published records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (<http://water.usgs.gov/nwis/nwis>). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent data updates. Updates to NWISWeb are made on an annual basis.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station manuscript would be published for these stations 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 District Office (address given on the back of the title page of this report) to determine if the published records were revised after the station was discontinued. If, however, the data for a discontinued station were obtained by computer retrieval, the data would be current. 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 stage-capacity table when daily volumes are given.

Peak Discharge Greater than Base Discharge

Tables of peak discharge above base discharge are included for some stations where secondary instantaneous peak discharge data are used in flood-frequency studies of highway and bridge design, flood-control structures, and other flood-related projects. The base discharge value is selected so an average of three peaks a year will be reported. This base discharge value has a recurrence interval of approximately 1.1 years or a 91-percent chance of exceedence in any 1 year.

Data Table of Daily Mean Values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed TOTAL gives the sum of the daily figures for each month; the line headed MEAN gives the arithmetic average flow in cubic feet per second for the month; and the lines headed MAX and MIN give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month is 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). Values for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if extensive regulation or diversion is in effect or if the drainage area includes large noncontributing areas. At some stations, monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir volumes are given. These values are identified by a symbol and a corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed MEAN), maximum (MAX), and minimum (MIN) of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those values. The designated period will be expressed as FOR WATER YEARS __-__, BY WATER YEAR (WY), and will list the first and last water years of the range of years selected from the PERIOD OF

RECORD paragraph in the station manuscript. The designated period will consist of all of the station record within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript.

Summary Statistics

A table titled SUMMARY STATISTICS follows the statistics of monthly mean data tabulation. This table consists of four columns with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, WATER YEARS __-__, will consist of all of the station records within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the ANNUAL 7-DAY MINIMUM statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When the dates of occurrence do not fall within the selected water years listed in the heading, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration-curve statistics and runoff data also are given. Runoff data may be omitted if extensive regulation or diversion of flow is in effect in the drainage basin.

The following summary statistics data are provided with each continuous record of discharge. Comments that follow clarify information presented under the various line headings of the SUMMARY STATISTICS table.

ANNUAL TOTAL.—The sum of the daily mean values of discharge for the year.

ANNUAL MEAN.—The arithmetic mean for the individual daily mean discharges for the year noted or for the designated period.

HIGHEST ANNUAL MEAN.—The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.—The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.—The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.—The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.—The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic

year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. This value should not be confused with the 7-day 10-year low-flow statistic.

MAXIMUM PEAK FLOW.—The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript.

MAXIMUM PEAK STAGE.—The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the manuscript or in a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow are different, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information. (For Alaska, a second line heading, **MAXIMUM PEAK STAGE**, is used for stations where the peak stage was from a backwater condition and had a different date from the peak discharge.)

INSTANTANEOUS LOW FLOW.—The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.—Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-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.

Cubic feet per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicate the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.—The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.—The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.—The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first table lists annual maximum stage and discharge at crest-stage stations, and the second table lists discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are often made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for a 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. This identification is shown either by flagging individual daily values with the letter “e” and noting in a table footnote, “e–Estimated,” or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of Field Data and Computed Results

The accuracy of streamflow data 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 observations of stage, measurements of discharge, and interpretations of records.

The degree of accuracy of the records is stated in the REMARKS in the station description. “Excellent” indicates that about 95 percent of the daily discharges are within 5 percent of the true value; “good” within 10 percent; and “fair,” within 15 percent. “Poor” indicates that daily discharges have less than “fair” accuracy. Different accuracies may be attributed to different parts of a given record.

Values of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft³/s; to the nearest tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 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 discharge values listed for partial-record stations.

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, values 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 Data Records Available

Information of a more detailed nature than that published for most of the stream-gaging stations such as discharge measurements, gage-height records, and rating tables is available from the District office. Also, most stream-gaging station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the District office (see address that is shown on the back of the title page of this report).

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Surface-water samples for analysis usually are collected at or near stream-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, and so forth); extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, sampling date, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from <http://water.usgs.gov/pubs/twri/>.

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 at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

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 and minimum values (and sometimes mean or median values) for each constituent measured, and are based on 15-minute or 1-hour intervals of recorded data beginning at 0000 hours and ending at 2400 hours for the day of record.

SURFACE-WATER-QUALITY RECORDS

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because discharge data are useful in the interpretation of surface-water quality. Records of surface-water quality in this report 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 *continuous-record station* is a site where data are collected on a regularly scheduled basis. Frequency may be one 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 continuous- or partial-record station, where 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 *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short

intervals. 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.

Accuracy of the Records

One of four accuracy classifications is applied for measured physical properties at continuous-record stations on a scale ranging from poor to excellent. The accuracy rating is based on data values recorded before any shifts or corrections are made. Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

Rating classifications for continuous water-quality records

[≤, less than or equal to; ±, plus or minus value shown; °C, degree Celsius; >, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical property	Rating			
	Excellent	Good	Fair	Poor
Water temperature	≤ ±0.2 °C	> ±0.2 to 0.5 °C	> ±0.5 to 0.8 °C	> ±0.8 °C
Specific conductance	≤ ±3%	> ±3 to 10%	> ±10 to 15%	> ±15%
Dissolved oxygen	≤ ±0.3 mg/L	> ±0.3 to 0.5 mg/L	> ±0.5 to 0.8 mg/L	> ±0.8 mg/L
pH	≤ ±0.2 unit	> ±0.2 to 0.5 unit	> ±0.5 to 0.8 unit	> ±0.8 unit
Turbidity	≤ ±5%	> ±5 to 10%	> ±10 to 15%	> ±15%

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 separate tables 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 naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must 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 on-site measurements and for collecting, treating, and shipping samples are given in TWRI's Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. Most of the methods used for collecting and analyzing water samples are described in the TWRI's, which may be accessed from <http://water.usgs.gov/pubs/twri/>. Also, detailed information on collecting, treating, and shipping samples can be obtained from the USGS District office (see address that is shown on the back of title page in this report).

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the 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 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, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District office.

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 section.

During periods of rapidly changing flow or rapidly changing concentration, samples may be 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 are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, 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.

Laboratory Measurements

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. The TWRI publications may be accessed from <http://water.usgs.gov/pubs/twri/>. These methods are consistent with ASTM standards and generally follow ISO standards.

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 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 information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

DRAINAGE AREA.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—This indicates the time periods for which published water-quality records for the station are available. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

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 USGS by a cooperating organization are identified here.

EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. For parameters measured weekly or less frequently, true maximums or minimums may not have been obtained. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.—Records are revised if errors in published water-quality records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (<http://waterdata.usgs.gov/nwis>). Users of USGS water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent updates. Updates to the NWISWeb are made on an annual basis.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables 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 section:

Printed Output	Remark
E	Value is estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
M	Presence of material verified, but not quantified.
N	Presumptive evidence of presence of material.
U	Material specifically analyzed for, but not detected.
A	Value is an average.
V	Analyte was detected in both the environmental sample and the associated blanks.
S	Most probable value.

Water-Quality Control Data

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDLs) and laboratory reporting levels (LRLs). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. Falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as less than LRL for samples in which the analyte was either not detected or did not pass identification. Analytes detected at concentrations between the LT-MDL and the LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E." These data should be used with the understanding that their uncertainty is greater than that of data reported without the E remark code.

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this District office are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples. These data are not presented in this report but are available from the District office.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible; each is designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

Field blank—A blank solution that is subjected to all aspects of sample collection, field processing, preservation, transportation, and laboratory handling as an environmental sample.

Trip blank—A blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank—A blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank—A blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank—A blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank—A blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank—A blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory. The reference material composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. Many types of replicate samples are possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Concurrent samples—A type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating the collection of samples into two or more compositing containers.

Sequential samples—A type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Generally, only ground-water-level data from selected wells with continuous recorders from a basic network of observation wells are published in this report. This basic network contains observation wells located so that the most significant data are obtained from the fewest wells in the most important aquifers.

Site Identification Numbers

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is produced for local needs.

Data Collection and Computation

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Most methods for collecting and analyzing water samples are described in the TWRI's referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI's Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1 through A9. The TWRI publications may be accessed from <http://water.usgs.gov/pubs/twri/>. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure 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.

Water-level measurements in this report are given in feet with reference to land-surface datum (lstd). 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 above sea level 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 day.

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 of water of several hundred feet, the error in 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 only to a tenth of a foot or a larger unit.

Data Presentation

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Well locations are shown in figure 5; each well is identified on the map by its local well or county well number.

Each well record consists of three parts: the well description, the data table of water levels observed during the water year, and, for most wells, a hydrograph following the data table. Well descriptions are presented in the headings preceding the tabular data.

The following comments clarify information presented in these various headings.

LOCATION.—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1927 unless otherwise specified.

AQUIFER.—This entry designates by name and geologic age the aquifer that the well taps.

WELL CHARACTERISTICS.—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and 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 continuous, monthly, or some other frequency of measurement.

DATUM.—This entry describes both the measuring point and the land-surface elevation at the well. The altitude of the land-surface datum is described in feet above the altitude datum; it is reported with a precision depending on the method of determination. The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth), 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 National Geodetic Vertical Datum of 1929 (NGVD 29); 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, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

PERIOD OF RECORD.—This entry indicates the time period for which records are published for the well, the month and year at the start of publication of water-level records by the USGS, and the words “to current year” if the records are to be continued into the following year. Time periods for which water-level records are available, but are not published by the USGS, may be noted.

EXTREMES FOR PERIOD OF RECORD.—This entry contains the highest and lowest instantaneously recorded or measured water levels of the period of published record, with respect to land-surface datum or sea level, and the dates of occurrence.

Water-Level Tables

A table of water levels follows the well description for each well. Water-level measurements in this report are given in feet with reference to either sea level or land-surface datum (l.s.d.). Missing records are indicated by dashes in place of the water-level value.

For wells not equipped with recorders, water-level measurements were obtained periodically by steel or electric tape. Tables of periodic water-level measurements in these wells show the date of measurement and the measured water-level value.

GROUND-WATER-QUALITY DATA

Data Collection and Computation

The ground-water-quality data in this report were obtained as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide.

Most methods for collecting and analyzing water samples are described in the TWRI, which may be accessed from <http://water.usgs.gov/pubs/twri/>. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI, Book 1, Chapter D2; Book 5, Chapters A1, A3, and A4; and Book 9, Chapters A1-A6. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS District office (see address shown on back of title page in this report).

Laboratory Measurements

Analysis for sulfide and measurement of alkalinity, pH, water temperature, specific conductance, and dissolved oxygen are performed on site. All other sample analyses are performed at the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used by the USGS laboratory are given in TWRI, Book 1, Chapter D2 and Book 5, Chapters A1, A3, and A4, which may be accessed from <http://water.usgs.gov/pubs/twri/>.

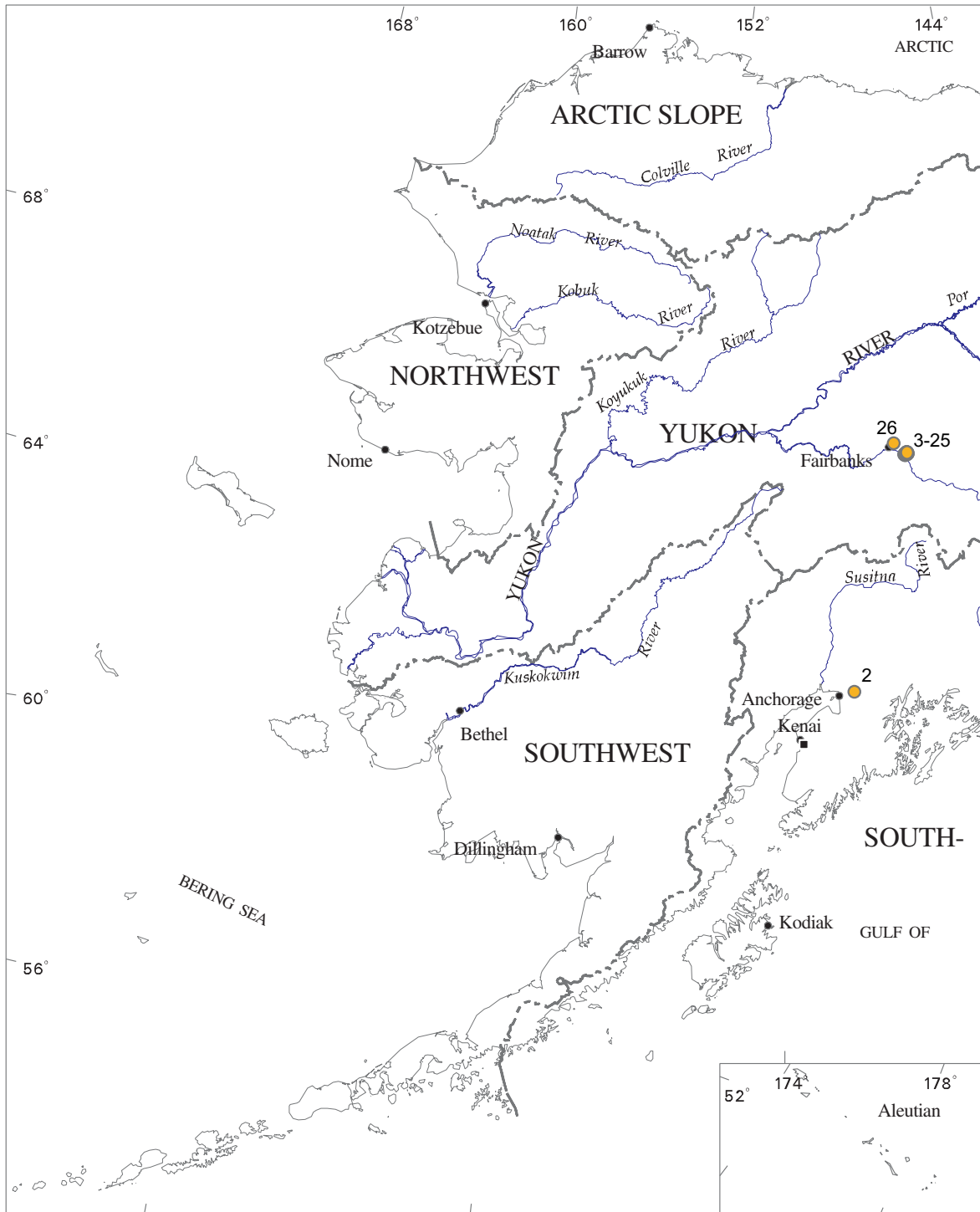
ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed from <http://water.usgs.gov>.

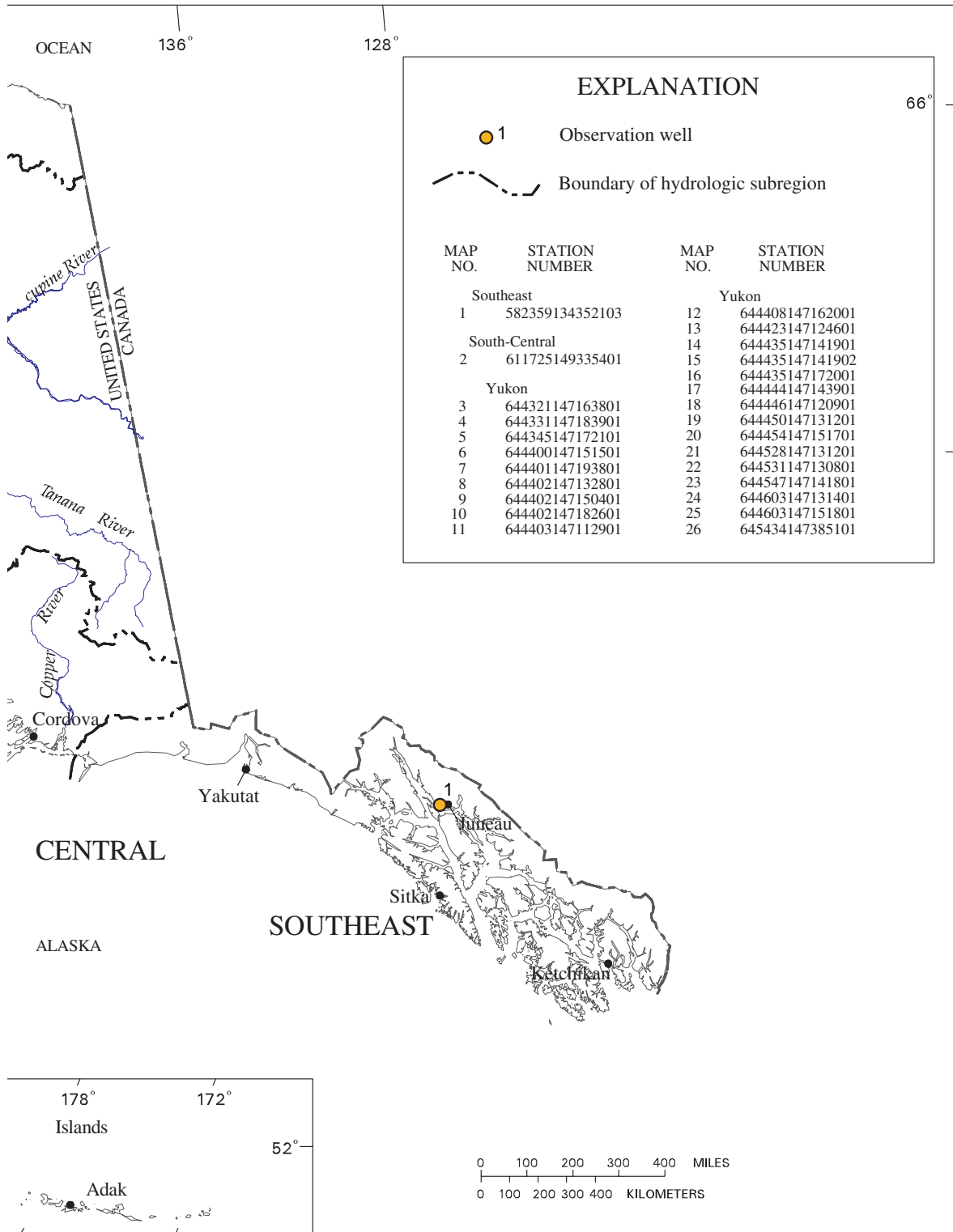
Water-quality data and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on various media. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each Water Discipline District Office (See address that is shown on the back of the title page of this report.)

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, may be accessed from http://water.usgs.gov/ADR_Defs_2004.pdf. Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units. Other glossaries that also define water-related terms are accessible from <http://water.usgs.gov/glossaries.html>.



Map 1. Locations of gaging stations



1501595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL

LOCATION.--Lat 56°14'26", long 130°52'49", in NW¹/₄ NW¹/₄ NE¹/₄ sec. 16, T. 65 S., R. 94 E. (Bradfield Canal A-3 quad), Hydrologic Unit 19010101, in Misty Fiords National Monument, on right bank 17 mi upstream from the Post (Bishop Ranch), near the mouth of Burroughs Bay and approximately 60 mi southeast of Wrangell.

DRAINAGE AREA.-- 745 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2003 to current year (no winter record).

GAGE.--Water-stage recorder. Elevation of gage is 130 ft above sea level, from topographic map.

REMARKS.-- Records good, except June 5 to August 26, 2003, which are poor.

EXTREMES FOR WATER YEAR 2003.--Maximum discharge 22,100 ft³/s, September 2, gage-height 29.48 ft; minimum discharge not determined, occurs during winter.

EXTREMES FOR WATER YEAR 2004.--Maximum discharge 34,800 ft³/s, October 26, gage-height 32.96 ft; minimum discharge not determined, occurs during winter..

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	5440	7590	9730	11400	8970
2	---	---	---	---	---	---	---	4540	6560	8880	11600	19100
3	---	---	---	---	---	---	---	3590	5960	9250	10300	13400
4	---	---	---	---	---	---	---	2910	5930	12300	9030	9700
5	---	---	---	---	---	---	---	2450	7020	11900	8200	9230
6	---	---	---	---	---	---	---	2300	10000	11000	7840	10700
7	---	---	---	---	---	---	---	2270	12200	10700	8790	11200
8	---	---	---	---	---	---	---	2520	11300	11000	9610	9860
9	---	---	---	---	---	---	---	3080	10500	10600	10300	7890
10	---	---	---	---	---	---	---	3740	10900	11600	8930	9560
11	---	---	---	---	---	---	---	4480	10800	12500	8100	13800
12	---	---	---	---	---	---	---	5330	10400	12800	8570	9600
13	---	---	---	---	---	---	---	5110	10300	13000	9860	11600
14	---	---	---	---	---	---	---	4000	9110	11900	9920	14300
15	---	---	---	---	---	---	---	3270	9130	10700	11300	10100
16	---	---	---	---	---	---	---	2790	7950	11200	13500	7990
17	---	---	---	---	---	---	---	2630	8330	12400	12400	6590
18	---	---	---	---	---	---	---	2920	10500	11600	12800	6880
19	---	---	---	---	---	---	---	3230	9260	11600	11000	8430
20	---	---	---	---	---	---	---	3390	7970	12400	9770	7090
21	---	---	---	---	---	---	---	3710	7760	12900	10400	9020
22	---	---	---	---	---	---	---	4500	7620	11900	7920	8980
23	---	---	---	---	---	---	---	5800	7640	10200	6580	6700
24	---	---	---	---	---	---	---	8590	7450	9910	6180	13000
25	---	---	---	---	---	---	---	8690	7270	11100	5930	15500
26	---	---	---	---	---	---	---	6930	8560	11600	6020	12000
27	---	---	---	---	---	---	---	6310	7810	11200	6000	10200
28	---	---	---	---	---	---	---	6390	7940	11100	6040	9770
29	---	---	---	---	---	---	---	7630	8560	11600	6490	10100
30	---	---	---	---	---	---	---	5200	7080	8720	11400	7950
31	---	---	---	---	---	---	---	7210	---	11400	8600	---
TOTAL	---	---	---	---	---	---	---	142830	261040	351370	281330	310450
MEAN	---	---	---	---	---	---	---	4607	8701	11330	9075	10350
MAX	---	---	---	---	---	---	---	8690	12200	13000	13500	19100
MIN	---	---	---	---	---	---	---	2270	5930	8880	5930	6590
AC-FT	---	---	---	---	---	---	---	283300	517800	696900	558000	615800
CFSM	---	---	---	---	---	---	---	6.18	11.7	15.2	12.2	13.9
IN.	---	---	---	---	---	---	---	7.13	13.03	17.54	14.05	15.50

1501595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8270	5130	---	---	---	---	1550	6990	6930	10900	9290	7110
2	7560	4700	---	---	---	---	1480	7600	6610	11100	11000	6570
3	6950	4310	---	---	---	---	1820	7250	6380	10800	11000	7780
4	6850	3980	---	---	---	---	2110	7250	6940	10500	10300	10500
5	6170	3730	---	---	---	---	2000	6850	8940	10300	10800	7900
6	7130	3540	---	---	---	---	1790	5460	9770	11800	11900	6950
7	7780	3340	---	---	---	---	1720	5130	11200	11200	10700	6310
8	6540	3170	---	---	---	---	1900	5440	12300	9800	10200	5610
9	5750	3130	---	---	---	---	2020	5640	12200	10400	10100	5010
10	5460	3110	---	---	---	---	2360	5220	9450	11600	11100	4190
11	4900	3040	---	---	---	---	3840	5420	8340	10500	11200	4560
12	4370	4730	---	---	---	---	4940	5620	8090	9700	9920	4690
13	4050	10500	---	---	---	---	4580	6510	8940	9880	9890	5960
14	4000	7360	---	---	---	---	4370	7490	8440	10800	10800	7280
15	3790	4960	---	---	---	---	3950	7490	7690	11200	13200	6030
16	3520	4150	---	---	---	---	3210	7400	7460	12600	14100	4730
17	3590	3700	---	---	---	---	2860	7180	9020	11600	13600	4060
18	3700	---	---	---	---	---	2770	7500	10700	10700	13400	3790
19	4090	---	---	---	---	---	2540	8350	13000	10900	11800	3510
20	3990	---	---	---	---	---	2380	9940	13700	12100	11000	3700
21	3920	---	---	---	---	---	2540	10400	14200	12100	10200	16100
22	4410	---	---	---	---	---	2820	9010	14500	11600	10100	12800
23	4480	---	---	---	---	---	3140	8020	15200	11600	8320	13500
24	4130	---	---	---	---	---	3120	8220	15700	12000	7410	24000
25	18000	---	---	---	---	---	3300	9140	15000	11400	7270	13500
26	30000	---	---	---	---	---	5180	10000	14800	10100	7410	8120
27	15300	---	---	---	---	---	4810	9070	14600	9760	9310	9290
28	10700	---	---	---	---	---	4180	8040	12500	11600	10100	8430
29	7950	---	---	---	---	1580	4100	8030	12400	13400	8000	6250
30	6430	---	---	---	---	2180	5070	7480	11700	11500	7350	5510
31	5660	---	---	---	---	1820	---	7420	---	9910	6930	---
TOTAL	219440	---	---	---	---	---	92450	230560	326700	343350	317700	233740
MEAN	7079	---	---	---	---	---	3082	7437	10890	11080	10250	7791
MAX	30000	---	---	---	---	---	5180	10400	15700	13400	14100	24000
MIN	3520	---	---	---	---	---	1480	5130	6380	9700	6930	3510
AC-FT	435300	---	---	---	---	---	183400	457300	648000	681000	630200	463600
CFSM	9.50	---	---	---	---	---	4.14	9.98	14.6	14.9	13.8	10.5
IN.	10.96	---	---	---	---	---	4.62	11.51	16.31	17.14	15.86	11.67

15015595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2003 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April 2003 to current year.

INSTRUMENTATION.--Digital water-temperature recorder with 15-minute recording interval.

REMARKS.--No record from November 5 - March 31, due to probe out of water. Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on March 31 and July 14. No variation was found in the temperature cross sections. No variation was found between mean stream temperature and sensor temperature. Records good while probe was submerged.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 11.0°C, July 9, 23-24, 2004; minimum recorded, 0.5°C December 22, January 14-15, 2004; 0.0°C likely during period of missing record in winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 11.0°C, July 9, 23-24; minimum recorded, 0.5°C December 22, January 14-15, 0.0°C likely during period of missing record in winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Loca- tion in X-sect. looking dwnstrm ft from bank (00009)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd std units (00400)	Temper- ature, water, deg C (00010)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
MAR								
31...	1800	38.0	150	7.7	4.0	763	12.9	98
31...	1801	113	150	7.7	4.0	763	12.9	98
31...	1802	188	150	7.7	4.0	763	12.9	98
31...	1803	263	151	7.7	4.0	763	12.9	98
JUL								
14...	1817	25.0	72	7.9	9.0	755	11.3	99
14...	1818	85.0	72	7.8	9.0	755	11.1	97
14...	1819	145	71	7.7	9.0	755	11.1	97
14...	1820	205	72	7.7	9.0	755	11.1	97
14...	1821	270	72	7.7	9.0	755	11.1	97

Date	Time	Medium code	Sample type	Gage height, feet (00065)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Stream width, feet (00004)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)
OCT													
09...	1600	9	9	23.76	5720	10	275	745	11.8	98	7.9	95	--
MAR													
31...	1730	9	9	21.64	1740	10	300	763	12.9	98	7.7	150	3.5
JUL													
14...	1800	9	9	25.65	11100	10	285	755	11.1	97	7.7	72	18.5
SEP													
23...	1330	9	9	26.14	11500	10	255	755	--	--	7.8	74	8.5

Date	Time	Hard- ness, water, mg/L as CaCO3 (00010)	Calcium water, recovery fltrd, mg/L (00915)	Calcium water unfltrd recovery -able, mg/L (00916)	Magnes- ium, water, recovery fltrd, mg/L (00925)	Magnes- ium, water, recovery -able, mg/L (00927)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
OCT													
09...	6.5	42	14.5	--	1.33	--	.78	1.47	30	36	.28	<.2	3.98
MAR													
31...	4.0	71	24.5	23.3	2.33	2.22	1.18	2.87	48	59	.78	<.2	5.94
JUL													
14...	9.0	32	11.4	13.4	.802	2.59	.72	.90	23	28	E.18	<.2	2.60
SEP													
23...	6.5	34	11.8	--	1.01	--	.79	1.01	26	32	.21	<.2	3.37

1501595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Strontium, water, unfltrd recover- able, ug/L (01082)	Thallium, water, fltrd, ug/L (01057)	Thallium, water, unfltrd ug/L (01059)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover- able, ug/L (01092)	Uranium natural water, fltrd, ug/L (22703)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)	Sampler type, code (84164)
OCT 09...	--	--	--	--	--	--	--	24	371	3054
MAR 31...	122	<.04	<.2	.5	6.2	3	.27	3	14	3044
JUL 14...	69.2	<.04	<.2	.2	1.0	40	.09	209	6260	3054
SEP 23...	--	--	--	--	--	--	--	576	17900	3054

1501595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL—Continued

TEMPERATURE WATER, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.0	5.5	6.5	3.0	2.0	2.5	---	---	---	---	---	---
2	7.0	5.5	6.5	3.0	2.5	2.5	---	---	---	---	---	---
3	7.0	5.5	6.0	2.5	2.0	2.0	---	---	---	---	---	---
4	7.0	5.5	6.0	2.0	1.5	1.5	---	---	---	---	---	---
5	6.5	5.5	6.0	---	---	---	---	---	---	---	---	---
6	6.5	6.0	6.0	---	---	---	---	---	---	---	---	---
7	6.5	5.5	6.0	---	---	---	---	---	---	---	---	---
8	6.5	5.5	6.0	---	---	---	---	---	---	---	---	---
9	6.5	6.0	6.0	---	---	---	---	---	---	---	---	---
10	6.5	5.5	6.0	---	---	---	---	---	---	---	---	---
11	6.0	5.0	5.5	---	---	---	---	---	---	---	---	---
12	6.5	5.0	5.5	---	---	---	---	---	---	---	---	---
13	6.0	5.0	5.5	---	---	---	---	---	---	---	---	---
14	6.5	5.5	6.0	---	---	---	---	---	---	---	---	---
15	5.5	4.5	5.0	---	---	---	---	---	---	---	---	---
16	5.5	5.0	5.0	---	---	---	---	---	---	---	---	---
17	6.0	5.5	5.5	---	---	---	---	---	---	---	---	---
18	6.0	5.5	6.0	---	---	---	---	---	---	---	---	---
19	6.0	5.5	6.0	---	---	---	---	---	---	---	---	---
20	6.0	5.0	5.5	---	---	---	---	---	---	---	---	---
21	6.0	5.0	5.5	---	---	---	---	---	---	---	---	---
22	6.0	5.5	5.5	---	---	---	---	---	---	---	---	---
23	6.0	5.0	5.5	---	---	---	---	---	---	---	---	---
24	5.5	5.0	5.0	---	---	---	---	---	---	---	---	---
25	5.5	5.0	5.0	---	---	---	---	---	---	---	---	---
26	5.5	5.0	5.5	---	---	---	---	---	---	---	---	---
27	5.0	4.5	5.0	---	---	---	---	---	---	---	---	---
28	5.0	4.0	4.5	---	---	---	---	---	---	---	---	---
29	4.0	2.5	3.5	---	---	---	---	---	---	---	---	---
30	3.0	2.0	2.5	---	---	---	---	---	---	---	---	---
31	3.0	2.0	2.5	---	---	---	---	---	---	---	---	---
MONTH	7.0	2.0	5.4	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	4.5	2.5	3.5	5.5	3.5	4.5
2	---	---	---	---	---	---	3.5	3.0	3.0	6.0	3.5	4.5
3	---	---	---	---	---	---	4.0	2.5	3.5	6.0	3.5	5.0
4	---	---	---	---	---	---	5.0	3.0	4.0	7.0	3.5	5.0
5	---	---	---	---	---	---	5.0	2.5	3.5	6.5	3.0	5.0
6	---	---	---	---	---	---	5.5	2.5	4.0	7.0	3.0	5.0
7	---	---	---	---	---	---	5.0	3.5	4.5	7.5	4.0	5.5
8	---	---	---	---	---	---	6.5	3.5	4.5	7.0	4.5	6.0
9	---	---	---	---	---	---	5.0	3.0	4.0	6.0	4.5	5.0
10	---	---	---	---	---	---	4.5	3.5	4.0	7.5	4.5	6.0
11	---	---	---	---	---	---	5.5	3.0	4.0	8.0	4.0	6.0
12	---	---	---	---	---	---	4.0	2.5	3.0	8.0	4.0	6.0
13	---	---	---	---	---	---	5.0	3.0	3.5	8.5	4.0	6.5
14	---	---	---	---	---	---	6.0	2.5	4.0	7.5	4.0	6.0
15	---	---	---	---	---	---	5.0	2.0	3.5	8.5	4.0	6.0
16	---	---	---	---	---	---	5.0	2.0	3.5	7.5	4.5	6.0
17	---	---	---	---	---	---	5.0	3.5	4.5	8.5	4.0	6.5
18	---	---	---	---	---	---	6.0	3.5	4.5	9.0	4.5	6.5
19	---	---	---	---	---	---	6.5	3.0	4.5	9.0	4.5	6.5
20	---	---	---	---	---	---	7.0	3.0	5.0	8.5	4.5	6.5
21	---	---	---	---	---	---	7.0	3.5	5.0	8.0	4.0	6.0
22	---	---	---	---	---	---	5.5	3.5	4.0	8.5	4.0	6.0
23	---	---	---	---	---	---	5.5	3.5	4.5	9.0	5.0	7.0
24	---	---	---	---	---	---	4.5	3.5	4.0	7.5	5.0	6.0
25	---	---	---	---	---	---	4.0	3.5	4.0	7.5	5.5	6.5
26	---	---	---	---	---	---	5.0	3.0	4.0	7.0	5.0	6.0
27	---	---	---	---	---	---	7.0	3.5	5.0	8.0	4.5	6.0
28	---	---	---	---	---	---	7.0	3.5	5.5	8.5	5.0	6.5
29	---	---	---	---	---	---	7.5	3.5	5.5	7.5	5.0	6.5
30	---	---	---	---	---	---	7.5	3.5	5.5	8.0	5.5	6.5
31	---	---	---	---	---	---	---	---	---	7.5	5.0	6.5
MONTH	---	---	---	---	---	---	7.5	2.0	4.2	9.0	3.0	5.9

SOUTHEAST ALASKA

1501595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL—Continued

TEMPERATURE WATER, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.0	5.5	6.5	9.0	6.5	7.5	8.5	6.0	7.5	8.0	7.0	7.5
2	8.5	5.5	7.0	8.0	6.5	7.0	8.0	6.5	7.0	8.0	6.5	7.0
3	9.5	5.0	7.5	10.0	6.0	8.0	8.5	6.5	7.5	7.5	7.0	7.0
4	8.0	5.5	7.0	8.5	6.0	7.5	9.0	7.0	7.5	7.5	6.0	7.0
5	8.0	6.0	7.0	7.5	6.5	7.0	8.5	7.0	7.5	8.0	6.5	7.0
6	8.5	5.5	6.5	7.5	6.5	7.0	9.0	7.0	7.5	8.5	6.5	7.5
7	10.0	5.5	7.5	6.5	5.5	6.0	9.0	7.0	7.5	7.5	6.5	7.0
8	9.5	5.5	7.5	9.0	6.0	7.5	9.0	6.5	8.0	8.0	6.0	7.0
9	7.5	5.5	6.5	11.0	6.5	8.5	9.0	7.0	8.0	7.5	6.0	6.5
10	7.5	5.0	6.5	9.0	7.0	8.0	9.0	7.0	8.0	7.5	6.5	7.0
11	8.0	5.5	7.0	9.5	6.5	7.5	8.5	7.0	7.5	7.5	7.0	7.0
12	7.5	5.5	6.5	9.0	6.5	7.5	8.5	7.0	7.5	7.0	6.5	7.0
13	7.0	6.0	6.5	10.5	6.5	8.5	8.5	7.5	7.5	7.0	6.5	7.0
14	8.0	5.5	6.5	9.5	6.5	8.0	8.5	7.5	8.0	7.0	6.5	7.0
15	7.5	6.0	6.5	10.5	6.5	8.5	9.5	7.0	8.0	7.5	6.5	7.0
16	10.5	5.5	8.0	9.0	7.0	8.0	9.0	6.5	8.0	7.5	6.5	7.0
17	10.5	6.0	8.5	9.5	7.0	8.0	10.0	6.5	8.0	7.5	6.5	7.0
18	10.5	6.5	8.5	10.5	6.5	8.5	10.0	6.5	8.0	7.5	7.0	7.0
19	10.5	6.0	8.0	9.0	7.0	7.5	8.5	6.5	7.5	7.5	6.5	7.0
20	10.0	6.0	8.0	8.5	7.0	7.5	8.5	6.5	7.5	7.5	6.5	7.0
21	10.0	6.0	8.0	10.0	7.0	8.0	9.0	6.5	7.5	7.0	6.5	6.5
22	10.0	6.0	8.0	10.5	6.0	8.0	9.5	6.5	7.5	6.5	6.0	6.0
23	10.0	6.0	8.0	11.0	6.5	8.5	9.0	5.5	7.0	6.5	6.0	6.0
24	10.5	6.0	8.0	11.0	6.5	8.5	9.0	6.0	7.5	6.5	6.5	6.5
25	10.0	6.0	8.0	9.0	7.0	8.0	9.0	6.0	7.5	7.0	6.0	6.5
26	10.5	6.5	8.5	9.5	6.5	8.0	8.5	6.5	7.0	7.0	5.5	6.5
27	8.5	6.5	7.5	10.5	6.5	8.5	7.5	6.5	7.0	7.5	6.5	7.0
28	9.5	6.0	7.5	9.0	7.5	7.5	8.0	6.0	7.0	7.0	5.5	6.5
29	9.5	6.5	7.5	9.0	7.0	8.0	8.0	6.5	7.0	7.0	5.5	6.5
30	7.5	6.5	7.0	9.0	6.5	7.5	8.0	6.5	7.0	8.0	6.5	7.0
31	---	---	---	9.0	6.0	7.5	8.0	6.5	7.0	---	---	---
MONTH	10.5	5.0	7.4	11.0	5.5	7.8	10.0	5.5	7.5	8.5	5.5	6.8

15019990 TYEE LAKE OUTLET NEAR WRANGELL

LOCATION.--Lat 56°12'00", long 131°30'24", in SE¹/₄ SW¹/₄ sec. 28, T. 65 S., R. 90 E. (Bradfield Canal A-5 quad), Hydrologic Unit 19010101, in Tongass National Forest, on left bank at outlet of Tyee Lake, 1.5 mi south of Bradfield Canal and 37 mi southeast of Wrangell, Alaska.

DRAINAGE AREA.--14.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1979 to September 1981 and June 1992 to current year. Records for November 1922 to September 1927 and August 1963 to October 1969, published as Tyee Creek at Mouth near Wrangell (station 15020100) are not equivalent owing to inflow between sites.

GAGE.--Water-stage recorder. Elevation of gage is 1,370 ft above sea level from topographic map. Prior to June 9, 1992, at site 500 ft downstream at datum 13.66 ft lower.

REMARKS.--No estimated daily discharges. Records fair, except for discharges below 10 ft³/s, which are poor. Water for power generation is diverted from Tyee Lake and discharged into Bradfield Canal. Diversion to hydropower plant began February 1984, and is not included in the discharge records.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	165	0.00	0.00	5.7	0.00	0.00	104	315	232	55	1.8
2	102	119	0.00	0.00	3.4	0.00	0.00	155	309	216	65	1.0
3	80	83	0.00	0.00	1.7	0.00	0.00	200	302	201	85	1.7
4	65	56	0.00	0.00	0.60	0.00	0.00	228	298	180	89	18
5	55	36	0.00	0.00	0.00	0.00	0.00	227	343	169	85	36
6	68	21	0.00	0.00	0.00	0.00	0.00	207	377	226	87	39
7	95	12	0.00	0.00	0.00	0.00	0.00	191	389	231	83	38
8	107	6.9	0.00	0.00	0.00	0.00	0.00	180	428	213	71	34
9	97	4.0	0.00	0.00	0.00	0.00	0.00	171	437	189	57	26
10	98	2.1	0.00	0.00	0.00	0.00	0.00	165	405	173	47	19
11	94	0.79	0.00	0.00	0.00	0.00	0.00	167	364	158	39	15
12	79	13	0.00	0.00	0.00	0.00	0.00	168	349	138	29	16
13	67	310	0.00	0.00	0.00	0.00	0.00	178	361	118	21	91
14	67	370	0.00	0.00	0.00	0.00	0.00	197	358	106	16	149
15	60	290	0.00	8.0	0.00	0.00	0.00	217	329	98	14	147
16	51	223	0.00	15	0.00	0.00	0.00	227	304	106	13	126
17	54	167	0.00	21	0.00	0.00	0.00	229	300	104	11	100
18	104	127	0.00	46	0.00	0.00	0.00	236	315	90	8.9	77
19	160	90	0.00	58	0.00	0.00	0.00	255	351	79	6.9	59
20	150	60	0.00	59	0.00	0.00	0.00	297	379	77	6.1	54
21	159	38	0.00	66	0.00	0.00	0.00	335	393	77	5.2	247
22	193	23	0.00	88	0.00	0.00	0.00	339	403	73	4.0	311
23	218	15	0.00	103	0.00	0.00	0.00	321	407	65	2.5	403
24	211	9.4	0.00	93	0.00	0.00	0.58	315	410	62	1.2	669
25	447	6.1	0.00	75	0.00	0.00	2.1	346	402	68	0.47	583
26	789	3.5	0.00	57	0.00	0.00	10	383	382	68	0.11	435
27	624	2.3	0.00	40	0.00	0.00	23	386	359	58	0.93	360
28	503	0.90	0.00	28	0.00	0.00	31	359	323	60	2.9	305
29	388	0.00	0.00	19	0.00	0.00	39	338	284	84	2.7	237
30	292	0.00	0.00	13	---	0.00	57	328	255	81	2.6	182
31	221	---	0.00	8.9	---	0.00	---	324	---	67	2.7	---
TOTAL	5826	2253.99	0.00	797.90	11.40	0.00	162.68	7773	10631	3867	914.21	4780.5
MEAN	188	75.1	0.00	25.7	0.39	0.00	5.42	251	354	125	29.5	159
MAX	789	370	0.00	103	5.7	0.00	57	386	437	232	89	669
MIN	51	0.00	0.00	0.00	0.00	0.00	0.00	104	255	58	0.11	1.0
AC-FT	11560	4470	0.00	1580	23	0.00	323	15420	21090	7670	1810	9480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)#

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	155	51.0	12.8	8.15	0.23	0.00	3.10	85.0	272	178	106	187	
MAX	264	108	64.4	61.4	2.08	0.00	24.8	251	367	305	216	298	
(WY)	2000	1993	2003	2003	2003	1993	1993	2004	1999	1999	2000	2001	
MIN	66.1	5.10	0.00	0.00	0.00	0.00	0.00	0.00	176	55.2	19.2	41.5	
(WY)	2003	1997	1995	1993	1993	1993	1993	1994	2002	1994	1998	2003	1993

Record for 1980 and 1981 water years, prior to diversion of 1984, not included. See Period of Record.

SOUTHEAST ALASKA

15019990 TYEE LAKE OUTLET NEAR WRANGELL—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004#	
ANNUAL TOTAL	31967.40		37017.68			
ANNUAL MEAN	87.6		101		87.9	
HIGHEST ANNUAL MEAN					113	
LOWEST ANNUAL MEAN					56.5	
HIGHEST DAILY MEAN	789	Oct 26	789	Oct 26	789	Oct 26 2003
LOWEST DAILY MEAN	a0.00	Feb 10	b0.00	Nov 29	c0.00	Dec 30 1992
ANNUAL SEVEN-DAY MINIMUM	0.00	Feb 10	0.00	Nov 29	0.00	Dec 30 1992
MAXIMUM PEAK FLOW			d856	Oct 26	d975	Oct 26 1993
MAXIMUM PEAK STAGE			27.43	Oct 26	28.62	Oct 26 1993
INSTANTANEOUS LOW FLOW			f		f	
ANNUAL RUNOFF (AC-FT)	63410		73420		63670	
10 PERCENT EXCEEDS	290		336		280	
50 PERCENT EXCEEDS	21		30		20	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

PRIOR TO DIVERSION OF 1984

SUMMARY STATISTICS	WATER YEARS 1980 - 1981	
ANNUAL MEAN	179	
HIGHEST ANNUAL MEAN	213	
LOWEST ANNUAL MEAN	146	1980
HIGHEST DAILY MEAN	1690	Oct. 7 1980
LOWEST DAILY MEAN	g1.4	Apr. 2 1980
ANNUAL SEVEN-DAY MINIMUM	2.0	Mar.31 1980
INSTANTANEOUS PEAK FLOW	1910	Oct. 7 1980
INSTANTANEOUS PEAK STAGE	12.72	Oct. 7 1980
ANNUAL RUNOFF (AC-FT)	130000	
10 PERCENT EXCEEDS	457	
50 PERCENT EXCEEDS	86	
90 PERCENT EXCEEDS	11	

- # Record for 1980 and 1981 water years, prior to diversion of 1984, not included. See Period of Record.
a Feb 10 to May 13 and Nov 29 to Dec 31.
b Nov 29 to Jan. 14, Feb. 5 to Apr. 23
c No flow many days during winter months most years.
d From rating extended above 400 cfs.
f Not determined, see lowest daily mean
g April 2-3 1980.

15019990 TYEE LAKE OUTLET NEAR WRANGELL—Continued

LAKE-STAGE RECORDS

PERIOD OF RECORD.-- June of 1992 to Sept.2002 (fragmentary) during many winter months when lake level was below the point of Zero flow at the outlet. 2003 to 2004.

GAGE.-- Water-stage recorder. Datum of gage is mean low low water (GPS survey of Aug.21,2003 by USGS using NADD 83) lake outlet at a datum of 1,368.80 ft. above mean low low water at the point of zero flow.

REMARKS.-- Lake outlet consists of Large boulders and log jams with uncontrolled spillway at elevation 1368.80 ft. Waterfor power generation is diverted from Tyee lake and discharged into Bradfield Canal. Diversion to power plant began in February 1984.

EXTREMES FOR PERIOD OF RECORD.-- Maximum elevation,1983.02 ft. Oct.26,1993;minimum observed unknown until 2003 wy

EXTREMES FOR CURRENT YEAR.-- Maximum elevation,1381.28 ft.October 25 ,2003; minimum 1363.82 ft.March 28,2004

ELEVATION OF RESERVOIR WATER SURFACE ABOVE DATUM, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1373.41	1373.60	1368.60	1366.75	1369.86	1366.99	1364.60	1372.57	1375.77	1374.63	1371.59	1369.34
2	1372.83	1372.84	1368.54	1366.50	1369.59	1366.82	1364.50	1373.45	1375.69	1374.39	1371.82	1369.17
3	1372.34	1372.18	1368.42	1366.23	1369.31	1366.66	1364.55	1374.15	1375.59	1374.17	1372.22	1369.31
4	1371.95	1371.63	1368.18	1365.96	1369.05	1366.50	1364.71	1374.57	1375.55	1373.84	1372.29	1370.57
5	1371.68	1371.15	1367.96	1365.67	1368.85	1366.38	1364.74	1374.55	1376.13	1373.68	1372.21	1371.16
6	1372.02	1370.73	1367.70	1365.36	1368.68	1366.23	1364.70	1374.26	1376.57	1374.54	1372.25	1371.24
7	1372.68	1370.33	1367.43	1365.08	1368.49	1366.19	1364.71	1374.02	1376.71	1374.61	1372.18	1371.20
8	1372.95	1369.97	1367.14	1364.88	1368.35	1366.34	1364.85	1373.84	1377.19	1374.35	1371.93	1371.11
9	1372.74	1369.66	1366.83	1364.79	1368.34	1366.83	1365.00	1373.70	1377.30	1373.98	1371.65	1370.88
10	1372.74	1369.38	1366.51	1365.05	1368.38	1366.87	1365.18	1373.61	1376.91	1373.74	1371.41	1370.66
11	1372.65	1369.11	1366.21	1365.18	1368.33	1366.84	1365.71	1373.64	1376.39	1373.49	1371.23	1370.50
12	1372.31	1369.92	1365.96	1365.23	1368.24	1366.76	1366.51	1373.65	1376.20	1373.16	1370.97	1370.53
13	1372.01	1375.60	1365.67	1365.93	1368.17	1366.64	1367.07	1373.81	1376.36	1372.83	1370.73	1372.28
14	1372.00	1376.48	1365.36	1367.73	1368.16	1366.53	1367.40	1374.11	1376.32	1372.61	1370.53	1373.36
15	1371.81	1375.44	1365.12	1370.02	1368.09	1366.45	1367.67	1374.40	1375.95	1372.46	1370.44	1373.32
16	1371.57	1374.48	1364.98	1370.48	1367.99	1366.35	1367.82	1374.55	1375.62	1372.61	1370.39	1372.97
17	1371.67	1373.64	1364.79	1370.74	1367.87	1366.16	1367.94	1374.59	1375.57	1372.57	1370.28	1372.49
18	1372.88	1372.98	1364.61	1371.38	1367.85	1365.94	1368.04	1374.68	1375.77	1372.30	1370.13	1372.06
19	1374.03	1372.31	1364.89	1371.67	1367.86	1365.73	1368.04	1374.95	1376.24	1372.10	1369.97	1371.68
20	1373.86	1371.70	1365.19	1371.68	1367.88	1365.53	1368.03	1375.53	1376.58	1372.05	1369.90	1371.56
21	1374.00	1371.19	1365.20	1371.83	1367.99	1365.32	1368.13	1376.03	1376.77	1372.06	1369.81	1374.81
22	1374.61	1370.81	1366.04	1372.28	1368.01	1365.10	1368.35	1376.08	1376.89	1371.98	1369.66	1375.72
23	1375.02	1370.48	1367.48	1372.56	1367.95	1364.81	1368.82	1375.85	1376.94	1371.81	1369.45	1376.88
24	1374.91	1370.17	1367.96	1372.37	1367.87	1364.53	1369.04	1375.76	1376.97	1371.75	1369.21	1379.91
25	1378.09	1369.89	1368.13	1372.03	1367.75	1364.30	1369.38	1376.17	1376.87	1371.88	1369.00	1378.97
26	1381.28	1369.60	1368.15	1371.64	1367.61	1364.07	1370.20	1376.64	1376.63	1371.88	1368.83	1377.27
27	1379.42	1369.41	1367.98	1371.26	1367.46	1363.89	1370.80	1376.68	1376.33	1371.67	1369.11	1376.35
28	1378.07	1369.13	1367.75	1370.94	1367.31	1363.82	1371.03	1376.34	1375.87	1371.71	1369.51	1375.63
29	1376.70	1368.88	1367.48	1370.68	1367.16	1364.02	1371.23	1376.07	1375.35	1372.20	1369.49	1374.69
30	1375.46	1368.67	1367.23	1370.40	---	1364.63	1371.64	1375.94	1374.95	1372.14	1369.47	1373.87
31	1374.46	---	1366.99	1370.13	---	1364.71	---	1375.89	---	1371.86	1369.48	---
MEAN	1373.94	1371.38	1366.79	1368.79	1368.22	1365.74	1367.35	1374.84	1376.27	1372.87	1370.55	1372.98
MAX	1381.28	1376.48	1368.60	1372.56	1369.86	1366.99	1371.64	1376.68	1377.30	1374.63	1372.29	1379.91
MIN	1371.57	1368.67	1364.61	1364.79	1367.16	1363.82	1364.50	1372.57	1374.95	1371.67	1368.83	1369.17

15022000 HARDING RIVER NEAR WRANGELL

LOCATION.--Lat 56°12'48", long 131°38'12", in SW¹/₄ SW¹/₄ sec. 22, T. 65 S., R. 89 E. (Bradfield Canal A-5 quad),
 Hydrologic Unit 19010101, in Tongass National Forest, on right bank 1 mi upstream from mouth on north shore of
 Bradfield Canal, 4 mi downstream from Fall Lake, and 34 mi southeast of Wrangell.

DRAINAGE AREA.--67.4 mi².

PERIOD OF RECORD.--August 1951 to April 30, 2004.(discontinued)

REVISED RECORDS.--WSP 1640: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above sea level, by barometer. Prior to September 30, 1960,
 at site 300 ft upstream at datum 0.12 ft lower. October 1, 1960, to August 23, 1975, at prior site and present
 datum.

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

EXTREMES FOR CURRENT PERIOD.-- Maximum discharge for period October 2003 through April 2004, 11,300 ft³/s, Oct. 26,
 gage height 13.57, minimum not determined, minimum daily mean discharge 70 ft³/s January 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	531	310	345	e150	e76	e150	348	---	---	---	---	---
2	481	263	651	e120	e80	e140	339	---	---	---	---	---
3	439	227	436	e90	e85	e130	492	---	---	---	---	---
4	429	e190	270	e85	e90	e120	658	---	---	---	---	---
5	476	e180	228	e80	e94	e110	480	---	---	---	---	---
6	690	e170	192	e80	e100	166	386	---	---	---	---	---
7	1080	e160	181	e85	e400	372	381	---	---	---	---	---
8	973	e150	e170	e90	e500	725	464	---	---	---	---	---
9	631	e140	e160	e97	e520	860	486	---	---	---	---	---
10	769	e130	e150	e200	e400	454	587	---	---	---	---	---
11	587	e190	e145	e390	e310	419	927	---	---	---	---	---
12	402	1480	e160	e600	e290	356	1320	---	---	---	---	---
13	365	4470	e190	e900	e270	269	1010	---	---	---	---	---
14	677	1390	e240	e1400	e250	237	787	---	---	---	---	---
15	518	666	e300	e1200	e240	272	671	---	---	---	---	---
16	385	479	e330	724	e230	307	518	---	---	---	---	---
17	501	388	e320	868	214	291	460	---	---	---	---	---
18	1180	328	384	1120	298	213	457	---	---	---	---	---
19	1670	266	1430	905	480	e170	395	---	---	---	---	---
20	834	216	1200	702	510	e150	364	---	---	---	---	---
21	1120	e170	688	889	574	e140	411	---	---	---	---	---
22	1020	e140	2080	1250	410	e130	515	---	---	---	---	---
23	1150	e120	2140	1140	332	e120	715	---	---	---	---	---
24	914	e110	987	642	317	e178	725	---	---	---	---	---
25	6780	e105	770	403	258	215	813	---	---	---	---	---
26	8100	e101	515	e200	221	223	1310	---	---	---	---	---
27	1930	e100	364	e73	196	255	932	---	---	---	---	---
28	1610	e100	276	e70	181	395	670	---	---	---	---	---
29	763	e110	237	e71	e160	690	622	---	---	---	---	---
30	495	e190	213	e72	---	913	880	---	---	---	---	---
31	379	---	191	e73	---	490	---	---	---	---	---	---
TOTAL	37879	13039	15943	14769	8086	9660	19123	---	---	---	---	---
MEAN	1222	435	514	476	279	312	637	---	---	---	---	---
MAX	8100	4470	2140	1400	574	913	1320	---	---	---	---	---
MIN	365	100	145	70	76	110	339	---	---	---	---	---
MED	690	185	300	200	258	237	553	---	---	---	---	---
AC-FT	75130	25860	31620	29290	16040	19160	37930	---	---	---	---	---
CFSM	18.1	6.45	7.63	7.07	4.14	4.62	9.46	---	---	---	---	---
IN.	20.91	7.20	8.80	8.15	4.46	5.33	10.55	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)#

MEAN	1077	499	345	263	236	204	366	918	1385	1340	1137	1161
MAX	2152	1252	1065	819	655	510	733	1357	1896	1878	1871	2039
(WY)	1962	1970	1990	1981	1954	1986	1994	1956	1996	1972	2002	2001
MIN	610	118	102	50.6	46.7	54.8	90.0	624	960	861	601	507
(WY)	1970	1986	1984	1969	1969	1969	1954	1977	1981	1995	1993	1965

See Period of Record; partial years used in monthly statistics
 e Estimated

15022000 HARDING RIVER NEAR WRANGELL—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		WATER YEARS 1951 - 2004#	
ANNUAL TOTAL	287791			
ANNUAL MEAN	788		747	
HIGHEST ANNUAL MEAN			921	1992
LOWEST ANNUAL MEAN			558	1995
HIGHEST DAILY MEAN	8100	Oct 26	11400	Oct 14 1961
LOWEST DAILY MEAN	94	Mar 12	a35	Jan 23 1969
ANNUAL SEVEN-DAY MINIMUM	107	Nov 23	35	Jan 23 1969
MAXIMUM PEAK FLOW	b11300	Oct 26	b15300	Oct 26 1993
MAXIMUM PEAK STAGE	13.57	Oct 26	c16.22	Oct 14 1961
INSTANTANEOUS LOW FLOW	d		35	Jan 23 1969
ANNUAL RUNOFF (AC-FT)	570800		541100	
ANNUAL RUNOFF (CFSM)	11.7		11.1	
ANNUAL RUNOFF (INCHES)	158.84		150.56	
10 PERCENT EXCEEDS	1610		1610	
50 PERCENT EXCEEDS	504		544	
90 PERCENT EXCEEDS	140		110	

See Period of Record; partial years used in monthly statistics

a From Jan. 23 to Feb. 11, 1969

b From rating curve extended above 5,000 ft³/s on basis of slope-area measurement at gage height, 13.90 ft

c At site then in use

d Not determined, see lowest daily mean

15024800 STIKINE RIVER NEAR WRANGELL
(International gaging station)

LOCATION.--Lat 56°42'29", long 132°07'49", in SE¹/₄ SE¹/₄ sec. 35, T. 59 S., R. 84 E. (Petersburg C-1 quad), Hydrologic Unit 19010201, on right bank about 10 mi upstream from mouth near Point Rothsay, 11 mi west of Alaska-British Columbia boundary, and 18 mi northeast of Wrangell.

DRAINAGE AREA.--19,920 mi², approximately.

PERIOD OF RECORD.--July 1976 to current year.

REVISED RECORDS.--WDR AK-78-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 25 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges during periods of ice effect, Nov. 26 to Apr. 18, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83400	43200	e9800	e7300	e6100	e7600	e13000	43400	105000	171000	102000	63300
2	78600	38500	e9500	e7200	e6000	e7500	e12500	52600	98400	159000	97500	63400
3	74000	e31000	e9300	e7000	e5800	e7400	e16100	59000	92100	153000	99000	65600
4	70600	e27000	e9100	e6900	e5700	e7200	e18300	63500	89100	147000	99400	86500
5	70200	e23000	e9000	e6800	e5700	e7000	e17900	67100	96700	140000	103000	78200
6	69100	e20000	e8800	e6700	e5700	e7000	e16600	62800	115000	142000	109000	64200
7	77100	e18000	e8700	e6700	e5800	e7000	e16300	56200	137000	144000	107000	58500
8	71100	e16000	e8600	e6600	e5900	e7000	e16800	55500	168000	139000	102000	53300
9	61700	e16000	e8500	e6600	e6100	e7200	e17800	58800	180000	152000	100000	46400
10	57900	e17000	e8400	e6500	e6300	e7400	e17900	60600	168000	159000	105000	40300
11	51100	e18000	e8300	e6700	e6600	e7700	21000	59900	147000	153000	116000	36900
12	45000	e20000	e8300	e7000	e6800	e7900	24900	59300	131000	140000	114000	36600
13	40900	e45000	e8300	e7200	e6900	e8000	26200	62400	126000	140000	97900	43600
14	41800	e34000	e8400	e7500	e7000	e7800	27000	70400	126000	148000	98900	53700
15	38700	e28000	e8400	e7700	e7000	e7600	26600	78200	122000	150000	111000	51100
16	34700	e24000	e8500	e7800	e7200	e7600	e23500	82900	118000	151000	125000	44000
17	32500	e20000	e8800	e7800	e7300	e7600	e22000	86400	121000	145000	131000	38700
18	34500	e18000	e9000	e7800	e7400	e7600	e21500	91200	133000	134000	132000	35300
19	42700	e17000	e9200	e7500	e7500	e7700	e20900	97500	152000	131000	128000	32900
20	39600	e15000	e9500	e7200	e7600	e7800	e20100	110000	171000	133000	113000	33600
21	35900	e14000	e10000	e7200	e7800	e8000	e20600	125000	184000	139000	100000	90300
22	37000	e13000	e11000	e7200	e8100	e8300	e21500	129000	192000	136000	94800	115000
23	38200	e13000	e12000	e7100	e8200	e8600	25300	119000	191000	136000	87800	102000
24	35800	e12000	e11000	e6800	e8400	e9400	26100	112000	197000	136000	72900	151000
25	78600	e12000	e10000	e6600	e8400	e12000	27600	117000	199000	133000	69000	134000
26	173000	e11000	e9700	e6500	e8300	e14000	34400	131000	193000	121000	68200	85000
27	176000	e11000	e9000	e6500	e8100	e14500	36700	140000	192000	109000	75100	78900
28	114000	e11000	e8300	e6200	e8000	e14500	35100	134000	180000	117000	90900	83900
29	82000	e10000	e8000	e6200	e7800	e14000	34300	121000	174000	135000	78700	64600
30	62600	e10000	e7600	e6200	---	e14000	36400	113000	179000	133000	68900	55000
31	51200	---	e7400	e6100	---	e13500	---	109000	---	112000	64500	---
TOTAL	1999500	605700	280400	215100	203500	280400	694900	2727700	4477300	4338000	3061500	1985800
MEAN	64500	20190	9045	6939	7017	9045	23160	87990	149200	139900	98760	66190
MAX	176000	45000	12000	7800	8400	14500	36700	140000	199000	171000	132000	151000
MIN	32500	10000	7400	6100	5700	7000	12500	43400	89100	109000	64500	32900
MED	57900	17500	8800	6900	7000	7700	21500	82900	150000	140000	100000	60900
AC-FT	3966000	1201000	556200	426700	403600	556200	1378000	5410000	8881000	8604000	6072000	3939000
CFSM	3.24	1.01	0.45	0.35	0.35	0.45	1.16	4.42	7.49	7.02	4.96	3.32
IN.	3.73	1.13	0.52	0.40	0.38	0.52	1.30	5.09	8.36	8.10	5.72	3.71

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2004, BY WATER YEAR (WY)#

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
MEAN	57330	24480	13970	11550	9172	9968	16730	66950	135200	134600	106900	80130																		
MAX	113300	58280	25780	39450	19080	42340	31960	119100	199900	163800	134200	128600																		
(WY)	1987	1979	1990	1981	1977	1992	1992	1993	1992	1985	1977	1981																		
MIN	30590	10010	5593	5958	5111	4719	7292	32260	103400	109100	76770	50760																		
(WY)	1986	1986	1997	1978	1999	1978	2002	1982	1978	1983	1995	1986																		

See Period of Record; partial years used in monthly statistics
e Estimated

15024800 STIKINE RIVER NEAR WRANGELL—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1976 - 2004#	
ANNUAL TOTAL	19451650		20869800			
ANNUAL MEAN	53290		57020		55760	
HIGHEST ANNUAL MEAN					72870	
LOWEST ANNUAL MEAN					42100	
HIGHEST DAILY MEAN	176000		199000		324000	
LOWEST DAILY MEAN	4500	Oct 27	a5700	Jun 25	4000	Sep 23 1994
ANNUAL SEVEN-DAY MINIMUM	4740	Mar 12	5800	Feb 4	4090	Feb 12 1988
MAXIMUM PEAK FLOW			b201000	Feb 2	351000	Mar 8 1999
MAXIMUM PEAK STAGE			b24.34	Jun 24	30.60	Sep 23 1994
ANNUAL RUNOFF (AC-FT)	38580000		41400000		40390000	
ANNUAL RUNOFF (CFSM)	2.68		2.86		2.80	
ANNUAL RUNOFF (INCHES)	36.33		38.97		38.03	
10 PERCENT EXCEEDS	127000		139000		136000	
50 PERCENT EXCEEDS	37000		35600		31900	
90 PERCENT EXCEEDS	7000		7000		7200	

a Feb. 4-6

b Jun. 24-25

See Period of Record; partial years used in monthly statistics

SOUTHEAST ALASKA

15041200 TAKU RIVER NEAR JUNEAU
(International gaging station)

LOCATION.--Lat 58°32'19", long 133°42'00", in NE¹/₄ NW¹/₄ sec. 33, T. 38 S., R. 71 E. (Taku River C-6 quad), Hydrologic Unit 19010301, City and Borough of Juneau, in Tongass National Forest, on left bank, 1.5 mi upstream from Wright River, and 31 mi northeast of Juneau.

DRAINAGE AREA.--6,600 mi², approximately.

WATER-DISCHARGE RECORDS

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

REVISED RECORD.--WDR AK-98-1, 1987-1997; WDR AK-00-1 1989-90 (M), 1992-95 (M).

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50,000 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 09	0145	59,300	39.86	July 01	1315	51,000	38.97
Jun 25	1630	*128,000	*45.07	July 14	1645	55,400	39.45

DISCHARGE, in CFS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20800	e7400	e3600	e2700	e1600	e2000	2600	11500	28400	50500	27000	15300
2	19200	e6800	e3500	e2600	e1600	e1900	2740	13700	26700	47700	23600	15300
3	17700	e6000	e3400	e2500	e1500	e1900	3240	15700	24800	47000	25500	19800
4	16900	e5100	e3300	e2400	e1500	e1900	3840	17600	24800	45800	27900	24600
5	17200	e4600	e3250	e2400	e1500	e1900	3940	17700	29100	41800	27400	22100
6	15400	e4300	e3200	e2300	e1500	e1800	3760	16200	37600	39200	29100	18800
7	14400	e4100	e3100	e2200	e1600	e1800	3640	16000	47000	39100	29300	15500
8	13200	e4000	e3100	e2200	e1700	e1900	3720	17800	55700	37000	29100	12700
9	11700	e4200	e3000	e2200	e1800	e1900	3880	19600	57200	37300	26900	11000
10	10700	e4700	e2900	e2200	e1900	e2000	3950	19600	47500	37000	27300	9900
11	9800	e5200	e2900	e2200	e1900	e2100	4170	18900	38200	36200	29300	9090
12	8920	e6000	e2900	e2100	e2000	e2100	4580	19300	32300	35200	28300	9150
13	8180	e7400	e3000	e2200	e2000	e2100	4810	21600	30300	39600	25300	10400
14	7670	e6700	e3000	e2300	e2100	e2000	5000	25200	33500	50400	25300	11200
15	7280	e6000	e3000	e2400	e2100	e2000	4920	28200	34700	40300	28300	10600
16	6840	e5600	e3100	e2300	e2100	e2000	4570	29500	33400	36500	30700	9790
17	6470	e5300	e3200	e2300	e2100	e2000	4370	30400	33200	35900	33900	8820
18	6290	e5000	e3200	e2200	e2170	e2000	4380	30700	35800	34400	36900	8030
19	6150	e4700	e3300	e2200	e2200	e1900	4450	31900	42900	33000	34200	7490
20	6150	e4500	e3400	e2200	e2300	e1900	4430	36400	47500	32500	29700	7430
21	5990	e4300	e3400	e2300	e2400	e2000	4600	41300	49200	33400	27500	17800
22	5830	e4200	e3500	e2300	e2500	e2000	4970	40100	48200	35700	26700	28000
23	5860	e4100	e3600	e2200	e2500	e2000	5120	37300	48000	38300	22600	24900
24	5810	e4100	e3500	e2100	e2500	2140	5140	38600	64100	36700	19100	33100
25	7760	e4000	e3400	e2000	e2400	2470	5660	42700	113000	32500	17900	29000
26	16800	e4000	e3200	e1900	e2300	2800	7510	46500	76800	28700	17100	20900
27	21700	e3900	e3100	e1800	e2300	2870	8630	43100	48800	26900	19800	24200
28	16000	e3800	e3000	e1700	e2200	2810	8860	38400	48100	32200	22400	25000
29	12400	e3800	e2800	e1700	e2100	2840	9120	36100	47000	40000	20900	20100
30	10200	e3700	e2700	e1700	---	2850	9540	36600	49100	37300	17300	17100
31	8480	---	e2800	e1600	---	2690	---	31300	---	32700	15900	---
TOTAL	347780	147500	98350	67400	58370	66570	150140	869500	1332900	1170800	802200	497100
MEAN	11220	4917	3173	2174	2013	2147	5005	28050	44430	37770	25880	16570
MAX	21700	7400	3600	2700	2500	2870	9540	46500	113000	50500	36900	33100
MIN	5810	3700	2700	1600	1500	1800	2600	11500	24800	26900	15900	7430
AC-FT	689800	292600	195100	133700	115800	132000	297800	1725000	2644000	2322000	1591000	986000
CFSM	1.70	0.74	0.48	0.33	0.30	0.33	0.76	4.25	6.73	5.72	3.92	2.51
IN.	1.96	0.83	0.55	0.38	0.33	0.38	0.85	4.90	7.51	6.60	4.52	2.80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)#

	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)
	11610	4740	3434	2282	1935	2480	4333	20040	34310	31980	26280	18980
	17250	8633	6613	4223	3682	10500	6815	33800	49280	41080	33330	26550
	1992	1994	2000	2000	1992	1992	1992	1993	1992	1992	2002	1994
	6265	2488	1256	1125	1041	1359	1870	9652	23170	25040	18610	11180
	1997	1997	1997	1988	1999	1991	2002	2001	1995	1996	1995	1992

See Period of Record; partial years used in monthly statistics
e Estimated

15041200 TAKU RIVER NEAR JUNEAU—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1988 - 2004#	
ANNUAL TOTAL	4260730		5608610			
ANNUAL MEAN	11670		15320		13600	
HIGHEST ANNUAL MEAN					16820	1992
LOWEST ANNUAL MEAN					10800	1996
HIGHEST DAILY MEAN	57700	Aug 10	113000	Jun 25	113000	Jun 25 2004
LOWEST DAILY MEAN	a1200	Mar 10	b1500	Feb 3	710	Feb 12 1988
ANNUAL SEVEN-DAY MINIMUM	1230	Mar 8	1540	Jan 31	721	Feb 8 1988
MAXIMUM PEAK FLOW			c128000	Jun 25	c128000	Jun 25 2004
MAXIMUM PEAK STAGE			45.07	Jun 25	45.07	Jun 25 2004
INSTANTANEOUS LOW FLOW			d		710	Feb 12 1989
ANNUAL RUNOFF (AC-FT)	8451000		11120000		9851000	
ANNUAL RUNOFF (CFSM)	1.77		2.32		2.06	
ANNUAL RUNOFF (INCHES)	24.02		31.61		27.99	
10 PERCENT EXCEEDS	28200		37800		33200	
50 PERCENT EXCEEDS	7250		6820		7280	
90 PERCENT EXCEEDS	1500		2000		1650	

See Period of Record; partial years used in monthly statistics

a Mar. 10 to 14

b Feb. 3-6

c Result of Tulsequah River glacier dam breakout

d Not determined see lowest daily mean

15041200 TAKU RIVER NEAR JUNEAU—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1999 to current year

INSTRUMENTATION.--Electronic water-temperature recorder set for 15-minute recording interval.

REMARKS.- Records good. Records represent water temperature at the sensor within 0.5°C. The outburst peak of the lake dammed by Tulsequah Glacier occurred on June 25, 2004.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 12.5°C, July 14, 1999 , July 20 and 21, 2001, July 9-10,12-13 and 18, 2003, and June 18 and July 16, 2004; minimum, 0.0°C, many days during most winters.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 12.5°C, June 18 and July 16, 2004; minimum, 0.0°C, many days during winter.

WATER TEMPERATURE, in DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.5	5.5	6.0	0.5	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
2	6.5	5.0	6.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
3	6.0	4.5	5.5	0.5	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0
4	5.5	4.5	5.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
5	6.0	5.0	5.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6.0	5.5	6.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
7	6.5	5.5	6.0	0.5	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0
8	6.5	5.5	6.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
9	6.0	5.5	5.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	5.5	5.0	5.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
11	5.5	4.0	4.5	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
12	4.5	3.0	3.5	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
13	3.5	3.0	3.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
14	4.0	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	3.5	3.0	3.0	0.5	0.0	0.5	0.5	0.0	0.5	0.0	0.0	0.0
17	3.5	3.0	3.5	0.5	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
18	3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	4.0	3.5	3.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	4.0	4.0	4.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	4.0	3.0	3.5	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
22	3.0	2.5	3.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
23	4.0	3.0	3.5	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
24	4.0	3.5	3.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	4.5	3.5	3.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	5.0	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
27	4.5	3.5	4.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	3.5	3.0	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	3.0	1.5	2.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
30	1.5	0.5	1.0	0.5	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
31	0.5	0.0	0.0	---	---	---	0.5	0.0	0.5	0.0	0.0	0.0
MONTH	6.5	0.0	4.0	0.5	0.0	0.1	0.5	0.0	0.1	0.5	0.0	0.0

15041200 TAKU RIVER NEAR JUNEAU—Continued

WATER TEMPERATURE, in DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	0.0	0.0	0.0	1.5	0.5	0.5	3.0	2.0	2.5	7.5	5.5	6.0
2	0.5	0.0	0.0	1.5	0.5	0.5	2.5	1.5	2.0	7.0	5.0	6.0
3	0.0	0.0	0.0	1.0	0.5	0.5	3.0	1.5	2.5	7.5	5.0	6.5
4	0.0	0.0	0.0	1.0	0.5	0.5	3.5	2.0	2.5	7.5	5.0	6.0
5	0.0	0.0	0.0	1.0	0.5	1.0	4.5	2.0	3.0	7.0	4.0	6.0
6	0.0	0.0	0.0	1.0	0.5	0.5	4.0	2.0	3.0	8.0	5.0	6.5
7	0.0	0.0	0.0	1.0	0.5	0.5	4.0	2.5	3.0	8.0	6.0	7.0
8	0.0	0.0	0.0	1.0	0.0	0.5	5.0	2.5	3.5	8.0	6.0	7.0
9	0.5	0.0	0.0	1.0	0.5	0.5	4.0	3.0	3.0	7.5	6.0	6.5
10	0.0	0.0	0.0	0.5	0.5	0.5	5.0	3.0	3.5	8.0	5.5	6.5
11	0.5	0.0	0.5	1.5	0.5	1.0	5.0	3.0	4.0	8.5	5.5	7.0
12	0.5	0.0	0.5	1.0	0.5	1.0	4.0	3.0	3.5	9.0	6.0	7.5
13	0.5	0.0	0.5	1.5	0.5	1.0	4.5	2.5	3.5	9.5	6.5	8.0
14	0.5	0.0	0.5	1.5	0.5	1.0	4.5	2.5	3.5	9.0	6.5	8.0
15	0.5	0.0	0.5	1.5	1.0	1.5	4.0	2.0	3.0	9.0	6.5	7.5
16	0.5	0.0	0.5	2.0	1.0	1.5	4.5	2.5	3.5	8.5	6.5	7.5
17	0.5	0.0	0.5	2.5	1.5	1.5	4.5	3.5	4.0	8.5	7.0	8.0
18	0.5	0.5	0.5	2.5	1.0	1.5	5.5	3.5	4.5	9.5	7.0	8.0
19	0.5	0.5	0.5	3.0	1.0	1.5	6.0	3.5	4.5	10.0	7.0	8.5
20	1.0	0.5	0.5	2.5	0.5	1.0	6.0	3.5	4.5	9.5	7.5	8.5
21	1.0	0.5	0.5	2.0	0.0	1.0	6.5	4.0	5.0	9.0	7.0	8.0
22	0.5	0.5	0.5	2.0	0.5	1.5	5.0	3.5	4.0	9.0	6.0	7.5
23	0.5	0.5	0.5	3.0	0.5	2.0	4.5	3.0	3.5	9.5	7.0	8.0
24	1.0	0.5	0.5	4.0	1.5	2.5	5.0	4.0	4.5	9.0	8.0	8.0
25	1.0	0.5	0.5	3.5	2.5	3.0	4.5	4.0	4.5	8.0	7.0	7.5
26	1.0	0.0	0.5	4.0	2.5	3.0	5.0	3.5	4.5	8.5	6.5	7.5
27	1.5	0.0	0.5	3.5	2.5	2.5	5.5	4.0	5.0	9.0	6.5	8.0
28	1.5	0.0	0.5	2.5	1.0	2.0	6.5	4.5	5.5	9.5	7.0	8.0
29	1.5	0.5	0.5	2.5	1.0	1.5	7.0	4.0	5.5	9.5	7.5	8.5
30	---	---	---	2.5	1.0	1.5	8.0	5.0	6.5	8.5	6.0	7.0
31	---	---	---	3.0	1.0	2.0	---	---	---	9.5	7.0	8.0
MONTH	1.5	0.0	0.3	4.0	0.0	1.3	8.0	1.5	3.9	10.0	4.0	7.4
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.0	7.0	8.5	10.0	8.5	9.0	9.0	7.5	8.5	9.0	6.5	7.5
2	9.5	8.0	8.5	10.0	8.0	9.0	9.0	8.0	8.5	8.5	7.0	7.5
3	10.5	7.5	9.0	9.5	8.0	9.0	9.0	8.0	8.5	7.5	7.0	7.0
4	10.5	8.5	9.5	10.0	8.0	9.0	10.5	8.0	9.0	7.5	6.5	7.0
5	10.0	8.5	9.0	11.0	8.5	9.5	10.5	8.5	9.5	7.5	6.0	6.0
6	10.5	7.5	9.0	11.0	9.0	10.0	10.0	8.0	8.5	6.5	6.0	6.0
7	11.0	8.0	9.5	10.5	8.0	9.0	9.0	7.0	8.0	7.5	5.5	6.5
8	10.0	8.5	9.0	10.5	7.5	9.0	10.5	7.0	8.5	7.0	5.5	6.5
9	9.0	8.0	8.5	11.0	8.5	9.5	10.5	8.0	9.5	7.0	5.0	6.0
10	10.0	7.5	8.5	10.0	9.0	9.5	10.5	8.5	9.5	6.5	5.0	5.5
11	10.0	8.0	9.0	9.5	8.5	9.0	10.5	9.0	9.5	6.5	5.5	6.0
12	10.5	8.0	9.5	10.0	8.0	9.0	10.0	8.0	9.0	7.0	6.0	6.5
13	10.0	8.5	9.0	9.5	7.5	8.5	10.5	7.5	9.0	7.0	6.0	6.5
14	9.0	8.0	8.5	9.5	6.5	8.0	11.0	8.5	9.5	7.0	6.0	6.5
15	10.0	8.0	8.5	11.5	8.0	9.5	10.5	8.5	9.5	7.0	6.0	6.5
16	11.0	8.0	9.5	12.5	9.0	10.5	10.0	8.0	9.0	7.0	5.5	6.5
17	12.0	9.0	10.5	12.0	10.0	11.0	10.0	8.0	9.0	7.0	5.5	6.5
18	12.5	9.5	11.0	11.5	9.5	10.5	9.5	7.5	8.5	7.0	5.5	6.0
19	11.5	9.5	10.5	12.0	9.5	10.5	9.5	8.5	9.0	7.0	5.5	6.0
20	11.5	8.5	10.0	11.5	9.5	10.5	10.0	8.0	9.0	7.0	6.0	6.5
21	11.5	8.5	10.0	12.0	10.0	11.0	9.5	8.0	9.0	6.5	6.0	6.5
22	12.0	9.0	10.5	11.5	9.5	10.5	10.0	8.0	9.0	6.5	5.5	6.0
23	11.5	8.5	10.0	10.5	8.0	9.5	9.5	7.5	8.0	5.5	5.0	5.5
24	10.5	7.5	9.0	10.0	8.5	9.0	9.0	7.0	8.0	6.0	5.5	5.5
25	10.0	7.0	8.0	10.5	9.0	9.5	8.5	7.0	7.5	6.0	5.0	5.5
26	10.5	8.0	9.5	10.5	9.0	9.5	8.0	7.0	7.5	6.0	5.0	5.5
27	11.0	8.5	9.5	10.0	9.0	9.5	8.5	7.5	7.5	6.0	5.5	5.5
28	11.5	9.0	10.0	9.5	9.0	9.5	8.0	7.0	7.5	6.0	5.0	5.5
29	11.5	8.5	10.0	9.5	8.5	9.0	8.5	7.0	7.5	6.5	5.5	6.0
30	11.5	9.0	10.0	9.0	7.5	8.5	8.5	6.5	7.5	6.5	6.0	6.5
31	---	---	---	9.0	7.5	8.5	9.0	7.0	8.0	---	---	---
MONTH	12.5	7.0	9.4	12.5	6.5	9.5	11.0	6.5	8.6	9.0	5.0	6.2

SOUTHEAST ALASKA

15050000 GOLD CREEK AT JUNEAU

LOCATION.--Lat 58°18'25", long 134°24'05", in NW¹/₄ NE¹/₄ sec. 23, T. 41 S., R. 67 E. (Juneau B-2 SE quad), City and Borough of Juneau, Hydrologic Unit 19010301, on left bank, 150 ft upstream from Alaska Electric Light and Power Company dam and diversion, 0.5 mi northeast of Juneau, and 1 mi upstream from mouth at Gastineau Channel.

DRAINAGE AREA.--9.76 mi².

PERIOD OF RECORD.--July 1916 to December 1920 (monthly discharge only), October 1946 to September 1948, October 1949 to September 1982. Annual maximums, water years 1991, 1994, 1996. October 1997 to current year.

REVISED RECORDS.--WSP 1372: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 245 ft above sea level, from topographic map. July 20, 1916 to December 31, 1920, at site 50 ft upstream at different datum. September 11, 1946 to September 30, 1948, nonrecording gage at site 0.7 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Water may be diverted about 0.5 mi upstream and three wells, located upstream from the gage in Last Chance Basin, pump water for municipal use and may decrease flow during winter periods.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct 26	0500	1360	5.23	Sept 23	1545	*1460	*5.40
Sep 21	0430	1400	5.29				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	59	24	21	18	19	16	186	183	157	87	22
2	76	57	44	18	17	18	51	213	209	161	85	160
3	59	42	27	e17	16	17	115	194	217	175	98	186
4	104	37	22	e15	16	16	99	183	224	123	78	86
5	72	31	20	e13	23	15	64	140	260	190	73	86
6	100	27	19	e13	21	15	47	111	264	154	71	108
7	119	26	18	e12	17	17	41	105	313	109	63	73
8	73	24	17	e11	60	44	56	115	284	129	59	44
9	55	34	16	11	149	30	56	125	217	109	58	32
10	59	27	15	13	100	25	56	125	179	123	61	26
11	43	33	15	17	78	25	55	121	143	90	75	28
12	31	344	15	14	86	20	60	134	157	90	42	86
13	33	143	14	28	72	18	58	162	179	99	35	228
14	32	87	14	128	64	16	52	189	216	106	48	103
15	26	81	14	94	47	16	39	188	175	133	60	100
16	24	71	16	56	35	15	30	168	161	103	58	66
17	23	60	24	53	27	13	27	153	186	103	41	46
18	40	47	23	121	24	12	24	154	260	84	44	35
19	119	38	63	91	29	12	22	181	317	84	41	27
20	109	35	60	108	76	11	22	253	300	100	40	412
21	70	32	53	183	104	11	23	292	280	154	34	572
22	78	30	242	171	110	10	37	248	300	119	28	435
23	98	25	192	109	75	10	50	232	284	87	19	688
24	116	25	99	78	58	10	54	284	276	136	17	461
25	505	24	74	e50	41	13	95	434	256	143	16	216
26	590	22	56	e40	31	15	128	385	220	87	26	190
27	217	21	39	e33	25	15	99	288	220	213	75	419
28	158	20	33	e28	23	17	81	220	201	434	109	210
29	100	19	31	e26	21	18	72	209	172	256	30	193
30	81	18	27	23	---	20	109	205	172	175	19	178
31	68	---	24	19	---	17	---	198	---	112	14	---
TOTAL	3378	1539	1350	1614	1463	530	1738	6195	6825	4338	1604	5516
MEAN	109	51.3	43.5	52.1	50.4	17.1	57.9	200	228	140	51.7	184
MAX	590	344	242	183	149	44	128	434	317	434	109	688
MIN	23	18	14	11	16	10	16	105	143	84	14	22
MED	76	32	24	28	35	16	54	188	218	123	48	106
AC-FT	6700	3050	2680	3200	2900	1050	3450	12290	13540	8600	3180	10940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2004, BY WATER YEAR (WY)#

	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	158	81.8	37.4	23.3	15.2	12.4	25.3	127	225	224	188	185																																																																													
MAX	349	206	202	170	81.4	137	91.7	220	326	364	374	302																																																																													
(WY)	2000	1947	2000	1981	1977	1947	1947	1948	2002	1975	1961	1999																																																																													
MIN	62.6	18.1	6.22	1.71	0.48	0.05	3.78	64.5	121	111	51.7	73.7																																																																													
(WY)	1952	1976	1956	1974	1972	1974	1954	1920	2003	2003	2004	1978																																																																													

See period of record; partial years used in monthly statistics
e Estimated

15050000 GOLD CREEK AT JUNEAU—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1916 - 2004	
ANNUAL TOTAL	30466.0		36090			
ANNUAL MEAN	83.5		98.6		109	
HIGHEST ANNUAL MEAN					155 2000	
LOWEST ANNUAL MEAN					77.5 1951	
HIGHEST DAILY MEAN	883	Sep 8	688	Sep 23	1830	Aug 12 1961
LOWEST DAILY MEAN	a1.4	Mar 13	b10	Mar 22	c0.00	Mar 4 1951
ANNUAL SEVEN-DAY MINIMUM	1.7	Mar 8	11	Mar 18	0.00	Mar 4 1951
MAXIMUM PEAK FLOW			1460	Sep 23	2950	Sep 25 1996
MAXIMUM PEAK STAGE			5.40	Sep 23	8.14	Sep 25 1996
INSTANTANEOUS LOW FLOW			8.3	Mar 8	0.00	Mar 4 1951
ANNUAL RUNOFF (AC-FT)	60430		71580		78960	
10 PERCENT EXCEEDS	197		220		264	
50 PERCENT EXCEEDS	53		60		66	
90 PERCENT EXCEEDS	7.1		16		5.0	

- # See Period of Record; partial years used in monthly statistics
a May have been lower during period of ice affect
b Mar. 22-24.
c No flow at times during winter

15051010 SALMON CREEK NEAR JUNEAU

LOCATION.--Lat 58°19'57", long 134°27'57", in NE¹/₄ SE¹/₄ NW¹/₄ sec. 9, T. 41 S., R. 67 E. (Juneau B-2 SE quad), City and Borough of Juneau, Hydrologic Unit 19010301, in Tongass National Forest, on left bank, about 0.3 mi upstream from mouth and 2.5 mi northwest of Juneau.

DRAINAGE AREA.--9.69 mi².

PERIOD OF RECORD.--October 1990 to current year. Daily discharge record previously collected 0.5 mi upstream at station number 15051008 "above canyon mouth" during water-years 1982-90. Drainage area, 9.50 mi².

REVISED RECORDS.--WDR AK 93-1: 1991 (m).

GAGE.--Water-stage recorder. Elevation of gage is 30 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges which are poor. Flow regulated by Salmon Creek Reservoir 2.5 mi upstream. Diversions upstream for off-stream hydropower plant; outflow from the plant goes into Gastineau Channel and is not included in the discharge records. Diversions upstream into Twin Lakes via a pipeline are also not included in the discharge records.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	23	20	13	e13	13	14	44	45	37	20	12
2	31	21	32	e12	12	13	43	52	49	35	18	19
3	28	19	19	e11	11	12	75	48	46	39	18	27
4	29	17	16	e10	11	12	47	43	45	31	16	25
5	28	16	14	e9.4	19	11	30	35	54	41	14	23
6	29	15	13	e9.1	17	11	24	31	50	34	13	35
7	34	15	12	e9.6	14	15	23	33	64	27	12	25
8	30	14	12	e9.5	42	42	26	36	53	29	14	18
9	27	22	11	e9.5	75	27	25	37	48	29	16	16
10	30	18	10	e10	49	26	25	38	43	29	18	14
11	29	24	11	e11	45	28	23	35	39	25	21	13
12	24	159	11	12	52	19	23	35	39	23	17	18
13	23	54	11	28	34	16	22	40	41	24	16	51
14	22	40	9.7	98	28	15	21	45	49	26	16	36
15	20	41	9.6	45	23	15	18	44	39	25	17	33
16	18	34	14	27	19	14	16	41	37	25	16	26
17	16	28	27	30	17	13	15	39	41	24	15	20
18	18	22	26	60	17	11	14	40	53	20	15	17
19	24	19	63	42	21	10	13	45	59	18	15	15
20	28	17	46	54	48	9.9	13	52	56	19	16	69
21	22	17	39	76	56	9.7	13	56	51	22	14	140
22	23	18	109	62	57	9.4	17	48	51	16	13	89
23	31	16	81	46	34	9.1	20	46	51	13	12	170
24	31	16	46	32	27	9.0	25	66	51	33	12	138
25	101	15	33	27	22	15	47	86	50	28	12	68
26	110	14	26	e24	19	15	57	72	45	17	12	57
27	51	13	20	e21	17	14	38	53	42	35	15	112
28	45	12	18	e18	16	17	29	46	40	93	16	65
29	34	12	17	e16	15	17	26	47	35	54	14	52
30	28	12	17	e15	---	17	30	46	34	37	12	49
31	25	---	15	e14	---	14	---	46	---	25	14	---
TOTAL	1024	763	808.3	861.1	830	479.1	812	1425	1400	933	469	1452
MEAN	33.0	25.4	26.1	27.8	28.6	15.5	27.1	46.0	46.7	30.1	15.1	48.4
MAX	110	159	109	98	75	42	75	86	64	93	21	170
MIN	16	12	9.6	9.1	11	9.0	13	31	34	13	12	12
AC-FT	2030	1510	1600	1710	1650	950	1610	2830	2780	1850	930	2880

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)#

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	61.2	30.5	26.9	19.7	21.5	16.1	23.3	47.6	54.0	43.3	37.0	61.0		
MAX	131	76.9	69.5	33.5	45.0	39.0	38.6	71.3	82.9	69.0	76.1	108		
(WY)	1999	1994	2000	1992	1992	1992	1994	1992	1991	1997	2002	1991		
MIN	33.0	16.3	12.7	9.65	9.16	8.91	9.52	29.0	31.7	21.9	15.1	41.0		
(WY)	2004	1991	1997	1997	1999	2003	2002	2003	2003	2003	2004	1997		

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1991 - 2004#
ANNUAL TOTAL	9808.6	11256.5	
ANNUAL MEAN	26.9	30.8	36.9
HIGHEST ANNUAL MEAN			48.6
LOWEST ANNUAL MEAN			29.7
HIGHEST DAILY MEAN	164	Sep 27	954
LOWEST DAILY MEAN	5.6	Mar 13	5.6
ANNUAL SEVEN-DAY MINIMUM	6.2	Mar 8	6.2
MAXIMUM PEAK FLOW			394
MAXIMUM PEAK STAGE			3.13
INSTANTANEOUS LOW FLOW			7.4
ANNUAL RUNOFF (AC-FT)	19460	22330	26740
10 PERCENT EXCEEDS	49	53	70
50 PERCENT EXCEEDS	20	24	27
90 PERCENT EXCEEDS	8.4	12	10

See Period of Record
a From flood marks
b Undetermined, see lowest daily mean
e Estimated

15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY

LOCATION.--Lat 58°21'59", long 134°34'34", in SW¹/₄ SW¹/₄ SE¹/₄ sec. 30, T. 40 S., R. 66 (Juneau B-2 SW quad), Hydrologic Unit 19010301, City and Borough of Juneau on right bank at downstream side of footbridge, 50 ft downstream from Egan Drive, 0.4 mi southeast of intersection of Egan Drive and Mendenhall Loop Road and 3 mi east of Auke Bay Post Office.

DRAINAGE AREA.--2.60 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to September 2004 (discontinued). Prior to October 1996, published as miscellaneous site 15052482 Jordan Creek at Trout Street Bridge near Auke Bay, at site about 500 ft downstream at different datum.

GAGE.--Water-stage recorder. Datum of gage is 19.80 ft above sea level, determined by levels survey.

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

EXTEREMES OUTSIDE PERIOD OF DAILY RECORD.--Flood of September 25, 1996, reached a stage of 4.34 ft, site and datum then in use, from floodmarks, discharge 140 ft³/s; no flow observed March 2, 1989, March 5, 1996, January 15, 1997, and July 2-4,7,8,10-24,26, 2004; August 7-10,13-26,31, 2004; September 1, 2004.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	4.2	3.4	e5.0	e2.8	4.1	4.2	9.4	2.0	0.11	0.25	0.00
2	9.5	3.9	8.5	e4.0	e2.7	3.6	12	9.8	2.3	0.00	0.18	0.52
3	8.3	3.5	5.0	e3.6	e2.8	3.4	32	8.6	2.2	0.00	0.43	1.3
4	8.0	3.0	3.6	e3.2	e6.0	3.3	16	8.5	1.8	0.00	0.38	1.8
5	7.0	2.6	3.1	e2.7	15	3.2	11	7.1	1.7	0.16	0.16	1.5
6	7.6	2.2	2.7	e2.5	7.7	2.9	9.7	6.2	1.4	0.12	0.10	5.9
7	6.5	2.2	2.4	e2.4	4.4	4.4	9.7	5.9	1.4	0.00	0.00	4.9
8	5.8	2.1	2.3	e2.5	8.6	9.2	14	5.9	1.2	0.00	0.00	1.3
9	6.0	4.0	2.1	e3.0	24	6.1	11	5.6	1.5	0.24	0.00	0.79
10	5.1	3.4	e2.0	e3.6	25	6.4	9.7	5.1	1.7	0.00	0.00	0.67
11	4.6	4.8	e1.9	e5.0	14	8.0	8.7	5.1	1.1	0.00	0.15	0.59
12	4.0	24	e1.9	e4.0	19	5.5	8.6	5.0	0.99	0.00	0.10	0.82
13	4.3	22	2.0	e8.0	11	4.6	8.0	4.9	1.3	0.00	0.00	10
14	4.2	12	1.7	e3.0	10	4.0	7.2	4.8	1.4	0.00	0.00	5.1
15	3.6	11	1.7	e1.3	8.1	4.5	6.3	4.6	1.1	0.00	0.00	2.4
16	3.2	8.9	3.0	e8.0	7.2	4.4	5.7	4.2	0.90	0.00	0.00	1.8
17	2.9	7.6	7.5	e1.5	6.5	3.9	5.7	3.6	0.96	0.00	0.00	1.4
18	2.8	6.3	7.4	e2.0	6.9	3.1	5.7	3.2	0.74	0.00	0.00	1.2
19	2.6	e4.0	15	e1.6	7.9	2.7	5.0	3.5	0.62	0.00	0.00	1.0
20	2.5	e3.5	14	e1.9	11	2.3	4.5	3.4	0.56	0.00	0.00	4.0
21	2.2	e3.0	12	22	13	e2.3	4.1	3.1	0.45	0.00	0.00	20
22	2.2	4.9	34	28	18	2.0	4.2	2.6	e0.25	0.00	0.00	10
23	2.2	3.8	32	21	10	1.9	4.6	2.3	0.50	0.00	0.00	28
24	2.2	3.5	19	e1.1	8.4	1.9	5.5	3.3	0.37	0.00	0.00	29
25	12	3.2	15	e7.0	7.2	5.1	9.2	5.0	0.21	0.12	0.00	9.0
26	23	2.9	11	e5.1	6.2	9.2	14	4.6	0.16	0.00	0.00	5.1
27	9.3	2.6	e8.0	e4.1	5.5	5.4	8.8	3.4	0.15	1.3	0.19	7.9
28	14	e2.4	e6.8	e3.5	5.0	5.0	7.0	2.7	0.22	3.9	1.0	5.7
29	6.4	e2.2	e6.7	e3.2	4.5	5.3	6.3	2.4	0.16	3.7	0.65	5.6
30	5.1	2.1	6.6	e3.0	---	5.3	6.9	2.1	0.12	0.98	0.14	6.6
31	4.7	---	6.0	e2.9	---	4.3	---	1.8	---	0.44	0.00	---
TOTAL	193.8	165.8	248.3	281.3	278.4	137.3	265.3	147.7	29.46	11.07	3.73	173.89
MEAN	6.25	5.53	8.01	9.07	9.60	4.43	8.84	4.76	0.98	0.36	0.12	5.80
MAX	23	24	34	30	25	9.2	32	9.8	2.3	3.9	1.0	29
MIN	2.2	2.1	1.7	2.4	2.7	1.9	4.1	1.8	0.12	0.00	0.00	0.00
AC-FT	384	329	493	558	552	272	526	293	58	22	7.4	345
CFSM	2.40	2.13	3.08	3.49	3.69	1.70	3.40	1.83	0.38	0.14	0.05	2.23
IN.	2.77	2.37	3.55	4.02	3.98	1.96	3.80	2.11	0.42	0.16	0.05	2.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)#

MEAN	16.1	7.99	9.99	6.77	3.74	3.15	5.01	6.65	4.17	4.32	6.15	12.9
MAX	23.2	11.2	20.8	11.3	9.60	4.74	12.1	13.7	10.2	8.49	15.0	18.7
(WY)	2003	2000	2000	1999	2004	2001	1999	1999	1999	2000	2002	1999
MIN	6.25	4.21	2.67	3.52	0.47	1.62	0.72	1.70	0.98	0.36	0.12	5.80
(WY)	2004	1999	1999	1998	1999	1998	2002	2003	2004	2004	2004	2004

e Estimated

See Period of Record; partial year used in monthly statistics

15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004#	
ANNUAL TOTAL	1797.31		1936.05			
ANNUAL MEAN	4.92		5.29		7.28	
HIGHEST ANNUAL MEAN					9.87 2000	
LOWEST ANNUAL MEAN					5.29 2004	
HIGHEST DAILY MEAN	52	Sep 27	34	Dec 22	129	Dec 28 1999
LOWEST DAILY MEAN	a0.34	Jun 15	b0.00	Jul 2	c0.00	Mar 3 1999
ANNUAL SEVEN-DAY MINIMUM	0.44	Jun 11	0.00	Jul 10	0.00	Mar 3 1999
MAXIMUM PEAK FLOW			d46	Dec 22	149	Dec 28 1999
MAXIMUM PEAK STAGE			5.41	Dec 22	7.59	Dec 28 1999
INSTANTANEOUS LOW FLOW			f		0.00	Mar 3 1999
ANNUAL RUNOFF (AC-FT)	3560		3840		5270	
ANNUAL RUNOFF (CFSM)	1.89		2.03		2.80	
ANNUAL RUNOFF (INCHES)	25.72		27.70		38.04	
10 PERCENT EXCEEDS	12		12		16	
50 PERCENT EXCEEDS	2.6		3.6		4.6	
90 PERCENT EXCEEDS	0.90		0.00		0.91	

See Period of Record; partial year used in monthly statistics

a June 15 and June 16

b July 2-4,7,8,10-24,26; August 7-10,13-26,31; September 1

c Mar. 3 to Mar. 9, 1999 and Apr. 8 to Apr. 18, 2002; July 2-4,7,8,10-24,26, 2004; August 7-10,13-26,31, 2004; September 1, 2004

d May have been higher during period of estimated discharge.

e Estimated

f Not determined, see lowest daily mean

15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1997 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 1999 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder with 15-minute recording interval started on July 15, 1999.

REMARKS.-- There is missing record on July 2-5,7-8,12-24, and August 8-11,14-27, because the probe came out of water. Discharges decreased to zero flow in late summer of the 2004 water year. Records represent water temperature at the sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum recorded, 18.5°C, on June 22, and 24-25, 2004 ; minimum, 0°C, many days during winters.

EXTREMES FOR CURRENT PERIOD.--

WATER TEMPERATURE: Maximum recorded, 18.5°C, on June 22, and 24-25, 2004 ; minimum, 0°C, many days during winter.

WATER TEMPERATURE, in (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.0	6.5	7.5	3.0	2.0	2.5	0.5	0.0	0.0	1.5	0.0	0.5
2	7.5	6.0	7.0	3.0	2.0	2.5	1.0	0.5	1.0	0.0	0.0	0.0
3	8.0	6.0	7.0	2.5	1.5	2.0	1.5	1.0	1.0	0.0	0.0	0.0
4	8.5	7.5	8.0	1.5	1.0	1.5	1.0	0.5	1.0	0.0	0.0	0.0
5	8.5	8.0	8.0	1.5	0.5	1.0	1.5	1.0	1.5	0.0	0.0	0.0
6	8.5	8.0	8.5	1.5	0.5	1.0	1.5	0.5	1.0	0.0	0.0	0.0
7	8.5	8.5	8.5	2.5	1.5	2.0	0.5	0.0	0.5	0.0	0.0	0.0
8	8.5	7.0	7.5	2.5	1.5	2.0	1.5	0.5	1.0	0.0	0.0	0.0
9	7.5	6.5	7.0	3.0	2.5	3.0	1.0	0.0	0.5	0.0	0.0	0.0
10	7.5	7.0	7.0	3.5	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0
11	7.0	5.5	6.0	3.5	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
12	5.5	4.5	5.0	4.5	3.5	4.0	1.5	0.0	0.5	0.0	0.0	0.0
13	6.0	5.5	5.5	4.0	2.5	3.5	1.5	0.5	1.0	0.0	0.0	0.0
14	7.0	6.0	6.5	4.0	3.0	3.5	0.5	0.0	0.0	0.0	0.0	0.0
15	6.0	4.0	4.5	4.5	4.0	4.0	1.0	0.0	0.5	0.0	0.0	0.0
16	5.5	3.5	4.5	4.0	3.5	4.0	1.0	0.0	0.5	0.0	0.0	0.0
17	6.5	5.5	6.0	3.5	2.5	3.0	1.5	1.0	1.0	0.0	0.0	0.0
18	7.0	6.0	6.5	3.0	0.5	2.0	1.5	0.5	1.0	0.0	0.0	0.0
19	7.5	7.0	7.0	0.5	0.0	0.5	1.5	1.0	1.5	0.5	0.0	0.0
20	7.0	5.5	6.5	0.0	0.0	0.0	2.0	1.0	1.5	1.0	0.0	0.5
21	6.0	4.5	5.0	0.0	0.0	0.0	2.5	2.0	2.0	1.0	1.0	1.0
22	6.0	5.5	6.0	1.5	0.0	0.5	2.5	1.5	2.0	1.0	1.0	1.0
23	7.0	6.0	6.5	1.5	1.5	1.5	2.5	2.0	2.0	1.5	1.0	1.5
24	7.0	6.0	6.5	1.5	0.5	1.0	2.5	2.0	2.0	1.0	0.0	0.5
25	8.5	7.0	8.0	2.0	1.5	1.5	2.5	1.5	2.0	0.0	0.0	0.0
26	8.5	7.5	8.5	1.5	1.0	1.5	1.5	0.0	1.0	0.0	0.0	0.0
27	7.5	6.5	7.0	1.0	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
28	6.5	5.0	5.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	5.0	3.0	4.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
30	3.0	2.0	2.5	0.5	0.0	0.5	1.5	0.5	1.5	0.0	0.0	0.0
31	3.0	2.0	2.5	---	---	---	2.0	1.5	1.5	0.0	0.0	0.0
MONTH	8.5	2.0	6.3	4.5	0.0	1.9	2.5	0.0	0.9	1.5	0.0	0.2

15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY—Continued

WATER TEMPERATURE, in (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	1.0	0.0	0.5	3.0	2.0	2.5	8.0	6.0	6.5
2	0.0	0.0	0.0	1.5	0.0	0.5	2.5	2.0	2.5	7.5	6.0	6.5
3	0.0	0.0	0.0	1.0	1.0	1.0	3.0	1.5	2.5	9.5	6.0	7.5
4	0.0	0.0	0.0	1.5	1.0	1.5	4.0	2.5	3.0	9.0	5.0	7.0
5	0.0	0.0	0.0	2.0	1.5	1.5	5.0	2.5	3.5	8.5	4.5	6.5
6	1.0	0.0	0.5	2.0	1.5	1.5	5.5	2.5	3.5	9.0	5.0	7.0
7	1.0	1.0	1.0	2.5	1.5	2.0	5.5	3.5	4.5	9.5	6.0	7.5
8	1.5	0.0	1.0	2.5	1.5	2.0	5.5	3.0	4.0	10.0	5.5	7.5
9	1.0	0.0	0.5	2.0	1.5	1.5	5.0	3.0	4.0	9.0	7.0	7.5
10	1.5	0.0	1.0	2.0	1.5	2.0	6.0	4.0	4.5	10.0	6.5	8.0
11	2.0	1.5	1.5	3.0	2.0	2.5	6.0	3.0	4.5	9.5	5.5	8.0
12	1.5	1.0	1.5	2.5	2.0	2.0	5.5	4.5	5.0	10.0	6.5	8.0
13	2.0	1.5	1.5	2.5	1.0	2.0	5.5	4.0	5.0	10.5	6.5	8.5
14	2.5	1.5	2.0	2.0	1.0	1.5	5.5	3.5	4.5	10.5	7.0	9.0
15	2.0	1.0	1.5	2.0	1.5	2.0	5.5	2.5	4.0	10.0	6.5	8.5
16	2.0	1.5	1.5	2.0	0.5	1.5	5.5	2.0	3.5	9.5	8.0	9.0
17	2.5	1.5	2.0	3.0	1.5	2.0	5.5	4.0	5.0	9.5	8.0	8.5
18	2.0	2.0	2.0	1.5	0.5	1.0	6.0	3.5	4.5	10.5	7.5	9.0
19	2.5	2.0	2.5	1.5	0.0	0.5	6.0	3.0	4.5	10.5	7.5	9.0
20	2.5	2.5	2.5	2.0	0.0	1.0	6.5	3.0	4.5	11.5	8.0	9.5
21	3.0	2.5	2.5	2.0	0.0	1.0	7.0	3.5	5.0	11.0	8.0	10.0
22	2.5	1.5	2.0	2.0	1.5	1.5	6.0	5.0	5.5	11.0	7.5	9.5
23	3.0	2.0	2.5	2.0	0.5	1.5	5.0	4.0	4.5	11.5	8.0	10.0
24	2.5	1.5	2.0	3.5	1.5	2.5	5.0	4.0	4.5	11.0	9.0	10.0
25	2.0	0.5	1.0	3.0	2.5	2.5	5.0	4.5	4.5	9.0	8.5	8.5
26	1.5	0.5	1.0	3.5	2.0	2.5	5.5	4.0	5.0	9.0	7.5	8.5
27	1.0	0.0	0.5	3.5	2.0	3.0	6.5	4.0	5.5	9.5	7.5	8.5
28	1.5	0.5	1.0	4.0	2.5	3.0	7.0	4.5	5.5	9.5	8.0	8.5
29	1.5	0.5	1.0	3.5	0.5	2.5	8.0	3.5	5.5	10.5	8.5	9.5
30	---	---	---	2.0	0.0	1.0	9.0	4.5	6.5	10.5	8.5	9.5
31	---	---	---	2.5	1.0	2.0	---	---	---	10.5	8.5	9.5
MONTH	3.0	0.0	1.2	4.0	0.0	1.7	9.0	1.5	4.4	11.5	4.5	8.4
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	10.5	9.0	9.5	15.0	12.0	13.5	12.5	11.5	12.0	11.5	9.5	10.5
2	9.0	8.5	9.0	---	---	---	14.5	11.0	12.5	11.0	10.0	10.5
3	11.0	7.0	9.0	---	---	---	13.5	12.0	12.5	11.0	10.5	11.0
4	11.0	8.5	10.0	---	---	---	14.0	10.5	12.0	11.0	10.0	10.5
5	10.5	9.5	10.0	---	---	---	14.0	11.0	12.5	10.5	9.5	10.0
6	12.0	9.5	10.5	13.5	12.0	12.5	15.0	12.5	13.5	9.5	9.0	9.5
7	14.0	10.0	12.0	---	---	---	14.5	13.0	13.5	9.0	8.0	8.5
8	13.0	10.5	11.5	---	---	---	---	---	---	8.5	6.5	7.5
9	11.0	9.5	10.0	15.0	12.5	13.5	---	---	---	7.5	5.5	6.5
10	11.0	9.0	10.0	14.0	13.0	13.5	---	---	---	7.0	5.0	6.0
11	11.0	9.0	10.0	14.5	12.0	13.0	---	---	---	8.0	6.5	7.0
12	12.0	9.5	11.0	---	---	---	14.0	12.0	12.5	8.0	8.0	8.0
13	11.5	10.0	11.0	---	---	---	14.0	11.5	12.5	8.5	8.0	8.0
14	11.0	9.5	10.0	---	---	---	---	---	---	9.0	8.0	8.5
15	11.0	9.5	10.0	---	---	---	---	---	---	8.5	8.0	8.0
16	13.0	8.5	10.5	---	---	---	---	---	---	8.5	7.0	7.5
17	14.0	10.0	12.0	---	---	---	---	---	---	7.5	6.0	7.0
18	15.5	11.0	13.0	---	---	---	---	---	---	7.0	5.0	6.0
19	17.0	12.5	14.5	---	---	---	---	---	---	6.0	4.5	5.5
20	17.5	13.0	15.0	---	---	---	---	---	---	8.0	6.0	7.0
21	18.0	13.0	15.0	---	---	---	---	---	---	8.5	8.0	8.5
22	18.5	13.5	15.5	---	---	---	---	---	---	8.0	8.0	8.0
23	18.0	13.5	15.5	---	---	---	---	---	---	8.5	8.0	8.0
24	18.5	14.0	16.0	---	---	---	---	---	---	8.5	8.0	8.5
25	18.5	14.0	16.0	14.0	11.0	13.0	---	---	---	8.0	7.5	7.5
26	18.0	14.5	16.5	13.5	12.5	13.0	---	---	---	8.0	7.5	7.5
27	17.0	14.0	15.0	13.5	12.0	13.0	---	---	---	8.5	7.5	8.0
28	14.5	13.0	14.0	13.0	12.5	12.5	12.0	11.5	11.5	8.0	7.0	7.5
29	15.5	13.0	14.0	12.5	12.0	12.5	12.0	10.5	11.0	8.0	7.5	7.5
30	16.5	13.0	14.5	13.5	11.5	12.5	13.0	10.0	11.0	8.0	7.5	7.5
31	---	---	---	13.5	12.0	12.5	11.5	9.5	10.5	---	---	---
MONTH	18.5	7.0	12.3	---	---	---	---	---	---	11.5	4.5	8.1

SOUTHEAST ALASKA

15052500 MENDENHALL RIVER NEAR AUKE BAY

LOCATION.--Lat 58°25'47", long 134°34'22", in NW¹/₄ SE¹/₄ sec. 6, T. 40 S., R. 66 E. (Juneau B-2 NW quad.), Hydrologic Unit 19010301, at the north end of Mendenhall Lake, 1.2 mi north of Mendenhall Lake Outlet and 4.1 mi northeast of Auke Bay, and 7 mi upstream from mouth at Fritz Cove.

DRAINAGE AREA.--85.1 mi².

PERIOD OF RECORD.--May 1965 to October 1994, annual maximum, water years 1995-96, October 1996 to current year. Prior to April 15, 1983, at site 1.3 mi southeast at east end of Mendenhall Lake, same datum.

REVISED RECORDS.--WDR AK-95-1: 1981 (M)

GAGE.--Water-stage recorder. Elevation of gage is 60 ft above sea level, from topographic map.

REMARKS.--Records fair except estimated daily discharges, which are poor. Streamflow is augmented and diurnal fluctuations caused by melting from Mendenhall Glacier, which covers two-thirds of the basin. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--During late summer 1961, flood flows of 27,000 ft³/s were estimated at the mouth of the Mendenhall River. For discussion of this flood, see USGS Hydrologic Atlas HA-259.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,600 ft³/s and maximum (*):.

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
July 29	2045	*9410	*8.63	Sept 24	0745	6070	7.18
Aug 16	2230	5600	6.94				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2870	671	125	e120	123	130	112	464	1460	3580	3550	e1800
2	2330	501	150	e110	117	119	124	609	1450	3380	3040	e1600
3	2280	412	154	e110	111	113	213	e660	1550	3460	3400	e1900
4	2470	353	142	e110	110	107	283	e630	1600	3240	3350	e2400
5	2670	308	131	e110	116	101	262	e620	1670	3310	3340	e2000
6	2440	271	123	e100	124	95	236	e630	1810	3390	3440	e1800
7	2530	242	116	e100	120	93	225	635	2260	3030	3550	e1700
8	2190	216	113	e100	127	107	249	644	2460	3130	3490	e1550
9	1440	230	106	e90	201	121	238	648	2360	3470	3430	1310
10	1290	228	99	e90	261	120	231	650	2360	3280	3900	1120
11	1040	226	95	89	266	123	230	682	2040	2860	4460	1010
12	745	438	91	85	318	118	241	755	1800	2890	3200	1170
13	610	510	86	94	302	111	246	894	1890	3140	2860	1770
14	573	415	80	180	296	103	245	1170	1940	3600	3510	2310
15	506	371	79	301	275	100	238	1290	1830	3860	4800	2360
16	433	335	83	252	261	97	222	1270	1800	3970	5310	1810
17	376	296	91	217	244	91	199	1060	2010	3710	4970	1300
18	360	244	98	240	211	84	182	932	2440	3080	4500	1060
19	398	191	119	271	186	78	168	1010	3210	3060	3770	870
20	488	166	143	299	177	72	160	1160	3620	3150	3610	938
21	533	154	146	380	186	68	156	1400	3670	3280	3200	2580
22	578	152	221	427	253	67	159	1410	3700	3600	e4000	4290
23	600	147	335	413	242	65	168	1360	3860	3840	3080	4850
24	566	144	332	334	216	63	179	1450	4100	4390	2620	5720
25	998	139	289	262	200	74	210	1860	4020	3580	2360	4400
26	2280	133	234	204	193	103	311	2300	3720	2790	2000	3860
27	2820	130	185	172	175	111	336	2300	3580	2820	2180	3780
28	2240	127	160	156	159	113	321	2260	3370	5290	e2300	3070
29	1610	129	146	144	143	120	307	1960	3360	8410	e3000	2410
30	1440	126	135	135	---	126	337	1720	3530	8050	e2300	2950
31	1010	---	128	129	---	119	---	1540	---	4540	e2000	---
TOTAL	42714	8005	4535	5824	5713	3112	6788	35973	78470	117180	104520	69688
MEAN	1378	267	146	188	197	100	226	1160	2616	3780	3372	2323
MAX	2870	671	335	427	318	130	337	2300	4100	8410	5310	5720
MIN	360	126	79	85	110	63	112	464	1450	2790	2000	870
AC-FT	84720	15880	9000	11550	11330	6170	13460	71350	155600	232400	207300	138200
CFSM	16.2	3.14	1.72	2.21	2.31	1.18	2.66	13.6	30.7	44.4	39.6	27.3
IN.	18.67	3.50	1.98	2.55	2.50	1.36	2.97	15.72	34.30	51.22	45.69	30.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)#

MEAN	1374	348	166	119	93.7	91.2	141	666	1907	3037	3361	2664
MAX	2649	920	563	600	254	379	313	1227	2819	3835	4701	4100
(WY)	1987	1977	2003	1981	1977	1992	1994	1993	1969	1979	1990	1991
MIN	532	110	40.0	30.8	21.5	22.3	46.9	268	732	1939	2025	1380
(WY)	1969	1986	1984	1969	1969	1974	2002	1985	1985	1985	1985	1984

See Period of Record; partial years used in monthly summary statistics and break in record
e Estimated

15052500 MENDENHALL RIVER NEAR AUKE BAY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1965 - 2004#	
ANNUAL TOTAL	463673		482522			
ANNUAL MEAN	1270		1318		1176	
HIGHEST ANNUAL MEAN					1547 1990	
LOWEST ANNUAL MEAN					758 1985	
HIGHEST DAILY MEAN	9780	Aug 16	8410	Jul 29	13700	Sep 8 1981
LOWEST DAILY MEAN	a46	Mar 17	63	Mar 24	19	Mar 1 1969
ANNUAL SEVEN-DAY MINIMUM	48	Mar 15	70	Mar 19	19	Mar 5 1974
MAXIMUM PEAK FLOW			9410	Jul 29	16000	Sep 11 1995
MAXIMUM PEAK STAGE			8.63	Jul 29	b11.18	Sep 11 1995
INSTANTANEOUS LOW FLOW			c62	Mar 24	d19	Mar 1 1969
ANNUAL RUNOFF (AC-FT)	919700		957100		851800	
ANNUAL RUNOFF (CFSM)	14.9		15.5		13.8	
ANNUAL RUNOFF (INCHES)	202.69		210.93		187.72	
10 PERCENT EXCEEDS	3370		3560		3240	
50 PERCENT EXCEEDS	488		451		395	
90 PERCENT EXCEEDS	69		109		49	

See Period of Record; partial years used in monthly summary statistics and break in record

a Mar. 17-19

b From flood marks

c Mar. 24-25

d Mar. 1-3, 1969, and Mar. 7-11, 1974

SOUTHEAST ALASKA

15052800 MONTANA CREEK NEAR AUKE BAY

LOCATION.--Lat 58°23'53", long 134°36'34", in SE¹/₄ SW¹/₄ sec. 13, T. 40 S., R. 65 E. (Juneau B-2 NW quad.), Hydrologic Unit 19010301, On right bank 30 ft upstream from bridge on Mendenhall Loop Road, 1.2 mi upstream from mouth at Mendenhall River, 1.5 mi northeast of Auke Lake, and 3.9 mi downstream from McGinnis Creek.

DRAINAGE AREA.--14.1 mi².

PERIOD OF RECORD.-- August 1965 to September 1975, July 1983 to September 1987, Annual Maximum 1996 to 2000, November 2000 to current year.

REVISED RECORDS.--WDR-99-1: 1996-98 (M).

GAGE.--Water-stage recorder. Elevation of gage is 40 ft above sea level, from topographic map.

REMARKS.--Records fair, except estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.-- Peak discharges greater than base discharge of 800 ft³/s and maximum (*)

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Oct 26	0615	1190	14.81	Jan 18	2000	975	14.35
Nov 12	1015	1460	15.25	Sep 21	0700	1460	15.24
Jan 14	1700	1630	15.48	Sep 23	1915	*1740	*15.62

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	45	38	e22	e17	e25	27	138	85	71	53	31
2	69	40	89	e20	e16	e22	96	172	89	65	47	89
3	63	35	47	e17	e15	20	199	139	83	68	57	238
4	84	32	35	e15	e16	18	148	127	92	61	52	172
5	76	28	30	e13	e25	17	70	102	116	91	47	118
6	92	26	28	e12	e47	16	57	89	118	70	44	189
7	188	25	26	e11	96	22	79	91	153	57	41	131
8	160	24	25	e11	193	83	124	88	135	56	39	68
9	79	85	e24	e11	428	51	76	90	112	58	39	51
10	79	61	e23	e13	307	35	80	88	96	54	38	43
11	76	90	e24	e16	146	45	70	88	77	47	90	39
12	58	615	e25	e15	177	34	73	99	74	47	51	77
13	64	172	24	e29	106	28	69	112	80	49	40	282
14	78	102	e24	938	97	22	63	121	96	53	39	123
15	54	104	e25	450	76	21	52	109	85	53	41	78
16	46	86	26	214	62	22	45	97	77	52	41	62
17	41	64	54	223	53	22	44	84	86	51	39	50
18	39	48	59	499	54	18	49	79	116	43	39	43
19	48	e45	128	335	81	18	42	99	143	41	41	38
20	51	e39	101	202	106	14	41	122	139	40	42	173
21	40	e35	72	214	167	19	43	133	126	59	36	695
22	37	e32	184	199	197	13	48	113	123	66	35	328
23	59	37	196	136	89	12	60	107	122	46	31	764
24	49	35	95	102	67	13	97	133	121	70	28	505
25	396	34	68	e70	55	50	131	196	114	64	27	203
26	558	32	50	e48	45	82	186	257	101	44	27	147
27	153	32	e42	e34	e38	47	99	144	94	57	76	344
28	142	31	e35	e27	e33	44	74	102	83	426	80	160
29	80	31	e29	e23	29	47	65	94	74	198	60	171
30	61	34	e25	e21	---	40	87	91	73	106	40	187
31	51	---	e24	e19	---	29	---	85	---	68	34	---
TOTAL	3154	2099	1675	3959	2838	949	2394	3589	3083	2331	1394	5599
MEAN	102	70.0	54.0	128	97.9	30.6	79.8	116	103	75.2	45.0	187
MAX	558	615	196	938	428	83	199	257	153	426	90	764
MIN	37	24	23	11	15	12	27	79	73	40	27	31
AC-FT	6260	4160	3320	7850	5630	1880	4750	7120	6120	4620	2760	11110
CFSM	7.22	4.96	3.83	9.06	6.94	2.17	5.66	8.21	7.29	5.33	3.19	13.2
IN.	8.32	5.54	4.42	10.45	7.49	2.50	6.32	9.47	8.13	6.15	3.68	14.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)#

	1965	1969	1975	1986	1997	1998	1999	2000	2003	2004	1968	1972
MEAN	158	75.6	47.6	50.0	42.1	46.6	53.9	127	157	140	154	168
MAX	285	138	112	186	121	195	88.5	185	207	213	246	263
(WY)	1975	1975	1986	1985	1971	1972	1969	1972	1967	1975	1972	1987
MIN	89.7	21.4	15.9	5.02	7.52	9.64	25.0	61.9	71.1	52.5	45.0	70.9
(WY)	1969	1986	1972	1974	1972	1974	2002	2003	1971	1971	2004	1984

15052800 MONTANA CREEK NEAR AUKE BAY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1965 - 2004#	
ANNUAL TOTAL	29805		33064			
ANNUAL MEAN	81.7		90.3		103	
HIGHEST ANNUAL MEAN					131 1975	
LOWEST ANNUAL MEAN					80.8 1971	
HIGHEST DAILY MEAN	629	Sep 27	938	Jan 14	1350	Sep 29 1970
LOWEST DAILY MEAN	13	Mar 13	a11	Jan 7	3.4	Feb 8 1972
ANNUAL SEVEN-DAY MINIMUM	14	Mar 9	12	Jan 4	3.5	Jan 13 1974
MAXIMUM PEAK FLOW			1740	Sep 23	3800	Oct 20 1998
MAXIMUM PEAK STAGE			15.62	Sep 23	17.36	Oct 20 1998
INSTANTANEOUS LOW FLOW			b		3.2	Feb 8 1972
ANNUAL RUNOFF (AC-FT)	59120		65580		74360	
ANNUAL RUNOFF (CFSM)	5.79		6.41		7.28	
ANNUAL RUNOFF (INCHES)	78.63		87.23		98.91	
10 PERCENT EXCEEDS	159		174		220	
50 PERCENT EXCEEDS	56		61		74	
90 PERCENT EXCEEDS	25		23		15	

See Period of Record, partial years used in monthly statistics

a Jan 7 to 9

b Not determined, see lowest daily mean

e Estimated

15053200 DUCK CREEK BELOW NANCY STREET NEAR AUKE BAY

LOCATION.--Lat 58°22'31", long 134°34'38", in NW¹/₄ SW¹/₄ NE¹/₄ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 NW), Hydrologic Unit 19010301, City and Borough of Juneau, on right bank, 50 ft south of intersection of Nancy Street and Mendenhall Loop Road, 0.4 mi north of intersection of Egan Drive and Mendenhall Loop Road, and 1.44 mi upstream from mouth.

DRAINAGE AREA.-- 1.30 mi².

PERIOD OF RECORD.--December 1993 to September 2004 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 21.87 ft above sea level, determined by levels survey.

REMARKS.--No estimated daily discharge. Records are good, except for daily discharges less than 1 ft³/s, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	3.6	2.7	3.0	2.2	2.6	3.8	2.3	0.81	0.63	1.0	0.63
2	5.2	3.1	8.0	2.3	2.1	2.4	7.8	2.1	0.96	0.63	0.96	0.74
3	4.6	2.7	6.1	2.0	1.9	2.4	15	1.9	1.0	0.63	1.1	1.4
4	5.5	2.3	4.5	1.8	2.0	2.4	9.8	1.8	0.84	0.63	1.0	1.6
5	6.1	2.1	3.6	1.6	11	2.5	6.9	1.6	0.74	0.68	0.89	1.8
6	7.0	1.9	3.0	1.5	9.2	2.4	5.5	1.5	0.72	0.66	0.80	2.7
7	6.9	1.8	2.6	1.4	6.3	4.2	4.9	1.4	0.69	0.63	0.78	2.6
8	6.5	1.7	2.4	1.5	9.3	6.6	6.5	1.3	0.67	0.63	0.73	2.0
9	5.8	5.2	2.1	1.4	15	5.6	4.8	1.3	0.73	0.62	0.68	1.6
10	5.5	4.1	1.9	1.5	14	6.2	3.5	1.2	0.79	0.53	0.63	1.4
11	5.5	4.9	1.9	2.1	8.7	7.5	3.2	1.1	0.75	0.51	0.80	1.2
12	5.0	13	1.9	2.0	11	5.4	3.0	0.93	0.74	0.50	0.79	1.4
13	5.5	13	2.1	6.0	6.8	4.5	2.8	0.85	0.72	0.39	0.74	3.8
14	5.9	10	1.9	19	5.4	3.9	2.2	0.78	0.75	0.38	0.67	3.1
15	5.2	8.9	1.8	11	4.6	4.4	2.5	0.74	0.72	0.35	0.62	2.6
16	4.9	7.3	2.7	5.5	4.2	4.2	2.4	0.74	0.68	0.31	0.58	2.3
17	4.6	6.3	7.0	4.7	3.8	3.9	2.6	0.77	0.67	0.31	0.52	1.9
18	4.5	5.1	7.3	13	3.9	3.6	2.4	0.71	0.63	0.31	0.54	1.7
19	4.3	4.3	12	8.4	4.5	3.1	2.0	0.68	0.55	0.24	0.57	1.4
20	4.5	3.5	11	16	6.8	2.7	1.9	0.67	0.50	0.22	0.58	3.4
21	4.1	3.1	9.1	14	7.1	2.5	1.6	0.65	0.52	0.28	0.54	7.8
22	3.9	3.5	14	15	9.2	2.3	1.6	0.62	0.53	0.31	0.48	5.6
23	4.2	3.4	15	10	6.5	2.2	1.4	0.66	0.58	0.29	0.44	9.2
24	4.3	3.5	11	7.0	5.3	2.0	2.4	0.90	0.58	0.33	0.36	10
25	11	3.1	8.2	5.1	4.4	3.1	4.7	1.3	0.60	0.55	0.35	6.3
26	14	2.7	6.6	4.2	3.9	5.0	6.7	1.4	0.58	0.54	0.35	4.6
27	9.0	2.5	5.3	3.6	3.6	4.4	4.8	1.2	0.62	0.65	0.54	4.6
28	9.3	2.3	4.3	3.1	3.2	4.2	3.6	1.1	0.64	2.0	0.67	4.1
29	6.3	2.3	3.9	2.8	2.9	4.3	3.0	0.98	0.63	1.9	0.73	4.4
30	5.0	2.1	3.8	2.5	---	4.7	2.6	0.83	0.63	1.6	0.74	4.6
31	4.2	---	3.4	2.4	---	4.2	---	0.77	---	1.2	0.69	---
TOTAL	184.3	133.3	171.1	175.4	178.8	119.4	125.9	34.78	20.57	19.44	20.87	100.47
MEAN	5.95	4.44	5.52	5.66	6.17	3.85	4.20	1.12	0.69	0.63	0.67	3.35
MAX	14	13	15	19	15	7.5	15	2.3	1.0	2.0	1.1	10
MIN	3.9	1.7	1.8	1.4	1.9	2.0	1.4	0.62	0.50	0.22	0.35	0.63
AC-FT	366	264	339	348	355	237	250	69	41	39	41	199
CFSM	4.57	3.42	4.25	4.35	4.74	2.96	3.23	0.86	0.53	0.48	0.52	2.58
IN.	5.27	3.81	4.90	5.02	5.12	3.42	3.60	1.00	0.59	0.56	0.60	2.87

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)#

MEAN	9.04	4.85	5.31	3.17	2.73	2.48	2.80	2.47	2.03	2.53	3.66	7.66
MAX	18.1	10.3	12.2	5.66	6.17	5.08	6.16	4.97	3.47	4.23	7.66	14.5
(WY)	2000	2000	2000	2004	2004	1994	1999	1999	1999	1997	2002	2000
MIN	5.29	2.36	1.95	0.85	0.79	0.94	0.64	0.86	0.69	0.63	0.67	3.35
(WY)	1998	1996	1996	1997	1999	1995	2003	2002	2004	2004	2004	2004

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1994 - 2004#
ANNUAL TOTAL	1247.72	1284.33	
ANNUAL MEAN	3.42	3.51	4.06
HIGHEST ANNUAL MEAN			6.90
LOWEST ANNUAL MEAN			3.26
HIGHEST DAILY MEAN	22 Sep 27	19 Jan 14	68 Dec 28 1999
LOWEST DAILY MEAN	a0.31 Apr 9	0.22 Jul 20	0.19 Mar 15 2000
ANNUAL SEVEN-DAY MINIMUM	0.34 Apr 7	0.28 Jul 17	0.26 Mar 10 2000
MAXIMUM PEAK FLOW		27 Jan 14	80 Dec 28 1999
MAXIMUM PEAK STAGE		5.76 Jan 14	b7.59 Sep 25 1996
INSTANTANEOUS LOW FLOW	c	0.18 Jul 20	d0.18 Mar 8 1999
ANNUAL RUNOFF (AC-FT)	2470	2550	2940
ANNUAL RUNOFF (CFSM)	2.63	2.70	3.12
ANNUAL RUNOFF (INCHES)	35.70	36.75	42.40
10 PERCENT EXCEEDS	8.0	7.9	8.5
50 PERCENT EXCEEDS	2.2	2.4	2.6
90 PERCENT EXCEEDS	0.72	0.59	0.89

See period of record; partial years used in monthly statistics

a Apr. 9-11

b Backwater caused by culvert, which was removed Apr. 1998

c Undetermined, see lowest daily mean

d Mar. 8, 1999 and Mar. 14 and 15, 2000; and Jul. 20, 2004

15055500 ANTLER RIVER BELOW ANTLER LAKE NEAR AUKE BAY

LOCATION.--Lat 58°51'07", long 134°42'31", in NE¹/₄ SE¹/₄ NE¹/₄ sec. 10, T. 35 S., R. 64 E. (Juneau D-3 quad), Hydrologic Unit 19010301, in Tongass National Forest, 200 ft below outlet of Antler Lake, 10 mi northeast of Berners Bay, and located 32 mi northwest of Auke Bay.

DRAINAGE AREA.--26.0 mi², approximately.

PERIOD OF RECORD.--May 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 80 ft above sea level, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	97	29	39	e34	e39	35	128	228	356	192	111
2	193	84	38	35	e32	33	46	165	230	332	168	112
3	173	75	40	32	e31	31	89	182	222	317	166	161
4	169	68	37	29	e29	29	102	195	230	292	165	193
5	164	60	35	27	e32	28	94	186	267	265	168	200
6	150	56	33	25	e35	27	86	172	328	249	175	225
7	147	46	30	24	e47	28	79	165	433	232	178	204
8	144	39	29	24	e68	34	78	162	497	227	176	158
9	127	40	27	24	e96	38	76	164	415	233	176	127
10	115	39	26	23	e120	40	72	162	342	236	182	105
11	105	37	24	22	e150	44	68	161	283	240	201	89
12	92	73	24	21	e140	43	67	170	251	229	189	84
13	82	96	23	22	e130	41	65	191	257	229	169	99
14	74	89	22	28	e110	38	64	224	293	236	171	107
15	67	92	22	33	e100	37	61	242	296	246	190	100
16	61	88	24	33	e93	36	57	244	280	248	207	90
17	56	79	26	35	e86	34	53	233	288	245	221	80
18	54	69	29	44	e78	32	50	216	348	220	219	71
19	55	59	37	50	e74	30	47	228	460	201	203	64
20	56	52	47	54	e70	28	44	267	530	194	188	64
21	56	46	53	63	e75	27	43	319	536	187	173	213
22	59	44	125	68	e79	26	44	316	515	186	172	302
23	69	41	156	68	e77	25	51	300	509	184	155	429
24	75	39	135	62	e70	25	52	301	504	195	139	695
25	122	36	111	e58	e64	24	61	327	500	200	125	489
26	236	34	91	e54	e57	25	90	337	468	180	116	326
27	246	32	75	e50	e52	26	101	321	423	165	141	407
28	198	30	63	e47	e46	29	97	285	381	237	151	348
29	160	29	54	e42	e42	32	92	259	354	313	141	249
30	134	28	49	e39	---	37	96	250	358	281	128	194
31	113	---	43	e37	---	37	---	234	---	229	119	---
TOTAL	3776	1697	1557	1212	2117	1003	2060	7106	11026	7384	5264	6096
MEAN	122	56.6	50.2	39.1	73.0	32.4	68.7	229	368	238	170	203
MAX	246	97	156	68	150	44	102	337	536	356	221	695
MIN	54	28	22	21	29	24	35	128	222	165	116	64
AC-FT	7490	3370	3090	2400	4200	1990	4090	14090	21870	14650	10440	12090
CFSM	4.68	2.18	1.93	1.50	2.81	1.24	2.64	8.82	14.1	9.16	6.53	7.82
IN.	5.40	2.43	2.23	1.73	3.03	1.44	2.95	10.17	15.78	10.56	7.53	8.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)#

	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	165	65.3	69.3	42.5	31.5	21.5	42.4	150
MAX	240	97.9	134	69.5	73.0	32.4	68.7	229
(WY)	1999	2003	2000	2003	2004	2004	2004	2004
MIN	104	39.4	30.6	21.2	11.5	14.6	14.5	90.1
(WY)	1998	2002	2002	1999	1999	1999	2002	2001

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1997 - 2004#

ANNUAL TOTAL	40892	50298	
ANNUAL MEAN	112	137	133
HIGHEST ANNUAL MEAN			147
LOWEST ANNUAL MEAN			121
HIGHEST DAILY MEAN	467	Aug 17	695
LOWEST DAILY MEAN	a14	Mar 11	21
ANNUAL SEVEN-DAY MINIMUM	14	Mar 11	23
MAXIMUM PEAK FLOW			740
MAXIMUM PEAK STAGE			32.89
INSTANTANEOUS LOW FLOW			c21
ANNUAL RUNOFF (AC-FT)	81110	99770	96500
ANNUAL RUNOFF (CFSM)	4.31	5.29	5.12
ANNUAL RUNOFF (INCHES)	58.51	71.97	69.61
10 PERCENT EXCEEDS	227	297	304
50 PERCENT EXCEEDS	91	92	90
90 PERCENT EXCEEDS	18	29	19

See period of record; partial years used in monthly statistics
a Mar. 11-13, 15-17, and 20
b From rating curve extended above 600 cfs on basis of slope-area measurement at gage height 34.07 ft.
c Dec. 14, 15, and Jan. 11-13
e Estimated

15056030 KAKUHAN CREEK NEAR HAINES

LOCATION.--Lat 59°00'19", long 135°11'02", in SW¹/₄ NE¹/₄ SE¹/₄ sec. 14, T. 33 S., R. 61 E. (Skagway A-1 quad), Hydrologic Unit 19010301, in Tongass National Forest, about 500 ft upstream from mouth on east side of Lynn Canal, 19 mi southeast of Haines, and 60 mi northwest of Juneau.

DRAINAGE AREA.--1.53 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 45 ft above sea level, from topographic map. May 1997 to May 15,2003, at a site 300 ft down stream at a different datum.

REMARKS.--Records poor.

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)
Oct. 6	0115	*276	*12.37	Jun. 30	0700	51	11.47
Jun. 8	0030	54	11.48				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	4.5	1.0	e0.57	e0.49	1.1	0.49	15	14	36	17	10
2	19	3.9	1.4	e0.54	e0.47	1.5	1.7	15	14	29	16	15
3	21	3.6	1.0	e0.52	e0.46	0.55	9.4	15	13	26	18	18
4	25	3.0	0.90	e0.50	e0.43	0.57	2.4	17	15	25	19	13
5	28	2.9	e0.77	e0.48	e0.42	0.56	0.82	13	20	27	20	12
6	52	2.6	e0.72	e0.46	e7.0	0.54	0.72	12	27	26	21	8.3
7	33	2.1	e0.68	e0.44	e7.4	0.59	1.3	13	35	26	21	4.8
8	23	1.9	e0.65	e0.43	e4.8	2.1	2.0	14	33	24	20	3.5
9	12	1.9	e0.62	e0.43	e2.9	0.83	1.9	13	23	24	19	3.4
10	9.6	1.9	e0.63	e0.44	e2.3	0.72	2.0	11	22	23	20	2.2
11	7.5	1.9	0.63	e0.46	e2.0	0.74	2.6	12	17	22	22	1.9
12	5.8	3.1	0.63	e0.60	e1.7	0.61	2.5	14	16	23	19	6.1
13	5.4	2.0	0.62	e0.51	e1.5	0.55	1.4	18	18	23	19	7.1
14	5.2	1.9	0.59	e0.63	e1.4	0.51	1.4	21	17	25	21	2.9
15	4.9	1.9	0.60	e2.5	e1.3	0.50	1.1	20	16	26	23	1.9
16	4.3	1.9	0.64	e8.0	e1.2	0.50	1.1	17	15	26	25	1.5
17	4.1	e1.7	0.73	e4.8	1.0	0.48	0.92	15	17	23	26	1.2
18	5.0	e1.6	0.70	e2.9	1.1	e0.46	0.73	15	28	20	24	1.2
19	5.1	e1.5	1.9	e1.6	1.2	e0.44	0.68	18	34	21	22	1.0
20	4.5	e1.4	1.2	e0.97	1.9	e0.42	0.66	23	32	21	19	8.4
21	4.3	e1.3	2.8	e3.0	3.7	e0.40	1.1	26	31	21	20	19
22	4.6	e1.2	12	2.3	4.0	e0.39	2.2	23	32	23	19	7.0
23	4.9	e1.1	5.8	0.96	3.1	e0.38	1.9	21	33	24	15	19
24	5.7	e1.1	2.2	e0.85	2.2	0.47	1.2	24	33	24	12	12
25	17	1.0	1.1	e0.78	1.7	0.52	5.7	27	32	22	11	5.6
26	25	e1.0	e0.87	e0.72	1.4	0.51	7.0	22	31	19	15	12
27	11	e0.97	e0.73	e0.68	1.1	0.52	2.5	21	29	21	16	16
28	7.0	e0.94	e0.63	e0.63	e0.80	0.66	1.9	18	30	26	15	8.0
29	5.5	e0.90	e0.56	e0.58	0.67	0.66	3.6	18	33	24	13	5.4
30	5.2	0.88	e0.60	e0.55	---	0.56	10	17	37	21	14	4.8
31	4.8	---	e0.60	e0.52	---	0.50	---	14	---	19	12	---
TOTAL	389.4	57.59	44.50	39.35	59.64	19.84	72.92	542	747	740	573	232.2
MEAN	12.6	1.92	1.44	1.27	2.06	0.64	2.43	17.5	24.9	23.9	18.5	7.74
MAX	52	4.5	12	8.0	7.4	2.1	10	27	37	36	26	19
MIN	4.1	0.88	0.56	0.43	0.42	0.38	0.49	11	13	19	11	1.0
AC-FT	772	114	88	78	118	39	145	1080	1480	1470	1140	461
CFSM	8.21	1.25	0.94	0.83	1.34	0.42	1.59	11.4	16.3	15.6	12.1	5.06
IN.	9.47	1.40	1.08	0.96	1.45	0.48	1.77	13.18	18.16	17.99	13.93	5.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)#

	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	11.1	3.61	3.07	1.50	1.18	0.96	2.43	9.49
MAX	18.4	8.35	5.89	2.94	2.06	1.76	4.47	17.5
(WY)	2003	2003	2003	2003	2004	1999	2003	2003
MIN	4.70	1.72	0.89	0.88	0.58	0.50	0.70	4.87
(WY)	1998	2002	2002	2002	2002	2002	2001	2000

See period of Record;partial years used in monthly statistics
e Estimated

15056030 KAKUHAN CREEK NEAR HAINES—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004#	
ANNUAL TOTAL	4580.43		3517.44			
ANNUAL MEAN	12.5		9.61		11.0	
HIGHEST ANNUAL MEAN					14.0 2003	
LOWEST ANNUAL MEAN					9.61 2004	
HIGHEST DAILY MEAN	90	Aug 15	52	Oct 6	155	Aug 13 2002
LOWEST DAILY MEAN	0.56	Dec 29	0.38	Mar 23	0.36	Feb 24 2001
ANNUAL SEVEN-DAY MINIMUM	0.62	Dec 9	0.42	Mar 18	0.41	Feb 19 2001
MAXIMUM PEAK FLOW			a276	Oct 6	b415	Aug 31 1998
MAXIMUM PEAK STAGE			12.37	Oct 6	c8.77	Aug 31 1998
ANNUAL RUNOFF (AC-FT)	9090		6980		8010	
ANNUAL RUNOFF (CFSM)	8.20		6.28		7.22	
ANNUAL RUNOFF (INCHES)	111.37		85.52		98.13	
10 PERCENT EXCEEDS	35		24		30	
50 PERCENT EXCEEDS	4.5		4.4		4.3	
90 PERCENT EXCEEDS	0.75		0.55		0.71	

See period of Record; partial years used in monthly statistics

a From a rating curve extended above 33 ft³/s

b From rating curve extended above 51 ft³/s

c At site 300 ft. downstream, at different datum.

15056030 KAKUHAN CREEK NEAR HAINES—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1998 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1998 to current year.

INSTRUMENTATION.-- Electronic water-temperature recorder set for 15-minute recording interval.

REMARKS.-- Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on October 22. No variation was found within the cross section. No variation was found between mean stream temperature and sensor temperature. Sensor was moved upstream 200ft on May 15,2003.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 15.5°C, August 16, 2004; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 15.5°C, August 16; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (00004)	Sample location, cross section ft from rt bank (72103)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
OCT							
22...	1430	23.0	3.0	11.00	4.7	5.5	6.5
22...	1431	23.0	6.0	11.00	4.7	5.5	6.5
22...	1432	23.0	9.0	11.00	4.7	5.5	6.5
22...	1433	23.0	12.0	11.00	4.7	5.5	6.5
22...	1434	23.0	15.0	11.00	4.7	5.5	6.5
22...	1435	23.0	18.0	11.00	4.7	5.5	6.5
22...	1436	23.0	21.0	11.00	4.7	5.5	6.5

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.5	7.5	9.0	4.0	0.5	2.5	0.5	0.0	0.5	0.0	0.0	0.0
2	11.0	7.5	8.5	3.0	1.5	2.5	0.5	0.0	0.5	0.0	0.0	0.0
3	10.0	7.5	8.5	2.5	1.0	1.5	0.5	0.0	0.5	0.0	0.0	0.0
4	9.0	8.0	8.5	1.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
5	8.5	7.0	7.5	1.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
6	8.5	6.5	7.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	7.5	6.5	7.0	1.5	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
8	7.5	5.0	6.0	3.0	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
9	7.0	5.0	6.0	3.0	2.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
10	6.0	4.5	5.0	2.5	1.5	2.0	0.0	0.0	0.0	0.5	0.0	0.0
11	5.5	3.5	4.5	3.0	1.0	2.0	0.0	0.0	0.0	0.5	0.0	0.5
12	6.0	3.0	4.5	4.5	3.0	4.0	0.5	0.0	0.5	0.5	0.5	0.5
13	5.5	4.5	5.0	3.5	1.5	2.5	1.0	0.5	0.5	0.5	0.0	0.0
14	5.5	4.0	5.0	2.5	1.5	2.0	0.5	0.5	0.5	0.5	0.0	0.0
15	5.0	3.0	3.5	3.5	2.5	3.0	0.5	0.0	0.5	0.0	0.0	0.0
16	4.0	3.0	3.5	2.5	0.0	1.0	1.0	0.0	0.5	0.0	0.0	0.0
17	5.0	4.0	4.0	0.0	0.0	0.0	1.0	0.5	1.0	0.0	0.0	0.0
18	6.0	4.5	5.5	0.0	0.0	0.0	1.0	0.0	0.5	0.0	0.0	0.0
19	6.5	5.5	6.0	0.0	0.0	0.0	1.0	0.0	0.5	0.0	0.0	0.0
20	7.0	5.0	6.0	0.0	0.0	0.0	1.0	0.5	1.0	0.0	0.0	0.0
21	5.5	4.0	5.0	0.0	0.0	0.0	1.0	0.0	0.5	0.5	0.0	0.0
22	5.5	4.5	5.0	0.0	0.0	0.0	2.5	0.5	2.0	1.0	0.0	0.5
23	5.5	4.5	5.0	0.0	0.0	0.0	2.0	1.5	1.5	1.0	0.0	0.5
24	5.0	4.5	4.5	0.5	0.0	0.0	1.5	1.0	1.5	0.0	0.0	0.0
25	7.5	4.5	7.0	0.0	0.0	0.0	1.5	0.5	1.0	0.0	0.0	0.0
26	6.5	5.0	6.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
27	5.5	4.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	4.5	2.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	2.0	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	1.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	1.0	0.0	0.5	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	11.5	0.0	5.3	4.5	0.0	1.0	2.5	0.0	0.4	1.0	0.0	0.1

15056030 KAKUHAN CREEK NEAR HAINES—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	5.5	4.5	5.0
2	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.5	5.5	4.0	5.0
3	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0	1.5	7.5	4.0	5.0
4	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.5	2.0	6.0	3.5	4.5
5	0.0	0.0	0.0	0.5	0.0	0.0	2.5	1.5	2.0	6.0	3.0	4.5
6	0.5	0.0	0.0	0.5	0.0	0.5	3.5	1.5	2.5	6.5	3.5	4.5
7	0.5	0.0	0.5	1.0	0.0	0.5	3.5	2.0	3.0	7.0	4.0	5.0
8	0.5	0.0	0.5	1.0	0.0	0.0	4.0	2.0	2.5	7.5	4.0	5.0
9	1.0	0.0	0.5	1.0	0.0	0.5	3.0	2.0	2.5	5.5	4.0	5.0
10	1.0	0.5	1.0	1.5	1.0	1.0	4.0	2.5	3.0	7.5	4.0	5.0
11	1.5	1.0	1.0	2.0	1.0	1.5	4.0	1.5	2.5	7.5	4.0	5.5
12	1.5	1.0	1.0	2.0	0.5	1.5	3.0	2.5	3.0	8.0	4.0	5.5
13	1.5	1.0	1.5	1.5	0.5	1.0	4.0	2.5	3.0	8.0	4.5	6.0
14	1.5	1.0	1.5	1.0	0.0	0.5	3.0	2.0	2.5	8.0	4.5	6.0
15	1.0	0.5	1.0	1.5	1.0	1.0	3.5	1.5	2.0	8.0	4.5	5.5
16	0.5	0.5	0.5	2.0	1.0	1.0	3.0	1.0	2.0	7.5	5.0	6.0
17	0.5	0.5	0.5	1.5	0.0	1.0	3.0	2.0	2.5	8.0	4.5	6.0
18	1.5	0.0	0.5	0.0	0.0	0.0	3.5	2.0	2.5	8.0	4.5	6.0
19	1.5	1.5	1.5	0.0	0.0	0.0	3.5	1.5	2.5	9.0	5.0	6.5
20	2.0	1.5	1.5	0.0	0.0	0.0	4.0	1.5	2.5	9.0	5.0	6.5
21	2.0	1.5	2.0	0.0	0.0	0.0	4.5	2.0	3.0	7.5	4.5	5.5
22	2.5	1.5	2.0	0.0	0.0	0.0	3.5	2.5	3.0	8.0	4.5	6.0
23	2.0	1.5	2.0	0.0	0.0	0.0	4.0	2.5	3.0	8.5	4.5	6.0
24	2.0	1.5	1.5	0.5	0.0	0.0	3.5	2.5	3.0	6.5	6.0	6.0
25	1.5	1.0	1.0	1.5	0.5	1.0	3.5	2.5	3.0	6.5	5.0	5.5
26	1.0	0.5	0.5	2.0	1.0	1.5	4.0	2.0	3.5	8.0	5.0	6.0
27	0.5	0.0	0.0	2.0	1.5	1.5	5.0	2.5	3.5	7.5	4.5	6.0
28	0.5	0.0	0.0	1.5	0.0	1.0	5.5	3.0	4.0	8.5	4.5	6.0
29	0.5	0.0	0.5	1.5	0.5	1.5	6.5	3.0	4.0	7.5	5.5	6.5
30	---	---	---	0.5	0.0	0.5	7.5	4.0	5.0	8.0	4.5	6.0
31	---	---	---	0.5	0.0	0.0	---	---	---	8.0	5.5	6.5
MONTH	2.5	0.0	0.8	2.0	0.0	0.5	7.5	0.0	2.6	9.0	3.0	5.6
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.5	5.5	6.5	9.5	8.0	9.0	11.0	9.0	9.5	12.0	7.5	9.0
2	6.5	5.0	5.5	12.5	8.5	10.0	10.5	8.0	9.5	10.0	8.5	9.0
3	9.5	4.5	6.5	10.0	9.0	9.5	10.5	9.0	9.5	9.5	7.5	8.5
4	9.5	6.0	7.5	11.5	8.5	9.5	13.5	8.0	10.5	9.0	7.5	8.0
5	9.0	7.0	7.5	11.0	8.0	9.0	14.0	9.0	11.0	7.5	6.0	6.5
6	12.5	6.5	9.0	12.0	8.0	9.5	14.0	9.5	11.0	7.5	6.0	6.5
7	11.0	7.0	8.5	11.0	8.0	9.5	14.0	9.0	11.0	7.0	4.0	5.5
8	7.0	6.0	6.5	13.0	8.5	10.5	14.0	9.5	11.5	7.5	4.0	5.5
9	7.0	5.5	6.0	13.0	9.0	10.5	14.5	9.5	11.5	7.5	4.0	5.5
10	7.0	5.0	5.5	10.0	9.0	10.0	14.0	10.0	11.5	7.0	4.0	5.5
11	7.5	5.0	6.5	13.0	8.5	10.5	12.0	9.0	10.5	7.0	5.5	6.0
12	9.5	6.0	7.5	14.0	9.0	11.0	12.5	8.0	10.0	7.5	6.5	7.0
13	9.5	6.0	8.0	14.0	9.0	11.5	14.0	8.5	11.0	7.5	6.5	7.0
14	7.5	6.5	7.0	14.5	10.0	12.0	15.0	9.5	12.0	8.0	6.5	7.0
15	8.0	6.5	7.0	15.0	10.0	12.0	14.5	10.5	12.0	8.0	6.5	7.0
16	10.0	5.5	7.5	15.0	9.5	11.5	15.5	10.5	12.5	8.0	5.5	6.5
17	12.0	6.5	9.0	11.5	9.5	10.5	14.5	10.5	12.0	7.0	5.0	6.0
18	12.5	7.5	9.5	11.5	9.5	10.5	12.0	10.5	11.5	7.0	4.5	5.5
19	12.5	7.5	9.5	13.5	9.0	10.5	12.0	10.5	11.0	6.5	4.5	5.5
20	12.0	7.5	9.0	13.5	10.0	11.0	13.5	10.0	11.0	7.5	6.0	6.5
21	12.5	7.5	9.5	12.5	10.5	11.5	13.5	9.5	11.5	9.0	6.5	7.5
22	12.5	7.5	9.5	12.5	9.5	10.5	11.0	8.0	9.5	7.0	6.0	6.5
23	13.0	8.0	10.0	12.5	9.5	10.5	11.5	7.0	9.0	8.0	6.5	7.0
24	13.5	8.5	10.5	11.0	9.0	10.0	12.0	8.0	9.5	7.5	5.5	6.5
25	13.5	8.5	10.5	10.5	8.5	9.5	11.0	8.5	9.5	6.5	4.5	5.5
26	13.0	8.5	10.5	10.0	8.0	9.0	11.0	9.5	10.0	7.0	6.0	6.5
27	10.5	9.0	10.0	10.5	9.5	10.0	10.0	9.0	9.5	7.5	5.0	6.5
28	10.0	8.5	9.0	11.5	9.5	10.5	10.5	8.5	9.0	6.5	5.0	6.0
29	12.5	8.5	10.0	10.0	8.5	9.0	11.5	8.0	9.5	7.5	6.5	7.0
30	10.0	9.0	9.5	11.5	8.0	9.5	12.5	7.5	9.5	8.0	7.0	7.5
31	---	---	---	11.0	8.5	9.5	12.0	7.5	9.0	---	---	---
MONTH	13.5	4.5	8.3	15.0	8.0	10.2	15.5	7.0	10.5	12.0	4.0	6.7

15056210 TAIYA RIVER NEAR SKAGWAY

LOCATION.--Lat 59°30'43", long 135°20'40", in SW¹/₄ NE¹/₄ SE¹/₄ sec. 22, T. 27 S., R. 59 E. (Skagway C-1 quad), Hydrologic Unit 19010303, on the downstream side of highway bridge, 1.0 mi downstream from West Creek, 2.2 mi upstream from mouth, and 4 mi north of Skagway.

DRAINAGE AREA.--179 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- October 1969 to November 1977; October 2003 to September 2004.

GAGE.--Water-stage recorder.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD --Flood of September 1967 overflowed banks and probably reached a peak discharge of over 25,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2000	362	e110	e103	e77	e135	e90	1250	e1800	e4200	e3000	e2300
2	e1700	326	e220	e97	e75	e130	118	1440	e1700	e4100	e2500	e2200
3	e1700	295	e190	e90	e75	123	363	1360	e1700	e4000	e2750	e3000
4	e1800	266	e150	e85	e75	116	337	1560	e1650	e3900	e3000	e4000
5	e1900	e250	e130	e80	e135	113	237	1320	e1800	e3900	e3200	e2000
6	e1800	e240	e115	e77	e175	108	195	1210	e2700	e3850	e3400	1250
7	e1900	234	e105	e74	e140	110	190	1310	e3450	e3800	e3300	938
8	e1500	218	e96	e72	e110	124	224	1400	e4720	e3750	e3250	774
9	e1300	237	e94	e70	e400	132	229	1460	e5530	e3700	e3200	732
10	e1100	215	e93	e68	e325	130	219	1370	e4850	e3600	e3300	718
11	e920	200	e95	e66	e260	167	238	1390	e3900	e3550	e3350	672
12	764	327	e98	e65	e225	150	240	1590	e3090	e3800	e3500	782
13	649	307	e105	e73	e200	130	229	1910	e2780	e4100	e3700	1290
14	564	272	e109	e82	e185	119	249	2230	e2870	e5000	e4000	1270
15	496	293	e112	e93	e175	116	240	2260	e3280	e5100	e5000	1090
16	445	277	130	e105	168	111	232	2160	e3310	e5100	e5000	833
17	405	e225	142	e120	147	106	223	2110	e3760	e3900	e4620	660
18	396	e170	143	e140	137	101	219	2030	e3840	e3600	e4300	533
19	454	e120	144	e130	143	e95	216	2280	e4600	e3250	e4000	463
20	524	e110	162	e150	195	e90	219	2730	e6010	e3200	e3800	673
21	460	e100	155	e168	298	e85	235	2680	e6870	e3600	e3700	2390
22	427	e96	439	e173	368	e82	271	2530	e6960	e4000	e3600	e4000
23	481	e97	606	e165	281	e79	320	2470	e6690	e4300	e3300	e3100
24	438	e103	363	e145	233	e76	315	e2600	e6610	e3800	e2900	2320
25	1250	e120	260	e125	202	e80	406	e2500	e5310	e3400	e2600	1620
26	1790	e105	e220	e113	e185	e83	571	e2500	e4600	e3000	e2500	1620
27	1260	e92	e180	e100	e165	e95	549	e2600	e4400	e2800	e2800	2340
28	847	e92	e160	e95	e155	e100	537	e2400	e4500	e4000	e3300	1990
29	592	e95	e140	e88	e145	120	581	e2100	e4600	e4800	e3200	1870
30	464	e100	e130	e83	---	113	814	e2000	e4500	e4000	e2700	1840
31	401	---	e110	e79	---	102	---	e1900	---	e3400	e2500	---
TOTAL	30727	5944	5306	3174	5454	3421	9106	60650	122380	120500	105270	49268
MEAN	991	198	171	102	188	110	304	1956	4079	3887	3396	1642
MAX	2000	362	606	173	400	167	814	2730	6960	5100	5000	4000
MIN	396	92	93	65	75	76	90	1210	1650	2800	2500	463
AC-FT	60950	11790	10520	6300	10820	6790	18060	120300	242700	239000	208800	97720
CFSM	5.54	1.11	0.96	0.57	1.05	0.62	1.70	10.9	22.8	21.7	19.0	9.17
IN.	6.39	1.24	1.10	0.66	1.13	0.71	1.89	12.60	25.43	25.04	21.88	10.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)#

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	2000	2001	2002	2003	2004
MEAN	793	384	148	85.1	106	77.2	148	832	2267	3570	3473	2009			
MAX	1535	805	330	112	191	139	304	1956	4079	4558	4776	3131			
(WY)	1975	1970	1970	1970	1977	1970	2004	2004	2004	1971	1977	1975			
MIN	444	91.5	54.2	33.3	49.4	27.7	53.5	452	1625	2592	2718	1215			
(WY)	1974	1974	1973	1973	1974	1974	1972	1971	1974	1970	1970	1973			

SUMMARY STATISTICS

FOR 2004 WATER YEAR

WATER YEARS 1970 - 2004#

ANNUAL TOTAL	521200														
ANNUAL MEAN	1424									1168					
HIGHEST ANNUAL MEAN										1424		2004			
LOWEST ANNUAL MEAN										880		1973			
HIGHEST DAILY MEAN					6960		Jun 22			9620		Sep 13 1975			
LOWEST DAILY MEAN					65		Jan 12			a16		Mar 30 1974			
ANNUAL SEVEN-DAY MINIMUM					70		Jan 7			17		Mar 27 1974			
MAXIMUM PEAK FLOW					b					11500		Sep 27 1976			
MAXIMUM PEAK STAGE					c					18.43		Sep 27 1976			
ANNUAL RUNOFF (AC-FT)	1034000									846200					
ANNUAL RUNOFF (CFSM)					7.96					6.53					
ANNUAL RUNOFF (INCHES)					108.32					88.66					
10 PERCENT EXCEEDS					3900					3400					
50 PERCENT EXCEEDS					457					350					
90 PERCENT EXCEEDS					95					60					

See Period of Record; partial years used in monthly statistics

- a Mar. 30 and 31
- b Not determined; see highest daily mean
- c Not determined
- e Estimated

15056210 TAIYA RIVER NEAR SKAGWAY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-74, 1976-1977, and 2004.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June to October 1971, July 1972 to October 1973, March to September 1974, February to September 1977, and October 2003 to September 2004.

INSTRUMENTATION.--Electronic water temperature recorder, recorder set at 15 minute recording interval.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on April 6, 2004. No variation was found within the cross section, or between mean stream temperature and temperature at the sensor. Missing record December 1-14, and May 24 to June 24 due to recorder malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 10.0°C, May 21, 1974 ; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 8.5°C, July 16 and 19, but may have been higher during period of missing record; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Loca- tion in X-sect. looking dwnstrm ft from l bank (00009)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, water, deg C (00010)	Dis- solved oxygen, mg/L (00300)
APR						
06...	0923	2.00	79	7.7	2.0	13.9
06...	0924	28.0	79	7.7	2.0	13.9
06...	0925	54.0	79	7.7	2.0	13.9
06...	0926	80.0	79	7.7	2.0	13.9
06...	0927	106	79	7.7	2.0	13.8

Date	Time	Medium code	Sample type	Gage height, feet (00065)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Stream width, feet (00004)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)
DEC													
15...	1000	9	9	--	112	10	101	734	13.3	100	7.8	77	-2.0
FEB													
10...	1030	9	9	--	325	10	84.0	765	13.2	90	7.7	63	2.0
APR													
06...	0915	9	9	12.65	197	10	130	756	13.9	100	7.7	79	1.0
JUN													
25...	0730	9	9	16.50	5300	10	190	758	12.6	98	7.1	22	25.0
AUG													
17...	0920	9	9	16.16	4620	10	184	760	13.1	104	7.0	17	24.5

Date	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, water, fltrd, mg/L (00915)	Calcium unfltrd recover- able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)	Magnes- ium, water, unfltrd recover- able, mg/L (00927)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar- bonate, wat flt incrm. field, mg/L (00453)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
DEC													
15...	.5	36	11.8	--	1.65	--	1.55	1.27	34	41	.85	<.2	5.32
FEB													
10...	.0	30	9.68	--	1.53	--	1.25	1.09	26	32	1.42	<.2	4.57
APR													
06...	2.0	36	11.6	10.7	1.77	1.58	1.54	1.47	34	42	1.24	<.2	5.62
JUN													
25...	4.5	9	3.10	5.04	.387	2.40	.57	.28	9	11	1.76	.9	1.21
AUG													
17...	5.5	8	2.64	--	.324	--	.43	.18	6	7	.96	<.2	1.01

15056210 TAIYA RIVER NEAR SKAGWAY—Continued

Date	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)
DEC 15...	3.5	47	42	<.10	<.10	<.010	.230	<.002	--	<.006	E.002	<.004	--
FEB 10...	2.6	39	45	E.07	E.09	E.008	.316	E.001	--	<.006	E.003	<.04	--
APR 06...	2.6	48	48	E.05	E.07	<.010	.260	<.002	<.02	<.006	E.004	<.004	<.1
JUN 25...	28.6	42	16	E.10	<.10	E.005	.027	<.002	.02	.017	.022	.109	.3
AUG 17...	.7	10	11	<.10	<.10	E.006	E.014	E.001	--	E.003	<.004	.139	--

Date	Organic carbon, water, fltrd, mg/L (00681)	Aluminum, water, fltrd, recoverable, ug/L (01106)	Aluminum, water, unfltrd recoverable, ug/L (01105)	Antimony, water, fltrd, ug/L (01095)	Antimony, water, unfltrd recoverable, ug/L (01097)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Barium, water, unfltrd recoverable, ug/L (01007)	Beryllium, water, fltrd, recoverable, ug/L (01010)	Beryllium, water, unfltrd recoverable, ug/L (01012)	Boron, water, fltrd, ug/L (01020)	Boron, water, unfltrd recoverable, ug/L (01022)	Cadmium water, fltrd, ug/L (01025)
DEC 15...	.9	--	--	--	--	--	--	--	--	--	--	--	--
FEB 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 06...	2.3	36	74	<.20	<.2	<.2	37	37	<.06	<.06	<8	<8	<.04
JUN 25...	E.2	48	4760	<.20	<.2	<.2	10	117	<.06	.08	<8	<8	<.04
AUG 17...	E.2	--	--	--	--	--	--	--	--	--	--	--	--

Date	Cadmium water, unfltrd recoverable, ug/L (01027)	Chromium, water, fltrd, recoverable, ug/L (01030)	Chromium, water, unfltrd recoverable, ug/L (01034)	Cobalt water, fltrd, recoverable, ug/L (01035)	Cobalt water, unfltrd recoverable, ug/L (01037)	Copper, water, fltrd, recoverable, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, fltrd, recoverable, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, fltrd, recoverable, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Lithium water, fltrd, recoverable, ug/L (01130)	Lithium water, unfltrd recoverable, ug/L (01132)
DEC 15...	--	--	--	--	--	--	--	23	--	--	--	--	--
FEB 10...	--	--	--	--	--	--	--	61	--	--	--	--	--
APR 06...	<.04	<.8	<.8	.072	.080	1.4	1.6	49	120	.13	.09	<.6	E.4
JUN 25...	.05	<.8	3.6	.034	1.73	E.2	2.6	37	6070	E.06	1.96	E.3	3.5
AUG 17...	--	--	--	--	--	--	--	92	--	--	--	--	--

15056210 TAIYA RIVER NEAR SKAGWAY—Continued

Date	Mangan- ese, water, unfltrd recover- able, ug/L (01056)	Mangan- ese, water, unfltrd recover- able, ug/L (01055)	Mercury water, unfltrd recover- able, ug/L (71890)	Mercury water, unfltrd recover- able, ug/L (71900)	Molyb- denum, water, unfltrd recover- able, ug/L (01060)	Molyb- denum, water, unfltrd recover- able, ug/L (01062)	Nickel, water, unfltrd recover- able, ug/L (01065)	Nickel, water, unfltrd recover- able, ug/L (01067)	Selen- ium, water, unfltrd recover- able, ug/L (01145)	Selen- ium, water, unfltrd recover- able, ug/L (01147)	Silver, water, unfltrd recover- able, ug/L (01075)	Silver, water, unfltrd recover- able, ug/L (01077)	Stront- ium, water, unfltrd recover- able, ug/L (01080)
DEC 15...	11.2	--	--	--	--	--	--	--	--	--	--	--	--
FEB 10...	9.7	--	--	--	--	--	--	--	--	--	--	--	--
APR 06...	10.8	12	<.02	<.02	1.2	1.2	.61	.28	<.4	<.4	<.2	<.16	64.0
JUN 25...	5.5	105	<.02	<.02	.6	.6	.12	1.73	<.4	<.4	<.2	<.16	17.7
AUG 17...	8.0	--	--	--	--	--	--	--	--	--	--	--	--

Date	Stront- ium, water, unfltrd recover- able, ug/L (01082)	Thall- ium, water, unfltrd recover- able, ug/L (01057)	Thall- ium, water, unfltrd recover- able, ug/L (01059)	Vanad- ium, water, unfltrd recover- able, ug/L (01085)	Zinc, water, unfltrd recover- able, ug/L (01090)	Zinc, water, unfltrd recover- able, ug/L (01092)	Uranium natural water, unfltrd recover- able, ug/L (22703)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)	Sampler type, code (84164)
DEC 15...	--	--	--	--	--	--	--	2	.60	3044
FEB 10...	--	--	--	--	--	--	--	9	7.9	3044
APR 06...	68.8	<.04	<.2	.2	1.4	E1	.44	1	.53	3044
JUN 25...	30.9	<.04	<.2	.2	.7	24	.09	234	3350	3054
AUG 17...	--	--	--	--	--	--	--	144	1800	3054

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	2.0	1.0	1.5	---	---	---	0.0	0.0	0.0
2	---	---	---	2.0	1.0	1.5	---	---	---	0.0	0.0	0.0
3	---	---	---	2.0	0.5	1.5	---	---	---	0.0	0.0	0.0
4	---	---	---	1.0	0.0	0.5	---	---	---	0.0	0.0	0.0
5	---	---	---	1.0	0.0	0.5	---	---	---	0.0	0.0	0.0
6	---	---	---	0.5	0.0	0.0	---	---	---	0.0	0.0	0.0
7	---	---	---	1.5	0.5	1.0	---	---	---	0.0	0.0	0.0
8	---	---	---	2.0	0.0	1.0	---	---	---	0.0	0.0	0.0
9	---	---	---	2.5	2.0	2.0	---	---	---	0.0	0.0	0.0
10	---	---	---	2.0	1.5	2.0	---	---	---	0.0	0.0	0.0
11	---	---	---	1.5	1.0	1.5	---	---	---	0.0	0.0	0.0
12	4.0	2.5	3.0	2.5	1.5	2.0	---	---	---	0.0	0.0	0.0
13	4.5	3.0	4.0	2.5	2.0	2.0	---	---	---	0.0	0.0	0.0
14	4.5	3.0	4.0	2.5	2.0	2.0	---	---	---	0.0	0.0	0.0
15	4.0	2.0	3.0	2.5	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
16	3.5	2.5	3.0	2.0	0.5	1.5	0.5	0.0	0.0	0.0	0.0	0.0
17	4.5	3.0	3.5	0.5	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
18	5.0	4.0	4.5	0.5	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
19	5.0	4.0	4.5	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
20	4.5	3.5	4.0	0.5	0.0	0.0	1.0	0.5	0.5	0.0	0.0	0.0
21	4.0	2.5	3.5	0.5	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
22	4.0	3.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	5.0	4.0	4.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
24	4.5	3.5	4.0	0.0	0.0	0.0	1.0	0.0	0.5	0.0	0.0	0.0
25	5.5	4.0	4.5	0.0	0.0	0.0	1.0	0.5	0.5	0.0	0.0	0.0
26	5.5	4.5	5.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
27	5.0	4.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	3.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	2.0	0.5	1.0	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
31	1.5	0.5	1.0	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	---	---	---	---	---	---	---	---	---	0.0	0.0	0.0

SOUTHEAST ALASKA

15056210 TAIYA RIVER NEAR SKAGWAY—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	0.0	0.0	0.0	0.5	0.0	0.0	3.0	1.0	2.0	4.5	1.5	3.0
2	0.0	0.0	0.0	0.5	0.0	0.0	2.0	1.0	1.5	4.5	2.0	3.0
3	0.0	0.0	0.0	1.5	0.0	1.0	1.5	0.5	1.0	6.5	1.5	3.5
4	0.0	0.0	0.0	1.0	0.5	0.5	4.0	1.0	2.0	6.0	1.5	3.5
5	0.0	0.0	0.0	2.0	0.0	1.0	4.0	1.5	2.5	6.5	1.5	3.5
6	0.0	0.0	0.0	2.5	0.5	1.5	5.0	1.5	3.0	6.5	2.0	4.0
7	0.0	0.0	0.0	2.5	0.0	1.5	5.5	2.0	3.5	6.5	2.0	4.0
8	0.0	0.0	0.0	1.5	0.0	0.5	6.0	2.0	3.5	6.0	2.5	4.0
9	0.0	0.0	0.0	2.0	0.0	1.0	3.5	1.5	2.5	5.0	2.5	4.0
10	0.5	0.0	0.0	2.0	1.0	1.5	6.0	2.0	4.0	7.5	2.0	4.0
11	0.0	0.0	0.0	3.5	1.0	2.0	5.5	1.0	3.0	7.5	2.0	4.5
12	0.0	0.0	0.0	2.0	1.0	1.5	4.0	2.0	3.0	7.5	2.0	4.5
13	0.5	0.0	0.0	3.5	1.5	2.0	5.0	2.5	4.0	7.5	2.5	4.5
14	0.5	0.0	0.5	2.0	0.0	1.0	6.0	2.0	4.0	7.0	2.5	4.5
15	1.0	0.5	0.5	3.5	1.0	2.0	6.0	1.5	3.5	6.5	2.5	4.0
16	1.5	0.5	1.0	4.0	1.5	2.5	5.0	1.0	3.0	5.5	2.5	4.0
17	1.5	0.5	1.0	3.5	1.0	2.0	4.5	2.5	3.5	6.0	3.0	4.0
18	2.0	0.5	1.0	2.5	0.0	1.0	5.5	2.5	3.5	7.5	3.0	4.5
19	3.0	1.5	2.0	1.5	0.0	0.5	6.5	2.0	4.0	7.5	2.5	4.5
20	2.5	1.5	2.0	0.5	0.0	0.0	6.5	1.5	4.0	7.0	3.0	4.5
21	2.5	1.0	2.0	0.5	0.0	0.0	6.5	1.5	4.0	6.5	2.5	4.5
22	2.0	1.0	1.5	2.0	0.0	0.5	4.5	2.5	3.5	7.0	2.5	4.5
23	2.5	1.0	1.5	2.5	0.0	1.0	5.5	2.0	3.5	7.5	2.5	4.5
24	3.0	1.0	2.0	3.0	0.5	1.5	4.5	2.5	3.5	---	---	---
25	2.0	0.5	1.0	4.0	1.5	2.5	4.5	2.5	3.5	---	---	---
26	1.5	0.0	0.5	4.5	1.0	2.5	4.0	1.5	3.0	---	---	---
27	0.5	0.0	0.0	5.0	2.0	3.0	6.5	2.0	4.0	---	---	---
28	0.5	0.0	0.0	2.5	0.5	1.5	6.0	2.5	4.0	---	---	---
29	1.0	0.0	0.0	3.0	1.5	2.0	7.5	1.5	4.0	---	---	---
30	---	---	---	3.5	1.0	2.0	7.0	1.5	4.0	---	---	---
31	---	---	---	3.0	0.5	2.0	---	---	---	---	---	---
MONTH	3.0	0.0	0.6	5.0	0.0	1.3	7.5	0.5	3.3	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	5.5	4.5	5.0	6.5	4.0	5.0	7.0	3.5	5.0
2	---	---	---	7.0	4.0	5.5	6.0	4.0	5.0	6.0	4.5	5.0
3	---	---	---	6.0	4.5	5.0	5.5	4.5	5.0	6.5	4.5	5.5
4	---	---	---	6.0	4.0	5.0	8.0	4.0	5.5	5.5	4.0	4.5
5	---	---	---	6.0	4.0	5.0	8.0	4.0	5.5	5.0	4.0	4.5
6	---	---	---	7.0	4.0	5.5	8.0	4.0	5.5	6.0	4.0	4.5
7	---	---	---	6.0	4.0	5.0	8.0	4.0	5.5	6.0	3.0	4.5
8	---	---	---	7.5	4.0	5.5	8.0	4.0	5.5	6.5	2.5	4.5
9	---	---	---	7.0	4.5	5.5	8.0	4.0	5.5	6.0	2.5	4.0
10	---	---	---	6.0	4.5	5.0	7.5	4.5	5.5	6.0	2.0	4.0
11	---	---	---	8.0	4.0	5.5	6.0	4.5	5.5	5.5	3.5	4.5
12	---	---	---	8.0	4.0	5.5	7.5	4.0	5.5	5.5	4.0	5.0
13	---	---	---	7.5	4.5	5.5	8.0	4.0	5.5	6.0	4.0	5.0
14	---	---	---	7.5	4.5	6.0	8.0	4.0	5.5	6.5	4.5	5.0
15	---	---	---	8.0	5.0	6.0	7.5	4.5	5.5	6.0	4.0	5.0
16	---	---	---	8.5	4.5	6.0	7.5	4.5	6.0	6.0	3.5	4.5
17	---	---	---	7.5	5.0	6.0	7.5	4.5	5.5	6.0	4.0	5.0
18	---	---	---	7.5	5.0	6.0	6.0	4.5	5.0	6.5	4.0	5.0
19	---	---	---	8.5	4.5	6.0	6.5	4.5	5.5	5.5	2.5	4.0
20	---	---	---	8.0	4.5	6.0	7.0	4.5	5.5	5.5	4.0	5.0
21	---	---	---	7.0	5.0	6.0	7.5	4.5	5.5	6.0	4.5	5.5
22	---	---	---	7.0	4.5	5.5	7.5	4.5	5.5	5.0	4.0	4.5
23	---	---	---	6.5	5.0	5.5	7.5	3.5	5.0	5.5	4.0	5.0
24	---	---	---	6.5	4.5	5.5	6.5	3.5	5.0	5.5	4.5	5.0
25	8.0	4.5	6.0	6.5	4.5	5.5	6.0	4.0	5.0	5.5	4.0	4.5
26	7.0	4.5	5.5	5.5	4.5	5.0	5.5	4.0	5.0	5.5	4.5	5.0
27	8.0	4.0	5.5	5.5	4.5	5.0	6.0	4.5	5.0	5.5	4.0	5.0
28	5.5	4.5	5.0	6.0	4.5	5.5	6.0	4.5	5.0	5.5	4.0	4.5
29	7.0	4.0	5.5	5.5	4.5	5.0	6.0	4.0	5.0	6.0	5.0	5.5
30	6.0	4.5	5.0	6.0	4.0	5.0	6.5	4.0	5.0	6.0	5.0	5.5
31	---	---	---	7.0	4.0	5.0	7.0	3.5	5.0	---	---	---
MONTH	---	---	---	8.5	4.0	5.5	8.0	3.5	5.3	7.0	2.0	4.8

15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS

LOCATION.--Lat 58°26'37", long 135°36'01", in SW¹/₄ SE¹/₄ SE¹/₄ sec. 36, T. 39 S., R. 59 E. (Juneau B-5 quad), Hydrologic Unit 19010302, in Glacier Bay National Park and Preserve, 1.7 miles above the mouth at Icy Passage, 4.5 mi east of Gustavus, and 44 mi west of Juneau.

DRAINAGE AREA.--10.1 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1999 to September 2004 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 560 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 180 ft³/s, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	30	52	e14	e8.5	19	15	119	58	22	32	11
2	38	27	69	e13	e9.5	18	58	151	62	20	31	46
3	32	24	24	e12	e10	17	168	148	61	24	28	115
4	34	22	18	e11	e12	16	84	151	64	22	25	82
5	34	20	16	e11	e29	15	52	131	79	27	22	94
6	46	18	e15	e10	e58	15	49	106	78	25	20	102
7	50	18	e14	e9.5	e50	22	62	95	84	21	18	71
8	39	17	e14	e9.0	e150	89	53	89	85	20	17	48
9	33	116	13	e9.3	e260	38	57	90	76	19	16	37
10	31	38	e13	e10	127	42	64	93	84	18	15	31
11	28	43	e12	e12	78	50	53	99	73	18	20	29
12	26	341	e12	e22	64	31	54	106	66	16	16	77
13	24	113	12	e70	62	24	50	112	59	16	14	127
14	24	68	12	e180	62	20	47	115	58	15	13	87
15	21	75	12	e70	42	19	43	108	50	14	12	68
16	20	49	13	e30	33	18	38	95	44	14	12	52
17	19	37	47	e35	28	18	37	84	43	14	11	40
18	22	30	54	e79	29	e17	36	81	47	13	12	33
19	23	e28	103	e62	41	e16	32	90	51	12	13	29
20	22	e25	44	e69	71	e15	31	107	50	12	13	89
21	20	e23	108	82	79	e14	33	128	45	13	12	270
22	25	e22	311	101	99	14	42	114	42	13	11	158
23	75	e21	127	94	54	13	45	98	39	12	11	176
24	52	20	61	57	44	15	44	113	37	13	10	229
25	180	18	43	e23	35	13	60	151	35	12	10	149
26	183	17	34	e10	29	16	107	164	32	12	10	101
27	103	16	e27	e9.0	e25	17	82	113	32	24	19	144
28	88	15	e24	e8.6	23	46	72	83	28	78	20	109
29	53	19	e20	e8.3	21	37	63	72	26	56	19	92
30	41	39	e18	e8.0	---	22	75	65	24	36	16	150
31	35	---	e16	e8.0	---	18	---	61	---	32	12	---
TOTAL	1468	1349	1358	1146.7	1633.0	744	1706	3332	1612	663	510	2846
MEAN	47.4	45.0	43.8	37.0	56.3	24.0	56.9	107	53.7	21.4	16.5	94.9
MAX	183	341	311	180	260	89	168	164	85	78	32	270
MIN	19	15	12	8.0	8.5	13	15	61	24	12	10	11
MED	34	25	20	13	42	18	52	106	51	18	15	88
AC-FT	2910	2680	2690	2270	3240	1480	3380	6610	3200	1320	1010	5650
CFSM	4.69	4.45	4.34	3.66	5.58	2.38	5.63	10.6	5.32	2.12	1.63	9.39
IN.	5.41	4.97	5.00	4.22	6.01	2.74	6.28	12.27	5.94	2.44	1.88	10.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)#

	MEAN	88.4	54.3	55.8	35.3	26.6	18.6	33.9	83.3	81.7	54.7	52.8	98.8
MAX	129	99.0	128	55.4	56.3	24.0	56.9	107	114	79.1	131	128	
(WY)	2003	2003	2000	2003	2004	2004	2004	2004	2000	2000	2002	1999	
MIN	47.4	22.8	20.6	18.7	11.0	8.67	15.2	53.2	47.6	21.4	16.5	77.5	
(WY)	2004	2002	2002	2000	2000	2002	2002	2003	2003	2004	2004	2002	

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1999 - 2004#

ANNUAL TOTAL	16287.5	18367.7	
ANNUAL MEAN	44.6	50.2	56.6
HIGHEST ANNUAL MEAN			70.3
LOWEST ANNUAL MEAN			50.2
HIGHEST DAILY MEAN	341	341	1110
LOWEST DAILY MEAN	7.0	a8.0	5.0
ANNUAL SEVEN-DAY MINIMUM	7.4	8.6	5.8
MAXIMUM PEAK FLOW		759	b1650
MAXIMUM PEAK STAGE		29.67	30.52
INSTANTANEOUS LOW FLOW		c	5.0
ANNUAL RUNOFF (AC-FT)	32310	36430	41030
ANNUAL RUNOFF (CFSM)	4.42	4.97	5.61
ANNUAL RUNOFF (INCHES)	59.99	67.65	76.19
10 PERCENT EXCEEDS	101	108	122
50 PERCENT EXCEEDS	29	33	35
90 PERCENT EXCEEDS	13	12	11

See period of Record, partial years used in monthly statistics
a January 30-31
b From rating curve extended above 130 cfs
c Undetermined, see lowest daily value
e Estimated

15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- October 1999 to September 2004 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1999 to September 2004 (discontinued).

INSTRUMENTATION.-- Electronic water-temperature recorder set for 1-hour recording interval.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on May 14, 2004. No variation was found in the temperature cross section. No variation was found between mean stream temperature and sensor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 17.5°C, July 15-16, 2004; minimum, 0.0°C, on many days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE 2003: Maximum, 15.5°C, July 12; minimum, 0.0°C, on many days during the winter.

WATER TEMPERATURE 2004: Maximum, 17.5°C, July 15-16; minimum, 0.0°C, on many days during the winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (00004)	Location in X-sect. looking downstrm ft from l bank (00009)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
MAY							
14...	1204	49.0	1.50	28.21	104	6.0	12.5
14...	1205	49.0	11.5	28.21	104	6.0	12.5
14...	1206	49.0	21.5	28.21	104	6.0	12.5
14...	1207	49.0	31.5	28.21	104	6.0	12.5

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.5	6.5	7.0	5.0	4.5	4.5	4.5	3.5	4.0	1.0	0.5	1.0
2	7.0	6.0	6.5	4.5	4.5	4.5	3.5	2.5	3.0	1.5	1.0	1.0
3	7.0	5.5	6.5	4.5	4.0	4.5	2.5	1.5	2.0	1.5	0.5	1.0
4	7.0	6.0	6.5	5.0	4.5	4.5	1.5	1.0	1.5	1.5	0.5	1.0
5	6.0	5.5	6.0	5.5	4.5	5.0	2.0	1.0	1.5	2.0	1.5	1.5
6	7.5	6.0	7.0	6.0	5.0	5.5	2.0	1.0	1.5	2.5	1.0	2.0
7	7.5	7.0	7.5	5.5	3.5	4.5	2.5	2.0	2.5	1.5	1.0	1.5
8	7.0	6.0	6.5	3.5	3.0	3.5	3.0	2.5	3.0	1.5	0.5	1.0
9	6.0	4.0	5.0	4.0	3.5	4.0	4.0	3.0	3.5	0.5	0.0	0.0
10	4.5	3.5	4.0	4.5	4.0	4.0	4.0	3.5	4.0	0.0	0.0	0.0
11	5.5	4.0	5.0	4.5	4.0	4.5	3.5	3.5	3.5	0.0	0.0	0.0
12	6.0	5.5	6.0	4.5	4.0	4.0	4.0	3.0	3.5	0.0	0.0	0.0
13	6.5	6.0	6.0	5.0	4.5	4.5	3.5	2.0	3.0	1.5	0.0	1.0
14	6.5	5.5	6.0	5.0	4.5	5.0	2.5	2.0	2.0	1.0	0.0	0.0
15	7.0	6.5	6.5	5.0	4.0	5.0	3.0	2.0	2.5	1.5	0.0	0.5
16	8.0	7.0	7.5	4.0	3.0	3.5	3.0	2.0	2.5	1.5	1.5	1.5
17	7.5	7.0	7.0	4.0	3.0	3.5	2.5	2.0	2.5	1.5	0.5	1.0
18	7.0	6.5	6.5	4.0	3.5	3.5	2.5	1.5	2.0	2.0	1.5	1.5
19	7.5	6.5	7.5	4.0	3.5	3.5	2.0	0.5	1.5	2.0	2.0	2.0
20	8.0	7.0	7.5	4.0	4.0	4.0	0.5	0.0	0.0	2.5	2.0	2.0
21	7.0	7.0	7.0	4.0	4.0	4.0	0.0	0.0	0.0	2.0	0.5	1.0
22	7.0	6.5	7.0	4.0	3.5	3.5	0.0	0.0	0.0	0.5	0.0	0.5
23	7.0	6.0	6.5	3.5	2.0	2.5	1.0	0.0	0.5	0.5	0.0	0.0
24	6.5	5.5	6.0	4.0	2.5	3.5	1.5	0.0	1.0	0.0	0.0	0.0
25	6.5	6.0	6.5	4.5	4.0	4.0	1.5	1.0	1.0	0.5	0.0	0.0
26	6.5	6.0	6.5	5.5	4.0	5.0	1.0	0.5	1.0	0.5	0.0	0.5
27	6.5	6.0	6.5	5.5	4.5	5.0	1.0	0.0	0.5	1.0	0.0	0.5
28	6.0	5.0	5.5	5.0	4.5	4.5	0.5	0.0	0.5	1.0	1.0	1.0
29	5.0	4.0	4.5	5.0	4.5	5.0	0.0	0.0	0.0	1.5	1.0	1.5
30	4.0	3.5	4.0	5.0	4.5	5.0	0.5	0.0	0.0	1.5	1.0	1.0
31	4.5	3.5	4.0	---	---	---	1.0	0.0	0.5	1.0	0.0	0.5
MONTH	8.0	3.5	6.2	6.0	2.0	4.2	4.5	0.0	1.8	2.5	0.0	0.8

SOUTHEAST ALASKA

77

15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS—Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1.5	0.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	6.0	4.0	5.0
2	2.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	5.5	3.0	4.0
3	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	5.5	3.0	4.0
4	2.0	1.5	1.5	0.5	0.0	0.5	0.0	0.0	0.0	5.0	2.0	3.5
5	2.0	1.5	1.5	0.5	0.0	0.0	0.0	0.0	0.0	6.0	2.0	4.0
6	2.0	1.5	2.0	0.0	0.0	0.0	0.5	0.0	0.0	6.5	3.0	4.5
7	2.0	1.5	2.0	0.0	0.0	0.0	1.5	0.5	1.0	6.5	2.5	4.5
8	2.0	1.5	1.5	0.0	0.0	0.0	2.5	0.5	1.5	7.5	3.0	5.0
9	2.5	1.5	2.0	0.0	0.0	0.0	2.5	0.5	1.0	7.5	3.5	5.5
10	2.0	1.5	2.0	0.0	0.0	0.0	3.0	1.0	1.5	6.5	4.0	5.5
11	2.5	1.5	2.0	0.0	0.0	0.0	3.5	1.0	1.5	5.5	5.0	5.5
12	2.5	1.5	2.0	0.0	0.0	0.0	4.0	0.5	1.5	5.5	5.0	5.0
13	2.5	1.0	2.0	0.0	0.0	0.0	4.0	0.5	1.5	6.0	4.0	5.0
14	1.0	0.0	0.5	0.0	0.0	0.0	4.0	0.5	2.0	5.0	3.5	4.5
15	1.5	0.5	1.0	0.0	0.0	0.0	3.0	2.0	2.5	6.5	3.5	5.0
16	1.5	1.0	1.0	0.0	0.0	0.0	2.0	1.5	2.0	6.5	3.0	4.5
17	1.5	1.0	1.0	0.0	0.0	0.0	2.5	1.5	2.0	7.0	3.5	5.0
18	1.5	1.0	1.0	0.0	0.0	0.0	2.5	1.5	2.0	9.0	5.0	6.5
19	1.0	0.0	0.5	0.0	0.0	0.0	5.0	2.0	3.0	8.5	4.0	6.0
20	0.0	0.0	0.0	0.0	0.0	0.0	4.0	1.5	2.5	9.0	4.0	6.5
21	0.0	0.0	0.0	0.0	0.0	0.0	5.0	2.0	3.0	9.0	5.0	7.0
22	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.5	3.5	9.0	6.5	7.5
23	0.0	0.0	0.0	0.0	0.0	0.0	6.0	3.0	4.0	7.5	6.5	7.0
24	0.0	0.0	0.0	0.0	0.0	0.0	6.0	2.5	4.0	7.5	6.5	7.0
25	0.0	0.0	0.0	0.0	0.0	0.0	6.0	3.0	4.5	6.5	6.0	6.0
26	0.0	0.0	0.0	0.0	0.0	0.0	6.0	3.0	4.5	8.0	5.5	6.5
27	0.0	0.0	0.0	0.0	0.0	0.0	6.0	3.5	4.5	8.0	5.0	6.5
28	0.0	0.0	0.0	0.0	0.0	0.0	6.5	2.5	4.5	8.0	6.0	7.0
29	---	---	---	0.0	0.0	0.0	6.5	3.0	4.5	8.5	7.0	7.5
30	---	---	---	0.0	0.0	0.0	6.5	3.5	5.0	9.0	6.5	8.0
31	---	---	---	0.5	0.0	0.0	---	---	---	8.0	7.0	7.5
MONTH	2.5	0.0	1.0	0.5	0.0	0.0	6.5	0.0	2.2	9.0	2.0	5.7
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.0	6.0	7.0	12.5	8.5	10.5	11.5	9.5	10.0	10.0	9.5	9.5
2	9.0	6.5	8.0	10.0	9.0	9.5	11.5	9.5	10.5	10.0	9.5	9.5
3	8.5	6.5	7.5	10.0	8.5	9.5	11.5	9.5	10.0	9.5	9.0	9.5
4	9.0	6.0	7.5	10.0	9.0	9.5	10.5	9.0	10.0	9.5	8.5	9.0
5	9.0	7.5	8.0	10.5	8.5	9.0	12.0	9.0	10.0	9.5	7.0	8.5
6	9.5	8.0	8.5	10.0	8.5	9.5	12.5	8.0	10.0	9.5	8.5	9.0
7	8.5	7.5	8.0	12.5	8.5	10.0	13.0	8.5	10.5	10.0	9.0	9.5
8	11.0	6.5	8.5	12.5	9.0	10.5	14.0	9.0	11.0	10.0	9.5	10.0
9	11.5	7.5	9.0	13.5	9.5	11.0	14.0	9.5	11.0	10.0	9.0	9.5
10	12.5	8.0	9.5	14.5	9.0	11.5	13.5	8.5	10.5	9.5	8.5	9.0
11	10.5	8.0	9.5	12.5	10.0	11.0	12.0	10.0	11.0	10.0	9.0	9.5
12	9.5	8.5	9.0	15.5	10.5	12.0	11.5	10.0	10.5	10.0	9.5	9.5
13	11.0	8.5	9.5	15.0	9.5	12.0	12.0	10.5	11.0	10.0	9.0	9.5
14	11.5	8.0	9.5	12.0	10.5	11.0	11.0	10.0	10.5	9.0	8.0	8.5
15	12.0	8.0	10.0	12.5	10.0	11.0	12.5	11.0	11.5	8.0	7.0	7.5
16	12.0	8.0	10.0	11.0	10.0	10.5	11.5	10.5	11.0	7.0	6.0	6.5
17	10.0	9.0	9.5	11.5	10.0	10.5	12.5	10.5	11.0	7.5	5.5	6.5
18	9.5	9.0	9.5	14.5	10.0	11.5	12.0	9.0	10.5	7.0	7.0	7.0
19	9.0	8.0	8.5	14.0	9.5	11.5	11.5	10.0	10.5	7.5	6.5	7.0
20	9.0	8.0	8.5	13.0	11.0	12.0	11.0	9.5	10.0	8.0	7.5	8.0
21	8.5	8.0	8.0	12.5	10.5	11.5	11.0	9.5	10.0	8.0	7.0	7.5
22	10.0	7.5	8.5	12.0	10.5	11.0	11.0	9.0	10.0	7.5	6.5	7.0
23	9.5	8.0	8.5	12.5	10.5	11.0	11.0	8.0	9.5	7.0	6.0	6.5
24	8.5	8.0	8.5	11.5	10.0	10.5	10.0	9.5	9.5	7.5	7.0	7.0
25	9.0	8.0	8.5	11.0	10.0	10.5	11.0	9.5	10.0	8.0	7.5	8.0
26	8.5	8.0	8.5	10.5	9.5	10.0	10.0	8.0	9.0	8.0	7.5	7.5
27	8.5	7.5	8.0	10.5	9.5	10.0	10.5	9.0	9.5	8.5	7.5	8.0
28	9.0	7.5	8.0	11.0	9.5	10.0	11.5	9.0	10.0	9.0	8.0	8.5
29	9.5	7.5	8.5	11.0	10.0	10.5	10.5	9.0	9.5	8.5	7.5	8.0
30	11.0	7.5	9.0	10.5	9.5	9.5	11.0	10.0	10.5	9.0	7.5	8.5
31	---	---	---	10.5	8.5	9.5	10.0	9.5	10.0	---	---	---
MONTH	12.5	6.0	8.6	15.5	8.5	10.6	14.0	8.0	10.3	10.0	5.5	8.3

SOUTHEAST ALASKA

15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS—Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.0	8.0	8.5	3.0	2.0	2.5	0.0	0.0	0.0	0.5	0.0	0.0
2	8.5	7.0	8.0	4.0	2.5	3.0	0.5	0.0	0.5	0.5	0.0	0.5
3	8.5	7.0	7.5	2.5	1.5	2.0	1.0	0.0	0.5	0.5	0.0	0.0
4	9.0	8.5	8.5	1.5	0.5	1.0	1.0	0.0	0.5	0.5	0.0	0.5
5	9.0	8.0	8.5	2.0	0.0	1.0	1.5	0.0	1.0	0.5	0.0	0.0
6	9.0	8.5	8.5	2.5	1.0	2.0	0.5	0.0	0.0	0.5	0.0	0.0
7	9.0	8.0	8.5	3.0	2.0	2.5	0.0	0.0	0.0	0.5	0.0	0.0
8	8.0	7.0	7.5	3.0	2.0	2.5	1.5	0.0	0.5	0.0	0.0	0.0
9	7.5	7.0	7.0	3.0	1.5	2.0	1.0	0.0	0.5	0.0	0.0	0.0
10	7.0	6.0	6.5	3.0	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
11	6.0	5.0	5.5	3.0	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0
12	5.5	4.0	5.0	3.5	3.0	3.5	1.5	0.0	0.5	0.0	0.0	0.0
13	6.5	5.5	6.0	3.5	1.5	3.0	1.5	0.5	1.0	0.0	0.0	0.0
14	6.5	5.0	6.0	3.0	1.5	2.5	1.0	0.5	0.5	0.0	0.0	0.0
15	5.0	3.5	4.0	3.5	3.0	3.0	1.0	0.0	1.0	0.0	0.0	0.0
16	5.5	3.5	4.5	3.0	2.5	3.0	1.5	0.5	1.0	0.0	0.0	0.0
17	6.0	5.5	6.0	2.5	2.0	2.5	1.5	1.0	1.0	0.0	0.0	0.0
18	7.0	6.0	6.5	2.0	0.0	1.0	1.5	0.0	0.5	0.0	0.0	0.0
19	7.0	6.5	6.5	0.0	0.0	0.0	1.5	0.5	1.5	0.5	0.0	0.0
20	6.5	5.0	6.0	0.5	0.0	0.0	2.0	1.5	1.5	1.5	0.5	0.5
21	6.5	4.0	5.5	0.0	0.0	0.0	2.0	1.5	2.0	1.5	1.5	1.5
22	6.5	6.0	6.0	0.0	0.0	0.0	2.0	1.5	2.0	2.0	1.0	1.5
23	6.5	5.5	6.0	1.0	0.0	0.5	2.0	1.5	2.0	2.0	1.0	1.5
24	6.5	5.5	6.0	1.5	0.5	1.0	2.0	2.0	2.0	1.0	0.0	0.5
25	7.5	6.5	7.0	1.5	0.5	1.0	2.0	0.0	1.0	0.5	0.0	0.0
26	7.5	6.5	7.0	1.0	0.5	0.5	1.0	0.0	0.5	0.5	0.0	0.5
27	6.5	6.0	6.5	0.5	0.0	0.5	0.5	0.0	0.0	0.5	0.0	0.0
28	6.0	4.5	5.5	0.5	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0
29	4.5	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	3.0	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	3.0	2.0	2.5	---	---	---	1.5	0.0	1.0	0.0	0.0	0.0
MONTH	9.0	2.0	6.2	4.0	0.0	1.6	2.0	0.0	0.7	2.0	0.0	0.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	0.0	0.0	0.0	2.0	0.5	1.0	1.5	0.0	1.0	5.0	4.0	4.5
2	0.0	0.0	0.0	1.5	0.0	0.5	1.5	1.0	1.0	5.5	4.0	4.5
3	0.0	0.0	0.0	1.0	0.5	0.5	2.0	1.0	1.5	6.5	4.0	5.0
4	0.0	0.0	0.0	2.0	0.5	1.0	3.0	1.5	2.0	6.0	3.5	4.5
5	0.0	0.0	0.0	2.0	0.0	1.0	4.0	2.0	2.5	6.5	3.5	4.5
6	0.0	0.0	0.0	1.5	0.0	1.0	4.0	2.0	3.0	6.5	3.5	5.0
7	0.0	0.0	0.0	2.0	1.0	1.5	3.5	2.0	3.0	6.5	4.0	5.0
8	0.0	0.0	0.0	1.0	0.0	1.0	4.0	1.5	2.5	7.0	3.5	5.0
9	0.5	0.0	0.0	1.5	0.0	1.0	4.0	2.5	3.0	6.0	4.5	5.0
10	1.5	0.5	1.0	1.5	0.0	1.0	4.0	2.0	3.0	7.0	4.0	5.5
11	2.0	1.5	1.5	2.0	1.0	1.5	4.0	2.0	3.0	7.5	3.5	5.5
12	2.0	1.5	2.0	2.0	1.0	1.5	3.5	3.0	3.5	7.5	4.0	5.5
13	2.0	2.0	2.0	2.0	1.0	1.5	4.0	3.0	3.5	8.0	4.0	5.5
14	2.0	1.5	2.0	1.5	0.0	1.0	4.5	2.5	3.5	7.5	4.5	6.0
15	2.0	1.5	1.5	1.0	0.0	0.5	4.5	2.0	3.0	7.5	4.0	5.5
16	2.0	1.5	1.5	2.0	0.5	1.0	4.0	1.5	3.0	6.5	4.5	5.5
17	2.0	1.5	2.0	2.0	0.5	1.5	4.5	3.0	3.5	6.0	5.0	5.5
18	2.5	1.5	2.0	0.5	0.0	0.0	4.0	2.5	3.5	7.0	5.0	5.5
19	2.0	1.5	2.0	0.0	0.0	0.0	5.5	2.0	3.5	8.0	4.5	6.0
20	1.5	1.5	1.5	0.0	0.0	0.0	5.0	2.0	3.5	8.5	4.5	6.0
21	2.0	1.5	1.5	0.0	0.0	0.0	5.5	3.0	4.0	8.0	4.5	6.0
22	2.0	1.5	2.0	1.5	0.0	0.5	5.0	3.0	3.5	8.0	4.0	6.0
23	2.5	2.0	2.0	1.5	0.0	0.5	4.5	3.0	3.5	8.5	4.0	6.0
24	2.0	1.0	2.0	1.5	0.0	0.5	4.5	3.5	4.0	6.5	5.5	6.0
25	1.5	0.5	1.0	2.0	1.0	1.5	4.0	3.5	4.0	6.0	5.0	5.5
26	1.0	0.0	0.5	3.0	1.0	1.5	4.5	3.5	4.0	6.0	5.0	5.5
27	0.5	0.0	0.0	2.5	1.0	1.5	5.0	3.5	4.0	7.5	4.5	6.0
28	1.5	0.0	1.0	2.0	1.0	1.5	4.5	3.5	4.0	8.0	4.5	6.0
29	2.0	0.5	1.0	2.0	0.0	1.0	6.0	3.0	4.0	7.5	5.5	6.5
30	---	---	---	1.5	0.0	0.5	6.5	3.5	5.0	8.5	5.5	7.0
31	---	---	---	0.5	0.0	0.0	---	---	---	7.5	5.5	6.5
MONTH	2.5	0.0	1.0	3.0	0.0	0.9	6.5	0.0	3.2	8.5	3.5	5.5

15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS—Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.5	5.5	7.0	11.0	9.5	10.0	11.0	10.0	11.0	11.5	8.5	10.0
2	7.5	6.0	6.5	12.5	9.0	11.0	12.0	10.5	11.0	12.0	10.5	11.0
3	9.0	5.5	7.5	11.5	10.5	11.0	12.0	11.0	11.0	11.5	11.0	11.5
4	8.5	6.0	7.5	12.0	10.0	11.0	14.0	10.0	11.5	11.0	10.5	11.0
5	8.0	7.0	7.5	11.0	10.0	10.5	13.0	10.0	11.5	10.5	10.0	10.5
6	10.5	6.5	8.0	13.5	10.0	11.0	14.5	11.0	12.5	10.5	9.5	10.0
7	10.0	6.5	8.5	13.0	10.5	11.5	15.0	11.5	12.5	9.5	8.0	8.5
8	8.0	6.5	7.0	14.0	9.5	11.5	15.5	10.0	12.5	8.5	7.0	7.5
9	7.5	6.5	7.0	14.5	10.5	12.0	16.0	10.5	12.5	8.0	6.5	7.5
10	8.0	6.0	7.0	12.0	10.5	11.5	15.5	10.5	12.5	8.0	6.0	7.0
11	8.0	6.0	7.0	13.5	10.0	11.5	14.0	12.0	13.0	8.5	7.0	8.0
12	9.0	6.5	8.0	15.0	9.5	12.0	14.0	10.5	12.0	9.0	8.0	8.5
13	9.0	7.0	8.0	16.0	11.0	12.5	15.5	10.0	12.5	9.0	8.5	9.0
14	8.0	7.0	7.5	16.5	11.0	13.0	16.0	10.0	12.5	9.0	8.0	8.5
15	9.0	7.0	8.0	17.5	10.5	13.5	16.5	11.0	13.5	8.5	7.5	8.0
16	10.0	6.5	8.0	17.5	11.0	13.5	17.0	12.0	14.0	8.5	7.0	7.5
17	11.0	7.0	9.5	15.0	12.5	13.5	17.0	12.0	14.0	8.0	7.0	7.5
18	12.0	8.0	10.0	14.0	11.5	13.0	15.0	12.5	13.5	8.0	6.0	7.0
19	12.5	9.0	11.0	15.0	10.5	12.5	13.5	12.5	13.0	7.5	5.5	6.5
20	12.5	9.0	11.0	15.0	12.0	13.0	15.5	12.5	13.5	9.0	7.0	8.0
21	12.5	8.5	11.0	15.0	12.0	13.0	16.5	12.0	13.5	9.5	8.0	9.0
22	13.0	9.0	11.0	14.5	12.0	13.0	16.0	11.0	13.0	8.0	8.0	8.0
23	13.5	9.5	11.5	15.0	12.0	13.5	14.5	9.0	11.5	8.5	8.0	8.5
24	14.0	9.5	11.5	13.5	12.0	12.5	14.5	9.0	11.5	8.5	7.5	8.0
25	14.0	10.0	12.0	15.5	11.5	13.0	12.5	9.5	11.0	8.0	7.0	7.5
26	12.5	10.5	11.5	13.5	11.5	12.5	13.0	11.0	12.0	8.0	7.5	7.5
27	11.5	10.0	10.5	12.5	11.5	12.0	13.0	11.5	12.0	8.5	7.5	8.0
28	10.5	9.5	10.0	13.0	12.0	12.5	12.5	11.5	12.0	8.0	7.0	7.5
29	10.5	9.5	10.0	12.5	11.0	12.0	13.0	11.0	12.0	8.0	7.5	8.0
30	10.5	9.5	10.0	12.0	10.5	11.0	13.5	10.5	11.5	8.0	8.0	8.0
31	---	---	---	12.0	10.5	11.0	13.0	9.0	10.5	---	---	---
MONTH	14.0	5.5	9.0	17.5	9.0	12.1	17.0	9.0	12.3	12.0	5.5	8.4

15070000 SWAN LAKE NEAR KETCHIKAN

LOCATION.--Lat 55°36'54", long 131°20'14", in SW¹/₄ NE¹/₄ sec. 20, T. 72 S., R. 92 E. (Ketchikan C-4 quad), Hydrologic Unit 19010102, Ketchikan Gateway Borough, on Revillagigedo Island, in Tongass National Forest, 0.7 mi upstream from mouth at Carroll Inlet, and 22 mi northeast of Ketchikan.

DRAINAGE AREA.--36.5 mi².

PERIOD OF RECORD.--September 1916 to January 1926, September 1927 to December 1933 and October 1946 to September 1959 (discharge). Published as "Swan Lake Outlet at Carroll Inlet" prior to 1946 and as "Falls Creek near Ketchikan" October 1946 to September 1959. Monthly discharges only for some periods, published in WSP 1372. October 1984 to current year (month end reservoir contents and monthly discharges).

REVISED RECORDS.--WSP 1372: Drainage area, 1918.

GAGE.--Non-recording lake-level staff gage. Datum of lake-level staff gage is at sea level. Totalizing MWH meters on the two turbines in Swan Lake Powerhouse. September 1916 to January 1926 and September 1927 to December 1933 at site 1,500 ft downstream at different datum. October 1946 to September 1959, recording gage at site 2,500 ft downstream, elevation of gage was 130 ft above sea level, from topographic map.

REMARKS.--Reservoir is formed by a concrete arch dam located at the outlet of Swan Lake; construction began in August 1980 and was completed in March 1983. Total and usable capacities below spillway crest of 330 ft are 126,200 and 82,800 acre-ft, respectively. Reservoir is used for power. Discharge released through turbines is computed from relation between discharge, head, and power generation; release flow enters directly into Carroll Inlet and is not returned to stream. Spill is computed from a theoretical relation between discharge and stage above crest of the spillway. Turbine and spillway ratings and reservoir capacity table furnished by the City of Ketchikan in 1985.

COOPERATION.--Reservoir elevations and release flow provided by the City of Ketchikan.

AVERAGE DISCHARGE.--48 years (water years 1917-25, 1928-33, 1947-59, 1985-2004), 444 ft³/s, 165.20 in/yr, 321,680 acre-ft/yr. Mean discharge for water years 1985-2004 adjusted for change in contents of Swan Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 134,920 acre-ft, October 26, 2003, elevation, 336.10 ft; minimum contents observed, 51,770 acre-ft, September 22, 1993, elevation, 278.4 ft. Maximum discharge, about 5,500 ft³/s, November 1, 1917; minimum daily discharge, 19 ft³/s, February 21 to 25, 1925. Maximum daily discharge since construction of dam, 3,680 ft³/s, November 30, 1988; no flow released several days most years.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 134,920 acre-ft, October 26, elevation, 336.10 ft; minimum contents observed, 75,240 acre-ft, September 12, elevation, 294.80 ft. Maximum release from reservoir (mean daily, not adjusted for changes in storage), 3,673 ft³/s, October 26; minimum release, 158 ft³/s, October 3.

MONTH END RESERVOIR ELEVATION, IN FEET ABOVE SEA LEVEL, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
Sep 30	326.3	120,810	
Oct 31	330.5	126,890	+6,080
Nov 30	324.7	118,500	-8,390
Dec 31	328.7	124,290	+5,790
Jan 31	327.1	121,970	-2,310
Feb 29	320.9	113,010	-8,970
Mar 31	318.1	108,950	-4,050
Apr 30	323.2	116,330	+7,370
May 31	327.4	122,410	+6,080
Jun 30	326.0	120,380	-2,030
Jul 31	315.6	105,330	-15,050
Aug 31	299.4	80,900	-24,440
Sep 30	302.7	86,670	+5,770
		CAL YR 2003	-570
		WTR YR 2004	-34,150

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
MEAN VALUES

MONTH	RELEASE	SPILL	TOTAL	ADJUSTED
OCT	344	274	618	717
NOV	419	77	496	355
DEC	455	33	488	582
JAN	467	251	718	680
FEB	430	0	430	274
MAR	390	0	390	324
APR	333	0	333	457
MAY	319	0	319	418
JUN	333	0	333	299
JUL	387	0	387	142
AUG	456	0	456	59
SEP	428	0	428	525
CAL YR 2003	370	52	422	420
WTR YR 2004	397	52.9	450	403

15072000 FISH CREEK NEAR KETCHIKAN

LOCATION.--Lat 55°23'31", long 131°11'38", in SW¹/₄SW¹/₄ sec. 6, T. 75 S., R. 94 E. (Ketchikan B-4 quad.), Gateway Borough, Hydrologic Unit 19010102, on Revillagigedo Island, in Tongass National Forest, on right bank 250 ft upstream from outlet of Low Lake, 750 ft upstream from mouth at Thorne Arm, and 18 mi east of Ketchikan.

DRAINAGE AREA.--32.1 mi², excludes that of Granite Lake drainage basin.

PERIOD OF RECORD.--May 1915 to October 1936, October 1938 to current year. Prior to October 1945, monthly discharge only. Records of daily discharge prior to October 1945 are available in computer files of the Geological Survey. Prior to January 1921, published as "near Sea Level, Revillagigedo Island."

REVISED RECORDS.--WSP 1372: 1918.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above sea level, by barometer. Prior to October 1935, at site 150 ft downstream at different datum. October 1935 to October 3, 1975, at prior site and present datum.

REMARKS.--No estimated daily discharges. Records fair. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft³/s and/or maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 26	1030	*3640	*4.39	Jan. 15	0700	2450	3.59
Dec. 23	0415	2880	3.89				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302	436	450	215	147	157	358	496	318	139	103	104
2	253	342	592	183	129	142	301	503	345	133	121	101
3	217	281	537	156	113	136	269	561	338	126	149	135
4	192	236	452	136	99	134	279	546	310	120	167	292
5	178	204	470	119	114	172	281	488	299	123	184	295
6	215	178	378	106	143	193	262	424	296	206	179	266
7	382	157	308	102	146	308	249	373	286	283	166	246
8	534	141	260	106	197	431	268	337	276	298	153	236
9	484	132	224	162	321	557	265	311	269	261	142	218
10	509	127	197	340	508	500	277	300	257	228	131	197
11	466	134	196	449	459	493	336	287	239	208	121	191
12	390	356	232	474	374	447	379	275	246	190	112	195
13	366	1680	212	822	315	349	382	268	276	172	104	381
14	372	1640	179	1670	276	302	347	266	263	157	98	591
15	322	1130	307	2290	242	295	309	265	240	145	91	615
16	282	809	478	1610	213	304	278	260	220	145	86	499
17	303	620	540	1530	202	277	252	250	204	135	80	397
18	358	510	576	1620	275	235	244	243	194	128	75	324
19	477	392	582	1710	338	201	221	243	189	124	71	271
20	526	317	717	1290	453	177	200	254	186	123	77	239
21	463	262	899	1180	622	157	186	273	185	121	74	583
22	408	231	1990	1220	558	147	211	284	181	120	71	791
23	433	208	2730	1160	463	142	359	279	177	118	66	1120
24	481	225	1970	852	390	139	497	270	173	114	62	1750
25	1400	240	1390	606	320	138	777	282	167	109	58	1610
26	3240	210	989	443	268	138	1060	309	163	105	57	1100
27	2390	337	708	331	228	137	1000	332	157	100	66	816
28	1700	252	505	268	200	228	788	324	152	100	86	679
29	1160	212	370	231	177	494	633	304	148	104	104	524
30	792	259	301	198	---	509	535	305	153	106	109	412
31	576	---	257	170	---	437	---	303	---	105	107	---
TOTAL	20171	12258	19996	21749	8290	8476	11803	10215	6907	4646	3270	15178
MEAN	651	409	645	702	286	273	393	330	230	150	105	506
MAX	3240	1680	2730	2290	622	557	1060	561	345	298	184	1750
MIN	178	127	179	102	99	134	186	243	148	100	57	101
MED	433	255	470	443	268	228	291	300	229	126	103	352
AC-FT	40010	24310	39660	43140	16440	16810	23410	20260	13700	9220	6490	30110
CFSM	20.3	12.7	20.1	21.9	8.91	8.52	12.3	10.3	7.17	4.67	3.29	15.8
IN.	23.38	14.21	23.17	25.20	9.61	9.82	13.68	11.84	8.00	5.38	3.79	17.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2004, BY WATER YEAR (WY)#

MEAN	694	565	424	360	316	262	353	501	468	332	330	450
MAX	1326	1767	1081	975	944	673	655	867	764	718	767	966
(WY)	1975	1918	1931	1926	1993	1986	1949	1999	1951	1976	1972	2001
MIN	237	89.2	83.4	37.9	37.8	71.4	130	182	142	65.3	50.7	80.0
(WY)	1926	1974	1984	1950	1969	1969	1967	1998	1998	1958	1965	1965

See Period of Record

SOUTHEAST ALASKA

15072000 FISH CREEK NEAR KETCHIKAN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1915 - 2004#	
ANNUAL TOTAL	161036		142959			
ANNUAL MEAN	441		391		422	
HIGHEST ANNUAL MEAN					556 1992	
LOWEST ANNUAL MEAN					302 1978	
HIGHEST DAILY MEAN	3240	Oct 26	3240	Oct 26	4410	Oct 15 1961
LOWEST DAILY MEAN	51	Aug 14	57	Aug 26	20	Sep 9 1928
ANNUAL SEVEN-DAY MINIMUM	59	Aug 9	65	Aug 21	23	Sep 5 1928
MAXIMUM PEAK FLOW			3640	Oct 26	a5400	Oct 15 1961
MAXIMUM PEAK STAGE			4.39	Oct 26	b5.85	Oct 15 1961
INSTANTANEOUS LOW FLOW			53	Aug 26	20	Sep 9 1928
ANNUAL RUNOFF (AC-FT)	319400		283600		305900	
ANNUAL RUNOFF (CFSM)	13.7		12.2		13.2	
ANNUAL RUNOFF (INCHES)	186.62		165.67		178.70	
10 PERCENT EXCEEDS	890		789		862	
50 PERCENT EXCEEDS	308		268		319	
90 PERCENT EXCEEDS	135		114		99	

See Period of Record

a From rating curve extended above 3,600 ft³/s

b At site then in use

15081497 STANEY CREEK NEAR KLAWOCK

LOCATION.--Lat 55°48'05", long 133°06'31", in SW¹/₄ NW¹/₄ sec. 14, T. 70 S., R. 80 E. (Craig D-4 quad), Hydrologic Unit 19010103, on Prince of Wales Island, in Tongass National Forest, on right bank, approximately 2.9 mi upstream from mouth, and 17 mi north of Klawock.

DRAINAGE AREA.--50.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1989 to current year. Equivalent daily discharge record collected at station No. 15081500 near Craig during water years 1964-81. Drainage area, 51.6 mi².

GAGE.--Water-stage recorder. Elevation of gage is 47 ft above sea level, by barometer.

REMARKS.--Records fair, except for discharges above 6,000 ft³/s, and estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct 26	0545	11300	15.18	Sep 21	0600	11200	15.16
Nov 30	2245	7370	13.85	Sep 24	0200	*11600	15.26
Dec 19	0345	8050	14.11				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	110	3050	e170	e30	55	216	121	322	15	29	45
2	74	90	1400	e120	e25	51	363	100	293	16	145	35
3	64	75	370	e90	e30	84	366	163	127	16	222	403
4	58	63	212	e70	e50	147	380	128	67	16	129	644
5	69	56	216	e56	e100	235	204	95	48	18	232	168
6	234	53	175	e45	e200	274	163	65	39	257	236	144
7	312	49	133	e50	489	2380	294	55	33	214	114	237
8	193	49	102	e80	1090	2210	244	48	30	91	77	193
9	133	e54	93	e600	1370	669	161	46	27	52	50	106
10	193	175	113	e650	688	457	230	52	24	37	38	71
11	186	294	100	473	284	645	304	52	23	37	32	50
12	117	5010	e120	553	202	313	245	46	23	37	28	42
13	144	3730	181	1450	208	192	173	45	24	31	25	566
14	379	612	112	1780	224	170	149	45	25	26	23	350
15	191	332	1400	616	136	620	118	41	22	23	22	253
16	131	257	1810	339	106	1080	82	38	21	24	21	145
17	255	234	1390	979	163	376	65	35	20	46	21	85
18	373	223	1980	1490	704	202	63	35	19	37	22	68
19	370	151	5070	510	568	139	56	37	18	30	27	52
20	340	107	957	685	1060	117	52	36	17	31	40	186
21	217	135	755	749	626	106	52	35	16	64	34	4440
22	294	e180	2950	586	296	144	75	33	16	45	27	1120
23	719	367	2050	475	195	179	188	28	15	32	23	3770
24	297	647	458	252	185	201	876	30	15	27	21	3910
25	3460	807	336	e130	133	185	971	49	15	28	19	552
26	4450	360	220	e80	105	151	1160	50	15	30	22	231
27	742	239	154	e50	83	148	294	51	16	31	119	233
28	1260	165	114	e48	68	620	168	42	16	52	140	208
29	330	272	133	e46	62	1640	120	38	15	92	65	131
30	187	2450	173	e45	---	850	108	89	15	49	55	97
31	137	---	e271	e36	---	297	---	189	---	34	70	---
TOTAL	16000	17346	26598	13303	9480	14937	7940	1917	1376	1538	2128	18535
MEAN	516	578	858	429	327	482	265	61.8	45.9	49.6	68.6	618
MAX	4450	5010	5070	1780	1370	2380	1160	189	322	257	236	4440
MIN	58	49	93	36	25	51	52	28	15	15	19	35
AC-FT	31740	34410	52760	26390	18800	29630	15750	3800	2730	3050	4220	36760
CFSM	10.2	11.4	17.0	8.48	6.46	9.52	5.23	1.22	0.91	0.98	1.36	12.2
IN.	11.76	12.75	19.55	9.78	6.97	10.98	5.84	1.41	1.01	1.13	1.56	13.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)#

MEAN	649	558	610	461	381	347	294	220	116	91.1	189	500
MAX	1123	996	1270	782	983	565	559	558	252	200	469	898
(WY)	2000	1992	1992	1992	1991	1994	1997	1999	1999	1997	2002	2003
MIN	403	201	267	240	152	104	144	61.8	26.5	22.1	26.6	166
(WY)	2003	1997	1997	1998	1994	2002	2003	2004	1993	1993	1993	1995

See period of Record; partial years used in monthly summary of statistics
e Estimated

SOUTHEAST ALASKA

15081497 STANEY CREEK NEAR KLAWOCK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1990 - 2004#	
ANNUAL TOTAL	138776		131098			
ANNUAL MEAN	380		358		368	
HIGHEST ANNUAL MEAN					506 1992	
LOWEST ANNUAL MEAN					283 1995	
HIGHEST DAILY MEAN	5070	Dec 19	5070	Dec 19	14900	Oct 26 1993
LOWEST DAILY MEAN	a17	Aug 11	b15	Jun 23	4.4	Jul 21 1993
ANNUAL SEVEN-DAY MINIMUM	18	Aug 8	15	Jun 23	6.0	Jul 15 1993
MAXIMUM PEAK FLOW			11600	Sep 24	c19800	Oct 26 1993
MAXIMUM PEAK STAGE			15.26	Sep 24	17.20	Oct 26 1993
INSTANTANEOUS LOW FLOW			d14	Jun 24	4.0	Jul 21 1993
ANNUAL RUNOFF (AC-FT)	275300		260000		266600	
ANNUAL RUNOFF (CFSM)	7.51		7.08		7.27	
ANNUAL RUNOFF (INCHES)	102.03		96.38		98.80	
10 PERCENT EXCEEDS	897		771		879	
50 PERCENT EXCEEDS	145		130		168	
90 PERCENT EXCEEDS	32		25		37	

See Period of Record;partial years used in monthly statistics

a Aug. 11-13

b Jun. 23-26, 29-30, and Jul. 1

c From rating curve extended above 3300 ft³/sec

d Jun. 24-26

15081497 STANEY CREEK NEAR KLAWOCK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: January 1990 to current year.

INSTRUMENTATION.--Electronic water temperature recorder since January 11, 1990, set for 2-hour recording interval. As of April 9, 1996, recorder set to 15-minute recording interval.

REMARKS.-- Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross-section on August 25. No variation was found in the temperature cross-section or between mean stream temperature and temperature recorded at the sensor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE.--Maximum recorded, 26.0°C, June 29, 1990, but may have been higher during period of instrument malfunction July 9 to August 23, 1990; minimum, 0.0°C on many days during winter.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE.--Maximum, 23.5°C, June 20; minimum, 0.0°C on many days during the winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (00004)	Location in X-sect. looking dwnstrm ft from l bank (00009)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
AUG							
25...	1100	60.5	6.00	6.82	18	14.0	20.5
25...	1101	60.5	18.0	6.82	18	14.0	20.5
25...	1102	60.5	30.0	6.82	18	14.0	20.5
25...	1103	60.5	42.0	6.82	18	14.0	20.5
25...	1104	60.5	54.0	6.82	18	14.0	20.5

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.5	8.5	9.5	5.0	3.0	4.0	2.5	1.5	2.0	0.0	0.0	0.0
2	10.5	9.5	10.0	4.5	2.5	3.5	3.0	2.0	2.5	0.0	0.0	0.0
3	10.5	9.5	10.0	4.0	2.5	3.5	2.5	1.5	2.0	0.0	0.0	0.0
4	11.5	9.5	10.0	3.5	1.5	2.5	2.5	1.5	2.5	0.0	0.0	0.0
5	10.0	8.5	9.5	3.0	1.0	2.0	3.0	2.0	2.5	0.0	0.0	0.0
6	10.5	9.5	10.0	3.0	1.0	2.0	3.0	1.5	2.5	0.0	0.0	0.0
7	10.0	9.0	9.5	2.5	1.0	2.0	3.0	1.5	2.5	0.0	0.0	0.0
8	9.5	8.0	9.0	2.5	0.5	2.0	2.5	0.5	1.5	0.0	0.0	0.0
9	9.5	8.5	9.0	3.0	0.0	1.5	2.0	1.0	2.0	0.0	0.0	0.0
10	8.5	7.5	8.0	2.0	0.5	1.5	2.0	1.5	2.0	0.0	0.0	0.0
11	8.0	7.0	7.5	3.5	1.5	2.5	2.0	0.0	1.5	0.5	0.0	0.0
12	8.0	7.0	7.5	5.5	3.5	5.0	1.5	0.0	0.5	1.0	0.0	0.0
13	8.0	7.0	7.5	6.0	5.0	5.5	1.5	0.0	1.0	1.0	0.0	0.5
14	8.0	6.5	7.5	5.0	4.0	4.5	2.0	0.0	1.0	1.5	1.0	1.0
15	7.0	5.5	6.0	5.0	4.5	4.5	2.5	0.0	1.0	2.0	1.0	1.5
16	7.5	6.0	7.0	5.0	4.0	4.5	2.0	1.5	1.5	2.0	1.0	1.5
17	8.0	7.0	7.5	4.5	1.5	3.5	2.0	2.0	2.0	2.0	1.0	1.5
18	8.0	7.0	7.5	3.5	1.5	2.5	2.5	2.0	2.5	2.5	2.0	2.0
19	8.0	7.5	7.5	3.0	1.0	2.5	3.0	2.5	3.0	2.5	1.5	2.0
20	7.5	6.0	6.5	2.5	0.5	1.5	3.0	2.5	2.5	2.5	2.0	2.5
21	7.5	6.0	6.5	1.5	0.0	0.0	3.5	2.5	3.0	3.0	2.5	3.0
22	7.5	7.0	7.0	0.5	0.0	0.0	4.0	3.5	3.5	3.5	3.0	3.5
23	7.0	6.5	7.0	2.0	0.5	1.0	4.0	3.5	3.5	3.0	2.0	2.5
24	7.5	6.5	7.0	2.5	1.5	1.5	4.0	3.5	3.5	2.0	0.5	1.5
25	9.0	7.5	8.5	2.5	1.5	2.0	3.5	1.5	3.0	2.0	0.0	0.5
26	9.5	8.5	9.0	2.5	1.5	2.0	2.5	1.5	2.0	0.0	0.0	0.0
27	8.5	8.0	8.5	2.5	0.5	1.5	2.5	1.0	1.5	0.0	0.0	0.0
28	8.0	6.5	7.5	3.0	1.5	2.0	2.5	1.0	2.0	0.0	0.0	0.0
29	6.5	4.5	5.5	2.5	0.5	1.0	2.5	2.0	2.5	0.0	0.0	0.0
30	5.0	3.0	4.0	3.0	0.5	1.5	2.5	0.0	1.5	0.0	0.0	0.0
31	4.0	2.5	3.5	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	11.5	2.5	7.8	6.0	0.0	2.5	4.0	0.0	2.1	3.5	0.0	0.8

SOUTHEAST ALASKA

15081497 STANEY CREEK NEAR KLAWOCK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	2.0	0.5	1.5	4.0	2.0	3.5	9.0	7.0	8.0
2	0.0	0.0	0.0	1.5	0.5	1.0	4.5	3.5	4.0	9.5	7.0	8.0
3	0.0	0.0	0.0	2.5	1.0	2.0	5.5	3.5	4.5	9.0	7.0	8.0
4	0.0	0.0	0.0	2.5	1.5	2.0	5.5	3.5	4.5	11.5	6.0	8.5
5	0.0	0.0	0.0	2.5	1.0	1.5	6.0	4.0	4.5	12.0	6.5	9.0
6	0.0	0.0	0.0	2.5	1.0	2.0	6.5	4.0	5.0	12.5	6.5	9.5
7	0.0	0.0	0.0	2.0	1.5	1.5	7.0	5.0	6.0	12.5	7.0	9.5
8	0.5	0.0	0.0	3.0	2.0	2.5	6.5	4.0	5.0	10.0	7.5	8.0
9	1.0	0.0	0.5	2.5	1.5	2.0	6.0	4.5	5.0	10.0	7.5	8.5
10	1.5	1.0	1.0	3.0	2.0	2.5	6.5	5.0	5.5	13.0	7.5	10.0
11	2.0	1.0	1.5	3.0	2.5	2.5	7.0	5.5	6.0	14.5	7.5	11.0
12	2.5	1.5	2.0	3.0	1.5	2.5	6.5	5.5	6.0	15.5	8.0	11.5
13	3.0	2.0	2.5	3.0	2.0	2.5	7.5	5.0	6.0	15.5	9.0	12.0
14	2.5	1.0	2.0	3.0	2.0	2.5	7.5	5.0	6.0	15.5	10.0	12.5
15	2.0	1.0	1.5	2.5	1.5	2.0	7.0	4.0	5.5	12.5	10.5	11.5
16	2.5	1.5	2.0	2.5	2.0	2.0	8.0	4.0	6.0	13.5	10.0	11.5
17	3.0	2.0	2.5	3.0	1.5	2.0	7.0	5.0	6.0	14.0	8.5	11.5
18	2.5	2.0	2.5	3.0	2.0	2.5	7.5	4.5	6.0	16.0	9.5	12.5
19	2.5	2.0	2.5	3.0	1.5	2.5	8.0	4.0	6.0	17.0	10.0	13.5
20	3.0	2.5	2.5	3.5	2.0	3.0	9.5	4.5	7.0	17.5	10.5	14.0
21	3.5	2.5	3.0	4.0	2.5	3.0	10.0	5.0	7.5	17.5	11.5	14.5
22	3.0	2.0	2.5	5.0	3.0	4.0	8.0	6.0	6.5	17.0	10.0	14.0
23	4.0	2.5	3.0	5.0	3.0	4.0	7.0	4.5	5.5	17.5	10.5	14.0
24	3.0	2.0	2.5	5.0	4.0	4.5	6.0	5.0	5.0	14.0	11.5	12.5
25	3.0	2.0	2.5	5.5	3.5	4.0	5.5	5.0	5.0	13.0	11.5	12.0
26	2.5	1.5	2.0	5.0	3.0	4.0	7.0	5.0	6.0	13.5	11.0	12.0
27	2.0	1.0	1.5	5.0	3.5	4.0	8.0	5.0	6.0	15.0	10.5	12.5
28	2.0	0.0	1.5	4.5	3.5	4.0	9.0	5.0	6.5	12.5	10.5	11.5
29	2.5	1.0	2.0	4.0	3.5	3.5	10.0	5.0	7.0	11.5	10.0	11.0
30	---	---	---	4.0	2.5	3.5	11.5	6.0	8.0	11.5	10.0	10.5
31	---	---	---	4.0	2.0	3.0	---	---	---	10.0	9.0	9.5
MONTH	4.0	0.0	1.5	5.5	0.5	2.7	11.5	2.0	5.7	17.5	6.0	11.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.0	8.0	9.0	18.0	16.0	17.0	16.5	14.0	15.0	15.0	11.0	13.0
2	9.5	8.0	9.0	17.0	16.0	16.5	15.5	13.5	14.0	13.5	11.0	12.5
3	13.0	8.0	10.0	18.0	15.5	17.0	15.0	12.5	13.5	13.0	12.0	12.5
4	11.5	9.5	10.5	17.0	15.5	16.5	15.5	12.0	14.0	13.0	11.5	12.0
5	15.0	10.5	12.5	16.5	14.0	15.5	15.0	13.0	14.0	12.0	10.0	11.0
6	14.0	11.0	12.5	14.0	11.5	13.0	14.0	11.5	13.0	12.5	10.5	11.5
7	17.5	11.5	14.5	14.5	11.0	12.5	14.5	11.0	12.5	12.5	11.0	11.5
8	16.5	13.0	14.5	17.0	12.5	14.5	15.5	12.0	13.5	12.0	10.0	11.0
9	17.0	13.0	14.5	17.5	13.5	15.0	18.0	12.5	15.5	13.0	10.0	11.5
10	14.5	12.5	14.0	16.0	14.5	15.0	17.5	14.0	16.0	11.5	9.5	10.5
11	13.0	12.0	12.5	17.0	14.0	15.0	18.5	14.5	16.5	12.5	10.0	11.0
12	13.5	11.5	12.5	19.5	13.0	16.5	18.5	14.5	16.5	11.5	10.0	11.0
13	13.0	12.5	12.5	21.0	14.5	18.0	19.0	14.0	17.0	11.5	10.5	11.0
14	13.5	12.5	13.0	22.0	15.5	18.5	20.0	14.0	17.5	11.0	9.5	10.5
15	13.0	12.0	12.5	23.0	15.5	19.5	20.0	16.0	18.5	10.5	9.0	10.0
16	17.5	12.5	14.5	20.0	16.0	18.0	20.5	16.5	19.0	10.0	8.0	9.0
17	20.0	13.5	16.5	18.5	16.0	17.0	19.5	17.0	17.5	10.5	7.5	9.0
18	21.0	15.0	18.0	21.0	14.0	17.0	19.0	16.5	17.5	11.0	9.0	10.0
19	22.0	16.5	19.5	18.5	16.0	16.5	18.0	14.5	17.0	10.0	8.0	9.0
20	23.5	17.5	20.5	17.0	15.0	16.0	18.5	16.5	17.5	10.0	8.5	9.0
21	23.0	18.0	20.5	17.5	15.5	16.5	19.0	15.5	17.5	10.5	9.5	10.5
22	20.5	18.5	19.5	20.0	13.5	17.0	19.0	14.5	17.0	10.0	10.0	10.0
23	21.5	17.0	19.5	20.5	14.0	17.5	17.5	13.5	16.0	10.5	10.0	10.0
24	20.5	17.5	19.0	18.5	16.5	17.5	17.0	12.0	15.0	10.5	10.0	10.5
25	19.0	17.0	17.5	19.5	16.0	17.5	17.0	12.0	15.0	10.0	9.0	9.5
26	17.0	16.0	16.0	17.0	15.5	16.0	15.5	13.0	14.0	10.0	8.5	9.0
27	16.0	15.5	16.0	19.5	15.5	17.0	15.0	13.0	14.0	10.5	9.0	9.5
28	17.0	15.0	16.0	18.0	16.5	17.5	15.0	12.5	13.5	9.5	7.5	8.5
29	17.0	15.5	16.5	16.5	14.5	15.5	16.0	13.0	14.5	9.5	8.0	8.5
30	18.5	16.0	17.0	17.0	14.0	15.5	14.5	12.5	13.5	9.5	7.5	8.5
31	---	---	---	18.5	13.0	15.5	15.0	11.0	13.0	---	---	---
MONTH	23.5	8.0	15.0	23.0	11.0	16.4	20.5	11.0	15.4	15.0	7.5	10.4

15081614 HALFMILE CREEK ABOVE DIVERSION NEAR KLAWOCK

LOCATION.--Lat 55°33'26", long 133°01'01", in NW¹/₄ SW¹/₄ NW¹/₄ sec. 7, T. 73 S., R. 82 E. (Craig C-3 quad), Hydrologic Unit 19010103, on Prince of Wales Island, approximately 1.1 mi upstream from the mouth at Klawock Lake, and 2.9 mi east of the city of Klawock.

DRAINAGE AREA.--4.73 mi²

PERIOD OF RECORD.--December 2000 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 400 ft above sea level, from topographic map.

REMARKS.--Records fair, except for estimated discharges and those above 180 ft³/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	8.1	168	7.2	3.8	4.2	16	8.8	37	1.8	13	7.4
2	8.2	6.7	147	e5.3	3.3	3.9	43	10	26	2.3	68	11
3	7.4	5.8	29	e4.3	3.2	6.1	42	22	14	3.3	35	135
4	7.4	5.0	15	e3.7	3.4	12	32	12	9.1	2.8	16	90
5	19	4.5	14	e3.3	72	17	15	9.2	7.3	56	22	22
6	28	4.1	11	e3.0	65	52	11	7.2	5.8	174	20	17
7	33	4.0	8.0	5.4	66	159	37	6.2	5.0	55	19	13
8	22	3.7	6.4	37	134	195	22	5.5	4.3	20	14	9.3
9	30	16	5.4	135	143	53	13	6.3	3.8	e11.8	9.1	7.9
10	47	30	6.1	126	71	34	30	7.8	3.4	e9.0	6.3	6.7
11	20	60	12	38	22	81	36	6.9	3.2	e7.5	4.9	6.0
12	12	329	27	48	14	34	20	6.3	3.7	e6.2	4.1	10
13	19	297	13	130	14	15	14	6.0	4.2	e5.8	3.5	70
14	41	48	8.0	194	16	15	11	5.9	3.9	4.6	3.1	31
15	15	26	227	66	10	32	8.5	5.6	3.4	3.6	2.7	32
16	19	16	170	26	8.4	101	6.5	5.1	3.1	6.4	2.4	13
17	36	17	104	97	27	29	6.2	4.9	2.7	11	2.4	8.5
18	28	14	203	145	92	14	8.5	4.9	2.4	7.1	2.4	10
19	31	9.1	346	57	44	9.2	6.9	5.1	2.1	5.2	4.7	7.1
20	22	8.0	83	59	78	8.1	5.9	5.2	1.8	4.9	8.3	62
21	20	10	141	67	52	9.1	5.4	5.1	1.6	19	5.4	250
22	57	39	393	101	22	33	19	4.7	1.5	11	4.2	72
23	57	25	171	74	14	25	31	4.3	1.4	6.2	3.3	218
24	76	87	39	22	11	24	113	7.0	1.3	8.5	2.8	170
25	404	56	27	e11	8.6	20	100	12	1.3	68	2.4	28
26	306	23	15	e6.8	7.0	15	83	62	1.5	40	5.6	12
27	131	14	10	e4.8	5.8	14	20	27	2.0	17	32	21
28	137	11	12	e3.6	5.1	87	11	13	1.9	25	26	16
29	27	15	15	e3.0	4.7	173	8.7	15	1.8	37	14	11
30	13	154	11	6.7	---	70	8.9	30	1.7	22	17	8.3
31	9.6	---	13	4.4	---	21	---	41	---	12	12	---
TOTAL	1691.7	1346.0	2449.9	1494.5	1020.3	1365.6	784.5	372.0	162.2	664.0	385.6	1375.2
MEAN	54.6	44.9	79.0	48.2	35.2	44.1	26.1	12.0	5.41	21.4	12.4	45.8
MAX	404	329	393	194	143	195	113	62	37	174	68	250
MIN	7.4	3.7	5.4	3.0	3.2	3.9	5.4	4.3	1.3	1.8	2.4	6.0
MED	27	15	15	26	14	24	15	6.9	3.1	9.0	6.3	15
AC-FT	3360	2670	4860	2960	2020	2710	1560	738	322	1320	765	2730
CFSM	11.5	9.49	16.7	10.2	7.44	9.31	5.53	2.54	1.14	4.53	2.63	9.69
IN.	13.30	10.59	19.27	11.75	8.02	10.74	6.17	2.93	1.28	5.22	3.03	10.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)#

	2001	2002	2003	2004
MEAN	50.0	40.4	59.8	49.3
MAX	56.3	44.9	79.0	59.4
(WY)	2002	2004	2004	2001
MIN	39.2	37.3	46.8	36.2
(WY)	2003	2002	2002	2003

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 2001 - 2004#

ANNUAL TOTAL	13396.4	13111.5	
ANNUAL MEAN	36.7	35.8	35.2
HIGHEST ANNUAL MEAN			37.1
LOWEST ANNUAL MEAN			32.8
HIGHEST DAILY MEAN	404	Oct 25	404
LOWEST DAILY MEAN	2.0	Mar 12	a1.3
ANNUAL SEVEN-DAY MINIMUM	2.5	May 5	1.5
MAXIMUM PEAK FLOW			745
MAXIMUM PEAK STAGE			10.40
INSTANTANEOUS LOW FLOW			b1.2
ANNUAL RUNOFF (AC-FT)	26570	26010	25520
ANNUAL RUNOFF (CFSM)	7.76	7.57	7.45
ANNUAL RUNOFF (INCHES)	105.36	103.12	101.18
10 PERCENT EXCEEDS	106	98	89
50 PERCENT EXCEEDS	15	13	16

See Period of Record, partial years used in monthly statistics
a June 24 and 25.
b June 23-26.
e Estimated

15081614 HALFMILE CREEK ABOVE DIVERSION NEAR KLAWOCK—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.5	8.0	8.5	---	---	---	14.0	13.0	13.5	13.0	11.0	12.0
2	---	8.5	---	---	---	---	14.0	13.0	13.5	13.0	12.5	12.5
3	---	---	---	---	---	---	14.0	13.0	13.5	13.0	12.5	13.0
4	---	---	---	---	---	---	15.0	12.5	14.0	13.5	12.5	13.0
5	---	---	---	---	---	---	14.5	13.5	14.0	12.5	11.0	12.0
6	---	---	---	---	---	---	15.0	13.0	14.0	12.5	11.5	12.0
7	---	---	---	---	---	---	15.0	12.5	13.5	12.5	12.0	12.5
8	12.0	10.5	11.0	---	---	---	15.0	13.5	14.0	12.0	10.5	11.0
9	10.5	9.5	10.5	---	---	---	16.5	13.5	14.5	11.5	10.5	11.0
10	10.5	9.0	10.0	---	---	---	16.5	15.0	16.0	10.5	9.5	10.0
11	9.5	8.5	9.0	---	---	---	16.0	14.0	15.0	10.5	9.5	10.0
12	11.0	9.0	10.5	---	---	---	15.0	13.5	14.0	11.0	10.0	10.5
13	10.5	10.0	10.5	15.0	---	---	15.0	13.0	14.0	11.0	10.5	11.0
14	12.0	9.5	11.0	15.5	13.5	14.5	15.5	13.0	14.5	11.0	10.5	10.5
15	11.5	9.5	10.5	16.5	13.5	15.0	16.5	14.5	15.5	10.5	9.5	10.0
16	13.0	10.0	11.5	16.0	14.0	15.0	17.0	15.5	16.0	9.5	8.0	9.0
17	14.5	10.5	12.5	15.5	14.0	14.5	16.0	15.5	15.5	10.0	8.5	9.5
18	16.5	12.0	14.5	15.5	13.0	14.5	16.5	15.0	15.5	10.0	8.5	9.5
19	18.0	14.0	16.0	15.5	14.5	15.0	15.5	15.0	15.5	9.0	8.0	8.5
20	18.5	14.5	16.5	15.5	14.0	15.0	15.5	14.5	15.0	11.0	8.5	9.0
21	18.0	15.0	16.5	15.0	13.5	14.5	16.0	14.5	15.5	11.5	10.5	11.0
22	17.0	15.0	16.0	16.0	13.0	14.5	15.5	14.5	15.0	10.5	10.0	10.0
23	---	---	---	15.5	13.0	14.5	14.5	12.5	13.5	10.5	10.0	10.5
24	16.0	14.0	15.0	15.5	13.5	14.5	13.5	11.5	12.5	10.5	10.0	10.5
25	14.0	13.5	14.0	13.5	13.0	13.0	13.0	11.5	12.5	10.0	8.0	9.0
26	13.5	13.0	13.5	14.0	12.5	13.5	13.5	12.5	13.0	9.5	8.5	9.0
27	13.0	---	---	15.5	13.5	14.5	13.5	13.0	13.0	10.0	9.0	10.0
28	---	---	---	15.0	14.0	14.5	13.5	12.5	13.5	9.0	7.0	8.0
29	---	---	---	14.0	13.5	13.5	14.0	12.5	13.0	9.5	8.5	9.0
30	---	---	---	14.0	13.0	13.5	13.5	12.0	13.0	9.5	8.5	9.0
31	---	---	---	14.5	13.0	13.5	13.0	11.0	12.0	---	---	---
MONTH	---	---	---	---	---	---	17.0	11.0	14.1	13.5	7.0	10.4

SOUTHEAST ALASKA

15085100 OLD TOM CREEK NEAR KASAAN

LOCATION.--Lat 55°23'44", long 132°24'25", in NW¹/₄ SW¹/₄ sec. 6, T. 75 S., R. 86 E. (Craig B-2 quad) Hydrologic Unit 19010103, on Prince of Wales Island, in Tongass National Forest, on left bank 1,000 ft upstream from mouth at Skowl Arm of Kasaan Bay, 0.4 mi downstream from unnamed tributary, and 10 mi south of Kasaan.

DRAINAGE AREA.--5.90 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1949 to current year.

REVISED RECORDS.--WDR AK-85-1: 1950-1983 (P), 1984.

GAGE.--Water-stage recorder. Elevation of gage is 10 ft above sea level, from topographic map.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Oct 26	0245	717	4.97	Dec 23	0030	*983	*5.68
Dec 02	0700	564	4.58	Feb 17	1600	745	5.07
Dec 15	1630	*983	*5.68	Mar 29	1745	478	4.33
Dec 18	2315	932	5.55	Sep 24	0445	612	4.72

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	21	173	13	e6.0	11	30	16	26	3.9	2.3	3.7
2	11	18	212	e11	e6.0	9.7	91	17	22	3.9	11	3.4
3	10	15	57	e8.5	e6.2	12	63	34	17	3.5	10	14
4	9.2	13	42	e7.2	e7.0	13	41	22	13	3.2	7.2	29
5	32	12	60	e6.8	e100	27	29	18	13	5.8	6.0	11
6	61	11	52	e6.6	37	53	26	14	11	23	4.7	7.9
7	27	9.4	33	e12	21	163	57	12	9.6	11	3.9	6.2
8	24	8.4	25	e30	35	161	31	11	8.2	13	3.7	5.5
9	19	8.8	19	e150	73	69	23	10	7.0	9.1	3.3	4.6
10	19	10	16	146	65	36	43	9.4	6.5	6.9	3.0	4.1
11	21	14	24	52	37	39	41	9.0	6.2	6.0	2.5	4.2
12	17	96	31	113	30	39	32	8.5	71	5.1	2.4	38
13	20	244	25	245	37	26	24	8.2	54	4.5	2.2	72
14	23	104	18	200	30	23	20	7.8	24	3.9	2.0	23
15	16	194	530	83	20	37	17	7.7	17	3.6	1.9	18
16	56	89	194	54	28	58	14	7.3	13	4.0	1.9	13
17	73	64	105	210	427	32	12	6.9	11	3.8	2.0	9.5
18	62	46	293	197	238	22	12	6.8	9.2	3.6	1.9	8.3
19	40	31	615	64	68	17	11	7.0	7.8	3.6	e2.1	6.6
20	28	23	220	89	66	30	10	7.3	6.9	5.4	e2.5	7.2
21	90	18	287	68	55	27	9.3	7.5	6.2	6.7	e2.6	80
22	56	20	596	64	36	31	22	7.3	5.5	4.3	e2.1	42
23	53	24	394	39	48	30	22	6.8	4.8	3.3	e2.0	63
24	92	31	146	26	39	34	34	7.4	4.3	2.8	e2.0	241
25	413	48	107	18	25	43	103	8.0	4.1	2.6	e2.0	54
26	387	32	46	e11	20	25	97	7.3	4.1	2.4	e2.6	27
27	109	26	31	e8.0	15	20	40	6.9	4.9	2.4	3.1	24
28	101	20	21	e6.5	13	156	26	7.4	4.3	2.4	3.6	18
29	54	26	16	e7.0	12	259	20	14	4.0	2.4	3.8	14
30	35	94	15	e6.8	---	123	17	19	3.9	2.2	4.0	11
31	27	---	14	e6.6	---	45	---	22	---	2.0	4.3	---
TOTAL	1998.2	1370.6	4417	1959.0	1600.2	1670.7	1017.3	353.5	399.5	160.3	108.6	863.2
MEAN	64.5	45.7	142	63.2	55.2	53.9	33.9	11.4	13.3	5.17	3.50	28.8
MAX	413	244	615	245	427	259	103	34	71	23	11	241
MIN	9.2	8.4	14	6.5	6.0	9.7	9.3	6.8	3.9	2.0	1.9	3.4
AC-FT	3960	2720	8760	3890	3170	3310	2020	701	792	318	215	1710
CFMS	10.9	7.74	24.1	10.7	9.35	9.13	5.75	1.93	2.26	0.88	0.59	4.88
IN.	12.60	8.64	27.85	12.35	10.09	10.53	6.41	2.23	2.52	1.01	0.68	5.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2004, BY WATER YEAR (WY)#

	MEAN	70.0	65.9	60.6	50.1	45.2	39.0	47.8	42.4	25.9	13.0	15.2	32.6
MAX	163	166	142	128	117	86.3	122	99.1	56.1	31.0	50.9	93.6	
(WY)	1978	2000	2004	1992	1998	1984	1980	1999	1950	1991	2001	2001	
MIN	23.0	17.1	8.29	3.00	5.00	10.1	19.1	11.4	5.45	2.66	1.81	2.69	
(WY)	2003	1966	1984	1950	1950	1956	1967	2004	1958	1958	1993	1965	

See Period of Record; partial years used in monthly summary statistics
e Estimated

15085100 OLD TOM CREEK NEAR KASAAN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1949 - 2004#	
ANNUAL TOTAL	19689.8		15918.1			
ANNUAL MEAN	53.9		43.5		42.3	
HIGHEST ANNUAL MEAN					63.1 2000	
LOWEST ANNUAL MEAN					25.2 1951	
HIGHEST DAILY MEAN	615	Dec 19	615	Dec 19	858	Oct 23 1990
LOWEST DAILY MEAN	1.4	Aug 13	a1.9	Aug 15	0.28	Nov 14 1965
ANNUAL SEVEN-DAY MINIMUM	1.7	Aug 8	2.0	Aug 13	0.55	Nov 13 1965
MAXIMUM PEAK FLOW			b983	Dec 15	c1490	Apr 16 1952
MAXIMUM PEAK STAGE			5.68	Dec 15	6.96	Apr 16 1952
INSTANTANEOUS LOW FLOW			1.4	Aug 16	0.16	Nov 15 1965
ANNUAL RUNOFF (AC-FT)	39050		31570		30620	
ANNUAL RUNOFF (CFSM)	9.14		7.37		7.16	
ANNUAL RUNOFF (INCHES)	124.15		100.36		97.34	
10 PERCENT EXCEEDS	118		100		94	
50 PERCENT EXCEEDS	23		18		24	
90 PERCENT EXCEEDS	6.2		3.7		6.5	

See Period of Record; partial years used in monthly summary statistics

a August 15, 16, and 18

b December 15 and 23

c From rating curve extended above 330 ft³/s

15085100 OLD TOM CREEK NEAR KASAAN—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1959, and 1965 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1964, April 1965 to February 1975, June 1975 to April 1978, and November 1978 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder set for 15-minute recording interval since April 11,1996.

REMARKS.--Records represent water-temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on October 28 and January 13. No variation was found within the cross section. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 18.5°C, July 3, 1998, and June 23, 2004; minimum, 0.0°C, on many days during most winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 18.5°C, June 23; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (000004)	Sample location, cross section ft from rt bank (72103)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
OCT							
28...	1429	41.5	1.0	2.74	101	7.5	6.0
28...	1430	41.5	6.0	2.74	101	7.5	6.0
28...	1431	41.5	11.0	2.74	101	7.5	6.0
28...	1432	41.5	16.0	2.74	101	7.5	6.0
28...	1433	41.5	21.0	2.74	101	7.5	6.0
28...	1434	41.5	26.0	2.74	101	7.5	6.0
28...	1435	41.5	31.0	2.74	101	7.5	6.0
28...	1436	41.5	36.0	2.74	101	7.5	6.0
JAN							
13...	1121	47.0	42.0	3.48	236	2.5	3.0
13...	1122	47.0	33.0	3.48	236	2.5	3.0
13...	1123	47.0	24.0	3.48	236	2.5	3.0
13...	1124	47.0	15.0	3.48	236	2.5	3.0
13...	1125	47.0	6.0	3.48	236	2.5	3.0

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.5	9.5	10.0	5.0	4.5	5.0	3.5	2.5	3.0	1.5	1.0	1.5			
2	10.5	9.5	10.0	5.0	4.0	4.5	3.5	3.0	3.0	1.0	0.0	0.5			
3	10.5	9.5	10.0	4.5	3.5	4.0	3.0	2.5	2.5	0.0	0.0	0.0			
4	10.5	9.5	10.0	3.5	2.5	3.0	3.0	2.5	2.5	0.0	0.0	0.0			
5	10.0	9.0	9.5	2.5	2.0	2.5	3.0	2.5	3.0	0.0	0.0	0.0			
6	10.5	9.5	10.0	2.0	1.5	2.0	3.5	3.0	3.0	0.0	0.0	0.0			
7	10.0	9.0	9.5	2.0	2.0	2.0	3.5	2.5	3.0	0.0	0.0	0.0			
8	9.5	9.0	9.0	3.0	2.0	2.5	3.0	2.5	2.5	0.0	0.0	0.0			
9	9.5	9.0	9.0	3.5	3.0	3.0	2.5	1.5	2.0	0.0	0.0	0.0			
10	9.0	8.0	8.5	4.0	3.0	3.5	2.0	1.5	1.5	1.5	0.0	1.0			
11	8.5	8.0	8.0	4.5	3.5	4.0	2.5	2.0	2.0	2.0	1.5	1.5			
12	8.5	7.5	8.0	6.0	4.5	5.5	2.5	2.0	2.5	2.0	1.5	1.5			
13	8.0	7.5	8.0	6.5	5.0	6.0	2.5	2.0	2.0	2.5	2.0	2.0			
14	8.0	7.0	7.5	5.0	4.5	5.0	2.0	1.5	1.5	2.5	2.5	2.5			
15	7.5	6.5	7.0	5.5	5.0	5.0	3.0	1.5	2.5	2.5	2.5	2.5			
16	8.0	7.0	7.5	5.0	5.0	5.0	3.0	3.0	3.0	2.5	2.0	2.0			
17	8.5	8.0	8.0	5.0	4.0	4.5	3.0	3.0	3.0	3.0	2.0	2.5			
18	9.0	8.0	8.5	4.0	3.5	4.0	3.5	3.0	3.5	3.0	2.5	3.0			
19	8.5	8.0	8.5	3.5	3.0	3.5	4.0	3.5	4.0	3.0	2.5	3.0			
20	8.0	7.0	7.5	3.0	1.5	2.5	3.5	3.0	3.5	3.0	3.0	3.0			
21	8.5	7.5	8.0	2.0	1.0	1.5	4.0	3.0	3.5	3.5	3.0	3.5			
22	8.0	8.0	8.0	2.5	1.5	2.0	4.5	4.0	4.0	3.5	3.0	3.5			
23	8.0	7.5	7.5	2.5	2.5	2.5	4.5	4.0	4.0	3.0	2.5	3.0			
24	8.0	7.5	8.0	3.0	2.5	2.5	4.0	4.0	4.0	2.5	1.0	2.0			
25	9.0	8.0	8.5	3.0	2.5	3.0	4.0	3.0	3.5	1.0	0.0	0.5			
26	9.0	8.5	9.0	3.0	2.0	2.5	3.0	2.5	2.5	0.0	0.0	0.0			
27	8.5	8.5	8.5	2.5	1.5	2.0	2.5	2.0	2.0	0.0	0.0	0.0			
28	8.5	7.0	7.5	2.5	1.5	2.0	2.0	0.5	1.0	0.0	0.0	0.0			
29	7.0	5.5	6.0	2.5	2.0	2.0	1.0	0.5	1.0	0.0	0.0	0.0			
30	5.5	4.5	5.0	2.5	2.0	2.5	1.5	0.5	1.0	0.0	0.0	0.0			
31	5.0	4.0	4.5	---	---	---	2.0	1.5	2.0	0.0	0.0	0.0			
MONTH	10.5	4.0	8.2	6.5	1.0	3.3	4.5	0.5	2.6	3.5	0.0	1.3			

15085100 OLD TOM CREEK NEAR KASAAN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	2.5	1.5	2.0	4.0	2.5	3.5	9.0	7.5	8.0
2	0.0	0.0	0.0	2.5	1.5	2.0	4.0	3.5	3.5	8.0	7.0	7.5
3	0.0	0.0	0.0	3.0	2.0	2.5	4.5	3.5	4.0	7.5	6.5	7.0
4	0.0	0.0	0.0	3.0	2.0	2.5	4.5	3.5	4.0	9.0	6.0	7.5
5	0.5	0.0	0.0	2.5	1.5	2.0	5.0	3.5	4.0	9.5	6.5	7.5
6	1.5	0.5	1.0	2.5	2.0	2.0	5.5	4.0	4.5	9.5	6.0	7.5
7	2.0	1.0	1.5	3.0	2.5	2.5	5.5	4.0	4.5	9.5	6.0	7.5
8	2.0	1.5	1.5	3.0	3.0	3.0	6.0	4.0	4.5	8.5	7.0	8.0
9	2.0	1.0	1.5	3.0	2.5	2.5	5.0	4.5	5.0	9.0	7.5	8.0
10	2.0	1.5	2.0	3.5	2.5	3.0	5.0	4.5	5.0	10.5	7.5	8.5
11	2.0	1.5	2.0	3.5	3.0	3.0	6.0	5.0	5.5	11.0	7.0	8.5
12	2.5	2.0	2.5	3.0	2.5	3.0	6.5	5.0	5.5	11.0	7.5	9.0
13	3.0	2.0	2.5	3.0	2.5	3.0	6.5	4.5	5.0	11.0	8.0	9.5
14	2.5	2.0	2.0	3.0	2.5	2.5	6.5	4.0	5.0	12.0	8.5	10.0
15	2.0	2.0	2.0	3.5	2.5	3.0	6.5	4.0	5.0	10.5	9.0	9.5
16	2.5	2.0	2.5	3.5	3.0	3.0	6.0	4.0	5.0	10.5	9.0	9.5
17	2.5	2.0	2.5	3.0	3.0	3.0	5.5	4.5	5.0	11.0	8.0	9.5
18	3.0	2.5	2.5	3.0	2.5	2.5	5.5	4.0	4.5	12.5	8.5	10.0
19	3.0	2.5	3.0	2.5	2.0	2.5	6.0	3.5	4.5	13.0	9.0	10.5
20	3.0	3.0	3.0	2.5	2.0	2.0	7.5	4.0	5.5	14.0	10.0	11.5
21	3.5	2.5	3.0	3.0	2.5	3.0	7.5	4.0	5.5	14.0	10.5	12.0
22	3.0	2.5	3.0	3.5	3.0	3.0	6.0	5.0	5.5	13.5	9.5	11.0
23	3.5	3.0	3.0	3.5	3.0	3.5	6.0	4.5	5.0	13.5	9.5	11.0
24	3.0	2.5	3.0	4.0	3.5	3.5	5.5	5.0	5.0	11.5	10.5	11.0
25	3.5	2.5	2.5	4.0	3.5	3.5	6.0	5.0	5.5	11.5	10.5	11.0
26	2.5	2.0	2.0	4.0	3.0	3.5	7.0	5.5	6.0	12.0	10.0	11.0
27	2.0	1.5	2.0	4.0	3.5	4.0	8.0	5.5	6.5	11.0	9.5	10.0
28	2.5	1.5	2.0	4.0	3.5	4.0	8.5	5.5	6.5	11.0	9.5	10.0
29	3.0	2.5	2.5	4.0	3.5	4.0	9.0	5.5	7.0	9.5	8.5	9.5
30	---	---	---	4.0	3.0	3.5	9.5	6.0	7.5	9.5	8.5	9.0
31	---	---	---	4.0	2.5	3.5	---	---	---	9.5	8.5	9.0
MONTH	3.5	0.0	1.9	4.0	1.5	2.9	9.5	2.5	5.1	14.0	6.0	9.3
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.0	8.0	8.5	14.5	13.0	14.0	14.0	12.5	13.5	13.0	11.0	12.0
2	9.0	8.0	8.5	14.5	13.0	13.5	13.0	12.5	13.0	12.5	11.0	11.5
3	11.0	8.0	9.5	14.5	13.0	13.5	13.0	12.0	12.5	12.5	11.5	12.0
4	10.5	9.0	10.0	13.5	12.0	13.0	14.0	12.0	12.5	12.5	11.5	12.0
5	12.0	9.5	10.5	13.5	12.0	13.0	14.5	12.5	13.0	12.0	11.0	11.5
6	11.0	9.5	10.5	12.0	11.0	11.5	15.0	12.5	13.5	12.0	10.5	11.5
7	13.5	10.0	11.5	12.5	11.0	11.5	15.0	12.0	13.0	12.5	11.5	12.0
8	13.5	11.0	12.0	13.5	11.0	12.0	14.5	13.0	13.5	12.5	11.0	11.5
9	13.0	10.5	11.5	15.0	12.0	13.0	16.0	12.5	13.5	12.0	11.0	11.5
10	11.0	9.5	10.5	13.0	12.5	13.0	15.5	13.0	14.0	11.5	10.0	10.5
11	11.0	9.5	10.0	13.5	12.5	13.0	16.0	13.5	14.5	11.5	10.0	10.5
12	10.0	9.0	9.5	15.5	11.5	13.0	16.0	13.0	14.0	11.0	10.0	10.5
13	9.5	9.0	9.0	16.0	12.0	14.0	15.5	13.0	14.0	11.5	10.5	11.0
14	10.5	9.0	9.5	17.0	13.0	14.5	16.5	13.0	14.5	11.5	10.5	11.0
15	11.5	9.5	10.5	17.5	13.5	15.0	16.0	14.0	15.0	11.0	10.0	10.5
16	13.5	10.0	11.0	15.0	14.0	14.5	17.0	14.0	15.0	10.5	9.5	10.0
17	14.5	10.5	12.0	16.0	13.5	14.5	15.5	14.5	15.0	10.0	9.0	9.5
18	16.0	11.5	13.5	16.5	13.0	14.5	16.5	14.5	15.0	11.0	9.5	10.0
19	17.0	13.0	14.5	15.0	14.0	14.5	---	14.5	---	10.0	8.5	9.0
20	17.5	13.5	15.0	15.0	13.0	14.0	---	---	---	10.0	9.0	9.0
21	17.5	14.0	15.5	14.0	12.5	13.5	---	---	---	11.0	10.0	10.5
22	18.0	14.5	16.0	16.0	12.0	13.5	---	---	---	11.0	10.5	10.5
23	18.5	14.5	16.0	16.5	12.5	14.0	---	---	---	11.0	10.5	10.5
24	17.5	14.5	15.5	16.0	13.5	14.5	---	---	---	11.5	10.5	11.0
25	15.0	14.0	14.5	14.5	13.5	14.0	---	---	---	10.5	9.5	10.0
26	14.0	13.5	14.0	14.5	13.0	14.0	13.0	---	---	10.5	9.5	10.0
27	14.0	13.0	13.5	16.5	13.5	14.5	13.5	12.5	13.0	10.5	10.0	10.5
28	13.5	12.5	13.0	15.5	14.0	15.0	13.5	12.0	12.5	10.0	8.5	9.0
29	14.0	13.0	13.5	15.0	14.0	14.5	13.5	12.0	12.5	10.0	8.5	9.5
30	14.5	13.0	13.5	14.5	13.5	14.0	13.0	12.0	12.5	9.5	8.5	9.0
31	---	---	---	14.5	12.0	13.5	13.0	11.0	12.0	---	---	---
MONTH	18.5	8.0	12.1	17.5	11.0	13.7	---	---	---	13.0	8.5	10.6

15085800 MAYBESO CREEK NEAR HOLLIS

LOCATION.-- Lat 55°29'26", long 132°40'31", in SW¹/₄SE¹/₄SE¹/₄ sec. 32 T. 73 S., R. 84 E. (Craig B-3 quad), on Prince of Wales Island, on right bank 600 ft downstream from unnamed tributary, 2,400 ft upstream from mouth, and 1/2 mi northwest of Hollis.

DRAINAGE AREA.-- 15.1 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949, 1956, 1959, and 2004.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 2003 to September 2004.

INSTRUMENTATION.-- Electronic water-temperature recorder since October 2003, set for 15-minute recording interval.

REMARKS.--Daily discharge not published for 2004 due to lack of rating development. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on April 1, 2004. No variation was found within the cross section, or between mean stream temperature and sensor temperature. Missing record January 23 to May 5, and September 14 due to recorder malfunction.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 17.5°C, June 23-24; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (000004)	Location in X-sect. looking downstrm ft from l bank (000009)	Gage height, feet (000065)	Instantaneous discharge, cfs (000061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
APR							
01...	1710	60.0	5.00	2.45	70	3.5	5.0
01...	1711	60.0	15.0	2.45	70	3.5	5.0
01...	1712	60.0	25.0	2.45	70	3.5	5.0
01...	1713	60.0	35.0	2.45	70	3.5	5.0
01...	1714	60.0	45.0	2.45	70	3.5	5.0
01...	1715	60.0	55.0	2.45	70	3.5	5.0

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	4.5	4.0	4.5	2.0	1.0	2.0	1.5	0.5	1.5			
2	---	---	---	4.5	3.5	4.0	2.5	2.0	2.0	0.5	0.0	0.0			
3	---	---	---	4.0	3.0	3.5	2.0	1.5	2.0	0.0	0.0	0.0			
4	---	---	---	3.5	2.5	3.0	2.5	2.0	2.5	0.0	0.0	0.0			
5	---	---	---	2.5	2.0	2.5	2.5	2.0	2.5	0.0	0.0	0.0			
6	---	---	---	2.5	1.5	2.0	2.5	2.0	2.5	0.0	0.0	0.0			
7	---	---	---	3.0	2.0	2.5	2.5	2.5	2.5	0.0	0.0	0.0			
8	---	---	---	3.0	2.0	2.5	2.5	2.5	2.5	0.5	0.0	0.0			
9	---	---	---	3.5	3.0	3.0	2.5	1.5	2.0	0.0	0.0	0.0			
10	---	---	---	3.5	2.5	3.0	2.0	1.0	1.5	0.5	0.0	0.0			
11	---	---	---	4.0	3.0	3.5	2.5	1.5	2.0	1.5	0.5	1.0			
12	---	---	---	6.0	4.0	5.0	2.0	1.5	2.0	1.5	1.0	1.5			
13	---	---	---	6.5	4.5	6.0	2.0	1.5	2.0	2.0	1.0	1.5			
14	---	---	---	5.0	4.5	4.5	1.5	1.0	1.0	2.0	2.0	2.0			
15	---	---	---	5.0	4.5	4.5	1.5	1.0	1.5	2.0	2.0	2.0			
16	---	---	---	5.0	4.5	4.5	2.0	1.5	2.0	2.0	2.0	2.0			
17	---	---	---	4.5	3.0	4.0	2.0	2.0	2.0	2.5	2.0	2.0			
18	---	---	---	3.5	3.0	3.0	2.5	2.0	2.5	2.5	2.0	2.5			
19	---	---	---	3.0	2.0	3.0	2.5	2.0	2.5	3.0	2.0	2.5			
20	---	---	---	2.0	1.0	2.0	2.5	2.5	2.5	3.0	2.5	3.0			
21	---	---	---	2.0	1.0	1.5	3.0	2.5	2.5	3.5	3.0	3.0			
22	---	---	---	2.0	1.0	1.5	3.0	3.0	3.0	3.5	3.0	3.0			
23	---	---	---	2.0	1.0	1.5	3.5	3.0	3.0	---	---	---			
24	---	---	---	2.0	1.5	1.5	3.5	3.0	3.5	---	---	---			
25	---	---	---	1.5	1.0	1.5	3.5	2.0	2.5	---	---	---			
26	---	---	---	2.0	1.5	2.0	2.0	2.0	2.0	---	---	---			
27	---	---	---	2.0	0.5	1.5	2.0	1.5	2.0	---	---	---			
28	---	---	---	1.5	0.5	1.5	1.5	0.5	1.0	---	---	---			
29	---	---	---	1.5	1.0	1.0	1.5	0.5	1.0	---	---	---			
30	---	---	---	1.5	0.0	1.0	1.5	1.0	1.0	---	---	---			
31	4.5	3.5	4.0	---	---	---	2.0	1.5	1.5	---	---	---			
MONTH	---	---	---	6.5	0.0	2.8	3.5	0.5	2.1	---	---	---			

15085800 MAYBESO CREEK NEAR HOLLIS—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	9.0	5.0	7.0
7	---	---	---	---	---	---	---	---	---	9.0	5.5	7.0
8	---	---	---	---	---	---	---	---	---	7.5	6.0	6.5
9	---	---	---	---	---	---	---	---	---	8.0	6.5	7.0
10	---	---	---	---	---	---	---	---	---	9.0	6.0	7.5
11	---	---	---	---	---	---	---	---	---	9.5	6.0	7.5
12	---	---	---	---	---	---	---	---	---	10.0	6.0	8.0
13	---	---	---	---	---	---	---	---	---	10.0	7.0	8.5
14	---	---	---	---	---	---	---	---	---	10.0	7.0	8.5
15	---	---	---	---	---	---	---	---	---	9.5	7.5	8.5
16	---	---	---	---	---	---	---	---	---	9.0	7.5	8.5
17	---	---	---	---	---	---	---	---	---	10.0	7.0	8.5
18	---	---	---	---	---	---	---	---	---	11.0	7.5	9.0
19	---	---	---	---	---	---	---	---	---	11.5	7.5	9.5
20	---	---	---	---	---	---	---	---	---	12.0	8.0	10.0
21	---	---	---	---	---	---	---	---	---	12.0	8.5	10.0
22	---	---	---	---	---	---	---	---	---	11.5	8.0	10.0
23	---	---	---	---	---	---	---	---	---	12.0	8.0	10.0
24	---	---	---	---	---	---	---	---	---	10.0	9.0	9.5
25	---	---	---	---	---	---	---	---	---	10.0	8.5	9.5
26	---	---	---	---	---	---	---	---	---	10.0	8.5	9.0
27	---	---	---	---	---	---	---	---	---	9.5	7.5	8.5
28	---	---	---	---	---	---	---	---	---	9.5	8.0	9.0
29	---	---	---	---	---	---	---	---	---	9.0	8.0	8.5
30	---	---	---	---	---	---	---	---	---	9.0	7.5	8.5
31	---	---	---	---	---	---	---	---	---	9.0	8.0	8.0
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.0	7.5	8.0	15.0	13.0	14.0	14.0	12.5	13.0	12.5	10.5	11.5
2	9.5	7.5	8.5	14.5	13.0	13.5	13.0	12.5	12.5	12.0	10.5	11.5
3	11.0	7.0	9.0	15.0	13.0	14.0	13.5	12.0	13.0	12.0	11.5	12.0
4	9.5	8.5	9.0	14.0	12.5	13.5	14.5	12.0	13.5	12.5	11.0	11.5
5	11.0	8.5	10.0	14.0	11.5	13.0	15.0	12.5	13.5	11.5	10.0	11.0
6	10.5	8.5	9.5	11.5	11.0	11.0	15.0	12.5	13.5	11.5	10.5	11.0
7	13.5	9.0	11.0	12.5	11.0	11.5	15.0	12.0	13.5	12.0	11.0	11.5
8	12.5	9.5	11.0	13.0	11.0	12.0	14.0	12.5	13.0	12.0	10.5	11.0
9	12.0	10.0	10.5	15.0	11.5	13.0	15.0	12.0	13.5	11.5	10.5	11.0
10	11.0	9.0	10.0	13.5	12.5	13.0	15.5	12.5	14.0	11.0	9.5	10.5
11	10.0	9.0	9.5	13.5	12.0	12.5	15.0	13.0	14.0	11.5	10.0	10.5
12	10.5	9.0	9.5	15.0	11.0	13.0	15.5	12.5	14.0	10.5	10.0	10.5
13	10.0	9.0	9.5	16.0	11.5	13.5	15.5	12.5	14.0	11.0	10.5	10.5
14	10.0	9.0	9.5	16.0	12.5	14.5	15.5	12.5	14.0	---	---	---
15	11.5	8.5	10.0	17.0	13.0	15.0	16.0	13.5	14.5	10.5	9.0	10.0
16	13.5	9.0	11.0	15.5	14.0	15.0	16.5	14.0	15.0	10.0	9.0	9.5
17	14.5	10.0	12.0	15.0	14.0	14.5	15.0	14.5	14.5	10.5	8.5	9.5
18	15.5	11.0	13.0	16.5	13.0	14.5	16.0	14.0	15.0	10.5	9.0	9.5
19	16.5	12.0	14.0	14.5	13.5	14.0	15.0	14.0	14.5	10.0	8.0	9.0
20	17.0	12.5	15.0	15.0	13.0	14.0	15.5	14.0	14.5	10.0	8.5	9.0
21	17.0	13.5	15.0	15.5	13.0	14.0	15.5	13.5	14.5	10.5	9.5	10.0
22	17.0	14.0	15.5	16.0	12.5	14.0	15.5	13.5	14.5	10.0	9.5	9.5
23	17.5	14.0	16.0	16.5	13.0	14.5	14.5	12.5	13.5	10.0	9.5	10.0
24	17.5	14.5	16.0	15.5	13.5	14.5	14.5	11.5	13.0	10.0	9.0	10.0
25	15.5	14.5	15.0	15.0	13.5	14.0	14.0	11.5	13.0	9.5	8.5	9.0
26	14.5	13.5	14.0	14.5	13.0	13.5	13.5	11.5	12.5	9.0	8.5	9.0
27	14.0	13.0	13.5	15.5	13.0	14.0	13.5	12.5	13.0	10.0	9.0	9.5
28	14.0	12.5	13.5	15.0	14.0	14.5	13.5	12.0	12.5	9.0	8.0	8.5
29	13.5	13.0	13.0	15.0	13.0	14.0	13.0	11.5	12.5	9.0	8.0	8.5
30	14.5	12.5	13.5	14.5	13.0	13.5	13.0	11.5	12.0	9.0	8.0	8.5
31	---	---	---	14.5	12.0	13.5	13.0	11.0	12.0	---	---	---
MONTH	17.5	7.0	11.8	17.0	11.0	13.6	16.5	11.0	13.5	---	---	---

15087080 UPPER EARL WEST CREEK NEAR WRANGELL

LOCATION.--Lat 56°17'09", long 132°07'51", in SW¹/₄ SE¹/₄ SE¹/₄ sec. 27, T. 64 S., R. 86 E. (Petersburg B-1 quad.)
Hydrologic Unit 19010202, on right bank 150 ft upstream from the bridge on USFS road #6270, 5.0 mi upstream from the mouth, 26.6 mi south of Wrangell.

DRAINAGE AREA.--3.3 mi²

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2003 to September 2004.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 2003 to September 2004.

INSTRUMENTATION.-- Electronic water-temperature recorder since October 2003, set for 15-minute recording interval.

REMARKS.--Probe installed on October 13. Water-discharge records are computed daily. Missing record October 13-30, January 27-February 11, 14, and May 18-June 29 due to recorder malfunction. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on October 13, and June 29. No variation was found within the cross sections. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 20.5°C, July 15; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Medium code	Stream width, ft (00004)	Location in X-sect. looking downstrm ft from l bank (00009)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
OCT								
13...	1100	9	26.5	25.0	8.56	9.9	6.0	5.5
13...	1101	9	26.5	23.0	8.56	9.2	6.0	5.5
13...	1102	9	26.5	21.0	8.56	9.9	6.0	5.5
13...	1103	9	26.5	19.0	8.56	9.9	6.0	5.5
13...	1104	9	26.5	13.0	8.56	9.9	6.0	5.5
13...	1105	9	26.5	9.00	8.56	9.9	6.0	5.5
13...	1106	9	26.5	5.00	8.56	9.9	6.0	5.5
13...	1107	9	26.5	1.00	8.56	9.9	6.0	5.5
JUN								
29...	1447	9	--	1.00	8.10	.64	17.5	16.2
29...	1448	9	--	5.00	8.10	.64	17.5	16.2
29...	1449	9	--	9.00	8.10	.64	17.5	16.2
29...	1450	9	--	13.0	8.10	.64	17.5	16.2
29...	1451	9	--	17.0	8.10	.64	17.5	16.2

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	1.5	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
2	---	---	---	1.5	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
3	---	---	---	1.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
4	---	---	---	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
5	---	---	---	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
6	---	---	---	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	---	---	---	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
8	---	---	---	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	---	---	---	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	---	---	---	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	---	---	---	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
12	---	---	---	3.0	0.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
13	---	---	---	4.0	2.5	3.0	0.0	0.0	0.0	0.5	0.0	0.0
14	---	---	---	3.0	2.5	2.5	0.0	0.0	0.0	1.0	0.5	0.5
15	---	---	---	3.0	2.5	2.5	0.0	0.0	0.0	1.0	0.5	0.5
16	---	---	---	3.0	2.5	2.5	0.0	0.0	0.0	1.0	0.5	0.5
17	---	---	---	3.0	1.0	2.0	0.5	0.0	0.5	1.0	0.5	1.0
18	---	---	---	1.0	0.5	0.5	1.0	0.0	0.5	1.0	0.5	1.0
19	---	---	---	0.5	0.0	0.0	1.0	0.0	0.5	1.5	1.0	1.0
20	---	---	---	0.0	0.0	0.0	1.0	1.0	1.0	1.5	1.0	1.0
21	---	---	---	0.0	0.0	0.0	1.5	0.5	1.0	1.5	1.0	1.5
22	---	---	---	0.0	0.0	0.0	1.0	0.5	0.5	1.5	1.0	1.5
23	---	---	---	0.0	0.0	0.0	1.0	1.0	1.0	1.5	0.5	1.0
24	---	---	---	0.0	0.0	0.0	1.5	1.0	1.5	1.0	0.0	0.5
25	---	---	---	0.0	0.0	0.0	1.5	0.5	1.0	0.0	0.0	0.0
26	---	---	---	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
27	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
28	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
29	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
30	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
31	2.0	1.0	1.5	---	---	---	0.0	0.0	0.0	---	---	---
MONTH	---	---	---	4.0	0.0	0.6	1.5	0.0	0.2	---	---	---

15087080 UPPER EARL WEST CREEK NEAR WRANGELL—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	1.5	0.0	0.5	2.5	1.0	2.0	0.5	0.5	0.5
2	---	---	---	1.0	0.0	0.5	2.5	1.0	1.5	0.5	0.5	0.5
3	---	---	---	0.5	0.0	0.5	2.0	1.0	1.5	0.5	0.5	0.5
4	---	---	---	1.0	0.0	0.5	2.5	1.0	1.5	0.5	0.5	0.5
5	---	---	---	0.0	0.0	0.0	3.0	1.0	2.0	0.5	0.0	0.5
6	---	---	---	0.5	0.0	0.0	4.0	1.0	2.5	0.5	0.0	0.5
7	---	---	---	0.0	0.0	0.0	3.0	1.5	2.0	0.5	0.5	0.5
8	---	---	---	0.5	0.0	0.0	4.0	1.5	2.0	0.5	0.5	0.5
9	---	---	---	1.0	0.0	0.5	2.5	1.5	2.0	0.5	0.5	0.5
10	---	---	---	0.5	0.0	0.5	2.5	1.5	2.0	1.0	0.5	0.5
11	---	0.0	---	1.0	0.5	0.5	3.5	1.5	2.0	1.0	0.5	0.5
12	0.0	0.0	0.0	1.5	0.0	1.0	2.5	1.5	2.0	1.0	0.5	0.5
13	0.0	0.0	0.0	1.0	0.5	0.5	4.0	1.5	2.5	1.0	0.5	0.5
14	0.5	0.0	0.0	1.5	0.5	1.0	5.0	1.5	2.5	1.0	0.5	0.5
15	0.5	0.0	0.0	1.0	0.0	0.5	4.0	1.0	2.5	0.5	0.5	0.5
16	1.0	0.0	0.5	1.0	0.0	0.5	4.5	1.0	3.0	0.5	0.5	0.5
17	1.0	0.5	0.5	1.5	0.0	0.5	4.0	2.0	3.0	0.5	0.5	0.5
18	1.0	0.5	0.5	1.0	0.5	0.5	3.5	2.0	3.0	---	0.5	---
19	1.0	0.5	0.5	1.5	0.0	0.5	4.5	1.5	3.0	---	---	---
20	1.0	0.5	1.0	2.5	0.5	1.0	5.5	1.5	3.0	---	---	---
21	1.5	0.5	1.0	2.5	0.5	1.5	5.0	1.5	3.0	---	---	---
22	1.5	0.5	1.0	3.0	1.0	2.0	3.0	2.0	2.5	---	---	---
23	2.0	1.0	1.5	3.0	0.0	1.5	3.5	1.5	2.5	---	---	---
24	1.5	0.5	1.0	3.0	1.0	2.0	2.5	2.0	2.5	---	---	---
25	1.0	0.0	0.5	2.5	1.0	1.5	2.5	2.0	2.0	---	---	---
26	1.5	0.0	0.5	2.5	0.5	1.5	3.0	0.0	2.0	---	---	---
27	1.0	0.0	0.5	2.0	1.0	1.5	0.5	0.0	0.5	---	---	---
28	1.0	0.0	0.5	1.0	0.5	1.0	0.5	0.0	0.5	---	---	---
29	1.5	0.0	0.5	1.5	1.0	1.0	0.5	0.0	0.5	---	---	---
30	---	---	---	1.5	0.5	1.0	0.5	0.0	0.5	---	---	---
31	---	---	---	2.0	0.0	1.0	---	---	---	---	---	---
MONTH	---	---	---	3.0	0.0	0.8	5.5	0.0	2.1	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	17.5	15.5	16.5	16.0	13.5	15.0	15.0	11.0	13.0
2	---	---	---	17.0	16.0	16.5	15.0	12.5	13.5	14.0	12.0	12.5
3	---	---	---	18.0	15.0	16.5	14.0	12.5	13.5	12.5	11.5	12.0
4	---	---	---	18.0	15.5	16.5	16.5	12.5	14.5	12.0	11.0	11.5
5	---	---	---	17.0	15.5	16.0	15.0	13.0	13.5	12.0	10.0	11.0
6	---	---	---	15.5	11.0	11.5	13.5	12.5	13.0	12.0	11.5	11.5
7	---	---	---	12.0	11.0	11.5	14.5	12.0	13.0	11.5	10.5	11.0
8	---	---	---	13.5	11.0	12.0	15.0	12.0	13.5	12.0	9.5	10.5
9	---	---	---	16.5	13.0	14.0	17.5	13.0	15.0	12.0	9.5	10.5
10	---	---	---	15.0	14.0	14.5	18.0	14.5	16.0	11.5	8.5	10.0
11	---	---	---	14.0	13.0	13.5	17.5	15.0	16.0	11.0	9.5	10.0
12	---	---	---	15.5	12.0	13.5	17.5	14.0	16.0	10.5	9.5	10.0
13	---	---	---	18.5	13.0	15.5	18.5	14.0	16.0	10.5	9.5	10.0
14	---	---	---	18.5	14.5	16.5	19.0	14.5	17.0	10.0	9.0	9.5
15	---	---	---	20.5	14.5	17.5	20.0	16.0	18.0	9.5	8.5	9.0
16	---	---	---	19.0	16.5	17.5	19.0	17.0	18.0	10.0	8.0	8.5
17	---	---	---	17.5	15.5	16.5	18.5	16.5	17.5	9.5	7.0	8.0
18	---	---	---	17.0	14.0	15.5	19.5	16.5	18.0	11.0	8.5	9.5
19	---	---	---	16.0	14.5	15.0	18.5	16.5	17.5	9.5	7.5	8.5
20	---	---	---	17.0	14.5	15.5	17.5	15.0	16.0	9.0	7.5	8.0
21	---	---	---	15.0	13.5	14.5	17.5	14.0	15.5	9.5	9.0	9.0
22	---	---	---	18.0	13.5	15.5	17.5	14.5	15.5	9.0	8.5	9.0
23	---	---	---	19.5	14.5	17.0	16.0	13.0	14.5	9.5	8.5	9.0
24	---	---	---	17.5	15.5	16.5	15.5	12.5	14.0	9.5	9.0	9.5
25	---	---	---	17.0	15.5	16.0	16.0	12.0	14.0	9.0	8.0	8.5
26	---	---	---	16.5	14.5	15.5	14.5	12.5	13.5	8.5	7.5	8.0
27	---	---	---	19.0	14.5	16.5	14.0	12.0	13.0	9.5	8.5	9.0
28	---	---	---	18.0	13.5	15.0	13.5	12.0	13.0	8.5	6.5	7.5
29	---	---	---	15.0	13.0	14.0	14.0	12.5	13.5	8.5	7.0	8.0
30	17.0	16.0	16.5	15.0	13.5	14.5	15.0	12.5	13.5	9.5	7.5	8.5
31	---	---	---	17.0	13.0	15.0	14.5	11.5	13.0	---	---	---
MONTH	---	---	---	20.5	11.0	15.2	20.0	11.5	15.0	15.0	6.5	9.7

15087300 FALLS CREEK NEAR PETERSBURG

LOCATION.--Lat 56°40'56", long 132°55'20", in NW¹/₄ SE¹/₄ sec. 11, T. 60 S., R. 79 E. (Petersburg C-3 quad.) Hydrologic Unit 19010202, on left bank 50 ft upstream from the bridge on Mitkof Highway, 1000 ft upstream from the mouth, 10.7 mi south of Petersburg, 4.1 mi north of Blind Island Campground

DRAINAGE AREA.--17.4 mi²

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 2004 to September 2004.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 2004 to September 2004.

INSTRUMENTATION.-- Electronic water-temperature recorder since May 2004, set for 15-minute recording interval.

REMARKS.--Water-discharge records are computed daily. Probe installed on April 30. Records represent water temperature at sensor within 0.5°C. No temperature cross sections were taken in the 2004 water year.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 22.0°C, June 24-25; minimum recorded, 6.0°C, April 30, partial year of record.

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	8.5	8.0	8.5
2	---	---	---	---	---	---	---	---	---	8.5	7.5	8.0
3	---	---	---	---	---	---	---	---	---	8.0	7.5	7.5
4	---	---	---	---	---	---	---	---	---	9.0	7.5	8.0
5	---	---	---	---	---	---	---	---	---	9.5	7.0	8.0
6	---	---	---	---	---	---	---	---	---	9.0	6.5	7.5
7	---	---	---	---	---	---	---	---	---	9.0	7.0	8.0
8	---	---	---	---	---	---	---	---	---	9.5	8.0	8.5
9	---	---	---	---	---	---	---	---	---	9.5	8.5	9.0
10	---	---	---	---	---	---	---	---	---	10.0	8.0	8.5
11	---	---	---	---	---	---	---	---	---	10.5	7.5	9.0
12	---	---	---	---	---	---	---	---	---	10.5	8.5	9.5
13	---	---	---	---	---	---	---	---	---	11.0	9.0	10.0
14	---	---	---	---	---	---	---	---	---	11.5	9.5	10.5
15	---	---	---	---	---	---	---	---	---	12.0	10.0	10.5
16	---	---	---	---	---	---	---	---	---	10.5	10.0	10.0
17	---	---	---	---	---	---	---	---	---	11.5	10.0	10.5
18	---	---	---	---	---	---	---	---	---	12.5	10.5	11.0
19	---	---	---	---	---	---	---	---	---	13.0	10.5	11.5
20	---	---	---	---	---	---	---	---	---	13.5	11.5	12.0
21	---	---	---	---	---	---	---	---	---	14.0	12.0	13.0
22	---	---	---	---	---	---	---	---	---	14.5	11.5	12.5
23	---	---	---	---	---	---	---	---	---	14.0	11.5	12.5
24	---	---	---	---	---	---	---	---	---	14.5	13.0	13.0
25	---	---	---	---	---	---	---	---	---	13.0	11.0	11.5
26	---	---	---	---	---	---	---	---	---	11.0	10.0	10.5
27	---	---	---	---	---	---	---	---	---	11.5	10.0	10.5
28	---	---	---	---	---	---	---	---	---	11.5	10.0	11.0
29	---	---	---	---	---	---	---	---	---	11.5	10.0	10.5
30	---	---	---	---	---	---	8.5	6.0	7.0	11.0	10.0	10.0
31	---	---	---	---	---	---	---	---	---	11.0	9.5	10.0
MONTH	---	---	---	---	---	---	---	---	---	14.5	6.5	10.0

15087300 FALLS CREEK NEAR PETERSBURG—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER 2003			NOVEMBER 2003			DECEMBER 2003			JANUARY 2004		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.5	9.5	10.0	16.5	15.0	16.0	15.0	14.0	14.5	13.0	11.5	12.0
2	11.0	9.5	10.0	16.5	15.5	16.0	14.5	13.5	14.0	12.5	11.5	12.0
3	11.0	9.0	10.0	16.5	15.0	15.5	14.0	13.5	13.5	12.0	11.5	11.5
4	11.5	10.0	10.5	17.0	15.5	16.0	15.0	13.5	14.0	12.0	11.5	12.0
5	12.0	10.5	11.0	16.5	15.0	15.5	15.5	14.0	14.5	12.0	11.5	12.0
6	12.5	11.0	12.0	15.5	11.5	13.5	14.5	13.5	14.0	12.5	11.5	12.0
7	14.0	11.0	12.0	12.5	11.5	12.0	14.0	13.0	13.5	12.5	11.5	12.0
8	14.5	13.0	13.5	13.0	11.5	12.0	14.5	13.0	13.5	12.0	10.0	11.0
9	15.0	13.0	13.5	14.5	13.0	13.5	15.0	13.5	14.0	11.0	10.0	10.5
10	14.0	11.5	12.5	15.0	14.5	14.5	16.0	14.0	15.0	11.0	9.5	10.0
11	12.5	11.5	12.0	14.5	13.5	14.0	16.5	15.5	15.5	10.5	9.5	10.0
12	12.0	11.5	11.5	15.0	13.0	14.0	17.0	15.0	15.5	10.5	10.0	10.0
13	12.0	11.5	12.0	16.0	14.0	14.5	16.5	14.5	15.5	10.5	10.0	10.0
14	12.0	10.5	11.0	17.5	15.5	16.0	16.5	14.5	15.5	11.0	10.0	10.5
15	12.0	10.0	10.5	18.0	16.0	17.0	16.5	15.0	15.5	10.5	10.0	10.0
16	13.0	10.5	12.0	19.0	16.5	17.5	17.0	15.5	16.5	10.5	9.5	10.0
17	14.5	12.0	13.0	17.0	15.5	16.0	17.5	16.0	16.5	10.0	8.0	9.0
18	16.0	13.5	14.5	17.5	15.5	16.0	18.5	16.5	17.0	9.0	8.0	8.5
19	18.0	15.0	16.0	18.0	15.5	16.5	18.5	17.0	17.5	9.0	7.5	8.0
20	19.0	16.0	17.0	16.0	15.0	15.5	18.0	16.5	17.0	8.0	7.5	7.5
21	19.5	16.5	17.5	16.5	15.5	16.0	17.5	15.5	16.5	10.0	8.0	9.0
22	19.5	17.0	18.0	17.0	15.0	16.0	17.0	15.0	16.0	10.0	9.5	10.0
23	20.5	16.5	18.5	17.5	15.0	16.5	16.5	13.5	15.0	9.5	9.5	9.5
24	22.0	17.0	19.0	17.5	16.0	16.5	15.5	12.5	13.5	10.0	9.5	10.0
25	22.0	16.5	19.0	17.0	15.5	16.0	14.5	12.0	13.0	10.0	9.0	9.5
26	21.0	17.0	18.5	16.5	15.0	16.0	14.0	12.5	13.0	9.5	9.0	9.0
27	19.0	16.5	17.0	16.5	15.5	15.5	13.0	13.0	13.0	10.0	9.0	9.5
28	17.0	15.0	16.0	17.0	15.0	16.0	13.5	12.5	13.0	10.0	8.5	9.0
29	17.0	15.0	16.0	15.0	13.5	14.0	13.5	12.5	13.0	9.0	8.0	8.5
30	16.5	15.0	15.5	14.5	13.5	14.0	13.5	13.0	13.0	9.0	8.5	8.5
31	---	---	---	15.0	14.0	14.5	14.0	12.0	13.0	---	---	---
MONTH	22.0	9.0	14.0	19.0	11.5	15.2	18.5	12.0	14.7	13.0	7.5	10.0

15087500 EAST FORK HOBO CREEK NEAR PETERSBURG

LOCATION.--Lat 56°47'38", long 132°52'23", in NW¹/₄ NE¹/₄ NE¹/₄ sec. 06, T. 59 S., R. 80 E. (Petersburg D-3 quad.) Hydrologic Unit 19010202, on left bank 50 ft upstream from the culvert on Fredrick Point Road, 4.5 mi east of Petersburg, 1000 ft upstream from the mouth.

DRAINAGE AREA.--0.45 square miles

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2003 to September 2004.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 2003 to September 2004.

INSTRUMENTATION.-- Electronic water-temperature recorder since November 2004. Recording interval changed to 15-minutes.

REMARKS.--Water-discharge records are computed daily. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on February 10, 2004. No variation was found within the cross section, or between mean stream temperature and sensor temperature.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 14.0°C, August 17-18, 2004 ; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (00004)	Sample location, cross section ft from rt bank (72103)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
FEB							
10...	1646	10.1	1.6	10.36	5.0	1.0	3.0
10...	1647	10.1	2.5	10.36	5.0	1.0	3.0
10...	1648	10.1	3.5	10.36	5.0	1.0	3.0
10...	1649	10.1	4.5	10.36	5.0	1.0	3.0
10...	1650	10.1	6.5	10.36	5.0	1.0	3.0
10...	1651	10.1	7.5	10.36	5.0	1.0	3.0
10...	1652	10.1	8.5	10.36	5.0	1.0	3.0
10...	1653	10.1	9.5	10.36	5.0	1.0	3.0

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	1.5	0.5	1.0	0.5	0.0	0.5			
2	---	---	---	---	---	---	1.5	1.0	1.0	0.5	0.5	0.5			
3	---	---	---	2.0	1.5	2.0	1.5	1.0	1.0	0.5	0.5	0.5			
4	---	---	---	1.5	1.0	1.0	1.5	1.0	1.0	1.0	0.5	0.5			
5	---	---	---	1.0	0.5	0.5	1.5	1.5	1.5	1.0	0.5	1.0			
6	---	---	---	0.5	0.0	0.0	1.5	1.5	1.5	1.0	0.5	1.0			
7	---	---	---	0.5	0.0	0.0	1.5	1.0	1.0	1.0	0.5	0.5			
8	---	---	---	1.5	0.5	1.0	1.0	0.0	0.5	0.5	0.0	0.0			
9	---	---	---	2.0	1.5	2.0	0.5	0.0	0.0	0.0	0.0	0.0			
10	---	---	---	2.5	2.0	2.0	0.5	0.0	0.0	0.0	0.0	0.0			
11	---	---	---	2.5	2.0	2.5	0.5	0.0	0.5	0.0	0.0	0.0			
12	---	---	---	3.5	2.5	3.0	1.0	0.0	0.5	0.0	0.0	0.0			
13	---	---	---	3.5	3.0	3.0	1.0	0.5	0.5	1.0	0.0	0.5			
14	---	---	---	3.0	3.0	3.0	0.5	0.0	0.0	1.0	0.5	1.0			
15	---	---	---	3.5	3.0	3.5	1.0	0.0	0.5	1.0	1.0	1.0			
16	---	---	---	3.5	3.0	3.5	1.5	1.0	1.0	1.0	0.5	1.0			
17	---	---	---	3.5	1.5	3.0	1.5	1.0	1.5	1.5	1.0	1.0			
18	---	---	---	2.0	1.5	2.0	1.5	1.0	1.5	2.0	1.5	1.5			
19	---	---	---	1.5	1.5	1.5	1.5	1.0	1.5	2.0	1.5	1.5			
20	---	---	---	1.5	0.0	0.5	1.5	1.5	1.5	2.0	1.5	2.0			
21	---	---	---	0.0	0.0	0.0	2.0	1.5	1.5	2.5	2.0	2.0			
22	---	---	---	0.5	0.0	0.0	2.0	1.5	1.5	2.5	2.0	2.5			
23	---	---	---	1.5	0.5	1.0	2.0	2.0	2.0	2.5	2.0	2.0			
24	---	---	---	1.5	0.5	1.0	2.0	2.0	2.0	2.0	0.5	1.0			
25	---	---	---	1.5	1.5	1.5	2.0	1.5	2.0	1.0	0.5	1.0			
26	---	---	---	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.0	1.0			
27	---	---	---	1.5	1.5	1.5	1.5	0.5	1.0	1.0	1.0	1.0			
28	---	---	---	1.5	0.0	1.0	0.5	0.0	0.0	1.0	1.0	1.0			
29	---	---	---	1.0	0.5	1.0	0.5	0.0	0.5	1.0	1.0	1.0			
30	---	---	---	1.0	0.0	0.5	0.0	0.0	0.0	1.0	1.0	1.0			
31	---	---	---	---	---	---	0.5	0.0	0.5	1.0	1.0	1.0			
MONTH	---	---	---	---	---	---	2.0	0.0	1.0	2.5	0.0	0.9			

15087500 EAST FORK HOBO CREEK NEAR PETERSBURG—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.0	1.0	1.0	1.0	0.5	1.0	2.0	1.5	2.0	5.5	5.0	5.5
2	1.0	1.0	1.0	1.0	0.5	1.0	2.5	2.0	2.5	5.0	4.5	5.0
3	1.0	1.0	1.0	1.0	0.5	1.0	2.5	2.5	2.5	5.0	4.5	5.0
4	1.0	0.5	1.0	1.5	1.0	1.0	2.5	2.5	2.5	5.5	4.5	5.0
5	0.5	0.5	0.5	1.0	1.0	1.0	3.0	2.5	2.5	5.5	4.5	5.0
6	0.5	0.5	0.5	1.0	1.0	1.0	3.5	2.5	3.0	6.0	4.5	5.5
7	1.0	0.5	0.5	1.0	1.0	1.0	3.5	3.0	3.5	6.0	5.0	5.5
8	0.5	0.5	0.5	1.0	1.0	1.0	3.0	3.0	3.0	6.0	5.0	5.5
9	0.5	0.5	0.5	1.5	1.0	1.0	3.5	3.0	3.5	5.5	5.0	5.5
10	1.0	0.5	1.0	1.0	0.5	1.0	3.5	3.0	3.5	6.0	5.0	5.5
11	1.0	1.0	1.0	1.5	1.0	1.0	3.5	3.0	3.5	6.0	5.0	5.5
12	1.0	1.0	1.0	1.5	1.0	1.5	3.5	3.0	3.5	6.5	5.5	6.0
13	1.5	1.0	1.5	1.5	1.0	1.5	3.5	3.0	3.5	7.0	5.5	6.5
14	1.5	1.0	1.0	1.5	1.0	1.0	3.5	3.0	3.5	7.0	6.0	6.5
15	1.0	0.5	1.0	1.0	1.0	1.0	3.5	3.0	3.0	6.5	5.5	6.0
16	1.5	1.0	1.5	1.0	1.0	1.0	4.0	2.5	3.0	7.0	6.0	6.5
17	2.0	1.5	1.5	1.5	1.0	1.0	4.0	3.5	4.0	7.0	6.0	6.5
18	2.0	1.5	1.5	1.5	1.0	1.0	4.0	3.5	3.5	7.0	6.0	6.5
19	1.5	1.0	1.5	1.0	0.5	0.5	4.0	3.0	3.5	7.0	6.0	6.5
20	1.5	1.0	1.5	1.5	1.0	1.0	4.0	3.0	3.5	7.5	6.5	7.0
21	2.0	1.5	2.0	1.5	1.0	1.5	4.5	3.5	4.0	8.0	7.0	7.5
22	2.0	2.0	2.0	2.0	1.5	1.5	5.0	4.0	4.5	8.0	6.5	7.5
23	2.5	2.0	2.0	2.0	1.5	1.5	4.5	3.5	4.0	8.5	7.0	7.5
24	2.0	1.5	1.5	2.0	1.5	2.0	4.0	4.0	4.0	8.0	7.5	8.0
25	2.0	1.5	1.5	2.5	2.0	2.0	4.0	4.0	4.0	7.5	7.0	7.5
26	1.5	1.0	1.5	2.5	2.0	2.0	4.0	3.5	4.0	7.5	7.0	7.5
27	1.0	1.0	1.0	2.5	2.0	2.0	4.0	3.5	4.0	8.0	7.0	7.5
28	1.5	0.5	1.0	2.5	2.0	2.0	5.0	4.0	4.0	8.0	7.0	7.5
29	1.5	1.0	1.0	2.5	2.0	2.0	4.5	3.5	4.0	8.0	7.0	7.5
30	---	---	---	2.5	1.5	2.0	5.5	4.0	5.0	8.0	7.0	7.5
31	---	---	---	2.0	1.5	1.5	---	---	---	7.5	7.5	7.5
MONTH	2.5	0.5	1.2	2.5	0.5	1.3	5.5	1.5	3.5	8.5	4.5	6.4
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.5	7.0	7.5	12.5	11.5	12.0	12.0	11.0	11.5	11.0	10.0	10.5
2	8.0	7.0	7.5	12.0	11.5	11.5	12.0	11.5	11.5	11.0	10.0	10.5
3	8.0	7.0	7.5	12.0	11.0	11.5	12.0	11.5	11.5	11.5	11.0	11.5
4	8.5	7.5	8.0	12.0	11.0	11.5	12.0	11.0	11.5	11.5	11.0	11.0
5	9.5	8.5	8.5	12.0	11.0	11.5	12.0	11.5	11.5	11.0	10.5	11.0
6	9.0	8.5	8.5	11.0	10.5	10.5	12.0	11.5	11.5	11.0	10.5	11.0
7	10.5	8.5	9.5	10.5	10.0	10.5	12.0	11.0	11.5	11.0	10.0	10.5
8	10.5	9.5	10.0	11.5	10.0	10.5	12.0	11.0	11.5	10.0	9.0	9.5
9	9.5	9.0	9.5	11.5	10.5	11.0	12.5	11.0	12.0	10.0	9.0	9.5
10	9.5	8.0	9.0	11.5	11.0	11.0	13.5	11.5	12.5	9.5	8.5	9.0
11	9.5	8.5	9.0	11.5	11.0	11.5	13.0	12.5	13.0	9.5	9.0	9.5
12	9.5	8.5	9.0	12.0	11.0	11.5	12.5	11.5	12.0	10.0	9.5	9.5
13	9.5	9.0	9.0	12.5	11.0	12.0	12.5	11.5	12.0	10.0	9.5	10.0
14	9.0	8.5	9.0	13.0	11.5	12.0	12.5	11.0	12.0	10.0	9.5	9.5
15	9.0	8.5	9.0	13.0	11.5	12.5	13.5	12.0	12.5	9.5	9.0	9.0
16	10.0	8.5	9.0	13.0	12.0	12.5	13.5	12.5	13.0	9.0	8.5	8.5
17	10.5	8.5	9.5	12.5	12.0	12.0	14.0	13.0	13.5	8.5	8.0	8.5
18	11.5	9.5	10.5	12.5	11.5	12.0	14.0	13.0	13.5	8.5	8.0	8.5
19	12.5	10.5	11.5	12.5	11.5	12.0	13.5	12.5	13.0	8.0	7.5	8.0
20	13.0	11.0	12.0	12.5	12.0	12.0	13.0	12.5	13.0	9.0	8.0	8.5
21	13.0	11.0	12.0	12.5	12.0	12.0	13.0	12.0	12.5	9.5	9.0	9.0
22	13.0	11.5	12.5	12.5	11.5	12.0	12.5	11.5	12.0	9.5	9.0	9.0
23	13.5	11.5	12.5	12.5	11.0	12.0	12.0	10.5	11.0	9.5	9.0	9.0
24	13.5	12.0	12.5	13.0	11.5	12.5	11.0	10.0	10.5	9.5	9.0	9.5
25	13.5	11.5	12.5	12.5	12.0	12.5	11.0	9.5	10.5	9.0	8.5	9.0
26	13.0	12.5	13.0	12.0	11.5	12.0	12.0	10.0	11.0	9.0	8.5	8.5
27	12.5	12.0	12.5	13.0	11.5	12.0	12.5	11.5	12.0	9.0	9.0	9.0
28	12.0	11.5	12.0	13.0	12.5	12.5	12.5	12.0	12.0	9.0	8.0	8.5
29	12.0	11.5	11.5	12.5	12.0	12.5	12.0	11.5	12.0	8.5	8.0	8.5
30	12.0	11.0	11.5	12.5	12.0	12.0	12.0	11.0	11.5	9.0	8.5	8.5
31	---	---	---	12.5	11.5	12.0	11.5	10.5	11.0	---	---	---
MONTH	13.5	7.0	10.2	13.0	10.0	11.8	14.0	9.5	11.9	11.5	7.5	9.4

15087618 STARRIGAVIN CREEK AT UPPER BRIDGE NEAR SITKA

LOCATION.--Lat 57°07'31", long 135°19'54", in SW¹/₄ SW¹/₄ NE¹/₄ sec. 1, T. 55 S., R. 63 E. (Sitka A-4 quad), Hydrologic Unit 19010203, on Baranof Island, in Tongass National Forest, on right bank 2.3 mi upstream from mouth, and 4.3 mi north of Sitka.

DRAINAGE AREA.--4.29 mi².

PERIOD OF RECORD.-- October 2003 to September 2004.

GAGE.--Water-stage recorder. Elevation of gage is 100 ft above sea level, from topographic map.

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

EXTREMES FOR CURRENT YEAR.-- Maximum discharge 1320 ft³/s, November 12, gage-height 14.89 ft; minimum discharge 2.4 ft³/s, July 19-20, gage-height 9.86 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	17	118	12	6.4	10	15	54	16	3.9	19	6.9
2	---	14	96	9.1	5.8	9.8	55	46	17	3.7	16	53
3	---	12	34	8.1	5.3	10	95	41	15	3.7	13	76
4	---	11	21	7.1	7.6	14	65	41	17	3.4	10	86
5	---	9.3	17	6.5	12	12	33	37	20	4.0	8.9	32
6	---	8.7	14	6.0	21	11	28	31	16	22	7.9	21
7	---	8.3	12	5.8	88	51	44	27	16	10	7.1	16
8	---	8.2	11	6.2	223	119	34	23	14	6.5	6.3	12
9	---	69	9.7	10	207	46	34	24	13	5.0	5.7	10
10	---	32	8.6	14	107	128	38	29	13	4.5	5.2	8.6
11	---	120	8.3	16	55	81	37	30	11	4.7	4.8	8.6
12	---	542	10	19	56	36	51	30	11	4.0	4.5	11
13	---	77	10	87	41	25	40	32	11	3.5	4.0	14
14	---	40	8.2	151	36	24	34	29	11	3.2	3.9	21
15	---	59	11	57	26	31	27	24	9.3	2.9	3.8	19
16	---	30	27	32	22	61	20	21	8.9	2.7	3.6	15
17	---	20	44	133	18	27	18	20	9.2	2.6	3.4	11
18	---	14	49	165	19	19	16	24	9.8	2.6	3.4	9.4
19	---	10	85	59	44	15	14	29	9.9	2.5	3.6	8.2
20	---	8.5	46	75	83	12	16	28	9.4	2.5	4.0	167
21	---	8.1	82	92	178	11	17	30	8.0	2.7	3.7	260
22	---	50	213	79	86	14	24	27	7.1	e2.6	3.6	135
23	63	21	81	56	38	14	30	23	6.7	e2.5	3.5	244
24	33	62	49	26	25	14	44	36	6.3	e2.6	3.4	119
25	189	34	37	15	19	24	66	50	5.8	e2.8	3.3	55
26	188	18	23	11	16	27	100	64	5.3	e3.1	3.2	61
27	95	13	17	10	13	22	44	35	4.9	e8.8	17	120
28	99	13	14	9.2	12	39	29	23	5.1	e88	24	59
29	41	14	13	8.5	11	28	26	19	4.6	81	14	79
30	26	55	14	7.5	---	19	43	18	4.2	46	11	54
31	20	---	18	7.0	---	15	---	17	---	25	9.2	---
TOTAL	---	1398.1	1200.8	1200.0	1481.1	968.8	1137	962	315.5	363.0	234.0	1791.7
MEAN	---	46.6	38.7	38.7	51.1	31.3	37.9	31.0	10.5	11.7	7.55	59.7
MAX	---	542	213	165	223	128	100	64	20	88	24	260
MIN	---	8.1	8.2	5.8	5.3	9.8	14	17	4.2	2.5	3.2	6.9
AC-FT	---	2770	2380	2380	2940	1920	2260	1910	626	720	464	3550
CFSM	---	10.9	9.03	9.02	11.9	7.28	8.83	7.23	2.45	2.73	1.76	13.9
IN.	---	12.12	10.41	10.41	12.84	8.40	9.86	8.34	2.74	3.15	2.03	15.54

e Estimated

15087690 INDIAN RIVER NEAR SITKA

LOCATION.--Lat 57°04'01", long 135°17'42", in SW¹/₄ SE¹/₄ sec. 30, T. 55 S., R. 64 E. (Sitka A-4 quad), Hydrologic Unit 19010203, in Tongass National Forest, on Baranof Island, on right bank 2 mi upstream from mouth, and 1 mi northeast of Sitka.

DRAINAGE AREA.--10.1 mi²

PERIOD OF RECORD.--August 1980 to September 1993. October 1998 to current year.

REVISED RECORD.--WDR-82-1: 1980-81.

GAGE.--Water-stage recorder. Elevation of gage is 125 ft above sea level, from topographic map. Prior to October 1998, at site 200 ft upstream and at different datum

REMARKS.-- Records fair except for Jan. 6-9, Sept. 2-9, and estimated daily discharges which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of November 19, 1993, reached a stage of 14.04 ft, site and datum then in use, from recorder, discharge, 6,460 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1200 ft³/s and maximum(*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	0630	*4350	*13.93	Sep 21	0230	2220	12.27

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	73	154	47	35	40	54	119	53	e16	e37	e14
2	68	65	164	40	32	36	101	102	50	e16	e33	e50
3	59	58	97	35	29	37	150	99	47	e15	e29	103
4	70	52	80	32	29	46	127	90	53	e15	e26	132
5	62	47	74	29	34	40	88	82	62	e18	e24	72
6	58	43	65	27	43	37	84	73	52	e43	e22	75
7	67	39	59	25	114	87	105	67	49	e28	e21	65
8	58	37	55	25	254	120	93	63	46	e21	e18	57
9	50	100	49	27	285	79	85	66	42	e18	e17	53
10	48	78	45	35	184	148	89	75	41	e17	e15	48
11	45	207	42	37	118	115	92	74	37	e16	e14	45
12	40	1280	44	44	122	80	129	73	36	e15	e14	45
13	65	181	46	115	106	71	100	77	39	e15	e13	50
14	71	138	37	199	96	67	86	72	37	e15	e13	61
15	48	155	50	104	78	81	76	59	33	e14	e13	62
16	41	112	88	74	67	117	66	55	31	e14	e13	50
17	37	96	83	135	60	71	61	52	31	e13	e13	41
18	43	80	98	198	58	57	57	62	34	e13	e12	36
19	73	69	137	121	79	49	51	72	35	e13	e12	33
20	66	61	105	117	119	45	48	67	33	e13	e12	389
21	50	56	157	148	196	42	48	66	30	e13	e12	572
22	68	131	373	182	132	44	58	62	e27	e13	e11	215
23	104	88	178	150	89	42	74	55	e25	e12	e11	377
24	64	144	130	100	75	43	82	80	e25	e13	e11	201
25	387	105	114	78	66	57	96	126	e23	e14	e11	146
26	404	75	89	63	58	63	121	154	e21	e15	e12	117
27	233	63	75	56	53	59	84	87	e20	e26	e26	204
28	259	60	64	52	48	92	70	64	e19	e122	e51	144
29	120	59	59	47	43	66	66	57	e18	e106	e22	243
30	93	102	59	42	---	55	100	57	e17	e75	e15	150
31	81	---	62	38	---	48	---	55	---	e46	e14	---
TOTAL	3010	3854	2932	2422	2702	2034	2541	2362	1066	803	567	3850
MEAN	97.1	128	94.6	78.1	93.2	65.6	84.7	76.2	35.5	25.9	18.3	128
MAX	404	1280	373	199	285	148	150	154	62	122	51	572
MIN	37	37	37	25	29	36	48	52	17	12	11	14
AC-FT	5970	7640	5820	4800	5360	4030	5040	4690	2110	1590	1120	7640
CFSM	9.61	12.7	9.36	7.74	9.22	6.50	8.39	7.54	3.52	2.56	1.81	12.7
IN.	11.09	14.19	10.80	8.92	9.95	7.49	9.36	8.70	3.93	2.96	2.09	14.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)#

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	184	102	99.1	97.6	80.4	61.8	66.3	103	85.8	61.5	85.6	168													
MAX	293	218	207	184	154	122	111	167	166	111	238	295													
(WY)	1988	1990	1990	1984	1993	1986	1983	1983	1985	1985	1983	1991													
MIN	97.1	37.0	21.7	46.3	24.8	19.9	29.0	37.1	28.8	20.6	18.3	52.8													
(WY)	2004	1999	1984	1988	1999	1989	2002	2003	1993	1993	2004	1986													

See period of record; partial years used in monthly summary statistics and break in record
e Estimated

15087690 INDIAN RIVER NEAR SITKA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1980 - 2004#	
ANNUAL TOTAL	27031		28143			
ANNUAL MEAN	74.1		76.9		99.9	
HIGHEST ANNUAL MEAN					123 1987	
LOWEST ANNUAL MEAN					76.3 2003	
HIGHEST DAILY MEAN	1280	Nov 12	1280	Nov 12	2000	Oct 12 1982
LOWEST DAILY MEAN	17	Aug 11	a11	Aug 22	8.6	Jan 18 1989
ANNUAL SEVEN-DAY MINIMUM	18	Aug 8	11	Aug 19	10	Jan 13 1989
MAXIMUM PEAK FLOW			b4350	Nov 12	c5710	Sep 4 1990
MAXIMUM PEAK STAGE			13.93	Nov 12	d13.51	Sep 4 1990
INSTANTANEOUS LOW FLOW			f		8.2	Jan 19 1989
ANNUAL RUNOFF (AC-FT)	53620		55820		72380	
ANNUAL RUNOFF (CFSM)	7.33		7.61		9.89	
ANNUAL RUNOFF (INCHES)	99.56		103.66		134.40	
10 PERCENT EXCEEDS	130		140		181	
50 PERCENT EXCEEDS	50		59		67	
90 PERCENT EXCEEDS	28		15		28	

See period of record; partial years used in monthly summary statistics and break in record

a Aug 22-25

b From rating curve extended above 500 ft³/s

c From rating curve extended above 3,100 ft³/s, at site and datum then in use

d At site and datum then in use

f Not determined, see lowest daily mean

15088000 SAWMILL CREEK NEAR SITKA

LOCATION.--Lat 57°03'05", long 135°13'40", in NE¹/₄ SW¹/₄ sec. 34, T. 55 S., R. 64 E. (Sitka A-4 quad.), Hydrologic Unit 19010401, on Baranof Island, in Tongass National Forest, on left bank 500 ft upstream from mouth, 1.6 mi downstream from Blue Lake, and 4.0 mi east of Sitka.

DRAINAGE AREA.--39.0 mi².

PERIOD OF RECORD.-- September 1920 to December 1923, February 1928 to September 1942, October 1945 to September 1957, 1994 (peak discharge only, published in WRD AK 95-1), and May 2001 to current year. Records prior to 1945 furnished by U.S. Forest Service.

REVISED RECORDS.-- WSP 1372: 1921-22 and 1928-36.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is sea level, from topographic map. Prior to April 1947, staff gages or water-stage recorders at several sites within 1,700 ft of present site at various datums. April 1947 to September 1957 at site about 200 ft upstream at different datum.

REMARKS.--Records good, except estimated daily discharges, which are poor. Minor regulation above station by Sitka Public Utilities hydroelectric plant during periods 1920-23 and 1937-42. In 1959, Blue Lake Dam, 1.6 mi upstream, was completed. The area of the lake is 1225 acres. The dam is concrete with a spillway elevation of 342.0 ft above sea level. In 1960, the Blue Lake Hydro plant, located 400 ft downstream from gage, was put into operation. Water is taken from Blue Lake and piped via a penstock to Blue Lake hydro, through 2-3,000 kw turbines and discharged back into Sawmill Creek just below high tide level. This penstock also provides water for the City of Sitka and for the filter plant for the Sitka Sawmill. In the years following, Campground Hydro, a smaller generation plant was constructed about 1,000 ft below Blue Lake Dam. It also has a penstock from Blue Lake and discharges directly into Sawmill Creek. A fish bypass valve has been installed at Campground Hydro that automatically releases 50 ft³/s to the tailrace anytime the hydro plant is shut down. Another small generator was installed just above the Sawmill Filter Plant diversion from Blue Lake Hydro penstock with the capability of bypassing the filter plant and discharging back into Sawmill Creek above the gage site. Water that went to the filter plant was piped to the sawmill and eventually discharged directly into Silver Bay. The sawmill has since closed and water is now supplied to Sawmill Cove Industrial Park. Flow is constantly regulated except when Blue Lake is spilling.

EXTREMES OUTSIDE PERIOD OF RECORD.-- It was reported that in October 1972, a storm produced a peak elevation at Blue Lake of 353.0 ft or 11.0 ft of spill at the spillway. Extending the spillway rating, this flood was estimated to be 17,000 ft³/s. It was reported to have been the largest since 1921.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e400	110	135	109	105	108	88	115	117	124	129	107
2	e200	108	147	82	105	72	129	112	117	122	126	124
3	e108	106	121	63	105	53	145	112	117	123	123	135
4	109	106	114	63	105	71	141	112	117	123	121	144
5	118	105	113	63	102	79	122	112	118	124	120	120
6	109	104	111	63	110	62	118	111	118	132	119	117
7	112	104	110	93	112	80	120	111	118	128	119	114
8	115	104	109	105	133	93	118	111	77	126	116	110
9	109	113	108	106	115	110	115	111	100	124	116	109
10	108	120	107	109	73	137	114	112	120	124	115	108
11	103	138	106	109	62	137	118	112	120	124	114	108
12	64	1550	106	109	66	125	108	112	120	124	114	109
13	69	1500	107	118	74	120	89	112	120	124	113	112
14	71	654	105	141	72	116	113	112	121	124	113	117
15	85	335	106	124	70	119	111	111	122	124	113	115
16	107	188	117	116	68	130	109	111	121	124	112	111
17	109	125	122	131	67	120	109	111	121	125	112	108
18	113	114	135	139	68	115	109	111	121	124	110	107
19	121	109	138	122	98	113	91	111	121	124	110	107
20	212	108	124	121	122	111	59	112	121	125	110	221
21	216	108	134	125	141	111	76	112	121	125	110	1190
22	337	140	189	146	129	110	94	113	122	124	110	1760
23	352	120	151	136	118	110	70	113	122	124	109	2490
24	304	139	131	119	114	111	71	115	122	124	109	2200
25	1710	128	125	112	112	113	74	125	123	124	108	1330
26	2500	117	116	104	110	115	78	139	123	123	108	665
27	1430	112	113	106	109	115	73	124	124	125	116	1210
28	1120	111	111	107	109	126	97	91	124	135	122	1070
29	539	110	110	106	109	84	110	119	124	151	112	1540
30	215	116	110	106	---	102	117	118	124	146	109	1320
31	122	---	111	105	---	97	---	118	---	134	107	---
TOTAL	11387	7102	3742	3358	2883	3265	3086	3521	3556	3927	3545	17178
MEAN	367	237	121	108	99.4	105	103	114	119	127	114	573
MAX	2500	1550	189	146	141	137	145	139	124	151	129	2490
MIN	64	104	105	63	62	53	59	91	77	122	107	107
AC-FT	22590	14090	7420	6660	5720	6480	6120	6980	7050	7790	7030	34070
CFSM	9.42	6.07	3.10	2.78	2.55	2.70	2.64	2.91	3.04	3.25	2.93	14.7
IN.	10.86	6.77	3.57	3.20	2.75	3.11	2.94	3.36	3.39	3.75	3.38	16.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2004, BY WATER YEAR (WY)#

	732	465	255	171	164	127	199	520	686	640	646	739
MEAN	732	465	255	171	164	127	199	520	686	640	646	739
MAX	1204	998	818	500	644	365	663	861	1179	976	1235	1287
(WY)	1938	1936	1931	1942	1935	1947	1936	1936	1936	1935	1939	1947
MIN	354	78.5	50.1	29.9	33.1	24.8	61.5	60.3	53.9	87.0	114	359
(WY)	1923	2002	1951	1956	1951	1922	1948	2002	2002	2003	2004	1941

See Period of Record; partial years used in monthly statistics
e Estimated

15088000 SAWMILL CREEK NEAR SITKA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1920 - 2004#	
ANNUAL TOTAL	55549		66550			
ANNUAL MEAN	152		182		451	
HIGHEST ANNUAL MEAN					715 1936	
LOWEST ANNUAL MEAN					182 2004	
HIGHEST DAILY MEAN	2540	Sep 25	2500	Oct 26	5500	Oct 22 1937
LOWEST DAILY MEAN	51	Jan 2	53	Mar 3	11	Mar 30 1922
ANNUAL SEVEN-DAY MINIMUM	63	May 4	68	Feb 11	12	Mar 25 1922
MAXIMUM PEAK FLOW			3420	Sep 23	a10700	Nov 19 1993
MAXIMUM PEAK STAGE			16.22	Sep 23	18.26	Aug 12 2002
INSTANTANEOUS LOW FLOW			41	Apr 20	b	
ANNUAL RUNOFF (AC-FT)	110200		132000		326800	
ANNUAL RUNOFF (CFSM)	3.90		4.66		11.6	
ANNUAL RUNOFF (INCHES)	52.99		63.48		157.17	
10 PERCENT EXCEEDS	143		144		930	
50 PERCENT EXCEEDS	80		114		325	
90 PERCENT EXCEEDS	65		91		66	

- # See Period of Record; partial years used in monthly statistics
a On the basis of a slope-area computation of peak flow below Campground Hydro and adding diversion values at the time of peak between Campground Hydro and gage; peak flow below Blue Lake Tailrace was computed to be 11,100 ft³/s.
b Undetermined

15088200 SILVER BAY TRIBUTARY AT BEAR COVE NEAR SITKA

LOCATION.--Lat 57°01'09", long 135°09'45", in SW¹/₄ NW¹/₄ NE¹/₄ sec. 13, T. 56 S., R. 64 E. (Sitka A-4 quad), Hydrologic Unit 19010203, in Tongass National Forest, on Baranof Island, on right bank 350 ft upstream from mouth, and 6.5 mi southwest of Sitka.

DRAINAGE AREA.--0.38 mi².

PERIOD OF RECORD.-- October 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 110 ft above sea level, from topographic map.

REMARKS.-- Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.34	0.74	17	0.23	0.10	0.40	1.1	6.1	0.60	0.18	0.36	0.07
2	0.24	0.36	11	0.15	0.10	0.32	18	4.4	0.62	0.18	0.28	5.4
3	0.40	0.26	0.91	0.12	0.09	0.34	14	3.2	0.67	0.16	0.16	4.4
4	0.69	0.19	0.48	0.10	0.15	0.47	5.8	4.8	1.3	0.14	0.10	5.6
5	0.43	0.16	0.40	0.09	1.1	0.40	3.6	3.7	1.2	0.68	0.08	0.44
6	1.1	0.13	0.31	0.09	1.0	0.38	4.6	2.8	0.72	6.9	0.09	0.29
7	2.0	0.12	0.27	0.09	5.4	4.7	9.1	1.9	0.74	1.1	0.09	0.22
8	0.85	0.25	0.24	0.09	17	18	3.9	1.2	0.43	0.40	0.08	0.09
9	0.85	4.7	0.20	0.61	19	2.1	4.5	1.1	0.54	0.26	0.07	0.07
10	0.96	3.5	0.18	1.9	7.7	6.8	4.8	1.9	0.67	0.21	0.06	0.06
11	0.58	18	0.20	0.92	1.9	3.8	8.7	2.6	0.40	0.18	0.05	0.06
12	0.31	41	0.32	1.6	2.8	1.1	13	3.0	0.57	0.16	0.03	0.27
13	5.4	2.8	0.34	14	2.9	0.81	4.3	3.1	0.63	0.15	0.00	3.1
14	2.8	2.1	0.20	23	1.6	0.73	4.4	e2.4	0.62	0.13	0.00	4.1
15	0.68	5.2	0.95	2.0	0.66	0.89	3.4	e2.1	0.47	0.13	0.00	1.5
16	0.42	1.0	4.3	0.80	0.42	1.8	2.3	e1.8	0.43	0.12	0.00	0.39
17	0.44	0.70	3.4	21	0.33	0.73	1.9	e1.4	0.44	0.10	0.00	0.12
18	5.6	0.38	18	8.4	0.70	0.49	1.7	e1.7	0.48	0.09	0.00	0.08
19	11	0.25	15	1.4	2.3	0.36	1.5	e2.9	0.51	0.09	0.00	0.07
20	2.9	0.18	2.6	6.2	6.1	0.33	2.8	3.7	0.42	0.09	0.01	31
21	4.7	0.16	25	8.6	20	0.35	2.1	4.3	0.31	0.11	0.00	24
22	4.9	7.4	39	17	2.9	0.72	2.8	3.2	0.29	0.11	0.00	6.2
23	4.1	1.1	5.3	3.7	1.2	1.1	1.5	2.4	0.31	0.08	0.00	26
24	1.6	4.0	2.3	0.67	0.81	1.5	2.5	5.1	0.28	0.17	0.00	4.5
25	20	1.3	1.4	0.26	0.59	2.3	5.5	9.1	0.25	0.63	0.00	1.8
26	21	0.56	0.54	0.17	0.57	2.0	3.7	13	0.20	0.72	0.03	8.5
27	13	0.37	0.34	0.13	0.65	1.4	1.6	2.6	0.18	0.54	1.2	12
28	9.3	0.34	0.27	0.12	0.57	7.4	1.2	1.3	0.20	1.4	3.3	1.9
29	1.2	0.38	0.24	0.11	0.41	1.5	3.2	0.98	0.19	15	0.33	28
30	0.55	6.5	0.28	0.11	---	0.86	10	0.82	0.18	5.1	0.18	3.8
31	0.58	---	0.46	0.11	---	0.62	---	0.70	---	0.76	0.09	---
TOTAL	118.92	104.13	151.43	113.77	99.05	64.70	147.5	99.30	14.85	36.07	6.59	174.03
MEAN	3.84	3.47	4.88	3.67	3.42	2.09	4.92	3.20	0.49	1.16	0.21	5.80
MAX	21	41	39	23	20	18	18	13	1.3	15	3.3	31
MIN	0.24	0.12	0.18	0.09	0.09	0.32	1.1	0.70	0.18	0.08	0.00	0.06
MED	1.1	0.63	0.48	0.61	1.0	0.86	3.7	2.6	0.45	0.18	0.05	1.9
AC-FT	236	207	300	226	196	128	293	197	29	72	13	345
CFSM	10.1	9.13	12.9	9.66	8.99	5.49	12.9	8.43	1.30	3.06	0.56	15.3
IN.	11.64	10.19	14.82	11.14	9.70	6.33	14.44	9.72	1.45	3.53	0.65	17.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

	2000	2001	2002	2003	2004
MEAN	6.02	3.46	4.31	2.92	2.42
MAX	7.64	4.56	7.73	3.67	3.42
(WY)	2002	2000	2000	2004	2004
MIN	3.84	2.85	2.49	1.68	1.12
(WY)	2004	2001	2003	2000	2002

e Estimated

15088200 SILVER BAY TRIBUTARY AT BEAR COVE NEAR SITKA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	919.53		1130.34			
ANNUAL MEAN	2.52		3.09		3.46	
HIGHEST ANNUAL MEAN					4.54 2000	
LOWEST ANNUAL MEAN					2.46 2003	
HIGHEST DAILY MEAN	41	Nov 12	41	Nov 12	51	Aug 12 2002
LOWEST DAILY MEAN	0.00	Jul 17	a0.00	Aug 13	b0.00	Jul 17 2003
ANNUAL SEVEN-DAY MINIMUM	0.08	Jul 14	0.00	Aug 13	0.00	Aug 13 2004
MAXIMUM PEAK FLOW			140	Sep 20	264	Aug 12 2002
MAXIMUM PEAK STAGE			19.48	Sep 20	19.68	Aug 12 2002
INSTANTANEOUS LOW FLOW			c0.00	Aug 12	d0.00	Dec 2 2001
ANNUAL RUNOFF (AC-FT)	1820		2240		2510	
ANNUAL RUNOFF (CFSM)	6.63		8.13		9.11	
ANNUAL RUNOFF (INCHES)	90.02		110.65		123.73	
10 PERCENT EXCEEDS	5.6		8.5		8.1	
50 PERCENT EXCEEDS	1.0		0.73		1.9	
90 PERCENT EXCEEDS	0.27		0.09		0.29	

a Aug. 13-19, 21-25

b Jul. 17-18, Aug. 10, 2003, and Aug. 13-19, 21-25, 2004

c Aug. 12-26

d Dec. 2-3, 2001, Jul. 16-19 and Aug. 10-11, 2003, and Aug. 12-26, 2004

15090000 GREEN LAKE NEAR SITKA

LOCATION.--Lat 56°59'14", long 135°06'37", in SW¹/₄ NE¹/₄ sec. 29, T. 56 S., R. 65 E. (Port Alexander D-4 quad), Hydrologic Unit 19010203, Greater Sitka Borough, on Baranof Island, in Tongass National Forest, 0.4 mi upstream from mouth at Silver Bay, and 9.4 mi southeast of Sitka.

DRAINAGE AREA.--28.8 mi².

PERIOD OF RECORD.--September 1915 to September 1925 (published as "Green Lake Outlet"); monthly discharges only published in WSP 1372. October 1983 to current year (month end reservoir contents and monthly discharges).

REVISED RECORDS.--WSP 1372: 1916, 1917, 1922 (monthly discharge). WDR AK-84-1: Drainage area. WDR AK-86-1: 1984, 1985 (month-end reservoir contents, change in month-end and yearly contents, adjusted mean monthly discharges, and extremes). WRD AK-00-01: 1998-1999 (M m).

GAGE.--Staff gage on upstream face of dam. Datum of gage is at mean low water, which is about 5 ft below sea level. Totalizing MWH meters are on the two turbines in Green Lake powerhouse. September 1915 to September 1925, recording gage at site of present day dam, elevation of gage was 220 ft above sea level, by barometer; prior to December 27, 1916 at datum 1 ft higher. Water years 1983-88, nonrecording remote lake-level indicator at Blue Lake powerhouse (6 mi northwest of gage).

REMARKS.--Reservoir is formed by concrete arch dam located at the outlet of Green Lake, construction began in 1978 and was completed in 1982. Total and usable capacity below spillway crest elevation of 395 ft is 88,000 and 75,000 acre-ft, respectively. Reservoir is used for power. Discharge released through the turbines is computed from relation between discharge, head, and power generation; release flow empties directly into Silver Bay and is not returned to stream. Spill is computed from a theoretical relation between discharge and stage above the crest of the 100 ft wide spillway. Turbine and spillway ratings and reservoir capacity table furnished by City and Borough of Sitka in 1983. Corrected reservoir capacity table furnished in April 1987.

COOPERATION.--Daily reservoir elevations and MWH power generation provided by City and Borough of Sitka.

AVERAGE DISCHARGE.--30 years (water years, 1916-25, 1985-2004), 310 ft³/s, 146.2in/yr, 224,600 acre-ft/yr. Mean discharge for water years 1985-2004 adjusted for change in contents of Green Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 93,780 acre-ft, September 22-23, 1994, elevation, 400.5 ft; minimum contents observed, 23,170 acre-ft, June 1, 1996, elevation, 307.6 ft; Maximum daily discharge, 5,020 ft³/s, September 22-23, 1994; no flow released, February 5-8, 1987, November 27-29, 1988 and June 19, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 91,890 acre-ft, September 23, elevation 398.7 ft; minimum contents observed, 65,680 acre-ft, April 1-2, elevation 370.5 ft; Maximum daily discharge (not adjusted for storage) 309 ft³/s, April 1; minimum daily discharge, 0 ft³/s, June 19.

CORRECTIONS.--Monthly and annual discharge for Water Year 2003 have been corrected and are listed in the table below; the previously published values are incorrect.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
MEAN VALUES

MONTH	RELEASE	SPILL	TOTAL	ADJUSTED
OCT	162	485	647	634
NOV	198	74	272	274
DEC	170	110	280	285
JAN	192	22	214	192
FEB	207	0	207	52
MAR	249	0	249	79
APR	213	0	213	126
MAY	165	0	165	247
JUN	148	0	148	327
JUL	153	0	153	213
AUG	142	0	142	230
SEP	141	341	482	534
CAL YR 2002	229	65.7	294	310
WTR YR 2003	178	86.5	265	267

MONTH END RESERVOIR ELEVATION, IN FEET ABOVE SEA LEVEL, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
Sep 30	395.4	88,420	
Oct 31	394.8>	87,810	-610
Nov 30	391.3	84,490	-3320
Dec 31	387.8	81,160	-3330
Jan 31	381.3	75,170	-5990
Feb 29	378.8	72,920	-2250
Mar 31	370.9	66,020	-6900
Apr 30	371.4	66,440	+420
May 31	385.4	78,880	+12,440
Jun 30	395.5	88,530	+9650
Jul 31	395.5	88,530	0
Aug 31	395.0	88,000	-530
Sep 30	396.4	89,470	+1470
CAL YR 2003			-4940
WTR YR 2004			+1050

SOUTHEAST ALASKA

15090000 GREEN LAKE NEAR SITKA—Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
MEAN VALUES

MONTH	RELEASE	SPILL	TOTAL	ADJUSTED
OCT	153	129	282	272
NOV	195	42	237	181
DEC	244	0	244	190
JAN	241	0	241	144
FEB	219	0	219	180
MAR	236	0	236	124
APR	187	0	187	194
MAY	142	0	142	344
JUN	136	108	244	406
JUL	142	146	288	288
AUG	147	45	192	183
SEP	131	480	611	636
CAL YR 2003	176	25	201	194
WTR YR 2004	181	79	260	261

15101490 GREENS CREEK AT GREENS CREEK MINE NEAR JUNEAU

LOCATION.--Lat 58°05'00", long 134°37'54", in NW¹/₄ SE¹/₄ sec. 4, T. 44 S., R. 66 E. (Juneau A-2 quad), Hydrologic Unit 19010204, on Admiralty Island, in Admiralty Island National Monument, Tongass National Forest, on right bank, 100 ft upstream from mine portal, 0.3 mi downstream from Big Sore Creek, 7.0 mi upstream from mouth at Hawk Inlet, and 19 mi southwest of Juneau.

DRAINAGE AREA.--8.62 mi².

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

REVISED RECORD.--WRD AK-99-1, 1990-1994(M), 1996-1998(M).

GAGE.--Water-stage recorder. Datum of gage is 890.16 ft above sea level (levels by Greens Creek Mining Company). Prior to February 16, 1999, recording gage at site 30 ft upstream at datum 9.84 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Greens Creek Mining Company pumps water from gage pool for use in mill. Diversion flow is recorded on totalizing meters in gage house. Pump records are available from Greens Creek Mining Company.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e43	e34	e15	e11	e9.0	12	9.6	98	90	38	25	10
2	e38	e33	e21	e10	e9.5	11	20	100	88	37	24	13
3	e34	e30	e15	e9.8	e9.5	11	50	101	85	42	27	19
4	e39	e27	e14	e9.6	e10	10	28	98	87	36	25	20
5	e37	e25	14	e9.4	e12	10	22	89	97	41	23	19
6	e39	e23	13	e9.6	15	9.7	21	84	96	57	22	26
7	e43	e22	13	e9.0	12	11	25	86	106	40	20	25
8	e38	e20	12	e9.5	17	34	27	87	98	35	19	20
9	e34	e23	e12	13	63	19	26	86	90	32	18	17
10	e33	e22	e11	21	46	15	27	87	88	29	18	16
11	e31	e28	12	18	27	15	27	90	84	28	21	15
12	e29	e68	11	15	31	13	29	94	89	26	18	23
13	e29	e59	11	29	26	12	28	98	88	25	16	59
14	e25	e41	11	113	23	11	28	101	88	33	16	30
15	e23	e38	11	43	19	10	25	98	80	27	15	25
16	e22	e36	11	22	16	10	23	94	78	25	14	22
17	e20	e34	12	21	15	9.3	22	91	84	25	14	20
18	e29	e32	15	32	14	8.9	22	96	92	23	13	18
19	e40	e30	31	26	15	10	20	102	96	21	14	17
20	e43	e29	22	33	18	8.8	21	105	94	21	16	42
21	e38	e27	21	45	35	9.6	22	108	89	25	14	101
22	e36	e26	79	54	39	7.8	35	102	86	22	12	86
23	e39	e24	41	32	24	7.5	29	97	86	20	11	112
24	e43	e24	27	e24	20	7.9	25	107	85	26	11	107
25	e92	e22	24	e18	17	19	48	114	82	30	10	86
26	e124	e19	19	e14	16	17	56	112	75	23	11	69
27	e82	e18	e15	e15	14	14	36	99	67	24	15	106
28	e54	e17	e12	e13	14	15	33	90	56	38	15	86
29	e44	e15	e13	e11	13	14	36	91	45	35	14	68
30	e38	e14	e13	e9.7	---	12	67	92	41	31	13	59
31	e36	---	e12	e8.6	---	10	---	92	---	27	11	---
TOTAL	1295	860	563	708.2	599.0	384.5	887.6	2989	2510	942	515	1336
MEAN	41.8	28.7	18.2	22.8	20.7	12.4	29.6	96.4	83.7	30.4	16.6	44.5
MAX	124	68	79	113	63	34	67	114	106	57	27	112
MIN	20	14	11	8.6	9.0	7.5	9.6	84	41	20	10	10
AC-FT	2570	1710	1120	1400	1190	763	1760	5930	4980	1870	1020	2650
CFSM	4.85	3.33	2.11	2.65	2.40	1.44	3.43	11.2	9.71	3.53	1.93	5.17
IN.	5.59	3.71	2.43	3.06	2.59	1.66	3.83	12.90	10.83	4.07	2.22	5.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)#

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	60.3	30.1	25.4	16.1	13.6	11.3	28.4	78.6	86.0	52.5	39.0	61.0				
MAX	97.9	49.5	65.7	26.5	36.9	27.2	49.6	107	147	90.5	69.7	95.0				
(WY)	1999	1994	1990	2003	1992	1992	1994	1992	1992	2000	1991	1991				
MIN	34.7	14.6	8.27	5.50	3.43	2.82	3.56	51.7	50.7	20.8	16.6	33.3				
(WY)	1994	1991	1997	1997	1999	2002	2002	2003	2003	2003	2004	1995				

See Period of Record, partial years used in monthly statistics
e Estimated

15101490 GREENS CREEK AT GREENS CREEK MINE NEAR JUNEAU—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1989 - 2004#	
ANNUAL TOTAL	11965.9		13589.3			
ANNUAL MEAN	32.8		37.1		42.1	
HIGHEST ANNUAL MEAN					60.1 1992	
LOWEST ANNUAL MEAN					31.8 1998	
HIGHEST DAILY MEAN	164	Sep 14	124	Oct 26	465	Oct 20 1998
LOWEST DAILY MEAN	4.6	Mar 25	7.5	Mar 23	a1.2	Apr 3 2002
ANNUAL SEVEN-DAY MINIMUM	5.0	Mar 21	8.6	Mar 18	1.2	Apr 8 2002
MAXIMUM PEAK FLOW			b164	Sep 23	c710	Oct 20 1998
MAXIMUM PEAK STAGE			2.65	Sep 23	d14.79	Oct 20 1998
INSTANTANEOUS LOW FLOW			5.7	Mar 23	f0.98	Mar 20 2002
ANNUAL RUNOFF (AC-FT)	23730		26950		30470	
ANNUAL RUNOFF (CFSM)	3.80		4.31		4.88	
ANNUAL RUNOFF (INCHES)	51.64		58.65		66.30	
10 PERCENT EXCEEDS	76		91		91	
50 PERCENT EXCEEDS	23		25		30	
90 PERCENT EXCEEDS	8.8		11		6.6	

See Period of Record, partial years used in monthly statistics

a Apr. 3-4, 8, and 11-14

b May have been higher during period of estimated discharge.

c From rating curve extended above 140 ft³/s on basis of slope area measurement of peak flow

d Same site, different datum

f Mar. 20, and Apr. 7-11

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE

LOCATION.--Lat 57°39'46", long 135°11'06", in NW¹/₄ SE¹/₄ sec. 34, T. 48 S., R. 63 E. (Sitka C-4 quad), Greater Sitka Borough, Hydrologic Unit 19010203, on Chichagof Island, in Tongass National Forest, on right bank 0.6 mi upstream from Hook Creek, 3.5 mi upstream from mouth at Kadashan Bay, and 9 mi south of Tenakee.

DRAINAGE AREA.--10.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1968 to September 1978, October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 100 ft above sea level, from topographic map. Prior to October 24, 1969, at site 90 ft downstream at different datum; October 24, 1969 to September 30, 1978, at site 75 ft downstream at datum 1.89 ft higher.

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

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)
Oct. 25	0345	649	3.92	Feb. 09	0145	868	4.33
Nov. 12	0515	*995	*4.54	Sept. 21	0130	569	3.75
Dec. 22	0415	669	3.96	Sept. 23	1545	741	4.10

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	39	112	19	19	23	32	145	44	8.9	7.3	5.9
2	34	33	201	e16	17	21	168	139	45	9.0	7.4	21
3	31	29	60	e14	16	22	207	145	41	9.6	6.5	68
4	32	29	42	e13	16	22	114	133	38	8.4	6.1	61
5	34	26	35	e12	55	24	76	99	49	9.7	5.7	18
6	65	25	30	e11	84	24	78	89	43	33	5.9	27
7	69	24	27	e11	72	122	115	82	46	15	5.7	29
8	53	25	24	e12	246	264	89	84	38	11	5.3	13
9	35	136	22	e12	338	125	91	76	30	9.1	5.1	9.4
10	33	76	20	e13	256	205	103	78	26	8.2	4.9	7.9
11	29	159	20	e17	141	160	90	79	23	7.9	4.7	7.4
12	24	529	26	24	133	94	90	85	25	7.4	4.7	16
13	54	150	42	117	87	60	75	95	27	7.0	4.5	70
14	63	117	23	254	88	53	72	96	26	6.6	4.3	30
15	37	156	27	82	54	75	57	70	21	6.4	4.3	24
16	29	89	86	42	42	69	46	72	19	6.1	4.1	23
17	28	63	150	103	36	49	46	74	19	5.9	4.1	18
18	46	49	110	133	43	37	45	84	18	5.8	4.2	13
19	48	38	199	66	83	30	39	89	17	5.6	5.3	12
20	41	30	99	137	157	27	40	81	15	6.1	5.4	164
21	32	28	182	159	186	25	44	84	14	7.9	4.7	317
22	50	34	392	179	135	25	87	69	13	7.0	4.3	147
23	72	31	161	97	81	23	91	60	13	6.0	4.1	352
24	74	45	94	63	71	22	120	75	12	6.1	4.0	182
25	294	40	67	e40	49	40	187	84	11	5.9	4.0	112
26	205	29	48	e27	38	46	165	70	11	5.8	4.5	99
27	173	24	34	e19	33	44	98	60	11	6.1	10	278
28	151	21	29	e13	29	114	80	50	10	12	7.8	98
29	75	21	26	e9.0	25	76	77	43	9.7	12	9.7	99
30	58	23	24	e10	---	46	109	47	9.2	11	12	57
31	47	---	23	e13	---	33	---	47	---	8.3	6.9	---
TOTAL	2054	2118	2435	1737.0	2630	2000	2731	2584	723.9	274.8	177.5	2378.6
MEAN	66.3	70.6	78.5	56.0	90.7	64.5	91.0	83.4	24.1	8.86	5.73	79.3
MAX	294	529	392	254	338	264	207	145	49	33	12	352
MIN	24	21	20	9.0	16	21	32	43	9.2	5.6	4.0	5.9
AC-FT	4070	4200	4830	3450	5220	3970	5420	5130	1440	545	352	4720
CFSM	6.50	6.92	7.70	5.49	8.89	6.33	8.92	8.17	2.37	0.87	0.56	7.77
IN.	7.49	7.72	8.88	6.33	9.59	7.29	9.96	9.42	2.64	1.00	0.65	8.67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2004, BY WATER YEAR (WY)#

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004			
MEAN	116	76.8	64.0	50.4	49.4	44.3	66.6	99.2	64.1	29.6	32.3	75.9																												
MAX	234	152	147	147	118	129	118	182	151	60.2	79.0	141																												
(WY)	1975	1975	2000	1985	1985	1994	1994	1972	1972	1970	1983	1981																												
MIN	50.6	17.7	8.05	6.15	5.95	9.21	22.7	38.3	19.8	6.41	5.73	17.5																												
(WY)	1970	1974	1978	1969	1969	1974	2002	2003	1998	1989	2004	1986																												

See Period of Record; partial years used in monthly summary statistics
e Estimated

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1968 - 2004#	
ANNUAL TOTAL	17937.5		21843.8			
ANNUAL MEAN	49.1		59.7		63.9	
HIGHEST ANNUAL MEAN					80.8	
LOWEST ANNUAL MEAN					44.1	
HIGHEST DAILY MEAN	529 Nov 12		529 Nov 12		1010 Oct 19 1998	
LOWEST DAILY MEAN	6.7 Aug 11		a4.0 Aug 24		b3.2 Jul 28 1989	
ANNUAL SEVEN-DAY MINIMUM	7.2 Aug 8		4.3 Aug 12		4.2 Jan 13 1974	
MAXIMUM PEAK FLOW			995 Nov 12		c1970 Oct 8 1990	
MAXIMUM PEAK STAGE			4.54 Nov 12		5.83 Oct 8 1990	
INSTANTANEOUS LOW FLOW			d3.8 Aug 13		3.2 Jul 28 1989	
ANNUAL RUNOFF (AC-FT)	35580		43330		46320	
ANNUAL RUNOFF (CFSM)	4.82		5.85		6.27	
ANNUAL RUNOFF (INCHES)	65.42		79.67		85.17	
10 PERCENT EXCEEDS	99		145		138	
50 PERCENT EXCEEDS	32		37		42	
90 PERCENT EXCEEDS	12		6.6		12	

See Period of Record; partial years used in monthly summary statistics

a Aug. 24 to Aug. 25, 2004

b Jul. 28 to Jul. 29, 1989

c From rating curve extended above 330 ft³/s on basis of area-velocity study at gage height 4.8 ft and shape of previous rating

d Aug. 13 and Aug. 23 to Aug. 26, 2004

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-72, 1974-77, 1981-1985, and 1987 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1967 to September 1978, December 1981 to December 1984, March 1987 to March 1988, and September 1988 to current year.

INSTRUMENTATION.--Digital water-temperature recorder, November 1967 to December 1984, set for 1-hour punch interval. Electronic water-temperature recorder since March 13, 1987, set for 2-hour recording interval. Electronic water-temperature recorder with 15-minute recording interval since July 11, 1996.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross sections on October 1, and June 22. No variation was found in the temperature cross section on October 1, and a 1.0°C variation on June 22, during low flow and warm weather conditions. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 16.5°C, July 15, 1993; minimum, 0.0°C, on many days during most winters.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 15.5°C, July 16; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (00004)	Sample location, cross section ft from rt bank (72103)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
OCT							
01...	1605	47.0	4.0	1.64	38	8.5	12.0
01...	1606	47.0	11.0	1.64	38	8.5	12.0
01...	1607	47.0	18.0	1.64	38	8.5	12.0
01...	1608	47.0	25.0	1.64	38	8.5	12.0
01...	1609	47.0	32.0	1.64	38	8.5	12.0
JUN							
22...	1140	24.0	2.0	1.32	13	12.0	26.5
22...	1141	24.0	6.0	1.32	13	12.0	26.5
22...	1142	24.0	10.0	1.32	13	12.0	26.5
22...	1143	24.0	14.0	1.32	13	12.0	26.5
22...	1144	24.0	18.0	1.32	13	12.5	26.5
22...	1145	24.0	22.0	1.32	13	13.0	26.5

TEMPERATURE WATER, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.0	8.0	8.5	3.5	3.0	3.5	0.5	0.0	0.5	2.0	1.0	1.5
2	8.0	7.5	8.0	3.5	3.0	3.0	0.5	0.0	0.5	1.0	0.5	0.5
3	8.5	7.5	8.0	3.0	2.0	3.0	2.0	0.5	1.5	0.5	0.0	0.5
4	9.0	8.0	8.5	2.5	2.0	2.0	2.0	1.5	1.5	0.5	0.0	0.0
5	8.5	8.0	8.5	2.5	2.0	2.5	2.0	2.0	2.0	0.5	0.0	0.0
6	9.0	8.0	8.5	3.0	2.5	2.5	2.0	1.5	2.0	0.5	0.0	0.0
7	9.0	8.5	9.0	3.0	3.0	3.0	2.0	1.5	1.5	0.0	0.0	0.0
8	8.5	7.5	8.0	3.5	3.0	3.5	2.0	2.0	2.0	0.0	0.0	0.0
9	7.5	7.0	7.5	3.5	3.0	3.5	2.0	0.5	1.5	0.0	0.0	0.0
10	7.0	6.5	7.0	3.5	3.0	3.0	1.0	0.5	0.5	0.5	0.0	0.0
11	6.5	5.5	6.5	3.5	3.0	3.0	1.5	1.0	1.5	1.0	0.5	0.5
12	6.0	5.0	5.5	4.5	3.5	4.5	1.5	1.0	1.5	1.0	1.0	1.0
13	6.0	5.0	5.5	4.0	3.0	3.5	1.5	1.0	1.5	1.0	0.0	0.5
14	6.5	5.5	6.0	3.5	2.5	3.0	1.5	1.0	1.5	1.0	0.0	0.5
15	6.0	4.5	5.0	3.5	3.0	3.5	1.5	0.5	1.0	1.5	0.5	1.0
16	5.5	4.5	5.0	4.0	3.5	3.5	1.0	1.0	1.0	1.5	1.0	1.5
17	6.0	5.5	5.5	3.5	3.0	3.5	1.5	1.0	1.0	1.0	1.0	1.0
18	6.5	6.0	6.5	3.0	2.0	2.5	1.5	0.0	1.0	1.5	1.0	1.5
19	7.0	6.5	6.5	2.0	1.0	1.5	1.5	1.0	1.5	2.0	1.5	1.5
20	7.0	5.5	6.5	1.0	0.5	1.0	2.0	1.5	2.0	2.0	1.5	1.5
21	6.0	5.0	5.5	1.5	0.5	1.0	2.5	1.5	2.0	2.0	1.5	1.5
22	6.5	6.0	6.0	2.0	1.5	1.5	2.0	1.0	1.5	2.0	1.5	1.5
23	6.0	5.5	6.0	2.0	1.5	2.0	2.5	2.0	2.0	2.0	1.5	2.0
24	6.5	5.5	6.0	2.0	0.5	1.5	2.5	2.0	2.5	1.5	0.5	1.0
25	8.0	6.5	7.0	2.0	0.5	1.5	2.5	2.0	2.5	0.5	0.0	0.0
26	8.0	7.0	7.5	1.5	1.5	1.5	2.0	1.5	2.0	0.0	0.0	0.0
27	7.0	6.0	6.5	1.5	1.5	1.5	1.5	1.0	1.0	0.0	0.0	0.0
28	6.0	5.0	5.0	1.5	0.0	1.0	1.5	0.5	1.0	0.0	0.0	0.0
29	5.0	3.5	4.5	1.0	0.5	1.0	1.5	1.5	1.5	0.0	0.0	0.0
30	3.5	3.0	3.0	1.0	0.0	0.5	2.0	1.5	2.0	0.0	0.0	0.0
31	3.5	2.5	3.0	---	---	---	2.0	2.0	2.0	1.0	0.0	0.0
MONTH	9.0	2.5	6.5	4.5	0.0	2.4	2.5	0.0	1.5	2.0	0.0	0.6

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE—Continued

TEMPERATURE, WATER, DEGREE CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.0	0.5	1.0	2.0	1.0	1.5	1.5	1.0	1.5	4.0	3.5	4.0
2	1.0	0.5	0.5	1.5	1.0	1.5	1.5	0.5	1.0	4.5	3.5	4.0
3	1.0	0.5	1.0	1.5	0.5	1.0	2.0	1.0	1.5	5.0	3.5	4.0
4	1.0	1.0	1.0	2.0	1.5	1.5	3.0	1.5	2.0	5.5	3.5	4.0
5	1.0	0.0	0.5	1.5	0.5	1.0	3.0	2.0	2.5	5.5	3.0	4.0
6	0.5	0.0	0.5	1.0	0.5	1.0	3.5	2.0	2.5	5.5	3.0	4.5
7	0.5	0.0	0.5	1.0	0.5	0.5	3.0	2.0	2.5	5.5	3.5	4.5
8	0.5	0.0	0.5	1.0	0.5	0.5	3.5	1.5	2.5	6.0	4.0	5.0
9	1.0	0.0	0.5	1.5	0.5	1.0	3.5	2.5	3.0	5.0	4.5	4.5
10	1.5	0.5	1.0	1.0	0.5	1.0	3.5	2.5	3.0	6.0	3.5	4.5
11	2.0	1.5	1.5	2.0	1.0	1.5	4.0	2.5	3.0	6.0	3.5	5.0
12	2.0	1.5	1.5	2.5	1.5	2.0	3.0	2.5	3.0	6.5	4.0	5.0
13	2.5	1.5	2.0	2.5	2.0	2.0	4.0	2.5	3.0	6.5	4.0	5.5
14	2.0	1.5	2.0	2.0	1.0	2.0	4.0	2.5	3.0	6.5	4.0	5.5
15	2.0	1.5	1.5	1.5	1.0	1.0	3.5	2.0	2.5	6.0	4.0	5.0
16	2.0	1.5	2.0	1.5	0.5	1.0	3.5	1.5	2.5	6.0	5.0	5.5
17	2.5	2.0	2.0	2.0	1.0	1.5	4.0	3.0	3.5	6.5	5.0	5.5
18	2.5	2.0	2.0	1.5	1.0	1.5	3.5	2.0	3.0	6.5	5.0	6.0
19	2.0	1.5	2.0	1.5	0.5	1.0	4.0	2.5	3.0	7.0	5.0	6.0
20	2.0	1.5	1.5	2.0	1.5	1.5	4.0	2.0	3.5	7.5	4.5	6.0
21	2.5	1.5	2.0	2.0	1.0	1.5	4.5	2.0	3.5	7.0	5.0	6.0
22	2.5	1.5	2.0	2.0	1.0	1.5	4.0	2.5	3.5	7.5	4.5	6.0
23	2.5	2.0	2.5	2.5	1.5	2.0	3.5	2.0	3.0	7.5	5.0	6.5
24	2.5	2.0	2.0	2.5	1.5	2.0	4.0	3.0	3.0	7.0	6.0	6.5
25	2.0	1.0	1.5	3.0	2.0	2.5	3.5	3.0	3.0	6.5	5.5	6.0
26	1.5	1.0	1.5	2.5	1.5	2.0	4.0	3.0	3.5	6.5	5.5	6.0
27	1.5	0.5	1.0	2.5	2.0	2.0	4.5	3.0	3.5	7.0	5.5	6.5
28	2.0	1.0	1.5	2.0	1.0	1.5	4.5	3.5	4.0	7.0	5.5	6.5
29	1.5	1.0	1.5	1.5	0.5	1.0	5.0	2.5	4.0	6.5	5.5	6.5
30	---	---	---	1.0	0.5	1.0	5.5	3.0	4.0	7.5	6.0	7.0
31	---	---	---	1.0	0.5	1.0	---	---	---	7.0	6.0	6.5
MONTH	2.5	0.0	1.4	3.0	0.5	1.4	5.5	0.5	2.9	7.5	3.0	5.4
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.5	6.0	7.0	12.5	11.0	12.0	12.0	11.0	11.5	11.5	10.0	11.0
2	7.0	6.0	6.5	12.0	11.5	12.0	13.0	11.5	12.0	11.5	10.0	10.5
3	8.5	6.0	7.0	13.0	11.5	12.0	13.0	12.0	12.5	11.5	11.0	11.0
4	8.0	6.5	7.5	12.5	11.5	12.0	14.0	11.0	12.5	11.0	10.5	11.0
5	8.5	7.5	8.0	12.5	11.0	11.5	13.0	11.0	12.0	11.0	10.0	10.5
6	9.0	7.0	8.0	12.0	11.0	11.5	12.5	12.0	12.0	10.5	10.0	10.5
7	10.0	7.5	8.5	12.5	11.0	12.0	13.5	12.0	12.5	10.0	8.5	9.5
8	9.0	7.5	8.0	14.0	11.0	12.0	13.5	11.0	12.0	8.5	7.5	8.5
9	8.5	7.5	8.0	13.5	11.5	12.5	14.0	11.0	12.5	8.0	6.5	7.5
10	8.5	7.0	8.0	12.5	12.0	12.0	14.0	11.5	13.0	8.0	6.0	7.0
11	8.0	7.0	7.5	13.0	11.5	12.0	14.0	12.5	13.0	8.0	7.0	7.5
12	8.5	7.5	8.0	14.0	11.0	12.5	14.0	11.5	12.5	8.5	8.0	8.5
13	8.5	7.5	8.0	14.5	11.5	13.0	14.0	11.5	12.5	9.5	8.5	9.0
14	8.0	7.5	8.0	14.5	12.0	13.0	14.0	11.0	12.5	9.0	8.5	9.0
15	9.0	7.5	8.5	15.0	12.0	13.5	14.5	12.0	13.0	8.5	8.0	8.5
16	10.0	7.5	9.0	15.5	12.5	14.0	14.5	12.5	13.5	8.5	7.5	8.0
17	11.0	8.0	9.5	14.0	13.0	13.5	15.0	13.0	14.0	7.5	6.5	7.0
18	12.0	9.0	10.5	14.0	12.5	13.0	14.5	13.5	14.0	7.0	5.5	6.5
19	12.5	10.0	11.5	13.5	11.5	12.5	14.0	13.5	13.5	7.0	5.5	6.0
20	13.5	10.5	12.0	13.0	12.5	12.5	14.0	13.0	13.5	---	---	---
21	13.0	10.5	12.0	13.0	12.0	12.5	14.5	12.5	13.5	---	---	---
22	14.0	11.0	12.5	14.0	12.0	13.0	14.0	12.0	13.0	---	---	---
23	14.0	11.0	12.5	13.5	12.5	13.0	13.0	10.5	12.0	---	---	---
24	14.5	11.5	13.0	14.5	12.5	13.0	13.0	10.5	12.0	---	---	---
25	15.0	12.0	13.5	13.5	12.0	12.5	12.5	10.5	11.5	---	---	---
26	13.5	12.0	12.5	12.5	12.0	12.0	12.5	11.0	12.0	---	---	---
27	12.5	11.5	12.0	12.5	12.0	12.0	12.5	11.5	12.0	---	---	---
28	12.0	11.0	11.5	13.0	12.0	12.5	12.5	11.5	12.0	---	---	---
29	11.5	11.0	11.5	12.5	12.0	12.5	12.5	11.0	12.0	---	---	---
30	12.0	11.0	11.5	13.0	11.5	12.5	12.5	11.0	11.5	---	---	---
31	---	---	---	12.5	11.0	12.0	12.0	10.5	11.5	---	---	---
MONTH	15.0	6.0	9.7	15.5	11.0	12.5	15.0	10.5	12.5	---	---	---

15106970 MIDDLE BASIN CREEK NEAR TENAKEE

LOCATION.--Lat 57°41'33", long 135°12'06", in NE¹/₄ NE¹/₄ SE¹/₄ sec. 21, T. 48 S., R. 63 E. (Sitka C-4 quad), Hydrologic Unit 19010203, in Tongass National Forest, on Chichagof Island, on left bank 0.3 mi upstream from confluence with Kadashan River, and about 7 mi south of Tenakee.

DRAINAGE AREA.--0.12 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1981 to July 1987 (unpublished fragmentary records provided by the U.S. Forest Service). July 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 190 ft above sea level, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	0.75	0.84	0.49	0.49	0.64	0.52	0.77	0.69	0.22	0.12	0.05
2	0.98	0.67	1.4	0.42	0.44	0.64	0.98	0.99	0.62	0.22	0.14	0.07
3	0.89	0.60	0.66	0.38	0.42	0.66	1.2	1.1	0.63	0.21	0.13	0.13
4	0.86	0.55	0.61	0.37	0.44	0.65	0.87	1.2	0.62	0.20	0.12	0.10
5	0.80	0.50	0.59	0.34	0.58	0.65	0.74	1.3	0.63	0.20	0.12	0.06
6	0.81	0.46	0.53	0.33	0.54	0.60	0.69	1.3	0.57	0.25	0.12	0.08
7	0.79	0.44	0.46	0.36	0.48	1.2	0.69	1.2	0.56	0.21	0.11	0.07
8	0.71	0.42	0.42	0.35	0.79	2.1	0.63	1.2	0.49	0.20	0.09	0.05
9	0.63	0.61	0.39	0.39	1.6	1.0	0.63	1.1	0.44	0.20	0.10	0.04
10	0.57	0.53	0.37	0.40	1.7	1.6	0.65	1.1	0.41	0.20	0.12	0.04
11	0.54	0.65	0.43	0.39	1.5	1.5	0.66	1.1	0.38	0.19	0.10	0.05
12	0.48	2.4	0.45	0.41	1.5	1.00	0.67	1.1	0.39	0.18	0.09	0.08
13	0.52	2.1	0.43	0.54	1.6	0.89	0.67	1.2	0.36	0.19	0.09	0.13
14	0.50	2.1	0.38	1.1	1.1	0.83	0.66	1.3	0.32	0.19	0.10	0.09
15	0.46	1.6	0.43	0.71	0.96	0.87	0.61	1.3	0.31	0.19	0.11	0.08
16	0.47	1.4	0.59	0.62	0.99	0.83	0.54	1.3	0.30	0.19	0.12	0.07
17	0.45	1.2	0.78	0.84	0.96	0.74	0.56	1.2	0.31	0.18	0.11	0.05
18	0.46	0.97	0.89	0.97	0.90	0.69	0.52	1.1	0.32	0.18	0.10	0.04
19	0.43	0.85	1.2	0.79	0.90	0.58	0.52	1.1	0.32	0.17	0.10	0.04
20	0.41	0.74	0.84	1.1	1.0	0.53	0.50	1.1	0.32	0.17	0.10	0.29
21	0.38	0.70	1.6	1.2	1.1	0.53	0.46	1.2	0.31	0.15	0.10	0.60
22	0.43	0.72	3.5	1.6	1.1	0.54	0.50	1.2	0.30	0.14	0.09	0.33
23	0.42	0.62	2.1	1.2	1.1	0.52	0.46	1.1	0.29	0.16	0.08	0.73
24	0.46	0.63	1.9	0.96	1.0	0.52	0.50	1.1	0.28	0.15	0.09	0.66
25	0.93	0.59	1.4	0.76	0.92	0.55	0.63	1.1	0.28	0.13	0.08	0.61
26	0.96	0.53	0.99	0.58	0.83	0.53	0.65	1.1	0.25	0.11	0.08	0.61
27	1.2	0.48	0.75	0.64	0.73	0.49	0.62	1.0	0.22	0.13	0.12	0.75
28	1.5	0.48	0.65	0.58	0.69	0.69	0.66	0.92	0.21	0.16	0.09	0.63
29	1.2	0.44	0.65	0.55	0.68	0.71	0.67	0.86	0.22	0.13	0.07	0.62
30	1.0	0.49	0.69	0.52	---	0.62	0.69	0.78	0.23	0.13	0.07	0.56
31	0.87	---	0.61	0.52	---	0.52	---	0.73	---	0.12	0.06	---
TOTAL	22.21	25.22	27.53	20.41	27.04	24.42	19.35	34.15	11.58	5.45	3.12	7.71
MEAN	0.72	0.84	0.89	0.66	0.93	0.79	0.65	1.10	0.39	0.18	0.10	0.26
MAX	1.5	2.4	3.5	1.6	1.7	2.1	1.2	1.3	0.69	0.25	0.14	0.75
MIN	0.38	0.42	0.37	0.33	0.42	0.49	0.46	0.73	0.21	0.11	0.06	0.04
MED	0.63	0.62	0.65	0.55	0.92	0.65	0.64	1.1	0.32	0.18	0.10	0.08
AC-FT	44	50	55	40	54	48	38	68	23	11	6.2	15
CFSM	5.97	7.01	7.40	5.49	7.77	6.56	5.38	9.18	3.22	1.47	0.84	2.14
IN.	6.89	7.82	8.53	6.33	8.38	7.57	6.00	10.59	3.59	1.69	0.97	2.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)#

	1999	2000	2001	2002	2003	2004	2004	2004	2004	2004	2004	2004
MEAN	1.50	1.24	1.39	0.68	0.56	0.45	0.37	0.71	0.70	0.33	0.25	0.80
MAX	2.98	2.65	3.75	0.97	0.93	0.79	0.65	1.10	1.31	0.65	0.40	1.34
(WY)	2000	2000	2000	2003	2004	2004	2004	2004	2002	1999	2002	2000
MIN	0.72	0.83	0.45	0.47	0.30	0.26	0.17	0.42	0.24	0.18	0.10	0.26
(WY)	2004	2001	2002	2000	2000	2002	2002	2003	2003	2004	2004	2004

See Period of Record; partial years used in monthly statistics

15106970 MIDDLE BASIN CREEK NEAR TENAKEE—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004#	
ANNUAL TOTAL	192.05		228.19			
ANNUAL MEAN	0.53		0.62		0.74	
HIGHEST ANNUAL MEAN					1.20 2000	
LOWEST ANNUAL MEAN					0.61 2003	
HIGHEST DAILY MEAN	3.5	Dec 22	3.5	Dec 22	31	Dec 27 1999
LOWEST DAILY MEAN	0.06	Aug 28	a0.04	Sep 9	a0.04	Sep 9 2004
ANNUAL SEVEN-DAY MINIMUM	0.07	Aug 23	0.06	Sep 5	0.06	Sep 5 2004
MAXIMUM PEAK FLOW			6.1 Dec 22		b66	Dec 27 1999
MAXIMUM PEAK STAGE			4.39 Dec 22		5.16	Dec 27 1999
INSTANTANEOUS LOW FLOW			a0.03 Sep 9		a0.03	Sep 9 2004
ANNUAL RUNOFF (AC-FT)	381		453		536	
ANNUAL RUNOFF (CFSM)	4.38		5.20		6.16	
ANNUAL RUNOFF (INCHES)	59.54		70.74		83.70	
10 PERCENT EXCEEDS	0.97		1.2		1.2	
50 PERCENT EXCEEDS	0.39		0.56		0.50	
90 PERCENT EXCEEDS	0.15		0.11		0.19	

See Period of Record; partial years used in monthly statistics

a Sept. 9,10,18 and 19.

b From rating curve extended above 3.0 ft³/s

15106970 MIDDLE BASIN CREEK NEAR TENAKEE—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1981 to July 1987 (unpublished fragmentary records provided by the U.S. Forest Service), July 2000 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 2000 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder with 15-minute recording interval since July 09, 2000.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with stream average by cross section on January 23 and August 24, 2004. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 11.0°C, August 16, 2004; minimum, 0.0°C, on many days during most winters.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 11.0°C, August 16; minimum, 0.0°C, on January 6 and 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (00004)	Location in X-sect. looking downstrm ft from l bank (00009)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
JAN							
23...	1148	3.50	1.50	4.01	1.1	2.5	1.5
23...	1149	3.50	2.00	4.01	1.1	2.5	1.5
23...	1150	3.50	3.00	4.01	1.1	2.5	1.5
23...	1151	3.50	4.00	4.01	1.1	2.5	1.5
AUG							
24...	1510	5.00	.50	3.57	.10	9.5	17.5
24...	1511	5.00	1.50	3.57	.10	9.5	17.5
24...	1512	5.00	2.50	3.57	.10	9.5	17.5
24...	1513	5.00	3.50	3.57	.10	9.5	17.5
24...	1514	5.00	9.50	3.57	.10	9.5	17.5

TEMPERATURE, WATER (DEG. CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.0	7.0	7.0	4.5	4.0	4.0	2.5	2.0	2.5	2.5	1.5	2.0
2	7.0	6.5	7.0	4.5	4.0	4.0	3.0	2.5	2.5	1.5	1.0	1.0
3	7.0	6.5	7.0	4.0	3.5	4.0	3.0	2.5	2.5	1.0	1.0	1.0
4	7.0	7.0	7.0	3.5	3.5	3.5	3.0	2.5	3.0	1.5	1.0	1.0
5	7.0	7.0	7.0	3.5	3.5	3.5	3.0	2.5	3.0	1.0	0.5	1.0
6	7.0	7.0	7.0	3.5	3.5	3.5	3.0	2.5	2.5	1.0	0.0	0.5
7	7.0	7.0	7.0	4.0	3.5	4.0	3.0	2.5	2.5	1.0	0.0	0.5
8	7.0	6.5	7.0	4.0	4.0	4.0	3.0	2.5	3.0	1.5	0.5	1.0
9	6.5	6.5	6.5	4.5	4.0	4.0	3.0	2.0	2.5	1.5	1.5	1.5
10	6.5	6.0	6.5	4.5	4.0	4.0	2.5	1.5	2.0	2.0	1.5	1.5
11	6.5	6.0	6.0	4.5	4.0	4.0	2.5	2.5	2.5	2.0	2.0	2.0
12	6.0	5.5	6.0	5.0	4.5	5.0	3.0	2.5	2.5	2.0	2.0	2.0
13	6.0	5.5	6.0	4.5	4.0	4.0	3.0	2.5	2.5	2.0	2.0	2.0
14	6.0	6.0	6.0	4.5	4.0	4.0	2.5	2.5	2.5	2.0	1.5	2.0
15	6.0	5.5	5.5	4.5	4.0	4.5	2.5	2.5	2.5	2.0	2.0	2.0
16	6.0	5.0	5.5	4.5	4.0	4.5	2.5	2.5	2.5	2.0	1.0	2.0
17	6.0	6.0	6.0	4.0	3.5	4.0	3.0	2.5	2.5	2.0	1.0	1.5
18	6.5	6.0	6.0	3.5	2.5	3.0	3.0	2.0	2.5	2.5	2.0	2.0
19	6.5	6.0	6.5	2.5	2.5	2.5	3.0	2.5	2.5	2.5	2.0	2.5
20	6.5	5.5	6.0	2.5	2.0	2.0	3.0	2.5	3.0	2.5	2.5	2.5
21	6.5	5.5	6.0	3.0	2.0	2.5	3.0	3.0	3.0	3.0	2.5	2.5
22	6.0	6.0	6.0	3.0	2.5	3.0	3.0	3.0	3.0	3.0	2.5	3.0
23	6.0	6.0	6.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5
24	6.5	6.0	6.0	3.0	2.5	3.0	3.0	3.0	3.0	2.5	1.5	2.0
25	7.0	6.5	6.5	3.0	2.5	3.0	3.0	2.5	3.0	1.5	0.5	0.5
26	7.0	6.5	6.5	3.0	2.5	3.0	2.5	2.0	2.5	0.5	0.5	0.5
27	6.5	6.0	6.0	3.0	2.5	2.5	2.0	1.0	1.5	0.5	0.5	0.5
28	6.0	5.5	5.5	2.5	2.0	2.5	2.0	1.0	1.5	0.5	0.5	0.5
29	5.5	4.5	5.0	2.5	2.0	2.5	2.0	2.0	2.0	1.0	0.5	1.0
30	4.5	4.0	4.0	---	---	---	2.5	2.0	2.5	1.5	0.5	1.0
31	4.5	4.0	4.0	---	---	---	2.5	2.5	2.5	1.5	1.5	1.5
MONTH	7.0	4.0	6.1	---	---	---	3.0	1.0	2.5	3.0	0.0	1.5

15106970 MIDDLE BASIN CREEK NEAR TENAKEE—Continued

TEMPERATURE, WATER (DEG. CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.5	1.5	1.5	2.5	2.5	2.5	2.5	2.0	2.0	5.0	5.0	5.0
2	1.5	1.5	1.5	2.5	2.0	2.5	2.5	2.0	2.5	5.0	4.5	5.0
3	1.5	1.0	1.5	2.5	2.0	2.0	3.0	2.5	2.5	5.5	4.5	5.0
4	1.5	1.5	1.5	2.5	2.5	2.5	3.0	2.5	3.0	5.5	4.5	5.0
5	2.0	1.5	1.5	2.5	2.0	2.0	3.0	2.5	3.0	5.5	4.0	5.0
6	2.0	1.5	1.5	2.5	2.0	2.0	3.5	3.0	3.0	5.5	4.5	5.0
7	2.0	1.5	2.0	2.0	2.0	2.0	3.5	3.0	3.5	5.5	4.5	5.0
8	2.0	1.5	2.0	2.5	2.0	2.0	3.5	3.0	3.0	5.5	5.0	5.0
9	2.0	1.0	2.0	2.5	2.0	2.0	4.0	3.5	3.5	5.5	5.0	5.0
10	2.5	2.0	2.0	2.5	2.0	2.0	4.0	3.5	3.5	5.5	4.5	5.0
11	3.0	2.5	2.5	2.5	2.0	2.5	4.0	3.5	4.0	6.0	4.5	5.0
12	3.0	2.5	2.5	3.0	2.5	2.5	4.0	4.0	4.0	6.0	5.0	5.5
13	3.0	2.5	3.0	2.5	2.5	2.5	4.0	3.5	4.0	6.0	5.0	5.5
14	3.0	2.5	3.0	2.5	2.5	2.5	4.0	3.5	4.0	6.0	5.0	5.5
15	2.5	2.5	2.5	2.5	2.5	2.5	4.0	3.0	3.5	6.0	5.0	5.5
16	2.5	2.5	2.5	2.5	2.0	2.0	4.0	2.5	3.5	5.5	5.0	5.5
17	3.0	2.5	2.5	2.5	2.0	2.5	4.0	3.5	3.5	6.0	5.0	5.5
18	3.0	2.5	3.0	2.5	2.0	2.0	3.5	3.0	3.5	6.0	5.5	5.5
19	3.0	3.0	3.0	2.0	1.5	2.0	4.0	3.0	3.5	6.5	5.5	6.0
20	3.0	3.0	3.0	2.5	2.0	2.0	4.0	3.0	3.5	6.5	5.5	6.0
21	3.5	3.0	3.0	2.5	2.0	2.0	4.0	3.0	3.5	6.5	5.5	6.0
22	3.0	3.0	3.0	2.5	2.0	2.0	4.0	3.5	4.0	6.5	5.5	6.0
23	3.5	3.0	3.0	2.5	2.0	2.0	4.0	3.5	3.5	6.5	5.5	6.0
24	3.0	3.0	3.0	2.5	2.0	2.5	4.0	3.5	4.0	6.0	5.5	6.0
25	3.0	2.5	2.5	3.0	2.5	2.5	4.0	4.0	4.0	6.0	5.5	6.0
26	2.5	2.5	2.5	3.0	2.5	2.5	4.5	4.0	4.0	6.0	5.5	5.5
27	2.5	2.0	2.5	3.0	2.5	2.5	4.5	4.0	4.0	6.0	5.5	5.5
28	2.5	2.0	2.5	3.0	2.5	2.5	4.5	4.0	4.0	6.0	5.0	5.5
29	2.5	2.0	2.5	2.5	2.0	2.5	5.0	3.5	4.0	6.0	5.5	5.5
30	---	---	---	2.0	2.0	2.0	5.5	4.0	4.5	6.0	5.5	6.0
31	---	---	---	2.0	2.0	2.0	---	---	---	6.0	5.5	6.0
MONTH	3.5	1.0	2.4	3.0	1.5	2.2	5.5	2.0	3.5	6.5	4.0	5.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.0	5.5	6.0	8.5	8.5	8.5	9.0	8.5	9.0	9.5	8.5	9.0
2	6.0	5.5	5.5	8.5	8.5	8.5	9.5	8.5	9.0	9.5	9.0	9.0
3	6.5	5.5	6.0	8.5	8.5	8.5	9.5	9.0	9.0	9.5	9.0	9.5
4	6.5	5.5	6.0	8.5	8.0	8.5	9.5	8.5	9.0	9.5	9.0	9.0
5	6.5	6.0	6.5	8.5	8.0	8.5	9.5	8.5	9.0	9.0	9.0	9.0
6	7.0	6.0	6.5	8.5	8.0	8.5	9.5	9.0	9.0	9.0	9.0	9.0
7	7.5	6.5	7.0	9.0	8.5	8.5	9.5	9.0	9.5	9.0	8.0	8.5
8	7.0	6.5	6.5	9.5	8.0	8.5	10.0	8.5	9.5	8.5	8.0	8.0
9	6.5	6.5	6.5	9.0	8.5	8.5	10.0	9.0	9.5	8.0	6.5	7.5
10	6.5	6.0	6.5	8.5	8.5	8.5	10.5	9.0	9.5	8.0	6.5	7.0
11	6.5	6.0	6.0	9.0	8.5	8.5	10.0	9.5	9.5	8.0	7.0	7.5
12	7.0	6.0	6.5	9.5	8.0	8.5	10.0	9.0	9.5	8.5	8.0	8.0
13	6.5	6.0	6.5	9.5	8.5	9.0	10.0	9.0	9.5	8.5	8.5	8.5
14	6.5	6.5	6.5	9.5	8.5	9.0	10.0	9.0	9.5	8.5	8.0	8.0
15	7.0	6.5	6.5	9.5	8.5	9.0	10.5	9.0	10.0	8.0	7.5	8.0
16	7.0	6.0	6.5	10.0	8.5	9.0	11.0	9.5	10.0	8.0	7.5	8.0
17	7.5	6.5	7.0	9.0	9.0	9.0	10.5	9.5	10.0	8.0	6.5	7.5
18	8.0	7.0	7.5	9.5	8.5	9.0	10.5	10.0	10.0	7.5	6.5	7.0
19	8.5	7.0	7.5	9.0	8.5	9.0	10.0	10.0	10.0	7.5	6.0	7.0
20	8.5	7.5	8.0	9.0	9.0	9.0	10.0	10.0	10.0	8.5	7.5	8.0
21	8.5	7.5	8.0	9.0	9.0	9.0	10.5	9.5	10.0	9.0	8.5	8.5
22	9.0	7.5	8.5	9.5	8.5	9.0	10.0	9.5	10.0	8.5	8.5	8.5
23	9.0	8.0	8.5	9.5	9.0	9.0	10.0	8.5	9.5	9.0	8.5	8.5
24	9.0	8.0	8.5	9.5	9.0	9.0	10.0	9.0	9.5	8.5	8.0	8.5
25	9.5	8.0	8.5	9.0	9.0	9.0	10.0	9.0	9.5	8.5	8.0	8.0
26	9.0	8.5	8.5	9.0	8.5	9.0	10.0	9.0	9.5	8.0	8.0	8.0
27	8.5	8.0	8.5	9.0	8.5	9.0	9.5	9.5	9.5	8.0	7.5	8.0
28	8.5	8.0	8.5	9.5	9.0	9.0	9.5	9.0	9.5	7.5	7.5	7.5
29	8.5	8.0	8.5	9.0	9.0	9.0	9.5	9.0	9.5	7.5	7.5	7.5
30	8.5	8.5	8.5	9.0	8.5	9.0	9.5	9.0	9.5	7.5	7.5	7.5
31	---	---	---	9.0	8.5	9.0	9.5	9.0	9.5	---	---	---
MONTH	9.5	5.5	7.2	10.0	8.0	8.8	11.0	8.5	9.5	9.5	6.0	8.1

15109048 PETERSON CREEK BELOW NORTH FORK NEAR AUKE BAY

LOCATION. (REVISED)--Lat 58°17'00", long 134°39'54", in SE¹/₄ NW¹/₄ SW¹/₄ sec. 29, T. 41 S., R. 66 E. (Juneau B-2 SW), Hydrologic Unit 19010301, City and Borough of Juneau, on Douglas Island, in Tongass National Forest, on left bank 100 ft downstream from North Fork Peterson Creek, 1.25 mi upstream from mouth, 7.2 mi south of Auke Bay, and 9.6 mi west of Douglas.

DRAINAGE AREA.--4.33 mi²,

PERIOD OF RECORD.--November 1998 to September 2004 (discontinued)

REVISED RECORDS.--WDR AK-00-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above sea level, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	e12	9.2	4.6	e1.7	4.6	7.9	22	6.2	2.7	e2.8	e2.1
2	8.7	e12	24	e3.4	e1.9	4.3	26	24	6.2	2.6	e2.7	e2.5
3	e7.0	e8.3	13	e3.0	e2.5	4.2	43	21	5.8	2.7	e3.1	3.6
4	e15	e7.0	9.8	e2.6	3.4	4.4	26	20	5.5	2.6	e2.8	4.1
5	e20	e6.2	6.0	e2.3	5.6	4.9	17	15	6.5	2.7	e2.6	5.1
6	e15	e5.8	e4.7	e2.1	6.4	4.9	12	12	6.7	2.7	e2.5	11
7	e35	e5.7	e4.6	e1.9	5.0	8.0	9.9	12	8.5	2.6	e2.5	12
8	e24	e5.4	e4.4	e1.8	7.5	21	12	13	7.1	2.5	e2.4	7.3
9	e18	11	e4.3	e2.8	47	18	10	12	6.5	2.3	e2.3	5.2
10	e18	10	e4.2	5.3	33	12	9.9	12	5.5	2.3	e2.2	4.1
11	e14	14	4.1	6.7	24	11	9.4	12	5.0	2.2	e2.7	3.4
12	e10	93	4.1	5.9	26	8.1	9.5	13	4.6	2.1	e3.0	3.1
13	e10	50	4.2	13	18	6.7	9.3	14	4.6	2.1	e2.5	16
14	e9.5	29	4.1	130	14	5.7	8.6	15	4.9	2.0	e2.3	12
15	e7.8	21	4.1	37	10	5.3	7.6	13	4.6	2.0	e2.2	9.0
16	e7.1	15	7.0	19	8.0	6.1	6.8	13	4.2	2.0	e2.1	6.4
17	e6.7	9.9	20	12	6.8	6.9	6.3	11	4.1	1.9	e2.0	4.8
18	e10	7.2	21	25	6.4	5.6	5.9	11	4.2	1.9	e2.2	4.0
19	e11	6.5	37	24	6.9	4.7	5.4	11	4.5	1.9	e2.3	3.5
20	e13	5.7	24	31	9.4	4.2	5.0	14	4.4	1.8	e2.3	7.6
21	e11	6.3	22	35	14	3.9	4.9	14	4.2	2.0	e2.2	26
22	e14	6.5	31	42	28	3.9	5.4	11	3.9	2.1	e2.0	15
23	e16	6.5	34	29	18	3.9	6.2	9.4	3.7	2.1	e2.0	72
24	e15	9.6	25	19	13	4.1	6.2	12	3.5	2.3	e1.8	51
25	15	9.1	22	e10	9.1	13	6.7	15	3.4	2.9	e1.8	22
26	30	6.0	15	e5.5	7.1	20	9.9	14	3.3	2.6	e1.8	13
27	23	5.8	8.9	e3.3	6.1	13	8.7	9.9	3.2	2.4	e2.1	12
28	44	e4.4	6.7	e2.2	5.4	10	7.8	7.7	3.1	3.4	e2.5	10
29	e26	4.6	5.9	e1.6	4.9	9.7	7.2	6.9	2.9	4.2	e3.0	8.3
30	e21	5.4	5.6	e1.5	---	11	10	6.6	2.8	5.2	e2.7	7.7
31	e16	---	5.2	e1.6	---	9.1	---	6.4	---	e3.3	e2.3	---
TOTAL	502.8	398.9	395.1	484.1	349.1	252.2	320.5	402.9	143.6	78.1	73.7	363.8
MEAN	16.2	13.3	12.7	15.6	12.0	8.14	10.7	13.0	4.79	2.52	2.38	12.1
MAX	44	93	37	130	47	21	43	24	8.5	5.2	3.1	72
MIN	6.7	4.4	4.1	1.5	1.7	3.9	4.9	6.4	2.8	1.8	1.8	2.1
AC-FT	997	791	784	960	692	500	636	799	285	155	146	722
CFSM	3.75	3.07	2.94	3.61	2.78	1.88	2.47	3.00	1.11	0.58	0.55	2.80
IN.	4.32	3.43	3.39	4.16	3.00	2.17	2.75	3.46	1.23	0.67	0.63	3.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)#

	1999	2000	2001	2002	2003	2004	1999	2000	2001	2002	2003	2004
MEAN	19.8	12.6	16.3	11.1	7.32	6.74	9.07	12.8	10.7	7.52	8.32	16.8
MAX	29.6	19.7	43.2	16.1	12.2	8.14	19.2	18.1	14.9	15.9	16.6	22.8
(WY)	2003	2000	2000	2003	2002	2004	1999	1999	1999	2000	2002	2003
MIN	15.9	4.99	8.30	5.57	2.00	4.14	3.02	5.79	4.01	2.52	2.38	12.1
(WY)	2001	1999	2002	2000	1999	2002	2002	2003	2003	2004	2004	2004

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1999 - 2004#

ANNUAL TOTAL	3702.2	3764.8		
ANNUAL MEAN	10.1	10.3	11.7	
HIGHEST ANNUAL MEAN			15.5	2000
LOWEST ANNUAL MEAN			9.84	2001
HIGHEST DAILY MEAN	189	Sep 27	130	Jan 14
LOWEST DAILY MEAN	a1.8	Jul 19	1.5	Jan 30
ANNUAL SEVEN-DAY MINIMUM	1.9	Jul 14	1.9	Jan 28
MAXIMUM PEAK FLOW			232	Jan 14
MAXIMUM PEAK STAGE			9.46	Jan 14
INSTANTANEOUS LOW FLOW			b	
ANNUAL RUNOFF (AC-FT)	7340	7470	8440	
ANNUAL RUNOFF (CFSM)	2.34	2.38	2.69	
ANNUAL RUNOFF (INCHES)	31.81	32.34	36.56	
10 PERCENT EXCEEDS	21	22	22	
50 PERCENT EXCEEDS	6.3	6.6	7.4	
90 PERCENT EXCEEDS	2.8	2.3	2.7	

See Period of Record; partial years used in monthly statistics

a Jul. 19 and 20

b Not determined; see lowest daily mean

e Estimated

15129000 ALSEK RIVER NEAR YAKUTAT
(International gaging station)

LOCATION.--Lat 59°23'42", long 138°04'55", in NW¹/₄ NE¹/₄ sec. 19, T. 29 S., R. 44 E. (Yakutat B-1 quad), Hydrologic Unit 19010401, in Glacier Bay National Park, on right bank across from terminus of Walker Glacier, 33 mi upstream from Dry Bay, and 55 mi southeast of Yakutat.

DRAINAGE AREA.--10,820 mi².

PERIOD OF RECORD.--July 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 250 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e49000	16300	e6000	e5600	e2900	e3500	e3900	12500	49200	123000	96000	56900
2	e43000	15800	e6200	e5400	e2900	e3500	e4100	13700	49300	119000	86000	58600
3	e36000	15300	e6000	e5200	e2900	e3400	e4400	15500	49400	120000	91000	85400
4	41200	14500	e5800	e5100	e2900	e3400	5040	17400	49100	114000	90300	90900
5	42900	13600	e5700	e5000	e2900	e3300	4910	19200	52200	109000	89400	73500
6	42800	13400	e5600	e4900	e3000	e3300	4840	20400	57800	103000	92400	56900
7	42800	13200	e5500	e4800	e3000	e3400	5010	20900	75700	102000	96000	43900
8	41600	13000	e5500	e3800	e3100	e3400	5740	21400	94200	105000	98300	35000
9	39200	14500	e5400	e4000	e3200	e3400	5550	22600	100000	108000	98600	29100
10	36500	14000	e5400	e4000	e3300	e3400	5600	23200	91200	106000	99300	25100
11	33700	13100	e5300	e3800	e3300	e3500	5400	23600	77600	100000	109000	22200
12	30800	14000	e5300	e3700	e3500	e3600	5410	24500	69900	99100	97700	20200
13	28200	13800	e5300	e3700	e3600	e3600	5500	26100	68000	100000	85100	20900
14	26100	13200	e5400	e3700	e3700	e3600	5750	27900	70300	99100	86600	22300
15	24400	13100	e5500	e3700	e3800	e3600	6120	30200	73100	101000	98400	21700
16	23000	12400	e5500	e3600	e3900	e3500	6150	31900	76500	105000	106000	26500
17	21700	11400	e5600	e3600	e4000	e3500	6050	33900	77600	107000	111000	48000
18	20600	10100	e5700	e3500	e4300	e3400	6160	37000	84800	106000	111000	22500
19	20600	e8700	e5800	e3700	e4300	e3400	6220	38500	95900	103000	104000	17800
20	20800	e8300	e6000	e3900	e4400	e3400	6230	41000	107000	98800	95800	16000
21	20500	e7700	e6100	e4100	e4400	e3400	6290	46300	113000	102000	92000	26300
22	20200	e7500	e7000	e4000	e4400	e3400	6480	49700	118000	103000	96400	31700
23	20300	e6900	e6800	e3800	e4400	e3400	6660	50700	123000	100000	94500	32700
24	19900	e6600	e6300	e3600	e4200	e3500	6830	52100	128000	98300	85500	38100
25	21600	e6300	e5900	e3400	e4100	e3500	7360	56400	131000	95800	77900	35900
26	23000	e6100	e5600	e3300	e3900	e3600	8290	59400	133000	90500	68400	35800
27	22400	e6000	e5300	e3200	e3800	e3600	9010	56000	131000	88500	67000	53100
28	20800	e5900	e5000	e3100	e3900	e3700	9880	53300	133000	104000	64200	47500
29	19300	e6000	e5600	e3100	e3600	e3800	10600	53300	130000	113000	63200	40400
30	17900	e5800	e5700	e3000	---	e3900	11300	52600	131000	110000	61300	38000
31	17100	---	e5900	e2900	---	e3900	---	50300	---	103000	60300	---
TOTAL	887900	326500	177700	122200	105600	108800	190780	1081500	2739800	3236100	2772600	1172900
MEAN	28640	10880	5732	3942	3641	3510	6359	34890	91330	104400	89440	39100
MAX	49000	16300	7000	5600	4400	3900	11300	59400	133000	123000	111000	90900
MIN	17100	5800	5000	2900	2900	3300	3900	12500	49100	88500	60300	16000
AC-FT	1761000	647600	352500	242400	209500	215800	378400	2145000	5434000	6419000	5499000	2326000
CFSM	2.65	1.01	0.53	0.36	0.34	0.32	0.59	3.22	8.44	9.65	8.27	3.61
IN.	3.05	1.12	0.61	0.42	0.36	0.37	0.66	3.72	9.42	11.13	9.53	4.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)#

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	24490	9973	7016	5123	4214	4027	6508	26300	68930	87430	77160	48310		
MAX	40300	19160	12640	9118	6625	6619	10870	40100	91330	104400	99370	76330		
(WY)	1995	2003	2003	2001	1993	1992	1992	1993	2004	2004	1994	1995		
MIN	12040	5828	3229	3045	2707	3033	4379	16770	53490	73510	59750	29040		
(WY)	1997	1997	1997	1995	1995	1995	2002	2001	1996	1996	1996	1992		

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1991 - 2004#

ANNUAL TOTAL	10647560	12922380		
ANNUAL MEAN	29170	35310	30850	
HIGHEST ANNUAL MEAN			35850	1993
LOWEST ANNUAL MEAN			23920	1996
HIGHEST DAILY MEAN	118000	Aug 16	a133000	Jun 26
LOWEST DAILY MEAN	2580	Mar 13	b2900	Jan 31
ANNUAL SEVEN-DAY MINIMUM	2620	Mar 8	2910	Jan 30
MAXIMUM PEAK FLOW			137000	Jun 26
MAXIMUM PEAK STAGE			85.87	Jun 26
ANNUAL RUNOFF (AC-FT)	21120000	25630000	22350000	
ANNUAL RUNOFF (CFSM)	2.70	3.26	2.85	
ANNUAL RUNOFF (INCHES)	36.61	44.43	38.74	
10 PERCENT EXCEEDS	76900	101000	83500	
50 PERCENT EXCEEDS	16300	15600	13000	
90 PERCENT EXCEEDS	3560	3500	3500	

- # See Period of Record; partial years used in monthly summary statistics
a June 26 and 28
b January 31 to February 5
c From rating extended above 100,000 cfs
e Estimated

15129500 SITUK RIVER NEAR YAKUTAT

LOCATION.--Lat 59°35'00", long 139°29'31", in SE¹/₄ SW¹/₄ sec. 9, T. 27 S., R. 35 E. (Yakutat C-4 quad.), Yakutat Borough, Hydrologic Unit 19010401, in Tongass National Forest, on left bank 20 ft downstream from Alsek Road bridge, 3.5 mi downstream from Situk Lake, 8.8 mi northeast of Yakutat, and 10 mi upstream from mouth.

DRAINAGE AREA.--36 mi², approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is sea level, by U.S. Forest Service.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum(*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec 22	1245	1620	69.62	Feb 11	1130	*2030	*70.34
Feb 09	0300	1830	69.99	Sept 26	2045	1000	68.24

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e184	196	156	182	147	210	217	262	217	129	281	83
2	e164	179	378	e170	170	195	394	292	221	124	232	122
3	e204	165	340	e160	176	186	777	278	213	124	196	304
4	e263	154	297	e150	190	184	753	265	198	124	170	374
5	e260	144	256	e150	446	178	585	254	191	128	151	327
6	e326	136	225	e140	556	169	478	244	186	126	135	277
7	e382	130	200	e130	429	169	422	234	183	121	123	233
8	e366	137	184	e130	783	174	422	223	184	116	114	200
9	e327	220	167	149	1280	172	377	215	187	113	109	176
10	e290	196	155	144	1010	229	341	207	191	112	103	156
11	e275	193	153	138	1820	290	302	199	188	107	106	143
12	e246	343	165	133	1180	301	272	194	181	104	103	145
13	e224	295	193	174	778	283	263	190	172	102	99	159
14	e202	311	189	211	612	258	251	186	167	99	94	155
15	e170	492	181	186	493	264	237	183	162	96	90	165
16	156	400	203	169	410	261	224	180	158	93	85	149
17	145	332	253	182	352	236	214	178	154	89	82	133
18	144	282	292	198	309	214	229	174	150	86	79	121
19	188	245	729	182	345	193	224	171	150	84	80	113
20	204	215	663	353	496	176	206	169	154	82	80	167
21	182	195	665	469	756	164	194	170	156	82	77	372
22	175	207	1380	387	637	156	210	171	156	84	74	379
23	205	211	966	352	509	148	265	173	156	85	72	485
24	254	195	656	301	448	140	284	187	154	85	70	549
25	384	178	496	e260	379	146	391	250	152	92	69	501
26	387	166	390	e230	327	161	392	320	149	98	75	690
27	360	154	317	e200	283	173	360	332	146	130	93	844
28	314	148	269	e180	253	211	324	298	144	270	101	772
29	272	145	240	e160	230	294	297	266	139	435	102	712
30	241	139	230	e150	---	268	272	246	134	471	96	677
31	217	---	204	e140	---	242	---	231	---	351	91	---
TOTAL	7711	6503	11192	6260	15804	6445	10177	6942	5093	4342	3432	9683
MEAN	249	217	361	202	545	208	339	224	170	140	111	323
MAX	387	492	1380	469	1820	301	777	332	221	471	281	844
MIN	144	130	153	130	147	140	194	169	134	82	69	83
AC-FT	15290	12900	22200	12420	31350	12780	20190	13770	10100	8610	6810	19210
CFSM	6.91	6.02	10.0	5.61	15.1	5.78	9.42	6.22	4.72	3.89	3.08	8.97
IN.	7.97	6.72	11.57	6.47	16.33	6.66	10.52	7.17	5.26	4.49	3.55	10.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)#

MEAN	525	348	381	284	259	231	235	267	225	185	274	481
MAX	878	598	739	620	545	516	370	418	345	292	612	838
(WY)	2000	1993	2000	2001	2004	1992	1998	1991	1991	1991	2002	1991
MIN	249	173	142	131	81.2	54.2	73.6	160	127	77.7	105	261
(WY)	2004	1999	1991	1996	1999	1989	2002	1996	1993	1993	1994	2003

e Estimated

15129500 SITUK RIVER NEAR YAKUTAT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1989 - 2004#	
ANNUAL TOTAL	83347		93584			
ANNUAL MEAN	228		256		308	
HIGHEST ANNUAL MEAN					382 1992	
LOWEST ANNUAL MEAN					230 1996	
HIGHEST DAILY MEAN	1380	Dec 22	1820	Feb 11	2850	Dec 27 1999
LOWEST DAILY MEAN	67	May 9	69	Aug 25	a47	Mar 5 1989
ANNUAL SEVEN-DAY MINIMUM	70	May 3	74	Aug 20	48	Mar 3 1989
MAXIMUM PEAK FLOW			2030	Feb 11	3840	Oct 18 1999
MAXIMUM PEAK STAGE			70.34	Feb 11	72.99	Oct 18 1999
INSTANTANEOUS LOW FLOW			b69	Aug 24	c47	Mar 5 1989
ANNUAL RUNOFF (AC-FT)	165300		185600		223300	
ANNUAL RUNOFF (CFSM)	6.34		7.10		8.56	
ANNUAL RUNOFF (INCHES)	86.13		96.70		116.34	
10 PERCENT EXCEEDS	369		447		588	
50 PERCENT EXCEEDS	190		195		233	
90 PERCENT EXCEEDS	91		104		112	

See Period of Record

a Mar. 5-7 1989

b Aug. 24-26

c Mar. 5, 1989 and Apr. 15 and 17, 2002

15129500 SITUK RIVER NEAR YAKUTAT—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to 1973 and 1988 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1970 to September 1973 (fragmentary) and May 1988 to current year.

INSTRUMENTATION.--Water-temperature recorder October 1970 to September 1973, at a site 500 ft downstream. Electronic water-temperature recorder since May 1988, set for 2-hour recording interval. Recording interval changed to 15-minutes on March 6, 1996.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on August 10, 2004. No variation was found within the cross section. No variation was found between mean stream temperature and sensor temperature. Missing record October 1-15 due to recorder malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 20.5°C, June 24 and 25, 2004; minimum, 0.0°C, on many days during winters.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 20.5°C, June 24 and 25; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (000004)	Location in X-sect. looking dwnstrm ft from l bank (000009)	Gage height, feet (000065)	Instantaneous discharge, cfs (000061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
AUG							
10...	1655	57.0	10.0	65.22	101	18.0	32.0
10...	1656	57.0	20.0	65.22	101	18.0	32.0
10...	1657	57.0	30.0	65.22	101	18.0	32.0
10...	1658	57.0	40.0	65.22	101	18.0	32.0
10...	1659	57.0	50.0	65.22	101	18.0	32.0

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	4.5	3.5	4.0	1.5	0.0	1.0	1.0	0.0	0.5
2	---	---	---	5.0	4.0	4.5	1.5	0.0	0.5	0.0	0.0	0.0
3	---	---	---	4.0	3.5	3.5	2.0	1.0	1.5	0.0	0.0	0.0
4	---	---	---	3.5	3.0	3.5	2.0	1.0	1.5	0.0	0.0	0.0
5	---	---	---	3.5	2.5	3.0	2.0	2.0	2.0	0.0	0.0	0.0
6	---	---	---	4.5	3.0	3.5	2.0	1.0	1.5	0.0	0.0	0.0
7	---	---	---	4.5	4.0	4.5	2.0	1.5	1.5	0.0	0.0	0.0
8	---	---	---	5.0	4.5	4.5	2.0	2.0	2.0	0.0	0.0	0.0
9	---	---	---	4.5	3.5	4.0	2.0	1.0	1.5	1.5	0.0	0.5
10	---	---	---	4.0	3.5	3.5	2.0	1.0	1.5	2.0	1.5	1.5
11	---	---	---	4.0	3.5	3.5	2.5	2.0	2.0	1.5	1.0	1.0
12	---	---	---	4.0	3.5	4.0	2.5	2.0	2.0	1.5	1.0	1.0
13	---	---	---	4.0	3.0	3.5	2.0	1.5	1.5	1.5	1.0	1.5
14	---	---	---	3.5	3.0	3.0	1.5	1.0	1.5	1.0	0.5	1.0
15	---	---	---	3.5	3.0	3.5	2.0	1.5	2.0	1.0	0.5	0.5
16	6.0	4.5	5.5	4.0	3.0	3.5	2.0	1.5	2.0	1.0	0.0	0.5
17	6.5	5.0	5.5	3.0	2.0	3.0	2.0	2.0	2.0	1.0	0.0	1.0
18	6.5	6.0	6.0	2.5	2.0	2.0	2.0	1.5	1.5	1.5	1.0	1.5
19	6.5	6.0	6.5	2.5	1.5	2.0	2.0	0.5	1.0	1.0	0.5	1.0
20	7.0	5.5	6.5	1.5	1.0	1.0	1.5	1.0	1.5	1.0	1.0	1.0
21	6.0	4.5	5.5	3.0	1.5	2.0	2.0	1.5	1.5	1.0	1.0	1.0
22	6.5	6.0	6.5	3.0	2.0	3.0	1.5	1.0	1.5	1.5	1.0	1.0
23	6.5	6.0	6.0	3.0	2.0	2.5	1.5	1.5	1.5	1.5	0.5	1.0
24	6.5	5.5	6.0	2.5	2.0	2.5	1.5	1.0	1.5	1.0	0.0	0.5
25	7.0	6.5	7.0	2.5	1.5	2.0	1.5	1.0	1.0	0.5	0.0	0.0
26	7.0	6.5	7.0	2.5	1.5	1.5	1.0	0.5	0.5	0.0	0.0	0.0
27	6.5	5.5	6.0	1.5	0.5	1.0	0.5	0.0	0.5	0.0	0.0	0.0
28	5.5	5.0	5.5	1.0	0.0	0.5	1.0	0.0	0.5	0.0	0.0	0.0
29	5.0	4.5	5.0	0.5	0.0	0.5	1.5	1.0	1.0	0.0	0.0	0.0
30	5.5	4.5	5.0	1.0	0.0	0.5	1.5	1.0	1.5	0.0	0.0	0.0
31	5.0	4.5	5.0	---	---	---	1.5	1.0	1.0	0.0	0.0	0.0
MONTH	---	---	---	5.0	0.0	2.8	2.5	0.0	1.4	2.0	0.0	0.5

15129500 SITUK RIVER NEAR YAKUTAT—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.0	0.0	0.5	3.0	1.5	2.5	3.0	0.5	2.0	7.0	5.0	6.0
2	1.0	1.0	1.0	3.0	1.5	2.0	2.0	1.5	2.0	7.5	5.0	6.0
3	1.5	0.5	1.0	3.0	2.0	2.5	1.5	1.0	1.0	10.0	4.5	7.0
4	1.5	0.0	0.5	2.5	2.0	2.0	2.5	1.0	1.5	10.5	5.0	7.5
5	1.0	0.5	0.5	2.5	1.5	2.0	3.5	1.5	2.0	10.5	5.5	7.5
6	1.0	0.5	0.5	2.5	1.0	2.0	4.0	1.5	2.5	11.0	6.0	8.5
7	1.5	1.0	1.0	3.0	1.5	2.5	3.0	2.0	2.5	9.0	7.5	8.0
8	1.5	0.0	1.0	2.0	0.5	1.5	4.0	1.5	2.5	8.5	7.0	8.0
9	1.0	0.0	0.5	2.5	0.0	1.5	3.5	2.0	2.5	10.0	7.5	8.5
10	1.5	1.0	1.0	1.5	0.0	0.5	5.0	1.5	3.0	10.5	7.0	8.5
11	1.0	0.5	0.5	2.5	1.0	2.0	5.5	1.5	3.0	12.5	7.0	9.5
12	1.0	0.5	1.0	3.0	1.5	2.0	4.5	2.0	3.0	13.0	8.0	10.0
13	1.5	1.0	1.5	3.0	1.5	2.0	5.0	2.5	3.5	13.0	7.5	10.0
14	1.5	1.0	1.5	1.5	0.5	1.0	6.0	2.5	4.0	10.5	8.5	9.5
15	1.5	1.0	1.0	2.5	0.5	1.5	6.0	2.0	4.0	10.5	8.5	9.5
16	2.0	1.0	1.5	3.0	1.5	2.0	5.0	2.0	3.5	9.5	8.5	9.0
17	2.0	1.0	1.5	3.5	1.5	2.0	5.5	3.0	4.0	12.0	8.5	10.0
18	2.0	1.0	1.5	2.5	0.5	1.5	4.5	3.0	3.5	11.0	9.0	10.0
19	2.0	1.5	1.5	2.5	0.5	1.5	5.5	2.0	3.5	13.0	9.0	10.5
20	2.0	1.5	1.5	3.0	0.5	1.5	7.0	2.5	4.5	15.0	9.5	11.5
21	1.5	1.5	1.5	4.0	0.0	2.0	6.5	3.0	4.5	15.5	10.0	12.5
22	2.0	1.0	1.5	3.5	1.0	2.5	4.5	3.5	4.0	15.5	10.0	12.5
23	2.5	1.5	2.0	4.0	1.0	2.5	4.5	3.0	3.5	13.0	11.0	11.5
24	2.5	1.5	2.0	3.5	1.5	2.5	4.5	3.0	4.0	11.0	10.5	11.0
25	2.0	1.0	1.5	2.5	1.5	2.0	4.5	3.5	4.0	10.5	9.0	10.0
26	2.0	1.0	1.5	3.0	1.5	2.0	5.0	3.5	4.0	10.5	9.5	10.0
27	2.0	0.5	1.5	3.5	1.0	2.0	5.5	3.5	4.5	11.0	10.0	10.5
28	3.0	2.0	2.0	2.5	2.0	2.0	5.5	4.0	5.0	12.0	10.0	11.0
29	3.0	2.0	2.5	3.0	1.5	2.0	8.0	3.5	5.5	13.0	9.5	11.0
30	---	---	---	2.5	0.5	1.5	9.0	4.0	6.5	11.5	9.5	10.5
31	---	---	---	2.5	0.5	1.5	---	---	---	12.5	9.5	11.0
MONTH	3.0	0.0	1.3	4.0	0.0	1.9	9.0	0.5	3.5	15.5	4.5	9.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.0	9.5	10.5	15.5	13.5	14.5	15.5	14.0	15.0	13.5	11.0	12.5
2	11.0	9.5	10.0	18.5	13.0	15.5	16.0	13.5	14.5	13.0	11.5	12.0
3	14.5	9.0	11.5	16.5	14.0	14.5	17.5	12.5	15.0	13.5	12.0	12.5
4	13.5	9.5	11.5	16.0	13.5	14.5	17.5	12.5	15.0	15.0	12.5	13.5
5	11.5	10.5	11.0	15.5	13.5	14.5	17.5	12.5	15.0	15.5	13.0	14.0
6	16.0	10.5	12.5	19.0	13.0	15.5	17.5	13.5	15.5	14.5	12.0	13.5
7	13.0	11.5	12.0	19.5	14.0	16.5	17.5	13.0	15.0	14.0	11.0	12.5
8	12.0	11.0	11.5	20.0	13.5	16.5	18.0	13.0	15.5	13.5	10.0	11.5
9	13.0	10.5	11.5	17.5	14.5	15.5	18.0	12.5	15.5	13.0	9.5	11.0
10	11.5	10.0	11.0	18.5	14.0	16.0	18.0	13.0	15.5	12.0	9.0	10.5
11	13.0	10.0	11.0	19.0	13.5	16.0	16.5	14.0	15.0	12.0	9.5	11.0
12	14.0	10.0	12.0	19.5	13.5	16.5	16.5	12.0	14.5	11.5	10.0	10.5
13	16.5	10.0	13.0	17.5	14.5	16.0	17.5	12.5	15.0	12.0	10.0	11.0
14	13.5	11.5	12.0	16.5	14.0	15.0	17.0	12.5	15.0	11.0	10.0	10.5
15	13.0	11.0	12.0	19.0	13.5	16.0	17.5	13.0	15.0	11.5	9.5	10.5
16	13.0	10.0	11.5	19.5	13.5	16.5	17.5	13.0	15.5	11.5	9.5	10.5
17	17.0	11.0	13.5	17.5	15.0	15.5	17.5	13.5	15.5	10.5	8.0	9.0
18	18.0	11.5	14.5	16.0	14.0	15.0	16.0	13.5	15.0	10.0	7.0	8.5
19	19.5	12.0	15.5	18.0	13.0	15.5	15.0	13.5	14.0	9.5	6.5	8.0
20	20.0	13.0	16.5	17.5	13.5	15.5	15.5	12.5	14.0	9.5	8.5	9.0
21	20.0	13.5	16.5	16.5	14.5	15.5	15.5	12.0	14.0	10.5	9.0	9.5
22	20.0	14.0	17.0	15.0	13.5	14.0	16.0	11.5	14.0	10.5	10.0	10.0
23	20.0	14.5	17.0	15.0	12.5	14.0	15.5	11.5	13.5	10.0	9.5	10.0
24	20.5	15.0	17.5	16.5	13.0	14.5	15.0	12.0	13.5	10.5	10.0	10.0
25	20.5	14.5	17.5	15.0	13.5	14.5	13.5	11.5	12.0	10.0	9.5	9.5
26	19.0	15.5	17.0	14.5	12.5	13.5	13.0	11.5	12.0	9.5	9.5	9.5
27	18.0	15.0	16.5	13.5	13.0	13.5	13.5	11.5	12.5	9.5	9.5	9.5
28	16.0	15.0	15.5	14.0	13.0	13.5	13.0	11.5	12.5	9.5	9.0	9.0
29	16.5	14.0	15.0	14.5	13.5	14.0	14.5	11.5	13.0	9.5	9.0	9.0
30	15.0	14.0	14.5	15.0	13.5	14.0	14.5	11.0	13.0	9.5	9.0	9.5
31	---	---	---	15.5	14.0	14.5	14.0	10.5	12.5	---	---	---
MONTH	20.5	9.0	13.6	20.0	12.5	15.0	18.0	10.5	14.3	15.5	6.5	10.6

15129510 OLD SITUK RIVER NEAR YAKUTAT

LOCATION.--Lat 59°34'14", long 139°26'18", in NW¹/₄ NE¹/₄ NW¹/₄ sec. 23, T. 27 S., R. 35 E. (Yakutat C-4 quad.), Yakutat Borough, Hydrologic Unit 19010401, in Tongass National Forest, on right bank 100 ft downstream from Forest Hwy. 10, 10.5 mi northeast of Yakutat.

DRAINAGE AREA.--4.78 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 2003 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 77 ft above sea level, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	32	27	36	25	42	28	52	23	13	18	9.7
2	26	31	45	33	28	42	44	55	24	13	17	14
3	30	30	35	31	27	43	68	51	24	13	17	19
4	31	29	32	29	27	40	67	49	23	12	16	17
5	29	28	30	28	43	38	59	47	22	13	15	16
6	34	28	28	28	48	36	54	46	22	12	15	16
7	44	27	26	27	43	38	52	46	20	12	14	15
8	42	28	26	26	79	37	51	44	20	12	13	14
9	39	33	25	27	127	33	48	43	19	12	13	14
10	37	28	25	25	117	41	46	41	19	12	13	13
11	35	29	26	24	189	43	46	39	19	11	13	13
12	33	43	27	24	137	40	44	36	19	11	12	14
13	31	37	28	29	104	38	44	35	19	11	12	14
14	31	39	26	30	89	36	43	33	18	11	12	13
15	31	48	26	26	75	37	41	32	17	11	12	14
16	30	43	28	24	67	34	40	31	17	11	12	13
17	29	40	30	27	60	32	40	30	17	11	11	12
18	29	36	32	25	56	31	41	29	17	11	11	11
19	33	33	64	23	61	29	40	28	17	11	11	11
20	33	32	60	39	72	27	39	27	17	10	11	17
21	31	31	70	44	102	27	38	26	16	9.9	11	24
22	30	34	139	39	88	27	41	26	16	9.9	10	23
23	31	32	104	38	73	26	44	25	16	9.6	10	32
24	33	31	81	33	69	26	46	27	15	9.7	10	31
25	47	28	67	31	60	26	59	31	15	10	9.9	28
26	45	28	56	29	55	27	63	31	14	9.8	11	53
27	42	26	50	28	50	27	60	29	14	14	11	58
28	39	26	48	27	47	30	56	27	14	18	11	50
29	36	25	46	26	45	32	55	26	13	20	11	49
30	35	24	45	25	---	30	53	25	13	22	10	53
31	34	---	40	25	---	28	---	24	---	20	10	---
TOTAL	1056	959	1392	906	2063	1043	1450	1091	539	385.9	382.9	680.7
MEAN	34.1	32.0	44.9	29.2	71.1	33.6	48.3	35.2	18.0	12.4	12.4	22.7
MAX	47	48	139	44	189	43	68	55	24	22	18	58
MIN	26	24	25	23	25	26	28	24	13	9.6	9.9	9.7
AC-FT	2090	1900	2760	1800	4090	2070	2880	2160	1070	765	759	1350
CFSM	7.13	6.69	9.39	6.11	14.9	7.04	10.1	7.36	3.76	2.60	2.58	4.75
IN.	8.22	7.46	10.83	7.05	16.06	8.12	11.28	8.49	4.19	3.00	2.98	5.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)#

	2003	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004
MEAN	34.1	32.0	44.9	29.2	71.1	33.6	48.3	35.2	18.0	15.0	18.8	26.1
MAX	34.1	32.0	44.9	29.2	71.1	33.6	48.3	35.2	18.0	17.5	25.3	29.4
(WY)	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2003	2003
MIN	34.1	32.0	44.9	29.2	71.1	33.6	48.3	35.2	18.0	12.4	12.4	22.7
(WY)	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004

SUMMARY STATISTICS

FOR 2004 WATER YEAR

WATER YEARS 2003 - 2004#

ANNUAL TOTAL	11948.5		
ANNUAL MEAN	32.6	32.6	
HIGHEST ANNUAL MEAN		32.6	2004
LOWEST ANNUAL MEAN		32.6	2004
HIGHEST DAILY MEAN	189	Feb 11	189
LOWEST DAILY MEAN	9.6	Jul 23	9.6
ANNUAL SEVEN-DAY MINIMUM	9.8	Jul 20	9.8
MAXIMUM PEAK FLOW	a214	Feb 11	a214
MAXIMUM PEAK STAGE	15.14	Feb 11	15.14
INSTANTANEOUS LOW FLOW	b9.1	Jul 22	b9.1
ANNUAL RUNOFF (AC-FT)	23700		23650
ANNUAL RUNOFF (CFSM)	6.83		6.83
ANNUAL RUNOFF (INCHES)	92.99		92.80
10 PERCENT EXCEEDS	55		55
50 PERCENT EXCEEDS	29		29
90 PERCENT EXCEEDS	12		12

See Period of record; partial years were used in monthly summary statistics

a From rating curve extended above 58 ft³/s

b Jul. 22-27, Aug. 26, and Sep. 1

15129510 OLD SITUK RIVER NEAR YAKUTAT—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- June 2003 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 2003 to current year.

INSTRUMENTATION.--Water-temperature recorder set for 15 minute recording interval.

REMARKS.--Records represent water temperature at sensor within 0.5°C. No temperature cross sections were taken in the 2004 water year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 16.0°C, June 19,2004; minimum, 0.0°C on November 28, 2003, February 4, and March 9-10, 2004.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 16.0°C June 19; minimum, 0.0°C on November 28, February 4, and March 9-10.

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.5	6.0	6.5	3.5	3.0	3.5	3.0	0.5	1.5	2.5	1.5	2.0
2	7.5	5.5	6.5	4.5	3.5	4.0	3.0	0.5	1.5	1.5	1.0	1.0
3	7.0	6.0	6.5	3.5	3.0	3.0	2.5	1.5	2.0	1.5	1.0	1.0
4	7.5	6.5	7.0	3.0	2.5	3.0	3.0	2.0	2.5	1.0	1.0	1.0
5	7.0	6.5	6.5	3.5	2.5	3.0	3.5	3.0	3.0	1.5	1.0	1.0
6	7.0	6.0	6.5	4.0	3.0	3.5	3.0	2.5	2.5	1.5	0.5	1.0
7	7.5	6.5	7.0	4.5	3.5	4.0	3.0	2.5	3.0	1.5	1.0	1.0
8	7.0	6.0	6.5	5.0	4.0	4.5	3.5	3.0	3.0	2.5	1.5	2.0
9	6.5	5.5	6.0	5.0	3.5	4.0	3.0	2.5	3.0	3.0	1.5	3.0
10	6.0	5.0	5.5	3.5	3.0	3.5	3.5	2.5	3.0	3.5	3.0	3.0
11	6.0	4.5	5.0	4.0	3.0	3.5	3.5	3.5	3.5	3.0	2.5	2.5
12	5.0	3.5	4.5	4.5	3.5	4.0	3.5	3.5	3.5	3.0	2.5	2.5
13	5.5	4.0	4.5	4.0	2.5	3.5	3.5	3.0	3.0	3.5	3.0	3.0
14	5.0	3.5	4.0	3.5	2.0	2.5	3.0	2.0	2.5	3.0	2.5	2.5
15	4.5	3.0	4.0	4.0	3.5	3.5	3.5	3.0	3.5	2.5	2.0	2.0
16	5.0	3.0	4.0	4.0	3.0	3.5	3.5	2.5	3.0	2.5	1.5	2.0
17	5.5	3.5	4.5	3.0	2.0	3.0	4.0	3.5	3.5	2.5	1.0	2.0
18	5.5	4.5	5.0	2.5	1.5	2.0	3.5	3.0	3.5	3.0	2.5	3.0
19	6.0	5.0	5.5	2.5	1.5	2.0	3.5	3.0	3.5	3.0	2.0	2.5
20	6.0	4.5	5.5	2.0	1.0	1.5	3.5	3.0	3.0	3.0	2.5	3.0
21	5.0	3.5	4.5	3.0	1.5	2.5	4.0	3.0	3.5	3.5	3.0	3.5
22	5.5	5.0	5.0	3.5	2.0	3.0	4.0	2.5	3.5	3.5	3.0	3.5
23	5.5	5.0	5.0	3.5	2.5	3.0	3.0	2.5	3.0	3.5	2.5	3.0
24	5.5	5.0	5.0	3.5	2.5	3.0	3.5	3.0	3.0	2.5	2.0	2.0
25	6.5	5.5	6.0	3.0	2.0	2.5	3.0	2.5	3.0	2.0	0.5	1.0
26	6.0	5.5	6.0	2.5	1.5	2.0	3.0	2.0	2.5	1.0	0.5	0.5
27	5.5	4.5	5.0	2.0	1.0	1.5	2.0	2.0	2.0	1.5	0.5	1.0
28	4.5	3.5	4.0	2.0	0.0	1.0	3.0	1.5	2.5	1.0	1.0	1.0
29	4.0	3.0	3.5	1.5	1.0	1.5	3.5	3.0	3.0	2.0	0.5	1.5
30	4.5	3.5	4.0	2.0	0.5	1.5	3.5	3.0	3.5	2.0	1.5	2.0
31	4.5	3.5	4.0	---	---	---	3.0	2.5	3.0	3.0	2.0	2.5
MONTH	7.5	3.0	5.3	5.0	0.0	2.9	4.0	0.5	2.9	3.5	0.5	2.0

15129510 OLD SITUK RIVER NEAR YAKUTAT—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.0	2.0	2.5	4.5	3.0	4.0	4.5	1.5	3.0	7.0	5.5	6.0
2	3.0	2.0	2.5	4.0	3.5	3.5	4.0	2.5	3.5	8.5	5.0	6.5
3	3.0	1.5	2.5	4.0	3.5	3.5	3.5	3.0	3.5	10.0	5.0	7.0
4	3.0	0.0	1.5	3.5	3.0	3.5	5.0	2.5	4.0	10.0	4.5	7.0
5	3.0	2.0	2.5	3.5	2.5	3.0	5.0	3.0	4.0	10.0	5.0	7.0
6	2.5	2.0	2.5	3.5	2.5	3.0	5.5	3.5	4.5	10.0	4.5	7.0
7	3.0	2.0	2.5	4.0	2.5	3.5	4.5	3.5	4.0	7.0	6.0	6.5
8	3.0	2.5	3.0	3.0	1.0	2.5	6.0	2.5	4.5	7.0	5.5	6.0
9	3.0	2.0	2.5	3.5	0.0	2.0	5.5	4.0	4.5	8.5	5.5	6.5
10	3.5	3.0	3.0	2.5	0.0	1.5	7.0	3.0	4.5	9.0	5.0	7.0
11	3.0	2.5	2.5	4.0	2.0	3.0	7.0	2.5	4.5	11.0	5.0	7.5
12	3.0	2.5	3.0	4.0	3.0	3.5	6.0	3.5	4.5	11.0	5.5	8.0
13	4.0	3.0	3.5	5.0	3.0	3.5	6.5	4.0	5.0	11.0	5.5	8.0
14	4.0	3.5	3.5	3.0	1.5	2.5	7.5	4.0	5.5	7.5	6.5	7.0
15	3.5	3.0	3.0	3.5	1.5	2.5	8.0	3.0	5.0	8.5	6.0	7.0
16	4.0	3.0	3.5	4.5	3.0	3.5	6.5	4.0	5.0	7.5	6.0	6.5
17	4.0	3.0	3.5	5.0	3.0	3.5	6.5	4.5	5.0	10.0	6.0	7.5
18	3.5	3.0	3.5	4.5	2.0	3.0	5.5	4.0	4.5	9.0	6.5	7.5
19	3.5	3.0	3.5	4.0	1.5	2.5	7.0	3.0	5.0	11.0	6.5	8.5
20	4.0	3.5	3.5	4.5	2.0	3.0	8.0	3.5	5.5	12.5	6.5	9.0
21	4.0	3.5	4.0	5.5	1.5	3.0	8.0	3.5	5.5	13.0	7.0	9.5
22	4.0	3.0	3.5	5.5	2.5	4.0	5.0	4.0	5.0	13.0	7.0	9.5
23	4.0	3.5	4.0	6.0	2.5	4.0	5.0	3.5	4.5	9.0	7.0	8.0
24	4.5	3.5	3.5	5.0	3.0	4.0	5.0	4.0	4.5	8.0	6.5	7.0
25	3.5	2.5	3.0	4.0	3.0	3.5	5.5	4.0	5.0	7.5	6.5	7.0
26	3.5	2.5	3.0	4.5	2.5	3.5	5.5	4.5	5.0	7.5	6.5	7.0
27	3.5	2.0	3.0	5.0	2.0	3.5	6.5	4.0	5.0	8.0	6.5	7.0
28	4.5	3.0	3.5	4.0	3.0	3.5	6.0	4.5	5.5	9.5	6.0	7.5
29	4.5	3.5	4.0	5.0	3.5	4.0	9.0	4.0	6.0	11.0	6.0	8.0
30	---	---	---	4.0	1.5	3.0	9.5	4.5	6.5	8.5	6.0	7.0
31	---	---	---	4.0	2.0	2.5	---	---	---	9.0	6.0	7.5
MONTH	4.5	0.0	3.1	6.0	0.0	3.2	9.5	1.5	4.7	13.0	4.5	7.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.0	6.0	7.0	9.5	7.0	8.0	9.5	7.0	8.0	9.0	7.0	8.0
2	8.0	6.0	7.0	13.5	7.0	10.0	9.5	7.0	8.0	8.5	7.5	8.0
3	13.0	6.0	8.5	11.0	8.5	9.0	12.0	6.5	9.0	9.5	8.0	8.5
4	11.0	6.5	8.5	10.5	7.5	9.0	12.5	6.5	9.0	9.0	6.0	7.5
5	8.5	7.0	7.5	10.0	8.0	9.0	12.5	6.5	9.5	9.5	6.0	7.5
6	13.5	6.5	9.5	14.0	7.5	10.0	12.0	7.5	9.5	8.0	5.5	7.0
7	9.5	7.5	8.0	15.0	8.5	11.5	12.0	7.0	9.5	8.5	4.5	6.0
8	9.0	7.0	7.5	15.0	8.5	11.5	12.5	7.0	9.5	8.0	4.0	6.0
9	9.0	6.0	7.5	11.5	9.5	10.5	13.0	7.0	9.5	8.0	4.0	6.0
10	8.0	6.5	7.0	13.0	8.5	10.0	12.5	7.0	10.0	7.5	4.5	6.0
11	9.0	6.0	7.5	14.5	8.0	10.5	11.0	8.5	9.5	8.0	5.0	6.5
12	11.5	6.5	8.5	14.5	9.0	11.0	11.0	7.0	8.5	7.0	6.0	6.0
13	14.0	6.5	9.5	12.5	9.5	10.5	12.5	7.0	9.5	7.5	6.0	6.5
14	10.0	7.5	8.0	10.0	8.5	9.0	12.5	7.0	9.5	7.5	6.0	6.5
15	9.5	6.5	8.0	14.5	8.0	10.5	12.0	7.5	10.0	8.0	5.5	6.5
16	9.5	6.5	7.5	15.0	8.5	11.5	12.5	7.5	10.0	8.0	5.5	6.5
17	14.0	6.5	9.5	12.0	9.5	10.5	13.0	8.0	10.0	7.5	4.0	6.0
18	14.5	7.5	10.5	10.5	8.5	9.5	10.5	8.0	9.5	7.0	4.0	5.5
19	16.0	7.5	11.0	12.0	8.0	9.5	9.5	8.0	9.0	6.5	4.0	5.5
20	15.5	7.5	11.0	12.5	8.0	10.0	10.5	7.5	9.0	7.0	6.0	6.5
21	15.5	8.0	11.0	11.5	9.5	10.5	11.0	7.5	9.0	7.5	6.5	7.0
22	15.0	8.0	11.0	10.0	9.0	9.5	12.5	7.0	9.0	7.0	6.0	6.5
23	15.0	8.0	11.0	10.0	7.5	9.0	12.0	7.0	9.5	7.5	6.5	6.5
24	15.5	8.5	11.5	12.0	8.0	9.5	11.5	7.5	9.5	7.0	6.0	6.5
25	15.0	8.5	11.5	11.0	9.0	9.5	9.0	7.5	8.0	6.0	5.5	6.0
26	13.0	9.0	11.0	9.5	8.0	8.5	8.5	7.5	8.0	7.5	6.0	6.5
27	11.5	8.5	10.0	9.5	8.5	9.0	9.5	7.5	8.5	7.0	6.0	6.5
28	9.5	8.0	8.5	9.5	8.5	9.0	9.0	7.5	8.5	6.0	5.5	6.0
29	10.5	7.5	8.5	9.5	8.0	8.5	10.0	7.0	8.5	6.5	5.5	6.0
30	9.0	7.5	8.0	9.5	8.0	8.5	10.5	6.5	8.5	7.0	6.0	6.5
31	---	---	---	9.5	7.0	8.5	10.5	6.5	8.0	---	---	---
MONTH	16.0	6.0	9.0	15.0	7.0	9.7	13.0	6.5	9.1	9.5	4.0	6.5

15129600 OPHIR CREEK NEAR YAKUTAT

LOCATION.--Lat 59°31'26", long 139°44'37", in SW¹/₄ NW¹/₄ NE¹/₄ sec. 1, T. 28 S., R. 33 E. (Yakutat C-5 SW quad), Hydrologic Unit 19010401, in Tongass National Forest, on right bank 0.8 mi upstream from Summit Lake and 2 mi south of Yakutat.

DRAINAGE AREA.-- 2.5 mi², approximately.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 9.05 ft above sea level, determined by levels survey.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	9.1	6.5	22	16	23	18	20	3.0	1.2	1.9	1.1
2	8.0	8.4	15	22	18	22	23	20	3.3	1.2	1.8	1.8
3	9.6	7.6	12	22	18	22	36	19	3.1	1.1	1.7	2.8
4	12	6.9	11	21	19	21	36	18	3.0	1.1	1.5	2.4
5	12	6.5	9.8	20	29	21	31	17	2.9	1.2	1.5	2.0
6	15	6.1	9.1	19	35	20	28	16	2.8	1.0	1.3	1.8
7	17	5.8	8.1	e17	28	20	27	15	2.7	1.0	1.3	1.5
8	16	6.1	7.4	16	42	20	27	14	2.3	0.98	1.2	1.6
9	15	8.7	6.7	17	60	19	26	13	2.2	0.94	1.2	1.5
10	13	7.3	6.4	17	56	22	26	12	2.2	0.92	1.1	1.3
11	13	7.5	6.5	16	74	24	24	12	2.0	0.83	1.2	1.3
12	11	14	8.4	15	64	23	23	11	1.9	0.81	1.1	1.3
13	10	12	11	19	52	22	22	10	1.9	0.73	0.99	1.3
14	9.6	14	11	22	45	21	22	9.2	1.9	0.72	0.94	1.2
15	8.8	20	11	19	39	22	22	8.5	1.8	0.66	0.91	1.3
16	8.2	18	12	18	35	22	21	7.7	1.8	0.62	0.84	2.0
17	7.4	16	16	19	31	21	20	7.7	1.8	0.62	0.73	1.7
18	7.2	14	16	20	29	20	21	6.1	1.8	0.61	0.65	1.4
19	9.6	13	37	18	29	19	21	5.5	1.7	0.52	0.68	1.3
20	11	12	36	26	33	18	20	5.0	1.5	0.52	0.59	2.8
21	10	11	36	33	45	17	19	5.6	1.5	0.47	0.50	6.8
22	9.8	11	61	28	42	17	21	4.1	1.5	0.61	0.41	5.5
23	10	11	51	26	36	17	23	3.6	1.4	0.45	0.32	13
24	13	10	40	24	35	16	24	3.5	1.3	0.43	0.29	12
25	19	9.6	34	21	32	16	30	4.1	1.3	0.36	0.19	8.6
26	16	9.2	28	20	29	16	29	4.3	1.3	0.37	0.40	17
27	14	8.1	26	19	27	16	26	4.2	1.3	1.7	1.0	19
28	13	7.7	24	18	26	18	24	3.8	1.3	3.4	1.5	16
29	12	6.9	25	17	24	21	23	3.5	1.2	2.9	1.5	17
30	11	6.1	27	17	---	20	21	3.4	1.2	2.5	1.3	18
31	10	---	24	16	---	19	---	3.0	---	2.2	1.2	---
TOTAL	360.0	303.6	632.9	624	1048	615	734	289.8	58.9	32.67	31.74	166.3
MEAN	11.6	10.1	20.4	20.1	36.1	19.8	24.5	9.35	1.96	1.05	1.02	5.54
MAX	19	20	61	33	74	24	36	20	3.3	3.4	1.9	19
MIN	7.2	5.8	6.4	15	16	16	18	3.0	1.2	0.36	0.19	1.1
AC-FT	714	602	1260	1240	2080	1220	1460	575	117	65	63	330
CFSM	4.65	4.05	8.17	8.05	14.5	7.94	9.79	3.74	0.79	0.42	0.41	2.22
IN.	5.36	4.52	9.42	9.29	15.59	9.15	10.92	4.31	0.88	0.49	0.47	2.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	29.9	24.3	23.0	19.2	17.2	15.6	15.1	12.9	6.43	4.11	8.49	17.5	
MAX	60.7	43.8	49.1	42.7	36.1	38.3	28.3	34.4	19.7	9.67	19.4	30.8	
(WY)	2000	2001	2000	2001	2004	1992	1998	1999	1999	1998	1998	1998	
MIN	11.6	10.1	8.96	5.13	3.31	4.13	2.68	5.26	1.96	0.66	1.02	5.54	
(WY)	2004	2004	1996	1993	1999	1999	2002	2003	2004	1993	2004	2004	

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1992 - 2004
ANNUAL TOTAL	3750.6	4896.91	
ANNUAL MEAN	10.3	13.4	16.1
HIGHEST ANNUAL MEAN			23.3
LOWEST ANNUAL MEAN			10.9
HIGHEST DAILY MEAN	61	Dec 22	e118
LOWEST DAILY MEAN	a2.1	Aug 11	0.19
ANNUAL SEVEN-DAY MINIMUM	2.3	Aug 7	0.39
MAXIMUM PEAK FLOW		79	Feb 11
MAXIMUM PEAK STAGE		11.88	Feb 11
INSTANTANEOUS LOW FLOW		c0.10	Aug 25
ANNUAL RUNOFF (AC-FT)	7440	9710	11700
ANNUAL RUNOFF (CFSM)	4.11	5.35	6.46
ANNUAL RUNOFF (INCHES)	55.81	72.87	87.76
10 PERCENT EXCEEDS	19	28	34
50 PERCENT EXCEEDS	8.3	11	12
90 PERCENT EXCEEDS	3.0	1.1	3.1

a Aug. 11 and Aug. 13

b May have been exceeded during period of gage malfunction from Dec. 25 to 28, 1999

c Aug. 25 and 26

d Minimum recorded, Aug. 24 and 25, 2004, but may have been less during period water was below intake Jul. 28, Aug. 2, and Aug. 8 to Aug. 10, 1993

e Estimated

15199500 SINONA CREEK NEAR CHISTOCHINA

LOCATION.--Lat 62°35'28", long 144°38'48", in SW¹/₄ of NW¹/₄ sec. 3, T. 9 N., R. 4 E., (Gulkana C-2 quad), Hydrologic Unit 19020101, on downstream left bank, at Glenn Highway/Tok Cutoff (Alaska Route 1) bridge, 1.8 miles NE of Chistochina.

DRAINAGE AREA.-- 167 mi²

PERIOD OF RECORD.--September 2002 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,900 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

REVISIONS.--The maximum discharge for water year 2003 has been revised to 194 ft³/s, May 13, 2003. Revised daily discharges, in cubic feet per second, for May 11-14, 2003, are given below. These figures supercede those published in the report for 2003.

May 11.....160 May 13.....178
12.....178 May 14.....160

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	e10	e5.5	e3.5	e1.4	e3.5	e5.5	e12	27	21	12	12
2	15	e10	e5.5	e3.5	e1.4	e3.5	e5.5	e16	29	20	12	13
3	15	e10	e5.5	e3.5	e1.4	e3.5	e5.5	e21	28	20	11	15
4	15	e9.5	e5.5	e3.0	e1.4	e3.5	e5.5	e29	39	18	11	18
5	15	e9.5	e5.5	e3.0	e1.4	e3.5	e5.5	e39	63	16	10	16
6	16	e9.5	e5.5	e3.0	e1.4	e3.5	e5.5	e50	53	16	9.6	15
7	16	e9.5	e5.5	e3.0	e1.4	e3.5	e6.0	e70	41	17	9.1	14
8	16	e9.5	e5.5	e3.0	e1.4	e3.5	e6.0	e100	37	16	9.5	14
9	17	e9.5	e5.0	e3.0	e2.0	e4.0	e6.0	e135	36	17	8.3	13
10	17	e9.0	e5.0	e3.0	e2.0	e4.0	e6.0	e175	82	16	8.4	13
11	e17	e9.0	e5.0	e3.0	e2.0	e4.0	e6.0	e230	129	15	7.9	13
12	e16	e9.0	e5.0	e3.0	e2.0	e4.5	e6.5	e310	124	14	10	13
13	15	e9.0	e5.0	e3.0	e2.0	e4.5	e6.5	e350	94	13	8.6	13
14	e15	e8.5	e5.0	e2.5	e2.0	e4.5	e6.5	326	70	13	8.4	13
15	15	e8.5	e4.5	e2.5	e2.5	e4.5	e6.5	243	53	12	11	13
16	e15	e8.0	e4.5	e2.5	e2.5	e4.5	e6.5	179	43	14	10	13
17	e15	e7.5	e4.5	e2.5	e2.5	e4.5	e6.5	137	36	12	10	13
18	e15	e7.0	e4.5	e2.5	e2.5	e4.5	e7.0	103	32	10	9.8	13
19	15	e7.0	e4.5	e2.5	e2.5	e4.5	e7.0	79	29	11	9.7	13
20	14	e7.0	e4.5	e2.5	e2.5	e4.5	e7.0	62	28	10	11	14
21	14	e7.0	e4.5	e2.0	e3.0	e5.0	e7.0	50	25	12	12	14
22	e14	e7.0	e4.5	e2.0	e3.0	e5.0	e7.5	41	25	12	11	14
23	16	e6.5	e4.0	e2.0	e3.0	e5.0	e7.5	35	24	11	11	16
24	14	e6.5	e4.0	e2.0	e3.0	e5.0	e7.5	32	22	12	11	17
25	14	e6.0	e4.0	e2.0	e3.0	e5.0	e7.5	30	21	14	11	16
26	15	e6.0	e4.0	e2.0	e3.0	e5.0	e8.0	28	22	13	12	16
27	15	e6.0	e4.0	e2.0	e3.0	e5.0	e8.0	27	22	13	12	17
28	e14	e6.0	e3.5	e2.0	e3.0	e5.0	e8.5	28	20	13	13	17
29	e13	e6.0	e3.5	e1.4	e3.0	e5.5	e8.5	27	20	14	14	17
30	e12	e5.5	e3.5	e1.4	---	e5.5	e8.5	26	19	13	13	16
31	e11	---	e3.5	e1.4	---	e5.5	---	28	---	12	13	---
TOTAL	462	239.0	144.0	78.2	65.2	137.0	201.5	3018	1293	440	330.3	434
MEAN	14.9	7.97	4.65	2.52	2.25	4.42	6.72	97.4	43.1	14.2	10.7	14.5
MAX	17	10	5.5	3.5	3.0	5.5	8.5	350	129	21	14	18
MIN	11	5.5	3.5	1.4	1.4	3.5	5.5	12	19	10	7.9	12
AC-FT	916	474	286	155	129	272	400	5990	2560	873	655	861
CFSM	0.09	0.05	0.03	0.02	0.01	0.03	0.04	0.58	0.26	0.09	0.06	0.09
IN.	0.10	0.05	0.03	0.02	0.01	0.03	0.04	0.67	0.29	0.10	0.07	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)#

	2002	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2004
MEAN	53.4	18.4	6.09	4.05	6.22	6.22	8.49	103	41.3	15.0	11.7	33.5
MAX	91.9	28.9	7.53	5.58	10.3	8.02	10.3	110	43.1	15.7	12.7	70.8
(WY)	2003	2003	2003	2003	2003	2003	2003	2003	2004	2003	2003	2002
MIN	14.9	7.97	4.65	2.52	2.25	4.42	6.72	97.4	39.5	14.2	10.7	14.5
(WY)	2004	2004	2004	2004	2004	2004	2004	2004	2003	2004	2004	2004

See Period of Record, partial years used in monthly statistics
e Estimated

15199500 SINONA CREEK NEAR CHISTOCHINA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004#	
ANNUAL TOTAL	7779.8		6842.2			
ANNUAL MEAN	21.3		18.7		24.3	
HIGHEST ANNUAL MEAN					29.8	
LOWEST ANNUAL MEAN					18.7	
HIGHEST DAILY MEAN	178	May 12	350	May 13	350	May 13 2004
LOWEST DAILY MEAN	a3.5	Dec 28	b1.4	Jan 29	b1.4	Jan 29 2004
ANNUAL SEVEN-DAY MINIMUM	3.7	Dec 25	1.4	Jan 29	1.4	Jan 29 2004
MAXIMUM PEAK FLOW			370	May 13	370	May 13 2004
MAXIMUM PEAK STAGE			7.75	May 13	7.75	May 13 2004
MAXIMUM PEAK STAGE			c11.55	May 01	c11.55	May 01 2004
ANNUAL RUNOFF (AC-FT)	15430		13570		17570	
ANNUAL RUNOFF (CFSM)	0.128		0.112		0.145	
ANNUAL RUNOFF (INCHES)	1.73		1.52		1.97	
10 PERCENT EXCEEDS	48		29		65	
50 PERCENT EXCEEDS	12		9.5		12	
90 PERCENT EXCEEDS	5.5		2.5		4.0	

See Period of Record, partial years used in monthly statistics

a Dec. 28-31

b Jan. 29 to Feb. 8

c Backwater from ice

15200280 GULKANA RIVER AT SOURDOUGH

LOCATION.--Lat 62°31'15", long 145°31'51", in SE¹/₄ NE¹/₄ sec. 35, T. 9 N., R. 2 W. (Gulkana C-4 quad), Hydrologic Unit 19020102, near left bank on downstream side of pier of Alyeska Pipeline Service Company bridge, 0.3 mi downstream from Sourdough Creek and 0.8 mi southwest of Sourdough.

DRAINAGE AREA.--1,770 mi².

PERIOD OF RECORD.--October 1972 to September 1978, May to September 1982, October 1988 to September 1993, May 1997 to September 2004 (discontinued).

REVISED RECORDS.--WRD AK-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,845.96 ft above sea level (levels of Alyeska Engineering).

REMARKS.--Records good except for estimated daily discharges, which are poor. Rain gage at station. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1280	e560	e490	e390	e260	e280	e360	e1200	2620	819	501	469
2	1290	e560	e490	e390	e260	e280	e360	e1500	2690	806	500	483
3	1280	e560	e490	e380	e260	e280	e360	e2250	4020	784	486	514
4	1220	e560	e490	e370	e260	e280	e360	e3000	4300	767	458	570
5	1190	e560	e490	e360	e260	e280	e360	e4000	3560	761	440	597
6	1160	e560	e490	e350	e260	e280	e360	5860	2990	798	426	571
7	1140	e560	e490	e350	e260	e280	e360	6190	2640	794	408	543
8	1100	e550	e490	e340	e260	e280	e365	6940	2870	753	397	510
9	1090	e550	e490	e340	e260	e280	e365	7110	3820	724	393	483
10	1110	e550	e490	e330	e260	e280	e365	7270	4220	694	386	466
11	1070	e550	e490	e330	e270	e290	e365	6130	4010	653	384	457
12	989	e550	e490	e320	e270	e300	e370	5320	3520	613	382	447
13	971	e540	e480	e320	e270	e310	e370	5040	3060	576	381	471
14	934	e530	e480	e310	e270	e320	e370	4600	2700	548	383	470
15	824	e520	e480	e310	e270	e320	e370	4210	2440	523	386	471
16	748	e520	e470	e300	e270	e320	e375	3880	2200	500	385	459
17	690	e510	e470	e300	e270	e320	e380	3540	2000	483	387	463
18	652	e510	e460	e300	e270	e320	e390	3220	1840	465	386	451
19	e640	e510	e460	e290	e270	e320	e400	2830	1710	457	383	429
20	e630	e510	e460	e290	e270	e320	e410	2600	1570	444	396	448
21	e620	e500	e450	e290	e270	e320	e420	2310	1450	441	406	472
22	e610	e500	e450	e290	e280	e320	e450	2130	1340	439	409	495
23	e600	e500	e440	e280	e280	e330	e500	2000	1240	432	406	534
24	e600	e500	e440	e280	e280	e340	e550	2020	1160	414	402	584
25	e600	e500	e430	e280	e280	e340	e590	2330	1080	409	414	623
26	e600	e500	e430	e280	e280	e340	e640	2830	1020	419	436	623
27	e600	e500	e420	e280	e280	e340	e700	2830	968	424	465	681
28	e600	e500	e420	e270	e280	e340	e790	3080	917	435	476	731
29	e590	e490	e410	e270	e280	e350	e880	3250	874	460	491	687
30	e580	e490	e410	e270	---	e350	e1000	3010	841	489	486	637
31	e570	---	e400	e270	---	e360	---	2790	---	501	476	---
TOTAL	26578	15800	14340	9730	7810	9670	13935	115270	69670	17825	13115	15839
MEAN	857	527	463	314	269	312	464	3718	2322	575	423	528
MAX	1290	560	490	390	280	360	1000	7270	4300	819	501	731
MIN	570	490	400	270	260	280	360	1200	841	409	381	429
AC-FT	52720	31340	28440	19300	15490	19180	27640	228600	138200	35360	26010	31420
CFSM	0.48	0.30	0.26	0.18	0.15	0.18	0.26	2.10	1.31	0.32	0.24	0.30
IN.	0.56	0.33	0.30	0.20	0.16	0.20	0.29	2.42	1.46	0.37	0.28	0.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2004, BY WATER YEAR (WY)#

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004			
MEAN	1053	594	445	369	324	315	475	3106	2690	1440	1289	1394																							
MAX	2369	1362	1005	801	670	563	1344	5630	4969	2696	2821	4253																							
(WY)	2003	2003	2003	2003	2003	2003	1993	1989	1977	1992	1992	1990																							
MIN	437	287	208	200	200	200	227	836	1150	575	423	505																							
(WY)	1975	1976	1974	1974	1974	1974	2000	2002	1998	2004	2004	1974																							

See period of record, partial years used in monthly statistics
e Estimated

15200280 GULKANA RIVER AT SOURDOUGH—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1973 - 2004#	
ANNUAL TOTAL	362387		329582			
ANNUAL MEAN	993		900		1125	
HIGHEST ANNUAL MEAN					1564	
LOWEST ANNUAL MEAN					658	
HIGHEST DAILY MEAN	3270	May 19	7270	May 10	12100	Sep 12 1990
LOWEST DAILY MEAN	400	Dec 31	a260	Feb 1	b200	Dec 6 1973
ANNUAL SEVEN-DAY MINIMUM	417	Dec 25	260	Feb 1	200	Dec 6 1973
MAXIMUM PEAK FLOW			7600	May 10	c12700	Sep 12 1990
MAXIMUM PEAK STAGE			9.50	May 10	11.26	Sep 12 1990
MAXIMUM PEAK STAGE					d16.03	May 07 1976
ANNUAL RUNOFF (AC-FT)	718800		653700		814800	
ANNUAL RUNOFF (CFSM)	0.561		0.509		0.635	
ANNUAL RUNOFF (INCHES)	7.62		6.93		8.63	
10 PERCENT EXCEEDS	2000		2610		2620	
50 PERCENT EXCEEDS	748		482		624	
90 PERCENT EXCEEDS	500		280		250	

See period of record, partial years used in monthly statistics
a Feb. 1-10
b Dec. 6, 1973 to Apr. 12, 1974
c From rating curve extended above 4,600 ft³/s
d Backwater from ice

15215990 NICOLET CREEK NEAR CORDOVA

LOCATION.--Lat 60°31'09", long 145°47'23", in SW¹/₄ SW¹/₄ SE¹/₄ sec. 32, T. 15 S., R. 3 W. (Cordova C-5 quad), Hydrologic Unit 19020201, on right bank 275 ft upstream from culvert for Whitshed Road, 475 ft upstream from mouth and 2.1 mi southwest of Cordova.

DRAINAGE AREA.--0.75 mi².

PERIOD OF RECORD.--Annual maximum, water years 1991-99. September 1999 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 40 ft above sea level, from topographic map.

REMARKS.--Records good except for discharges greater than 60 ft³/s, which are fair; and estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e8.5	0.86	e0.90	e1.1	e1.5	0.89	0.99	19	15	0.34	1.4	0.63
2	e18	0.97	e0.70	e1.0	e1.1	3.1	94	19	4.7	0.28	0.95	13
3	e70	0.82	e0.60	e1.0	e1.3	8.9	61	8.1	4.5	0.28	0.61	13
4	3.8	0.72	e0.90	e1.0	e9.0	e3.0	13	7.9	1.9	0.74	0.41	3.3
5	12	0.66	e0.60	e1.0	e15	e1.5	6.2	7.8	1.3	0.83	0.34	1.5
6	29	1.9	e1.0	e1.0	e10	e1.0	44	7.3	1.1	0.54	0.29	1.1
7	43	14	e1.0	e1.0	e6.0	e1.0	58	7.8	0.87	0.31	0.27	0.81
8	6.2	57	e5.0	e1.0	e21	e1.0	16	5.5	1.2	0.25	0.25	0.71
9	14	5.0	e12	e1.5	e10	e1.0	31	6.8	1.2	0.22	0.23	0.62
10	34	1.7	8.8	e2.5	111	e2.0	6.4	5.7	2.2	0.24	0.20	0.59
11	2.6	3.0	20	e1.1	25	4.4	4.0	5.1	2.5	0.22	0.33	0.51
12	1.9	15	12	e1.0	e2.0	8.1	3.7	5.5	1.2	0.21	0.38	0.50
13	1.5	2.6	16	e0.90	e1.5	5.5	3.5	4.6	0.80	0.20	0.26	0.44
14	1.2	1.5	4.6	e0.85	e1.0	2.8	5.0	3.9	0.61	0.21	0.23	0.45
15	1.0	1.2	4.7	e0.80	e0.90	1.8	5.8	3.0	0.66	0.19	0.19	0.46
16	0.85	0.96	4.8	e0.75	e0.80	1.5	6.9	16	6.9	0.17	0.17	0.38
17	0.74	e0.90	31	e0.70	e0.70	1.2	10	16	31	0.20	0.15	0.37
18	1.5	e0.80	4.4	e0.70	e0.70	e1.1	18	4.8	2.7	1.1	0.14	0.34
19	28	e0.70	18	2.1	e2.0	e1.3	5.9	3.4	1.2	1.5	0.33	0.98
20	15	e0.60	8.2	48	30	e1.1	4.6	2.6	0.82	0.62	0.51	18
21	2.4	e1.0	37	83	86	e1.0	4.4	2.0	0.61	1.5	0.27	15
22	1.6	e3.0	28	26	21	e0.90	27	1.7	0.46	31	0.21	49
23	23	e2.0	3.3	e4.0	e3.5	0.83	15	3.4	0.39	5.7	0.17	38
24	11	e1.5	2.6	e2.0	e3.0	0.74	25	29	0.33	1.9	0.14	3.9
25	34	e1.1	3.5	e1.5	e2.5	1.6	49	33	0.30	1.5	0.13	66
26	22	e1.1	1.8	e1.1	e2.0	1.9	8.4	6.0	0.26	29	6.8	e200
27	5.5	e1.0	1.2	e1.1	e2.0	2.1	51	2.1	0.25	74	24	e50
28	2.0	e1.0	1.1	e1.0	e1.0	1.5	56	3.9	0.26	25	23	e20
29	1.3	e1.0	e3.0	e1.0	e1.0	1.7	24	2.3	0.32	6.2	2.4	e18
30	1.1	e0.95	e2.0	e1.0	---	1.3	13	1.4	0.30	2.9	1.2	e80
31	0.97	---	e1.5	e1.1	---	1.2	---	7.1	---	2.1	0.77	---
TOTAL	397.66	124.54	240.20	191.80	372.50	66.96	670.79	251.7	85.84	189.45	66.73	597.59
MEAN	12.8	4.15	7.75	6.19	12.8	2.16	22.4	8.12	2.86	6.11	2.15	19.9
MAX	70	57	37	83	111	8.9	94	33	31	74	24	200
MIN	0.74	0.60	0.60	0.70	0.70	0.74	0.99	1.4	0.25	0.17	0.13	0.34
AC-FT	789	247	476	380	739	133	1330	499	170	376	132	1190
CFSM	17.1	5.54	10.3	8.25	17.1	2.88	29.8	10.8	3.82	8.15	2.87	26.6
IN.	19.72	6.18	11.91	9.51	18.48	3.32	33.27	12.48	4.26	9.40	3.31	29.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)#

	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
MEAN	16.0	11.0	12.7	13.6	10.5	5.16	11.5	10.0	5.47	5.47	8.16	11.1			
MAX	20.2	19.8	20.4	26.6	20.7	10.2	22.4	16.1	9.35	6.79	15.2	19.9			
(WY)	2001	2003	2000	2001	2003	2000	2004	2000	2002	2001	2003	2004			
MIN	10.4	4.15	5.33	6.19	2.00	2.16	3.56	6.27	1.59	3.88	2.15	6.69			
(WY)	2002	2004	2003	2004	2002	2004	2003	2003	2001	2003	2004	2003			

See Period of Record and Remarks
e Estimated

15215990 NICOLET CREEK NEAR CORDOVA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004#	
ANNUAL TOTAL	2873.75		3255.76			
ANNUAL MEAN	7.87		8.90		10.1	
HIGHEST ANNUAL MEAN					11.7 2001	
LOWEST ANNUAL MEAN					8.90 2004	
HIGHEST DAILY MEAN	124	Feb 5	200	Sep 26	200	Sep 26 2004
LOWEST DAILY MEAN	a0.10	Mar 12	0.13	Aug 25	a0.10	Mar 12 2003
ANNUAL SEVEN-DAY MINIMUM	0.41	Apr 1	0.20	Jul 11	0.19	Jun 27 2001
MAXIMUM PEAK FLOW			b740	Sep 26	cd988	Nov 3 1994
MAXIMUM PEAK STAGE					d19.60	Nov 3 1994
MAXIMUM PEAK STAGE			26.53	Sep 26	26.53	Sep 26 2004
INSTANTANEOUS LOW FLOW			f0.10	Jul 17	f0.10	Jul 17 2004
ANNUAL RUNOFF (AC-FT)	5700		6460		7290	
ANNUAL RUNOFF (CFSM)	10.5		11.9		13.4	
ANNUAL RUNOFF (INCHES)	142.54		161.49		182.19	
10 PERCENT EXCEEDS	23		26		30	
50 PERCENT EXCEEDS	2.0		1.7		3.5	
90 PERCENT EXCEEDS	0.55		0.33		0.74	

See Period of Record and Remarks

a Mar. 12 and 13

b From rating extended above 33 ft³/s on basis of step-backwater analysis

c From rating curve extended above 66 ft³/s on basis of slope-area measurement of peak flow

d Site and datum then in use

f Minimum observed, but may have been lower during periods of ice effect.

15225990 SOLOMON LAKE NEAR VALDEZ

LOCATION.--Lat 61°04'25", long 146°18'08", in NE¹/₄ SW¹/₄ sec. 21, T. 9 S., R. 6 W. (Valdez A-7 SE quad), Hydrologic Unit 19020201, within Valdez Corporate boundary, at outlet of Solomon Lake, 0.7 mi upstream from mouth of Solomon Gulch, and 4.6 mi southeast of Valdez.

DRAINAGE AREA.--19.2 mi².

PERIOD OF RECORD.--October 1991 to current year. Additional unpublished records prior to period of record available from Copper Valley Electric Association and in station files of Geological Survey.

REMARKS.--Reservoir is formed by a rockfill dam at outlet of Solomon Lake. Reservoir is used for power; power-plant operation began January 6, 1982. Usable capacity is 31,500 acre-feet below spillway crest at 685 ft. Discharge released to the penstocks is accounted for at Solomon Gulch Tailrace (station 15225996). Releases through the dam to maintain minimum flows, spillway releases, and incremental flow are accounted for at the Solomon Gulch at top of falls gage (station 15225997).

COOPERATION.--Reservoir contents furnished by Copper Valley Electric Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents 32,500 acre-ft, September 21, 1993, from crest-stage gage and rating extended above 31,500 acre-ft; minimum contents, 2,167 acre-ft, May 1, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 32,100 acre-ft September 30, elevation, 686.14 ft, from crest-stage gage and rating extended above 31,500 acre-ft; minimum contents, 4,070 acre-ft, April 30 and May 1, elevation, 625.3 ft.

MONTH END RESERVOIR ELEVATION, IN FEET, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
SEP 30	684.6	31,100	----
OCT 31	678.3	26,600	-4,500
NOV 30	672.8	23,500	-3,100
DEC 31	666.8	20,400	-3,100
JAN 31	658.2	16,100	-4,300
FEB 29	649.7	12,500	-3,600
MAR 31	638.5	8,170	-4,330
APR 30	625.6	4,150	-4,020
MAY 31	648.8	12,100	+7,950
JUN 30	673.6	24,000	+11,900
JUL 31	678.4	26,700	+2,700
AUG 31	----	25,300e	-1,400e
SEP 30	684.4	30,900	+5,600e
		CAL YR 2003	-3,600
		WTR YR 2004	-200

e Estimated

15225996 SOLOMON GULCH TAILRACE NEAR VALDEZ

LOCATION.--Lat 61°05'01", long 146°18'10", in NE¹/₄ SE¹/₄ SW¹/₄ sec. 16, T. 9 S., R. 6 W. (Valdez A-7 SE quad), Hydrologic Unit 19020201, within Valdez Corporate boundary, on left wingwall of tailrace pool of Copper Valley Electric Association powerhouse facility, 350 ft upstream from mouth at Solomon Gulch, and 3.8 mi southeast of Valdez.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 40 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharge, which is poor. Discharge shown herein is flow through the Solomon Gulch Power Plant turbines. Solomon Lake, 0.8 mi upstream, supplies water to the power-plant through two 48-in. diameter penstocks. Water for the fish hatchery, diverted upstream from the gage, is not included in these published daily values. Annual mean discharge for these diversions for 2004 water year was 11.6 ft³/s.

COOPERATION.--Records of daily discharge diverted to the fish hatchery are furnished by Valdez Fisheries Development Association. Copper Valley Electric Association provides tables of hourly power output through the turbines.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 293 ft³/s, January 2 and 3, 1992, gage height, 3.04 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 255 ft³/s, July 6, and August 18, gage height, 2.98 ft, but may have been higher during period of missing record; no flow for period on May 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	182	e105	65	52	46	57	67	73	189	212	197	221
2	185	e105	52	59	64	51	67	87	201	182	209	220
3	183	e110	53	58	68	52	61	84	202	211	213	215
4	174	e110	51	60	68	58	64	83	202	207	208	208
5	179	e110	59	63	62	57	69	92	200	217	209	207
6	185	e85	56	57	58	60	71	103	195	218	212	206
7	185	e85	58	56	49	60	71	173	195	220	211	213
8	151	e105	75	48	43	75	65	210	205	218	205	217
9	182	e90	75	42	52	77	65	208	204	217	217	217
10	180	e95	56	52	54	71	57	216	202	204	217	124
11	171	e105	54	49	57	58	54	216	202	204	218	85
12	174	e95	55	50	55	59	64	214	199	216	215	84
13	185	e95	52	54	54	58	68	217	198	207	185	70
14	184	87	54	56	49	51	65	216	203	214	219	60
15	182	82	72	48	51	65	66	209	209	213	218	57
16	e180	88	75	52	69	66	71	211	208	211	209	64
17	e185	109	73	68	76	58	65	219	206	205	211	63
18	e185	106	70	65	74	73	60	217	208	204	224	56
19	e185	94	56	58	72	79	53	216	204	204	228	60
20	e190	76	50	54	58	76	52	117	202	206	179	58
21	e190	67	48	51	53	71	62	205	209	204	218	55
22	e190	62	46	68	49	62	78	193	206	202	214	61
23	e190	63	47	68	54	67	81	197	208	199	220	59
24	e190	68	47	55	57	70	83	213	207	198	223	54
25	e190	87	50	57	69	86	81	205	190	196	223	54
26	e180	92	63	53	65	88	91	186	209	201	222	67
27	e190	74	69	55	65	74	96	183	210	206	224	150
28	e190	74	52	53	58	73	92	182	173	207	213	210
29	e150	70	46	68	57	76	82	176	213	201	205	209
30	e200	61	42	68	---	82	76	173	212	208	210	205
31	e120	---	48	47	---	73	---	176	---	205	217	---
TOTAL	5587	2655	1769	1744	1706	2083	2097	5470	6071	6417	6593	3829
MEAN	180	88.5	57.1	56.3	58.8	67.2	69.9	176	202	207	213	128
MAX	200	110	75	68	76	88	96	219	213	220	228	221
MIN	120	61	42	42	43	51	52	73	173	182	179	54
AC-FT	11080	5270	3510	3460	3380	4130	4160	10850	12040	12730	13080	7590
CAL YR 2003	TOTAL	47422	MEAN	130	MAX	223	MIN	36	AC-FT	94060		
WTR YR 2004	TOTAL	46021	MEAN	126	MAX	228	MIN	42	AC-FT	91280		

e Estimated

15225997 SOLOMON GULCH AT TOP OF FALLS NEAR VALDEZ

LOCATION.--Lat 61°04'45", long 146°18'11", in SE¹/₄ NE¹/₄ NW¹/₄ sec. 21, T. 9 S., R. 6 W. (Valdez A-7 SE quad), Hydrologic Unit 19020201, within Valdez Corporate boundary, on right bank, 72 ft above Alyeska Pipeline Service Company Bridge, 150 ft upstream from top of falls, 0.3 mi upstream from mouth, and 4.2 mi southeast of Valdez.

DRAINAGE AREA.--Indeterminate.

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

REVISED RECORDS.--WDR AK-00-1: 1999.

GAGE.--Water-stage recorder. Elevation of gage is 400 ft above sea level, from topographic map. Prior to October 1, 1991, discharge computed for site 150 ft downstream at datum 72.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Discharge shown herein represents controlled releases from bypass valve and flow over the spillway of dam at Solomon Lake, 0.5 mi upstream, plus inflow between the spillway and the gage. Spillway crest elevation is 685 ft above sea level, from construction plans. Water for power generation is diverted from Solomon Lake (see records for station 15225996). Water is diverted for fish hatchery use 1,150 ft downstream from gage. Reservoir spilled October 1-9, September 26, and 30.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,280 ft³/s, October 11, 1986, by computation of peak flow by several indirect measurement methods; gage height, 82.20 ft from water surface profiles for 1986 flood at top of falls and at datum 72.00 ft lower (12.90 ft from profile at present site and datum); minimum daily discharge, about 0.20 ft³/s, January 23 to April 6, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 987 ft³/s, October 3, gage height, 7.58 ft, maximum gage height, 7.72 ft, September 30; minimum daily discharge, 3.0 ft³/s, April 5, and September 17-18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	301	5.9	4.3	4.0	3.6	3.5	e3.1	11	6.1	3.6	3.9	3.4
2	199	5.8	4.3	3.9	3.6	3.4	3.1	15	5.5	3.6	3.8	3.6
3	614	5.8	4.3	3.9	3.5	3.3	3.1	11	5.1	3.5	3.8	3.7
4	252	5.6	4.2	3.9	3.5	3.3	3.1	14	4.8	3.6	3.7	3.7
5	185	5.5	4.1	3.9	3.5	3.3	3.0	16	4.6	3.7	3.7	3.5
6	105	5.5	4.1	3.9	3.6	3.2	3.1	14	4.4	3.6	3.7	3.5
7	82	5.8	4.1	e3.9	3.6	3.3	3.5	14	4.1	3.6	3.7	3.4
8	81	11	4.0	3.9	3.6	3.2	4.0	11	4.1	3.5	3.7	3.4
9	39	7.7	4.0	3.9	3.7	3.2	3.9	11	4.1	3.5	3.6	3.4
10	7.3	6.4	4.0	e3.8	e3.7	3.3	3.9	10	4.1	3.5	3.6	3.3
11	6.5	6.1	4.1	3.8	e3.7	3.3	3.7	12	4.0	3.5	3.6	3.1
12	6.2	6.2	4.0	3.8	e3.7	3.3	3.7	12	3.9	3.5	3.5	3.1
13	6.1	5.9	4.0	3.8	3.7	3.3	3.7	12	3.8	3.5	3.4	3.1
14	6.0	5.7	4.1	3.8	3.6	3.3	3.6	12	3.7	3.5	3.4	3.1
15	5.9	5.5	4.0	e3.7	3.6	3.3	3.9	12	3.7	3.5	3.3	3.1
16	5.8	5.3	4.0	e3.7	3.5	3.2	4.1	11	3.8	3.5	3.3	3.1
17	5.7	5.1	4.0	3.7	3.5	3.2	4.3	10	7.1	3.5	3.3	3.0
18	5.6	5.0	4.1	3.7	3.5	3.2	4.5	11	4.9	3.5	3.3	3.0
19	6.0	4.8	4.0	3.7	3.4	e3.2	4.3	11	4.2	3.5	3.4	3.1
20	6.2	4.9	4.0	3.8	3.5	3.3	4.1	12	4.0	3.6	3.5	3.5
21	5.9	4.9	4.0	3.8	e3.5	3.1	4.3	11	3.9	3.6	3.4	3.5
22	5.8	4.9	e4.0	3.8	e3.5	3.2	4.2	10	3.8	3.6	3.4	5.9
23	5.9	4.9	e4.0	3.8	e3.5	3.1	4.4	9.6	3.8	3.6	3.3	10
24	7.1	4.9	4.0	3.8	e3.5	3.1	4.3	9.9	3.7	3.6	3.3	5.2
25	9.3	4.6	4.0	3.7	3.6	3.1	5.3	10	3.7	3.6	3.3	12
26	14	4.6	3.9	3.7	3.5	3.1	6.3	8.7	3.6	3.7	3.5	51
27	8.1	4.6	e4.0	3.7	3.5	3.1	7.0	7.9	3.6	4.0	3.8	16
28	6.8	4.5	e4.0	3.7	3.4	3.1	7.1	7.1	3.6	4.9	3.9	7.0
29	6.3	4.4	4.0	3.7	3.4	3.1	7.7	6.7	3.6	5.2	3.6	10
30	6.1	4.4	4.0	3.6	---	3.1	8.1	6.5	3.6	4.4	3.5	193
31	6.0	---	4.0	3.6	---	3.1	---	7.9	---	4.0	3.4	---
TOTAL	2006.6	166.2	125.6	117.4	103.0	99.8	132.4	337.3	126.9	115.0	109.6	379.7
MEAN	64.7	5.54	4.05	3.79	3.55	3.22	4.41	10.9	4.23	3.71	3.54	12.7
MAX	614	11	4.3	4.0	3.7	3.5	8.1	16	7.1	5.2	3.9	193
MIN	5.6	4.4	3.9	3.6	3.4	3.1	3.0	6.5	3.6	3.5	3.3	3.0
AC-FT	3980	330	249	233	204	198	263	669	252	228	217	753
CAL YR 2003	TOTAL	6635.9	MEAN	18.2	MAX	614	MIN	2.7	AC-FT	13160		
WTR YR 2004	TOTAL	3819.5	MEAN	10.4	MAX	614	MIN	3.0	AC-FT	7580		

e Estimated

15226000 SOLOMON GULCH NEAR VALDEZ

LOCATION.--Lat 61°05'02", long 146°18'13", in NE¹/₄ SE¹/₄ SW¹/₄ sec. 16, T. 9 S., R. 6 W. (Valdez A-7 SE quad), Hydrologic Unit 19020201, at bridge crossing at mouth and 3.8 mi southeast across Port Valdez from Valdez.

DRAINAGE AREA.--19.7 mi².

PERIOD OF RECORD.--July to December 1948, October 1949 to September 1956, and September 1986 to current year.

GAGE.--Nonrecording gage. Elevation of gage is at sea level. July 9, 1948 to May 21, 1950, nonrecording gage, and May 22, 1950 to September 30, 1956, water-stage recorder at about present site and datum.

REMARKS.-- Records fair. Discharge data represent the flow at mouth which includes Solomon Gulch at top of falls (station 15225997), power plant tailrace (station 15225996), and all fish hatchery diversions. Water for power generation is diverted by a dam at Solomon Lake, 0.8 mi upstream. Water is diverted for the fish hatchery by a 24-in. penstock aeration system, and a 24-in. penstock line from the tailrace weir pool. An unaerated penstock and an 8-in. pipe for warm water supply are upstream. Additional water is diverted to the fish hatchery from Solomon Gulch bypass channel about 750 ft above gage, by means of a 12-in. diameter pipe. The fish hatchery discharges water directly into Port Valdez. Average daily diversion to fish hatchery for 2004 water year was 11.6 ft³/s. Power generation began January 6, 1982.

COOPERATION.--Records of daily discharge diverted to the fish hatchery are furnished by Valdez Fisheries Development Association. Copper Valley Electric Association provides tables of hourly power output through the turbines and monthly storage values for Solomon Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	511	120	77	63	57	68	e75	90	198	216	228	253
2	412	e120	64	70	75	62	75	107	210	186	240	252
3	825	e125	65	69	79	63	69	100	210	215	243	248
4	454	e125	63	71	79	69	72	101	210	211	238	240
5	392	e123	71	75	73	68	77	114	208	221	239	239
6	318	e101	68	69	69	71	79	124	203	222	242	238
7	295	e101	70	e68	60	71	80	194	202	224	242	245
8	261	e127	87	60	54	86	74	227	212	222	235	248
9	250	e108	87	54	64	88	74	225	212	220	248	249
10	217	e112	69	e64	e66	82	66	233	209	208	249	156
11	206	e122	67	61	e68	69	63	234	209	208	250	117
12	209	e111	68	62	e66	70	72	231	205	220	247	116
13	220	e111	65	66	66	69	77	233	204	210	217	100
14	219	101	67	68	60	62	74	231	209	218	251	92
15	216	96	85	e60	62	76	76	224	215	225	250	90
16	e194	102	88	e64	80	77	81	225	214	238	241	96
17	e199	123	86	79	87	69	75	232	216	232	243	95
18	e199	120	83	76	85	84	70	231	214	231	256	88
19	e199	108	69	70	83	e90	63	230	210	231	260	92
20	e204	90	62	66	69	87	61	133	208	233	211	91
21	e204	81	60	63	e64	81	72	220	214	231	250	87
22	e204	76	e59	80	e60	72	86	206	211	229	246	96
23	e204	76	e60	80	e65	76	90	210	213	226	252	98
24	e205	82	60	66	e68	79	93	227	212	225	255	88
25	e207	100	63	68	80	95	92	218	195	223	255	96
26	e202	105	75	64	76	97	102	198	214	228	254	148
27	e206	87	e81	67	76	83	108	194	215	234	256	196
28	e205	87	e64	65	69	82	105	192	178	238	246	247
29	e164	83	59	79	68	84	95	186	218	233	237	249
30	e214	74	55	80	---	91	89	183	217	239	242	429
31	e134	---	61	58	---	81	---	187	---	236	247	---
TOTAL	8149	3097	2158	2105	2028	2402	2385	5940	6265	6933	7570	5079
MEAN	263	103	69.6	67.9	69.9	77.5	79.5	192	209	224	244	169
MAX	825	127	88	80	87	97	108	234	218	239	260	429
MIN	134	74	55	54	54	62	61	90	178	186	211	87
AC-FT	16160	6140	4280	4180	4020	4760	4730	11780	12430	13750	15020	10070

ADJUSTED FOR CHANGE IN STORAGE IN SOLOMON LAKE

MEAN	190	51.1	19.2	e0.0	e5.3	7.0	11.9	321	409	268	222	263
AC-FT	11660	3040	1180	e0.0	e300	430	710	19730	24330	16450	13620	15670
CFM	9.63	2.59	0.97	e0.0	e0.27	0.35	0.61	16.29	20.75	13.58	11.24	13.37
IN	11.11	2.90	1.12	e0.0	e0.29	0.41	0.68	18.80	23.18	15.67	12.98	14.93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2004, BY WATER YEAR (WY)#

MEAN	201	109	98.2	92.5	89.1	83.5	75.8	154	186	266	296	323
MAX	435	228	180	138	130	138	132	213	229	410	462	501
(WY)	2003	2003	2003	1995	1987	2003	2003	1993	1990	2001	1993	1989
MIN	97.2	77.1	69.0	63.0	58.9	5.08	26.2	103	145	177	152	152
(WY)	1997	1993	2002	2003	2002	1991	1991	1992	1988	1991	1996	1996

e Estimated

15226000 SOLOMON GULCH NEAR VALDEZ—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1986 - 2004#	
ANNUAL TOTAL	58262		54111			
ANNUAL MEAN	160		148		165	
ANNUAL MEAN	*154		*147		*165	
HIGHEST ANNUAL MEAN					197 1990	
LOWEST ANNUAL MEAN					125 1996	
HIGHEST DAILY MEAN	825	Oct 3	825	Oct 3	2270	Sep 24 1989
LOWEST DAILY MEAN	50	Jan 20	a54	Jan 9	1.0	Apr 12 1989
ANNUAL SEVEN-DAY MINIMUM	54	Feb 11	62	Dec 19	2.3	Mar 24 1991
ANNUAL RUNOFF (AC-FT)	115600		107300		119800	
ANNUAL RUNOFF (AC-FT)	*111950		*107120		*119500	
ANNUAL RUNOFF (CFSM)	*7.80		*7.47		*8.38	
ANNUAL RUNOFF (IN)	*106.67		*102.07		*113.74	
10 PERCENT EXCEEDS	235		243		279	
50 PERCENT EXCEEDS	127		106		123	
90 PERCENT EXCEEDS	58		64		68	

PRIOR TO CONSTRUCTION OF SOLOMON GULCH HYDROELECTRIC PROJECT

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1956, BY WATER YEAR (WY) #

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	124	58.9	18.3	13.3	10.4	8.82	10.9	102	370	385	322	260
MAX	304	131	35.6	20.9	12.2	11.1	18.3	224	544	514	442	574
(WY)	1953	1953	1950	1956	1954	1953	1953	1953	1953	1955	1956	1951
MIN	48.0	21.7	4.00	1.40	3.57	7.19	6.57	36.5	261	277	254	126
(WY)	1951	1951	1949	1951	1951	1951	1950	1955	1951	1950	1950	1955

SUMMARY STATISTICS

WATER YEARS 1948 - 1956#

ANNUAL MEAN	143	
HIGHEST ANNUAL MEAN	194	1953
LOWEST ANNUAL MEAN	126	1950
HIGHEST DAILY MEAN	1530	Sep 4 1951
LOWEST DAILY MEAN	.50	Dec 31 1950
ANNUAL SEVEN-DAY MINIMUM	1.0	Jan 10 1951
MAXIMUM PEAK FLOW	b2420	Sep 4 1951
MAXIMUM PEAK STAGE	c6.50	Sep 4 1951
INSTANTANEOUS LOW FLOW	d.00	Feb 20 1954
ANNUAL RUNOFF (AC-FT)	103900	
ANNUAL RUNOFF (CFSM)	7.28	
ANNUAL RUNOFF (INCHES)	98.89	
10 PERCENT EXCEEDS	396	
50 PERCENT EXCEEDS	49	
90 PERCENT EXCEEDS	8.0	

See Period of Record and Remarks. Values shown on this page are unadjusted for change in storage in Solomon Lake, unless otherwise noted

* Adjusted for change in storage in Solomon Lake Jan. 9 and Feb. 8

a From rating curve extended above 620 ft³/s

c Site and datum then in use

d No flow sometime during period Feb. 20 to Mar. 3, 1954, caused by temporary storage upstream

15236900 WOLVERINE CREEK NEAR LAWING—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1967 - 2004#	
ANNUAL TOTAL	49176.4		53477.5			
ANNUAL MEAN	135		146		94.5	
HIGHEST ANNUAL MEAN					146 2004	
LOWEST ANNUAL MEAN					66.6 1970	
HIGHEST DAILY MEAN	1840	Oct 6	1840	Oct 6	1930	Aug 28 2001
LOWEST DAILY MEAN	a2.0	Jan 1	b1.8	Feb 10	c0.00	Dec 2 2000
ANNUAL SEVEN-DAY MINIMUM	2.0	Jan 1	1.8	Feb 10	0.00	Dec 2 2000
MAXIMUM PEAK FLOW			3570	Oct 7	d4160	Aug 28 2001
MAXIMUM PEAK STAGE			5.01	Oct 7	5.27	Aug 28 2001
MAXIMUM PEAK STAGE					f6.28	Aug 21 1981
ANNUAL RUNOFF (AC-FT)	97540		106100		68440	
ANNUAL RUNOFF (CFSM)	14.2		15.4		9.93	
ANNUAL RUNOFF (INCHES)	192.36		209.19		134.98	
10 PERCENT EXCEEDS	368		428		321	
50 PERCENT EXCEEDS	9.9		10		6.0	
90 PERCENT EXCEEDS	2.0		1.8		1.0	

See Period of Record; partial years used in monthly statistics

a Jan. 1 to Mar. 23, and Apr. 4-22

b Feb. 10 to Apr. 29

c No flow most days during winter

d From rating curve extended above 1,290 ft³/s

f From floodmarks, date approximate: flow over dense snow

15237730 GROUSE CREEK AT GROUSE LAKE OUTLET NEAR SEWARD

LOCATION.--Lat 60°11'54", long 149°22'24", in NE¹/₄ NE¹/₄ NW¹/₄ sec. 12, T. 1 N., R. 1 W. (Seward A-7 NE quad), Kenai Peninsula Borough, Hydrologic Unit 19020202, on right bank, 200 ft downstream from Grouse Lake outlet, 0.2 mi upstream from Seward Highway, 7 mi north of Seward.

DRAINAGE AREA.--6.22 mi².

PERIOD OF RECORD.--June 1997 to current year.

GAGE.--Water stage recorder and crest-stage gage. Elevation of gage is 250 ft above sea level from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Rain gage recorder at station. GOES satellite telemetry and phone modem at station.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 100 ft³/s and water year maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage Height(ft)	Date	Time	Discharge (ft ³ /s)	Gage Height(ft)
Oct 03	13:00	145	6.53	May 06	21:00	128	6.31
Oct 06	20:45	*149	*6.58	Jun 17	12:30	131	6.34

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	15	e6.0	7.5	5.6	11	e6.5	65	49	12	10	6.8
2	40	15	6.4	7.1	5.7	11	e7.0	77	46	12	9.9	7.1
3	101	14	6.8	7.0	5.8	11	e8.0	72	43	11	9.4	7.4
4	72	13	7.4	6.7	5.7	10	e8.0	78	42	11	8.8	6.9
5	51	12	6.9	6.7	5.6	9.7	e10	98	42	11	8.7	6.9
6	111	13	6.6	6.6	5.4	9.2	e20	114	40	10	8.8	7.2
7	122	12	6.7	6.5	5.4	8.8	e35	114	e38	9.7	8.7	6.4
8	77	12	7.2	6.4	5.8	8.3	e32	103	e36	9.5	8.3	6.3
9	51	12	8.6	6.7	5.7	7.4	e30	87	35	9.2	8.4	6.3
10	41	11	14	6.9	8.2	9.0	27	82	33	9.0	8.2	5.8
11	35	11	14	6.8	11	8.6	26	86	31	8.7	8.0	5.8
12	31	11	14	6.4	9.2	8.5	22	91	28	8.5	7.9	5.9
13	25	10	13	6.4	8.6	8.4	19	93	25	8.4	7.7	e5.8
14	e24	9.9	11	6.2	9.0	8.4	18	91	23	8.1	7.8	e5.7
15	e21	8.6	11	6.0	8.6	8.2	18	82	21	8.0	e7.6	5.7
16	e18	8.2	10	5.9	8.1	7.7	21	79	40	7.8	e7.5	5.6
17	16	8.2	9.7	6.0	7.6	7.5	27	81	106	7.7	e7.4	5.5
18	15	7.9	9.2	6.2	7.2	7.2	26	81	60	7.8	e7.3	5.5
19	15	7.7	8.9	6.4	8.0	6.6	24	84	41	7.7	e7.3	5.8
20	14	8.0	8.7	6.5	7.6	6.7	24	93	34	7.5	7.3	6.9
21	13	8.4	8.5	6.4	11	6.9	23	96	29	7.5	7.2	7.1
22	13	8.2	8.6	7.5	19	6.9	27	91	23	7.9	6.8	7.2
23	12	7.7	8.1	6.6	19	6.8	29	89	19	8.7	6.5	10
24	13	7.8	7.6	6.2	16	6.8	27	82	17	7.8	6.3	8.5
25	16	7.5	7.0	6.0	15	6.8	30	77	16	7.2	6.6	7.9
26	29	e6.5	7.1	6.1	14	e6.7	34	e65	15	12	6.7	22
27	28	e6.0	6.9	6.0	13	e6.7	39	e60	14	17	8.1	13
28	21	e6.0	7.3	5.8	12	e6.6	43	e55	14	14	8.5	11
29	18	e6.0	8.2	5.5	11	e6.6	45	53	13	13	7.8	10
30	16	e6.0	9.8	5.4	---	e6.5	47	50	13	12	7.3	13
31	15	---	8.4	5.6	---	e6.0	---	51	---	11	7.1	---
TOTAL	1118	289.6	273.6	198.0	273.8	246.5	752.5	2520	986	302.7	243.9	235.0
MEAN	36.1	9.65	8.83	6.39	9.44	7.95	25.1	81.3	32.9	9.76	7.87	7.83
MAX	122	15	14	7.5	19	11	47	114	106	17	10	22
MIN	12	6.0	6.0	5.4	5.4	6.0	6.5	50	13	7.2	6.3	5.5
AC-FT	2220	574	543	393	543	489	1490	5000	1960	600	484	466
CFSM	5.80	1.55	1.42	1.03	1.52	1.28	4.03	13.1	5.28	1.57	1.26	1.26
IN.	6.69	1.73	1.64	1.18	1.64	1.47	4.50	15.07	5.90	1.81	1.46	1.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)#

	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	27.7	28.6	18.7	17.1	13.6	8.81	18.4	53.6
MAX	60.8	83.3	39.7	58.0	45.0	15.6	38.6	81.3
(WY)	2003	2003	2003	2001	2003	1998	1998	2004
MIN	11.8	7.41	8.83	5.23	3.34	2.69	5.81	29.9
(WY)	1998	2002	2004	1998	1999	1999	2002	2003

See Period of Record, partial year used in monthly statistics
e Estimated

15237730 GROUSE CREEK AT GROUSE LAKE OUTLET NEAR SEWARD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004#	
ANNUAL TOTAL	6003.8		7439.6			
ANNUAL MEAN	16.4		20.3		21.8	
HIGHEST ANNUAL MEAN					27.3	
LOWEST ANNUAL MEAN					15.4	
HIGHEST DAILY MEAN	277	Feb 5	122	Oct 7	326	Nov 23 2002
LOWEST DAILY MEAN	4.6	Aug 10	5.4	Jan 30	a2.1	Mar 9 1999
ANNUAL SEVEN-DAY MINIMUM	4.7	Aug 5	5.6	Feb 1	2.2	Mar 4 1999
MAXIMUM PEAK FLOW			149	Oct 6	478	Feb 5 2003
MAXIMUM PEAK STAGE			6.58	Oct 6	b8.14	Feb 5 2003
INSTANTANEOUS LOW FLOW			4.1	Mar 15	c1.5	Apr 7 1999
ANNUAL RUNOFF (AC-FT)	11910		14760		15790	
ANNUAL RUNOFF (CFSM)	2.64		3.27		3.50	
ANNUAL RUNOFF (INCHES)	35.91		44.49		47.60	
10 PERCENT EXCEEDS	33		52		55	
50 PERCENT EXCEEDS	10		9.1		11	
90 PERCENT EXCEEDS	6.0		6.2		5.6	

See Period of Record, partial year used in monthly statistics

a Mar. 9 and 10, 1999

b From crest-stage gage.

c From temporary blockage of channel upstream from gage

15238600 SPRUCE CREEK NEAR SEWARD

LOCATION.--Lat 60°04'10", long 149°27'08", in SW¼ SE¼ sec. 21, T. 1 S., R. 1 W. (Seward A-7 quad), Kenai Peninsula Borough, Hydrologic Unit 19020202, on left bank 0.7 mi upstream from mouth at Resurrection Bay and 2.4 mi south of Seward.

DRAINAGE AREA.--9.26 mi².

PERIOD OF RECORD.--September 1967 to September 1979, annual maximum, water years 1980-90. October 1990 to current year.

REVISED RECORDS.--WDR AK-76-1: 1966-67(M), 1970(M), 1972(M). WDR AK-77-1: 1969(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 75 ft above sea level, from topographic map.

REMARKS.--Records good, except estimated daily discharges and discharges below 7.0 ft³/s, which are poor. Precipitation gage at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 21, 1966, reached a stage of 10.1 ft, from floodmarks; discharge, 3,090 ft³/s, by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Oct. 1	0030	*2170	*7.02	July 26	unknown	1510	6.60
Jun. 16	2245	1150	6.33	Sep. 26	0930	1590	6.65

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	750	45	12	11	2.5	8.1	0.02	49	169	195	e130	55
2	469	42	11	9.6	2.3	8.0	0.43	54	163	164	e120	115
3	521	40	11	8.8	1.9	8.0	2.5	53	153	152	e120	72
4	265	38	12	8.0	1.7	7.4	2.3	83	176	166	e110	48
5	231	37	11	7.3	1.4	6.7	9.1	133	209	156	e110	38
6	464	51	11	6.7	1.1	6.0	19	154	241	215	e105	34
7	560	75	10	6.1	0.89	5.4	34	138	264	264	e96	31
8	319	71	11	e5.5	2.7	5.1	33	114	239	281	e92	28
9	182	58	38	e5.0	2.7	e4.6	29	100	211	294	e90	26
10	144	47	44	e4.5	14	4.3	25	97	166	236	e86	26
11	110	41	23	e4.5	20	3.9	19	109	151	182	e78	24
12	90	38	19	e4.0	17	4.4	16	116	147	165	e72	23
13	76	33	16	e4.0	14	4.0	15	120	159	139	e70	22
14	92	28	14	e3.5	15	3.9	14	118	202	113	e68	19
15	99	25	13	e3.0	14	3.4	14	112	209	101	e66	17
16	74	23	12	e3.0	13	2.8	15	173	504	103	e64	16
17	62	20	11	e2.5	11	2.5	16	198	814	132	e62	14
18	55	19	10	e2.5	9.8	e2.4	15	188	474	165	e60	13
19	56	20	9.8	e2.5	9.0	e2.2	15	179	397	122	e58	14
20	50	19	9.3	2.4	8.3	2.1	14	281	356	98	e56	19
21	45	20	8.8	4.1	15	0.98	14	320	325	e100	e54	33
22	40	19	8.5	7.8	33	0.44	14	276	318	e110	e52	38
23	37	17	8.0	6.9	23	0.26	14	263	277	e94	e52	50
24	50	16	7.6	6.8	17	0.19	14	260	238	e110	e50	33
25	109	16	7.3	6.4	14	0.14	15	259	257	e150	60	47
26	185	14	7.0	5.9	12	0.11	16	209	313	e200	73	464
27	148	13	6.5	5.2	11	0.08	44	196	266	e180	67	114
28	94	13	6.5	4.6	9.8	0.07	43	193	227	e160	56	67
29	69	13	16	4.0	8.9	0.04	31	167	209	e140	48	59
30	57	12	14	e3.5	---	0.07	32	164	216	e135	50	123
31	50	---	12	2.9	---	e0.05	---	172	---	e130	42	---
TOTAL	5553	923	410.3	162.5	305.99	97.63	544.35	5048	8050	4952	2317	1682
MEAN	179	30.8	13.2	5.24	10.6	3.15	18.1	163	268	160	74.7	56.1
MAX	750	75	44	11	33	8.1	44	320	814	294	130	464
MIN	37	12	6.5	2.4	0.89	0.04	0.02	49	147	94	42	13
AC-FT	11010	1830	814	322	607	194	1080	10010	15970	9820	4600	3340
CFSM	19.3	3.32	1.43	0.57	1.14	0.34	1.96	17.6	29.0	17.3	8.07	6.05
IN.	22.31	3.71	1.65	0.65	1.23	0.39	2.19	20.28	32.34	19.89	9.31	6.76

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2004, BY WATER YEAR (WY)#

	1967	1974	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004		
MEAN	95.3	44.2	18.8	11.1	11.2	4.06	12.7	76.8	203	188	145	163																				
MAX	333	249	89.0	46.1	53.1	15.3	35.6	163	318	371	323	372																				
(WY)	1970	2003	2003	2001	2003	1970	1969	2004	2001	1977	1977	1995																				
MIN	17.0	9.40	3.52	0.65	0.00	0.00	0.12	30.6	116	104	56.9	48.8																				
(WY)	1997	1974	1997	1974	1972	1971	1972	1971	1972	1997	1969	2000																				

See Period of Record, partial year used in monthly statistics
e Estimated

15238600 SPRUCE CREEK NEAR SEWARD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1967 - 2004#	
ANNUAL TOTAL	28355.7		30045.77			
ANNUAL MEAN	77.7		82.1		80.8	
HIGHEST ANNUAL MEAN					123 1977	
LOWEST ANNUAL MEAN					50.6 1996	
HIGHEST DAILY MEAN	750	Oct 1	814	Jun 17	1650	Oct 11 1969
LOWEST DAILY MEAN	1.4	Apr 7	0.02	Apr 1	a0.00	Mar 1 1969
ANNUAL SEVEN-DAY MINIMUM	1.6	Apr 4	0.06	Mar 26	0.00	Mar 1 1969
MAXIMUM PEAK FLOW			2170	Oct 1	b13600	Oct 11 1986
MAXIMUM PEAK STAGE			c7.02	Oct 1	d13.96	Oct 11 1986
INSTANTANEOUS LOW FLOW			f0.00	Mar 29	0.00	Mar 1 1969
ANNUAL RUNOFF (AC-FT)	56240		59600		58520	
ANNUAL RUNOFF (CFSM)	8.39		8.87		8.72	
ANNUAL RUNOFF (INCHES)	113.91		120.70		118.53	
10 PERCENT EXCEEDS	185		215		208	
50 PERCENT EXCEEDS	46		36		34	
90 PERCENT EXCEEDS	7.0		3.3		1.7	

- # See Period of Record, partial year used in monthly statistics
a No flow many days in water years 1969, 1971-76, 1992, 1996, 1999, and 2002
b Slope-area measurement of the release of water temporarily stored behind a debris-avalanche dam. Inflow into the ponded area was 5,420 ft³/s, from a slope-area measurement made about 0.3 mi upstream at a site with a drainage area of 8.98 mi²
c From crest-stage gage
d From floodmarks
f Mar. 29 to Apr. 2, 2004

15238648 UPPER NUKA RIVER NEAR PARK BOUNDARY NEAR HOMER

LOCATION.--Lat 59°41'04", long 150°42'12" (Seldovia C-2 quad), Kenai Peninsula Borough, Hydrologic Unit 19020202, on left bank, 0.4 mi downstream from terminus of Nuka Glacier, 4.9 mi southeast of Bradley Lake, and 29 mi east of Homer, Alaska.

DRAINAGE AREA.--Indeterminate. Prior to July 29, 1990, drainage area was about 3 mi² and varied according to position of glacier terminus.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1980-81, prior to shift in glacier terminus; September 1984 to current year. Records prior to July 29, 1990, are not equivalent. Published as "Upper Nuka River near Homer" prior to October 1989. Low-flow records not equivalent prior to November 1987 because most low-flow measurements were made at site 0.5 mi downstream.

REVISED RECORDS.--WDR AK-89-1: 1985 (M), 1986-88.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,300 ft above sea level, from topographic map.

REMARKS.--Records fair except estimated daily discharges, which are poor. Water is diverted, 300 ft upstream from gage, into Bradley River drainage since July 29, 1990. Precipitation gage and air temperature recorder at station; daily values of precipitation and air temperature are available from the computer files of the Alaska Science Center, Water Resources Office. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	1.2	0.00	0.00	0.00	e0.00	0.00	e0.00	e1.0	2.5	3.6	1.6
2	57	0.88	e0.00	0.00	0.00	e0.00	0.00	e0.00	e2.0	1.9	8.6	2.0
3	12	0.64	e0.00	0.00	0.00	e0.00	0.00	e0.00	e4.0	1.6	5.9	1.7
4	2.1	0.64	e0.00	0.00	0.00	e0.00	0.00	e0.00	e5.0	1.7	1.8	1.0
5	5.7	0.68	e0.00	0.00	0.00	e0.00	0.00	e0.00	e6.0	2.6	3.3	0.72
6	21	1.7	e0.00	0.00	0.00	e0.00	0.00	e0.00	e5.0	6.0	2.9	0.84
7	12	1.2	e0.00	0.00	0.00	e0.00	0.00	e0.00	e5.0	12	4.5	0.84
8	1.4	0.75	0.00	0.00	0.00	e0.00	0.00	e0.00	e5.0	13	3.4	0.73
9	0.84	0.66	0.00	0.00	0.00	e0.00	0.00	e0.00	2.7	11	2.4	0.72
10	0.78	0.62	0.00	0.00	0.00	e0.00	0.00	e0.00	9.2	8.7	5.0	0.86
11	0.69	e0.50	0.00	0.00	0.00	e0.00	0.00	e0.00	13	8.7	2.0	0.77
12	0.61	0.49	0.00	0.00	0.00	e0.00	0.00	e0.00	4.0	7.7	3.2	0.69
13	0.63	0.45	0.00	0.00	0.00	0.00	0.00	e0.00	4.1	4.5	2.9	0.66
14	13	e0.40	0.00	0.00	0.00	0.00	0.00	e0.00	6.0	2.1	2.5	0.55
15	19	e0.30	0.00	0.00	0.00	0.00	0.00	e0.00	8.4	1.4	2.3	0.49
16	0.93	e0.20	0.00	0.00	0.00	0.00	0.00	e0.00	23	2.5	4.7	0.46
17	0.68	e0.10	0.00	0.00	0.00	0.00	0.00	e0.00	30	6.4	6.5	0.43
18	0.67	e0.00	0.00	0.00	0.00	0.00	0.00	e0.00	21	4.1	3.2	0.42
19	0.57	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	18	3.0	2.1	0.80
20	0.50	0.00	0.00	0.00	e0.00	0.00	0.00	e0.00	16	2.0	1.7	1.1
21	0.47	0.00	0.00	0.00	e0.00	0.00	0.00	e0.00	12	2.4	2.5	0.76
22	0.47	0.00	0.00	0.00	e0.00	0.00	0.00	e0.00	8.5	8.3	2.5	1.2
23	0.47	0.00	0.00	0.00	e0.00	0.00	0.00	e0.00	9.6	12	2.6	0.94
24	0.53	0.00	0.00	0.00	e0.00	0.00	0.00	e0.00	9.6	2.3	1.7	0.71
25	4.2	0.00	0.00	0.00	e0.00	0.00	0.00	e0.00	10	5.1	2.5	0.76
26	17	0.00	0.00	0.00	e0.00	0.00	0.00	e0.00	14	22	1.4	24
27	4.8	0.00	0.00	0.00	e0.00	0.00	0.00	e0.00	13	22	1.1	2.4
28	0.83	0.00	0.00	0.00	e0.00	0.00	0.00	e0.00	13	15	0.74	0.82
29	0.68	0.00	0.00	0.00	e0.00	0.00	e0.00	e0.10	4.1	2.3	0.98	0.77
30	0.59	0.00	0.00	0.00	---	0.00	e0.00	e0.20	4.0	1.8	1.3	7.6
31	0.71	---	0.00	0.00	---	0.00	---	e0.30	---	1.7	1.4	---
TOTAL	363.85	11.41	0.00	0.00	0.00	0.00	0.00	0.60	286.2	198.3	91.22	57.34
MEAN	11.7	0.38	0.00	0.00	0.00	0.00	0.00	0.02	9.54	6.40	2.94	1.91
MAX	183	1.7	0.00	0.00	0.00	0.00	0.00	0.30	30	22	8.6	24
MIN	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.0	1.4	0.74	0.42
AC-FT	722	23	0.00	0.00	0.00	0.00	0.00	1.2	568	393	181	114

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)#

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	7.81	4.00	0.26	0.04	0.18	0.01	0.01	1.28	27.4	36.1	18.5	12.5		
MAX	62.1	36.7	2.15	0.16	1.56	0.10	0.12	9.96	209	272	53.1	41.1		
(WY)	2003	2003	2003	1995	1994	2003	2003	2003	1999	1999	1998	2002		
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	2.96	0.97	1.72		
(WY)	1992	1992	1991	1991	1991	1991	1991	1992	1992	1991	1991	1991		

See Period of Record and Remarks. Not adjusted to account for changes in drainage area
e Estimated

15238648 UPPER NUKA RIVER NEAR PARK BOUNDARY NEAR HOMER—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004#	
ANNUAL TOTAL	3702.16		1008.92			
ANNUAL MEAN	10.1		2.76		9.05	
HIGHEST ANNUAL MEAN					a45.6	1999
LOWEST ANNUAL MEAN					1.09	1991
HIGHEST DAILY MEAN	183	Oct 1	183	Oct 1	389	Oct 23 2002
LOWEST DAILY MEAN	b0.00	Jan 22	c0.00	Nov 18	d0.00	Nov 3 1990
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 22	0.00	Nov 18	0.00	Nov 3 1990
MAXIMUM PEAK FLOW			356	Oct 1	565	Oct 23 2002
MAXIMUM PEAK STAGE			f4.12	Oct 1	f4.48	Oct 23 2002
ANNUAL RUNOFF (AC-FT)	7340		2000		6560	
10 PERCENT EXCEEDS	29		7.9		16	
50 PERCENT EXCEEDS	1.0		0.00		0.22	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

PRIOR TO REGULATION AND DIVERSION OF NUKA RIVER

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1989, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	47.6	7.01	2.83	1.48	.49	.21	.22	23.8	34.7	141	180	131
MAX	72.0	24.9	9.00	5.79	2.24	.87	.72	117	81.2	307	432	321
(WY)	1987	1987	1987	1985	1985	1985	1985	1986	1989	1989	1989	1989
MIN	3.84	.024	.000	.000	.000	.000	.000	.016	.76	6.41	12.1	7.08
(WY)	1989	1989	1989	1989	1988	1988	1988	1987	1987	1988	1986	1988

SUMMARY STATISTICS

WATER YEARS 1985 - 1989#

ANNUAL MEAN	47.9
HIGHEST ANNUAL MEAN	96.2
LOWEST ANNUAL MEAN	8.60
HIGHEST DAILY MEAN	1240
LOWEST DAILY MEAN	g.00
ANNUAL SEVEN-DAY MINIMUM	.00
INSTANTANEOUS PEAK FLOW	h1630
INSTANTANEOUS PEAK STAGE	5.47
ANNUAL RUNOFF (AC-FT)	34700
10 PERCENT EXCEEDS	183
50 PERCENT EXCEEDS	1.1
90 PERCENT EXCEEDS	.00

- # See Period of Record and Remarks. Not adjusted to account for changes in drainage area
a Diversion dam failed Jun. 17, 1999; repaired Sep. 25, 1999
b From Jan. 22-31, Mar. 12 - Apr. 10, and Nov. 18 - Dec. 31
c From Nov. 18 - May 28
d No flow most days during winter
e From crest-stage gage
f No flow many days each year since 1987 during winter through Jun.
g See Period of Record for remark on low-flow records
h From rating curve extended above 380 ft³/s

15238978 BATTLE CREEK DIVERSION ABOVE BRADLEY LAKE NEAR HOMER

LOCATION.--Lat 59°44'45", long 150°50'22", in SW¹/₄ NE¹/₄ sec. 17, T. 5 S., R. 9 W. (Seldovia C-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on right bank 0.6 mi upstream from Bradley Lake and 25 mi east of Homer.

DRAINAGE AREA.--0.95 mi².

PERIOD OF RECORD.--August 1992 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,350 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. The entire flow of Battle Creek at the station has been diverted into Bradley Lake since October 1991.

EXTREMES FOR CURRENT YEAR.-- Peak discharges greater than base discharge of 50 ft³/s and maximums (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 2	1130	*91	*6.76	Sep. 26	0515	67	6.39
Jun. 17	1630	60	6.27				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	3.5	0.00	0.00	0.00	0.00	0.00	1.8	6.9	9.6	3.3	0.25
2	45	3.9	0.00	0.00	0.00	0.00	0.00	1.4	8.5	9.7	3.7	2.2
3	32	2.1	0.00	0.00	0.00	0.00	0.00	0.84	9.9	8.9	3.7	2.2
4	13	1.8	e0.00	0.00	0.00	0.00	0.00	0.83	13	11	3.0	1.4
5	10	1.7	0.00	0.00	0.00	0.00	0.00	1.2	14	8.9	2.8	0.66
6	30	2.1	0.00	0.00	0.00	0.00	e0.00	1.4	12	8.5	2.5	0.35
7	21	2.0	0.00	0.00	0.00	0.00	e0.00	1.7	14	11	2.2	0.18
8	11	2.3	0.00	0.00	0.00	0.00	e0.00	1.6	12	12	2.3	0.09
9	8.1	1.7	e0.00	0.00	0.00	0.00	e0.00	1.4	8.3	12	3.1	0.02
10	5.0	1.5	e0.00	0.00	e0.00	0.00	0.00	1.1	8.2	10	2.8	0.03
11	3.2	0.92	0.00	0.00	e0.00	0.00	0.00	1.3	9.6	9.3	2.4	0.04
12	2.2	0.89	0.00	0.00	0.00	0.00	0.00	1.6	9.5	10	2.3	0.00
13	1.8	0.92	0.00	0.00	e0.00	0.00	0.00	2.0	7.6	9.4	1.7	0.00
14	13	0.64	0.00	0.00	e0.00	0.00	0.00	2.4	9.2	7.4	1.6	0.00
15	16	0.47	0.00	0.00	e0.00	0.00	0.00	3.0	13	9.6	1.6	0.00
16	4.2	0.34	0.00	0.00	0.00	0.00	0.00	4.7	32	8.0	1.5	0.00
17	2.5	0.22	0.00	0.00	0.00	0.00	0.00	5.4	49	9.6	1.7	0.00
18	1.8	0.12	0.00	0.00	0.00	0.00	0.00	6.3	42	8.4	1.8	0.00
19	1.6	0.08	0.00	0.00	0.00	0.00	0.00	6.6	28	6.7	1.7	0.00
20	1.3	0.10	0.00	0.00	0.00	0.00	0.00	9.2	20	5.1	1.6	0.14
21	1.3	0.33	0.00	0.00	0.00	0.00	0.00	9.5	17	5.7	1.1	0.87
22	1.1	0.28	0.00	0.00	0.00	0.00	0.00	11	15	5.8	1.0	1.3
23	0.97	0.10	0.00	0.00	0.00	0.00	0.00	27	15	6.5	1.2	1.8
24	0.91	0.06	0.00	0.00	0.00	0.00	0.00	31	18	4.4	1.3	0.98
25	2.2	0.01	0.00	0.00	0.00	0.00	0.00	27	18	5.1	1.0	2.4
26	3.6	0.00	0.00	0.00	0.00	0.00	0.00	19	16	22	0.80	30
27	3.1	0.00	0.00	0.00	0.00	0.00	0.04	15	15	16	0.72	5.6
28	1.7	0.00	0.00	0.00	0.00	0.00	0.07	15	15	9.7	0.53	3.6
29	1.1	0.00	0.00	0.00	0.00	0.00	0.38	11	10	6.1	0.30	3.8
30	0.99	0.00	0.00	0.00	---	0.00	0.88	8.1	9.3	4.6	0.17	9.6
31	1.4	---	0.00	0.00	---	0.00	---	7.0	---	3.8	0.10	---
TOTAL	295.07	28.08	0.00	0.00	0.00	0.00	1.37	236.37	475.0	274.8	55.52	67.51
MEAN	9.52	0.94	0.00	0.00	0.00	0.00	0.05	7.62	15.8	8.86	1.79	2.25
MAX	54	3.9	0.00	0.00	0.00	0.00	0.88	31	49	22	3.7	30
MIN	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.83	6.9	3.8	0.10	0.00
AC-FT	585	56	0.00	0.00	0.00	0.00	2.7	469	942	545	110	134
CFSM	10.0	0.99	0.00	0.00	0.00	0.00	0.05	8.03	16.7	9.33	1.89	2.37
IN.	11.55	1.10	0.00	0.00	0.00	0.00	0.05	9.26	18.60	10.76	2.17	2.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)#

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	4.32	2.14	0.54	0.05	0.22	0.00	0.12	3.12	14.2	11.1	5.39	6.41	
MAX	16.6	15.1	4.76	0.22	1.58	0.01	0.67	7.67	23.5	20.1	14.5	16.9	
(WY)	2003	2003	2003	2003	2003	1998	1997	1993	1998	2001	2001	1995	
MIN	0.21	0.01	0.00	0.00	0.00	0.00	0.00	0.21	5.55	1.83	0.09	0.91	
(WY)	1997	2000	1996	1996	1996	1994	1999	1999	1996	1996	1996	1992	

a Maximum discharge, Oct. 1, stage falling, peak occurred Sep. 20, 2004
 b Maximum stage, Oct.1, stage falling, peak occurred Sep. 30, 2004
 e Estimated

15238978 BATTLE CREEK DIVERSION ABOVE BRADLEY LAKE NEAR HOMER—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004#	
ANNUAL TOTAL	1390.51		1433.72			
ANNUAL MEAN	3.81		3.92		4.01	
HIGHEST ANNUAL MEAN					5.98 2003	
LOWEST ANNUAL MEAN					1.23 1996	
HIGHEST DAILY MEAN					121 Oct 23 2002	
LOWEST DAILY MEAN	54	Oct 1	54	Oct 1	10.00 Jun 3 1992	
ANNUAL SEVEN-DAY MINIMUM	c0.00	Jan 1	d0.00	Nov 26	0.00 Jan 11 1993	
MAXIMUM PEAK FLOW	0.00 Jan 1		0.00 Nov 26		151 Oct 23 2002	
MAXIMUM PEAK STAGE			g91 Oct 2		7.50 Oct 23 2002	
ANNUAL RUNOFF (AC-FT)	2760		2840		2910	
ANNUAL RUNOFF (CFPM)	4.01		4.12		4.23	
ANNUAL RUNOFF (INCHES)	54.45		56.14		57.42	
10 PERCENT EXCEEDS	12		12		13	
50 PERCENT EXCEEDS	0.84		0.34		0.40	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

See Period of Record and Remarks, partial years used in summary statistics

c No flow many days during winter, and Sep. 19

d No flow Nov. 26 to Apr. 26, and Sep. 12-19

f No flow many days most winters, and Jun. 3, 1992 (observation), Aug. 4, Aug. 5, Aug. 9, Aug. 14 - Sep. 11, 1986, Sep. 19, 2003, and Sep. 12-19, 2004

g Maximum discharge, 116 ft³/s, Oct. 1, gage-height 7.10 ft., stage falling, peak occurred Sep. 30, 2004; maximum peak discharge, 91 ft³/s, Oct. 2, gage-height 6.76 ft

15238990 UPPER BRADLEY RIVER NEAR NUKA GLACIER NEAR HOMER

LOCATION.--Lat 59°42'02", long 150°42'09", (Seldovia C-2 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on left bank 1.0 mi downstream from Nuka Glacier terminus, 2.7 mi upstream from confluence with Kachemak Creek, 3.7 mi southeast of Bradley Lake, and 29 mi east of Homer. Prior to July 22, 1991 at site 0.2 mi downstream.

DRAINAGE AREA.--Indeterminate. Prior to July 29, 1990, drainage area was about 10 mi² and varied according to position of glacier terminus.

PERIOD OF RECORD.--October 1979 to current year. Prior to October 1989, published as Upper Bradley River near Homer.

REVISED RECORDS.--WDR AK-86-1: 1980-85, WRD AK-96-1: 1991-95.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,250 ft above sea level, from topographic map. Prior to July 22, 1991 at site 0.2 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow diverted from Upper Nuka River into Upper Bradley River drainage since July 29, 1990. Air temperature recorder at station, daily values of air temperature available from the computer files of the Alaska Science Center, Water Resources Office. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1790	54	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e15	482	416	317
2	1810	71	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e33	474	671	501
3	1060	53	e0.50	e0.00	e0.00	e0.00	e0.00	e0.00	e60	467	569	457
4	711	51	e0.30	e0.00	e0.00	e0.00	e0.00	e0.00	e160	518	425	278
5	672	56	e0.20	e0.00	e0.00	e0.00	e0.00	e0.00	276	498	417	207
6	1020	94	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	294	586	383	189
7	792	93	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	350	805	399	166
8	494	61	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	303	e1300	400	138
9	313	40	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	244	e1000	466	134
10	207	31	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	256	e800	482	189
11	142	29	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	266	e700	468	158
12	101	28	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	233	e600	449	132
13	85	e20	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	218	e550	383	128
14	180	e15	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	257	e500	401	79
15	247	e10	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	331	e500	439	58
16	98	e7.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.20	634	e550	451	47
17	59	e4.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.25	973	635	544	35
18	46	e2.5	e0.00	e0.00	e0.00	e0.00	e0.00	e0.30	1060	814	493	28
19	40	e1.5	e0.00	e0.10	e0.00	e0.00	e0.00	e0.40	948	733	536	38
20	36	e1.0	e0.00	e0.50	e0.00	e0.00	e0.00	e0.50	788	597	467	86
21	32	e0.90	e0.00	e1.0	e0.00	e0.00	e0.00	e0.60	666	618	400	83
22	32	e0.70	e0.00	e0.80	e0.00	e0.00	e0.00	e0.70	593	774	430	119
23	31	e0.50	e0.00	e0.50	e0.00	e0.00	e0.00	e0.80	576	895	533	102
24	34	e0.40	e0.00	e0.20	e0.00	e0.00	e0.00	e0.90	586	610	548	50
25	66	e0.35	e0.00	e0.00	e0.00	e0.00	e0.00	e1.4	612	642	460	68
26	138	e0.30	e0.00	e0.00	e0.00	e0.00	e0.00	e2.0	660	1270	380	391
27	92	e0.25	e0.00	e0.00	e0.00	e0.00	e0.00	e3.0	641	1380	282	150
28	45	e0.20	e0.00	e0.00	e0.00	e0.00	e0.00	e4.0	631	1010	199	77
29	33	e0.10	e0.00	e0.00	e0.00	e0.00	e0.00	e5.0	548	645	214	105
30	32	e0.10	e0.00	e0.00	---	e0.00	e0.00	e7.0	513	500	243	264
31	36	---	e0.00	e0.00	---	e0.00	---	e10	---	391	225	---
TOTAL	10474	725.80	1.00	3.10	0.00	0.00	0.00	37.05	13725	21844	13173	4774
MEAN	338	24.2	0.03	0.10	0.00	0.00	0.00	1.20	458	705	425	159
MAX	1810	94	0.50	1.0	0.00	0.00	0.00	10	1060	1380	671	501
MIN	31	0.10	0.00	0.00	0.00	0.00	0.00	0.00	15	391	199	28
AC-FT	20780	1440	2.0	6.1	0.00	0.00	0.00	73	27220	43330	26130	9470

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)#

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	103	28.4	7.16	0.53	0.64	0.02	0.14	21.0	236	429	446	335		
MAX	338	195	68.5	4.75	4.39	0.27	1.02	93.6	458	763	597	851		
(WY)	2004	2003	2003	2001	2003	2003	2003	1993	2004	2001	1993	1995		
MIN	12.9	2.40	0.00	0.00	0.00	0.00	0.00	0.01	94.4	106	293	117		
(WY)	1997	2000	1995	1991	1991	1991	1992	1998	1999	1999	1998	1992		

See Period of Record and Remarks. Not adjusted to account for changes in drainage area
e Estimated

15238990 UPPER BRADLEY RIVER NEAR NUKA GLACIER NEAR HOMER—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004#	
ANNUAL TOTAL	54512.55		64756.95			
ANNUAL MEAN	149		177		135	
HIGHEST ANNUAL MEAN					181	
LOWEST ANNUAL MEAN					91.1	
HIGHEST DAILY MEAN	1810 Oct 2		1810 Oct 2		a3600 Sep 21 1995	
LOWEST DAILY MEAN	b0.00 Mar 20		c0.00 Dec 1		d0.00 Dec 5 1990	
ANNUAL SEVEN-DAY MINIMUM	0.00 Mar 20		0.00 Dec 6		0.00 Dec 5 1990	
MAXIMUM PEAK FLOW			f2730 Oct 2		f4100 Sep 20 1995	
MAXIMUM PEAK STAGE			14.33 Oct 2		g15.10 Sep 20 1995	
ANNUAL RUNOFF (AC-FT)	108100		128400		97570	
10 PERCENT EXCEEDS	447		598		436	
50 PERCENT EXCEEDS	32		0.85		6.5	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

PRIOR TO DIVERSION FROM UPPER NUKA RIVER

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1989, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	106	22.8	10.2	4.67	1.74	1.35	1.29	38.3	161	290	349	292
MAX	279	75.7	54.6	15.1	4.82	6.50	4.67	92.0	270	458	595	673
(WY)	1980	1980	1987	1981	1981	1984	1981	1986	1988	1981	1986	1982
MIN	26.3	2.60	.50	.000	.000	.000	.000	.33	102	149	133	63.1
(WY)	1986	1988	1989	1989	1989	1989	1986	1987	1985	1985	1985	1983

SUMMARY STATISTICS

WATER YEARS 1980 - 1989 #

ANNUAL MEAN	107	
HIGHEST ANNUAL MEAN	154	1986
LOWEST ANNUAL MEAN	49.6	1985
HIGHEST DAILY MEAN	1890	Aug 27 1986
LOWEST DAILY MEAN	d.00	Dec 25 1979
ANNUAL SEVEN-DAY MINIMUM	.00	Dec 25 1979
INSTANTANEOUS PEAK FLOW	h2530	Oct 10 1986
INSTANTANEOUS PEAK STAGE	i9.86	Oct 10 1986
ANNUAL RUNOFF (AC-FT)	77650	
10 PERCENT EXCEEDS	338	
50 PERCENT EXCEEDS	15	
90 PERCENT EXCEEDS	.50	

- # See Period of Record and Remarks. Not adjusted to account for changes in drainage area
- a Estimated discharge, but may have been higher during period of no gage-height record, Sep. 21 to Sep. 22, 1995
- b From Mar. 20 to Apr. 10 and Dec. 1, 2, and 6-31
- c From Dec. 1, 2, Dec. 6 to Jan. 18, and Jan. 25 to May 15
- d No flow in winter most years
- f From rating curve extended above 400 ft³/s on basis of slope-area measurement of peak flow
- g From floodmarks
- h From rating curve extended above 440 ft³/s on basis of slope-area measurement of peak flow
- i Site and datum then in use

SOUTH-CENTRAL ALASKA

15239000 BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°45'30", long 150°51'02", in SW¹/₄ SE¹/₄ NW¹/₄ sec. 8, T. 5 S., R. 9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, about 1,300 ft downstream from Bradley Lake dam, 3.3 mi upstream from confluence with Middle Fork Bradley River, and 26 mi northeast of Homer.

DRAINAGE AREA.--About 65 mi² since July and August 1990, when additional water was diverted into the basin. Prior drainage area was about 54 mi².

PERIOD OF RECORD.--July to August 1955, October 1957 to September 1990 (discharge). October 1991 to September 2004 (discontinued) (beginning month reservoir contents and monthly discharges).

REVISED RECORDS.--WSP 2136: 1960 (M), 1965. WDR AK-77-1: 1958, 1961, 1963 (M), 1966, 1967, 1970, 1972, 1974, 1976.

GAGE.--Nonrecording gage. Datum of gage is 1,054.16 ft above sea level (levels of dam-site survey for Alaska Power Authority). Totalizing flow meters on penstocks to two turbines in Bradley powerhouse. Lake-level sensor. July 13-22, 1955, non-recording lake gage at site 1 mi upstream and July 23 to August 5, 1955, at site 3 mi upstream at different datum. Prior to November 4, 1980, and April 29 to October 5, 1986, water-stage recorder at site 500 ft upstream at different datum and November 4, 1980 to April 28, 1986, water-stage recorder 1,300 ft upstream at different datum. April 29, 1986 to September 30, 1989, water-stage recorder at present site and datum.

REMARKS.--Reservoir is formed by an earthen dam with impermeable core and concrete face at the outlet of Bradley Lake. Construction began November 1986 and was completed in April 1991. Total and usable capacities below the spillway crest of 1,180 ft are 547,500 and 284,200 acre-ft, respectively. Reservoir is used for power. Discharge released through turbines is computed using totalizing flow meters; release flow enters Kachemak Bay and is not returned to stream. Spill, dam seepage, and fish-water bypass are measured at Bradley River below Dam (15239001) gage. Reservoir capacity table furnished by the Alaska Energy Authority.

COOPERATION.--Reservoir elevations and power generation discharge provided by the Homer Electric Association, for the Alaska Energy Authority.

AVERAGE DISCHARGE.--45 years (water years 1958 to 1989, and 1992 to 2004), 463 ft³/s, 335,400 acre-ft/yr. The inflow diversions from Middle Fork Bradley River and Battle Creek into the reservoir are excluded. Flow diverted from Upper Nuka River into Upper Bradley since July 29, 1990 was not measurable and is included in the following tabulations.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 557,700 acre-ft, November 6, 2002, elevation 1182.6 ft; minimum contents observed, 246,600 acre-ft, April 23, 1997, elevation 1069.3 ft. Maximum computed discharge, 8,800 ft³/s, October 10, 1986, gage height, 10.90 ft from floodmarks, site and datum then in use. Maximum discharge, September 21-22, 1995 was probably higher, as indicated by extremes for period of record on these dates for other sites in the Bradley River basin; minimum daily, about 9.0 ft³/s, December 7, 1986, result of power tunnel construction at dam site.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 550,200 acre-ft, October 8,9, elevation 1180.7 ft; minimum contents observed, 327,100 acre-ft, April 29,30, elevation 1111.0 ft.

BEGINNING OF MONTH RESERVOIR ELEVATION, IN FEET ABOVE SEA LEVEL, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
Oct 1	1,171.9	516,800	--
Nov 1	1,173.7	523,200	+6,400
Dec 1	1,163.8	488,000	-35,200
Jan 1	1,153.6	451,800	-36,200
Feb 1	1,144.3	421,500	-30,300
Mar 1	1,134.6	391,600	-29,900
Apr 1	1,121.4	353,000	-38,600
May 1	1,111.1	327,300	-25,700
Jun 1	1,119.6	348,500	+21,200
Jul 1	1,142.4	415,600	+67,100
Aug 1	1,160.7	477,000	+61,400
Sep 1	1,167.6	501,500	+24,500
Oct 1	1,163.8	488,000	-13,500
		CAL YR 2003	-60,700
		WTR YR 2004	-28,800

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
MEAN VALUES

MONTH	CHANGE IN CONTENTS	POWER GENERATION	BRADLEY RIVER BELOW DAM 15239001	MIDDLE FORK BRADLEY RIVER 15239050	BATTLE CREEK DIVERSION 15238978	BRADLEY RIVER 15239000
OCT	+104	1,077	32.1	147	9.52	1,060
NOV	-592	741	23.0	19.0	0.94	153
DEC	-589	638	42.0	7.87	0.00	83
JAN	-493	522	38.5	6.03	0.00	62
FEB	-520	577	37.3	5.21	0.00	60e
MAR	-628	618	37.4	4.75	0.00	52e
APR	-432	543	21.7	4.25	0.05	128
MAY	+345	481	0.78	34.1	7.62	785
JUN	+1,128	472	6.75	208	15.8	1,380
JUL	+999	675	63.7	193	8.86	1,540
AUG	+398	724	99.0	152	1.79	1,070
SEP	-227	731	79.0	56.7	2.25	524
CAL YR 2003	-88	697	47.4	66.5	3.81	587
WTR YR 2004	-42	650	40.2	70.1	3.92	575

e Estimated

15239001 BRADLEY RIVER BELOW DAM NEAR HOMER

LOCATION.--Lat 59°45'30", long 150°51'02", in SW¹/₄ SE¹/₄ NW¹/₄ sec. 8, T. 5 S., R. 9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on right bank about 1,300 ft downstream from Bradley Lake Dam, 3.3 mi upstream from Middle Fork Bradley River, and 26 mi northeast of Homer.

DRAINAGE AREA.--About 66 mi² since October 1991, when additional water was diverted into the basin. Prior drainage area was about 54 mi².

PERIOD OF RECORD.--October 1989 to current year. Prior to 1990 water year, records are equivalent to "Bradley River near Homer" (station no. 15239000).

GAGE.--Water-stage recorder. Datum of gage is 1,054.16 ft above sea level (levels of dam-site survey for Alaska Power Authority).

REMARKS.--No estimated daily discharges. Records fair. Nuka River and Middle Fork Bradley River were diverted into Bradley Lake, upstream from dam, beginning July 29 and August 7, 1990, respectively. Reservoir began filling April 26, 1991. Water has been diverted out of the basin through the turbines since hydro-power generation began on June 28, 1991. Battle Creek was diverted into reservoir in October 1991. Rain gage and air temperature recorder at station, daily values of precipitation and air temperature available from the computer files of the Alaska Science Center, Water Resources Office.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,480 ft³/s November 6, 2002 gage height, 7.15 ft; minimum, 0.00 ft³/s, from rating curve extended below 0.18 ft³/s, most likely ponded water, but no measurable flow, June 9 and June 10, 1997.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 378 ft³/s, Oct. 8, gage height, 3.84 ft; minimum, 0.09 ft³/s, Jun. 21 to 24, gage-height 1.65 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	13	49	41	38	34	41	2.1	0.23	35	86	107
2	2.3	13	49	41	38	34	41	1.2	0.22	39	87	99
3	8.0	13	50	41	38	33	41	0.96	0.21	42	87	96
4	0.74	4.2	44	41	38	33	38	1.1	0.22	43	88	98
5	0.56	12	40	41	38	33	34	1.2	0.19	48	88	100
6	1.3	15	40	40	38	33	20	1.3	0.17	57	93	100
7	122	12	40	40	38	33	5.3	1.5	0.19	53	95	102
8	332	11	40	40	38	31	15	1.00	0.15	41	96	106
9	246	9.5	42	40	38	37	17	0.76	6.3	52	95	106
10	100	9.5	40	40	39	33	24	0.67	9.4	51	96	106
11	5.9	10	40	40	38	35	31	0.67	9.4	54	96	106
12	4.2	12	40	40	38	40	33	0.67	9.4	58	96	105
13	13	12	40	40	38	40	33	0.70	9.4	54	99	105
14	7.3	7.0	40	40	38	40	33	0.69	9.4	54	106	105
15	0.44	0.37	40	40	38	39	33	0.68	9.2	64	106	101
16	0.32	0.99	40	39	37	39	33	0.81	4.5	64	106	96
17	0.27	0.48	40	31	37	39	22	0.75	0.26	66	106	94
18	3.3	31	42	29	37	39	30	0.68	0.19	67	107	94
19	13	42	43	29	38	39	20	0.65	0.15	75	107	83
20	18	42	43	33	38	38	11	0.65	0.12	80	107	64
21	22	42	43	39	38	38	14	0.59	0.10	80	102	62
22	19	41	43	39	38	38	13	0.61	0.09	81	99	59
23	18	41	43	39	38	38	13	0.79	0.09	81	99	53
24	13	41	42	39	38	38	13	0.64	23	82	100	50
25	6.1	41	42	39	35	38	13	0.64	10	82	100	50
26	0.58	41	41	41	34	39	13	0.47	10	72	100	21
27	0.69	41	41	40	34	42	7.6	0.42	10	78	100	33
28	0.46	41	42	36	34	42	4.8	0.37	10	74	104	28
29	0.35	41	42	38	34	42	2.5	0.27	33	83	106	22
30	3.5	49	41	38	---	42	1.6	0.27	37	83	106	19
31	13	---	41	38	---	41	---	0.24	---	83	106	---
TOTAL	996.31	689.04	1303	1192	1081	1160	650.8	24.05	202.58	1976	3069	2370
MEAN	32.1	23.0	42.0	38.5	37.3	37.4	21.7	0.78	6.75	63.7	99.0	79.0
MAX	332	49	50	41	39	42	41	2.1	37	83	107	107
MIN	0.27	0.37	40	29	34	31	1.6	0.24	0.09	35	86	19
AC-FT	1980	1370	2580	2360	2140	2300	1290	48	402	3920	6090	4700
CAL YR 2003	TOTAL 17317.35	MEAN 47.4	MAX 332	MIN 0.27	AC-FT 34350							
WTR YR 2004	TOTAL 14713.78	MEAN 40.2	MAX 332	MIN 0.09	AC-FT 29180							

15239050 MIDDLE FORK BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°46'42", long 150°45'15", in NW¼ NE¼ sec.2, T.5 S., R.9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on left bank 6.0 mi upstream from mouth and 27 mi east of Homer.

DRAINAGE AREA.--9.25 mi².

PERIOD OF RECORD.--October 1979 to current year. Published as Bradley River tributary near Homer prior to October 1989.

REVISED RECORDS.-- WDR AK-86-1: 1980(P), 1981-82(M), 1984(M). WRD AK-2000-1: 1995-1997.

GAGE.--Water-stage recorder. Elevation of gage is 2,300 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Precipitation gage and air temperature recorder at station; daily values of air temperature and precipitation are available from the computer files of the Alaska Science Center, Water-Resources office. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximums (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 01	1145	532	9.51	Jun. 17	2115	*684	*9.72
Oct. 02	1045	676	9.71	Jun. 24	2015	324	9.23
Oct. 03	0600	580	9.58	Jul. 26	1600	580	9.60
Oct. 06	1900	668	9.70				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	449	29	e9.0	e6.5	e5.5	e5.0	e4.4	e4.8	73	202	163	109
2	464	37	e8.0	e6.5	e5.5	e5.0	e4.4	e5.5	72	190	217	134
3	496	34	e8.0	e6.5	e5.5	e5.0	e4.4	e6.0	76	186	184	e120
4	345	32	e9.0	e6.5	e5.5	e5.0	e4.4	e7.0	87	197	163	e100
5	351	31	e9.0	e6.5	e5.5	e4.8	e4.4	e8.0	98	187	167	e90
6	574	30	e9.0	e6.5	e5.5	e4.8	e4.4	e9.0	115	189	156	e80
7	423	29	e9.0	e6.5	e5.5	e4.8	e4.2	e10	146	225	155	e70
8	225	30	e9.0	e6.5	e5.5	e4.8	e4.2	e13	137	229	163	e60
9	164	28	e9.0	e6.5	e5.5	e4.8	e4.2	e14	104	241	178	e44
10	119	27	e8.5	e6.5	e5.5	e4.8	e4.2	e15	88	225	e185	49
11	93	e22	e8.5	e6.0	e5.5	e4.8	e4.2	e15	87	206	e185	41
12	75	e17	e8.5	e6.0	e5.5	e4.8	e4.2	e16	78	198	e185	36
13	64	e15	e8.5	e6.0	e5.0	e4.8	e4.2	e16	73	184	e185	35
14	71	e13	e8.5	e6.0	e5.0	e4.8	e4.2	e17	90	172	e185	30
15	76	e12	e8.0	e6.0	e5.0	e4.8	e4.2	e18	129	171	e185	28
16	60	e11	e8.0	e6.0	e5.0	e4.8	e4.2	e20	303	161	e180	25
17	49	e10	e8.0	e6.0	e5.0	e4.8	e4.2	e23	532	182	e175	23
18	45	e13	e8.0	e6.0	e5.0	e4.8	e4.2	e25	539	181	e170	21
19	42	e15	e8.0	e6.0	e5.0	e4.8	e4.2	e28	390	163	e165	23
20	37	e16	e7.5	e6.0	e5.0	e4.8	e4.2	e32	332	145	145	27
21	34	e15	e7.5	e6.0	e5.0	e4.8	e4.0	e36	302	148	135	27
22	32	e14	e7.5	e6.0	e5.0	e4.8	e4.0	e40	275	159	140	34
23	30	e13	e7.0	e6.0	e5.0	e4.8	e4.0	e45	262	163	170	37
24	28	e12	e6.5	e5.5	e5.0	e4.8	e4.0	e50	279	134	152	31
25	30	e12	e6.0	e5.5	e5.0	e4.6	e4.0	e58	291	140	124	33
26	34	e11	e6.0	e5.5	e5.0	e4.6	e4.2	e68	283	325	111	109
27	31	e11	e6.5	e5.5	e5.0	e4.6	e4.2	e80	277	328	91	66
28	28	e10	e7.0	e5.5	e5.0	e4.4	e4.4	e90	266	237	73	49
29	31	e10	e7.0	e5.5	e5.0	e4.4	e4.6	e110	238	186	72	55
30	25	e10	e7.0	e5.5	---	e4.4	e4.8	99	213	167	76	114
31	24	---	e7.0	e5.5	---	e4.4	---	79	---	155	73	---
TOTAL	4549	569	244.0	187.0	151.0	147.4	127.4	1057.3	6235	5976	4708	1700
MEAN	147	19.0	7.87	6.03	5.21	4.75	4.25	34.1	208	193	152	56.7
MAX	574	37	9.0	6.5	5.5	5.0	4.8	110	539	328	217	134
MIN	24	10	6.0	5.5	5.0	4.4	4.0	4.8	72	134	72	21
AC-FT	9020	1130	484	371	300	292	253	2100	12370	11850	9340	3370
CFSM	15.9	2.05	0.85	0.65	0.56	0.51	0.46	3.69	22.5	20.8	16.4	6.13
IN.	18.29	2.29	0.98	0.75	0.61	0.59	0.51	4.25	25.07	24.03	18.93	6.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	51.4	20.4	9.58	5.88	5.39	3.74	3.37	17.6	101	164	145	101													
MAX	147	106	37.5	17.0	23.0	7.17	4.42	44.5	208	221	204	220													
(WY)	2004	2003	2003	1981	2003	1981	2001	1990	2004	2001	2001	1995													
MIN	15.6	5.29	4.45	3.82	2.86	1.30	2.38	5.45	44.7	111	86.9	38.7													
(WY)	1997	1985	1985	1991	1991	1986	1999	1987	1985	1996	1996	1992													

e Estimated

15239050 MIDDLE FORK BRADLEY RIVER NEAR HOMER—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1980 - 2004	
ANNUAL TOTAL	24270.8		25651.1			
ANNUAL MEAN	66.5		70.1		52.7	
HIGHEST ANNUAL MEAN					75.3	
LOWEST ANNUAL MEAN					34.6	
HIGHEST DAILY MEAN	574 Oct 6		574 Oct 6		966 Sep 20 1995	
LOWEST DAILY MEAN	a3.8 Apr 13		b4.0 Apr 21		c1.1 Mar 28 1986	
ANNUAL SEVEN-DAY MINIMUM	3.8 Apr 13		4.1 Apr 19		1.1 Mar 28 1986	
MAXIMUM PEAK FLOW			684 Jun 17		1470 Sep 20 1995	
MAXIMUM PEAK STAGE			9.72 Jun 17		10.09 Nov 5 2002	
MAXIMUM PEAK STAGE					d16.16 May 12 1988	
ANNUAL RUNOFF (AC-FT)	48140		50880		38160	
ANNUAL RUNOFF (CFSM)	7.19		7.58		5.70	
ANNUAL RUNOFF (INCHES)	97.61		103.16		77.38	
10 PERCENT EXCEEDS	198		189		156	
50 PERCENT EXCEEDS	18		16		12	
90 PERCENT EXCEEDS	4.8		4.7		3.4	

a Apr. 13-21
b Apr. 21-25
c From Mar. 28 to Apr. 10, 1986
d Backwater from ice

15239060 MIDDLE FORK BRADLEY RIVER BELOW NORTH FORK BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°47'54", long 150°51'48", in SE¹/₄ NE¹/₄ SW¹/₄ sec. 29, T. 4 S., R. 9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on left bank 100 ft upstream from confluence with the main stem Bradley River, 0.2 mi below the mouth of the North Fork Bradley River, 5.5 mi downstream from the Middle Fork Bradley River diversion dam, and 25 mi east of Homer.

DRAINAGE AREA.--24.8 mi².

PERIOD OF RECORD.--August 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 200 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Water from upper Middle Fork Bradley River (15239050) is diverted into Bradley Lake at Middle Fork Bradley River diversion dam, located 5.5 mi upstream. Air temperature recorder at station, daily values of air temperature are available from the computer files of the Alaska Science Center, Water Resources Office.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	e58	e11	e4.0	e4.5	e4.5	e3.0	e90	e150	86	42	20
2	290	e59	e10	e4.0	e4.5	e4.5	e3.0	e90	e150	76	45	28
3	362	e52	e9.0	e4.0	e4.5	e5.0	e3.0	e120	e155	72	49	30
4	224	e52	e9.0	e4.0	e4.5	e5.0	e5.0	e180	e155	72	44	25
5	164	e42	e9.0	e4.0	e4.0	e5.0	e7.0	e230	e156	71	39	20
6	322	e45	e9.0	e4.0	e4.0	e5.0	e13	e260	158	73	37	18
7	316	e48	e7.0	e4.0	e4.0	e5.0	e25	e320	182	87	36	16
8	194	e54	e7.0	e4.0	e4.0	e4.5	e24	e290	157	89	36	15
9	175	e51	e6.0	e4.0	e4.5	e4.5	e25	e230	119	92	37	15
10	127	e48	e7.0	e4.0	e4.5	e4.5	e23	e210	114	87	37	14
11	99	e42	e7.0	e4.0	e4.5	e4.5	e20	e215	119	78	36	14
12	80	e44	e6.0	e4.0	e4.5	e4.0	e18	e220	113	73	35	14
13	69	e40	e6.0	e4.0	e4.5	e4.0	e20	e230	101	67	32	13
14	73	e41	e6.0	e4.0	e4.5	e4.0	e22	e230	111	60	30	12
15	83	e42	e6.0	e4.0	e4.0	e4.0	e24	e220	133	57	31	12
16	71	e37	e6.0	e4.0	e4.0	e4.0	e30	e240	278	53	30	11
17	63	e38	e6.0	e4.0	e4.0	e4.0	e38	e260	400	55	31	11
18	59	e39	e6.0	e4.0	e4.0	e4.0	e36	e280	350	53	31	11
19	56	e38	e6.0	e4.0	e4.0	e4.0	e40	e270	261	48	30	11
20	49	e34	e5.0	e4.0	e4.0	e4.0	e38	e270	208	43	30	14
21	e53	e30	e5.0	e4.0	e4.5	e4.0	e43	e290	178	41	27	20
22	e53	e27	e4.5	e4.0	e4.5	e4.0	e42	e310	153	40	26	22
23	e49	e27	e4.5	e4.0	e4.5	e4.0	e43	e410	141	42	27	26
24	e49	e24	e4.5	e4.0	e4.5	e4.0	e47	e400	142	37	27	21
25	e70	e25	e4.5	e4.0	e4.5	e4.0	e48	e350	148	35	25	24
26	e100	e18	e4.5	e4.0	e4.5	e4.0	e50	e280	148	68	24	114
27	e117	e16	e4.5	e4.0	e4.5	e3.0	e52	e250	139	72	24	71
28	e93	e11	e5.0	e4.0	e4.5	e3.0	e53	e230	119	59	21	58
29	e74	e11	e5.0	e4.0	e4.5	e3.0	e60	e165	91	51	19	63
30	e63	e12	e5.0	e4.0	---	e3.0	e70	e160	88	49	18	100
31	e59	---	e5.0	e4.0	---	e3.0	---	e155	---	46	17	---
TOTAL	3911	1105	196.0	124.0	125.5	127.0	925.0	7455	4917	1932	973	843
MEAN	126	36.8	6.32	4.00	4.33	4.10	30.8	240	164	62.3	31.4	28.1
MAX	362	59	11	4.0	4.5	5.0	70	410	400	92	49	114
MIN	49	11	4.5	4.0	4.0	3.0	3.0	90	88	35	17	11
AC-FT	7760	2190	389	246	249	252	1830	14790	9750	3830	1930	1670
CFSM	5.09	1.49	0.25	0.16	0.17	0.17	1.24	9.70	6.61	2.51	1.27	1.13
IN.	5.87	1.66	0.29	0.19	0.19	0.19	1.39	11.18	7.38	2.90	1.46	1.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)#

MEAN	85.4	77.8	28.3	18.0	19.1	9.29	22.4	127	177	98.4	46.3	64.6
MAX	267	309	95.5	75.3	81.4	20.7	36.4	240	277	193	120	116
(WY)	2003	2003	2003	2001	2003	1998	1998	2004	2001	2001	2001	1997
MIN	23.2	16.2	6.32	2.68	2.00	2.74	9.59	74.0	82.3	45.7	12.5	25.0
(WY)	1997	2000	2004	1999	1999	1999	1999	2003	2003	1997	1996	2003

See Period of Record; partial years used in monthly statistics
e Estimated

15239060 MIDDLE FORK BRADLEY RIVER BELOW NORTH FORK BRADLEY RIVER NEAR HOMER—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004#	
ANNUAL TOTAL	17076.1		22633.5			
ANNUAL MEAN	46.8		61.8		65.2	
HIGHEST ANNUAL MEAN					90.8	
LOWEST ANNUAL MEAN					44.0	
HIGHEST DAILY MEAN	423	Feb 5	410	May 23	1950	Oct 23 2002
LOWEST DAILY MEAN	a4.4	Apr 7	b3.0	Mar 27	c1.0	Feb 5 1999
ANNUAL SEVEN-DAY MINIMUM	4.5	Apr 4	3.0	Mar 27	1.0	Feb 5 1999
MAXIMUM PEAK FLOW			d532	Oct 2	d3940	Oct 24 2002
MAXIMUM PEAK STAGE			11.80	Oct 2	16.27	Oct 24 2002
ANNUAL RUNOFF (AC-FT)	33870		44890		47270	
ANNUAL RUNOFF (CFPM)	1.89		2.49		2.63	
ANNUAL RUNOFF (INCHES)	25.61		33.95		35.75	
10 PERCENT EXCEEDS	89		186		159	
50 PERCENT EXCEEDS	30		30		33	
90 PERCENT EXCEEDS	6.6		4.0		5.3	

See Period of Record; partial years used in monthly statistics

a Apr. 7-8

b From Mar. 27 to Apr. 3

c Feb. 5-12, 1999

d From rating curve extended above 52 ft³/s on basis of comparison of instantaneous discharge of Bradley River below Dam (15239001) and instantaneous discharge of Bradley River near Tidewater (15239070)

15239070 BRADLEY RIVER NEAR TIDEWATER NEAR HOMER

LOCATION.--Lat 59°48'06", long 150°52'58", in SE¹/₄ NE¹/₄ sec. 30, T. 4 S., R. 9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on right bank 0.7 mi upstream from mouth, 0.8 mi downstream from Middle Fork Bradley River, 4.3 mi downstream from Bradley Lake outlet and dam site, and 25 mi east of Homer.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 25 ft above sea level, from topographic map.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Flow occasionally affected by high tides. Intermittent regulation during construction at the Bradley River dam site began in November 1986. Flow has been regulated since the reservoir began filling April 26, 1991. (See station 15239001.) Upper Nuka River was diverted into Upper Bradley River on July 29, 1990; flow from about 10 mi² of Middle Fork Bradley River upstream drainage has been seasonally diverted into the Bradley Lake reservoir since August 7, 1990. Battle Creek was diverted into the reservoir in October 1990. Water has been diverted out of the basin through the turbines since hydropower generation began June 28, 1991. Rain gage and air temperature recorder at station; daily values of precipitation and air temperature available from the computer files of the Alaska Science Center, Water Resources Office. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	282	75	e62	e47	e44	e40	e45	246	147	128	120	126
2	300	76	e60	e47	e44	e40	e45	232	146	119	133	130
3	408	70	e60	e47	e44	e40	e45	198	151	116	139	128
4	263	62	e55	e47	e44	e40	e44	197	167	119	134	123
5	204	58	e50	e47	e44	e40	e42	238	159	122	128	122
6	342	64	e50	e47	e44	e40	e40	273	158	136	130	119
7	452	64	e48	e47	e44	e40	e40	342	175	151	132	118
8	546	69	e48	e46	e44	e41	e45	302	156	137	132	122
9	474	65	e49	e46	e44	e45	e50	241	129	154	133	121
10	298	62	e48	e46	e44	e45	e55	214	129	146	132	122
11	149	56	e48	e46	e44	e45	e60	219	134	139	131	123
12	110	60	e47	e46	e44	e45	e60	232	127	140	130	121
13	105	56	e47	e46	e44	e45	e65	244	117	129	128	120
14	107	e50	e47	e46	e44	e45	e70	244	127	115	132	119
15	114	e44	e47	e46	e44	e44	74	227	144	125	133	116
16	96	e40	e47	e46	e44	e44	84	252	295	120	132	109
17	82	e40	e47	e37	e44	e44	75	265	377	128	133	106
18	75	e72	e50	e35	e44	e44	80	286	313	126	133	106
19	83	e82	e50	e35	e44	e44	75	273	234	128	134	98
20	78	e78	e49	e39	e44	e43	57	275	192	129	140	76
21	80	e74	e49	e46	e44	e43	68	298	171	127	132	79
22	76	e70	e48	e46	e44	e43	64	320	153	126	126	77
23	74	70	e48	e46	e44	e43	65	438	143	129	127	73
24	67	66	e48	e46	e44	e43	67	414	165	123	128	66
25	84	67	e48	e46	e42	e43	71	362	160	122	126	69
26	110	e62	e48	e45	e40	e44	86	289	158	147	125	161
27	130	e58	e48	e45	e40	e46	104	255	152	151	125	105
28	101	e53	e48	e44	e40	e46	99	235	134	126	126	88
29	81	e53	e48	e44	e40	e46	121	169	126	128	127	86
30	71	e62	e48	e44	---	e46	179	161	135	126	125	130
31	77	---	e48	e44	---	e45	---	153	---	122	124	---
TOTAL	5519	1878	1538	1385	1258	1342	2075	8094	5074	4034	4030	3259
MEAN	178	62.6	49.6	44.7	43.4	43.3	69.2	261	169	130	130	109
MAX	546	82	62	47	44	46	179	438	377	154	140	161
MIN	67	40	47	35	40	40	40	153	117	115	120	66
AC-FT	10950	3730	3050	2750	2500	2660	4120	16050	10060	8000	7990	6460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)#

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	117	125	69.3	62.7	65.6	51.7	69.1	167	185	141	132	133	
MAX	317	594	137	137	117	70.5	93.8	261	263	185	178	224	
(WY)	2003	2003	2003	2001	2003	1998	1993	2004	1998	2001	1995	1995	
MIN	64.0	51.2	47.1	41.6	42.2	43.3	50.5	120	114	115	105	104	
(WY)	1998	2000	1998	1999	1999	2004	1999	1996	1997	1997	2002	1993	

See Period of Record and Remarks
e Estimated

15239070 BRADLEY RIVER NEAR TIDEWATER NEAR HOMER—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004#	
ANNUAL TOTAL	36956		39486			
ANNUAL MEAN	101		108		110	
HIGHEST ANNUAL MEAN					164	
LOWEST ANNUAL MEAN					83.8	
HIGHEST DAILY MEAN					3490	
LOWEST DAILY MEAN	546	Oct 8	546	Oct 8	Nov 6 2002	
ANNUAL SEVEN-DAY MINIMUM	a40	Nov 16	b35	Jan 18	c35 Jan 18 2004	
MAXIMUM PEAK FLOW	46	Mar 26	40	Feb 26	40 Jan 28 1999	
MAXIMUM PEAK STAGE			591	Oct 7	6200 Nov 5 2002	
INSTANTANEOUS LOW FLOW			6.47	Oct 7	d10.83 Nov 5 2002	
ANNUAL RUNOFF (AC-FT)	73300		78320		17 Mar 28 1989	
10 PERCENT EXCEEDS	148		228		178	
50 PERCENT EXCEEDS	90		77		91	
90 PERCENT EXCEEDS	48		44		47	

PRIOR TO REGULATION AND DIVERSION OF BRADLEY DAM

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1989, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	808	224	198	145	82.1	74.0	72.8	462	1032	1390	1318	966
MAX	1908	480	503	223	114	163	101	676	1357	1577	1781	1746
(WY)	1987	1984	1987	1985	1985	1984	1989	1987	1988	1988	1988	1989
MIN	363	86.1	78.9	72.5	37.4	27.4	42.5	282	862	1153	907	470
(WY)	1984	1986	1988	1989	1989	1989	1985	1985	1986	1983	1983	1983

SUMMARY STATISTICS

WATER YEARS 1983 - 1989#

ANNUAL MEAN	583	
HIGHEST ANNUAL MEAN	722	1987
LOWEST ANNUAL MEAN	475	1985
HIGHEST DAILY MEAN	10000	Oct 11 1986
LOWEST DAILY MEAN	19	Dec 7 1986
ANNUAL SEVEN-DAY MINIMUM	22	Mar 26 1989
MAXIMUM PEAK FLOW	f11000	Oct 11 1986
MAXIMUM PEAK STAGE	d13.73	Oct 11 1986
INSTANTANEOUS LOW FLOW	g17	Mar 28 1989
ANNUAL RUNOFF (AC-FT)	422700	
ANNUAL RUNOFF (CFSM)	7.11	
ANNUAL RUNOFF (IN)	96.67	
10 PERCENT EXCEEDS	1470	
50 PERCENT EXCEEDS	388	
90 PERCENT EXCEEDS	52	

See Period of Record and Remarks

a Nov. 16, 17

b Jan. 18, 19

c Jan. 18, 19, 2004

d From floodmarks

f From rating curve extended above 2,400 ft³/s on basis of runoff comparisons with nearby stations

g Minimum recorded, but may have been less during period of ice effect, Mar. 28 to Mar. 31, 1989

15243900 SNOW RIVER NEAR SEWARD

LOCATION.--Lat 60°17'42", long 149°20'38", in NE¹/₄ SW¹/₄ sec. 6, T. 2 N., R. 1 E. (Seward B-7 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, on left bank, 0.5 mi below the Alaska Railroad bridge, 3.0 mi upstream from the mouth at Kenai Lake, and 13.5 mi north of Seward.

DRAINAGE AREA.--128 mi² (revision pending).

PERIOD OF RECORD.--August to September of 1970, 1974, 1977 and April 1997 to current year.

GAGE.--Water stage recorder. Elevation of gage is 470 ft above sea level, from topographic map. Prior to April 9, 1998 at site 0.5 mi upstream at different datum.

REMARKS.--Record poor. Rain gage at station. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Glacier-dammed lake outburst flood about August 31, 1967, 55,000 ft³/s from rating curve extended above 27,000 ft³/s, gage-height 42.60 ft from floodmarks, site and datum then in use.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5940	1050	e150	e110	e80	e95	e75	789	1560	3020	2590	1990
2	5700	1100	e180	e95	e80	e95	103	914	1530	2870	2900	2420
3	7880	1100	e160	e95	e80	e95	112	829	1590	2720	2990	2520
4	5360	1110	e150	e95	e80	e95	108	785	1680	2870	2930	2020
5	5100	1140	e140	e95	e80	e90	108	883	1750	2740	2670	1600
6	7650	1210	e140	e95	e75	e90	133	978	1850	2570	2540	1440
7	6950	1340	e140	e100	e75	e85	187	1000	2120	3130	2720	1340
8	4410	1510	e150	e110	e75	e85	189	955	2080	3290	2840	1220
9	3480	1800	e160	e100	e75	e100	240	864	1910	3300	2950	1150
10	3830	2400	e170	e95	e80	e100	215	833	1690	3090	2920	1140
11	2080	3200	e150	e90	e80	e90	191	887	1710	3060	2980	1060
12	1720	4260	e130	e90	e90	e90	180	974	1810	3100	2800	1010
13	1530	6220	e120	e90	e90	e90	175	1010	1710	2990	2710	1000
14	1430	8940	e120	e90	e90	e85	173	980	1710	2860	2620	885
15	1490	e12700	e120	e90	e90	e85	182	950	1770	2820	2820	760
16	1350	e14600	e120	e85	e90	e85	198	928	2670	2750	2990	680
17	1230	5140	e120	e85	e85	e85	210	934	4650	2830	3380	622
18	1140	1640	e120	e85	e85	e90	210	885	3950	3090	3320	568
19	1170	992	e110	e85	e85	e95	208	1040	3510	3540	3340	545
20	1120	915	e110	e85	e85	e95	209	1430	3330	3270	3350	638
21	1040	375	e110	e90	e90	e95	215	1710	3190	2990	2860	934
22	1050	320	e110	e85	e100	e95	242	1840	3110	3850	2940	855
23	1070	e200	e110	e85	e95	e90	254	2080	3030	4260	3960	1180
24	1160	e190	e110	e85	e90	e90	255	2390	3030	3340	4030	878
25	1440	e180	e110	e85	e90	e90	275	2560	2980	2840	2770	736
26	1820	e170	e110	e80	e90	e85	310	2120	3190	3740	2770	2660
27	1550	e160	e120	e80	e90	e85	339	1960	3200	4610	2680	1720
28	1320	e155	e130	e80	e90	e85	356	1780	3090	3990	2320	1150
29	1170	e150	e120	e80	e90	e85	376	1620	2860	3200	2010	1040
30	1090	e150	e110	e80	---	e80	434	1570	2960	2780	2010	1430
31	1050	---	e110	e80	---	e70	---	1560	---	2540	2030	---
TOTAL	84320	74417	4010	2775	2475	2770	6462	40038	75220	98050	88740	37191
MEAN	2720	2481	129	89.5	85.3	89.4	215	1292	2507	3163	2863	1240
MAX	7880	14600	180	110	100	100	434	2560	4650	4610	4030	2660
MIN	1040	150	110	80	75	70	75	785	1530	2540	2010	545
AC-FT	167200	147600	7950	5500	4910	5490	12820	79420	149200	194500	176000	73770

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)#

MEAN	1396	901	338	205	159	102	173	875	2281	3168	2980	2832
MAX	2720	2481	713	524	444	220	277	1412	2714	3281	5598	6294
(WY)	2004	2004	2003	2001	2003	1998	1998	2002	2002	1998	1977	1974
MIN	279	163	87.3	57.0	42.0	39.2	81.8	491	1780	2866	1764	1157
(WY)	1998	2002	1999	1999	1999	1999	1999	2001	1999	1999	1998	2000

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1970 - 2004#

ANNUAL TOTAL	498467	516468	
ANNUAL MEAN	1366	1411	1210
HIGHEST ANNUAL MEAN			1412
LOWEST ANNUAL MEAN			965
HIGHEST DAILY MEAN	ae14600	Nov 16	a23800
LOWEST DAILY MEAN	85	Apr 3	b36
ANNUAL SEVEN-DAY MINIMUM	85	Apr 3	77
MAXIMUM PEAK FLOW		15200	a26400
MAXIMUM PEAK STAGE		14.07	c40.75
INSTANTANEOUS LOW FLOW		d	36
ANNUAL RUNOFF (AC-FT)	988700	1024000	876900
10 PERCENT EXCEEDS	3350	3220	3140
50 PERCENT EXCEEDS	627	931	478
90 PERCENT EXCEEDS	100	85	80

- # See Period of Record, partial years used in monthly summary statistic
a Result of release of stored water from glacier-dammed lake
b Mar. 3 and Mar. 4, 1999
c Site and datum then in use
d Not determined, see lowest daily mean
e Estimated

15258000 KENAI RIVER AT COOPER LANDING

LOCATION.--Lat 60°29'34", long 149°48'28", in SE¹/₄ sec. 28, T. 5 N., R. 3 W. (Seward B-8 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, Chugach National Forest, on right bank 10 ft. downstream from bridge on Sterling Highway, 0.9 mi upstream from Bean Creek, 0.9 mi east of Cooper Landing, and at Kenai Lake outlet.

DRAINAGE AREA.--634 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1947 to current year.

REVISED RECORDS.--WSP 2136: 1964 (M).

GAGE.--Water-stage recorder. Datum of gage is 419.92 ft. above sea level (levels by Alaska Department of Transportation). See WSP 2136 for history of changes prior to August 28, 1965. August 28, 1965 to January 21, 1974, at site 10 ft. upstream at present datum. January 22, 1974 to September 30, 1981, non-recording gage at site 40 ft. upstream at present datum.

REMARKS.--Records good except for estimated daily discharge, which are poor. Diversion from Cooper Lake to Kenai Lake above gage through Cooper Lake power plant began May 1961. Rain gage at station. GOES satellite telemetry and telephone modem at station.

COOPERATION.--Records of diversion provided by Chugach Electric Association.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3180	2380	1830	924	752	846	644	1590	5390	7810	5940	4360
2	4290	2320	1710	900	746	844	643	1780	5260	7580	5690	4230
3	6360	2290	1670	883	737	825	654	1990	5100	7330	5640	4220
4	8620	2240	1540	868	727	819	660	2170	5020	7070	5610	4130
5	9260	2200	1480	855	720	817	657	2390	5030	6870	5510	4020
6	10700	2170	1410	833	731	812	658	2670	5090	6560	5340	3840
7	12900	2160	1360	820	739	803	663	2980	5330	6450	5240	3630
8	13400	2160	1350	806	736	790	676	3300	5540	6520	5250	3400
9	12400	2170	1340	827	731	797	698	3550	5750	6680	5220	3210
10	11200	2220	1370	852	752	794	719	3750	5790	6770	5220	3040
11	9880	2350	1350	846	765	789	730	3870	5690	6780	5300	2860
12	8470	2570	1330	837	773	778	754	4000	5590	6760	5270	2710
13	7310	3110	1300	832	775	772	771	4190	5490	6720	5210	2570
14	6390	4240	1290	823	788	766	786	4350	5380	6650	5100	2460
15	5630	e6330	1260	827	796	752	812	4460	5340	6520	5050	2340
16	5020	e9940	1230	829	795	742	848	4510	5470	6370	5110	2210
17	4540	e10700	1210	819	796	735	892	4550	5660	6220	5190	2070
18	4110	8490	1190	820	797	715	932	4540	7750	6090	5350	2000
19	3800	6940	1180	812	798	712	967	4520	8460	6140	5490	1970
20	3550	5750	1160	823	802	708	996	4610	8790	6220	5610	1900
21	3300	4900	1130	816	818	697	1030	4860	8860	6190	5620	1860
22	3090	4190	1130	794	850	695	1060	5110	8810	6170	5540	1860
23	2910	3710	1100	790	852	688	1100	5380	8680	6510	5550	1850
24	2770	3250	1070	795	858	684	1140	5690	8560	6660	5920	1840
25	2720	2890	1040	789	852	680	1190	6010	8410	6480	5800	1840
26	2770	2610	1010	799	854	676	1240	6160	8400	6360	5620	2040
27	2760	2430	994	781	854	675	1320	6210	8410	6680	5490	2320
28	2700	2230	997	764	848	662	1380	6150	8340	6980	5330	2410
29	2650	2100	994	760	844	657	1430	5950	8150	6930	5040	2450
30	2560	1960	962	758	---	646	1480	5740	7940	6670	4750	2540
31	2440	---	945	758	---	645	---	5570	---	6320	4510	---
TOTAL	181680	113000	38932	25440	22886	23021	27530	132600	202380	206060	166510	82180
MEAN	5861	3767	1256	821	789	743	918	4277	6746	6647	5371	2739
MAX	13400	10700	1830	924	858	846	1480	6210	8860	7810	5940	4360
MIN	2440	1960	945	758	720	645	643	1590	5020	6090	4510	1840
MED	4290	2500	1230	820	795	742	830	4510	5770	6650	5340	2450
AC-FT	360400	224100	77220	50460	45390	45660	54610	263000	401400	408700	330300	163000
CFSM	9.24	5.94	1.98	1.29	1.24	1.17	1.45	6.75	10.6	10.5	8.47	4.32
IN.	10.66	6.63	2.28	1.49	1.34	1.35	1.62	7.78	11.87	12.09	9.77	4.82

ADJUSTED TO EXCLUDE DIVERSION FROM COOPER LAKE

MEAN	5811	3658	1171	642	611	595	789	4145	6613	6548	5295	2674
CFSM	9.17	5.77	1.85	1.01	0.96	0.94	1.24	6.54	10.43	10.33	8.35	4.22
IN	10.57	6.44	2.13	1.17	1.04	1.08	1.39	7.54	11.64	11.91	9.63	4.71
AC-FT	357320	217680	71980	39480	35140	36610	46940	254850	393480	402640	325600	159110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2004, BY WATER YEAR (WY)#

MEAN	3358	1905	1171	835	684	528	556	1969	5455	6996	6337	5210
MAX	8955	6739	3755	2807	2066	1122	1071	4277	10010	10480	11430	11490
(WY)	1980	2003	2003	1981	1981	1977	1980	2004	1953	1980	1977	1967
MIN	1264	654	364	310	251	208	262	658	3268	4868	3651	2629
(WY)	1956	1951	1951	1951	1949	1951	1952	1952	1972	1996	1969	1969

See Period of Record and Remarks; partial years used in monthly statistics
e Estimated

15258000 KENAI RIVER AT COOPER LANDING—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1947 - 2004#	
ANNUAL TOTAL	1201452		1222219			
ANNUAL MEAN	3292		3339		2935	
ANNUAL MEAN	*3186		*3224		*2860	
HIGHEST ANNUAL MEAN					4499 1977	
LOWEST ANNUAL MEAN					2102 1969	
HIGHEST DAILY MEAN	13400	Oct 8	13400	Oct 8	22500	Sep 21 1974
LOWEST DAILY MEAN	643	Apr 11	643	Apr 2	100	Mar 28 1964
ANNUAL SEVEN-DAY MINIMUM	654	Apr 10	650	Mar 29	190	Mar 15 1951
MAXIMUM PEAK FLOW			a13600	Oct 7	b23100	Sep 21 1974
MAXIMUM PEAK STAGE			14.07	Oct 8	17.18	Sep 21 1974
INSTANTANEOUS LOW FLOW			612	Apr 2	c0.00	Mar 27 1964
ANNUAL RUNOFF (AC-FT)	2383000		2424000		2126000	
ANNUAL RUNOFF (AC-FT)	*2306760		*2340830		2072000	
ANNUAL RUNOFF (CFSM)	*5.03		*5.09		*4.51	
ANNUAL RUNOFF (INCHES)	*68.22		*69.22		*61.26	
10 PERCENT EXCEEDS	6820		6760		6980	
50 PERCENT EXCEEDS	2280		2380		1670	
90 PERCENT EXCEEDS	922		752		420	

See Period of Record and Remarks; partial years used in monthly statistics
Values shown on this page are unadjusted for inflow from diversion, unless
otherwise noted

* Adjusted to account for inflow from diversion, see Remarks

a Maximum peak flow recorded on Oct. 7 and Oct. 8

b Result of release of stored water from glacier-dammed lake at head of unnamed
glacier in the Snow River Basin

c No flow, Mar. 27 and Mar. 28, 1964, caused by earthquake

15258000 KENAI RIVER AT COOPER LANDING—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-53, 1955-60, 1966-74, 1976, 1994 and December 2002 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Water year 1950, and December 2002 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder set for 15 minute recording interval.

REMARKS.--Records represent water temperature at the sensor within 0.5°C.

EXTREMES FOR PERIOD OF DAILY RECORDS.--

WATER TEMPERATURE: Maximum, 18.0°C, August 18, 19 2004; Minimum, 0.0°C, Several days January and March, 2003 and April 27, 2004.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 18.0°C, August 18, 19; Minimum, 0.0°C, April 27.

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.5	8.5	9.0	6.5	6.0	6.0	3.0	1.5	2.5	2.5	1.0	2.0
2	9.0	8.5	8.5	6.5	6.0	6.0	2.5	1.5	2.5	2.5	1.0	2.0
3	9.0	8.0	8.5	6.5	6.0	6.0	2.5	1.0	2.0	2.0	1.5	2.0
4	9.0	8.0	8.5	6.5	6.0	6.0	2.5	1.5	2.0	2.0	1.5	2.0
5	9.0	8.0	8.5	6.5	6.0	6.0	2.0	1.5	2.0	2.5	1.5	2.0
6	9.0	8.0	8.5	6.5	6.0	6.0	2.0	1.0	1.5	2.5	1.0	2.0
7	9.0	8.0	8.5	6.5	5.5	6.0	2.0	1.0	1.5	2.5	1.5	2.0
8	9.0	8.0	8.5	6.0	5.5	6.0	2.0	1.5	2.0	2.0	1.0	1.5
9	8.5	8.0	8.5	6.0	5.5	6.0	2.5	1.0	2.0	2.0	1.5	1.5
10	8.5	8.0	8.5	6.0	5.0	5.5	2.0	0.5	1.5	3.5	1.0	1.5
11	8.5	8.0	8.0	6.0	4.5	5.5	2.0	1.5	1.5	1.5	1.0	1.5
12	8.5	8.0	8.0	5.5	5.0	5.5	2.0	1.0	1.5	1.5	0.5	1.0
13	8.5	7.5	8.0	5.5	5.0	5.0	2.0	1.0	1.5	1.5	0.5	1.0
14	8.0	7.5	8.0	5.5	4.0	5.0	2.5	1.0	1.5	1.5	0.5	1.0
15	8.0	7.5	8.0	5.0	4.5	5.0	2.5	0.5	1.5	1.5	0.5	1.0
16	8.0	7.5	7.5	5.0	4.0	4.5	1.5	0.5	1.0	1.5	1.0	1.0
17	8.0	7.5	7.5	4.5	3.5	4.0	2.0	1.0	1.5	1.5	1.0	1.0
18	8.0	7.0	7.5	4.5	3.5	4.0	2.0	0.5	1.5	1.5	1.0	1.0
19	7.5	7.0	7.0	4.5	4.0	4.0	2.5	1.0	1.5	1.0	0.5	1.0
20	7.5	7.0	7.0	4.5	3.5	4.0	2.5	1.5	2.0	1.5	1.0	1.0
21	7.5	6.5	7.0	4.0	3.5	4.0	2.0	1.5	1.5	1.5	1.0	1.5
22	7.0	6.5	7.0	4.0	3.5	4.0	3.0	1.5	2.0	1.5	0.5	1.0
23	7.0	6.5	7.0	4.0	3.0	3.5	2.5	1.0	2.0	1.5	0.5	1.0
24	7.0	6.5	7.0	4.0	3.0	3.5	2.0	1.5	2.0	1.5	0.5	1.0
25	7.0	6.5	7.0	4.0	2.0	3.0	2.5	1.5	2.0	1.5	0.5	1.0
26	7.0	6.5	7.0	3.0	1.5	2.5	2.5	1.0	2.0	1.5	0.5	1.0
27	7.0	6.0	6.5	3.0	2.0	2.5	2.5	2.0	2.5	1.5	1.0	1.0
28	6.5	5.5	6.0	2.5	1.5	2.0	3.0	2.0	2.5	1.5	0.5	1.0
29	6.5	5.5	6.0	3.0	2.0	2.5	3.0	2.0	2.5	1.0	0.5	1.0
30	6.5	6.0	6.0	2.5	1.5	2.0	2.5	1.5	2.0	1.0	0.5	1.0
31	6.5	6.0	6.0	---	---	---	2.5	1.0	1.5	1.5	1.0	1.0
MONTH	9.5	5.5	7.6	6.5	1.5	4.5	3.0	0.5	1.8	3.5	0.5	1.3

15258000 KENAI RIVER AT COOPER LANDING—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.5	1.0	1.0	2.5	1.0	1.5	2.5	1.0	1.5	3.0	2.0	3.0
2	1.5	1.0	1.0	2.5	1.0	1.5	2.0	1.0	1.5	3.5	2.5	3.0
3	1.5	1.0	1.0	3.0	1.0	2.0	2.5	1.5	2.0	3.5	2.5	3.0
4	1.5	1.0	1.0	3.0	1.0	1.5	2.0	1.5	1.5	3.5	3.0	3.5
5	1.5	1.0	1.0	2.5	0.5	1.5	2.0	1.5	1.5	3.5	3.0	3.5
6	1.5	0.5	1.0	2.5	1.0	1.5	2.5	1.5	2.0	4.0	3.0	3.5
7	1.5	1.0	1.0	2.5	1.0	1.5	2.5	1.5	2.0	4.5	3.0	3.5
8	1.5	1.0	1.0	2.0	1.0	1.5	2.5	1.5	2.0	4.5	3.5	4.0
9	1.5	1.0	1.0	2.0	1.0	1.5	3.5	1.5	2.0	4.0	3.5	4.0
10	1.5	1.0	1.5	2.5	1.5	2.0	4.0	1.5	2.5	4.5	3.5	4.0
11	1.5	1.0	1.0	3.0	1.5	2.0	4.0	1.5	2.0	4.5	3.5	4.0
12	1.5	1.0	1.0	2.5	1.5	2.0	4.0	1.5	2.5	4.5	3.5	4.0
13	1.5	1.0	1.5	3.0	1.0	2.0	4.0	1.5	2.5	5.0	3.5	4.5
14	2.0	0.5	1.0	2.5	1.5	2.0	3.5	1.5	2.5	5.5	4.5	4.5
15	1.5	0.5	1.0	3.0	1.5	2.0	4.0	1.5	2.5	5.0	4.5	4.5
16	1.5	0.5	1.0	3.0	1.0	1.5	3.0	2.0	2.5	5.0	4.0	4.5
17	1.5	1.0	1.0	3.0	1.0	1.5	3.5	2.0	2.5	5.0	4.0	4.5
18	1.5	1.0	1.0	1.5	0.5	1.0	3.5	2.0	2.5	5.0	4.0	4.5
19	1.5	1.0	1.0	2.0	1.0	1.5	3.0	2.0	2.5	5.0	4.5	4.5
20	2.0	1.0	1.5	2.5	1.0	1.5	3.5	2.0	2.5	5.0	4.0	4.5
21	2.0	1.0	1.5	2.5	1.0	1.5	3.0	2.0	2.5	5.5	4.0	4.5
22	2.0	1.0	1.5	3.0	1.5	2.0	3.0	2.0	2.5	6.0	4.5	5.5
23	2.0	1.0	1.5	3.0	1.5	2.0	3.0	2.0	2.5	6.0	5.0	5.5
24	2.5	1.0	1.5	3.0	1.5	2.0	3.0	2.0	2.5	5.5	4.5	5.0
25	2.0	1.0	1.5	3.0	1.5	2.0	3.0	2.0	2.5	5.5	4.5	5.0
26	2.5	1.0	1.5	2.5	1.0	1.5	3.0	1.0	2.5	5.5	4.5	5.0
27	2.0	1.0	1.5	2.5	1.0	2.0	2.5	0.0	1.0	5.5	4.5	5.0
28	2.5	1.0	1.5	2.5	1.0	1.5	2.5	2.0	2.5	5.5	5.0	5.0
29	2.5	1.0	1.5	2.5	0.5	1.5	3.0	2.0	2.5	5.5	4.5	5.0
30	---	---	---	2.0	0.5	1.0	3.0	2.0	2.5	5.5	4.5	5.0
31	---	---	---	2.5	0.5	1.5	---	---	---	6.0	4.5	5.5
MONTH	2.5	0.5	1.2	3.0	0.5	1.7	4.0	0.0	2.2	6.0	2.0	4.4
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.0	5.0	5.5	11.0	8.0	10.0	13.5	10.5	12.0	14.5	11.0	13.0
2	6.0	5.5	6.0	12.5	10.0	11.0	11.0	8.0	9.5	14.5	13.0	14.0
3	6.0	5.5	5.5	12.5	10.0	11.0	10.0	8.0	8.5	13.5	8.0	11.5
4	6.5	5.0	5.5	12.5	11.5	12.0	14.5	9.5	13.0	9.0	6.0	7.0
5	6.5	5.5	6.0	12.5	11.5	12.0	15.5	14.0	14.5	7.5	6.0	6.5
6	6.0	5.0	5.5	12.5	8.0	10.0	15.0	12.5	14.5	10.0	7.0	8.5
7	8.0	5.0	6.5	9.0	6.0	7.5	14.5	12.0	13.0	11.0	10.0	10.5
8	7.5	5.5	6.5	8.5	6.0	7.0	16.5	12.5	15.5	11.0	10.0	10.5
9	7.5	5.5	6.5	6.5	5.5	6.0	16.5	15.0	16.0	11.5	10.0	10.5
10	7.5	6.5	7.0	8.0	6.0	7.0	15.5	13.0	14.5	11.5	11.0	11.0
11	7.0	6.5	7.0	10.5	6.5	8.5	16.5	13.0	14.5	12.0	11.0	11.5
12	7.0	6.5	6.5	14.0	10.5	12.5	16.5	15.0	16.0	11.5	11.0	11.5
13	7.0	6.0	6.5	15.5	12.5	14.0	15.5	13.0	14.5	11.5	8.5	10.5
14	8.0	6.5	7.0	15.0	12.5	13.5	15.0	12.0	13.5	10.5	7.0	8.5
15	8.0	7.0	7.5	15.5	14.0	14.5	14.5	12.0	13.5	9.0	6.5	8.0
16	8.0	7.0	7.5	16.0	14.0	15.0	14.5	12.0	13.5	8.5	6.0	7.0
17	8.0	7.0	7.5	16.0	15.0	15.5	17.5	12.5	14.0	8.0	6.0	7.0
18	8.5	7.0	7.5	15.5	14.5	15.0	18.0	15.5	17.0	8.0	7.0	7.5
19	8.0	6.5	7.0	15.5	13.5	14.5	18.0	17.0	17.5	8.0	7.5	7.5
20	8.0	6.0	6.5	15.5	14.0	15.0	17.5	15.0	16.5	8.5	7.5	8.0
21	7.0	6.0	6.5	15.5	14.5	15.0	17.5	14.5	15.5	8.0	7.5	7.5
22	6.5	5.5	6.0	15.0	14.5	15.0	17.5	15.0	16.5	9.0	7.5	8.0
23	6.5	5.5	6.0	15.0	14.0	14.5	17.5	16.5	17.0	9.0	7.0	8.0
24	10.0	5.0	7.5	15.0	14.0	14.5	17.0	16.0	16.5	8.0	7.0	7.5
25	10.5	7.0	9.0	15.0	14.0	14.5	16.5	14.5	16.0	8.5	7.5	8.0
26	11.0	7.5	9.0	14.5	14.0	14.5	16.5	16.0	16.5	8.5	7.5	8.0
27	12.0	9.0	11.0	14.5	14.0	14.5	16.5	13.5	15.0	8.0	7.0	7.5
28	12.0	10.0	11.0	14.5	14.0	14.5	15.0	12.5	14.0	8.0	7.0	7.5
29	10.0	8.5	9.0	14.5	13.5	14.0	14.5	12.5	13.0	8.0	7.0	7.5
30	9.5	7.5	8.5	14.5	13.5	14.0	14.0	10.5	13.0	8.0	7.0	7.5
31	---	---	---	14.5	13.0	14.0	13.5	11.0	12.0	---	---	---
MONTH	12.0	5.0	7.2	16.0	5.5	12.6	18.0	8.0	14.4	14.5	6.0	8.9

15261000 COOPER CREEK AT MOUTH NEAR COOPER LANDING

LOCATION.--Lat 60°28'50", long 149°52'50", in NW¹/₄ SW¹/₄ sec. 31, T. 5 N., R. 3 W. (Seward B-8 quad), Hydrologic Unit 19020302 Kenai Peninsula Borough, on left bank, approximately 0.5 mi upstream from mouth, and 1.5 mi west of Cooper Landing.

DRAINAGE AREA.--48.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to January 1965, August 1998 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 450 ft above sea level, from topographic map. From October 1957 to January 1965, 0.4 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Since July 1959, entire flow from 31.8 mi² of drainage area has been regulated by dam at Cooper Lake outlet. No spilling since 1959 except for period May 1961 to October 1962. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	32	e16	e11	12	10	e9.0	80	115	76	32	17
2	42	32	e16	e11	11	10	e9.0	88	111	70	32	18
3	120	31	e16	e11	11	9.9	e10	83	114	66	32	18
4	102	30	e16	e11	11	9.9	e10	98	120	64	30	17
5	79	30	e16	e11	11	9.8	9.6	119	117	64	29	16
6	112	30	e16	e11	11	e9.5	11	139	121	61	27	16
7	112	30	e16	e11	11	e9.5	13	142	126	62	27	16
8	93	32	e15	e11	14	e9.5	14	135	123	63	26	15
9	79	31	e15	e11	11	e9.5	14	124	107	63	26	15
10	64	30	e15	e11	e12	e9.5	14	110	104	61	25	15
11	59	33	e15	e11	e12	e9.5	14	115	101	56	24	15
12	53	28	e15	e11	12	e9.5	14	122	99	54	24	15
13	49	e24	e15	e11	12	e9.5	14	124	96	53	23	19
14	47	e21	e15	e11	12	e9.5	15	122	92	46	22	16
15	45	e19	e15	e11	12	9.3	17	119	91	45	21	13
16	43	e18	e15	e11	e11	9.7	19	117	116	42	20	13
17	41	e17	e15	e11	e11	e9.5	19	115	145	41	20	13
18	40	e15	e15	e11	e11	e9.0	19	121	151	41	20	13
19	39	e14	e15	e11	e11	e9.0	19	120	143	40	19	14
20	38	e12	e15	e11	e11	e9.0	20	126	131	39	19	15
21	37	e12	e15	e12	e11	e9.0	22	110	124	37	19	12
22	36	e13	e14	e12	e11	e9.5	23	119	121	36	18	14
23	35	e13	e13	e12	11	e9.5	25	180	114	37	18	14
24	36	e14	e13	e12	11	e9.5	25	224	112	35	18	14
25	38	e14	e12	e12	11	e9.5	28	166	106	33	18	15
26	37	e14	e12	e12	10	9.4	32	143	106	37	17	45
27	35	e15	e12	e12	10	9.1	33	142	106	44	21	28
28	33	e15	e11	12	10	9.1	33	139	96	39	21	22
29	32	e15	e11	11	10	8.9	40	125	83	36	19	25
30	33	e15	e11	12	---	e9.0	50	116	79	36	18	31
31	32	---	e11	13	---	e9.0	---	111	---	35	17	---
TOTAL	1674	649	442	352	325	292.1	594.6	3894	3370	1512	702	529
MEAN	54.0	21.6	14.3	11.4	11.2	9.42	19.8	126	112	48.8	22.6	17.6
MAX	120	33	16	13	14	10	50	224	151	76	32	45
MIN	32	12	11	11	10	8.9	9.0	80	79	33	17	12
AC-FT	3320	1290	877	698	645	579	1180	7720	6680	3000	1390	1050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2004, BY WATER YEAR (WY)#

MEAN	75.9	51.1	26.1	19.6	16.4	11.9	18.5	99.2	181	135	76.4	68.6
MAX	264	285	82.9	58.9	50.5	28.0	50.3	219	412	326	226	309
(WY)	1958	1958	1958	1958	2003	1958	1958	1961	1958	1961	1961	1961
MIN	20.7	11.9	10.0	8.00	6.43	4.50	9.00	42.6	73.7	48.8	22.6	17.6
(WY)	1964	1964	1964	1964	1999	1999	1960	1964	1963	2004	2004	2004

See Period of Record, partial years used in monthly statistics
e Estimated

15261000 COOPER CREEK AT MOUTH NEAR COOPER LANDING—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1958 - 2004#	
ANNUAL TOTAL	15061.5		14335.7			
ANNUAL MEAN	41.3		39.2		65.9	
HIGHEST ANNUAL MEAN					a174	1958
LOWEST ANNUAL MEAN					29.9	1963
HIGHEST DAILY MEAN	187	Feb 5	224	May 24	ab810	Sep 22 1961
LOWEST DAILY MEAN	9.5	Apr 12	8.9	Mar 29	c4.0	Mar 19 1999
ANNUAL SEVEN-DAY MINIMUM	10	Apr 8	9.0	Mar 27	4.0	Mar 19 1999
MAXIMUM PEAK FLOW			260	May 24	d1230	Oct 23 2002
MAXIMUM PEAK STAGE			f10.94	May 24	12.45	Oct 23 2002
INSTANTANEOUS LOW FLOW	g		g		h3.1	Mar 1 1960
ANNUAL RUNOFF (AC-FT)	29870		28430		47730	
10 PERCENT EXCEEDS	87		115		162	
50 PERCENT EXCEEDS	32		18		33	
90 PERCENT EXCEEDS	13		10		10	

- # See Period of Record, partial years used in monthly statistics
a Includes natural flow or spill from area upstream from Cooper Lake dam
b Caused by release of water behind log jam upstream. Site and datum then in use
c From Mar. 19 to Apr. 14, 1999
d From high water mark
e From crest-stage gage
f Not determined. See Lowest Daily Mean
g Caused by temporary storage behind ice jam upstream (observed)

15261000 COOPER CREEK AT MOUTH NEAR COOPER LANDING—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1998 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder set for 15 minute recording interval.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the average for the stream by cross section on April 13 and August 13. Variations found in the cross sections were less than 0.2°C. No variation was found between mean stream temperature and sensor temperature. Heavy shore ice occurs near the gage.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 12.5°C, July 7 and 12, 2004 and August 17, 2004; Minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 12.5°C, July 7, 12 and August 17; Minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (00004)	Location in X-sect. looking downstream, ft from bank (00009)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler type, code (84164)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
APR									
13...	1215	32.0	6.00	9.82	14	10	8010	1.6	5.6
13...	1218	32.0	12.0	9.82	14	10	8010	1.6	5.6
13...	1221	32.0	18.0	9.82	14	10	8010	1.5	5.6
13...	1224	32.0	24.0	9.82	14	10	8010	1.6	5.6
13...	1227	32.0	30.0	9.82	14	10	8010	1.5	5.6
AUG									
13...	1200	28.0	4.00	9.96	24	10	8010	8.7	17.3
13...	1205	28.0	9.00	9.96	24	10	8010	8.6	17.3
13...	1210	28.0	14.0	9.96	24	10	8010	8.6	17.3
13...	1215	28.0	20.0	9.96	24	10	8010	8.6	17.3
13...	1220	28.0	26.0	9.96	24	10	8010	8.5	17.3

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.0	7.0	7.5	4.0	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0
2	7.0	6.0	6.5	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
3	6.0	5.0	5.5	3.5	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0
4	5.5	4.5	5.0	3.5	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
5	6.0	5.0	5.5	3.5	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
6	6.0	5.0	5.5	4.0	3.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0
7	6.0	4.5	5.5	3.5	2.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
8	5.0	3.0	4.0	3.5	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0
9	4.5	3.5	4.5	2.5	0.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
10	4.0	2.5	3.0	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
11	4.5	3.0	3.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	3.5	2.0	2.5	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
13	4.0	2.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	4.5	3.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	4.0	2.0	3.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
16	2.0	0.5	1.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
17	2.0	0.5	1.0	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
18	2.5	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	2.5	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	2.5	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	2.5	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	3.0	1.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	3.5	1.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	4.5	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	3.0	2.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	2.0	0.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	1.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	2.5	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	3.5	1.5	2.5	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	8.0	0.0	3.4	4.0	0.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0

15261000 COOPER CREEK AT MOUTH NEAR COOPER LANDING—Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	1.5	1.0	1.0	0.0	0.0	0.0	3.0	1.5	2.0
2	0.5	0.0	0.0	1.5	1.0	1.0	0.0	0.0	0.0	3.0	1.5	2.0
3	0.5	0.5	0.5	1.5	1.0	1.0	0.0	0.0	0.0	4.0	1.0	2.5
4	0.5	0.5	0.5	1.0	0.5	1.0	1.0	0.0	0.5	4.5	1.5	2.5
5	0.5	0.5	0.5	0.5	0.0	0.5	1.0	0.5	1.0	4.0	1.5	2.5
6	0.5	0.0	0.5	0.0	0.0	0.0	1.0	0.5	1.0	4.5	1.5	2.5
7	0.5	0.5	0.5	0.0	0.0	0.0	1.5	0.5	1.0	4.5	1.5	2.5
8	1.0	0.0	0.5	0.0	0.0	0.0	2.0	0.5	1.0	4.0	1.5	2.5
9	1.0	0.5	0.5	0.0	0.0	0.0	1.5	1.0	1.0	4.0	1.5	2.5
10	0.5	0.0	0.0	0.0	0.0	0.0	2.5	1.0	1.5	4.5	2.0	3.0
11	0.5	0.0	0.0	0.0	0.0	0.0	2.0	0.5	1.0	4.5	2.5	3.0
12	1.0	0.0	0.5	0.0	0.0	0.0	2.0	0.5	1.0	5.0	2.5	3.0
13	1.0	0.5	1.0	0.0	0.0	0.0	2.5	0.5	1.5	5.5	2.0	3.5
14	1.0	0.5	1.0	1.0	0.0	0.5	2.5	1.0	1.5	5.5	2.0	3.5
15	0.5	0.0	0.0	1.0	0.5	0.5	2.5	0.5	1.5	5.0	2.0	3.0
16	0.0	0.0	0.0	0.5	0.0	0.0	1.5	1.0	1.5	4.0	2.5	3.0
17	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.0	1.5	5.0	2.5	3.5
18	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.0	1.5	5.5	2.5	3.5
19	0.0	0.0	0.0	0.0	0.0	0.0	3.0	1.0	2.0	5.5	3.0	4.0
20	0.0	0.0	0.0	0.0	0.0	0.0	3.0	1.0	2.0	6.0	2.5	4.0
21	1.0	0.0	0.5	0.0	0.0	0.0	3.0	0.5	1.5	6.0	2.5	4.0
22	1.0	0.5	0.5	0.0	0.0	0.0	3.0	1.0	2.0	6.0	2.5	4.0
23	1.0	0.5	1.0	0.0	0.0	0.0	3.0	1.0	2.0	4.0	3.0	3.5
24	1.5	1.0	1.0	0.0	0.0	0.0	3.0	1.0	2.0	4.0	2.5	3.5
25	1.0	0.5	0.5	0.0	0.0	0.0	3.0	1.5	2.0	4.5	2.5	3.5
26	0.5	0.5	0.5	0.5	0.0	0.5	3.5	1.0	2.0	5.5	3.0	4.0
27	1.0	0.5	1.0	1.0	0.0	0.5	2.0	1.5	1.5	6.0	3.0	4.5
28	1.0	0.5	1.0	0.5	0.0	0.5	2.5	1.5	2.0	4.5	3.0	3.5
29	1.5	0.5	1.0	0.5	0.0	0.5	2.5	1.5	2.0	6.5	3.0	4.0
30	---	---	---	0.0	0.0	0.0	4.0	1.5	2.0	6.5	2.5	4.0
31	---	---	---	0.0	0.0	0.0	---	---	---	6.0	3.5	4.5
MONTH	1.5	0.0	0.4	1.5	0.0	0.2	4.0	0.0	1.4	6.5	1.0	3.3
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.0	2.5	4.5	9.5	6.5	8.0	10.5	7.0	9.0	9.0	7.5	8.5
2	6.5	3.5	4.5	9.5	6.0	7.5	11.0	7.0	9.5	9.5	8.0	8.5
3	7.0	3.5	4.5	10.0	6.5	8.0	11.5	7.0	9.5	9.0	7.0	8.0
4	7.5	3.0	5.0	10.0	7.0	8.0	11.0	8.0	9.5	7.0	4.5	5.5
5	6.0	4.0	5.0	9.0	6.0	7.5	11.5	7.5	9.5	6.5	3.5	5.0
6	6.5	4.0	5.0	11.0	6.0	8.5	10.5	6.5	9.0	7.0	5.0	6.0
7	7.5	3.5	5.0	12.5	6.5	9.5	11.5	7.5	9.5	6.5	4.0	5.0
8	6.0	4.0	5.0	11.5	7.0	9.5	12.0	8.0	10.0	6.0	3.5	5.0
9	6.5	3.5	4.5	11.5	7.0	9.0	11.0	8.0	9.5	6.5	3.5	5.0
10	6.0	3.5	5.0	11.5	6.5	9.0	11.5	7.5	10.0	7.5	5.5	6.5
11	6.5	3.5	5.0	11.5	6.5	9.0	11.5	8.0	10.0	6.5	4.0	5.0
12	6.5	3.5	5.0	12.5	7.5	10.0	11.0	8.0	9.5	6.5	3.5	5.0
13	8.0	4.0	5.5	12.0	7.0	9.5	11.0	7.5	9.5	5.5	4.0	5.0
14	8.0	4.0	5.5	11.0	7.0	9.0	11.0	7.5	9.5	4.0	2.0	3.0
15	6.5	4.5	5.5	12.0	7.5	9.5	11.0	8.0	9.5	4.0	1.5	2.5
16	6.0	4.5	5.0	11.5	7.0	9.5	11.5	8.0	10.0	3.5	1.5	2.5
17	7.5	4.5	5.5	10.5	8.0	9.5	12.5	9.0	10.5	2.5	0.5	1.5
18	8.5	4.5	6.0	10.5	8.0	9.0	12.0	9.0	10.5	3.5	0.5	2.0
19	9.5	4.0	6.5	10.5	8.0	9.0	11.5	9.5	10.5	4.0	3.0	3.5
20	9.5	4.0	6.5	10.5	7.5	9.0	11.0	9.0	10.0	6.0	4.0	5.0
21	10.0	4.5	7.0	9.5	7.5	8.5	10.5	7.5	9.0	5.5	4.0	4.5
22	10.0	4.5	7.0	9.5	7.5	8.5	11.0	7.5	9.0	6.5	4.5	5.0
23	10.5	5.0	7.5	11.0	7.5	9.0	11.5	8.0	9.5	6.0	3.5	5.0
24	10.5	4.5	7.0	11.0	6.5	8.5	11.5	8.5	10.0	3.5	1.0	2.0
25	11.0	5.0	8.0	10.0	7.0	8.5	10.5	7.5	9.0	4.0	2.5	3.0
26	11.5	6.0	8.5	10.0	8.0	9.0	9.5	8.5	9.0	5.5	4.0	4.5
27	10.5	6.0	8.0	9.0	7.5	8.0	9.0	8.5	9.0	4.5	2.5	3.0
28	8.0	6.0	7.0	9.5	7.0	8.0	9.5	7.0	8.0	4.0	2.0	3.0
29	9.0	6.0	7.5	9.5	6.0	8.0	8.5	5.5	7.0	5.0	3.5	4.0
30	11.0	6.5	8.5	9.5	7.0	8.0	9.0	6.5	8.0	6.5	4.5	5.5
31	---	---	---	9.5	6.5	8.0	9.0	6.5	8.0	---	---	---
MONTH	11.5	2.5	6.0	12.5	6.0	8.7	12.5	5.5	9.4	9.5	0.5	4.6

15266110 KENAI RIVER BELOW SKILAK LAKE OUTLET NEAR STERLING

LOCATION.--Lat 60°28'00", long 150°35'56", in SW¹/₄ NW¹/₄ sec. 1, T. 4 N., R. 8 W. (Kenai B-2 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, on right bank, 3.5 mi downstream from Skilak Lake, 7 mi southeast of Sterling.

DRAINAGE AREA.--1,206 mi².

PERIOD OF RECORD.--June 1997 to current year.

REVISED RECORDS.-- WRD-AK-00-1: Drainage area.

GAGE.--Water stage recorder. Elevation of gage is 240 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Rain gage recorder at station. GOES satellite telemetry and phone modem at station.

WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4030	4000	3320	1550	e1300	e1100	995	1890	8140	14300	15400	10400
2	4610	3860	3100	1510	e1300	e1100	1010	1990	8070	14100	14800	10300
3	6490	3730	2930	1540	1250	e1100	1000	2090	7880	14000	14500	10200
4	8990	3610	2800	1460	1120	e1100	e1000	2230	7660	14200	13900	10000
5	10900	3480	2650	1450	1100	e1100	1050	2400	7510	14000	13600	9720
6	12700	3400	2520	e1350	1110	e1100	e1080	2600	7470	13800	13300	9270
7	14800	3310	2400	e1350	1110	e1100	1090	2850	7500	13300	12800	8860
8	16600	3230	2330	e1350	1110	e1100	1120	3140	7590	13200	12500	8400
9	17700	3130	2400	e1350	1110	e1100	1160	3430	7740	13000	12300	7790
10	17800	3100	2460	e1350	e1100	e1100	1170	3760	8000	13100	12100	7270
11	17200	3040	2400	e1350	e1100	e1100	1170	4070	8000	13200	12000	6860
12	16200	3010	2270	e1300	e1100	e1100	1200	4310	8050	13100	11900	6450
13	15100	3030	2220	e1300	e1100	e1100	1210	4570	7960	13100	11800	6100
14	13900	3080	2180	e1300	e1100	e1100	1230	4840	8000	13300	11600	e6000
15	12700	3290	2130	e1300	e1100	e1100	1260	5140	8300	13500	11500	e5800
16	11600	3810	2040	e1300	e1100	e1100	1290	5420	8590	13400	11300	e5500
17	10600	4660	1980	e1200	e1100	e1100	1350	5550	8920	13400	11200	e5200
18	9700	5460	1940	e1200	e1100	1110	1400	5660	9540	13600	11300	5110
19	8880	5930	1880	e1200	e1100	1100	1400	5800	10600	13000	11400	4880
20	8130	6100	1830	e1200	e1100	1080	1420	5910	11900	13100	11600	4650
21	7430	6090	1780	e1300	e1100	1070	1450	6040	12700	13300	11600	4400
22	6810	5930	1790	e1300	e1100	1070	1480	6220	13600	13000	11600	4280
23	6280	5640	1750	e1300	e1100	1060	1500	6620	13800	13100	11700	4150
24	5840	5350	1740	e1300	e1100	1050	1530	7030	14100	13300	11700	3960
25	5500	4970	1730	e1300	e1100	1030	1550	7430	14300	13700	11800	3830
26	5220	4610	1760	e1300	e1100	1010	1590	7790	14400	13900	11800	3840
27	4940	4310	1610	e1300	e1100	1020	e1650	8020	14500	14400	11900	3790
28	4700	4010	1640	e1300	e1100	1010	e1700	8280	14800	15100	11800	3780
29	4490	3730	1650	e1300	e1100	1000	e1750	8330	14700	15800	11500	3860
30	4300	3540	1610	e1300	---	990	1820	8290	14600	16100	11100	3960
31	4170	---	1590	e1300	---	997	---	8210	---	15900	10700	---
TOTAL	298310	124440	66430	41210	32510	33297	39625	159910	308920	427300	378000	188610
MEAN	9623	4148	2143	1329	1121	1074	1321	5158	10300	13780	12190	6287
MAX	17800	6100	3320	1550	1300	1110	1820	8330	14800	16100	15400	10400
MIN	4030	3010	1590	1200	1100	990	995	1890	7470	13000	10700	3780
AC-FT	591700	246800	131800	81740	64480	66040	78600	317200	612700	847500	749800	374100
CFSM	7.98	3.44	1.78	1.10	0.93	0.89	1.10	4.28	8.54	11.4	10.1	5.21
IN.	9.20	3.84	2.05	1.27	1.00	1.03	1.22	4.93	9.53	13.18	11.66	5.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)#

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
MEAN	6907	4751	2631	1846	1598	1180	1112	2860	8419	13140	11970	9285
MAX	9623	14170	7548	2960	2773	1867	1321	5158	10300	15400	13600	13860
(WY)	2004	2003	2003	2001	2003	2003	2004	2004	2004	2001	2001	2001
MIN	3937	2106	1387	1164	891	870	888	2210	6156	11960	10310	5659
(WY)	2001	2002	2002	1999	1998	1998	2002	2001	1997	1999	1998	2000

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1997 - 2004#

	2003 CALENDAR YEAR	2004 WATER YEAR	1997 - 2004#
ANNUAL TOTAL	2004350	2098562	
ANNUAL MEAN	5491	5734	5495
HIGHEST ANNUAL MEAN			6742
LOWEST ANNUAL MEAN			4742
HIGHEST DAILY MEAN	17800	Oct 10	20300
LOWEST DAILY MEAN	a1090	Apr 19	776
ANNUAL SEVEN-DAY MINIMUM	1110	Apr 19	792
MAXIMUM PEAK FLOW		18400	21400
MAXIMUM PEAK STAGE		13.27	13.95
INSTANTANEOUS LOW FLOW		957	b765
ANNUAL RUNOFF (AC-FT)	3976000	4162000	3981000
ANNUAL RUNOFF (CFSM)	4.55	4.75	4.56
ANNUAL RUNOFF (INCHES)	61.83	64.73	61.91
10 PERCENT EXCEEDS	12700	13500	13000
50 PERCENT EXCEEDS	3290	3860	3190
90 PERCENT EXCEEDS	1450	1100	1080

See Period of Record, partial year used in monthly statistics

a Apr. 19 and 23

b Mar. 12 and 13, 1998 and Apr. 20, 2002

e Estimated

15266150 KENAI RIVER BELOW MOUTH OF KILLEY RIVER NEAR STERLING

LOCATION.--Lat 60°29'28", long 150°37'50", in NW¹/₄ SW¹/₄ SE¹/₄ sec. 26, T. 5 N., R. 8 W. (Kenai B-2 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, on right bank, 1.5 mi downstream from Killey River, 4.5 mi southeast of Sterling.

DRAINAGE AREA.--1,496 mi².

PERIOD OF RECORD.--June 1997 to current year.

GAGE.--Water stage recorder. Elevation of gage is 230 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES satellite telemetry and phone modem at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5260	4660	3600	e1850	e1200	e1200	e1000	e2610	e9820	e15800	16600	10900
2	6150	4490	3340	e1850	e1200	e1200	e1000	e2870	e9800	e15600	16000	10900
3	8630	4260	3160	e1650	e1200	e1200	e1000	e3100	e9800	e15400	15600	10900
4	10900	4060	3060	e1650	e1200	e1200	e1050	e3320	e9700	e15000	15100	10500
5	12500	3950	2940	e1650	e1200	e1200	e1100	e3500	e9700	e14500	14700	e10000
6	14800	e3900	2790	e1650	e1200	e1200	e1200	e3650	e9600	e14200	14300	e9500
7	17200	e3850	2670	e1500	e1200	e1200	e1200	e3960	e9700	e14000	13900	e8900
8	18700	3840	2560	e1500	e1200	e1200	e1200	e4370	e9800	14000	13600	e8600
9	20000	3540	2650	e1500	e1200	e1200	e1220	e4680	e9900	14400	13400	8530
10	21100	3460	2810	e1500	e1200	e1200	e1250	e4900	e10000	14400	13300	8150
11	20300	3350	2610	e1400	e1200	e1200	e1260	e5150	e10000	14400	13200	7830
12	19100	3340	2540	e1400	e1200	e1200	e1230	e5420	e10000	14400	13100	e7400
13	17800	3360	2470	e1400	e1200	e1200	e1240	e5700	e10000	14500	12900	6900
14	16300	3340	2390	e1350	e1200	e1200	e1360	e6010	e10000	14500	12700	6600
15	15000	3500	2330	e1350	e1200	e1200	e1520	e6300	e11000	14400	12400	6240
16	13700	4040	2240	e1350	e1200	e1200	e1510	e6520	e11200	14400	12200	5880
17	12500	4990	2210	e1300	e1200	e1150	e1700	e6640	e11400	14400	12300	5530
18	11400	5950	2150	e1300	e1200	e1150	e1790	e6790	e11500	14400	12500	5190
19	10500	6540	2110	e1300	e1200	e1150	e1820	e6980	e12000	14300	12600	4960
20	9610	6740	2070	e1300	e1200	e1100	e1730	e6880	e12500	14200	12800	4660
21	8840	6760	2010	e1300	e1200	e1100	e1600	e7050	e13000	14200	12700	4450
22	8180	6650	2030	e1300	e1200	e1100	e1630	e7380	e13500	14200	12700	4380
23	7560	6370	2000	e1250	e1200	e1100	e1710	e7990	e14000	14500	12800	4360
24	7020	6040	2010	e1250	e1200	e1100	e1760	e9560	e14500	14500	13000	4150
25	6700	5710	e2000	e1250	e1200	e1050	e1860	e10200	e15000	14700	12900	4030
26	6360	5240	e2000	e1250	e1200	e1050	e2000	e10300	e15500	15100	12800	4260
27	6020	4790	e1900	e1250	e1200	e1050	e2170	e10200	e16000	16100	12800	4500
28	5670	4500	e1900	e1250	e1200	e1050	e2240	e10400	e16500	16700	12600	4260
29	5360	4100	e1900	e1250	e1200	e1050	e2430	e10200	e16500	17100	12200	4400
30	5120	3850	1860	e1200	---	e1050	e2530	e10100	e16000	17300	11700	4630
31	4880	---	1840	e1200	---	e1000	---	e9780	---	17100	11300	---
TOTAL	353160	139170	74150	43500	34800	35450	46310	202510	357920	462700	410700	201490
MEAN	11390	4639	2392	1403	1200	1144	1544	6533	11930	14930	13250	6716
MAX	21100	6760	3600	1850	1200	1200	2530	10400	16500	17300	16600	10900
MIN	4880	3340	1840	1200	1200	1000	1000	2610	9600	14000	11300	4030
AC-FT	700500	276000	147100	86280	69030	70320	91860	401700	709900	917800	814600	399700
CFSM	7.62	3.10	1.60	0.94	0.80	0.76	1.03	4.37	7.98	9.98	8.86	4.49
IN.	8.78	3.46	1.84	1.08	0.87	0.88	1.15	5.04	8.90	11.51	10.21	5.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)#

	7619	5351	2932	1959	1683	1256	1283	3399	9716	14620	12990	9766
MEAN	7619	5351	2932	1959	1683	1256	1283	3399	9716	14620	12990	9766
MAX	11390	17110	8687	3140	3034	1914	1544	6533	11930	18240	15930	14240
(WY)	2004	2003	2003	2001	2003	2003	2004	2004	2004	2001	2001	2001
MIN	4291	2139	1633	1126	989	926	1010	2456	7701	12580	11020	6196
(WY)	2001	2002	2002	1999	1998	1999	1999	1999	1997	1999	1998	2000

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1997 - 2004#

ANNUAL TOTAL	2290910	2361860	
ANNUAL MEAN	6276	6453	6067
HIGHEST ANNUAL MEAN			7798
LOWEST ANNUAL MEAN			5010
HIGHEST DAILY MEAN	21100	Oct 10	21100
LOWEST DAILY MEAN	1140	Apr 14	b1000
ANNUAL SEVEN-DAY MINIMUM	1170	Apr 10	1020
MAXIMUM PEAK FLOW			22300
MAXIMUM PEAK STAGE		12.65	Oct 9
ANNUAL RUNOFF (AC-FT)	4544000	4685000	4395000
ANNUAL RUNOFF (CFSM)	4.20	4.31	4.06
ANNUAL RUNOFF (INCHES)	56.97	58.73	55.10
10 PERCENT EXCEEDS	14800	14500	14200
50 PERCENT EXCEEDS	3750	4420	3510
90 PERCENT EXCEEDS	1580	1200	1170

See Period of Record, partial year used in monthly statistics

- a Oct. 30 and Nov. 7
- b Mar. 31 to Apr. 3
- c Apr. 19, 1997 and Apr. 6-7, 1999
- e Estimated

15266300 KENAI RIVER AT SOLDOTNA

LOCATION.--Lat 60°28'39", long 151°04'46", in W¹/₂ SW¹/₄ sec. 32, T. 5 N., R. 10 W. (Kenai B-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, near center of span on downstream side of bridge on Sterling Highway, 1.0 mi southwest of Soldotna.

DRAINAGE AREA.--1,951 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1965 to current year.

REVISED RECORDS.--WRD AK-00-1 drainage area.

GAGE.--Water-stage recorder. Datum of gage is 35.34 ft above sea level. Prior to May 1, 1997, non-recording gage at same site and datum.

REMARKS.--Records good, except for estimated daily discharges, which are poor. GOES satellite telemetry and phone modem at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5680	5390	4260	e2100	e1500	e1350	e1150	3510	10600	16500	17200	11500
2	6360	5380	e4100	e2000	e1500	e1350	e1150	3480	10500	16500	16800	11600
3	8610	5390	e4000	e2000	e1500	e1350	e1250	3590	10500	16400	16400	11600
4	11600	5210	e3800	e2000	e1450	e1350	e1350	3740	10400	16300	15900	11200
5	13400	5090	e3600	e1900	e1450	e1350	e1400	3920	10300	16100	15600	10700
6	15500	4970	e3400	e1800	e1450	e1350	e1450	4210	10300	15700	15200	10300
7	17900	4900	e3300	e1800	e1400	e1350	e1400	4460	10200	15600	14800	9850
8	19200	4720	3200	e1700	e1400	e1350	e1450	4800	10400	15500	14500	9520
9	19800	4490	e3200	e1700	e1400	e1350	e1500	5190	10500	15500	14300	9150
10	20000	4390	e3100	e1700	e1400	e1300	e1600	5490	10500	15400	14300	8950
11	19500	4180	e3000	e1700	e1400	e1300	e1700	5770	10700	15400	14100	8520
12	18800	4260	e2900	e1700	e1400	e1300	e1800	6120	10700	15300	13900	8100
13	17900	4080	e2800	e1700	e1400	e1300	e1800	6410	10600	15200	13700	7670
14	17000	3940	e2800	e1700	e1400	e1300	e1900	6720	10300	15200	13500	7170
15	15900	4060	e2800	e1700	e1400	e1300	e2000	7020	10500	15200	13400	6840
16	14600	4530	e2700	e1700	e1400	e1300	e2150	7210	10800	15100	13300	6430
17	13300	5320	e2700	e1600	e1400	e1300	e2500	7270	11800	15100	13000	6050
18	12300	6260	2570	e1600	e1400	e1300	e2600	7330	12700	15300	13100	5740
19	11500	6800	e2500	e1600	e1400	e1250	e2900	7530	13500	15300	13200	5750
20	10500	7100	e2500	e1600	e1400	e1250	e3100	7820	14300	14900	13400	5510
21	9720	7060	e2500	e1600	e1400	e1250	e3100	8160	15000	14800	13400	5340
22	8980	6930	e2500	e1600	e1350	e1200	e3300	8470	15500	14800	13300	5260
23	8280	6750	e2500	e1500	e1350	e1200	e3400	9070	15900	15100	13500	5220
24	7780	6430	e2400	e1500	e1350	e1150	e3400	10100	16200	15100	13600	4900
25	7510	6100	e2400	e1500	e1350	e1150	e3300	10800	16500	15200	13500	4760
26	7090	5750	e2400	e1500	e1350	e1150	3210	10900	16700	15600	13400	5070
27	6660	5380	e2300	e1500	e1350	e1150	3210	10900	16800	16300	13300	5500
28	6230	5030	e2300	e1500	e1350	e1150	3130	11000	16900	16900	13100	5200
29	5870	4740	e2200	e1500	e1350	e1150	3240	11000	17000	17300	12800	5360
30	5670	4520	e2200	e1500	---	e1100	3400	10900	16800	17600	12400	5680
31	5510	---	e2100	e1500	---	e1150	---	10800	---	17500	11900	---
TOTAL	368650	159150	89030	52000	40650	39150	68840	223690	383400	487700	433800	224440
MEAN	11890	5305	2872	1677	1402	1263	2295	7216	12780	15730	13990	7481
MAX	20000	7100	4260	2100	1500	1350	3400	11000	17000	17600	17200	11600
MIN	5510	3940	2100	1500	1350	1100	1150	3480	10200	14800	11900	4760
AC-FT	731200	315700	176600	103100	80630	77650	136500	443700	760500	967400	860400	445200
CFSM	6.10	2.72	1.47	0.86	0.72	0.65	1.18	3.70	6.55	8.06	7.17	3.83
IN.	7.03	3.03	1.70	0.99	0.78	0.75	1.31	4.27	7.31	9.30	8.27	4.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)#

MEAN	7390	3821	2406	1905	1677	1363	1579	3274	8683	13570	14360	11540
MAX	14370	17350	9172	4290	4575	2696	2836	7216	12780	18740	24890	21280
(WY)	1970	2003	2003	1981	1981	1981	1980	2004	2004	1977	1977	1995
MIN	2852	1631	1132	823	822	800	812	1950	4940	9696	8706	5873
(WY)	1993	1974	1976	1976	1976	1976	1972	1973	1972	1973	1969	1969

e Estimated

SOUTH-CENTRAL ALASKA

15266300 KENAI RIVER AT SOLDOTNA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1965 - 2004#	
ANNUAL TOTAL	2405210		2570500			
ANNUAL MEAN	6590		7023		6010	
HIGHEST ANNUAL MEAN					8810 1977	
LOWEST ANNUAL MEAN					4002 1973	
HIGHEST DAILY MEAN	20000	Oct 10	20000	Oct 10	41400	Sep 24 1995
LOWEST DAILY MEAN	1500	Apr 14	1100	Mar 30	a770	Apr 1 1966
ANNUAL SEVEN-DAY MINIMUM	1520	Apr 9	1140	Mar 24	774	Apr 1 1966
MAXIMUM PEAK FLOW			b20100	Oct 9	42200	Sep 24 1995
MAXIMUM PEAK STAGE			b10.81	Oct 9	14.50	Sep 24 1995
MAXIMUM PEAK STAGE					c22.62	Jan 18 1969
INSTANTANEOUS LOW FLOW					770	Apr 1 1966
ANNUAL RUNOFF (AC-FT)	4771000		5099000		4354000	
ANNUAL RUNOFF (CFSM)	3.38		3.60		3.08	
ANNUAL RUNOFF (INCHES)	45.86		49.01		41.85	
10 PERCENT EXCEEDS	14700		15500		14300	
50 PERCENT EXCEEDS	4260		5290		3300	
90 PERCENT EXCEEDS	2010		1350		1200	

See Period of Record; partial years used in monthly statistics

a Apr. 1 to Apr. 4, 1966

b Oct. 9 and 10

c Backwater from ice

15271000 SIXMILE CREEK NEAR HOPE

LOCATION.--Lat 60°49'15", long 149°25'31", in SW¹/₄ SE¹/₄ sec. 34, T. 8 N., R. 1 W. (Seward D-7 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, Chugach National Forest, on left bank, 6.0 mi upstream from mouth at Turnagain Arm, and 10.6 mi southeast of Hope.

DRAINAGE AREA.-- 234 mi²

PERIOD OF RECORD.--June 1979 to September 1990, August 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 250 ft above sea level, from topographic map. Prior to November 26, 1979, recording gage at site 0.8 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Rain gage at station. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*)

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Oct. 03	1345	4360	11.76	May 24	0015	4070	11.64
Oct. 06	1515	*5480	*12.17	Jun. 08	0400	3510	11.39

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	763	e500	e280	e220	e190	185	e150	1060	2160	1780	678	430
2	920	e480	e280	e200	e190	185	e155	1460	2170	1630	704	476
3	2880	e480	e260	e200	e190	182	164	1470	2210	1480	713	457
4	2000	e460	e260	e200	e190	182	160	1490	2270	1490	698	375
5	2150	e440	e280	e200	e190	178	158	1780	2440	1390	649	342
6	4460	e420	e300	e200	e190	e170	196	2140	2600	1260	631	323
7	4080	e440	e280	e200	187	e170	245	2420	2990	1450	643	314
8	2520	e460	e260	e240	187	e170	258	2520	3150	1490	666	303
9	1930	e420	e260	e220	180	e165	264	2240	2720	1410	666	295
10	1520	e400	e240	e200	201	e165	270	1990	2400	1320	632	285
11	1290	e380	e240	e200	209	e165	268	2000	2130	1250	638	279
12	1130	e400	e240	e200	189	e165	266	2150	2030	1220	620	277
13	1000	e400	e240	e200	207	e165	269	2380	2020	1190	587	269
14	922	355	e220	e200	227	e160	274	2450	2100	1100	571	252
15	924	310	e220	e200	197	e160	295	2420	2270	1050	579	242
16	842	341	e220	e200	e190	e160	324	2330	2530	1010	580	234
17	783	e320	e220	e200	e190	e155	341	2260	3120	1020	629	226
18	741	e320	e220	e200	e180	e155	359	2210	2960	996	637	221
19	745	e340	e220	e200	e190	e155	367	2330	2860	995	624	227
20	696	e320	e220	e220	e200	e155	368	2560	2790	939	630	246
21	657	e320	e220	e240	216	e155	380	2750	2680	863	570	281
22	643	e320	e240	e220	217	e160	432	2820	2570	1110	571	268
23	e600	e340	e220	e220	206	e165	463	3250	2480	1020	564	279
24	e600	e320	e220	e200	210	e160	455	3600	2430	843	533	250
25	e650	e320	e220	e200	205	160	525	3430	2350	773	500	251
26	e650	e300	e220	e200	195	157	607	2870	2380	917	506	1000
27	e600	e300	e220	e190	193	156	621	2720	2330	983	602	605
28	e550	e300	e240	e190	188	154	601	2650	2180	893	536	451
29	e550	e280	e220	e190	185	154	634	2370	2050	790	455	491
30	e500	e280	e220	e190	---	152	679	2290	1870	726	435	918
31	e500	---	e220	e190	---	e150	---	2240	---	685	423	---
TOTAL	38796	11066	7420	6330	5689	5070	10548	72650	73240	35073	18470	10867
MEAN	1251	369	239	204	196	164	352	2344	2441	1131	596	362
MAX	4460	500	300	240	227	185	679	3600	3150	1780	713	1000
MIN	500	280	220	190	180	150	150	1060	1870	685	423	221
AC-FT	76950	21950	14720	12560	11280	10060	20920	144100	145300	69570	36640	21550
CFSM	5.35	1.58	1.02	0.87	0.84	0.70	1.50	10.0	10.4	4.83	2.55	1.55
IN.	6.17	1.76	1.18	1.01	0.90	0.81	1.68	11.55	11.64	5.58	2.94	1.73

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2004, BY WATER YEAR (WY)#

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	933	485	299	240	192	158	258	1329	2696	2168	1248	964														
MAX	1777	1735	687	528	433	240	397	2344	3957	3986	2699	1556														
(WY)	1981	2003	2003	1981	2003	1984	1990	2004	2001	1980	1981	1999														
MIN	500	221	198	133	113	106	119	748	1736	1131	596	362														
(WY)	1998	1986	1999	1999	1999	1999	1985	1985	1989	2004	2004	2004														

See Period of Record; partial years used in monthly statistics
e Estimated

15271000 SIXMILE CREEK NEAR HOPE—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1979 - 2004#	
ANNUAL TOTAL	306329		295219			
ANNUAL MEAN	839		807		923	
HIGHEST ANNUAL MEAN					1335	1980
LOWEST ANNUAL MEAN					675	1986
HIGHEST DAILY MEAN	4460	Oct 6	4460	Oct 6	7570	Jul 12 1980
LOWEST DAILY MEAN	170	Apr 7	a150	Mar 31	b80	Apr 1 1986
ANNUAL SEVEN-DAY MINIMUM	172	Apr 3	153	Mar 27	80	Apr 1 1986
MAXIMUM PEAK FLOW			5480	Oct 6	10800	Oct 24 2002
MAXIMUM PEAK STAGE			12.17	Oct 6	13.56	Oct 24 2002
INSTANTANEOUS LOW FLOW					c29	Nov 26 1979
ANNUAL RUNOFF (AC-FT)	607600		585600		668400	
ANNUAL RUNOFF (CFSM)	3.59		3.45		3.94	
ANNUAL RUNOFF (INCHES)	48.70		46.93		53.57	
10 PERCENT EXCEEDS	2220		2340		2420	
50 PERCENT EXCEEDS	480		390		524	
90 PERCENT EXCEEDS	218		184		146	

See Period of Record; partial years used in monthly statistics

a Mar. 31 to Apr. 1

b Apr. 1 to Apr. 9, 1986

c Sometime between Nov. 26, 1979 and Jan. 9, 1980, during release from storage behind snow-avalanche dam upstream from former gage site, site and datum then in use

15272280 PORTAGE CREEK AT PORTAGE LAKE OUTLET NEAR WHITTIER

LOCATION.--Lat 60°47'07", long 148°50'20", in SW¹/₄ NE¹/₄ sec. 13, T. 8 N., R. 3 E. (Seward D-5 SW quad), Municipality of Anchorage, Hydrologic Unit 19020302, on left bank at lake outlet, 5.0 mi west of Whittier, 5.8 mi southeast of Portage, and 6.5 mi upstream from mouth.

DRAINAGE AREA.--40.5 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 95 ft above sea level, from topographic map.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 12,500 ft³/s, August 19, 1984 (elevation about 97.05 ft above sea level from USFS levels) by contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 4,600 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage Height	Date	Time	Discharge (ft ³ /s)	Gage Height
Oct 3	u	*9370	*a9.40	Jul 22	2345	6730	8.37
Oct 7	u	be8500	u	Jul 27	0830	6190	8.13
Jun 17	0800	4760	7.44				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4500	223	51	144	63	101	39	409	816	1650	1470	1140
2	e6500	202	49	123	58	101	45	488	861	1590	1620	1540
3	e9000	188	65	107	56	122	80	487	1110	1490	1680	1680
4	e6000	174	109	94	56	113	86	450	1120	1760	1620	1270
5	e5000	161	100	83	60	101	133	466	1050	1740	1440	931
6	e7500	167	88	72	70	91	284	505	1040	1510	1330	764
7	e8500	203	80	60	74	84	777	550	1210	1810	1370	681
8	3710	229	83	54	80	77	960	561	1340	2070	1480	604
9	1970	227	148	67	78	75	937	524	1290	2100	1490	553
10	1430	197	320	84	120	93	696	480	1190	1950	1490	543
11	1080	178	363	80	192	90	457	466	1310	1840	1560	519
12	781	165	394	71	169	96	322	500	1340	1830	1650	525
13	595	149	363	65	164	86	242	538	1160	1870	1550	535
14	587	130	298	61	220	86	199	557	1080	1750	1390	473
15	859	114	261	57	201	83	176	587	1260	1620	1420	390
16	662	102	221	50	166	71	163	716	2600	1580	1510	327
17	486	91	193	42	138	61	159	975	4390	1690	1690	282
18	383	84	158	35	116	57	169	965	3090	2630	1720	248
19	489	79	147	32	108	56	179	873	2360	3680	1730	264
20	490	77	136	43	135	52	165	826	2140	2550	1860	535
21	414	83	134	110	221	48	152	844	2190	2190	1600	706
22	353	79	173	203	353	45	194	869	2070	4310	1540	686
23	342	76	162	187	309	41	231	1020	1890	5230	1570	685
24	636	70	145	157	285	39	253	1380	1890	2750	1460	549
25	804	64	123	131	249	37	285	1740	1910	1870	1320	467
26	890	59	105	118	197	38	296	1430	1960	2930	1340	1740
27	872	58	93	103	161	39	313	1160	2010	5740	1730	1440
28	635	56	86	86	137	39	386	1140	1970	3880	1870	806
29	433	55	147	74	115	38	431	1170	1900	2520	1310	560
30	325	55	200	65	---	39	383	1010	1750	1880	1130	596
31	262	---	171	63	---	41	---	898	---	1570	1130	---
TOTAL	66488	3795	5166	2721	4351	2140	9192	24584	51297	73580	47070	22039
MEAN	2145	126	167	87.8	150	69.0	306	793	1710	2374	1518	735
MAX	9000	229	394	203	353	122	960	1740	4390	5740	1870	1740
MIN	262	55	49	32	56	37	39	409	816	1490	1130	248
AC-FT	131900	7530	10250	5400	8630	4240	18230	48760	101700	145900	93360	43710
CFSM	53.0	3.12	4.11	2.17	3.70	1.70	7.57	19.6	42.2	58.6	37.5	18.1
IN.	61.07	3.49	4.75	2.50	4.00	1.97	8.44	22.58	47.12	67.58	43.23	20.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)#

	736	303	163	146	136	82.8	229	604	1472	2102	2024	1719
MEAN	736	303	163	146	136	82.8	229	604	1472	2102	2024	1719
MAX	2145	1456	482	460	407	189	393	1158	1728	2518	3164	3583
(WY)	2004	2003	2003	2001	2003	1998	1995	1995	1990	1990	1989	1995
MIN	136	90.5	26.3	26.0	26.0	26.0	36.7	286	1178	1714	1409	649
(WY)	1997	1991	1991	1991	1991	1991	2002	2001	2001	1999	1998	1992

See Period of Record: partial years used in monthly statistics
a From floodmark
b Mean daily discharge
e Estimated

15272280 PORTAGE CREEK AT PORTAGE LAKE OUTLET NEAR WHITTIER—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1989 - 2004#	
ANNUAL TOTAL	329193		312423			
ANNUAL MEAN	902		854		803	
HIGHEST ANNUAL MEAN					1010	
LOWEST ANNUAL MEAN					656	
HIGHEST DAILY MEAN	e9000	Oct 3	e9000	Oct 3	10700	Sep 20 1995
LOWEST DAILY MEAN	33	Apr 7	32	Jan 19	b26	Dec 5 1990
ANNUAL SEVEN-DAY MINIMUM	35	Apr 2	38	Mar 24	26	Dec 5 1990
MAXIMUM PEAK FLOW			9370	Oct 3	13000	Sep 20 1995
MAXIMUM PEAK STAGE			c9.40	Oct 3	10.66	Sep 20 1995
INSTANTANEOUS LOW FLOW			27	Jan 19	26	Dec 5 1990
ANNUAL RUNOFF (AC-FT)	653000		619700		581500	
ANNUAL RUNOFF (CFSM)	22.3		21.1		19.8	
ANNUAL RUNOFF (INCHES)	302.37		286.97		269.26	
10 PERCENT EXCEEDS	2170		1890		1990	
50 PERCENT EXCEEDS	328		384		323	
90 PERCENT EXCEEDS	65		61		55	

See Period of Record: partial years used in monthly statistics
b From Dec. 5, 1990 to Mar. 31, 1991
c From floodmark
e Estimated

15272380 TWENTYMILE RIVER BELOW GLACIER RIVER NEAR PORTAGE

LOCATION.--Lat 60°53'53", long 148°55'19", in NE¹/₄ NW¹/₄ SE¹/₄ sec. 4, T. 9 N., R. 3 E. (Seward D-6 quad), Hydrologic Unit 19020401, on right bank, 0.1 miles downstream from Glacier River, 4.0 miles upstream from mouth at Seward Highway, and 6.0 miles northeast of Portage.

DRAINAGE AREA.--141 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2001 to current year.

REVISED RECORDS.--WDR AK-02-1: 2001.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 50 ft above sea level, from topographic map.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Rain gage at station.GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7920	276	e55	e200	e75	199	e40	e1700	2160	3340	3030	2480
2	7660	253	e50	e180	e70	219	e60	e1700	2150	3210	3130	2880
3	12900	226	e100	e160	e65	260	e100	e1800	2230	3040	3260	2880
4	8640	206	e120	e140	e75	248	211	e1700	2210	3280	3180	2290
5	5420	186	e110	e130	e85	189	248	e1650	2260	3290	2950	1760
6	10300	188	e90	e120	e100	174	391	e1600	2390	2880	2910	1410
7	9500	189	e90	e110	e110	139	718	e1550	2930	3570	3040	1300
8	5670	204	e170	e100	e130	135	1060	e1500	3080	3990	3160	1280
9	3170	205	e400	e120	e170	e200	1220	1560	2830	4060	3210	1130
10	2270	193	e500	e160	e200	e175	1180	1490	2510	3970	3120	1070
11	1620	199	e450	e190	e290	e130	924	1490	2370	3940	3310	994
12	1100	186	e380	e180	e420	e120	739	1410	2350	4010	3400	951
13	816	170	e320	e160	e370	e110	564	1450	2410	3990	3240	891
14	677	139	254	e150	352	e100	416	1510	2450	3700	2970	798
15	746	e130	217	e130	324	e95	333	1540	2490	3570	3010	696
16	658	e120	202	e110	308	e90	282	1590	3920	3410	3100	557
17	525	e110	174	e100	345	e80	289	1590	7250	3510	3490	498
18	430	e100	169	e70	295	e70	e290	1650	6240	4440	3600	426
19	548	e90	e140	e48	204	e60	e320	1830	5200	5400	3530	376
20	624	e85	e130	e110	230	e55	e340	1940	4750	4380	3730	490
21	545	e95	e150	e250	486	e55	e380	2120	4490	3920	3250	880
22	456	e95	e190	e320	613	e50	e410	2190	4380	6030	3200	900
23	399	e85	e180	e280	525	e45	e450	2330	4170	7890	3310	951
24	798	e80	e160	e250	522	e42	e500	2770	4160	4880	3040	825
25	1070	e75	e140	e220	411	e40	e550	3040	4140	3530	2800	675
26	1190	e70	e120	e180	299	e38	e650	2670	4190	4620	2900	2760
27	1060	e65	e110	e160	223	e36	e750	2470	4280	9490	3960	2300
28	757	e60	e150	e130	210	e36	e950	2370	4060	7440	4280	1410
29	526	e55	e230	e110	209	e36	e1300	2290	3690	5010	2950	1110
30	402	e55	e260	e90	---	e36	e1600	2160	3520	3800	2600	1680
31	325	---	e240	e80	---	e38	---	2110	---	3230	2470	---
TOTAL	88722	4190	6051	4738	7716	3300	17265	58770	105260	134820	99130	38648
MEAN	2862	140	195	153	266	106	576	1896	3509	4349	3198	1288
MAX	12900	276	500	320	613	260	1600	3040	7250	9490	4280	2880
MIN	325	55	50	48	65	36	40	1410	2150	2880	2470	376
MED	816	125	169	140	230	90	433	1700	3300	3940	3160	1030
AC-FT	176000	8310	12000	9400	15300	6550	34250	116600	208800	267400	196600	76660
CFSM	20.3	0.99	1.38	1.08	1.89	0.75	4.08	13.4	24.9	30.8	22.7	9.14
IN.	23.41	1.11	1.60	1.25	2.04	0.87	4.56	15.51	27.77	35.57	26.15	10.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)#

	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
MEAN	2327	1026	621	441	440	137	346	1313	2976	3535	3580	1921
MAX	2883	2496	906	735	932	229	576	1896	3509	4349	4603	2613
(WY)	2003	2003	2003	2002	2003	2003	2004	2004	2004	2004	2003	2001
MIN	1235	140	195	153	127	77.1	121	796	2513	2796	2700	1288
(WY)	2002	2004	2004	2004	2002	2002	2002	2001	2002	2002	2002	2004

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004#	
ANNUAL TOTAL	592759		568610			
ANNUAL MEAN	1624		1554		1565	
HIGHEST ANNUAL MEAN					1880	
LOWEST ANNUAL MEAN					1263	
HIGHEST DAILY MEAN	12900	Oct 3	12900	Oct 3	12900	Oct 3 2003
LOWEST DAILY MEAN	50	Dec 2	a36	Mar 27	a36	Mar 27 2004
ANNUAL SEVEN-DAY MINIMUM	59	Nov 26	37	Mar 25	37	Mar 25 2004
MAXIMUM PEAK FLOW			14400		14400	
MAXIMUM PEAK STAGE			25.88		25.88	
ANNUAL RUNOFF (AC-FT)	1176000		1128000		1134000	
ANNUAL RUNOFF (CFSM)	11.5		11.0		11.1	
ANNUAL RUNOFF (INCHES)	156.39		150.02		150.85	
10 PERCENT EXCEEDS	3980		3960		3700	
50 PERCENT EXCEEDS	724		560		878	
90 PERCENT EXCEEDS	150		88		100	

See Period of Record, partial years used in monthly statistics

a Mar. 27-30

e Estimated

15272380 TWENTYMILE RIVER BELOW GRANITE RIVER NEAR PORTAGE—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2002 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April 2002 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder set for 15 minute recording interval.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Probe malfunction caused missing record July 18, 22-23, and 25-30, and September 13-24. Temperature at the sensor was compared with the average for the stream by cross section on July 30. No variation more than 0.1°C was found within the cross section. No variation more than 0.3°C was found between mean stream temperature and sensor temperature. Heavy shore ice occurs near the gage.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 10.0°C, July 16, 2004; Minimum, 0.0°C on many days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 10.0°C, July 16; Minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (00004)	Sample location, cross section ft from rt bank (72103)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler type, code (84164)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
JUL									
30...	1332	208	20.0	19.71	3410	10	8010	7.0	9.6
30...	1334	208	60.0	19.71	3410	10	8010	7.0	9.6
30...	1336	208	100.0	19.71	3410	10	8010	7.1	9.6
30...	1338	208	140.0	19.71	3410	10	8010	7.1	9.6
30...	1340	208	180.0	19.71	3410	10	8010	7.0	9.6

WATER TEMPERATURE, (DEGREES CELSIUS) WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.0	4.5	5.0	3.5	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	6.0	5.0	5.0	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	6.5	5.0	6.0	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	5.5	4.5	5.0	3.5	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	5.0	4.5	5.0	3.5	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	6.0	5.0	5.5	4.0	3.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	5.5	4.5	5.0	4.0	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	5.5	4.0	5.0	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	5.5	4.5	5.0	3.0	2.5	2.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	5.5	4.0	4.5	2.5	2.0	2.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	5.0	4.0	4.5	2.5	1.5	2.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	
12	4.5	3.5	4.0	2.5	1.5	2.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	
13	4.5	3.5	4.0	1.5	1.0	1.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	
14	4.5	4.0	4.5	1.0	0.5	1.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	
15	5.0	3.5	4.5	0.5	0.0	0.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	
16	4.0	2.5	3.0	0.0	0.0	0.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	
17	3.5	2.0	3.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	4.0	3.0	3.5	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	
19	4.5	3.5	4.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	4.5	3.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	4.5	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	4.5	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	4.5	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	3.5	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	2.5	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	3.5	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	3.0	2.0	2.5	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MONTH	6.5	2.0	4.1	4.0	0.0	1.3	1.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	

15272380 TWENTYMILE RIVER BELOW GRANITE RIVER NEAR PORTAGE—Continued

WATER TEMPERATURE, (DEGREES CELSIUS) WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	1.5	0.5	1.0	0.5	0.0	0.0	3.5	2.0	2.5
2	0.0	0.0	0.0	1.0	0.5	1.0	0.0	0.0	0.0	4.5	1.5	2.5
3	0.0	0.0	0.0	2.0	0.5	1.0	1.0	0.0	0.5	6.0	1.0	3.5
4	0.0	0.0	0.0	1.0	0.0	0.5	1.0	0.5	0.5	6.5	1.5	3.5
5	0.0	0.0	0.0	2.0	0.0	0.5	1.5	0.5	1.0	6.0	1.5	3.5
6	0.0	0.0	0.0	0.5	0.0	0.0	1.0	0.5	1.0	6.0	1.5	3.5
7	0.0	0.0	0.0	0.5	0.0	0.0	1.0	0.5	0.5	6.5	1.5	3.5
8	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.5	0.5	6.5	2.0	3.5
9	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	1.0	6.5	2.0	4.0
10	0.0	0.0	0.0	0.5	0.0	0.0	3.5	0.5	1.5	6.0	2.5	4.0
11	0.0	0.0	0.0	1.5	0.0	0.5	3.5	0.0	1.5	6.0	3.0	4.0
12	0.0	0.0	0.0	1.0	0.0	0.5	4.0	0.0	1.5	6.5	3.0	4.5
13	0.5	0.0	0.5	2.0	0.5	1.0	4.0	0.5	2.0	7.5	2.5	4.5
14	0.5	0.0	0.5	1.5	0.0	0.5	5.0	1.0	2.5	7.0	2.5	4.5
15	0.5	0.0	0.0	2.5	0.5	1.0	5.0	0.5	2.5	6.0	3.5	4.5
16	0.0	0.0	0.0	1.5	0.0	0.5	3.0	1.5	2.0	5.0	3.5	4.0
17	0.0	0.0	0.0	1.0	0.0	0.5	4.5	1.0	2.5	5.0	3.5	4.0
18	0.0	0.0	0.0	0.5	0.0	0.0	4.0	1.5	2.5	7.0	3.0	5.0
19	0.5	0.0	0.5	0.5	0.0	0.0	4.5	1.0	2.5	8.0	3.5	5.5
20	0.5	0.5	0.5	0.0	0.0	0.0	5.5	1.0	3.0	8.0	3.0	5.5
21	0.5	0.5	0.5	0.0	0.0	0.0	4.5	0.5	2.5	8.0	3.0	5.0
22	0.5	0.5	0.5	0.5	0.0	0.0	3.5	1.5	2.5	7.5	3.5	5.5
23	0.5	0.5	0.5	1.0	0.0	0.5	4.5	1.0	2.5	5.0	4.0	4.5
24	0.5	0.5	0.5	1.5	0.0	0.5	4.0	1.5	2.5	6.0	4.0	4.5
25	0.5	0.0	0.5	2.0	0.0	1.0	4.0	1.5	2.5	6.5	4.0	5.0
26	0.5	0.0	0.0	1.5	0.0	1.0	5.5	0.5	3.0	6.5	4.0	5.0
27	1.0	0.5	0.5	1.5	0.0	0.5	3.0	2.0	2.0	5.0	4.0	4.5
28	1.0	0.5	0.5	1.5	0.0	0.5	3.0	1.5	2.5	4.5	4.0	4.5
29	1.0	0.0	0.5	2.5	0.0	1.0	5.0	2.0	3.0	7.5	4.0	5.0
30	---	---	---	1.5	0.0	0.0	6.0	1.5	3.5	8.5	3.5	6.0
31	---	---	---	0.0	0.0	0.0	---	---	---	6.5	4.5	5.0
MONTH	1.0	0.0	0.2	2.5	0.0	0.4	6.0	0.0	1.9	8.5	1.0	4.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.5	3.5	5.5	7.5	4.5	6.0	7.5	5.0	6.5	6.5	5.5	6.0
2	6.0	4.5	5.0	7.0	5.0	6.0	9.0	5.0	6.5	6.0	5.0	5.5
3	8.0	4.0	5.5	7.0	5.0	6.0	8.5	5.0	6.5	6.5	5.0	5.5
4	8.5	4.0	6.0	7.5	5.0	6.0	8.5	5.5	7.0	7.5	4.0	5.5
5	6.5	4.5	5.5	6.0	5.0	5.5	8.5	5.5	6.5	7.5	4.0	5.5
6	7.5	4.5	5.5	8.5	4.5	6.5	9.0	5.0	6.5	8.0	4.5	6.0
7	8.5	4.0	6.0	9.0	5.0	7.0	9.0	5.0	6.5	8.0	4.0	5.5
8	6.0	4.5	5.5	8.5	5.0	6.5	9.0	5.5	7.0	7.5	4.0	5.5
9	7.0	4.5	5.5	9.0	5.0	6.5	7.5	5.0	6.5	8.0	4.0	5.5
10	6.5	4.0	5.5	9.0	5.0	7.0	8.5	5.0	6.5	7.0	4.5	5.5
11	6.5	4.5	5.5	9.0	5.0	7.0	9.0	5.5	7.0	7.5	4.0	5.5
12	8.0	4.0	6.0	9.5	5.0	7.0	8.5	5.5	6.5	8.0	4.5	5.5
13	8.5	4.5	6.0	9.0	5.5	7.0	8.5	5.0	6.5	7.0	4.5	5.5
14	8.0	4.5	6.5	9.0	5.5	7.0	8.5	5.0	6.5	---	---	---
15	6.0	5.0	5.5	9.0	6.0	7.0	7.5	5.0	6.0	---	---	---
16	6.0	4.5	5.0	10.0	5.5	7.0	8.5	5.0	6.5	---	---	---
17	6.0	3.5	5.0	7.5	4.5	6.5	8.0	5.0	6.5	---	---	---
18	8.0	4.5	6.0	---	5.5	---	8.0	5.0	6.5	---	---	---
19	8.0	4.0	6.0	8.0	5.5	6.5	7.0	5.5	6.0	---	---	---
20	8.5	4.5	6.5	7.5	5.5	7.0	7.5	5.5	6.0	---	---	---
21	8.5	4.5	6.0	8.0	5.5	6.0	8.0	5.0	6.0	---	---	---
22	8.5	4.5	6.5	---	---	---	8.0	5.0	6.5	---	---	---
23	9.0	4.5	6.5	---	4.5	6.0	8.5	5.0	6.5	---	---	---
24	9.0	5.0	6.5	9.0	5.5	7.0	8.0	5.0	6.0	5.5	---	---
25	9.0	5.0	6.5	---	---	---	8.0	5.0	6.0	4.5	4.0	4.0
26	9.0	5.0	7.0	5.5	---	---	6.5	5.5	6.0	6.0	4.5	5.0
27	8.5	5.5	7.0	---	---	---	6.0	5.0	5.5	5.0	4.0	4.5
28	7.0	5.0	6.0	---	---	---	6.0	5.0	5.5	4.0	3.5	4.0
29	6.5	5.0	5.5	---	---	---	7.5	4.5	6.0	4.5	4.0	4.0
30	6.5	5.0	5.5	8.0	---	---	8.0	4.5	6.0	5.0	4.0	4.5
31	---	---	---	9.0	5.0	7.0	8.0	5.0	6.0	---	---	---
MONTH	9.0	3.5	---	---	---	---	9.0	4.5	6.3	---	---	---

15276000 SHIP CREEK NEAR ANCHORAGE

LOCATION.--Lat 61°13'32", long 149°38'06", in SW¹/₄ SE¹/₄ sec. 9, T. 13 N., R. 2 W. (Anchorage A-8 quad), Municipality of Anchorage, Hydrologic Unit 19020401, in Fort Richardson Military Reservation, on left bank, 800 ft downstream from diversion dam, 3.3 mi upstream from North Fork Ship Creek, and 7.8 mi east of intersection of Seward and Glenn Highways in Anchorage.

DRAINAGE AREA.--89.5 mi², revised. (area at site used prior to October 1, 2003, 90.5 mi², revised).

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 1936: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 490 ft above sea level, from topographic map. Prior to August 22, 1985, water-stage recorder at dam 800 ft upstream. See WSP 1936 for history of changes prior to October 1, 1954.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Discharge data represent the net flow remaining after diversion for water supply to Fort Richardson, Elmendorf Air Force Base, and Municipality of Anchorage. Average diversion for water year 2004 was 5.86 ft³/s. Diversion began in 1944. Magnitude of discharges downstream of dam may be affected by periodic spillway adjustment.

COOPERATION.--Gage inspected and records of diversion provided by Office of Post Engineers, Fort Richardson.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	e100	e85	e60	e46	e36	e28	e180	389	236	90	80
2	112	e100	e80	e55	e44	e36	e32	e190	372	223	84	80
3	288	e100	e75	e60	e44	e36	e33	e250	358	211	81	78
4	394	e95	e85	e60	e44	e36	e34	e300	369	201	74	75
5	e300	e100	e90	e60	e44	e34	e36	344	389	192	77	71
6	e300	e100	e80	e60	e44	e32	e38	393	405	181	75	68
7	e280	e105	e80	e60	e43	e32	e40	390	455	173	73	66
8	e260	e110	e85	e55	e42	e36	e42	454	495	165	71	65
9	e250	e110	e85	e60	e42	e30	e40	365	456	151	70	64
10	e220	e110	e82	e60	e42	e36	e40	358	406	146	69	62
11	e200	e110	e82	e60	e44	e36	e42	366	371	141	66	62
12	e190	e110	e80	e55	e40	e36	e44	405	338	132	65	60
13	e180	e110	e80	e55	e44	e34	e46	449	330	129	65	65
14	e165	e90	e75	e55	e42	e34	e50	488	322	127	64	60
15	e160	e65	e75	e55	e38	e34	e50	402	329	134	64	59
16	e150	e50	e75	e50	e32	e34	e50	411	326	132	61	57
17	e140	e46	e70	e50	e34	e34	e55	394	369	130	51	56
18	e140	e34	e70	e50	e38	e34	e60	409	390	127	52	56
19	e130	e46	e70	e50	e40	e30	e65	434	391	122	57	56
20	e130	e65	e70	e52	e44	e30	e70	469	385	115	63	60
21	e120	e95	e70	e50	e42	e34	e70	480	374	117	60	71
22	e120	e85	e70	e50	e42	e36	e75	482	361	114	57	68
23	e110	e82	e65	e50	e42	e36	e80	572	341	109	55	75
24	e110	e85	e60	e46	e40	e34	e85	629	329	106	54	68
25	e120	e80	e60	e46	e38	e34	e90	574	315	103	53	69
26	e120	e65	e55	e48	e36	e30	e95	526	303	100	62	161
27	e110	e70	e55	e48	e38	e30	e110	465	298	100	128	147
28	e110	e75	e65	e46	e36	e30	e130	445	287	110	132	126
29	e110	e80	e70	e46	e36	e32	e150	410	272	101	110	147
30	e100	e85	e70	e42	---	e30	e170	394	248	96	94	488
31	e100	---	e65	e46	---	e26	---	410	---	93	84	---
TOTAL	5328	2558	2279	1640	1181	1032	1950	12838	10773	4317	2261	2720
MEAN	172	85.3	73.5	52.9	40.7	33.3	65.0	414	359	139	72.9	90.7
MAX	394	110	90	60	46	36	170	629	495	236	132	488
MIN	100	34	55	42	32	26	28	180	248	93	51	56
AC-FT	10570	5070	4520	3250	2340	2050	3870	25460	21370	8560	4480	5400

ADJUSTED TO INCLUDE DIVERSION

MEAN	177	90.4	78.6	58.2	46.3	39.3	70.2	420	365	149	79.9	95.4
CFSM	1.98	1.01	0.88	0.65	0.52	0.44	0.78	4.69	4.08	1.66	0.89	1.07
IN	2.28	1.13	1.01	0.75	0.56	0.50	0.87	5.40	4.55	1.92	1.03	1.19
AC-FT	10900	5380	4830	3580	2660	2410	4180	25810	21710	9160	4910	5680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2004, BY WATER YEAR (WY)#

MEAN	153	79.6	49.5	32.5	23.3	17.7	26.1	172	450	301	204	207
MAX	356	199	154	79.4	61.6	50.2	69.7	456	798	645	510	471
(WY)	2003	2003	2003	2003	2003	2003	1990	1990	1977	1980	1981	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	132	72.0	72.9	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1996	1996	2004	1969

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted
e Estimated

15276000 SHIP CREEK NEAR ANCHORAGE—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1947 - 2004#	
ANNUAL TOTAL	47925		48877			
ANNUAL MEAN	131		134		143	
ANNUAL MEAN	*137		*139		*161	
HIGHEST ANNUAL MEAN					223 1980	
LOWEST ANNUAL MEAN					67.3 1969	
HIGHEST DAILY MEAN	480	Jun 14	629	May 24	1420	Aug 9 1971
LOWEST DAILY MEAN	a34	Apr 10	26	Mar 31	b0.00	Jan 2 1956
ANNUAL SEVEN-DAY MINIMUM	35	Apr 9	29	Mar 26	0.43	Jan 9 1956
MAXIMUM PEAK FLOW			c750	May 23	1860	Jun 21 1949
MAXIMUM PEAK STAGE			c5.91	May 23	d3.44	Jun 21 1949
MAXIMUM PEAK STAGE					f6.52	Jun 21 1949
MAXIMUM PEAK STAGE					g8.54	Dec 29 2002
ANNUAL RUNOFF (AC-FT)	95060		96950		103800	
ANNUAL RUNOFF (AC-FT)	*99480		*101200		*116600	
ANNUAL RUNOFF (CFMS)	*1.53		*1.55		*1.79	
ANNUAL RUNOFF (IN)	*20.8		*21.2		*24.4	
10 PERCENT EXCEEDS	282		373		368	
50 PERCENT EXCEEDS	101		75		78	
90 PERCENT EXCEEDS	48		36		14	

- # See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted
- * Adjusted to account for diversion, see Remarks
- a Apr. 10 and Apr. 11
- b No flow during one or more days in water years 1956, 1960, 1969, and 1971
- c Maximum discharge, 805 ft³/s, Sep. 30, stage rising, peak occurred Oct. 1, 2004; maximum peak discharge, 750 ft³/s, May 23, gage height, 5.91 ft.
- d Site and datum then in use
- f Current site and datum
- g From CSG mark from ice-affected winter breakout event, at current site and datum

15276320 SHIP CREEK BELOW FISH HATCHERY NEAR ANCHORAGE

LOCATION.--Lat 61°14'36", long 149°43'19", in SW¹/₄ NE¹/₄ SE¹/₄ sec. 1, T. 13 N., R. 3 W. (Anchorage A-8NE quad), Municipality of Anchorage, Hydrologic Unit 19020401, in Fort Richardson Military Reservation, on left bank, 0.5 mi downstream from fish hatchery, 0.8 mi upstream of the Fort Richardson Elmendorf border, 3.3 mi downstream from diversion dam, and 6.0 mi east of intersection of Seward and Glenn Highways in Anchorage.

DRAINAGE AREA.--104.6 mi².

PERIOD OF RECORD.--October 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 250 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Discharge data represent the net flow remaining after diversion for water supply to Fort Richardson, Elmendorf Air Force Base, and Municipality of Anchorage. Average diversion for water year 2004 was 5.86 ft³/s. Diversion began in 1944. Magnitude of discharges downstream of dam may be affected by periodic spillway adjustment.

COOPERATION.--Gage inspected and records of diversion provided by Office of Post Engineers, Fort Richardson.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	e100	76	50	41	33	26	128	411	233	90	96
2	111	104	71	47	40	33	30	153	392	218	86	96
3	288	100	65	52	39	33	30	157	377	206	84	94
4	400	94	78	53	38	33	30	172	386	190	79	92
5	305	96	80	53	38	31	30	204	409	183	83	87
6	302	98	70	52	38	22	32	253	418	172	82	84
7	278	102	71	50	37	27	37	310	463	164	80	83
8	256	111	76	49	38	33	39	357	517	156	78	81
9	252	111	76	52	37	25	36	347	474	144	78	80
10	223	e106	74	52	38	33	37	336	426	139	78	78
11	e200	e105	74	51	40	34	37	346	391	133	75	77
12	e190	e105	71	49	35	33	37	356	360	124	75	76
13	e180	e100	68	47	39	31	38	392	348	119	75	82
14	e165	e85	68	47	38	31	40	418	343	117	73	77
15	e160	e60	67	45	34	31	44	423	360	120	74	75
16	e150	e48	65	44	25	30	49	414	351	117	73	74
17	e140	e42	63	44	28	27	49	396	393	114	63	72
18	e140	e32	63	44	32	29	50	411	422	113	64	71
19	e130	31	58	44	37	21	52	431	418	106	71	71
20	e130	49	63	46	40	26	55	456	411	101	77	75
21	e120	81	63	47	39	29	58	489	393	105	74	87
22	e120	83	63	47	38	33	65	514	357	104	72	84
23	e110	73	60	45	36	33	71	629	345	102	70	92
24	111	78	55	41	35	32	73	620	330	99	68	84
25	123	75	46	39	34	30	75	529	314	96	68	86
26	121	56	43	43	33	28	82	499	305	95	79	170
27	e113	49	43	43	34	28	89	449	299	96	140	170
28	e110	63	51	41	33	27	92	450	284	104	149	149
29	e110	74	60	40	33	28	108	413	268	100	126	163
30	e100	77	64	36	---	26	117	405	244	97	111	423
31	e100	---	63	39	---	21	---	421	---	93	101	---
TOTAL	5347	2388	2008	1432	1047	911	1608	11878	11209	4060	2596	3129
MEAN	172	79.6	64.8	46.2	36.1	29.4	53.6	383	374	131	83.7	104
MAX	400	111	80	53	41	34	117	629	517	233	149	423
MIN	100	31	43	36	25	21	26	128	244	93	63	71
AC-FT	10610	4740	3980	2840	2080	1810	3190	23560	22230	8050	5150	6210
CFSM	1.65	0.76	0.62	0.44	0.35	0.28	0.51	3.66	3.57	1.25	0.80	1.00
IN.	1.90	0.85	0.71	0.51	0.37	0.32	0.57	4.22	3.99	1.44	0.92	1.11

ADJUSTED TO INCLUDE DIVERSION

MEAN	178	84.8	69.8	51.5	41.7	35.4	58.8	389	379	141	90.7	109
CFSM	1.70	0.81	0.67	0.49	0.40	0.34	0.56	3.72	3.63	1.34	0.87	1.04
IN	1.89	0.90	0.77	0.57	0.43	0.39	0.63	4.28	4.04	1.55	1.00	1.20
AC-FT	10920	5040	4290	3170	2400	2170	3500	23900	22600	8650	5580	6490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)#

MEAN	255	134	106	60.3	46.2	39.0	50.5	274	356	164	118	108
MAX	337	188	148	74.4	56.6	48.7	53.6	383	374	196	153	113
(WY)	2003	2003	2003	2003	2003	2003	2004	2004	2004	2003	2003	2003
MIN	172	79.6	64.8	46.2	36.1	29.4	47.5	165	339	131	83.7	104
(WY)	2004	2004	2004	2004	2004	2004	2003	2003	2003	2004	2004	2004

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted

e Estimated

15276320 SHIP CREEK BELOW FISH HATCHERY NEAR ANCHORAGE—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004#	
ANNUAL TOTAL	46051		47613			
ANNUAL MEAN	126		130		143	
ANNUAL MEAN	*132		*136		*149	
HIGHEST ANNUAL MEAN					156 2003	
LOWEST ANNUAL MEAN					130 2004	
HIGHEST DAILY MEAN	517	Jun 14	629	May 23	680	Dec 28 2002
LOWEST DAILY MEAN	31	Nov 19	a21	Mar 19	a21	Mar 19 2004
ANNUAL SEVEN-DAY MINIMUM	35	Apr 9	26	Mar 26	26	Mar 26 2004
MAXIMUM PEAK FLOW			876	May 23	876	May 23 2004
MAXIMUM PEAK STAGE			5.08	May 23	5.08	May 23 2004
INSTANTANEOUS LOW FLOW			b16	Mar 6	b16	Mar 6 2004
ANNUAL RUNOFF (AC-FT)	91340		94440		103600	
ANNUAL RUNOFF (AC-FT)	*95760		*98700		*108000	
ANNUAL RUNOFF (CFSM)	*1.26		*1.30		*1.42	
ANNUAL RUNOFF (INCHES)	*17.08		*17.65		*19.34	
10 PERCENT EXCEEDS	269		380		345	
50 PERCENT EXCEEDS	100		78		100	
90 PERCENT EXCEEDS	46		33		38	

See Period of Record and Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted

a Mar. 19 and 31

b Mar. 6 and 19

* Adjusted to account for diversion, see Remarks

15278000 EKLUTNA LAKE NEAR PALMER

LOCATION.--Lat 61°24'39", long 149°07'20", in NE¹/₄ NE¹/₄ sec. 18, T. 15 N., R. 2 E. (Anchorage B-6 quad), Municipality of Anchorage, Hydrologic Unit 19020402, on north shore, 0.7 mi upstream from lake outlet, 12 mi upstream from mouth of Eklutna River, and 14 mi south of Palmer.

DRAINAGE AREA.--119 mi².

PERIOD OF RECORD.--November 1946 to September 1962 (fragmentary after January 1955), June 1983 to current year. Fragmentary records for the period October 1962 to June 1983 available from Eklutna Hydroelectric Project.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Alaska Power Administration). Prior to June 1983, non-recording gage at lake outlet at datum of 859.8 ft above sea level.

REMARKS.--Lake outlet consists of earth and rockfill dam with uncontrolled spillway crest at an elevation of 871 ft. Prior to 1965, control structure 1400 ft upstream with spillway crest at elevation of 867.5 ft which could be flash-boarded to elevation of 871 ft. Outflow was controlled by the flash boards and sluice gates. Dead storage below elevation of 859 ft. Reservoir is used for power generation and water supply. Rain gage at station. GOES satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 877.68 ft, September 25, 1995; minimum observed, 814.2 ft, June 1, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 869.08 ft, October 14; minimum, 832.39 ft, May 3.

GAGE-HEIGHT, FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	865.21	867.07	859.41	854.00	849.25	---	837.92	832.61	835.32	847.40	861.25	868.73
2	865.55	866.86	859.20	853.81	849.09	844.13	837.73	832.50	835.38	847.98	861.45	868.78
3	866.48	866.61	859.03	853.55	848.93	843.89	837.55	832.45	835.46	848.56	861.65	868.87
4	867.70	866.35	858.91	853.37	848.78	843.70	837.35	832.56	835.54	849.14	861.92	868.91
5	868.13	866.10	858.69	853.15	848.62	843.51	837.09	832.68	835.62	849.71	862.17	868.82
6	868.44	865.84	858.47	852.99	848.51	843.33	836.95	832.83	835.79	850.14	862.42	868.70
7	868.68	865.57	858.26	852.85	848.32	843.13	836.79	832.99	836.00	850.57	862.70	868.66
8	868.79	865.32	858.06	852.71	848.14	842.92	836.62	833.16	836.28	---	863.02	868.60
9	868.85	865.09	857.85	852.58	847.96	842.69	836.43	833.27	836.52	---	863.33	868.50
10	868.92	864.83	857.63	852.50	847.87	842.44	836.26	833.33	836.77	---	863.60	868.43
11	868.98	864.55	857.46	852.40	847.78	842.21	836.08	833.41	836.96	---	863.88	868.37
12	869.02	864.31	857.34	852.31	847.65	842.01	835.91	833.44	837.10	---	864.19	868.27
13	869.03	864.04	857.19	852.17	847.53	841.77	835.72	833.48	837.33	---	864.42	868.10
14	869.03	863.78	857.03	851.98	847.39	841.51	835.51	833.49	837.54	854.49	864.62	867.92
15	868.98	863.49	856.85	851.81	847.19	841.26	835.31	833.51	837.78	854.93	864.84	867.77
16	868.92	863.20	856.68	851.60	846.95	841.06	835.10	833.54	838.03	855.37	865.08	867.61
17	868.85	862.90	856.50	851.41	846.80	840.85	834.91	833.55	838.37	855.87	865.41	867.42
18	868.67	862.61	856.32	851.25	846.62	840.65	834.69	833.56	838.87	856.36	865.81	867.21
19	868.47	862.34	856.13	851.10	846.44	840.44	834.53	833.60	839.46	856.81	866.23	866.98
20	868.29	862.06	855.99	850.89	846.29	840.22	834.35	833.67	840.12	857.25	866.66	866.78
21	868.18	861.79	855.85	850.69	846.14	839.99	834.12	833.76	840.77	857.64	866.96	866.65
22	868.09	861.56	855.68	850.53	845.92	839.79	833.95	833.89	841.40	858.09	867.23	866.48
23	867.96	861.33	855.48	850.43	845.69	839.58	833.79	834.04	842.00	858.54	867.57	866.31
24	867.83	861.09	855.31	850.31	845.51	839.39	833.63	834.26	842.63	858.88	867.78	866.14
25	867.74	860.87	855.17	850.17	845.29	839.20	833.47	834.47	843.27	859.19	867.89	865.99
26	867.64	860.63	855.01	850.03	845.06	839.00	833.29	834.63	843.94	859.47	868.06	865.92
27	867.52	860.37	854.80	849.92	---	838.82	833.12	834.76	844.64	859.85	868.37	865.80
28	867.44	860.10	854.60	849.79	---	838.63	832.96	834.91	845.43	860.22	868.65	865.62
29	867.35	859.83	854.42	849.66	---	838.43	832.81	835.05	846.10	860.53	868.73	865.43
30	867.30	859.61	854.28	849.53	---	838.26	832.71	835.15	846.78	860.79	868.75	865.34
31	867.23	---	854.14	849.39	---	838.11	---	835.26	---	861.01	868.74	---
MEAN	868.04	863.34	856.70	851.58	---	---	835.22	833.67	839.24	---	865.27	867.44
MAX	869.03	867.07	859.41	854.00	---	---	837.92	835.26	846.78	---	868.75	868.91
MIN	865.21	859.61	854.14	849.39	---	---	832.71	832.45	835.32	---	861.25	865.34

15280200 EKLUTNA RIVER AT OLD GLENN HIGHWAY AT EKLUTNA

LOCATION.--Lat 61°27'01", long 149°22'02", in NE¹/₄ SW¹/₄ NE¹/₄ sec. 25, T. 16 N., R. 1 W. (Anchorage B-7 quad), Municipality of Anchorage, Hydrologic Unit 19020402, on right bank, 1.3 mi upstream from mouth, 0.7 mi south of Eklutna.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--May 1 2002 to current year

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

REMARKS.--Records are fair except for estimated daily discharges, which are poor. Flow regulated by Eklutna Reservoir, 11 mi upstream, for power generation and water supply. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	e30	e21	e16	e14	12	e11	29	80	62	28	51
2	26	e30	e20	e16	e14	13	e11	28	78	60	29	51
3	32	29	e20	e16	e14	14	e12	24	78	58	28	49
4	36	28	e20	e15	e14	12	e12	25	81	57	28	47
5	52	28	e20	e15	e14	12	12	27	85	55	e28	44
6	72	27	e20	e15	e14	e13	13	30	87	53	27	43
7	62	27	e19	e15	e14	e12	13	35	90	53	26	43
8	52	29	e19	e15	e14	e12	e13	36	83	52	25	47
9	54	27	e19	e15	e13	e12	e14	34	88	50	24	43
10	47	23	e19	e16	e13	e12	e15	32	90	49	25	43
11	45	24	e18	e17	e13	e12	e17	34	89	47	24	41
12	43	28	e18	e17	e13	11	e19	35	90	46	24	39
13	41	24	e18	e17	13	11	18	35	65	45	25	41
14	41	e14	e18	e17	13	11	20	47	68	43	23	37
15	41	e8	e18	e16	e13	11	21	44	73	42	23	40
16	40	e6	e18	e16	e13	e12	21	41	71	41	e24	39
17	38	e7	e17	e16	e12	e11	22	46	78	40	e24	40
18	37	e10	e16	e16	e12	e11	20	56	82	40	25	39
19	37	e19	e11	e15	e12	e11	19	e54	88	41	25	37
20	34	e26	e10	e15	e13	e11	20	e55	92	39	29	37
21	35	e27	e13	e16	e13	e11	21	e60	92	35	28	39
22	37	e29	16	e16	e14	e11	22	62	89	32	28	36
23	35	e30	16	e16	14	e11	22	65	86	31	28	35
24	33	e30	e16	e16	13	e11	21	71	83	29	29	33
25	34	e28	e16	e16	14	e11	21	e71	82	29	26	34
26	33	e26	e16	e16	13	e11	20	e82	78	28	28	48
27	32	e24	e16	e15	12	e11	20	e81	73	28	38	45
28	30	e22	e16	e15	12	e11	20	77	67	29	37	44
29	e29	e22	e16	e15	12	e11	23	82	64	28	46	47
30	e32	e21	e16	e15	---	e11	24	80	63	27	57	72
31	e30	---	e16	e15	---	e11	---	79	---	29	53	---
TOTAL	1216	703	532	487	382	357	537	1557	2413	1298	912	1284
MEAN	39.2	23.4	17.2	15.7	13.2	11.5	17.9	50.2	80.4	41.9	29.4	42.8
MAX	72	30	21	17	14	14	24	82	92	62	57	72
MIN	26	6.0	10	15	12	11	11	24	63	27	23	33
AC-FT	2410	1390	1060	966	758	708	1070	3090	4790	2570	1810	2550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)#

	2002	2003	2004	2004	2004	2004	2004	2003	2003	2004	2004	2003
MEAN	52.7	33.4	20.3	18.5	17.6	13.6	19.8	41.2	76.6	54.0	44.1	45.8
MAX	66.1	43.3	23.5	21.3	22.1	15.7	21.6	52.5	80.4	67.0	63.2	64.4
(WY)	2003	2003	2003	2003	2003	2003	2003	2002	2004	2003	2002	2002
MIN	39.2	23.4	17.2	15.7	13.2	11.5	17.9	21.0	71.9	41.9	29.4	30.3
(WY)	2004	2004	2004	2004	2004	2004	2004	2003	2003	2004	2004	2003

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 2002 - 2004#

ANNUAL TOTAL	11887.0	11678	
ANNUAL MEAN	32.6	31.9	34.5
HIGHEST ANNUAL MEAN			37.0
LOWEST ANNUAL MEAN			31.9
HIGHEST DAILY MEAN	111	Jun 15	92
LOWEST DAILY MEAN	6.0	Nov 16	6.0
ANNUAL SEVEN-DAY MINIMUM	11	Mar 9	11
MAXIMUM PEAK FLOW			a104
MAXIMUM PEAK STAGE			a85.82
MAXIMUM PEAK STAGE			b87.13
ANNUAL RUNOFF (AC-FT)	23580	23160	24970
10 PERCENT EXCEEDS	62	67	68
50 PERCENT EXCEEDS	26	26	27
90 PERCENT EXCEEDS	16	12	13

See Period of Record. Partial years used in monthly statistics

a Maximum discharge, 118 ft³/s, gage-height, 85.86 ft., Sep. 30, stage rising, peak occurred Oct. 1, 2004; maximum peak discharge, 104 ft³/s, Jun. 20 to Jun. 22, gage height, 85.82 ft.

b Backwater from ice

e Estimated

15281000 KNIK RIVER NEAR PALMER—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 1960 - 2004#	
ANNUAL MEAN			7004	
HIGHEST ANNUAL MEAN			8889	2003
LOWEST ANNUAL MEAN			5590	1973
HIGHEST DAILY MEAN	52600	Oct 4	341000	Jul 26 1961
LOWEST DAILY MEAN			a260	Mar 1 1962
ANNUAL SEVEN-DAY MINIMUM			260	Mar 1 1962
MAXIMUM PEAK FLOW	60400	Oct 3	bc355000	Jul 26 1961
MAXIMUM PEAK STAGE	14.70	Oct 3	b24.35	Jul 17 1960
ANNUAL RUNOFF (AC-FT)			5074000	
ANNUAL RUNOFF (CFSM)			5.94	
ANNUAL RUNOFF (INCHES)			80.65	
10 PERCENT EXCEEDS			21100	
50 PERCENT EXCEEDS			2100	
90 PERCENT EXCEEDS			500	

See Period of Record; partial years used in monthly statistics

a Mar. 1-31, 1962

b Site then in use, caused by release of stored water (Lake George) behind Knik Glacier

c Gage height, 24.3 ft

15281000 KNIK RIVER NEAR PALMER—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-58, 1961-72, 1974-75, 1989, 2003 and current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: Water years 1962-66.

I

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Medium code	Stream width, feet (00004)	Location in X-sect. looking downstrm ft from l bank (00009)	Gage height, feet (00065)	Startng time, 24 hour clock, hr:min (82073)	Ending time, 24 hour clock, hr:min (82074)	Instantaneous discharge, cfs (00061)	Sampler type, code (84164)	Sam-pling method, code (82398)	Temper-ature, water, deg C (00010)	Temper-ature, air, deg C (00020)	Sus-pended sedi-ment concentration mg/L (80154)
NOV													
04...	1315	9	382	--	6.44	1315.00	1348.00	3520	3055	20	1.0	1.5	27
04...	1405	9	382	304	6.44	1405.00	1505.00	3510	1100	1000	1.0	1.5	--
04...	1520	H	382	--	6.44	1520.00	1802.00	3510	8010	--	1.0	1.5	--

Date	Sus-pended sedi-ment discharge, tons/d (80155)	Suspd. sedi-ment, sieve diametr percent <.063mm (70331)	Bedload discharge, tons/d (80225)	Bedload sedimnt dschrge average unit t/d/ft (04122)	Compstd samples in x-sec bedload measmnt number (04118)	Number of sam-pling points, count (00063)	Verti-cals in com-posite sample, number (04119)	Hori-zontal width of verti-cal, feet (04121)	Rest time on bed for bed load sample, seconds (04120)	Bag mesh size, bedload sampler mm (30333)	Tether line used in sampling (yes=1) (04117)	Bedload sedi-ment, sieve diametr percent <.125mm (80227)	Bedload sedi-ment, sieve diametr percent <.25mm (80228)
NOV													
04...	256	90	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	24	.06	2	1	18	4.0	60	.025	1	.0	1
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Bedload sedi-ment, sieve diametr percent <.5 mm (80229)	Bedload sedi-ment, sieve diametr percent <1 mm (80230)	Bedload sedi-ment, sieve diametr percent <2 mm (80231)	Bedload sedi-ment, sieve diametr percent <4 mm (80232)	Bedload sedi-ment, sieve diametr percent <8 mm (80233)	Bedload sedi-ment, sieve diametr percent <16 mm (80234)	Bed sedi-ment, wsv nat field, percent <.031mm (49286)	Bed sedi-ment, dry svd sve dia percent <.063mm (80164)	Bed sedi-ment, dry svd sve dia percent <.125mm (80165)	Bed sedi-ment, dry svd sve dia percent <.25mm (80166)	Bed sedi-ment, dry svd sve dia percent <.5 mm (80167)	Bed sedi-ment, dry svd sve dia percent <1 mm (80168)	Bed sedi-ment, dry svd sve dia percent <2 mm (80169)
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	38	63	83	92	98	100	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	.0	1	7	34	72	86	92

Date	Bed sedi-ment, dry svd sve dia percent <4 mm (80170)	Bed sedi-ment, dry svd sve dia percent <8 mm (80171)	Bed sedi-ment, dry svd sve dia percent <16 mm (80172)
NOV			
04...	--	--	--
04...	--	--	--

15281500 CAMP CREEK NEAR SHEEP MOUNTAIN LODGE

LOCATION.--Lat 61°50'20", long 147°24'31", in SE¹/₄ SE¹/₄ NW¹/₄ sec. 11, T. 20 N., R. 11 E. (Anchorage D-2 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020402, on left bank 5 ft downstream from culvert on old alignment (1/2 mile upstream from new alignment) Glenn Highway, and 3.5 mi northeast of Sheep Mountain Lodge.

DRAINAGE AREA.--1.09 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximum, water years 1968-69, 1971, 1989-95. October 1995 to September 2004 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,950 ft above sea level, from topographic map. Prior to 1971 crest-stage gage at site above culvert at different datum, June 2, 1989 to September 30, 1995, crest-stage gage at same site and datum.

REMARKS.--Records are poor. GOES satellite telemetry at station. Rain gauge at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.27	e0.19	e0.05	e0.00	e0.00	e0.00	e0.00	e0.05	2.1	0.14	0.46	0.39
2	0.25	e0.19	e0.05	e0.00	e0.00	e0.00	e0.00	e0.05	1.7	0.12	0.47	0.46
3	0.27	e0.19	e0.05	e0.00	e0.00	e0.00	e0.00	e0.05	1.5	0.16	0.46	0.89
4	0.26	e0.19	e0.05	e0.00	e0.00	e0.00	e0.00	e0.05	1.3	0.16	0.45	0.97
5	0.29	e0.18	e0.05	e0.00	e0.00	e0.00	e0.00	e0.05	1.2	0.42	0.39	0.95
6	0.29	e0.18	e0.05	e0.00	e0.00	e0.00	e0.00	e0.05	1.1	1.3	0.35	0.94
7	0.29	e0.18	e0.05	e0.00	e0.00	e0.00	e0.00	e0.05	1.2	1.2	0.34	0.95
8	0.29	e0.18	e0.05	e0.00	e0.00	e0.00	e0.00	e0.05	1.2	1.0	0.32	0.91
9	0.28	e0.17	e0.05	e0.00	e0.00	e0.00	e0.00	e0.05	1.2	1.0	0.30	0.87
10	0.27	e0.17	e0.05	e0.00	e0.00	e0.00	e0.00	e0.10	1.1	0.93	0.28	0.83
11	0.26	e0.16	e0.05	e0.00	e0.00	e0.00	e0.00	e0.15	1.1	0.85	0.28	0.81
12	0.25	e0.15	e0.05	e0.00	e0.00	e0.00	e0.00	e0.30	1.1	0.82	0.28	0.76
13	0.24	e0.14	e0.05	e0.00	e0.00	e0.00	e0.00	e0.45	1.1	0.77	0.26	0.79
14	e0.23	e0.13	e0.05	e0.00	e0.00	e0.00	e0.00	e0.70	1.0	0.65	0.24	0.76
15	e0.23	e0.12	e0.05	e0.00	e0.00	e0.00	e0.00	e1.0	0.91	0.48	0.25	0.80
16	e0.23	e0.11	e0.05	e0.00	e0.00	e0.00	e0.00	e1.3	0.84	0.43	0.25	0.79
17	e0.23	e0.10	e0.05	e0.00	e0.00	e0.00	e0.00	e1.6	0.75	0.40	0.24	0.80
18	e0.22	e0.05	e0.00	e0.00	e0.00	e0.00	e0.00	e1.9	0.58	0.41	0.24	0.78
19	e0.22	e0.05	e0.00	e0.00	e0.00	e0.00	e0.00	e2.7	0.42	0.38	0.25	0.77
20	e0.22	e0.05	e0.00	e0.00	e0.00	e0.00	e0.00	3.3	0.29	0.53	0.27	0.77
21	e0.21	e0.05	e0.00	e0.00	e0.00	e0.00	e0.00	3.3	0.26	0.45	0.25	0.83
22	e0.21	e0.05	e0.00	e0.00	e0.00	e0.00	e0.00	3.3	0.23	0.44	0.23	0.90
23	e0.21	e0.05	e0.00	e0.00	e0.00	e0.00	e0.00	2.2	0.22	0.46	0.22	0.96
24	e0.21	e0.05	e0.00	e0.00	e0.00	e0.00	e0.00	1.8	0.21	0.45	0.23	1.1
25	e0.21	e0.05	e0.00	e0.00	e0.00	e0.00	e0.00	2.0	0.20	0.45	0.40	0.98
26	e0.21	e0.05	e0.00	e0.00	e0.00	e0.00	e0.00	3.4	0.18	0.43	0.42	0.86
27	e0.21	e0.05	e0.00	e0.00	e0.00	e0.00	e0.00	4.2	0.15	0.43	0.43	0.63
28	e0.20	e0.05	e0.00	e0.00	e0.00	e0.00	e0.00	3.3	0.14	0.45	0.41	0.57
29	e0.20	e0.05	e0.00	e0.00	e0.00	e0.00	e0.05	2.1	0.14	0.40	0.47	0.54
30	e0.20	e0.05	e0.00	e0.00	---	e0.00	e0.05	1.8	0.14	0.51	0.41	0.66
31	e0.20	---	e0.00	e0.00	---	e0.00	---	2.2	---	0.46	0.38	---
TOTAL	7.36	3.38	0.85	0.00	0.00	0.00	0.10	43.55	23.56	17.08	10.23	24.02
MEAN	0.24	0.11	0.03	0.00	0.00	0.00	0.00	1.40	0.79	0.55	0.33	0.80
MAX	0.29	0.19	0.05	0.00	0.00	0.00	0.05	4.2	2.1	1.3	0.47	1.1
MIN	0.20	0.05	0.00	0.00	0.00	0.00	0.00	0.05	0.14	0.12	0.22	0.39
AC-FT	15	6.7	1.7	0.00	0.00	0.00	0.2	86	47	34	20	48
CFSM	0.22	0.10	0.03	0.00	0.00	0.00	0.00	1.29	0.72	0.51	0.30	0.73
IN.	0.25	0.12	0.03	0.00	0.00	0.00	0.00	1.49	0.80	0.58	0.35	0.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)#

	1996	1997	1998	1999	2000	2001	2002	2003	2004			
MEAN	0.46	0.21	0.08	0.01	0.00	0.00	0.01	0.93	3.35	1.44	1.12	1.01
MAX	1.12	0.65	0.39	0.04	0.01	0.01	0.06	1.55	8.58	2.97	3.58	2.63
(WY)	1998	1998	1998	1999	2003	2003	1996	1998	2001	2001	1997	2000
MIN	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.56	0.22	0.32	0.37
(WY)	1997	2001	2001	1996	1996	1996	1999	1999	1996	2002	2003	2002

See Period of Record
e Estimated

15281500 CAMP CREEK NEAR SHEEP MOUNTAIN LODGE—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004#	
ANNUAL TOTAL	129.12		130.13			
ANNUAL MEAN	0.35		0.36		0.72	
HIGHEST ANNUAL MEAN					1.46 2000	
LOWEST ANNUAL MEAN					0.26 2002	
HIGHEST DAILY MEAN	4.5 Jun 10		4.2 May 27		17 Jun 7 1997	
LOWEST DAILY MEAN	a0.00 Dec 18		b0.00 Dec 18		c0.00 Dec 6 1995	
ANNUAL SEVEN-DAY MINIMUM	0.00 Dec 18		0.00 Dec 18		0.00 Dec 6 1995	
MAXIMUM PEAK FLOW			7.9 May 27		d46 Jul 21 1992	
MAXIMUM PEAK STAGE			14.81 May 27		15.49 Jun 28 2000	
ANNUAL RUNOFF (AC-FT)	256		258		522	
ANNUAL RUNOFF (CFSM)	0.325		0.326		0.661	
ANNUAL RUNOFF (INCHES)	4.41		4.44		8.98	
10 PERCENT EXCEEDS	0.85		0.99		2.0	
50 PERCENT EXCEEDS	0.16		0.14		0.20	
90 PERCENT EXCEEDS	0.01		0.00		0.00	

See Period of Record

a Dec. 18 - 31

b Dec. 18 to Apr. 28

c No flow most days during winter

d From rating curve extended above 2 ft³/s

15281500 CAMP CREEK NEAR SHEEP MOUNTAIN LODGE—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1996 to September 2004 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1996 to September 2004 (discontinued).

INSTRUMENTATION.--Electronic water-temperature recorder set for 1-hour recording interval.

REMARKS.--No record from December 18 to April 28 due to probe froze in ice or no flow conditions. Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on August 25. No variation was found within the cross section. No variation was found between mean stream temperature and temperature at the sensor. Large stream icing forms near the gage.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 10.0°C, on July 15, 2003; minimum, 0.0°C, on many days during fall, winter, and spring breakup periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 8.5°C, several days in July and August; minimum, 0.0°C, on many days during fall, winter, and spring breakup period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (00004)	Sample location, cross section ft from rt bank (72103)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler type, code (84164)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
AUG									
25...	1355	2.70	.3	14.11	.42	10	8010	7.1	12.3
25...	1356	2.70	.8	14.11	.42	10	8010	7.1	12.3
25...	1357	2.70	1.4	14.11	.42	10	8010	7.1	12.3
25...	1358	2.70	1.9	14.11	.42	10	8010	7.1	12.3
25...	1400	2.70	2.4	14.11	.42	10	8010	7.1	12.3

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	4.0	3.0	3.0	0.5	0.0	0.0	0.0	0.0	0.0	---	---	---
2	3.5	3.0	3.0	0.5	0.5	0.5	0.0	0.0	0.0	---	---	---
3	3.5	2.5	3.0	0.5	0.0	0.5	0.0	0.0	0.0	---	---	---
4	2.5	1.5	2.0	0.5	0.0	0.5	0.0	0.0	0.0	---	---	---
5	3.0	2.0	2.5	0.5	0.0	0.5	0.0	0.0	0.0	---	---	---
6	3.0	2.0	2.5	0.5	0.0	0.5	0.0	0.0	0.0	---	---	---
7	2.5	2.0	2.5	0.5	0.0	0.0	0.0	0.0	0.0	---	---	---
8	2.5	1.5	2.0	0.5	0.0	0.5	0.0	0.0	0.0	---	---	---
9	2.5	1.5	2.0	0.5	0.0	0.0	0.0	0.0	0.0	---	---	---
10	2.0	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
11	1.5	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
12	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
13	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
14	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
15	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
16	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
17	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
18	0.5	0.0	0.0	0.0	0.0	0.0	---	---	---	---	---	---
19	0.5	0.5	0.5	0.0	0.0	0.0	---	---	---	---	---	---
20	0.5	0.0	0.0	0.0	0.0	0.0	---	---	---	---	---	---
21	0.5	0.0	0.5	0.0	0.0	0.0	---	---	---	---	---	---
22	0.5	0.0	0.5	0.0	0.0	0.0	---	---	---	---	---	---
23	0.5	0.0	0.5	0.0	0.0	0.0	---	---	---	---	---	---
24	0.5	0.5	0.5	0.0	0.0	0.0	---	---	---	---	---	---
25	1.0	0.5	0.5	0.0	0.0	0.0	---	---	---	---	---	---
26	1.0	0.5	0.5	0.0	0.0	0.0	---	---	---	---	---	---
27	0.5	0.0	0.5	0.0	0.0	0.0	---	---	---	---	---	---
28	0.5	0.0	0.0	0.0	0.0	0.0	---	---	---	---	---	---
29	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	---	---	---
30	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	---	---	---
31	0.0	0.0	0.0	---	---	---	---	---	---	---	---	---
MONTH	4.0	0.0	1.0	0.5	0.0	0.1	---	---	---	---	---	---

SOUTH-CENTRAL ALASKA

15281500 CAMP CREEK NEAR SHEEP MOUNTAIN LODGE—Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	0.0	0.0	0.0
2	---	---	---	---	---	---	---	---	---	0.0	0.0	0.0
3	---	---	---	---	---	---	---	---	---	0.0	0.0	0.0
4	---	---	---	---	---	---	---	---	---	0.0	0.0	0.0
5	---	---	---	---	---	---	---	---	---	0.0	0.0	0.0
6	---	---	---	---	---	---	---	---	---	0.0	0.0	0.0
7	---	---	---	---	---	---	---	---	---	0.0	0.0	0.0
8	---	---	---	---	---	---	---	---	---	0.0	0.0	0.0
9	---	---	---	---	---	---	---	---	---	0.0	0.0	0.0
10	---	---	---	---	---	---	---	---	---	0.5	0.0	0.0
11	---	---	---	---	---	---	---	---	---	1.0	0.0	0.5
12	---	---	---	---	---	---	---	---	---	2.5	0.0	1.0
13	---	---	---	---	---	---	---	---	---	2.5	0.0	1.0
14	---	---	---	---	---	---	---	---	---	2.5	0.0	1.0
15	---	---	---	---	---	---	---	---	---	2.5	0.0	1.0
16	---	---	---	---	---	---	---	---	---	2.5	0.0	1.5
17	---	---	---	---	---	---	---	---	---	3.5	0.0	1.5
18	---	---	---	---	---	---	---	---	---	4.0	0.5	1.5
19	---	---	---	---	---	---	---	---	---	4.5	0.5	2.0
20	---	---	---	---	---	---	---	---	---	4.5	0.5	2.0
21	---	---	---	---	---	---	---	---	---	4.5	0.5	2.5
22	---	---	---	---	---	---	---	---	---	4.5	1.0	2.5
23	---	---	---	---	---	---	---	---	---	3.0	1.0	2.0
24	---	---	---	---	---	---	---	---	---	3.0	1.0	2.0
25	---	---	---	---	---	---	---	---	---	2.5	1.5	2.0
26	---	---	---	---	---	---	---	---	---	3.5	1.5	2.0
27	---	---	---	---	---	---	---	---	---	5.5	1.5	3.0
28	---	---	---	---	---	---	---	---	---	4.5	2.0	3.0
29	---	---	---	---	---	---	0.0	0.0	0.0	4.0	1.5	2.5
30	---	---	---	---	---	---	0.0	0.0	0.0	4.5	1.0	3.0
31	---	---	---	---	---	---	---	---	---	5.0	2.5	3.0
MONTH	---	---	---	---	---	---	---	---	---	5.5	0.0	1.3

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.0	2.0	3.0	6.5	5.0	5.5	7.0	6.0	6.5	7.0	5.5	6.0
2	3.5	2.0	2.5	7.0	5.5	6.0	7.5	5.5	6.5	6.5	5.5	6.0
3	4.0	1.5	2.5	6.5	5.5	6.0	8.0	5.5	6.5	6.0	5.0	5.5
4	5.5	1.5	3.5	7.0	5.5	6.0	7.5	6.0	6.5	6.0	4.5	5.0
5	5.5	2.5	4.0	5.5	5.5	5.5	8.0	5.5	6.5	5.5	4.5	5.0
6	6.5	3.0	4.5	7.0	5.0	6.0	8.0	5.5	6.5	5.5	4.0	4.5
7	5.5	3.5	4.5	8.0	5.0	6.5	8.0	6.0	7.0	5.0	3.5	4.0
8	4.5	3.5	4.0	8.0	5.5	6.5	8.0	6.0	7.0	5.0	3.0	4.0
9	5.5	3.0	4.0	6.5	6.0	6.0	8.0	6.0	7.0	5.0	3.0	4.0
10	4.5	3.0	3.5	7.0	5.0	6.0	8.0	6.0	7.0	5.0	3.0	4.0
11	3.5	2.5	3.0	8.0	5.0	6.5	8.0	6.5	7.0	4.5	3.0	4.0
12	5.5	2.0	3.5	8.5	5.5	7.0	8.0	6.5	7.0	5.0	3.0	4.0
13	5.5	2.5	4.0	8.5	6.0	7.0	8.5	6.0	7.0	4.0	3.5	3.5
14	7.0	3.0	4.5	8.0	6.0	7.0	8.0	6.0	7.0	4.0	2.5	3.0
15	6.0	3.5	4.5	8.0	5.5	7.0	7.5	6.5	7.0	3.5	2.5	3.0
16	5.0	3.5	4.5	8.5	6.0	7.0	8.0	6.5	7.0	3.0	2.5	3.0
17	6.5	3.5	5.0	7.5	6.0	6.5	8.0	6.5	7.0	3.0	2.0	2.5
18	7.0	3.5	5.0	8.0	6.0	7.0	8.5	6.5	7.5	3.5	2.0	2.5
19	7.5	4.0	5.5	8.0	6.0	7.0	8.0	6.5	7.0	3.0	2.0	2.5
20	7.5	4.5	6.0	7.5	6.5	7.0	7.5	6.5	7.0	3.5	2.5	3.0
21	8.0	4.5	6.0	8.0	6.5	7.0	8.0	6.0	7.0	3.5	2.5	3.0
22	8.0	4.5	6.0	7.0	6.0	6.5	8.5	6.5	7.0	3.0	2.0	2.5
23	8.0	4.5	6.0	7.5	6.0	6.5	8.0	6.0	7.0	3.0	2.0	2.5
24	8.0	5.0	6.0	8.0	5.5	7.0	7.5	6.0	6.5	3.0	1.5	2.0
25	8.0	5.0	6.5	7.5	6.0	6.5	7.0	6.0	6.5	2.0	1.5	2.0
26	8.0	5.5	6.5	6.5	6.0	6.0	7.0	6.0	6.5	2.5	1.0	2.0
27	8.0	6.0	6.5	7.0	5.5	6.0	7.5	6.0	6.5	2.0	0.5	1.5
28	7.5	5.5	6.5	7.0	6.0	6.5	7.0	6.0	6.5	1.5	0.5	1.0
29	7.5	6.0	6.5	7.5	5.5	6.5	7.0	6.0	6.5	1.5	1.0	1.5
30	6.5	5.5	6.0	7.5	6.0	6.5	7.5	5.0	6.0	2.0	1.5	2.0
31	---	---	---	7.5	6.0	6.5	7.5	5.0	6.0	---	---	---
MONTH	8.0	1.5	4.8	8.5	5.0	6.5	8.5	5.0	6.8	7.0	0.5	3.3

15284000 MATANUSKA RIVER AT PALMER

LOCATION.--Lat 61°36'33", long 149°04'15", in SE¹/₄ NW¹/₄ sec. 34, T. 18 N., R. 2 E. (Anchorage C-6 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020402, on downstream left bank of Old Glenn Highway bike path bridge, and 1 mi east of Palmer.

DRAINAGE AREA.--2,070 mi², approximately.

PERIOD OF RECORD.--April 1949 to September 1973, May 1985 to September 1986, October 1991 to September 1992, and May 2000 to current year. Annual maximum, water year 1974 and 1995.

GAGE.--Water-stage recorder. Datum of gage is 170.92 ft above National Geodetic Vertical Datum of 1929 (Alaska Railroad Commission benchmark, prior to Mar. 27, 1964 earthquake). Prior to Nov. 2, 1950, non-recording gage at bridge 20 ft upstream at same datum. Nov. 2, 1950 to Apr. 30, 1952, non-recording gage at current site and same datum. May 1, 1952 to Sep. 30, 1973, July 19 to Oct. 20, 1987, and Oct. 1, 1991 to Sep. 30, 1992, water-stage recorder at site 100 ft downstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Precipitation gage at station. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 21,000 ft³/s and maximums (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
June 8	0530	a26,000	12.21	June 21	0800	*a45,000	13.34

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3170	1170	e1000	e750	e600	467	e445	1120	4210	18900	10500	5700
2	3610	1340	e950	e700	e600	472	445	1500	4150	18300	9900	5530
3	10100	1380	e950	e700	e600	469	436	1780	3380	18600	9950	6380
4	15100	1270	e950	e700	e600	472	468	2210	3120	17900	10300	5940
5	11000	1240	e950	e700	e600	458	467	2490	4250	17500	10400	4310
6	8120	1220	e900	e700	e600	e460	481	3090	5940	16800	10400	3550
7	6140	1200	e900	e700	e600	e460	525	5120	11400	15700	11200	3260
8	5060	1240	e900	e700	e600	e460	526	10300	16600	15600	11100	2940
9	4560	1270	e900	e700	e600	e460	549	8710	10700	14700	10800	2730
10	3900	1160	e850	e700	e600	e460	552	3200	9450	12400	11100	2600
11	3200	1170	e850	e700	e580	e460	545	2220	8300	11500	11600	2470
12	2820	e1100	e850	e700	e560	458	577	2200	6900	12300	11600	2350
13	2520	e1100	e850	e650	562	463	587	2400	7430	13500	11200	2270
14	2370	e1000	e850	e650	539	458	600	2620	9280	14300	10500	2210
15	2310	e900	e850	e650	e540	453	647	2930	11700	13600	10100	2180
16	2130	e800	e850	e650	e540	464	675	2700	8160	13200	10100	2180
17	1970	e750	e850	e650	e540	469	680	2350	8950	13300	10300	2170
18	1820	e700	e800	e650	e540	e465	739	2350	13100	12300	11500	2160
19	1850	e700	e800	e650	e540	465	705	2500	19300	12100	12000	2160
20	1810	e750	e800	e650	545	e470	706	2790	29900	13500	12000	2160
21	1690	e800	e800	e650	538	e475	751	3020	31300	13600	10300	2170
22	1670	e850	e800	e650	543	484	783	3570	28600	12900	9800	2170
23	1620	e850	e800	e650	505	496	797	4710	26200	11400	9810	2170
24	1620	e900	e800	e650	496	487	800	5920	24400	11500	9090	2150
25	1590	e900	e750	e600	494	469	827	4290	23900	12000	8380	2160
26	1580	e950	e750	e600	482	488	836	4590	23900	11800	8560	2190
27	1480	e950	e750	e600	471	444	929	5260	24500	10400	9390	2180
28	1350	e1000	e750	e600	482	e440	791	5630	22900	10100	8540	2170
29	1230	e1000	e750	e600	475	433	797	3870	21500	9580	7270	2180
30	1210	e1000	e750	e600	---	452	951	3170	21500	9950	6720	2360
31	1150	---	e750	e600	---	e450	---	4110	---	10400	6120	---
TOTAL	109750	30660	26050	20450	15972	14381	19617	112720	444920	419630	310530	87150
MEAN	3540	1022	840	660	551	464	654	3636	14830	13540	10020	2905
MAX	15100	1380	1000	750	600	496	951	10300	31300	18900	12000	6380
MIN	1150	700	750	600	471	433	436	1120	3120	9580	6120	2150
AC-FT	217700	60810	51670	40560	31680	28520	38910	223600	882500	832300	615900	172900
CFSM	1.71	0.49	0.41	0.32	0.27	0.22	0.32	1.76	7.16	6.54	4.84	1.40
IN.	1.97	0.55	0.47	0.37	0.29	0.26	0.35	2.03	8.00	7.54	5.58	1.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2004, BY WATER YEAR (WY)#

	2005	1005	738	623	527	476	648	2750	10240	13130	9843	4796
MEAN	2005	1005	738	623	527	476	648	2750	10240	13130	9843	4796
MAX	3540	1793	1024	821	708	583	985	6019	17250	18750	15730	8966
(WY)	2004	1972	1972	1961	2003	2001	1964	1960	1964	2000	1971	1951
MIN	1166	568	440	349	381	360	465	1007	5415	9206	4992	2123
(WY)	1992	1959	1969	1959	1971	1971	1972	1966	1965	1973	1969	1969

See Period of Record; partial years used in monthly statistics

a Peak discharge adjusted to exclude surge; peak gage-height not adjusted to exclude surge

e Estimated

15284000 MATANUSKA RIVER AT PALMER—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1949 - 2004#	
ANNUAL TOTAL	1381553		1611830			
ANNUAL MEAN	3785		4404		3842	
HIGHEST ANNUAL MEAN					4815 1957	
LOWEST ANNUAL MEAN					2562 1969	
HIGHEST DAILY MEAN	20900	Jul 21	31300	Jun 21	40700	Aug 10 1971
LOWEST DAILY MEAN	440	Mar 13	433	Mar 29	234	Apr 25 1956
ANNUAL SEVEN-DAY MINIMUM	457	Mar 9	443	Mar 28	304	Apr 20 1956
MAXIMUM PEAK FLOW			a45000	Jun 21	b82100	Aug 10 1971
MAXIMUM PEAK STAGE			a13.56	Jun 20	c13.60	Aug 10 1971
ANNUAL RUNOFF (AC-FT)	2740000		3197000		2783000	
ANNUAL RUNOFF (CFSM)	1.83		2.13		1.86	
ANNUAL RUNOFF (INCHES)	24.83		28.97		25.21	
10 PERCENT EXCEEDS	11500		12000		11700	
50 PERCENT EXCEEDS	1380		1270		1200	
90 PERCENT EXCEEDS	591		482		480	

- # See Period of Record; partial years used in monthly statistics
a Peak discharge adjusted to exclude surge; peak stage not adjusted to exclude surge
b From rating curve extended above 34,000 ft³/s on basis of velocity-area study,
from break-out of natural reservoir on Granite Creek tributary
c Site then in use

15266300 MATANUSKA RIVER AT PALMER—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-54, 1957-68, 1985-1987, and 2003 to current year (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: Water years 1953-54, and 1959-1966.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Medium code	Stream width, feet (000004)	Location in X-sect. looking dwnstrm ft from l bank (000009)	Gage height, feet (000065)	Startng time, 24 hour clock, hr:min (82073)	Ending time, 24 hour clock, hr:min (82074)	Instan-taneous dis-charge, cfs (000061)	Sampler type, code (84164)	Sam-pling method, code (82398)	Temper-ature, water, deg C (00010)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)
OCT													
24...	1349	9	142	--	9.31	1349.00	1421.00	1840	3055	20	2.0	75	372
24...	1458	9	142	26.0	9.32	1458.00	1626.00	1840	1170	1000	2.0	--	--
24...	1635	H	--	--	--	1635.00	1650.00	--	8010	--	--	--	--

Date	Time	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Bedload sedi-ment discharge, tons/d (80225)	Bedload sedi-ment average unit composit t/d/ft (04122)	Compstd samples in x-sec bedload measmnt number (04118)	Number of sam-pling points, count (00063)	Verti-cals in com-posite sample, number (04119)	Hori-zontal width of verti-cal, feet (04121)	Rest time on bed load sample, seconds (04120)	Bag mesh size, bedload sampler mm (30333)	Bedload sedi-ment, sieve diametr percent <.25mm (80228)	Bedload sedi-ment, sieve diametr percent <.5 mm (80229)	Bedload sedi-ment, sieve diametr percent <1 mm (80230)	Bedload sedi-ment, sieve diametr percent <2 mm (80231)
OCT														
24...	92	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	27	.19	2	1	19	3.0	60	.025	.0	18	43	50
24...	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Time	Bedload sedi-ment, sieve diametr percent <4 mm (80232)	Bedload sedi-ment, sieve diametr percent <8 mm (80233)	Bedload sedi-ment, sieve diametr percent <16 mm (80234)	Bedload sedi-ment, sieve diametr percent <32 mm (80235)	Bedload sedi-ment, sieve diametr percent <64 mm (80236)	Bed sedi-ment, dry svd sve dia percent <.063mm (80164)	Bed sedi-ment, dry svd sve dia percent <.125mm (80165)	Bed sedi-ment, dry svd sve dia percent <.25mm (80166)	Bed sedi-ment, dry svd sve dia percent <.5 mm (80167)	Bed sedi-ment, dry svd sve dia percent <1 mm (80168)	Bed sedi-ment, dry svd sve dia percent <2 mm (80169)	Bed sedi-ment, dry svd sve dia percent <4 mm (80170)	Bed sedi-ment, dry svd sve dia percent <8 mm (80171)
OCT														
24...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	58	--	68	85	99	100	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	1	4	19	42	42	42	42	43

Date	Time	Bed sedi-ment, dry svd sve dia percent <16 mm (80172)	Bed sedi-ment, dry svd sve dia percent <32 mm (80173)	Bed sedi-ment, dry svd sve dia percent <64 mm (80174)
OCT				
24...	--	--	--	--

15290000 LITTLE SUSITNA RIVER NEAR PALMER

LOCATION.--Lat 61°42'37", long 149°13'47", in SE1/4 NW1/4 sec. 26, T. 19 N., R. 1 E. (Anchorage C-6 NW quad), Matanuska-Susitna Borough, Hydrologic Unit 19020505, on right bank 100 ft downstream from highway bridge on Wasilla-Fishhook Road, 1.5 mi north of road junction, 1.8 mi downstream from unnamed tributary, and 8 mi northwest of Palmer. Prior to October 1, 1991 at site 60 ft upstream.

DRAINAGE AREA.--61.9 mi².

PERIOD OF RECORD.--July 1948 to current year. Low-flow records not equivalent prior to January 1962 because most measurements below 300 ft³/s were made at site 3.4 mi downstream.

GAGE.--Water-stage recorder. Datum of gage is 916.6 ft above sea level (river-profile survey). Prior to August 16, 1948, non-recording gage and August 17, 1948 to May 15, 1972, water-stage recorder on left bank; water-stage recorder on right bank, May 16, 1972 to September 30, 1991, at site 60 ft upstream. Prior to October 1, 1974, at datum 4.00 ft higher; October 1, 1974 to September 30, 1991, at datum 2.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges, and for discharges above 700 ft³/s, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*).

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jun. 17	0730	1240	5.27	Sep. 30	2300	*2080	*5.95

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	315	99	e65	e41	e31	e21	e23	113	413	252	165	173
2	266	107	e63	e41	e30	e21	e23	116	418	239	154	225
3	348	98	e61	e40	e30	e21	e23	107	370	291	153	244
4	440	94	e60	e40	e29	e21	e23	132	380	281	153	253
5	360	92	e59	e40	e29	e22	e23	162	483	292	150	205
6	324	95	e57	e39	e28	e22	e23	201	583	267	152	176
7	290	98	e56	e39	e28	e22	e24	284	721	253	154	158
8	260	105	e55	e39	e27	e22	e24	346	536	248	154	144
9	249	101	e55	e38	e27	e22	e24	357	427	239	146	136
10	222	96	e54	e38	e26	e22	25	308	380	224	143	129
11	200	94	e53	e38	e26	e22	26	321	344	221	137	124
12	184	96	e52	e37	e26	e22	27	333	311	227	129	119
13	171	87	e51	e37	e25	e22	28	385	352	230	125	118
14	161	e55	e50	e37	e25	e22	30	435	368	224	124	112
15	152	e39	e50	e36	e25	e22	33	456	374	224	126	107
16	144	e35	e49	e36	e25	e22	35	440	325	227	125	102
17	136	e35	e48	e36	e25	e23	33	408	796	221	123	98
18	132	e36	e48	e36	e24	e23	34	414	518	207	127	95
19	129	e37	e47	e35	e24	e23	34	444	479	203	126	96
20	123	e40	e47	e35	e24	e23	34	496	454	202	167	101
21	119	e47	e47	e35	e23	e23	36	580	429	189	140	116
22	116	e55	e46	e35	e23	e23	39	674	403	174	132	112
23	113	e62	e46	e34	e23	e23	42	807	368	167	123	114
24	112	e66	e45	e34	e22	e23	45	829	346	169	118	102
25	125	e67	e45	e34	e22	e23	48	769	331	166	116	103
26	128	e68	e44	e33	e22	e23	53	637	335	161	e200	132
27	115	e69	e44	e33	e22	e23	52	588	336	151	343	122
28	105	e69	e43	e33	e22	e23	49	527	317	159	413	115
29	101	e68	e43	e32	e22	e23	63	430	298	179	288	126
30	105	e67	e42	e32	---	e23	79	430	281	173	220	888
31	101	---	e42	e31	---	e23	---	469	---	177	182	---
TOTAL	5846	2177	1567	1124	735	693	1055	12998	12476	6637	5108	4845
MEAN	189	72.6	50.5	36.3	25.3	22.4	35.2	419	416	214	165	162
MAX	440	107	65	41	31	23	79	829	796	292	413	888
MIN	101	35	42	31	22	21	23	107	281	151	116	95
MED	144	68	49	36	25	22	33	430	377	221	146	120
AC-FT	11600	4320	3110	2230	1460	1370	2090	25780	24750	13160	10130	9610
CFSM	3.05	1.17	0.82	0.59	0.41	0.36	0.57	6.77	6.72	3.46	2.66	2.61
IN.	3.51	1.31	0.94	0.68	0.44	0.42	0.63	7.81	7.50	3.99	3.07	2.91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2004, BY WATER YEAR (WY)#

MEAN	142	63.4	40.5	30.9	24.9	20.5	25.6	223	660	490	403	299
MAX	391	134	61.7	54.1	41.2	29.7	68.0	649	1215	1047	909	651
(WY)	1984	1980	1980	1961	1982	1991	1990	1990	1977	1963	1971	1985
MIN	51.3	24.5	17.4	17.5	14.0	10.0	10.0	52.9	276	193	165	82.2
(WY)	1969	1969	1955	1959	1952	1956	1955	1971	1996	1996	2004	1969

See Period of Record for remark on low-flow records; partial years used in monthly statistics

e Estimated

15290000 LITTLE SUSITNA RIVER NEAR PALMER—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1948 - 2004#	
ANNUAL TOTAL	67741		55261			
ANNUAL MEAN	186		151		202	
HIGHEST ANNUAL MEAN					316 1949	
LOWEST ANNUAL MEAN					95.8 1969	
HIGHEST DAILY MEAN	1260	Jun 13	888	Sep 30	5040	Aug 10 1971
LOWEST DAILY MEAN	a21	Apr 9	b21	Mar 1	c8.0	Apr 1 1956
ANNUAL SEVEN-DAY MINIMUM	22	Apr 4	21	Feb 27	8.0	Apr 1 1956
MAXIMUM PEAK FLOW			2080	Sep 30	d7840	Aug 10 1971
MAXIMUM PEAK STAGE			5.95	Sep 30	f13.00	Aug 10 1971
INSTANTANEOUS LOW FLOW					8.0	Apr 1 1956
ANNUAL RUNOFF (AC-FT)	134400		109600		146500	
ANNUAL RUNOFF (CFSM)	3.00		2.44		3.27	
ANNUAL RUNOFF (INCHES)	40.71		33.21		44.39	
10 PERCENT EXCEEDS	451		380		555	
50 PERCENT EXCEEDS	98		101		70	
90 PERCENT EXCEEDS	28		23		21	

See Period of Record for remark on low-flow records; partial years used in monthly statistics

a Apr. 9 and 10

b Mar. 1 to 4

c Apr. 1 to Apr. 20, 1956; and Mar. 11 and 12, 1957

d From rating curve extended above 4,600 ft³/s on basis of slope-area measurement of peak flow

f Gage height about 13.0 ft, from floodmarks; 9.84 ft in gage well; 12.30 ft at top of needle peak in gage well; at prior datum (WY 1974-91) at sites then in use

15292000 SUSITNA RIVER AT GOLD CREEK

LOCATION.--Lat 62°46'04", long 149°41'28", in NW¹/₄ sec. 20, T. 31 N., R. 2 W. (Talkeetna Mts. D-6 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020501, near left bank under Alaska Railroad bridge, 0.1 mi downstream from Gold Creek, 0.9 mi north of Gold Creek railroad station, and 2.0 mi. downstream from Indian River.

DRAINAGE AREA.--6,160 mi², approximately.

PERIOD OF RECORD.--August 1949 to 1996 and May 2001 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 676.50 ft above sea level. Prior to June 6, 1957, non-recording gage at same site and datum. June 7, 1957 to June 2, 1964, water-stage recorder at site 0.3 mi upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station. Rain gage at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11900	e3100	e2000	e1600	e1300	e1200	e1100	e9000	25900	26200	17300	11100
2	12600	e3000	e2000	e1600	e1300	e1200	e1100	e10000	26400	22200	17600	10800
3	14300	e3000	e2000	e1600	e1300	e1200	e1200	e12000	29800	21700	16900	10900
4	14900	e3000	e2000	e1600	e1300	e1200	e1200	e14000	28600	24100	15900	11200
5	15900	e2900	e2000	e1500	e1300	e1100	e1300	e16000	24200	22700	17100	9440
6	15600	e2900	e1900	e1500	e1300	e1100	e1300	e20000	22200	23400	17300	7680
7	14000	e2800	e1900	e1500	e1300	e1100	e1300	e30000	24000	23600	18200	6800
8	13100	e2800	e1900	e1500	e1300	e1100	e1400	39900	30500	20800	19200	6330
9	12300	e2700	e1900	e1500	e1300	e1100	e1400	40600	30500	20900	19100	6120
10	12200	e2700	e1900	e1500	e1300	e1100	e1400	35100	28900	21000	18800	6040
11	10500	e2600	e1900	e1500	e1300	e1100	e1500	28400	27100	19100	18700	6100
12	8840	e2600	e1900	e1500	e1300	e1100	e1500	26500	26600	17600	18800	6200
13	7940	e2500	e1900	e1500	e1300	e1100	e1600	26900	24700	18300	17800	6340
14	7340	e2500	e1800	e1500	e1300	e1100	e1700	26900	22200	19900	17200	6290
15	6940	e2500	e1800	e1500	e1300	e1100	e1800	27800	21600	20900	16900	6000
16	6360	e2400	e1800	e1500	e1300	e1100	e1900	27600	21600	21100	17500	5460
17	6100	e2400	e1800	e1500	e1300	e1100	e2000	24500	22700	20300	19500	5050
18	e5500	e2400	e1800	e1500	e1300	e1100	e2200	21100	25300	20600	20900	4720
19	5250	e2300	e1800	e1400	e1300	e1100	e2400	19500	25800	20200	20800	4470
20	e5100	e2300	e1800	e1400	e1300	e1100	e2800	18400	22700	18900	20800	4580
21	e5000	e2300	e1700	e1400	e1300	e1100	e3000	17700	23400	19900	20500	4900
22	e4800	e2300	e1700	e1400	e1300	e1000	e3200	17500	24400	21500	17900	5180
23	e4600	e2200	e1700	e1400	e1200	e1000	e3600	18000	25300	20900	18000	5650
24	e4400	e2200	e1700	e1400	e1200	e1000	e4000	21000	23900	19200	17900	5450
25	e4200	e2200	e1700	e1400	e1200	e1000	e4500	24000	23800	17200	16700	5110
26	e4000	e2100	e1700	e1400	e1200	e1000	e5000	26900	23800	16400	16400	4870
27	e3900	e2100	e1700	e1400	e1200	e1000	e5500	25900	24600	15900	16600	5100
28	e3700	e2100	e1600	e1400	e1200	e1000	e6000	26000	26100	15800	17900	5620
29	e3500	e2100	e1600	e1400	e1200	e1000	e7000	27600	26700	18200	15500	5130
30	e3400	e2000	e1600	e1400	---	e1000	e8000	26700	26600	18500	13600	4920
31	e3200	---	e1600	e1400	---	e1000	---	25300	---	17900	12100	---
TOTAL	251370	75000	56100	45600	37000	33500	81900	730800	759900	624900	549400	193550
MEAN	8109	2500	1810	1471	1276	1081	2730	23570	25330	20160	17720	6452
MAX	15900	3100	2000	1600	1300	1200	8000	40600	30500	26200	20900	11200
MIN	3200	2000	1600	1400	1200	1000	1100	9000	21600	15800	12100	4470
AC-FT	498600	148800	111300	90450	73390	66450	162400	1450000	1507000	1239000	1090000	383900
CFSM	1.32	0.41	0.29	0.24	0.21	0.18	0.44	3.83	4.11	3.27	2.88	1.05
IN.	1.52	0.45	0.34	0.28	0.22	0.20	0.49	4.41	4.59	3.77	3.32	1.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2004, BY WATER YEAR (WY)#

MEAN	6314	2709	1891	1589	1413	1289	1674	13550	26750	23930	21320	13570
MAX	12680	5394	3264	2452	2243	1900	4250	25630	50580	34400	37870	26510
(WY)	1987	2003	1958	1961	2003	1968	1990	1990	1964	1963	1981	1990
MIN	3124	1215	866	724	723	713	745	3745	15500	16010	8879	5093
(WY)	1970	1970	1970	1969	1969	1964	1964	1971	1969	1996	1969	1969

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1949 - 2004#
ANNUAL TOTAL	3552340	3439020	
ANNUAL MEAN	9732	9396	9704
HIGHEST ANNUAL MEAN			13020
LOWEST ANNUAL MEAN			5597
HIGHEST DAILY MEAN	48400	Jul 28	40600
LOWEST DAILY MEAN	a900	Apr 6	b1000
ANNUAL SEVEN-DAY MINIMUM	943	Apr 3	1000
MAXIMUM PEAK FLOW			43400
MAXIMUM PEAK STAGE			12.46
MAXIMUM PEAK STAGE			16.58
ANNUAL RUNOFF (AC-FT)	7046000	6821000	7030000
ANNUAL RUNOFF (CFSM)	1.58	1.53	1.58
ANNUAL RUNOFF (INCHES)	21.45	20.77	21.40
10 PERCENT EXCEEDS	25600	24300	25400
50 PERCENT EXCEEDS	4000	4300	3400
90 PERCENT EXCEEDS	1400	1200	1100

See Period of Record; partial years used in monthly statistics
a Apr. 6-9
b Mar. 22-31
c Feb. 16-20, 1950
d Maximum observed, ice jam
e Estimated

15292700 TALKEETNA RIVER NEAR TALKEETNA
(Hydrologic Bench-Mark Station)

LOCATION.--Lat 62°20'49", long 150°01'01", in NE¹/₄ sec. 16, T. 26 N., R. 4 W. (Talkeetna B-1 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020503, on left bank 1.7 mi downstream from Chunilna Creek, 3.5 mi northeast of Talkeetna, and about 5 mi upstream from mouth.

DRAINAGE AREA.--1,996 mi².

REVISED RECORDS.-- WRD AK 2000-1: Drainage Area.

PERIOD OF RECORD.--June 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 400 ft above sea level, from topographic map. From October 1, 1992 to September 30, 1994 at site 0.5 mi upstream at different datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4600	1630	e950	e700	e600	e500	e480	2590	8470	8610	8020	4830
2	4290	1870	e900	e700	e600	e500	e480	3390	8180	8920	7080	5080
3	4690	1880	e900	e700	e600	e500	e480	3670	8070	9740	7430	5870
4	5790	1750	e900	e700	e600	e500	e500	4010	6910	10700	7550	5050
5	4790	1690	e900	e700	e550	e500	e500	4510	6980	10400	7370	4190
6	4280	1740	e900	e700	e550	e500	e500	4930	7250	10200	7440	3750
7	3950	1920	e900	e700	e550	e500	e500	6590	8620	10100	7720	3390
8	3690	2220	e900	e700	e550	e500	e550	10300	10900	9960	8020	3120
9	3540	2200	e850	e700	e550	e500	e550	10600	8460	9600	7900	2950
10	3470	1870	e850	e700	e550	e500	e550	7510	7480	8630	7860	2830
11	3220	1580	e850	e700	e550	e500	e580	6490	7790	8510	8190	2710
12	2900	1540	e850	e700	e550	e480	e580	7880	7550	8840	7350	2580
13	2720	1540	e850	e700	e550	e480	e580	8090	7300	9080	6990	2620
14	2670	1320	e800	e650	e550	e480	e600	8240	7980	8890	6940	2510
15	2640	e1200	e800	e650	e550	e480	e620	8890	8590	8530	7040	2280
16	2450	e1100	e800	e650	e550	e480	e650	8810	7940	8640	6990	2140
17	2300	e1000	e800	e650	e550	e480	e680	8070	8680	8440	7160	1990
18	2120	e1100	e800	e650	e550	e480	e700	7870	9580	7470	7580	1900
19	2250	e1200	e800	e650	e550	e480	e750	8240	8840	7670	7810	1890
20	2260	e1100	e800	e650	e550	e480	e800	8070	9230	8490	8030	2270
21	2050	e1100	e800	e650	e500	e480	e900	7800	9520	8970	6400	2780
22	1990	e1100	e800	e630	e500	e480	e1000	8100	9300	9950	6910	2750
23	1970	e1000	e750	e600	e500	e480	1050	8350	9100	9650	6540	3090
24	2140	e1000	e750	e600	e500	e460	1130	9630	9160	9460	5880	2620
25	2160	e1000	e750	e600	e500	e460	1180	10200	9150	9130	6090	2210
26	2360	e1000	e750	e600	e500	e460	1390	9660	9410	8580	7600	2400
27	2150	e1000	e750	e600	e500	e460	1570	8450	9980	7780	8760	2630
28	1980	e950	e750	e600	e500	e460	1520	9000	10100	7980	7530	2290
29	1650	e950	e700	e600	e500	e460	1820	8230	10400	8150	6850	2130
30	1600	e950	e700	e600	---	e460	2110	7490	10400	8220	5930	2920
31	1840	---	e700	e600	---	e460	---	7820	---	8070	5200	---
TOTAL	90510	41500	25300	20330	15700	14940	25300	233480	261320	277360	224160	89770
MEAN	2920	1383	816	656	541	482	843	7532	8711	8947	7231	2992
MAX	5790	2220	950	700	600	500	2110	10600	10900	10700	8760	5870
MIN	1600	950	700	600	500	460	480	2590	6910	7470	5200	1890
AC-FT	179500	82320	50180	40320	31140	29630	50180	463100	518300	550100	444600	178100
CFSM	1.46	0.69	0.41	0.33	0.27	0.24	0.42	3.77	4.36	4.48	3.62	1.50
IN.	1.69	0.77	0.47	0.38	0.29	0.28	0.47	4.35	4.87	5.17	4.18	1.67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)#

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
MEAN	2856	1201	834	674	572	511	674	4851	10870	10300	9090	5769
MAX	10000	2400	1122	996	990	1058	1912	11510	19040	15410	16770	12090
(WY)	1987	2003	1987	1990	1990	1990	1990	1990	1971	1981	1971	1993
MIN	1424	672	538	457	401	285	396	2145	5207	7080	3787	2070
(WY)	1997	1992	1996	1996	1969	1982	1986	1971	1969	1969	1969	1969

e Estimated

SOUTH-CENTRAL ALASKA

15292700 TALKEETNA RIVER NEAR TALKEETNA—Continued
(Hydrologic Bench-Mark Station)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004#	
ANNUAL TOTAL	1426220		1319670		4030	
ANNUAL MEAN	3907		3606		5389	
HIGHEST ANNUAL MEAN					2249	
LOWEST ANNUAL MEAN					1969	
HIGHEST DAILY MEAN	22900	Jul 17	10900	Jun 8	63200	Oct 11 1986
LOWEST DAILY MEAN	a350	Apr 4	b460	Mar 24	c260	Feb 27 1982
ANNUAL SEVEN-DAY MINIMUM	353	Apr 2	460	Mar 24	260	Feb 27 1982
MAXIMUM PEAK FLOW			12100	Jun 8	75700	Oct 11 1986
MAXIMUM PEAK STAGE			7.65	Jun 8	17.38	Oct 11 1986
ANNUAL RUNOFF (AC-FT)	2829000		2618000		2919000	
ANNUAL RUNOFF (CFSM)	1.96		1.81		2.02	
ANNUAL RUNOFF (INCHES)	26.58		24.60		27.43	
10 PERCENT EXCEEDS	10100		8840		10500	
50 PERCENT EXCEEDS	2120		1910		1400	
90 PERCENT EXCEEDS	400		500		500	

See Period of Record; partial years used in monthly statistics

a Apr. 4-8

b Mar. 24-31

c From Feb. 27 to Mar. 20, 1982

15294005 WILLOW CREEK NEAR WILLOW

LOCATION.--Lat 61°46'51", long 149°53'04", in NW¹/₄ SE¹/₄ sec. 31, T.20 N., R.3 W. (Anchorage D-8 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020505, on the right bank, 0.9 mi downstream from unnamed tributary, 5.5 mi northeast of Willow, and 6.7 mi upstream from Deception Creek.

DRAINAGE AREA.--166 mi².

PERIOD OF RECORD.--June 1978 to September 1993, and May 2001 to current year.

REVISED RECORDS.--WRD-AK-80-1: 1979 (M).

GAGE.--Water-stage recorder. Elevation of gage is 350 ft above sea level from topographic map. Prior to Apr. 2, 1981 at site 0.2 mi upstream at different datum.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Rain gage at station. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge 2,300 ft³/s and maximums (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Jun 17	0915	*a1890	*b4.47	No peaks greater than base discharge			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	690	253	e70	e80	e60	e55	e48	483	779	319	210	307
2	540	297	e70	e80	e60	e55	e50	482	783	300	185	358
3	828	267	e70	e75	e60	e55	e50	383	708	389	160	346
4	1190	248	e70	e75	e60	e55	e50	472	659	409	159	349
5	806	240	e70	e75	e60	e55	e55	534	717	405	158	302
6	685	251	e75	e75	e60	e50	53	574	777	332	152	275
7	616	272	e75	e75	e60	e50	52	674	860	290	145	256
8	560	331	e80	e75	e60	e50	53	770	769	266	138	241
9	552	315	e85	e75	e60	e50	53	749	678	250	134	230
10	511	271	e90	e75	e60	e50	54	620	619	236	132	221
11	460	189	e95	e70	e60	e50	54	732	595	218	130	214
12	424	241	e95	e70	e60	e50	57	742	542	206	136	208
13	398	209	e95	e70	e60	e50	59	798	578	196	129	243
14	383	169	e95	e70	e60	e50	60	847	618	189	123	235
15	366	140	e90	e70	e60	e50	65	859	587	182	120	212
16	342	e130	e90	e70	e55	e50	71	848	539	177	119	201
17	318	e120	e90	e70	e55	e50	71	836	1310	174	114	194
18	309	e110	e90	e70	e55	e50	70	864	928	176	108	187
19	306	e100	e90	e70	e55	e50	69	950	769	168	108	187
20	294	e100	e85	e70	e55	e50	73	977	699	162	159	221
21	276	e95	e85	e65	e55	e50	76	989	632	187	159	305
22	270	e90	e85	e65	e55	e48	83	1030	568	171	134	326
23	260	e85	e85	e65	e55	e48	95	1150	512	158	122	417
24	273	e85	e85	e65	e55	e48	104	1280	475	157	115	301
25	362	e80	e85	e65	e55	e48	116	1370	440	160	110	279
26	475	e80	e85	e65	e55	e48	137	1150	416	150	257	497
27	353	e80	e80	e65	e55	e48	150	996	393	151	728	513
28	294	e75	e80	e65	e55	e48	139	1010	370	172	836	393
29	222	e75	e80	e65	e55	e48	189	858	353	234	524	384
30	298	e75	e80	e65	---	e46	301	815	336	250	392	1810
31	269	---	e80	e65	---	e46	---	846	---	244	327	---
TOTAL	13930	5073	2580	2175	1670	1551	2557	25688	19009	7078	6523	10212
MEAN	449	169	83.2	70.2	57.6	50.0	85.2	829	634	228	210	340
MAX	1190	331	95	80	60	55	301	1370	1310	409	836	1810
MIN	222	75	70	65	55	46	48	383	336	150	108	187
AC-FT	27630	10060	5120	4310	3310	3080	5070	50950	37700	14040	12940	20260
CFSM	2.71	1.02	0.50	0.42	0.35	0.30	0.51	4.99	3.82	1.38	1.27	2.05
IN.	3.12	1.14	0.58	0.49	0.37	0.35	0.57	5.76	4.26	1.59	1.46	2.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2004, BY WATER YEAR (WY)#

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	417	163	107	84.6	75.5	62.6	90.9	630	1018	665	594	629															
MAX	1197	364	152	112	134	97.5	205	1578	1500	1287	1286	1177															
(WY)	1987	1980	1980	1980	2003	1990	1990	1990	1990	1980	1981	1993															
MIN	177	81.5	57.3	57.1	52.9	33.7	45.8	328	484	228	210	259															
(WY)	1985	1985	1981	1981	1981	1982	2002	2003	1981	2004	2004	1978															

See Period of Record; partial years used in monthly statistics

a Maximum discharge, 3,590 ft³/s, Sep. 30, stage rising, peak occurred Oct. 1, 2004

b Maximum stage, 5.63 ft., Sep. 30, stage rising, peak occurred Oct. 1, 2004

e Estimated

SOUTH-CENTRAL ALASKA

15294005 WILLOW CREEK NEAR WILLOW—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1978 - 2004#	
ANNUAL TOTAL	108849		98046			
ANNUAL MEAN	298		268		386	
HIGHEST ANNUAL MEAN					536 1990	
LOWEST ANNUAL MEAN					268 2004	
HIGHEST DAILY MEAN	1290	Jun 13	1810	Sep 30	8670	Oct 11 1986
LOWEST DAILY MEAN	30	Apr 6	c46	Mar 30	30	Apr 6 2003
ANNUAL SEVEN-DAY MINIMUM	32	Apr 1	47	Mar 25	32	Apr 1 2003
MAXIMUM PEAK FLOW			d1890	Jun 17	f12000	Oct 11 1986
MAXIMUM PEAK STAGE			d4.47	Jun 17	9.01	Oct 11 1986
MAXIMUM PEAK STAGE			d5.63	Sep 30	g9.40	Dec 18 1986
ANNUAL RUNOFF (AC-FT)	215900		194500		279300	
ANNUAL RUNOFF (CFSM)	1.80		1.61		2.32	
ANNUAL RUNOFF (INCHES)	24.39		21.97		31.56	
10 PERCENT EXCEEDS	683		729		966	
50 PERCENT EXCEEDS	241		150		195	
90 PERCENT EXCEEDS	70		55		60	

See Period of Record; partial years used in monthly statistics

c Mar. 30, 31

d Maximum discharge, 3,590 ft³/s, Sep. 30, gage-height 5.63 ft., stage rising, peak occurred Oct. 1, 2004; maximum peak discharge, 1,890 ft³/s, Jun. 17, gage-height 4.47 ft.

f From rating curve extended above 3,900 ft³/s on basis of slope-area measurement of peak flow

g Backwater from ice

15294700 JOHNSON RIVER ABOVE LATERAL GLACIER NEAR TUXEDNI BAY

LOCATION.--Lat 60°05'41", long 152°54'38", in SW¹/₄ NW¹/₄ NW¹/₄ sec. 16, T. 1 S., R. 21 W. (Kenai A-8 quad), Kenai Peninsula Borough, Hydrologic Unit 19020602, on the right bank about 20 mi upstream from mouth, 10 mi south of Tuxedni Bay, and 60 mi northeast of Iliamna.

DRAINAGE AREA.--24.8 mi².

PERIOD OF RECORD.--July 1995 to September 2004 (discontinued) (no winter record).

GAGE.--Water-stage recorder. Elevation of gage is 450 ft above sea level, from topographic map. July 1995 to June 1996, at site 300 ft downstream at same datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 11,900 ft³/s, October 1, 2003, from rating curve extended above 3,500 ft³/s on the basis of slope-area measurement, gage height 17.49 ft., minimum not determined, occurs during the winter.

EXTREMES FOR CURRENT YEAR.--Maximum discharge for the period October 2003 and May through September 2004; 11,900 ft³/s, October 1, from rating curve extended above 3,500 ft³/s on the basis of slope-area measurement, gage height 17.49 ft. from high-water mark; minimum not determined, occurs during the winter.

REMARKS.--Records are fair except for estimated discharges, which are poor. Rain gage at station. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e11000	---	---	---	---	---	---	24	369	761	600	537
2	e9000	---	---	---	---	---	---	25	381	671	701	781
3	e4000	---	---	---	---	---	---	27	377	638	606	704
4	e3000	---	---	---	---	---	---	e30	475	741	567	412
5	e2000	---	---	---	---	---	---	e35	535	801	538	317
6	e1500	---	---	---	---	---	---	e50	589	848	618	386
7	965	---	---	---	---	---	---	e70	636	914	698	395
8	546	---	---	---	---	---	---	e60	536	992	674	284
9	241	---	---	---	---	---	---	e50	476	902	606	193
10	180	---	---	---	---	---	---	e60	477	899	739	223
11	e150	---	---	---	---	---	---	e80	491	864	803	231
12	e120	---	---	---	---	---	---	e100	452	900	658	232
13	e100	---	---	---	---	---	---	e140	480	786	521	193
14	e130	---	---	---	---	---	---	e160	531	655	498	140
15	e250	---	---	---	---	---	---	180	518	604	598	116
16	e210	---	---	---	---	---	---	278	1200	549	758	105
17	e190	---	---	---	---	---	---	346	1770	682	833	94
18	e170	---	---	---	---	---	---	235	1620	1210	796	84
19	e150	---	---	---	---	---	---	211	1310	1120	755	111
20	121	---	---	---	---	---	---	283	1260	784	742	129
21	113	---	---	---	---	---	---	367	1090	589	628	105
22	106	---	---	---	---	---	---	449	997	686	582	151
23	98	---	---	---	---	---	---	842	910	768	574	121
24	97	---	---	---	---	---	---	713	810	576	586	85
25	99	---	---	---	---	---	---	554	878	539	610	76
26	191	---	---	---	---	---	---	455	1110	2210	643	90
27	152	---	---	---	---	---	---	429	1160	3010	595	69
28	115	---	---	---	---	---	---	435	977	1950	598	63
29	97	---	---	---	---	---	---	385	813	928	543	70
30	94	---	---	---	---	---	---	378	823	648	633	197
31	94	---	---	---	---	---	---	367	---	543	554	---
TOTAL	35279	---	---	---	---	---	---	7818	24051	28768	19855	6694
MEAN	1138	---	---	---	---	---	---	252	802	928	640	223
MAX	11000	---	---	---	---	---	---	842	1770	3010	833	781
MIN	94	---	---	---	---	---	---	24	369	539	498	63
AC-FT	69980	---	---	---	---	---	---	15510	47710	57060	39380	13280
CFSM	45.9	---	---	---	---	---	---	10.2	32.3	37.4	25.8	9.00
IN.	52.92	---	---	---	---	---	---	11.73	36.08	43.15	29.78	10.04

e Estimated

15294700 JOHNSON RIVER ABOVE LATERAL GLACIER NEAR TUXEDNI BAY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to 2001, and June 2004 to September 2004(discontinued)

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June to September 2004.
 SPECIFIC CONDUCTANCE: June to September 2004.
 pH: June to September 2004.
 DISSOLVED OXYGEN: June to September 2004.
 TURBIDITY: June to September 2004.

INSTRUMENTATION.--Water-quality monitor set for 15 minute recording interval.

REMARKS.-- Record from June 3 to September 22. Interruptions in record were due to malfunction of the monitoring instruments. Water temperature: Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the average for the stream by cross section on June 3, and 24, July 20, August 17, and September 8, and 15. No variation more than 0.5°C was found within the cross section. No variation was found between mean stream temperature and sensor temperature.

Specific Conductance: Records represent specific conductance at the sensor within 5%. Specific conductance at the sensor was compared with the average for the stream by cross section on June 3, and 24, July 20, August 17, and September 8, and 15. Variation more than 5% was found within the cross section on June 3 and 24. Variation was less than 5% between mean stream and sensor specific conductance.

pH: Records represent pH at the sensor within 0.2 pH units. pH at the sensor was compared with the average for the stream by cross section on June 24, July 20, August 17, and September 8, and 15. No variation more than 0.2 pH units was found within the cross section. No variation more than 0.2 pH units was found between mean stream and sensor pH.

Dissolved Oxygen: Records represent dissolved oxygen at the sensor within 0.3 mg/l. Dissolved Oxygen concentrations at the sensor was compared with the average for the stream by cross section on June 24, July 20, August 17, and September 8, and 15. Variation more than 0.3 mg/l units was found within the cross section on August 17. No variation more than 0.3 mg/l was found between mean stream and sensor dissolved oxygen concentrations.

Turbidity: Records represent turbidity at the sensor within 10%. No values over 328 FNU were logged due to equipment malfunction. Values were greater than 328 FNU on June 7, 17-20, July 9-10, 18-19, and 26-28. Turbidity at the sensor was compared with the average for the stream by cross section on June 3, and 24, July 20, August 17, and September 8, and 15. Variation more than 10% was found within the cross section on June 24, July 20, and August 17. No variation more than 10% was found between mean stream and sensor turbidity.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 7.0°C, August 1 and September 6, 11, 16, and 21; Minimum recorded, 1.0°C, several days in June and September.

SPECIFIC CONDUCTANCE: Maximum recorded, 82 microsiemens per centimeter, September 19-20; minimum recorded, 28 microsiemens per centimeter, July 8, and August 18-19.

pH: Maximum recorded, 9.1 units, July 27; minimum recorded, 7.2 units, several days in June.

DISSOLVED OXYGEN: Maximum recorded, 14.2 mg/L, June 6-8; minimum recorded, 12.1 mg/L, August 21, September 11, and 16-17.

TURBIDITY: Maximum recorded, undetermined; minimum recorded, 1.74 FNU, September 22.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Minimum observed, 0.0°C, May 17, 1999.

SPECIFIC CONDUCTANCE: Maximum observed, 105 microsiemens per centimeter, May 9, 2000.

pH: Minimum observed, 6.9 units, September 27, 2001.

DISSOLVED OXYGEN: Maximum observed, 15.3 mg/L, June 15, 2000; minimum observed, 11.5 mg/L, September 3, 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Medium code	Stream width, feet (000004)	Sample location, cross section, ft from rt bank (72103)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Specific conductance, uS/cm wat unf 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)
JUN													
03...	1250	9	99.5	9.5	11.57	407	10	65	--	2.5	8.2	755	--
03...	1251	9	99.5	29.5	11.57	407	10	63	--	2.6	8.2	755	--
03...	1252	9	99.5	49.5	11.57	407	10	62	--	2.6	8.2	755	--
03...	1253	9	99.5	69.5	11.57	407	10	61	--	2.6	8.2	755	--
03...	1254	9	99.5	89.5	11.57	407	10	60	--	2.7	8.2	755	--
24...	1501	9	144	5.0	11.86	789	10	48	7.6	3.2	9.9	755	13.4
24...	1503	9	144	39.0	11.86	789	10	45	7.7	2.8	9.9	755	13.4
24...	1504	9	144	73.0	11.86	789	10	44	7.7	2.9	9.9	755	13.5
24...	1505	9	144	107.0	11.86	789	10	44	7.7	3.0	9.9	755	13.4
24...	1506	9	144	141.0	11.86	789	10	44	7.7	3.1	9.9	755	13.3
JUL													
20...	1330	9	100	5.0	11.84	778	10	38	7.5	3.6	16.2	749	13.1
20...	1335	9	100	25.0	11.84	778	10	37	7.5	3.6	16.2	749	13.3
20...	1337	9	100	45.0	11.84	778	10	37	7.5	3.6	16.2	749	13.3
20...	1338	9	100	65.0	11.84	778	10	37	7.5	3.6	16.2	749	13.3
20...	1339	9	100	85.0	11.84	778	10	37	7.5	3.7	16.2	749	13.3
20...	1340	9	100	96.0	11.84	778	10	38	7.6	3.8	16.2	749	13.2
AUG													
17...	1116	9	102	8.0	11.80	665	10	32	7.2	3.9	24.0	751	12.8
17...	1117	9	102	28.0	11.80	665	10	32	7.1	3.8	24.0	751	13.0
17...	1118	9	102	48.0	11.80	665	10	32	7.2	3.8	24.0	751	13.1
17...	1119	9	102	68.0	11.80	665	10	32	7.2	3.8	24.0	751	13.2
17...	1120	9	102	96.0	11.80	665	10	32	7.2	3.8	24.0	751	13.1

15294700 JOHNSON RIVER ABOVE LATERAL GLACIER NEAR TUXEDNI BAY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Medium code	Stream width, feet (00004)	Sample loc- ation, cross section ft from rt bank (72103)	Gage height, feet (00065)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, water, deg C (00010)	Temper- ature, air, deg C (00020)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)
SEP													
08...	1152	9	93.0	76.0	11.06	169	10	57	7.4	4.0	10.1	754	13.0
08...	1154	9	93.0	56.0	11.06	169	10	57	7.4	4.0	10.1	754	13.0
08...	1156	9	93.0	36.0	11.06	169	10	57	7.3	4.0	10.1	754	13.0
08...	1158	9	93.0	16.0	11.06	169	10	57	7.3	4.0	10.1	754	12.9
08...	1200	9	93.0	6.0	11.06	169	10	57	7.3	4.1	10.1	754	12.9
23...	1200	9	90.0	80.0	10.87	119	10	71	7.3	3.5	8.6	731	13.1
23...	1201	9	90.0	60.0	10.87	119	10	71	7.3	3.6	8.6	731	13.1
23...	1202	9	90.0	40.0	10.87	119	10	71	7.3	3.6	8.6	731	13.1
23...	1203	9	90.0	20.0	10.87	119	10	71	7.3	3.6	8.6	731	13.1
23...	1204	9	90.0	10.0	10.87	119	10	72	7.3	3.7	8.6	731	13.1
Date													
		Dis- solved oxygen, percent of sat- uration (00301)	Turb- idity, IR LED light, det ang 90 deg, FNU (63680)										
JUN													
03...		--	13.7										
03...		--	13.6										
03...		--	11.8										
03...		--	10.5										
03...		--	12.0										
24...		101	47.8										
24...		100	75.5										
24...		101	63.1										
24...		100	55.0										
24...		100	49.0										
JUL													
20...		101	78.2										
20...		102	77.9										
20...		102	89.0										
20...		102	78.6										
20...		102	157										
20...		102	159										
AUG													
17...		99	33.4										
17...		100	33.1										
17...		101	42.2										
17...		102	41.1										
17...		101	38.5										
SEP													
08...		100	10.1										
08...		100	12.6										
08...		100	12.0										
08...		100	11.5										
08...		100	10.5										
23...		103	5.00										
23...		103	5.80										
23...		103	5.40										
23...		103	5.90										
23...		104	5.90										

SOUTH-CENTRAL ALASKA

15294700 JOHNSON RIVER ABOVE LATERAL GLACIER NEAR TUXEDNI BAY—Continued

Temperature, water, degrees Celsius
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	2.5	2.0	2.5	7.0	2.5	4.0	5.5	2.5	3.5
2	---	---	---	3.5	2.0	2.5	6.0	2.5	4.0	4.0	2.0	3.0
3	3.5	---	---	4.0	2.0	3.0	5.5	2.5	3.5	5.5	2.0	3.0
4	4.0	1.0	2.0	6.0	2.0	3.5	5.5	2.5	3.5	6.0	1.0	3.0
5	3.0	1.0	1.5	6.5	2.0	3.5	6.5	2.5	4.0	5.5	1.5	3.0
6	3.5	1.0	2.0	6.0	2.0	3.5	6.5	2.0	4.0	7.0	1.5	3.5
7	3.0	1.0	1.5	6.0	2.0	3.5	6.0	2.0	3.5	6.5	1.5	3.0
8	3.5	1.0	2.0	5.5	2.0	3.5	6.0	2.0	3.5	6.5	1.5	3.0
9	3.0	1.0	1.5	6.0	2.0	3.5	3.5	2.0	3.0	5.5	1.5	3.0
10	2.0	1.0	1.5	6.0	2.0	3.5	6.0	2.5	4.0	4.0	2.5	3.0
11	2.5	1.5	2.0	6.0	2.0	3.5	6.0	2.0	3.5	7.0	1.5	3.5
12	3.5	1.0	2.5	6.0	2.0	3.5	6.5	2.5	3.5	6.0	1.5	3.0
13	4.5	1.5	2.5	6.0	2.0	3.5	6.0	2.0	3.5	6.0	1.5	3.0
14	2.5	1.5	2.0	6.0	2.0	3.5	6.5	2.0	4.0	6.5	1.0	3.0
15	3.0	1.5	2.0	5.0	2.5	3.5	5.5	2.0	3.5	6.5	1.0	3.0
16	1.5	1.0	1.0	4.0	2.5	3.0	5.5	2.5	3.5	7.0	1.0	3.0
17	1.5	1.0	1.0	3.5	2.5	3.0	5.5	2.5	3.5	6.5	1.0	2.5
18	1.5	1.0	1.0	3.0	2.5	2.5	5.5	2.5	3.5	5.0	1.0	2.5
19	4.0	1.0	2.5	4.5	2.0	3.0	4.5	2.5	3.0	3.0	2.5	2.5
20	4.5	1.0	2.5	3.5	2.0	2.5	4.0	2.5	3.0	6.0	3.0	3.5
21	5.0	1.0	3.0	4.5	2.0	3.0	6.0	2.0	3.5	7.0	2.0	4.0
22	5.5	1.5	3.0	3.5	2.5	3.0	4.5	2.0	3.0	5.0	2.5	3.5
23	6.0	1.5	3.0	4.5	2.0	3.0	3.0	2.5	2.5	---	---	---
24	3.0	1.5	2.5	5.0	1.5	3.0	5.0	2.0	3.0	---	---	---
25	6.5	1.5	3.5	3.5	2.5	3.0	5.5	2.0	3.0	---	---	---
26	6.0	2.0	3.5	4.0	2.5	3.5	4.5	2.0	3.0	---	---	---
27	5.5	2.0	3.0	3.5	2.5	3.0	3.5	2.0	2.5	---	---	---
28	4.5	1.5	3.0	4.0	2.5	3.0	5.0	2.0	3.0	---	---	---
29	4.5	1.5	3.0	5.5	2.5	3.5	6.0	2.0	3.5	---	---	---
30	6.0	1.5	3.5	6.5	2.5	4.0	5.5	1.5	3.0	---	---	---
31	---	---	---	6.5	2.5	4.0	5.0	2.0	3.0	---	---	---
MONTH	---	---	---	6.5	1.5	3.2	7.0	1.5	3.4	---	---	---

Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	41	38	40	44	36	40	46	39	43
2	---	---	---	42	41	42	38	34	36	39	36	37
3	---	---	---	43	41	42	39	36	37	42	36	39
4	66	62	65	41	36	39	39	37	38	50	42	46
5	62	59	61	39	34	37	41	37	39	55	47	51
6	60	54	58	37	33	35	41	35	38	55	44	50
7	58	53	55	35	31	33	40	34	37	56	46	51
8	60	57	59	33	31	32	39	34	37	58	46	52
9	62	59	60	40	31	35	42	36	38	58	50	54
10	62	59	61	41	33	36	39	32	36	53	48	50
11	60	59	59	36	31	33	36	32	34	54	45	50
12	61	59	60	34	30	32	38	33	36	55	42	49
13	61	57	59	35	32	34	41	35	38	55	45	52
14	58	57	57	38	34	36	42	35	39	61	54	58
15	57	56	57	37	35	36	39	33	36	66	60	63
16	56	39	47	39	36	38	36	30	33	69	62	66
17	43	37	40	38	31	36	34	28	31	72	65	69
18	49	41	45	35	29	32	33	28	31	76	68	74
19	49	45	48	37	33	35	33	30	32	82	73	78
20	49	44	46	40	35	37	34	30	32	82	74	78
21	48	44	46	42	39	41	37	30	34	79	73	75
22	48	45	46	41	36	39	38	33	35	75	58	69
23	49	45	47	38	36	37	36	34	35	---	---	---
24	49	46	47	41	38	39	39	33	35	---	---	---
25	47	41	45	42	38	40	38	31	34	---	---	---
26	41	36	39	38	30	33	36	33	33	---	---	---
27	39	36	37	36	28	31	41	35	39	---	---	---
28	40	36	39	37	29	33	44	39	41	---	---	---
29	42	40	41	42	37	40	44	35	40	---	---	---
30	41	38	40	43	41	42	44	35	40	---	---	---
31	---	---	---	45	42	43	45	40	42	---	---	---
MONTH	---	---	---	45	28	37	45	28	36	---	---	---

15294700 JOHNSON RIVER ABOVE LATERAL GLACIER NEAR TUXEDNI BAY—Continued

pH, water, unfiltered, field, standard units
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.5	7.4	7.5	7.6	7.5	7.6	7.5	7.4	7.4
2	---	---	---	7.5	7.4	7.5	7.6	7.5	7.6	7.5	7.4	7.4
3	---	---	---	7.5	7.4	7.5	7.6	7.5	7.6	7.5	7.4	7.5
4	7.3	7.2	7.2	7.5	7.4	7.5	7.6	7.5	7.5	7.5	7.4	7.5
5	7.2	7.2	7.2	7.6	7.4	7.5	7.6	7.5	7.5	7.5	7.4	7.4
6	7.3	7.2	7.2	7.7	7.4	7.5	7.6	7.5	7.5	7.5	7.4	7.4
7	7.5	7.2	7.3	7.5	7.4	7.5	7.7	7.4	7.5	7.5	7.4	7.4
8	7.6	7.4	7.5	7.7	7.4	7.5	7.7	7.5	7.5	7.5	7.4	7.4
9	7.4	7.4	7.4	8.9	7.4	7.8	7.6	7.4	7.5	7.6	7.4	7.5
10	7.5	7.4	7.4	9.0	7.6	8.2	7.6	7.4	7.5	7.5	7.4	7.4
11	7.4	7.3	7.4	7.7	7.5	7.6	7.6	7.4	7.5	7.6	7.4	7.5
12	7.4	7.3	7.4	7.7	7.5	7.6	7.6	7.5	7.5	7.6	7.4	7.5
13	7.4	7.3	7.4	7.6	7.5	7.6	7.6	7.4	7.5	7.6	7.4	7.5
14	7.4	7.3	7.4	7.7	7.5	7.6	7.6	7.4	7.5	7.6	7.4	7.5
15	7.4	7.4	7.4	7.6	7.5	7.6	7.5	7.4	7.5	7.6	7.4	7.5
16	7.4	7.2	7.3	7.6	7.5	7.6	7.6	7.4	7.5	7.6	7.4	7.5
17	7.5	7.3	7.3	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.5
18	8.3	7.5	7.7	8.7	7.5	8.0	7.5	7.4	7.4	7.6	7.4	7.5
19	8.4	7.6	7.8	8.9	8.1	8.5	7.4	7.3	7.4	7.5	7.4	7.4
20	8.4	7.4	7.6	8.1	7.5	7.8	7.5	7.3	7.4	7.5	7.4	7.4
21	7.4	7.3	7.4	7.8	7.7	7.8	7.5	7.4	7.4	7.5	7.4	7.5
22	7.4	7.3	7.4	7.8	7.6	7.7	7.5	7.4	7.5	7.5	7.4	7.4
23	7.4	7.3	7.4	7.8	7.6	7.7	7.5	7.4	7.4	---	---	---
24	7.5	7.4	7.4	7.8	7.6	7.7	7.5	7.4	7.5	---	---	---
25	7.5	7.4	7.4	7.7	7.6	7.7	7.5	7.4	7.5	---	---	---
26	7.4	7.3	7.4	8.9	7.6	7.9	7.5	7.4	7.4	---	---	---
27	7.6	7.4	7.5	9.1	7.8	8.5	7.5	7.4	7.5	---	---	---
28	7.6	7.4	7.5	8.0	7.7	7.7	7.5	7.4	7.4	---	---	---
29	7.6	7.5	7.5	7.7	7.6	7.7	7.5	7.4	7.4	---	---	---
30	7.6	7.4	7.5	7.7	7.6	7.6	7.5	7.4	7.4	---	---	---
31	---	---	---	7.6	7.6	7.6	7.5	7.4	7.4	---	---	---
MONTH	---	---	---	9.1	7.4	7.7	7.7	7.3	7.5	---	---	---

Dissolved oxygen, water, unfiltered, milligrams per liter

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	13.2	13.1	13.1	13.2	12.3	12.9	13.1	12.6	12.9
2	---	---	---	13.2	12.9	13.1	13.3	12.5	13.0	13.0	12.7	12.8
3	---	---	13.7	13.2	12.8	13.1	13.3	12.6	13.0	13.2	12.3	12.8
4	14.0	13.2	13.7	13.2	12.3	12.9	13.2	12.7	13.0	13.5	12.3	13.1
5	14.0	13.6	13.8	13.2	12.3	12.9	13.2	12.3	13.0	13.4	12.5	13.1
6	14.2	13.5	13.9	13.3	12.5	13.0	13.4	12.5	13.0	13.4	12.3	13.1
7	14.2	13.6	14.0	13.3	12.5	13.0	13.6	12.7	13.2	13.7	12.3	13.1
8	14.2	13.6	13.9	13.3	12.6	13.0	13.6	12.7	13.2	13.6	12.2	13.0
9	14.1	13.6	13.8	13.3	12.4	12.9	13.6	13.2	13.3	13.2	12.2	12.8
10	13.9	13.7	13.8	13.4	12.5	12.9	13.4	12.5	13.1	12.9	12.7	12.8
11	13.8	13.4	13.6	13.2	12.4	12.9	13.4	12.7	13.2	13.1	12.1	12.8
12	13.8	13.1	13.5	13.2	12.5	12.9	13.5	12.7	13.2	13.2	12.3	12.9
13	13.8	13.0	13.5	13.3	12.4	12.9	13.5	12.7	13.2	13.3	12.2	13.0
14	13.8	13.5	13.7	13.2	12.4	12.9	13.5	12.6	13.2	13.3	12.2	12.9
15	13.9	13.5	13.7	13.1	12.6	12.9	13.5	12.7	13.2	13.4	12.1	12.9
16	14.2	13.7	14.0	13.2	12.8	13.0	13.4	12.8	13.2	13.4	12.1	13.0
17	14.2	13.9	14.1	13.1	12.9	13.0	13.4	12.4	13.0	13.5	12.1	13.0
18	14.2	14.0	14.1	13.2	12.9	13.1	13.0	12.2	12.7	13.4	12.3	12.9
19	14.1	13.2	13.7	13.2	12.6	13.0	12.8	12.3	12.6	12.9	12.5	12.7
20	13.9	13.0	13.5	13.2	12.8	13.0	12.9	12.5	12.8	12.6	11.9	12.4
21	13.8	12.8	13.4	13.2	12.7	13.0	12.9	12.1	12.7	12.9	11.8	12.4
22	13.8	12.5	13.2	13.1	12.9	13.0	12.9	12.4	12.7	12.8	12.4	12.6
23	13.6	12.5	13.2	13.3	12.8	13.1	12.8	12.6	12.7	---	---	13.0
24	13.5	13.1	13.3	13.4	12.6	13.0	12.9	12.3	12.6	---	---	---
25	13.4	12.3	12.9	13.2	13.0	13.1	13.0	12.2	12.7	---	---	---
26	13.3	12.4	12.9	13.2	12.8	13.0	13.0	12.4	12.8	---	---	---
27	13.4	12.6	13.1	13.3	12.9	13.1	13.0	12.6	12.9	---	---	---
28	13.4	12.7	13.1	13.0	12.7	12.9	12.9	12.3	12.8	---	---	---
29	13.4	12.6	13.1	13.1	12.5	12.9	13.1	12.3	12.8	---	---	---
30	13.3	12.4	12.9	13.2	12.3	12.9	13.2	12.4	12.9	---	---	---
31	---	---	---	13.2	12.2	12.9	13.3	12.7	13.0	---	---	---
MONTH	---	---	---	13.4	12.2	13.0	13.6	12.1	13.0	---	---	---

15294700 JOHNSON RIVER ABOVE LATERAL GLACIER NEAR TUXEDNI BAY—Continued

Turbidity, water, monochrome near infra-red LED light, 780-900 nm, detection angle 90 +/- 2.5 degrees,
 Formalin Nephelometric Units (FNU) WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	41.7	33.4	37.5	62.6	23.7	39.2	22.1	7.91	13.1
2	---	---	---	58.6	31.0	36.8	68.3	34.6	46.2	44.6	11.8	29.7
3	---	---	---	73.7	30.8	37.0	46.1	28.7	35.5	44.3	14.3	23.5
4	28.6	10.6	15.9	73.7	35.9	43.9	33.8	24.2	28.0	23.9	9.82	15.4
5	45.9	19.3	25.6	78.9	36.1	54.0	42.0	21.5	25.2	18.6	8.38	11.7
6	293	19.2	48.1	79.2	44.9	56.6	51.3	20.4	30.3	20.4	7.06	12.1
7	---	35.4	61.9	79.1	41.0	57.3	95.5	23.3	32.1	22.4	7.37	11.0
8	228	53.8	96.0	107	53.0	66.0	95.5	19.4	26.7	14.9	5.31	10.0
9	93.5	42.5	60.6	---	57.0	---	36.4	18.2	21.3	10.5	7.41	8.78
10	81.9	38.7	56.4	---	65.8	---	51.1	18.2	29.6	19.6	8.12	12.1
11	47.0	20.8	31.1	83.0	52.8	65.9	49.2	23.6	31.7	18.1	8.24	11.2
12	106	20.1	34.1	86.9	53.2	65.9	32.6	20.9	26.0	21.1	7.45	12.1
13	73.8	23.6	35.5	72.4	41.4	50.4	26.1	17.2	20.9	19.9	7.57	10.4
14	32.3	19.1	22.7	54.0	32.5	42.1	31.8	13.7	20.0	8.39	6.46	7.24
15	23.1	16.6	19.3	54.9	28.4	35.3	36.1	17.5	26.1	7.59	5.26	6.20
16	163	20.3	87.6	38.4	25.4	30.7	56.7	22.8	35.8	7.30	4.46	5.43
17	---	74.5	---	124	26.4	50.3	94.9	24.4	43.5	6.09	3.65	4.46
18	---	194	---	---	124	---	63.5	22.6	35.4	4.87	2.44	3.16
19	---	174	---	---	143	---	49.2	20.6	28.4	7.74	2.14	3.99
20	---	105	---	199	54.5	91.7	75.4	17.8	31.8	3.37	2.24	2.53
21	106	56.1	78.3	56.6	36.6	45.7	42.2	16.5	26.0	3.37	1.84	2.48
22	71.0	48.8	54.8	94.2	33.9	47.0	35.0	14.6	21.6	70.1	1.74	13.0
23	50.4	39.9	44.0	71.3	48.7	57.2	35.9	13.9	22.8	---	---	---
24	65.2	37.3	46.2	77.6	30.4	39.8	38.4	14.9	23.7	---	---	---
25	91.9	33.5	48.7	48.9	28.0	33.3	66.6	13.7	23.1	---	---	---
26	95.3	44.1	64.4	---	38.1	---	33.2	16.3	23.3	---	---	---
27	142	57.6	77.3	---	288	---	29.6	11.8	19.4	---	---	---
28	102	54.2	64.7	---	107	195	26.3	10.7	16.7	---	---	---
29	80.6	46.3	56.8	114	50.9	74.2	29.6	6.95	15.3	---	---	---
30	62.3	39.8	50.0	55.4	34.0	43.4	33.7	10.8	16.6	---	---	---
31	---	---	---	43.1	26.6	32.2	19.4	8.21	13.5	---	---	---
MONTH	---	---	---	---	25.4	---	95.5	6.95	27.0	---	---	---

15295700 TERROR RIVER AT MOUTH NEAR KODIAK

LOCATION.--Lat 57°41'41", long 153°09'42", in SW¹/₄ NE¹/₄ sec. 5, T. 29 S., R. 24 W. (Kodiak C-4 quad), Kodiak Island Borough, Hydrologic Unit 19020701, on Kodiak Island, in Kodiak National Wildlife Refuge, on right bank, 0.9 mi upstream from mouth, 7.5 mi downstream from Terror Lake Dam, and 29 mi southwest of Kodiak.

DRAINAGE AREA.--30.7 mi², 45.7 mi² prior to partial diversion of Terror Lake to hydropower plant in February 1985.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1964 to October 1968, October 1981 to current year.

REVISED RECORDS.--WDR AK-84-1: 1982-83. WDR AK-96-1: 1995(M).

GAGE.--Water-stage recorder. Elevation of gage is 30 ft above sea level, from topographic map. Prior to October 1, 1981 at site 0.2 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records fair. Flow from 15 mi² at headwaters regulated by Terror Lake Dam and some flow diverted from Terror Lake to Kizhuyak River. Regulation for construction began in November 1982. Began filling reservoir April 29, 1984. Diversion to hydropower plant began February 12, 1985. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2260	268	143	136	137	92	109	459	440	329	175	184
2	1480	241	142	135	136	153	118	309	526	260	173	190
3	468	195	154	126	137	119	121	232	607	264	181	210
4	322	192	190	135	137	104	123	267	533	254	188	189
5	989	196	165	140	137	94	145	322	539	223	178	177
6	1310	198	146	134	135	88	207	463	482	230	181	179
7	780	188	142	134	136	80	180	558	460	264	171	176
8	529	194	137	131	151	85	282	443	359	267	172	171
9	365	192	155	129	150	102	406	330	293	262	186	170
10	256	199	136	126	307	94	216	281	307	247	186	172
11	205	199	146	124	219	88	157	325	710	225	183	173
12	198	193	148	119	198	85	130	295	1270	224	179	169
13	202	188	142	121	551	82	127	276	811	226	179	170
14	2080	188	151	120	288	82	135	257	503	206	177	172
15	3780	184	146	116	203	82	140	280	443	205	180	179
16	1940	160	135	116	182	83	142	384	483	215	181	169
17	749	147	130	112	145	83	144	382	463	212	182	157
18	415	142	132	117	119	80	133	315	681	197	177	157
19	271	148	133	160	104	79	131	444	524	208	196	166
20	248	135	129	151	96	80	137	457	440	211	186	165
21	263	136	129	167	96	81	173	406	382	225	192	159
22	377	131	145	151	90	81	206	543	379	433	189	157
23	452	149	145	147	91	81	167	869	399	294	201	156
24	365	152	143	145	101	82	157	1310	412	246	193	154
25	364	142	144	143	88	82	187	762	367	258	188	170
26	337	142	142	142	83	81	175	479	361	254	190	176
27	296	145	142	143	85	86	188	483	357	202	188	172
28	284	151	169	141	82	89	192	475	351	180	190	170
29	275	147	393	139	82	88	245	606	386	188	185	169
30	263	146	164	138	---	91	254	652	406	190	182	171
31	265	---	137	137	---	96	---	515	---	187	187	---
TOTAL	22388	5188	4755	4175	4466	2773	5227	14179	14674	7386	5696	5149
MEAN	722	173	153	135	154	89.5	174	457	489	238	184	172
MAX	3780	268	393	167	551	153	406	1310	1270	433	201	210
MIN	198	131	129	112	82	79	109	232	293	180	171	154
AC-FT	44410	10290	9430	8280	8860	5500	10370	28120	29110	14650	11300	10210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2004, BY WATER YEAR (WY)#

MEAN	302	207	153	131	117	101	172	330	491	359	276	280
MAX	722	631	313	267	205	152	247	457	872	1070	662	707
(WY)	2004	2003	1986	2003	2003	1998	1993	2004	1987	1987	1988	1995
MIN	192	93.8	78.4	81.8	72.6	60.9	115	231	305	228	183	172
(WY)	1998	1995	1988	1989	1989	1986	1986	2003	1990	1989	1994	2004

See Period of Record and Remarks

15295700 TERROR RIVER AT MOUTH NEAR KODIAK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1986 - 2004#	
ANNUAL TOTAL	98637		96056			
ANNUAL MEAN	270		262		244	
HIGHEST ANNUAL MEAN					369 1987	
LOWEST ANNUAL MEAN					193 2000	
HIGHEST DAILY MEAN	3780	Oct 15	3780	Oct 15	4610 Sep 20 1995	
LOWEST DAILY MEAN	79	Feb 22	79	Mar 19	a26 Dec 11 1996	
ANNUAL SEVEN-DAY MINIMUM	85	Feb 21	81	Mar 18	39 Nov 19 1985	
MAXIMUM PEAK FLOW			4910	Oct 15	b10000 Sep 19 1995	
MAXIMUM PEAK STAGE			5.82	Oct 15	7.67 Sep 19 1995	
INSTANTANEOUS LOW FLOW			c67	Mar 7	a9.8 Dec 11 1996	
ANNUAL RUNOFF (AC-FT)	195600		190500		176600	
10 PERCENT EXCEEDS	480		463		464	
50 PERCENT EXCEEDS	195		180		186	
90 PERCENT EXCEEDS	108		100		86	

PRIOR TO CONSTRUCTION OF TERROR LAKE DAM

SUMMARY STATISTICS, WATER YEARS 1965 - 1983

ANNUAL MEAN	293	
HIGHEST ANNUAL MEAN	421	1983
LOWEST ANNUAL MEAN	230	1967
HIGHEST DAILY MEAN	2600	Oct 2 1965
LOWEST DAILY MEAN	d19	Feb 23 1967
ANNUAL SEVEN-DAY MINIMUM	20	Feb 23 1967
INSTANTANEOUS PEAK FLOW	3820	Sep 26 1966
INSTANTANEOUS PEAK STAGE	f6.48	Sep 26 1966
INSTANTANEOUS PEAK STAGE	g7.54	Mar 28 1964
ANNUAL RUNOFF (AC-FT)	212200	
ANNUAL RUNOFF (CFSM)	9.54	
ANNUAL RUNOFF (IN)	129.66	
10 PERCENT EXCEEDS	774	
50 PERCENT EXCEEDS	157	
90 PERCENT EXCEEDS	39	

See Period of Record and Remarks

a Occurred while dam release valve was closed for repair

b From rating curve extended above 960 ft³/s on basis of slope-area measurement of peak flow

c Mar. 7-8

d Feb. 23 and Mar. 1, 1967

f Site and datum then in use

g Site and datum then in use; from tidal wave

15295700 TERROR RIVER AT MOUTH NEAR KODIAK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968, 1982 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: December 1981 to current year.

INSTRUMENTATION.--Water-temperature recorder since December 10, 1981. Electronic water temperature recorder set for 1-hour recording interval.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by cross section on June 19, and July 29. A gravel bar running parallel to the channel formed in the 2003 water year and remained in place for the entire year. This bar caused two channels to form at the sensor location. The June 19 cross section found 25 percent of the discharge on the left side of this bar opposite of the sensor. This channel has much lower velocities and much more backwater which resulted in an increase of 1.0°C water temperature in this channel. The July 29 cross section measurement found 7 percent of the discharge on the left side of this bar. The water temperature was found to be 2.0°C higher than the right side of this bar which carries a majority of the flow. No variation was found between median stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 15.0°C, July 15, 2003; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 13.5°C, July 12, 2004; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (000004)	Sample location, cross section ft from rt bank (72103)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
JUN							
19...	1215	86.0	2.0	2.36	457	6.1	12.8
19...	1216	86.0	16.0	2.36	457	6.1	12.8
19...	1217	86.0	26.0	2.36	457	6.1	12.8
19...	1218	86.0	36.0	2.36	457	6.1	12.8
19...	1219	86.0	46.0	2.36	457	6.2	12.8
19...	1220	86.0	56.0	2.36	457	6.6	12.8
19...	1221	86.0	66.0	2.36	457	7.0	12.8
19...	1222	86.0	76.0	2.36	457	7.2	12.8
19...	1223	86.0	84.0	2.36	457	7.2	12.8

Date	Time	Stream width, feet (00004)	Sample location, cross section ft from rt bank (72103)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
JUL							
29...	1100	68.8	1.3	1.72	187	7.5	14.6
29...	1102	68.8	14.3	1.72	187	7.5	14.6
29...	1104	68.8	24.3	1.72	187	7.5	14.6
29...	1106	68.8	34.3	1.72	187	7.5	14.6
29...	1108	68.8	44.3	1.72	187	7.5	14.6
29...	1110	68.8	54.3	1.72	187	7.5	14.6
29...	1112	68.8	64.3	1.72	187	9.5	14.6

SOUTH-CENTRAL ALASKA

15295700 TERROR RIVER AT MOUTH NEAR KODIAK—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.0	7.0	7.5	6.5	6.0	6.5	2.0	1.0	1.5	0.0	0.0	0.0
2	7.5	5.5	7.0	7.0	6.5	6.5	1.5	0.5	1.0	0.5	0.0	0.0
3	7.0	5.0	6.0	6.5	6.0	6.0	2.5	0.5	1.5	0.5	0.0	0.5
4	6.5	6.0	6.0	6.5	6.0	6.0	2.0	1.5	2.0	0.5	0.0	0.0
5	7.5	6.5	7.0	6.5	6.0	6.0	1.5	1.0	1.5	1.5	0.5	1.0
6	8.0	6.5	7.5	6.0	5.5	6.0	1.0	0.5	0.5	1.0	0.5	0.5
7	8.0	7.5	7.5	5.5	5.0	5.0	1.5	0.5	1.0	0.5	0.0	0.5
8	7.5	6.5	7.0	6.0	5.0	5.5	2.5	1.0	2.0	1.0	0.5	0.5
9	6.5	5.0	6.0	5.0	4.5	5.0	2.5	1.5	2.0	1.0	0.5	1.0
10	5.5	4.5	5.0	5.0	4.5	4.5	2.0	1.0	1.5	1.0	0.5	0.5
11	5.0	4.0	4.5	5.0	4.0	4.5	2.0	1.5	2.0	1.0	0.0	0.5
12	5.0	3.5	4.0	4.0	3.0	3.5	2.0	1.5	1.5	1.0	0.0	0.0
13	5.0	3.5	4.5	3.0	2.5	2.5	2.0	0.5	1.5	0.0	0.0	0.0
14	7.0	4.5	6.0	3.0	2.5	3.0	1.5	0.5	1.5	0.0	0.0	0.0
15	7.0	6.5	6.5	3.0	2.5	2.5	2.5	1.5	2.0	0.0	0.0	0.0
16	6.5	5.0	6.0	2.5	2.0	2.5	2.5	1.5	2.0	0.0	0.0	0.0
17	6.0	5.0	5.5	2.5	1.0	1.5	1.5	0.0	1.0	0.0	0.0	0.0
18	5.5	4.5	5.5	3.5	1.0	2.5	1.5	0.0	1.0	0.0	0.0	0.0
19	4.5	4.0	4.5	4.0	3.5	3.5	1.5	1.0	1.5	1.0	0.0	0.0
20	5.0	3.5	4.0	4.0	3.5	3.5	1.0	0.5	0.5	2.0	1.0	1.5
21	5.5	4.5	5.0	4.0	3.5	4.0	1.5	0.5	1.0	2.5	1.5	2.0
22	5.5	5.0	5.5	3.5	2.0	2.5	1.0	0.5	1.0	2.0	1.0	1.0
23	5.5	5.0	5.0	4.0	2.0	3.5	0.5	0.0	0.0	1.5	1.0	1.0
24	6.0	4.5	5.0	4.0	3.0	3.5	0.0	0.0	0.0	1.5	0.5	1.0
25	6.0	5.0	5.5	3.0	1.5	2.0	0.0	0.0	0.0	2.5	1.5	2.0
26	5.5	4.0	5.0	1.5	1.0	1.0	0.5	0.0	0.0	2.0	1.0	2.0
27	4.5	3.5	4.0	3.0	1.0	2.0	2.0	0.5	1.0	2.0	0.0	1.0
28	4.5	3.5	4.0	3.0	2.0	2.5	2.5	1.5	2.0	2.5	2.0	2.0
29	5.5	3.5	4.5	2.5	2.0	2.5	1.5	0.5	1.0	2.0	1.0	1.5
30	5.5	5.0	5.5	2.5	2.0	2.0	1.0	0.5	1.0	2.0	0.5	1.5
31	6.5	5.5	6.0	---	---	---	0.5	0.0	0.0	2.0	1.5	2.0
MONTH	9.0	3.5	5.6	7.0	1.0	3.7	2.5	0.0	1.2	2.5	0.0	0.8

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2.5	1.5	2.0	3.0	2.0	2.5	0.5	0.0	0.0	4.0	2.0	3.0
2	2.5	1.0	1.5	3.0	2.0	2.5	0.5	0.0	0.0	4.0	1.5	3.0
3	3.0	2.0	2.5	2.5	1.5	2.0	3.0	0.5	1.5	5.0	2.5	3.5
4	3.0	2.0	2.5	2.0	0.5	1.5	3.5	1.0	2.0	7.5	2.0	4.0
5	2.5	0.0	2.0	2.0	1.0	1.5	2.0	1.5	2.0	6.0	2.0	3.5
6	1.0	0.0	0.5	1.5	0.5	1.0	3.5	1.5	2.0	6.5	2.5	4.0
7	2.5	1.0	1.5	2.0	0.5	1.0	4.0	1.0	2.0	6.5	2.0	3.5
8	2.5	2.0	2.0	0.5	0.0	0.0	2.0	1.0	1.5	6.0	2.0	3.5
9	3.0	2.0	2.5	1.0	0.0	0.5	2.5	1.0	1.5	5.0	2.0	3.5
10	2.0	1.5	1.5	3.0	0.5	1.5	4.0	1.0	2.0	7.0	2.5	4.5
11	2.5	1.5	2.0	2.5	1.0	1.5	3.5	1.0	2.0	6.5	2.5	4.0
12	2.5	2.0	2.5	3.0	1.0	2.0	4.0	0.5	2.0	6.5	2.5	4.0
13	2.5	1.5	1.5	3.0	1.0	1.5	4.5	1.5	3.0	6.0	2.5	4.0
14	2.0	1.5	2.0	2.5	1.5	2.0	5.0	1.0	3.0	6.0	3.0	4.0
15	2.5	2.0	2.0	3.0	1.0	1.5	4.0	1.5	3.0	5.5	3.0	4.0
16	2.5	1.5	2.0	3.5	1.0	2.0	5.0	2.0	3.5	5.5	2.5	3.5
17	1.5	0.5	1.0	3.0	1.5	2.0	5.0	1.5	3.0	4.5	2.0	3.5
18	1.5	0.5	1.0	2.0	0.5	1.0	4.5	2.0	3.0	6.0	2.5	4.0
19	2.5	1.5	2.0	1.0	0.5	0.5	6.0	2.0	3.5	6.5	3.0	4.0
20	2.0	1.0	1.5	1.5	0.5	0.5	5.5	1.5	3.5	7.0	2.5	4.5
21	3.0	1.5	2.0	2.5	1.0	1.5	4.0	2.0	3.0	7.0	2.5	4.5
22	2.5	1.5	2.0	4.0	1.5	2.0	4.5	2.0	3.0	6.0	2.5	4.0
23	2.5	1.5	2.0	4.0	1.0	2.0	5.5	1.5	3.5	5.0	2.5	3.5
24	2.5	1.5	2.0	3.5	0.5	2.0	5.0	2.5	3.5	3.5	2.5	3.0
25	2.5	1.0	1.5	3.5	1.0	2.0	5.0	2.5	3.5	4.0	2.5	3.0
26	2.0	1.0	1.5	3.5	1.0	2.0	4.5	1.5	3.0	5.5	3.0	4.0
27	3.0	1.5	2.0	2.0	0.5	1.0	5.5	2.5	3.5	6.5	3.0	4.5
28	3.0	1.5	2.0	2.5	0.0	1.0	4.5	2.0	3.0	4.5	3.0	4.0
29	3.5	2.0	2.5	1.0	0.0	0.5	4.0	2.5	3.0	4.5	3.0	3.5
30	---	---	---	0.5	0.0	0.0	5.5	2.0	3.5	4.5	3.0	3.5
31	---	---	---	0.5	0.0	0.0	---	---	---	5.5	3.0	4.0
MONTH	3.5	0.0	1.8	4.0	0.0	1.4	6.0	0.0	2.5	7.5	1.5	3.8

15295700 TERROR RIVER AT MOUTH NEAR KODIAK—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.0	3.0	4.0	9.5	5.5	7.0	11.0	7.0	9.0	8.0	6.5	7.5
2	4.5	3.0	4.0	8.0	6.5	7.0	11.5	7.5	9.0	8.5	7.0	7.5
3	4.5	3.5	4.0	7.5	6.5	7.0	10.0	7.5	8.5	9.0	6.5	8.0
4	5.5	3.5	4.0	8.5	6.5	7.0	9.0	8.0	8.5	8.0	5.5	6.5
5	5.0	3.0	4.0	9.5	6.5	8.0	8.5	8.0	8.0	8.0	5.0	6.5
6	8.5	3.5	5.5	11.5	7.0	9.0	10.0	8.0	8.5	8.5	5.5	6.5
7	5.5	3.5	4.5	12.0	7.0	9.5	10.5	7.0	8.5	8.0	5.5	6.5
8	6.0	3.0	4.5	12.0	7.5	9.5	11.0	7.5	9.0	7.5	5.5	6.5
9	6.0	3.5	4.5	12.5	7.5	9.5	9.5	8.0	8.5	7.5	6.0	6.5
10	5.5	3.5	4.5	13.0	7.5	10.0	11.5	8.0	9.5	7.5	6.5	7.0
11	4.5	3.5	4.0	13.0	8.0	10.5	10.5	7.5	9.0	7.5	6.0	6.5
12	5.0	4.0	4.5	13.5	8.5	10.5	10.0	7.0	8.5	8.0	5.5	6.5
13	6.0	4.0	4.5	11.5	8.0	9.5	10.0	6.5	8.0	7.5	5.5	6.5
14	6.0	3.5	4.5	9.0	8.0	8.5	10.0	7.0	8.0	7.5	5.0	6.0
15	5.5	4.0	4.5	11.0	8.0	9.0	10.0	6.5	8.0	7.5	6.0	6.5
16	7.0	4.0	5.0	10.5	8.5	9.5	10.5	7.0	8.5	7.0	5.0	6.0
17	7.0	4.5	5.5	10.5	8.0	9.0	10.5	7.0	8.5	7.0	5.0	5.5
18	6.0	4.0	5.0	9.5	8.0	9.0	9.0	7.5	8.0	7.0	5.0	6.0
19	8.5	4.0	5.5	9.0	8.0	8.5	10.0	7.5	8.5	8.0	6.0	7.0
20	9.0	4.0	6.0	9.5	8.0	8.5	8.5	7.5	8.0	7.5	6.0	7.0
21	9.5	4.5	6.5	9.0	7.5	8.0	9.0	7.5	8.0	7.0	6.0	6.5
22	8.5	5.0	6.5	9.0	8.0	8.5	8.0	7.5	7.5	7.5	6.0	6.5
23	9.0	5.0	6.5	9.5	8.0	8.5	8.0	7.5	8.0	7.0	5.5	6.0
24	9.0	5.5	7.0	10.0	8.0	9.0	9.5	7.5	8.5	6.5	4.5	5.5
25	9.5	5.5	7.0	9.5	8.0	8.5	10.0	7.5	8.5	6.5	6.0	6.5
26	10.5	6.0	8.0	10.5	8.5	9.0	8.0	7.5	7.5	6.5	5.5	6.0
27	7.5	6.0	7.0	11.0	8.0	9.0	8.5	7.0	7.5	7.0	5.0	5.5
28	9.0	5.5	7.0	9.0	8.0	8.5	7.0	6.5	6.5	7.0	6.0	6.5
29	8.5	6.0	7.0	9.0	7.5	8.0	8.5	5.5	7.0	7.5	6.5	7.0
30	8.0	6.0	7.0	9.5	7.5	8.5	8.0	6.0	7.0	7.5	7.0	7.0
31	---	---	---	10.0	7.5	8.5	8.5	6.0	7.0	---	---	---
MONTH	10.5	3.0	5.4	13.5	5.5	8.7	11.5	5.5	8.2	9.0	4.5	6.5

15297610 RUSSELL CREEK NEAR COLD BAY

LOCATION.--Lat 55°10'40", long 162°41'15", (Cold Bay A-3 quad), Aleutians East Borough, Hydrologic Unit 19030101, on left bank, at Russell Creek Fish Hatchery, 2.1 mi upstream from mouth, and 2.6 mi southeast of Cold Bay. Prior to February 27, 1997, at site 0.2 mi downstream.

DRAINAGE AREA.--30.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1981 to December 1986, October 1995 to current year.

REVISED RECORDS.-- WRD AK-97-1: 1996, Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 7.65 ft above sea level. Prior to February 27, 1997, elevation 3.55 ft above sea level at site 0.2 mi downstream (levels by private engineering firm).

REMARKS.--Records good, except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR WATER YEARS 1982-1986, 1996-2004.--Peak discharges above base of 1,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Oct. 22, 1981	u	e6000*	11.19	Sep. 05, 1996	0945	3290	10.81
Jul. 22, 1982	1200	2810	9.70	Nov. 15, 1996	1100	1860	9.27
Jul 26, 1982	1900	2520	9.50	Sep. 06, 1997	0945	1910*	27.50
Sep. 06, 1982	2100	1660	8.78	Sep. 23, 1997	0715	1660	27.31
Sep. 16, 1982	1600	1860	8.98	May 17, 1998	0300	2240	27.76
Nov. 11, 1982	u	1930*	9.03	Sep. 18, 1998	1545	3170*	28.52
Dec. 20, 1983	2200	2490	9.51	Sep. 22, 1998	0230	1610	27.26
Dec. 22, 1983a	0200	2540*	9.55	Aug. 03, 1999	u	2930*	28.34
Oct. 30, 1984	0800	2260	9.31	Jun. 02, 2000	0645	1760*	27.73
Aug. 14, 1985	0200	2340	9.40	Aug. 01, 2000	2245	1550	27.55
Sep. 18, 1985	u	3620*	10.25	Aug. 28, 2000	1430	1530	27.53
Oct. 05, 1985	2200	5200*	10.93	Oct. 24, 2000	0645	2850	28.57
Oct. 7, 1985	1200	3740	10.31	Nov. 12, 2000	1830	3060*	28.74
Nov. 08, 1985	2030	4720	10.75	Dec. 09, 2000	0415	1760	27.73
Nov. 21, 1985	1030	1590	8.72	May 20, 2002	0800	1800	27.77
Aug. 02, 1986	0630	2280	9.35	May 24, 2002	0045	2220*	28.11
Sep. 05, 1986	2400	3570	10.20	Oct. 10, 2002	0445	1490	27.49
Sep. 13, 1986	0400	4500	10.66	Dec. 28, 2003	2215	1500	27.50
Nov. 13, 1986	0330	2030*	9.14	May 23, 2004	0800	1690	27.67
Oct. 29, 1995	0515	1560	8.56	Sep. 29, 2004	1130	1840*	27.80
Jun. 24, 1996	u	4700*	11.76				

a Previously published as Dec. 20, 1983
e Estimated
u unknown

15297610 RUSSELL CREEK NEAR COLD BAY—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	295	357	e200	235	227	594	e95	208	387	331	224	302
2	253	429	e200	216	204	369	e90	206	347	324	249	278
3	205	538	e190	e200	311	268	e90	200	342	292	419	298
4	206	393	e190	184	237	222	92	203	469	292	267	240
5	459	314	e180	172	204	204	89	378	366	314	763	209
6	539	314	e180	166	e200	188	99	754	663	319	602	278
7	561	273	e170	e160	193	183	103	767	697	278	332	469
8	370	348	e170	e160	235	176	108	441	490	262	318	254
9	372	251	e160	e150	293	199	111	426	434	269	277	236
10	297	235	e150	e150	195	218	250	562	361	298	242	346
11	287	291	143	e140	187	183	152	408	371	294	234	371
12	400	258	128	e140	268	163	151	364	375	368	337	267
13	321	222	124	e140	202	161	135	369	340	309	757	220
14	260	194	122	e130	189	149	267	318	289	246	1090	199
15	310	188	121	e130	201	142	764	300	287	243	849	227
16	242	e175	e120	e130	178	148	283	398	321	505	516	193
17	264	e165	e120	e130	168	133	324	315	310	385	420	342
18	217	255	e120	e130	164	e130	242	269	313	478	452	371
19	194	219	e110	e120	180	e130	199	275	519	482	422	477
20	180	377	e110	e120	176	e125	213	353	379	400	344	377
21	172	312	e110	e120	154	e120	243	455	431	303	426	302
22	167	239	e110	e110	142	e120	213	843	777	243	624	285
23	164	260	e100	e110	137	115	189	1390	509	241	568	241
24	159	307	e100	e200	140	119	179	1240	374	703	380	238
25	158	247	e100	e400	188	117	174	786	321	623	328	213
26	152	222	389	e500	275	113	206	553	302	393	298	189
27	148	272	397	345	170	107	237	524	337	340	328	207
28	144	287	714	273	256	e105	185	512	320	307	282	249
29	431	211	781	240	379	e100	197	466	288	314	254	1290
30	374	e200	360	250	---	e100	232	401	301	263	226	593
31	412	---	277	296	---	e95	---	353	---	242	406	---
TOTAL	8713	8353	6446	5947	6053	5296	5912	15037	12020	10661	13234	9761
MEAN	281	278	208	192	209	171	197	485	401	344	427	325
MAX	561	538	781	500	379	594	764	1390	777	703	1090	1290
MIN	144	165	100	110	137	95	89	200	287	241	224	189
AC-FT	17280	16570	12790	11800	12010	10500	11730	29830	23840	21150	26250	19360
CFSM	9.10	9.01	6.73	6.21	6.75	5.53	6.38	15.7	13.0	11.1	13.8	10.5
IN.	10.49	10.06	7.76	7.16	7.29	6.38	7.12	18.10	14.47	12.83	15.93	11.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2004, BY WATER YEAR (WY) #

MEAN	281	296	246	165	158	145	145	252	334	339	320	346
MAX	516	530	549	318	272	218	261	575	634	528	427	538
(WY)	1986	1986	1984	1982	1982	1996	1998	2002	2000	1982	2004	1998
MIN	172	168	86.8	59.5	71.2	75.8	80.3	133	208	192	256	170
(WY)	1997	2000	2000	2000	2000	1986	1985	2001	1997	1997	1996	2000

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1982 - 2004#
ANNUAL TOTAL	81336	107433	
ANNUAL MEAN	223	294	252
HIGHEST ANNUAL MEAN			302
LOWEST ANNUAL MEAN			206
HIGHEST DAILY MEAN	781	Dec 29	1390
LOWEST DAILY MEAN	b95	Jan 8	89
ANNUAL SEVEN-DAY MINIMUM	99	Jan 3	93
MAXIMUM PEAK FLOW			1840
MAXIMUM PEAK STAGE			27.80
INSTANTANEOUS LOW FLOW			g
ANNUAL RUNOFF (AC-FT)	161300	213100	182800
ANNUAL RUNOFF (CFSM)	7.21	9.50	8.16
ANNUAL RUNOFF (INCHES)	97.92	129.34	110.93
10 PERCENT EXCEEDS	371	493	436
50 PERCENT EXCEEDS	191	254	204
90 PERCENT EXCEEDS	120	122	100

See Period of Record

b Jan. 8-9

c Feb. 19-23, 1982

d From rating curve extended above 610 ft³/s on basis of estimate by slope-area measurement of 6,000 ft³/s and gage height of 11.19 ft

e Estimated

f Site and datum then in use; from flood marks

g Not determined, see lowest daily mean

h Mar. 13-14, 1983

15297610 RUSSELL CREEK NEAR COLD BAY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1982-83, 1996 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1996 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder set for 1-hour recording interval.

REMARKS.--Records represent water-temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on July 7 and August 30. No variation was found within the cross section. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 15.5°C, August 13-14, 2001, July 31 and August 1, 2002, July 8-10 and August 2, 2004; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 15.5°C, July 8-10 and August 2; minimum 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (00004)	Location in X-sect. looking downstrm 1 bank ft from (00009)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
JUL							
07...	1700	73.0	3.00	26.04	257	15.0	21.0
07...	1702	73.0	23.0	26.04	257	15.0	21.0
07...	1704	73.0	43.0	26.04	257	15.0	21.0
07...	1706	73.0	63.0	26.04	257	15.0	21.0
07...	1708	73.0	73.0	26.04	257	15.0	21.0
AUG							
30...	1745	71.0	15.0	25.88	205	9.5	12.0
30...	1747	71.0	30.0	25.88	205	9.5	12.0
30...	1749	71.0	45.0	25.88	205	9.5	12.0
30...	1751	71.0	60.0	25.88	205	9.5	12.0

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.5	6.0	7.0	8.0	6.0	6.5	0.0	0.0	0.0	2.5	0.0	1.0
2	9.5	5.0	7.0	7.0	6.0	6.5	0.0	0.0	0.0	1.5	0.0	0.5
3	9.0	5.0	7.0	6.0	4.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0
4	8.0	5.5	6.5	6.5	4.0	5.0	0.0	0.0	0.0	1.5	0.0	0.5
5	7.0	5.5	6.5	5.5	3.5	4.5	0.0	0.0	0.0	1.5	0.5	1.0
6	5.5	4.0	5.0	5.0	3.5	4.5	0.0	0.0	0.0	1.5	0.0	0.5
7	5.5	4.0	4.5	7.0	3.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0
8	6.5	3.5	4.5	7.0	3.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0
9	5.0	3.0	4.0	5.0	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
10	7.0	3.5	4.5	4.0	2.5	3.0	1.0	0.0	0.5	0.0	0.0	0.0
11	6.0	3.5	4.5	3.5	1.0	2.5	1.5	0.5	1.0	0.0	0.0	0.0
12	7.0	4.5	5.5	3.0	1.5	2.0	1.5	0.0	1.0	0.0	0.0	0.0
13	7.5	4.5	5.5	3.0	0.5	1.5	0.5	0.0	0.0	0.0	0.0	0.0
14	8.0	4.0	5.5	1.5	0.0	1.0	1.5	0.0	0.5	0.0	0.0	0.0
15	8.0	5.0	6.5	1.0	0.0	0.5	1.0	0.0	0.5	0.0	0.0	0.0
16	7.5	4.5	5.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	5.5	3.0	4.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	3.5	2.0	2.5	3.5	1.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
19	3.0	1.5	2.0	4.0	2.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
20	3.0	1.5	2.0	7.0	3.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0
21	3.0	0.5	1.5	5.0	1.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
22	4.0	1.5	2.5	3.0	0.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
23	4.5	2.0	3.0	5.0	2.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
24	6.5	2.0	4.0	3.5	1.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0
25	4.5	2.5	4.0	1.5	0.0	1.0	0.5	0.0	0.0	0.5	0.0	0.0
26	2.5	1.0	2.0	0.5	0.0	0.0	1.0	0.5	0.5	1.5	0.5	1.0
27	5.0	2.0	3.5	3.0	0.5	2.0	1.5	0.0	0.5	2.0	0.0	1.0
28	4.5	1.5	3.0	2.5	0.5	1.0	1.5	0.0	1.0	2.0	0.0	1.0
29	6.5	4.5	5.5	1.5	0.0	0.5	1.0	0.0	0.5	2.0	0.5	1.0
30	6.0	4.5	5.0	0.0	0.0	0.0	1.5	0.0	0.5	2.5	0.5	1.5
31	7.0	4.5	6.0	---	---	---	1.5	0.0	1.0	2.0	0.5	1.0
MONTH	9.5	0.5	4.5	8.0	0.0	2.8	1.5	0.0	0.2	2.5	0.0	0.3

15297610 RUSSELL CREEK NEAR COLD BAY—Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2.0	0.5	1.0	2.5	1.0	2.0	0.0	0.0	0.0	10.0	3.0	6.0
2	2.5	0.5	1.5	3.5	0.5	1.5	0.0	0.0	0.0	8.5	3.0	6.0
3	2.5	1.5	2.0	4.0	0.5	1.5	2.5	0.0	0.5	11.0	3.0	6.0
4	1.5	0.0	1.0	3.5	0.0	1.5	3.5	0.0	1.0	9.0	2.5	5.5
5	0.0	0.0	0.0	4.5	0.5	2.0	5.5	0.0	2.0	9.5	3.5	5.5
6	0.0	0.0	0.0	2.5	0.0	1.0	5.5	1.5	3.5	9.0	3.0	4.5
7	1.0	0.0	0.5	1.0	0.0	0.0	5.5	1.5	3.5	7.0	3.0	4.0
8	1.5	0.5	1.0	0.0	0.0	0.0	7.0	1.0	3.5	7.5	2.0	4.5
9	2.5	0.5	1.5	2.5	0.0	1.0	9.0	1.0	4.0	4.5	2.5	3.5
10	2.0	0.0	0.5	3.5	0.5	1.5	6.5	0.5	3.0	5.0	3.0	4.0
11	2.5	0.0	1.0	4.5	0.0	2.0	8.0	0.0	3.5	7.5	3.0	5.0
12	2.0	1.0	1.5	4.5	0.5	2.0	7.5	1.5	4.0	7.0	3.0	5.0
13	2.5	1.0	1.5	4.5	0.0	1.5	5.5	0.5	3.0	10.0	3.5	6.0
14	2.5	1.0	1.5	5.5	0.0	2.0	6.5	2.5	4.0	7.0	3.5	5.0
15	3.5	1.0	1.5	5.0	0.0	2.0	7.0	1.5	3.5	5.5	3.5	4.5
16	4.0	0.0	1.5	3.0	0.0	1.5	8.0	1.0	4.0	10.0	3.0	5.5
17	3.0	0.0	1.0	0.5	0.0	0.0	7.5	1.0	3.5	10.5	3.5	6.0
18	3.0	0.5	1.5	0.5	0.0	0.0	5.0	2.5	3.5	7.0	4.0	5.5
19	3.5	1.5	2.0	0.5	0.0	0.0	6.0	1.0	3.5	5.5	4.5	5.0
20	3.5	2.0	2.5	2.0	0.0	0.5	5.0	2.5	3.5	7.0	4.0	5.0
21	3.5	1.0	2.0	4.0	0.0	1.0	7.0	2.0	4.0	8.0	4.0	5.5
22	3.0	0.0	1.5	5.0	0.0	1.5	7.0	2.5	4.0	5.5	4.0	5.0
23	3.0	0.0	1.5	6.5	0.0	2.5	7.0	2.5	4.5	5.0	4.0	4.5
24	3.5	0.0	1.0	7.0	1.0	3.0	7.5	2.5	4.5	5.5	4.0	4.5
25	1.0	0.0	0.5	6.5	1.5	3.0	9.5	1.5	4.5	6.0	3.5	4.5
26	4.5	1.0	2.0	5.0	0.0	2.0	5.0	2.5	3.5	9.5	3.5	6.0
27	4.0	0.5	2.0	3.0	0.0	0.5	8.5	1.5	4.5	6.5	4.5	5.5
28	3.0	1.0	2.0	0.0	0.0	0.0	6.0	2.0	3.5	6.0	4.0	5.0
29	3.5	1.0	2.0	0.5	0.0	0.0	4.5	1.0	3.0	7.0	3.0	5.0
30	---	---	---	0.5	0.0	0.0	5.0	3.0	4.0	7.5	3.5	5.0
31	---	---	---	2.0	0.0	0.5	---	---	---	8.0	3.5	5.5
MONTH	4.5	0.0	1.3	7.0	0.0	1.2	9.5	0.0	3.2	11.0	2.0	5.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	6.0	4.5	5.0	8.0	5.5	6.5	13.5	7.0	9.5	10.5	8.0	9.0
2	8.5	4.0	6.0	9.0	5.0	7.0	15.5	7.5	10.5	11.5	6.5	8.5
3	8.0	4.5	6.0	9.5	5.5	7.5	11.0	8.0	9.0	12.0	7.5	9.0
4	9.0	4.5	6.5	11.5	5.5	8.0	9.0	6.5	7.5	10.0	7.0	8.0
5	11.5	4.5	7.0	11.5	5.5	8.0	8.5	7.5	8.0	11.0	6.5	8.5
6	6.5	4.5	5.5	14.0	5.0	8.5	13.5	7.0	9.0	10.0	7.5	8.5
7	8.5	3.5	6.0	15.0	5.0	9.0	14.5	6.5	10.0	11.0	6.0	8.5
8	7.5	4.5	5.5	15.5	5.5	9.5	10.5	8.0	9.0	10.0	6.0	8.0
9	9.5	4.0	6.5	15.5	5.0	9.5	15.0	7.5	10.5	10.0	6.5	8.0
10	8.5	4.0	6.5	15.5	6.0	10.0	10.5	7.5	9.0	8.5	6.0	7.0
11	8.0	5.0	6.0	14.5	5.5	9.5	11.0	7.0	9.0	10.0	6.5	8.0
12	12.0	4.0	7.5	10.5	7.5	8.5	10.5	9.0	9.5	12.5	7.0	8.5
13	10.0	4.0	6.5	10.0	5.5	7.5	10.5	9.0	9.5	10.5	5.5	7.5
14	9.5	4.5	6.5	9.5	6.0	7.5	10.0	8.5	9.5	8.5	3.5	6.0
15	8.5	5.5	6.5	12.0	6.0	8.0	10.0	8.5	9.0	10.5	6.0	7.5
16	9.0	5.0	7.0	10.0	7.0	8.0	10.5	8.0	9.0	10.5	5.0	7.5
17	10.0	5.0	7.0	8.5	5.5	7.0	14.0	7.0	9.5	9.5	6.5	8.0
18	7.0	5.0	6.0	8.5	6.0	7.0	11.0	8.5	9.5	12.0	8.5	9.5
19	6.0	4.5	5.5	8.5	6.0	7.5	12.0	7.5	9.5	10.0	7.0	8.5
20	8.0	4.5	5.5	9.5	6.0	7.5	14.5	7.0	10.0	9.0	6.5	7.5
21	7.5	5.0	6.0	11.5	6.0	8.0	10.0	8.5	9.0	9.0	6.0	7.5
22	9.5	5.5	7.0	14.5	5.5	9.0	9.5	7.5	8.5	9.0	6.0	7.0
23	7.5	4.5	6.0	10.0	6.5	8.0	10.5	7.5	8.5	9.0	5.0	6.5
24	9.5	5.0	6.5	8.5	7.5	8.0	9.5	7.0	8.5	9.5	5.5	7.0
25	9.0	5.0	6.5	9.0	7.0	8.0	10.0	7.0	8.5	7.0	4.5	6.0
26	12.0	5.0	7.5	9.0	6.0	7.5	10.0	7.0	8.0	8.5	4.0	5.5
27	13.5	5.5	8.5	8.5	6.5	7.0	11.0	7.5	9.0	8.0	5.0	6.5
28	10.5	5.5	7.0	9.5	6.0	7.5	11.0	7.0	8.5	8.0	6.0	7.0
29	9.5	5.0	7.0	9.0	6.5	7.5	10.0	7.0	8.5	8.0	6.5	7.5
30	8.0	5.5	6.5	13.0	6.5	9.0	9.0	6.5	8.0	6.5	4.0	5.5
31	---	---	---	13.5	6.0	9.0	10.5	8.5	9.0	---	---	---
MONTH	13.5	3.5	6.4	15.5	5.0	8.1	15.5	6.5	9.0	12.5	3.5	7.6

15300300 ILIAMNA RIVER NEAR PEDRO BAY

LOCATION.--Lat 59°45'31", long 153°50'41", in NE¹/₄ SE¹/₄ sec. 10, T. 5 S., R. 27 W. (Iliamna D-3 quad), Lake and Peninsula Borough, Hydrologic Unit 19030206, on left bank 100 ft downstream from bridge on road between Pile Bay and Williamsport, 9.2 mi east of Pedro Bay, and 37 mi east of Iliamna.

DRAINAGE AREA.--128 mi².

PERIOD OF RECORD.--May 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 80 ft above sea level, from topographic map.

REMARKS.--Records are good except for estimated daily discharges which are poor. GOES satellite telemetry at station. Precipitation gage at station.

REVISIONS.--The maximum discharges for some water years have been revised, as shown in the following table. They supersede figures published in the reports for 1998-2001 and 2003.

Water Year	Date	Discharge (ft ³ /s)	Gage Height (ft)
1998	Jun. 8, 1998	a22,300	71.82
1999	Sep. 18, 1999	a20,000	71.16
2000	Aug. 2, 2000	a13,700	69.20
2001	Jul. 19, 2001	a14,400	69.44
2003	Nov. 6, 2002	a17,400	70.39

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33800	394	e350	e100	e70	e150	e80	1330	2030	1810	889	308
2	25700	445	e300	e100	e70	e150	e70	1550	2100	1540	819	329
3	5810	430	e300	e100	e70	e150	e70	1270	2040	1430	725	358
4	2530	466	e275	e90	e70	e150	e90	1260	2190	1480	662	318
5	1860	580	e275	e90	e70	e150	e90	1620	2610	1590	619	291
6	1710	1530	e275	e90	e80	e150	297	1790	2520	1480	571	279
7	1510	1390	e250	e90	e80	e150	617	2220	2980	1470	542	270
8	1660	1080	e250	e90	e80	e100	653	2340	2630	1570	524	263
9	1330	1040	e250	e90	e90	e100	641	1930	2210	1470	514	254
10	1100	866	e225	e80	e90	e125	649	1510	2270	1360	506	249
11	961	719	e225	e80	e100	e125	500	1560	2520	1290	494	250
12	830	671	e225	e80	e100	e125	415	1540	2220	1280	477	246
13	764	e650	e200	e80	e100	e125	363	1490	1930	1310	458	244
14	787	e600	e200	e80	e100	e125	333	1720	2030	1160	440	233
15	1570	e580	e175	e80	e125	e100	327	1520	2210	1050	424	223
16	1080	e550	e175	e80	e125	e100	352	2580	2930	1010	414	218
17	846	704	e175	e80	e125	e100	348	3570	4880	1270	414	211
18	716	752	e175	e70	e100	e100	333	2510	5390	1820	419	205
19	630	708	e150	e70	e100	e90	339	2010	4540	1420	403	212
20	564	642	e150	e70	e125	e90	358	2200	3510	1140	443	392
21	518	664	e150	e70	e125	e90	377	2460	3120	994	409	405
22	481	637	e150	e70	e125	e90	401	2630	2750	941	385	393
23	452	535	e100	e70	e125	e100	438	4330	2520	1050	371	475
24	427	e500	e100	e70	e125	e100	429	4220	2440	960	392	386
25	415	e450	e100	e70	e150	e100	447	3680	2650	939	369	343
26	453	e450	e100	e70	e150	e90	470	3100	2510	2450	405	367
27	505	e400	e125	e70	e150	e90	539	3210	2550	5740	433	362
28	451	e400	e125	e60	e150	e80	593	3410	2340	3860	364	370
29	407	e375	e125	e60	e150	e80	755	2780	1940	1970	338	633
30	387	e375	e125	e60	---	e80	935	2240	1920	1370	325	1630
31	394	---	e100	e70	---	e80	---	2080	---	1070	313	---
TOTAL	90648	19583	5900	2430	3120	3435	12369	71660	80480	49294	14861	10717
MEAN	2924	653	190	78.4	108	111	412	2312	2683	1590	479	357
MAX	33800	1530	350	100	150	150	935	4330	5390	5740	889	1630
MIN	387	375	100	60	70	80	70	1260	1920	939	313	205
AC-FT	179800	38840	11700	4820	6190	6810	24530	142100	159600	97770	29480	21260
CFSM	22.8	5.10	1.49	0.61	0.84	0.87	3.22	18.1	21.0	12.4	3.75	2.79
IN.	26.34	5.69	1.71	0.71	0.91	1.00	3.59	20.83	23.39	14.33	4.32	3.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY) #

	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	1137	680	331	214	193	165	267	1244	2529
MAX	2924	2346	976	410	688	407	500	2312	3790
(WY)	2004	2003	2003	2002	2003	1998	1998	2004	1998
MIN	289	161	84.5	75.2	61.6	60.6	87.8	752	1716
(WY)	1997	1997	1997	1998	1998	1999	1999	2001	1996

See Period of Record; partial year used in monthly statistics

a From rating curve extended above 8,900 ft³/s on the basis of a slope-conveyance computation at gage height 78.42 ft

e Estimated

15300300 ILIAMNA RIVER NEAR PEDRO BAY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004#	
ANNUAL TOTAL	373599		364497			
ANNUAL MEAN	1024		996		924	
HIGHEST ANNUAL MEAN					1188 2003	
LOWEST ANNUAL MEAN					622 1997	
HIGHEST DAILY MEAN	33800	Oct 1	33800	Oct 1	33800	Oct 1 2003
LOWEST DAILY MEAN	a100	Dec 23	b60	Jan 28	c38	Jan 5 1997
ANNUAL SEVEN-DAY MINIMUM	111	Dec 23	66	Jan 24	40	Jan 2 1997
MAXIMUM PEAK FLOW			d53000	Oct 1	d53000	Oct 1 2003
MAXIMUM PEAK STAGE			78.42	Oct 1	78.42	Oct 1 2003
ANNUAL RUNOFF (AC-FT)	741000		723000		669200	
ANNUAL RUNOFF (CFSM)	8.00		7.78		7.22	
ANNUAL RUNOFF (INCHES)	108.58		105.93		98.06	
10 PERCENT EXCEEDS	2000		2370		2280	
50 PERCENT EXCEEDS	540		408		484	
90 PERCENT EXCEEDS	167		80		85	

See Period of Record; partial year used in monthly statistics

a Dec. 23-26

b Jan. 28-30

c Jan. 5-6, 1997

d From rating curve extended above 8,900 ft³/s on the basis of a slope-conveyance computation at gage height 78.42 ft

15302000 NUYAKUK RIVER NEAR DILLINGHAM

LOCATION.--Lat 59°56'08", long 158°11'16", in NE¹/₄ NE¹/₄ sec. 10, T.3 S., R.52 W. (Dillingham D-6 quad), Hydrologic Unit 19030301, on the left bank 350 ft downstream from outlet of Tikchik Lake, about 0.6 mi upstream from unnamed tributary entering from left bank and 62 mi north of Dillingham.

DRAINAGE AREA.--1,490 mi², approximately.

PERIOD OF RECORD.--May 1953 to September 1996 and July 2002 to September 2003 (discontinued).

REVISED RECORDS.--WRD-Alaska 1972; 1971.

GAGE.--Water-stage recorder. Elevation of gage is 325 ft above sea level from topographic map. Prior to Oct.8, 1983, at site 650 ft downstream at different datum, but datum was 2.00 ft higher from May 1953 to Oct. 1. 1957.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Rain gage at station. GOES satellite telemetry at station. Discharge affected by storage in Tikchik Lake, Nuyakuk Lake, Lake Chauekuktuli, and other smaller lakes covering over 170 mi² of the basin.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4800	7120	e3800	e2700	e2200	e1900	e1800	3020	16000	11700	7870	4870
2	5610	7070	e3700	e2700	e2200	e1900	e1800	3180	16100	11400	7800	4820
3	5910	6940	e3700	e2700	e2200	e1900	e1800	3360	16100	11300	7720	4730
4	6020	6860	e3600	e2700	e2200	e1900	e1800	3550	16200	11000	7740	4620
5	6260	6870	e3600	e2600	e2100	e1900	1790	3790	16100	10800	7620	4520
6	e6500	6910	e3500	e2600	e2100	e1900	1840	4040	16100	10500	7550	4440
7	e6800	6840	e3400	e2600	e2100	e1900	1860	4360	16100	10200	7450	4320
8	e7100	e6800	e3400	e2500	e2100	e1900	1880	4720	16000	10000	7320	4230
9	e7300	e6600	e3300	e2500	e2100	e1900	1840	5020	15800	9720	7150	4170
10	e7600	e6400	e3300	e2500	e2100	e1900	1940	5310	15400	9450	7090	4100
11	7760	e6200	e3200	e2500	e2100	e1900	2000	5630	15500	9170	7000	4090
12	e7900	e6000	e3200	e2400	e2100	e1900	2030	5930	15300	8860	6780	4120
13	e8100	e5900	e3100	e2400	e2100	e1900	2040	6140	15100	8650	6620	4040
14	e8200	e5800	e3100	e2400	e2100	e1900	2050	6370	14800	8400	6570	3970
15	8520	e5600	e3000	e2400	e2100	e1900	2050	6550	14500	8160	6510	3880
16	9170	e5400	e3000	e2400	e2000	e1900	2080	6950	14400	7980	6440	3850
17	9260	e5300	e3000	e2300	e2000	e1900	2100	7790	14200	7850	6290	3780
18	e9200	e5200	e2900	e2300	e2000	e1900	2100	8390	14200	7800	6140	e3750
19	9190	e5000	e2900	e2300	e2000	e1900	2130	8800	14400	7780	6020	3710
20	9040	e4800	e2900	e2300	e2000	e1900	2150	9120	14300	7760	5930	3750
21	8930	e4700	e2800	e2300	e2000	e1800	2190	9480	14100	7580	5780	e3650
22	8760	e4600	e2800	e2300	e2000	e1800	2250	9910	13900	7480	5540	3620
23	8580	e4500	e2800	e2300	e2000	e1800	2300	10600	13700	7260	5370	3610
24	8440	e4400	e2700	e2300	e2000	e1800	2380	11600	13500	7100	5490	3520
25	8220	e4300	e2700	e2300	e2000	e1800	2460	12500	13300	6720	5530	3460
26	8080	e4200	e2700	e2200	e2000	e1800	2450	13300	13100	6930	5520	3460
27	7850	e4100	e2600	e2200	e2000	e1800	2560	14000	12800	7340	5400	3320
28	7640	e4000	e2600	e2200	e2000	e1800	2640	14600	12500	7690	5320	3270
29	7410	e4000	e2600	e2200	e2000	e1800	2750	15200	12300	7830	5220	3290
30	7160	e3900	e2800	e2200	---	e1800	2910	15600	12000	7880	5090	3350
31	7140	---	e2800	e2200	---	e1800	---	15800	---	7880	4950	---
TOTAL	238450	166310	95500	74500	59900	57800	63970	254610	437800	270170	198820	118310
MEAN	7692	5544	3081	2403	2066	1865	2132	8213	14590	8715	6414	3944
MAX	9260	7120	3800	2700	2200	1900	2910	15800	16200	11700	7870	4870
MIN	4800	3900	2600	2200	2000	1800	1790	3020	12000	6720	4950	3270
AC-FT	473000	329900	189400	147800	118800	114600	126900	505000	868400	535900	394400	234700
CFSM	5.16	3.72	2.07	1.61	1.39	1.25	1.43	5.51	9.79	5.85	4.30	2.65
IN.	5.95	4.15	2.38	1.86	1.50	1.44	1.60	6.36	10.93	6.75	4.96	2.95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2004, BY WATER YEAR (WY)#

MEAN	7767	5207	3383	2517	2121	1859	1805	4575	15290	13850	8923	8037
MAX	13350	13150	11160	5310	4082	3265	2692	11320	23290	26220	24190	17070
(WY)	1992	2003	2003	2003	2003	2003	1993	1978	1969	1977	1977	1989
MIN	3816	2570	1848	1397	1252	990	800	1719	10360	6794	3855	3944
(WY)	1969	1969	1964	1964	1964	1976	1960	1964	1954	1954	1957	2004

See Period of Record
e Estimated

15302000 NUYAKUK RIVER NEAR DILLINGHAM—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1953 - 2004#	
ANNUAL TOTAL	2269990		2036140			
ANNUAL MEAN	6219		5563		6313	
HIGHEST ANNUAL MEAN					9470 1977	
LOWEST ANNUAL MEAN					4236 1954	
HIGHEST DAILY MEAN					32100 Jul 2 1977	
LOWEST DAILY MEAN	a2200	Jun 21	1790	Apr 5	b770 Apr 16 1960	
ANNUAL SEVEN-DAY MINIMUM	2200	Apr 8	1800	Mar 30	770 Apr 16 1960	
MAXIMUM PEAK FLOW			16300	Jun 3	32200 Jul 2 1977	
MAXIMUM PEAK STAGE			9.19	Jun 3	c10.49 Jul 2 1977	
INSTANTANEOUS LOW FLOW			d		770 Apr 16 1960	
ANNUAL RUNOFF (AC-FT)	4503000		4039000		4573000	
ANNUAL RUNOFF (CFSM)	4.17		3.73		4.24	
ANNUAL RUNOFF (INCHES)	56.67		50.84		57.56	
10 PERCENT EXCEEDS	11600		12100		14300	
50 PERCENT EXCEEDS	5200		4140		4390	
90 PERCENT EXCEEDS	2660		1900		1700	

See Period of Record

a Apr. 8-17

b Apr.16-30, 1960

c Site and datum then in use

d Not determined, see lowest daily mean

15303700 TATALINA RIVER NEAR TAKOTNA

LOCATION.--Lat 62°53'06", long 155°56'22", in NW¹/₄ NE¹/₄ sec. 12, T.32 N., R.36 W. (McGrath D-6 quad), Hydrologic Unit 19030405, at downstream side of bridge on right bank, 1.2 mi southeast of Tatalina Airstrip, and 8.1 mi southeast of Takotna.

DRAINAGE AREA.--76.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1987 to current year (no winter record), except May only in 1989, and annual maximum in water year 1991.

GAGE.--Water-stage recorder, non-recording gage, and crest-stage gage. Elevation of gage is 450 ft above sea level, from topographic map. Prior to May 9, 1990 at site 20 ft downstream at same datum.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Precipitation gage and air temperature recorder at station. GOES satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft³/s, July 8, 1998, gage-height 10.97 ft; maximum gage height 11.46 ft, 1996, date and time unknown, backwater from ice, discharge not determined; minimum discharge not determined, occurs during winter.

EXTREMES FOR CURRENT PERIOD.-- October 2003, May 2004 to October 2004: maximum discharge during period, 540 ft³/s, May 28, gage height 7.54 ft. Minimum discharge not determined, occurs during winter.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	---	---	---	---	---	---	409	237	70	42	36
2	123	---	---	---	---	---	---	323	206	70	42	38
3	124	---	---	---	---	---	---	239	185	68	40	34
4	94	---	---	---	---	---	---	196	161	73	49	e33
5	80	---	---	---	---	---	---	180	143	81	61	e37
6	74	---	---	---	---	---	---	168	126	71	48	e39
7	69	---	---	---	---	---	---	162	114	62	42	e38
8	66	---	---	---	---	---	---	148	140	57	40	e37
9	65	---	---	---	---	---	---	142	159	56	37	e35
10	e60	---	---	---	---	---	---	152	131	54	36	e33
11	e55	---	---	---	---	---	---	156	118	51	37	e32
12	e55	---	---	---	---	---	---	127	163	49	58	e32
13	e55	---	---	---	---	---	---	116	136	47	46	e33
14	e50	---	---	---	---	---	---	108	117	46	41	e35
15	e50	---	---	---	---	---	---	101	112	46	39	e32
16	e48	---	---	---	---	---	---	95	100	46	39	30
17	e46	---	---	---	---	---	---	89	97	49	38	29
18	e44	---	---	---	---	---	---	92	92	47	37	e28
19	e44	---	---	---	---	---	---	98	85	48	36	32
20	e42	---	---	---	---	---	---	87	80	49	35	42
21	e42	---	---	---	---	---	---	79	75	53	35	40
22	e40	---	---	---	---	---	---	77	70	58	35	64
23	e40	---	---	---	---	---	---	93	68	49	34	74
24	e38	---	---	---	---	---	---	125	79	46	33	53
25	e38	---	---	---	---	---	---	103	148	49	33	e42
26	e38	---	---	---	---	---	---	118	157	44	39	e38
27	e36	---	---	---	---	---	---	128	104	49	41	e36
28	e36	---	---	---	---	---	---	425	83	50	38	e44
29	e36	---	---	---	---	---	---	264	76	50	34	66
30	e36	---	---	---	---	---	---	230	73	44	33	105
31	e34	---	---	---	---	---	---	390	---	43	34	---
TOTAL	1744	---	---	---	---	---	---	5220	3635	1675	1232	1247
MEAN	56.3	---	---	---	---	---	---	168	121	54.0	39.7	41.6
MAX	124	---	---	---	---	---	---	425	237	81	61	105
MIN	34	---	---	---	---	---	---	77	68	43	33	28
AC-FT	3460	---	---	---	---	---	---	10350	7210	3320	2440	2470
CFSM	0.73	---	---	---	---	---	---	2.19	1.58	0.70	0.52	0.54
IN.	0.84	---	---	---	---	---	---	2.53	1.76	0.81	0.60	0.60

e Estimated

SOUTHWEST ALASKA

15303700 TATALINA RIVER NEAR TAKOTNA—Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	0.5	0.5	0.5
2	---	---	---	---	---	---	---	---	---	0.5	0.5	0.5
3	---	---	---	---	---	---	---	---	---	1.0	0.5	0.5
4	---	---	---	---	---	---	---	---	---	1.5	0.5	1.0
5	---	---	---	---	---	---	---	---	---	1.5	0.5	1.0
6	---	---	---	---	---	---	---	---	---	1.5	0.5	1.0
7	---	---	---	---	---	---	---	---	---	2.0	0.5	1.5
8	---	---	---	---	---	---	---	---	---	1.5	0.5	1.0
9	---	---	---	---	---	---	---	---	---	1.5	0.5	1.0
10	---	---	---	---	---	---	---	---	---	2.0	1.0	1.0
11	---	---	---	---	---	---	---	---	---	1.5	1.0	1.0
12	---	---	---	---	---	---	---	---	---	2.5	1.0	1.5
13	---	---	---	---	---	---	---	---	---	3.0	1.5	2.0
14	---	---	---	---	---	---	---	---	---	5.5	2.5	3.5
15	---	---	---	---	---	---	---	---	---	5.0	4.0	4.5
16	---	---	---	---	---	---	---	---	---	4.5	3.5	4.0
17	---	---	---	---	---	---	---	---	---	4.5	3.5	4.0
18	---	---	---	---	---	---	---	---	---	4.5	3.5	4.0
19	---	---	---	---	---	---	---	---	---	5.0	3.5	4.5
20	---	---	---	---	---	---	---	---	---	7.0	4.0	5.0
21	---	---	---	---	---	---	---	---	---	6.5	5.5	6.0
22	---	---	---	---	---	---	---	---	---	6.5	5.5	6.0
23	---	---	---	---	---	---	---	---	---	6.5	5.5	6.0
24	---	---	---	---	---	---	---	---	---	6.5	5.0	6.0
25	---	---	---	---	---	---	---	---	---	7.5	6.0	6.5
26	---	---	---	---	---	---	---	---	---	7.5	5.5	6.0
27	---	---	---	---	---	---	---	---	---	6.0	5.0	5.5
28	---	---	---	---	---	---	---	---	---	5.0	3.5	4.0
29	---	---	---	---	---	---	---	---	---	5.5	3.5	4.5
30	---	---	---	---	---	---	---	---	---	5.5	5.0	5.0
31	---	---	---	---	---	---	---	---	---	5.0	4.0	4.5
MONTH	---	---	---	---	---	---	---	---	---	7.5	0.5	3.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	5.0	4.5	5.0	10.5	9.0	9.5	11.5	10.5	11.0	9.0	7.5	8.0
2	5.5	4.0	5.0	9.0	8.5	8.5	11.5	9.5	10.5	9.0	8.0	8.5
3	6.5	5.0	6.0	10.0	8.0	9.0	11.0	9.5	10.0	8.5	7.0	8.0
4	7.5	5.5	6.5	9.5	8.5	9.0	10.5	9.5	10.0	7.0	5.5	6.5
5	8.5	6.0	7.0	10.5	8.0	9.5	10.5	9.0	10.0	7.0	6.0	6.5
6	9.0	7.0	8.0	11.5	8.5	10.0	12.0	9.0	10.0	6.5	5.0	5.5
7	9.0	7.5	8.0	12.0	9.5	10.5	11.5	10.0	10.5	5.0	3.5	4.5
8	8.0	6.5	7.0	12.0	10.5	11.0	13.5	10.5	11.5	4.5	3.0	3.5
9	7.0	6.0	6.5	12.0	9.5	10.5	13.5	11.0	12.0	4.5	2.5	3.5
10	8.0	6.0	7.0	13.0	9.5	11.0	14.5	12.0	13.0	4.5	2.5	3.5
11	7.5	6.5	7.0	13.5	10.5	12.0	14.0	12.0	13.0	4.0	2.5	3.5
12	7.5	5.5	6.5	14.0	11.0	12.5	12.5	11.0	12.0	4.5	2.5	3.5
13	8.0	6.5	7.5	14.5	11.5	13.0	11.5	11.0	11.0	4.0	2.5	3.0
14	9.0	7.0	8.0	14.5	12.5	13.0	12.0	10.0	11.0	3.5	2.5	3.0
15	9.0	7.0	8.0	14.5	12.0	13.0	12.0	10.5	11.0	3.0	1.5	2.5
16	8.5	7.5	8.0	14.0	12.0	13.0	12.5	10.0	11.5	3.0	2.5	2.5
17	7.5	6.5	7.0	13.0	12.0	12.5	12.5	10.5	11.5	2.5	1.0	2.0
18	8.5	7.0	7.5	13.5	11.0	12.0	13.0	11.5	12.0	1.0	0.0	0.5
19	10.5	7.5	9.0	14.0	11.0	12.5	13.5	11.5	12.5	1.5	0.5	1.0
20	11.0	8.5	10.0	13.0	10.5	12.0	12.5	11.5	12.0	2.0	1.5	1.5
21	12.0	9.5	10.5	13.0	11.0	12.0	12.5	10.5	11.5	2.5	2.0	2.0
22	12.5	10.0	11.0	13.0	10.5	11.5	12.0	10.0	11.0	3.5	2.5	3.0
23	11.5	9.5	10.5	12.5	11.0	12.0	12.0	9.5	11.0	3.5	2.0	2.5
24	9.5	8.0	9.0	12.0	10.5	11.5	11.0	9.5	10.0	2.0	1.0	1.5
25	8.5	7.5	8.0	12.5	9.0	10.5	10.0	8.5	9.5	1.0	0.0	0.5
26	9.5	7.5	8.5	11.5	10.5	10.5	9.5	8.0	9.0	0.0	0.0	0.0
27	11.5	8.5	10.0	10.5	9.5	10.0	8.0	7.0	7.5	0.5	0.0	0.0
28	12.0	10.0	11.0	10.5	9.0	10.0	8.0	6.5	7.0	0.0	0.0	0.0
29	11.5	10.5	11.0	12.0	9.0	10.5	7.5	6.0	7.0	0.0	0.0	0.0
30	11.0	10.0	10.5	12.0	10.5	11.0	8.5	6.5	7.0	0.0	0.0	0.0
31	---	---	---	12.0	10.0	11.0	8.5	7.0	7.5	---	---	---
MONTH	12.5	4.0	8.2	14.5	8.0	11.1	14.5	6.0	10.5	9.0	0.0	3.0

15303900 KUSKOKWIM RIVER AT LISKYS CROSSING NEAR STONY RIVER

LOCATION.--Lat 62°03'07", long 156°12'38", in SW¹/₄ NE¹/₄ SE¹/₄ sec. 27, T. 23 N., R. 38 W. (Iditarod A-1 quad), Hydrologic Unit 19030405, on the downstream point of the first channel island located 0.25 mi above Lisky's house site (historic, house since destroyed), 22 mi northeast of the village of Stony River.

DRAINAGE AREA.--15,600 mi², approximately.

PERIOD OF RECORD.--May 1996 to current year (no winter record).

GAGE.--Water-stage recorder. Elevation of gage is 250 ft above sea level from topographic map.

REMARKS.-- Rain gage at station. GOES satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed 34.11 ft, August 1, 2003, but may have been higher during a period of missing record. Minimum gage height observed 22.94 ft, October 11, 1997, but may have been lower during a period of missing record.

EXTREMES FOR CURRENT PERIOD.--October 1-19, 2003, May 27 to September 30, 2004; Maximum gage height 30.25 ft, June 1; minimum gage height 23.51 ft, September 21.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.88	---	---	---	---	---	---	---	30.18	28.39	26.72	25.11
2	25.05	---	---	---	---	---	---	---	29.90	28.39	26.87	24.90
3	25.27	---	---	---	---	---	---	---	29.80	28.61	26.86	24.76
4	25.41	---	---	---	---	---	---	---	29.69	28.69	26.77	24.68
5	25.67	---	---	---	---	---	---	---	29.43	28.56	26.75	24.62
6	26.20	---	---	---	---	---	---	---	29.22	28.29	26.98	24.60
7	26.67	---	---	---	---	---	---	---	28.87	28.08	27.24	24.57
8	26.93	---	---	---	---	---	---	---	28.54	28.05	27.39	24.49
9	26.83	---	---	---	---	---	---	---	28.39	28.15	27.40	24.40
10	26.61	---	---	---	---	---	---	---	28.53	28.06	27.13	24.31
11	26.39	---	---	---	---	---	---	---	29.00	27.83	26.87	24.23
12	26.21	---	---	---	---	---	---	---	29.41	27.67	26.79	24.16
13	26.08	---	---	---	---	---	---	---	29.19	27.44	26.75	24.10
14	25.95	---	---	---	---	---	---	---	28.70	27.21	26.72	24.03
15	25.77	---	---	---	---	---	---	---	28.26	27.05	26.74	23.94
16	25.57	---	---	---	---	---	---	---	27.89	27.07	26.79	23.86
17	25.36	---	---	---	---	---	---	---	27.65	27.15	26.62	23.79
18	25.20	---	---	---	---	---	---	---	27.54	27.11	26.36	23.72
19	25.06	---	---	---	---	---	---	---	27.43	26.97	26.20	23.66
20	---	---	---	---	---	---	---	---	27.25	26.82	26.19	23.61
21	---	---	---	---	---	---	---	---	27.04	26.66	26.25	23.54
22	---	---	---	---	---	---	---	---	27.12	26.53	26.23	23.55
23	---	---	---	---	---	---	---	---	27.32	26.41	26.31	23.57
24	---	---	---	---	---	---	---	---	27.49	26.35	26.37	23.63
25	---	---	---	---	---	---	---	---	27.70	26.47	26.31	23.76
26	---	---	---	---	---	---	---	---	27.85	26.59	26.15	23.80
27	---	---	---	---	---	---	---	26.73	27.98	26.59	26.02	23.83
28	---	---	---	---	---	---	---	27.52	28.19	26.82	25.90	23.75
29	---	---	---	---	---	---	---	28.02	28.45	26.91	25.74	23.65
30	---	---	---	---	---	---	---	28.65	28.46	26.66	25.58	23.81
31	---	---	---	---	---	---	---	29.76	---	26.58	25.37	---
MEAN	---	---	---	---	---	---	---	---	28.42	27.36	26.53	24.08
MAX	---	---	---	---	---	---	---	---	30.18	28.69	27.40	25.11
MIN	---	---	---	---	---	---	---	---	27.04	26.35	25.37	23.54

15304000 KUSKOKWIM RIVER AT CROOKED CREEK

LOCATION.--Lat 61°52'16", long 158°06'03", in NE¹/₄ NE¹/₄ sec. 32, T. 21 N., R. 48 W. (Sleetmute D-6 quad), Hydrologic Unit 19030501, on right bank at village of Crooked Creek, 0.1 mi upstream from Crooked Creek.

DRAINAGE AREA.--31,100 mi², approximately.

PERIOD OF RECORD.--June 1951 to September 1994, October 1995 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 200 ft above sea level, from topographic map. Prior to August 6, 1977, non-recording gage at site 1,600 ft upstream at same datum. From August 6, 1977, to September 30, 1991, water-stage recorder at site 2,300 ft upstream at same datum. From October 1, 1991 to September 30, 1994, and October 1, 1995 to August 7, 1997 non-recording gage.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43200	37700	e16000	e13000	e12000	e11000	e11000	e124000	93800	69700	50900	36400
2	49700	38500	e16000	e13000	e12000	e11000	e11000	e126000	93000	68200	50300	35500
3	63200	38900	e16000	e13000	e12000	e11000	e11000	e120000	88700	66800	50200	34800
4	77600	40500	e16000	e13000	e12000	e11000	e12000	e114000	85000	66700	50400	33700
5	83800	41800	e16000	e13000	e12000	e11000	e12000	e108000	81800	67000	50400	32800
6	86500	42300	e16000	e13000	e12000	e11000	e13000	101000	78000	68500	51800	32200
7	87600	43900	e15000	e13000	e12000	e11000	e15000	98600	74900	70100	53100	31400
8	89100	47800	e15000	e13000	e12000	e11000	e17000	97200	72700	68900	53300	30500
9	89100	52000	e15000	e13000	e12000	e11000	e19000	96800	72000	66200	52700	29800
10	86900	55400	e15000	e13000	e12000	e11000	e21000	95100	72100	64300	51700	29500
11	82300	52500	e15000	e13000	e12000	e11000	e23000	93000	72400	62100	50500	29300
12	77400	e44000	e15000	e13000	e12000	e11000	e25000	92900	72400	60100	49800	28800
13	72400	e37000	e15000	e13000	e12000	e11000	e27000	92700	71900	58000	49100	28200
14	67600	e32000	e15000	e13000	e12000	e11000	e29000	89300	69700	56200	49300	27800
15	64000	e29000	e15000	e13000	e12000	e11000	e32000	84300	66500	55100	48500	26800
16	61500	e27000	e14000	e13000	e12000	e11000	e36000	80300	64800	53800	47500	25900
17	59900	e25000	e14000	e13000	e12000	e11000	e40000	75900	63400	52600	47300	25700
18	59200	e24000	e14000	e13000	e12000	e11000	e45000	73600	62000	52000	46400	25300
19	57300	e23000	e14000	e13000	e12000	e11000	e50000	72600	61700	52100	45600	25400
20	53200	e22000	e14000	e13000	e12000	e11000	e55000	73200	62200	51700	44700	25200
21	49900	e21000	e14000	e12000	e12000	e11000	e60000	73600	62000	51700	44800	26100
22	48000	e20000	e14000	e12000	e12000	e11000	e66000	72900	60500	51500	44900	27900
23	48200	e20000	e14000	e12000	e12000	e11000	e74000	71600	59400	52600	44400	29800
24	47500	e19000	e14000	e12000	e12000	e11000	e82000	70100	59300	52300	44000	31200
25	44700	e19000	e14000	e12000	e12000	e11000	e90000	70500	60400	51200	43800	31900
26	42900	e18000	e14000	e12000	e11000	e11000	e100000	73400	63600	50600	43400	31700
27	42300	e18000	e14000	e12000	e11000	e11000	e105000	77200	68900	51000	42200	30800
28	41700	e17000	e14000	e12000	e11000	e11000	e110000	82100	69400	49900	41200	29800
29	39600	e17000	e14000	e12000	e11000	e11000	e116000	86500	69300	50500	39800	29500
30	37700	e17000	e14000	e12000	---	e11000	e120000	88400	70000	51400	38500	29400
31	37200	---	e13000	e12000	---	e11000	---	90800	---	51400	37400	---
TOTAL	1891200	940300	454000	392000	344000	341000	1427000	2765600	2121800	1794200	1457900	893100
MEAN	61010	31340	14650	12650	11860	11000	47570	89210	70730	57880	47030	29770
MAX	89100	55400	16000	13000	12000	11000	120000	126000	93800	70100	53300	36400
MIN	37200	17000	13000	12000	11000	11000	11000	70100	59300	49900	37400	25200
AC-FT	3751000	1865000	900500	777500	682300	676400	2830000	5486000	4209000	3559000	2892000	1771000
CFSM	1.96	1.01	0.47	0.41	0.38	0.35	1.53	2.87	2.27	1.86	1.51	0.96
IN.	2.26	1.12	0.54	0.47	0.41	0.41	1.71	3.31	2.54	2.15	1.74	1.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)#

MEAN	44900	21920	15540	13150	11740	10780	15300	80340	82390	67850	75530	68150
MAX	102000	43110	31100	23030	20710	19550	47570	161700	235100	119500	169800	150900
(WY)	1994	2003	2003	2003	1991	1991	2004	1957	1964	1980	1963	1951
MIN	22650	12730	10000	8400	6900	6100	8600	22130	33880	40910	41840	29770
(WY)	1979	1981	1957	1966	1966	1966	1953	1964	1954	1997	1957	2004

See Period of Record, partial years used in monthly computations
e Estimated

15304000 KUSKOKWIM RIVER AT CROOKED CREEK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1951 - 2004#	
ANNUAL TOTAL	16803000		14822100			
ANNUAL MEAN	46040		40500		42310	
HIGHEST ANNUAL MEAN					62120 1963	
LOWEST ANNUAL MEAN					28600 1997	
HIGHEST DAILY MEAN	127000	Aug 1	126000	May 2	391000	Jun 5 1964
LOWEST DAILY MEAN	13000	Dec 31	a11000	Feb 26	b6100	Mar 1 1966
ANNUAL SEVEN-DAY MINIMUM	13900	Dec 25	11000	Feb 26	6100	Mar 1 1966
MAXIMUM PEAK FLOW			c		392000	Jun 5 1964
MAXIMUM PEAK STAGE			d18.04	May 2	f25.74	Jun 5 1964
INSTANTANEOUS LOW FLOW					6100	Mar 1 1966
ANNUAL RUNOFF (AC-FT)	33330000		29400000		30650000	
ANNUAL RUNOFF (CFMS)	1.48		1.30		1.36	
ANNUAL RUNOFF (INCHES)	20.10		17.73		18.49	
10 PERCENT EXCEEDS	85600		82000		92900	
50 PERCENT EXCEEDS	42300		35800		26000	
90 PERCENT EXCEEDS	15000		11000		10000	

See Period of Record, partial years used in monthly computations

a Feb. 26 - Apr. 3

b Mar. 1-31, 1966

c Not determined. See highest daily mean.

d From floodmarks, backwater from ice

f From floodmarks, backwater from ice, at different site, same datum

15304400 TAKIKCHAK RIVER NEAR NEWTOK

LOCATION.--Lat 60°48'24", long 164°35'46", in SE¹/₄ SW¹/₄ SW¹/₄ sec. 5, T.08 N., R.86 W. (Baird Inlet D-7 quad), Hydrologic Unit 19030502, on right bank, 1.0 mi upstream from mouth, and 10 south of Newtok.

DRAINAGE AREA.--19.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to September 2004.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 12.5 ft above sea level, from topographic map.

REMARKS.--Records are poor. Rain gage at station, GOES satellite telemetry at station.

EXTREMES FOR CURRENT PERIOD.-- May 2004 to September 2004: maximum discharge during period, 146 ft³/s, May 25, gage height 10.28 ft., from mark on crest-stage gage; minimum daily discharge during period, 18 ft³/s, September 17 to 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	e34	e26	e22	e21
2	---	---	---	---	---	---	---	---	e34	e26	e22	e20
3	---	---	---	---	---	---	---	---	e33	e26	e22	e20
4	---	---	---	---	---	---	---	---	e33	e26	e21	e20
5	---	---	---	---	---	---	---	---	e32	e25	e22	e20
6	---	---	---	---	---	---	---	---	e32	e25	e21	e19
7	---	---	---	---	---	---	---	---	e31	e25	e21	e19
8	---	---	---	---	---	---	---	---	e31	e24	e21	e20
9	---	---	---	---	---	---	---	---	e30	e24	e24	e19
10	---	---	---	---	---	---	---	---	e30	e24	e25	e20
11	---	---	---	---	---	---	---	---	e30	e24	e26	e20
12	---	---	---	---	---	---	---	---	e29	e24	e26	e20
13	---	---	---	---	---	---	---	---	e32	e24	e25	e19
14	---	---	---	---	---	---	---	---	e29	e24	e24	e19
15	---	---	---	---	---	---	---	---	e32	e27	e23	e19
16	---	---	---	---	---	---	---	---	e30	e26	e22	e19
17	---	---	---	---	---	---	---	---	e35	e24	e22	e18
18	---	---	---	---	---	---	---	---	e31	e24	e21	e18
19	---	---	---	---	---	---	---	---	e29	e23	e21	e18
20	---	---	---	---	---	---	---	---	e28	e23	e21	e18
21	---	---	---	---	---	---	---	+43	e27	e23	e21	e18
22	---	---	---	---	---	---	---	---	e28	e23	e21	e23
23	---	---	---	---	---	---	---	---	e30	e23	e20	e22
24	---	---	---	---	---	---	---	---	e29	e22	e20	e22
25	---	---	---	---	---	---	---	---	e28	e22	e20	e21
26	---	---	---	---	---	---	---	---	e27	e22	e20	e20
27	---	---	---	---	---	---	---	---	e27	e23	e20	e20
28	---	---	---	---	---	---	---	---	e27	e22	e20	e20
29	---	---	---	---	---	---	---	---	e27	e23	e20	e20
30	---	---	---	---	---	---	---	---	e26	e24	e20	e21
31	---	---	---	---	---	---	---	---	---	e22	e20	---
TOTAL	---	---	---	---	---	---	---	---	901	743	674	593
MEAN	---	---	---	---	---	---	---	---	30.0	24.0	21.7	19.8
MAX	---	---	---	---	---	---	---	---	35	27	26	23
MIN	---	---	---	---	---	---	---	---	26	22	20	18
AC-FT	---	---	---	---	---	---	---	---	1790	1470	1340	1180
CFSM	---	---	---	---	---	---	---	---	1.54	1.23	1.11	1.01
IN.	---	---	---	---	---	---	---	---	1.71	1.41	1.28	1.13

+ Result of discharge measurement
e Estimated

15304400 TAKIKCHAK RIVER NEAR NEWTOK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

	1,2,3,5-Tetra-methyl-benzene water	1,2,3-Tri-chloro-benzene water	1,2,3-Tri-chloro-propane water	1,2,3-Tri-methyl-benzene water	1,2,4-Tri-chloro-benzene water	1,2,4-Tri-methyl-benzene water	Dibromo-chloro-propane water	1,2-Di-bromo-ethane water	1,2-Di-chloro-benzene water	1,2-Di-chloro-ethane water	1,2-Di-chloro-ethane-d4, sur Sch2090	1,3,5-Tri-methyl-benzene water	
Date	unfltrd ug/L (50000)	unfltrd ug/L (77613)	unfltrd ug/L (77443)	unfltrd ug/L (77221)	unfltrd ug/L (34551)	unfltrd ug/L (77222)	unfltrd ug/L (82625)	unfltrd ug/L (77651)	unfltrd ug/L (34536)	unfltrd ug/L (32103)	wat unf pct rcv (99832)	unfltrd ug/L (34541)	unfltrd ug/L (77226)
JUN 14...	<.1	<.3	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	97.6	<.03	<.04
AUG 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,3-Di-chloro-benzene water	1,3-Di-chloro-propane water	1,4-Di-chloro-benzene water	14Bromo-fluoro-benzene surrog. VOC Sch	2,2-Di-chloro-propane water	2-Chloro-toluene water	2-Ethyl-toluene water	3-Chloro-propene water	4-Chloro-toluene water	4-Iso-propyl-toluene water	Acetone water	Acrylo-nitrile water	Benzene water
Date	unfltrd ug/L (34566)	unfltrd ug/L (77173)	unfltrd ug/L (34571)	wat unf pct rcv (99834)	unfltrd ug/L (77170)	unfltrd ug/L (77275)	unfltrd ug/L (77220)	unfltrd ug/L (78109)	unfltrd ug/L (77277)	unfltrd ug/L (77356)	unfltrd ug/L (81552)	unfltrd ug/L (34215)	unfltrd ug/L (34030)
JUN 14...	<.03	<.1	<.03	96.5	<.05	<.04	<.06	<.50	<.05	<.08	<6	<1	<.02
AUG 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
	Bromo-benzene water	Bromo-chloro-methane water	Bromo-di-chloro-methane water	Bromo-ethene water	Bromo-methane water	Carbon di-sulfide water	Chloro-benzene water	Chloro-ethane water	Chloro-methane water	cis-1,2-Di-chloro-ethene water	cis-1,3-Di-chloro-propene water	Di-bromo-chloro-methane water	Di-bromo-methane water
Date	unfltrd ug/L (81555)	unfltrd ug/L (77297)	unfltrd ug/L (32101)	unfltrd ug/L (50002)	unfltrd ug/L (34413)	unfltrd ug/L (77041)	unfltrd ug/L (34301)	unfltrd ug/L (34311)	unfltrd ug/L (34418)	unfltrd ug/L (77093)	unfltrd ug/L (34704)	unfltrd ug/L (32105)	unfltrd ug/L (30217)
JUN 14...	<.03	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05
AUG 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
	Di-chloro-di-fluoro-methane wat unf	Di-chloro-methane water	Di-ethyl ether, water	Diiso-propyl ether, water	Ethyl methac-rylate, water	Ethyl methyl ketone, water	Ethyl-benzene water	Hexa-chloro-buta-diene water	Hexa-chloro-ethane water	Iodo-methane water	Iso-butyl methyl ketone, water	Iso-propyl-benzene water	Methyl acrylo-nitrile water
Date	unfltrd ug/L (34668)	unfltrd ug/L (34423)	unfltrd ug/L (81576)	unfltrd ug/L (81577)	unfltrd ug/L (73570)	unfltrd ug/L (81595)	unfltrd ug/L (34371)	unfltrd ug/L (39702)	unfltrd ug/L (34396)	unfltrd ug/L (77424)	unfltrd ug/L (78133)	unfltrd ug/L (77223)	unfltrd ug/L (81593)
JUN 14...	<.18	<.1	<.1	<.10	<.2	<4.0	<.03	<.1	<.1	<.35	<.4	<.04	<.8
AUG 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
	Methyl acryl-ate, water	Methyl methac-rylate, water	Methyl tert-ethyl ether, water	meta-+ para-Xylene, water	Naphth-alene, water	Methyl n-butyl ketone, water	n-Butyl benzene water	n-propyl-benzene water	o-Xylene, water	sec-Butyl-benzene water	Styrene water	t-Butyl ether, water	Methyl t-butyl ether, water
Date	unfltrd ug/L (49991)	unfltrd ug/L (81597)	unfltrd ug/L (50005)	unfltrd ug/L (85795)	unfltrd ug/L (34696)	unfltrd ug/L (77103)	unfltrd ug/L (77342)	unfltrd ug/L (77224)	unfltrd ug/L (77135)	unfltrd ug/L (77350)	unfltrd ug/L (77128)	unfltrd ug/L (50004)	unfltrd ug/L (78032)
JUN 14...	<2.0	<.3	<.08	<.06	<.5	<.7	<.1	<.04	<.04	<.06	<.04	<.05	<.2
AUG 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
	tert-Butyl-benzene water	Tetra-chloro-ethene water	Tetra-chloro-methane water	Tetra-hydro-furan, water	Toluene water	Toluene surrog. Sch2090	trans-1,2-Di-chloro-ethene water	trans-1,3-Di-chloro-propene water	trans-1,4-Di-chloro-2-butene, water	Tri-bromo-methane water	Tri-chloro-ethene water	Tri-chloro-methane water	Tri-chloro-methane water
Date	unfltrd ug/L (77353)	unfltrd ug/L (34475)	unfltrd ug/L (32102)	unfltrd ug/L (81607)	unfltrd ug/L (34010)	wat unf percent recovery (99833)	unfltrd ug/L (34546)	unfltrd ug/L (34699)	unfltrd ug/L (73547)	unfltrd ug/L (32104)	unfltrd ug/L (39180)	unfltrd ug/L (34488)	unfltrd ug/L (32106)
JUN 14...	<.06	<.06	<.06	<2	E.02	101	<.03	<.09	<.7	<.10	<.04	<.16	<.02
AUG 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
		Vinyl chlor-ide, water	Uranium natural water	Number of TICS from VOC	Sample purpose	Sampler type							
Date		unfltrd ug/L (39175)	fltrd, ug/L (22703)	by GCMS number (99871)	code (71999)	code (84164)							
JUN 14...		<.1	<.04	.0	10.00	3044							
AUG 17...		--	<.04	--	10.00	3044							

15320100 WADE CREEK TRIBUTARY NEAR CHICKEN

LOCATION.-- Lat 64°07'06", Long 141°33'13", in SE¹/₄ sec. 18, T. 27 N., R. 20 E. (Eagle A-2 quad), Hydrologic Unit 19040104, on left bank, 600 ft upstream from Taylor Highway, 0.4 mi upstream from the culvert at mi 86.1 Taylor Highway and 12 mi northeast of Chicken.

DRAINAGE AREA.--4.24 mi².

PERIOD OF RECORD.--Annual maximum, water year 1995. May 1996 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 1970 ft above sea level, from topographic map. Prior to June 19, 1997, recording gage was at a site 700 ft downstream at a different datum.

REMARKS.--Records fair, except for discharges below 0.1 ft³/s and estimated daily discharges which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 236 ft³/s, June 13, 1997, from rating curve extended above 14 ft³/s on basis of slope-area measurement of peak flow, gage height, 22.7 ft, from floodmarks; no flow most days during the winter.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge undetermined, occurred during period of backwater from ice, May 12, gage height, 21.35 ft, no flow most days during the winter.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e0.50	1.3	0.03	2.5	0.06
2	---	---	---	---	---	---	---	e0.70	1.0	0.03	3.4	0.06
3	---	---	---	---	---	---	---	e1.0	0.82	0.03	1.3	0.07
4	---	---	---	---	---	---	---	e2.0	0.64	0.02	0.67	0.16
5	---	---	---	---	---	---	---	e3.0	0.45	0.02	0.39	0.16
6	---	---	---	---	---	---	---	e6.0	0.32	0.02	0.27	0.15
7	---	---	---	---	---	---	---	e10	0.29	0.02	0.21	0.11
8	---	---	---	---	---	---	---	e8.0	0.45	0.02	0.17	0.10
9	---	---	---	---	---	---	---	e7.0	0.62	0.02	0.15	0.09
10	---	---	---	---	---	---	---	e7.8	0.83	0.02	0.13	0.09
11	---	---	---	---	---	---	---	e10	0.80	0.02	0.11	0.08
12	---	---	---	---	---	---	---	e19	0.53	0.02	0.11	0.07
13	---	---	---	---	---	---	---	18	0.34	0.02	0.10	0.07
14	---	---	---	---	---	---	---	15	0.32	0.02	0.10	0.08
15	---	---	---	---	---	---	---	13	0.57	0.02	0.09	0.07
16	---	---	---	---	---	---	---	10	0.47	0.02	0.08	e0.07
17	---	---	---	---	---	---	---	7.1	0.31	0.01	0.07	e0.06
18	---	---	---	---	---	---	---	5.2	0.22	0.01	0.07	e0.06
19	---	---	---	---	---	---	---	3.8	0.17	0.01	0.07	e0.06
20	---	---	---	---	---	---	---	2.7	0.13	0.01	0.07	e0.06
21	---	---	---	---	---	---	---	1.7	0.11	0.01	0.06	e0.05
22	---	---	---	---	---	---	---	1.3	0.10	0.03	0.06	e0.05
23	---	---	---	---	---	---	---	1.3	0.08	0.15	0.06	e0.05
24	---	---	---	---	---	---	---	1.5	0.08	0.11	0.05	e0.05
25	---	---	---	---	---	---	---	9.4	0.07	0.08	0.05	e0.05
26	---	---	---	---	---	---	---	13	0.06	0.08	0.05	e0.05
27	---	---	---	---	---	---	---	5.8	0.05	0.07	0.05	e0.10
28	---	---	---	---	---	---	---	3.8	0.05	0.07	0.06	e0.07
29	---	---	---	---	---	---	---	5.0	0.04	0.10	0.06	e0.06
30	---	---	---	---	---	---	---	2.9	0.04	0.20	0.06	e0.05
31	---	---	---	---	---	---	---	2.0	---	0.19	0.06	---
TOTAL	---	---	---	---	---	---	---	197.50	11.26	1.48	10.68	2.31
MEAN	---	---	---	---	---	---	---	6.37	0.38	0.05	0.34	0.08
MAX	---	---	---	---	---	---	---	19	1.3	0.20	3.4	0.16
MIN	---	---	---	---	---	---	---	0.50	0.04	0.01	0.05	0.05
AC-FT	---	---	---	---	---	---	---	392	22	2.9	21	4.6
CFSM	---	---	---	---	---	---	---	1.50	0.09	0.01	0.08	0.02
IN.	---	---	---	---	---	---	---	1.73	0.10	0.01	0.09	0.02

e Estimated

15356000 YUKON RIVER AT EAGLE—Continued
(International Gaging Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-57, 1962-70, 1974-76, 1978-79 and 2001 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED SEDIMENT: 1962 to 1966

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample location, cross section ft from rt bank (72103)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, water, deg C (00010)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
APR								
13...	1100	385.0	245	7.7	.0	758	10.2	70
13...	1110	560.0	244	7.7	.0	758	10.3	71
13...	1120	690.0	243	7.8	.0	758	10.2	70
13...	1130	865.0	237	7.7	.0	758	10.2	70
13...	1140	970.0	244	7.7	.0	758	10.1	70
JUN								
17...	1000	409.0	205	8.0	15.0	--	10.1	--
17...	1002	622.0	206	8.0	15.0	--	9.7	--
17...	1004	783.0	205	7.9	15.0	--	9.8	--
17...	1006	963.0	205	7.9	15.0	--	9.6	--
17...	1008	1190	205	7.9	15.0	--	10.0	--
30...	1545	385.0	188	8.2	17.9	743	9.2	99
30...	1550	585.0	187	8.2	17.9	743	9.2	99
30...	1555	755.0	187	8.2	17.9	743	9.2	99
30...	1600	925.0	186	8.2	17.9	743	9.2	100
30...	1605	1145	191	8.2	17.9	743	9.2	99
JUL								
20...	1430	314.0	212	8.0	16.1	737	9.6	101
20...	1435	504.0	210	8.0	16.2	737	9.8	103
20...	1440	684.0	210	8.0	16.2	737	9.7	102
20...	1445	834.0	210	8.0	16.2	737	9.8	103
20...	1450	1064	200	8.0	16.2	737	9.8	103
AUG								
19...	1404	360.0	213	8.0	15.7	--	--	--
19...	1414	530.0	210	8.0	15.9	--	--	--
19...	1424	690.0	207	8.0	15.9	--	--	--
19...	1434	850.0	211	8.0	15.9	--	--	--
19...	1444	1040	211	8.0	16.0	--	--	--
SEP								
06...	1020	--	225	7.9	9.3	--	--	--
06...	1025	--	223	7.7	9.3	--	--	--
06...	1030	--	224	7.8	9.3	--	--	--
06...	1035	--	225	7.8	9.3	--	--	--
06...	1040	--	226	7.7	9.2	--	--	--

Date	Time	Medium code	Sample type	Stream width, feet (00004)	Gage height, feet (00065)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Sampler type, code (84164)	Type of sample related QA data, code (99111)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)
APR													
13...	1230	9	9	1110	--	19400	20	3055	10	240	7.7	--	.0
MAY													
26...	1300	9	9	1500	--	--	20	3055	1	--	7.0	--	10.0
JUN													
17...	1030	9	9	1600	--	205000	20	3055	1	206	7.9	--	15.0
30...	1620	9	9	--	18.83	--	20	3055	1	188	8.2	27.2	17.9
JUL													
20...	1500	9	9	1370	--	125000	20	3055	1	208	8.0	--	16.2
AUG													
19...	1510	9	9	1320	13.14	116000	20	3055	30	210	8.0	--	15.9
SEP													
06...	1100	9	9	--	10.83	84500	20	3055	10	225	7.8	6.8	9.3

15356000 YUKON RIVER AT EAGLE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as CaCO3 (00410)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)
APR 13...	--	.0307	.0213	758	11.1	77	130	35.4	9.84	3.05	--	1.1	116
MAY 26...	157	.4488	.3551	--	--	--	87	24.1	6.42	1.75	56	.95	73
JUN 17...	99	.1279	.0948	--	9.9	--	100	28.5	7.92	2.11	--	.99	81
JUN 30...	925	.0487	.0355	743	9.2	99	100	28.1	7.20	2.67	--	1.7	89
JUL 20...	1020	.0343	.0242	737	9.8	103	110	30.9	7.71	3.13	--	1.8	95
AUG 19...	840	.0344	.0249	737	67.4	704	110	29.9	7.57	2.94	--	1.7	85
SEP 06...	63	.0556	.0403	--	--	--	110	31.5	8.20	3.20	--	1.5	91

Date	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Alkalinity, wat flt fxd end field, mg/L as CaCO3 (39036)	Sulfate, water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Residue on evap. at 180degC, wat flt mg/L (70300)	Residue water, sum of constituents mg/L (70301)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
APR 13...	.0	95	100	31.3	.75	<.17	6.88	154	146	<.002	.088	<.010	E.06
MAY 26...	.0	56	68	22.2	.6	<.17	5.13	112	98	.002	.031	E.005	.7
JUN 17...	.0	67	67	29.9	.45	<.17	6.30	118	116	<.002	.034	<.010	.3
JUN 30...	.0	73	69	30.9	.78	<.17	5.60	131	121	<.002	.031	<.010	.6
JUL 20...	.0	78	78	30.7	1.06	<.17	5.78	132	128	E.001	.027	<.010	.5
AUG 19...	.0	71	70	37.6	1.09	<.17	5.33	109	128	E.001	.022	<.010	.4
SEP 06...	.0	74	74	34.9	.92	.18	5.87	137	131	E.001	.028	E.008	.2

Date	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Phosphorus, water, unfltrd mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)	Orthophosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic, water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)
APR 13...	E.06	.004	<.004	<.006	2.3	E.1	.4	51.1	<.06	8	E.02	<.8	.094
MAY 26...	.3	.635	.008	<.006	38.8	E.2	.5	35.9	<.06	8	.05	<.8	.134
JUN 17...	E.07	.322	<.04	<.006	25.5	E.2	.6	43.8	<.06	E8	E.02	1.0	.106
JUN 30...	E.05	1.53	E.002	<.006	26.8	.3	.6	37.2	<.06	12	<.04	<.8	.137
JUL 20...	<.1	1.17	<.004	E.003	21.7	.3	.6	40.7	<.06	16	<.04	<.8	.129
AUG 19...	E.07	E.81	<.004	<.006	21.3	.3	.5	39.9	<.06	14	<.04	<.8	.108
SEP 06...	E.10	.26	<.004	<.006	14.8	E.2	.6	40.1	<.06	24	<.04	<.8	.100

15356000 YUKON RIVER AT EAGLE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Mangan- ese, water, fltrd, ug/L (01056)	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen- ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront- ium, water, fltrd, ug/L (01080)	Vanad- ium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)
APR 13...	.8	E3.2	<.08	2.3	1.5	1.3	1.13	.6	<.20	164	.36	1.6	1.12
MAY 26...	3.8	93.1	E.07	2.0	7.0	.8	2.88	<.4	<.20	97.1	.55	1.6	.65
JUN 17...	1.7	17.8	<.08	2.3	1.9	1.0	1.52	.5	<.20	112	.57	.7	.83
JUN 30...	1.3	E3.5	E.06	3.2	.6	1.6	1.07	E.4	<.20	117	.60	E.5	.90
JUL 20...	1.0	<6.4	<.08	3.2	.7	1.8	1.52	.5	<.20	145	.63	<.6	.96
AUG 19...	1.1	<6.4	<.08	3.1	.7	1.7	.91	.5	<.20	141	.62	E.5	.87
SEP 06...	1.4	E4.3	<.08	3.2	2.7	1.6	1.27	.6	<.20	147	.40	1.2	1.04
Date	Organic carbon, water, fltrd, mg/L (00681)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Total carbon, suspnd sedimnt total, mg/L (00694)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)					
APR 13...	1.5	<.12	<.12	<.12	<.022	2	105	74					
MAY 26...	8.6	3.10	5.32	8.42	.424	593	--	61					
JUN 17...	4.7	1.21	2.87	4.08	.154	383	212000	53					
JUN 30...	2.1	E23.0	E9.62	E32.6	E.434	1490	--	88					
JUL 20...	1.7	17.9	4.82	22.7	.282	1490	502000	89					
AUG 19...	.9	7.03	4.91	11.9	.174	1260	395000	90					
SEP 06...	2.1	3.38	3.20	6.58	.134	--	--	--					

15388960 PORCUPINE RIVER NEAR INTERNATIONAL BOUNDARY
(International Gaging Station)

LOCATION.--Lat 67°25'27", long 140°53'28", 3.1 mi upstream from old townsite of Ramparts House, at Alaska-Yukon Territory Boundary.

DRAINAGE AREA.--23,100 mi², approximately.

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

GAGE.--Water-stage recorder. Elevation of gage is 600 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Differences between data published herein and corresponding data in the reports of the Water Survey of Canada are due to variations in automated program techniques. After December 1978, data published in reports of the Water Survey of Canada are in International System (SI) units, and have been converted to inch-pound units for this report. Formerly the data reported in the USGS Water-Data Report were one year prior to those reported for U.S. gages because the Water Survey of Canada discharge records for the calendar year were not received until the following year. Starting with the 2003 water year, periods of record for this station will be current with U.S. gage reports.

COOPERATION.--Discharge records furnished by the Water Survey of Canada.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6650	e3520	e2000	e1370	e982	e823	e773	e946	62100	5510	4980	4450
2	6550	e3480	e1970	e1370	e975	e823	e773	e1020	61300	5300	4940	4310
3	6400	e3430	e1910	e1360	e960	e819	e773	e1080	59600	5050	8120	4170
4	6270	e3340	e1890	e1350	e939	e816	e770	e1150	57700	4770	23300	4100
5	6200	e3300	e1870	e1330	e922	e816	e770	e1250	50500	4520	23000	4030
6	7110	e3250	e1860	e1320	e918	e816	e770	e1350	44600	4310	19900	4240
7	9000	e3180	e1830	e1300	e915	e812	e766	e1490	45600	4170	19000	4560
8	10100	e3140	e1810	e1290	e911	e812	e766	e1570	45300	3920	18100	4840
9	9790	e3100	e1780	e1260	e907	e812	e766	e1640	40500	3810	15200	4910
10	8870	e3040	e1760	e1250	e904	e812	e766	e1790	34100	3710	12400	4980
11	8040	e2940	e1730	e1230	e897	e812	e763	e1960	29000	3670	10500	4870
12	7490	e2880	e1690	e1210	e893	e812	e766	e2310	24400	3600	9070	4730
13	7000	e2820	e1680	e1200	e886	e809	e766	e2800	20300	3640	8020	4520
14	6550	e2720	e1660	e1190	e883	e805	e766	e3270	17000	3850	7240	4380
15	7390	e2650	e1650	e1180	e879	e805	e770	e4100	14500	3850	6600	4270
16	6460	e2620	e1600	e1150	e872	e805	e770	e5330	13100	3780	6290	4100
17	4470	e2580	e1600	e1150	e872	e805	e770	12900	12500	3710	6140	3950
18	e3950	e2540	e1580	e1140	e865	e805	e770	20800	11700	3640	6110	3810
19	e3450	e2490	e1550	e1130	e862	e805	e770	91500	11000	3570	5970	3570
20	e3340	e2440	e1530	e1120	e858	e805	e773	194000	10100	3470	5830	3410
21	e3420	e2400	e1510	e1110	e855	e802	e773	188000	9780	3370	5580	3310
22	e3600	e2370	e1500	e1100	e851	e798	e777	165000	9680	3460	5440	3210
23	e3990	e2340	e1480	e1090	e847	e791	e780	121000	9180	3570	5160	3090
24	e4130	e2300	e1450	e1080	e844	e784	e784	93800	8400	3470	4940	3150
25	e3990	e2260	e1450	e1060	e840	e777	e791	89600	7770	3390	4840	3160
26	e3950	e2210	e1430	e1050	e837	e777	e798	98500	7380	3530	4770	2870
27	e3880	e2150	e1430	e1030	e833	e777	e805	105000	6850	4270	4730	3000
28	e3810	e2130	e1420	e1030	e833	e777	e830	109000	6500	5860	4730	3000
29	e3710	e2090	e1400	e1010	e830	e777	e855	102000	6180	5970	4660	3530
30	e3670	e2040	e1390	e1010	---	e777	e879	80800	5830	5720	4560	3430
31	e3600	---	e1370	e999	---	e777	---	66500	---	5330	4560	---
TOTAL	176830	81750	50780	36469	25670	24843	23449	1571456	742450	129790	274680	117950
MEAN	5704	2725	1638	1176	885	801	782	50690	24750	4187	8861	3932
MAX	10100	3520	2000	1370	982	823	879	194000	62100	5970	23300	4980
MIN	3340	2040	1370	999	830	777	763	946	5830	3370	4560	2870
AC-FT	350700	162200	100700	72340	50920	49280	46510	3117000	1473000	257400	544800	234000
CFSM	0.25	0.12	0.07	0.05	0.04	0.03	0.03	2.19	1.07	0.18	0.38	0.17
IN.	0.28	0.13	0.08	0.06	0.04	0.04	0.04	2.53	1.20	0.21	0.44	0.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	4662	1896	1145	844	697	657	766	33790	42000	15120	19240	15990					
MAX	8241	3161	1638	1176	966	870	1711	63160	86470	29580	37940	34320					
(WY)	1996	1999	2004	2004	2001	2001	1998	1990	1992	1994	1991	1995					
MIN	2571	1122	870	551	398	383	562	1369	20410	4187	8861	3932					
(WY)	2000	1997	2000	1997	1997	1997	1997	2001	1999	2004	2004	2004					

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1988 - 2004

ANNUAL TOTAL	3823052	3256117	
ANNUAL MEAN	10470	8896	11440
HIGHEST ANNUAL MEAN			16090
LOWEST ANNUAL MEAN			6569
HIGHEST DAILY MEAN	78700	194000	248000
LOWEST DAILY MEAN	a618	763	b367
ANNUAL SEVEN-DAY MINIMUM	620	766	369
MAXIMUM PEAK FLOW		214000	250000
MAXIMUM PEAK STAGE		48.35	50.76
ANNUAL RUNOFF (AC-FT)	7583000	6459000	8287000
ANNUAL RUNOFF (CFSM)	0.453	0.385	0.495
ANNUAL RUNOFF (INCHES)	6.16	5.24	6.73
10 PERCENT EXCEEDS	30500	13000	32900
50 PERCENT EXCEEDS	2940	2840	2010
90 PERCENT EXCEEDS	652	801	646

a From Mar 9 to 10
b From Mar 3 to 6
e Estimated

15392000 BIRCH CREEK ABOVE TWELVEMILE CREEK NEAR MILLER HOUSE—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	---	---	---	---	---	---	---	122	27	75	110
2	33	---	---	---	---	---	---	---	174	30	65	116
3	---	---	---	---	---	---	---	---	157	232	55	105
4	---	---	---	---	---	---	---	---	134	331	48	102
5	---	---	---	---	---	---	---	---	136	203	42	104
6	---	---	---	---	---	---	---	---	128	235	36	133
7	---	---	---	---	---	---	---	---	114	212	34	244
8	---	---	---	---	---	---	---	---	113	145	36	204
9	---	---	---	---	---	---	---	---	102	104	43	177
10	---	---	---	---	---	---	---	---	145	83	54	153
11	---	---	---	---	---	---	---	---	1130	69	69	135
12	---	---	---	---	---	---	---	---	773	76	79	130
13	---	---	---	---	---	---	---	---	504	96	95	116
14	---	---	---	---	---	---	---	---	306	77	104	105
15	---	---	---	---	---	---	---	---	198	63	95	97
16	---	---	---	---	---	---	---	519	144	53	145	90
17	---	---	---	---	---	---	---	508	115	44	339	86
18	---	---	---	---	---	---	---	584	98	37	395	85
19	---	---	---	---	---	---	---	590	91	157	386	88
20	---	---	---	---	---	---	---	710	e85	254	274	89
21	---	---	---	---	---	---	---	750	e80	135	198	85
22	---	---	---	---	---	---	---	602	e91	111	218	79
23	---	---	---	---	---	---	---	499	e80	82	222	76
24	---	---	---	---	---	---	---	398	e60	67	272	73
25	---	---	---	---	---	---	---	343	45	63	265	74
26	---	---	---	---	---	---	---	319	54	109	192	74
27	---	---	---	---	---	---	---	214	48	140	164	84
28	---	---	---	---	---	---	---	129	40	239	156	87
29	---	‡0.4	---	---	---	---	---	107	35	168	129	87
30	---	---	---	---	---	---	---	104	30	118	108	87
31	---	---	---	---	---	---	---	115	---	91	100	---
TOTAL	---	---	---	---	---	---	---	---	5332	3851	4493	3275
MEAN	---	---	---	---	---	---	---	---	178	124	145	109
MAX	---	---	---	---	---	---	---	---	1130	331	395	244
MIN	---	---	---	---	---	---	---	---	30	27	34	73
MED	---	---	---	---	---	---	---	---	113	104	104	94
AC-FT	---	---	---	---	---	---	---	---	10580	7640	8910	6500
CFSM	---	---	---	---	---	---	---	---	1.99	1.39	1.62	1.22
IN.	---	---	---	---	---	---	---	---	2.22	1.61	1.87	1.37

e Estimated

‡ Result of discharge measurement

15392000 BIRCH CREEK ABOVE TWELVEMILE CREEK NEAR MILLER HOUSE—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	---	---	---	---	---	---	e135	248	39	365	636
2	83	---	---	---	---	---	---	e120	184	36	271	1050
3	79	---	‡13	---	---	---	---	e110	173	37	244	750
4	75	---	---	---	---	---	---	e100	162	35	304	554
5	64	---	---	---	---	---	---	e90	138	31	244	501
6	38	---	---	---	---	---	---	e100	270	38	198	434
7	75	---	---	---	---	---	---	e110	341	71	141	390
8	65	---	---	---	---	---	---	139	249	73	100	346
9	51	---	---	---	---	---	---	201	177	57	75	297
10	50	---	---	---	---	---	---	250	134	44	57	261
11	35	---	---	---	---	---	---	236	119	39	44	295
12	53	---	---	---	---	---	---	240	82	37	36	333
13	45	---	---	---	---	---	---	297	64	36	30	257
14	27	---	---	---	---	---	---	219	52	46	25	206
15	41	---	---	---	---	---	---	181	46	212	22	178
16	20	---	---	---	---	---	---	151	40	274	19	163
17	20	---	---	---	---	---	---	112	39	283	16	134
18	---	---	---	---	---	---	---	106	40	254	13	121
19	---	---	---	---	---	---	---	109	34	160	14	115
20	---	---	---	---	---	---	---	138	27	117	15	105
21	---	---	---	---	---	---	---	141	25	94	16	92
22	---	---	---	---	---	---	---	124	25	77	13	87
23	---	---	---	---	---	---	---	120	23	67	14	72
24	---	---	---	---	---	---	---	134	30	59	22	56
25	---	---	---	---	---	---	---	135	63	54	44	69
26	---	---	---	---	---	---	---	173	46	66	45	75
27	---	---	---	---	---	---	---	251	66	970	43	64
28	---	---	---	---	---	---	---	273	77	960	35	55
29	---	---	---	---	---	---	---	310	60	420	30	56
30	---	---	---	---	---	---	---	270	47	295	28	57
31	---	---	---	---	---	---	---	276	---	415	36	---
TOTAL	---	---	---	---	---	---	---	5351	3081	5396	2559	7809
MEAN	---	---	---	---	---	---	---	173	103	174	82.5	260
MAX	---	---	---	---	---	---	---	310	341	970	365	1050
MIN	---	---	---	---	---	---	---	90	23	31	13	55
MED	---	---	---	---	---	---	---	139	64	67	36	170
AC-FT	---	---	---	---	---	---	---	10610	6110	10700	5080	15490
CFSM	---	---	---	---	---	---	---	1.94	1.15	1.95	0.93	2.92
IN.	---	---	---	---	---	---	---	2.23	1.28	2.25	1.07	3.26

e Estimated

‡ Result of discharge measurement

15392000 BIRCH CREEK ABOVE TWELVEMILE CREEK NEAR MILLER HOUSE—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	---	---	---	---	---	---	---	431	14	122	23
2	50	---	---	---	---	---	---	---	293	14	140	26
3	49	---	---	---	---	---	---	---	255	15	98	24
4	47	---	---	---	---	---	---	---	184	23	76	23
5	43	---	---	---	---	---	---	---	152	20	65	23
6	42	---	---	---	---	---	---	---	122	23	57	22
7	39	---	---	---	---	---	---	---	97	19	50	21
8	37	---	---	---	---	---	---	---	82	17	44	21
9	38	---	---	---	---	---	---	---	75	16	40	20
10	38	---	---	---	---	---	---	---	60	17	38	19
11	---	---	---	---	---	---	---	---	49	15	36	19
12	---	---	---	---	---	---	---	---	40	13	34	18
13	---	---	---	---	---	---	---	528	35	13	32	18
14	---	---	---	---	---	---	---	566	46	13	31	18
15	---	---	---	---	---	---	---	635	73	13	30	16
16	---	---	---	---	---	---	---	641	57	17	28	15
17	---	---	---	---	---	---	---	573	45	17	27	15
18	---	---	---	---	---	---	---	488	37	15	27	13
19	---	---	---	---	---	---	---	384	34	16	26	e14
20	---	---	---	---	---	---	---	214	30	19	25	e15
21	---	---	---	---	---	---	---	168	26	52	25	e15
22	---	---	---	---	---	---	---	207	24	51	25	e15
23	---	---	---	---	---	---	---	253	22	92	25	e15
24	---	---	---	---	---	---	---	559	18	79	25	e15
25	---	---	---	---	---	---	---	562	18	81	24	e14
26	---	---	---	---	---	---	---	369	18	107	24	e14
27	---	---	---	---	---	---	---	270	17	80	23	e15
28	---	---	---	---	---	---	---	298	15	71	23	e15
29	---	---	---	---	---	---	---	357	14	73	23	‡15
30	---	---	---	---	---	---	---	625	14	77	22	e15
31	---	---	---	---	---	---	---	402	---	91	21	---
TOTAL	---	---	---	---	---	---	---	---	2383	1183	1286	531
MEAN	---	---	---	---	---	---	---	---	79.4	38.2	41.5	17.7
MAX	---	---	---	---	---	---	---	---	431	107	140	26
MIN	---	---	---	---	---	---	---	---	14	13	21	13
MED	---	---	---	---	---	---	---	---	42	19	28	16
AC-FT	---	---	---	---	---	---	---	---	4730	2350	2550	1050
CFSM	---	---	---	---	---	---	---	---	0.89	0.43	0.47	0.20
IN.	---	---	---	---	---	---	---	---	0.99	0.49	0.54	0.22

e Estimated

15453500 YUKON RIVER NEAR STEVENS VILLAGE

LOCATION.--Lat 65°52'32", long 149°43'04", in SE¹/₄ SW¹/₄ sec. 7, T. 12 N., R. 10 W. (Livengood D-6 quad), Hydrologic Unit 19040404, on right bank, 115 ft upstream from bridge at MP 56.0 on Dalton Highway, 0.5 mi downstream from Woodcamp Creek, 2.5 mi upstream from Ray River, and 21 mi southwest of Stevens Village.

DRAINAGE AREA.--196,300 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder and supplementary water-stage recorder on bridge pier at same site and datum. Datum of gage is 240.68 ft above sea level (revised).

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge observed, 950,000 ft³/s, June 15-16, 1964, "at Rampart" (station 15468000), drainage area, 199,400 mi², approximately.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107000	84000	e40000	e31000	e27000	e23000	e21000	e24000	435000	219000	150000	123000
2	105000	82100	e40000	e31000	e27000	e23000	e21000	e26000	439000	213000	151000	118000
3	103000	81100	e39000	e31000	e27000	e23000	e21000	e30000	437000	208000	157000	114000
4	101000	79000	e39000	e31000	e27000	e23000	e21000	e35000	428000	203000	165000	112000
5	99800	78800	e38000	e31000	e27000	e23000	e21000	e40000	421000	198000	172000	111000
6	99000	77700	e38000	e30000	e27000	e23000	e21000	e50000	416000	193000	174000	109000
7	98400	73100	e37000	e30000	e27000	e23000	e21000	e80000	409000	187000	173000	107000
8	98900	69000	e37000	e30000	e26000	e22000	e21000	e130000	403000	182000	172000	105000
9	99900	65000	e36000	e30000	e26000	e22000	e21000	e190000	390000	178000	175000	104000
10	101000	e63000	e36000	e30000	e26000	e22000	e21000	e230000	372000	176000	172000	104000
11	102000	e61000	e35000	e30000	e26000	e22000	e21000	e260000	353000	174000	166000	102000
12	104000	e60000	e35000	e30000	e26000	e22000	e21000	e280000	336000	171000	160000	101000
13	105000	e58000	e35000	e30000	e26000	e22000	e21000	307000	324000	166000	155000	101000
14	105000	e56000	e34000	e29000	e26000	e22000	e21000	313000	320000	162000	152000	e99000
15	104000	e54000	e34000	e29000	e26000	e22000	e21000	301000	322000	158000	149000	e97000
16	103000	e53000	e34000	e29000	e25000	e22000	e21000	270000	324000	156000	147000	e95000
17	102000	e52000	e34000	e29000	e25000	e21000	e21000	264000	316000	155000	145000	e93500
18	99500	e51000	e33000	e29000	e25000	e21000	e21000	271000	301000	151000	142000	e92000
19	96000	e49000	e33000	e29000	e25000	e21000	e21000	288000	284000	147000	138000	e91000
20	92200	e48000	e33000	e29000	e25000	e21000	e21000	308000	268000	146000	135000	e90000
21	87400	e47000	e33000	e28000	e25000	e21000	e21000	331000	256000	147000	133000	88700
22	83500	e46000	e33000	e28000	e24000	e21000	e21000	374000	247000	148000	132000	87900
23	82400	e45000	e32000	e28000	e24000	e21000	e21000	415000	240000	148000	132000	87400
24	81200	e44000	e32000	e28000	e24000	e21000	e21000	442000	233000	150000	133000	86700
25	82100	e44000	e32000	e28000	e24000	e21000	e21000	459000	228000	153000	133000	86200
26	81800	e43000	e32000	e28000	e24000	e21000	e21000	466000	225000	156000	133000	85900
27	80000	e42000	e32000	e28000	e24000	e21000	e21000	457000	226000	157000	132000	85800
28	80400	e42000	e32000	e28000	e24000	e21000	e22000	440000	227000	158000	130000	85800
29	82100	e41000	e32000	e28000	e23000	e21000	e22000	437000	227000	157000	128000	85700
30	85100	e41000	e31000	e28000	---	e21000	e23000	440000	224000	156000	126000	85500
31	84900	---	e31000	e27000	---	e21000	---	437000	---	153000	125000	---
TOTAL	2936600	1729800	1072000	905000	738000	674000	634000	8395000	9631000	5226000	4587000	2934100
MEAN	94730	57660	34580	29190	25450	21740	21130	270800	321000	168600	148000	97800
MAX	107000	84000	40000	31000	27000	23000	23000	466000	439000	219000	175000	123000
MIN	80000	41000	31000	27000	23000	21000	21000	24000	224000	146000	125000	85500
AC-FT	5825000	3431000	2126000	1795000	1464000	1337000	1258000	16650000	19100000	10370000	9098000	5820000
CFSM	0.48	0.29	0.18	0.15	0.13	0.11	0.11	1.38	1.64	0.86	0.75	0.50
IN.	0.56	0.33	0.20	0.17	0.14	0.13	0.12	1.59	1.83	0.99	0.87	0.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2004, BY WATER YEAR (WY)#

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	99850	51680	36720	29940	25530	22540	22230	208000	335500	229000	197800	163100																
MAX	164500	70300	48450	37680	32140	28970	28170	373000	614100	320200	255100	229500																
(WY)	2001	2003	1983	1977	1981	1981	1981	1991	1992	1992	2000	2000																
MIN	75340	34530	26770	23550	19320	16000	14800	90680	226800	168600	142400	97800																
(WY)	1993	1990	1990	1996	1999	1999	1997	1992	1995	2004	1989	2004																

e Estimated

15453500 YUKON RIVER NEAR STEVENS VILLAGE—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1977 - 2004#	
ANNUAL TOTAL	39620400		39462500			
ANNUAL MEAN	108500		107800		118900	
HIGHEST ANNUAL MEAN					144400 1992	
LOWEST ANNUAL MEAN					93910 1996	
HIGHEST DAILY MEAN	309000	Jun 11	466000	May 26	823000	Jun 11 1992
LOWEST DAILY MEAN	a26000	Feb 25	b21000	Mar 17	c14000	Apr 14 1997
ANNUAL SEVEN-DAY MINIMUM	26000	Feb 25	21000	Mar 17	14000	Apr 14 1997
MAXIMUM PEAK FLOW			467000	May 26	827000	Jun 11 1992
MAXIMUM PEAK STAGE			46.66	May 26	59.60	Jun 11 1992
ANNUAL RUNOFF (AC-FT)	78590000		78270000		86160000	
ANNUAL RUNOFF (CFSM)	0.553		0.549		0.606	
ANNUAL RUNOFF (INCHES)	7.51		7.48		8.23	
10 PERCENT EXCEEDS	227000		274000		276000	
50 PERCENT EXCEEDS	79000		78200		58000	
90 PERCENT EXCEEDS	26000		21000		22000	

a From Feb. 25 to Apr. 25
b From Mar. 17 to Apr. 27
c From Apr. 14 to 25

15453500 YUKON RIVER NEAR STEVENS VILLAGE—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-72, 1978, and 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample location, cross section ft from rt bank (72103)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, water, deg C (00010)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)
APR								
01...	1620	220.0	284	7.7	.0	775	8.1	55
01...	1640	375.0	283	7.7	.0	775	8.2	55
01...	1700	600.0	284	7.7	.0	775	8.2	55
01...	1720	750.0	284	7.7	.0	775	8.2	55
01...	1740	825.0	284	7.7	.0	775	8.2	55
01...	1800	1050	284	7.7	.0	775	8.2	55
JUN								
04...	1508	350.0	164	8.1	13.7	753	9.6	94
04...	1510	768.0	165	8.1	13.7	753	9.5	93
04...	1512	1059	165	8.0	13.7	753	9.5	93
04...	1514	1385	165	8.1	13.7	753	9.5	93
04...	1516	1775	165	8.1	13.7	753	9.5	93
09...	1400	347.0	168	7.9	15.2	756	8.8	89
09...	1405	734.0	168	8.0	15.2	753	8.6	87
09...	1410	1057	166	8.0	15.3	753	8.8	89
09...	1415	1373	166	8.0	15.3	753	8.6	87
09...	1420	1744	168	8.0	15.3	753	8.7	88
23...	1200	377.0	206	7.8	20.1	756	9.1	101
23...	1210	750.0	206	8.0	20.1	756	9.2	102
23...	1220	1052	206	8.0	20.2	756	9.2	102
23...	1230	1345	205	8.0	20.3	756	9.2	103
23...	1240	1675	205	8.0	20.3	756	9.2	103
JUL								
13...	1420	300.0	231	7.9	17.6	759	9.3	98
13...	1425	680.0	229	7.9	17.6	759	9.4	99
13...	1430	1000	--	7.9	17.6	759	9.4	--
13...	1435	1300	229	7.9	17.6	759	9.4	99
13...	1440	1680	229	7.9	17.6	759	9.5	100
AUG								
17...	1600	365.0	230	8.0	17.6	761	--	--
17...	1610	746.0	230	8.0	17.5	761	--	--
17...	1620	1038	230	8.0	17.5	761	--	--
17...	1630	1310	230	7.9	17.5	761	--	--
17...	1640	1617	230	--	17.5	761	--	--
SEP								
10...	1500	480.0	244	7.9	8.0	759	11.2	95
10...	1505	805.0	244	8.0	8.1	759	11.1	94
10...	1510	1075	244	8.0	8.1	759	11.1	94
10...	1515	1310	244	8.0	8.2	759	11.1	94
10...	1520	1620	244	8.0	8.1	759	11.1	94

Date	Time	Medium code	Sample type	Ice thick-ness, feet (82130)	Stream width, feet (00004)	Gage height, feet (00065)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Sampler type, code (84164)	Type of sample related QA data, code (99111)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, air, deg C (00020)
APR													
01...	1900	9	9	2.50	1900	--	20600	20	3039	1	284	7.7	-18.0
JUN													
04...	1520	9	9	--	2230	--	424000	20	3055	30	165	8.1	18.0
09...	1430	9	9	--	1980	--	394000	20	3055	1	167	8.0	--
23...	1300	9	7	--	--	36.70	265000	20	3055	30	206	7.9	24.0
JUL													
13...	1450	9	9	--	--	--	189000	20	3055	1	229	7.9	--
AUG													
17...	1650	9	9	--	1980	28.45	151000	20	3055	1	230	7.9	22.5
SEP													
10...	1530	9	9	--	--	--	--	20	3055	1	244	8.0	--

Date	Temperature, water, deg C (00010)	Turbid-ity, wat unf lab, Hach 2100AN NTU (99872)	UV absorb-ance, 254 nm, wat flt units /cm (50624)	UV absorb-ance, 280 nm, wat flt units /cm (61726)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potas-sium, water, fltrd, mg/L (00935)	Bicar-bonate, wat flt incr. titr., field, mg/L (00453)
APR													
01...	.0	3	.0363	.0260	775	8.2	55	160	45.3	11.0	3.39	1.2	132
JUN													
04...	13.7	221	.3672	.2760	759	9.5	92	85	25.5	5.22	1.59	.98	74
09...	15.3	153	.2764	.2063	756	8.7	87	86	25.1	5.54	1.62	.92	74
23...	20.0	122	.1358	.0992	756	9.2	102	110	30.2	7.19	2.08	1.0	88
JUL													
13...	17.6	496	.0574	.0411	759	9.4	99	110	30.2	7.57	2.72	1.7	84
AUG													
17...	17.5	135	.0655	.0469	761	7.5	79	110	32.2	8.04	2.97	1.5	100
SEP													
10...	8.1	118	.0601	.0426	759	11.1	94	120	34.8	8.45	3.21	1.4	116

15453500 YUKON RIVER NEAR STEVENS VILLAGE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Alka-linity, wat flt fxd end field, mg/L as CaCO3 (39036)	Sulfate water, fltrd, mg/L (00945)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Residue on evap. at 180degC, wat flt mg/L (70300)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Nitrite + nitrate water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
APR 01...	.0	108	110	35.1	1.33	<.17	7.36	185	170	<.002	.084	<.010	E.09
JUN 04...	.0	61	62	19.0	.58	<.17	4.41	121	94	.002	.033	<.010	.8
09...	.0	61	62	20.7	.55	<.17	4.73	113	96	E.001	.033	<.010	.7
23...	.0	72	72	29.1	.66	<.17	5.94	135	120	<.002	.036	<.010	.4
JUL 13...	.0	69	69	32.8	.94	.28	5.68	141	124	E.001	.032	E.005	.4
AUG 17...	.0	82	82	37.7	.68	<.17	5.49	142	138	<.002	.037	E.005	.3
SEP 10...	.0	95	93	37.9	.91	<.17	5.67	164	150	E.001	.038	.010	.2

Date	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Phos-phorus, water, unfltrd mg/L (00665)	Phos-phorus, water, fltrd, mg/L (00666)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)
APR 01...	E.06	.007	E.003	<.006	1.6	E.1	.4	67.8	<.06	15	<.04	<.8	.123
JUN 04...	.3	.649	.008	<.006	29.3	E.2	.6	39.3	<.06	E4	E.02	<.8	.154
09...	.2	.465	.005	<.006	26.2	E.2	.6	42.3	<.06	E5	<.04	<.8	.112
23...	.1	.325	.004	<.006	21.4	.2	.7	50.7	<.06	E6	<.04	<.8	.131
JUL 13...	E.07	.50	<.004	<.006	23.6	.3	.7	49.2	<.06	10	<.04	<.8	.111
AUG 17...	E.08	.40	E.003	<.006	24.9	.2	.6	47.1	<.06	14	<.04	<.8	.093
SEP 10...	E.09	.20	<.004	<.006	13.4	E.2	.6	46.9	<.06	15	<.04	<.8	.150

Date	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Mangan-ese, water, fltrd, ug/L (01056)	Molyb-denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen-ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront-ium, water, fltrd, ug/L (01080)	Vanad-ium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)
APR 01...	.8	15.5	<.08	3.3	20.4	1.5	1.06	.6	<.20	178	.37	.8	1.15
JUN 04...	3.6	107	.10	2.1	4.2	.7	2.53	E.3	<.20	85.8	.69	1.0	.62
09...	2.8	60.5	.08	2.0	3.8	.7	1.86	.4	<.20	94.7	.49	E.5	.62
23...	2.0	15.8	<.08	2.6	3.5	1.0	1.54	.6	<.20	109	.65	E.5	.82
JUL 13...	1.4	<6.4	<.08	3.0	3.2	1.5	1.07	.7	<.20	138	.73	<.6	.97
AUG 17...	1.5	6.7	<.08	3.8	1.8	1.5	1.07	.5	<.20	144	.93	.7	.93
SEP 10...	2.7	E6.1	<.08	5.2	8.0	1.5	1.11	.6	<.20	157	.56	1.1	.91

Date	Organic carbon, water, fltrd, mg/L (00681)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Total carbon, suspnd sedimnt total, mg/L (00694)	Partic-ulate nitro-gen, susp, water, mg/L (49570)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)	Suspnd. sedi-ment, sieve diametr <.063mm percent (70331)
APR 01...	1.8	<.12	.140	.148	<.022	4	222	87
JUN 04...	10	2.17	7.03	9.20	.511	612	701000	80
09...	9.1	.956	4.28	5.24	.292	415	441000	74
23...	4.6	<.12	2.83	2.89	.155	351	251000	72
JUL 13...	2.4	7.67	6.28	13.9	.285	664	339000	89
AUG 17...	1.2	6.10	1.70	7.79	.131	460	188000	88
SEP 10...	2.2	.683	1.41	2.09	.072	236	--	74

15477730 LIESE CREEK NEAR BIG DELTA

LOCATION.--Lat 64°26'53", long 144°52'59", in SW¹/₄ sec.25, T.5 S., R.14 E., (Big Delta B-2 quad), Hydrologic Unit 19040503, on right bank, 1.7 mi upstream from mouth, 1.5 mi east of Teck Cominco Corp, Pogo Mine Camp site, and 34 mi northeast of Big Delta.

DRAINAGE AREA.--1.08 mi².

PERIOD OF RECORD.--October 1999 to current year (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 2200 ft above sea level, from topographic map.

REMARKS.--Records fair except for discharges below 0.2 cfs which are poor. Estimated daily discharges are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.73	e0.25	e0.05	e0.01	e0.01	e0.01	e0.01	e0.12	1.1	0.25	0.56	0.33
2	0.72	e0.24	e0.05	e0.01	e0.01	e0.01	e0.01	e0.17	1.2	0.25	0.72	0.33
3	0.72	e0.23	e0.05	e0.01	e0.01	e0.01	e0.01	e0.26	1.7	0.25	0.62	0.31
4	0.78	e0.22	e0.04	e0.01	e0.01	e0.01	e0.01	e0.63	1.3	0.24	0.53	0.31
5	0.81	e0.21	e0.04	e0.01	e0.01	e0.01	e0.02	e1.3	0.96	0.73	0.45	0.31
6	0.82	e0.20	e0.04	e0.01	e0.01	e0.01	e0.02	e1.8	0.82	0.90	0.40	0.31
7	0.80	e0.19	e0.04	e0.01	e0.01	e0.01	e0.02	e2.3	0.68	0.78	0.36	0.29
8	0.77	e0.18	e0.03	e0.01	e0.01	e0.01	e0.02	2.9	3.2	0.56	0.34	0.31
9	0.73	e0.17	e0.03	e0.01	e0.01	e0.01	e0.02	3.5	7.7	0.47	0.33	0.30
10	0.69	e0.16	e0.03	e0.01	e0.01	e0.01	e0.02	2.0	3.7	0.41	0.32	0.28
11	e0.66	e0.16	e0.03	e0.01	e0.01	e0.01	e0.02	3.6	2.0	0.38	0.33	0.25
12	e0.62	e0.15	e0.02	e0.01	e0.01	e0.01	e0.02	6.4	1.3	0.35	0.34	0.25
13	e0.58	e0.14	e0.02	e0.01	e0.01	e0.01	e0.02	3.7	1.0	0.32	0.34	0.25
14	e0.54	e0.13	e0.02	e0.01	e0.01	e0.01	e0.02	2.8	0.90	0.30	0.33	0.25
15	e0.52	e0.13	e0.02	e0.01	e0.01	e0.01	e0.02	3.0	0.77	0.30	0.32	0.24
16	e0.49	e0.12	e0.02	e0.01	e0.01	e0.01	e0.03	2.3	0.68	0.29	0.31	0.24
17	e0.47	e0.12	e0.01	e0.01	e0.01	e0.01	e0.03	1.8	0.59	0.29	0.30	0.23
18	e0.45	e0.11	e0.01	e0.01	e0.01	e0.01	e0.03	1.2	0.52	0.28	0.29	0.24
19	e0.42	e0.10	e0.01	e0.01	e0.01	e0.01	e0.03	0.90	0.47	0.28	0.29	0.22
20	e0.40	e0.10	e0.01	e0.01	e0.01	e0.01	e0.03	0.66	0.42	0.27	0.30	0.23
21	e0.38	e0.09	e0.01	e0.01	e0.01	e0.01	e0.03	0.48	0.39	0.26	0.32	0.22
22	e0.37	e0.09	e0.01	e0.01	e0.01	e0.01	e0.03	0.44	0.36	0.26	0.32	0.23
23	e0.35	e0.08	e0.01	e0.01	e0.01	e0.01	e0.03	0.55	0.33	0.27	0.32	e0.22
24	e0.34	e0.08	e0.01	e0.01	e0.01	e0.01	e0.03	0.79	0.31	0.27	0.32	e0.21
25	e0.32	e0.07	e0.01	e0.01	e0.01	e0.01	e0.03	1.4	0.29	0.26	0.31	e0.20
26	e0.31	e0.07	e0.01	e0.01	e0.01	e0.01	e0.03	2.2	0.28	0.26	0.31	e0.20
27	e0.30	e0.06	e0.01	e0.01	e0.01	e0.01	e0.04	2.1	0.28	0.26	0.32	e0.19
28	e0.29	e0.06	e0.01	e0.01	e0.01	e0.01	e0.05	1.4	0.26	0.25	0.33	e0.19
29	e0.28	e0.06	e0.01	e0.01	e0.01	e0.01	e0.07	1.7	0.26	0.25	0.32	e0.19
30	e0.27	e0.05	e0.01	e0.01	---	e0.01	e0.09	1.8	0.25	0.25	0.33	e0.18
31	e0.26	---	e0.01	e0.01	---	e0.01	---	1.3	---	0.25	0.33	---
TOTAL	16.19	4.02	0.68	0.31	0.29	0.31	0.84	55.50	34.02	10.74	11.31	7.51
MEAN	0.52	0.13	0.02	0.01	0.01	0.01	0.03	1.79	1.13	0.35	0.36	0.25
MAX	0.82	0.25	0.05	0.01	0.01	0.01	0.09	6.4	7.7	0.90	0.72	0.33
MIN	0.26	0.05	0.01	0.01	0.01	0.01	0.01	0.12	0.25	0.24	0.29	0.18
MED	0.49	0.12	0.02	0.01	0.01	0.01	0.03	1.7	0.68	0.27	0.33	0.24
AC-FT	32	8.0	1.3	0.6	0.6	0.6	1.7	110	67	21	22	15
CFSM	0.48	0.12	0.02	0.01	0.01	0.01	0.03	1.66	1.05	0.32	0.34	0.23
IN.	0.56	0.14	0.02	0.01	0.01	0.01	0.03	1.91	1.17	0.37	0.39	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

	2000	2001	2002	2003	2004
MEAN	0.28	0.06	0.01	0.01	0.01
MAX	0.52	0.13	0.02	0.01	0.01
(WY)	2004	2004	2002	2002	2002
MIN	0.03	0.00	0.00	0.00	0.00
(WY)	2000	2000	2000	2000	2000

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 2000 - 2004

ANNUAL TOTAL	191.10	141.72	
ANNUAL MEAN	0.52	0.39	0.52
HIGHEST ANNUAL MEAN			0.66
LOWEST ANNUAL MEAN			0.39
HIGHEST DAILY MEAN	9.6 Sep 2	7.7 Jun 9	9.6 Sep 2 2003
LOWEST DAILY MEAN	a0.01 Jan 1	b0.01 Dec 17	c0.00 Oct 30 1999
ANNUAL SEVEN-DAY MINIMUM	0.01 Jan 1	0.01 Dec 17	0.00 Oct 30 1999
MAXIMUM PEAK FLOW		23 Jun 8	23 Jun 8 2004
MAXIMUM PEAK STAGE		20.75 Jun 8	20.75 Jun 8 2004
MAXIMUM PEAK STAGE			d22.80 May 18 2000
ANNUAL RUNOFF (AC-FT)	379	281	380
ANNUAL RUNOFF (CFSM)	0.485	0.359	0.486
ANNUAL RUNOFF (INCHES)	6.58	4.88	6.60
10 PERCENT EXCEEDS	1.1	0.82	1.5
50 PERCENT EXCEEDS	0.13	0.20	0.08
90 PERCENT EXCEEDS	0.01	0.01	0.00

a Jan. 1 to Apr. 13
 b Dec. 17 to Apr. 4
 c Oct. 30, 1999 to May 7, 2000 and Nov. 30, 2000 to Apr. 21, 2001
 d Backwater from ice
 e Estimated

15477740 GOODPASTER RIVER NEAR BIG DELTA

LOCATION.--Lat 64°27'02", long 144°56'32", in SE¹/₄ sec.27, T.5 S., R.14 E., (Big Delta B-2 quad), Hydrologic Unit 19040503, on right bank, 0.3 mi northwest of Pogo Mine Camp site, 7 mi upstream from Central Creek, and 34 mi northeast of Big Delta.

DRAINAGE AREA.--677 mi².

PERIOD OF RECORD.--August 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1350 ft above sea level, from topographic map. August 1997 to August 13, 2000 gage located 300 ft upstream of present site at same datum. August 14, 2000 to May 4, 2004 gage located 700 ft downstream of present site at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	680	e200	e140	e92	e88	e78	e72	e900	1090	e300	573	413
2	679	e200	e140	e92	e88	e78	e72	e1000	991	e290	990	406
3	669	e190	e140	e92	e86	e78	e72	e700	1170	e280	827	401
4	656	e190	e130	e92	e86	e78	e72	e800	1100	e280	710	399
5	617	e180	e130	e92	e86	e78	e72	e1300	856	e290	629	397
6	608	e170	e130	e90	e86	e78	e72	1620	757	e440	575	388
7	590	e160	e120	e90	e86	e76	e72	4820	746	e540	535	375
8	567	e150	e120	e90	e86	e76	e72	3930	891	441	503	364
9	548	e130	e120	e90	e86	e76	e72	2030	2750	397	475	354
10	538	e120	e120	e90	e84	e76	e74	1440	1830	369	456	344
11	480	e110	e120	e90	e84	e76	e74	1350	1180	343	450	336
12	e430	e110	e110	e90	e84	e76	e74	3420	929	314	442	328
13	e390	e120	e110	e90	e84	e76	e74	2720	766	289	432	320
14	e340	e130	e110	e90	e84	e76	e74	1920	733	277	417	338
15	e310	e130	e110	e90	e84	e76	e74	1770	699	e260	405	345
16	e280	e140	e110	e90	e84	e74	e78	1950	661	e250	398	322
17	e240	e140	e110	e88	e82	e74	e82	1650	619	e250	392	311
18	e220	e140	e110	e88	e82	e74	e86	1270	565	e240	395	300
19	e230	e150	e110	e88	e82	e74	e90	1030	524	e240	393	294
20	e240	e150	e100	e88	e82	e74	e100	808	493	e330	391	298
21	e240	e150	e100	e88	e82	e74	e110	651	462	311	415	310
22	e250	e150	e100	e88	e82	e74	e130	627	435	432	416	301
23	e250	e150	e100	e88	e80	e74	e160	719	447	718	408	299
24	e260	e150	e100	e88	e80	e74	e180	924	400	646	405	306
25	e250	e160	e98	e88	e80	e72	e220	1050	372	563	401	275
26	e250	e160	e98	e88	e80	e72	e280	1480	362	533	394	282
27	e240	e160	e96	e88	e80	e72	e370	1240	354	494	393	300
28	e230	e150	e96	e88	e80	e72	e410	1230	341	455	391	269
29	e220	e150	e94	e88	e78	e72	e460	1390	330	451	432	248
30	e210	e150	e94	e88	---	e72	e700	1680	310	450	447	254
31	e210	---	e94	e88	---	e72	---	1200	---	445	422	---
TOTAL	11922	4540	3460	2770	2416	2322	4548	48619	23163	11918	14912	9877
MEAN	385	151	112	89.4	83.3	74.9	152	1568	772	384	481	329
MAX	680	200	140	92	88	78	700	4820	2750	718	990	413
MIN	210	110	94	88	78	72	72	627	310	240	391	248
AC-FT	23650	9010	6860	5490	4790	4610	9020	96440	45940	23640	29580	19590
CFSM	0.57	0.22	0.16	0.13	0.12	0.11	0.22	2.32	1.14	0.57	0.71	0.49
IN.	0.66	0.25	0.19	0.15	0.13	0.13	0.25	2.67	1.27	0.65	0.82	0.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)#

MEAN	277	122	88.4	63.8	53.4	48.1	154	991	895	778	967	755
MAX	385	153	123	90.6	83.3	76.4	440	1568	1993	1158	1651	1785
(WY)	2004	2003	2003	2001	2004	2001	2003	2004	2000	2003	2000	2003
MIN	149	90.1	57.5	28.9	13.6	10.5	52.7	562	468	384	481	329
(WY)	2000	1999	1999	1999	1999	1999	2002	2003	1998	2004	2004	2004

See Period of Record; partial years used in monthly statistics
e Estimated

15477740 GOODPASTER RIVER NEAR BIG DELTA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004#	
ANNUAL TOTAL	189843		140467			
ANNUAL MEAN	520		384		440	
HIGHEST ANNUAL MEAN					595 2000	
LOWEST ANNUAL MEAN					272 1999	
HIGHEST DAILY MEAN	8890	Sep 2	4820	May 7	8890	Sep 2 2003
LOWEST DAILY MEAN	a60	Apr 1	b72	Mar 25	c10	Mar 8 1999
ANNUAL SEVEN-DAY MINIMUM	60	Apr 1	72	Mar 25	10	Mar 8 1999
MAXIMUM PEAK FLOW			7040	May 7	11300	Sep 2 2003
MAXIMUM PEAK STAGE			18.74	May 7	d17.97	Sep 2 2003
ANNUAL RUNOFF (AC-FT)	376600		278600		318800	
ANNUAL RUNOFF (CFSM)	0.768		0.567		0.650	
ANNUAL RUNOFF (INCHES)	10.43		7.72		8.83	
10 PERCENT EXCEEDS	1160		836		1030	
50 PERCENT EXCEEDS	240		235		180	
90 PERCENT EXCEEDS	64		76		40	

See Period of Record; partial years used in monthly statistics

a From Apr. 1 to 11

b From Mar. 25 to Apr. 9

c From Mar. 8 to 24, 1999

d Recorded at downstream gage site. (19.49 ft was recorded Aug. 14, 2000 at upstream gage site but corresponds to a lower peak flow)

15477768 SONORA CREEK ABOVE TRIBUTARY NEAR BIG DELTA

LOCATION.--Lat 64°23'22", long 144°46'40", in SW¹/₄ sec.16, T.6 S., R.15 E. (Big Delta B-2 quad), Hydrologic Unit 19040503, on right bank, 2.5 miles upstream from mouth, 6.3 miles southeast of Pogo Mine Camp site, and 35 miles northeast of Big Delta.

DRAINAGE AREA.--6.05 mi².

PERIOD OF RECORD.--May, 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1650 ft above sea level, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	e4.0	e2.4	e1.7	e1.6	e1.5	e1.4	e9.5	6.1	3.8	4.5	3.0
2	5.7	e4.0	e2.4	e1.7	e1.6	e1.5	e1.4	e12	6.6	3.7	4.4	3.0
3	5.7	e3.9	e2.4	e1.7	e1.6	e1.5	e1.4	e10	7.3	3.7	4.1	2.9
4	5.6	e3.9	e2.3	e1.7	e1.6	e1.5	e1.4	e8.8	6.0	3.7	3.9	2.9
5	5.5	e3.8	e2.3	e1.7	e1.6	e1.5	e1.4	12	4.9	8.4	3.7	2.9
6	5.5	e3.6	e2.3	e1.7	e1.6	e1.5	e1.4	15	4.5	7.8	3.6	2.9
7	5.4	e3.4	e2.2	e1.7	e1.5	e1.5	e1.5	37	4.3	5.8	3.5	2.9
8	5.3	e3.3	e2.2	e1.7	e1.5	e1.5	e1.5	14	5.0	4.6	3.5	2.9
9	5.3	e3.2	e2.2	e1.7	e1.5	e1.4	e1.5	13	12	4.3	3.4	2.8
10	5.2	e3.1	e2.2	e1.7	e1.5	e1.4	e1.5	9.6	9.3	4.1	3.4	2.7
11	5.0	e3.0	e2.1	e1.7	e1.5	e1.4	e1.5	11	6.3	4.0	3.3	2.7
12	5.2	e3.4	e2.1	e1.7	e1.5	e1.4	e1.5	16	5.3	3.8	3.3	2.7
13	4.5	e3.3	e2.1	e1.7	e1.5	e1.4	e1.6	9.7	4.9	3.6	3.3	2.7
14	4.7	e3.2	e2.1	e1.7	e1.5	e1.4	e1.6	7.3	4.6	3.6	3.1	2.7
15	4.7	e3.2	e2.1	e1.7	e1.5	e1.4	e1.6	6.4	4.4	3.5	3.1	2.7
16	4.3	e3.1	e2.0	e1.7	e1.5	e1.4	e1.6	5.5	4.3	3.5	3.1	2.7
17	4.2	e3.1	e2.0	e1.6	e1.5	e1.4	e1.6	4.7	4.2	3.4	3.1	2.6
18	4.1	e3.0	e2.0	e1.6	e1.5	e1.4	e1.7	4.2	4.1	3.3	3.0	2.6
19	e4.0	e2.9	e2.0	e1.6	e1.5	e1.4	e1.7	4.0	4.1	3.3	3.0	2.6
20	e4.1	e2.9	e2.0	e1.6	e1.5	e1.4	e1.7	3.8	4.0	3.4	3.1	2.7
21	e4.2	e2.8	e1.9	e1.6	e1.5	e1.4	e1.7	3.5	4.0	3.4	3.1	2.7
22	e4.3	e2.8	e1.9	e1.6	e1.5	e1.4	e1.8	3.5	3.9	3.5	3.1	2.7
23	e4.3	e2.7	e1.9	e1.6	e1.5	e1.4	e1.9	3.5	3.9	3.4	3.0	2.7
24	e4.4	e2.7	e1.9	e1.6	e1.5	e1.4	e2.2	3.7	3.8	3.4	3.0	2.5
25	e4.4	e2.6	e1.9	e1.6	e1.5	e1.4	e2.8	4.4	3.8	3.3	3.0	2.2
26	e4.3	e2.6	e1.9	e1.6	e1.5	e1.4	e3.4	5.5	3.8	3.3	3.0	2.7
27	e4.3	e2.6	e1.9	e1.6	e1.5	e1.4	e4.2	8.7	3.8	3.2	3.0	2.6
28	e4.3	e2.5	e1.8	e1.6	e1.5	e1.4	e4.9	5.8	3.8	3.3	3.2	2.4
29	e4.2	e2.5	e1.8	e1.6	e1.5	e1.4	e6.4	4.9	3.8	3.4	3.0	2.3
30	e4.2	e2.5	e1.8	e1.6	---	e1.4	e7.8	4.9	3.8	3.4	3.0	2.6
31	e4.1	---	e1.8	e1.6	---	e1.4	---	5.1	---	3.3	3.0	---
TOTAL	146.7	93.6	63.9	51.2	44.1	44.2	67.6	267.0	150.6	122.2	102.8	81.0
MEAN	4.73	3.12	2.06	1.65	1.52	1.43	2.25	8.61	5.02	3.94	3.32	2.70
MAX	5.7	4.0	2.4	1.7	1.6	1.5	7.8	37	12	8.4	4.5	3.0
MIN	4.0	2.5	1.8	1.6	1.5	1.4	1.4	3.5	3.8	3.2	3.0	2.2
MED	4.4	3.1	2.0	1.7	1.5	1.4	1.6	6.4	4.3	3.5	3.1	2.7
AC-FT	291	186	127	102	87	88	134	530	299	242	204	161
CFSM	0.78	0.52	0.34	0.27	0.25	0.24	0.37	1.42	0.83	0.65	0.55	0.45
IN.	0.90	0.58	0.39	0.31	0.27	0.27	0.42	1.64	0.93	0.75	0.63	0.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)#

	2000	2001	2002	2003	2004
MEAN	4.62	2.88	2.05	1.60	1.48
MAX	6.03	3.89	2.63	2.03	1.68
(WY)	2001	2001	2001	2001	2003
MIN	2.84	1.67	1.16	1.12	1.16
(WY)	2002	2002	2002	2002	2002

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 2000 - 2004#

ANNUAL TOTAL	1171.6	1234.9		
ANNUAL MEAN	3.21	3.37	3.40	
HIGHEST ANNUAL MEAN			3.64	2002
LOWEST ANNUAL MEAN			3.23	2003
HIGHEST DAILY MEAN		17 Apr 27	37 May 7	37 May 7 2004
LOWEST DAILY MEAN	a1.5	Feb 18	b1.4 Mar 9	0.94 Apr 20 2002
ANNUAL SEVEN-DAY MINIMUM	1.5	Feb 18	1.4 Mar 9	0.95 Apr 20 2002
MAXIMUM PEAK FLOW			c56 May 7	c56 May 7 2004
MAXIMUM PEAK STAGE			21.74 May 7	21.74 May 7 2004
INSTANTANEOUS LOW FLOW			d0.56	d0.56 Mar 21 2000
ANNUAL RUNOFF (AC-FT)	2320	2450	2460	
ANNUAL RUNOFF (CFSM)	0.531	0.558	0.561	
ANNUAL RUNOFF (INCHES)	7.20	7.59	7.62	
10 PERCENT EXCEEDS	5.7	5.5	6.2	
50 PERCENT EXCEEDS	2.4	2.9	2.6	
90 PERCENT EXCEEDS	1.5	1.5	1.3	

See Period of Record; partial years used in monthly statistics
a Feb. 18 through Apr. 9
b Mar. 9 through Apr. 6
c From rating curve extended above 15 ft³/s
d Minimum observed outside period of record, result of discharge measurement
e Estimated

15477770 SONORA CREEK NEAR BIG DELTA

LOCATION.--Lat 64°22'40", long 144°48'41", in SE¹/₄ sec.20, T.6 S., R.15 E. (Big Delta B-2 quad), Hydrologic Unit 19040503, on left bank, 1.2 mi upstream from mouth, 6.5 mi southeast of Pogo Mine Camp site, and 34 mi northeast of Big Delta.

DRAINAGE AREA.--10.5 mi².

PERIOD OF RECORD.--August 1997 to current year.

REVISED RECORDS.--WDR AK-00-1: 1998 (M). WDR AK-01-1: 2000.

GAGE.--Water-stage recorder. Elevation of gage is 1450 ft above sea level, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	e5.9	e4.1	e2.9	e2.5	e2.2	e2.0	e16	8.8	5.4	6.6	4.1
2	8.5	e5.8	e4.0	e2.9	e2.5	e2.2	e2.0	e20	9.5	5.2	6.4	4.0
3	8.9	e5.7	e4.0	e2.9	e2.5	e2.2	e2.0	e17	11	5.2	5.9	4.1
4	8.9	e5.7	e3.9	e2.8	e2.4	e2.2	e2.0	e13	9.0	5.2	5.5	4.1
5	8.6	e5.6	e3.8	e2.8	e2.4	e2.2	e2.0	18	7.6	12	5.3	4.1
6	8.5	e5.5	e3.8	e2.8	e2.4	e2.2	e2.0	23	6.6	12	5.1	4.0
7	8.5	e5.4	e3.7	e2.8	e2.4	e2.2	e2.1	e99	6.5	9.6	4.9	4.0
8	8.3	e5.3	e3.7	e2.8	e2.4	e2.2	e2.1	26	8.0	8.0	4.7	3.9
9	8.2	e5.2	e3.6	e2.8	e2.4	e2.2	e2.1	24	21	7.2	4.6	3.8
10	7.9	e5.2	e3.6	e2.8	e2.4	e2.2	e2.1	16	17	7.0	4.9	3.7
11	7.2	e5.1	e3.6	e2.8	e2.4	e2.1	e2.1	17	11	6.6	4.7	3.6
12	e6.1	e5.0	e3.5	e2.7	e2.4	e2.1	e2.1	31	8.7	6.1	4.5	3.6
13	6.2	e5.5	e3.5	e2.7	e2.4	e2.1	e2.2	15	7.8	5.8	4.3	3.6
14	6.1	e5.4	e3.4	e2.7	e2.3	e2.1	e2.2	10	7.3	5.7	4.2	3.8
15	e5.7	e5.3	e3.4	e2.7	e2.3	e2.1	e2.2	8.6	7.0	5.8	4.2	3.8
16	e5.6	e5.2	e3.3	e2.7	e2.3	e2.1	e2.2	7.2	6.7	5.5	4.2	3.6
17	e5.6	e5.2	e3.3	e2.7	e2.3	e2.1	e2.3	5.8	6.5	5.3	4.1	3.5
18	e5.5	e5.1	e3.3	e2.7	e2.3	e2.1	e2.3	5.2	6.2	5.2	4.0	3.5
19	e5.7	e5.0	e3.3	e2.7	e2.3	e2.1	e2.4	4.9	6.1	5.4	4.0	3.4
20	e5.9	e4.9	e3.2	e2.6	e2.3	e2.1	e2.5	4.6	6.0	5.4	4.1	3.5
21	e6.1	e4.8	e3.2	e2.6	e2.3	e2.1	e2.6	4.2	5.8	5.3	4.2	3.7
22	e6.2	e4.8	e3.2	e2.6	e2.3	e2.1	e2.9	4.1	5.8	5.8	4.1	3.6
23	e6.3	e4.7	e3.2	e2.6	e2.3	e2.1	e3.4	4.0	5.8	5.4	4.1	3.7
24	e6.4	e4.6	e3.1	e2.6	e2.3	e2.1	e3.9	4.3	5.5	5.2	4.0	3.5
25	e6.4	e4.5	e3.1	e2.6	e2.2	e2.1	e4.6	5.7	5.5	5.1	4.1	2.9
26	e6.4	e4.4	e3.1	e2.6	e2.2	e2.1	e5.5	8.1	5.5	5.1	4.1	3.8
27	e6.3	e4.4	e3.0	e2.5	e2.2	e2.1	e7.0	15	5.4	4.9	3.9	3.7
28	e6.3	e4.3	e3.0	e2.5	e2.2	e2.0	e8.3	9.3	5.5	4.8	4.4	3.3
29	e6.2	e4.2	e3.0	e2.5	e2.2	e2.0	e10	7.6	5.2	5.0	4.2	3.2
30	e6.1	e4.1	e2.9	e2.5	---	e2.0	e13	8.2	5.5	4.9	4.2	3.6
31	e6.1	---	e2.9	e2.5	---	e2.0	---	8.2	---	4.7	4.0	---
TOTAL	212.9	151.8	105.7	83.4	67.8	65.7	104.1	460.0	233.8	189.8	141.5	110.7
MEAN	6.87	5.06	3.41	2.69	2.34	2.12	3.47	14.8	7.79	6.12	4.56	3.69
MAX	8.9	5.9	4.1	2.9	2.5	2.2	13	99	21	12	6.6	4.1
MIN	5.5	4.1	2.9	2.5	2.2	2.0	2.0	4.0	5.2	4.7	3.9	2.9
AC-FT	422	301	210	165	134	130	206	912	464	376	281	220
CFSM	0.65	0.48	0.32	0.26	0.22	0.20	0.33	1.41	0.74	0.58	0.43	0.35
IN.	0.75	0.54	0.37	0.30	0.24	0.23	0.37	1.63	0.83	0.67	0.50	0.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)#

	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	4.77	2.91	1.97	1.41	1.25	1.14	2.71	10.3
MAX	8.88	5.06	3.41	2.69	2.34	2.12	7.40	16.4
(WY)	2001	2004	2004	2004	2004	2004	2003	2000
MIN	1.63	1.31	0.98	0.71	0.56	0.45	0.91	4.27
(WY)	2000	2000	1998	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1997 - 2004#

ANNUAL TOTAL	1879.5	1927.2		
ANNUAL MEAN	5.15	5.27	4.40	
HIGHEST ANNUAL MEAN			5.91	2000
LOWEST ANNUAL MEAN			2.07	1998
HIGHEST DAILY MEAN	47	Sep 1	e99	May 7 2004
LOWEST DAILY MEAN	a1.5	Feb 23	b2.0	Mar 28 1998
ANNUAL SEVEN-DAY MINIMUM	1.5	Feb 23	2.0	Mar 28 1998
MAXIMUM PEAK FLOW			c180	May 7 2004
MAXIMUM PEAK STAGE			30.46	May 7 2004
ANNUAL RUNOFF (AC-FT)	3730	3820	3180	
ANNUAL RUNOFF (CFSM)	0.490	0.501	0.419	
ANNUAL RUNOFF (INCHES)	6.66	6.83	5.69	
10 PERCENT EXCEEDS	9.8	8.4	9.0	
50 PERCENT EXCEEDS	3.8	4.1	2.7	
90 PERCENT EXCEEDS	1.5	2.2	0.70	

See Period of Record; partial years used in monthly statistics
a From Feb. 23 to Apr. 3
b From Mar. 28 to Apr. 6
c From rating curve extended above 30 ft³/s
e Estimated

15477790 CENTRAL CREEK NEAR BIG DELTA

LOCATION.--Lat 64°22'37", long 144°56'35", in SE¹/₄ sec. 22, T. 6 S., R. 14 E. (Big Delta B-2 quad), Hydrologic Unit 19040503, on right bank, 0.5 mi upstream from mouth, 5 mi south of Pogo Mine Camp site, and 31 mi northeast of Big Delta.

DRAINAGE AREA.--115 mi².

PERIOD OF RECORD.--August 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1250 ft above sea level, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	e28	e14	e10	e9.0	e8.0	e8.0	280	215	27	38	31
2	81	e29	e14	e10	e8.0	e8.0	e8.0	331	199	25	82	29
3	82	e29	e14	e10	e8.0	e8.0	e8.0	208	246	25	65	29
4	82	e29	e14	e10	e8.0	e8.0	e8.0	230	194	24	53	29
5	79	e28	e13	e10	e8.0	e8.0	e9.0	363	125	40	46	29
6	78	e28	e13	e9.0	e8.0	e8.0	e9.0	593	93	55	41	28
7	77	e27	e13	e9.0	e8.0	e8.0	e9.0	2050	83	63	38	28
8	74	e26	e13	e9.0	e8.0	e8.0	e9.0	1270	296	51	35	28
9	71	e24	e13	e9.0	e8.0	e8.0	e9.0	737	767	44	33	27
10	70	e22	e12	e9.0	e8.0	e8.0	e9.0	444	639	39	32	27
11	57	e20	e12	e9.0	e8.0	e8.0	e9.0	449	259	37	32	26
12	61	e19	e12	e9.0	e8.0	e8.0	9.4	1260	149	33	31	25
13	42	e23	e12	e9.0	e8.0	e8.0	9.5	688	102	30	30	25
14	34	e22	e12	e9.0	e8.0	e8.0	10	408	81	28	29	28
15	e34	e22	e12	e9.0	e8.0	e8.0	10	339	74	27	28	28
16	e31	e21	e12	e9.0	e8.0	e8.0	11	278	63	27	28	26
17	e28	e20	e11	e9.0	e8.0	e8.0	11	206	56	26	28	24
18	e24	e19	e11	e9.0	e8.0	e8.0	12	151	50	25	27	23
19	e26	e19	e11	e9.0	e8.0	e8.0	15	118	46	24	26	22
20	e28	e18	e11	e9.0	e8.0	e8.0	18	92	41	29	26	24
21	e29	e18	e11	e9.0	e8.0	e8.0	20	73	38	30	35	25
22	e30	e17	e11	e9.0	e8.0	e8.0	23	63	34	30	36	24
23	e29	e17	e11	e9.0	e8.0	e8.0	25	66	32	33	35	25
24	e29	e16	e10	e9.0	&15	e8.0	27	73	31	31	34	25
25	e29	e16	e10	e9.0	e8.0	e8.0	35	100	29	30	33	21
26	e28	e15	e10	e9.0	e8.0	e8.0	47	243	29	31	32	23
27	e28	e15	e10	e9.0	e8.0	e8.0	62	515	29	29	31	27
28	e27	e15	e10	e9.0	e8.0	e8.0	67	348	29	28	32	23
29	e27	e15	e10	e9.0	e8.0	e8.0	76	314	28	29	33	23
30	e27	e14	e10	e9.0	---	e8.0	134	255	28	29	33	23
31	e28	---	e10	e9.0	---	e8.0	---	179	---	29	32	---
TOTAL	1449	631	362	284.0	240.0	248.0	716.9	12724	4085	1008	1114	775
MEAN	46.7	21.0	11.7	9.16	8.28	8.00	23.9	410	136	32.5	35.9	25.8
MAX	82	29	14	10	15	8.0	134	2050	767	63	82	31
MIN	24	14	10	9.0	8.0	8.0	8.0	63	28	24	26	21
AC-FT	2870	1250	718	563	476	492	1420	25240	8100	2000	2210	1540
CFSM	0.41	0.18	0.10	0.08	0.07	0.07	0.21	3.57	1.18	0.28	0.31	0.22
IN.	0.47	0.20	0.12	0.09	0.08	0.08	0.23	4.12	1.32	0.33	0.36	0.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)#

	34.5	15.0	7.44	4.26	3.30	2.88	19.5	189	95.4	77.9	111	91.6
MEAN	34.5	15.0	7.44	4.26	3.30	2.88	19.5	189	95.4	77.9	111	91.6
MAX	60.3	30.9	17.4	11.3	8.74	8.00	68.4	410	170	128	237	228
(WY)	2003	2001	2003	2001	2001	2004	2003	2004	2000	2001	2000	2003
MIN	13.8	4.71	0.75	0.03	0.00	0.00	3.83	81.6	26.3	32.5	35.9	25.8
(WY)	2000	1999	1999	1999	1999	1999	2002	1998	1998	2004	2004	2004

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1997 - 2004#

ANNUAL TOTAL	21463.0	23636.9										
ANNUAL MEAN	58.8	64.6								55.3		
HIGHEST ANNUAL MEAN										75.7		2002
LOWEST ANNUAL MEAN										26.8		1998
HIGHEST DAILY MEAN	997	Sep 1				2050	May 7		2050	May 7		2004
LOWEST DAILY MEAN	a4.0	Mar 15				b8.0	Feb 2		c0.00	Jan 8		1999
ANNUAL SEVEN-DAY MINIMUM	4.0	Mar 15				8.0	Feb 2		0.00	Jan 8		1999
MAXIMUM PEAK FLOW						d2800	May 7		d2800	May 7		2004
MAXIMUM PEAK STAGE						46.42	May 7		46.42	May 7		2004
ANNUAL RUNOFF (AC-FT)	42570					46880			40060			
ANNUAL RUNOFF (CFSM)		0.511				0.562			0.481			
ANNUAL RUNOFF (INCHES)		6.94				7.65			6.53			
10 PERCENT EXCEEDS		126				107			129			
50 PERCENT EXCEEDS		26				25			22			
90 PERCENT EXCEEDS		4.2				8.0			0.30			

See Period of Record; partial years used in monthly statistics
a From Mar. 15 to Apr. 11
b From Feb. 2 to Apr. 4
c From Jan. 8 to Apr.17, 1999 and Feb. 18 to Apr. 17, 2000
d From rating curve extended above 430 ft³/s
e Estimated

1547804 PHELAN CREEK NEAR PAXSON

LOCATION.--Lat 63°14'27", Long 145°28'03", in SW¹/₄ sec. 28, T. 19 S., R. 12 E. (Mt.Hayes A-3 quad), Hydrologic Unit 19020102, on left bank about 1 mi downstream from terminus of Gulkana Glacier and 14.5 mi north of Paxson, Alaska.

DRAINAGE AREA.--12.2 mi².

PERIOD OF RECORD.--October 1966 to September 1978, annual maximums, water years 1984-85, October 1989 to current year. Water year 1994 not published, daily mean values of discharge are available from the computer files of the Alaska Science Center. Prior to October 1968, published as Gulkana Creek near Paxson.

GAGE.--Water-stage recorder. Datum of gage is 3,690.67 ft above sea level.

REMARKS.--Records are poor. Streamflow augmented by Gulkana Glacier and other glaciers that cover 7.5 mi² and 1.1 mi², respectively, of the drainage basin. A recording air temperature and precipitation gage at 4,860 ft above sea level, plus 3 snow and ice balance measurement sites, are located in the basin. Combined snow, ice, and water balances of the basin are published in other reports of the Geological Survey. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	e10	e6.0	e5.0	e5.0	e5.0	e4.0	e4.0	110	438	571	162
2	111	e9.0	e6.0	e5.0	e5.0	e5.0	e4.0	e4.0	88	500	617	280
3	98	e9.0	e6.0	e5.0	e5.0	e5.0	e4.0	e5.0	57	512	628	166
4	80	e9.0	e6.0	e5.0	e5.0	e5.0	e4.0	e5.0	73	442	627	74
5	63	e9.0	e6.0	e5.0	e5.0	e5.0	e4.0	e5.0	146	442	688	56
6	62	e9.0	e6.0	e5.0	e5.0	e5.0	e4.0	e6.0	313	545	640	49
7	50	e9.0	e6.0	e5.0	e5.0	e5.0	e4.0	e6.0	385	484	725	52
8	47	e8.0	e6.0	e5.0	e5.0	e5.0	e4.0	e7.0	371	553	719	56
9	42	e8.0	e6.0	e5.0	e5.0	e5.0	e4.0	e7.0	392	413	714	55
10	39	e8.0	e6.0	e5.0	e5.0	e5.0	e4.0	e8.0	453	454	583	48
11	37	e8.0	e6.0	e5.0	e5.0	e5.0	e4.0	e9.0	398	457	554	41
12	35	e8.0	e6.0	e5.0	e5.0	e5.0	e4.0	e10	365	545	367	40
13	e33	e8.0	e6.0	e5.0	e5.0	e5.0	e4.0	e12	372	587	345	33
14	e31	e8.0	e6.0	e5.0	e5.0	e5.0	e4.0	e14	393	495	441	29
15	e28	e8.0	e6.0	e5.0	e5.0	e5.0	e4.0	e16	375	440	590	26
16	e25	e8.0	e6.0	e5.0	e5.0	e5.0	e4.0	e18	306	493	482	25
17	e25	e7.0	e6.0	e5.0	e5.0	e5.0	e4.0	e20	327	583	528	28
18	e20	e7.0	e5.0	e5.0	e5.0	e5.0	e4.0	e25	379	689	576	24
19	e18	e7.0	e5.0	e5.0	e5.0	e5.0	e4.0	e30	472	684	567	27
20	e20	e7.0	e5.0	e5.0	e5.0	e5.0	e4.0	e38	532	652	502	26
21	e18	e7.0	e5.0	e5.0	e5.0	e5.0	e4.0	e55	507	623	565	26
22	e14	e6.0	e5.0	e5.0	e5.0	e5.0	e4.0	e77	544	567	451	25
23	e10	e6.0	e5.0	e5.0	e5.0	e4.0	e4.0	e102	497	469	449	24
24	e10	e6.0	e5.0	e5.0	e5.0	e4.0	e4.0	131	676	502	538	17
25	e10	e6.0	e5.0	e5.0	e5.0	e4.0	e4.0	110	607	511	413	17
26	e10	e6.0	e5.0	e5.0	e5.0	e4.0	e4.0	82	717	451	430	18
27	e10	e6.0	e5.0	e5.0	e5.0	e4.0	e4.0	94	611	630	551	21
28	e10	e6.0	e5.0	e5.0	e5.0	e4.0	e4.0	102	691	622	356	15
29	e10	e6.0	e5.0	e5.0	e5.0	e4.0	e4.0	89	711	662	287	15
30	e10	e6.0	e5.0	e5.0	---	e4.0	e4.0	89	548	611	270	14
31	e10	---	e5.0	e5.0	---	e4.0	---	109	---	572	214	---
TOTAL	1134	225.0	172.0	155.0	145.0	146.0	120.0	1289.0	12416	16628	15988	1489
MEAN	36.6	7.50	5.55	5.00	5.00	4.71	4.00	41.6	414	536	516	49.6
MAX	148	10	6.0	5.0	5.0	5.0	4.0	131	717	689	725	280
MIN	10	6.0	5.0	5.0	5.0	4.0	4.0	4.0	57	413	214	14
AC-FT	2250	446	341	307	288	290	238	2560	24630	32980	31710	2950
CFSM	3.00	0.61	0.45	0.41	0.41	0.39	0.33	3.41	33.9	44.0	42.3	4.07
IN.	3.46	0.69	0.52	0.47	0.44	0.45	0.37	3.93	37.86	50.70	48.75	4.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2004, BY WATER YEAR (WY)#

MEAN	12.5	6.15	4.31	3.33	2.80	2.47	2.34	17.7	152	316	259	61.6
MAX	36.6	15.1	8.67	5.32	5.00	4.71	4.00	48.2	414	536	516	129
(WY)	2004	2003	2003	1996	2004	2004	1971	1995	2004	2004	2004	1995
MIN	5.55	2.50	2.00	1.48	1.00	1.00	1.00	2.39	72.9	181	73.6	14.3
(WY)	1999	1978	1978	1967	1967	1967	1967	1992	1975	1991	1992	1992

15478040 PHELAN CREEK NEAR PAXSON—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1967 - 2004#	
ANNUAL TOTAL	25672.2		49907.0			
ANNUAL MEAN	70.3		136		70.7	
HIGHEST ANNUAL MEAN					136 2004	
LOWEST ANNUAL MEAN					43.0 1973	
HIGHEST DAILY MEAN	756	Aug 12	725	Aug 7	1330	Aug 13 1997
LOWEST DAILY MEAN	a2.3	Apr 11	b4.0	Mar 23	c1.0	Jan 16 1967
ANNUAL SEVEN-DAY MINIMUM	2.3	Apr 11	4.0	Mar 23	1.0	Jan 16 1967
MAXIMUM PEAK FLOW			1150	Jun 26	2320	Aug 13 1967
MAXIMUM PEAK STAGE			9.54	Jun 26	11.51	Aug 13 1967
MAXIMUM PEAK STAGE					df14.70	Jun 1 1967
ANNUAL RUNOFF (AC-FT)	50920		98990		51200	
ANNUAL RUNOFF (CFSM)	5.77		11.2		5.79	
ANNUAL RUNOFF (INCHES)	78.28		152.18		78.70	
10 PERCENT EXCEEDS	240		546		257	
50 PERCENT EXCEEDS	6.0		8.0		6.0	
90 PERCENT EXCEEDS	2.4		4.0		2.0	

See Period of Record

a From Apr. 11 to May 15

b From Mar. 23 to May 2

c For many days in the winter and spring during water years 1967, 1969, 1978, and 1991

d Backwater from snow and ice

e Estimated

f Occurred in early Jun. as a result of flow over ice

15484000 SALCHA RIVER NEAR SALCHAKET

LOCATION.--Lat 64°28'22", long 146°55'26", in NE¹/₄ sec. 22, T. 5 S., R. 4 E. (Big Delta B-6 quad), Fairbanks North Star Borough, Hydrologic Unit 19040505, on right bank 0.2 mi upstream from bridge on Richardson Highway, 0.5 mi east of Sno-Shu Inn, 2 mi upstream from mouth, and 6 mi southeast of Salchaket.

DRAINAGE AREA.--2,170 mi², approximately.

PERIOD OF RECORD.--July 1909 to August 1910, published as "at mouth" (no winter records), October 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 631.85 ft above sea level. Prior to August 10, 1910, nonrecording gage at site 1.5 mi downstream at different datum. October 1, 1948, to April 24, 1953, nonrecording gage, and April 25, 1953 to October 16, 1967, water-stage recorder at site 800 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
May 8	1600	*17,300	*13.78

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2240	e1350	e780	e530	e340	e320	e300	2390	4160	1090	1570	1060
2	2230	e1400	e780	e520	e330	e320	e300	3510	3900	1080	1820	1060
3	2210	e1450	e760	e510	e330	e320	e300	4080	3880	1070	2380	1060
4	2190	e1400	e740	e500	e330	e320	e300	3270	6070	1050	2220	1100
5	2170	e1350	e730	e500	e330	e320	e300	3140	4720	1110	1990	1090
6	2110	e1280	e710	e490	e330	e320	e300	3520	3510	2040	1810	1070
7	2070	e1150	e700	e480	e320	e320	e300	6220	2900	2150	1670	1050
8	2020	e1000	e680	e470	e320	e320	e310	15300	2560	1790	1570	1030
9	1970	e900	e670	e460	e320	e315	e320	8530	2470	1530	1480	1020
10	1920	e800	e660	e460	e320	e315	e330	6120	4130	1400	1420	1010
11	1870	e700	e650	e450	e320	e315	e350	4630	4450	1330	1370	1000
12	1740	e580	e640	e440	e320	e315	e360	4750	3390	1260	1350	995
13	1680	e480	e630	e430	e320	e315	e380	9200	2730	1190	1320	991
14	1530	e450	e620	e420	e320	e315	e400	7260	2320	1120	1290	e990
15	e1350	e430	e620	e410	e320	e315	e430	5920	2130	1090	1260	e980
16	e1250	e420	e610	e400	e320	e315	e460	5690	2090	1080	1230	e970
17	e1150	e440	e610	e390	e320	e315	e490	5360	2010	1110	1220	e960
18	e1050	e460	e600	e380	e320	e315	e520	4950	1850	1140	1200	e950
19	e1000	e490	e600	e370	e320	e320	e570	3990	1690	1200	1180	e940
20	e950	e540	e600	e370	e320	e310	e630	3470	1570	1200	1170	e940
21	e1000	e580	e600	e360	e320	e310	e700	2710	1470	1200	1160	e970
22	e1050	e620	e590	e360	e320	e310	e770	2220	1390	1190	1140	e1000
23	e1100	e680	e590	e360	e320	e310	e860	2090	1330	1250	1130	1030
24	e1200	e720	e590	e350	e320	e310	e960	2350	1320	1760	1130	1030
25	e1300	e750	e590	e350	e320	e310	e1100	3280	1290	1890	1120	990
26	e1400	e780	e580	e350	e320	e310	e1300	5820	1240	1790	1110	937
27	e1500	e780	e580	e350	e320	e300	e1500	5690	e1200	1850	1110	958
28	e1450	e800	e570	e340	e320	e300	e1700	4470	1160	1720	1100	977
29	e1400	e800	e560	e340	e320	e300	1910	3890	1130	1590	1090	939
30	e1350	e800	e550	e340	---	e300	1860	4230	1110	1530	1080	917
31	e1300	---	e540	e340	---	e300	---	4860	---	1520	1060	---
TOTAL	48750	24380	19730	12820	9350	9700	20310	152910	75170	43320	42750	30014
MEAN	1573	813	636	414	322	313	677	4933	2506	1397	1379	1000
MAX	2240	1450	780	530	340	320	1910	15300	6070	2150	2380	1100
MIN	950	420	540	340	320	300	300	2090	1110	1050	1060	917
AC-FT	96700	48360	39130	25430	18550	19240	40280	303300	149100	85930	84790	59530
CFSM	0.72	0.37	0.29	0.19	0.15	0.14	0.31	2.27	1.15	0.64	0.64	0.46
IN.	0.84	0.42	0.34	0.22	0.16	0.17	0.35	2.62	1.29	0.74	0.73	0.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2004, BY WATER YEAR (WY) #

MEAN	1100	514	363	264	214	193	413	4249	3740	2653	3057	2487
MAX	1969	1028	730	471	449	377	1373	8666	8640	7330	13350	6186
(WY)	1994	1994	1994	1992	1994	1992	1993	1962	1964	1949	1967	1952
MIN	484	230	160	130	62.0	60.0	104	1564	963	568	717	636
(WY)	1959	1954	1954	1954	1953	1953	1974	1964	1969	1958	1966	1966

See Period of Record
e Estimated

15484000 SALCHA RIVER NEAR SALCHAKET—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1949 - 2004#	
ANNUAL TOTAL	675587		489204			
ANNUAL MEAN	1851		1337		1612	
HIGHEST ANNUAL MEAN					2957 1967	
LOWEST ANNUAL MEAN					796 1999	
HIGHEST DAILY MEAN	19700	Sep 3	15300	May 8	94100	Aug 14 1967
LOWEST DAILY MEAN	a280	Mar 29	b300	Mar 27	c60	Mar 1 1953
ANNUAL SEVEN-DAY MINIMUM	280	Mar 29	300	Mar 27	60	Mar 1 1953
MAXIMUM PEAK FLOW			17300	May 8	97000	Aug 14 1967
MAXIMUM PEAK STAGE			13.78	May 8	21.78	Aug 14 1967
ANNUAL RUNOFF (AC-FT)	1340000		970300		1168000	
ANNUAL RUNOFF (CFSM)	0.853		0.616		0.743	
ANNUAL RUNOFF (INCHES)	11.58		8.39		10.10	
10 PERCENT EXCEEDS	4450		2780		3940	
50 PERCENT EXCEEDS	1070		990		660	
90 PERCENT EXCEEDS	310		320		170	

See Period of Record

a From Mar. 29 to Apr. 9

b From Mar. 27 to Apr. 6

c Monthly mean published for Mar. 1953

15485500 TANANA RIVER AT FAIRBANKS

LOCATION.--Lat 64°47'34", long 147°50'20", in NE¹/₄ SW¹/₄ SW¹/₄ sec. 25, T. 1 S., R. 2 W. (Fairbanks D-2 quad), Fairbanks North Star Borough, Hydrologic Unit 19040507, on right bank at the end of Groin No. 1 on Corps of Engineers flood-protection levee, 1.0 mi south of Fairbanks International Airport, and 1.0 mi upstream from Chena River.

DRAINAGE AREA.--Undefined. Part of river flows through Salchaket Slough and is ungaged.

PERIOD OF RECORD.--June 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400 ft above sea level. Prior to September 14, 1973, nonrecording gage, and September 14, 1973 to June 14, 1985, water-stage recorder, at site 2.8 mi upstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 16, 1967 reached a stage of 34.4 ft, from floodmarks at site then in use; discharge, about 125,000 ft³/s, contained in reports of the Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21700	e13500	e9600	e7800	e6600	e6200	e6100	17800	36100	67000	50200	31300
2	26100	e13000	e9400	e7800	e6600	e6200	e6100	19000	36600	61200	50900	30200
3	28700	e12500	e9200	e7800	e6600	e6200	e6100	20500	37600	59700	49800	28700
4	28500	e12500	e8800	e7600	e6600	e6200	e6100	21000	41900	59700	48600	27300
5	27900	e12500	e8600	e7600	e6400	e6200	e6100	21200	37600	60100	48800	25500
6	25700	e12000	e8600	e7400	e6400	e6200	e6100	22300	33900	62900	49600	23900
7	24100	e12000	e8400	e7400	e6400	e6200	e6100	25300	32800	60500	50500	22900
8	23800	e11500	e8400	e7200	e6400	e6200	e6100	36400	34300	57400	51100	22000
9	23400	e11000	e8200	e7200	e6400	e6200	e6100	48800	35900	57200	51200	20900
10	22700	e10000	e8200	e7200	e6400	e6200	e6100	40400	39400	56300	52400	19900
11	22000	e9500	e8200	e7000	e6400	e6200	e6200	35000	42800	54600	53000	19200
12	20900	e8500	e8200	e7000	e6400	e6200	e6300	32800	43100	53900	52400	18600
13	19900	e7600	e8000	e6900	e6400	e6200	e6500	35700	41200	54600	53000	18000
14	19300	e7200	e8000	e6900	e6300	e6200	e6700	38900	38200	57000	53000	18000
15	18700	e6800	e8000	e6900	e6300	e6200	e6900	35900	37900	58800	53000	17800
16	17800	e6800	e8000	e6900	e6300	e6100	e7100	34100	39300	59000	53600	17400
17	17300	e7000	e8000	e6900	e6300	e6100	e7400	34300	39800	58400	54600	16900
18	16800	e7400	e8000	e6900	e6300	e6100	e7900	34300	39700	60000	57200	16500
19	16000	e7600	e8000	e6900	e6200	e6100	e8500	32300	40100	60100	58400	16200
20	14600	e8000	e8000	e6900	e6200	e6100	e9000	30500	41500	59200	57600	15900
21	e14000	e8400	e8000	e6900	e6200	e6100	e9600	29100	44900	59700	57800	15400
22	e14000	e8600	e8000	e6700	e6200	e6100	e10500	28100	49200	60000	57700	15300
23	e14000	e9000	e8000	e6700	e6200	e6100	e11000	27400	52300	60200	57800	15300
24	e14500	e9200	e8000	e6700	e6200	e6100	e12000	28100	54000	57800	57100	15200
25	e15000	e9400	e8000	e6700	e6200	e6100	e12500	29500	56100	55300	53900	15000
26	e15500	e9600	e8000	e6700	e6200	e6100	e13500	32300	59200	55100	47900	14800
27	e15500	e9800	e8000	e6700	e6200	e6100	e14500	35800	62200	56100	41900	14800
28	e15000	e9800	e8000	e6600	e6200	e6100	e15500	36800	63500	56500	40800	14800
29	e14500	e9800	e8000	e6600	e6200	e6100	e16500	35900	65000	55400	39700	14600
30	e14000	e9800	e8000	e6600	---	e6100	17200	36200	67300	51900	36300	14300
31	e14000	---	e8000	e6600	---	e6100	---	36900	---	50000	33100	---
TOTAL	595900	290300	255800	217700	183700	190600	266300	972600	1343400	1795600	1572900	576600
MEAN	19220	9677	8252	7023	6334	6148	8877	31370	44780	57920	50740	19220
MAX	28700	13500	9600	7800	6600	6200	17200	48800	67300	67000	58400	31300
MIN	14000	6800	8000	6600	6200	6100	6100	17800	32800	50000	33100	14300
AC-FT	1182000	575800	507400	431800	364400	378100	528200	1929000	2665000	3562000	3120000	1144000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2004, BY WATER YEAR (WY)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004				
MEAN	13960	7925	6276	5669	5473	5414	7497	22780	36320	52970	48920	27180																								
MAX	20840	12520	8252	7135	6700	6761	12700	36290	51350	66090	70080	44880																								
(WY)	2003	2003	2004	1986	1991	1993	1995	1991	1992	1992	1997	1990																								
MIN	8669	5000	4500	4016	3207	3100	4230	14810	25120	39550	34680	16950																								
(WY)	1997	1977	1977	1974	1974	1974	1974	1998	1978	1996	1996	1976																								

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1973 - 2004	
	MEAN	MAX	MEAN	MAX	MEAN	MAX
ANNUAL TOTAL		7204100		8261400		
ANNUAL MEAN		19740		22570		20210
HIGHEST ANNUAL MEAN						22970
LOWEST ANNUAL MEAN						16080
HIGHEST DAILY MEAN		80500	Jul 18	67300	Jun 30	92400
LOWEST DAILY MEAN		a6000	Jan 1	b6100	Mar 16	c3100
ANNUAL SEVEN-DAY MINIMUM		6000	Jan 1	6100	Mar 16	3100
MAXIMUM PEAK FLOW				68400	Jul 1	96400
MAXIMUM PEAK STAGE				23.89	Jul 1	26.25
ANNUAL RUNOFF (AC-FT)		14290000		16390000		14640000
10 PERCENT EXCEEDS		42100		55600		50400
50 PERCENT EXCEEDS		14500		14200		10000
90 PERCENT EXCEEDS		6100		6200		5200

- # See Period of Record, partial years used in monthly statistics
a From Jan. 1 to Feb. 4
b From Mar. 16 to Apr. 10
c From Feb. 14 to Mar. 31, 1974
e Estimated

15493000 CHENA RIVER NEAR TWO RIVERS

LOCATION.--Lat 64°54'10", long 146°21'25", in NE¹/₄ sec. 20, T. 1 N., R. 7 E. (Big Delta D-5 quad), Fairbanks North Star Borough, Hydrologic Unit 19040506, on left bank about 200 ft upstream from bridge at mi 39.5 on the Chena Hot Springs Highway, 15 mi upstream from South Fork Chena River, 22 mi east of Two Rivers, and 41 mi east of Fairbanks.

DRAINAGE AREA.--937 mi².

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 719.7 ft above sea level from datum used by Alaska Department of Transportation and Public Facilities. Prior to April 25, 1994, water stage recorder at site 2.5 mi downstream at datum of 700 ft.

REMARKS.--Records good except for estimated daily discharges, which are poor. Corps of Engineers meteor-burst and GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 13, 1967 reached a stage of 26.6 ft at site and datum of gage in use prior to April 25, 1994, from floodmarks, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1230	e450	e390	e270	e180	e160	e140	2020	1890	377	e670	423
2	1190	e480	e380	e260	e180	e160	e140	2120	1750	373	e1400	463
3	1170	e510	e370	e260	e180	e160	e140	1660	3060	370	1160	542
4	1150	e530	e360	e260	e180	e160	e140	1470	2460	366	966	541
5	1130	e530	e350	e250	e180	e160	e140	1590	1680	369	835	513
6	1090	e520	e340	e250	e170	e160	e150	1910	1310	505	748	493
7	1060	e510	e340	e250	e170	e160	e150	4310	1080	538	691	474
8	1020	e490	e330	e240	e170	e160	e160	4350	957	462	649	460
9	997	e480	e330	e240	e170	e160	e170	2320	898	452	614	449
10	984	e460	e330	e240	e170	e150	e180	1830	921	432	586	437
11	923	e420	e320	e240	e170	e150	e190	1700	847	412	568	426
12	879	e350	e320	e230	e170	e150	e210	2230	775	388	554	417
13	879	e290	e320	e230	e170	e150	e230	2700	710	368	543	411
14	765	e260	e310	e230	e170	e150	e260	2240	668	354	530	407
15	776	e240	e310	e230	e170	e150	e290	2110	667	366	519	401
16	742	e230	e310	e220	e170	e150	e330	2010	641	373	511	394
17	632	e230	e300	e220	e170	e150	e360	1800	610	366	502	388
18	&541	e240	e300	e210	e170	e150	e400	1510	571	362	494	379
19	e500	e250	e300	e210	e170	e150	e460	1410	536	375	493	371
20	e470	e270	e290	e200	e170	e150	e530	1180	508	381	484	368
21	e440	e290	e290	e200	e170	e150	e600	933	485	395	478	392
22	e420	e310	e290	e200	e170	e150	e680	815	466	472	474	404
23	e420	e330	e290	e200	e170	e150	e770	845	455	495	470	399
24	e430	e350	e290	e190	e170	e140	e850	1020	439	586	462	406
25	e450	e370	e280	e190	e170	e140	e920	1680	423	587	458	392
26	e480	e380	e280	e190	e170	e140	e1000	1810	410	691	452	382
27	e530	e390	e280	e190	e160	e140	e1050	1430	400	651	447	393
28	e540	e400	e280	e190	e160	e140	1120	1400	391	571	442	398
29	e520	e400	e270	e190	e160	e140	1210	1640	389	536	435	381
30	e480	e390	e270	e190	---	e140	1430	2000	384	541	430	375
31	e450	---	e270	e190	---	e140	---	2010	---	604	425	---
TOTAL	23288	11350	9690	6860	4950	4660	14400	58053	26781	14118	18490	12679
MEAN	751	378	313	221	171	150	480	1873	893	455	596	423
MAX	1230	530	390	270	180	160	1430	4350	3060	691	1400	542
MIN	420	230	270	190	160	140	140	815	384	354	425	368
AC-FT	46190	22510	19220	13610	9820	9240	28560	115100	53120	28000	36670	25150
CFSM	0.80	0.40	0.33	0.24	0.18	0.16	0.51	2.00	0.95	0.49	0.64	0.45
IN.	0.92	0.45	0.38	0.27	0.20	0.19	0.57	2.30	1.06	0.56	0.73	0.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2004, BY WATER YEAR (WY)#

MEAN	580	279	191	136	110	96.8	248	1857	1329	1063	1316	1168
MAX	1656	617	369	242	246	171	912	4210	4038	2505	3207	2739
(WY)	1987	1987	1994	1994	1994	1991	2003	1971	1992	1984	1969	2003
MIN	260	120	85.5	38.1	20.2	21.9	68.3	625	323	380	437	423
(WY)	1969	1969	1977	1970	1970	1970	1982	1998	1969	1976	1976	2004

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1968 - 2004#	
ANNUAL TOTAL	359763	205319		
ANNUAL MEAN	986	561	702	
HIGHEST ANNUAL MEAN			1080	1971
LOWEST ANNUAL MEAN			398	1997
HIGHEST DAILY MEAN	14200	Jul 28	4350	May 8
LOWEST DAILY MEAN	a130	Apr 7	b140	Mar 24
ANNUAL SEVEN-DAY MINIMUM	133	Apr 5	140	Mar 24
MAXIMUM PEAK FLOW			6640	May 8
MAXIMUM PEAK STAGE			19.37	May 8
				d22.04
				f23.56
				Jul 28 2003
ANNUAL RUNOFF (AC-FT)	713600	407300	508300	
ANNUAL RUNOFF (CFSM)	1.05	0.599		0.749
ANNUAL RUNOFF (INCHES)	14.28	8.15		10.17
10 PERCENT EXCEEDS	2540	1200	1640	
50 PERCENT EXCEEDS	420	394	340	
90 PERCENT EXCEEDS	150	160	86	

See Period of Record and Remarks

a From Apr. 7 to Apr. 11

b From Mar. 24 to Apr. 5

c From Feb. 6 to Mar. 12, 1970

d At site and datum then in use

e Estimated

f At present gage site and datum, corresponds to a discharge of 16000 ft³/s

15511000 LITTLE CHENA RIVER NEAR FAIRBANKS

LOCATION.--Lat 64°53'10", long 147°14'50", in SW¹/₄ NE¹/₄ sec. 25, T. 1 N., R. 2 E. (Fairbanks D-1 quad), Fairbanks North Star Borough, Hydrologic Unit 19040506, on downstream side of left bridge abutment at mi 11.9 Chena Hot Springs Highway, 22.5 mi upstream from mouth, and 14 mi northeast of Fairbanks.

DRAINAGE AREA.--372 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 458.79 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. Corps of Engineers Meteor-burst and NOAA telephone telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	427	e250	e150	e105	e74	e68	e60	624	506	154	271	116
2	416	e230	e150	e105	e74	e68	e60	681	465	153	450	132
3	406	e210	e150	e100	e74	e68	e60	601	459	151	408	156
4	399	e200	e145	e98	e74	e68	e60	505	433	150	316	149
5	388	e190	e145	e96	e72	e68	e60	479	385	146	259	141
6	379	e180	e140	e94	e72	e68	e60	489	343	147	224	136
7	369	e170	e140	e92	e72	e68	e60	742	312	145	197	132
8	357	e160	e140	e90	e72	e68	e60	1120	294	140	181	128
9	346	e150	e135	e88	e72	e68	e60	752	298	138	169	125
10	341	e140	e135	e86	e72	e68	e60	593	289	138	161	122
11	332	e130	e130	e84	e72	e68	e62	506	277	136	157	121
12	320	e120	e130	e82	e72	e66	e64	487	267	132	154	119
13	310	e110	e130	e82	e72	e66	e66	498	264	128	150	117
14	288	e100	e130	e80	e72	e66	e68	456	263	126	144	117
15	e260	e100	e130	e80	e70	e66	e72	421	275	125	139	115
16	e230	e100	e130	e78	e70	e66	e74	404	282	127	136	112
17	e200	e110	e130	e78	e70	e66	e76	378	258	126	134	110
18	e180	e130	e130	e76	e70	e66	e80	352	238	123	133	108
19	e155	e150	e125	e76	e70	e66	e84	401	223	122	131	107
20	e145	e170	e125	e76	e70	e66	e90	426	210	123	129	109
21	e180	e180	e125	e76	e70	e66	e110	361	200	126	128	114
22	e210	e190	e125	e76	e70	e66	e130	e320	192	123	129	123
23	e230	e190	e125	e74	e70	e64	e150	e300	185	128	128	120
24	e245	e190	e120	e74	e70	e64	e180	e410	178	148	128	124
25	e250	e180	e120	e74	e70	e64	e210	629	172	149	125	121
26	e230	e180	e115	e74	e70	e62	e260	967	167	145	123	118
27	e200	e170	e115	e74	e70	e62	e350	751	163	137	123	122
28	e170	e170	e115	e74	e68	e60	e410	628	159	131	121	124
29	e145	e160	e110	e74	e68	e60	e480	574	158	128	119	115
30	e190	e160	e110	e74	---	e60	e560	619	155	141	119	115
31	e230	---	e105	e74	---	e60	---	593	---	225	118	---
TOTAL	8528	4870	4005	2564	2062	2030	4176	17067	8070	4311	5404	3668
MEAN	275	162	129	82.7	71.1	65.5	139	551	269	139	174	122
MAX	427	250	150	105	74	68	560	1120	506	225	450	156
MIN	145	100	105	74	68	60	60	300	155	122	118	107
AC-FT	16920	9660	7940	5090	4090	4030	8280	33850	16010	8550	10720	7280
CFSM	0.74	0.44	0.35	0.22	0.19	0.18	0.37	1.48	0.72	0.37	0.47	0.33
IN.	0.85	0.49	0.40	0.26	0.21	0.20	0.42	1.71	0.81	0.43	0.54	0.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2004, BY WATER YEAR (WY)#

MEAN	196	106	72.5	48.6	36.9	32.5	92.4	546	336	294	388	326
MAX	490	264	176	112	74.8	72.0	270	1217	932	665	2147	773
(WY)	1987	1994	1986	1987	2001	1993	1993	1991	1992	1981	1967	2003
MIN	69.8	32.0	22.5	7.90	6.00	3.23	19.1	147	99.2	85.0	124	107
(WY)	1967	1967	1978	1970	1970	1967	1970	1998	1998	1997	1997	1966

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1966 - 2004#

ANNUAL TOTAL	99946	66755										
ANNUAL MEAN	274								209			
HIGHEST ANNUAL MEAN									414			1967
LOWEST ANNUAL MEAN									103			1997
HIGHEST DAILY MEAN			2900	Jul 29		1120	May 8		12000	Aug 13	1967	
LOWEST DAILY MEAN			a55	Mar 18		b60	Mar 28		c0.00	Mar 11	1967	
ANNUAL SEVEN-DAY MINIMUM			55	Mar 18		60	Mar 28		d17000	Mar 11	1967	
MAXIMUM PEAK FLOW						1300	May 8			Aug 13	1967	
MAXIMUM PEAK STAGE						19.30	May 8			31.95	Aug 13	1967
ANNUAL RUNOFF (AC-FT)	198200					132400			151100			
ANNUAL RUNOFF (CFSM)		0.736					0.490			0.561		
ANNUAL RUNOFF (INCHES)		9.99					6.68			7.62		
10 PERCENT EXCEEDS		667					405			475		
50 PERCENT EXCEEDS		150					130			120		
90 PERCENT EXCEEDS		60					68			25		

See Period of Record; partial years used in monthly statistics

a From Mar. 18 to Apr. 11

b From Mar. 28 to Apr. 10

c From Mar. 11 to Apr. 15, 1967

d From rating curve extended above 3,000 ft³/s on basis of contracted-opening determination of peak flow

e Estimated

15514000 CHENA RIVER AT FAIRBANKS

LOCATION.--Lat 64°50'45", long 147°42'04", in NW¹/₄ sec. 11, T. 1 S., R. 1 W. (Fairbanks D-2 quad), Fairbanks North Star Borough, Hydrologic Unit 19040506, on right bank 100 ft downstream from Steese Highway Bridge, 800 ft upstream from Wendell Street bridge, 0.3 mi upstream from Noyes Slough, 11 mi upstream from mouth, and 11 mi downstream from Chena Slough.

DRAINAGE AREA.--1,995 mi².

PERIOD OF RECORD.--July 1947 to September 1948 (no winter records), October 1948 to current year.

GAGE.--Water-stage recorder and supplementary gage. Datum of gage is 422.92 ft above sea level. Supplementary gage, Chena River at Lathrop Street (15514003), 1.6 mi downstream on left bank, used during winter period. See WSP 1936 and 2136 for history of changes prior to April 27, 1968.

REMARKS.--Records are good except for estimated daily discharges, which are fair. Regulation during high-flow periods began July 9, 1981 at Moose Creek Dam 31.8 mi upstream. Flows were not regulated this year. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD--Outstanding floods occurred in early May 1905 and 1911, late August 1930, and May 11-14, 1937. See WDR AK-90-1 for more information.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2440	e1120	e890	e600	e430	e375	e330	2520	3000	970	1120	829
2	2420	e1240	e870	e590	e420	e375	e330	2980	3060	959	1220	839
3	2390	e1340	e850	e580	e420	e375	e330	3180	3000	947	1590	854
4	2330	e1320	e820	e580	e410	e370	e330	2860	3600	933	1730	894
5	2270	e1290	e800	e570	e410	e370	e330	2550	3690	928	1600	928
6	2230	e1270	e780	e570	e400	e365	e340	2510	3020	917	1480	924
7	2190	e1240	e770	e560	e400	e365	e360	2780	2560	930	1370	910
8	2130	e1200	e760	e560	e390	e365	e360	4850	2270	1050	1280	895
9	2070	e1100	e760	e550	e390	e360	e380	6350	2110	1050	1210	876
10	2020	e930	e750	e550	e380	e360	e390	4470	2020	1000	1160	863
11	1980	e820	e740	e530	e380	e360	e420	3720	1980	968	1110	854
12	1930	e730	e730	e520	e380	e360	e450	3300	1920	941	1070	838
13	1870	e600	e720	e510	e380	e365	e470	3340	1800	916	1050	828
14	1830	e500	e710	e500	e380	e370	e500	3680	1690	890	1030	833
15	1760	e470	e700	e500	e380	e375	e510	3370	1600	867	1010	822
16	1670	e460	e690	e500	e380	e370	e530	3140	1540	860	987	814
17	1520	e490	e690	e500	e380	e365	e580	2990	1490	854	967	800
18	1400	e510	e680	e490	e380	e360	e680	2810	1410	841	956	785
19	1300	e560	e680	e480	e380	e360	e760	2600	1360	832	942	774
20	e1120	e610	e680	e470	e380	e355	e820	2490	1310	827	933	768
21	e1050	e660	e680	e460	e380	e355	e970	2330	1250	832	919	774
22	e1020	e720	e680	e450	e380	e350	e1000	2100	1200	836	908	783
23	e1000	e760	e680	e450	e380	e350	e1050	1930	1170	872	899	808
24	e1030	e790	e680	e450	e380	e345	e1200	1860	1130	912	890	811
25	e1120	e830	e680	e450	e380	e345	e1400	2000	1090	947	883	815
26	e1280	e850	e680	e450	e380	e340	e1600	2690	1060	983	872	820
27	e1370	e860	e680	e440	e380	e340	e1800	3110	1030	1010	866	806
28	e1290	e880	e670	e440	e380	e335	e2000	2860	1000	1040	853	800
29	e1200	e890	e660	e440	e380	e335	e2200	2710	988	1020	838	803
30	e1150	e900	e650	e430	---	e330	2330	2770	978	1000	832	802
31	e1100	---	e630	e430	---	e330	---	2970	---	1010	827	---
TOTAL	51480	25940	22440	15600	11270	11075	24750	93820	55326	28942	33402	24950
MEAN	1661	865	724	503	389	357	825	3026	1844	934	1077	832
MAX	2440	1340	890	600	430	375	2330	6350	3690	1050	1730	928
MIN	1000	460	630	430	380	330	330	1860	978	827	827	768
MED	1670	840	690	500	380	360	520	2860	1570	933	987	821
AC-FT	102100	51450	44510	30940	22350	21970	49090	186100	109700	57410	66250	49490
CFSM	0.83	0.43	0.36	0.25	0.19	0.18	0.41	1.52	0.92	0.47	0.54	0.42
IN.	0.96	0.48	0.42	0.29	0.21	0.21	0.46	1.75	1.03	0.54	0.62	0.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2004, BY WATER YEAR (WY)#

MEAN	1209	602	455	347	287	264	479	3613	2520	2035	2492	2191
MAX	2413	1231	922	595	509	445	1406	10250	6721	6133	13120	5735
(WY)	1962	1994	1994	1987	1968	1968	1993	1948	1949	1949	1967	1962
MIN	461	297	194	163	120	120	209	1050	816	665	682	615
(WY)	1967	1959	1977	1977	1953	1958	1977	1998	1969	1958	1957	1957

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1948 - 2004#

ANNUAL TOTAL	620174	398995	
ANNUAL MEAN	1699	1090	1360
HIGHEST ANNUAL MEAN			2603
LOWEST ANNUAL MEAN			713
HIGHEST DAILY MEAN	10200	Jul 30	64600
LOWEST DAILY MEAN	a340	Apr 7	c120
ANNUAL SEVEN-DAY MINIMUM	346	Apr 3	120
MAXIMUM PEAK FLOW			74400
MAXIMUM PEAK STAGE		6.92	d18.82
ANNUAL RUNOFF (AC-FT)	1230000	791400	985600
ANNUAL RUNOFF (CFSM)	0.852	0.546	0.682
ANNUAL RUNOFF (INCHES)	11.56	7.44	9.27
10 PERCENT EXCEEDS	4220	2350	3070
50 PERCENT EXCEEDS	880	846	725
90 PERCENT EXCEEDS	416	375	240

See Period of Record
a April 7 to 9
b March 30 to April 5
c Monthly means published for Feb. 1953 and Mar. 1958
d Site then in use
e Estimated

15515500 TANANA RIVER AT NENANA

LOCATION.--Lat 64°33'55", long 149°05'30", in SE¹/₄ sec. 14, T. 4 S., R. 8 W. (Fairbanks C-5 quad), Hydrologic Unit 19040507, on left bank on east end of Alaska Railroad dock in Nenana, and 0.3 mi upstream from Nenana River.

DRAINAGE AREA.--25,600 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1962 to current year.

REVISED RECORDS.--WSP 2136: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 338.50 ft above sea level. Prior to March 10, 1965, on right bank 280 ft downstream from railroad bridge 0.5 mi upstream at present datum. March 10, 1965 to March 23, 1968, nonrecording gage on railroad bridge 0.5 mi upstream at present datum.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1948 reached a stage of 15.9 ft, discharge, about 135,000 ft³/s, contained in reports of Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22500	e16000	e12000	e9200	e7200	e6700	e6600	22800	54300	70800	57100	41800
2	29100	e14000	e12000	e9200	e7200	e6700	e6600	25000	53900	67900	59900	41000
3	34900	e14000	e11500	e9000	e7200	e6700	e6600	27500	52300	65200	60100	40300
4	37300	e13500	e11500	e8800	e7200	e6700	e6600	29800	53500	65100	57800	38900
5	38800	e13500	e11000	e8600	e7200	e6700	e6600	30600	53300	64400	56800	36600
6	36300	e13500	e11000	e8400	e7000	e6700	e6600	32300	49000	66400	56900	33100
7	32500	e13000	e10500	e8200	e7000	e6700	e6600	38800	46100	66600	57700	31500
8	30800	e13000	e10500	e8200	e7000	e6700	e6600	50100	46800	63700	58000	29700
9	30200	e12500	e10000	e8000	e7000	e6700	e6600	63900	48700	62600	58000	27800
10	29100	e12500	e10000	e8000	e7000	e6700	e6600	62400	50700	62000	58600	26400
11	27700	e12000	e9800	e8000	e7000	e6700	e6600	52900	53400	60900	58900	25200
12	26000	e11500	e9600	e7800	e7000	e6700	e6700	48300	55800	60100	58300	24200
13	24400	e10000	e9600	e7800	e7000	e6700	e6900	47500	55200	60500	57700	23500
14	23300	e8500	e9400	e7700	e7000	e6700	e7300	51700	52000	62300	58400	23300
15	22300	e8000	e9400	e7700	e6900	e6700	e7800	51300	50400	64100	58100	23400
16	21400	e7800	e9400	e7700	e6900	e6700	e8300	48800	50900	64300	58700	22500
17	19400	e7800	e9400	e7600	e6900	e6600	e8900	47500	52100	63700	59900	21700
18	18700	e8200	e9400	e7600	e6900	e6600	e9400	45800	52700	63600	61400	21000
19	18600	e8600	e9400	e7600	e6900	e6600	e10000	43500	52500	64200	62300	20300
20	17500	e9000	e9400	e7600	e6800	e6600	e11000	40400	53400	63700	62300	19700
21	17200	e9500	e9400	e7600	e6800	e6600	e12000	38500	54900	63600	61700	19400
22	16200	e10000	e9400	e7600	e6800	e6600	e13000	37300	56500	64300	60700	19100
23	16200	e10500	e9400	e7400	e6800	e6600	e14000	36700	58300	64600	60600	19200
24	15800	e11000	e9400	e7400	e6800	e6600	e15000	37500	60100	63900	60800	19200
25	16500	e11000	e9400	e7400	e6800	e6600	e16000	40100	61000	61500	58700	18900
26	17000	e11500	e9400	e7400	e6800	e6600	e17000	43800	63500	60600	55600	18400
27	e17500	e11500	e9400	e7400	e6800	e6600	e18500	49900	66300	61600	51500	18500
28	e17500	e12000	e9400	e7400	e6800	e6600	e20000	53000	67900	62100	50000	18500
29	e17500	e12000	e9400	e7200	e6800	e6600	e21500	51600	69200	62500	50300	18000
30	e17000	e12000	e9400	e7200	---	e6600	e21000	51000	70300	59900	47900	17600
31	e17000	---	e9400	e7200	---	e6600	---	53500	---	57500	44400	---
TOTAL	726200	337900	308200	243900	201500	206200	316900	1353800	1665000	1964200	1779100	758700
MEAN	23430	11260	9942	7868	6948	6652	10560	43670	55500	63360	57390	25290
MAX	38800	16000	12000	9200	7200	6700	21500	63900	70300	70800	62300	41800
MIN	15800	7800	9400	7200	6800	6600	6600	22800	46100	57500	44400	17600
MED	21400	11500	9400	7700	6900	6700	8050	45800	53500	63700	58300	22900
AC-FT	1440000	670200	611300	483800	399700	409000	628600	2685000	3303000	3896000	3529000	1505000
CFSM	0.92	0.44	0.39	0.31	0.27	0.26	0.41	1.71	2.17	2.48	2.24	0.99
IN.	1.06	0.49	0.45	0.35	0.29	0.30	0.46	1.97	2.42	2.85	2.59	1.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)#

MEAN	17290	9475	7504	6804	6580	6508	8800	31180	47470	60170	56960	33520
MAX	26870	14460	10770	9065	8171	8161	15090	62210	87390	76770	98210	57690
(WY)	2001	2003	1986	1986	1986	1993	1995	1963	1962	1988	1967	1990
MIN	11420	5517	4532	4694	4421	4071	5870	16030	29750	44920	41510	21710
(WY)	1977	1977	1977	1977	1974	1974	1974	1964	1970	1996	1996	1976

See Period of Record, partial years used in monthly statistics
e Estimated

15515500 TANANA RIVER AT NENANA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004#	
ANNUAL TOTAL	9054700		9861600			
ANNUAL MEAN	24810		26940		24270	
HIGHEST ANNUAL MEAN					29310 1967	
LOWEST ANNUAL MEAN					19530 1970	
HIGHEST DAILY MEAN					183000 Aug 18 1967	
LOWEST DAILY MEAN	a7700	Mar 24	b6600	Mar 17	c4000 Mar 6 1974	
ANNUAL SEVEN-DAY MINIMUM	7700	Mar 24	6600	Mar 17	4000 Mar 6 1974	
MAXIMUM PEAK FLOW			71900	Jul 1	186000 Aug 18 1967	
MAXIMUM PEAK STAGE			9.97	Jul 1	d18.90 Aug 18 1967	
ANNUAL RUNOFF (AC-FT)	17960000		19560000		17580000	
ANNUAL RUNOFF (CFSM)	0.969		1.05		0.948	
ANNUAL RUNOFF (INCHES)	13.16		14.33		12.88	
10 PERCENT EXCEEDS	54900		61100		58300	
50 PERCENT EXCEEDS	17000		17000		12000	
90 PERCENT EXCEEDS	7800		6700		6200	

See Period of Record, partial years used in monthly statistics

a From Mar. 24 to Apr. 13

b From Mar. 17 to Apr. 11

c From Mar. 6 to Mar. 20, 1974

d At site then in use

e Estimated

15515500 TANANA RIVER AT NENANA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-57, 1963-64, 1966-75, 1978-1995, and 2001 to current year.

PERIOD OF RECORD.--
WATER TEMPERATURE: 1954 to 1956 (seasonal).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample location, cross section ft from rt bank (72103)	Specif. conduc- tance, wat unf 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, water, deg C (00010)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
MAR								
30...	1600	150.0	--	7.6	.0	753	10.3	--
30...	1620	295.0	--	7.6	.0	753	10.3	--
30...	1640	430.0	313	7.5	.0	753	10.3	71
30...	1700	570.0	--	7.6	.0	753	10.3	--
30...	1720	765.0	--	7.5	.0	753	10.3	--
MAY								
28...	1230	244.0	198	7.8	12.9	745	10.2	99
28...	1232	299.0	198	7.8	12.9	745	10.2	99
28...	1234	381.0	198	7.8	12.9	745	10.2	99
28...	1236	473.0	197	7.8	12.8	745	10.2	99
28...	1238	556.0	198	7.8	12.8	745	10.2	99
JUN								
10...	1240	205.0	225	7.9	14.5	751	9.7	97
10...	1245	322.0	238	7.9	14.6	751	9.4	94
10...	1250	411.0	238	7.9	14.6	751	9.4	94
10...	1255	492.0	239	7.9	14.6	751	9.5	95
10...	1300	571.0	238	7.9	14.6	751	9.4	94
25...	1600	286.0	217	7.9	20.2	758	8.9	99
25...	1605	422.0	215	7.9	20.2	758	8.9	99
25...	1610	539.0	213	7.9	20.2	758	8.9	99
25...	1615	636.0	214	7.9	20.2	758	8.9	99
25...	1620	741.0	213	7.9	20.2	758	9.3	103
JUL								
23...	1500	171.0	209	7.9	14.9	755	10.0	100
23...	1510	274.0	209	7.9	14.9	755	9.9	99
23...	1520	376.0	209	7.9	14.9	755	9.9	98
23...	1530	499.0	209	7.9	14.9	755	9.8	98
23...	1540	670.0	209	7.9	14.9	755	9.7	97
AUG								
26...	1500	176.0	236	7.8	10.3	753	8.5	77
26...	1505	289.0	236	7.8	10.3	753	8.7	78
26...	1510	352.0	236	7.8	10.7	753	8.3	76
26...	1515	455.0	236	7.8	10.7	753	8.9	81
26...	1520	635.0	236	7.8	10.7	753	9.2	84
SEP								
22...	1540	155.0	284	7.7	4.3	--	11.8	--
22...	1542	270.0	284	7.8	4.3	--	11.9	--
22...	1544	350.0	284	7.8	4.3	--	11.9	--
22...	1546	340.0	284	7.8	4.4	--	11.8	--

Date	Time	Medium code	Sample type	Stream width, feet (00004)	Gage height, feet (00065)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Sampler type, code (84164)	Type of sample related QA data, code (99111)	Specif. conduc- tance, wat unf 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)
MAR													
30...	1750	9	7	920	--	6560	20	3060	30	313	7.9	-6.5	.0
MAY													
28...	1200	9	9	696	7.76	52500	20	3055	1	198	7.8	--	12.9
JUN													
10...	1310	9	9	707	7.51	50900	20	3055	1	238	7.9	--	14.6
25...	1635	9	9	935	8.79	58800	20	3055	1	214	7.9	28.5	20.2
JUL													
23...	1610	9	9	925	9.15	66200	20	3055	10	209	7.9	--	14.9
AUG													
26...	1530	9	9	910	8.07	55400	20	3055	10	236	7.8	12.0	10.7
SEP													
22...	1600	9	9	785	3.19	18800	20	3055	10	284	7.8	--	4.3

15515500 TANANA RIVER AT NENANA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Turbidity, lab, Hach 2100AN NTU (99872)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
MAR 30...	4	.0241	.0177	756	10.1	69	160	48.5	10.1	4.70	2.4	151	.0
MAY 28...	336	.1914	.1427	745	10.2	99	100	29.1	6.70	3.33	1.9	96	.0
JUN 10...	448	.0753	.0555	751	9.4	94	110	31.9	7.38	3.79	2.0	92	.0
JUN 25...	1260	.0307	.0224	758	9.0	100	110	31.1	8.26	3.67	2.80	101	.0
JUL 23...	1200	.0163	.0122	754	9.8	98	110	32.1	6.33	3.28	2.2	82	.0
AUG 26...	1130	.0150	.0110	753	8.4	76	78	22.5	5.35	2.77	1.4	87	.0
SEP 22...	68	.0392	.0281	--	11.8	--	150	42.9	9.47	5.05	1.9	137	.0
Date	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Alkalinity, wat flt fxd end field, mg/L as CaCO3 (39036)	Sulfate, water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Residue on evap. at 180degC, wat flt mg/L (70300)	Residue water, fltrd, sum of constituents mg/L (70301)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
MAR 30...	124	120	35.3	1.35	<.17	15.8	204	194	.002	.182	.049	.1	.1
MAY 28...	74	74	32.5	1.93	<.17	7.51	125	131	.002	.099	<.010	.6	.2
JUN 10...	76	76	36.6	2.18	<.17	7.80	124	138	.002	.090	<.010	.5	E.08
JUN 25...	83	84	37.4	1.6	<.17	6.46	136	141	E.001	.067	<.010	.9	<.1
JUL 23...	67	67	37.2	1.48	<.17	6.33	123	129	<.002	.062	<.010	.7	<.1
AUG 26...	72	71	42.5	1.28	<.17	4.56	134	124	.002	.064	E.007	.6	<.1
SEP 22...	113	110	41.7	1.60	<.17	11.7	190	183	E.001	.123	.028	.2	E.07
Date	Phosphorus, water, unfltrd mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)	Orthophosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic, water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)
MAR 30...	.023	E.003	<.006	E.9	E.1	.6	50.7	<.06	27	<.04	<.8	.272	1.0
MAY 28...	.773	.006	E.004	20.6	.3	1.0	31.2	<.06	23	E.02	<.8	.158	4.8
JUN 10...	1.31	E.003	<.006	20.2	.3	1.0	36.0	<.06	22	<.04	<.8	.125	1.8
JUN 25...	1.19	<.004	<.006	27	.60	1.1	36.0	<.06	30	<.04	<.8	.111	1.1
JUL 23...	.39	E.003	<.006	18.7	.4	.8	30.3	<.06	19	<.04	<.8	.130	.8
AUG 26...	.53	<.004	<.006	15.2	.2	.5	21.3	<.06	16	E.02	<.8	.170	1.7
SEP 22...	.22	E.004	<.006	6.6	.2	1.0	39.9	<.06	29	E.03	<.8	.233	1.1

15515500 TANANA RIVER AT NENANA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Mangan- ese, water, fltrd, ug/L (01056)	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen- ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront- ium, water, fltrd, ug/L (01080)	Vanad- ium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Organic carbon, water, fltrd, mg/L (00681)
MAR													
30...	10.8	<.08	3.4	105	1.3	1.49	.9	<.20	202	1.89	2.4	.89	1.4
MAY													
28...	43.7	<.08	3.9	9.8	.9	1.69	E.4	<.20	123	.66	.8	.75	5.9
JUN													
10...	10.3	<.08	4.8	6.3	1.0	.96	.5	<.20	146	.50	E.3	.93	2.7
25...	<6.4	.05	6.2	2.0	1.5	.06	.6	<.2	141	.6	--	.97	1.2
JUL													
23...	<6.4	<.08	4.5	2.4	1.2	1.41	.5	<.20	127	.58	<.6	.71	.7
AUG													
26...	<6.4	E.06	3.2	10.9	.9	1.48	.5	<.20	85.8	.37	3.5	.61	.8
SEP													
22...	21.2	<.08	4.2	53.4	1.3	1.19	.6	<.20	181	.98	.7	.83	1.6
Date	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Total carbon, suspnd sedimnt total, mg/L (00694)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)						
MAR													
30...	<.12	.271	.273	<.022	16	283	74						
MAY													
28...	.870	5.05	5.92	.349	1300	184000	53						
JUN													
10...	1.97	4.38	6.34	.311	1270	175000	55						
25...	E3.32	E6.61	E9.93	E.483	2990	474000	82						
JUL													
23...	1.16	4.60	5.76	.327	2630	470000	78						
AUG													
26...	.215	1.10	1.31	.108	2610	390000	75						
SEP													
22...	.194	1.67	1.86	.095	399	20300	59						

15518040 NENANA RIVER AT HEALY

LOCATION.--Lat 63°51'15", long 148°57'20", in SE ¼ sec. 20, T. 12 S., R. 7 W. (Healy D-4 quad), Denali Borough, Hydrologic Unit 19040508, on left bank upstream side of Healy Spur railroad bridge, 0.3 mi east of Parks Hwy in Healy, 0.4 mi downstream from Healy Creek, and 4 mi upstream of Lignite Creek.

DRAINAGE AREA.--2,100 mi².

PERIOD OF RECORD.--April 1990 to September 1991 (year-round), May 2003 to September 2004 (no winter record).

GAGE.--Water-stage-recorder. Datum of gage is 1244.17 ft above NGVD of 1929. Prior to Sept. 26, 1990, non-recording gage site 60 ft downstream at same datum. A National Weather Service wire-weight is attached to the down-stream edge of the highway bridge and was established in June 1972.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 31,200 ft³/s, September 15, 1990, gage height, 14.4 ft, from flood marks; minimum daily not determined, occurred during period of ice effect.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge 12,100 ft³/s, October 4, 2003, gage height, 11.70 ft; minimum daily not determined, occurred during winter.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6300	---	---	---	---	---	---	e2500	8270	7590	7530	3790
2	7270	---	---	---	---	---	---	e2400	7720	7430	7780	3880
3	7490	---	---	---	---	---	---	e2600	7100	7990	6950	4010
4	10600	---	---	---	---	---	---	e3000	6970	7530	6510	3500
5	8290	---	---	---	---	---	---	e5000	6970	7660	6510	3000
6	7090	---	---	---	---	---	---	e7000	7060	7810	6680	2750
7	6350	---	---	---	---	---	---	e10000	7920	7450	6850	2600
8	5960	---	---	---	---	---	---	e9800	8510	7460	6760	2530
9	5300	---	---	---	---	---	---	e9100	8450	7160	6650	2490
10	4910	---	---	---	---	---	---	7400	8220	6830	6530	2480
11	4580	---	---	---	---	---	---	5640	8500	6430	6410	2490
12	4260	---	---	---	---	---	---	5960	8290	6540	6240	2470
13	3980	---	---	---	---	---	---	6360	7580	7200	6210	2540
14	3880	---	---	---	---	---	---	6420	7510	7740	6320	2510
15	3920	---	---	---	---	---	---	6980	7560	7600	6130	2430
16	3650	---	---	---	---	---	---	7040	7780	7280	6730	2300
17	3140	---	---	---	---	---	---	6280	8030	7150	7300	2160
18	2770	---	---	---	---	---	---	5320	8320	7000	6890	2070
19	2710	---	---	---	---	---	---	4650	8300	6880	6700	2050
20	e2600	---	---	---	---	---	---	4320	8630	6820	6710	2050
21	e2500	---	---	---	---	---	---	4390	8660	7250	6140	2170
22	2380	---	---	---	---	---	---	4730	8320	7150	6120	2160
23	2370	---	---	---	---	---	---	5210	8170	7070	6140	2280
24	e2400	---	---	---	---	---	---	6270	8170	6500	5700	2220
25	e2300	---	---	---	---	---	---	6940	8480	6110	5060	2000
26	e2200	---	---	---	---	---	---	7090	8750	6210	4740	2190
27	e2100	---	---	---	---	---	---	7300	9040	6570	5550	2770
28	e2000	---	---	---	---	---	---	7150	9140	6690	5500	2410
29	2180	---	---	---	---	---	---	6930	9060	6590	4760	2070
30	2090	---	---	---	---	---	---	7630	9030	6520	4410	2100
31	2540	---	---	---	---	---	---	7700	---	6190	4010	---
TOTAL	130110	---	---	---	---	---	---	189110	244510	218400	192520	76470
MEAN	4197	---	---	---	---	---	---	6100	8150	7045	6210	2549
MAX	10600	---	---	---	---	---	---	10000	9140	7990	7780	4010
MIN	2000	---	---	---	---	---	---	2400	6970	6110	4010	2000
AC-FT	258100	---	---	---	---	---	---	375100	485000	433200	381900	151700
CFSM	2.00	---	---	---	---	---	---	2.90	3.88	3.35	2.96	1.21
IN.	2.30	---	---	---	---	---	---	3.35	4.33	3.87	3.41	1.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)#

	1990	1991	1991	1991	1991	1991	1991	2003	2004	2004	2004	2004
MEAN	4055	1407	1123	965	925	826	828	5890	10620	10380	8808	6777
MAX	4197	1407	1123	965	925	826	828	8945	14370	13410	11230	13440
(WY)	2004	1991	1991	1991	1991	1991	1991	1990	1990	2003	1990	1990
MIN	3913	1407	1123	965	925	826	828	2811	8150	7045	6210	2549
(WY)	1991	1991	1991	1991	1991	1991	1991	2003	2004	2004	2004	2004

See Period of Record; partial years used in monthly statistics
e Estimated

15518080 LIGNITE CREEK ABOVE MOUTH NEAR HEALY

LOCATION.--Lat 63°54'17", long 148°59'01", in SE¹/₄ NE¹/₄ sec. 6, T. 11 S., R. 7 W. (Healy D-4 quad), Hydrologic Unit 19040508, on right bank 300 ft downstream from culverts on access road to Usibelli Coal Mine office, 1,000 ft upstream from mouth, and 3.5 mi north of Healy.

DRAINAGE AREA.--48.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1985 to September 2004 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 1,300 ft above sea level, from topographic map. Prior to May 22, 1987 on left bank, 400 ft upstream at same datum. From May 22, 1987 to September 30, 1997 on left bank, 300 ft upstream at same datum.

REMARKS.--Records fair except for the period April 26 to September 30 1998 and estimated daily discharges which are poor. Precipitation gage at station; daily values of precipitation are available from the computer files of the Alaska Science Center, Water Resources Office. GOES satellite telemetry at station.

REVISIONS.--Revised daily discharges in cubic feet per second for water years 1998 to 2001 are given below. These figures supersede those published in reports AK-98-1, AK-99-1, AK-00-1 and AK-01-1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e30	e18	e16	e9.3	e6.5	e5.5	e8.0	16	44	63	58	59
2	e31	e18	e15	e9.3	e6.3	e5.5	e7.8	18	45	53	52	48
3	e30	e18	e15	e9.0	e6.3	e5.5	e7.8	16	40	49	47	36
4	e29	e18	e15	e9.0	e6.3	e5.5	e8.0	15	38	33	41	33
5	e29	e19	e15	e9.0	e6.3	e5.5	e8.5	22	35	32	34	27
6	e28	e19	e14	e8.8	e6.3	e5.5	e9.0	37	33	51	34	28
7	e27	e20	e14	e8.8	e6.0	e5.5	e10	45	32	68	31	30
8	e26	e21	e14	e8.5	e6.0	e5.5	e11	37	33	52	53	27
9	e26	e22	e14	e8.5	e6.0	e5.5	e13	25	27	41	197	25
10	e25	e23	e13	e8.3	e6.0	e5.5	e14	24	29	39	114	25
11	e25	e24	e13	e8.3	e6.0	e5.3	e16	21	24	41	93	24
12	e24	e25	e13	e8.0	e6.0	e5.3	e18	19	23	48	71	24
13	e24	e25	e13	e8.0	e6.0	e5.3	e20	18	23	39	66	32
14	e23	e25	e12	e8.0	e6.0	e5.3	e23	21	28	36	60	39
15	e23	e24	e12	e7.8	e5.8	e5.3	e27	25	83	34	98	45
16	e23	e23	e12	e7.8	e5.8	e5.5	e31	30	53	31	64	49
17	e22	e22	e12	e7.5	e5.8	e5.8	e35	40	58	49	67	48
18	e22	e22	e12	e7.5	e5.8	e6.2	e41	45	58	79	84	41
19	e21	e21	e11	e7.5	e5.8	e6.5	e48	38	41	40	96	38
20	e21	e21	e11	e7.3	e5.8	e7.0	e60	33	34	37	70	37
21	e21	e20	e11	e7.3	e5.8	e8.0	e50	31	34	32	57	42
22	e20	e20	e11	e7.3	e5.5	e9.0	e40	59	56	29	55	38
23	e20	e19	e11	e7.0	e5.5	e10	e35	135	49	115	46	36
24	e20	e19	e10	e7.0	e5.5	e11	e30	74	52	143	49	35
25	e20	e18	e10	e7.0	e5.5	e13	e25	77	91	112	67	33
26	e19	e18	e10	e6.8	e5.5	e14	21	77	87	95	70	30
27	e19	e17	e10	e6.8	e5.5	e15	24	75	47	91	74	27
28	e19	e17	e10	e6.8	e5.5	e14	26	72	41	118	85	24
29	e19	e16	e9.8	e6.8	---	e12	16	63	43	127	90	21
30	e18	e16	e9.8	e6.5	---	e11	16	66	74	99	64	20
31	e18	---	e9.5	e6.5	---	e9.0	---	56	---	76	68	---
TOTAL	722	608	378.1	242.0	165.1	238.5	699.1	1330	1355	1952	2155	1021
MEAN	23.3	20.3	12.2	7.81	5.90	7.69	23.3	42.9	45.2	63.0	69.5	34.0
MAX	31	25	16	9.3	6.5	15	60	135	91	143	197	59
MIN	18	16	9.5	6.5	5.5	5.3	7.8	15	23	29	31	20
AC-FT	1430	1210	750	480	327	473	1390	2640	2690	3870	4270	2030
CFSM	0.48	0.42	0.25	0.16	0.12	0.16	0.48	0.89	0.94	1.31	1.45	0.71
IN.	0.56	0.47	0.29	0.19	0.13	0.18	0.54	1.03	1.05	1.51	1.67	0.79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1998, BY WATER YEAR (WY)#

MEAN	23.4	15.8	11.8	9.77	8.11	8.26	24.7	81.2	69.6	45.0	46.8	41.8
MAX	47.4	25.4	20.0	18.7	20.6	19.1	45.5	166	145	77.0	96.8	134
(WY)	1994	1994	1987	1995	1994	1994	1994	1992	1989	1986	1986	1990
MIN	10.3	4.87	1.65	0.95	0.00	0.00	0.00	42.6	41.9	25.6	25.7	17.6
(WY)	1988	1988	1988	1986	1986	1986	1986	1987	1997	1996	1994	1987

See Period of Record, partial years used in monthly statistics
e Estimated

15518080 LIGNITE CREEK ABOVE MOUTH NEAR HEALY—Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1985 - 1998#	
ANNUAL TOTAL	10339.1		10865.8			
ANNUAL MEAN	28.3		29.8		31.8	
HIGHEST ANNUAL MEAN					43.6 1990	
LOWEST ANNUAL MEAN					23.8 1987	
HIGHEST DAILY MEAN	236	May 30	197	Aug 9	852	Jun 25 1989
LOWEST DAILY MEAN	a2.0	Mar 19	b5.3	Mar 11	c0.00	Feb 1 1986
ANNUAL SEVEN-DAY MINIMUM	2.0	Mar 19	5.4	Mar 9	0.00	Feb 1 1986
MAXIMUM PEAK FLOW			285	May 22	d2400	Aug 21 1986
MAXIMUM PEAK STAGE			3.97	May 22	f1.05	Aug 21 1986
MAXIMUM PEAK STAGE			g4.62	Apr 20		
ANNUAL RUNOFF (AC-FT)	20510		21550		23010	
ANNUAL RUNOFF (CFSM)	0.589		0.619		0.660	
ANNUAL RUNOFF (INCHES)	8.00		8.40		8.97	
10 PERCENT EXCEEDS	62		66		65	
50 PERCENT EXCEEDS	22		22		20	
90 PERCENT EXCEEDS	3.0		6.0		3.0	

See Period of Record, partial years used in monthly statistics

a From Mar. 19 to Apr. 5

b From Mar. 11 to 15

c From Feb. 1 to Apr. 30, 1986

d Estimated discharge from rating curve extended above 280 ft³/s based on surface-float measurement at gage

f At site then in use, same datum

g Backwater from ice

15518080 LIGNITE CREEK ABOVE MOUTH NEAR HEALY—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	e16	e17	e11	e7.5	e6.5	e7.0	e16	19	34	20	19
2	e15	e17	e17	e11	e7.5	e6.5	e7.0	e15	15	32	23	21
3	e14	e18	e17	e11	e7.5	e6.5	e7.0	e15	13	40	20	32
4	e13	e19	e17	e11	e7.5	e6.5	e7.0	e14	49	32	16	31
5	e12	e18	e16	e11	e7.5	e6.5	e7.0	e14	42	31	14	27
6	e12	e18	e16	e10	e7.5	e6.5	e6.5	e15	32	43	14	32
7	e12	e18	e16	e10	e7.5	e6.5	e6.5	e15	29	40	14	29
8	e12	e17	e16	e10	e7.5	e6.5	e6.5	e16	25	29	16	27
9	e13	e17	e15	e10	e7.0	e6.5	e6.5	e17	23	25	14	25
10	e13	e16	e15	e10	e7.0	e6.5	e6.5	e18	25	45	13	21
11	e14	e16	e15	e9.5	e7.0	e6.5	e7.0	e25	24	35	12	20
12	e15	e16	e15	e9.5	e7.0	e6.5	e7.0	e36	16	72	13	21
13	e16	e15	e15	e9.5	e7.0	e6.5	e7.5	e50	22	35	51	19
14	e16	e15	e15	e9.5	e7.0	e6.5	e13	e70	12	33	27	18
15	e17	e15	e14	e9.0	e7.0	e6.5	e18	e110	11	39	37	18
16	e18	e15	e14	e9.0	e7.0	e6.5	e30	e150	19	37	33	18
17	e18	e15	e14	e9.0	e7.0	e7.0	e40	94	37	37	26	19
18	e19	e16	e14	e9.0	e7.0	e7.0	e70	62	38	36	20	19
19	e18	e17	e14	e8.5	e7.0	e7.5	e60	29	26	32	18	19
20	e18	e16	e14	e8.5	e7.0	e7.5	e50	27	24	29	17	19
21	e17	e16	e14	e9.5	e7.0	e8.0	e40	28	18	42	16	18
22	e17	e15	e13	e8.5	e7.0	e8.0	e34	37	27	71	18	19
23	e16	e15	e13	e8.5	e7.0	e8.5	e28	42	33	52	16	25
24	e16	e15	e13	e8.0	e6.5	e8.0	e23	55	24	58	32	26
25	e15	e15	e13	e8.0	e6.5	e8.0	e19	63	21	85	55	22
26	e15	e15	e13	e8.0	e6.5	e8.0	e15	75	21	70	32	21
27	e14	e15	e12	e8.0	e6.5	e8.0	e16	20	64	58	26	22
28	e14	e15	e12	e8.0	e6.5	e7.5	e17	17	84	69	22	22
29	e14	e15	e12	e8.0	---	e7.5	e18	8.4	51	48	21	19
30	e14	e16	e12	e7.5	---	e7.5	e17	7.6	39	39	20	23
31	e15	---	e12	e7.5	---	e7.5	---	14	---	28	20	---
TOTAL	469	482	445	285.5	197.5	219.5	597.0	1175.0	883	1356	696	671
MEAN	15.1	16.1	14.4	9.21	7.05	7.08	19.9	37.9	29.4	43.7	22.5	22.4
MAX	19	19	17	11	7.5	8.5	70	150	84	85	55	32
MIN	12	15	12	7.5	6.5	6.5	6.5	7.6	11	25	12	18
MED	15	16	14	9.0	7.0	6.5	16	25	25	39	20	21
AC-FT	930	956	883	566	392	435	1180	2330	1750	2690	1380	1330
CFSM	0.31	0.33	0.30	0.19	0.15	0.15	0.41	0.79	0.61	0.91	0.47	0.47
IN.	0.36	0.37	0.34	0.22	0.15	0.17	0.46	0.91	0.68	1.05	0.54	0.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1999, BY WATER YEAR (WY)#

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MEAN	22.8	15.8	12.0	9.73	8.03	8.17	24.4	78.1	66.9	44.9	45.1	40.5			
MAX	47.4	25.4	20.0	18.7	20.6	19.1	45.5	166	145	77.0	96.8	134			
(WY)	1994	1994	1987	1995	1994	1994	1994	1992	1989	1986	1986	1990			
MIN	10.3	4.87	1.65	0.95	0.00	0.00	0.00	37.9	29.4	25.6	22.5	17.6			
(WY)	1988	1988	1988	1986	1986	1986	1986	1999	1999	1996	1999	1987			

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1985 - 1999#

ANNUAL TOTAL	10553.7			7476.5			31.0		
ANNUAL MEAN	28.9			20.5			20.5		
HIGHEST ANNUAL MEAN							43.6		
LOWEST ANNUAL MEAN							20.5		
HIGHEST DAILY MEAN	197			Aug 9			150		
LOWEST DAILY MEAN	a5.3			Mar 11			b6.5		
ANNUAL SEVEN-DAY MINIMUM	5.4			Mar 9			6.5		
MAXIMUM PEAK FLOW							265		
MAXIMUM PEAK STAGE							3.91		
MAXIMUM PEAK STAGE							g8.00		
ANNUAL RUNOFF (AC-FT)	20930			14830			22420		
ANNUAL RUNOFF (CFSM)	0.601			0.426			0.644		
ANNUAL RUNOFF (INCHES)	8.16			5.78			8.74		
10 PERCENT EXCEEDS	66			39			63		
50 PERCENT EXCEEDS	17			16			20		
90 PERCENT EXCEEDS	6.0			7.0			4.0		

See Period of Record, partial years used in monthly statistics

a From Mar. 11 to 15

b From Feb. 24 to Mar. 16 and Apr.6 to 10

c From Feb. 1 to Apr. 30, 1986

d Estimated discharge from rating curve extended above 280 ft³/s based on surface-float measurement at gage

e Estimated

f At site then in use, same datum

g Backwater from ice

15518080 LIGNITE CREEK ABOVE MOUTH NEAR HEALY—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	e9.0	e9.0	e9.0	e8.0	e8.5	e10	e50	98	25	23	109
2	42	e9.0	e9.0	e9.0	e8.0	e8.5	e10	e70	110	23	22	113
3	42	e9.0	e9.0	e8.5	e8.0	e8.5	e10	e100	86	26	21	95
4	33	e9.0	e9.0	e8.5	e8.0	e8.5	e10	e65	101	25	21	93
5	31	e9.0	e9.0	e8.0	e8.0	e8.5	e10	e40	88	42	26	87
6	30	e9.0	e9.0	e8.0	e8.0	e8.0	e10	e55	87	38	30	86
7	26	e9.0	e9.0	e7.5	e8.0	e8.0	e10	e70	86	28	30	98
8	23	e9.0	e8.5	e7.5	e7.5	e8.0	e10	e90	69	25	30	104
9	22	e9.0	e8.5	e7.5	e7.5	e8.0	e10	e60	52	27	38	102
10	16	e9.0	e8.5	e7.5	e7.5	e8.0	e10	e42	50	50	36	92
11	e14	e9.0	e8.5	e7.5	e7.5	e8.0	e10	e32	51	72	132	97
12	e13	e9.5	e8.5	e7.0	e7.5	e8.0	e11	e27	46	96	323	95
13	e13	e9.5	e8.5	e7.0	e7.5	e8.0	e11	e25	44	58	81	89
14	e12	e9.5	e8.5	e7.0	e7.5	e8.0	e11	e28	48	43	144	86
15	e12	e9.5	e8.5	e7.0	e7.5	e8.5	e11	e38	47	32	116	87
16	e11	e9.5	e8.5	e7.5	e7.5	e8.5	e11	e55	38	27	82	81
17	e11	e9.5	e8.5	e7.5	e7.5	e8.5	e12	e80	35	25	125	77
18	e10	e9.5	e9.0	e7.5	e7.5	e8.5	e12	e110	33	23	165	73
19	e10	e10	e9.0	e8.0	e7.5	e8.5	e12	e120	33	23	141	71
20	e10	e10	e9.5	e8.0	e7.5	e8.5	e12	103	31	23	63	69
21	e9.5	e11	e10	e8.0	e7.5	e8.5	e13	72	30	21	55	73
22	e9.5	11	e10	e8.0	e7.5	e8.5	e14	76	37	21	121	89
23	e9.5	e11	e10	e8.0	e7.5	e8.5	e16	86	33	21	78	69
24	e9.5	e10	e10	e8.0	e7.5	e8.5	e18	82	31	21	56	62
25	e9.5	e10	e10	e8.0	e7.5	e8.0	e20	60	27	25	111	60
26	e9.5	e10	e9.5	e8.0	e7.5	e8.0	e22	56	28	23	96	61
27	e9.5	e9.5	e9.5	e8.0	e8.0	e8.0	e25	61	26	27	73	55
28	e9.0	e9.5	e9.5	e7.5	e8.0	e8.0	e29	69	26	35	65	49
29	e9.0	e9.5	e9.5	e7.5	e8.0	e8.5	e34	108	28	33	76	47
30	e9.0	e9.5	e9.5	e7.5	---	e9.5	e40	98	30	26	203	45
31	e9.0	---	e9.0	e7.5	---	e10	---	98	---	23	124	---
TOTAL	510.5	286.5	282.0	241.0	222.5	259.5	444	2126	1529	1007	2707	2414
MEAN	16.5	9.55	9.10	7.77	7.67	8.37	14.8	68.6	51.0	32.5	87.3	80.5
MAX	42	11	10	9.0	8.0	10	40	120	110	96	323	113
MIN	9.0	9.0	8.5	7.0	7.5	8.0	10	25	26	21	21	45
MED	11	9.5	9.0	7.5	7.5	8.5	11	69	41	26	76	86
AC-FT	1010	568	559	478	441	515	881	4220	3030	2000	5370	4790
CFSM	0.34	0.20	0.19	0.16	0.16	0.17	0.31	1.43	1.06	0.68	1.82	1.67
IN.	0.39	0.22	0.22	0.19	0.17	0.20	0.34	1.64	1.18	0.78	2.09	1.87

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2000, BY WATER YEAR (WY)#

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	22.4	15.4	11.8	9.60	8.01	8.19	23.7	77.4	65.9	44.1	47.8	43.0				
MAX	47.4	25.4	20.0	18.7	20.6	19.1	45.5	166	145	77.0	96.8	134				
(WY)	1994	1994	1987	1995	1994	1994	1992	1992	1989	1986	1986	1990				
MIN	10.3	4.87	1.65	0.95	0.00	0.00	0.00	37.9	29.4	25.6	22.5	17.6				
(WY)	1988	1988	1988	1986	1986	1986	1986	1999	1999	1996	1999	1987				

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1985 - 2000#

ANNUAL TOTAL	7159.5	12029.0														
ANNUAL MEAN	19.6	32.9								31.1						
HIGHEST ANNUAL MEAN										43.6						1990
LOWEST ANNUAL MEAN										20.5						1999
HIGHEST DAILY MEAN				150	May 16		323	Aug 12		852	Jun 25					1989
LOWEST DAILY MEAN				a6.5	Feb 24		b7.0	Jan 12		c0.00	Feb 1					1986
ANNUAL SEVEN-DAY MINIMUM				6.5	Feb 24		7.2	Jan 9		0.00	Feb 1					1986
MAXIMUM PEAK FLOW							716	Aug 12		d2400	Aug 21					1986
MAXIMUM PEAK STAGE							5.06	Aug 12		f11.05	Aug 21					1986
ANNUAL RUNOFF (AC-FT)	14200						23860			22520						
ANNUAL RUNOFF (CFSM)	0.408						0.683			0.646						
ANNUAL RUNOFF (INCHES)	5.54						9.30			8.78						
10 PERCENT EXCEEDS				40			88			66						
50 PERCENT EXCEEDS				11			11			20						
90 PERCENT EXCEEDS				7.0			8.0			4.0						

See Period of Record, partial years used in monthly statistics
a From Feb. 24 to Mar. 16 and Apr.6 to 10
b From Jan 12 to 15
c From Feb. 1 to Apr. 30, 1986
d Estimated discharge from rating curve extended above 280 ft³/s based on surface-float measurement at gage
e Estimated
f At site then in use, same datum

15518080 LIGNITE CREEK ABOVE MOUTH NEAR HEALY—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	e28	e21	e16	e15	e14	e11	e46	35	22	117	28
2	e26	e27	e20	e16	e15	e14	e11	e42	37	22	74	29
3	e31	e27	e20	e16	e15	e14	e11	e36	36	21	79	48
4	e36	e27	e20	e16	e15	e14	e11	e50	37	22	91	36
5	e35	e27	e20	e16	e15	e14	e11	87	36	24	60	35
6	e32	e27	e19	e16	e15	e14	e11	78	34	41	51	36
7	e30	e27	e19	e16	e15	e14	e11	74	34	55	46	34
8	e29	e27	e19	e16	e15	e14	e11	78	32	44	43	38
9	e28	e26	e19	e16	e15	e14	e11	88	30	32	41	34
10	e27	e26	e19	e16	e15	e14	e12	86	32	26	40	31
11	e26	e26	e19	e16	e15	e14	e12	74	31	24	45	30
12	e26	e26	e18	e16	e15	e14	e12	75	44	23	51	29
13	e27	e26	e18	e16	e15	e14	e12	87	38	22	45	28
14	e28	e26	e18	e16	e15	e14	e12	103	33	23	41	27
15	e30	e26	e18	e16	e15	e14	e12	97	30	21	39	26
16	e34	e26	e18	e16	e15	e14	e12	89	28	19	41	26
17	e36	e26	e18	e16	e15	e13	e12	67	28	23	43	26
18	e35	e26	e18	e16	e15	e13	e13	70	27	28	43	24
19	e34	e25	e17	e16	e15	e12	e14	81	27	23	39	24
20	e32	e25	e17	e16	e15	e12	e15	69	26	21	39	24
21	e31	e24	e17	e16	e15	e12	e16	58	24	20	44	24
22	e30	e24	e17	e16	e14	e11	e17	54	23	22	41	24
23	e30	e23	e17	e16	e14	e11	e19	57	23	23	45	24
24	e29	e23	e17	e16	e14	e11	e20	47	22	45	45	23
25	e29	e22	e17	e16	e14	e11	e22	39	22	46	39	23
26	e29	e22	e17	e16	e14	e11	e24	36	21	75	37	23
27	e29	e22	e17	e15	e14	e11	e27	39	22	137	36	23
28	e29	e21	e17	e15	e14	e11	e32	40	21	102	34	22
29	e28	e21	e16	e15	---	e11	e38	36	21	101	32	21
30	e28	e21	e16	e15	---	e11	e48	34	24	147	31	22
31	e28	---	e16	e15	---	e11	---	32	---	165	28	---
TOTAL	931	750	559	491	413	396	500	1949	878	1419	1480	842
MEAN	30.0	25.0	18.0	15.8	14.8	12.8	16.7	62.9	29.3	45.8	47.7	28.1
MAX	36	28	21	16	15	14	48	103	44	165	117	48
MIN	26	21	16	15	14	11	11	32	21	19	28	21
MED	29	26	18	16	15	14	12	67	29	24	43	26
AC-FT	1850	1490	1110	974	819	785	992	3870	1740	2810	2940	1670
CFSM	0.62	0.52	0.37	0.33	0.31	0.27	0.35	1.31	0.61	0.95	0.99	0.58
IN.	0.72	0.58	0.43	0.38	0.32	0.31	0.39	1.51	0.68	1.10	1.14	0.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2001, BY WATER YEAR (WY)#

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	22.8	16.0	12.2	9.99	8.43	8.47	23.3	76.5	63.8	44.2	47.8	42.2					
MAX	47.4	25.4	20.0	18.7	20.6	19.1	45.5	166	145	77.0	96.8	134					
(WY)	1994	1994	1987	1995	1994	1994	1994	1992	1989	1986	1986	1990					
MIN	10.3	4.87	1.65	0.95	0.00	0.00	0.00	37.9	29.3	25.6	22.5	17.6					
(WY)	1988	1988	1988	1986	1986	1986	1986	1999	2001	1996	1999	1987					

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1985 - 2001#

ANNUAL TOTAL	13190.0	10608		
ANNUAL MEAN	36.0	29.1	31.0	
HIGHEST ANNUAL MEAN			43.6	1990
LOWEST ANNUAL MEAN			20.5	1999
HIGHEST DAILY MEAN	323	Aug 12	165	Jul 31
LOWEST DAILY MEAN	a7.0	Jan 12	b11	Mar 22
ANNUAL SEVEN-DAY MINIMUM	7.2	Jan 9	11	Mar 22
MAXIMUM PEAK FLOW			190	Jul 31
MAXIMUM PEAK STAGE			3.48	Jul 31
MAXIMUM PEAK STAGE			g5.44	Apr 20
ANNUAL RUNOFF (AC-FT)	26160	21040	22430	
ANNUAL RUNOFF (CFSM)	0.749	0.604	0.644	
ANNUAL RUNOFF (INCHES)	10.20	8.20	8.74	
10 PERCENT EXCEEDS	88	47	64	
50 PERCENT EXCEEDS	26	23	20	
90 PERCENT EXCEEDS	8.0	14	5.0	

See Period of Record, partial years used in monthly statistics

a From Jan 12-15

b From Mar. 22 to Apr. 9

c From Feb. 1 to Apr. 30, 1986

d Estimated discharge from rating curve extended above 280 ft³/s based on surface-float measurement at gage

e Estimated

f At site then in use, same datum

g Backwater from ice

15518080 LIGNITE CREEK ABOVE MOUTH NEAR HEALY—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	e20	e16	e13	e13	e14	e12	e26	93	29	54	15
2	37	e20	e15	e13	e13	e14	e12	e28	69	29	36	16
3	41	e20	e15	e13	e14	e14	e12	e31	60	36	23	16
4	44	e19	e15	e13	e14	e14	e12	e36	54	32	21	16
5	39	e19	e15	e13	e14	e13	e12	e60	49	43	19	16
6	37	e19	e15	e13	e14	e13	e13	169	46	55	18	16
7	35	e18	e15	e13	e14	e13	e13	289	46	41	18	16
8	35	e18	e15	e12	e14	e13	e13	132	47	43	17	16
9	34	e17	e15	e12	e14	e13	e13	106	60	40	17	16
10	33	e17	e14	e12	e15	e12	e13	83	139	42	17	16
11	32	e16	e14	e12	e15	e12	e13	79	111	38	18	17
12	32	e16	e14	e12	e15	e12	e14	122	90	36	18	17
13	e30	e15	e14	e12	e15	e12	e14	92	79	34	17	22
14	34	e14	e14	e12	e15	e12	e14	79	72	34	17	25
15	32	e13	e14	e12	e15	e12	e14	72	65	47	17	24
16	e30	e13	e14	e12	e15	e12	e15	66	69	39	17	21
17	e28	e12	e14	e12	e15	e12	e15	57	53	31	17	19
18	e27	e12	e13	e12	e15	e12	e16	53	46	32	17	20
19	e26	e12	e13	e12	e15	e12	e16	54	40	47	16	20
20	e25	e13	e13	e12	e15	e12	e17	49	37	50	16	25
21	e24	e13	e13	e12	e15	e12	e17	45	34	40	16	29
22	e23	e14	e13	e13	e15	e12	e18	49	33	37	16	24
23	e23	e14	e13	e13	e15	e12	e19	51	31	42	16	e22
24	e22	e15	e13	e13	e15	e12	e19	54	29	35	16	e20
25	e22	e15	e13	e13	e15	e12	e20	55	28	25	16	e19
26	e22	e16	e13	e13	e15	e12	e21	119	27	20	19	e22
27	e21	e16	e13	e13	e15	e12	e22	125	27	16	18	e21
28	e21	e16	e13	e13	e15	e12	e23	78	27	17	17	e20
29	e21	e16	e13	e13	e14	e12	e24	69	27	19	16	e19
30	e20	e16	e13	e13	---	e12	e25	75	28	20	16	e19
31	e20	---	e13	e13	---	e12	---	86	---	17	15	---
TOTAL	909	474	430	389	423	385	481	2489	1616	1066	591	584
MEAN	29.3	15.8	13.9	12.5	14.6	12.4	16.0	80.3	53.9	34.4	19.1	19.5
MAX	44	20	16	13	15	14	25	289	139	55	54	29
MIN	20	12	13	12	13	12	12	26	27	16	15	15
MED	30	16	14	13	15	12	14	69	47	36	17	19
AC-FT	1800	940	853	772	839	764	954	4940	3210	2110	1170	1160
CFSM	0.61	0.33	0.29	0.26	0.30	0.26	0.33	1.67	1.12	0.71	0.40	0.40
IN.	0.70	0.37	0.33	0.30	0.33	0.30	0.37	1.92	1.25	0.82	0.46	0.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2004, BY WATER YEAR (WY)

	2003	2003	1987	1995	1994	1994	1994	1992	2001	1996	2004	1987
MEAN	24.8	16.9	12.4	10.3	8.91	8.72	21.4	75.7	63.0	47.0	49.6	43.4
MAX	55.4	35.5	20.0	18.7	20.6	19.1	45.5	166	145	110	105	134
(WY)	2003	2003	1987	1995	1994	1994	1994	1992	1989	2002	2002	1990
MIN	10.3	4.87	1.65	0.95	0.00	0.00	0.00	31.0	29.3	25.6	19.1	17.6
(WY)	1988	1988	1988	1986	1986	1986	1986	2003	2001	1996	2004	1987

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1985 - 2004

ANNUAL TOTAL	10406.4	9837										
ANNUAL MEAN	28.5	26.9								31.6		
HIGHEST ANNUAL MEAN										45.4		2002
LOWEST ANNUAL MEAN										20.5		1999
HIGHEST DAILY MEAN			298	Sep 2		289	May 7		852		Jun 25	1989
LOWEST DAILY MEAN			a9.4	Mar 30		b12	Nov 17		c0.00		Feb 1	1986
ANNUAL SEVEN-DAY MINIMUM			9.4	Mar 30		12	Jan 8		d0.00		Feb 1	1986
MAXIMUM PEAK FLOW						381	May 7		d2400		Aug 21	1986
MAXIMUM PEAK STAGE						3.97	May 7		f11.05		Aug 21	1986
ANNUAL RUNOFF (AC-FT)	20640	19510							22880			
ANNUAL RUNOFF (CFSM)	0.593	0.559							0.657			
ANNUAL RUNOFF (INCHES)	8.05	7.61							8.92			
10 PERCENT EXCEEDS		55				53			67			
50 PERCENT EXCEEDS		16				17			20			
90 PERCENT EXCEEDS		10				12			6.0			

See Period of Record, partial years used in monthly statistics

a From Mar. 30 to Apr. 10

b From Nov. 17 to 19, Jan. 8 to 21 and Mar. 10 to Apr. 5

c From Feb. 1 to Apr. 30, 1986

d Estimated discharge from rating curve extended above 280 ft³/s based on surface-float measurement at gage

e Estimated

f At site then in use, same datum

15518080 LIGNITE CREEK ABOVE MOUTH NEAR HEALY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1980 to 1981, 1986 to September 2004 (discontinued)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Medium code	Stream width, feet (00004)	Gage height, feet (00065)	Instan- taneous dis- charge, cfs (00061)	Sampler type, code (84164)	Sam- pling method, code (82398)	Temper- ature, water, deg C (00010)	Temper- ature, air, deg C (00020)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)
MAY 05...	1421	9	27.5	2.66	39	3001	10	6.4	17.5	1710	181	--
JUN 22...	1310	9	12.6	2.18	33	3001	10	16.8	18.1	257	23	66
JUL 26...	1522	9	13.1	2.03	19	3001	10	13.1	17.5	216	11	45
SEP 26...	1023	9	20.2	--	21	3001	10	.4	.3	185	10	53

15564879 SLATE CREEK AT COLDFOOT

LOCATION.--Lat 67°15'17", long 150°10'24", in NW¹/₄ sec. 15, T. 28 N., R. 12 W. (Wiseman B-1 quad), Hydrologic Unit 19040601, on left bank 40 ft downstream from bridge on Dalton Highway, 1.1 mi upstream from mouth and 0.1 mi north of Coldfoot.

DRAINAGE AREA.--73.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximums, water years 1981-94. May 1995 to current year (no winter records in water years 1995-98).

REVISED RECORDS.--WRD AK-99-1: 1984(M), 1989(M), 1993(M), 1994(M), 1998 (M).

GAGE.--Water-stage recorder. Elevation of gage is 1050 ft above sea level, from topographic map. Prior to May 5, 1995, nonrecording gage at site 105 ft upstream at same datum. May 5, 1995 to Present, recording gage at site 60 ft downstream at same datum.

REMARKS.--Records good, except estimated daily discharges which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	e55	e14	e1.5	e0.0	e0.0	e0.0	e4.0	269	30	107	44
2	120	e53	e14	e1.4	e0.0	e0.0	e0.0	e6.0	295	28	82	46
3	122	e50	e13	e1.2	e0.0	e0.0	e0.0	e7.0	241	29	64	43
4	197	e48	e13	e1.0	e0.0	e0.0	e0.0	e8.0	262	29	55	41
5	184	e46	e12	e0.8	e0.0	e0.0	e0.0	e9.0	333	29	49	40
6	166	e44	e12	e0.6	e0.0	e0.0	e0.0	e10	246	27	45	38
7	159	e42	e11	e0.4	e0.0	e0.0	e0.0	e11	192	26	43	37
8	149	e40	e11	e0.2	e0.0	e0.0	e0.0	e14	164	27	41	37
9	139	e38	e10	e0.0	e0.0	e0.0	e0.0	e18	144	25	39	36
10	139	e37	e9.4	e0.0	e0.0	e0.0	e0.0	e27	130	23	38	35
11	132	e35	e8.8	e0.0	e0.0	e0.0	e0.0	e44	106	21	36	34
12	126	e34	e8.2	e0.0	e0.0	e0.0	e0.0	e67	95	20	35	34
13	120	e32	e7.5	e0.0	e0.0	e0.0	e0.0	e100	85	20	63	33
14	e110	e31	e6.9	e0.0	e0.0	e0.0	e0.0	e200	78	19	143	36
15	e107	e30	e6.4	e0.0	e0.0	e0.0	e0.0	e230	72	19	114	35
16	e100	e28	e5.9	e0.0	e0.0	e0.0	e0.0	e330	71	19	95	33
17	e94	e27	e5.5	e0.0	e0.0	e0.0	e0.0	e400	69	19	86	31
18	e90	e26	e5.0	e0.0	e0.0	e0.0	e0.0	e340	63	22	78	29
19	e88	e25	e4.6	e0.0	e0.0	e0.0	e0.0	e280	57	32	73	28
20	e86	e24	e4.3	e0.0	e0.0	e0.0	e0.0	209	53	30	68	29
21	e84	e23	e4.0	e0.0	e0.0	e0.0	e0.0	186	51	25	63	31
22	e82	e22	e3.7	e0.0	e0.0	e0.0	e0.0	183	48	28	60	30
23	e78	e21	e3.4	e0.0	e0.0	e0.0	e0.0	209	46	28	58	34
24	e75	e20	e3.1	e0.0	e0.0	e0.0	e0.0	340	42	29	54	32
25	e72	e19	e2.8	e0.0	e0.0	e0.0	e0.0	474	40	27	51	31
26	e70	e18	e2.6	e0.0	e0.0	e0.0	e0.0	560	37	27	50	29
27	e67	e17	e2.4	e0.0	e0.0	e0.0	e0.1	385	36	26	47	28
28	e65	e17	e2.2	e0.0	e0.0	e0.0	e0.5	407	35	25	46	27
29	e62	e16	e2.0	e0.0	e0.0	e0.0	e1.0	397	33	24	46	22
30	e60	e15	e1.8	e0.0	---	e0.0	e2.0	365	31	26	44	18
31	e57	---	e1.7	e0.0	---	e0.0	---	297	---	36	43	---
TOTAL	3318	933	212.2	7.1	0.0	0.0	3.6	6117.0	3424	795	1916	1001
MEAN	107	31.1	6.85	0.23	0.00	0.00	0.12	197	114	25.6	61.8	33.4
MAX	197	55	14	1.5	0.00	0.00	2.0	560	333	36	143	46
MIN	57	15	1.7	0.00	0.00	0.00	0.00	4.0	31	19	35	18
AC-FT	6580	1850	421	14	0.00	0.00	7.1	12130	6790	1580	3800	1990
CFSM	1.46	0.42	0.09	0.00	0.00	0.00	0.00	2.69	1.55	0.35	0.84	0.45
IN.	1.68	0.47	0.11	0.00	0.00	0.00	0.00	3.10	1.74	0.40	0.97	0.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)#

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	56.9	17.4	7.85	3.31	1.98	1.54	2.50	196	210	100	182	145								
MAX	107	31.1	17.3	12.1	9.07	7.13	9.32	378	319	184	435	234								
(WY)	2004	2004	1999	1999	1999	1999	1998	1998	2003	1995	1998	2003								
MIN	16.2	2.28	1.41	0.12	0.00	0.00	0.00	27.5	114	25.6	52.8	33.4								
(WY)	1997	1998	2002	2001	2001	2001	2001	2003	2004	2004	2002	2004								

See Period of Record; partial years used in monthly summary statistics
e Estimated

15564879 SLATE CREEK AT COLDFOOT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1995 - 2004#	
ANNUAL TOTAL	35193.80		17726.9			
ANNUAL MEAN	96.4		48.4		71.7	
HIGHEST ANNUAL MEAN					93.4 2003	
LOWEST ANNUAL MEAN					48.4 2004	
HIGHEST DAILY MEAN	1940	Jul 26	560	May 26	a2850	May 26 1998
LOWEST DAILY MEAN	b0.00	Feb 22	c0.00	Jan 9	0.00	Jan 13 2001
ANNUAL SEVEN-DAY MINIMUM	0.00	Feb 22	0.00	Jan 9	0.00	Jan 13 2001
MAXIMUM PEAK FLOW			790	May 26	f4930	May 26 1998
MAXIMUM PEAK STAGE			16.01	May 26	19.73	May 26 1998
ANNUAL RUNOFF (AC-FT)	69810		35160		51930	
ANNUAL RUNOFF (CFSM)	1.31		0.660		0.977	
ANNUAL RUNOFF (INCHES)	17.84		8.98		13.27	
10 PERCENT EXCEEDS	256		131		190	
50 PERCENT EXCEEDS	19		24		19	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Revised in 1999 from 2740 ft³/s

b From Feb. 22 to May 10

c From Jan. 9 to Apr. 26

f From rating curve extended above 2,190 ft³/s on basis of slope-area measurement at discharge 4,700 ft³/s, gage height 19.6 ft, at previous site 60 ft downstream.

15564879 SLATE CREEK AT COLDFOOT—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1998 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 1998 to current year (seasonal).

INSTRUMENTATION.--Water-temperature recorder since May 11, 1998. Electronic water temperature recorder set for 1-hour recording interval.

REMARKS.--Record not used or absent October 24 to May 13 and August 24 to September 30 due to probe being frozen in ice, or malfunctioning. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on June 10, July 13 and September 20. Variation within the cross sections was less than 0.3°C. The variation found between mean stream temperature and sensor temperature was less than 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 15.5°C, August 20, 2004; minimum, 0.0°C, on many days during spring breakup and winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 15.5°C, August 20; minimum, 0°C, on many days during fall, winter, and spring breakup periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Stream width, feet (00004)	Location in X-sect. looking downstrm ft from l bank (00009)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
JUN								
10...	0910	59.4	52.2	14.42	132	10	4.9	14.7
10...	0911	59.4	40.2	14.42	132	10	4.9	14.7
10...	0912	59.4	28.2	14.42	132	10	5.0	14.7
10...	0913	59.4	16.2	14.42	132	10	5.0	14.7
10...	0914	59.4	4.2	14.42	132	10	5.0	14.7
JUL								
13...	0954	13.8	12.0	13.82	21	10	8.5	17.3
13...	0955	13.8	9.5	13.82	21	10	8.3	17.3
13...	0956	13.8	7.0	13.82	21	10	8.3	17.3
13...	0957	13.8	4.5	13.82	21	10	8.3	17.3
13...	0958	13.8	2.0	13.82	21	10	8.3	17.3
SEP								
20...	1807	18.0	15.0	13.89	29	10	4.2	5.2
20...	1810	18.0	12.0	13.89	29	10	4.1	5.2
20...	1813	18.0	9.0	13.89	29	10	4.2	5.2
20...	1816	18.0	6.0	13.89	29	10	4.3	5.2
20...	1819	18.0	3.0	13.89	29	10	4.1	5.2

15565400 ANVIK RIVER NEAR ANVIK

LOCATION.--Lat 62°47'22", long 160°41'49", in NW¹/₄ NW¹/₄ SE¹/₄ sec. 10, T.31 N., R.61 W. (Holy Cross D-4 quad), Hydrologic Unit 190401801, on the right bank, approximately 25 river mi upstream from mouth, 18 mi northwest of Anvik.

DRAINAGE AREA.-- Pending

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 2001 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 160 ft above sea level from topographic map.

REMARKS.--Records good, except for June 10 to August 6, which are fair, and estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2120	2720	e480	e300	e210	e190	e180	e10000	5900	1900	1010	938
2	3460	2910	e470	e290	e210	e190	e180	e9800	5120	1870	934	922
3	4560	2970	e460	e280	e210	e190	e180	e9600	4820	1820	924	896
4	5160	3010	e450	e270	e210	e190	e180	e9200	4550	1690	943	862
5	4610	3080	e440	e260	e210	e190	e180	e9000	4200	1550	919	882
6	4070	3140	e430	e260	e210	e190	e180	e8800	3960	1470	905	937
7	3680	3230	e420	e250	e210	e190	e180	e8600	3770	1450	871	943
8	3470	3680	e410	e250	e210	e190	e180	e8200	3660	1320	862	886
9	3510	4480	e410	e240	e210	e190	e190	e8000	3730	1240	939	839
10	3360	e3600	e400	e240	e210	e190	e190	e7800	3640	1230	992	813
11	3150	e2400	e400	e240	e210	e190	e200	e7600	3410	1160	1060	792
12	3010	e1600	e400	e230	e210	e190	e220	e7400	3370	1080	1190	773
13	2830	e1300	e390	e230	e210	e190	e250	e7200	3600	1030	2080	767
14	2690	e1200	e380	e230	e210	e190	e280	e7000	3510	986	3680	824
15	2770	e1100	e370	e230	e210	e190	e340	e6800	3240	958	3490	869
16	3000	e1000	e360	e220	e200	e180	e400	e6600	3010	960	2730	829
17	2990	e1000	e360	e220	e200	e180	e500	e6600	2940	928	2250	794
18	e2500	e900	e350	e220	e200	e180	e600	e6400	3000	912	1930	757
19	e2300	e900	e350	e220	e200	e180	e700	e6200	3130	931	1710	752
20	e2100	e900	e340	e220	e200	e180	e900	5970	3000	909	1550	781
21	e2000	e1000	e340	e220	e200	e180	e1100	5460	2840	837	1440	822
22	e1950	e900	e330	e220	e200	e180	e1500	5670	2750	829	1370	1110
23	e1900	e800	e330	e220	e200	e180	e2000	6510	2890	816	1310	1560
24	e1850	e700	e320	e220	e200	e180	e2500	8800	3090	817	1250	1370
25	e1800	e600	e320	e220	e200	e180	e3000	8420	2890	766	1180	1170
26	e1800	e600	e310	e220	e200	e180	e4000	7180	2690	731	1110	1080
27	1760	e560	e310	e220	e200	e180	e5000	6220	2510	750	1070	1010
28	1690	e540	e300	e220	e200	e180	e6000	5510	2310	861	1030	932
29	1600	e520	e300	e220	e200	e180	e8000	5530	2130	933	1010	888
30	1600	e500	e300	e210	---	e180	e9000	5090	1960	984	976	872
31	2330	---	e300	e210	---	e180	---	5050	---	1100	958	---
TOTAL	85620	51840	11530	7300	5950	5730	48310	226210	101620	34818	43673	27670
MEAN	2762	1728	372	235	205	185	1610	7297	3387	1123	1409	922
MAX	5160	4480	480	300	210	190	9000	10000	5900	1900	3680	1560
MIN	1600	500	300	210	200	180	180	5050	1960	731	862	752
MED	2690	1050	360	220	210	180	370	7180	3180	984	1070	877
AC-FT	169800	102800	22870	14480	11800	11370	95820	448700	201600	69060	86630	54880

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)#

MEAN	2201	1143	416	260	213	191	901	5826	3755	1977	1981	2086
MAX	2762	1728	571	312	235	213	1610	7297	4998	3051	3320	3220
(WY)	2004	2004	2003	2003	2003	2003	2004	2004	2003	2001	2003	2001
MIN	1302	520	304	233	198	176	162	4266	2881	984	656	922
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2004

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 2001 - 2004#

ANNUAL TOTAL	792750	650271		
ANNUAL MEAN	2172	1777		1677
HIGHEST ANNUAL MEAN				2125
LOWEST ANNUAL MEAN				1130
HIGHEST DAILY MEAN				16900
LOWEST DAILY MEAN	12400	May 10	10000	May 1
ANNUAL SEVEN-DAY MINIMUM	a210	Mar 11	b180	Mar 16
MAXIMUM PEAK FLOW	210	Mar 11	180	Mar 16
MAXIMUM PEAK STAGE			10100	May 1
INSTANTANEOUS LOW FLOW			d24.57	May 1
ANNUAL RUNOFF (AC-FT)	1572000		180	Mar 16
10 PERCENT EXCEEDS	5230		5060	
50 PERCENT EXCEEDS	1760		902	
90 PERCENT EXCEEDS	220		190	

See Period of Record: partial year used in monthly statistics

a From Mar. 11 to Apr. 7

b From Mar. 16 to Apr. 8

c From Apr. 1 to Apr. 26, 2002

d From flood mark

e Estimated

15565400 ANVIK RIVER NEAR ANVIK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2002 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 2002 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder set for one-hour recording interval.

REMARKS.-- Probe installed on June 25, 2002. Missing record in May was from probe damaged by ice. Records represent water temperature at the sensor within 0.5°C. Temperature was compared with the stream average by cross section on June 3. No variation was found. The variation found between mean stream temperature and sensor temperature was less than 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 19.0°C, Aug. 3-4; 2002; minimum, 0.0°C, many days during winter and spring breakup periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 18.5°C, July 13-15.; minimum, 0.0°C, many days during fall, winter and spring breakup period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	STREAM WIDTH (FT) (00004)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM-PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)
Jun									
03...	1501	196	30.0	22.39	4950	10	8010	8.5	15.0
03...	1503	196	60.0	22.39	4950	10	8010	8.5	15.0
03...	1505	196	90.0	22.39	4950	10	8010	8.5	15.0
03...	1507	196	144	22.39	4950	10	8010	8.5	15.0
03...	1509	196	180	22.39	4950	10	8010	8.5	15.0

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.5	4.5	5.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
2	6.5	6.5	6.5	1.5	1.5	1.5	0.0	0.0	0.0	0.5	0.0	0.0
3	6.5	5.5	6.0	2.0	1.5	2.0	0.5	0.0	0.0	0.5	0.0	0.5
4	5.5	5.0	5.0	2.0	2.0	2.0	0.0	0.0	0.0	0.5	0.0	0.5
5	5.0	4.5	5.0	2.5	2.0	2.0	0.0	0.0	0.0	0.5	0.5	0.5
6	4.5	4.5	4.5	2.5	2.5	2.5	0.0	0.0	0.0	0.5	0.0	0.5
7	4.5	4.5	4.5	2.5	2.0	2.5	0.0	0.0	0.0	0.5	0.0	0.5
8	4.5	4.5	4.5	2.0	1.5	2.0	0.0	0.0	0.0	0.5	0.5	0.5
9	4.5	4.5	4.5	1.5	1.0	1.0	0.0	0.0	0.0	0.5	0.5	0.5
10	4.5	4.0	4.0	1.0	0.5	0.5	0.0	0.0	0.0	0.5	0.5	0.5
11	4.0	3.5	3.5	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.5
12	3.5	3.0	3.0	1.0	0.5	0.5	0.0	0.0	0.0	0.5	0.5	0.5
13	3.0	2.5	2.5	1.0	1.0	1.0	0.0	0.0	0.0	0.5	0.5	0.5
14	2.5	1.5	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.5	0.5	0.5
15	1.5	1.5	1.5	1.0	0.0	0.5	0.0	0.0	0.0	0.5	0.5	0.5
16	2.0	1.5	2.0	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.5	0.5
17	2.0	1.5	2.0	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.5	0.5
18	1.5	1.0	1.5	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.5	0.5
19	1.0	1.0	1.0	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.5	0.5
20	1.0	1.0	1.0	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.5	0.5
21	1.0	1.0	1.0	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.5	0.5
22	1.0	1.0	1.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5
23	1.0	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5
24	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.5
25	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.5
26	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.5
27	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0
28	1.0	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0
29	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
30	1.0	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
31	1.5	1.0	1.5	---	---	---	0.0	0.0	0.0	0.5	0.0	0.5
MONTH	6.5	0.5	2.5	2.5	0.0	0.7	0.5	0.0	0.1	0.5	0.0	0.4

1556540 ANVIK RIVER NEAR ANVIK—Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	---	---
2	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.5
3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.5	1.0
4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	2.0	2.0
5	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	3.5	2.5	3.0
6	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.0	2.0
7	0.5	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0
8	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	2.5	2.0	2.5
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.0	2.5
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	2.0	2.5
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.0	3.5
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	3.5	---
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
19	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	---	---
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	5.0	5.5
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	6.0	---
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	---	---
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	6.5	7.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	7.5	8.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	7.5	8.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	8.5	7.0	7.5
29	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	7.0	6.5	6.5
30	---	---	---	0.0	0.0	0.0	1.0	0.5	0.5	8.0	7.0	---
31	---	---	---	0.0	0.0	0.0	---	---	---	9.0	---	---
MONTH	0.5	0.0	0.1	0.5	0.0	0.0	1.0	0.0	0.0	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.0	7.5	8.5	16.0	14.0	15.0	16.0	15.0	15.5	11.0	10.0	10.5
2	10.0	8.5	9.0	14.0	13.0	13.0	16.0	14.5	15.0	11.0	10.0	10.5
3	10.0	8.5	9.0	13.5	12.5	12.5	15.5	14.0	14.5	10.5	9.0	9.5
4	9.0	8.5	8.5	13.5	12.5	13.0	14.5	14.0	14.5	9.5	8.0	8.5
5	11.0	8.5	9.5	14.0	13.0	13.5	15.0	13.5	14.5	9.5	8.0	8.5
6	13.0	10.5	11.5	15.5	13.0	14.0	17.0	14.0	15.5	10.5	8.5	9.5
7	14.0	13.0	13.5	16.0	14.5	15.5	16.5	15.0	15.5	10.5	9.0	10.0
8	14.0	11.5	12.5	16.5	14.5	15.5	15.0	13.5	14.0	10.5	8.5	9.5
9	11.5	9.5	10.0	17.0	15.0	16.0	14.0	13.0	13.5	10.5	9.0	9.5
10	11.5	10.0	10.5	17.5	15.0	16.5	13.5	13.0	13.5	11.0	9.5	10.0
11	11.5	11.0	11.5	18.0	16.0	17.0	15.0	13.0	14.0	10.5	8.5	9.5
12	12.5	11.5	12.0	18.0	16.0	17.5	15.0	14.0	14.5	9.5	7.5	8.5
13	12.5	11.5	12.0	18.5	16.5	17.5	14.0	13.5	13.5	8.0	6.5	7.0
14	12.5	12.0	12.0	18.5	16.5	17.5	13.5	13.0	13.5	7.0	6.0	6.5
15	12.0	11.0	11.5	18.5	17.0	17.5	15.0	13.0	13.5	6.5	5.5	5.5
16	12.0	12.0	12.0	17.5	16.5	17.0	16.5	14.0	15.0	5.5	5.0	5.0
17	12.0	11.0	11.5	16.5	15.5	16.0	16.5	15.0	16.0	5.0	3.5	4.5
18	11.5	10.0	10.5	17.0	15.0	16.0	16.5	15.0	16.0	4.0	3.5	4.0
19	12.0	10.0	10.5	17.0	14.5	16.0	17.5	15.5	16.5	4.5	4.0	4.0
20	13.5	11.5	12.5	17.5	15.5	16.5	17.5	16.0	16.5	5.0	4.0	4.5
21	13.5	12.5	13.0	18.0	16.0	17.0	16.5	14.5	15.0	5.0	4.5	5.0
22	13.5	12.0	12.5	18.0	16.0	17.0	14.5	13.5	14.0	5.0	4.5	4.5
23	12.0	11.0	11.5	17.5	15.5	16.5	15.5	13.5	14.5	5.0	4.0	4.0
24	11.5	10.0	10.5	18.0	15.5	17.0	15.0	14.0	14.5	4.0	3.0	4.0
25	11.5	9.5	10.5	17.5	16.5	17.0	15.0	13.5	14.0	4.0	3.0	3.5
26	13.5	11.0	12.0	17.0	15.5	16.0	14.0	11.5	12.5	3.0	2.5	2.5
27	16.0	13.5	14.0	15.5	14.5	15.0	11.5	10.5	11.0	2.5	1.5	2.0
28	17.0	15.0	15.5	15.5	14.0	14.5	10.5	8.5	9.5	2.0	1.0	1.5
29	17.0	16.0	16.5	16.5	14.5	15.5	9.5	8.5	9.0	2.0	1.0	1.5
30	16.5	15.5	16.0	15.5	14.0	14.5	10.5	9.5	10.0	1.0	0.5	0.5
31	---	---	---	16.5	15.0	16.0	10.5	10.0	10.0	---	---	---
MONTH	17.0	7.5	11.7	18.5	12.5	15.8	17.5	8.5	13.8	11.0	0.5	6.1

15565447 YUKON RIVER AT PILOT STATION

LOCATION.--Lat 61°56'04", long 162°52'50", in SW¹/₄ SE¹/₄ sec. 5, T.21 N., R.74 W. (Marshall D-3 quad), Hydrologic Unit 19040805, on the right bank, .2 mi downstream from village of Pilot Station, 2.4 mi downstream from Atchuelinguk River, and 19 mi upstream from Andreaafsky River.

DRAINAGE AREA.--321,000 mi² approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to September 1996, April 2001 to current year.

REVISED RECORDS.--WRD-AK-99-1: 1998.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above sea level from topographic map.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	334000	e138000	e85000	e64500	e54000	e49000	e46500	e83000	584000	488000	306000	294000
2	326000	e135000	e83000	e64000	e53500	e49000	e46500	e105000	594000	476000	307000	e290000
3	319000	e131000	e82000	e63500	e53500	e49000	e46500	e130000	602000	464000	307000	e285000
4	313000	e128000	e81000	e63000	e53000	e48500	e46500	e165000	608000	454000	307000	e280000
5	308000	e126000	e80000	e63000	e53000	e48500	e46500	e190000	614000	446000	307000	e275000
6	e301000	e124000	e79000	e62500	e53000	e48500	e46500	e225000	619000	438000	307000	e270000
7	e295000	e122000	e78000	e62500	e52500	e48500	e46500	e270000	624000	432000	305000	e265000
8	e285000	e120000	e77500	e62000	e52500	e48000	e46500	312000	629000	427000	303000	e258000
9	e277000	e119000	e77000	e61500	e52500	e48000	e46500	340000	636000	422000	305000	e251000
10	e270000	e117000	e76000	e61000	e52000	e48000	e46500	362000	640000	415000	307000	e245000
11	e262000	e115000	e75500	e60500	e52000	e48000	e46500	380000	642000	408000	308000	e239000
12	e254000	e112000	e74500	e60000	e52000	e48000	e46500	389000	645000	400000	308000	e233000
13	e247000	e110000	e74000	e59500	e51500	e47500	e46500	392000	645000	391000	313000	e228000
14	e239000	e108000	e73000	e59500	e51500	e47500	e46500	401000	642000	384000	324000	e223000
15	e231000	e106000	e72500	e59000	e51000	e47500	e46500	418000	639000	377000	330000	e218000
16	e226000	e104000	e72000	e59000	e51000	e47500	e46500	435000	633000	371000	334000	e213000
17	e219000	e102000	e71000	e58500	e50500	e47000	e46500	450000	627000	370000	335000	e210000
18	e213000	e100000	e70500	e58000	e50500	e47000	e47000	468000	621000	361000	334000	e208000
19	e208000	e99000	e70000	e58000	e50500	e47000	e47000	488000	615000	355000	333000	e206000
20	e201000	e98000	e69500	e57500	e50000	e47000	e47000	502000	607000	351000	330000	e204000
21	e195000	e97000	e69000	e57500	e50000	e47000	e47500	510000	600000	347000	324000	e203000
22	e190000	e95000	e68500	e57000	e50000	e47000	e48000	513000	592000	347000	319000	e202000
23	e185000	e93000	e68000	e57000	e50000	e46500	e48500	516000	583000	338000	314000	e200000
24	e180000	e92000	e67500	e56500	e49500	e46500	e49000	518000	574000	331000	310000	e197000
25	e174000	e91000	e67000	e56000	e49500	e46500	e50000	521000	563000	316000	307000	e194000
26	e169000	e90000	e66500	e56000	e49500	e46500	e52000	524000	552000	308000	306000	e190000
27	e164000	e89000	e66500	e55000	e49000	e46500	e54000	531000	540000	305000	304000	e186000
28	e159000	e88000	e66000	e55000	e49000	e46500	e57000	542000	527000	304000	302000	e182000
29	e154000	e87000	e65500	e54500	e49000	e46500	e63000	552000	514000	303000	299000	e178000
30	e148000	e86000	e65000	e54000	---	e46500	e70000	563000	501000	304000	298000	e175000
31	e141000	---	e65000	e54000	---	e46500	---	574000	---	305000	295000	---
TOTAL	7187000	3222000	2255500	1829500	1485500	1471500	1470500	12369000	18012000	11738000	9688000	6802000
MEAN	231800	107400	72760	59020	51220	47470	49020	399000	600400	378600	312500	226700
MAX	334000	138000	85000	64500	54000	49000	70000	574000	645000	488000	335000	294000
MIN	141000	86000	65000	54000	49000	46500	46500	83000	501000	303000	295000	175000
AC-FT14260000	6391000	4474000	3629000	2946000	2919000	2917000	24530000	35730000	23280000	19220000	13490000	
CFSM	0.72	0.33	0.23	0.18	0.16	0.15	0.15	1.24	1.87	1.18	0.97	0.71
IN.	0.83	0.37	0.26	0.21	0.17	0.17	0.17	1.43	2.09	1.36	1.12	0.79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2004, BY WATER YEAR (WY)#

MEAN	252900	129500	76080	61530	53140	48160	46320	280200	579600	445100	391000	357300
MAX	335900	211800	94840	76000	65360	56770	55000	501700	844600	563500	515800	481300
(WY)	1991	2003	1986	1986	1994	1980	1989	1991	1985	1992	1981	1994
MIN	170600	725000	50000	50000	38380	35160	38430	100200	364400	314000	312500	226700
(WY)	1979	1989	1988	1988	1984	1984	1976	1985	1978	1996	2004	2004

See Period of Record, partial years used in monthly statistics
e Estimated

15565447 YUKON RIVER AT PILOT STATION—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1976 - 2004#	
ANNUAL TOTAL	80897500		77530500			
ANNUAL MEAN	221600		211800		226400	
HIGHEST ANNUAL MEAN					253700 1994	
LOWEST ANNUAL MEAN					185300 1978	
HIGHEST DAILY MEAN	a541000	Jun 18	b645000	Jun 12	ce1100000	Jun 5 1985
LOWEST DAILY MEAN	d48000	Apr 1	f46500	Mar 23	g35000	Feb 23 1984
ANNUAL SEVEN-DAY MINIMUM	48000	Apr 1	46500	Mar 23	35000	Feb 23 1984
MAXIMUM PEAK FLOW			b648000	Jun 12	h1070000	Jun 9 1985
MAXIMUM PEAK STAGE			b25.54	Jun 12	i27.50	Jun 9 1985
MAXIMUM PEAK STAGE					j36.25	May 25 1989
ANNUAL RUNOFF (AC-FT)	160500000		153800000		164000000	
ANNUAL RUNOFF (CFSM)	0.690		0.660		0.705	
ANNUAL RUNOFF (INCHES)	9.38		8.98		9.58	
10 PERCENT EXCEEDS	453000		517000		500000	
50 PERCENT EXCEEDS	126000		133000		130000	
90 PERCENT EXCEEDS	50000		47500		48000	

See Period of Record, partial years used in monthly statistics

a Jun. 18-19

b Jun. 12-13

c Jun. 5-8, 1985.

d Apr. 1-26

e Estimated

f Mar. 23 - Apr. 17

g Feb. 23 - Mar. 27, 1984.

h Not determined. See highest daily mean

i Maximum recorded, but may have been higher during period of estimated discharge, Jun. 5-8, 1985

j Backwater from ice.

15565447 YUKON RIVER AT PILOT STATION—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-1956, 1975-96, and April 2001 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: 1976 and 1978, (seasonal).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Loca- tion in X-sect. looking dwnstrm ft from l bank (00009)	Specif. conduc- tance, wat unf us/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, water, deg C (00010)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
APR								
06...	1820	1870	320	6.9	.0	745	2.5	18
06...	1910	1780	318	7.0	.0	745	2.5	17
06...	1925	1600	322	7.0	.0	745	2.6	18
06...	1943	1420	324	7.0	.0	745	2.6	18
06...	2005	1120	324	7.0	.0	745	2.5	17
06...	2017	695	326	7.0	.0	745	2.5	18
MAY								
26...	1740	2080	148	7.6	9.1	--	--	--
26...	1745	1820	147	7.9	9.1	--	--	--
26...	1750	1480	147	7.8	9.0	--	--	--
26...	1755	1100	147	7.8	9.0	--	--	--
26...	1758	620	147	7.8	9.0	--	--	--
JUN								
15...	1440	2150	163	7.3	16.4	767	--	--
15...	1442	1850	163	7.5	16.5	767	--	--
15...	1444	1600	163	7.5	16.5	767	--	--
15...	1446	1220	162	7.5	16.4	767	--	--
15...	1448	700	163	7.5	16.5	767	--	--
29...	1814	2150	186	7.4	18.8	764	8.8	95
29...	1818	1850	195	7.3	18.9	764	8.7	93
29...	1820	1600	197	7.3	18.9	764	8.6	93
29...	1822	1220	196	7.3	18.9	764	8.6	92
29...	1824	700	198	7.3	18.9	764	8.5	92
JUL								
19...	1915	620	221	7.7	19.4	761	8.6	94
19...	1918	1100	219	7.7	19.4	761	8.5	93
19...	1921	1480	220	7.7	19.5	761	8.6	94
19...	1924	1820	212	7.7	19.6	761	8.5	92
19...	1926	2080	208	7.7	19.6	761	8.4	92
AUG								
18...	1154	2050	222	7.7	18.0	--	--	--
18...	1155	1750	235	7.8	18.0	--	--	--
18...	1157	1400	239	7.8	18.0	--	--	--
18...	1159	1050	238	7.8	18.0	--	--	--
18...	1200	600	239	--	18.0	--	--	--
SEP								
22...	1307	600	264	8.0	7.5	748	10.8	92
22...	1309	1000	264	8.0	7.5	748	10.8	92
22...	1311	1400	264	8.0	7.5	748	10.9	92
22...	1313	1700	264	8.0	7.5	748	10.8	92
22...	1315	2000	261	8.0	7.5	748	10.8	92

Date	Time	Medium code	Sample type	Stream width, feet (00004)	Gage height, feet (00065)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Sampler type, code (84164)	Type of sample related QA data, code (99111)	Type of repli- cate, code (99105)	Specif. conduc- tance, wat unf us/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, air, deg C (00020)
APR													
07...	1020	9	9	1980	--	46300	20	3060	--	--	323	7.0	3.5
MAY													
26...	1620	9	9	2400	22.10	521000	20	3055	--	--	147	7.8	13.5
JUN													
15...	1520	9	9	3040	25.35	639000	20	3055	--	--	163	7.5	--
29...	1640	9	7	2600	21.69	512000	20	3055	30	10.00	197	7.9	--
JUL													
20...	1030	9	9	2260	15.98	330000	20	3055	--	--	220	7.7	24.5
AUG													
18...	1110	9	9	2300	15.50	330000	20	3055	10	--	238	7.8	25.0
SEP													
22...	1300	9	9	2100	10.62	218000	20	3055	10	--	264	8.0	5.5

15565447 YUKON RIVER AT PILOT STATION—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Temperature, water, deg C (00010)	Turbidity, wat unflab, Hach 2100AN NTU (99872)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfl fixed end pt, field, mg/L as CaCO3 (00410)	Potassium, water, fltrd, mg/L (00935)
APR 07...	.0	5.9	.059	.043	--	2.5	--	170	48.7	11.5	3.95	--	1.52
MAY 26...	9.0	150	.548	.413	--	--	--	75	22.8	4.43	1.83	--	.96
JUN 15...	16.5	140	.320	.238	767	7.3	74	87	26.9	4.89	1.77	--	1.08
JUN 29...	19.0	170	.222	.164	764	8.6	93	94	28.0	5.69	2.25	--	1.15
JUL 20...	19.5	450	.094	.068	761	8.5	93	110	32.8	7.34	3.07	76	1.90
AUG 18...	18.0	350	.086	.062	--	--	--	120	34.5	7.69	3.13	--	1.76
SEP 22...	7.5	190	.090	.066	748	10.8	92	140	38.2	9.72	3.82	--	1.68
Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Alkalinity, wat tit incrm. field, mg/L as CaCO3 (39086)	Sulfate, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Residue on evap. at 180degC, wat flt mg/L (70300)	Residue water, sum of constituents, mg/L (70301)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)
APR 07...	16	.0	13	27.5	1.32	<.2	12.8	197	117	.002	.188	.100	.22
MAY 26...	63	.0	52	13.4	.80	<.2	4.96	115	81	.002	.084	<.010	.69
JUN 15...	77	.0	63	17.9	.75	<.2	5.19	118	97	E.001	.054	E.005	.71
JUN 29...	83	.0	68	23.7	.81	<.2	6.36	120	109	E.001	.069	<.010	.79
JUL 20...	95	.0	76	29.9	1.12	<.2	6.84	E145	130	E.001	.082	E.006	E.41
AUG 18...	94	.0	77	36.0	1.28	<.2	6.26	155	137	E.001	.082	<.010	.41
SEP 22...	114	.0	94	36.7	1.13	<.2	7.48	E153	156	E.001	.108	E.014	E.32
Date	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Phosphorus, water, unfltrd, mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)	Orthophosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic, water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)
APR 07...	.20	.024	E.002	<.006	M	<.20	.4	80	<.06	10	E.04	<.8	.317
MAY 26...	.42	.34	.014	<.006	27	E.17	.8	37	<.06	E5	<.04	<.8	.156
JUN 15...	.27	.50	.010	<.006	15	.26	1.0	41	<.06	E6	<.04	<.8	.143
JUN 29...	.17	.31	.007	E.003	14	.25	.9	42	<.06	E8	<.04	<.8	.129
JUL 20...	E.10	E.43	E.005	E.003	17	.34	.9	49	<.06	13	<.04	<.8	.119
AUG 18...	E.08	.24	.004	<.006	15	.30	.9	51	<.06	14	<.04	<.8	.108
SEP 22...	E.12	E.18	E.005	E.003	7	.27	.8	54	<.06	18	<.04	<.8	.140
Date	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Uranium natural, water, fltrd, ug/L (22703)
APR 07...	1.2	91	<.08	3.1	143	.8	2.70	E.3	<.2	200	.6	3.0	.85
MAY 26...	5.4	306	.20	1.8	16.4	.5	2.31	E.2	<.2	88.6	.7	2.3	.52
JUN 15...	3.6	123	.11	1.9	14.3	.7	1.57	E.3	<.2	93.6	.8	E.5	.51
JUN 29...	2.9	141	.09	2.2	5.4	.9	1.45	E.4	<.2	95.0	.7	2.0	.64
JUL 20...	1.8	14	<.08	3.4	.5	1.5	1.04	.7	<.2	132	.8	<.6	.94
AUG 18...	1.9	25	<.08	3.3	1.9	1.4	.86	E.4	<.2	139	.9	E.4	.89
SEP 22...	1.3	64	<.08	3.7	15.3	1.3	.94	.4	<.2	161	.8	<.6	.99

15565447 YUKON RIVER AT PILOT STATION—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Organic carbon, water, fltrd, mg/L (00681)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Total carbon, suspnd sedimnt total, mg/L (00694)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)
APR 07...	2.2	<.1	.6	.6	.05	5	625	97
MAY 26...	13.9	.3	5.2	5.5	.34	339	477000	75
JUN 15...	9.1	.3	4.1	4.4	.26	514	887000	68
JUN 29...	6.2	.3	4.5	4.8	.30	299	413000	84
JUL 20...	E3.1	E4.4	E4.3	E8.8	E.30	--	--	--
AUG 18...	2.6	5.4	3.7	9.0	.25	499	445000	96
SEP 22...	E2.7	E.7	E4.1	E4.8	E.22	--	--	--

15565700 UNALAKLEET RIVER ABOVE CHIROSKEY RIVER NEAR UNALAKLEET

LOCATION.--Lat 63°56'06", long 160°18'18", in NW¹/₄ NE¹/₄ sec. 18, T.18 S., R.8 W. (Unalakleet D-3 quad), Hydrologic Unit 19050102, on the right bank, 3.5 mi upstream from mouth of the Chiroskey River, 28 mi upstream from mouth, 15 mi east of Unalakleet.

DRAINAGE AREA.--1,048 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to September 1999 (no winter record), October 1999 to current year.

REVISED RECORDS.--WRD-AK-99-1: 1998.

GAGE.--Water-stage recorder. Elevation of gage is 40 ft above sea level from topographic map.

REMARKS.--Records good, except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1530	1760	e390	e180	e130	e120	e120	e10000	e5800	1610	1100	1690
2	2110	1830	e370	e170	e130	e120	e120	e11000	e5600	1580	1070	1640
3	2790	1860	e360	e170	e130	e120	e120	e10600	e5400	1550	1070	1580
4	3620	1870	e340	e170	e130	e120	e120	e10200	e5100	1520	1070	1530
5	3760	1960	e330	e170	e130	e120	e120	e10000	e4800	1490	1060	1540
6	3490	2100	e320	e160	e130	e120	e130	e9600	4310	1450	1040	1530
7	3200	2340	e310	e160	e130	e120	e140	e9400	3920	1400	1020	1480
8	2950	2380	e300	e160	e130	e120	e150	e9200	3570	1370	1030	1430
9	2790	e2200	e290	e160	e130	e120	e160	e9000	3320	1370	1390	1390
10	2650	e1900	e280	e150	e130	e120	e170	e8800	3080	1340	1580	1350
11	2640	e1600	e280	e150	e120	e120	e190	e8600	2880	1290	1490	1320
12	2560	e1300	e270	e150	e120	e120	e210	e8400	2720	1240	1790	1290
13	2350	e1200	e260	e150	e120	e120	e230	e8200	2590	1200	6220	1270
14	2190	e1100	e250	e150	e120	e120	e250	e7800	2490	1170	14100	1290
15	2110	e1000	e250	e150	e120	e120	e270	e7400	2430	1150	15500	1290
16	2130	e900	e240	e150	e120	e120	e300	e7000	2340	1140	10600	1270
17	2040	e840	e240	e140	e120	e120	e330	e6600	2310	1150	6470	1230
18	1880	e760	e230	e140	e120	e120	e360	e6200	2340	1130	4890	1190
19	e1750	e700	e230	e140	e120	e120	e400	e5800	2290	1130	3990	1160
20	e1700	e700	e220	e140	e120	e120	e450	e5600	2200	1140	3400	1160
21	e1650	e700	e220	e140	e120	e120	e500	e5600	2120	1130	3000	1160
22	e1650	e600	e210	e140	e120	e120	e600	e6200	2070	1090	2730	1260
23	e1600	e580	e210	e140	e120	e120	e650	e7200	2040	1080	2500	1430
24	e1600	e540	e200	e140	e120	e120	e800	e8000	2020	1060	2330	1430
25	1580	e500	e200	e140	e120	e120	e1000	e7600	2000	1050	2170	1350
26	1460	e480	e190	e130	e120	e120	e1300	e7000	1930	1050	2050	1280
27	1430	e460	e190	e130	e120	e120	e1800	e6400	1840	1050	1960	1220
28	1370	e440	e190	e130	e120	e120	e2500	e6000	1770	1080	1880	1170
29	1350	e420	e180	e130	e120	e120	e4000	e5400	1700	1110	1810	1120
30	1310	e400	e180	e130	---	e120	e6000	e5000	1650	1120	1760	1110
31	1460	---	e180	e130	---	e120	---	e5200	---	1140	1730	---
TOTAL	66700	35420	7910	4590	3580	3720	23490	239000	88630	38380	103800	40160
MEAN	2152	1181	255	148	123	120	783	7710	2954	1238	3348	1339
MAX	3760	2380	390	180	130	120	6000	11000	5800	1610	15500	1690
MIN	1310	400	180	130	120	120	120	5000	1650	1050	1020	1110
AC-FT	132300	70260	15690	9100	7100	7380	46590	474100	175800	76130	205900	79660
CFSM	2.05	1.13	0.24	0.14	0.12	0.11	0.75	7.36	2.82	1.18	3.20	1.28
IN.	2.37	1.26	0.28	0.16	0.13	0.13	0.83	8.48	3.15	1.36	3.68	1.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)#

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
MEAN	1602	709	265	161	127	114	270	3702	3548	1672	2940	2512
MAX	2190	1181	342	200	145	123	783	7710	8788	2571	5690	3890
(WY)	2003	2004	2003	2003	2003	2003	2004	2004	2001	2003	1998	1998
MIN	1037	394	198	147	116	98.2	105	1182	1216	562	809	1339
(WY)	2002	2002	2002	2002	2001	2001	2001	2001	1997	1997	2002	2004

See Period of Record
e Estimated

15565700 UNALAKLEET RIVER ABOVE CHIROSKEY RIVER NEAR UNALAKLEET—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004#	
ANNUAL TOTAL	592330		655380			
ANNUAL MEAN	1623		1791		1470	
HIGHEST ANNUAL MEAN					1791 2004	
LOWEST ANNUAL MEAN					1005 2002	
HIGHEST DAILY MEAN	7590	May 10	15500	Aug 15	19600	Jun 8 2001
LOWEST DAILY MEAN	a120	Mar 11	b120	Feb 11	c95	Mar 21 2001
ANNUAL SEVEN-DAY MINIMUM	120	Mar 11	120	Feb 11	95	Mar 21 2001
MAXIMUM PEAK FLOW			15900	Aug 15	d19700	Jun 8 2001
MAXIMUM PEAK STAGE			96.94	Aug 15	98.41	Jun 8 2001
MAXIMUM PEAK STAGE					f99.58	May 23 2002
ANNUAL RUNOFF (AC-FT)	1175000		1300000		1065000	
ANNUAL RUNOFF (CFSM)	1.55		1.71		1.40	
ANNUAL RUNOFF (INCHES)	21.03		23.26		19.05	
10 PERCENT EXCEEDS	3980		5460		3610	
50 PERCENT EXCEEDS	1420		1120		750	
90 PERCENT EXCEEDS	120		120		120	

See Period of Record
a From Mar. 11 to Apr. 16
b From Feb. 11 to Apr. 5
c From Mar. 21 to Apr. 10
d From rating curve extended above 8800 ft³/s
f Backwater from ice

15565700 UNALAKLEET RIVER ABOVE CHIROSKEY RIVER NEAR UNALAKLEET—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.5	2.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0	1.5
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0	1.5
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.0	1.5
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.0	1.5
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.0	1.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.5	2.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.5	1.5
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.5	1.5
11	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	2.5	2.0	2.5
12	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	2.5	2.0	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	3.0	2.5	3.0
14	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	3.0	2.5	3.0
15	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	3.5	3.0	3.5
16	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	4.0	3.5	4.0
17	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	4.0	2.5	3.0
18	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	3.0	2.5	2.5
19	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	4.0	3.0	3.5
20	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	4.5	4.0	4.5
21	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	5.5	4.5	5.0
22	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	5.0	4.0	4.5
23	0.0	0.0	0.0	0.0	0.0	0.0	1.5	---	---	5.5	5.0	5.5
24	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	1.0	5.0	5.0	5.0
25	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	1.0	6.0	5.0	5.5
26	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	1.0	6.5	6.0	6.5
27	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.5	6.0	5.5	5.5
28	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.5	1.0	5.5	5.5	5.5
29	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.5	1.5	6.0	5.0	5.5
30	---	---	---	0.0	0.0	0.0	3.0	1.5	2.0	6.5	5.5	6.5
31	---	---	---	0.0	0.0	0.0	---	---	---	6.5	6.0	6.5
MONTH	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	6.5	1.0	3.5

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	6.0	5.0	5.5	12.0	11.0	11.5	12.0	11.0	11.5	8.5	8.0	8.5
2	6.5	5.0	6.0	12.0	11.0	11.0	11.5	10.5	11.0	8.5	7.5	8.0
3	7.0	6.5	7.0	11.0	10.0	10.5	11.0	10.0	10.5	7.5	6.5	7.0
4	7.0	6.5	6.5	10.5	9.5	10.0	11.0	10.0	10.5	7.0	6.5	6.5
5	8.5	7.0	8.0	12.0	10.0	10.5	11.5	10.0	10.5	7.5	6.5	7.0
6	10.0	8.5	9.0	11.5	11.0	11.0	12.5	10.5	11.5	8.0	7.0	7.5
7	10.5	9.5	10.0	11.5	10.5	11.0	12.0	11.5	11.5	7.5	6.5	7.0
8	10.5	8.5	10.0	10.5	9.5	10.0	11.5	10.5	10.5	7.5	6.5	7.0
9	8.5	7.0	7.5	11.0	9.0	10.0	11.0	10.0	10.5	7.0	6.0	6.5
10	9.5	7.0	8.0	12.5	10.5	11.0	12.0	11.0	11.0	7.0	6.0	6.5
11	10.0	9.0	9.5	14.0	12.0	13.0	12.5	11.0	11.5	7.0	6.0	6.5
12	10.5	9.5	10.0	14.5	12.0	13.5	12.0	11.5	11.5	7.0	6.0	6.5
13	10.5	9.5	10.0	15.0	12.5	14.0	11.5	11.0	11.0	6.5	5.5	6.0
14	10.0	9.5	9.5	15.5	13.5	14.5	11.0	10.5	10.5	6.0	5.0	5.5
15	10.5	9.0	9.5	15.0	13.5	14.0	11.0	10.5	10.5	6.0	5.0	5.5
16	10.5	10.0	10.0	14.0	13.0	13.5	11.5	11.0	11.5	6.0	5.0	5.5
17	10.0	9.5	9.5	13.5	12.5	13.0	11.5	11.5	11.5	5.5	4.0	4.5
18	9.5	9.0	9.0	13.0	12.0	12.5	12.0	11.5	11.5	---	---	3.5
19	10.5	8.5	9.0	14.0	12.0	13.0	12.0	11.0	11.5	---	---	3.5
20	11.0	9.5	10.5	14.5	12.0	13.5	11.5	11.0	11.5	4.5	---	4.0
21	11.5	10.5	11.0	15.0	13.5	14.0	11.0	10.5	10.5	4.0	3.5	4.0
22	11.0	10.5	11.0	15.0	13.0	14.0	11.0	10.0	10.5	---	3.5	4.0
23	10.5	10.0	10.5	14.0	13.0	13.5	11.0	10.0	10.5	---	3.5	4.0
24	10.0	9.5	9.5	14.0	12.0	13.0	11.0	10.0	10.5	3.5	2.5	3.0
25	10.5	9.0	9.5	14.5	13.0	13.5	10.5	10.0	10.0	---	---	3.0
26	12.0	10.0	10.5	13.5	12.0	12.5	10.0	8.0	9.0	---	---	3.0
27	13.5	11.0	12.0	12.0	11.5	11.5	8.5	7.5	8.0	2.5	2.0	2.5
28	14.0	12.0	13.0	12.0	11.0	11.5	8.0	7.0	7.5	2.0	1.5	2.0
29	14.0	12.5	13.5	13.5	11.5	12.5	8.5	7.0	7.5	2.0	1.0	1.5
30	13.5	12.0	12.5	14.5	12.0	13.0	8.5	8.0	8.0	1.5	1.0	1.5
31	---	---	---	13.5	12.0	13.0	8.5	8.0	8.0	---	---	---
MONTH	14.0	5.0	9.6	15.5	9.0	12.4	12.5	7.0	10.4	---	---	5.0

15583500 ETTA CREEK NEAR COUNCIL

LOCATION.--Lat 64°41'56", long 164°09'57", in SE¹/₄ NE¹/₄ NE¹/₄ sec. 24, T.9 S., R.28 W. (Solomon C-5 quad), Seward Peninsula, Hydrologic Unit 19050104, on the left bank, .2 mi upstream from mouth at the East Fork of Solomon River, 25 miles southwest of Council, Alaska.

DRAINAGE AREA.--1.33 mi².

PERIOD OF RECORD.--July 2001 to current year (no winter record).

GAGE.--Water-stage recorder. Elevation of gage is 330 ft above sea level from topographic map.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT PERIOD.-- July to September 2001: Maximum discharge during period, 9.3 ft³/s, August 13, gage height 50.22 ft. Minimum discharge not determined, occurs during winter.

October 2001 to September 2002: Maximum discharge observed during period, 9.3 ft³/s, September 28, gage height 50.22 ft. Minimum discharge not determined, occurs during winter.

October 2002 to September 2003: Maximum daily discharge during period, 15 ft³/s (estimated), June 1. Minimum discharge not determined, occurs during winter.

October 2003 to September 2004: Maximum daily discharge during period, 15 ft³/s (estimated), June 4. Minimum discharge not determined, occurs during winter.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	e5.8	3.4	2.8
2	---	---	---	---	---	---	---	---	---	e5.4	3.2	2.7
3	---	---	---	---	---	---	---	---	---	e5.0	3.0	2.7
4	---	---	---	---	---	---	---	---	---	e5.1	2.9	3.3
5	---	---	---	---	---	---	---	---	---	e5.2	2.8	2.8
6	---	---	---	---	---	---	---	---	---	e4.8	2.7	2.8
7	---	---	---	---	---	---	---	---	---	e4.6	2.7	2.8
8	---	---	---	---	---	---	---	---	---	e4.5	3.3	2.8
9	---	---	---	---	---	---	---	---	---	e4.5	3.2	2.9
10	---	---	---	---	---	---	---	---	---	e4.6	2.9	2.8
11	---	---	---	---	---	---	---	---	---	e4.7	3.0	2.8
12	---	---	---	---	---	---	---	---	---	e4.8	3.4	2.7
13	---	---	---	---	---	---	---	---	---	e5.0	5.1	2.6
14	---	---	---	---	---	---	---	---	---	e4.9	7.2	2.5
15	---	---	---	---	---	---	---	---	---	e5.2	7.0	2.4
16	---	---	---	---	---	---	---	---	---	e5.5	6.5	2.3
17	---	---	---	---	---	---	---	---	---	5.7	6.2	2.2
18	---	---	---	---	---	---	---	---	---	5.2	5.9	2.2
19	---	---	---	---	---	---	---	---	---	6.1	5.7	2.1
20	---	---	---	---	---	---	---	---	---	5.7	5.4	2.1
21	---	---	---	---	---	---	---	---	---	5.5	5.0	2.1
22	---	---	---	---	---	---	---	---	---	5.3	4.8	2.0
23	---	---	---	---	---	---	---	---	---	5.1	4.6	2.0
24	---	---	---	---	---	---	---	---	---	4.7	4.4	1.9
25	---	---	---	---	---	---	---	---	---	4.5	4.1	1.9
26	---	---	---	---	---	---	---	---	---	4.3	4.0	1.8
27	---	---	---	---	---	---	---	---	---	4.2	3.8	1.8
28	---	---	---	---	---	---	---	---	---	4.0	3.7	1.7
29	---	---	---	---	---	---	---	---	---	3.9	3.3	1.6
30	---	---	---	---	---	---	---	---	---	3.7	3.2	e1.5
31	---	---	---	---	---	---	---	---	---	3.6	3.1	---
TOTAL	---	---	---	---	---	---	---	---	---	151.1	129.5	70.6
MEAN	---	---	---	---	---	---	---	---	---	4.87	4.18	2.35
MAX	---	---	---	---	---	---	---	---	---	6.1	7.2	3.3
MIN	---	---	---	---	---	---	---	---	---	3.6	2.7	1.5
MED	---	---	---	---	---	---	---	---	---	4.9	3.7	2.4
AC-FT	---	---	---	---	---	---	---	---	---	300	257	140
CFSM	---	---	---	---	---	---	---	---	---	3.66	3.14	1.77
IN.	---	---	---	---	---	---	---	---	---	4.23	3.62	1.97

e Estimated

15583500 ETTA CREEK NEAR COUNCIL—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	---	---	---	---	---	---	---	e5.4	e0.54	e0.68	0.36
2	1.5	---	---	---	---	---	---	---	e4.2	e0.54	e0.66	0.36
3	1.7	---	---	---	---	---	---	---	e3.6	e0.57	e0.63	0.38
4	2.0	---	---	---	---	---	---	---	e3.7	e0.60	e0.60	0.59
5	1.7	---	---	---	---	---	---	---	e3.8	e0.65	e0.58	1.3
6	1.6	---	---	---	---	---	---	---	e3.5	e0.69	e0.54	2.1
7	1.5	---	---	---	---	---	---	---	e3.0	e0.69	e0.50	1.9
8	e1.4	---	---	---	---	---	---	---	e2.8	e0.66	e0.48	1.7
9	e1.4	---	---	---	---	---	---	---	e2.6	e0.63	e0.47	1.6
10	e1.3	---	---	---	---	---	---	---	e2.2	e0.62	e0.44	1.4
11	e1.3	---	---	---	---	---	---	---	e2.0	e0.62	e0.42	1.3
12	e1.2	---	---	---	---	---	---	---	e1.9	e0.61	e0.40	1.5
13	e1.2	---	---	---	---	---	---	---	e1.8	e0.60	e0.39	1.5
14	e1.1	---	---	---	---	---	---	---	e1.7	e0.60	e0.38	1.3
15	e1.1	---	---	---	---	---	---	---	e1.6	e0.60	e0.37	1.2
16	e1.0	---	---	---	---	---	---	---	e1.5	e0.59	e0.36	1.2
17	e1.0	---	---	---	---	---	---	---	e1.4	e0.59	e0.36	1.2
18	e0.90	---	---	---	---	---	---	---	e1.3	e0.58	e0.35	1.4
19	e0.90	---	---	---	---	---	---	---	e1.2	e0.57	e0.35	1.4
20	e0.80	---	---	---	---	---	---	---	e1.1	e0.55	e0.35	1.3
21	e0.80	---	---	---	---	---	---	---	e1.0	e0.54	e0.36	1.3
22	e0.80	---	---	---	---	---	---	---	e0.90	e0.53	0.36	1.2
23	e0.80	---	---	---	---	---	---	---	e0.85	e0.53	0.36	1.2
24	e0.7	---	---	---	---	---	---	---	e0.80	e0.55	0.36	1.6
25	e0.70	---	---	---	---	---	---	---	e0.75	e0.57	0.36	1.4
26	e0.70	---	---	---	---	---	---	---	e0.72	e0.59	0.36	2.5
27	e0.70	---	---	---	---	---	---	---	e0.68	e0.60	0.40	5.5
28	e0.60	---	---	---	---	---	---	---	e0.63	e0.66	0.43	7.1
29	e0.60	---	---	---	---	---	---	---	e0.59	e0.70	0.38	5.7
30	e0.60	---	---	---	---	---	---	---	e0.56	e0.70	0.36	5.3
31	e0.60	---	---	---	---	---	---	---	---	e0.69	0.36	---
TOTAL	33.80	---	---	---	---	---	---	---	57.78	18.76	13.40	57.79
MEAN	1.09	---	---	---	---	---	---	---	1.93	0.61	0.43	1.93
MAX	2.0	---	---	---	---	---	---	---	5.4	0.70	0.68	7.1
MIN	0.60	---	---	---	---	---	---	---	0.56	0.53	0.35	0.36
MED	1.0	---	---	---	---	---	---	---	1.6	0.60	0.38	1.4
AC-FT	67	---	---	---	---	---	---	---	115	37	27	115
CFSM	0.82	---	---	---	---	---	---	---	1.45	0.46	0.33	1.45
IN.	0.95	---	---	---	---	---	---	---	1.62	0.52	0.37	1.62

e Estimated

15583500 ETTA CREEK NEAR COUNCIL—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	---	---	---	---	---	---	---	e15	3.7	2.1	3.5
2	5.0	---	---	---	---	---	---	---	e14	3.2	2.1	3.4
3	4.3	---	---	---	---	---	---	---	e13	2.8	2.1	3.4
4	4.2	---	---	---	---	---	---	---	e12	2.9	2.0	3.1
5	4.1	---	---	---	---	---	---	---	e11	2.7	1.9	3.0
6	4.1	---	---	---	---	---	---	---	10	2.7	1.9	3.1
7	3.8	---	---	---	---	---	---	---	8.4	2.6	1.9	3.0
8	e3.5	---	---	---	---	---	---	---	8.1	2.4	1.9	2.9
9	e3.2	---	---	---	---	---	---	---	7.6	2.3	1.8	2.8
10	3.3	---	---	---	---	---	---	---	6.7	2.4	1.8	2.8
11	3.7	---	---	---	---	---	---	---	7.1	2.1	2.5	2.7
12	3.5	---	---	---	---	---	---	---	7.2	2.1	2.1	2.6
13	3.4	---	---	---	---	---	---	---	6.1	2.1	2.4	2.5
14	3.5	---	---	---	---	---	---	---	4.5	2.0	2.4	2.5
15	3.5	---	---	---	---	---	---	---	3.6	1.9	2.4	2.4
16	e3.2	---	---	---	---	---	---	---	3.1	1.8	2.3	2.3
17	e3.1	---	---	---	---	---	---	---	3.2	1.7	2.3	2.3
18	e3.0	---	---	---	---	---	---	---	3.1	1.6	2.3	2.3
19	e3.0	---	---	---	---	---	---	---	2.9	1.5	2.3	2.3
20	e2.9	---	---	---	---	---	---	---	2.8	1.5	2.2	2.1
21	e2.8	---	---	---	---	---	---	---	2.7	1.5	2.1	2.1
22	e2.8	---	---	---	---	---	---	---	2.6	1.7	2.2	2.1
23	e2.7	---	---	---	---	---	---	---	2.3	2.1	2.4	2.0
24	e2.6	---	---	---	---	---	---	---	2.9	1.8	2.3	2.0
25	2.7	---	---	---	---	---	---	---	2.3	2.0	3.1	1.9
26	2.5	---	---	---	---	---	---	---	2.1	2.1	3.3	e1.8
27	2.4	---	---	---	---	---	---	---	1.8	2.1	3.6	1.8
28	2.4	---	---	---	---	---	---	---	1.8	2.2	3.7	1.8
29	2.5	---	---	---	---	---	---	---	3.8	2.3	3.7	2.0
30	e2.6	---	---	---	---	---	---	---	2.5	2.3	3.7	1.9
31	2.7	---	---	---	---	---	---	---	---	2.1	3.7	---
TOTAL	102.2	---	---	---	---	---	---	---	174.2	68.2	76.5	74.4
MEAN	3.30	---	---	---	---	---	---	---	5.81	2.20	2.47	2.48
MAX	5.2	---	---	---	---	---	---	---	15	3.7	3.7	3.5
MIN	2.4	---	---	---	---	---	---	---	1.8	1.5	1.8	1.8
MED	3.2	---	---	---	---	---	---	---	3.7	2.1	2.3	2.4
AC-FT	203	---	---	---	---	---	---	---	346	135	152	148
CFSM	2.48	---	---	---	---	---	---	---	4.37	1.65	1.86	1.86
IN.	2.86	---	---	---	---	---	---	---	4.87	1.91	2.14	2.08

e Estimated

15583500 ETTA CREEK NEAR COUNCIL—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.0	---	---	---	---	---	---	e5.0	5.5	1.9	0.91	2.8
2	2.1	---	---	---	---	---	---	e10	5.7	1.8	0.95	2.7
3	2.2	---	---	---	---	---	---	e12	5.0	1.8	1.1	2.6
4	2.3	---	---	---	---	---	---	e15	4.7	1.7	1.1	2.5
5	2.3	---	---	---	---	---	---	e14	5.7	1.7	0.99	2.6
6	2.3	---	---	---	---	---	---	e14	5.7	1.6	0.99	2.6
7	2.3	---	---	---	---	---	---	e13	5.6	1.5	1.3	2.5
8	2.3	---	---	---	---	---	---	e12	4.7	1.5	2.9	2.4
9	2.1	---	---	---	---	---	---	e12	4.1	1.5	3.5	2.2
10	2.1	---	---	---	---	---	---	e12	4.0	1.4	3.2	2.2
11	2.1	---	---	---	---	---	---	e11	4.0	1.3	3.0	2.2
12	2.0	---	---	---	---	---	---	e10	4.1	1.3	3.8	2.2
13	2.0	---	---	---	---	---	---	e10	3.9	1.2	6.1	2.1
14	1.9	---	---	---	---	---	---	e9.5	3.4	1.2	5.7	2.0
15	1.9	---	---	---	---	---	---	e9.0	3.3	1.2	5.5	2.0
16	e1.9	---	---	---	---	---	---	e8.0	3.1	1.2	5.8	2.0
17	e1.8	---	---	---	---	---	---	e7.0	3.0	1.3	5.2	1.9
18	e1.8	---	---	---	---	---	---	e6.0	2.9	1.2	4.6	1.9
19	e1.8	---	---	---	---	---	---	e5.0	3.0	1.2	4.2	1.9
20	e1.7	---	---	---	---	---	---	e5.0	2.6	1.2	4.2	1.8
21	e1.7	---	---	---	---	---	---	e6.0	2.6	1.2	4.1	1.8
22	e1.7	---	---	---	---	---	---	e6.4	2.7	1.1	3.9	1.8
23	e1.6	---	---	---	---	---	---	e6.2	3.2	1.0	3.5	1.8
24	e1.6	---	---	---	---	---	---	e6.0	2.5	1.0	3.5	1.7
25	e1.5	---	---	---	---	---	---	5.5	2.4	1.0	3.4	1.7
26	e1.5	---	---	---	---	---	---	5.3	2.3	1.0	3.4	1.5
27	e1.4	---	---	---	---	---	---	4.4	2.3	1.1	3.3	e1.5
28	e1.4	---	---	---	---	---	---	3.9	2.3	0.99	3.2	e1.4
29	e1.3	---	---	---	---	---	---	4.6	2.2	0.99	3.1	1.4
30	e1.3	---	---	---	---	---	---	5.4	2.0	0.98	3.0	1.4
31	e1.4	---	---	---	---	---	---	5.8	---	0.96	2.9	---
TOTAL	57.3	---	---	---	---	---	---	259.0	108.5	40.02	102.34	61.1
MEAN	1.85	---	---	---	---	---	---	8.35	3.62	1.29	3.30	2.04
MAX	2.3	---	---	---	---	---	---	15	5.7	1.9	6.1	2.8
MIN	1.3	---	---	---	---	---	---	3.9	2.0	0.96	0.91	1.4
MED	1.9	---	---	---	---	---	---	7.0	3.2	1.2	3.4	2.0
AC-FT	114	---	---	---	---	---	---	514	215	79	203	121
CFSM	1.39	---	---	---	---	---	---	6.28	2.72	0.97	2.48	1.53
IN.	1.60	---	---	---	---	---	---	7.24	3.03	1.12	2.86	1.71

e Estimated

15625850 STEWART RIVER 0.1 MILE BELOW BOULDER CREEK MOUTH NEAR NOME

LOCATION.--Lat 64°48'28", long 165°25'46", in SE¹/₄ NW¹/₄ SE¹/₄ sec. 7, T. 8 S., R. 33 W. (Nome D-1 quad), Hydrologic Unit 19050104, on the right bank, 0.1 mi downstream from Boulder Creek, 8.8 mi upstream from mouth, and 21 mi north of Nome.

DRAINAGE AREA.-- 22.28 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- May 2004 to September 2004 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 475 ft above sea level, from topographic map.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge during period May to September 2004, 463 ft³/s, Aug 12 and 13, gage height, 38.81 ft. minimum daily discharge 14 ft³/s, July 25 and 26.

REMARKS.--Records are poor. Rain gage at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	272	e40	e22	e52
2	---	---	---	---	---	---	---	---	254	e34	e20	---
3	---	---	---	---	---	---	---	---	178	e32	33	---
4	---	---	---	---	---	---	---	---	149	e30	25	---
5	---	---	---	---	---	---	---	---	234	e29	23	---
6	---	---	---	---	---	---	---	---	229	e27	22	---
7	---	---	---	---	---	---	---	---	199	e26	41	---
8	---	---	---	---	---	---	---	---	124	e26	139	---
9	---	---	---	---	---	---	---	---	81	e25	e90	---
10	---	---	---	---	---	---	---	---	70	e24	e60	---
11	---	---	---	---	---	---	---	---	83	e22	e50	---
12	---	---	---	---	---	---	---	---	80	e20	219	---
13	---	---	---	---	---	---	---	---	67	e20	237	---
14	---	---	---	---	---	---	---	---	56	e20	172	---
15	---	---	---	---	---	---	---	---	50	e19	132	---
16	---	---	---	---	---	---	---	---	61	e19	90	---
17	---	---	---	---	---	---	---	---	76	e22	76	---
18	---	---	---	---	---	---	---	---	56	e23	66	---
19	---	---	---	---	---	---	---	---	73	e19	61	---
20	---	---	---	---	---	---	---	---	60	e17	60	---
21	---	---	---	---	---	---	---	---	57	e16	60	---
22	---	---	---	---	---	---	---	---	76	e16	e60	---
23	---	---	---	---	---	---	---	---	108	e15	e60	---
24	---	---	---	---	---	---	---	---	84	e15	e60	---
25	---	---	---	---	---	---	---	---	e78	e14	e60	---
26	---	---	---	---	---	---	---	---	e72	e14	e60	---
27	---	---	---	---	---	---	---	e220	e65	e23	59	---
28	---	---	---	---	---	---	---	177	e60	43	58	---
29	---	---	---	---	---	---	---	177	e53	e30	57	---
30	---	---	---	---	---	---	---	215	e47	e30	57	---
31	---	---	---	---	---	---	---	318	---	e24	56	---
TOTAL	---	---	---	---	---	---	---	---	3152	734	2285	---
MEAN	---	---	---	---	---	---	---	---	105	23.7	73.7	---
MAX	---	---	---	---	---	---	---	---	272	43	237	---
MIN	---	---	---	---	---	---	---	---	47	14	20	---
AC-FT	---	---	---	---	---	---	---	---	6250	1460	4530	---

e Estimated

15625850 STEWART RIVER 0.1 MILE BELOW BOULDER CREEK MOUTH NEAR NOME—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May to September 2004 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May to September 2004 (discontinued).

INSTRUMENTATION.--Water-temperature recorder. Electronic water temperature recorder set for 15-minute recording interval.

REMARKS.-- Water temperature sensor installed May 27, 2004. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by cross section on May 27, July 28, and September 1. No variation was found within the cross section. A 0.5°C variation was found between mean stream temperature and sensor temperature on May 27. Beaver dam construction isolated the sensor from the main channel June 7 to September 1, 2004. Recorded stream temperatures at the sensor are not representative of mean stream temperatures during periods affected by the beaver dam and were not reported.

EXTREMES FOR CURRENT YEAR .--

WATER TEMPERATURE: Maximum recorded, 10.0°C, June 6; minimum recorded, 0.5°C, May 28.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 10.5°C, June 21.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Loca- tion in X-sect. looking dwnstrm ft from l bank (00009)	Specif. conduc- tance wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, water, deg C (00010)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	Medium code	Sample type	Stream width, feet (00004)	Gage height, feet (00065)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Sampler type, code (84164)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Turbid- ity, wat unf lab, Hach 2100AN NTU (99872)
MAY																				
27...	1334	7.0	89	7.5	1.5	735	12.7	94												
27...	1335	22.0	89	7.5	1.5	735	12.6	93												
27...	1336	39.0	89	7.4	1.5	735	12.6	93												
27...	1337	54.0	89	7.4	1.5	735	12.5	92												
27...	1338	69.0	88	7.4	1.5	735	12.5	92												
27...	1339	84.0	88	7.4	1.5	735	12.5	92												
27...	1340	99.0	100	7.4	1.5	735	12.5	92												
JUL																				
28...	1304	3.0	216	7.4	11.5	743	10.4	98												
28...	1305	5.0	216	7.4	11.5	743	10.3	97												
28...	1306	7.0	216	7.4	11.5	743	10.3	97												
28...	1307	9.00	217	7.5	11.5	743	10.3	97												
28...	1308	11.0	221	7.4	11.5	743	10.2	96												
SEP																				
01...	1137	2.0	224	7.9	7.5	744	11.9	102												
01...	1139	10.0	224	7.9	7.5	744	11.9	102												
01...	1140	18.0	223	7.9	7.5	744	11.8	101												
01...	1141	26.0	223	7.9	7.5	744	11.8	101												
01...	1142	34.0	223	7.9	7.5	744	11.8	101												
MAY																				
27...	1430	9	9	104	38.06	218	10	3044	90	7.6	9.8	1.5	<2.0							
JUN																				
23...	1520	H	9	--	37.66	98	--	--	--	--	8.9	--	--							
JUL																				
28...	1240	9	7	12.0	37.83	34	10	3044	216	7.4	15.8	11.5	<2.0							
SEP																				
01...	1120	9	9	40.0	37.62	55	10	3044	223	7.9	8.2	7.5	<2.0							
Date	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, mg/L fltrd, (00915)	Magnes- ium, water, mg/L fltrd, (00925)	Sodium, water, mg/L fltrd, (00930)	Potas- sium, water, mg/L fltrd, (00935)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon- ate, wat flt incrm. titr., field, mg/L (00452)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Alka- linity, wat flt incrd field, mg/L as CaCO3 (39036)							
MAY	27...	735	12.5	92	E1	44	14.5	1.92	1.08	.49	35	.0	28	30						
JUN																				
23...	--	--	--	--	--	--	--	--	--	--	--	--	--							
JUL																				
28...	743	10.3	97	64	110	36.2	5.24	2.21	.95	97	.0	80	82							
SEP																				
01...	744	11.8	101	E5	110	34.1	5.48	2.02	.84	103	.0	84	85							

15625900 STEWART RIVER 0.2 MILE BELOW DURRANT CREEK MOUTH NEAR NOME

LOCATION.--Lat 64°47'18", long 165°37'54", in NW¹/₄ NW¹/₄ NE¹/₄ sec. 19, T. 8 S., R. 34 W. (Nome D-2 quad), Hydrologic Unit 19050104, on the left bank, 0.2 mi downstream from Durrant Creek, 2.6 mi upstream from mouth, and 22 mi northwest of Nome.

DRAINAGE AREA.-- 53.18 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- May 2004 to September 2004 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 375 ft above sea level, from topographic map.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge during period May to September 2004, 760 ft³/s, May 26 and 27, gage height, 15.73 ft. minimum discharge 35 ft³/s, July 25 and 26.

REMARKS.--Records are fair, except for estimated discharges, which are poor. Rain gage at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	494	89	56	110
2	---	---	---	---	---	---	---	---	445	86	51	---
3	---	---	---	---	---	---	---	---	383	81	80	---
4	---	---	---	---	---	---	---	---	338	76	90	---
5	---	---	---	---	---	---	---	---	410	73	71	---
6	---	---	---	---	---	---	---	---	399	67	63	---
7	---	---	---	---	---	---	---	---	418	65	70	---
8	---	---	---	---	---	---	---	---	310	66	232	---
9	---	---	---	---	---	---	---	---	268	63	231	---
10	---	---	---	---	---	---	---	---	241	59	156	---
11	---	---	---	---	---	---	---	---	235	54	130	---
12	---	---	---	---	---	---	---	---	230	51	387	---
13	---	---	---	---	---	---	---	---	203	50	537	---
14	---	---	---	---	---	---	---	---	180	50	446	---
15	---	---	---	---	---	---	---	---	157	48	397	---
16	---	---	---	---	---	---	---	---	156	48	313	---
17	---	---	---	---	---	---	---	---	193	54	270	---
18	---	---	---	---	---	---	---	---	149	58	235	---
19	---	---	---	---	---	---	---	---	169	47	214	---
20	---	---	---	---	---	---	---	---	142	43	195	---
21	---	---	---	---	---	---	---	---	130	41	179	---
22	---	---	---	---	---	---	---	---	160	40	171	---
23	---	---	---	---	---	---	---	---	224	38	160	---
24	---	---	---	---	---	---	---	---	174	37	149	---
25	---	---	---	---	---	---	---	---	165	36	137	---
26	---	---	---	---	---	---	---	e660	149	36	126	---
27	---	---	---	---	---	---	---	626	131	58	123	---
28	---	---	---	---	---	---	---	434	116	109	117	---
29	---	---	---	---	---	---	---	469	103	76	112	---
30	---	---	---	---	---	---	---	462	94	75	113	---
31	---	---	---	---	---	---	---	e640	---	61	110	---
TOTAL	---	---	---	---	---	---	---	---	6966	1835	5721	---
MEAN	---	---	---	---	---	---	---	---	232	59.2	185	---
MAX	---	---	---	---	---	---	---	---	494	109	537	---
MIN	---	---	---	---	---	---	---	---	94	36	51	---
AC-FT	---	---	---	---	---	---	---	---	13820	3640	11350	---

e Estimated

15625900 STEWART RIVER 0.2 MILE BELOW DURRANT CREEK MOUTH NEAR NOME—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May to September 2004 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May to September 2004 (discontinued).

INSTRUMENTATION.--Water-temperature recorder. Electronic water temperature recorder set for 15-minute recording interval.

REMARKS.--Probe installed on May 26. Recorder malfunctioned from May 28 to June 9, and 11. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by cross section on May 26, and July 28, and September 1. A 0.5°C variation was found May 26 and July 28. No variation was found September 1. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR CURRENT PERIOD.--

WATER TEMPERATURE: Maximum, 18.5°C, July 22 and 24; minimum recorded, 0.5°C, May 27.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Loca- tion in X-sect. looking dwnstrm ft from 1 bank (00009)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, water, deg C (00010)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
MAY								
26...	1831	16.0	83	7.2	4.5	751	11.9	93
26...	1833	36.0	83	7.2	4.5	751	11.8	93
26...	1834	76.0	83	7.2	4.5	751	11.8	93
26...	1835	96.0	83	7.2	4.5	751	11.8	93
26...	1836	116	84	7.2	4.5	751	11.7	92
26...	1837	136	84	7.2	5.0	751	11.7	93
JUL								
28...	1505	64.0	201	7.6	13.5	743	10.3	101
28...	1506	49.0	202	7.6	13.0	743	9.9	96
28...	1507	34.0	203	7.6	13.0	743	9.8	95
28...	1508	19.0	203	7.5	13.0	743	9.8	95
28...	1509	4.00	204	7.5	13.0	743	9.8	95
SEP								
01...	1330	8.00	221	7.7	8.5	--	11.0	--
01...	1331	24.0	219	7.7	8.5	--	11.0	--
01...	1332	40.0	218	7.7	8.5	--	11.0	--
01...	1333	56.0	216	7.7	9.0	--	11.0	--
01...	1334	72.0	215	7.7	9.0	--	11.0	--
SEP								
01...	1330	8.00	221	7.7	8.5	--	11.0	--
01...	1331	24.0	219	7.7	8.5	--	11.0	--

Date	Time	Medium code	Sample type	Stream width, feet (00004)	Gage height, feet (00065)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Sampler type, code (84164)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Turbid- ity, wat unf lab, Hach 2100AN NTU (99872)
MAY													
26...	1810	9	9	146	15.55	680	10	3044	83	7.2	10.5	4.5	3.3
JUN													
23...	1410	H	9	--	14.88	265	70	--	--	--	--	--	--
JUL													
28...	1440	9	9	74.0	14.50	89	20	3044	203	7.5	18.1	13.0	<2.0
SEP													
01...	1310	9	9	97.0	14.62	109	10	3044	220	7.8	13.5	8.8	<2.0

Date	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, mg/L fltrd, (00915)	Magnes- ium, water, mg/L fltrd, (00925)	Sodium, water, mg/L fltrd, (00930)	Potas- sium, water, mg/L fltrd, (00935)	Bicar- bonate, wat flt incrm. titr., mg/L (00453)	Carbon- ate, wat flt incrm. titr., mg/L (00452)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Alka- linity, wat flt fxd end field, mg/L as CaCO3 (39036)
MAY													
26...	741	11.8	94	E4	38	12.3	1.88	1.03	.38	31	.0	25	26
JUN													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
28...	743	9.8	95	40	100	33.1	5.14	2.29	.71	95	.0	77	78
SEP													
01...	744	11.0	97	E8	120	37.3	5.68	2.20	.62	101	.0	83	83

15625900 STEWART RIVER 0.2 MILE BELOW DURRANT CREEK MOUTH NEAR NOME—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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	---	---	---	---	---	---	---	---	---	5.0	0.5	2.0
28	---	---	---	---	---	---	---	---	---	6.5	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	7.0	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	9.0	---	---	13.5	9.5	11.5	13.5	11.5	12.5	---	8.0	---
2	7.5	---	---	12.5	9.0	10.5	12.5	11.0	12.0	---	---	---
3	9.5	---	---	16.0	9.0	12.0	13.0	11.0	12.0	---	---	---
4	9.0	---	---	14.0	10.0	11.5	12.5	11.0	11.5	---	---	---
5	10.5	---	---	16.0	9.0	12.5	13.5	10.0	12.0	---	---	---
6	11.5	---	---	15.0	10.0	12.5	13.5	9.0	11.5	---	---	---
7	13.0	---	---	12.5	9.5	11.0	12.0	11.0	11.5	---	---	---
8	9.5	---	---	13.0	9.5	10.5	12.5	11.0	11.5	---	---	---
9	10.5	---	---	16.0	9.0	12.0	11.5	10.0	10.5	---	---	---
10	13.5	5.0	8.5	16.0	9.5	12.5	13.5	9.5	11.0	---	---	---
11	13.5	---	---	14.5	9.5	12.0	13.0	10.0	11.5	---	---	---
12	14.0	6.5	10.5	16.0	9.5	12.5	12.0	11.0	11.5	---	---	---
13	14.5	6.5	10.0	14.5	11.5	13.0	12.5	10.5	11.5	---	---	---
14	14.0	7.0	10.5	16.0	10.5	12.5	12.0	11.0	11.5	---	---	---
15	15.0	7.5	11.0	16.0	10.5	13.0	13.5	10.5	12.0	---	---	---
16	12.5	7.5	9.5	16.5	11.5	13.5	13.0	9.5	11.5	---	---	---
17	9.0	7.0	8.0	14.5	12.0	13.5	14.0	10.0	11.5	---	---	---
18	11.5	6.5	9.0	16.0	11.5	13.5	16.0	9.0	12.0	---	---	---
19	9.5	8.0	9.0	17.0	10.0	13.5	15.5	11.0	12.5	---	---	---
20	11.5	7.0	9.0	16.0	11.0	13.0	16.5	10.0	13.0	---	---	---
21	12.0	8.0	9.5	17.5	10.5	14.0	14.5	10.5	12.5	---	---	---
22	10.0	8.0	9.0	18.5	11.0	14.5	14.5	11.0	12.5	---	---	---
23	9.5	8.0	8.5	17.0	11.5	14.0	14.0	9.5	11.5	---	---	---
24	9.5	6.5	8.0	18.5	12.5	15.0	14.5	9.0	11.5	---	---	---
25	9.0	6.5	8.0	17.0	12.0	14.5	14.0	9.5	11.5	---	---	---
26	11.5	6.0	8.0	15.5	12.0	13.5	13.0	8.0	10.5	---	---	---
27	14.5	6.0	10.0	14.0	12.0	13.0	12.5	7.0	10.0	---	---	---
28	16.0	8.0	12.0	14.0	11.5	13.0	12.5	6.5	9.5	---	---	---
29	16.0	9.0	12.5	16.0	11.5	13.5	11.0	9.0	10.0	---	---	---
30	15.0	10.5	12.5	14.5	12.0	13.0	10.5	9.0	9.5	---	---	---
31	---	---	---	14.5	11.5	13.0	11.5	8.5	10.0	---	---	---
MONTH	16.0	---	---	18.5	9.0	12.8	16.5	6.5	11.4	---	---	---

15743850 DAHL CREEK NEAR KOBUK

LOCATION.--Lat 66°56'46", long 156°54'32", in NW¹/₄ SE¹/₄ sec. 21, T. 18 N., R.9 E. (Shungnak D-2 quad), Hydrologic Unit 19050302, on right bank 25 ft downstream from bridge on road to Bornite at west end of Dahl Creek landing strip, 3.5 mi upstream from mouth, 3 mi north of Kobuk, and 7.3 miles northeast of Shungnak.

DRAINAGE AREA.--11.0 mi².

PERIOD OF RECORD.--Annual maximum, water years 1986-87, April 1988 to current year. (No winter record in water years 1989, 1991-92, 1994, and 1996.)

REVISED RECORDS.--WDR AK-88-1: 1986 (M).

GAGE.--Water-stage recorder. Elevation of gage is 225 ft above sea level, from topographic map. July 16, 1986, to April 28, 1988, the water-stage recorder was operated to obtain annual maximums. Prior to August 17, 1994 at site 50 ft upstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	28	e14	e5.0	e1.8	e1.4	e1.4	13	58	20	29	33
2	47	27	e14	e4.8	e1.7	e1.4	e1.4	14	56	20	24	30
3	45	27	e13	e4.6	e1.7	e1.4	e1.4	15	50	19	23	29
4	43	26	e13	e4.4	e1.7	e1.4	e1.4	17	47	20	23	27
5	43	26	e13	e4.2	e1.7	e1.4	e1.4	18	46	20	22	26
6	44	e25	e12	e3.8	e1.7	e1.4	e1.4	107	44	20	22	26
7	44	e25	e12	e3.6	e1.6	e1.4	e1.5	59	42	20	22	25
8	44	e25	e12	e3.6	e1.6	e1.4	e1.6	28	39	19	24	24
9	43	e24	e11	e3.4	e1.6	e1.4	e1.6	21	38	19	33	24
10	43	e24	e11	e3.2	e1.6	e1.4	e1.6	24	36	19	32	23
11	42	e23	e11	e3.0	e1.6	e1.4	e1.7	27	34	18	30	23
12	41	e23	e10	e3.0	e1.6	e1.4	e1.8	27	33	18	32	25
13	40	e22	e10	e2.8	e1.5	e1.4	e1.9	29	32	18	335	24
14	39	e22	e10	e2.8	e1.5	e1.4	e1.9	52	31	17	159	23
15	38	e21	e9.2	e2.6	e1.5	e1.4	e1.9	64	29	17	128	22
16	38	e21	e9.0	e2.6	e1.5	e1.4	e1.8	85	28	17	112	21
17	37	e20	e8.8	e2.4	e1.5	e1.4	e1.8	97	28	17	98	21
18	36	e20	e8.6	e2.4	e1.5	e1.4	e1.8	113	26	17	86	21
19	e35	e19	e8.2	e2.4	e1.5	e1.4	e1.9	85	25	17	76	20
20	34	e19	e8.0	e2.2	e1.5	e1.4	e1.9	78	24	16	68	20
21	33	e18	e7.8	e2.2	e1.5	e1.4	e2.0	76	23	16	62	20
22	e33	e18	e7.6	e2.2	e1.5	e1.4	e2.2	80	23	16	56	20
23	e32	e17	e7.2	e2.0	e1.5	e1.4	e2.4	104	23	15	51	20
24	e31	e17	e7.0	e2.0	e1.5	e1.4	e2.8	155	25	15	46	20
25	31	e17	e6.8	e2.0	e1.5	e1.4	e3.4	103	24	15	43	19
26	e30	e16	e6.6	e1.9	e1.5	e1.4	e4.0	76	22	15	40	19
27	e29	e16	e6.4	e1.9	e1.4	e1.4	e5.0	63	22	15	38	18
28	e29	e15	e6.0	e1.9	e1.4	e1.4	e7.6	59	21	15	35	18
29	28	e15	e5.8	e1.9	e1.4	e1.4	e9.0	59	21	17	34	e19
30	28	e14	e5.6	e1.8	---	e1.4	e11	60	20	16	33	19
31	29	---	e5.4	e1.8	---	e1.4	---	58	---	30	33	---
TOTAL	1156	630	290.0	88.4	45.1	43.4	82.5	1866	970	553	1849	679
MEAN	37.3	21.0	9.35	2.85	1.56	1.40	2.75	60.2	32.3	17.8	59.6	22.6
MAX	47	28	14	5.0	1.8	1.4	11	155	58	30	335	33
MIN	28	14	5.4	1.8	1.4	1.4	1.4	13	20	15	22	18
AC-FT	2290	1250	575	175	89	86	164	3700	1920	1100	3670	1350
CFSM	3.39	1.91	0.85	0.26	0.14	0.13	0.25	5.47	2.94	1.62	5.42	2.06
IN.	3.91	2.13	0.98	0.30	0.15	0.15	0.28	6.31	3.28	1.87	6.25	2.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2004, BY WATER YEAR (WY)#

MEAN	29.5	11.1	6.52	4.64	3.97	3.62	4.07	51.7	62.5	36.5	69.0	48.6
MAX	67.2	21.0	9.46	6.88	6.15	5.63	7.39	93.1	116	73.2	223	104
(WY)	1994	2004	2003	1998	1998	1998	1997	1996	1992	1989	1994	1993
MIN	9.65	3.70	2.55	2.00	1.56	1.40	1.50	6.21	13.1	10.6	17.3	19.8
(WY)	1993	1993	1993	1993	2004	2004	1993	2001	1997	1997	1990	1991

See Period of Record; partial years used in monthly statistics

e Estimated

15743850 DAHL CREEK NEAR KOBUK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1986 - 2004#	
ANNUAL TOTAL	13479.6		8252.4			
ANNUAL MEAN	36.9		22.5		25.6	
HIGHEST ANNUAL MEAN					36.7 1993	
LOWEST ANNUAL MEAN					18.8 1999	
HIGHEST DAILY MEAN	186	Aug 16	335	Aug 13	1400	Aug 17 1994
LOWEST DAILY MEAN	a4.2	Mar 25	b1.4	Feb 27	b1.4	Feb 27 2004
ANNUAL SEVEN-DAY MINIMUM	4.2	Mar 25	1.4	Feb 27	1.4	Feb 27 2004
MAXIMUM PEAK FLOW			791	Aug 13	d1840	Aug 17 1994
MAXIMUM PEAK STAGE			6.18	Aug 13	6.73	Aug 17 1994
MAXIMUM PEAK STAGE					f7.03	May 10 2002
ANNUAL RUNOFF (AC-FT)	26740		16370		18550	
ANNUAL RUNOFF (CFSM)	3.36		2.05		2.33	
ANNUAL RUNOFF (INCHES)	45.59		27.91		31.63	
10 PERCENT EXCEEDS	92		47		65	
50 PERCENT EXCEEDS	19		18		11	
90 PERCENT EXCEEDS	4.4		1.4		3.0	

See Period of Record; partial years used in monthly statistics

a From Mar. 25 to Apr. 15

b From Feb. 27 to Apr. 6

d From rating curve extended above 170 ft³/s on basis of slope-area measurement of peak flow

f Backwater from ice

15746991 IKALUKROK CREEK BELOW RED DOG CREEK NEAR KIVALINA

LOCATION.--Lat 68°02'51", long 163°01'34", in NE¹/₄ NW¹/₄ sec.33, T.31 N., R.19 W. (Delong Mountains A-2 quad) Northwest Arctic Borough, Hydrologic Unit 19050404, on left bank about 3.5 mi downstream from the mouth of Red Dog Creek, 2.5 mi upstream from the mouth of Dudd Creek, and 45 mi northeast of Kivalina.

DRAINAGE AREA.--98.6 mi².

PERIOD OF RECORD.--June 1995 to current year (no winter record).

GAGE.--Water-stage recorder. Elevation of gage is 650 ft above sea level, from topographic map. Prior to June 1, 1998 at site 1 mi upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Runoff from 3.6 mi² is impounded in tailings ponds and released intermittently at a maximum rate of 25 ft³/s. Meteor-burst telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, undetermined, July 25, 1996; gage height, 12.22 ft, at site and datum then in use.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 4950 ft³/s, August 9, gage height, 12.18 ft; minimum not determined, occurs during the winter.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	278	---	---	---	---	---	---	---	e520	211	231	230
2	532	---	---	---	---	---	---	---	e560	199	208	214
3	419	---	---	---	---	---	---	---	518	189	197	190
4	e310	---	---	---	---	---	---	---	426	174	196	177
5	---	---	---	---	---	---	---	---	483	213	187	169
6	---	---	---	---	---	---	---	---	429	308	187	158
7	---	---	---	---	---	---	---	---	400	266	192	147
8	---	---	---	---	---	---	---	---	362	259	1140	140
9	---	---	---	---	---	---	---	---	336	243	2460	139
10	---	---	---	---	---	---	---	---	321	226	1140	e130
11	---	---	---	---	---	---	---	---	281	209	704	e120
12	---	---	---	---	---	---	---	---	260	194	654	e110
13	---	---	---	---	---	---	---	---	247	188	1130	e105
14	---	---	---	---	---	---	---	---	289	180	763	e100
15	---	---	---	---	---	---	---	---	252	172	630	e95
16	---	---	---	---	---	---	---	---	237	162	523	e85
17	---	---	---	---	---	---	---	---	394	167	425	e80
18	---	---	---	---	---	---	---	---	333	188	363	e75
19	---	---	---	---	---	---	---	---	392	175	303	e70
20	---	---	---	---	---	---	---	---	459	167	263	e65
21	---	---	---	---	---	---	---	---	322	160	244	e63
22	---	---	---	---	---	---	---	---	296	153	216	e61
23	---	---	---	---	---	---	---	---	351	149	208	e60
24	---	---	---	---	---	---	---	---	446	143	201	e58
25	---	---	---	---	---	---	---	---	399	136	180	e54
26	---	---	---	---	---	---	---	---	373	136	174	e50
27	---	---	---	---	---	---	---	---	316	139	167	e50
28	---	---	---	---	---	---	---	---	270	137	161	e50
29	---	---	---	---	---	---	---	---	246	137	153	e50
30	---	---	---	---	---	---	---	---	227	137	147	e50
31	---	---	---	---	---	---	---	---	---	237	175	---
TOTAL	---	---	---	---	---	---	---	---	10745	5754	13922	3145
MEAN	---	---	---	---	---	---	---	---	358	186	449	105
MAX	---	---	---	---	---	---	---	---	560	308	2460	230
MIN	---	---	---	---	---	---	---	---	227	136	147	50
AC-FT	---	---	---	---	---	---	---	---	21310	11410	27610	6240
CFSM	---	---	---	---	---	---	---	---	3.75	1.95	4.71	1.10
IN.	---	---	---	---	---	---	---	---	4.19	2.24	5.43	1.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004		
MEAN	59.9	12.5	---	---	---	---	---	112	451	210	403	252
MAX	88.0	21.5	---	---	---	---	---	200	872	328	687	515
(WY)	2003	1999	---	---	---	---	---	1999	2003	2003	1998	2002
MIN	39.8	2.56	---	---	---	---	---	23.7	259	91.6	125	84.7
(WY)	2001	2000	---	---	---	---	---	2001	1999	1999	1995	1996

e Estimated

15747000 WULIK RIVER BELOW TUTAK CREEK NEAR KIVALINA

LOCATION.--Lat 67°52'34", long 163°40'28", in NW¹/₄ sec. 34, T. 29 N., R. 22 W. (Noatak D-4 quad), Northwest Arctic Borough, Hydrologic Unit 19050404, on left bank 0.1 mi downstream from Tutak Creek and 25 mi northeast of Kivalina.

DRAINAGE AREA.--705 mi².

PERIOD OF RECORD.--September 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 175 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES satellite telemetry at station. Flow from 2.8 square miles of the drainage basin is regulated by a tailings dam at the Red Dog Mine site. Up to 25 ft³/s of the flow at the gage may be discharge from Red Dog Mine during the summer period.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	777	e210	e110	e64	e38	e27	e23	e290	5670	1010	1570	1140
2	3850	e210	e110	e62	e38	e27	e23	e360	6200	893	1320	1400
3	3220	e220	e110	e62	e37	e27	e22	e540	4260	809	1130	1320
4	2330	e220	e110	e60	e36	e27	e22	e700	3280	753	1060	1230
5	1830	e220	e100	e59	e36	e26	e22	e900	3490	803	995	1150
6	1490	e220	e100	e58	e35	e26	e22	e650	3570	1590	917	1060
7	1250	e210	e100	e57	e35	e26	e22	e550	3050	1580	879	993
8	1170	e210	e98	e56	e34	e26	e22	e650	2910	1450	1640	916
9	1100	e210	e96	e55	e34	e26	e22	e800	2530	1250	13600	862
10	1100	e200	e94	e54	e33	e26	e22	e900	2430	1050	11100	818
11	1200	e200	e92	e53	e33	e25	e22	e1300	1990	908	6330	769
12	1290	e190	e90	e52	e32	e25	e22	e1900	1850	794	4310	733
13	1070	e180	e88	e51	e32	e25	e22	e2700	1720	718	8450	705
14	736	e180	e86	e50	e32	e25	e22	e3600	1690	671	6650	665
15	e560	e170	e86	e50	e31	e25	e22	e5000	1500	626	4880	628
16	e500	e170	e84	e49	e31	e25	e22	e6500	1630	579	3950	589
17	e420	e160	e82	e48	e31	e24	e22	e9500	2030	650	3250	567
18	e360	e160	e80	e47	e30	e24	e22	6790	3100	936	2730	550
19	e320	e150	e80	e46	e30	e24	e22	4370	2480	995	2300	535
20	e290	e150	e78	e46	e30	e24	e22	3390	4370	871	1970	514
21	e260	e140	e76	e45	e29	e24	e22	2690	2480	752	1740	492
22	e240	e140	e76	e44	e29	e24	e22	3410	1870	671	1570	457
23	e230	e140	e74	e44	e29	e24	e22	7560	1900	612	1430	435
24	e215	e130	e74	e43	e29	e24	e22	12300	3250	565	1290	e400
25	e200	e130	e72	e42	e28	e23	e22	12500	2860	533	1170	e370
26	e190	e130	e72	e42	e28	e23	e32	7930	2660	511	1070	e350
27	e180	e120	e70	e41	e28	e23	e50	4940	2150	528	1010	e330
28	e180	e120	e68	e41	e28	e23	e70	2750	1690	536	951	e300
29	e180	e120	e68	e40	e27	e23	e100	3960	1360	530	910	e280
30	e190	e120	e66	e39	---	e23	e190	5640	1160	522	865	e260
31	e200	---	e64	e39	---	e23	---	5690	---	891	897	---
TOTAL	27128	5130	2654	1539	923	767	994	120760	81130	25587	91934	20818
MEAN	875	171	85.6	49.6	31.8	24.7	33.1	3895	2704	825	2966	694
MAX	3850	220	110	64	38	27	190	12500	6200	1590	13600	1400
MIN	180	120	64	39	27	23	22	290	1160	511	865	260
AC-FT	53810	10180	5260	3050	1830	1520	1970	239500	160900	50750	182400	41290
CFSM	1.24	0.24	0.12	0.07	0.05	0.04	0.05	5.53	3.84	1.17	4.21	0.98
IN.	1.43	0.27	0.14	0.08	0.05	0.04	0.05	6.37	4.28	1.35	4.85	1.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2004, BY WATER YEAR (WY)#

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	552	138	65.7	37.7	25.3	19.5	17.5	1888	3225	1644	2793	1648								
MAX	1542	290	111	70.0	49.3	39.5	38.8	4856	6669	6144	8458	3076								
(WY)	1994	1994	1986	1986	1986	1991	1991	1993	1989	1989	1994	2002								
MIN	207	63.1	34.2	21.5	12.0	9.10	9.00	20.6	1372	424	496	386								
(WY)	1997	2002	1988	1992	1992	1992	1992	1989	1988	1999	1991	1991								

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1985 - 2004#

ANNUAL TOTAL	320195	379364																		
ANNUAL MEAN	877	1037								1009										
HIGHEST ANNUAL MEAN										1843		1994								
LOWEST ANNUAL MEAN										530		1987								
HIGHEST DAILY MEAN	12600	Jun 6				13600	Aug 9			29400	Aug 17	1994								
LOWEST DAILY MEAN	a24	Apr 17				b22	Apr 3			c9.0	Apr 30	1985								
ANNUAL SEVEN-DAY MINIMUM	24	Apr 17				22	Apr 3			9.0	Apr 30	1985								
MAXIMUM PEAK FLOW						18100	Aug 9			38500	Aug 17	1994								
MAXIMUM PEAK STAGE						9.80	Aug 9			12.21	Aug 17	1994								
ANNUAL PEAK STAGE										d13.5	May 16	1999								
ANNUAL RUNOFF (AC-FT)	635100	752500								731100										
ANNUAL RUNOFF (CFSM)	1.24	1.47								1.43										
ANNUAL RUNOFF (INCHES)	16.90	20.02								19.45										
10 PERCENT EXCEEDS	2140	3060								2830										
50 PERCENT EXCEEDS	140	210								130										
90 PERCENT EXCEEDS	26	24								15										

See Period of Record
a From Apr. 17-29
b From Apr. 3-25
c From Apr. 30 to May 10, 1985, and Mar. 4 to May 17, 1992
d From floodmarks, backwater from snow and ice
e Estimated

15798700 NUNAVAK CREEK NEAR BARROW

LOCATION.--Lat 71°15'35", long 156°46'57", in SE¹/₄ sec. 18, T. 22 N., R. 18 W. (Barrow B-4 quad), North Slope Borough, Hydrologic Unit 19060202, 0.7 mi downstream from Emaiksoun Lake, 1.2 mi upstream from Nunavak Bay, and 2.3 mi south of Barrow Post Office.

DRAINAGE AREA.--2.79 mi², approximately.

PERIOD OF RECORD.--October 1971 to September 2004 (discontinued).

REVISED RECORDS.--WDR AK-76-1: 1972.

GAGE.--Water-stage recorder. Elevation of gage is 19 ft above sea level, from topographic map. Prior to May 29, 1982, at site 10 ft downstream at datum about 29.6 ft higher.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	8.5	2.4	1.5
2	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	7.6	1.7	0.92
3	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	7.8	3.4	0.74
4	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e16	7.9	8.2	0.59
5	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e9.8	7.1	2.7	0.43
6	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e12	6.8	1.4	e0.40
7	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e16	8.3	1.1	e0.60
8	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e28	8.1	1.5	0.78
9	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e53	8.9	2.7	0.52
10	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	42	6.0	3.0	0.33
11	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	33	8.0	1.8	0.28
12	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	31	9.9	1.5	0.24
13	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	33	8.1	1.9	0.15
14	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	35	8.3	1.4	e0.11
15	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	34	9.4	1.4	0.11
16	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	32	16	1.6	0.09
17	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	28	15	1.7	0.07
18	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	24	9.1	2.1	e0.06
19	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	21	6.5	3.0	e0.05
20	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	19	6.8	2.6	e0.06
21	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	17	5.3	2.0	0.04
22	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	15	4.9	1.3	0.03
23	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	13	4.8	1.0	0.06
24	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	13	3.8	0.98	1.8
25	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	13	3.5	0.68	6.3
26	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	13	3.6	0.54	7.9
27	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	12	3.0	0.80	e4.0
28	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	11	2.2	0.72	e1.0
29	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	10	1.6	1.2	e0.00
30	e0.00	e0.00	e0.00	e0.00	---	e0.00	e0.00	e0.00	8.4	3.2	0.58	e0.00
31	e0.00	---	e0.00	e0.00	---	e0.00	---	e0.00	---	5.0	2.5	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	592.20	215.0	59.40	29.16
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.7	6.94	1.92	0.97
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53	16	8.2	7.9
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.6	0.54	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1170	426	118	58
CFSM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.08	2.49	0.69	0.35
IN.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.90	2.87	0.79	0.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2004, BY WATER YEAR (WY)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004			
MEAN	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	8.62	2.14	0.89	1.05																							
MAX	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.55	19.7	9.93	6.79	8.34																							
(WY)	1980	1972	1972	1972	1972	1972	1972	1972	1990	2004	1981	1994	1986																							
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.73	0.09	0.00	0.00																							
(WY)	1972	1972	1972	1972	1972	1972	1972	1972	1972	1992	1983	1983	1975																							

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1972 - 2004

ANNUAL TOTAL	253.36	895.76		
ANNUAL MEAN	0.69	2.45	1.08	
HIGHEST ANNUAL MEAN			2.45	2004
LOWEST ANNUAL MEAN			0.26	1992
HIGHEST DAILY MEAN	25	Jun 9	110	Jun 14 1994
LOWEST DAILY MEAN	a0.00	Jan 1	c0.00	Oct 1 1971
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1 1971
MAXIMUM PEAK FLOW			55	Jun 9
MAXIMUM PEAK STAGE			f	d131 Jun 10 1980
ANNUAL RUNOFF (AC-FT)	503	1780	g34.36	Jun 11 1994
ANNUAL RUNOFF (CFSM)	0.249	0.877	779	
ANNUAL RUNOFF (INCHES)	3.38	11.94	0.386	
10 PERCENT EXCEEDS	1.8	8.2	5.24	
50 PERCENT EXCEEDS	0.00	0.00	2.1	
90 PERCENT EXCEEDS	0.00	0.00	0.00	

- a From Jan. 1 to Jun 4 and Oct 01 to Dec 31
- b From Oct. 1 to Jun 3, Sep 29 to Sep 30
- c No flow during winter months and at times during summer months
- d At site and datum then in use, flow over snow
- e Estimated
- f Undetermined
- g Backwater from snow and ice

15875000 COLVILLE RIVER AT UMIAT

LOCATION.--Lat 69°21'38", long 152°07'18", in NW¹/₄, sec. 15, T. 1 S., R. 1 W. (Umiat B-4 quad), Hydrologic Unit 19060303, on left bank, 1 mile upstream from Seabee Creek, and 1.0 mile east of Umiat.

DRAINAGE AREA.--13,830 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 275 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3250	e1100	e250	e15	e3.0	e1.0	e0.00	e0.00	99100	5980	25600	13900
2	3350	e1000	e200	e15	e3.0	e1.0	e0.00	e0.00	89200	5260	79600	19500
3	18300	e1000	e200	e10	e3.0	e1.0	e0.00	e0.00	76800	4830	56000	36400
4	77500	e900	e150	e10	e3.0	e1.0	e0.00	e0.00	58900	4600	35500	48900
5	68300	e900	e150	e10	e3.0	e1.0	e0.00	e0.00	51100	4490	26400	39000
6	36400	e800	e150	e10	e3.0	e0.00	e0.00	e0.00	42500	4640	20000	30400
7	22700	e800	e100	e9.0	e3.0	e0.00	e0.00	e0.00	35200	5840	16700	23100
8	14700	e800	e100	e9.0	e3.0	e0.00	e0.00	e0.00	31200	10000	14800	17900
9	10600	e700	e100	e8.0	e3.0	e0.00	e0.00	e0.00	26300	13900	13300	14600
10	8790	e700	e90	e8.0	e3.0	e0.00	e0.00	e1.0	22500	17600	12600	12300
11	7990	e700	e80	e8.0	e2.0	e0.00	e0.00	e2.0	18400	27300	14400	10800
12	7260	e600	e70	e7.0	e2.0	e0.00	e0.00	e3.0	15800	35900	16600	9900
13	6520	e600	e60	e7.0	e2.0	e0.00	e0.00	e4.0	13800	28100	14400	9330
14	5430	e600	e60	e7.0	e2.0	e0.00	e0.00	e6.0	12500	20700	17500	8880
15	4550	e500	e50	e7.0	e2.0	e0.00	e0.00	e8.0	11500	15600	69900	8280
16	3970	e500	e50	e6.0	e2.0	e0.00	e0.00	e10	11300	12200	65000	7270
17	3310	e500	e40	e6.0	e2.0	e0.00	e0.00	e20	12200	9880	42900	6150
18	2620	e400	e40	e6.0	e2.0	e0.00	e0.00	e80	12400	8710	31600	5310
19	e2200	e400	e40	e6.0	e2.0	e0.00	e0.00	e400	11200	8580	26500	4610
20	e2000	e400	e30	e5.0	e2.0	e0.00	e0.00	e4000	10600	24800	22500	e4050
21	e1800	e400	e30	e5.0	e2.0	e0.00	e0.00	e20000	11000	49100	18900	e3900
22	e1700	e300	e30	e5.0	e2.0	e0.00	e0.00	e50000	8970	34400	16600	e3750
23	e1600	e300	e25	e5.0	e2.0	e0.00	e0.00	e100000	7920	26000	14900	e3600
24	e1500	e300	e25	e4.0	e2.0	e0.00	e0.00	227000	7420	20100	13800	e3450
25	e1400	e300	e25	e4.0	e1.0	e0.00	e0.00	199000	6950	15800	13000	e3250
26	e1400	e300	e20	e4.0	e1.0	e0.00	e0.00	194000	7030	12600	12700	e3100
27	e1300	e250	e20	e4.0	e1.0	e0.00	e0.00	134000	9470	10600	12600	e2900
28	e1300	e250	e20	e4.0	e1.0	e0.00	e0.00	93400	10800	9630	12200	e2700
29	e1200	e250	e15	e3.0	e1.0	e0.00	e0.00	92900	9010	9310	11500	e2500
30	e1200	e250	e15	e3.0	---	e0.00	e0.00	92200	7160	8980	11100	e2200
31	e1100	---	e15	e3.0	---	e0.00	---	98700	---	9090	12000	---
TOTAL	325240	16800	2250	213.0	63.0	5.00	0.00	1305734.00	748230	474520	771100	361930
MEAN	10490	560	72.6	6.87	2.17	0.16	0.00	42120	24940	15310	24870	12060
MAX	77500	1100	250	15	3.0	1.0	0.00	227000	99100	49100	79600	48900
MIN	1100	250	15	3.0	1.0	0.00	0.00	0.00	6950	4490	11100	2200
AC-FT	645100	33320	4460	422	125	9.9	0.00	2590000	1484000	941200	1529000	717900
CFSM	0.76	0.04	0.01	0.00	0.00	0.00	0.00	3.05	1.80	1.11	1.80	0.87
IN.	0.87	0.05	0.01	0.00	0.00	0.00	0.00	3.51	2.01	1.28	2.07	0.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
MEAN	8856	702	86.4	5.21	1.11	0.08	0.00	21410	46350	19670	28340	15280
MAX	10490	844	100	6.87	2.17	0.16	0.00	42120	67760	24030	31800	21030
(WY)	2004	2003	2003	2004	2004	2004	2003	2004	2003	2003	2003	2002
MIN	7221	560	72.6	3.55	0.00	0.00	0.00	690	24940	15310	24870	12060
(WY)	2003	2004	2004	2003	2003	2003	2003	2003	2004	2004	2004	2004

See Period of Record, partial years used in monthly statistics
e Estimated

15875000 COLVILLE RIVER AT UMIAT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004#	
ANNUAL TOTAL	4512170.50		4006085.00			
ANNUAL MEAN	12360		10950		11530	
HIGHEST ANNUAL MEAN					12110 2003	
LOWEST ANNUAL MEAN					10950 2004	
HIGHEST DAILY MEAN	225000	Jun 10	227000	May 24	227000	May 24 2004
LOWEST DAILY MEAN	a0.00	Jan 19	b0.00	Mar 6	c0.00	Jan 19 2003
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 19	0.00	Mar 6	0.00	Jan 19 2003
MAXIMUM PEAK FLOW			261000	May 24	261000	May 24 2004
MAXIMUM PEAK STAGE			58.86	May 24	58.86	May 24 2004
ANNUAL RUNOFF (AC-FT)	8950000		7946000		8351000	
ANNUAL RUNOFF (CFSM)	0.894		0.791		0.833	
ANNUAL RUNOFF (INCHES)	12.14		10.78		11.32	
10 PERCENT EXCEEDS	33500		27500		29600	
50 PERCENT EXCEEDS	400		400		500	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

See Period of Record, partial years used in monthly statistics

a Jan. 19 to May 8

b Mar. 6 to May 9

c No flow during winter months

ARCTIC SLOPE ALASKA

15875000 COLVILLE RIVER AT UMIAT—Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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	---	---	---	---	---	---	---	---	---	0.5	0.0	0.0
24	---	---	---	---	---	---	---	---	---	1.0	0.0	0.5
25	---	---	---	---	---	---	---	---	---	1.0	0.5	1.0
26	---	---	---	---	---	---	---	---	---	1.0	0.5	0.5
27	---	---	---	---	---	---	---	---	---	1.5	0.5	0.5
28	---	---	---	---	---	---	---	---	---	2.0	1.5	1.5
29	---	---	---	---	---	---	---	---	---	3.0	2.0	2.0
30	---	---	---	---	---	---	---	---	---	4.0	3.0	3.0
31	---	---	---	---	---	---	---	---	---	7.0	4.0	4.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.0	5.5	6.5	15.0	13.0	14.0	12.0	10.0	11.0	11.0	9.5	10.0
2	7.5	6.5	7.0	18.5	13.5	16.0	10.5	10.0	10.5	10.0	8.0	9.5
3	9.0	7.0	8.0	18.0	15.5	16.5	11.5	10.5	11.0	8.0	7.0	7.0
4	10.5	8.0	9.0	16.0	14.0	15.0	13.0	10.5	11.5	7.0	6.0	6.5
5	11.5	9.5	10.5	16.0	12.0	13.5	14.0	12.5	13.0	6.5	6.0	6.0
6	11.5	10.0	11.0	15.5	11.5	13.5	15.0	13.0	14.0	6.5	5.5	6.0
7	11.5	10.0	11.0	14.5	13.0	14.0	16.0	14.5	15.0	7.5	6.0	6.5
8	11.5	10.0	11.0	14.0	12.0	13.0	16.5	14.5	15.5	9.0	7.5	8.0
9	11.0	9.5	10.0	13.5	12.5	13.0	16.5	15.0	15.5	8.0	7.5	7.5
10	10.0	8.5	9.0	12.5	12.0	12.0	15.5	14.5	15.0	8.5	7.0	7.5
11	9.5	8.5	9.0	14.0	11.5	13.0	15.5	14.0	15.0	8.0	6.5	7.0
12	9.0	8.0	8.5	14.0	13.5	13.5	15.0	14.0	14.5	7.5	5.5	6.5
13	11.0	8.0	9.5	14.5	13.0	14.0	15.0	14.0	14.5	7.0	6.0	6.5
14	13.0	9.5	11.0	15.5	14.0	14.5	15.0	13.5	14.0	7.0	5.0	6.0
15	14.5	12.0	13.5	16.0	15.0	15.5	14.5	13.5	14.0	7.0	5.0	6.0
16	16.0	13.5	14.5	15.0	14.5	15.0	15.5	14.0	14.5	7.0	5.0	6.0
17	15.5	14.5	15.0	16.0	14.5	15.5	16.5	15.0	15.5	8.0	5.5	6.5
18	15.5	11.5	14.0	17.0	15.5	16.5	17.5	16.0	16.5	8.0	4.5	6.0
19	15.0	13.5	14.5	16.5	14.5	15.5	17.5	16.5	17.0	---	---	---
20	15.5	14.0	15.0	15.0	14.0	14.5	17.0	15.5	16.0	---	---	---
21	15.0	13.5	14.5	14.0	12.5	13.0	16.5	14.5	15.5	---	---	---
22	16.5	13.5	15.0	15.0	12.5	14.0	17.0	15.5	16.0	---	---	---
23	16.5	15.0	15.5	17.0	14.5	15.5	16.0	13.0	14.5	---	---	---
24	16.0	15.0	15.5	17.5	15.5	16.5	13.0	11.5	12.0	---	---	---
25	15.0	14.5	14.5	18.0	16.0	17.0	12.0	10.5	11.0	---	---	---
26	15.5	13.5	14.5	18.5	16.5	17.5	11.0	10.0	10.5	---	---	---
27	16.5	13.5	15.0	18.0	17.0	17.0	10.5	9.5	10.0	---	---	---
28	17.0	15.0	16.0	17.0	14.0	15.5	12.5	9.5	10.5	---	---	---
29	17.0	14.5	15.5	14.5	13.0	13.5	11.5	10.0	10.5	---	---	---
30	16.0	14.0	15.0	14.0	12.5	13.5	11.0	10.0	10.5	---	---	---
31	---	---	---	14.0	12.0	13.0	12.0	10.0	11.0	---	---	---
MONTH	17.0	5.5	12.3	18.5	11.5	14.6	17.5	9.5	13.4	---	---	---

15896000 KUPARUK RIVER NEAR DEADHORSE

LOCATION.--Lat 70°16'54", long 148°57'35", in NE¹/₄ sec. 25, T. 11 N., R. 12 E. (Beechey Point B-4 quad), North Slope Borough, Hydrologic Unit 19060401, on right bank, 1.8 mi northeast of SE Eileen State No. 1, 2.1 mi south of Frontier Service City Camp, 10 mi upstream from mouth on Gwyder Bay, 3 miles upstream of Spine Road, and 13 mi northwest of Deadhorse.

DRAINAGE AREA.--3,130 mi².

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is at sea level (levels by private engineering firm).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Winter low flow may be discontinuous as the flow probably varies significantly along the main stem of the river due to the formation of auffs in the vicinity of springs. Flow may cease at other points. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1000	e200	e20	e0.0	e0.0	e0.0	e0.0	e0.0	e26000	1370	1860	1660
2	e950	e190	e15	e0.0	e0.0	e0.0	e0.0	e0.0	e28000	1270	8010	2590
3	e900	e180	e15	e0.0	e0.0	e0.0	e0.0	e0.0	e30000	1170	12700	6180
4	e850	e170	e15	e0.0	e0.0	e0.0	e0.0	e0.0	e29000	1090	8970	8230
5	e800	e160	e10	e0.0	e0.0	e0.0	e0.0	e0.0	e26500	1040	7090	8030
6	e760	e160	e10	e0.0	e0.0	e0.0	e0.0	e0.0	24600	1010	6260	7240
7	e720	e150	e9.0	e0.0	e0.0	e0.0	e0.0	e0.0	19400	1020	4660	6080
8	e680	e140	e8.0	e0.0	e0.0	e0.0	e0.0	e0.0	16000	1020	3500	4870
9	e640	e130	e7.0	e0.0	e0.0	e0.0	e0.0	e0.0	12900	1250	2720	3930
10	e620	e120	e6.0	e0.0	e0.0	e0.0	e0.0	e0.0	9370	2410	2190	3280
11	e580	e110	e5.0	e0.0	e0.0	e0.0	e0.0	e0.0	7110	3070	1830	2850
12	e550	e110	e5.0	e0.0	e0.0	e0.0	e0.0	e0.0	5910	5610	1590	2660
13	e520	e100	e4.0	e0.0	e0.0	e0.0	e0.0	e0.0	5220	8340	1520	2480
14	e500	e95	e4.0	e0.0	e0.0	e0.0	e0.0	e0.0	4960	6440	1460	2260
15	e470	e85	e3.0	e0.0	e0.0	e0.0	e0.0	e0.0	4570	4530	1650	2020
16	e450	e80	e3.0	e0.0	e0.0	e0.0	e0.0	e0.0	4000	3340	3030	1810
17	e430	e75	e2.0	e0.0	e0.0	e0.0	e0.0	e0.0	3600	2590	4110	1620
18	e410	e65	e2.0	e0.0	e0.0	e0.0	e0.0	e0.0	3370	2110	3440	1480
19	e390	e60	e2.0	e0.0	e0.0	e0.0	e0.0	e10	2890	1760	2760	1350
20	e370	e55	e2.0	e0.0	e0.0	e0.0	e0.0	e50	2590	1550	2300	1240
21	e350	e50	e1.0	e0.0	e0.0	e0.0	e0.0	e300	2310	2490	2010	1150
22	e330	e45	e1.0	e0.0	e0.0	e0.0	e0.0	e1000	2020	4460	1820	1080
23	e310	e45	e1.0	e0.0	e0.0	e0.0	e0.0	e1800	1810	3460	1650	1030
24	e300	e40	e1.0	e0.0	e0.0	e0.0	e0.0	e3000	1680	2730	1550	989
25	e290	e35	e1.0	e0.0	e0.0	e0.0	e0.0	e5000	1570	2110	1470	e930
26	e270	e30	e0.0	e0.0	e0.0	e0.0	e0.0	e8000	1550	1730	1410	e890
27	e260	e30	e0.0	e0.0	e0.0	e0.0	e0.0	e11000	1490	1480	1380	e850
28	e250	e25	e0.0	e0.0	e0.0	e0.0	e0.0	e15000	1630	1320	1400	e810
29	e240	e25	e0.0	e0.0	e0.0	e0.0	e0.0	e19000	1730	1190	1430	e780
30	e220	e20	e0.0	e0.0	---	e0.0	e0.0	e22000	1550	1130	1390	e760
31	e210	---	e0.0	e0.0	---	e0.0	---	e24000	---	1320	1440	---
TOTAL	15620	2780	152.0	0.0	0.0	0.0	0.0	110160.0	283330	75410	98600	81129
MEAN	504	92.7	4.90	0.00	0.00	0.00	0.00	3554	9444	2433	3181	2704
MAX	1000	200	20	0.0	0.0	0.0	0.0	24000	30000	8340	12700	8230
MIN	210	20	0.0	0.0	0.0	0.0	0.0	0.0	1490	1010	1380	760
MED	450	82	3.0	0.0	0.0	0.0	0.0	0.0	4280	1730	1860	1740
AC-FT	30980	5510	301	0.00	0.00	0.00	0.00	218500	562000	149600	195600	160900
CFSM	0.16	0.03	0.00	0.00	0.00	0.00	0.00	1.14	3.02	0.78	1.02	0.86
IN.	0.19	0.03	0.00	0.00	0.00	0.00	0.00	1.31	3.37	0.90	1.17	0.96

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2004, BY WATER YEAR (WY)#

	MEAN	287	24.4	2.75	0.93	0.91	0.91	0.91	1698	10390	1220	1838	1624
MAX	1675	174	24.3	10.0	10.0	10.0	10.0	10.0	8877	26360	3309	5229	4863
(WY)	2003	1973	1973	1972	1972	1972	1972	1972	1996	1982	2003	2002	1997
MIN	10.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	726	300	127	192	
(WY)	1975	1977	1977	1976	1976	1975	1975	1975	1990	1971	1990	1974	

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1971 - 2004#
ANNUAL TOTAL	559972.0	667181.0	
ANNUAL MEAN	1534	1823	1408
HIGHEST ANNUAL MEAN			2304
LOWEST ANNUAL MEAN			658
HIGHEST DAILY MEAN	43000	30000	100000
LOWEST DAILY MEAN	a0.0	b0.0	c0.0
ANNUAL SEVEN-DAY MINIMUM	0.00	0.00	0.00
MAXIMUM PEAK FLOW		d	118000
MAXIMUM PEAK STAGE		f35.65	37.60
ANNUAL RUNOFF (AC-FT)	1111000	1323000	1020000
ANNUAL RUNOFF (CFSM)	0.490	0.582	0.450
ANNUAL RUNOFF (INCHES)	6.66	7.93	6.11
10 PERCENT EXCEEDS	3650	4600	2910
50 PERCENT EXCEEDS	25	58	10
90 PERCENT EXCEEDS	0.00	0.00	0.00

See Period of Record, partial years used in monthly statistics

a From Dec. 29, 2002 to May 29, 2003

b From Dec. 26 to May 18

c No flow during winter months

d Not determined, occurred during period of backwater from ice and snow, see highest daily mean

e Estimated

f Backwater from snow and ice

15906000 SAGAVANIRK TOK RIVER TRIBUTARY NEAR PUMP STATION 3

LOCATION.--Lat 68°41'13", long 149°05'42", in SW¹/₄ sec. 4, T. 9 S., R. 13 E. (Phillip Smith Mountains C-4 quad), Hydrologic Unit 19060402, on right bank 30 ft downstream from culvert, at mi 297.9 Dalton Highway, 14 mi south of Pump Station 3, and 16.5 mi upstream from mouth.

DRAINAGE AREA.--28.4 mi².

PERIOD OF RECORD.--Annual maximums, water years 1979-87. October 1987 to current year. (No winter record in water year 1989.)

REVISED RECORDS.--WDR AK-96-1:1992(M), 1994(M), 1995(M).

GAGE.--Water stage recorder. Elevation of gage is 2,475 ft above sea level, from topographic map. Crest-stage gage only, August 15, 1979 to September 12, 1987, 30 ft upstream of culvert at same datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e30	e1.6	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	32	4.7	233	16
2	e70	e1.5	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	27	4.1	158	18
3	e55	e1.4	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	24	3.7	208	17
4	e44	e1.3	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	24	3.5	177	16
5	e38	e1.2	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	20	3.5	108	15
6	e33	e1.1	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	17	8.5	74	15
7	e28	e1.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	15	13	56	14
8	e24	e0.90	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	13	24	46	14
9	e20	e0.80	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	12	52	38	13
10	e17	e0.60	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	10	246	33	15
11	e15	e0.40	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	9.5	306	31	16
12	e13	e0.20	e0.00	e0.00	e0.00	e0.00	e0.00	e0.20	8.7	147	29	15
13	e11	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.50	8.1	88	39	14
14	e10	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.80	7.9	e64	91	e12
15	e8.5	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e1.5	11	e48	73	e10
16	e7.5	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e3.0	17	40	55	e8.4
17	e6.8	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e5.0	16	40	44	e7.5
18	e6.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e8.0	12	42	37	e6.6
19	e5.3	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e12	9.3	40	33	e6.0
20	e4.8	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e20	7.6	38	30	e5.2
21	e4.3	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e30	6.7	36	27	e4.3
22	e3.8	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e60	6.4	34	25	e3.6
23	e3.4	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	111	6.2	32	23	e3.1
24	e3.1	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	154	5.8	29	23	e2.7
25	e2.8	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	138	5.6	25	22	e2.3
26	e2.5	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	93	6.4	22	21	e2.0
27	e2.3	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	75	6.4	20	19	e1.7
28	e2.1	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	63	5.8	27	18	e1.4
29	e1.9	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	51	5.3	33	17	e1.1
30	e1.8	e0.00	e0.00	e0.00	---	e0.00	e0.00	44	5.0	33	17	e0.90
31	e1.7	---	e0.00	e0.00	---	e0.00	---	38	---	142	17	---
TOTAL	476.6	12.00	0.00	0.00	0.00	0.00	0.00	908.00	360.7	1649.0	1822	276.80
MEAN	15.4	0.40	0.00	0.00	0.00	0.00	0.00	29.3	12.0	53.2	58.8	9.23
MAX	70	1.6	0.00	0.00	0.00	0.00	0.00	154	32	306	233	18
MIN	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.0	3.5	17	0.90
AC-FT	945	24	0.00	0.00	0.00	0.00	0.00	1800	715	3270	3610	549
CFSM	0.54	0.01	0.00	0.00	0.00	0.00	0.00	1.03	0.42	1.87	2.07	0.32
IN.	0.62	0.02	0.00	0.00	0.00	0.00	0.00	1.19	0.47	2.16	2.39	0.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)#

	3.51	0.03	0.00	0.00	0.00	0.00	0.00	33.4	55.8	38.7	53.7	26.9
MEAN	3.51	0.03	0.00	0.00	0.00	0.00	0.00	33.4	55.8	38.7	53.7	26.9
MAX	15.4	0.40	0.00	0.00	0.00	0.00	0.01	95.6	150	84.3	111	77.4
(WY)	2004	2004	1988	1988	1988	1988	2003	1995	1992	2003	2002	1997
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	10.4	8.19	3.17	9.23
(WY)	1988	1988	1988	1988	1988	1988	1988	2001	1988	1990	1990	2004

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1988 - 2004#
ANNUAL TOTAL	11088.70	5505.10	
ANNUAL MEAN	30.4	15.0	18.0
HIGHEST ANNUAL MEAN			29.4
LOWEST ANNUAL MEAN			7.49
HIGHEST DAILY MEAN	526	306	871
LOWEST DAILY MEAN	a0.00	b0.00	c0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	0.00	0.00
MAXIMUM PEAK FLOW		392	d1810
MAXIMUM PEAK STAGE		20.27	21.90
ANNUAL RUNOFF (AC-FT)	21990	10920	13030
ANNUAL RUNOFF (CFSM)	1.07	0.530	0.633
ANNUAL RUNOFF (INCHES)	14.52	7.21	8.60
10 PERCENT EXCEEDS	76	39	50
50 PERCENT EXCEEDS	0.00	0.30	0.00
90 PERCENT EXCEEDS	0.00	0.00	0.00

See Period of Record, partial years used in monthly statistics

a From Jan. 1 to Apr. 24 and from Apr. 27 to May 25

b From Nov. 13 to May 11

c No flow during winter months

d Estimated, from rating extended above 450 ft³/s on basis of slope-area measurement of peak discharge

e Estimated

15908000 SAGAVANIRKTOK RIVER NEAR PUMP STATION 3

LOCATION.--Lat 69°00'54", long 148°49'02", in NW¹/₄ sec. 16, T. 5 S., R. 14 E. (Sagavanirktok River A-4 quad), North Slope Borough, Hydrologic Unit 19060402, on left bank 600 ft east of Dalton Highway at mi 324.7, 6.0 mi upstream from Lupine River, and 15 mi north of Pump Station 3.

DRAINAGE AREA.--1,860 mi², approximately.

PERIOD OF RECORD.--September 1982 to current year.

GAGE.--Water-stage recorder. Elevation is 1,150 ft above sea level, from topographic map.

REVISED RECORDS-- WDR AK-03-1:1991(M), 1992(M), 1999(M).

REMARKS.--Records good except for estimated daily discharges, which are poor. Precipitation gage and air temperature recorder at station, daily values of precipitation and air temperature are available from the computer files of the Alaska Science Center, Water Resources Office. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1500	e580	e190	e80	e18	e1.0	e1.0	e1.0	e13000	2960	13100	2120
2	e4000	e570	e180	e80	e18	e1.0	e1.0	e1.0	e14000	3130	10000	2350
3	e3900	e570	e170	e75	e16	e1.0	e1.0	e1.0	e14000	3000	10400	2210
4	e3000	e560	e170	e75	e14	e1.0	e1.0	e1.0	e12000	2860	14200	2120
5	e2500	e550	e170	e70	e14	e1.0	e1.0	e1.0	e9000	2950	9210	2010
6	e2200	e540	e160	e70	e14	e1.0	e1.0	e1.0	e8000	5130	6770	1810
7	e1900	e530	e160	e65	e12	e1.0	e1.0	e1.0	e7000	6270	5440	1690
8	e1700	e510	e160	e60	e12	e1.0	e1.0	e1.0	e6200	6670	4780	1620
9	e1600	e480	e160	e60	e10	e1.0	e1.0	e20	5800	5630	4500	1580
10	e1500	e450	e160	e55	e10	e1.0	e1.0	e60	4760	14000	4090	1550
11	e1400	e430	e150	e55	e10	e1.0	e1.0	e120	4870	21100	3780	1530
12	e1300	e410	e150	e50	e8.0	e1.0	e1.0	e110	5160	14000	3470	1480
13	e1300	e390	e150	e48	e8.0	e1.0	e1.0	e100	4580	8550	3540	1410
14	e1200	e370	e150	e46	e8.0	e1.0	e1.0	e130	4090	6170	5870	1340
15	e1100	e360	e140	e44	e6.0	e1.0	e1.0	e180	4320	5120	6760	1220
16	e1000	e350	e140	e42	e6.0	e1.0	e1.0	e250	4830	4510	5770	1190
17	e1000	e340	e140	e40	e6.0	e1.0	e1.0	e350	5030	4590	5100	1100
18	e960	e320	e140	e38	e4.0	e1.0	e1.0	e450	4530	4750	4790	e1000
19	e920	e310	e130	e36	e4.0	e1.0	e1.0	e550	3860	5190	4350	e980
20	e880	e290	e130	e34	e4.0	e1.0	e1.0	e750	3560	5580	4050	e1000
21	e840	e280	e130	e32	e4.0	e1.0	e1.0	e1000	3650	6770	3880	e1000
22	e800	e260	e120	e30	e2.0	e1.0	e1.0	e1500	3930	6800	3650	e900
23	e780	e250	e120	e30	e2.0	e1.0	e1.0	e2500	3450	6520	3460	e960
24	e740	e240	e110	e28	e2.0	e1.0	e1.0	e4000	3490	5480	3330	e930
25	e710	e230	e110	e28	e2.0	e1.0	e1.0	e6000	3440	4630	3130	e870
26	e680	e220	e100	e26	e2.0	e1.0	e1.0	e9000	3680	4130	2970	e900
27	e660	e210	e100	e24	e1.0	e1.0	e1.0	e10000	3190	3920	2770	e950
28	e640	e210	e95	e22	e1.0	e1.0	e11	e9000	2710	4300	2550	e900
29	e620	e200	e95	e22	e1.0	e1.0	e1.0	e9000	2710	4950	2400	e870
30	e600	e190	e90	e20	---	e1.0	e1.0	e10000	2820	4710	2340	e840
31	e590	---	e85	e20	---	e1.0	---	e11000	---	6780	2200	---
TOTAL	42520	11200	4255	1405	219.0	31.0	30.0	76078.0	171660	191150	162650	40430
MEAN	1372	373	137	45.3	7.55	1.00	1.00	2454	5722	6166	5247	1348
MAX	4000	580	190	80	18	1.0	1.0	11000	14000	21100	14200	2350
MIN	590	190	85	20	1.0	1.0	1.0	1.0	2710	2860	2200	840
AC-FT	84340	22220	8440	2790	434	61	60	150900	340500	379100	322600	80190
CFSM	0.74	0.20	0.07	0.02	0.00	0.00	0.00	1.32	3.08	3.32	2.82	0.72
IN.	0.85	0.22	0.09	0.03	0.00	0.00	0.00	1.52	3.43	3.82	3.25	0.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2004, BY WATER YEAR (WY)#

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
MEAN	622	227	90.8	47.9	31.6	26.2	26.3	1264	5884	4933	4103	1905												
MAX	1372	402	233	180	154	143	136	3588	9737	7370	6355	3984												
(WY)	2004	2003	1998	1998	2002	2002	2002	1993	1992	1995	2003	1997												
MIN	279	76.0	4.03	0.00	0.00	0.00	0.00	4.77	3304	2839	1897	883												
(WY)	1983	1984	1991	1983	1983	1983	1984	1986	2002	1991	1990	1983												

See Period of Record, partial years used in monthly statistics
e Estimated

15908000 SAGAVANIRKTOK RIVER NEAR PUMP STATION 3—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1982 - 2004#	
ANNUAL TOTAL	794769		701628.0			
ANNUAL MEAN	2177		1917		1606	
HIGHEST ANNUAL MEAN					2148 2003	
LOWEST ANNUAL MEAN					993 1983	
HIGHEST DAILY MEAN	16100		21100		33000 Aug 16 2002	
LOWEST DAILY MEAN	a58	Aug 13	b1.0	Jul 11	c0.00	Dec 25 1982
ANNUAL SEVEN-DAY MINIMUM	58	May 11	1.0	Feb 27	0.00	Dec 25 1982
MAXIMUM PEAK FLOW			24200		d48300 Aug 16 2002	
MAXIMUM PEAK STAGE			19.55		21.94 Aug 16 2002	
MAXIMUM PEAK STAGE			f25.42		f25.68 Jun 8 2000	
ANNUAL RUNOFF (AC-FT)	1576000		1392000		1163000	
ANNUAL RUNOFF (CFSM)	1.17		1.03		0.863	
ANNUAL RUNOFF (INCHES)	15.90		14.03		11.73	
10 PERCENT EXCEEDS	7100		5670		5050	
50 PERCENT EXCEEDS	200		350		200	
90 PERCENT EXCEEDS	66		1.0		0.00	

See Period of Record, partial years used in monthly statistics

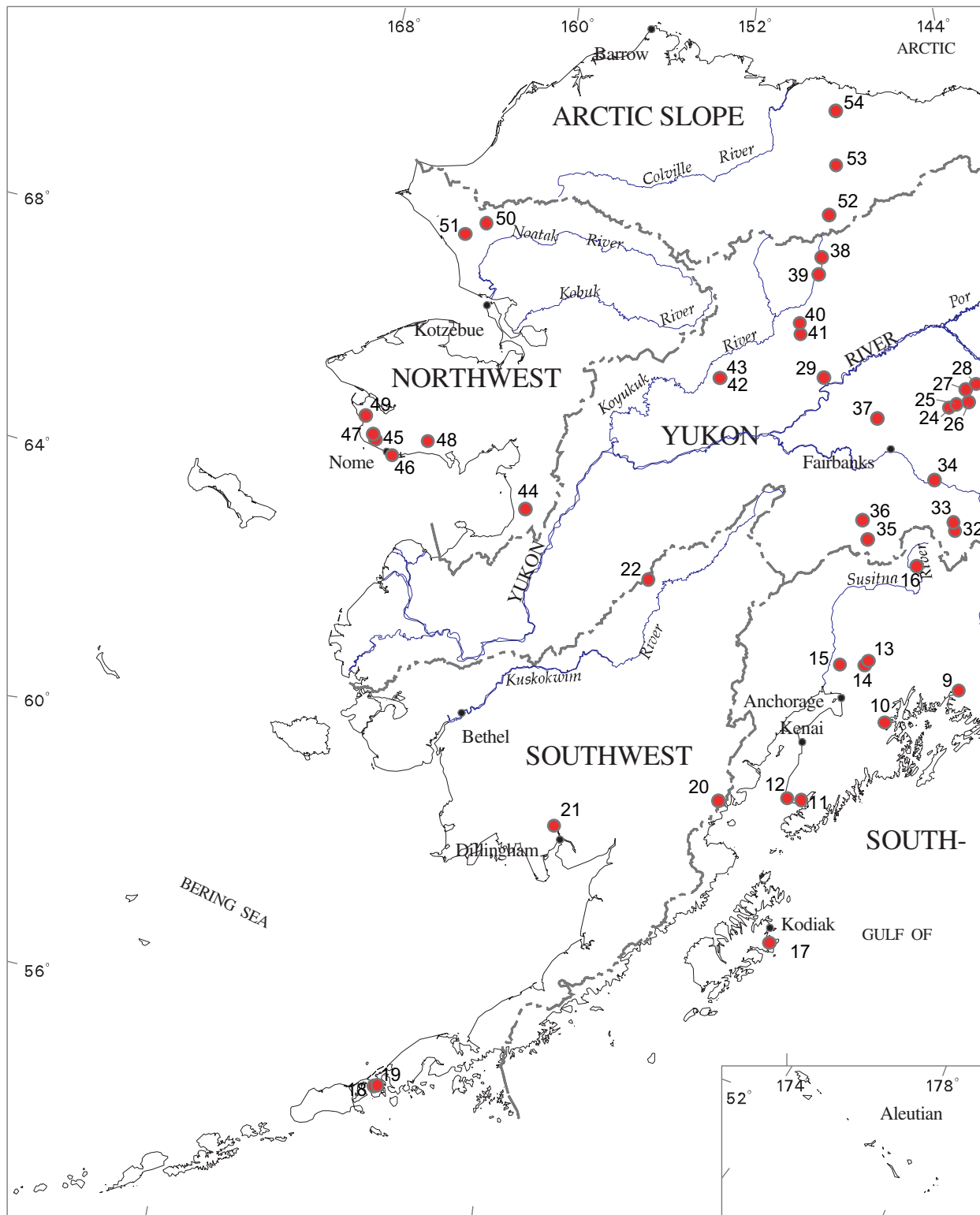
a From May 11 to May 24

b From Feb. 27 to May 8

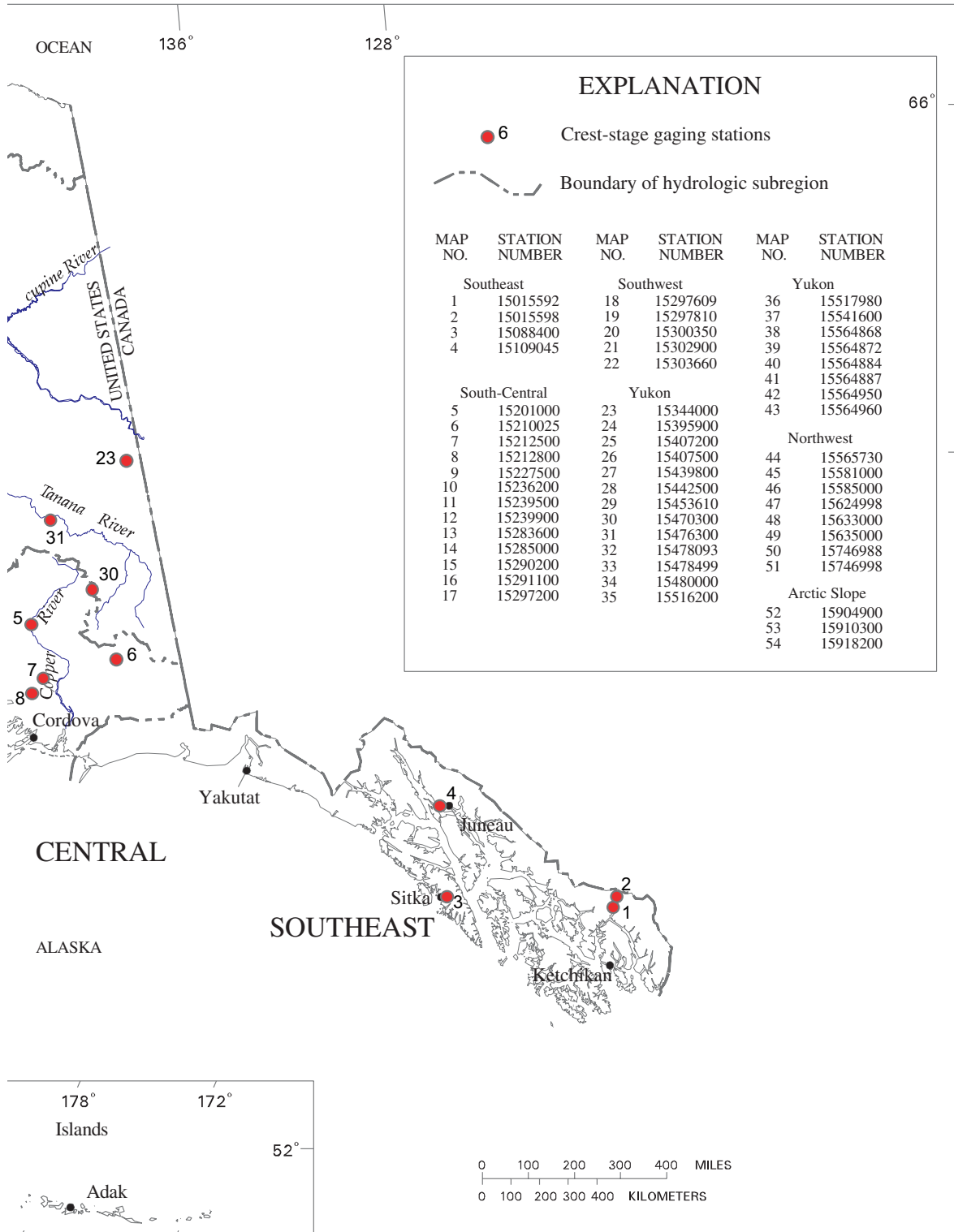
c No flow during winter months water years 1983 to 1995

d From rating curve extended above 10,000 ft³/s on basis of slope-area measurement of peak flow at 21.94 ft

f From floodmarks, backwater from ice and snow



Map 2. Locations of crest-stage partial-record stations



DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. 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.

Records of partial-record stations are presented in the table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a second table.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device that will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. The maximum discharge for each water year is given. The maximum discharge for the current water year and the maximum for the period of record are presented in the table below. However, at some stations the maximum discharge from spring runoff and from rainfall are shown by the symbols S/ and R/, respectively. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Maximum discharge at crest-stage partial-record stations
[Footnotes at end of table on page 333]

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
SOUTHEAST ALASKA								
Cripple Creek near Mouth near Wrangell (15015592)	Lat 56°15'55", long 130°47'14", in NE ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ sec. 6, T. 65 S., R. 95 E. (Bradfield Canal B-3 quad), Misty Fiords National Monument, on right bank 0.5 mi upstream from confluence with Unuk River, 19 mi upstream of Burroughs Bay, and 62 mi southeast of Wrangell. Drainage area is indeterminate.	2003-2004	10-26-03	>67.54	u	10-26-03	>67.54	u
Clear Creek at Mouth near Wrangell (15015598)	Lat 56°07'33", long 130°58'03", in SE ¹ / ₄ SW ¹ / ₄ SW ¹ / ₄ sec. 24, T. 66 S., R. 93 E. (Bradfield Canal A-3 quad), Misty Fiords National Monument, on left bank 0.5 mi upstream from confluence with Lake Creek, 0.3 mi upstream of confluence of Lake Creek and Unuk River, 5.5 mi upstream of Burroughs Bay, and 58 mi southeast of Wrangell. Drainage area 14.6 mi ² .	2003-2004	10-26-03	25.97	3,040	10-26-03	25.97	3,040

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on page 333]

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
SOUTHEAST ALASKA—Continued								
Cupola Peak Creek at Bear Cove near Sitka (15088400)	Lat 57°00'39", long 135°09'11", in NE ¹ / ₄ SE ¹ / ₄ SE ¹ / ₄ , sec. 13, T. 56 S., R. 64 E. (Sitka A-4 quad), on Baranof Island, in the Tongass National Forest, 200 ft downstream from Green Lake Road crossing, 400 ft upstream from mouth at south shore of Bear Cove in Silver Bay, and about 7.1 mi southeast of Sitka.	2000-2004	2003 09-20-04	g<16.56 18.30	u e279	09-20-04	18.30	e279
Granite Creek at Sitka (15087638)	Lat 57°06'05", long 135°23'52", in SE ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ , sec. 16, T. 55 S., R. 63 E. (Sitka A-5 quad), on Baranof Island, in the Tongass National Forest, 200 ft downstream from Granite Creek Road Bridge, 400 ft upstream from mouth, and about 3.9 mi northwest of Sitka.	2003-2004	11-12-03	21.15	1480	11-12-04	21.15	1480
North Fork Peterson Creek near Auke Bay (15109045)	Lat 58°17'02", long 134°39'49", in SE ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ , sec. 29, T. 41 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, on Douglas Island, Tongass National Forest, on left bank, 300 ft upstream from mouth, 7.3 mi south of Auke Bay, and 9.5 mi west of Douglas. Drainage area is 1.59 mi ² , revised.	1997-2004	01-14-04	22.82	110	11-01-99 and 12-28-99	23.38	160
SOUTH-CENTRAL ALASKA								
Dry Creek near Glennallen (15201000)	Lat 62°08'49", long 145°28'31", in NE ¹ / ₄ sec. 7, T. 4 N., R. 1 W. (Gulkana A-3 quad), on left bank 135 ft upstream from culvert at mi 119 Richardson Highway and 3.3 mi north of Glennallen. Drainage area is 11.4 mi ² .	1963-2004	5-07-04 9-04-04	<14.80 <14.05	S/<37 R/< 9.7	5- -72	d25.88	546
McCarthy Creek at McCarthy (15210025)	Lat 61°25'54", long 142°55'02", in NW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ sec. 19, T. 5 S., R. 14 E. (McCarthy B-6 quad), on left bank 1100 ft upstream from large boulder near footbridge at trail crossing at McCarthy, 0.8 mi upstream from mouth. Drainage area is 79.0 mi ² .	1994-2004	4- -04 6-19-04 9-29-04	f70.73 70.24 70.25	u S/795 R/805	9-27-00	j80.27	e4,000

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on page 333]

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA—Continued								
Boulder Creek near Tiekel (15212500)	Lat 61°20'08", long 145°18'26", in SE ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ sec. 19, T. 6 S., R. 1 E. (Valdez B-4 quad), on left downstream wingwall of bridge at mi 51.4 of old Richardson Highway, 0.2 mi downstream from culvert on present Richardson Highway, and 0.7 mi north of Tiekel. Drainage area is 9.80 mi ² .	1964-2004	6-08-04	10.53	S/369	8-07-81	11.72	1,330
			6-18-04	10.46	R/317			
Ptarmigan Creek Tributary near Valdez (15212800)	Lat 61°08'12", long 145°44'32", NW ¹ / ₄ NE ¹ / ₄ sec 34, T. 8 S., R. 3 W. (Valdez A-5 quad), on left bank 275 ft upstream from Richardson Highway, 21 mi east of Valdez. Drainage area is 0.72 mi ² .	1965-70 1996-2004	5- -04	78.07	u	9- -65	d10.82	85
			6-19-04	77.66	S/34			
			9-26-04	77.97	R/76			
Mineral Creek near Valdez (15227500)	Lat 61°08'30", long 146°21'42", in SW ¹ / ₄ NE ¹ / ₄ SE ¹ / ₄ sec. 30, T. 8 S., R. 6 W. (Valdez A-7 quad), on right bank 120 ft upstream from bridge, 1.8 mi upstream from mouth, and 0.5 mi northwest of Valdez. Drainage area is 44.0 mi ² .	i1976-81, 1990-2004	6-17-04	10.78	S/1,370	6- -76	di 90.81	5,570
			9-26-04	11.54	R/1,830			
Shakespeare Creek at Whittier (15236200)	Lat 60°46'35", long 148°43'35", in NE ¹ / ₄ sec. 22, T. 8 N., R. 4 E. (Seward D-5 quad), on upstream right wingwall of concrete bridge 0.5 mi upstream from mouth, and 1.8 mi west of the Alaska Railroad terminal building at Whittier. Drainage area is 1.61 mi ² .	1970-80, 1984-2004	3-31-04	f13.75	u	9-20-95	14.90	690
			5-04-04	11.83	S/480			
			7-27-04	11.35	R/427			
Fritz Creek near Homer (15239500)	Lat 59°42'30", long 151°20'35", in SW ¹ / ₄ SW ¹ / ₄ sec. 28, T. 5 S., R. 12 W. (Seldovia C-4 quad), Kenai Peninsula Borough, on right bank 15 ft upstream from culvert under East End Road, 8 mi northeast of Homer. Drainage area is 10.4 mi ² .	1963-85, ‡1986-92, 1993-2004	3-31-04	f14.92	u	10-22-80	d 18.53	852
			5-01-04	12.93	S/145			
			9-30-04	12.90	R/135			
Anchor River near Anchor Point (15239900)	Lat 59°44'50", long 151°45'11", in NE ¹ / ₄ sec. 13, T. 5 S., R. 15 W., (Seldovia C-5 quad), Kenai Peninsula Borough, on right bank underneath bridge on Sterling Highway, 4.3 mi southeast of Anchor Point. Mile post 161. Drainage area is 137 mi ² .	‡1965-73 1974 ‡1978-86 1987 ‡1991-92 2000-04	5-07-04	3.62	S/1,720	11-23-02	j9.10	9,000
			9-30-04	3.22	R/1,350			

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on page 333]

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA—Continued								
Premier Creek near Sutton (15283600)	Lat 61°42'40", long 149°05'12", in SE ¹ / ₄ NE ¹ / ₄ sec. 28, T. 19 N., R. 2 E. (Anchorage C-6 quad), Matanuska-Susitna Borough, 10 ft downstream from culvert on Buffalo Mine Road (called Moose Creek Road on Anchorage C-6 quad), 4 mi north from the Glenn Highway, 6 mi west of Sutton, and 7 mi northeast of Palmer. Drainage area is 3.38 mi ² .	1997-2004	10-04-03 3- -04 5-23-04	6.83 6.87 6.77	R/20 u S/15	10-18-03	7.20	55
Wasilla Creek near Palmer (15285000)	Lat 61°38'37", long 149°11'46", in SE ¹ / ₄ SW ¹ / ₄ sec. 13, T. 18 N., R. 1 E. (Anchorage C-6 quad), Matanuska-Susitna Borough, on right bank 20 ft downstream from culverts on Palmer-Fishhook Road, and 4.1 mi northeast of Palmer. Drainage area is 16.8 mi ² .	1971, 1976-2004	10-04-03 5-23-04	6.93 7.15	R/36 S/67	8-10-71	d17.74	700
Nancy Lake Tributary near Willow (15290200)	Lat 61°41'17", long 149°57'58", in SE ¹ / ₄ SE ¹ / ₄ sec. 34, T. 19 N., R. 4 W. (Tyonek C-1 quad), Matanuska-Susitna Borough, on left bank 150 ft upstream from culvert at Parks Highway, 0.3 mi upstream from mouth and 4.5 mi southeast of Willow. Drainage area is 8.00 mi ² .	1980, 1983-87, 1989-2004	5-04-04 9-30-04	<10.16 10.75	S/<72 R/252	10-11-86	13.21	465
Raft Creek near Denali (15291100)	Lat 63°03'04", long 147°16'22", in SE ¹ / ₄ sec. 36, T. 21 S., R. 2 E. (Healy A-1 quad), Matanuska-Susitna Borough, on right bank 30 ft upstream from culvert at mi 68.9 Denali Highway, and 10.7 mi southeast of Denali. Drainage area is 4.33 mi ² .	1963-2004	5-03-04 5-21-04 8-26-04	f15.25 <10.66 n	u S/<74 n	6- -64	11.72	133
Myrtle Creek near Kodiak (15297200)	Lat 57°36'12", long 152°24'12", in NW ¹ / ₄ SW ¹ / ₄ sec. 6, T. 30 S., R. 19 W. (Kodiak C-2 quad), Kodiak Island Borough, on left bank 0.1 mi upstream from bridge, 0.3 mi upstream from mouth, and 13 mi south of Kodiak. Drainage area is 4.74 mi ² .	‡1963-86, 1987-2004	10-01-03 5-07-04	6.33 5.22	R/1,080 S/633	1-03-77	6.93	1,350

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on page 333]

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA—Continued								
Stapp Creek near Cold Bay (15297609)	Lat 55°11'17", long 162°42'47", in SE ¹ / ₄ SE ¹ / ₄ NW ¹ / ₄ sec. 1, T. 58 S., R. 89 W. (Cold Bay A-3 quad), Aleutians East Borough, on left bank, 0.9 mi upstream from mouth, and 1 mi. south of Cold Bay. Drainage area is 1.68 mi ² .	2001-2004	3-31-04	f17.48	u	5-24-02	15.85	34
			5-07-04	15.70	S/26			
			5-23-04	15.12	R/6.6			
Frosty Creek near Cold Bay (15297810)	Lat 55°09'59", long 162°48'22", in SE ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄ sec. 8, T. 58 S., R. 89 W. (Cold Bay A-3 quad), Aleutians East Borough, on left bank, 2.8 mi upstream from mouth, and 4.5 mi southwest of Cold Bay. Drainage area is 5.92 mi ² .	2001-2004	1-22-04	f12.34	u	10-24-00	11.92	497
			5-07-04	10.60	S/139			
			5-23-04	10.75	R/168			
SOUTHWEST ALASKA								
Chinkelyes Creek Tributary near Pedro Bay (15300350)	Lat 59°44'02", long 153°48'40", in SE ¹ / ₄ NE ¹ / ₄ NE ¹ / ₄ sec. 23, T. 5 S., R. 27 W. (Iliamna C-3 quad), on left bank 60 ft upstream from culvert, 8 mi east of Pile Bay, and 11 mi east of Pedro Bay. Drainage area is 0.40 mi ² .	1997-2004	5-06-04	11.19	S/33	10-01-03	14.18	e257
			10-01-03	14.18	R/e257			
Moody Creek at Aleknagik (15302900)	Lat 59°16'34", long 158°35'42", in SE ¹ / ₄ sec. 30, T. 10 S., R. 55 W. (Dillingham B-7 quad), on left bank 10 ft upstream from culvert entrance, and 500 ft upstream from mouth at Wood River at the Aleknagik Mission. Drainage area is 1.28 mi ² .	1969-73,	10-01-03	17.52	R/7.9	6-07-71	19.60	55
		1975-85,	4-26-04	18.10	S/20			
		1988-2004	9-29-04	17.52	R/7.9			
Gold Creek at Takotna (15303660)	Lat 62°59'20", long 156°04'08", in SE ¹ / ₄ SE ¹ / ₄ sec. 34, T. 34 N., R. 36 W. (Iditarod D-1 quad), at Takotna, on right bank, 350 ft upstream from bridge, and 400 ft upstream from mouth. Drainage area is 6.31 mi ² .	1987-2004	4-23-04	f7.94	u	5-16-99	8.30	131
			5-28-04	<6.94	S/<18			
			6-26-04	7.04	R/36			
YUKON ALASKA								
King Creek near Dome Creek (15344000)	Lat 64°23'38", long 141°24'43", in NE ¹ / ₄ SW ¹ / ₄ sec. 16, T. 6 S., R. 32 E. (Eagle B-1 quad), on left bank 1,100 ft upstream from culvert at mi 119.8 Taylor Highway, 0.4 mi upstream from mouth, 4.9 mi east of Dome Creek, and 28 mi south of Eagle. Drainage area is 5.87 mi ² .	1975-82,	4-24-04	fj16.70	u	6-13-97	j17.65	n
		‡1983-90,	5-12-04	15.30	S/44			
		1991-2004	5-26-04	14.30	R/8.8			

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on page 333]

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
YUKON ALASKA—Continued								
Upper Frying Pan Creek near Central (15395900)	Lat 65°19'37", long 145°33'01", in SE ¹ / ₄ , sec. 19, T.6 N., R.10 E. (Circle B-4 quad), on right bank, 0.3 mi upstream of the confluence with Frying Pan Creek, 3.5 mi upstream from the mouth of Frying Pan Creek, 16.6 mi southwest of Miller House site, 9.4 mi southwest of Mastodon Dome, and 27.4 mi southwest of Central. Drainage area is 8.11 mi ² .	2002-2004	6-11-02	g16.36	g R/n	7-27-03	g17.75	R/n
			7-27-03	g17.75	g R/n			
			5-24-04	16.72	R/n			
South Fork Harrison Creek near Central (15407200)	Lat 65°21'52", long 145°15'25", in NW ¹ / ₄ , sec. 10 T.6 N., R.12 E., (Circle B-3 quad), on right bank 3.5 miles above junction with North Fork Harrison Creek. Located 4.7 miles southeast of Mastodon Dome and 17.7 miles southwest of Central. Drainage area is 9.11 mi ² .	2002-2004	6-11-02	fg 47.75	g R/u	7-27-03	g47.36	R/n
			7-27-03	g 47.36	g R/n			
			5-24-04	f47.63	R/u			
Harrison Creek near Central (15407500)	Lat 65°22'45", long 144°49'58", in NW ¹ / ₄ , sec. 3 T.6 N., R.14 E., (Circle B-2 quad), on left bank 0.5 miles upstream from Bottom Dollar Creek confluence. Located 13.9 miles southeast of Mastodon Dome, 8.3 miles southeast of Circle Hot Springs, and 12 miles south of Central. Drainage area is 71.6 mi ² .	2002-2004	6-11-02	g 47.01	g R/n	7-27-03	g47.79	R/n
			7-27-03	g 47.79	g R/n			
			5-24-04	46.34	R/n			
Boulder Creek near Central (15439800)	Lat 65°34'05", long 144°53'13", in NW ¹ / ₄ sec. 32, T. 9 N., R. 14 E. (Circle C-2 quad), on right bank 2,000 ft upstream from bridge at mi 125.4 Steese Highway, 0.7 mi upstream from mouth, and 2.3 mi west of Central. Drainage area is 31.3 mi ² .	1964-65, ‡1966-82, 1983, ‡1984-86, 1987-2004	5-16-02	fgm6.55	eg 44	6-25-89	10.01	1,460
			5-22-02	fg 6.03	g S/187			
			8-24-02	g 5.34	g R/148			
			5-13-04	fm7.50	u			
			5-17-04	d13.56	S/231			
5-24-04	5.34	R/152						
Quartz Creek near Central (15442500)	Lat 65°37'09", long 144°28'55", in SW ¹ / ₄ sec. 7, T. 9 N., R. 16 E. (Circle C-1 quad), on left bank 10 ft upstream from culvert at mi 138.1 on Steese Highway, 1 mi upstream from mouth, 19 mi southwest of Circle, and 10 mi east of Central. Drainage area is 17.2 mi ² .	1967, 1969-79, 1989-2004	5-23-01	fgm16.48	gmS/76	7-15-95	dj23.08	700
			7-07-01	gj18.25	gR/333			
			5-22-02	g17.42	gS/e80			
			8-24-02	u	gR/u			
			5-17-04	17.31	S/201			
5-24-04	16.94	R/130						

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on page 333]

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
YUKON ALASKA—Continued								
Ray River Tributary near Stevens Village (15453610)	Lat 65°56'57", long 149°54'55", in SE ¹ / ₄ sec. 17, T. 13 N., R. 11 W. (Livengood D-6 quad), on right bank 10 ft upstream from culvert at mi 63.6 on the Dalton Highway, and 22 mi west of Stevens Village. Drainage area is 8.00 mi ² .	1977-2004	5-06-04	f18.76	u	5- -79	d 21.10	860
			5-15-04	17.78	S/82			
			6-04-04	17.21	R/44			
Little Jack Creek near Nabesna (15470300)	Lat 62°32'39", long 143°19'22", in SW ¹ / ₄ NW ¹ / ₄ SE ¹ / ₄ sec. 22, T. 9 N., R. 11 E. (Nabesna C-5 quad), on left bank 10 ft upstream from the culvert at mi 25.8 Nabesna Road, and 15.6 mi northeast of Nabesna (previously 0.2 mi upstream on left bank). Drainage area is 6.73 mi ² .	1975-2004	5- -04	f19.44	u	c7-25-01	c21.42	c254
			5-21-04	18.68	S/120			
			7-29-04	<17.52	R/<62			
Berry Creek near Dot Lake (15476300)	Lat 63°41'23", long 144°21'47", in NW ¹ / ₄ sec. 13, T. 22 N., R. 5 E. (Mt. Hayes C-1 quad), on left bank 100 ft upstream from former bridge site, at mi 1371.4 on abandoned section of Alaska Highway, 1.9 mi upstream from mouth, and 6.0 mi west of Dot Lake. Drainage area is 65.1 mi ² .	1964-71, ‡1972-81, 1982-2004	4-26-04	f,j,m 14.9	u	7-19-64	15.49	2,800
			5-08-04	11.74	S/390			
			8-01-04	j 10.62	R/58			
Suzy Q Creek near Pump Station 10 (15478093)	Lat 63°29'43", long 145°51'27", in SW ¹ / ₄ sec. 29, T. 16 S., R. 10 E. (Mt. Hayes B-4 quad), on right bank 30 ft upstream from bridge at mi 224.8 on Richardson Highway, 0.1 mi upstream from mouth, and 6 mi north of Pump Station 10. Drainage area is 1.29 mi ² .	1987, 1989-2004	5-24-03	g30.07	gS/36	7-14-87	33.83	1,070
			7-16-03	g30.11	gR/43			
			5-15-04	f32.62	u			
			5-27-04	30.63	S/93			
			6-2-04	29.91	R/20			
Ruby Creek above Richardson Highway near Donnelly (15478499)	Lat 63°37'54", long 145°52'14", in NE ¹ / ₄ sec. 7, T. 15 S., R. 10 E. (Mt. Hayes C-4 quad), on right bank 0.2 mi upstream from Trans-Alaska Pipeline, 0.5 mi upstream from bridge at mi 234.8 on Richardson Highway, 2.2 mi upstream from mouth, and 2.3 mi south of Donnelly. Drainage area is 4.89 mi ² .	1987-2004	5-10-03	fg 15.41	g u	7-14-87	16.95	1,660
			5-25-03	g 14.61	g S/172			
			7-16-03	g 14.15	g R/81			
			4-30-04	f 15.14	u			
			5-7-04	14.79	S/216			
			6-7-04	14.10	R/69			

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on page 333]

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
YUKON ALASKA—Continued								
Banner Creek at Richardson (15480000)	Lat 64°17'24", long 146°20'56", in SW ¹ / ₄ sec. 22, T. 7 S., R. 7 E. (Big Delta B-5 quad), on left bank 400 ft upstream from bridge at mi 295.4 Richardson Highway, 0.2 mi upstream from mouth, and 0.4 mi northwest of Richardson. Drainage area is 20.2 mi ² .	1964-2004	5-03-02 5-11-02 8-18-02 4-07-04 5-08-04 6-09-04	fgj 17.4 fgj 16.0 g 14.61 f 22.75 fj 18.31 13.82	g u eg S/34 g R/229 u S/u R/46	6-26-89	16.38	950
Slime Creek near Cantwell (15516200)	Lat 63°30'34", long 148°48'39", in SE ¹ / ₄ sec. 24, T. 16 S., R. 7 W. (Healy C-4 quad), on right bank 25 ft downstream from culverts at mi 219.9 George Parks Highway, and 9.1 mi northeast of Cantwell. Drainage area is 6.90 mi ² .	1966-2004	5-21-04 6-06-04 7-05-04	f18.29 17.21 16.78	u S/108 R/51	7- -67	d14.52	685
Dragonfly Creek near Healy (15517980)	Lat 63°47'45", long 148°55'19", in SW ¹ / ₄ SE ¹ / ₄ SW ¹ / ₄ sec. 9, T. 13 S., R. 7 W., (Healy D-4 quad), on left bank at mi 242.6 George Parks Highway 100 ft upstream from highway bridge, and 6 mi southeast of Healy. Drainage area is 0.71 mi ² .	1990-2004	5-04-04 5-25-04 6-09-04	f 38.44 36.62 36.32	u S/39 R/3.8	7-12-90	d7.59	535
Globe Creek near Livengood (15541600)	Lat 65°17'08", long 148°07'56", in SE ¹ / ₄ sec. 3, T. 5 N., R. 3 W. (Livengood B-3 Quad), 0.1 mi upstream from culvert at mi 37.6 Elliot Highway, 9 mi upstream from mouth, and 19 mi southeast of Livengood. Drainage area is 23.0 mi ² .	1964-2004	5-10-02 5-16-02 7-04-02 5-6-04 7-20-04	fgj 14.87 g 13.80 g 15.30 15.52 13.95	u g S/149 g R/400 S/451 R/166	7-27-03	17.75	1,850
Snowden Creek near Wiseman (15564868)	Lat 67°44'20", long 149°44'24", in SW ¹ / ₄ sec. 26, T. 34 N., R. 10 W. (Chandalar C-6 quad), on right bank 0.25 mi upstream from culvert at mi 213.5 of the Dalton Highway, and 24.5 mi northeast of Wiseman. Drainage area is 16.7 mi ² .	1968, d1977-79, 1992-2004	6-02-03 9-02-03 5-23-04 8-13-04	g 22.18 g 22.61 j 22.06 22.86	g S/285 g R/554 S/348 R/657	1968	u	1,200
Nugget Creek near Wiseman (15564872)	Lat 67°29'25", long 149°52'20", in NW ¹ / ₄ sec. 30, T. 31 N., R. 10 W. (Chandalar B-6 quad), on left bank 1,000 ft upstream from culvert at mi 195.6 Dalton Highway, and 8.7 mi northeast of Wiseman. Drainage area is 9.47 mi ² .	d1975-88, d1990-92, 1993-2004	5-23-04 6-16-04	38.69 38.67	S/93 R/104	5-26-98	40.17	540

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on page 333]

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
YUKON ALASKA—Continued								
Prospect Creek near Prospect Camp (15564884)	Lat 66°46'56", long 150°41'06", in NW ¹ / ₄ sec. 31, T. 23 N., R. 14 W. (Bettles D-2 quad), on left bank 200 ft upstream from bridge at mi 135.2 on the Dalton Highway, 0.4 mi downstream from Trans-Alaska Pipeline crossing, 1.5 mi upstream from mouth, 2.1 mi south of Pump Station 5, and 1.5 mi southeast of Prospect Camp. Drainage area is 110 mi ² .	1968, 1975-2004	5-06-04	f7.64	u	1968	d10.22	6,800
			5-16-04	7.29	S/1065			
			5-26-04	<6.90	R/ <810			
Bonanza Creek Tributary near Prospect Camp (15564887)	Lat 66°36'52", long 150°41'24", in SE ¹ / ₄ sec. 25, T. 21 N., R. 15 W. (Bettles C-2 quad), on right bank 0.3 mi downstream from culverts at mi 121 on the Dalton Highway, 3.4 mi upstream from mouth, 13.5 mi south of Pump Station 5, and 12.6 mi south of Prospect Camp. Drainage area is 11.7 mi ² .	1975-2004	r5-15-93	19.89	r238	9-2-03	19.94	243
			5-31-03	dg40.64	gS/167			
			9-2-03	g19.94	gR/243			
			5-6-04	f19.76	u			
			5-15-04	18.28	S/111			
			5-26-04	17.61	R/77			
Indian River at Utopia (15564950)	Lat 65°59'49", long 153°41'31", in NW ¹ / ₄ sec. 19, T. 7 N., R. 25 E. (Meloizitna D-2 quad), on right bank, 200 ft downstream of bridge at mi 0.2 on road to Indian Mountain. Drainage area is 38.8 mi ² .	1998-2004	5-1-02	fg 18.75	g u	8-16-03	18.91	906
			5-21-02	g 18.43	g S/702			
			8-13-02	g 17.14	g R/299			
			5-18-04	18.29	S/636			
			5-26-04	18.36	R/664			
Utopia Creek at Utopia (15564960)	Lat. 65°59'26", long 153°41' 44", in SW ¹ / ₄ sec. 19, T. 7 N., R. 25 E. (Meloizitna D-2 quad), on right bank, 460 ft downstream of 4 wheeler crossing west of airstrip, .5 mi above mouth, .3 mi south-southeast of Utopia, 5.4 mi south of Indian Mt, and 16 mi east-southeast of Hughes. Drainage area is 5.18 mi ² .	1999-2004	5-1-02	fg 9.11	u	6-3-03	7.28	152
			5-21-02	g 7.09	g S/119			
			8-13-02	g 6.84	g R/82			
			5-17-04	7.16	S/131			
			5-26-04	7.25	R/147			
NORTHWEST ALASKA								
Chiroskey River near Unalakleet (15565730)	Lat 63°55'06", long 160°18'58", in NW ¹ / ₄ sec. 19, T. 18 S., R. 8 W. (Unalakleet D-3 quad), on left bank 1 mile upstream from mouth, 14 miles northeast of Unalakleet. Drainage area is 296 mi ² .	1998-2004	5-01-04	f48.65	u	8-15-04	47.28	1,640
			5-24-04	46.83	S/1,410			
			8-15-04	47.28	R/1,640			

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on page 333]

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
NORTHWEST ALASKA—Continued								
Hugh Rowe Creek near Council (15581000)	Lat 64°44'35", long 163°53'44", in NW ¹ / ₄ NW ¹ / ₄ NW ¹ / ₄ sec. 4, T. 09 S., R. 26 W. (Solomon C-4 quad), on left bank 150 ft upstream from culvert on Nome-Council Road, 0.1 miles upstream from mouth and 60 mi East of Nome. Drainage area is 2.34 mi ² .	2001-2004	6-06-01	72.52	gS/50	5-26-02	73.07	g72
			5-26-02	73.07	gS/72			
			9-05-02	71.68	gR/18			
			6-13-03	72.58	gS/52			
			8-26-03	71.67	gR/18			
			4-22-04	f75.50	u			
			6-07-04	72.36	S/44			
			8-13-04	72.44	R/47			
Goldengate Creek near Nome (15585000)	Lat 64°26'51", long 165°03'14", in SW ¹ / ₄ sec. 15, T. 12 S., R. 32 W. (Nome B-1 quad), on right bank 80 ft upstream from culvert on Nome-Council Road, and 11 mi southeast of Nome. Drainage area is 1.55 mi ² .	1965, 1977-84, 1986-2004	5-02-04	f14.04	u	9-08-65	d11.70	63
			6-07-04	11.51	S/34			
			8-13-04	11.58	R/38			
Arctic Creek above Tributary near Nome (15624998)	Lat 64°38'16", long 165°42'42", in NE ¹ / ₄ sec. 8, T. 10 S., R. 35 W. (Nome C-2 quad), on right bank 300 ft upstream from culvert on Nome-Teller Road, 2 mi upstream from mouth, and 13 mi northwest of Nome. Drainage area is 1.13 mi ² .	1975, 1979-2004	5-02-04	f21.57	u	8-20-98	19.06	182
			5-15-04	18.25	S/50			
			8-13-04	18.03	R/29			
Washington Creek near Nome (15633000)	Lat 64°42'52", long 165°49'13", in NW ¹ / ₄ sec. 14, T. 9 S., R. 35 W. (Nome C-2 quad), on left bank, 400 ft upstream from culvert on Nome-Teller Road, and 19 mi northwest of Nome. Drainage area is 6.34 mi ² .	1964-2004	5-25-04	f20.58	u	7-10-75	d19.35	620
			6-07-04	19.84	S/29			
			8-13-04	19.92	R/34			
Eldorado Creek near Teller (15635000)	Lat 64°57'38", long 166°11'59", in NE ¹ / ₄ NE ¹ / ₄ sec. 20, T. 6 S., R. 37 W. (Nome D-3 quad), on right bank 30 ft downstream from bridge at mi 46.3 on Nome-Teller Road, 0.5 mi upstream from mouth at Tisuk River, and 21 mi south of Teller. Drainage area is 5.83 mi ² .	1986-87, ‡1988-90, 1991, ‡1992-98, 1999-2004	4-22-04	f10.04	u	9-04-86	9.42	600
			5-02-04	f8.90	S/u			
			8-13-04	9.00	R/270			

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on page 333]

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
NORTHWEST ALASKA—Continued								
North Fork Red Dog Creek near Kivalina (15746988)	Lat 68°05'03", long 162°52'52", in NW ¹ / ₄ SW ¹ / ₄ sec. 18, T. 31 N., R. 18 W. (DeLong Mts. A-2 quad), on left bank 500 ft upstream from mouth, 1.1 mi northwest of Red Dog Mine mill site, 36 mi north of Noatak, and 50 mi northeast of Kivalina. Cominco Station 12. Drainage area is 15.9 mi ² .	‡1991-94, 1995-2004	5-24-04	u	e S/120	08-17-94	6.03	900
			8-9-04	5.39	R/458			
Tutak Creek near Kivalina (15746998)	Lat 67°52'28", long 163°40'14", in NW ¹ / ₄ NE ¹ / ₄ sec. 34, T. 29 N., R. 22 W. (Noatak D-4 quad), on left bank, 1,000 ft upstream from mouth, 25 mi northeast of Kivalina, and 28 mi northwest of Noatak. Drainage area is 119 mi ² .	1992-2004	6-02-01	fg16.02	u	6-15-92	15.00	3,100
			6-05-01	fgj13.82	gS/1860			
			8-13-01	g14.63	gR/2680			
			5-23-02	fg16.81	u			
			5-26-02	g12.83	gS/1230			
			9-05-02	g13.14	gR/1440			
			5-16-04	f13.88	u			
			5-23-04	13.25	S/1510			
8-8-04	13.37	R/1600						
ARCTIC SLOPE ALASKA								
Atigun River Tributary near Pump Station 4 (15904900)	Lat 68°22'25", long 149°18'48", in NE ¹ / ₄ SE ¹ / ₄ sec. 28, T. 12 S., R. 12 E. (Phillip Smith Mt. B-4 quad), on right bank 0.2 mi upstream from bridge at mi 265 on Dalton Highway, 0.9 mi upstream from mouth, and 4 mi south of Pump Station 4. Drainage area is 32.6 mi ² .	1976, ‡1977-86, 1987-2004	6-04-04	13.35	S/527	7-17-99	15.51	1,650
			7-11-04	13.62	R/621			
Sagavanirktok River Tributary near Happy Valley Camp (15910300)	Lat 69°09'38", long 148°49'40", in NE ¹ / ₄ sec. 30, T. 3 S., R. 14 E. (Sagavanirktok A-4 quad), North Slope Borough, on right bank 500 ft upstream from culvert at mi 335.2 on the Dalton Highway, 0.8 mi upstream from mouth, 0.8 mi north of Happy Valley Camp, and 16 mi south of Sagwon. Drainage area is 12.7 mi ² .	1997-2004	6-4-97	j 21.8	r S/217	6-8-00	23.82	850
			5-19-98	22.09	r S/277			
			5-28-99	21.90	r S/238			
			6-8-00	gj 23.82	g S/850			
			6-3-01	gjf 24.21	g u			
			6-8-01	gj 22.76	g S/449			
			8-15-01	g 22.45	g R/362			
			5-24-02	gj 22.86	g S/480			
			8-15-02	gj 23.74	g R/813			
			6-5-03	gj 22.20	g S/302			
			8-12-03	g 20.23	g R/43.4			
			5-24-04	22.66	S/420			
8-3-04	21.50	R/160						

Maximum discharge at crest-stage partial-record stations--Continued
 [Footnotes at end of table on page 333]

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
ARCTIC SLOPE ALASKA—Continued								
Sagavanirktok River Tributary near Deadhorse (15918200)	Lat 69°57'14", long 148°43'48", in NW ¹ / ₄ NE ¹ / ₄ sec. 19, T. 1 N., R. 14 E. (Sagavanirktok D-3 quad), on right bank 6 ft upstream from culvert at mi 386.2 on the Dalton Highway, 0.4 mi upstream from mouth, and 23 mi south of Deadhorse. Drainage area is 12 mi ² , approximately.	1986,	6-05-01	gj 9.07	g S/58	5-24-96	j11.8	142
		1988-2004	8-16-01	g 6.56	g R/5.3			
			5-23-02	g 8.83	g S/52			
			8-17-02	g 6.66	g R/6.6			
			5-25-04	9.92	S/82			

FOOTNOTES

‡ Operated as a continuous record station	f Ice affected
< Less than	g Not previously published
> Greater than	i Data collected by Dept. of Transportation and Public Facilities
R/ Rainfall	j From floodmarks
S/ Spring runoff	m Maximum Observed
a Approximately	n To be determined
c Corrected	r Revised
d At different site or datum	u Unknown
e estimated	

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
 [Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTHEAST ALASKA						
15015592 Cripple Creek near Mouth near Wrangell	Unuk River	Lat 56°15'55", long 130°47'14", in NE ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ sec. 6, T. 65 S., R. 95 E. (Bradfield Canal B-3 quad), in Misty Fiords National Monument, on right bank 0.5 mi upstream from confluence with Unuk River, 19 mi upstream of Burroughs Bay, and 62 mi southeast of Wrangell.	q	2003	10-10-03 07-15-04	88 147
15015596 Gene Creek above Gene Lake near Wrangell	Unuk River	Lat 56°12'44", long 130°51'27", in NE ¹ / ₄ NW ¹ / ₄ sec. 27, T. 65 S., R. 94 E. (Bradfield Canal A-3 quad), in Misty Fiords National Monument, on right bank 0.2 mi upstream from Gene Lake, 0.9 mi upstream of confluence with Unuk River, 8.8 mi upstream of Burroughs Bay, and 63 mi southeast of Wrangell.	9.55	2003	10-10-03	56
15015598 Clear Creek at Mouth near Wrangell	Lake Creek	Lat 56°07'33", long 130°58'03", in SE ¹ / ₄ SW ¹ / ₄ sec. 24, T. 66 S., R. 93 E. (Bradfield Canal A-3 quad), in Misty Fiords National Monument, on left bank 0.5 mi upstream from confluence with Lake Creek, 0.3 mi upstream of confluence of Lake Creek and Unuk River, 5.5 mi upstream of Burroughs Bay, and 58 mi southeast of Wrangell.	14.6	2003	10-11-03 07-15-04	84 72
15049900 Gold Creek near Juneau	Gastineau Channel	Lat 58°18'26", long 134°23'12", in NW ¹ / ₄ NE ¹ / ₄ , sec. 24, T. 41 S., R. 67 E. (Juneau B-2 SE quad), City and Borough of Juneau, at Old Ebner Dam site, at head of Last Chance Basin, 0.6 mi upstream from Basin Road bridge, and 1.1 mi east of Juneau.	8.41	(‡)1984-97, 1998-2003	12-03-23 02-03-04 03-17-04 04-26-04 05-06-04 06-30-04 07-15-04 08-02-04 08-25-04 09-01-04 09-30-04	28 25 19 108 101 143 106 82 26 29 144
15052900 Mendenhall River at Brotherhood Bridge near Auke Bay	Fritz Cove	Lat 58°22'15", long 134°36'00", in NW ¹ / ₄ SE ¹ / ₄ , sec. 25, T. 40 S., R. 65 E. (Juneau B-2 SW quad), City and Borough of Juneau, at Egan Expressway bridge, 1.0 mi upstream from mouth, and 2.3 mi southeast of Auke Bay.	104	1950, 1961-66, 1968, 1984, 1989, 1997, 1999-2003	1-07-04 3-02-04 5-04-04	151 167 771
15056100 Skagway River at Skagway	Taiya Inlet	Lat 59°28'02", long 135°17'00", in NE ¹ / ₄ NW ¹ / ₄ , sec. 12, T. 28 S., R. 59 E. (Skagway B-1 quad), City of Skagway, at highway bridge, 1.0 mi upstream from mouth.	a145	‡1963-86 2001	8-13-04	1,420
15056500 Chilkat River near Klukwan	Lynn Canal	Lat 59°24'55", long 135°55'45", in NE ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ , sec. 29, T. 28 S., R. 56 E. (Skagway B-3 quad), at Haines Highway Bridge, 0.25 mi upstream from mouth of Klehine River, and 1.7 mi northwest of Klukwan.	a760	‡1959-61 2001	8-08-04	8,330

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
[Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTHEAST ALASKA—Continued						
15087620	Starrigavin Creek	Lat 57°07'04", long 135°21'29", in SE ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ sec. 02, T. 55 S., R. 63 E. (Sitka A-5 quad), Baranoff Island, 0.2 mi upstream from confluence of Starrigavin Creek and .4 mi upstream from bay, and 12 miles north of Sitka.	n	g	5-18-04	0.43
	Starrigavin Creek trib at Starrigavin Creek campground near Sitka				9-21-04	9.5
15087638	Western Channel	Lat 57°06'05", long 135°23'52", in SE ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ , sec. 16, T. 55 S., R. 63 E. (Sitka A-5 quad), on Baranof Island, in the Tongass National Forest, 200 ft downstream from Granite Creek Road Bridge, 400 ft upstream from mouth, and about 3.9 mi northwest of Sitka.	2.42	2002-2003	10-04-03	85
	Granite Creek at Sitka				9-08-04	5.6
					9-21-04	90
15087810	Silver Bay	Lat 57°03'40", long 135°12'35", in NE ¹ / ₄ SE ¹ / ₄ NE ¹ / ₄ , sec 34, T.55S., R. 64E.(Sitka a-4 quad), on Baranof Island, in Tongass National Forest, at footbridge crossing at campground, 240 ft downstream from upper powerplant tailrace, 0.35 mi upstream from dam at Blue Lake, 1.2 mi upstream from mouth and 4.6 mi east of Sitka	38.0	1994-95 1998-2003	11-14-03	558
	Sawmill Creek below Upper Tailrace near Sitka				9-09-04	65
15088400	Bear Cove	Lat 57°00'39", long 135°09'11", in NE ¹ / ₄ SE ¹ / ₄ SE ¹ / ₄ , sec. 13, T. 56 S., R. 64 E. (Sitka A-4 quad), on Baranof Island, in the Tongass National Forest, 200 ft downstream from Green Lake Road crossing, 400 ft upstream from mouth at south shore of Bear Cove in Silver Bay, and about 7.1 mi southeast of Sitka.	0.43	†2000-2003	10-04-03	d no flow
	Cupola Peak Creek at Bear Cove near Sitka				1-22-04	d no flow
					3-03-04	d no flow
					5-19-04	0.15
					7-22-04	no flow
					9-09-04	no flow
					9-21-04	12
15109045	Peterson Creek	Lat 58°17'02", long 134°39'49", in SE ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ , sec. 29, T. 41 S., R. 66 E. (Juneau B-2 SW quad), City and Borough of Juneau, on Douglas Island, Tongass National Forest, 300 ft upstream from mouth, 7.3 mi south of Auke Bay, and 9.5 mi west of Douglas.	1.59	(†)1985-87, (†)1997-2003	11-17-03	2.1
	North Fork Peterson Creek near Auke Bay				12-19-03	17
					2-25-04	2.4
					4-23-04	1.6
					7-07-04	0.88
15129540	Lost River	Lat 59°29'42", long 139°37'56", in SE ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ sec. 15, T. 28 S. R. 34 E. (Yakutat B-5 quad), at Yakutat Airport, in Tongass National Forest, 1.5 mi upstream from mouth, and 5.5 mi southeast of Yakutat.	--	2003	10-17-03	1.1
	Drain at Airport Approach 29 near Yakutat				12/10/03	0.18
					02/17/04	0.27
					04/28/04	0.56
15129550	Tawah Creek	Lat 59°29'35", long 139°41'17", in SW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ , sec. 17, T. 28 S., R. 34 E. (Yakutat B-5 quad), at Yakutat Airport, in Tongass National Forest, 0.4 mi upstream from mouth, and 5.3 mi southeast of Yakutat.	--	2003	10/16/03	10
	Drain at Airport Approach 2 near Yakutat				12/10/03	11
					02/17/04	13
					04/27/04	21
SOUTH-CENTRAL ALASKA						
601708154203500	Kijik River	Lat 60°17'08", long 154°20'35", in SE ¹ / ₄ SW ¹ / ₄ SW ¹ / ₄ , sec. 5, T.2 N., R. 29 W. (Lake Clark B-4 quad), Lake and Peninsula Borough, 100 ft upstream from mouth at west end of Kijik Lake, and 6 mi north of Port Alsworth.	--	--	6-9-04	127
	Little Kijik River above Kijik Lake near Port Alsworth				7-14-04	40
					8-24-04	16
					10-6-04	39

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
[Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA—Continued						
601828154171700	Kijik River	Lat 60°18'28", long 154°17'17", in SW ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ , sec. 34, T.3 N., R. 29 W. (Lake Clark B-4 quad), Lake and Peninsula Borough, 1000 ft downstream from mouth at east end of Kijik Lake, and 7.4 mi north of Port Alsworth.	--	--	6-9-04	259
Little Kijik River below Kijik Lake near Port Alsworth					7-14-04	118
					8-25-04	60
					10-6-04	88
601833154154100	Kijik River	Lat 60°18'33", long 154°15'41", in NW ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ , sec. 35, T.3 N., R. 29 W. (Lake Clark B-4 quad), Lake and Peninsula Borough, 1500 ft upstream from confluence of Little Kijik River, and 7.5 mi northeast of Port Alsworth.	--	--	6-8-04	746
Kijik River above Little Kijik River near Port Alsworth					7-13-04	600
					8-26-04	378
					10-4-04	258
601801154143600	Kijik River	Lat 60°18'01", long 154°14'36", in SE ¹ / ₄ SW ¹ / ₄ SW ¹ / ₄ , sec. 36, T.3 N., R. 29 W. (Lake Clark B-4 quad), Lake and Peninsula Borough, 1.5 mi upstream from mouth, and 7.2 mi northeast of Port Alsworth.	--	--	6-8-04	1010
Kijik River 1.5 miles above mouth near Port Alsworth					7-13-04	718
					8-26-04	430
					10-4-04	346
15198600	Copper River	Lat 62°51'30", long 143°41'00", in NE ¹ / ₄ , sec. 3, T. 12 N., R. 9 E., SE ¹ / ₄ sec. 34, T. 13 N., R. 9 E., (Nabesna C-6 quad), near Mentasta. River is braided into three main channels at this reach. Flow was only measured at Mable Creek Slough bridge at mi 76.3 of the Tok Cutoff Highway:	--	1998	5-10-04	84
15201000	Copper River	Lat 62°08'49", long 145°28'31", in NE ¹ / ₄ , sec. 7, T. 4 N., R. 1 W. (Gulkana A-3 quad), 135 ft upstream from culvert at mi 119 Richardson Highway and 3.3 mi north of Glennallen.	11.4	†1963-2003	5-14-04	21
Dry Creek near Glennallen					6-08-04	2.5
15202000	Copper River	Lat 62°03'20", long 145°25'34", in SW ¹ / ₄ , sec. 9, T. 3 N., R. 1 W. (Gulkana A-3 quad), at bridge, 115.3 Richardson Highway, 5 mi south-east of Glennallen.	a2,670	‡1949-72 1997-99 2001-02	7-22-04	19,000
15210025	Kennicott River	Lat 61°25'54", long 142°55'02", in NW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ , sec. 19, T. 5 S., R. 14 E. (McCarthy B-6 quad), 1100 ft upstream from large boulder near footbridge at trail crossing at McCarthy, 0.8 mi upstream from mouth.	79.0	†1993-2003	10-11-03	68
McCarthy Creek at McCarthy					5-12-04	240
					6-23-04	331
15212500	Tiekel River	Lat 61°20'08", long 145°18'26", in SE ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ , sec. 19, T. 6 S., R. 1 E. (Valdez B-4 quad), at mi 51.4 on the former Richardson Highway.	9.80	†1964-2003	6-09-04	107
15212800	Ptarmigan Creek	Lat 61°08'12", long 145°44'32", NW ¹ / ₄ NE ¹ / ₄ , sec 34, T. 8 S., R. 3 W. (Valdez A-5 quad), 275 ft upstream from Richardson Highway, 21 mi east of Valdez.	0.72	†1965-70 †1995-2003	6-21-04	16
Ptarmigan Creek Tributary near Valdez						
15227500	Port Valdez	Lat 61°08'30", long 146°21'42", in SW ¹ / ₄ NE ¹ / ₄ SE ¹ / ₄ , sec. 30, T. 8 S., R. 6 W. (Valdez A-7 quad), 120 ft upstream from bridge, 1.8 mi above mouth, and 0.5 mi northwest of Valdez.	44.0	1913, 1948-50, 1972-73, †1990-2003	8-12-04	639

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
[Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA—Continued						
15236200 Shakespeare Creek at Whittier	Passage Channel	Lat 60°46'35", long 148°43'35", in NE ¹ / ₄ , sec.22, T. 8 N., R. 4 E. (Seward D-5 quad), at bridge 0.5 mi upstream from mouth, and 1.8 mi west of the Alaska Railroad terminal building at Whittier.	1.61	1969, †1970-80, †1985-2003	6-07-04 8-12-04	62 44
5940401504139 Upper Nuka River at Park Boundary near Homer	Beauty Bay	Lat 59°40'40", long 150°41'39", (Seldovia C-2 quad), Kenai Peninsula Borough, 0.7 mi downstream from Nuka Glacier terminus, 5.3 mi southeast of Bradley Lake, and 29 mi east of Homer.	--	--	6-03-04 7-16-04	25.4 7.50
15239500 Fritz Creek near Homer	Kachemak Bay	Lat 59°42'30", long 151°20'35", in SW ¹ / ₄ SW ¹ / ₄ sec. 28, T. 5 S., R. 12 W. (Seldovia C-4 quad), 15 ft upstream from culvert under East Road, and 8 mi northeast of Homer.	10.4	†1963-66, †f 1967-70, †1971-77, †f 1978-80 †+1981-85, ‡1986-92 †1993-2003	4-14-04 4-26-04	60 61
15239900 Anchor River near Anchor Point	Cook Inlet	Lat 59°44'50", long 151°45'11", in NE ¹ / ₄ sec. 13, T. 5 S., R. 15 W. (Seldovia C-5 quad), Kenai Peninsula Borough, at bridge on Sterling Highway (mile post 161), 4.3 mi southeast of Anchor Point.	137	‡1965-73 †1974 ‡1978-86 †1987 ‡1991-92 1996, 1999, 2002, 2003	6-02-04 7-15-04	204 56
15242000 Kasilof River near Kasilof	Cook Inlet	Lat 60°19'05", long 151°15'35", in SW ¹ / ₄ sec. 30, T. 3 N., R. 11 W. (Kenai B-4 quad), Kenai Peninsula Borough, at bridge, mi 67.1 Sterling Highway, 5 mi south of Kasilof.	738	‡1949 - 70 2002-03	9-11-04	6,980
15274796 + South Branch of South Fork Chester Creek at tank trail near Anchorage	South Fork Chester Creek	Lat 61°11'25", long 149°42'13" in SE ¹ / ₄ NW ¹ / ₄ , sec. 30, T. 13 N., R. 2 W. (Anchorage A-8 quad), Municipality of Anchorage, 100 ft upstream from bridge on tank trail (Bulldog Trail), and 6.5 mi east of Anchorage.	4.30	1968, 72 1980 1998-2003	10-03-03 4-09-04 6-02-04 7-13-04	7.7 1.5 6.3 3.4
15276200 Ship Creek at Glenn Highway near Anchorage	Knik Arm	Lat 61°14'20", long 149°41'45", in NW ¹ / ₄ NE ¹ / ₄ NE ¹ / ₄ , on line between sec. 6 and 7, T. 13 N., R. 2 W. (Anchorage A-8NE quad), Municipality of Anchorage, just downstream of the Glenn Highway, 2.6 mi downstream from Ship Creek diversion dam, and 6.0 mi east of intersection of Seward and Glenn Highways in Anchorage.	103.4	2002-03	10-10-03 11-12-03	218 110
15280100 Eklutna River above Thunderbird Creek near Eklutna	Knik Arm	Lat 61°26'44", long 149°21'16", in NW ¹ / ₄ SW ¹ / ₄ , sec. 30, T. 16 N., R. 1 E. (Anchorage B-7 quad), Municipality of Anchorage, 800 ft upstream from Thunder Bird Creek, 3.3 mi upstream from mouth, and 1.6 mi southeast of Eklutna.	--	1955-57 2002-03	11-06-03 11-06-03 2-25-04 4-25-04 7-02-04 8-16-04 9-16-04	5.0 5.8 4.1 7.7 5.1 4.1 4.6

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
 [Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA—Continued						
15283600 Premier Creek near Sutton	Moose Creek	Lat 61°42'40", long 149°05'12", in SE ¹ / ₄ NE ¹ / ₄ , sec. 28, T. 19 N., R. 2 E. (Anchorage C-6 quad), Matanuska-Susitna Borough, 10 ft downstream from culvert on Buffalo Mine Road (called Moose Creek Road on Anchorage C-6 quad), 4 mi north from Glenn Highway, 6 mi west of Sutton, and 7 mi northeast of Palmer.	3.38	†1996-2003	10-08-03 4-30-04 6-04-04 7-09-04 8-23-04	2.8 8.1 2.4 1.6 0.8
15285000 Wasilla Creek near Palmer	Knik Arm	Lat 61°38'37", long 149°11'46", in SE ¹ / ₄ SW ¹ / ₄ , sec. 13, T. 18 N., R. 1 E. (Anchorage C-6 quad), Matanuska-Susitna Borough, 20 ft downstream from culverts on Palmer-Fishhook Road, and 4.1 mi northeast of Palmer.	16.8	†1971, f†1976-83, †1984-2003	4-30-04 7-09-04 8-19-04	40 4.5 2.4
15290200 Nancy Lake Tributary near Willow	Nancy Lake	Lat 61°41'17", long 149°57'58", in SE ¹ / ₄ SE ¹ / ₄ , sec. 34, T. 19 N., R. 4 W. (Tyonek C-1 quad), Matanuska-Susitna Borough, 150 ft upstream from culvert at Parks Highway, 0.3 mi upstream from mouth, and 4.5 mi southeast of Willow.	8.00	f1978-79, †1980, f1981, †1983-86, †1990-2003	10-01-03 4-23-04 6-04-04	30 40 3.2
15291100 Raft Creek near Denali	Susitna River	Lat 63°03'04", long 147°16'22", in SE ¹ / ₄ , sec. 36, T. 21 S., R. 2 E., (Healy A-1 quad), Matanuska-Susitna Borough, 30 ft upstream from culvert at mi 68.9 Denali Highway, and 10.7 mi southeast of Denali.	4.33	†1963-67, †1971-75, †1977-82, †1984-90, †1993-2003	10-02-03 6-09-04	7.0 29
15292400 Chulitna River near Talkeetna	Susitna River	Lat 62°33'31", long 150°14'02", in SE ¹ / ₄ , sec. 32, T. 29 N., R. 5 W., (Talkeetna C-1 quad), Matanuska-Susitna Borough, 0.5 mi downstream from Parks Highway Bridge, 4.5 mi downstream from Troublesome Creek, 18 mi upstream from mouth, and 16 mi northwest of Talkeetna.	a2,570	‡1958-72 ‡1980-85 1998 2002-03	8-12-04	24,700
15294350 + Susitna River at Susitna Station	Cook Inlet	Lat 61°32'41", long 150°30'45", in SE ¹ / ₄ , sec. 22, T. 17 N., R. 7 W., Matanuska-Susitna Borough, on left bank at Susitna Station, approximately 1.5 mi downstream from Yetna River, 12.5 mi above Alexander Creek.	19,400	1974-93 2003	10-25-03	37,200
15294630 North Fork Crescent River near Tuxedni Bay	Cook Inlet	Lat 60°26'06", long 152°53'52", in SE ¹ / ₄ , sec. 15, T. 4 N., R. 21 W. (Kenai B-8 quad), 500 ft upstream from unnamed tributary on left bank, 8.5 mi upstream of Lake Fork and North fork confluence, 6 mi southwest of Mt. Redoubt, and 50 mi northwest of Ninilchik.	34.2	2003	8-11-04	501
15294640 Lake Fork Crescent River near Tuxedni Bay	Cook Inlet	Lat 60°21'31", long 152°48'59", in SW ¹ / ₄ , sec. 7, T. 3 N., R. 20 W., (Kenai B-8 quad), 1.0 mi downstream from lake outlet, 3.2 mi upstream of Lake Fork and North fork confluence, 9 mi south of Mt. Redoubt, and 46 mi northwest of Ninilchik.	125	2003	7-2-04 7-29-04 8-18-04 9-13-04	2140 2860 1380 560

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
[Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SOUTH-CENTRAL ALASKA—Continued						
15297200	Kalsin Bay	Lat 57°36'12", long 152°24'12", in NW ¹ / ₄ SW ¹ / ₄ , sec. 6, T. 30 S., R. 19 W. (Kodiak C-2 quad), Kodiak Island Borough, 0.1 mi upstream from bridge, 0.3 mi upstream from mouth, and 13 mi south of Kodiak.	4.74	‡1963-86, †1987-89, †1991-2003	10-08-03 5-04-04 7-29-04	64 84 46
15297580	Black Lake	Lat 56°27'18", long 158°55'35", in SE ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ , sec. 17, T.43 S., R. 61 W. (Chignik B-3 quad), Lake and Peninsula Borough, 0.4 mi upstream from the mouth and 15.4 mi northwest of Chignik Lake Village.	122.71	--	5-19-04 7-07-04 9-15-04	974 965 365
15297585	Chignik Lake	Lat 56°23'50", long 158°56'13", in SW ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ , sec. 05, T.44 S., R. 61 W. (Chignik B-3 quad), Lake and Peninsula Borough, 1.5 mi below Black Lake and 11.9 mi northwest of Chignik Lake Village.	282.93	--	5-20-04 9-15-04	1,300 770
SOUTHWEST ALASKA						
15297609	Cold Bay	Lat 55°11'17", long 162°42'47", in SE ¹ / ₄ SE ¹ / ₄ NW ¹ / ₄ , sec. 1, T.58 S., R. 89 W. (Cold Bay A-3 quad), Aleutians East Borough, 0.9 mi upstream from mouth, and 1 mi south of Cold Bay.	1.68	†2001-2003	2-24-04 5-11-04 7-07-04 8-30-04	1.9 2.1 1.1 0.77
15297810	Izembek Lagoon	Lat 55°09'59", long 162°48'22", in SE ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄ , sec. 8, T.58 S., R. 89 W. (Cold Bay A-3 quad), Aleutians East Borough, 2.8 mi upstream from mouth, and 4.5 mi southwest of Cold Bay.	5.92	†2001-2003	2-24-04 5-11-04 7-07-04 8-30-04	25 69 46 33
15300350	Chinkelyes Creek	Lat 59°44'02", long 153°48'40", in SE ¹ / ₄ NE ¹ / ₄ NE ¹ / ₄ , sec. 23, T. 5 S., R. 27 W. (Iliamna C-3 quad), Lake and Peninsula Borough, 60 ft upstream from culvert, 8 mi east of Pile Bay and 11 mi east of Pedro Bay.	0.40	†1998-2003	6-17-04 8-03-04	7.7 0.10
15302900	Wood River	Lat 59°16'34", long 158°35'42", in SE ¹ / ₄ , sec. 30, T. 10 S., R. 55 W. (Dillingham B-7 quad), 500 ft upstream from mouth at Wood River at the Aleknagik Mission.	1.28	1968 †1969-73, †1975-83, †1988-89 †1993-2003	9-11-04	1.0
15303660	Takotna River	Lat 62°59'20", long 156°04'08", in SE ¹ / ₄ SE ¹ / ₄ , sec. 34, T. 34 N., R. 36 W. (Iditarod D-1 quad), at Takotna, 350 ft upstream from bridge, and 400 ft upstream from mouth.	6.31	†1987-2003	10-09-03 6-01-04 9-16-04	5.0 11 2.6
YUKON ALASKA						
15470300	Jack Lake	Lat 62°32'39", long 143°19'22", in SW ¹ / ₄ NW ¹ / ₄ SE ¹ / ₄ , sec. 22 T. 9 N., R. 11 E. (Nabesna C-5 quad), mi 25.8 Nabesna Road, and 15.6 mi northwest of Nabesna.	6.73	†1975-77, †1980, †1982-83, †1985-88, †1990-95, †1997-2003	10-09-03 6-09-04 7-23-04 8-26-04	2.7 1.2 2.6 2.2

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
 [Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
YUKON ALASKA—Continued						
15472000 Tanana River near Tok Junction	Yukon River	Lat 63°19'00", long 142°38'30", in NW ¹ / ₄ , sec. 25, T. 18 N., R. 14 E. (Tanacross B-4 quad), 1.4 mi west of junction of Alaska and Taylor Highways, at bridge crossing.	6,800	‡1950-1953 2001 2003	8-25-04	24,700
15478000 Tanana River at Big Delta	Yukon River	Lat 64°09'20", long 145°51'00", in SW ¹ / ₄ sec. 5, T. 9 S., R. 10 E. (Big Delta A-4 quad), near Rika's Roadhouse, 1,900 ft upstream from the bridge, mi 208.3 Alaska Highway, at Big Delta.	13,500	‡1948-57 1999	6-09-04 7-28-04	22,400 43,200
15516000 Nenana River near Windy	Tanana River	Lat 63°27'28", long 148°48'11", in NE ¹ / ₄ sec. 12, T. 17 S. R. 7 W. (Healy B-4 quad), Matanuska-Susitna Borough, near left bank under bridge on Denali Highway, 0.8 mi upstream from Jack River, 1 mi southeast of Windy railroad station, and 2 mi downstream from Schist Creek.	710	‡1950-56 1957 ‡1958-73 2003	7-08-04	1,780
15516200 Slime Creek near Cantwell	Nenana River	Lat 63°30'34", long 148°48'39", in SE ¹ / ₄ , sec. 24, T. 16 S., R. 7 W. (Healy C-4 quad), 25 ft. down stream of culverts at mi 219.9 George Parks Highway, 9.1 mi northeast of Cantwell.	6.90	†1990-2003	10-02-03 6-10-04 7-09-04	16 30 15
15517000 Nenana River near McKinley Village	Tanana River	Lat 63°39'27", long 148°49'45", in SW ¹ / ₄ , sec. 36, T. 14 S., R. 7 W. (Healy B-4 quad), 10 mi south of entrance to Denali National Park, at mi 231.2 George Parks Highway.	1,184	1998	7-09-04	2,550
15517980 Dragonfly Creek near Healy	Nenana River	Lat 63°47'45", long 148°55'19", in SW ¹ / ₄ SE ¹ / ₄ SW ¹ / ₄ , sec. 9, T. 13 S., R. 7 W., (Healy D-4 quad), at mi 242.6 George Parks Highway, 6 mi southeast of Healy	0.71	†1990-95, †1997-2003	5-26-04	2.6
600954134422900 Nares River near Carcross, YT	Yukon River	Lat 60°09'54", long 134°29'59", at Carcross Highway bridge crossing between Bennet Lake and Nares Lake.	1365	--	6-5-04 8-25-04	3390 2490
15304600 Atlin River near Atlin, BC	Atlin Lake	Lat 59°35'57", long 133°48'48", 2.5 mi downstream from Graham Inlet, 0.2 mi upstream from Atlin Lake, 4.5 mi northeast of Atlin, and 4.8 mi northwest of Atlin Mtn.	2580	--	6-6-04 8-26-04	2310 10800
605008135104100 Yukon River above Takhini River near Whitehorse, YT	Norton Sound	Lat 60°50'08", long 135°10'41", 0.5 mi upstream of confluence with Takhini River, 9.5 mi northwest of Whitehorse, and 10 mi east of Takhini	7711	--	6-7-04 8-27-04	9320 20200
15305050 Takhini River near mouth near Whitehorse, YT	Yukon River	Lat 60°51'08", long 135°44'21", at Alaska Highway bridge crossing, 10 mi west of Takhini and 9.5 mi east of Stony Creek Camp	2704	--	6-7-04 8-27-04	3210 4580
15305260 Teslin River near mouth near Whitehorse, YT	Yukon River	Lat 61°29'25", long 134°46'35", 9 mi upstream from mouth, 17 mi northeast of Lower Laberge and 18 mi northwest of Livingston, and 58 mi north of Whitehorse.	13519	--	6-9-04 8-29-04	37900 8890
15305300 Big Salmon River near Carmacks, YT	Yukon River	Lat 61°52'22", long 134°50'00", 5 mi upstream from mouth, 3 mi southeast of Big Salmon, and 53 mi east of Carmacks.	2623	--	6-10-04 8-30-04	18500 2050

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
 [Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
YUKON ALASKA—Continued						
620322135395300 Little Salmon River near mouth near Carmacks, YT	Yukon River	Lat 62°03'22", long 135°39'53", 0.2 mi upstream from mouth, and 20.5 mi west of Carmacks.	1400	--	6-10-04 8-30-04	3030 547
15305350 Yukon River at Carmacks, YT	Norton Sound	Lat 62°05'45", long 136°16'18", 2 mi upstream of confluence with Nordenskiold River, and 500 feet upstream of Klondike Highway bridge crossing at Carmacks.	33827	--	6-11-04 8-31-04	70400 36100
15305352 Nordenskiold River near Carmacks, YT	Yukon River	Lat 62°03'00", long 136°16'45", 3.8 mi upstream of mouth, 0.3 mi downstream of unnamed tributary, and 1.4 mi south of Carmacks.	2476	--	6-11-04 8-31-04	1270 256
15305420 Pelly River at Pelly Crossing, YT	Yukon River	Lat 62°49'47", long 136°34'50", at Klondike Highway bridge crossing, 42 mi upstream of mouth, and 0.7 mi north of Pelly Crossing.	18879	--	6-12-04 9-1-04	64600 7020
15305450 Yukon River above White River near Dawson, YT	Norton Sound	Lat 63°05'02", long 139°29'46", 8 mi upstream of confluence with White River, 2.5 mi downstream of Los Angeles Creek, and 68 mi south of Dawson.	57349	--	6-13-04 9-2-04	135000 44400
631020139395400 White River near mouth near Dawson, YT	Yukon River	Lat 63°10'20", long 139°39'54", 2.5 mi upstream of mouth and 57 mi south of Dawson.	18533	--	6-13-04 9-2-04	34300 26200
15305650 Stewart River at mouth near Dawson, YT	Yukon River	Lat 63°16'55", long 139°14'56", 6 mi upstream of mouth, 0.5 mi downstream of Tenderfoot Creek, and 54 mi south of Dawson.	19901	--	6-14-04 9-3-04	55800 7910
633327139463400 Sixtymile River near mouth near Dawson, YT	Yukon River	Lat 63°33'27", long 139°46'34", 0.1 mi upstream of mouth and 34 mi south of Dawson.	1436	--	6-14-04 9-3-04	762 422
15305698 Klondike River above Bonanza Creek near Dawson, YT	Yukon River	Lat 64°02'34", long 139°24'28", 1.3 mi upstream of mouth, 0.3 mi upstream of Bonanza Creek, and 1.5 mile southeast of Dawson at Klondike Highway bridge crossing.	3012	--	9-4-04	1395
640305139260900 Klondike River below Bonanza Creek near Dawson, YT	Yukon River	Lat 64°03'05", long 139°26'09", 0.4 mi upstream of mouth, 0.6 mi downstream of Bonanza Creek, and 1.0 mi south of Dawson.	3106	--	6-15-04 9-4-04	6570 1404
15355000 Fortymile River near mouth near Eagle, YT	Yukon River	Lat 64°23'50", long 139°14'56", 2 mi upstream of mouth, 43 mi northwest of Dawson, YT, and 30 mi southeast of Eagle, AK	6491	--	6-16-04 9-15-04	3490 2290
15344000 King Creek near Dome Creek	O'Brien Creek	Lat 64°23'38", long 141°24'43", in NE ¹ / ₄ SW ¹ / ₄ sec. 16, T. 6 S., R. 32 E. (Eagle B-1 quad), at mi 120 Taylor Highway, 1,100 ft upstream from culvert at mi 119.9, 0.4 mi upstream from mouth, 4.9 mi east of Dome Creek, and 28 mi south of Eagle.	5.87	†1975-77 †1979-80 †1982 †1983-1990 †1991-2002	5-18-04 7-14-04 9-15-04	9.3 .39 1.3
15389000 Porcupine River near Fort Yukon	Yukon River	Lat 66°59'26", long 143°08'16", in SW ¹ / ₄ , sec. 16, T. 25N., R. 21E., (Black River D-5 quad), 1,000 ft upstream from John Herberts Village, and 65 mi northeast of Fort Yukon.	a29,500	‡1964-79, 2001-03	4-9-04 9-9-04	1020 5510

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
[Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
YUKON ALASKA—Continued						
15395900 Upper Frying Pan Creek near Central	Birch Creek	Lat 65°19'37", long 145°33'01", in SE ¹ / ₄ , sec. 19, T. 6 N., R. 10 E. (Circle B-4 quad), 0.3 mi upstream of the confluence with Frying Pan Creek, mi upstream from the mouth of Frying Pan Creek, 16.6 mi southwest of Miller House site, 9.4 mi southwest of Mastodon Dome, and 27.4 mi southwest of Central.	8.11	2001-02	6-10-04 8-3-04 9-1-04 9-24-04	6.4 5.4 1.5 0.70
15396000 Frying Pan Creek near Miller House	Birch Creek	Lat 65°19'18", long 145°33'02", in NE ¹ / ₄ , sec. 30, T. 6 N., R. 11 E. (Circle B-4 quad), 2.8 mi upstream of the confluence with Birch Creek, 18 mi southwest of Miller House site, 8.0 mi southwest of Mastodon Dome, and 26 mi southwest of Central.	14.7	1910	8-3-04 9-1-04 9-24-04	11 1.5 1.0
15407200 South Fork Harrison Creek near Central	Birch Creek	Lat 65°21'52", long 145°15'25", in NW ¹ / ₄ , sec. 10, T. 6 N., R. 12 E. (Circle B-3 quad), 4.0 mi upstream from confluence with North Fork Harrison Creek, 20.0 mi upstream from mouth of Harrison Creek, 11.1 mi south of Miller House site, 5.1 mi southeast of Mastodon Dome, and 19.5 mi southwest of Central.	9.11	2001-03	7-31-04 8-31-04 9-27-04	1.9 1.6 2.1
15407500 Harrison Creek near Central	Birch Creek	Lat 65°22'45", long 144°49'58", in NE ¹ / ₄ , sec. 3, T. 8 N., R. 14 E. (Circle B-2 quad), 0.4 mi upstream of mouth of Bottom Dollar Creek, 5.3 mi upstream from mouth of Harrison Creek, 15.0 mi southeast of Miller House site, 15.0 mi east of Mastodon Dome, and 13.5 mi south of Central.	71.6	2001-03	6-17-04 8-5-04 8-30-04 9-19-04 9-29-04	34 18 12 9.8 6.3
15439800 Boulder Creek near Central	Crooked Creek	Lat 65°34'05", long 144°53'13", in NW ¹ / ₄ , sec. 32, T. 9 N., R. 14 E. (Circle C-2 quad), 2000 ft upstream from bridge at mi 125.4 Steese Highway, 0.7 mi upstream from mouth, and 2.3 mi west of Central.	31.3	†1964-65, ‡1966-82, †1983, ‡1984-86, †1988-2003	5-21-04 6-18-04	34 9.4
15442500 Quartz Creek near Cen- tral	Crooked Creek	Lat 65°37'09", long 144°28'55", in SW ¹ / ₄ , sec. 7, T. 9 N., R. 16 E. (Circle C-2 quad), at mi 138.1 Steese Highway, 1 mi upstream from mouth, and 10 mi east of Central.	17.2	†1990, †1992-2003	5-13-04	33
15453610 Ray River Tributary near Stevens Village	Ray River	Lat 65°56'57", long 149°54'50", in SE ¹ / ₄ , sec. 17, T. 13 N., R. 11 W. (Livengood D-6 quad), at mi 63.8 Dalton Highway and 22 mi west of Stevens Village.	8.00	†1977, †1979-80 †1982 †1987-88 †1990-2003	5-12-04	41
15472100 Porcupine Creek near Tetlin Junction	Tanana River	Lat 63°22'53", long 142°32'31", in SE ¹ / ₄ , sec. 33 T. 19 N., R. 15 E. (Tanacross B-4 quad), at mi 6.1 of the Taylor Highway, 4.5 mi upstream from the confluence with the Tanana River, 6 mi north of Tetlin Junction, 14.3 mi northeast of Tok.	8.13	--	9-14-04	3.4

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
[Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
YUKON ALASKA—Continued						
15476300 Berry Creek near Dot Lake	Tanana River	Lat 63°41'23", long 144°21'47", in NW ¹ / ₄ , sec. 13 T. 22 N., R. 5 E. (Mt. Hayes C-1 quad), 100 ft upstream from former bridge site at mi 1371.4 on abandoned section of Alaska Highway, 1.9 mi upstream from mouth, and 6.0 mi west of Dot Lake.	65.1	†1963-71, †1972-81, †1982,1984, †1988 †1990-94 †1997-2003	7-13-04	50
15478093 Suzy Q Creek near Pump Station 10	Delta River	Lat 63°29'43", long 145°51'27", in SW ¹ / ₄ , sec. 29, T. 16 S., R. 10 E. (Mt. Hayes B-4 quad), at mi 224.8 Richardson Highway, 0.1 mi upstream from mouth, and 6 mi north of Pump Station 10.	1.29	†1987, †1991-94, †1997-2003	6-1-04 6-29-04	5.4 1.3
15478499 Ruby Creek above Richardson Highway near Donnelly	Delta River	Lat 63°37'54", long 145°52'14", in NE ¹ / ₄ , sec. 7, T. 15 S., R. 10 E. (Mt. Hayes C-4 quad), 0.2mi upstream from trans-Alaska Pipeline, 0.5 mi upstream from bridge at mi 234.8 Richardson Highway, 2.2 mi upstream from mouth, and 2.3 mi south of Donnelly.	4.89	†1987-88, †1991-97, †1999-2000 2002-2003	4-21-04 6-3-04	.43 18
15480000 Banner Creek at Richardson	Tanana River	Lat 64°17'24", long 146°20'56", in SW ¹ / ₄ , sec. 22, T. 7 S., R. 7 E. (Big Delta B-5 quad), 400 ft upstream from bridge at mi 295.4 Richardson Highway 0.2 mi upstream from mouth, and 0.4 mi northwest of Richardson.	20.2	†1964-67, †1969-70, †1972, †1974-75, †1977, †1982-84, †1989-93, †1995-96 †1998-2003	6-29-04 9-14-04	6.1 4.7
15493400 Chena River below Hunts Creek near Two Rivers	Tanana River	Lat 65°51'36", long 146°48'12", in NW ¹ / ₄ , sec. 5, T. 1 S., R. 5 E. (Big Delta D-6 quad), approximately 0.6 mi downstream from Hunts Creek and 1.5 mi south of mi 25.8 Chena Hot Springs Road.	1344	1985, 1987-89, 1991-2001	g10-7-02 g7-2-03 7-7-04	g1240 g461 855
15493700 Chena River below Moose Creek Dam	Tanana River	Lat 64°48'03", long 147°13'40", in NW ¹ / ₄ , sec. 30, T. 1 S., R. 3 E. (Fairbanks C-1 quad), 3.1 mi downstream from Moose Creek Dam, 1.4 mi upstream from Potlatch Creek, 5 mi northeast of North Pole, and 14.7 mi east of Fairbanks.	1,460	‡1979-96, 1997-99, 2001	g10-9-02 g7-3-03 7-21-04	g1530 g530 542
15512000 Chena Slough near Fairbanks	Chena River	Lat 64°49'15", long 147°26'15", in SW ¹ / ₄ , sec. 4, T. 1 S., R. 2 E. (Fairbanks D-1 quad), on Peede Road off Badger Road in North Pole, 2 mi upstream from confluence with the Chena River.	20.0	--	6-16-04 7-15-04	64 58
644612147202700 Chena Slough at Airway Drive near North Pole	Chena River	Lat 64°46'13", long 147°20'27", in SE ¹ / ₄ , sec. 18, T. 1 S., R. 2 E. (Fairbanks D-1 quad), on Airway Drive off Badger Road in North Pole, 7 mi upstream from confluence with the Chena River.	--	--	6-16-04 7-15-04	26 27
6358411484535 Marguerite Creek below trail crossing near Healy	California Creek	Lat 63°58'41", long 148°45'35", in NE ¹ / ₄ , sec. 8, T.11 S., R. 6 W., (Healy D-4 quad), 3.5 mi upstream from mouth of Emma Creek, 10.3 mi northeast of Healy.	--	--	3-25-04	4.6

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
 [Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
YUKON ALASKA—Continued						
6400171484333 Middle Marguerite Creek near Healy	California Creek	Lat 64°00'17", long 148°43'33", in NE ¹ / ₄ , sec. 33, T.10 S., R. 6 W., (Fairbanks A-4 quad), 0.6 mi upstream of Emma Creek, 1.0 mi upstream of Bonanza Creek, 12.4 mi northeast of Healy.	--	--	3-25-04	4.7
15515060 Marguerite Creek above Emma Creek near Healy	California Creek	Lat 64°00'32", long 148°43'33", in NE ¹ / ₄ , sec. 33, T.10 S., R. 6 W., (Fairbanks A-4 quad), 1200 ft upstream of mouth of Emma Cr, 12.6 mi northeast of Healy.	15.23	--	3-23-04 3-25-04 6-21-04 8-12-04 9-26-04	5.1 5.8 8.8 6.5 8.1
15515080 Emma Creek near Healy	Marguerite Creek	Lat 64°00'42", long 148°43'31", in SE ¹ / ₄ , sec. 28, T.10 S., R. 6 W., (Fairbanks A-4 quad), 500 ft upstream of mouth, 12.8 mi northeast of Healy.	5.80	--	3-23-04 6-21-04 8-12-04 9-26-04	3.6 3.4 3.4 3.4
15515100 Marguerite Creek near Healy	California Creek	Lat 64°00'55", long 148°43'00", in SW ¹ / ₄ , sec. 27, T.10 S., R. 6 W., (Fairbanks A-4 quad), 0.3 mi upstream of Bonanza Creek, 0.4 mi downstream of Emma Creek, and 13.2 mi northeast of Healy.	22.0	2003	g6-17-03 2-17-04	g10 6.3
15515120 Bonanza Creek above mouth near Healy	Marguerite Creek	Lat 64°01'02", long 148°42'29", in SW ¹ / ₄ , sec. 27, T.10 S., R. 6 W., (Fairbanks A-4 quad), 500 ft above mouth, 0.7 mi below Emma Creek, 13.4 mi northeast of Healy.	8.63	--	3-25-04	0
6402521484317 California Creek below McAdam Creek near Healy	Totatlanika River	Lat 64°02'52", long 148°43'17", in SE ¹ / ₄ , sec. 16, T.10 S., R. 6 W., (Fairbanks A-4 quad), 0.5 mi above mouth of Elsie Creek, 0.5 mi below mouth of McAdam Creek, 16.0 mi northeast of Healy.	n	--	g9-30-02	g41.4
15541600 Globe Creek near Liv- engood	Tatilina River	Lat 65°17'08", long 148°07'56", in SE ¹ / ₄ , sec. 3, T. 5 N., R. 3 W. (Livengood B-3 quad), 0.2 mi upstream from culvert at mi 36.7 Elliott Highway.	23.0	†1964-70, †1972-74, †1976, †1982-83, †1985-86, †1989-91, †1993, †1995-2002	5-12-04	43
15564864 Dietrich River tributary near Wiseman	Dietrich River	Lat 67°57'48", long 149°46'02", in NE ¹ / ₄ , sec. 10, T. 36 N., R. 10 W. (Chandalar D-6 quad), 200 ft upstream from culvert at mi 229.5 of Dalton Highway and 46 mi north of Wiseman.	0.88	--	5-26-04	4.9
15564868 Snowden Creek near Wiseman	Dietrich River	Lat 67°44'20", long 149°44'24", in SW ¹ / ₄ , sec. 26, T. 34 N., R. 10 W. (Chandalar C-6 quad), upstream from culvert at mi 213.5 Dalton Highway and 24.5 mi northeast of Wiseman.	16.7	†1977-80, †1982, †1984-85, †1987-94, †1996-2003	5-26-04 9-21-04	76 3.3
15564872 Nugget Creek near Wiseman	Middle Fork Koyukuk River	Lat 67°29'25", long 149°52'20", in NW ¹ / ₄ , sec. 30, T. 31 N., R. 10 W. (Chandalar B-6 quad), upstream from culvert at mi 195.6 Dalton Highway, and 8.7 mi northeast of Wiseman.	9.47	†1975-79, †1982, †1985, †1987, †1989-2003	5-13-04 5-26-04	9.4 31

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
[Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
YUKON ALASKA—Continued						
15564884 Prospect Creek near Prospect Camp	Jim River	Lat 66°46'56", long 150°41'06", in NW ¹ / ₄ , sec. 31, T. 23 N., R. 14 W. (Bettles D-2 quad), at mi 135.2 Dalton Highway, 0.4 mi downstream from Trans-Alaska Pipeline crossing, 1.5 mi upstream from mouth .	110	†1975-78, †1980 †1982 †1989 †1992-2003	6-10-04 9-20-04	116 29
15564887 Bonanza Creek Tributary near Prospect Camp	Bonanza Creek	Lat 66°36'52", long 150°41'24", in SE ¹ / ₄ , sec. 25, T. 21 N., R. 15 W., 0.3 mi downstream from culverts at mi 121.2 Dalton Highway, 3.4 mi upstream from mouth, and 13.5 mi south of pump station 5.	11.7	†1975-76, †1982, †1985-86, †1989-95, †1997-2003	5-12-04 5-25-04 9-20-04	41 51 1.2
15564950 Indian River at Utopia	Koyukuk River	Lat 65°59'49", long 153°41'31", in NW ¹ / ₄ , sec. 19, T. 7 N., R. 25 E. (Meložitna D-2 quad), at mi 0.2 on road to Indian Mountain, and 1.8 mi upstream from mouth of Flat Creek.	38.8	†1998-2003	5-21-04 7-29-04 9-28-04	155 20 11
15564960 Utopia Creek at Utopia	Indian River	Lat 65°59'26", long 153°41'44", in SW ¹ / ₄ , sec. 19, T. 7 N., R. 25 E. (Meložitna D-2 quad), 0.3 mi south of landing strip at Utopia, and 1.2 mi upstream from mouth.	5.18	†1998-2003	5-21-04 7-29-04 9-28-04	37.5 5.19 4.22
NORTHWEST ALASKA						
15565730 Chiroskey River near Unalakleet	Unalakleet River	Lat 63°55'06", long 160°18'58", in NW ¹ / ₄ , sec. 19, T. 18 S., R. 8 W. (Unalakleet D-3 quad), on left bank, 1 mi upstream from mouth, 14 mi northeast of Unalakleet.	296	†1998, †2001-2003	8-25-04	386
15581000 Hugh Rowe Creek near Council	Fox River	Lat 64°44'35", long 163°53'44", in NW ¹ / ₄ NW ¹ / ₄ , sec. 4, T. 9 S., R. 26 W. (Solomon C-4 quad), 150 ft upstream from Nome-Council Road, 0.1 mi upstream from mouth, and 60 mi East of Nome.	2.34	2002-03	10-06-03 5-19-04 6-24-04 8-31-04	4.2 19 4.8 5.0
15583500 Etta Creek near Council	East Fork Solomon River	Lat 64°41'56", long 164°09'57", in NE ¹ / ₄ NE ¹ / ₄ , sec. 24, T. 9 S., R. 28 W. (Solomon C-5 quad), 100 ft upstream from Nome-Council Road, 0.2 mi upstream from mouth, and 25 mi southwest of Council.	1.33	2003	10-06-03 6-24-04 7-27-04 8-31-04	2.4 2.1 1.1 3.3
15585000 Goldengate Creek near Nome	Norton Sound	Lat 64°26'51", long 165°03'14", in SW ¹ / ₄ , sec. 15, T. 12 S., R. 32 W. (Nome B-1 quad), 80 ft upstream from culvert on Nome-Council Road and 11 mi southeast of Nome.	1.55	†1965 1966 †1986-88 †1990-2003	5-19-04	2.7
15619800 Goldbottom Creek near Nome	Snake River	Lat 64°46'09", long 165°27'06", in NE ¹ / ₄ , sec. 25, T. 8 S., R. 34 W. (Nome D-1 quad), 7.0 mi upstream from the mouth and 18 mi northwest of Nome.	1.37	--	5-27-04 6-22-04 9-01-04	17.0 4.9 3.0
15619900 North Fork Snake River near Nome	Snake River	Lat 64°45'06", long 165°28'30", in SW ¹ / ₄ , sec. 36, T. 8 S., R. 34 W. (Nome D-1 quad), 4.5 mi upstream from the mouth of Goldbottom Creek and 18 mi northwest of Nome.	1.55	--	5-27-04 6-21-04 9-02-04	17.8 5.4 4.9

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
 [Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
NORTHWEST ALASKA—Continued						
15624998 Arctic Creek above tributary near Nome	Cripple River	Lat 64°38'16", long 165°42'42", in NE ¹ / ₄ , sec. 8, T. 10 S., R. 35 W. (Nome C-2 quad), 300 ft upstream from culvert on Nome-Teller Road, 2 mi upstream from mouth, and 13 mi northwest of Nome.	1.13	† 1975, † 1979-84, † 1986-2003	10-07-03	2.0
					5-18-04	7.3
					6-25-04	1.2
					9-02-04	3.9
15633000 Washington Creek near Nome	Sinuk River	Lat 64°42'52", long 165°49'13", in NW ¹ / ₄ , sec. 14, T. 9 S., R. 35 W. (Nome C-2 quad), 400 ft upstream from culvert on Nome-Teller Road, and 19 mi northwest of Nome.	6.34	† 1964-66, † 1968-78, † 1980-2003	10-07-03	0.12
					9-02-04	0.11
15635000 Eldorado Creek near Teller	Tisuk River	Lat 64°57'38", long 166°11'59", in NE ¹ / ₄ NE ¹ / ₄ , sec. 20, T. 6 S., R. 37 W. (Nome D-3 quad), 30 ft downstream from bridge at mi 46.3 of Nome-Teller Road, 0.5 mi upstream from mouth at Tisuk River and 21 mi south of Teller.	5.83	1986-87 ‡ 1988-90 1991 ‡ 1992-1998 † 1999-2003	10-07-03	15
					5-18-04	20
					9-02-04	11
15746980 Ikalukrok Creek above Red Dog Creek near Kivalina	Wulik River	Lat 68°05'38", long 162°56'47", in SE ¹ / ₄ , sec. 11, T. 31 N., R. 19 W. (DeLong Mts A-2 quad), 300 ft upstream from Red Dog Creek, 3 mi northwest of Red Dog Mine, 36 mi north of Noatak, and 50 mi northeast of Kivalina. Teck-Cominco Station 9.	59.2	‡ 1991-92, 1993-2003	6-1-04	760
					6-3-04	292
					6-19-04	474
					7-7-04	195
					9-10-04	87
15746983 Red Dog Mine Clean Water Ditch near Kivalina	Ikalukrok Creek	Lat 68°04'28", long 162°51'35", in NE ¹ / ₄ , sec. 19, T. 31 N., R. 18 W. (DeLong Mts A-2 quad), 500 ft downstream from outfall of clean water ditch, 300 ft northwest of Red Dog Mine mill site, 0.4 mi upstream from South Fork Red Dog Creek, 36 mi north of Noatak, and 50 mi northeast of Kivalina. TeckCominco station 140.	4.74 (total) 4.3 (contributing)	‡ 1991-92, 1993-2003	6-4-04	15
					6-16-04	7.6
					6-17-04	20
					7-9-04	7.3
					9-8-04	3.8
15746988 North Fork Red Dog Creek near Kivalina	Ikalukrok Creek	Lat 68°05'03", long 162°52'52", in SW ¹ / ₄ , sec. 18, T. 31 N., R. 18 W. (DeLong Mts. A-2 quad), 500 ft upstream from mouth, 1.1 mi northwest of Red Dog Mine, 36 mi north of Noatak, and 50 mi northeast of Kivalina. Teck-Cominco station 12.	15.9	‡ 1991-94, † 1995-2003	6-4-04	27
					6-16-04	13
					6-18-04	22
					7-8-04	22
					9-8-04	17
15746989 Red Dog Creek below North Fork Red Dog Creek near Kivalina	Ikalukrok Creek	Lat 68°04'58", long 162°53'38", in SE ¹ / ₄ , sec. 13, T. 31 N., R. 19 W. (DeLong Mts. A-2 quad) 0.3 mi downstream of North Fork of Red Dog Creek, 1.5 mi northwest of Red Dog Mine, 36 mi north of Noatak and 50 mi northeast of Kivalina. Teck-Cominco Station 151.	23.6	--	6-3-04	89
					6-17-04	72
					6-18-04	63
					7-6-04	29
					9-9-04	34
15746990 Red Dog Creek above Mouth near Kivalina	Ikalukrok Creek	Lat 68°05'20", long 162°55'30", in NW ¹ / ₄ , sec. 13, T. 31 N., R. 19 W. (DeLong Mts. A-2 quad), 1000 ft upstream from mouth, 2.3 mi northwest of Red Dog Mine, 36 mi north of Noatak, and 50 mi northeast of Kivalina. Teck-Cominco Station 10.	24.6 (total) 21.4 (contributing)	‡ 1991-92, 1993-2003	6-3-04	92
					6-18-04	57
					7-6-04	30
					9-9-04	34

Discharge measurements made at partial-record stations and miscellaneous sites during water year 2004
[Footnotes at end of table on page 347]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
NORTHWEST ALASKA—Continued						
1574699020 Ikalukrok Creek 0.6 mi below Red Dog Creek near Kivalina	Wulik River	Lat 68°05'09", long 162°58'07", in NE ¹ / ₄ , sec. 15, T. 31 N., R. 19 W. (DeLong Mts. A-2 quad), 0.6 mi downstream from Red Dog Creek, 3 mi northwest of Red Dog Mine, 36 mi north of Noatak, and 48 mi northeast of Kivalina. TeckCominco Station 150.	n	2001-03	6-3-04	347
					6-5-04	400
					6-17-04	619
					6-18-04	279
					7-7-04	231
9-10-04	112					
15746995 Ikalukrok Creek 4.3 mi below Dudd Creek near Kivalina	Wulik River	Lat 67°58'06", long 163°09'44", in SE ¹ / ₄ , sec. 26, T. 30 N., R. 20 W. (Noatak. D-3 quad), 4.3 mi blw Dudd Creek, 11 mi southwest of Red Dog Mine, 28 mi north of Noatak and 39 mi northeast of Kivalina. TeckCominco Station 160.	147 (total) 140 (contributing)	2002-03	6-19-04	345
					7-7-04	368
					9-10-04	172
15746998 Tutak Creek near Kivalina	Wulik River	Lat 67°52'28", long 163°40'14", in NW ¹ / ₄ NE ¹ / ₄ , sec. 34, T. 29 N., R. 22 W. (Noatak D-4 quad), 1,000 ft upstream from mouth, 28 mi northwest of Noatak, and 25 mi northeast of Kivalina.	119	1991, †1992-2003	6-2-04	192
					7-8-04	70
					9-9-04	52
ARCTIC SLOPE ALASKA						
15904900 Atigun River Tributary near Pump Station 4	Atigun River	Lat 68°22'25", long 149°18'48", in SE ¹ / ₄ , sec. 28, T. 12 S., R. 12 E. (Phillip Smith Mts. B-4 quad), 0.2 mi upstream from bridge at mi 265 on Dalton Highway, 0.9 mi upstream from mouth, and 4 mi south of Pump Station 4.	32.6	‡1977-86, †1987-91, †1994, †1996-99, †2001-03	7-13-04	136
15910300 Sagavanirktok River Tributary near Happy Valley Camp	Sagavanirktok River	Lat 69°09'38", long 148°49'40", in NE ¹ / ₄ , sec. 30, T. 3 S., R. 14 E. (Sagavanirktok A-4 quad), 500 ft upstream from culvert at mi 335.2 on Dalton Highway, 0.8 mi upstream from mouth, and 16 mi south of Sagwon.	12.7	†1997-2003	5-27-04	45
15918200 Sagavanirktok River Tributary near Deadhorse	Sagavanirktok River	Lat 69°57'14", long 148°43'48", in NW ¹ / ₄ NE ¹ / ₄ , sec. 19, T. 1 N., R. 14 E. (Sagavanirktok D-3 quad), at mi 386.2 on Dalton Highway, 0.4 mi upstream from mouth, and 23 mi south of Deadhorse.	a 12	†1988-91, †1995-97 †1999-2001 †2003	5-29-04	10.7

FOOTNOTES

- | | |
|--|--|
| † Operated as a crest-stage partial-record station | f Low-flow partial-record station |
| ‡ Operated as a continuous-record station | g Not previously published |
| + See analysis of samples collected at miscellaneous water-quality sites | h Previously published as 15052482 Jordan Creek at Trout Street Bridge near Auke Bay |
| * Operated as a stage-only partial-record station | j Ice effect |
| a Approximately | m Discharge measurement provided by the Bureau of Land Management |
| b Ponded water but no flow | n To be determined |
| c Observations reported by Mendenhall Watershed Personnel. | p Peak flow |
| d Channel dry | q Indeterminate |
| e Estimated | r Revised |

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTHEAST ALASKA

15049900 -- GOLD CREEK NEAR JUNEAU

Date	Time	Medium code	Sample type	Stream width, feet (00004)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler type, code (84164)	Specific conductance, wat unfltrd, 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Color, water, fltrd, Pt-Co units (00080)	Turbidity, wat unfltrd, Hach 2100AN NTU (99872)
DEC													
03...	0950	9	9	26.3	28	10	3044	150	7.9	1.0	2.5	2	8
FEB													
03...	1010	9	9	22.0	25	10	3044	167	7.7	--	2.0	2	3
MAR													
17...	1100	9	9	23.0	19	10	3044	165	8.1	--	3.0	25	3
APR													
26...	0730	9	9	30.8	108	10	3044	79	7.8	--	3.0	5	<2
MAY													
06...	1000	9	9	30.0	101	10	3044	115	7.3	--	4.0	<1	<2
JUN													
07...	0930	9	9	--	E270	70	3044	70	7.1	7.0	4.5	<1	<2
30...	1130	9	9	46.0	143	10	3044	76	7.6	18.5	6.5	2	<2
JUL													
15...	0955	9	9	31.7	106	10	3044	73	7.7	19.5	7.0	<1	<2
AUG													
02...	1045	9	9	29.7	82	10	3044	94	7.6	--	8.0	2	<2
25...	0900	9	9	24.8	26	10	3044	120	7.7	--	8.0	5	<2
SEP													
01...	0930	9	9	25.5	29	10	3044	117	7.4	--	7.5	2	<2
30...	0910	9	9	39.5	144	10	3044	96	8.0	--	6.5	5	<2

Date	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Bicarbonate, wat flt incrm. titr., field, mg/L CaCO3 (00453)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Sulfate, water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Bromide, water, fltrd, mg/L (71870)
DEC													
03...	764	14.0	102	70	19.3	5.33	1.17	39	32	34.0	.87	<.17	<.016
FEB													
03...	743	13.4	99	80	21.7	6.25	1.18	44	36	41.1	.72	<.17	E.012
MAR													
17...	748	12.2	92	78	21.1	6.07	1.33	46	38	40.3	.8	<.17	E.012
APR													
26...	744	12.2	93	39	11.7	2.42	.61	31	25	15.3	.73	.10	<.01
MAY													
06...	748	12.8	99	54	15.6	3.57	.76	33	27	24.2	.99	<.17	<.016
JUN													
07...	752	12.1	95	34	10.1	2.06	.64	22	18	12.7	.59	.06	<.01
30...	752	11.6	96	32	9.51	1.92	.56	22	18	16	.45	.04	<.01
JUL													
15...	--	--	--	27	8.12	1.68	.55	20	17	14	.33	.07	<.01
AUG													
02...	745	12.1	104	42	12.7	2.57	.70	29	24	18.6	.31	.08	<.01
25...	740	9.8	85	59	16.9	4.07	1.00	34	28	27.8	.34	<.17	<.016
SEP													
01...	749	--	--	63	18.1	4.24	1.09	34	28	28.0	.41	<.17	<.016
30...	757	10.9	89	44	12.9	2.92	.81	30	25	18.8	.55	<.17	<.016

Date	Silica, water, fltrd, mg/L (00955)	Residue on evap. at 180degC, wat flt mg/L (70300)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Ammonia water, fltrd, mg/L as N (00608)	Orthophosphate, water, fltrd, mg/L as P (00671)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)
DEC													
03...	2.85	86	<.008	.450	<.04	<.02	<1.9	38.0	<.4	<3.2	<.8	<2.6	<5.0
FEB													
03...	2.85	110	<.008	.531	<.04	<.02	<1.9	39.9	<.4	<3.2	<.8	<2.6	<5.0
MAR													
17...	2.81	107	<.008	.551	<.04	<.02	<1.9	38.2	<.4	<3.2	<.8	<2.6	<5.0
APR													
26...	2.19	59	<.008	.411	<.04	<.02	<1.9	30.0	<.4	<3.2	<.8	<2.6	<5.0
MAY													
06...	2.33	61	<.008	.367	<.04	<.02	<1.9	32.2	<.4	<3.2	<.8	<2.6	<5.0
JUN													
07...	1.59	54	<.008	<.060	<.04	<.02	<1.9	22.3	<.4	<3.2	<.8	<2.6	<5.0
30...	1.52	38	<.008	E.036	<.04	<.02	<1.9	21.7	<.4	<3.2	<.8	<2.6	<5.0
JUL													
15...	1.44	40	<.008	<.060	<.04	<.02	<1.9	21.4	<.4	<3.2	<.8	<2.6	7.7
AUG													
02...	2.02	52	<.008	.096	<.04	<.02	<1.9	29.3	<.4	<3.2	<.8	<2.6	5.4
25...	2.52	66	<.008	.107	<.04	<.02	<1.9	37.2	<.4	<3.2	<.8	<2.6	<5.0
SEP													
01...	2.70	74	<.008	.110	<.04	<.02	<1.9	40.3	<.4	<3.2	<.8	<2.6	<5.0
30...	2.38	64	<.008	.186	<.04	<.02	<1.9	31.1	<.4	<3.2	<.8	<2.6	<5.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTHEAST ALASKA—Continued

15049900 -- GOLD CREEK NEAR JUNEAU—Continued

Date	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)
DEC 03...	<6.4	<.08	<3.0	<.8	<.020	<4	2	<2.6	<2.8	104	<4.6	E1.6
FEB 03...	<6.4	.11	<3.0	<.8	<.020	E4	2	<2.6	<2.8	126	<4.6	4.7
MAR 17...	<6.4	E.07	<3.0	<.8	<.020	<4	2	<2.6	<2.8	116	<4.6	11.3
APR 26...	E5.6	E.08	<3.0	<.8	<.020	<4	E2	<2.6	<2.8	56.5	<4.6	E1.5
MAY 06...	<6.4	<.08	<3.0	<.8	<.020	<4	<2	<2.6	<2.8	85.3	<4.6	3.9
JUN 07...	<6.4	E.04	<3.0	<.8	<.020	<4	<2	<2.6	<2.8	49.7	<4.6	3.1
JUN 30...	<6.4	<.08	<3.0	<.8	<.020	<4	3	<2.6	<2.8	48.4	<4.6	4.6
JUL 15...	<6.4	<.08	<3.0	E.4	<.020	<4	<2	<2.6	<2.8	44.0	<4.6	E2.9
AUG 02...	<6.4	<.08	<3.0	E.8	<.020	<4	<2	<2.6	<2.8	65.2	<4.6	3.8
AUG 25...	<6.4	<.08	<3.0	<.8	<.020	<4	2	<2.6	<2.8	90.9	<4.6	<3.0
SEP 01...	<6.4	<.08	<3.0	<.8	<.020	<4	<2	E2.2	<2.8	96.3	<4.6	<3.0
SEP 30...	<6.4	<.08	<3.0	E.5	<.020	<4	<2	<2.6	<2.8	67.0	<4.6	4.5

15052900 -- MENDENHALL RIVER AT BROTHERHOOD BRIDGE AT AUKE BAY

Date	Time	Medium code	Sample type	Stream width, feet (00004)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler type, code (84164)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Turbidity, wat unfltrd lab, Hach 2100AN NTU (99872)
JAN 07...	0800	9	9	140	7.21	151	10	3044	85	7.0	-4.0	.0	46
MAR 02...	1630	9	9	133	7.23	167	10	3044	191	7.0	.0	1.0	43
MAY 04...	0900	9	9	170	8.60	771	10	3044	71	7.7	10.0	4.0	48
AUG 03...	0945	9	9	190	--	E3390	10	3054	24	7.5	9.5	3.0	219

Date	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Calcium water, unfltrd recover, mg/L (00916)	Magnesium water, unfltrd recover, mg/L (00927)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Alkalinity, wat tit inc tit field, mg/L as CaCO3 (39086)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Barium, water, unfltrd recover, ug/L (01007)	Cadmium water, unfltrd recover, ug/L (01027)	Copper, water, unfltrd recover, ug/L (01042)	Iron, water, unfltrd recover, ug/L (01045)	Lead, water, unfltrd recover, ug/L (01051)
JAN 07...	744	10.5	74	14.0	15.6	45	37	.2	126	<.22	3	3970	E.6
MAR 02...	758	12.1	86	12.0	4.47	41	34	.2	119	<.22	3	3920	<1
MAY 04...	769	13.3	101	8.60	2.26	24	20	<.1	123	<.22	5	3320	<1
AUG 03...	756	13.8	103	5.25	4.85	9	8	E.05	341	<.22	8	10800	2

Date	Manganese, water, unfltrd recover, ug/L (01055)	Selenium, water, unfltrd recover, ug/L (01147)	Silver, water, unfltrd recover, ug/L (01077)	Zinc, water, unfltrd recover, ug/L (01092)
JAN 07...	86.4	<2.6	<.26	11
MAR 02...	82.5	<2.6	<.26	14
MAY 04...	54.1	<2.6	<.26	13
AUG 03...	175	<2.6	<.26	41

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA

15274796 -- SOUTH BRANCH OF SOUTH FORK CHESTER CREEK AT TANK TRAIL NEAR ANCHORAGE

Date	Time	Medium code	Sample type	Stream width, feet (00004)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler type, code (84164)	Type of sample related QA data, code (99111)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	pH, water, unfiltered, field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Barometric pressure, mm Hg (00025)
OCT 03...	1310	9	9	--	7.8	10	3045	--	127	7.0	--	6.7	736
APR 09...	1000	9	9	3.90	1.5	70	3045	--	129	7.4	4.0	1.0	748
JUN 02...	1220	9	9	9.70	6.3	10	3045	--	107	7.5	14.0	6.0	752
JUL 13...	1150	9	9	6.00	3.4	10	3045	10	132	7.5	19.0	8.0	755
Date	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	E coli, m-TEC MF, water, col/100 mL (31633)	Hardness, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfiltered, end pt, mg/L as CaCO3 (00410)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat flt titr., field, mg/L (00453)	Carbonate, wat flt titr., field, mg/L (00452)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
OCT 03...	12.4	105	--	--	56	17.1	3.32	1.87	39	1.3	49	--	38
APR 09...	14.4	103	55	37	66	20.3	3.74	2.14	--	.53	59	.0	48
JUN 02...	12.4	101	2	1	51	15.9	2.69	1.55	--	.41	44	.0	36
JUL 13...	6.9	59	--	--	58	18.3	3.07	1.85	--	.35	54	.0	45
Date	Sulfate water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue water, sum of constituents mg/L (70301)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfiltered, mg/L as N (00625)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Phosphorus, water, unfiltered, mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)
OCT 03...	14.2	3.06	<.17	11.5	94	78	E.001	.278	<.010	1.2	.2	.107	.008
APR 09...	12.0	.41	<.17	11.9	94	82	E.001	.549	<.010	E.06	<.1	.008	.006
JUN 02...	10.5	.38	<.17	10.3	77	67	<.002	.925	<.010	.2	E.08	.010	.005
JUL 13...	16.0	.36	<.17	10.7	87	80	<.002	.548	<.010	E.06	<.1	.011	<.004
Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Organic carbon, water, fltrd, mg/L (00681)									
OCT 03...	<.006	27.9	2.3	7.5									
APR 09...	E.005	E4.0	2.0	1.2									
JUN 02...	<.006	E5.6	<.8	2.3									
JUL 13...	E.003	<6.4	<.8	1.3									

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA—Continued

15294350 -- SUSITNA RIVER AT SUSITNA STATION

Date	Time	Medium code	Stream width, feet (00004)	Location in X-sect. looking downstrm ft from l bank (00009)	Gage height, feet (00065)	Starting time, 24 hour clock, hr:min (82073)	Ending time, 24 hour clock, hr:min (82074)	Instantaneous discharge, cfs (00061)	Sampler type, code (84164)	Sampling method, code (82398)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	Suspended sediment concentration mg/L (80154)
OCT													
25...	1501	9	1440	--	8.59	1501.00	1549.00	37200	3055	20	1.5	4.0	280
25...	1632	9	1440	30.0	8.59	1632.00	1742.00	37200	1110	1000	1.5	4.0	--
25...	1805	H	1440	--	8.59	1805.00	1838.00	37200	8010	--	1.5	4.0	--

Date	Time	Suspnd. sediment discharge, tons/d (80155)	Suspnd. sediment, sieve diameter <.063mm percent (70331)	Bedload discharge, tons/d (80225)	Bedload sediment average unit composit t/d/ft (04122)	Compstd samples in x-sec bedload measmnt number (04118)	Number of sampling points, count (00063)	Verticals in composite sample, number (04119)	Horizontal width of vertical, feet (04121)	Rest time on bed for load sample, seconds (04120)	Bag mesh size, sampler (30333)	Bedload sediment, sieve diameter <.063mm percent (80226)	Bedload sediment, sieve diameter <.125mm percent (80227)	Bedload sediment, sieve diameter <.25mm percent (80228)
OCT														
25...	28100	17	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	437	.30	2	1	19	20.0	30	.025	.0	1	10	--
25...	--	--	--	--	2	1	21	70.0	--	--	--	--	--	--

Date	Time	Bedload sediment, sieve diameter <.5 mm percent (80229)	Bedload sediment, sieve diameter <1 mm percent (80230)	Bed sediment, dry svd <.063mm percent (80164)	Bed sediment, dry svd <.125mm percent (80165)	Bed sediment, dry svd <.25mm percent (80166)	Bed sediment, dry svd <.5 mm percent (80167)	Bed sediment, dry svd <1 mm percent (80168)	Bed sediment, dry svd <2 mm percent (80169)	Bed sediment, dry svd <4 mm percent (80170)	Bed sediment, dry svd <8 mm percent (80171)	Bed sediment, dry svd <16 mm percent (80172)	Bed sediment, dry svd <32 mm percent (80173)	Bed sediment, dry svd <64 mm percent (80174)
OCT														
25...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	98	100	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	.0	2	12	73	86	88	89	90	92	94	100	--

15294630 -- NORTH FORK CRESCENT RIVER NEAR TUXEDNI BAY

Date	Time	Medium code	Sample type	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Stream width, feet (00004)	Turbidity, wat unflab, Hach 2100AN NTU (99872)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, percent (00300)	Dissolved oxygen, of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm (00095)
OCT													
23...	1230	9	9	145	10	57.0	<2	--	--	--	--	7.1	--
AUG													
11...	1345	9	9	501	20	159	54	49.0	732	12.8	113	6.0	25
SEP													
08...	1115	9	9	104	10	100	26	14.0	726	12.1	94	5.8	51
08...	1120	H	9	--	--	--	--	--	--	--	--	--	--

Date	Time	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Calcium bed sed <62.5um wet svd field, total, percent (34830)	Magnesium bed sed <62.5um wet svd field, ftd, tot percent (34900)	Sodium bed sed <62.5um wet svd field, total, percent (34960)	Alkalinity, wat flt fxd end field, mg/L as CaCO3 (39036)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incm. titr., field, mg/L (00453)
OCT														
23...	-1.5	--	20	7.02	.513	.66	2.15	--	--	--	--	--	16	20
AUG														
11...	--	8.2	8	2.88	.222	.25	.80	--	--	--	7.0	7	9	--
SEP														
08...	--	2.7	14	5.07	.388	.52	1.52	--	--	--	14	12	16	--
08...	--	--	--	--	--	--	--	4.7	1.7	3	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA—Continued

15294630 -- NORTH FORK CRESCENT RIVER NEAR TUXEDNI BAY—Continued

Date	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Sulfur, bed sed <62.5um wet svd field, total, percent (34970)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
OCT 23...	.0	1.3	<.17	10.7	6.48	--	40	42	E.06	<.1	E.006	.230	E.001
AUG 11...	.0	.51	<.17	4.18	2.71	--	16	11	<.1	<.1	<.010	.028	<.002
SEP 08...	.0	1.13	<.17	7.16	4.36	--	28	35	<.1	E.05	E.005	.060	E.001
08...	--	--	--	--	--	<.05	--	--	--	--	--	--	--
Date	Ortho-phos-phate, water, fltrd, mg/L (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd, mg/L (00665)	Phos-phorus, bed sed <62.5um fld,tot percent (34935)	Organic carbon, water, fltrd, mg/L (00681)	Total carbon, sedimnt <62.5um field, percent (49267)	Inorg. carbon, bed sed <62.5um field, percent (49269)	Organic carbon, bed sed <62.5um field, percent (49266)	Iron, water, fltrd, mg/L (01046)	Mangan-ese, water, fltrd, mg/L (01056)	Alum-inum, bed sed <62.5um fld,tot percent (34790)	Anti-mony, bed sed <62.5um fld,tot ug/g (34795)	Arsenic bed sed <62.5um wet svd field, total, ug/g (34800)
OCT 23...	<.006	E.002	.010	--	.5	--	--	--	200	14.0	--	--	--
AUG 11...	E.004	.005	.187	--	E.2	--	--	--	40.2	5.6	--	--	--
SEP 08...	<.006	.004	.052	--	<.3	--	--	--	75.6	7.8	--	--	--
08...	--	--	--	.091	--	1.87	<.01	1.87	--	--	9.1	.35	4.7
Date	Barium, bed sed <62.5um wet svd field, total, ug/g (34805)	Beryll-ium, bed sed <62.5um wet svd field, fld,tot ug/g (34810)	Bismuth bed sed <177um wet svd field, total, ug/g (34816)	Cadmium bed sed <62.5um wet svd field, total, ug/g (34825)	Cerium, bed sed <62.5um wet svd field, total, ug/g (34835)	Chrom-ium, bed sed <62.5um wet svd field, total, ug/g (34840)	Cobalt, bed sed <62.5um wet svd field, total, ug/g (34845)	Copper, bed sed <62.5um wet svd field, total, ug/g (34850)	Europ-ium, bed sed <62.5um wet svd field, fld,tot ug/g (34855)	Gallium bed sed <62.5um wet svd field, total, ug/g (34860)	Gold, bed sed <62.5um wet svd field, total, ug/g (34870)	Holmium bed sed <62.5um wet svd field, total, ug/g (34875)	Iron, bed sed <62.5um wet svd field, total, percent (34880)
OCT 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	600	.84	<1	<.1	23	26	15	44	1.1	18	<1	<1	4.1
Date	Lantha-num, bed sed <62.5um wet svd field, fld,tot ug/g (34885)	Lead, bed sed <62.5um wet svd field, total, ug/g (34890)	Lithium bed sed <62.5um wet svd field, total, ug/g (34895)	Mangan-ese, bed sed <62.5um wet svd field, fld,tot ug/g (34905)	Mercury bed sed <62.5um wet svd field, total, ug/g (34910)	Molyb-denum, bed sed <62.5um wet svd field, total, ug/g (34915)	Neodym-ium, bed sed <62.5um wet svd field, total, ug/g (34920)	Nickel, bed sed <62.5um wet svd field, total, ug/g (34925)	Niobium bed sed <62.5um wet svd field, total, ug/g (34930)	Scand-ium, bed sed <62.5um wet svd field, fld,tot ug/g (34945)	Selen-ium, bed sed <62.5um wet svd field, total, ug/g (34950)	Silver, bed sed <62.5um wet svd field, total, ug/g (34955)	Stront-ium, bed sed <62.5um wet svd field, total, ug/g (34965)
OCT 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	11	6.1	12	1000	.02	1.1	14	12	7.8	19	<.1	.72	450
Date	Tant-alum, bed sed <62.5um wet svd field, fld,tot ug/g (34975)	Thorium bed sed <62.5um wet svd field, total, ug/g (34980)	Tin, bed sed <62.5um wet svd field, total, ug/g (34985)	Titan-ium, bed sed <62.5um wsv nat rec, percent (49274)	Vanad-ium, bed sed <62.5um wet svd field, total, ug/g (35005)	Ytterb-ium, bed sed <62.5um wet svd field, total, ug/g (35015)	Yttrium bed sed <62.5um wet svd field, total, ug/g (35010)	Zinc, bed sed <62.5um wet svd field, total, ug/g (35020)	Uranium bed sed <62.5um wet svd field, total, ug/g (35000)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)	Sampler type, code (84164)
OCT 23...	--	--	--	--	--	--	--	--	--	--	11	4.3	3045
AUG 11...	--	--	--	--	--	--	--	--	--	--	318	430	3045
SEP 08...	--	--	--	--	--	--	--	--	--	80	71	20	3045
08...	<1	2.7	1	.37	130	2.4	19	72	1.2	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA—Continued

15294630 -- NORTH FORK CRESCENT RIVER NEAR TUXEDNI BAY—Continued

Date	Type of sample related QA data, code (991111)
OCT 23...	1
AUG 11...	110
SEP 08...	110
08...	--

15294640 -- LAKE FORK CRESCENT RIVER NEAR TUXEDNI BAY

Date	Time	Medium code	Sample type	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Stream width, feet (00004)	Turbidity, wat unflab, Hach 2100AN NTU (99872)	Turbidity, IR LED light, 90 deg, FNU (63680)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)
OCT 23...	1545	9	9	--	741	20	189	20	--	--	--	--	7.1
JUL 02...	1245	9	9	2.40	2140	10	149	--	16.3	749	13.0	116	6.3
JUL 29...	1130	9	9	2.74	2860	20	156	--	16.3	747	12.3	109	6.0
AUG 18...	1200	9	9	--	1380	20	150	13	4.00	754	9.8	94	6.2
SEP 13...	1225	9	9	--	560	20	153	--	--	739	10.8	97	6.0
SEP 13...	1230	H	9	--	--	--	--	--	--	--	--	--	--

Date	Specif. conductance, wat unflab, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Calcium bed sed <62.5um wet svd field, total, percent (34830)	Magnesium bed sed <62.5um wet svd field, total, percent (34900)	Sodium, bed sed <62.5um wet svd field, total, percent (34960)	Alkalinity, wat flt fxd end field, mg/L as CaCO3 (39036)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)
OCT 23...	25	5.0	9	3.32	.189	.54	.83	--	--	--	--	8	10
JUL 02...	31	9.6	9	3.35	.168	.41	.71	--	--	--	8.0	8	10
JUL 29...	28	9.1	9	3.15	.155	.45	.70	--	--	--	8.0	8	10
AUG 18...	25	13.2	9	3.17	.158	.53	.55	--	--	--	9.0	8	10
SEP 13...	24	9.5	9	3.27	.164	.47	.60	--	--	--	9.0	8	10
SEP 13...	--	--	--	--	--	--	--	5.6	3.2	1.1	--	--	--

Date	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Sulfur, bed sed <62.5um wet svd field, total, percent (34970)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)
OCT 23...	.0	.33	<.17	4.62	1.77	--	17	25	<.1	E.06	<.010	.157	E.001
JUL 02...	.0	.47	<.17	4.42	1.89	--	17	15	<.1	E.05	E.005	.154	<.002
JUL 29...	.0	.38	<.17	3.94	1.74	--	16	26	<.1	E.07	E.007	.126	<.002
AUG 18...	.0	.54	<.17	3.72	1.29	--	15	17	<.1	<.1	E.005	.092	E.001
SEP 13...	.0	.32	<.17	3.95	1.81	--	16	17	<.1	<.1	E.006	.094	E.001
SEP 13...	--	--	--	--	--	<.05	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA—Continued

15294640 -- LAKE FORK CRESCENT RIVER NEAR TUXEDNI BAY—Continued

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Phosphorus, bed sed <62.5um, fld,tot, percent (34935)	Organic carbon, water, fltrd, mg/L (00681)	Total carbon, sediment, <62.5um, field, percent (49267)	Inorganic carbon, bed sed <62.5um, wsv nat, field, percent (49269)	Organic carbon, bed sed <62.5um, wsv nat, field, percent (49266)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Aluminum, bed sed <62.5um, wet svd, fld,tot, percent (34790)	Antimony, bed sed <62.5um, wet svd, fld,tot, ug/g (34795)	Arsenic, bed sed <62.5um, wet svd, field, total, ug/g (34800)
OCT 23...	<.006	<.004	.045	--	.4	--	--	--	64.7	1.9	--	--	--
JUL 02...	<.006	<.004	.017	--	.3	--	--	--	19.0	3.1	--	--	--
JUL 29...	<.006	<.004	.017	--	.3	--	--	--	19.9	2.4	--	--	--
AUG 18...	<.006	<.004	.015	--	--	--	--	--	23.8	1.6	--	--	--
SEP 13...	<.006	<.004	E.009	--	.4	--	--	--	18.3	1.4	--	--	--
SEP 13...	--	--	--	.12	--	3	.01	2.99	--	--	7.5	.53	9
Date	Barium, bed sed <62.5um, wet svd, field, total, ug/g (34805)	Beryllium, bed sed <62.5um, wet svd, fld,tot, ug/g (34810)	Bismuth, bed sed <177um, wet svd, field, total, ug/g (34816)	Cadmium, bed sed <62.5um, wet svd, field, total, ug/g (34825)	Cerium, bed sed <62.5um, wet svd, field, total, ug/g (34835)	Chromium, bed sed <62.5um, wet svd, fld,tot, ug/g (34840)	Cobalt, bed sed <62.5um, wet svd, field, total, ug/g (34845)	Copper, bed sed <62.5um, wet svd, field, total, ug/g (34850)	Europium, bed sed <62.5um, wet svd, fld,tot, ug/g (34855)	Gallium, bed sed <62.5um, wet svd, field, total, ug/g (34860)	Gold, bed sed <62.5um, wet svd, field, total, ug/g (34870)	Holmium, bed sed <62.5um, wet svd, field, total, ug/g (34875)	Iron, bed sed <62.5um, wet svd, field, total, percent (34880)
OCT 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 02...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 13...	400	.49	<1	.21	30	43	31	110	1.2	17	<1	1.4	7.9
Date	Lanthanum, bed sed <62.5um, wet svd, fld,tot, ug/g (34885)	Lead, bed sed <62.5um, wet svd, field, total, ug/g (34890)	Lithium, bed sed <62.5um, wet svd, field, total, ug/g (34895)	Manganese, bed sed <62.5um, wet svd, fld,tot, ug/g (34905)	Mercury, bed sed <62.5um, wet svd, field, total, ug/g (34910)	Molybdenum, bed sed <62.5um, wet svd, fld,tot, ug/g (34915)	Neodymium, bed sed <62.5um, wet svd, fld,tot, ug/g (34920)	Nickel, bed sed <62.5um, wet svd, field, total, ug/g (34925)	Niobium, bed sed <62.5um, wet svd, field, total, ug/g (34930)	Scandium, bed sed <62.5um, wet svd, fld,tot, ug/g (34945)	Selenium, bed sed <62.5um, wet svd, fld,tot, ug/g (34950)	Silver, bed sed <62.5um, wet svd, field, total, ug/g (34955)	Strontium, bed sed <62.5um, wet svd, fld,tot, ug/g (34965)
OCT 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 02...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 13...	13	7.9	16	1600	.04	.91	20	19	7.7	49	.16	.34	180
Date	Tantalum, bed sed <62.5um, wet svd, fld,tot, ug/g (34975)	Thorium, bed sed <62.5um, wet svd, field, total, ug/g (34980)	Tin, bed sed <62.5um, wet svd, field, total, ug/g (34985)	Titanium, bed sed <62.5um, wsv nat, rec, percent (49274)	Vanadium, bed sed <62.5um, wet svd, fld,tot, ug/g (35005)	Ytterbium, bed sed <62.5um, wet svd, fld,tot, ug/g (35015)	Yttrium, bed sed <62.5um, wet svd, field, total, ug/g (35010)	Zinc, bed sed <62.5um, wet svd, field, total, ug/g (35020)	Uranium, bed sed <62.5um, wet svd, field, total, ug/g (35000)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons/d (80155)	Sampler type, code (84164)	Type of sample related QA data, code (99111)
OCT 23...	--	--	--	--	--	--	--	--	--	10	20	3045	10
JUL 02...	--	--	--	--	--	--	--	--	--	13	75	3045	1
JUL 29...	--	--	--	--	--	--	--	--	--	12	93	3045	30
AUG 18...	--	--	--	--	--	--	--	--	--	11	41	3045	1
SEP 13...	--	--	--	--	--	--	--	--	--	8	12	3045	1
SEP 13...	<1	5.6	1.9	.7	320	4.2	33	120	2.9	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA—Continued

15294650 -- CRESCENT RIVER NEAR MOUTH NEAR TUXEDNI BAY

Date	Time	Medium code	Sample type	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Stream width, feet (00004)	Turbidity, wat unflab, Hach 2100AN NTU (99872)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfltrd, std (00400)	Specif. conductance, wat unfltrd, uS/cm 25 degC (00095)
OCT 24...	1515	9	9	--	70	--	13	--	--	--	--	7.3	--
AUG 11...	1520	9	9	--	--	152	54	50.0	767	12.8	120	6.7	35
SEP 08...	1300	9	9	660	--	130	20	10.0	--	10.2	--	6.3	39
SEP 08...	1305	H	9	--	--	--	--	--	--	--	--	--	--
Date	Temperature, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Calcium bed sed <62.5um wet svd field, total, percent (34830)	Magnesium bed sed <62.5um wet svd field, total, percent (34900)	Sodium, bed sed <62.5um wet svd field, total, percent (34960)	Alkalinity, wat flt fxd end field, mg/L as CaCO3 (39036)	Alkalinity, wat tit inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Carbonate, wat flt incrm. titr., mg/L (00452)
OCT 24...	5.0	16	5.23	.671	.66	2.34	--	--	--	--	12	15	.0
AUG 11...	12.8	11	3.64	.419	.37	1.42	--	--	--	9.2	9	12	--
SEP 08...	8.1	--	--	--	--	--	--	--	--	12	10	13	.0
SEP 08...	--	--	--	--	--	--	5.4	2.6	2.4	--	--	--	--
Date	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Sulfur, bed sed <62.5um wet svd field, total, percent (34970)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
OCT 24...	2.04	<.17	11.4	5.36	--	36	36	<.1	<.1	<.010	.280	E.001	E.003
AUG 11...	1.24	<.17	6.68	3.51	--	24	24	E.07	E.06	<.010	.118	E.001	E.004
SEP 08...	1.94	<.17	--	4.14	--	--	36	E.06	E.06	E.006	.146	E.001	E.003
SEP 08...	--	--	--	--	.05	--	--	--	--	--	--	--	--
Date	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Phosphorus, bed sed <62.5um wet svd fld, tot percent (34935)	Organic carbon, water, fltrd, mg/L (00681)	Total carbon, sediment <62.5um wsv nat field percent (49267)	Inorg. carbon, bed sed <62.5um wsv nat field percent (49269)	Organic carbon, bed sed <62.5um wsv nat field percent (49266)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Aluminum, bed sed <62.5um wet svd fld, tot percent (34790)	Antimony, bed sed <62.5um wet svd fld, tot ug/g (34795)	Arsenic, bed sed <62.5um wet svd field, total, ug/g (34800)	Barium, bed sed <62.5um wet svd field, total, ug/g (34805)
OCT 24...	.005	.109	--	.8	--	--	--	9.5	6.3	--	--	--	--
AUG 11...	.007	.197	--	E.3	--	--	--	19.8	5.8	--	--	--	--
SEP 08...	.005	.052	--	E.2	--	--	--	--	--	--	--	--	--
SEP 08...	--	--	.1	--	6.95	<.01	6.95	--	--	8.4	.26	2.9	430
Date	Beryllium, bed sed <62.5um wet svd fld, tot ug/g (34810)	Bismuth, bed sed <17um wet svd field, total, ug/g (34816)	Cadmium, bed sed <62.5um wet svd field, total, ug/g (34825)	Cerium, bed sed <62.5um wet svd field, total, ug/g (34835)	Chromium, bed sed <62.5um wet svd fld, tot ug/g (34840)	Cobalt, bed sed <62.5um wet svd field, total, ug/g (34845)	Copper, bed sed <62.5um wet svd field, total, ug/g (34850)	Europium, bed sed <62.5um wet svd field, total, ug/g (34855)	Gallium, bed sed <62.5um wet svd field, total, ug/g (34860)	Gold, bed sed <62.5um wet svd field, total, ug/g (34870)	Holmium, bed sed <62.5um wet svd field, total, ug/g (34875)	Iron, bed sed <62.5um wet svd field, total, percent (34880)	Lanthanum, bed sed <62.5um wet svd fld, tot ug/g (34885)
OCT 24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 08...	.54	<1	.12	22	20	31	72	1.1	20	<1	<1	9.3	10

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA—Continued

15294650 -- CRESCENT RIVER NEAR MOUTH NEAR TUXEDNI BAY—Continued

Date	Lead, bed sed <62.5um wet svd field, total, ug/g (34890)	Lithium bed sed <62.5um wet svd field, total, ug/g (34895)	Mangan-ese, bed sed <62.5um wet svd fld,tot ug/g (34905)	Mercury bed sed <62.5um wet svd field, total, ug/g (34910)	Molyb-denum, bed sed <62.5um wet svd fld,tot ug/g (34915)	Neodym-ium, bed sed <62.5um wet svd fld,tot ug/g (34920)	Nickel, bed sed <62.5um wet svd field, total, ug/g (34925)	Niobium bed sed <62.5um wet svd field, total, ug/g (34930)	Scand-ium, bed sed <62.5um wet svd fld,tot ug/g (34945)	Selen-ium, bed sed <62.5um wet svd field, total, ug/g (34950)	Silver, bed sed <62.5um wet svd field, total, ug/g (34955)	Stront-ium, bed sed <62.5um wet svd fld,tot ug/g (34965)	Tant-alum, bed sed <62.5um wet svd fld,tot ug/g (34975)
OCT 24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	4.2	13	1700	<.02	1.1	14	14	6.7	28	<.1	.24	390	<1

Date	Thorium bed sed <62.5um wet svd field, total, ug/g (34980)	Tin, bed sed <62.5um wet svd field, total, ug/g (34985)	Titan-ium, bed sed <62.5um wsv nat rec, percent (49274)	Vanad-ium, bed sed <62.5um wet svd fld,tot ug/g (35005)	Ytterb-ium, bed sed <62.5um wet svd fld,tot ug/g (35015)	Yttrium bed sed <62.5um wet svd field, total, ug/g (35010)	Zinc, bed sed <62.5um wet svd field, total, ug/g (35020)	Uranium bed sed <62.5um wet svd field, total, ug/g (35000)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)	Sampler type, code (84164)	Type of sample related QA data, code (99111)
OCT 24...	--	--	--	--	--	--	--	--	--	154	--	3070	1
AUG 11...	--	--	--	--	--	--	--	--	--	308	--	--	1
SEP 08...	--	--	--	--	--	--	--	--	80	71	127	3045	1
08...	1.8	1.4	.87	380	2.4	19	150	.96	--	--	--	--	--

SOUTHWEST ALASKA

601833154154100 -- KIJIK RIVER ABOVE LITTLE KIJIK RIVER NEAR PORT ALSWORTH

Date	Time	Medium code	Sample type	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Sampler type, code (84164)	Specif. conduc-tance, wat unfltrd, 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, water, deg C (00010)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	Hard-ness, water, mg/L as CaCO3 (00900)
JUN 08...	1200	9	9	746	10	3045	82	7.0	6.7	760	12.2	100	38
JUL 13...	1500	9	9	600	10	3045	81	7.3	16.9	750	9.8	103	35
AUG 26...	1345	9	9	378	10	3045	79	7.6	12.3	746	10.0	95	34

Date	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potas-sium, water, fltrd, mg/L (00935)	Bicar-bonate, wat flt incr., field, mg/L (00453)	Carbon-ate, wat flt incr., field, mg/L (00452)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Sulfate water, fltrd, mg/L (00945)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue water, fltrd, sum of consti-tuents mg/L (70301)
JUN 08...	13.0	1.46	1.80	.44	36	.0	28	12.8	.5	<.17	6.65	57	55
JUL 13...	11.8	1.31	1.64	.45	32	.0	25	11.9	.45	<.17	6.06	56	50
AUG 26...	11.5	1.24	1.53	.39	30	.0	23	10.8	.5	<.17	6.11	44	47

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTHWEST ALASKA—Continued

601833154154100 -- KIJIK RIVER ABOVE LITTLE KIJIK RIVER NEAR PORT ALSWORTH—Continued

Date	Nitrite	Nitrite + nitrate	Ammonia	Ammonia + org-N	Ammonia + org-N	Phos-phorus	Phos-phorus	Ortho-phosphate	Iron	Mangan-ese	Organic carbon	Chloro-phyll a	Pheo-phytin a
	water, fltrd, mg/L as N (00613)	water, fltrd, mg/L as N (00631)	water, fltrd, mg/L as N (00608)	water, unfltrd, mg/L as N (00625)	water, fltrd, mg/L as N (00623)	water, unfltrd, mg/L (00665)	water, fltrd, mg/L (00666)	water, fltrd, mg/L as P (00671)	water, fltrd, ug/L (01046)	water, fltrd, ug/L (01056)	water, fltrd, mg/L (00681)	phyto-plank-ton, fluoro, ug/L (70953)	phyto-plank-ton, ug/L (62360)
JUN 08...	.002	.131	<.010	<.1	<.1	.016	<.004	<.006	E4.1	1.2	1.0	.48	.29
JUL 13...	<.002	.066	<.010	<.1	<.1	E.004	<.004	<.006	E4.6	E.7	.5	.12	.14
AUG 26...	E.001	.072	<.010	<.1	<.1	E.003	<.004	<.006	<6.4	E.6	E.3	.12	.14
Date	Sus-pended sedi-ment concen-tration	Sus-pended sedi-ment dis-charge											
	mg/L (80154)	tons/d (80155)											
JUN 08...	21	42											
JUL 13...	4	6.5											
AUG 26...	3	3.1											

601708154203500 -- LITTLE KIJIK RIVER ABOVE KIJIK LAKE NEAR PORT ALSWORTH

Date	Time	Medium code	Sample type	Instan-taneous	Sam-pling	Sampler	Specif. conduc-tance	pH, unfltrd	Temper-ature	Baro-metric	Dis-solved	Dis-solved	Hard-ness
				dis-charge, cfs (00061)	method, code (82398)	type, code (84164)	uS/cm 25 degC (00095)	field, std units (00400)	water, deg C (00010)	pres-sure, mm Hg (00025)	oxygen, mg/L (00300)	oxygen, percent of saturation (00301)	water, mg/L as CaCO3 (00900)
JUN 09...	1430	9	9	127	10	3045	40	7.2	9.3	753	10.1	89	19
JUL 14...	1200	9	9	40	10	3045	48	6.4	6.7	751	11.3	94	21
AUG 24...	1345	9	9	16	10	3045	56	6.2	6.5	--	10.2	--	24
Date	Calcium	Magnes-ium	Sodium	Potas-sium	Bicar-bonate	Carbon-ate	Alka-linity	Sulfate	Chlor-ide	Fluor-ide	Silica	Residue on evap.	Residue water
	water, fltrd, mg/L (00915)	water, fltrd, mg/L (00925)	water, fltrd, mg/L (00930)	water, fltrd, mg/L (00935)	wat flt titr., field, mg/L (00453)	wat flt incrm. field, mg/L (00452)	field, mg/L as CaCO3 (39086)	water, fltrd, mg/L (00945)	water, fltrd, mg/L (00940)	water, fltrd, mg/L (00950)	water, fltrd, mg/L (00955)	at 180degC wat flt mg/L (70300)	sum of consti-tuents mg/L (70301)
JUN 09...	6.57	.710	1.31	.40	16	.0	12	7.65	.48	<.17	7.01	38	34
JUL 14...	7.08	.806	1.40	.49	18	.0	14	8.38	.41	<.17	7.66	39	37
AUG 24...	8.17	.920	1.43	.47	20	.0	15	8.78	.54	<.17	8.57	42	41
Date	Nitrite	Nitrite + nitrate	Ammonia	Ammonia + org-N	Ammonia + org-N	Phos-phorus	Phos-phorus	Ortho-phosphate	Iron	Mangan-ese	Organic carbon	Chloro-phyll a	Pheo-phytin a
	water, fltrd, mg/L as N (00613)	water, fltrd, mg/L as N (00631)	water, fltrd, mg/L as N (00608)	water, unfltrd, mg/L as N (00625)	water, fltrd, mg/L as N (00623)	water, unfltrd, mg/L (00665)	water, fltrd, mg/L (00666)	water, fltrd, mg/L as P (00671)	water, fltrd, ug/L (01046)	water, fltrd, ug/L (01056)	water, fltrd, mg/L (00681)	phyto-plank-ton, fluoro, ug/L (70953)	phyto-plank-ton, ug/L (62360)
JUN 09...	.002	.504	<.010	<.1	<.1	.006	<.004	<.006	<6.4	E.6	1.7	.35	.22
JUL 14...	<.002	.420	<.010	<.1	<.1	E.002	<.004	<.006	E5.6	1.4	.5	<.1	<.1
AUG 24...	E.001	.413	<.010	<.1	<.1	.008	<.004	<.006	20.9	3.2	.3	.32	.35

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTHWEST ALASKA—Continued

601708154203500 -- LITTLE KIIK RIVER ABOVE KIIK LAKE NEAR PORT ALSWORTH—Continued

Date	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUN 09...	5	1.7
JUL 14...	1	.11
AUG 24...	5	.22

601828154171700 -- LITTLE KIIK RIVER BELOW KIIK LAKE NEAR PORT ALSWORTH

Date	Time	Medium code	Sample type	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler type, code (84164)	Specific conductance, wat unf, uS/cm 25 degC (00095)	pH, water, unfltrd, field, std units (00400)	Temperature, water, deg C (00010)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Hardness, water, mg/L as CaCO3 (00900)
JUN 08...	1420	9	9	259	10	3045	56	7.2	9.9	760	11.3	100	26
JUL 14...	1630	9	9	118	10	3045	60	7.8	19.4	752	9.9	109	25
AUG 25...	1100	9	9	60	10	3045	64	7.2	16.0	--	9.2	--	27

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat flt, titr., field, mg/L (00453)	Carbonate, wat flt, titr., field, mg/L (00452)	Alkalinity, wat flt, inc tit, field, mg/L as CaCO3 (39086)	Sulfate, water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Residue on evap., at 180degC, wat flt, mg/L (70300)	Residue water, fltrd, sum of constituents, mg/L (70301)
JUN 08...	8.96	.841	1.52	.46	25	.0	19	7.49	.61	<.17	6.74	43	41
JUL 14...	8.69	.845	1.50	.43	23	.0	18	7.58	.63	<.17	6.68	43	40
AUG 25...	9.49	.907	1.43	.41	26	.0	20	7.93	.63	<.17	6.83	39	42

Date	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Phosphorus, water, unfltrd, mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)	Orthophosphate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Organic carbon, water, fltrd, mg/L (00681)	Chlorophyll a, phytoplankton, fluoro, ug/L (70953)	Pheophytin a, phytoplankton, ug/L (62360)
JUN 08...	.003	.439	<.010	<.1	<.1	E.003	<.004	<.006	<6.4	E.6	1.0	<.1	.13
JUL 14...	.004	.421	<.010	E.06	<.1	<.004	E.004	E.003	E5.5	E.7	.7	.18	.15
AUG 25...	.004	.403	E.006	E.06	<.1	E.002	<.004	<.006	<6.4	1.1	.7	.52	.51

Date	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUN 08...	1	.70
JUL 14...	1	.32
AUG 25...	5	.80

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTHWEST ALASKA—Continued

601801154143600 -- KIJIK RIVER 1.5 MILE ABOVE MOUTH NEAR PORT ALSWORTH

Date	Time	Medium code	Sample type	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler code (84164)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, deg C (00010)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Hardness, water, mg/L as CaCO3 (00900)
JUN 08...	1530	9	9	1010	10	3045	77	7.2	7.6	760	11.9	100	36
JUL 13...	1630	9	9	718	10	3045	80	7.2	16.6	752	9.6	100	35
AUG 26...	1130	9	9	430	10	3045	78	7.4	11.4	746	10.0	93	34

Date	Calcium water, fltrd, mg/L (00915)	Magnesium water, fltrd, mg/L (00925)	Sodium water, fltrd, mg/L (00930)	Potassium water, fltrd, mg/L (00935)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Carbonate, wat flt incrm. titr., mg/L (00452)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Sulfate water, fltrd, mg/L (00945)	Chloride water, fltrd, mg/L (00940)	Fluoride water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue water, fltrd, sum of constituents mg/L (70301)
JUN 08...	12.3	1.33	1.78	.41	34	.0	26	11.8	.54	<.17	6.78	57	53
JUL 13...	11.8	1.27	1.66	.43	31	.0	24	11.6	.47	<.17	6.26	52	49
AUG 26...	11.6	1.23	1.55	.48	31	.0	24	10.7	.36	<.17	6.36	46	48

Date	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Phosphorus, water, unfltrd, mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)	Orthophosphate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Organic carbon, water, fltrd, mg/L (00681)	Chlorophyll a phyto-plankton, fluoro, ug/L (70953)	Pheophytin a, phyto-plankton, ug/L (62360)
JUN 08...	.002	.207	<.010	<.1	<.1	.012	<.004	<.006	E3.6	1.1	1.9	.55	.39
JUL 13...	E.001	.128	<.010	E.06	<.1	.006	<.004	<.006	E4.1	.9	.5	.33	.34
AUG 26...	E.001	.125	<.010	<.1	<.1	E.004	E.002	<.006	<6.4	1.2	.4	.16	.16

Date	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUN 08...	15	41
JUL 13...	6	12
AUG 26...	3	3.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

YUKON ALASKA

15389000 -- PORCUPINE RIVER NEAR FORT YUKON

Date	Time	Sample location, cross section ft from rt bank (72103)	Specif. conductance, wat unf uS/cm (00095)	pH, water, unfltrd field, std units (00400)	Temperature, water, deg C (00010)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)
APR								
09...	1230	120.0	404	7.4	.0	764	5.7	39
09...	1250	200.0	404	7.4	.0	764	5.6	39
09...	1310	220.0	404	7.4	.0	764	5.7	39
09...	1330	300.0	400	7.4	.0	764	5.7	39
09...	1350	350.0	404	7.4	.0	764	5.7	39
JUN								
02...	1500	171.0	107	7.7	10.1	741	10.8	99
02...	1510	398.0	105	7.6	10.0	741	10.7	98
02...	1520	636.0	102	7.6	9.9	742	10.8	98
02...	1530	872.0	100	7.6	9.9	742	10.7	97
02...	1540	1151	98	7.5	10.0	742	10.7	97
07...	1420	86.0	138	7.6	12.7	752	9.9	95
07...	1430	289.0	136	7.6	12.6	752	9.6	91
07...	1440	580.0	131	7.7	12.6	752	9.4	89
07...	1450	703.0	129	7.7	12.7	752	9.4	90
07...	1500	955.0	124	7.7	12.8	752	9.4	90
11...	1300	88.0	139	7.7	13.0	744	8.8	85
11...	1310	242.0	138	7.7	13.0	744	8.6	83
11...	1320	420.0	137	7.7	13.0	744	8.6	84
11...	1330	694.0	134	7.7	13.0	744	8.6	83
11...	1340	867.0	133	7.7	13.1	744	8.6	84
JUL								
29...	1500	185.0	288	8.2	17.3	742	--	--
29...	1510	313.0	289	8.2	17.3	742	--	--
29...	1520	450.0	288	8.2	17.4	742	--	--
29...	1530	621.0	289	8.3	17.4	742	--	--
29...	1540	759.0	289	8.2	17.4	742	--	--
AUG								
09...	1500	200.0	223	7.8	15.2	756	9.8	98
09...	1510	390.0	223	7.7	15.1	766	9.7	96
09...	1520	550.0	223	7.7	4.0	756	9.3	71
09...	1530	760.0	223	7.7	15.0	756	9.3	93
09...	1540	980.0	222	7.7	15.1	756	9.2	92
SEP								
09...	1530	90.0	287	8.1	5.7	755	11.1	89
09...	1540	270.0	288	8.1	5.6	755	11.1	89
09...	1550	450.0	287	8.1	5.7	755	11.1	89
09...	1600	630.0	288	8.1	5.7	755	11.1	90
09...	1610	810.0	288	8.1	5.4	755	11.4	91

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

YUKON ALASKA—Continued

15389000 -- PORCUPINE RIVER NEAR FORT YUKON—Continued

Date	Time	Medium code	Sample type	Ice thickness, feet (82130)	Stream width, feet (00004)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler type, code (84164)	Type of sample related QA data, code (99111)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	
APR	09...	1400	9	9	4.00	--	--	20	3060	1	404	7.4	14.0	.0
JUN	02...	1620	9	9	--	--	65000	20	3055	1	102	7.6	--	10
	07...	1520	9	9	--	--	53500	20	3055	1	131	7.7	--	12.7
	11...	1350	9	9	--	1400	37600	20	3055	1	137	7.7	--	13.0
JUL	29...	1420	9	9	--	--	7000	20	3055	30	289	8.2	--	17.4
AUG	09...	1610	9	9	--	--	21700	20	3055	10	223	7.7	--	15.1
SEP	09...	1300	9	9	--	908	5510	20	3055	1	287	8.1	--	5.6
Date	Turbidity, wat unfltrd, Hach 2100AN NTU (99872)	UV absorbance, 254 nm, wat fltrd, units /cm (50624)	UV absorbance, 280 nm, wat fltrd, units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat fltrd, incrm. titr., mg/L (00453)	Carbonate, wat fltrd, incrm. titr., mg/L (00452)	
APR	09...	<2	.0396	.0279	764	5.7	39	210	61.9	13.5	5.38	.59	210	.0
JUN	02...	137	.5507	.4139	743	10.7	98	54	17.1	2.69	2.11	.71	48	.0
	07...	76	.3630	.2700	752	9.4	90	62	19.3	3.34	1.21	.63	55	.0
	11...	50	.3660	.2708	744	8.6	84	70	21.4	3.95	1.71	.61	57	.0
JUL	29...	18	.0795	.0557	742	--	--	160	50.8	8.38	3.75	.63	140	.0
AUG	09...	24	.209	.154	756	93.5	936	110	30.1	7.77	3.29	.65	76	.0
SEP	09...	<2	.1263	.0891	755	11.2	90	140	41.2	8.77	4.07	.53	122	.0
Date	Alkalinity, wat tit inc field, mg/L as CaCO3 (39086)	Alkalinity, wat fltrd, mg/L as CaCO3 (39036)	Sulfate water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Residue on evap. at 180degC, wat fltrd, mg/L (70300)	Residue water, fltrd, sum of constituents, mg/L (70301)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	
APR	09...	172	170	30.5	5.15	<.17	4.65	233	226	<.002	.217	<.010	<.1	E.05
JUN	02...	39	40	9.46	.62	<.17	2.17	91	59	.003	.025	<.010	.8	.4
	07...	45	47	13.1	.67	<.17	2.56	92	68	E.001	.032	<.010	.6	.3
	11...	47	47	16.7	.83	<.17	2.82	114	77	E.001	.037	<.010	.5	.3
JUL	29...	115	120	35.6	2.97	<.17	2.51	181	174	E.001	.040	E.005	.2	.1
AUG	09...	60	60	49.9	1.47	<.17	3.31	159	134	E.001	.075	E.007	.3	.2
SEP	09...	100	100	47.9	2.19	<.17	2.68	194	168	E.001	E.012	<.010	.2	.2
Date	Phosphorus, water, unfltrd, mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)	Orthophosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic, water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	
APR	09...	E.003	E.003	<.006	E1.2	<.2	.3	94.0	<.06	8	<.04	<.8	.179	.7
JUN	02...	.198	.017	E.003	34.5	E.1	.4	38.1	<.06	E7	<.04	<.8	.180	2.5
	07...	.130	.012	<.006	19.9	<.2	.4	37.2	<.06	<8	<.04	<.8	.127	4.3
	11...	.061	.009	<.006	25.6	<.2	.4	43.6	<.06	E5	<.04	<.8	.126	2.0
JUL	29...	.006	E.004	<.006	12.2	<.2	.3	67.8	<.06	8	<.04	<.8	.160	1.4
AUG	09...	.043	E.003	<.006	20.1	<.2	.3	54.9	<.06	8	<.04	<.8	.165	2.2
SEP	09...	E.003	E.002	<.006	12.0	<.2	.3	66.8	<.06	10	<.04	<.8	.205	1.7

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

YUKON ALASKA—Continued

15389000 -- PORCUPINE RIVER NEAR FORT YUKON—Continued

Date	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Uranium natural, water, fltrd, ug/L (22703)	Organic carbon, water, fltrd, mg/L (00681)
APR 09...	8.8	E.07	7.3	11.1	1.2	1.57	.5	<.20	161	.60	1.6	.83	1.7
JUN 02...	310	.24	1.8	6.6	E.3	3.21	<.4	<.20	44.4	.47	1.0	.20	16
JUN 07...	148	.14	2.0	4.2	E.3	2.34	<.4	<.20	54.6	.37	E.6	.25	11
JUN 11...	171	.14	2.5	4.5	E.3	2.15	E.3	<.20	64.1	.43	1.1	.25	13
JUL 29...	E4.0	<.08	5.6	.5	.7	1.80	.4	<.20	134	.29	.7	.66	3.1
AUG 09...	72.0	<.08	5.3	4.6	E.4	2.28	E.3	<.20	130	.61	1.6	.26	5.8
SEP 09...	25.2	<.08	7.5	4.4	.5	1.86	<.4	<.20	144	.21	1.5	.46	4.4

Date	Inorganic carbon, suspd sediment total, mg/L (00688)	Organic carbon, suspd sediment total, mg/L (00689)	Total carbon, suspd sediment total, mg/L (00694)	Particulate nitrogen, susp, water, mg/L (49570)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons/d (80155)	Suspended sediment, sieve diameter percent <.063mm (70331)
APR 09...	<.12	<.12	<.12	<.022	2	--	64
JUN 02...	.694	2.58	3.27	.278	218	38300	90
JUN 07...	.209	3.97	4.18	.317	150	21700	89
JUN 11...	.208	2.21	2.42	.186	90	9140	93
JUL 29...	<.12	.359	.359	.043	2	38	81
AUG 09...	<.1	1.1	--	--	39	2290	97
SEP 09...	<.12	.208	.208	<.022	--	--	--

15395900 -- UPPER FRYINGPAN CREEK NEAR CENTRAL

Date	Time	Medium code	Sample type	Stream width, feet (00004)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler code (84164)	Specif. conductance, uS/cm 25 degC (00095)	pH, water, unfltrd, std units (00400)	Temperature, water, deg C (00010)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)
SEP 01...	1400	9	9	--	--	1.5	10	3044	234	6.9	5.6	758	11.4
SEP 24...	1640	9	9	11.2	14.93	.70	10	3044	312	7.6	1.0	--	11.6

Date	Dissolved oxygen, percent of saturation (00301)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat flt incrm, titr., field, mg/L (00453)	Carbonate, wat flt incrm, titr., field, mg/L (00452)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Sulfate, water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
SEP 01...	91	140	32.5	15.3	1.84	.61	58	.0	46	90.3	<.20	<.2	6.37
SEP 24...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Residue on evap. at 180degC, wat flt mg/L (70300)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Phosphorus, water, unfltrd, mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)	Orthophosphate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons/d (80155)
SEP 01...	191	E.001	.087	E.006	.17	.19	E.002	<.004	<.006	47	10.2	1	.00
SEP 24...	--	--	--	--	--	--	--	--	--	--	--	<1	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

YUKON ALASKA—Continued

15407500 -- HARRISON CREEK NEAR CENTRAL

Date	Time	Medium code	Sample type	Stream width, feet (00004)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler type, code (84164)	Specific conductance, uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)
AUG 30...	1300	9	9	20.0	12	10	3044	218	7.5	12.0	9.0	761	11.7
SEP 19...	1515	9	9	16.5	9.8	10	3044	221	7.7	9.0	4.4	--	13.7
Date	Dis-solved oxygen, percent of saturation (00301)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Sulfate, water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
AUG 30...	102	120	37.2	6.07	1.24	.92	96	.0	80	37.5	.27	<.2	5.24
SEP 19...	--	--	--	--	--	--	--	--	--	--	--	--	--
Date	Residue on evap. at 180degC wat flt mg/L (70300)	Residue water, fltrd, sum of constituents mg/L (70301)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Phosphorus, water, unfltrd mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)	Orthophosphate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Suspended sediment concentration mg/L (80154)
AUG 30...	145	136	.002	.142	<.010	E.07	E.08	<.004	<.004	<.006	E5	9.8	--
SEP 19...	--	--	--	--	--	--	--	--	--	--	--	--	<1

15515060 -- MARGUERITE CREEK ABOVE EMMA CREEK NEAR HEALY

Date	Time	Medium code	Stream width, feet (00004)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampler type, code (84164)	Sampling method, code (82398)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)	Suspnd. sediment, sieve diameter percent <.063mm (70331)
SEP 26...	1155	9	20.0	24.25	8.1	3001	10	1.3	8.3	13	.29	81

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

NORTHWEST ALASKA—Continued

15619800 -- GOLDBOTTOM CREEK NEAR NOME—Continued

Date	Europ-ium, bed sed <62.5um wet svd fld,tot ug/g (34855)	Gold, bed sed <62.5um wet svd field, total, ug/g (34870)	Gallium, bed sed <62.5um wet svd field, total, ug/g (34860)	Holmium, bed sed <62.5um wet svd field, total, ug/g (34875)	Iron, bed sed <62.5um wet svd field, total, percent (34880)	Lantha-num, bed sed <62.5um wet svd field, total, ug/g (34885)	Lead, bed sed <62.5um wet svd field, total, ug/g (34890)	Lithium, bed sed <62.5um wet svd field, total, ug/g (34895)	Magnes-ium, bed sed <62.5um wet svd fld,tot percent (34900)	Mangan-ese, bed sed <62.5um wet svd field, total, ug/g (34905)	Mercury, bed sed <62.5um wet svd field, total, ug/g (34910)	Molyb-denum, bed sed <62.5um wet svd fld,tot ug/g (34915)	Neodym-ium, bed sed <62.5um wet svd fld,tot ug/g (34920)
MAY 27...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 23...	2.2	<1	19	1.4	5.3	39	24	42	1.4	800	.04	.88	40
SEP 01...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Nickel, bed sed <62.5um wet svd field, total, ug/g (34925)	Niobium, bed sed <62.5um wet svd field, total, ug/g (34930)	Phos-phorus, bed sed <62.5um wet svd fld,tot percent (34935)	Scand-ium, bed sed <62.5um wet svd fld,tot ug/g (34945)	Selen-ium, bed sed <62.5um wet svd fld,tot ug/g (34950)	Silver, bed sed <62.5um wet svd field, total, ug/g (34955)	Sodium, bed sed <62.5um wet svd field, total, percent (34960)	Stront-ium, bed sed <62.5um wet svd fld,tot ug/g (34965)	Sulfur, bed sed <62.5um wet svd field, total, percent (34970)	Tant-alum, bed sed <62.5um wet svd fld,tot ug/g (34975)	Thorium, bed sed <62.5um wet svd field, total, ug/g (34980)	Tin, bed sed <62.5um wet svd field, total, ug/g (34985)	Titan-ium, bed sed <62.5um wsv nat rec, percent (49274)
MAY 27...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 23...	40	9.8	.11	24	.63	.43	.78	160	.16	<1	14	3.8	.49
SEP 01...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Uranium, bed sed <62.5um wet svd field, total, ug/g (35000)	Vanad-ium, bed sed <62.5um wet svd fld,tot ug/g (35005)	Yttrium, bed sed <62.5um wet svd field, total, ug/g (35010)	Ytterb-ium, bed sed <62.5um wet svd fld,tot ug/g (35015)	Zinc, bed sed <62.5um wet svd field, total, ug/g (35020)	Organic carbon, bed sed <62.5um wsv nat field percent (49266)	Inorg. carbon, bed sed <62.5um wsv nat field percent (49269)	Total carbon, sedimnt bed sed <62.5um wsv nat field percent (49267)	Total carbon, bed sed <2 mm wsv nat field g/kg (49272)	Inorg. carbon, bed sed <2 mm wsv nat field g/kg (49270)	Organic carbon, bed sed <2 mm wsv nat field g/kg (49271)
MAY 27...	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	--	--	--	--	--	--	--	--	--	--	--
JUN 23...	4	160	35	3.8	130	2.66	.11	2.77	5.9	.73	5.2
SEP 01...	--	--	--	--	--	--	--	--	--	--	--

15619900 -- NORTH FORK SNAKE RIVER NEAR NOME

Date	Time	Medium code	Sample type	Stream width, feet (00004)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Sampler type, code (84164)	Specif. conduc-tance, uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Turbid-ity, wat unfl lab, Hach 2100AN NTU (99872)	Baro-metric pres-sure, mm Hg (00025)
MAY 27...	1510	9	9	12.0	18	--	--	90	7.4	--	1.6	--	733
JUN 21...	1730	9	9	10.0	5.4	10	3044	172	7.8	16.0	7.5	<2	--
JUL 28...	1700	H	9	--	--	--	--	199	7.6	--	10.0	--	740
SEP 02...	1010	9	9	12.0	4.9	10	3044	195	8.0	6.0	4.4	<2	745

Date	Time	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potas-sium, water, fltrd, mg/L (00935)	Bicar-bonate, wat flt incrm, titr., mg/L (00453)	Carbon-ate, wat flt incrm, titr., mg/L (00452)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Alka-linity, wat flt fxd end field, mg/L as CaCO3 (39036)	Sulfate water, fltrd, mg/L (00945)
MAY 27...	13.4	100	--	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	--	--	<1	82	24.8	4.77	1.31	.20	58	.0	47	49	27.7	--
JUL 28...	10.5	96	--	--	--	--	--	--	--	--	--	--	--	--
SEP 02...	12.6	99	<1	93	27.3	5.96	1.47	.17	76	.0	62	64	32.8	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA

613551149192900 -- COTTONWOOD LAKE NORTH COLONIAL PARK LAUNCH NEAR WASILLA

Date	Time	Depth to bot. from surface at samp locatn, meters (82903)	Sam-pling depth, meters (00098)	Specif. conduc-tance, uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, water, deg C (00010)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)
AUG									
05...	1730	10.5	1.0	170	8.1	20.7	753	10.8	122
05...	1732	10.5	2.0	170	8.1	20.2	753	10.8	121
05...	1734	10.5	3.0	169	8.1	20.0	753	10.8	120
05...	1736	10.5	4.0	180	8.0	19.2	753	9.7	106
05...	1738	10.5	5.0	182	7.9	18.3	753	8.9	96
05...	1740	10.5	6.0	205	7.8	16.1	753	9.6	99
05...	1742	10.5	7.0	300	7.5	11.1	753	7.7	71
05...	1744	10.5	8.0	322	7.4	8.8	753	2.6	23
05...	1746	10.5	9.0	361	7.2	7.2	753	1.3	11

Date	Time	Medium code	Sample type	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Sampler type, code (84164)	Type of sample related QA data, code (99111)	Sam-pling depth, meters (00098)	Depth to bot. from surface at samp locatn, meters (82903)	Temper-ature, air, deg C (00020)	Trans-parency Secchi disc, meters (00078)	Baro-metric pres-sure, mm Hg (00025)	Nitrite water, fltrd, mg/L as N (00613)
AUG													
05...	1800	9	9	5.0	1.0	100	--	--	10.5	26.0	5.50	753	<.002
05...	1810	9	7	--	--	100	30	9.0	10.5	26.0	5.50	753	.002

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Total nitro-gen, wat flt by anal mg/L (62854)	Total nitro-gen, wat unfltrd by anal mg/L (62855)	Ammonia water, fltrd, mg/L as N (00608)	Phos-phorus, water, unfltrd mg/L (00665)	Phos-phorus, water, fltrd, mg/L (00666)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Chloro-phyll a phyto-plank-ton, fluoro, ug/L (70953)	Pheo-phytin a, phyto-plank-ton, ug/L (62360)
AUG									
05...	<.016	.23	.25	E.005	.008	.004	<.006	1.3	1.0
05...	<.016	.99	1.26	.801	.050	.004	<.006	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA—Continued

613215149522600 -- BIG LAKE SOUTH OF LONG ISLAND NEAR WASILLA

Date	Time	Depth to bot. from surface at samp locatn, meters (82903)	Sam-pling depth, meters (00098)	Specif. conduc-tance, wat unf 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, water, deg C (00010)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)
AUG									
05...	1216	16.0	1.0	137	6.8	20.5	760	8.2	91
05...	1218	16.0	2.0	137	6.8	20.4	760	8.2	91
05...	1220	16.0	3.0	137	6.9	20.3	760	8.2	91
05...	1222	16.0	4.0	137	7.0	19.9	760	8.2	90
05...	1224	16.0	5.0	137	7.0	19.2	760	8.4	91
05...	1226	16.0	6.0	143	7.0	15.6	760	10.5	106
05...	1228	16.0	7.0	146	7.0	12.1	760	10.5	98
05...	1230	16.0	8.0	147	7.0	10.7	760	10.2	92
05...	1232	16.0	9.0	150	7.0	8.6	760	8.4	72
05...	1234	16.0	10.0	152	6.9	7.9	760	6.4	54
05...	1236	16.0	11.0	155	6.9	7.1	760	3.8	31
05...	1238	16.0	12.0	158	6.2	6.2	760	1.7	14
05...	1240	16.0	13.0	160	6.8	5.9	760	.6	5
05...	1242	16.0	14.0	164	6.7	5.5	760	.4	3
05...	1244	16.0	15.0	173	6.7	5.4	760	.4	3
05...	1246	16.0	16.0	203	6.7	5.3	760	.3	3

Date	Time	Medium code	Sample type	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Sampler type, code (84164)	Sam-pling depth, meters (00098)	Depth to bot. from surface at samp locatn, meters (82903)	Temper-ature, air, deg C (00020)	Trans-parency Secchi disc, meters (00078)	Baro-metric pres-sure, mm Hg (00025)	Nitrite water, mg/L as N (00613)	Nitrite + nitrate water fltrd, mg/L as N (00631)
AUG													
05...	1350	9	9	5.0	1.0	100	--	16.0	19.0	7.92	760	<.002	<.016
05...	1410	9	9	--	--	100	15.0	16.0	19.0	7.92	760	<.002	<.016

Date	Total nitro-gen, wat flt by anal ysis, mg/L (62854)	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Ammonia water, fltrd, mg/L as N (00608)	Phos-phorus, water, unfltrd mg/L (00665)	Phos-phorus, water, unfltrd mg/L (00666)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Chloro-phyll a phyto-plank-ton, fluoro, ug/L (70953)	Pheo-phytin a, phyto-plank-ton, ug/L (62360)
AUG								
05...	.17	.20	<.010	.005	E.003	<.006	.3	.2
05...	.19	.24	.055	.025	.006	<.006	--	--

613433149554700 -- HORSESHOE LAKE 0.3 MILE SOUTH BOAT LAUNCH NEAR BIG LAKE

Date	Time	Depth to bot. from surface at samp locatn, meters (82903)	Sam-pling depth, meters (00098)	Specif. conduc-tance, wat unf 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, water, deg C (00010)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)
AUG									
03...	1710	6.50	.50	73	7.2	21.5	759	8.1	92
03...	1712	6.50	1.0	73	7.2	20.5	759	8.2	91
03...	1714	6.50	2.0	73	7.2	20.0	759	8.1	89
03...	1716	6.50	3.0	72	7.2	19.9	759	8.1	89
03...	1718	6.50	4.0	73	7.2	19.6	759	7.9	87
03...	1720	6.50	5.0	73	7.1	18.7	759	6.2	67
03...	1722	6.50	6.0	86	6.9	15.6	759	.9	9

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA—Continued

613433149554700 -- HORSESHOE LAKE 0.3 MILE SOUTH BOAT LAUNCH NEAR BIG LAKE—Continued

Date	Time	Medium code	Sample type	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Sampler type, code (84164)	Type of sample related QA data, code (99111)	Sampling depth, meters (00098)	Depth to bot. from surface at samp locatn, meters (82903)	Temperature, air, deg C (00020)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Nitrite water, fltrd, mg/L as N (00613)
AUG													
03...	1750	9	9	4.0	1.5	100	10	--	6.50	24.0	3.66	759	<.002
03...	1810	9	9	--	--	100	10	5.5	6.50	24.0	3.66	759	<.002
Date		Nitrite + nitrate water fltrd, mg/L as N (00631)	Total nitro-gen, wat flt by anal ysis, mg/L (62854)	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Ammonia water, fltrd, mg/L as N (00608)	Phos-phorus, water, unfltrd mg/L (00665)	Phos-phorus, water, fltrd, mg/L (00666)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Chloro-phyll a phyto-plank-ton, fluoro, ug/L (70953)	Pheo-phytin a, phyto-plank-ton, ug/L (62360)			
AUG													
03...		<.016	.25	.25	<.010	.010	.004	<.006	1.2	1.0			
03...		<.016	.18	.22	<.010	.011	.004	<.006	--	--			

614113150001400 -- NANCY LAKE CENTRAL BASIN NEAR WILLOW

Date	Time	Depth to bot. from surface at samp locatn, meters (82903)	Sam-pling depth, meters (00098)	Specif. conduc-tance, wat unf 25 degC uS/cm (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, water, deg C (00010)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)
AUG									
06...	1400	19.0	1.0	112	8.3	20.8	762	8.3	93
06...	1402	19.0	2.0	112	8.3	20.4	762	8.4	93
06...	1404	19.0	3.0	110	8.4	19.4	762	9.5	103
06...	1406	19.0	4.0	117	8.1	15.9	762	9.5	96
06...	1408	19.0	5.0	125	7.9	10.3	762	9.9	88
06...	1410	19.0	6.0	124	7.7	7.7	762	5.7	48
06...	1412	19.0	7.0	124	7.4	6.4	762	3.5	28
06...	1414	19.0	8.0	125	7.1	6.0	762	2.4	19
06...	1416	19.0	9.0	122	7.0	5.4	762	2.3	18
06...	1418	19.0	10.0	122	7.0	5.1	762	2.1	16
06...	1420	19.0	11.0	123	6.9	4.9	762	2.0	16
06...	1422	19.0	12.0	125	6.8	4.6	762	1.4	11
06...	1424	19.0	13.0	127	6.8	4.4	762	1.1	8
06...	1426	19.0	14.0	130	6.8	4.3	762	.5	4
06...	1428	19.0	15.0	132	6.8	4.3	762	.5	3
06...	1430	19.0	16.0	134	6.7	4.3	762	.4	3
06...	1432	19.0	17.0	143	6.7	4.2	762	.4	3
06...	1434	19.0	18.0	165	6.8	4.2	762	.3	3
06...	1436	19.0	18.5	183	7.0	4.2	762	.3	2
06...	1438	19.0	19.0	280	7.7	4.2	762	.3	2

Date	Time	Medium code	Sample type	Cloud cover, percent (00032)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Sampler type, code (84164)	Sam-pling depth, meters (00098)	Depth to bot. from surface at samp locatn, meters (82903)	Temper-ature, air, deg C (00020)	Transparency Secchi disc, meters (00078)	Baro-metric pres-sure, mm Hg (00025)	Nitrite water, fltrd, mg/L as N (00613)
AUG													
06...	1450	9	9	--	3.0	1.0	100	--	19.0	21.0	3.66	762	<.002
06...	1500	9	9	--	--	--	100	17.5	19.0	21.0	3.66	762	E.001
06...	1510	9	9	.0	--	--	100	6.0	19.0	21.0	3.66	762	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA—Continued

614113150001400 -- NANCY LAKE CENTRAL BASIN NEAR WILLOW—Continued

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Total nitrogen, wat flt by anal, mg/L (62854)	Total nitrogen, wat unfltrd by anal, mg/L (62855)	Ammonia water, fltrd, mg/L as N (00608)	Phos-phorus, unfltrd, mg/L (00665)	Phos-phorus, fltrd, mg/L (00666)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Chloro-phyll a phyto-plank-ton, fluoro, ug/L (70953)	Pheo-phytin a, phyto-plank-ton, ug/L (62360)
AUG									
06...	<.016	.24	.32	E.005	.012	E.002	<.006	2.5	1.2
06...	<.016	.48	.56	.264	.023	.009	E.003	--	--
06...	--	--	--	--	--	--	--	10.8	7.3

613725150102500 -- RED SHIRT LAKE 0.4 MILE WEST OF LYNX CREEK NEAR WILLOW

Date	Time	Depth to bot. from surface at samp locatn, meters (82903)	Sam-pling depth, meters (00098)	Specif. conduc-tance, wat unfltrd, uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, water, deg C (00010)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)
AUG									
04...	1501	11.5	1.0	87	7.4	20.3	760	8.1	90
04...	1503	11.5	2.0	87	7.4	20.3	760	8.1	90
04...	1505	11.5	3.0	87	7.4	20.1	760	8.0	88
04...	1507	11.5	4.0	87	7.3	19.7	760	8.0	88
04...	1509	11.5	5.0	86	7.3	18.1	760	7.3	77
04...	1511	11.5	6.0	86	7.2	16.1	760	6.4	65
04...	1513	11.5	7.0	85	7.1	13.6	760	4.7	45
04...	1515	11.5	8.0	84	7.1	10.8	760	3.1	28
04...	1517	11.5	9.0	85	7.0	10.0	760	1.5	13
04...	1519	11.5	10.0	87	6.9	8.7	760	.6	5
04...	1521	11.5	11.0	92	6.8	8.2	760	.5	5

Date	Time	Medium code	Sample type	Depth to bot sample intrval, feet below LSD (72016)	Depth to top sample intrval, feet below LSD (72015)	Sampler type, code (84164)	Sam-pling depth, meters (00098)	Depth to bot. from surface at samp locatn, meters (82903)	Temper-ature, air, deg C (00020)	Baro-metric pres-sure, mm Hg (00025)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Total nitrogen, wat flt by anal, mg/L (62854)
AUG													
04...	1540	9	9	7.3	.90	100	--	11.5	27.0	760	<.002	<.016	.21
04...	1600	9	9	--	--	100	9.1	11.5	27.0	760	E.001	E.013	.21

Date	Total nitrogen, wat unfltrd by anal, mg/L (62855)	Ammonia water, fltrd, mg/L as N (00608)	Phos-phorus, water, unfltrd, mg/L (00665)	Phos-phorus, water, fltrd, mg/L (00666)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Chloro-phyll a phyto-plank-ton, fluoro, ug/L (70953)	Pheo-phytin a, phyto-plank-ton, ug/L (62360)
AUG							
04...	.23	<.010	.009	E.004	<.006	1.1	.8
04...	.23	E.005	.011	E.003	<.006	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA—Continued

602301152585200 -- CRESCENT LAKE 4.6 MILE ABOVE OUTLET NEAR TUXEDNI BAY

Date	Time	Sam- pling depth, meters (00098)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)
JUN						
23...	1710	.00	10.8	6.3	33	11.4
23...	1712	2.5	11.3	6.3	22	11.4
23...	1714	5.0	11.7	6.4	32	8.4
23...	1716	7.5	12.1	6.3	30	5.2
23...	1718	10.0	12.2	6.2	34	4.7
23...	1720	12.5	12.2	6.2	36	4.4
23...	1722	15.0	12.1	6.1	38	4.2
23...	1724	17.5	12.0	6.0	38	3.9
23...	1726	20.0	12.0	6.0	39	3.8
23...	1728	22.5	12.0	5.9	39	3.9
23...	1730	25.0	11.8	5.9	39	3.8
23...	1732	27.5	11.9	5.9	39	3.8
JUL						
29...	1300	.00	10.2	6.3	26	10.4
29...	1302	2.5	10.3	6.4	26	9.0
29...	1304	5.0	10.3	6.4	26	8.9
29...	1306	7.5	10.4	6.3	25	8.7
29...	1308	10.0	10.4	6.4	25	8.4
29...	1310	12.5	10.5	6.3	24	8.2
29...	1312	15.0	10.6	6.2	25	8.0
29...	1314	17.5	10.7	6.2	26	7.3
29...	1316	20.0	10.8	6.2	31	6.4
29...	1318	22.5	11.0	6.2	31	5.8
29...	1320	25.0	11.0	6.2	33	5.3
29...	1322	27.5	11.1	6.2	35	4.3
29...	1324	30.0	11.3	6.1	35	4.3
AUG						
18...	1331	.00	8.4	6.4	26	16.0
18...	1333	2.5	9.0	6.5	25	12.0
18...	1335	5.0	9.1	6.6	24	10.0
18...	1337	7.5	9.2	6.6	25	8.4
18...	1339	10.0	9.3	6.7	26	7.7
18...	1341	12.5	9.3	6.7	27	7.2
18...	1343	15.0	9.4	6.6	29	6.6
18...	1345	17.5	9.5	6.7	30	6.2
18...	1347	20.0	9.5	6.7	31	5.6
18...	1349	22.5	9.6	6.7	32	5.2
18...	1351	25.0	9.6	6.7	32	4.9
18...	1353	27.5	9.6	6.6	33	4.7
18...	1355	30.0	9.5	6.6	33	4.6

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA—Continued

602212152561300 -- CRESCENT LAKE 2.8 MILE ABOVE OUTLET NEAR TUXEDNI BAY

Date	Time	Sam- pling depth, meters (00098)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unfltrd std uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)							
		Medium code	Sample type	Sam- pling depth, meters (00098)	Trans- parency Secchi disc, meters (00078)	Turb- idity, IR LED light, 90 deg, FNU (63680)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unfltrd std uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)
JUN													
23...	1640			.00	11.8	6.0	34	9.6					
23...	1642			2.5	11.9	6.0	34	8.3					
23...	1644			5.0	12.0	6.0	34	7.6					
23...	1646			7.5	12.1	6.0	35	6.3					
23...	1648			10.0	12.2	6.0	36	5.5					
23...	1650			12.5	12.3	6.0	25	4.2					
23...	1652			15.0	12.1	6.0	35	4.1					
23...	1654			17.5	12.0	6.0	38	4.0					
23...	1656			20.0	11.9	6.0	38	3.9					
23...	1658			22.5	11.9	6.0	38	3.8					
23...	1700			25.0	11.9	6.0	38	3.8					
23...	1702			27.5	11.9	6.0	38	3.8					
23...	1704			30.0	11.8	6.0	39	3.7					
JUL													
29...	1410			.00	10.4	6.3	29	10.0					
29...	1412			2.5	10.5	6.3	29	9.6					
29...	1414			5.0	10.5	6.4	29	9.0					
29...	1416			7.5	10.5	6.3	28	8.9					
29...	1418			10.0	10.6	6.2	28	8.8					
29...	1420			12.5	10.7	6.2	32	8.6					
29...	1422			15.0	10.7	6.1	28	8.1					
29...	1424			17.5	10.9	6.1	31	7.2					
29...	1426			20.0	11.2	6.1	32	6.2					
29...	1428			22.5	11.3	6.2	34	5.2					
29...	1430			25.0	11.2	6.2	35	4.8					
29...	1432			27.5	11.2	6.3	36	4.3					
29...	1434			30.0	11.2	6.4	36	4.3					
AUG													
18...	1420			.00	10.1	6.5	28	16.1					
18...	1422			2.5	11.3	6.6	29	11.1					
18...	1424			5.0	11.5	6.6	30	9.5					
18...	1426			7.5	11.6	6.4	30	8.8					
18...	1428			7.5	11.7	6.4	31	8.6					
18...	1430			10.0	11.8	6.3	31	7.3					
18...	1432			15.0	11.9	6.2	31	6.9					
18...	1434			17.5	11.9	6.2	32	6.4					
18...	1436			20.0	12.0	6.2	34	5.6					
18...	1438			22.5	12.0	6.2	35	5.1					
18...	1440			25.0	12.1	6.3	35	4.8					
18...	1442			27.5	12.1	6.3	36	4.6					
18...	1444			30.0	12.1	6.3	36	4.5					
SEP													
13...	1420			.00	12.9	5.9	21	9.8					
13...	1422			2.5	12.0	5.9	21	9.8					
13...	1424			5.0	11.7	6.0	20	9.7					
13...	1426			7.5	11.6	6.1	20	9.7					
13...	1428			10.0	11.4	6.1	20	9.5					
13...	1430			12.5	11.3	6.1	20	9.4					
13...	1432			15.0	11.2	6.2	20	9.4					
13...	1434			17.5	11.2	6.3	20	9.0					
13...	1436			20.0	11.1	6.3	21	8.8					
13...	1438			22.5	11.1	6.3	21	8.4					
13...	1440			25.0	11.1	6.7	21	7.6					
13...	1442			27.5	11.3	6.7	25	5.9					
JUN													
23...	1635	9	9	7.5	1.00	14.0	12.1	6.0	35	6.3	10	3.69	.197
JUL													
29...	1400	9	9	7.5	.40	29.0	10.5	6.3	28	8.9	8	2.93	.144
AUG													
18...	1415	9	9	7.5	.41	7.00	11.6	6.4	30	8.8	9	3.21	.161
SEP													
13...	1415	9	9	7.5	--	--	11.6	6.1	20	9.7	9	3.20	.160

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA—Continued

602212152561300 -- CRESCENT LAKE 2.8 MILE ABOVE OUTLET NEAR TUXEDNI BAY—Continued

Date	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt fxd end field, mg/L as CaCO3 (39036)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon- ate, wat flt incrm. titr., field, mg/L (00452)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
JUN 23...	.45	.87	9.5	10	13	.0	.57	<.2	5.32	2.0	21	27	<.10
JUL 29...	.43	.58	7.9	8	9	.0	.32	<.2	3.59	1.5	15	13	<.10
AUG 18...	.49	.61	9.2	8	10	.0	.37	<.2	3.86	1.4	15	22	<.10
SEP 13...	.45	.56	8.8	8	10	.0	.30	<.2	4.00	1.8	16	20	<.10

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Pheo- phytin a, phyto- plank- ton, ug/L (62360)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Sampler type, code (84164)
JUN 23...	<.10	<.010	.221	<.002	<.006	E.002	.013	1.1	<.1	<.1	26	3.2	100
JUL 29...	E.05	<.010	.097	E.001	<.006	E.002	.032	E.2	.2	.2	16	2.6	100
AUG 18...	<.10	<.010	.114	<.002	<.006	<.004	.016	E.3	.2	.2	17	1.1	100
SEP 13...	<.10	<.010	.094	E.001	<.006	<.004	E.010	.4	.6	.9	30	1.1	100

Date	Type of sample related QA data, code (99111)
JUN 23...	1
JUL 29...	1
AUG 18...	1
SEP 13...	1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTH-CENTRAL ALASKA—Continued

602137152533500 -- CRESCENT LAKE 1.2 MILE ABOVE OUTLET NEAR TUXEDNI BAY

Date	Time	Sam- pling depth, meters (00098)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)
JUN						
23...	1540	.00	--	5.9	34	9.3
23...	1542	2.5	--	5.9	32	5.4
23...	1544	5.0	--	5.9	31	5.1
23...	1546	7.5	--	5.9	32	4.7
23...	1548	10.0	--	5.9	33	4.4
23...	1550	12.5	--	5.9	34	4.2
23...	1552	15.0	--	5.9	32	4.2
23...	1554	17.5	--	5.9	31	4.2
23...	1556	20.0	--	5.9	32	4.2
23...	1558	22.5	--	5.9	34	4.0
23...	1600	25.0	--	5.8	36	4.0
23...	1602	27.5	--	5.8	36	3.9
23...	1604	30.0	--	5.8	37	3.8
JUL						
29...	1435	.00	12.8	6.3	29	10.0
29...	1437	2.5	13.0	6.3	29	9.8
29...	1439	5.0	13.1	6.3	29	8.6
29...	1441	7.5	13.1	6.2	30	8.4
29...	1443	10.0	13.2	6.2	30	8.0
29...	1445	12.5	13.5	6.2	31	7.4
29...	1447	15.0	13.9	6.2	32	6.5
29...	1449	17.5	13.9	6.2	34	5.1
29...	1451	20.0	13.9	6.2	35	4.8
29...	1453	22.5	14.0	6.2	36	4.4
29...	1455	25.0	13.9	6.3	36	4.0
29...	1457	27.5	13.9	6.4	36	4.0
29...	1459	30.0	14.2	6.5	37	4.2
AUG						
18...	1530	.00	10.2	6.2	29	17.6
18...	1532	2.5	10.9	6.4	28	14.0
18...	1534	5.0	11.2	6.5	29	10.4
18...	1536	7.5	11.3	6.5	29	9.9
18...	1538	10.0	11.3	6.5	30	8.9
18...	1540	12.5	11.4	6.5	30	8.2
18...	1542	15.0	11.4	6.5	30	7.8
18...	1544	17.5	11.5	6.5	31	7.6
18...	1546	20.0	11.5	6.5	32	7.2
18...	1548	22.5	11.6	6.5	32	7.2
18...	1550	25.0	11.6	6.5	34	6.3
18...	1552	27.5	11.6	6.5	35	5.3

SOUTHWEST ALASKA

602943154002001 -- LACHBUNA LAKE NEAR PORT ALSWORTH

Date	Time	Sam- pling depth, meters (00098)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)
JUN						
09...	1030	.00	12.4	6.7	69	7.2
09...	1032	5.0	12.4	7.0	69	6.8
JUL						
14...	0950	.00	9.5	7.4	60	14.6
14...	0952	5.0	9.9	7.3	57	12.1
14...	0954	10.0	10.0	7.3	57	10.9
14...	0956	15.0	10.2	7.3	60	9.8
14...	0958	20.0	10.6	7.2	68	8.0
14...	1000	25.0	10.8	7.2	73	6.7
14...	1002	30.0	10.7	7.1	76	6.0
14...	1004	35.0	10.4	7.1	77	5.8
AUG						
24...	0932	.00	9.7	7.5	57	12.6
24...	0934	2.5	9.6	7.3	56	12.2
24...	0936	5.0	9.8	7.3	55	11.7
24...	0938	7.5	9.8	7.3	56	11.4
24...	0940	10.0	9.8	7.3	56	11.1
24...	0942	12.5	9.9	7.2	56	10.7
24...	0944	15.0	9.9	7.2	57	10.5
24...	0946	17.5	9.8	7.2	61	10.2
24...	0948	20.0	9.8	7.2	62	9.9
24...	0950	22.5	9.9	7.2	65	9.3
24...	0952	25.0	9.9	7.2	69	8.5
24...	0954	27.5	9.9	7.2	75	7.4
24...	0956	30.0	9.9	7.2	76	7.0
24...	0958	35.0	9.7	7.1	80	6.2
24...	1000	38.0	9.1	7.1	82	6.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTHWEST ALASKA—Continued

602943154002001 -- LACHBUNA LAKE NEAR PORT ALSWORTH—Continued

Date	Time	Medium code	Sample type	Sam-pling depth, meters (00098)	Sam-pling method, code (82398)	Trans-parency Secchi disc, meters (00078)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat un f uS/cm 25 degC (00095)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)
JUN 09...	1000	9	9	20.0	50	--	--	--	34	11.5	1.27	.42	1.75
JUL 14...	0930	9	9	15.0	50	.90	7.3	60	27	9.14	1.03	.41	1.45
AUG 24...	1015	9	9	10.0	50	1.00	7.3	56	25	8.67	.888	.36	1.25

Date	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., mg/L (00453)	Carbon-ate, wat flt incrm. titr., mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
JUN 09...	23	30	.0	.51	<.2	6.21	11.3	48	51	<.10	<.10	<.010	.080
JUL 14...	20	26	.0	.45	<.2	5.32	9.0	40	46	<.10	E.08	<.010	.048
AUG 24...	18	23	.0	.30	<.2	5.15	7.5	35	34	<.10	<.10	<.010	.028

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd, mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Pheo-phytin a, phyto-plank- ton, ug/L (62360)	Chloro-phyll a phyto-plank- ton, fluoro, ug/L (70953)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)	Sampler type, code (84164)
JUN 09...	.002	<.006	<.004	.006	1.6	.2	.3	7	5.4	100
JUL 14...	<.002	<.006	<.004	.006	.5	.1	<.1	<6	E.7	100
AUG 24...	E.001	<.006	<.004	.007	.4	<.1	<.1	17	3.0	100

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTHWEST ALASKA—Continued

601758154193201 -- KIJIK LAKE NEAR PORT ALSWORTH

Date	Time	Sam- pling depth, meters (00098)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat un- f uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)
JUN							
09...	1230	.00	11.3	100	7.5	52	9.4
09...	1232	5.0	11.5	98	7.2	52	7.9
09...	1234	10.0	11.5	96	7.2	51	7.1
09...	1236	15.0	11.6	95	7.2	51	6.1
09...	1238	20.0	11.7	93	7.2	51	5.1
09...	1240	25.0	11.4	89	7.1	52	4.4
09...	1242	30.0	11.2	87	7.1	52	4.1
09...	1244	35.0	10.9	84	7.1	52	4.0
09...	1246	40.0	83.0	84	7.0	52	3.9
09...	1248	45.0	10.9	84	7.0	52	3.9
09...	1250	50.0	10.8	83	7.0	52	3.8
09...	1252	55.0	10.7	82	6.9	52	3.8
JUL							
14...	1540	.00	10.2	110	7.1	56	18.4
14...	1542	5.0	10.9	111	7.1	58	15.5
14...	1544	10.0	11.9	112	7.0	58	12.0
14...	1546	15.0	12.8	114	7.1	58	9.5
14...	1548	20.0	13.4	112	7.2	57	6.9
14...	1550	25.0	13.0	103	7.1	57	4.9
14...	1552	30.0	12.2	95	7.0	57	4.2
14...	1554	35.0	11.8	91	6.9	58	4.0
14...	1556	40.0	11.8	91	6.8	58	4.0
14...	1558	45.0	11.6	90	6.7	58	4.0
14...	1600	50.0	11.5	89	6.7	58	3.9
14...	1602	55.0	11.3	87	6.7	58	3.9
14...	1604	60.0	11.2	86	6.6	58	3.8
14...	1606	65.0	11.1	85	6.6	58	3.8
AUG							
24...	1507	.00	9.5	--	7.1	63	17.0
24...	1509	5.0	9.3	--	7.2	63	16.9
24...	1511	10.0	11.2	--	7.3	62	14.0
24...	1513	15.0	12.3	--	7.6	62	10.0
24...	1515	20.0	12.8	--	7.6	61	6.2
24...	1517	25.0	12.4	--	7.5	61	5.2
24...	1519	30.0	11.3	--	7.3	62	4.6
24...	1521	35.0	10.9	--	7.2	62	4.3
24...	1523	40.0	10.6	--	7.1	62	4.0
24...	1525	45.0	10.4	--	7.0	63	3.9
24...	1527	50.0	10.3	--	7.0	63	3.9
24...	1529	55.0	10.2	--	7.0	63	3.9
24...	1531	60.0	10.1	--	6.9	63	3.9
24...	1533	65.0	10.0	--	6.9	63	3.8

Date	Time	Medium code	Sample type	Sam- pling depth, meters (00098)	Sam- pling method, code (82398)	Trans- parency Secchi disc, meters (00078)	Hard- ness, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat tit inc tit field, mg/L as CaCO3 (39086)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)
JUN													
09...	1200	9	9	25.0	50	15.0	25	8.66	.847	.50	1.54	18	23
JUL													
14...	1530	9	9	20.0	50	14.0	25	8.57	.845	.49	1.49	19	25
AUG													
24...	1555	9	9	20.0	50	11.0	27	9.37	.883	.37	1.42	19	25

Date	Carbon- ate, wat flt incrm. titr., field, mg/L (00452)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)
JUN													
09...	.0	.62	<.2	6.88	5.8	38	41	<.10	<.10	<.010	.443	.002	<.006
JUL													
14...	.0	.61	<.2	6.46	7.5	40	45	<.10	E.09	<.010	.416	E.001	<.006
AUG													
24...	.0	.65	<.2	6.66	7.7	40	47	<.10	E.06	E.006	.421	.002	<.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SOUTHWEST ALASKA—Continued

601758154193201 -- KIJIK LAKE NEAR PORT ALSWORTH—Continued

Date	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Sampler type, code (84164)
JUN 09...	<.004	.006	1.5	1.0	1.6	<6	<.8	100
JUL 14...	<.004	E.002	.6	.7	.5	<6	<.8	100
AUG 24...	<.004	E.002	.6	.4	.8	<6	<.8	100

NORTHWEST ALASKA

644647165382100 -- UNNAMED POND NEAR DURRANT CREEK LOWER STEWART RIVER NEAR NOME

Date	Time	Medium code	Sample type	Sampling method, code (82398)	Sampler type, code (84164)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Turbidity, wat unfltrd, lab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)
JUN 22...	1320	9	9	40	4080	10	5.9	11.3	15.0	<2	749	10.2	103
JUL 29...	1010	9	9	40	4080	13	5.9	--	17.0	<2	749	9.5	100
JUL 29...	1020	H	9	70	--	--	--	--	--	--	--	--	--

Date	E coli, m-TEC MF, water, col/100 mL (31633)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Carbonate, wat flt incrm. titr., mg/L (00452)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Alkalinity, wat flt fxd end field, mg/L as CaCO3 (39036)	Sulfate, water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
JUN 22...	<1	2	.330	.192	1.10	.29	3	.0	2	3.4	.42	1.27	<.17
JUL 29...	E5	2	.379	.230	1.40	.32	3	.0	3	3.7	.52	1.54	<.17
JUL 29...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Silica, water, fltrd, mg/L (00955)	Residue on water, evap. at 180degC, wat flt mg/L (70300)	Residue of constituents, mg/L (70301)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic, water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)
JUN 22...	.86	14	6	23.2	<.2	E.2	1.4	<.06	<.04	<.8	.032	E.4	77.7
JUL 29...	1.03	17	7	20.4	<.2	.3	1.4	<.06	<.04	<.8	.030	.4	71.9
JUL 29...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury, water, fltrd, ug/L (71890)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural, water, fltrd, ug/L (22703)	Cyanide, water, fltrd, mg/L (00723)	Aluminum, bed sed <62.5um wet svd fld, tot percent (34790)	Antimony, bed sed <62.5um wet svd fld, tot percent (34795)	Arsenic, bed sed <62.5um wet svd total, ug/g (34800)	Barium, bed sed <62.5um wet svd total, ug/g (34805)
JUN 22...	<.08	1.6	<.020	<.4	.18	<.20	.7	E.02	<.01	--	--	--	--
JUL 29...	<.08	1.3	<.020	<.4	.19	<.20	1.4	<.04	<.01	--	--	--	--
JUL 29...	--	--	--	--	--	--	--	--	--	8	1.1	15	990

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

NORTHWEST ALASKA—Continued

644647165382100 -- UNNAMED POND NEAR DURRANT CREEK LOWER STEWART RIVER NEAR NOME—Continued

Date	Beryllium, bed sed <62.5um wet svd fld,tot ug/g (34810)	Bismuth bed sed <177um wet svd field, total, ug/g (34816)	Cadmium bed sed <62.5um wet svd field, total, ug/g (34825)	Chromium, bed sed <62.5um wet svd field, fld,tot ug/g (34840)	Copper, bed sed <62.5um wet svd field, total, ug/g (34850)	Calcium bed sed <62.5um wet svd field, total, percent (34830)	Cobalt, bed sed <62.5um wet svd field, total, ug/g (34845)	Cerium, bed sed <62.5um wet svd field, total, ug/g (34835)	Europium, bed sed <62.5um wet svd field, total, ug/g (34855)	Gold, bed sed <62.5um wet svd field, total, ug/g (34870)	Gallium bed sed <62.5um wet svd field, total, ug/g (34860)	Holmium bed sed <62.5um wet svd field, total, ug/g (34875)	Iron, bed sed <62.5um wet svd field, total, percent (34880)
JUN 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	3.2	<1	.31	78	27	.9	12	92	1.6	<1	20	1	3.3
Date	Lanthanum, bed sed <62.5um wet svd fld,tot ug/g (34885)	Lead, bed sed <62.5um wet svd field, total, ug/g (34890)	Lithium bed sed <62.5um wet svd field, total, ug/g (34895)	Magnesium, bed sed <62.5um wet svd field, fld,tot percent (34900)	Manganese, bed sed <62.5um wet svd field, fld,tot ug/g (34905)	Mercury bed sed <62.5um wet svd field, total, ug/g (34910)	Molybdenum, bed sed <62.5um wet svd field, fld,tot ug/g (34915)	Neodymium, bed sed <62.5um wet svd field, fld,tot ug/g (34920)	Nickel, bed sed <62.5um wet svd field, total, ug/g (34925)	Niobium bed sed <62.5um wet svd field, total, ug/g (34930)	Phosphorus, bed sed <62.5um wet svd field, fld,tot percent (34935)	Scandium, bed sed <62.5um wet svd field, fld,tot ug/g (34945)	Selenium, bed sed <62.5um wet svd field, fld,tot ug/g (34950)
JUN 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	48	20	43	1.3	430	.03	1.7	44	34	17	.076	18	.72
Date	Silver, bed sed <62.5um wet svd field, total, ug/g (34955)	Sodium, bed sed <62.5um wet svd field, total, percent (34960)	Strontium, bed sed <62.5um wet svd field, fld,tot ug/g (34965)	Sulfur, bed sed <62.5um wet svd field, total, percent (34970)	Tantalum, bed sed <62.5um wet svd field, fld,tot ug/g (34975)	Thorium bed sed <62.5um wet svd field, total, ug/g (34980)	Tin, bed sed <62.5um wet svd field, total, ug/g (34985)	Titanium, bed sed <62.5um wet svd field, rec, percent (49274)	Uranium bed sed <62.5um wet svd field, total, ug/g (35000)	Vanadium, bed sed <62.5um wet svd field, fld,tot ug/g (35005)	Yttrium bed sed <62.5um wet svd field, total, ug/g (35010)	Ytterbium, bed sed <62.5um wet svd field, fld,tot ug/g (35015)	Zinc, bed sed <62.5um wet svd field, total, ug/g (35020)
JUN 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	.51	1.3	120	.06	<1	19	4.7	.45	6.3	120	25	2.6	110
Date	Organic carbon, bed sed <62.5um wsv nat field percent (49266)	Inorg. carbon, bed sed <62.5um wsv nat field percent (49269)	Total carbon, sedimnt <62.5um wsv nat field percent (49267)	Total carbon, bed sed <2 mm, wsv nat field g/kg (49272)	Inorg. carbon, bed sed <2 mm, wsv nat field g/kg (49270)	Organic carbon, bed sed <2 mm, wsv nat field g/kg (49271)							
JUN 22...	--	--	--	--	--	--							
JUL 29...	--	--	--	--	--	--							
29...	3.22	.01	3.23	44	<.2	44							

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

NORTHWEST ALASKA—Continued

644751165310400 -- UNNAMED POND NEAR JOSIE CREEK MIDDLE STEWART RIVER NEAR NOME—Continued

Date	Time	Medium code	Sample type	Sam-pling method, code (82398)	Sampler type, code (84164)	Specif. conduc-tance, wat un f, uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Turbid-ity, wat un f, lab, Hach 2100AN NTU (99872)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	
JUN	23...	1110	9	9	40	4080	180	7.0	9.5	4.0	<2	745	13.0	101
JUL	29...	1210	9	9	40	4080	173	6.5	18.5	6.0	<2	749	13.5	110
JUL	29...	1220	H	9	70	--	--	--	--	--	--	--	--	--
Date	E coli, m-TEC MF, water, col/ 100 mL (31633)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potas-sium, water, fltrd, mg/L (00935)	Bicar-bonate, wat flt incrm. titr., mg/L (00453)	Carbon-ate, wat flt incrm. titr., mg/L (00452)	Alka-linity, wat tit field, mg/L as CaCO3 (39086)	Alka-linity, wat flt fxd end field, mg/L as CaCO3 (39036)	Sulfate water, fltrd, mg/L (00945)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	
JUN	23...	<1	86	25.7	5.27	1.54	.27	49	.0	40	40	41.9	1.79	<.17
JUL	29...	E4	66	19.9	3.85	1.57	.19	40	.0	32	34	32.8	1.79	<.17
JUL	29...	--	--	--	--	--	--	--	--	--	--	--	--	--
Date	Silica, water, fltrd, mg/L (00955)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Cobalt fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	
JUN	23...	5.69	118	106	E.8	<.2	1.6	13.0	<.06	E.03	<.8	.133	.5	38.7
JUL	29...	6.14	99	86	E1.2	<.2	2.2	12.7	<.06	E.03	<.8	.074	.4	16.6
JUL	29...	--	--	--	--	--	--	--	--	--	--	--	--	--
Date	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Molyb-denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Cyanide water, fltrd, mg/L (00723)	Alum-inum, bed sed <62.5um wet svd field, tot percent (34790)	Anti-mony, bed sed <62.5um wet svd fld, tot ug/g (34795)	Arsenic bed sed <62.5um wet svd field, total, ug/g (34800)	Barium, bed sed <62.5um wet svd field, total, ug/g (34805)	
JUN	23...	<.08	3.4	<.020	.4	.99	<.20	1.2	.19	<.01	--	--	--	--
JUL	29...	<.08	1.0	<.020	E.3	1.01	<.20	.7	.06	<.01	--	--	--	--
JUL	29...	--	--	--	--	--	--	--	--	--	7.6	1.9	75	1200
Date	Beryll-ium, bed sed <62.5um wet svd fld, tot ug/g (34810)	Bismuth bed sed <177um wet svd field, total, ug/g (34816)	Cadmium bed sed <62.5um wet svd field, total, ug/g (34825)	Chrom-ium, bed sed <62.5um wet svd fld, tot ug/g (34840)	Copper, bed sed <62.5um wet svd field, total, ug/g (34850)	Calcium bed sed <62.5um wet svd field, total, percent (34830)	Cobalt, bed sed <62.5um wet svd field, total, ug/g (34845)	Cerium, bed sed <62.5um wet svd field, total, ug/g (34835)	Europ-ium, bed sed <62.5um wet svd field, total, fld, tot ug/g (34855)	Gold, bed sed <62.5um wet svd field, total, ug/g (34870)	Gallium bed sed <62.5um wet svd field, total, ug/g (34860)	Holmium bed sed <62.5um wet svd field, total, ug/g (34875)	Iron, bed sed <62.5um wet svd field, total, percent (34880)	
JUN	23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL	29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL	29...	2.4	<1	.58	100	35	.66	8.7	69	1.5	<1	19	<1	3.6

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

NORTHWEST ALASKA—Continued

644853165251800 -- UNNAMED POND NEAR SILVER CREEK UPPER STEWART RIVER NEAR NOME—Continued

Date	Silica, water, fltrd, mg/L (00955)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Alum- inum, water, fltrd, ug/L (01106)	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chrom- ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)
JUN 22...	1.04	28	16	33.7	<.2	2.6	5.4	<.06	<.04	<.8	.127	2.3	177
JUL 29...	.77	33	19	35.3	<.2	4.2	4.7	<.06	<.04	<.8	.097	1.3	306
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
Date	Lead, water, fltrd, ug/L (01049)	Mangan- ese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Cyanide water, fltrd, mg/L (00723)	Alum- inum, bed sed <62.5um wet svd fld,tot percent (34790)	Anti- mony, bed sed <62.5um wet svd fld,tot ug/g (34795)	Arsenic bed sed <62.5um wet svd field, total, ug/g (34800)	Barium, bed sed <62.5um wet svd field, total, ug/g (34805)
JUN 22...	.09	10.9	E.010	<.4	1.22	<.20	1.9	E.04	<.01	--	--	--	--
JUL 29...	E.06	9.6	E.010	<.4	.92	<.20	.7	E.02	<.01	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	8.6	1.1	210	880
Date	Beryll- ium, bed sed <62.5um wet svd fld,tot ug/g (34810)	Bismuth bed sed <177um wet svd field, total, ug/g (34816)	Cadmium bed sed <62.5um wet svd field, total, ug/g (34825)	Chrom- ium, bed sed <62.5um wet svd fld,tot ug/g (34840)	Copper, bed sed <62.5um wet svd field, total, ug/g (34850)	Calcium bed sed <62.5um wet svd field, total, percent (34830)	Cobalt, bed sed <62.5um wet svd field, total, ug/g (34845)	Cerium, bed sed <62.5um wet svd field, total, ug/g (34835)	Europ- ium, bed sed <62.5um wet svd fld,tot ug/g (34855)	Gold, bed sed <62.5um wet svd field, total, ug/g (34870)	Gallium bed sed <62.5um wet svd field, total, ug/g (34860)	Holmium bed sed <62.5um wet svd field, total, ug/g (34875)	Iron, bed sed <62.5um wet svd field, total, percent (34880)
JUN 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	2.5	<1	.74	60	39	1.2	16	73	2.1	<1	20	1.4	4
Date	Lantha- num, bed sed <62.5um wet svd fld,tot ug/g (34885)	Lead, bed sed <62.5um wet svd field, total, ug/g (34890)	Lithium bed sed <62.5um wet svd field, total, ug/g (34895)	Magnes- ium, bed sed <62.5um wet svd fld,tot percent (34900)	Mangan- ese, bed sed <62.5um wet svd fld,tot ug/g (34905)	Mercury bed sed <62.5um wet svd field, total, ug/g (34910)	Molyb- denum, bed sed <62.5um wet svd fld,tot ug/g (34915)	Neodym- ium, bed sed <62.5um wet svd fld,tot ug/g (34920)	Nickel, bed sed <62.5um wet svd field, total, ug/g (34925)	Niobium bed sed <62.5um wet svd field, total, ug/g (34930)	Phos- phorus, bed sed <62.5um wet svd field, total, percent (34935)	Scand- ium, bed sed <62.5um wet svd fld,tot ug/g (34945)	Selen- ium, bed sed <62.5um wet svd fld,tot ug/g (34950)
JUN 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	37	16	32	1.2	640	.03	3.4	40	46	15	.13	20	.89
Date	Silver, bed sed <62.5um wet svd field, total, ug/g (34955)	Sodium, bed sed <62.5um wet svd field, total, percent (34960)	Stront- ium, bed sed <62.5um wet svd fld,tot ug/g (34965)	Sulfur, bed sed <62.5um wet svd field, total, percent (34970)	Tant- alum, bed sed <62.5um wet svd fld,tot ug/g (34975)	Thorium bed sed <62.5um wet svd field, total, ug/g (34980)	Tin, bed sed <62.5um wet svd field, total, ug/g (34985)	Titan- ium, bed sed <62.5um wet svd rec, percent (49274)	Uranium bed sed <62.5um wet svd field, total, ug/g (35000)	Vanad- ium, bed sed <62.5um wet svd fld,tot ug/g (35005)	Yttrium bed sed <62.5um wet svd field, total, ug/g (35010)	Ytterb- ium, bed sed <62.5um wet svd fld,tot ug/g (35015)	Zinc, bed sed <62.5um wet svd field, total, ug/g (35020)
JUN 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	.54	1.5	150	.16	<1	12	3.3	.48	5.1	110	35	3.8	140

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

NORTHWEST ALASKA—Continued

644853165251800 -- UNNAMED POND NEAR SILVER CREEK UPPER STEWART RIVER NEAR NOME—Continued

Date	Organic carbon, bed sed <62.5um wsv nat field percent (49266)	Inorg. carbon, bed sed <62.5um wsv nat field percent (49269)	Total carbon, sedimnt <62.5um wsv nat field percent (49267)	Total carbon, bed sed <2 mm, wsv nat field g/Kg (49272)	Inorg. carbon, bed sed <2 mm, wsv nat field g/Kg (49270)	Organic carbon, bed sed <2 mm, wsv nat field g/Kg (49271)
JUN 22...	--	--	--	--	--	--
JUL 29...	--	--	--	--	--	--
JUL 29...	4.38	.02	4.4	60	<.2	60

ARCTIC ALASKA

704318153260200 -- UNNAMED LAKE 6.5 MILE SOUTH OF VABM QUAD NEAR LONELY

Date	Time	Sam-pling depth, meters (00098)	Specif. conduc-tance, wat unf 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, water, deg C (00010)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, percent of sat-uration (00301)
AUG 10...	1508	.50	286	8.2	11.8	765	98
AUG 10...	1510	1.0	286	8.2	11.8	765	98
AUG 10...	1512	1.5	286	8.2	11.8	765	97
AUG 10...	1514	2.0	286	8.2	11.8	765	97

Date	Time	Medium code	Sam-ple type	Sam-pling method, code (82398)	Sam-pler type, code (84164)	Temper-ature, water, deg C (00010)	Trans-parency, Secchi disc, meters (00078)	Baro-metric pres-sure, mm Hg (00025)	Sodium, water, mg/L (00930)	Chlor-ide, water, mg/L (00940)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Total nitro-gen, wat flt by anal ysis, mg/L (62854)
AUG 10...	1530	9	7	55	100	12.0	.90	765	21.5	45.1	<.002	<.016	.18

Date	Time	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Ammonia water, fltrd, mg/L as N (00608)	Phos-phorus, water, unfltrd mg/L (00665)	Phos-phorus, water, fltrd, mg/L (00666)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Chloro-phyll a phyto-plank-ton, ug/L (70953)	Pheo-phytin a, phyto-plank-ton, ug/L (62360)
AUG 10...		.18	<.010	.014	.004	<.006	.8	.6

704338153183300 -- UNNAMED LAKE 8 MILE SOUTH OF VABM FLORA NEAR LONELY

Date	Time	Sam-pling depth, meters (00098)	Specif. conduc-tance, wat unf 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, water, deg C (00010)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, percent of sat-uration (00301)
AUG 09...	1712	.50	270	7.9	12.9	763	96
AUG 09...	1714	1.0	270	7.9	12.9	763	96
AUG 09...	1716	1.5	270	7.9	12.9	763	96
AUG 09...	1718	2.0	270	7.9	12.9	763	95
AUG 09...	1720	2.5	270	7.9	12.9	763	95

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

ARCTIC ALASKA—Continued

704338153183300 -- UNNAMED LAKE 8 MILE SOUTH OF VABM FLORA NEAR LONELY—Continued

Date	Time	Medium code	Sample type	Sam-pling method, code (82398)	Sampler type, code (84164)	Temper-ature, water, deg C (00010)	Trans-parency Secchi disc, meters (00078)	Baro-metric pres-sure, mm Hg (00025)	Sodium, water, fltrd, mg/L (00930)	Chlor-ide, water, fltrd, mg/L (00940)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Total nitro-gen, wat flt by anal ysis, mg/L (62854)
AUG 09...	1740	9	9	55	100	13.0	1.10	763	23.8	54.0	.002	.016	.34
Date	Time	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Ammonia water, fltrd, mg/L as N (00608)	Phos-phorus, water, unfltrd, mg/L (00665)	Phos-phorus, water, fltrd, mg/L (00666)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Chloro-phyll a phyto-plank-ton, fluoro, ug/L (70953)	Pheo-phytin a, phyto-plank-ton, ug/L (62360)					
AUG 09...		.44	.037	.018	.006	<.006	1.8	1.4					

704437153170700 -- UNNAMED LAKE 7 MI S OF VABM FLORA NEAR LONELY

Date	Time	Sam-pling depth, meters (00098)	Specif. conduc-tance, wat unf 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, water, deg C (00010)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, percent of sat-uration (00301)	
AUG 09...	1132	.50	156	6.9	11.4	761	11.0	101
AUG 09...	1134	1.0	156	7.1	11.4	761	10.7	98
AUG 09...	1136	1.5	156	7.3	11.4	761	10.6	97
AUG 09...	1138	2.0	156	7.3	11.4	761	10.5	96

Date	Time	Medium code	Sample type	Sam-pling method, code (82398)	Sampler type, code (84164)	Temper-ature, water, deg C (00010)	Trans-parency Secchi disc, meters (00078)	Baro-metric pres-sure, mm Hg (00025)	Sodium, water, fltrd, mg/L (00930)	Chlor-ide, water, fltrd, mg/L (00940)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Total nitro-gen, wat flt by anal ysis, mg/L (62854)
AUG 09...	1210	9	9	55	100	11.5	.90	761	15.8	29.9	.002	.026	.46
Date	Time	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Ammonia water, fltrd, mg/L as N (00608)	Phos-phorus, water, unfltrd, mg/L (00665)	Phos-phorus, water, fltrd, mg/L (00666)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Chloro-phyll a phyto-plank-ton, fluoro, ug/L (70953)	Pheo-phytin a, phyto-plank-ton, ug/L (62360)					
AUG 09...		.56	.021	.022	.009	<.006	7.0	4.5					

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

ARCTIC ALASKA—Continued

704543153204300 -- UNNAMED LAKE 6.5 MILE SOUTH OF VABM FLORA NEAR LONELY

Date	Time	Sam- pling depth, meters (00098)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, water, deg C (00010)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
AUG								
10...	1048	.50	215	7.8	11.8	765	10.1	93
10...	1050	1.0	215	7.8	11.8	765	10.1	93
10...	1052	1.5	215	7.8	11.8	765	10.1	93
10...	1054	2.0	215	7.8	11.8	765	10.1	93

Date	Time	Medium code	Sample type	Sam- pling method, code (82398)	Sampler type, code (84164)	Temper- ature, water, deg C (00010)	Trans- parency Secchi disc, meters (00078)	Baro- metric pres- sure, mm Hg (00025)	Sodium, water, fltrd, mg/L (00930)	Chlor- ide, water, fltrd, mg/L (00940)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Total nitro- gen, wat flt by anal ysis, mg/L (62854)
AUG													
10...	1120	9	9	55	100	12.0	.90	765	16.5	34.2	<.002	<.016	.27

Date	Time	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	Ammonia water, fltrd, mg/L as N (00608)	Phos- phorus, water, unfltrd mg/L (00665)	Phos- phorus, water, fltrd, mg/L (00666)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)	Pheo- phytin a, phyto- plank- ton, ug/L (62360)
AUG								
10...		.37	<.010	.022	.006	<.006	1.6	1.1

704625152462200 -- UNNAMED LAKE 7.5 MILE SOUTHEAST OF VABM APRIL NEAR LONELY

Date	Time	Sam- pling depth, meters (00098)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper- ature, water, deg C (00010)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
AUG								
12...	1429	.50	359	7.8	12.0	759	10.7	100
12...	1431	1.0	359	7.9	12.0	759	10.4	97
12...	1433	1.5	359	7.9	12.0	759	10.3	96

Date	Time	Medium code	Sample type	Sam- pling method, code (82398)	Sampler type, code (84164)	Temper- ature, water, deg C (00010)	Trans- parency Secchi disc, meters (00078)	Baro- metric pres- sure, mm Hg (00025)	Sodium, water, fltrd, mg/L (00930)	Chlor- ide, water, fltrd, mg/L (00940)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Total nitro- gen, wat flt by anal ysis, mg/L (62854)
AUG													
12...	1450	9	9	55	100	12.0	.76	759	36.3	85.7	<.002	<.016	.17

Date	Time	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	Ammonia water, fltrd, mg/L as N (00608)	Phos- phorus, water, unfltrd mg/L (00665)	Phos- phorus, water, fltrd, mg/L (00666)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)	Pheo- phytin a, phyto- plank- ton, ug/L (62360)
AUG								
12...		.17	E.006	.016	.005	<.006	.5	.3

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

ARCTIC ALASKA—Continued

704727153091400 -- ISLAND LAKE 5.5 MILE SOUTHWEST OF VABM MARCH NEAR LONELY

Date	Time	Sam- pling depth, meters (00098)	Specif. conduc- tance, wat unfiltered, uS/cm 25 degC (00095)	pH, water, unfiltered, std units (00400)	Temper- ature, water, deg C (00010)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
AUG								
11...	1257	.50	155	7.7	12.0	764	11.7	108
11...	1259	1.0	155	7.7	12.0	764	10.9	101
11...	1301	1.5	155	7.7	12.0	764	10.7	99

Date	Time	Medium code	Sample type	Sam- pling method, code (82398)	Sampler type, code (84164)	Temper- ature, water, deg C (00010)	Trans- parency Secchi disc, meters (00078)	Baro- metric pres- sure, mm Hg (00025)	Sodium, water, filtrd, mg/L (00930)	Chlor- ide, water, filtrd, mg/L (00940)	Nitrite water, filtrd, mg/L as N (00613)	Nitrite + nitrate water filtrd, mg/L as N (00631)	Total nitro- gen, wat flt by anal ysis, mg/L (62854)
AUG													
11...	1320	9	9	55	100	12.0	.20	764	12.8	29.1	E.001	<.016	.24

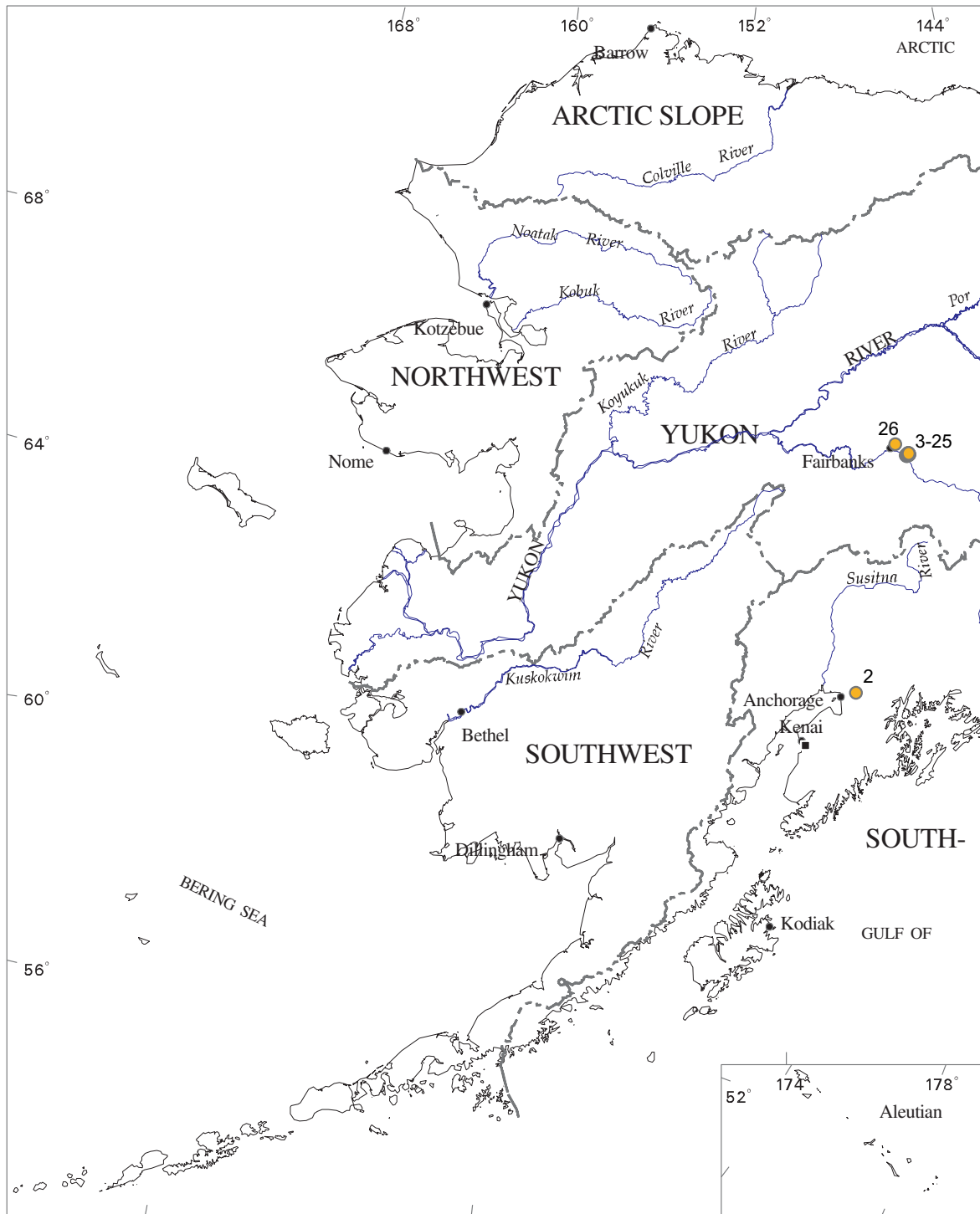
Date	Total nitro- gen, wat unfiltered, by anal ysis, mg/L (62855)	Ammonia water, filtrd, mg/L as N (00608)	Phos- phorus, water, unfiltered, mg/L (00665)	Phos- phorus, water, filtrd, mg/L (00666)	Ortho- phos- phate, water, filtrd, mg/L as P (00671)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)	Pheo- phytin a, phyto- plank- ton, ug/L (62360)
AUG							
11...	.49	E.006	.101	.006	<.006	5.0	2.7

704819152572000 -- UNNAMED LAKE 3.5 MILE SOUTH OF VABM APRIL NEAR LONELY

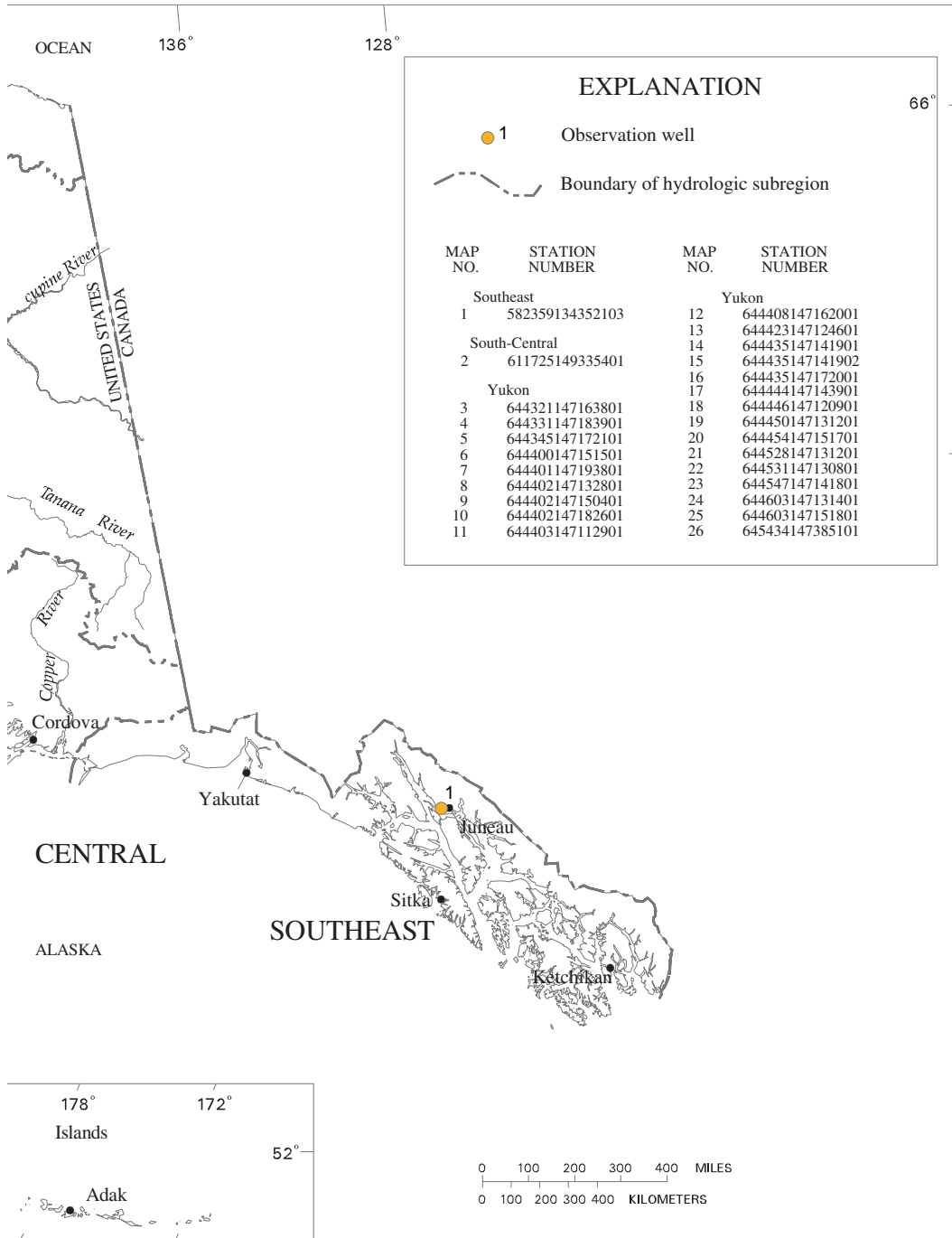
Date	Time	Sam- pling depth, meters (00098)	Specif. conduc- tance, wat unfiltered, uS/cm 25 degC (00095)	pH, water, unfiltered, std units (00400)	Temper- ature, water, deg C (00010)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
AUG								
12...	1330	.15	143	6.5	11.5	760	11.2	103
12...	1332	.30	143	6.7	11.5	760	10.6	97
12...	1334	.46	143	6.9	11.5	760	10.4	96
12...	1336	.61	143	6.9	11.5	760	10.4	96
12...	1338	.76	143	7.1	11.5	760	10.3	95

Date	Time	Medium code	Sample type	Sam- pling method, code (82398)	Sampler type, code (84164)	Temper- ature, water, deg C (00010)	Trans- parency Secchi disc, meters (00078)	Baro- metric pres- sure, mm Hg (00025)	Sodium, water, filtrd, mg/L (00930)	Chlor- ide, water, filtrd, mg/L (00940)	Nitrite water, filtrd, mg/L as N (00613)	Nitrite + nitrate water filtrd, mg/L as N (00631)	Total nitro- gen, wat flt by anal ysis, mg/L (62854)
AUG													
12...	1400	9	9	55	100	11.5	.05	760	12.7	23.7	E.001	.125	.45

Date	Total nitro- gen, wat unfiltered, by anal ysis, mg/L (62855)	Ammonia water, filtrd, mg/L as N (00608)	Phos- phorus, water, unfiltered, mg/L (00665)	Phos- phorus, water, filtrd, mg/L (00666)	Ortho- phos- phate, water, filtrd, mg/L as P (00671)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)	Pheo- phytin a, phyto- plank- ton, ug/L (62360)
AUG							
12...	1.63	E.008	.41	.009	<.006	6.0	4.9



Map 3. Locations of ground-water wells



GROUND-WATER LEVEL DATA

SOUTHEAST ALASKA

JUNEAU

582359134352103. Local number, CD04006618CBCA3019 85177

LOCATION.--Lat 58°23'59", Long 134°35'21", SW¹/₄ NW¹/₄ SW¹/₄ sec.18, T. 40 S., R. 66 E. (Juneau B-2 NW quad), Hydrologic Unit 19010301, Well is located in steel gage house by sewage treatment plant on Riverbend Road, 1/4 mile off of the Mendenhall Loop Road, Juneau. Owner: Harlan Olsen.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 6-in. PVC casing, depth 40 ft, screen opening from 30 to 40 ft.

INSTRUMENTATION.--Intermittent measurements with chalked steel tape by USGS, November 1983 to current year; continuous strip-chart recorder, November 1983 to August 1984; Digital recorder, August 1984 to April 1997; submersible pressure transducer/electric data logger, August 1997 to September 1998; electronic data logger and encoder, September 1998 to current year.

DATUM.--Elevation of land-surface datum is 50.53 ft above sea level (determined by levels survey). Measuring point: Top of casing 0.77 ft above land-surface datum.

REMARKS.--Well drilled November 3, 1983 by USGS, designated as Mendenhall well. Well sampled for water quality, May 17, 1984.

PERIOD OF RECORD.--November 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 4.89 ft below land-surface datum, September 25, 1990; lowest measured, 13.54 ft below land-surface datum, February 2, 1997.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 7.16 ft. below land-surface datum, September 24; lowest, 11.43 ft below land-surface datum, July 21.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	10.12	9.46	9.53	9.54	9.93	9.96	---	---	10.19	11.08
2	---	---	9.58	9.65	9.69	9.67	8.87	9.99	---	---	10.27	11.21
3	---	---	9.51	9.79	9.84	9.70	8.03	10.01	---	---	10.43	10.73
4	---	---	9.40	9.94	10.02	9.92	7.99	10.06	---	---	10.48	10.41
5	---	9.56	9.45	10.06	9.89	9.98	7.99	10.09	---	---	10.49	10.25
6	---	9.65	9.64	10.08	9.71	---	8.12	10.12	---	---	10.51	9.96
7	---	9.79	9.91	10.12	9.71	---	8.22	10.17	---	---	10.55	9.89
8	---	9.94	10.04	10.23	9.13	9.97	8.32	---	---	11.13	10.64	9.91
9	---	9.85	10.20	10.48	8.26	9.89	8.33	---	---	11.13	10.67	10.05
10	---	9.79	10.22	10.60	7.92	9.60	8.48	---	---	11.13	10.66	10.24
11	---	9.52	10.27	10.81	7.86	9.42	8.58	---	---	11.18	10.59	10.29
12	---	7.84	10.37	10.79	7.70	9.43	8.72	---	---	11.26	10.59	10.57
13	---	7.59	10.59	10.65	7.70	9.46	8.91	---	---	11.27	10.67	9.93
14	---	7.58	10.66	9.40	7.95	9.47	9.04	---	---	11.26	10.72	9.68
15	---	7.57	10.73	9.13	8.09	9.59	9.24	---	---	11.23	10.65	9.65
16	---	7.61	10.81	9.13	8.28	9.67	9.38	---	---	11.22	10.62	9.67
17	---	7.85	10.60	9.13	8.47	9.82	9.52	---	---	11.23	10.63	9.78
18	---	8.05	10.12	8.76	8.71	9.80	9.69	---	---	11.26	10.66	10.01
19	---	8.27	9.45	8.66	8.87	9.91	9.76	---	---	11.30	10.68	10.15
20	---	8.58	9.25	7.95	8.51	10.09	9.83	---	---	11.33	10.75	9.75
21	---	8.81	8.80	7.61	8.27	---	10.02	---	---	11.43	10.79	8.63
22	---	8.91	8.14	7.45	8.06	---	10.12	---	---	11.34	10.85	8.25
23	---	9.12	7.77	7.44	8.06	---	10.15	---	---	11.28	10.85	7.44
24	---	9.24	7.74	7.57	8.23	---	10.21	---	---	11.19	10.93	7.16
25	---	9.36	7.84	7.77	8.38	10.54	10.25	---	---	11.18	11.02	7.20
26	---	9.62	8.10	8.02	8.59	10.07	9.92	---	---	11.21	11.25	7.34
27	---	9.82	8.30	8.23	8.87	10.04	9.88	---	---	11.20	11.23	7.43
28	---	9.89	8.51	8.37	9.14	9.94	9.88	---	---	10.62	10.98	7.59
29	---	9.94	8.72	8.64	9.33	9.72	9.88	---	---	10.14	10.86	7.69
30	---	10.15	8.78	8.99	---	9.72	9.89	---	---	10.00	10.86	7.61
31	---	---	9.10	9.28	---	9.85	---	---	---	10.01	11.00	---
MEAN	---	---	9.44	9.17	8.72	---	9.24	---	---	---	10.71	9.32
MAX	---	---	10.81	10.81	10.02	---	10.25	---	---	---	11.25	11.21
MIN	---	---	7.74	7.44	7.70	---	7.99	---	---	---	10.19	7.16

SOUTH-CENTRAL ALASKA
MUNICIPALITY OF ANCHORAGE.

611725149335401. Local number, SB01400223BCCD1003.

LOCATION.--Lat 61°17'26", long 149°35'39", in SE¹/₄ SW¹/₄ SW¹/₄ NW¹/₄ sec.23, T.14 N., R.2 W.(Anchorage B-7SW quad), Hydrologic Unit 19020401, at Anchorage Regional Landfill, Glenn Highway and Hiland Road interchange, Anchorage. Owner: Municipality of Anchorage.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 6 in., depth 132 ft, cased to 118 ft, open hole. Casing perforated from 111 to 117 ft. Bedrock from 117 ft. Driller's log notes casing break at 80 ft.

INSTRUMENTATION.--Monthly measurement with chalked steel tape by U.S. Geological Survey personnel July 1997 to September 1999. electronic data logger from September 3, 1999 to current year.

DATUM.--Elevation of land surface datum is 542.56 ft above sea level (determined by level survey). Measuring point: Top of casing 3.4 ft above land-surface datum.

REMARKS.--Observation well drilled by Municipality of Anchorage, designated as KB-6.

PERIOD OF RECORD.--August 1986, July 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 107.88 ft below land-surface datum, June 7, 2000; lowest, 114.25 ft below land-surface datum, Aug. 21, 1986.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 109.09 ft. below land-surface datum, June 22; lowest, 110.72 ft. below land-surface datum, February 4, result of tapedown, but may have been lower during period of missing record, November 27 to May 2.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110.62	110.63	---	---	---	---	---	---	109.42	109.12	109.57	110.31
2	110.62	110.63	---	---	---	---	---	---	109.41	109.14	109.58	110.31
3	110.62	110.63	---	---	---	---	---	‡110.35	109.36	109.15	109.59	110.34
4	110.64	110.63	---	---	‡110.72	---	---	110.32	109.32	109.15	109.62	110.38
5	110.63	110.63	---	---	---	---	---	110.30	109.31	109.15	109.64	110.39
6	110.65	110.63	---	---	---	---	---	110.28	109.30	109.19	109.67	110.40
7	110.65	110.63	---	---	---	---	---	110.27	109.28	109.19	109.70	110.41
8	110.65	110.60	---	---	---	---	---	110.25	109.25	109.20	109.72	110.41
9	110.65	110.63	---	---	---	---	---	110.23	109.22	109.20	109.75	110.42
10	110.66	110.63	---	---	---	---	---	110.21	109.20	109.22	109.76	110.41
11	110.66	110.59	---	---	---	---	---	110.19	109.18	109.24	109.79	110.42
12	110.66	110.61	---	---	---	---	---	110.15	109.17	109.25	109.84	110.45
13	110.66	110.64	---	---	---	---	---	110.12	109.16	109.26	109.86	110.45
14	110.65	110.64	---	---	---	---	---	110.09	109.15	109.27	109.89	110.47
15	110.64	110.63	---	---	---	---	---	110.07	109.15	109.29	109.91	110.47
16	110.63	110.65	---	---	---	---	---	110.05	109.13	109.29	109.94	110.48
17	110.65	110.65	---	---	---	---	---	110.02	109.13	109.31	109.97	110.48
18	110.64	110.64	---	---	---	---	---	109.99	109.12	109.32	110.00	110.47
19	110.65	110.66	---	---	---	---	‡110.60	109.94	109.11	109.34	110.01	110.45
20	110.65	110.63	---	---	---	---	---	109.89	109.11	109.36	110.04	110.47
21	110.65	110.63	---	---	---	---	---	109.85	109.10	109.39	110.06	110.50
22	110.63	110.66	---	---	---	---	---	109.80	109.09	109.39	110.08	110.49
23	110.66	110.62	---	---	---	---	---	109.76	109.10	109.41	110.10	110.50
24	110.62	110.64	---	---	---	---	---	109.68	109.10	109.43	110.13	110.52
25	110.64	110.66	---	---	---	---	---	109.68	109.10	109.45	110.16	110.48
26	110.66	110.66	---	---	---	---	---	109.65	109.10	109.44	110.17	110.45
27	110.66	---	---	---	---	---	---	109.59	109.11	109.46	110.20	110.54
28	110.65	---	---	---	---	---	---	109.57	109.11	109.48	110.24	110.51
29	110.65	---	---	---	---	---	---	109.53	109.11	109.53	110.26	110.51
30	110.63	---	‡110.69	---	---	---	---	109.49	109.12	109.54	110.28	110.50
31	110.63	---	---	---	---	---	---	109.46	---	109.55	110.29	---

‡ Result of tapedown

GROUND-WATER LEVEL DATA

YUKON ALASKA

FAIRBANKS NORTH STAR BOROUGH

644321147163801. Local number, FD00200223DDBA1003.

LOCATION.--Lat 64°43'21", Long 147°16'38", in NW¹/₄ SE¹/₄ SE¹/₄ sec. 23, T.2 S., R.2 E., (Fairbanks C-1 NW quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located approximately 0.3 mi east of the Dyke Road, Old Richardson Highway and Levee Road intersection in city of North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 20.4 ft, screen opening from 15.4 to 19.9 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 13, 2001 to current year.

DATUM.--Elevation of land-surface datum is 510.14 ft above NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 2.60 ft above land surface datum.

REMARKS.--Observation well drilled April 10, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-14.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.29 ft below land-surface datum, July 28, 2003; lowest, 12.26 ft below land-surface datum, April 3-7, 2004.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 10.20 ft below land-surface datum, July 1; lowest, 12.26 ft below land-surface datum, April 3-7.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.06	11.76	11.55	12.00	12.16	12.16	12.24	11.52	10.70	10.20	10.32	10.92
2	11.05	11.77	11.55	12.01	12.18	12.14	12.23	11.54	10.66	10.21	10.37	10.85
3	10.97	11.79	11.57	12.02	12.18	12.14	12.24	11.57	10.63	10.25	10.47	10.90
4	10.93	11.81	11.60	12.03	12.19	12.14	12.25	11.58	10.61	10.26	10.56	11.00
5	10.89	11.83	11.62	12.03	12.19	12.15	12.26	11.58	10.61	10.31	10.65	11.05
6	10.90	11.85	11.64	12.02	12.20	12.15	12.26	11.45	10.68	10.27	10.71	11.11
7	10.92	11.88	11.66	12.01	12.21	12.15	12.25	11.20	10.77	10.29	10.73	11.16
8	10.97	11.90	11.70	12.01	12.20	12.17	12.20	11.08	10.76	10.36	10.74	11.21
9	11.00	11.93	11.72	12.03	12.22	12.18	12.14	10.92	10.61	10.36	10.75	11.26
10	11.03	11.95	11.74	12.04	12.19	12.19	12.08	10.83	10.57	10.40	10.73	11.30
11	11.06	11.99	11.74	12.06	12.21	12.20	12.00	10.78	10.55	10.45	10.69	11.36
12	11.09	12.00	11.76	12.06	12.21	12.20	11.92	10.76	10.53	10.53	10.67	11.41
13	11.12	12.04	11.77	12.07	12.18	12.19	11.87	10.74	10.55	10.57	10.67	11.46
14	11.14	12.03	11.78	12.07	12.18	12.19	11.80	10.71	10.61	10.59	10.70	11.43
15	11.18	11.95	11.78	12.08	12.18	12.19	11.73	10.70	10.66	10.57	10.69	11.43
16	11.21	11.89	11.80	12.08	12.17	12.20	11.69	10.72	10.67	10.54	10.68	11.52
17	11.25	11.86	11.83	12.08	12.16	12.20	11.62	10.76	10.66	10.56	10.66	11.57
18	11.30	11.82	11.85	12.09	12.15	12.20	11.57	10.74	10.67	10.51	10.62	11.61
19	11.34	11.79	11.85	12.10	12.14	12.21	11.51	10.73	10.66	10.45	10.58	11.65
20	11.39	11.75	11.87	12.10	12.14	12.21	11.44	10.76	10.66	10.48	10.58	11.69
21	11.43	11.71	11.88	12.12	12.14	12.21	11.38	10.82	10.64	10.48	10.57	11.63
22	11.47	11.68	11.88	12.13	12.15	12.20	11.35	10.87	10.60	10.45	10.55	11.64
23	11.50	11.63	11.91	12.14	12.15	12.20	11.35	10.89	10.56	10.30	10.54	11.71
24	11.55	11.60	11.93	12.14	12.16	12.20	11.36	10.83	10.51	10.30	10.54	11.74
25	11.59	11.57	11.94	12.14	12.15	12.20	11.38	10.76	10.48	10.39	10.58	11.78
26	11.63	11.54	11.96	12.14	12.14	12.19	11.40	10.76	10.45	10.47	10.62	11.82
27	11.67	11.51	11.97	12.13	12.15	12.20	11.42	10.73	10.40	10.51	10.70	11.85
28	11.70	11.51	11.97	12.14	12.16	12.20	11.45	10.71	10.33	10.55	10.78	11.89
29	11.72	11.53	11.97	12.14	12.16	12.21	11.47	10.71	10.27	10.54	10.81	11.92
30	11.74	11.54	11.99	12.15	---	12.21	11.50	10.72	10.23	10.48	10.84	11.92
31	11.75	---	12.01	12.15	---	12.23	---	10.70	---	10.51	10.88	---

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644331147183901. Local number, FD00200222DABD1006.

LOCATION.--Lat 64°43'31", Long 147°18'39", in NW¹/₄ NE¹/₄ SE¹/₄ sec. 22, T.2 S., R.2 E., (Fairbanks C-1 NW quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located on north side of Old Richardson Highway and VFW Road intersection in city of North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 17.1 ft, screen opening from 12.1 to 16.6 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 13, 2001 to current year.

DATUM.--Elevation of land-surface datum is 499.94 ft NGVD of 1929 (revised; levels by U.S. Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 2.67 ft above land surface datum.

REMARKS.--Observation well drilled April 9, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-16.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.73 ft below land-surface datum, July 30, 2003; lowest, 7.25 ft below land-surface datum, April 4, 2004.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.55 ft below land-surface datum, July 1; lowest, 7.25 ft below land-surface datum, April 4.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.87	6.75	6.20	6.81	7.01	7.02	7.23	6.74	5.24	4.55	4.85	5.38
2	5.75	6.79	6.20	6.82	7.03	7.01	7.23	6.71	5.21	4.58	4.87	5.40
3	5.65	6.82	6.23	6.84	7.04	7.01	7.23	6.64	5.16	4.66	4.92	5.43
4	5.60	6.85	6.28	6.85	7.05	7.02	7.24	6.59	5.10	4.68	4.98	5.49
5	5.55	6.89	6.33	6.84	7.05	7.02	7.23	6.56	5.10	4.71	5.04	5.54
6	5.55	6.92	6.36	6.84	7.06	7.03	7.21	6.46	5.15	4.68	5.08	5.60
7	5.59	6.95	6.39	6.83	7.07	7.04	7.18	6.23	5.22	4.68	5.11	5.66
8	5.66	6.99	6.44	6.83	7.06	7.07	7.13	5.99	5.23	4.74	5.11	5.72
9	5.70	7.01	6.47	6.85	7.08	7.08	7.07	5.74	5.08	4.77	5.13	5.78
10	5.74	7.05	6.49	6.86	7.06	7.09	6.99	5.63	5.02	4.79	5.10	5.84
11	5.79	7.09	6.50	6.88	7.07	7.10	6.89	5.59	4.98	4.83	5.08	5.91
12	5.83	7.12	6.52	6.89	7.05	7.10	6.80	5.58	4.96	4.89	5.07	5.98
13	5.88	7.16	6.53	6.88	7.03	7.10	6.72	5.50	4.96	4.92	5.07	6.05
14	5.92	6.92	6.54	6.88	7.02	7.10	6.61	5.45	4.99	4.91	5.09	6.11
15	5.96	6.76	6.54	6.88	7.02	7.11	6.53	5.44	5.05	4.87	5.08	6.13
16	6.00	6.65	6.56	6.89	7.02	7.12	6.46	5.46	5.03	4.85	5.07	6.17
17	6.05	6.59	6.60	6.90	7.01	7.13	6.39	5.46	5.02	4.86	5.04	6.23
18	6.12	6.52	6.61	6.90	7.00	7.12	6.34	5.45	5.02	4.84	4.98	6.28
19	6.18	6.47	6.63	6.91	6.99	7.13	6.29	5.45	5.00	4.81	4.95	6.32
20	6.25	6.41	6.65	6.92	7.00	7.14	6.24	5.48	4.98	4.83	4.96	6.37
21	6.32	6.34	6.67	6.95	6.99	7.16	6.23	5.52	4.94	4.84	4.95	6.42
22	6.38	6.28	6.67	6.95	7.00	7.15	6.25	5.56	4.89	4.81	4.94	6.44
23	6.44	6.20	6.70	6.96	7.00	7.14	6.31	5.59	4.83	4.74	4.95	6.48
24	6.50	6.16	6.72	6.96	7.00	7.14	6.36	5.58	4.79	4.74	4.95	6.52
25	6.54	6.13	6.73	6.96	7.00	7.14	6.45	5.54	4.74	4.80	4.99	6.56
26	6.57	6.11	6.76	6.96	7.00	7.15	6.51	5.46	4.69	4.86	5.05	6.60
27	6.59	6.10	6.78	6.96	7.00	7.17	6.56	5.37	4.65	4.87	5.14	6.64
28	6.61	6.11	6.79	6.97	7.01	7.18	6.61	5.34	4.63	4.89	5.21	6.68
29	6.65	6.17	6.79	6.98	7.01	7.18	6.66	5.31	4.60	4.89	5.25	6.71
30	6.68	6.19	6.81	6.99	---	7.19	6.70	5.28	4.56	4.90	5.28	6.74
31	6.72	---	6.82	7.00	---	7.20	---	5.25	---	4.93	5.33	---

GROUND-WATER LEVEL DATA

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644345147172101. Local number, FD00200223BDAD1002.

LOCATION.--Lat 64°43'45", Long 147°17'21", in NE¹/₄ SE¹/₄ NW¹/₄ sec. 23, T.2 S., R.2 E., (Fairbanks C-1 NW quad) Fairbanks Meridian, Hydrologic Unit 19040506. Well located approximately 0.2 mi south on Dyke Road from intersection with Laurance Road in city of North Pole. Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 13.0 ft, screen opening from 7.8 to 12.8 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 13, 2001 to current year.

DATUM.--Elevation of land-surface datum is 499.84 ft above NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 2.04 ft above land surface datum.

REMARKS.--Observation well drilled June 7, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-13.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.59 ft below land-surface datum, July 31, 2003; lowest, 8.09 ft below land-surface datum, April 6, 2004.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 6.23 ft below land-surface datum, July 1-2; lowest, 8.09 ft below land-surface datum, April 6, 2004.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.57	7.31	7.26	7.68	7.87	7.95	8.06	7.47	6.55	6.23	6.35	6.65
2	6.59	7.34	7.26	7.69	7.88	7.94	8.06	7.49	6.54	6.23	6.35	6.64
3	6.57	7.36	7.27	7.70	7.89	7.93	8.07	7.49	6.51	6.25	6.36	6.66
4	6.56	7.39	7.29	7.71	7.90	7.94	8.07	7.48	6.48	6.26	6.39	6.69
5	6.54	7.41	7.30	7.71	7.90	7.94	8.08	7.46	6.47	6.27	6.43	6.72
6	6.54	7.44	7.33	7.72	7.91	7.95	8.08	7.42	6.48	6.27	6.46	6.76
7	6.55	7.47	7.34	7.72	7.92	7.95	8.07	7.30	6.50	6.27	6.49	6.79
8	6.58	7.49	7.37	7.72	7.92	7.96	8.04	7.22	6.51	6.29	6.51	6.81
9	6.60	7.52	7.39	7.73	7.94	7.97	8.01	7.11	6.46	6.30	6.52	6.85
10	6.62	7.54	7.41	7.73	7.94	7.97	7.95	7.02	6.42	6.31	6.52	6.88
11	6.65	7.57	7.42	7.75	7.94	7.97	7.89	6.95	6.39	6.33	6.52	6.92
12	6.66	7.59	7.43	7.76	7.95	7.98	7.81	6.90	6.37	6.36	6.52	6.96
13	6.69	7.62	7.44	7.76	7.94	7.98	7.75	6.85	6.37	6.38	6.52	7.00
14	6.71	7.65	7.46	7.77	7.94	7.98	7.70	6.81	6.37	6.40	6.53	7.04
15	6.73	7.62	7.46	7.77	7.94	7.99	7.64	6.77	6.40	6.40	6.53	7.06
16	6.76	7.58	7.47	7.78	7.94	7.99	7.59	6.76	6.41	6.40	6.53	7.08
17	6.78	7.56	7.49	7.78	7.93	8.00	7.53	6.75	6.41	6.40	6.53	7.12
18	6.82	7.53	7.51	7.78	7.93	8.00	7.48	6.73	6.41	6.40	6.50	7.15
19	6.86	7.50	7.52	7.79	7.93	8.01	7.44	6.71	6.41	6.38	6.48	7.19
20	6.90	7.47	7.53	7.79	7.93	8.01	7.40	6.70	6.41	6.38	6.48	7.21
21	6.94	7.44	7.55	7.80	7.92	8.02	7.35	6.70	6.40	6.39	6.47	7.25
22	6.98	7.41	7.55	7.81	7.93	8.02	7.33	6.70	6.39	6.37	6.46	7.27
23	7.01	7.37	7.57	7.82	7.93	8.02	7.31	6.71	6.38	6.33	6.46	7.29
24	7.06	7.34	7.59	7.83	7.93	8.02	7.31	6.70	6.36	6.31	6.47	7.33
25	7.09	7.31	7.60	7.84	7.94	8.02	7.32	6.69	6.35	6.33	6.49	7.36
26	7.13	7.29	7.62	7.84	7.93	8.02	7.35	6.68	6.33	6.36	6.50	7.39
27	7.17	7.26	7.63	7.84	7.93	8.03	7.37	6.64	6.31	6.37	6.53	7.42
28	7.20	7.25	7.64	7.84	7.94	8.03	7.40	6.62	6.30	6.39	6.57	7.45
29	7.23	7.26	7.64	7.85	7.94	8.04	7.43	6.60	6.28	6.40	6.59	7.48
30	7.26	7.26	7.65	7.86	---	8.04	7.46	6.58	6.25	6.40	6.61	7.51
31	7.29	---	7.67	7.86	---	8.05	---	6.56	---	6.40	6.64	---

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644400147151501. Local number, FD00200224ABBB1001 51659.

LOCATION.--Lat 64°44'00", long 147°15'15", in NW¹/₄ NW¹/₄ NW¹/₄ sec. 24, T.2 S., R.2 E., (Fairbanks C-1) Fairbanks Meridian, Hydrologic Unit 19040506, in road right-of-way at intersection of Nelson and Laurence Roads near North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 4-in., depth 30 ft, screened from 27.5 to 30 ft using a 2-in. diameter well point.

INSTRUMENTATION.--Strip-chart recorder from June 1976 to May 1980. Digital recorder--1-hour punch interval, from November 1983 to June 1995. Electronic data logger from June 1995 to present.

DATUM.--Elevation of land-surface datum is 503.50 ft above sea level (determined by levels survey). Measuring point: top of casing 2.97 ft above land-surface datum.

REMARKS.--Observation well drilled by the U.S. Army Corps of Engineers designated as P-251.

PERIOD OF RECORD.--June 1976 to May 1980 and November 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.84 ft below land-surface datum, June 7, 1992; lowest, 13.70 ft below land-surface datum, February 18-20, 1988.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 11.42 ft below land-surface datum, October 1; lowest, 13.57 ft below land-surface datum, April 7-10.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.42	12.08	12.54	12.91	13.21	13.40	13.53	12.93	12.32	12.16	12.25	12.43
2	11.44	12.10	12.54	12.92	13.22	13.40	13.53	12.93	12.32	12.15	12.24	12.44
3	11.45	12.13	12.55	12.94	13.23	13.41	13.54	12.93	12.30	12.14	12.23	12.44
4	11.48	12.15	12.57	12.95	13.24	13.41	13.55	12.92	12.28	12.14	12.24	12.46
5	11.50	12.17	12.57	12.96	13.25	13.41	13.55	12.92	12.27	12.14	12.25	12.47
6	11.50	12.19	12.58	12.97	13.26	13.42	13.56	12.91	12.26	12.14	12.26	12.49
7	11.51	12.21	12.59	12.97	13.26	13.42	13.56	12.90	12.25	12.14	12.28	12.51
8	11.54	12.23	12.60	12.98	13.27	13.42	13.57	12.86	12.25	12.14	12.30	12.52
9	11.55	12.26	12.61	12.99	13.29	13.43	13.56	12.83	12.24	12.14	12.31	12.53
10	11.58	12.28	12.63	13.00	13.29	13.44	13.55	12.79	12.22	12.14	12.32	12.55
11	11.60	12.31	12.64	13.02	13.31	13.44	13.52	12.76	12.21	12.15	12.32	12.56
12	11.62	12.32	12.65	13.03	13.31	13.45	13.47	12.71	12.19	12.16	12.33	12.58
13	11.64	12.35	12.66	13.04	13.32	13.45	13.43	12.67	12.19	12.18	12.34	12.61
14	11.66	12.37	12.67	13.05	13.33	13.45	13.38	12.63	12.18	12.19	12.35	12.63
15	11.67	12.40	12.68	13.06	13.33	13.46	13.34	12.60	12.18	12.21	12.35	12.64
16	11.68	12.42	12.69	13.07	13.34	13.47	13.31	12.58	12.17	12.22	12.36	12.66
17	11.70	12.44	12.71	13.07	13.34	13.48	13.27	12.55	12.17	12.23	12.36	12.68
18	11.72	12.46	12.73	13.08	13.35	13.48	13.23	12.53	12.17	12.24	12.36	12.70
19	11.74	12.47	12.73	13.09	13.35	13.48	13.20	12.51	12.17	12.24	12.36	12.71
20	11.78	12.49	12.75	13.10	13.35	13.49	13.15	12.49	12.17	12.24	12.36	12.72
21	11.80	12.50	12.76	13.12	13.36	13.49	13.11	12.47	12.17	12.24	12.36	12.74
22	11.82	12.50	12.77	13.13	13.37	13.49	13.08	12.45	12.17	12.25	12.35	12.76
23	11.84	12.50	12.79	13.14	13.37	13.49	13.06	12.44	12.17	12.24	12.35	12.78
24	11.87	12.51	12.80	13.14	13.37	13.50	13.03	12.42	12.18	12.22	12.36	12.80
25	11.89	12.52	12.81	13.15	13.38	13.50	13.01	12.41	12.18	12.22	12.37	12.81
26	11.92	12.53	12.83	13.16	13.38	13.50	12.99	12.40	12.18	12.22	12.37	12.83
27	11.96	12.51	12.84	13.17	13.39	13.51	12.97	12.38	12.18	12.22	12.38	12.85
28	11.98	12.51	12.85	13.17	13.40	13.51	12.96	12.37	12.18	12.23	12.39	12.87
29	12.01	12.53	12.86	13.18	13.40	13.52	12.95	12.36	12.17	12.25	12.40	12.89
30	12.03	12.53	12.88	13.19	---	13.52	12.93	12.35	12.16	12.26	12.42	12.90
31	12.06	---	12.90	13.20	---	13.53	---	12.33	---	12.26	12.43	---

GROUND-WATER LEVEL DATA

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644401147193801. Local number, FD00200222BABA1005.

LOCATION.--Lat 64°44'01", Long 147°19'38", in NW¹/₄ NE¹/₄ NW¹/₄ sec. 22, T.2 S., R.2 E., (Fairbanks C-1 NW quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located at southeast corner of Laurance Road and Old Richardson Highway intersection, North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 14.1 ft, screen opening from 9.1 to 13.6 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 13, 2001 to current year.

DATUM.--Elevation of land-surface datum is 496.04 ft above sea level, NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 3.59 ft above land surface datum.

REMARKS.--Observation well drilled April 9, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-15.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.35 ft below land-surface datum, July 30, 2003; lowest, 6.55 ft below land-surface datum, April 2-6, 2004.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.12 ft below land-surface datum, July 2; lowest, 6.55 ft below land-surface datum, April 2-6.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.24	6.07	5.63	6.16	6.34	6.36	6.53	6.08	4.69	4.13	4.24	4.72
2	5.16	6.11	5.62	6.17	6.36	6.35	6.54	6.06	4.66	4.12	4.26	4.73
3	5.08	6.14	5.65	6.18	6.37	6.34	6.54	6.01	4.64	4.15	4.29	4.76
4	5.04	6.18	5.69	6.19	6.38	6.35	6.55	5.95	4.60	4.15	4.34	4.81
5	5.01	6.21	5.72	6.19	6.39	6.36	6.54	5.92	4.60	4.17	4.40	4.86
6	5.01	6.24	5.75	6.19	6.40	6.36	6.53	5.85	4.61	4.16	4.45	4.91
7	5.03	6.26	5.78	6.19	6.40	6.37	6.50	5.67	4.65	4.16	4.48	4.97
8	5.08	6.29	5.82	6.19	6.39	6.39	6.45	5.51	4.67	4.20	4.50	5.02
9	5.11	6.31	5.85	6.20	6.41	6.41	6.39	5.33	4.58	4.21	4.52	5.07
10	5.15	6.34	5.87	6.21	6.40	6.42	6.33	5.20	4.54	4.23	4.51	5.13
11	5.19	6.37	5.87	6.23	6.41	6.43	6.25	5.12	4.50	4.27	4.49	5.19
12	5.22	6.39	5.88	6.23	6.41	6.43	6.17	5.07	4.48	4.31	4.50	5.25
13	5.26	6.43	5.89	6.23	6.38	6.44	6.08	5.00	4.47	4.34	4.50	5.32
14	5.29	6.29	5.90	6.23	6.36	6.43	6.00	4.94	4.48	4.35	4.53	5.38
15	5.32	6.14	5.91	6.23	6.36	6.44	5.92	4.91	4.51	4.34	4.52	5.41
16	5.36	6.06	5.92	6.24	6.36	6.45	5.87	4.89	4.51	4.32	4.51	5.45
17	5.40	6.00	5.96	6.24	6.35	6.46	5.82	4.89	4.51	4.32	4.50	5.51
18	5.46	5.95	5.97	6.25	6.34	6.45	5.78	4.87	4.51	4.32	4.46	5.56
19	5.51	5.91	5.98	6.26	6.34	6.45	5.75	4.87	4.50	4.29	4.44	5.61
20	5.58	5.86	6.00	6.27	6.34	6.46	5.73	4.87	4.49	4.29	4.45	5.65
21	5.64	5.80	6.02	6.28	6.34	6.48	5.71	4.88	4.47	4.30	4.44	5.70
22	5.70	5.76	6.02	6.29	6.34	6.47	5.71	4.90	4.45	4.28	4.43	5.73
23	5.75	5.69	6.05	6.30	6.35	6.47	5.72	4.93	4.43	4.20	4.42	5.76
24	5.80	5.63	6.07	6.31	6.35	6.47	5.74	4.93	4.39	4.19	4.42	5.80
25	5.85	5.60	6.08	6.30	6.35	6.47	5.83	4.92	4.36	4.22	4.45	5.84
26	5.89	5.57	6.11	6.31	6.35	6.47	5.89	4.87	4.32	4.24	4.48	5.88
27	5.91	5.55	6.12	6.31	6.35	6.49	5.93	4.82	4.28	4.27	4.54	5.91
28	5.93	5.56	6.12	6.31	6.36	6.49	5.96	4.79	4.23	4.29	4.59	5.95
29	5.97	5.59	6.13	6.31	6.37	6.50	6.01	4.76	4.19	4.31	4.62	5.99
30	6.00	5.62	6.14	6.32	---	6.51	6.05	4.74	4.15	4.31	4.65	6.02
31	6.03	---	6.16	6.33	---	6.52	---	4.71	---	4.32	4.68	---

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644402147132801. Local number, FD00200319BAAB1001.

LOCATION.--Lat 64°44'02", Long 147°13'28", in NE¹/₄ NE¹/₄ NW¹/₄ sec. 19, T.2 S., R.3 E., (Fairbanks C-1 NE quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located approximately 1.2 mi east of gate at gravel road from U.S. Army Corps of Engineers office, then north of gravel road beneath power lines, North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 24.3 ft, screen opening from 19.2 to 24.2 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 5, 2001 to current year.

DATUM.--Elevation of land-surface datum is 505.44 ft above NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 5.92 ft above land surface datum.

REMARKS.--Observation well drilled September 7, 1994 by the U.S. Army Corps of Engineers and designated as USAP-1.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.64 ft. below land-surface datum, September 24, 2003; lowest, 14.62 ft below land-surface datum, April 24-26, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 11.78 ft below land-surface datum, October 1; lowest, 14.49 ft. below land-surface datum, April 10-11.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.78	12.45	13.06	13.54	13.94	14.23	14.42	13.88	13.33	13.08	13.22	13.42
2	11.80	12.46	13.07	13.56	13.95	14.24	14.42	13.87	13.32	13.08	13.23	13.43
3	11.81	12.48	13.09	13.58	13.96	14.24	14.43	13.87	13.31	13.08	13.23	13.44
4	11.84	12.51	13.11	13.60	13.97	14.25	14.44	13.86	13.29	13.08	13.23	13.45
5	11.86	12.52	13.12	13.61	13.98	14.26	14.44	13.85	13.28	13.08	13.23	13.47
6	11.86	12.55	13.13	13.62	13.99	14.26	14.45	13.84	13.27	13.08	13.24	13.48
7	11.88	12.57	13.15	13.63	14.00	14.27	14.46	13.83	13.25	13.08	13.25	13.48
8	11.91	12.58	13.17	13.63	14.02	14.27	14.47	13.81	13.25	13.08	13.26	13.49
9	11.94	12.60	13.18	13.65	14.03	14.28	14.47	13.78	13.23	13.08	13.27	13.50
10	11.96	12.62	13.20	13.66	14.04	14.29	14.47	13.75	13.22	13.07	13.28	13.50
11	12.01	12.65	13.21	13.69	14.05	14.30	14.48	13.72	13.20	13.08	13.28	13.51
12	12.02	12.66	13.22	13.70	14.07	14.30	14.47	13.69	13.19	13.08	13.29	13.52
13	12.05	12.69	13.24	13.71	14.08	14.31	14.46	13.66	13.19	13.08	13.30	13.53
14	12.07	12.71	13.26	13.73	14.08	14.32	14.43	13.64	13.18	13.09	13.32	13.55
15	12.07	12.74	13.27	13.74	14.10	14.32	14.39	13.61	13.17	13.10	13.33	13.56
16	12.08	12.76	13.28	13.75	14.11	14.33	14.36	13.59	13.15	13.12	13.33	13.58
17	12.09	12.79	13.30	13.76	14.12	14.35	14.31	13.58	13.15	13.12	13.34	13.59
18	12.12	12.82	13.32	13.77	14.12	14.35	14.27	13.56	13.13	13.13	13.34	13.60
19	12.13	12.84	13.33	13.79	14.13	14.36	14.21	13.53	13.13	13.14	13.35	13.61
20	12.16	12.87	13.35	13.79	14.14	14.36	14.15	13.52	13.12	13.15	13.35	13.61
21	12.19	12.88	13.37	13.81	14.15	14.37	14.10	13.50	13.11	13.16	13.36	13.62
22	12.21	12.90	13.37	13.82	14.16	14.37	14.07	13.48	13.11	13.18	13.36	13.64
23	12.22	12.92	13.39	13.84	14.17	14.38	14.04	13.46	13.11	13.18	13.36	13.65
24	12.25	12.93	13.41	13.84	14.18	14.39	14.02	13.44	13.10	13.18	13.36	13.67
25	12.26	12.96	13.43	13.86	14.19	14.39	13.99	13.42	13.10	13.19	13.37	13.68
26	12.29	12.98	13.46	13.87	14.20	14.39	13.97	13.41	13.10	13.18	13.38	13.69
27	12.33	12.99	13.47	13.88	14.20	14.39	13.94	13.39	13.10	13.18	13.38	13.70
28	12.35	13.00	13.48	13.89	14.22	14.39	13.93	13.39	13.09	13.18	13.39	13.72
29	12.39	13.03	13.49	13.90	14.22	14.40	13.91	13.37	13.09	13.20	13.40	13.74
30	12.40	13.04	13.51	13.91	---	14.41	13.90	13.35	13.08	13.21	13.41	13.74
31	12.42	---	13.53	13.92	---	14.41	---	13.34	---	13.22	13.42	---

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644402147150401. Local number, FD00200224ABBA1002.

LOCATION.--Lat 64°44'02", Long 147°15'04", in NW¹/₄ NW¹/₄ NE¹/₄ sec. 24, T.2 S., R.2 E., (Fairbanks C-1 NW quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located approximately 0.1 mi east of Laurance Road and Nelson Road intersection, then 50 ft east of road behind grove of trees towards levee, North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 19.4 ft, screen openings from 9.4 to 13.9 ft and 14.4 to 18.9 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 5, 2001 to current year.

DATUM.--Elevation of land-surface datum is 504.74 ft above NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 2.57 ft above land surface datum.

REMARKS.--Observation well drilled March 12, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-11.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.74 ft below land-surface datum, September 17-18, 2003; lowest, 13.31 ft below land-surface datum, April 19 and 21-25, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 11.00 ft below land-surface datum, October 1; lowest, 13.26 ft below land-surface datum, April 8.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.00	11.68	12.17	12.54	12.85	13.06	13.21	12.62	12.02	11.84	11.94	12.03
2	11.02	11.70	12.17	12.56	12.86	13.06	13.20	12.62	12.02	11.84	11.93	12.05
3	11.03	11.72	12.18	12.57	12.86	13.06	13.22	12.61	12.00	11.83	11.92	---
4	11.07	11.75	12.19	12.58	12.87	13.07	13.22	12.60	11.99	11.82	11.92	---
5	11.08	11.77	12.20	12.59	12.89	13.07	13.23	12.60	11.97	11.82	11.92	---
6	11.09	11.79	12.21	12.60	12.90	13.07	13.23	12.59	11.97	11.82	11.93	---
7	11.11	11.81	12.22	12.61	12.91	13.08	13.24	12.58	11.95	11.82	11.94	---
8	11.13	11.82	12.23	12.61	12.90	13.08	13.24	12.54	11.95	11.83	11.96	12.14
9	11.15	11.85	12.24	12.62	12.93	13.08	13.24	12.52	11.93	11.82	11.97	12.15
10	11.17	11.87	12.25	12.62	12.93	13.09	13.24	12.49	11.92	11.82	11.97	12.16
11	11.20	11.90	12.26	12.64	12.94	13.10	13.21	12.45	11.90	11.83	11.98	12.17
12	11.22	11.91	12.27	12.65	12.95	13.10	13.17	12.41	11.89	11.84	11.98	12.19
13	11.24	11.94	12.29	12.67	12.96	13.11	13.13	12.37	11.89	11.85	11.99	12.22
14	11.27	11.97	12.30	12.67	12.97	13.11	13.08	12.33	11.88	11.87	12.00	12.24
15	11.28	11.99	12.31	12.68	12.97	13.12	13.03	12.31	11.87	11.88	11.99	12.26
16	11.29	12.02	12.32	12.70	12.98	13.13	13.00	12.28	11.87	11.90	12.00	---
17	11.31	12.04	12.34	12.70	12.99	13.13	12.96	12.26	11.87	11.90	---	---
18	11.33	12.05	12.35	12.71	12.99	13.14	12.93	12.24	11.87	11.91	---	12.32
19	11.35	12.07	12.36	12.72	13.00	13.15	12.88	12.21	11.86	11.92	---	12.33
20	11.38	12.09	12.38	12.72	13.00	13.15	12.85	12.19	11.86	11.92	---	12.35
21	11.40	12.09	12.39	12.74	13.00	13.15	12.80	12.17	11.86	11.92	---	12.37
22	11.43	12.11	12.39	12.76	13.01	13.15	12.77	12.15	11.86	11.93	---	12.38
23	11.44	12.11	12.42	12.77	13.02	13.16	12.75	12.14	11.86	11.92	---	12.41
24	11.47	12.11	12.43	12.78	13.03	13.16	12.72	12.12	11.86	11.91	---	12.43
25	11.49	12.13	12.45	12.79	13.03	13.18	12.70	12.11	11.87	11.91	---	12.45
26	11.52	12.14	12.47	12.79	13.03	13.18	12.68	12.10	11.86	11.90	---	12.46
27	11.56	12.13	12.47	12.80	13.04	13.18	12.66	12.08	11.86	11.90	---	12.49
28	11.58	12.13	12.49	12.81	13.05	13.18	12.65	12.07	11.86	11.91	---	---
29	11.61	12.15	12.49	12.82	13.05	13.19	12.64	12.06	11.85	11.93	---	---
30	11.63	12.15	12.51	12.83	---	13.20	12.62	12.05	11.84	11.95	---	12.55
31	11.65	---	12.53	12.84	---	13.20	---	12.03	---	11.95	---	---

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644402147182601. Local number, FD00200222AAAA1004.

LOCATION.--Lat 64°44'02", Long 147°18'26", in NE¹/₄ NE¹/₄ NE¹/₄ sec. 22, T.2 S., R.2 E., (Fairbanks C-1 NW quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located approximately 25 ft southeast of southeast corner of Laurance Road and Treaty Street intersection, North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 15.0 ft, screen opening from 10.1 to 14.6 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 13, 2001 to current year.

DATUM.--Elevation of land-surface datum is 498.14 ft above NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point was changed from top of outer casing to top of inner casing (2.29 ft above land surface datum) in the 2002 Water Year.

REMARKS.--Observation well drilled April 10, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-12.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.51 ft below land-surface datum, August 3, 2003; lowest, lowest, 8.33 ft below land-surface datum, May 28-31, 2003.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 6.20 ft below land-surface datum, July 1-2, 2004; lowest, 8.23 ft below land-surface datum, April 4-5, 2004.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.77	7.61	7.45	7.87	8.04	8.09	8.20	7.65	6.57	6.20	6.25	6.58
2	6.77	7.64	7.45	7.88	8.05	8.07	8.20	7.66	6.55	6.20	6.26	6.56
3	6.74	7.67	7.46	7.89	8.06	8.07	8.21	7.64	6.52	6.21	6.29	6.58
4	6.73	7.69	7.49	7.90	8.07	8.07	8.22	7.61	6.49	6.21	6.33	6.62
5	6.71	7.72	7.51	7.90	8.07	8.07	8.22	7.59	6.49	6.23	6.37	6.66
6	6.71	7.75	7.53	7.89	8.08	8.07	8.22	7.52	6.49	6.22	6.40	6.70
7	6.73	7.77	7.55	7.89	8.09	8.08	8.20	7.36	6.52	6.23	6.43	6.74
8	6.76	7.80	7.58	7.89	8.09	8.10	8.16	7.26	6.52	6.25	6.44	6.78
9	6.78	7.82	7.59	7.90	8.10	8.10	8.12	7.15	6.43	6.25	6.46	6.82
10	6.80	7.85	7.61	7.91	8.10	8.11	8.06	7.06	6.40	6.27	6.46	6.86
11	6.83	7.88	7.62	7.93	8.11	8.12	7.99	7.00	6.38	6.29	6.45	6.91
12	6.85	7.91	7.63	7.94	8.11	8.12	7.90	6.95	6.37	6.33	6.45	6.96
13	6.88	7.94	7.64	7.94	8.09	8.13	7.84	6.89	6.38	6.35	6.45	7.01
14	6.91	7.91	7.65	7.94	8.09	8.13	7.77	6.84	6.39	6.36	6.48	7.06
15	6.94	7.84	7.66	7.94	8.09	8.13	7.72	6.81	6.42	6.36	6.47	7.08
16	6.97	7.79	7.67	7.95	8.08	8.13	7.67	6.79	6.43	6.35	6.46	7.12
17	7.00	7.76	7.69	7.95	8.08	8.14	7.61	6.78	6.43	6.36	6.46	7.17
18	7.05	7.72	7.71	7.96	8.07	8.14	7.57	6.76	6.44	6.35	6.44	7.21
19	7.09	7.70	7.71	7.97	8.07	8.15	7.52	6.74	6.43	6.33	6.41	7.25
20	7.14	7.65	7.73	7.97	8.07	8.15	7.49	6.74	6.43	6.33	6.41	7.29
21	7.18	7.62	7.74	7.98	8.07	8.16	7.45	6.74	6.43	6.34	6.40	7.33
22	7.23	7.58	7.74	7.99	8.07	8.16	7.44	6.74	6.40	6.32	6.39	7.34
23	7.28	7.53	7.77	8.00	8.08	8.15	7.44	6.74	6.40	6.25	6.39	7.37
24	7.33	7.50	7.78	8.00	8.08	8.16	7.45	6.74	6.38	6.24	6.39	7.41
25	7.37	7.47	7.79	8.01	8.08	8.16	7.47	6.72	6.37	6.26	6.41	7.45
26	7.42	7.45	7.81	8.01	8.08	8.16	7.51	6.70	6.35	6.29	6.43	7.49
27	7.45	7.43	7.83	8.01	8.08	8.17	7.54	6.65	6.30	6.30	6.46	7.53
28	7.48	7.43	7.83	8.01	8.08	8.17	7.57	6.63	6.28	6.33	6.50	7.57
29	7.52	7.44	7.84	8.02	8.09	8.18	7.60	6.62	6.25	6.33	6.52	7.61
30	7.54	7.44	7.85	8.03	---	8.18	7.63	6.61	6.22	6.32	6.53	7.64
31	7.58	---	7.86	8.03	---	8.19	---	6.58	---	6.33	6.56	---
MEAN	7.05	7.68	7.67	7.95	8.08	8.13	7.80	6.98	6.42	6.29	6.42	7.09
MIN	7.58	7.94	7.86	8.03	8.11	8.19	8.22	7.66	6.57	6.36	6.56	7.64
MAX	6.71	7.43	7.45	7.87	8.04	8.07	7.44	6.58	6.22	6.20	6.25	6.56

GROUND-WATER LEVEL DATA

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644403147112901. Local number, FD00200317CDDD1005.

LOCATION.--Lat 64°44'03", Long 147°11'29", in SE¹/₄ SE¹/₄ SW¹/₄ sec. 17, T.2 S., R.3 E., (Fairbanks C-1 NE quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located approximately 2.2 mi east of gate at gravel road from U.S. Army Corps of Engineers office, then just beyond powerlines north of gravel road, North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. pvc casing, depth 20.0 ft, screen opening from 14.9 to 19.9 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 5, 2001 to current year.

DATUM.--Elevation of land-surface datum is 503.44 ft above NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 2.57 ft above land surface datum.

REMARKS.--Observation well drilled September 7, 1994 by the U.S. Army Corps of Engineers and designated as USAP-2.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.80 ft below land-surface datum, September 13, 2003; lowest, 11.08 ft below land-surface datum, May 1, 2 and 17, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 1.88 ft below land-surface datum, October 3; lowest, 9.03 ft below land-surface datum, April 28.

DEPTH BELOW LAND SURFACE (WATER LEVEL in FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.06	3.34	5.02	6.75	7.43	8.11	8.53	8.59	6.98	6.01	7.40	8.42
2	1.97	3.42	4.93	6.87	7.48	7.84	8.24	8.66	7.01	6.06	7.32	8.36
3	1.88	3.35	5.26	6.82	7.50	7.86	8.37	8.66	7.00	6.18	7.28	8.40
4	2.16	3.39	5.28	6.77	7.51	7.92	8.52	8.52	6.74	6.22	7.36	8.46
5	2.02	3.39	5.27	6.65	7.44	7.98	8.62	8.42	6.74	6.29	7.48	8.48
6	2.05	3.33	5.37	6.51	7.60	8.03	8.58	8.33	6.81	6.46	7.61	8.47
7	2.12	3.24	5.37	6.27	7.69	8.04	8.61	8.33	6.62	6.55	7.75	8.45
8	2.24	2.96	5.59	6.25	7.47	8.14	8.70	8.21	6.65	6.68	7.83	8.44
9	2.24	3.19	5.50	6.46	7.71	7.98	8.64	8.38	6.45	6.65	7.86	8.42
10	2.31	3.25	5.41	6.51	7.43	8.05	8.76	8.33	6.25	6.72	7.84	8.42
11	2.38	3.17	5.35	7.03	7.63	8.26	8.74	8.25	6.27	6.85	7.87	8.44
12	2.37	3.11	5.40	6.91	7.80	8.26	8.61	8.12	6.15	6.96	7.94	8.50
13	2.38	3.61	5.60	6.91	7.64	8.18	8.67	7.89	6.17	7.01	7.96	8.53
14	2.35	3.73	5.61	6.85	7.68	8.10	8.79	7.86	6.22	7.10	8.05	8.50
15	2.35	3.87	5.53	6.91	7.89	8.17	8.59	7.80	6.16	7.22	8.03	8.47
16	2.36	4.02	5.58	6.98	7.76	8.34	8.57	7.80	6.06	7.23	8.07	8.49
17	2.45	4.21	6.01	6.93	7.73	8.37	8.56	7.92	6.10	7.30	8.11	8.47
18	2.67	4.38	5.78	6.99	7.73	8.35	8.59	8.06	6.03	7.35	8.11	8.42
19	2.71	4.48	5.56	6.99	7.70	8.54	8.78	7.98	5.83	7.37	8.12	8.35
20	2.95	4.46	5.82	6.92	7.73	8.44	8.81	7.81	5.78	7.47	8.17	8.35
21	2.96	4.40	5.67	7.05	7.70	8.25	8.72	7.52	5.73	7.53	8.18	8.36
22	2.90	4.40	5.63	7.15	7.81	8.21	8.55	7.42	5.74	7.54	8.16	8.27
23	2.92	4.22	6.27	7.41	7.90	8.14	8.62	7.25	5.78	7.43	8.21	8.30
24	3.06	4.21	6.35	7.39	7.97	8.29	8.79	6.99	5.86	7.35	8.25	8.30
25	3.03	4.56	6.36	7.35	7.97	8.39	8.81	7.02	5.94	7.43	8.29	8.29
26	3.30	4.93	6.55	7.23	7.92	8.39	8.77	7.24	5.98	7.46	8.31	8.12
27	3.47	4.30	6.36	7.17	7.98	8.43	8.71	7.14	5.96	7.52	8.35	8.36
28	3.54	4.33	6.08	7.23	8.10	8.29	8.82	7.16	6.03	7.57	8.40	8.40
29	3.41	4.75	5.89	7.33	8.14	8.45	8.72	7.20	5.97	7.70	8.40	8.33
30	3.39	4.73	6.18	7.38	---	8.45	8.55	7.17	6.03	7.66	8.43	8.31
31	3.47	---	6.69	7.40	---	8.68	---	7.08	---	7.63	8.40	---

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644408147162001. Local number, FD00200214DDDA1003.

LOCATION.--Lat 64°44'08", Long 147°16'20", in SE¹/₄ SE¹/₄ SE¹/₄ sec. 14, T.2 S., R.2 E., (Fairbanks C-1 NW quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located 10 ft off shoulder of northeast corner of Anton Road and Seavy Road intersection, North Pole. Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 15.2 ft, screen opening from 10.2 to 15.2 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 5, 2001 to current year.

DATUM.--Elevation of land-surface datum is 501.44 ft above NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 1.78 ft above land surface datum.

REMARKS.--Observation well drilled June 7, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-10.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.69 ft below land-surface datum, September 8, 2003; lowest, 10.95 ft below land-surface datum, March 31, April 1-4, 6-7, 16, 18 and 22-23, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 9.11 ft below land-surface datum, October 1; lowest, 10.93 ft below land-surface datum, April 7-8.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.11	9.78	10.09	10.40	10.65	10.79	10.90	10.31	9.65	9.49	9.58	9.73
2	9.14	9.80	10.08	10.41	10.66	10.79	10.90	10.32	9.64	9.49	9.57	9.73
3	9.15	9.82	10.10	10.43	10.67	10.79	10.90	10.32	9.62	9.49	9.55	9.73
4	9.17	9.84	10.10	10.44	10.68	10.79	10.91	10.33	9.60	9.48	9.56	9.75
5	9.19	9.86	10.11	10.44	10.68	10.80	10.91	10.32	9.59	9.48	9.57	9.77
6	9.19	9.88	10.12	10.45	10.70	10.80	10.92	10.30	9.58	9.49	9.58	9.79
7	9.20	9.91	10.13	10.46	10.70	10.80	10.92	10.26	9.57	9.49	9.60	9.81
8	9.22	9.92	10.14	10.46	10.70	10.80	10.91	10.23	9.56	9.50	9.62	9.83
9	9.24	9.95	10.15	10.47	10.72	10.81	10.90	10.18	9.55	9.49	9.63	9.85
10	9.26	9.97	10.16	10.48	10.72	10.81	10.87	10.14	9.53	9.50	9.64	9.87
11	9.29	10.00	10.16	10.49	10.73	10.82	10.82	10.10	9.51	9.51	9.65	9.89
12	9.30	10.01	10.17	10.50	10.73	10.82	10.75	10.06	9.50	9.53	9.66	9.91
13	9.33	10.04	10.19	10.51	10.74	10.83	10.70	10.01	9.49	9.54	9.65	9.94
14	9.34	10.06	10.20	10.52	10.74	10.83	10.66	9.97	9.50	9.56	9.67	9.96
15	9.35	10.08	10.21	10.52	10.75	10.84	10.63	9.94	9.50	9.57	9.67	9.98
16	9.37	10.10	10.22	10.54	10.75	10.84	10.59	9.92	9.50	9.57	9.67	10.00
17	9.38	10.12	10.23	10.54	10.75	10.84	10.55	9.90	9.50	9.58	9.67	10.02
18	9.41	10.13	10.24	10.55	10.76	10.85	10.51	9.87	9.51	9.59	9.67	10.03
19	9.43	10.13	10.25	10.56	10.76	10.85	10.48	9.85	9.51	9.59	9.66	10.05
20	9.46	10.13	10.26	10.56	10.76	10.86	10.45	9.83	9.51	9.59	9.66	10.07
21	9.48	10.13	10.27	10.57	10.76	10.86	10.41	9.80	9.52	9.59	9.66	10.09
22	9.51	10.13	10.28	10.58	10.76	10.86	10.38	9.79	9.52	9.59	9.66	10.11
23	9.53	10.10	10.30	10.60	10.77	10.87	10.35	9.78	9.52	9.57	9.66	10.13
24	9.56	10.10	10.31	10.60	10.77	10.87	10.33	9.76	9.53	9.56	9.66	10.15
25	9.58	10.10	10.32	10.61	10.78	10.87	10.32	9.75	9.53	9.56	9.67	10.17
26	9.62	10.10	10.34	10.62	10.78	10.87	10.31	9.74	9.53	9.56	9.67	10.19
27	9.65	10.07	10.35	10.62	10.78	10.88	10.30	9.72	9.53	9.56	9.68	10.21
28	9.68	10.07	10.36	10.63	10.78	10.88	10.31	9.71	9.52	9.57	9.70	10.24
29	9.71	10.08	10.36	10.64	10.79	10.88	10.30	9.69	9.51	9.59	9.71	10.26
30	9.73	10.08	10.37	10.64	---	10.89	10.31	9.68	9.50	9.60	9.72	10.27
31	9.75	---	10.39	10.65	---	10.89	---	9.66	---	9.60	9.73	---

GROUND-WATER LEVEL DATA

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644423147124601. Local number, FD00200318DABC1006.

LOCATION.--Lat 64°44'23", Long 147°12'46", in NW¹/₄ NE¹/₄ SE¹/₄ sec. 18, T.2 S., R.3 E., (Fairbanks C-1 NE quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located in Chena River Recreation Area, North Pole. From recreation area entrance station well is approximately 0.8 mi. southeast on dirt road from levee followed by 0.4 mi northeast on intersecting dirt road.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 20.0 ft, screen opening from 14.9 ft to 19.9 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 5, 2001 to current year.

DATUM.--Elevation of land-surface datum is 501.54 ft above NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 6.39 ft above land surface datum.

REMARKS.--Observation well drilled September 9, 1994 by the U.S. Army Corps of Engineers and designated as USAP-3.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.72 ft below land-surface datum, September 24, 2003; lowest, 11.37 ft below land-surface datum, April 22-28, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 7.78 ft below land-surface datum, October 1; lowest, 11.03 ft below land-surface datum, April 11-14.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.78	8.42	9.08	9.72	10.22	10.62	10.93	10.42	9.94	9.57	9.73	9.93
2	7.78	8.43	9.10	9.74	10.23	10.63	10.93	10.42	9.93	9.57	9.74	9.94
3	7.78	8.45	9.13	9.76	10.25	10.64	10.94	10.42	9.91	9.57	9.74	9.95
4	7.81	8.47	9.15	9.78	10.26	10.65	10.95	10.42	9.89	9.57	9.75	9.97
5	7.83	8.49	9.17	9.80	10.28	10.66	10.96	10.42	9.88	9.56	9.75	9.98
6	7.83	8.51	9.19	9.81	10.29	10.67	10.97	10.41	9.87	9.57	9.76	9.98
7	7.85	8.53	9.21	9.81	10.31	10.68	10.98	10.36	9.86	9.57	9.76	9.99
8	7.88	8.53	9.24	9.82	10.32	10.70	10.99	10.31	9.85	9.57	9.77	9.99
9	7.91	8.56	9.26	9.84	10.34	10.71	10.99	10.25	9.83	9.56	9.78	10.00
10	7.94	8.58	9.28	9.86	10.35	10.71	11.00	10.23	9.80	9.56	9.79	10.00
11	7.99	8.61	9.29	9.89	10.37	10.73	11.01	10.20	9.79	9.57	9.79	10.00
12	8.01	8.61	9.31	9.90	10.39	10.74	11.02	10.18	9.78	9.57	9.80	10.01
13	8.04	8.65	9.33	9.92	10.40	10.75	11.02	10.16	9.76	9.57	9.80	10.03
14	8.06	8.67	9.35	9.94	10.41	10.75	11.00	10.15	9.75	9.58	9.82	10.03
15	8.06	8.70	9.37	9.95	10.43	10.76	10.98	10.15	9.73	9.59	9.83	10.04
16	8.06	8.73	9.39	9.97	10.44	10.78	10.94	10.14	9.72	9.59	9.83	10.05
17	8.07	8.75	9.42	9.98	10.45	10.79	10.89	10.14	9.71	9.60	9.84	10.06
18	8.10	8.78	9.44	9.99	10.46	10.81	10.82	10.13	9.70	9.60	9.85	10.07
19	8.12	8.80	9.45	10.02	10.47	10.82	10.72	10.12	9.68	9.61	9.85	10.08
20	8.16	8.84	9.47	10.03	10.49	10.83	10.65	10.10	9.67	9.62	9.86	10.08
21	8.18	8.85	9.49	10.05	10.50	10.84	10.58	10.09	9.65	9.64	9.87	10.09
22	8.20	8.87	9.50	10.07	10.51	10.84	10.53	10.07	9.63	9.65	9.87	10.09
23	8.20	8.90	9.53	10.09	10.53	10.85	10.48	10.06	9.63	9.66	9.87	10.11
24	8.23	8.91	9.56	10.11	10.54	10.86	10.45	10.04	9.62	9.67	9.88	10.12
25	8.24	8.94	9.57	10.12	10.56	10.87	10.44	10.03	9.61	9.67	9.89	10.13
26	8.27	8.97	9.60	10.14	10.57	10.87	10.43	10.02	9.60	9.68	9.90	10.13
27	8.30	8.99	9.62	10.14	10.58	10.89	10.42	10.00	9.60	9.68	9.90	10.15
28	8.34	9.00	9.63	10.16	10.60	10.89	10.43	9.99	9.59	9.68	9.91	10.17
29	8.37	9.03	9.64	10.17	10.61	10.90	10.42	9.98	9.58	9.70	9.92	10.18
30	8.38	9.06	9.66	10.18	---	10.90	10.42	9.96	9.57	9.71	9.93	10.18
31	8.39	---	9.69	10.20	---	10.92	---	9.95	---	9.72	9.93	---

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644435147141901. Local number, FD00200213ADAD1007.

LOCATION.--Lat 64°44'35", Long 147°14'19", in NE¹/₄ SE¹/₄ NE¹/₄ sec. 13, T.2 S., R.2 E., (Fairbanks C-1 NE quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located south on Gordon Road from the intersection with Lyle Road, south of shoulder where road veers west, North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 19.15 ft, screen opening from 14.2 to 18.7 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 13, 2001 to current year.

DATUM.--Elevation of land-surface datum is 502.24 ft above NGVD of 1929 (revised; levels by U.S. Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 2.40 ft above land surface datum.

REMARKS.--Observation well drilled April 6, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-8S.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.20 ft below land-surface datum, September 24, 2003; lowest, 13.05 ft below land-surface datum, April 24, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 10.35 ft below land-surface datum, October 1; lowest, 12.98 ft below land-surface datum, April 10-11.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.35	11.02	11.61	12.08	12.46	12.74	12.93	12.42	11.79	11.57	11.77	11.97
2	10.37	11.04	11.62	12.10	12.48	12.74	12.92	12.41	11.78	11.57	11.78	11.98
3	10.37	11.06	11.64	12.12	12.49	12.75	12.93	12.40	11.77	11.57	---	11.98
4	10.42	11.08	11.66	12.13	12.50	12.76	12.94	12.39	11.75	11.57	11.77	12.00
5	10.44	11.10	11.67	12.13	12.50	12.77	12.95	12.38	11.74	11.57	11.78	12.01
6	10.44	11.12	11.68	12.14	12.51	12.76	12.94	12.37	11.72	11.58	11.78	12.02
7	10.46	11.14	11.69	12.15	12.53	12.77	12.95	12.35	11.71	11.59	11.79	12.03
8	10.50	11.14	11.71	12.16	12.53	12.78	12.96	12.33	11.70	11.59	11.80	12.03
9	10.52	11.17	11.72	12.18	12.55	12.78	12.96	12.30	11.68	11.59	11.81	12.03
10	10.54	11.19	11.73	12.19	12.55	12.79	12.97	12.27	11.67	11.59	11.82	12.04
11	10.59	11.22	11.74	12.21	12.57	12.80	12.97	12.24	11.66	11.61	11.82	12.05
12	10.60	11.22	11.76	12.23	12.59	12.81	12.95	12.20	11.64	11.61	11.83	12.06
13	10.63	11.26	11.77	12.24	12.59	12.81	12.94	12.17	11.63	11.62	11.84	12.07
14	10.64	11.29	11.79	12.25	12.60	12.82	12.91	12.14	11.63	11.64	11.86	12.09
15	10.65	11.31	11.80	12.26	12.62	12.82	12.87	12.12	11.62	11.65	11.86	12.10
16	10.66	11.33	11.82	12.28	12.62	12.83	12.85	12.10	11.61	11.66	11.87	12.11
17	10.67	11.36	11.84	12.29	12.63	12.84	12.82	12.08	11.60	11.67	11.87	12.14
18	10.69	11.39	11.86	12.30	12.64	12.85	12.78	12.06	11.60	11.69	11.88	12.15
19	10.71	11.41	11.86	12.32	12.65	12.86	12.73	12.04	11.59	11.70	11.90	12.15
20	10.74	11.43	11.88	12.32	12.65	12.86	12.69	12.02	11.58	11.70	11.90	12.16
21	10.76	11.44	11.90	12.34	12.66	12.87	12.63	11.99	11.57	11.72	11.91	12.17
22	10.79	11.46	11.90	12.35	12.67	12.87	12.60	11.97	11.57	11.73	11.91	12.18
23	10.79	11.48	11.93	12.37	12.68	12.87	12.57	11.95	11.56	11.73	11.91	12.20
24	10.82	11.49	11.95	12.38	12.69	12.88	12.54	11.92	11.56	11.73	11.91	12.21
25	10.84	11.52	11.97	12.39	12.70	12.89	12.52	11.92	11.57	11.74	11.93	12.22
26	10.87	11.54	11.99	12.40	12.71	12.89	12.50	11.90	11.57	11.73	11.93	12.22
27	10.90	11.54	12.01	12.41	12.72	12.90	12.47	11.88	11.57	11.73	11.94	12.25
28	10.93	11.55	12.01	12.42	12.73	12.90	12.46	11.86	11.57	11.74	11.94	12.27
29	10.97	11.58	12.02	12.43	12.74	12.91	12.44	11.85	11.57	11.75	11.95	12.28
30	10.98	11.59	12.04	12.45	---	12.91	12.43	11.83	11.57	11.76	11.97	12.29
31	11.00	---	12.07	12.46	---	12.93	---	11.81	---	11.77	11.97	---

GROUND-WATER LEVEL DATA

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644435147141902. Local number, FD00200213ADAD2007.

LOCATION.--Lat 64°44'35", Long 147°14'19", in NE¹/₄ SE¹/₄ NE¹/₄ sec. 13, T.2 S., R.2 E., (Fairbanks C-1 NE quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located 0.3 miles south on Gordon Road from the intersection with Lyle Road, south of shoulder where road veers west, North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 64.39 ft, screen opening from 59.5 to 64.0 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 13, 2001 to current year.

DATUM.--Elevation of land-surface datum is 502.54 ft above NGVD of 1929 (revised; levels by U.S. Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 2.17 ft above land surface datum.

REMARKS.--Observation well drilled April 6, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-8D.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.52 ft below land-surface datum, September 24, 2003; lowest, 13.36 ft below land-surface datum, April 22-24, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 10.67 ft below land-surface datum, October 1; lowest, 13.34 ft below land-surface datum, April 8-11.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.67	11.33	11.92	12.41	12.79	13.08	13.29	12.77	12.13	11.91	12.09	12.29
2	10.69	11.35	11.93	12.42	12.81	13.08	13.28	12.76	12.11	11.91	12.10	12.30
3	10.69	11.37	11.95	12.44	12.82	13.09	13.29	12.75	12.09	11.91	12.10	12.31
4	10.74	11.39	11.98	12.45	12.83	13.10	13.31	12.72	12.07	11.91	12.10	12.33
5	10.75	11.41	11.99	12.47	12.84	13.10	13.31	12.71	12.06	11.91	12.10	12.34
6	10.76	11.43	12.01	12.47	12.85	13.11	13.31	12.70	12.05	11.92	12.11	12.35
7	10.78	11.45	12.02	12.48	12.86	13.12	13.32	12.68	12.03	11.92	12.12	12.36
8	10.82	11.45	12.04	12.49	12.86	13.13	13.32	12.66	12.02	11.93	12.13	12.36
9	10.84	11.49	12.05	12.50	12.89	13.14	13.32	12.63	12.00	11.93	12.14	12.36
10	10.87	11.51	12.06	12.52	12.89	13.15	13.34	12.60	11.99	11.93	12.14	12.37
11	10.90	11.54	12.07	12.54	12.91	13.16	13.33	12.58	11.98	11.94	12.15	12.38
12	10.93	11.54	12.08	12.56	12.92	13.17	13.32	12.54	11.97	11.95	12.16	12.39
13	10.95	11.58	12.11	12.57	12.93	13.17	13.31	12.51	11.96	11.96	12.17	12.41
14	10.96	11.61	12.12	12.58	12.94	13.17	13.28	12.47	11.95	11.96	12.18	12.42
15	10.97	11.63	12.13	12.59	12.95	13.18	13.24	12.45	11.94	11.97	12.19	12.43
16	10.98	11.65	12.14	12.61	12.96	13.19	13.22	12.43	11.93	11.99	12.20	12.45
17	10.99	11.68	12.17	12.62	12.97	13.20	13.17	12.41	11.93	11.99	12.20	12.46
18	11.01	11.71	12.18	12.63	12.98	13.20	13.14	12.39	11.92	12.01	12.21	12.47
19	11.03	11.72	12.19	12.64	12.98	13.22	13.08	12.37	11.91	12.01	12.21	12.47
20	11.07	11.75	12.21	12.65	12.99	13.22	13.04	12.35	11.91	12.02	12.22	12.48
21	11.09	11.76	12.22	12.66	13.00	13.23	12.98	12.32	11.90	12.04	12.23	12.49
22	11.10	11.77	12.23	12.68	13.01	13.23	12.95	12.30	11.90	12.05	12.22	12.50
23	11.11	11.79	12.26	12.70	13.02	13.23	12.93	12.28	11.90	12.05	12.23	12.52
24	11.14	11.80	12.28	12.71	13.03	13.24	12.90	12.26	11.90	12.05	12.23	12.53
25	11.16	11.83	12.29	12.72	13.04	13.25	12.87	12.25	11.90	12.06	12.24	12.54
26	11.19	11.86	12.32	12.73	13.05	13.25	12.85	12.23	11.91	12.06	12.25	12.55
27	11.22	11.85	12.33	12.74	13.06	13.26	12.82	12.21	11.91	12.05	12.25	12.57
28	11.24	11.86	12.34	12.75	13.07	13.25	12.81	12.20	11.91	12.06	12.26	12.59
29	11.27	11.89	12.34	12.76	13.07	13.27	12.79	12.18	11.90	12.07	12.28	12.60
30	11.29	11.90	12.36	12.77	---	13.27	12.77	12.17	11.91	12.09	12.28	12.61
31	11.31	---	12.39	12.79	---	13.28	---	12.15	---	12.09	12.29	---

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644435147172001. Local number, FD00200214ACBC1002.

LOCATION.--Lat 64°44'358", Long 147°17'208", in NW¹/₄ SW¹/₄ NE¹/₄ sec. 14, T.2 S., R.2 E., (Fairbanks C-1 NW quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located 25 ft off shoulder of southeast corner of Newby Road and Newby Park intersection, North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 16.9 ft, screen opening from 11.9 to 16.4 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 12, 2001 to current year.

DATUM.--Elevation of land-surface datum is 497.04 ft above NGVD of 1929 (revised; levels by U.S. Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey.). Measuring point: top of inner casing 2.57 ft above land surface datum.

REMARKS.--Observation well drilled April 8, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-9.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.96 ft below land-surface datum, August 26, 2002; lowest, 8.88 ft below land-surface datum, April 6, 2004.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 7.60 ft below land-surface datum, June 11; lowest, 8.88 ft below land-surface datum, April 6.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.73	8.23	8.38	8.54	8.69	8.80	8.86	8.47	7.79	7.87	7.88	7.84
2	7.75	8.24	8.37	8.55	8.70	8.79	8.85	8.48	7.76	7.86	7.86	7.82
3	7.75	8.26	8.37	8.55	8.71	8.79	8.86	8.49	7.72	7.86	7.85	7.82
4	7.77	8.27	8.38	8.56	8.71	8.79	8.86	8.49	7.70	7.85	7.83	7.92
5	7.78	8.29	8.38	8.56	8.72	8.79	8.87	8.48	7.68	7.85	7.80	7.97
6	7.79	8.30	8.38	8.56	8.72	8.79	8.87	8.45	7.67	7.85	7.78	8.00
7	7.81	8.32	8.38	8.56	8.73	8.79	8.86	8.39	7.71	7.85	7.77	8.02
8	7.82	8.33	8.39	8.56	8.73	8.80	8.84	8.36	7.68	7.86	7.77	8.09
9	7.83	8.35	8.39	8.57	8.75	8.80	8.83	8.32	7.64	7.85	7.91	8.12
10	7.84	8.36	8.40	8.57	8.74	8.80	8.79	8.29	7.61	7.86	7.87	8.14
11	7.86	8.39	8.41	8.59	8.75	8.81	8.74	8.27	7.60	7.87	7.84	8.15
12	7.88	8.39	8.42	8.59	8.76	8.81	8.67	8.24	7.72	7.89	7.83	8.17
13	7.89	8.41	8.43	8.60	8.77	8.82	8.62	8.20	7.80	7.90	7.82	8.20
14	7.90	8.43	8.44	8.61	8.77	8.82	8.60	8.17	7.81	7.90	7.83	8.21
15	7.91	8.44	8.44	8.61	8.78	8.82	8.58	8.15	7.83	7.92	7.82	8.22
16	7.92	8.45	8.45	8.61	8.78	8.82	8.55	8.13	7.84	7.92	7.82	8.24
17	7.93	8.46	8.46	8.62	8.78	8.82	8.52	8.12	7.84	7.93	7.81	8.25
18	7.95	8.46	8.46	8.62	8.78	8.82	8.49	8.10	7.85	7.93	7.80	8.29
19	7.97	8.46	8.46	8.62	8.77	8.83	8.47	8.08	7.85	7.92	7.80	8.32
20	7.99	8.45	8.46	8.63	8.78	8.83	8.47	8.07	7.86	7.93	7.79	8.33
21	8.01	8.44	8.47	8.63	8.77	8.83	8.47	8.05	7.87	7.93	7.79	8.34
22	8.03	8.44	8.47	8.64	8.78	8.83	8.47	8.03	7.87	7.93	7.87	8.36
23	8.05	8.43	8.48	8.65	8.78	8.83	8.47	8.02	7.87	7.90	7.87	8.38
24	8.07	8.41	8.49	8.66	8.78	8.84	8.47	8.00	7.88	7.90	7.86	8.39
25	8.09	8.41	8.50	8.66	8.79	8.84	8.47	7.99	7.90	7.90	7.86	8.41
26	8.11	8.40	8.51	8.67	8.78	8.84	8.47	7.98	7.91	7.88	7.85	8.43
27	8.14	8.38	8.51	8.67	8.78	8.84	8.46	7.96	7.91	7.87	7.85	8.44
28	8.15	8.37	8.51	8.67	8.79	8.84	8.47	7.93	7.90	7.90	7.85	8.46
29	8.18	8.38	8.51	8.68	8.79	8.85	8.46	7.89	7.90	7.92	7.84	8.48
30	8.19	8.37	8.52	8.68	---	8.85	8.47	7.87	7.88	7.90	7.84	8.49
31	8.21	---	8.53	8.69	---	8.86	---	7.83	---	7.92	7.84	---

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

64444147143901. Local number, FD00200213AACD1005.

LOCATION.--Lat 64° 44' 44", Long 147° 14' 39", in SW¼ NE¼ NE¼ sec. 13, T.2 S., R.2 E., (Fairbanks C-1 NE quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located approximately 0.2 mi south on Silver Street from the intersection with Lyle Road, then 15 ft south of road, North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 17.15 ft, screen opening from 12.4 to 16.9 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 13, 2001 to current year.

DATUM.--Elevation of land-surface datum is 500.34 ft above NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 2.30 ft above land surface datum.

REMARKS.--Observation well drilled April 8, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-7. Missing daily values February 11 March 14 and March 23 to April 5 due to ice in well.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.74 ft below land-surface datum, September 24, 2003; lowest, 11.49 ft below land-surface datum, April 10-11, 2004.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 8.89 ft below land-surface datum, October 1; lowest, 11.49 ft below land-surface datum, April 10-11.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.89	9.55	10.13	10.60	10.96	---	---	10.92	10.26	10.09	10.31	10.49
2	8.91	9.57	10.14	10.61	10.98	---	---	10.91	10.25	10.09	10.31	10.50
3	8.92	9.59	10.16	10.63	10.99	---	---	10.90	10.24	10.09	10.29	10.50
4	8.95	9.61	10.17	10.64	11.00	---	---	10.89	10.22	10.10	10.29	10.52
5	8.97	9.63	10.18	10.65	11.01	---	---	10.88	10.21	10.10	10.29	10.53
6	8.98	9.65	10.20	10.66	11.02	---	---	10.87	10.20	10.11	10.30	10.54
7	9.00	9.67	10.21	10.67	11.03	---	11.46	10.84	10.18	10.11	10.31	10.54
8	9.03	9.68	10.23	10.68	11.04	---	11.47	10.80	10.17	10.12	10.32	10.55
9	9.05	9.70	10.24	10.69	11.06	---	11.47	10.79	10.16	10.12	10.33	10.56
10	9.08	9.72	10.25	10.70	11.06	---	11.48	10.76	10.14	10.12	10.34	10.56
11	9.12	9.75	10.26	10.72	---	---	11.48	10.73	10.13	10.14	10.34	10.57
12	9.14	9.76	10.28	10.74	---	---	11.45	10.68	10.12	10.14	10.35	10.58
13	9.16	9.79	10.29	10.75	---	---	11.44	10.65	10.11	10.15	10.36	10.59
14	9.18	9.82	10.31	10.76	---	---	11.41	10.62	10.10	10.17	10.37	10.61
15	9.18	9.84	10.32	10.77	---	11.34	11.37	10.59	10.10	10.19	10.38	10.62
16	9.19	9.86	10.33	10.79	---	11.34	11.35	10.58	10.09	10.20	10.39	10.63
17	9.20	9.89	10.35	10.80	---	11.35	11.30	10.56	10.08	10.21	10.40	10.65
18	9.23	9.92	10.37	10.81	---	11.36	11.26	10.54	10.08	10.23	10.40	10.67
19	9.24	9.93	10.38	10.82	---	11.37	11.21	10.52	10.07	10.23	10.41	10.67
20	9.28	9.96	10.39	10.83	---	11.37	11.18	10.49	10.07	10.24	10.42	10.68
21	9.30	9.97	10.41	10.84	---	11.38	11.14	10.47	10.07	10.25	10.43	10.69
22	9.32	9.99	10.41	10.85	---	11.39	11.10	10.44	10.06	10.27	10.43	10.70
23	9.33	10.01	10.44	10.87	---	---	11.07	10.43	10.06	10.27	10.43	10.71
24	9.36	10.02	10.46	10.89	---	---	11.04	10.40	10.07	10.27	10.44	10.73
25	9.37	10.04	10.48	10.90	---	---	11.02	10.38	10.08	10.27	10.45	10.74
26	9.40	10.06	10.51	10.91	---	---	11.00	10.36	10.08	10.27	10.45	10.74
27	9.43	10.06	10.52	10.91	---	---	10.98	10.34	10.09	10.27	10.46	10.77
28	9.46	10.07	10.53	10.92	---	---	10.97	10.32	10.09	10.27	10.47	10.78
29	9.49	10.10	10.53	10.93	---	---	10.95	10.31	10.09	10.29	10.48	10.80
30	9.51	10.11	10.55	10.95	---	---	10.93	10.29	10.09	10.30	10.48	10.80
31	9.53	---	10.57	10.96	---	---	---	10.27	---	10.31	10.49	---

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644446147120901. Local number, FD00200317BBCA1001.

LOCATION.--Lat 64°44'46", Long 147°12'09", in SW¹/₄ NW¹/₄ NW¹/₄ sec. 17, T.2 S., R.3 E., (Fairbanks C-1 NE quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located in Chena River Recreation Area, North Pole. From recreation area entrance station well is approximately 0.8 mi southeast on dirt road from levee followed by 0.8 mi northeast on intersecting dirt road.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 15.2 ft, screen opening from 10.1 ft. to 15.1 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 05, 2001 to current year.

DATUM.--Elevation of land-surface datum is 497.64 ft above NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 6.21 ft above land surface datum.

REMARKS.--Observation well drilled September 9, 1994 by the U.S. Army Corps of Engineers and designated as USAP-4.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.52 ft below land-surface datum, August 1, 2003; lowest, 11.81 ft below land-surface datum, April 27-28, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 3.92 ft below land-surface datum, October 3; lowest, 10.47 ft below land-surface datum, April 11-12.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.94	5.50	6.92	8.19	9.03	9.72	10.30	9.71	8.20	8.07	8.77	9.27
2	3.95	5.54	6.95	8.23	9.05	9.73	10.30	9.70	8.19	8.09	8.78	9.29
3	3.92	5.59	7.02	8.27	9.08	9.73	10.31	9.70	8.15	8.12	8.79	9.30
4	4.04	5.65	7.06	8.30	9.11	9.76	10.33	9.67	8.11	8.15	8.79	9.33
5	4.04	5.68	7.10	8.32	9.13	9.77	10.35	9.66	8.09	8.16	8.80	9.35
6	4.06	5.72	7.14	8.34	9.16	9.79	10.37	9.64	8.07	8.19	8.82	9.36
7	4.10	5.77	7.18	8.35	9.19	9.81	10.38	9.62	8.04	8.22	8.84	9.37
8	4.16	5.77	7.24	8.36	9.20	9.84	10.40	9.55	8.02	8.26	8.86	9.38
9	4.20	5.83	7.28	8.40	9.25	9.86	10.42	9.47	7.98	8.27	8.87	9.40
10	4.26	5.88	7.32	8.42	9.26	9.88	10.44	9.38	7.94	8.28	8.88	9.41
11	4.34	5.92	7.35	8.49	9.28	9.90	10.46	9.30	7.91	8.30	8.90	9.42
12	4.37	5.92	7.39	8.51	9.31	9.93	10.46	9.20	7.86	8.33	8.92	9.44
13	4.43	6.01	7.43	8.54	9.34	9.95	10.45	9.12	7.84	8.35	8.94	9.45
14	4.46	6.05	7.47	8.56	9.35	9.96	10.41	9.04	7.82	8.37	8.96	9.47
15	4.48	6.10	7.50	8.59	9.39	9.97	10.34	8.97	7.80	8.40	8.98	9.50
16	4.51	6.15	7.54	8.62	9.41	10.00	10.29	8.91	7.78	8.42	9.00	9.51
17	4.54	6.21	7.60	8.64	9.43	10.02	10.22	8.86	7.77	8.45	9.01	9.53
18	4.62	6.28	7.65	8.66	9.44	10.04	10.17	8.81	7.77	8.47	9.03	9.54
19	4.67	6.34	7.66	8.70	9.46	10.07	10.10	8.76	7.77	8.49	9.04	9.55
20	4.77	6.41	7.71	8.71	9.49	10.09	10.06	8.70	7.77	8.52	9.05	9.55
21	4.83	6.43	7.75	8.75	9.51	10.10	9.97	8.65	7.78	8.55	9.08	9.56
22	4.88	6.48	7.76	8.78	9.53	10.11	9.92	8.60	7.78	8.58	9.09	9.58
23	4.92	6.53	7.83	8.82	9.56	10.12	9.88	8.56	7.80	8.60	9.10	9.59
24	5.01	6.56	7.88	8.85	9.58	10.14	9.84	8.50	7.85	8.62	9.12	9.62
25	5.03	6.64	7.92	8.88	9.60	10.16	9.81	8.47	7.89	8.63	9.15	9.62
26	5.12	6.70	7.98	8.90	9.63	10.17	9.79	8.43	7.94	8.65	9.16	9.61
27	5.20	6.71	8.01	8.91	9.64	10.19	9.75	8.38	7.97	8.66	9.18	9.65
28	5.28	6.74	8.03	8.93	9.68	10.21	9.74	8.35	8.00	8.67	9.21	9.67
29	5.36	6.82	8.03	8.96	9.70	10.23	9.74	8.32	8.03	8.70	9.22	9.68
30	5.38	6.87	8.08	8.98	---	10.25	9.72	8.27	8.05	8.73	9.24	9.68
31	5.44	---	8.14	9.01	---	10.27	---	8.23	---	8.75	9.27	---

GROUND-WATER LEVEL DATA

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

64450147131201. Local number, FD00200318ABBD1005.

LOCATION.--Lat 64°44'50", Long 147°13'12", in NW¹/₄ NW¹/₄ NE¹/₄ sec. 18, T.2 S., R.3 E., (Fairbanks C-1 NE quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located in Chena River Recreation Area, North Pole. From recreation area entrance station well is approximately 0.3 mi southeast on dirt road from levee.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. pvc casing, depth 24.8 ft, screen opening from 19.7 to 24.7 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; Submersible pressure transducer/electronic data logger from October 13, 2001 to current year.

DATUM.--Elevation of land-surface datum is 502.44 ft above NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 5.38 ft above land surface datum.

REMARKS.--Observation well drilled September 9, 1994 by the U.S. Army Corps of Engineers and designated as USAP-5.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.13 ft below land-surface datum, September 24, 2003; lowest, 14.81 ft below land-surface datum, April 15-19 and 21-28, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 11.27 ft below land-surface datum, October 1; lowest, 14.50 ft below land-surface datum, April 13-14.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.27	11.97	12.66	13.28	13.77	14.14	14.40	13.94	13.28	12.96	13.24	13.48
2	11.29	11.99	12.67	13.30	13.79	14.13	14.38	13.93	13.27	12.96	13.25	13.49
3	11.28	12.02	12.70	13.33	13.79	14.15	14.41	13.92	13.25	12.97	13.26	13.50
4	11.34	12.04	12.73	13.34	13.81	14.16	14.43	13.90	13.23	12.97	13.26	13.51
5	11.35	12.06	12.74	13.35	13.81	14.17	14.43	13.89	13.22	12.97	13.27	13.52
6	11.36	12.08	12.76	13.36	13.84	14.17	14.44	13.86	13.20	12.99	13.27	13.52
7	11.39	12.10	12.78	13.37	13.84	14.18	14.44	13.85	13.18	13.00	13.28	13.53
8	11.43	12.10	12.81	13.38	13.84	14.19	14.46	13.80	13.17	13.01	13.29	13.54
9	11.45	12.14	12.82	13.40	13.88	14.19	14.45	13.78	13.15	13.00	13.30	13.54
10	11.48	12.16	12.84	13.41	13.86	14.22	14.47	13.76	13.13	13.01	13.30	13.55
11	11.53	12.19	12.85	13.45	13.91	14.23	14.47	13.73	13.12	13.02	13.31	13.56
12	11.54	12.19	12.87	13.46	13.92	14.23	14.47	13.70	13.10	13.03	13.33	13.57
13	11.56	12.23	12.90	13.47	13.92	14.24	14.48	13.67	13.09	13.04	13.34	13.58
14	11.58	12.25	12.92	13.49	13.94	14.25	14.48	13.65	13.08	13.05	13.35	13.59
15	11.58	12.28	12.94	13.51	13.96	14.26	14.45	13.64	13.06	13.07	13.36	13.60
16	11.59	12.30	12.96	13.52	13.97	14.28	14.44	13.62	13.04	13.08	13.37	13.62
17	11.60	12.33	12.98	13.53	13.98	14.29	14.39	13.61	13.04	13.09	13.37	13.63
18	11.63	12.37	13.01	13.55	13.99	14.29	14.36	13.58	13.02	13.10	13.38	13.63
19	11.65	12.38	13.01	13.57	14.00	14.30	14.29	13.56	13.01	13.11	13.38	13.64
20	11.68	12.42	13.04	13.57	14.01	14.31	14.23	13.53	13.00	13.13	13.39	13.64
21	11.71	12.43	13.06	13.60	14.02	14.31	14.15	13.50	12.98	13.14	13.40	13.65
22	11.73	12.45	13.06	13.62	14.04	14.32	14.11	13.48	12.96	13.16	13.40	13.66
23	11.73	12.47	13.10	13.64	14.05	14.32	14.11	13.46	12.96	13.17	13.40	13.67
24	11.77	12.49	13.12	13.65	14.07	14.33	14.07	13.43	12.95	13.18	13.41	13.68
25	11.78	12.53	13.14	13.66	14.08	14.34	14.05	13.41	12.95	13.18	13.42	13.69
26	11.81	12.56	13.17	13.67	14.08	14.35	14.02	13.40	12.95	13.18	13.43	13.69
27	11.85	12.56	13.18	13.69	14.10	14.36	13.98	13.37	12.95	13.19	13.44	13.71
28	11.88	12.58	13.19	13.71	14.12	14.35	13.97	13.36	12.96	13.19	13.45	13.72
29	11.91	12.61	13.20	13.73	14.12	14.38	13.96	13.34	12.95	13.21	13.46	13.73
30	11.92	12.63	13.23	13.73	---	14.38	13.94	13.32	12.95	13.22	13.47	13.74
31	11.94	---	13.25	13.75	---	14.40	---	13.30	---	13.23	13.48	---

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

64454147151701. Local number, FD00200213ABBB1006.

LOCATION.--Lat 64°44'54", Long 147°15'17", in NW¹/₄ NW¹/₄ NE¹/₄ sec. 13, T.2 S., R.2 E., (Fairbanks C-1 NW quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located approximately 30 ft southeast of intersection of Nelson Rd and Lyle Rd, North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 17.9 ft, screen openings from 12.6 to 17.6 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic datalogger from October 12, 2001 to current year.

DATUM.--Elevation of land-surface datum is 497.94 ft above NGVD of 1929 (revised; levels by U.S. Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 2.77 ft above land surface datum.

REMARKS.--Observation well drilled April 8, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-6.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.53 ft below land-surface datum, September 18-19, 2003; lowest, 10.13 ft below land-surface datum, April 22-24, 2002 and April 7-11, 2004.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 7.71 ft below land-surface datum, October 1; lowest, 10.13 ft below land-surface datum, April 7-11.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.71	8.33	8.88	9.32	9.70	9.95	10.10	9.54	8.84	8.71	8.90	9.10
2	7.73	8.35	8.89	9.34	9.71	9.96	10.09	9.53	8.83	8.71	8.90	9.10
3	7.73	8.37	8.91	9.36	9.72	9.96	10.10	9.53	8.81	8.72	8.89	9.10
4	7.77	8.39	8.92	9.37	9.73	9.96	10.10	9.52	8.79	8.72	8.89	9.12
5	7.78	8.41	8.93	9.38	9.74	9.97	10.11	9.50	8.78	8.72	8.90	9.12
6	7.79	8.43	8.94	9.39	9.75	9.97	10.12	9.48	8.77	8.73	8.91	9.14
7	7.81	8.45	8.95	9.40	9.77	9.98	10.12	9.44	8.75	8.74	8.92	9.15
8	7.84	8.45	8.97	9.41	9.77	9.98	10.13	9.41	8.75	8.75	8.93	9.15
9	7.86	8.48	8.98	9.42	9.79	9.99	10.13	9.38	8.73	8.76	8.94	9.16
10	7.88	8.50	9.00	9.43	9.80	10.00	10.13	9.34	8.71	8.76	8.95	9.16
11	7.92	8.53	9.01	9.46	9.81	9.99	10.11	9.31	8.70	8.77	8.95	9.17
12	7.94	8.54	9.02	9.47	9.82	10.00	10.08	9.28	8.69	8.79	8.96	9.18
13	7.96	8.57	9.03	9.48	9.83	10.01	10.05	9.25	8.68	8.80	8.97	9.20
14	7.97	8.59	9.05	9.49	9.84	10.01	10.02	9.23	8.68	8.80	8.98	9.21
15	7.98	8.61	9.06	9.50	9.85	10.01	9.98	9.20	8.68	8.81	8.99	9.22
16	7.99	8.63	9.08	9.51	9.86	10.02	9.95	9.18	8.67	8.83	9.00	9.23
17	8.00	8.65	9.10	9.52	9.86	10.03	9.91	9.16	8.66	8.84	9.00	9.26
18	8.03	8.68	9.11	9.53	9.87	10.03	9.86	9.14	8.66	8.85	9.01	9.27
19	8.04	8.70	9.12	9.55	9.87	10.04	9.81	9.13	8.66	8.86	9.02	9.28
20	8.08	8.72	9.14	9.56	9.88	10.05	9.78	9.10	8.66	8.87	9.03	9.28
21	8.10	8.73	9.15	9.57	9.88	10.05	9.73	9.07	8.66	8.88	9.03	9.29
22	8.12	8.75	9.16	9.59	9.89	10.05	9.70	9.05	8.66	8.89	9.03	9.30
23	8.13	8.77	9.18	9.61	9.90	10.06	9.67	9.03	8.67	8.88	9.04	9.31
24	8.16	8.77	9.20	9.62	9.91	10.06	9.65	9.01	8.68	8.88	9.05	9.33
25	8.18	8.80	9.21	9.63	9.91	10.07	9.63	8.98	8.70	8.88	9.06	9.34
26	8.21	8.82	9.23	9.64	9.92	10.07	9.61	8.96	8.71	8.88	9.06	9.35
27	8.23	8.82	9.25	9.65	9.93	10.08	9.59	8.93	8.71	8.88	9.07	9.37
28	8.25	8.83	9.26	9.66	9.94	10.08	9.58	8.91	8.72	8.88	9.08	9.38
29	8.28	8.85	9.26	9.67	9.94	10.09	9.56	8.89	8.72	8.89	9.09	9.40
30	8.29	8.86	9.28	9.68	---	10.09	9.55	8.87	8.71	8.91	9.09	9.41
31	8.31	---	9.31	9.69	---	10.09	---	8.85	---	8.91	9.10	---

GROUND-WATER LEVEL DATA

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644528147131201. Local number, FD00200307ACBD1001 51660.

LOCATION.--Lat 64°45'28", long 147°13'12", NW¹/₄ SW¹/₄ NE¹/₄, sec. 7, T.2 S., R.3 E., (Fairbanks D-1), Fairbanks Meridian, Hydrologic Unit 19040506, inside Corps of Engineers Chena Lakes Project fenced compound, 120 ft west of headquarters building and 2 mi northeast of the intersection of Laurence and Nelson Roads. Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 4-in., depth 31 ft, screened from 28.5 to 31 ft.

INSTRUMENTATION.--Continuous strip-chart recorder from June 1976 to May 1980. Digital recorder--1-hour punch interval, from October 1985 to April 1995. Electronic data logger from April 1995 to present.

DATUM.--Elevation of land-surface datum is 494.7 ft above sea level (determined by levels survey). Measuring point: top of casing 2.91 ft above land-surface datum.

REMARKS.--Observation well drilled by the U.S. Army Corps of Engineers, designated as P-252. Water levels from water years 1986 through 1990 were not previously published and are available from NWIS.

PERIOD OF RECORD.--June 1976 to May 1980 and October 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.85 ft below land-surface datum, June 8-9, 1992; lowest, 13.20 ft below land-surface datum September 15, 1976.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 7.35 ft below land-surface datum, October 1; lowest, 10.84 ft below land-surface datum, April 10-14.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.35	8.19	8.93	9.58	10.09	10.47	10.76	10.33	9.39	9.26	9.75	10.03
2	7.38	8.21	8.95	9.60	10.11	10.48	10.77	10.31	9.37	9.28	9.75	10.05
3	7.40	8.24	8.97	9.63	10.12	10.49	10.77	10.29	9.36	9.29	9.76	10.05
4	7.42	8.26	9.00	9.65	10.14	10.50	10.78	10.27	9.34	9.31	9.76	10.07
5	7.45	8.28	9.02	9.67	10.15	10.51	10.79	10.26	9.32	9.32	9.77	10.08
6	7.47	8.31	9.04	9.69	10.17	10.51	10.80	10.23	9.30	9.34	9.78	10.09
7	7.49	8.33	9.06	9.70	10.18	10.52	10.80	10.21	9.28	9.36	9.78	10.10
8	7.51	8.35	9.09	9.71	10.19	10.53	10.81	10.15	9.27	9.38	9.79	10.11
9	7.54	8.37	9.11	9.73	10.21	10.54	10.82	10.10	9.25	9.40	9.80	10.11
10	7.56	8.39	9.13	9.74	10.23	10.55	10.83	10.04	9.23	9.42	9.81	10.12
11	7.60	8.42	9.15	9.75	10.24	10.57	10.83	9.99	9.20	9.43	9.82	10.13
12	7.63	8.44	9.17	9.77	10.25	10.58	10.84	9.94	9.19	9.45	9.83	10.14
13	7.66	8.47	9.18	9.79	10.27	10.59	10.83	9.88	9.17	9.47	9.84	10.14
14	7.69	8.49	9.21	9.81	10.28	10.59	10.83	9.84	9.16	9.48	9.85	10.15
15	7.72	8.52	9.22	9.83	10.29	10.60	10.82	9.80	9.16	9.50	9.86	10.16
16	7.74	8.55	9.24	9.84	10.31	10.61	10.80	9.76	9.15	9.52	9.87	10.17
17	7.75	8.58	9.26	9.85	10.32	10.62	10.76	9.74	9.14	9.53	9.88	10.18
18	7.78	8.61	9.29	9.87	10.33	10.63	10.71	9.72	9.14	9.55	9.89	10.19
19	7.79	8.64	9.31	9.89	10.34	10.64	10.68	9.69	9.14	9.57	9.90	10.19
20	7.82	8.67	9.33	9.90	10.35	10.65	10.65	9.67	9.14	9.59	9.91	10.20
21	7.85	8.70	9.35	9.92	10.36	10.67	10.61	9.64	9.14	9.61	9.92	10.21
22	7.88	8.72	9.37	9.94	10.37	10.68	10.56	9.61	9.14	9.62	9.93	10.21
23	7.91	8.76	9.39	9.95	10.38	10.68	10.53	9.58	9.15	9.64	9.94	10.22
24	7.93	8.77	9.41	9.97	10.40	10.69	10.50	9.55	9.16	9.65	9.95	10.23
25	7.96	8.79	9.44	9.99	10.41	10.70	10.46	9.52	9.17	9.67	9.96	10.23
26	7.99	8.82	9.46	10.00	10.43	10.71	10.43	9.51	9.19	9.68	9.97	10.24
27	8.02	8.84	9.49	10.02	10.43	10.72	10.41	9.48	9.20	9.69	9.98	10.25
28	8.06	8.86	9.50	10.03	10.45	10.73	10.39	9.46	9.22	9.70	9.99	10.26
29	8.10	8.88	9.53	10.04	10.46	10.73	10.37	9.45	9.24	9.71	10.00	10.27
30	8.13	8.90	9.54	10.05	---	10.74	10.35	9.43	9.25	9.72	10.01	10.28
31	8.16	---	9.56	10.08	---	10.74	---	9.42	---	9.74	10.02	---

GROUND-WATER LEVEL DATA

411

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644531147130801. Local number, FD00200307ACBA1007.

LOCATION.--Lat 64°45'31", Long 147°13'08", in NW¹/₄ SW¹/₄ NE¹/₄ sec. 7, T.2 S., R.3 E., (Fairbanks D-1 SE) Fairbanks Meridian, Hydrologic Unit 19040506. Well located approximately 60 feet from bunker door off gravel road near U.S. Army Corps of Engineers' facility south of Chena Lake Recreation Area entrance.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 17.6 ft, screen opening from 7.6 ft to 12.1 ft and 12.6 to 17.1 ft

INSTRUMENTATION.--Intermittent measurements by USGS personnel February 2001 to current year; submersible pressure transducer/electronic data logger from October 5, 2001 to current year.

DATUM.--Elevation of land-surface datum is 495.84 ft above NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 2.49 feet above land surface datum.

REMARKS.--Observation well drilled March 12, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-4.

PERIOD OF RECORD.--February 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.46 ft below land-surface datum, August 9, 2003; lowest, 10.75 ft below land-surface datum, April 23-24, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 6.86 ft below land-surface datum, October 1; lowest, 10.28 ft below land-surface datum, April 10-12.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.86	7.74	8.47	9.13	9.58	9.95	10.22	9.71	8.76	8.76	9.24	9.54
2	6.88	7.76	8.49	9.15	9.60	9.95	10.20	9.70	8.76	8.77	9.25	9.54
3	6.87	7.78	8.52	9.18	9.61	9.96	10.21	9.68	8.74	8.80	9.25	9.55
4	6.93	7.80	8.55	9.19	9.63	9.97	10.22	9.65	8.72	8.82	9.25	9.57
5	6.96	7.83	8.56	9.21	9.64	9.97	10.23	9.63	8.71	8.83	9.26	9.58
6	6.97	7.85	8.58	9.21	9.65	9.98	10.24	9.60	8.69	8.85	9.27	9.59
7	6.99	7.88	8.60	9.21	9.67	9.99	10.25	9.56	8.67	8.88	9.29	9.60
8	7.03	7.86	8.64	9.21	9.68	10.00	10.26	9.50	8.66	8.90	9.29	9.61
9	7.06	7.91	8.65	9.23	9.70	10.01	10.26	9.44	8.63	8.92	9.31	9.61
10	7.09	7.93	8.67	9.24	9.70	10.02	10.27	9.39	8.59	8.92	9.32	9.61
11	7.14	7.96	8.68	9.28	9.73	10.04	10.28	9.33	8.58	8.95	9.32	9.62
12	7.17	7.96	8.69	9.29	9.75	10.05	10.25	9.27	8.57	8.97	9.33	9.62
13	7.20	8.02	8.72	9.31	9.76	10.06	10.24	9.22	8.57	8.98	9.34	9.64
14	7.23	8.05	8.74	9.32	9.77	10.06	10.23	9.18	8.57	9.01	9.36	9.65
15	7.23	8.09	8.76	9.33	9.79	10.07	10.19	9.15	8.57	9.04	9.37	9.65
16	7.25	8.11	8.78	9.36	9.80	10.08	10.15	9.12	8.57	9.06	9.37	9.66
17	7.26	8.14	8.82	9.37	9.80	10.10	10.10	9.10	8.57	9.07	9.38	9.68
18	7.30	8.19	8.84	9.38	9.81	10.11	10.07	9.08	8.58	9.09	9.40	9.68
19	7.32	8.21	8.84	9.40	9.82	10.12	10.03	9.04	8.57	9.10	9.40	9.69
20	7.37	8.23	8.86	9.41	9.82	10.14	10.01	9.01	8.58	9.12	9.41	9.69
21	7.40	8.25	8.88	9.43	9.83	10.14	9.96	8.98	8.59	9.14	9.43	9.69
22	7.43	8.27	8.88	9.44	9.84	10.14	9.92	8.95	8.60	9.16	9.43	9.70
23	7.44	8.28	8.93	9.47	9.86	10.14	9.90	8.93	8.61	9.17	9.44	9.70
24	7.49	8.28	8.96	9.49	9.87	10.15	9.87	8.89	8.64	9.17	9.44	9.71
25	7.50	8.34	8.98	9.50	9.89	10.16	9.84	8.88	8.66	9.18	9.46	9.72
26	7.55	8.38	9.02	9.51	9.90	10.17	9.81	8.87	8.69	9.20	9.47	9.71
27	7.59	8.35	9.03	9.52	9.91	10.17	9.79	8.84	8.71	9.20	9.48	9.74
28	7.63	8.37	9.03	9.53	9.92	10.17	9.78	8.83	8.73	9.21	9.50	9.75
29	7.67	8.43	9.03	9.54	9.94	10.19	9.76	8.81	8.74	9.23	9.51	9.76
30	7.68	8.45	9.06	9.56	---	10.19	9.73	8.80	8.75	9.24	9.52	9.77
31	7.71	---	9.09	9.57	---	10.21	---	8.78	---	9.25	9.53	---

GROUND-WATER LEVEL DATA

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644547147141801. Local number, FD00200306CCCC1002.

LOCATION.--Lat 64°45'47", Long 147°14'18", in SW¹/₄ SW¹/₄ SW¹/₄ sec. 6, T.2 S., R.3 E., (Fairbanks D-1 SE quad), Fairbanks Meridian, Hydrologic Unit 19040506, Well located 0.5 mi on Hurst Road from the intersection with Nelson Road, then 30 ft east of road, North Pole. Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in.PVC inner casing, depth 17.4 ft, screen opening from 12.4 ft to 16.9 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel August 2001 to current year; submersible pressure transducer/electronic data logger from October 12, 2001 to current year.

DATUM.--Elevation of land-surface datum is 493.64 ft above NGVD of 1929 (revised; levels by US Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey). Measuring point: top of inner casing 2.64 feet above land surface datum.

REMARKS.--Observation well drilled April 11, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-3.

PERIOD OF RECORD.--August 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.82 ft below land-surface datum, September 18-19, 2002; lowest, 10.07 ft below land-surface datum, April 22-23, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 6.09 ft below land-surface datum, October 1; lowest, 9.89 ft below land-surface datum, April 11.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.09	7.05	7.94	8.70	9.19	9.57	9.82	9.11	8.24	8.23	8.76	9.02
2	6.11	7.07	7.96	8.72	9.21	9.57	9.80	9.10	8.23	8.25	8.77	9.03
3	6.11	7.10	8.00	8.75	9.22	9.57	9.81	9.11	8.22	8.27	8.77	9.05
4	6.17	7.14	8.02	8.77	9.23	9.58	9.83	9.14	8.20	8.29	8.78	9.06
5	6.19	7.16	8.04	8.78	9.25	9.59	9.81	9.13	8.19	8.30	8.78	9.08
6	6.21	7.19	8.07	8.79	9.26	9.60	9.84	9.10	8.19	8.33	8.79	9.09
7	6.24	7.22	8.09	8.80	9.28	9.60	9.85	8.99	8.16	8.36	8.80	9.09
8	6.29	7.23	8.13	8.80	9.28	9.62	9.86	8.89	8.15	8.38	8.81	9.10
9	6.33	7.27	8.15	8.82	9.31	9.62	9.86	8.76	8.13	8.38	8.82	9.11
10	6.36	7.30	8.17	8.83	9.31	9.64	9.87	8.65	8.10	8.39	8.82	9.11
11	6.40	7.34	8.19	8.87	9.34	9.65	9.88	8.57	8.08	8.42	8.83	9.11
12	6.43	7.34	8.21	8.89	9.36	9.66	9.87	8.56	8.06	8.44	8.84	9.12
13	6.45	7.40	8.24	8.90	9.37	9.67	9.86	8.58	8.06	8.45	8.85	9.14
14	6.47	7.43	8.27	8.92	9.37	9.67	9.85	8.56	8.06	8.47	8.86	9.15
15	6.49	7.47	8.29	8.93	9.39	9.68	9.82	8.55	8.06	8.50	8.87	9.15
16	6.50	7.50	8.30	8.95	9.41	9.69	9.80	8.53	8.05	8.51	8.87	9.17
17	6.52	7.53	8.34	8.96	9.41	9.70	9.75	8.53	8.06	8.53	8.88	9.18
18	6.56	7.58	8.37	8.98	9.42	9.71	9.71	8.52	8.06	8.55	8.89	9.18
19	6.59	7.60	8.38	9.00	9.43	9.73	9.67	8.49	8.04	8.57	8.90	9.18
20	6.63	7.65	8.40	9.00	9.44	9.74	9.64	8.47	8.05	8.58	8.90	9.19
21	6.67	7.66	8.43	9.03	9.45	9.74	9.59	8.44	8.05	8.61	8.91	9.19
22	6.70	7.69	8.43	9.04	9.47	9.74	9.54	8.42	8.06	8.63	8.92	9.20
23	6.72	7.71	8.48	9.08	9.48	9.74	9.50	8.40	8.07	8.65	8.93	9.21
24	6.76	7.73	8.51	9.10	9.49	9.75	9.46	8.37	8.11	8.66	8.94	9.22
25	6.78	7.78	8.53	9.11	9.51	9.76	9.42	8.35	8.14	8.67	8.95	9.23
26	6.83	7.82	8.57	9.12	9.52	9.77	9.37	8.33	8.16	8.68	8.96	9.22
27	6.88	7.82	8.59	9.13	9.53	9.77	9.32	8.31	8.18	8.69	8.97	9.24
28	6.92	7.84	8.60	9.14	9.54	9.77	9.27	8.30	8.20	8.70	8.98	9.26
29	6.96	7.88	8.60	9.15	9.56	9.79	9.22	8.28	8.20	8.73	9.00	9.27
30	6.98	7.91	8.63	9.17	---	9.79	9.16	8.27	8.21	8.73	9.01	9.27
31	7.02	---	8.67	9.18	---	9.80	---	8.25	---	8.75	9.02	---

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644603147131401. Local number, FD00200306DBCA1001.

LOCATION.--Lat 64°46'03", Long 147°13'14", in SW¹/₄ NW¹/₄ SE¹/₄ sec. 06, T.2 S., R.3 E., (Fairbanks D-1 SE quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located 0.6 mi west on turn off to Lake Park in Chena Lakes Recreation Area, North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 19.3 ft., screen open from 14.3 to 18.8 ft.

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 5, 2001 to current year.

DATUM.--Elevation of land-surface datum is 490.44 ft above NGVD of 1929 (revised; levels by U.S. Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey. Measuring point: top of inner casing 2.57 ft above land surface datum.

REMARKS.--Observation well drilled April 6, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-1.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 4.81 ft below land-surface datum, September 16-17, 2003; lowest 8.49 ft below land-surface datum, March 18-21, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level measured 5.26 ft below land-surface datum, October 1; lowest 8.46 ft below land-surface datum, April 8, 10-11.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.26	6.45	7.18	7.70	8.03	8.28	8.42	8.00	6.92	7.32	7.93	8.25
2	5.30	6.48	7.19	7.72	8.05	8.27	8.40	7.97	6.92	7.34	7.94	8.24
3	5.33	6.51	7.22	7.74	8.05	8.28	8.41	7.95	6.90	7.37	7.95	8.24
4	5.38	6.54	7.24	7.75	8.06	8.29	8.43	7.92	6.88	7.39	7.95	8.25
5	5.42	6.57	7.26	7.76	8.07	8.29	8.44	7.89	6.87	7.42	7.96	8.26
6	5.44	6.60	7.28	7.77	8.08	8.29	8.44	7.84	6.87	7.45	7.97	8.27
7	5.48	6.63	7.29	7.77	8.09	8.29	8.44	7.78	6.85	7.48	7.98	8.27
8	5.54	6.64	7.31	7.77	8.09	8.30	8.45	7.71	6.85	7.51	7.99	8.27
9	5.57	6.68	7.33	7.79	8.11	8.30	8.44	7.61	6.82	7.53	7.99	8.27
10	5.60	6.70	7.34	7.80	8.10	8.31	8.45	7.53	6.81	7.56	8.00	8.26
11	5.66	6.74	7.36	7.83	8.13	8.32	8.44	7.46	6.81	7.59	8.01	8.27
12	5.69	6.74	7.37	7.85	8.15	8.33	8.41	7.38	6.81	7.62	8.02	8.27
13	5.73	6.78	7.40	7.85	8.15	8.33	8.40	7.32	6.82	7.64	8.02	8.27
14	5.77	6.81	7.42	7.86	8.16	8.33	8.39	7.26	6.84	7.66	8.04	8.27
15	5.80	6.84	7.43	7.87	8.17	8.34	8.36	7.22	6.86	7.69	8.05	8.27
16	5.83	6.87	7.44	7.88	8.17	8.35	8.35	7.19	6.88	7.71	8.06	8.28
17	5.87	6.90	7.47	7.89	8.18	8.36	8.32	7.17	6.90	7.74	8.07	8.29
18	5.91	6.94	7.49	7.89	8.18	8.36	8.30	7.14	6.93	7.76	8.09	8.29
19	5.95	6.96	7.49	7.91	8.19	8.37	8.26	7.10	6.95	7.78	8.10	8.30
20	6.01	7.00	7.51	7.91	8.19	8.38	8.24	7.08	6.97	7.80	8.11	8.30
21	6.05	7.01	7.53	7.92	8.20	8.37	8.21	7.05	7.00	7.83	8.12	8.29
22	6.09	7.02	7.53	7.93	8.21	8.37	8.18	7.03	7.03	7.85	8.13	8.30
23	6.11	7.04	7.57	7.95	8.22	8.37	8.17	7.02	7.06	7.85	8.14	8.30
24	6.15	7.04	7.58	7.96	8.23	8.38	8.14	6.98	7.10	7.86	8.14	8.30
25	6.18	7.08	7.60	7.97	8.24	8.39	8.12	6.98	7.14	7.88	8.16	8.31
26	6.23	7.10	7.62	7.98	8.25	8.39	8.10	6.97	7.17	7.89	8.18	8.30
27	6.28	7.09	7.64	7.98	8.25	8.40	8.08	6.96	7.21	7.90	8.19	8.32
28	6.32	7.10	7.64	7.99	8.26	8.39	8.06	6.95	7.24	7.92	8.21	8.33
29	6.36	7.14	7.64	8.00	8.27	8.40	8.04	6.95	7.27	7.94	8.22	8.34
30	6.39	7.16	7.66	8.01	---	8.41	8.02	6.94	7.29	7.94	8.23	8.33
31	6.42	---	7.68	8.02	---	8.42	---	6.93	---	7.96	8.25	---

GROUND-WATER LEVEL DATA

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

644603147151801. Local number, FD00200201DBCB1002.

LOCATION.--Lat 64°46'03", Long 147°15'18", in SW¹/₄ NW¹/₄ SE¹/₄ sec. 1, T.2 S., R.2 E., (Fairbanks D-1 SW quad), Fairbanks Meridian, Hydrologic Unit 19040506. Well located east side of Nelson Road approximately 2.3 mi from Laurance Road. West of Chena Lakes Flood Control Project and Recreational Area, North Pole.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Chena Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Diameter 2-in. PVC casing, depth 19.8 ft, screen openings from 14.8 ft to 19.3 ft

INSTRUMENTATION.--Intermittent measurements by USGS personnel July 2001 to current year; submersible pressure transducer/electronic data logger from October 12, 2001 to current year.

DATUM.--Elevation of land-surface datum is 493.04 ft above NGVD of 1929 (revised; levels by U.S. Army Corps of Engineers, adjusted to 1992 survey of benchmarks by U.S. Coast and Geodetic Survey.). Measuring point: top of inner casing 2.68 ft above land surface datum.

REMARKS.--Observation well drilled April 11, 1995 by the U.S. Army Corps of Engineers and designated as DSAP-2.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.49 ft below land-surface datum, September 24, 2003; lowest, 11.83 ft below land-surface datum, March 31, 2002

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 8.65 ft below land-surface datum, October 1; lowest, 11.78 ft below land-surface datum, April 7-11.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.65	9.51	10.29	10.94	11.35	11.62	11.74	11.18	10.24	10.35	10.85	11.13
2	8.66	9.54	10.31	10.96	11.36	11.61	11.73	11.17	10.23	10.36	10.86	11.14
3	8.67	9.56	10.34	10.98	11.37	11.62	11.73	11.15	10.21	10.38	10.85	11.15
4	8.71	9.60	10.36	11.00	11.38	11.62	11.75	11.13	10.19	10.40	10.86	11.16
5	8.73	9.62	10.38	11.01	11.39	11.63	11.75	11.11	10.18	10.41	10.86	11.18
6	8.74	9.64	10.40	11.02	11.41	11.63	11.75	11.09	10.17	10.43	10.86	11.18
7	8.77	9.67	10.42	11.03	11.42	11.63	11.76	11.06	10.15	10.45	10.87	11.19
8	8.81	9.68	10.45	11.03	11.42	11.64	11.76	11.03	10.14	10.46	10.89	11.20
9	8.83	9.71	10.47	11.05	11.45	11.64	11.76	10.99	10.11	10.48	10.90	11.20
10	8.86	9.74	10.49	11.06	11.44	11.65	11.77	10.94	10.11	10.49	10.91	11.20
11	8.91	9.78	10.51	11.09	11.46	11.66	11.75	10.90	10.09	10.51	10.91	11.21
12	8.94	9.79	10.52	11.11	11.48	11.66	11.72	10.85	10.08	10.54	10.92	11.21
13	8.97	9.83	10.55	11.12	11.48	11.67	11.68	10.81	10.07	10.56	10.93	11.22
14	8.99	9.86	10.57	11.13	11.49	11.67	11.63	10.76	10.07	10.57	10.95	11.23
15	9.00	9.89	10.59	11.15	11.50	11.67	11.60	10.72	10.07	10.59	10.96	11.24
16	9.01	9.92	10.61	11.16	11.51	11.68	11.55	10.68	10.07	10.61	10.97	11.24
17	9.03	9.95	10.64	11.16	11.51	11.69	11.51	10.65	10.07	10.63	10.98	11.25
18	9.06	9.98	10.66	11.18	11.52	11.69	11.48	10.61	10.09	10.65	10.99	11.25
19	9.09	10.01	10.67	11.19	11.52	11.71	11.43	10.58	10.09	10.66	11.00	11.25
20	9.13	10.04	10.69	11.20	11.53	11.71	11.40	10.54	10.09	10.69	11.01	11.26
21	9.16	10.06	10.71	11.21	11.53	11.71	11.36	10.51	10.11	10.71	11.02	11.26
22	9.19	10.08	10.72	11.23	11.55	11.71	11.33	10.48	10.12	10.73	11.03	11.28
23	9.22	10.11	10.76	11.25	11.56	11.70	11.31	10.45	10.15	10.74	11.03	11.28
24	9.25	10.12	10.78	11.26	11.57	11.71	11.29	10.42	10.18	10.76	11.04	11.29
25	9.28	10.16	10.80	11.28	11.57	11.72	11.28	10.40	10.22	10.77	11.06	11.30
26	9.31	10.19	10.83	11.29	11.58	11.72	11.26	10.36	10.24	10.78	11.06	11.29
27	9.36	10.20	10.85	11.29	11.59	11.73	11.23	10.34	10.27	10.79	11.08	11.31
28	9.38	10.22	10.86	11.30	11.60	11.72	11.22	10.32	10.30	10.80	11.08	11.32
29	9.43	10.25	10.86	11.32	11.60	11.74	11.21	10.30	10.32	10.82	11.10	11.33
30	9.45	10.26	10.89	11.33	---	11.74	11.20	10.28	10.33	10.83	11.11	11.33
31	9.48	---	10.92	11.34	---	11.75	---	10.26	---	10.84	11.12	---

YUKON ALASKA—Continued

FAIRBANKS NORTH STAR BOROUGH—Continued

645434147385101. Local number, FB00100113DDBC2001 50673.

LOCATION.--Lat 64°54'34", long 147°38'51", in NW¹/₄ SE¹/₄ SE¹/₄ sec. 13 T.1.S., R.1.W., (Fairbanks D-2 NE quad), Fairbanks Meridian, Hydrologic Unit, 19040506, in road right-of-way at 2.3 mi McGrath Road, off Farmers' Loop Road near Fairbanks.

Owner: U.S. Geological Survey.

AQUIFER.--Quartz-mica schist of pre-Jurassic age.

WELL CHARACTERISTICS.--Diameter 6-in., depth 100 ft, metal casing to 98.5 ft, perforated openings from 88.5 ft to 98.5 ft, and open hole to 100 ft.

INSTRUMENTATION.--Digital recorder, from October 1983 to June 1995. Electronic data logger from June 1995 to May 1996. Digital recorder, from May 1996 to September 1997. Electronic data logger from October 1997 to present.

DATUM.--Elevation of land-surface datum is 740 ft above sea level (determined from topographic map). Measuring point: top of casing 1.00 ft above land-surface datum.

REMARKS.--Observation well drilled by the U.S. Geological Survey, designated as McGrath Well, replaces old McGrath Estates well, 645429147383801.

PERIOD OF RECORD.--June 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.13 ft below land-surface datum, October 28, 1983; lowest, 44.85 ft below land-surface datum, July 3, 1990.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 39.94 ft below land-surface datum, November 28; lowest, 41.19 ft below land-surface datum, September 6-7, 17-18.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY HIGHEST WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40.22	40.22	40.04	40.35	40.26	40.58	40.66	40.38	40.39	40.66	40.77	40.99
2	40.20	40.21	40.10	40.43	40.31	40.36	40.40	40.38	40.39	40.64	40.80	40.95
3	40.12	40.18	40.10	40.48	40.29	40.30	40.39	40.42	40.39	40.67	40.73	40.95
4	40.12	40.18	40.21	40.49	40.27	40.31	40.44	40.48	40.32	40.65	40.73	40.99
5	40.25	40.19	40.12	40.33	40.20	40.33	40.58	40.38	40.29	40.66	40.76	41.11
6	40.15	40.14	40.10	40.22	40.20	40.36	40.60	40.35	40.31	40.70	40.77	41.17
7	40.14	40.13	40.16	40.11	40.30	40.41	40.58	40.33	40.35	40.73	40.81	41.11
8	40.18	40.02	40.20	40.04	40.34	40.46	40.58	40.38	40.34	40.67	40.88	41.08
9	40.24	40.04	40.16	40.06	40.35	40.49	40.66	40.41	40.33	40.67	40.91	40.99
10	40.25	40.09	40.09	40.07	40.21	40.49	40.68	40.47	40.25	40.70	40.83	40.97
11	40.30	40.13	40.02	40.17	40.21	40.52	40.69	40.46	40.25	40.74	40.78	40.96
12	40.34	40.03	40.02	40.33	40.34	40.56	40.62	40.45	40.32	40.82	40.78	40.99
13	40.33	40.07	40.04	40.29	40.32	40.57	40.58	40.32	40.37	40.85	40.81	41.03
14	40.28	40.13	40.23	40.23	40.31	40.47	40.61	40.30	40.48	40.85	40.81	41.08
15	40.21	40.18	40.12	40.23	40.37	40.49	40.56	40.35	40.53	40.92	40.86	41.10
16	40.09	40.19	40.12	40.28	40.43	40.52	40.49	40.39	40.51	40.95	40.86	41.12
17	40.08	40.22	40.17	40.24	40.37	40.58	40.49	40.42	40.49	40.95	40.88	41.15
18	40.08	40.20	40.28	40.22	40.32	40.58	40.48	40.46	40.53	40.86	40.95	41.14
19	40.09	40.19	40.05	40.30	40.29	40.62	40.51	40.52	40.59	40.80	40.93	41.09
20	40.11	40.19	40.05	40.21	40.29	40.72	40.53	40.48	40.62	40.78	40.91	41.00
21	40.22	40.04	40.17	40.20	40.31	40.68	40.52	40.39	40.62	40.78	40.97	41.01
22	40.18	40.04	40.04	40.20	40.32	40.47	40.36	40.36	40.62	40.79	41.00	41.01
23	40.16	40.04	40.09	40.28	40.43	40.38	40.36	40.28	40.67	40.74	40.97	40.99
24	40.20	39.95	40.25	40.40	40.45	40.38	40.47	40.29	40.72	40.73	40.96	41.02
25	40.18	39.96	40.34	40.44	40.50	40.44	40.52	40.25	40.77	40.74	40.97	41.07
26	40.21	40.09	40.40	40.29	40.44	40.48	40.49	40.26	40.76	40.70	41.00	40.90
27	40.30	40.00	40.42	40.22	40.43	40.47	40.44	40.30	40.74	40.68	41.00	40.91
28	40.35	39.94	40.28	40.21	40.46	40.53	40.44	40.29	40.76	40.69	41.01	41.02
29	40.35	39.96	40.04	40.22	40.54	40.55	40.45	40.32	40.73	40.72	41.03	41.12
30	40.29	40.04	40.05	40.24	---	40.53	40.39	40.41	40.66	40.76	41.05	41.00
31	40.28	---	40.17	40.26	---	40.55	---	40.43	---	40.79	41.00	---

	Page		Page
Aleknagik, Moody Creek at	336, 339	Bradley River, below dam near Homer.	155
Alsek River near Yakutat	122	near Homer.	154
Analyses of samples collected at miscellaneous sites.	348	near Tidewater near Homer	160
Anchorage, Municipality of, ground water levels.	391	California Creek below McAdam Creek near Healy	344
Anchorage, Ship Creek at Glenn Hwy near	337	Camp Creek near Sheep Mountain Lodge	191
Ship Creek below Fish Hatchery near	184	Cantwell, Slime Creek near	329, 340
Ship Creek near	182	Carcross, Nares River near	340
South Branch of South Fork Chester Creek at tank trail near	337, 350	Carmacks, Big Salmon River near	340
Anchor River near Anchor Point.	324, 337	Little Salmon River near Mouth near.	341
Antler River below Antler Lake near Auke Bay.	65	Nordenskiold River near	341
Anvik River near Anvik	282	Yukon River at	340
Arctic Creek above Tributary near Nome.	331, 346	Central, Boulder Creek near	327, 342
Arctic Slope Alaska, discharge measurement at miscellaneous sites in	347	Harrison Creek near	237, 342, 364
gaging-station records for.	310	Quartz Creek near	327, 342
Atigun River Tributary near Pump Station 4	332, 347	South Fork Harrison Creek near.	327, 342, 363
Atlin River near Atlin	340	Upper Frying Pan Creek near.	327, 342, 362
Auke Bay, Antler River below Antler Lake near	65	Central Creek near Big Delta	255
Duck Creek below Nancy St near	64	Chena River, at Fairbanks.	263
Jordan Creek below Egan Dr near	56	below Hunts Creek near Two Rivers	343
Mendenhall River at Brotherhood Bridge near.	334	below Moose Creek Dam.	343
Mendenhall River near	60	near Two Rivers	261
Montana Creek near	62	Chena Slough, at Airport Dr near North Pole.	343
North Fork Peterson Creek near.	323, 335	near Fairbanks	343
Peterson Creek below North Fork near	121	Chicken, Wade Creek Tributary near	236
Banner Creek at Richardson	329, 343	Chignik, Alec River near	339
Barrow, Nunavak Creek near	310	Chignik River at Black Lake outlet near Chignik.	339
Battle Creek diversion, above Bradley Lake near Homer.	150	Chilkat River near Klukwan	334
Berry Creek near Dot Lake.	328, 343	Chinkelyes Creek Tributary near Pedro Bay.	326, 339
Big Delta, Central Creek near.	253	Chiroskey River near Unalakleet	330, 345
Goodpaster River near	251	Chistochina, Sinona Creek near	131
Liese Creek near.	250	Chulitna River near Talkeetna.	338
Sonora Creek near	254	Clear Creek at Mouth near Wrangell	334, 322
Sonora Creek above Tributary near	253	Cold Bay, Frosty Creek near.	326, 339
Tanana River at.	340	Russell Creek near	216
Big Lake, Horseshoe Lake 0.3 mi South Boat Launch near	370	Stapp Creek near	326, 339
South of Long Lake Island near Wasilla	370	Coldfoot, Slate Creek at	277
Big Salmon River near Carmacks.	340	Colville River at Umiat.	311
Birch Creek, above Twelvemile Creek near Miller House.	242	Cooper Creek at Mouth near Cooper Landing	167
Bonanza Creek above Mouth near Healy	344	Cooper Landing, Cooper Creek at Mouth near.	167
Bonanza Creek Tributary near Prospect Camp	330, 345	Kenai River at.	163
Boulder Creek (South-Central) near Tiekel	324, 336	Cordova, Nicolet Creek near.	135
Boulder Creek (Yukon River basin) near Central.	327, 342	Cottonwood Lake North Colonial Park Launch near Wasilla	369
		Council, Etta Creek near.	294, 345
		Hugh Rowe Creek near	331, 345
		Crescent Lake, 1.2 mi above Outlet near Tuxedni Bay	376
		4.6 mi above Outlet near Tuxedni Bay.	373
		Crest-stage partial-record stations	322

Page	Page		
Crescent River near Mouth near Tuxedni Bay	355	Fort Yukon, Porcupine River near.	341, 360
Cripple Creek near Mouth near Wrangell.	322, 334	Fritz Creek near Homer	324, 337
Crooked Creek, Kuskokwim River at	231	Frosty Creek near Cold Bay	326, 339
Cupola Peak Creek at Bear Cove near Sitka	323	Frying Pan Creek near Miller House	342, 363
Dahl Creek near Kobuk.	306	Gene Creek above Gene Lake near Wrangell.	334
Dawson, Klondike River above Bonanza Creek near	341	Glennallen, Dry Creek near	336, 323
Klondike River below Bonanza Creek near	341	Tazlina River near	336
Sixtymile River near Mouth near	341	Globe Creek near Livengood	329, 344
Stewart River at Mouth near.	341	Goldbottom Creek near Nome	345, 365
White River near Mouth near.	341	Gold Creek (Southeast) at Juneau.	52
Yukon River above White River near.	341	near Juneau.	334, 348
Deadhorse, Kuparuk River near	315	Gold Creek (South-central), Susitna River at	200
Sagavanirktok River Tributary near	347	Gold Creek (Southwest) at Takotna	326, 339
Definition of terms	31	Goldengate Creek near Nome.	331, 345
Denali, Raft Creek near.	325, 338	Goodpaster River near Big Delta	251
Dietrich River Tributary near Wiseman	344	Granite Creek at Sitka.	323, 335
Dillingham, Nuyakuk River near	223	Green Lake near Sitka.	109
Discontinued surface-water discharge or stage-only stations	xiii	Greens Creek at Greens Creek Mine near Juneau	111
Discontinued surface-water-quality stations.	xxv	Ground-water level data, selected wells	390
Dome Creek, King Creek near	326, 341	Fairbanks-North Star Borough.	392
Donnelly, Ruby Creek above Richardson Hwy near	328, 343	Juneau.	390
Dot Lake, Berry Creek near	328, 348	Municipality of Anchorage	391
Dragonfly Creek near Healy	329, 340	Grouse Creek at Grouse Lake outlet near Seward	144
Drain at Airport Approach 2 near Yakutat	335	Gulkana River at Sourdough.	133
Drain at Airport Approach 29 near Yakutat	335	Gustavus, Kahtaheena River above upper falls near.	75
Dry Creek near Glennallen	323, 336	Haines, Kakuhan Creek near	66
Duck Creek below Nancy St near Auke Bay	64	Halfmile Creek above diversion near Klawock	87
Eagle, Yukon River at	237	Happy Valley Camp, Sagavanirktok River Tributary near.	332, 347
East Fork Hobo Creek near Petersburg	100	Harding River near Wrangell	44
Eklutna Lake near Palmer	186	Harrison Creek near Central	327, 342, 364
Eklutna River above Thunderbird Creek near Eklutna	337	Healy, Bonanza Creek above Mouth near.	344
at Old Glenn Hwy at Eklutna.	187	California Creek below McAdam Creek near	344
Eldorado Creek near Teller.	331, 346	Dragonfly Creek near	329, 340
Emma Creek near Healy	344	Emma Creek near.	344
Etta Creek near Council	294, 345	Lignite Creek above Mouth near	270
Explanation of the records	13	Marguerite Creek above Emma Creek near	344, 364
Falls Creek, near Petersburg	98	Marguerite Creek below trail crossing near	343
Fairbanks, Chena River at.	263	Marguerite Creek near	344
Chena Slough near	343	Middle Marguerite Creek near	344
ground-water levels	392	Nenana River at	269
Little Chena River near	262	Hollis, Maybeso Creek near	94
Tanana River at.	260	Homer, Bradley River below dam near.	155
Fish Creek near Ketchikan	81	Bradley River near	154
Fortymile River near Mouth near Eagle	341	Bradley River near Tidewater near.	160

	Page		Page
Homer-continued		Kenai River-continued	
Fritz Creek near	324, 337	below Skilak Lake Outlet near Sterling	171
Middle Fork Bradley River below North Fork Bradley River near	158	Ketchikan, Fish Creek near	81
Middle Fork Bradley River near	156	Swan Lake near	80
Upper Bradley River near Nuka Glacier near	152	Kijik Lake near Port Alsworth	378
Upper Nuka River near park boundary near	148, 337	Kijik River, 1.5 mi above Mouth near Port Alsworth	336, 359
Hope, Sixmile Creek near	175	above Little Kijik River near Port Alsworth	336, 356
Horseshoe Lake 0.3 mi South Boat Launch near Big Lake	370	King Creek near Dome Creek	326, 341
Hugh Rowe Creek near Council	331, 345	Kivalina, Ikalukrok Creek 0.6 mi below Red Dog Creek near	347
Ikalukrok Creek 0.6 mi below Red Dog Creek near Kivalina	347	Ikalukrok Creek 4.3 mi below Dudd Creek near	347
4.3 mi below Dudd Creek near Kivalina	347	Ikalukrok Creek above Red Dog Creek near .	346
above Red Dog Creek near Kivalina	346	Ikalukrok Creek below Red Dog Creek near .	308
below Red Dog Creek near Kivalina	308	North Fork Red Dog Creek near	332, 346
Iliamna, Koktuli River near	225	Red Dog Mine Clean Water Ditch near	346
North Fork Koktuli River near	226	Tutak Creek near	332, 347
Upper Talarik Creek near	220	Wulik River below Tutak Creek near	309
Iliamna River near Pedro Bay	221	Klawock, Halfmile Creek above Diversion near . . .	87
Indian River near Sitka	103	Red Dog Creek below North Fork Red Dog Creek near	346
Indian River (Yukon) at Utopia	330, 345	Staney Creek near	83
International Boundary, Yukon Territory, Porcupine River near	241	Klondike River, above Bonanza Creek near Dawson	341
International Gaging Station Network, records	46, 48, 122, 237, 241	below Bonanza Creek near Dawson	341
Island Lake 5.5 mi Southwest of VABM March near Lonely	387	Klukwan, Chilkat River near	334
Johnson River above Lateral Glacier near Tuxedni Bay	206	Knik River near Palmer	188
Jordan Creek below Egan Dr near Auke Bay	56	Kobuk, Dahl Creek near	306
Juneau, Gold Creek at	52	Kodiak, Myrtle Creek near	325, 339
Gold Creek near	334, 348	Terror River at Mouth near	211
Greens Creek at Greens Creek Mine near	111	Koktuli River near Iliamna	225
Lemon Creek near	55	Kuparuk River near Deadhorse	315
Salmon Creek near	54	Kuskokwim River, at Crooked Creek	231
Taku River near	48	at Liskys Crossing near Stony River	230
ground-water levels	390	Lachbuna Lake near Port Alsworth	376
Kadashan Rive above Hook Creek near Tenakee	113	Lake Fork Crescent River near Tuxedni Bay	338, 353
Kahtaheena River above upper falls near Gustavus	75	Lawing, Wolverine Creek near	142
Kakuhan Creek near Haines	66	Lemon Creek near Juneau	55
Kasaan, Old Tom Creek near	90	Liese Creek near Big Delta	250
Kasilof River near Kasilof	337	Lignite Creek above Mouth near Healy	270
Kenai River at Cooper Landing	163	Little Chena River near Fairbanks	262
at Soldotna	173	Little Jack Creek near Nabesna	328, 339
below Mouth of Killey River near Sterling	172	Little Kijik River, above Kijik Lake near Port Alsworth	335, 357
		below Kijik Lake near Port Alsworth	336, 358
		Little Salmon River near Mouth near Carmacks	341
		Little Susitna River near Palmer	198
		Livengood, Globe Creek near	329, 344

Page	Page
Lonely, Island Lake 5.5 mi Southwest of VABM	Nome, Arctic Creek above Tributary near . . . 331, 346
March near 387	Goldbottom Creek near Nome 345, 365
Unnamed Lake 3.5 mi South of VABM	Goldengate Creek near 331, 345
April near 387	North Fork Snake River near 345, 366
Unnamed Lake 7.5 mi Southeast of VABM	Stewart River 0.1 mi below Boulder Creek
April near 386	Mouth near 298
Unnamed Lake 6.5 mi South of VABM	Stewart River 0.2 mi below Durrant Creek
Flora near 386	Mouth near 302
Unnamed Lake 7 mi South of VABM	Unnamed Pond near Durrant Creek Lower
Flora near 385	Stewart River near 379
Unnamed Lake 8 mi South of VABM	Unnamed Pond near Josie Creek Middle
Flora near 384	Stewart River near 381
Unnamed Lake 6.5 mi South of VABM	Unnamed Pond near Silver Creek Upper
Quad near 384	Stewart River near 382
Marguerite Creek, above Emma Creek near	Washington Creek near 331, 346
Healy 344, 364	Nordenskiold River near Carmacks 341
below trail crossing near Healy 343	North Fork Crescent River near Tuxedni
near Healy 344	Bay 338, 351
Matanuska River at Palmer 195	North Fork Koktuli River near Iliamna 226
Maybeso Creek near Hollis 94	North Fork Peterson Creek near Auke Bay . . 323, 335
McCarthy Creek at McCarthy 323, 336	North Fork Red Dog Creek near Kivalina . . 332, 346
McKinley Village, Nenana River near 340	North Fork Snake River near Nome 345, 366
Mendenhall River, at Brotherhood Bridge	North Pole, Chena Slough at Airport Dr near 343
near Auke Bay 334, 349	Northwest Alaska, crest-stage partial-record
near Auke Bay 60	stations in 330
Mentasta, Slana River near 336	discharge measurements at miscellaneous
Middle Basin Creek near Tenakee 117	sites in 345
Middle Fork Bradley River below North	gaging-station records for 290
Fork Bradley River near Homer 158	Nugget Creek (Yukon) near Wiseman 344, 329
near Homer 156	Nunavak Creek near Barrow 310
Middle Marguerite Creek near Healy 344	Nuyakuk River near Dillingham 223
Miller House, Birch Creek above Twelvemile	Old Situk River near Yakutat 127
Creek near 242	Old Tom Creek near Kasaan 90
Frying Pan Creek near 342, 363	Ophir Creek near Yakutat 130
Mineral Creek near Valdez 324, 336	Palmer, Eklutna Lake near 186
Miscellaneous sites, discharge at 341	Knik River near 188
Montana Creek near Auke Bay 62	Little Susitna River near 198
Moody Creek at Aleknagik 326, 339	Matanuska River at 195
Moose Creek Dam, Chena River below 343	Wasilla Creek near 338, 325
Myrtle Creek near Kodiak 325, 339	Partial-record stations 334
Nabesna, Little Jack Creek near 328, 339	Paxson, Phelan Creek near 256
Nancy Lake, Central Basin near Willow 371	Pedro Bay, Chinkelyes Creek Tributary near . 326, 339
Tributary near Willow 325, 338	Iliamna River near 221
Nares River near Carcross 340	Pelly River at Pelly Crossing 341
Nenana, Tanana River at 264	Petersburg, East Fork Hobo Creek near 100
Nenana River, at Healy 269	Fass Creek near 98
near McKinley Village 340	Peterson Creek below North Fork near
near Windy 340	Auke Bay 121
Newtok, Takikchak River near 233	Phelan Creek near Paxson 256
Nicolet Creek near Cordova 135	Pilot Station, Yukon River at 285

	Page		Page
Porcupine River, near Fort Yukon	341, 360	Snow River near	162
near International Boundary, Yukon		Spruce Creek near	146
Territory	241	Shakespeare Creek at Whittier	324, 337
near Tetlin Junction	342	Sheep Mountain Lodge, Camp Creek near	191
Portage, Twentymile River below Glacier		Ship Creek, at Glenn Hwy near Anchorage	337
River near	179	below Fish Hatchery near Anchorage	184
Portage Creek at Portage Lake outlet near		near Anchorage	182
Whittier.	177	Silver Bay Tributary at Bear Cove near Sitka.	107
Port Alsworth, Kijik Lake near	378	Sinona Creek near Chistochina.	131
Kijik River 1.5 mi above Mouth near.	336, 359	Sitka, Cupola Peak Creek at Bear Cove near	323
Kijik River above Little Kijik River near	336, 356	Granite Creek at	323, 335
Lachbuna Lake near	376	Green Lake near	109
Little Kijik River above Kijik Lake near	335, 357	Indian River near	103
Little Kijik River below Kijik Lake near	336, 358	Sawmill Creek below Upper Trailrace near	335
Premier Creek near Sutton	338, 325	Sawmill Creek near	105
Prospect Camp, Bonanza Creek Tributary		Silver Bay Tributary at Bear Cover near	107
near	330, 345	Starrigavin Creek at upper Bridge near	102
Prospect Creek near	330, 345	Starrigavin Creek Tributary at Starrigavin	
Prospect Creek near Prospect Camp	330, 345	Creek campground near	335
Ptarmigan Creek Tributary near Valdez	324, 336	Situk River near Yakutat	123
Pump Station 3, Sagavanirktok River near	317	Sixmile Creek near Hope	175
Sagavanirktok Tributary near	316	Sixtymile River near Mouth near Dawson	341
Pump Station 4, Atigun River Tributary near	332, 347	Skagway, Skagway River near	334
Pump Station 10, Suzy Q Creek near	328, 343	Taiya River near	70
Quartz Creek near Central	327, 342	Slana River near Mentasta	336
Raft Creek near Denali	325, 338	Slate Creek at Coldfoot.	277
Ray River Tributary near Stevens Village.	328, 342	Slime Creek near Cantwell	329, 340
Red Dog Creek, above Mouth near Kivalina	346	Snow River near Seward.	162
below North Fork Red Dog Creek near		Snowden Creek near Wiseman	329, 344
Kivalina	346	Soldotna, Kenai River at	173
Red Dog Mine Clean Water Ditch near Kivalina	346	Solomon Gulch at top of falls near Valdez	139
Red Shirt Lake 0.4 mi West of Lynx Creek		near Valdez.	140
near Willow	373	tailrace near Valdez	138
Richardson, Banner Creek at	329, 343	Solomon Lake near Valdez	137
Ruby Creek above Richardson Hwy near		Sonora Creek near Big Delta	254
Donnelly	328, 343	above Tributary near Big Delta	253
Russell Creek near Cold Bay	216	Sourdough, Gulkana River at	133
Sagavanirktok River near Pump Station 3	317	South Branch of South Fork Chester Creek	
Sagavanirktok River Tributary, near		at tank trail near Anchorage	337, 350
Deadhorse.	333, 347	South-central Alaska, crest-stage partial-record	
near Happy Valley Camp	332, 347	stations in	323
near Pump Station 3	316	discharge measurements at miscellaneous	
Salcha River near Salchaket	258	sites in.	335
Salchaket, Salcha River near.	258	gaging-station records for	131
Salmon Creek near Juneau	54	Southeast Alaska, crest-stage partial-record	
Sawmill Creek, below Upper Trailrace near Sitka	335	stations in	322
near Sitka	105	discharge measurements at miscellaneous	
Seward, Grouse Creek at Grouse Lake outlet		sites in.	334
near	144	gaging-station records for	34
		South Fork Harrison Creek near Central	342, 363
		Southwest Alaska, crest-stage partial-record	
		stations in	326

	Page		Page
Southwest Alaska-continued		Tiekel, Boulder Creek near	324, 336
discharge measurements at miscellaneous		Tok Junction, Tanana River near	340
sites in	339	Tutak Creek near Kivalina	332, 347
gaging-station records for	216	Tuxedni Bay, Crescent Lake 1.2 mi above	
Special networks and programs	12	Outlet near	376
Spruce Creek near Seward	146	Crescent Lake 4.6 mi above Outlet near	373
Staney Cree near Klawock	83	Crescent River near Mouth near	355
Stapp Creek near Cold Bay	326, 339	Johnson River above Lateral Glacier near	206
Starrigavin Creek at upper Bridge near Sitka	102	Lake Fork Crescent River near	338, 353
Starrigavin Creek Tributary at Starrigavin Creek		North Fork Crescent River near	338, 351
campground near Sitka	335	Twentymile River below Glacier River near	
Sterling, Kenai River below Mouth of Killey		Portage	179
River near	172	Two Rivers, Chena River below Hunts Creek	
Kenai River below Skilak Lake outlet near	171	near	343
Stevens Village, Ray River Tributary near	328, 342	Chena River near	261
Yukon River near	246	Tyee Lake Outlet near Wrangell	41
Stewart River, 0.1 mi below Boulder Creek Mouth		Umiat, Colville River at	311
near Nome	298	Unalakleet, Chirosky River near	330, 345
0.2 mi below Durrant Creek Mouth near		Unalakleet River above Chirosky	
Nome	302	River near	290
at Mouth near Dawson	341	Unnamed Lake, 3.5 mi South of VABM April	
Stikine River near Wrangell	46	near Lonely	387
Stony River, Kuskokwim River at Liskys		7.5 mi Southeast of VABM April near	
Crossing near	230	Lonely	386
Summary of hydrologic conditions	4	6.5 mi South of VABM Flora near Lonely	386
Susitna River at Gold Creek	200	7 mi South of VABM Flora near Lonely	385
at Susitna Station	338, 351	8 mi South of VABM Flora near Lonely	384
Sutton, Premier Creek near	325, 338	6.5 mi South of VABM Quad near Lonely	384
Suzy Q Creek near Pump Station 10	328, 343	Unnamed Pond near Durrant Creek Lower	
Swan Lake near Ketchikan	80	Stewart River near Nome	379
Takhini River near Mouth near Whitehorse	340	near Josie Creek Middle Stewart River	
Takikchak River near Newtok	233	near Nome	381
Takotna, Gold Creek at	326, 339	near Silver Creek Upper Stewart River	
Tatalina River near	227	near Nome	382
Taku River near Juneau	48	Unuk River below Blue River near Wrangell	34
Taiya River near Skagway	70	Upper Bradley River near Nuka Glacier near	
Talkeetna, Chulitna River near	338	Homer	152
Talkeetna River near	201	Upper Earl West Creek near Wrangell	96
Tanana River, at Big Delta	340	Upper Frying Pan Creek near Central	327, 342, 362
at Fairbanks	260	Upper Nuka River near park boundary near	
at Nenana	264	Homer	148, 337
near Tok Junction	340	Upper Talarik Creek near Iliamna	220
Tatalina River near Takotna	227	Utopia, Indian River at	330, 345
Tazlina River near Glennallen	336	Utopia Creek at	330, 345
Teller, Eldorado Creek near	331, 346	Valdez, Mineral Creek near	324, 336
Tenakee, Kadashan River above Hook		Ptarmigan Creek Tributary near	324, 336
Creek near	113	Solomon Gulch at top of falls near	139
Middle Creek Basin Creek near	117	Solomon Gulch near	140
Terror River at Mouth near Kodiak	211	Solomon Gulch tailrace near	138
Teslin River near Mouth near Whitehorse	340	Solomon Lake near	137
Tetlin Junction, Porcupine Creek near	342		

	Page	Page
Wade Creek Tributary near Chicken	236	
Washington Creek near Nome	331, 346	
Wasilla, Big Lake South of Long Lake Island near	370	
Cottonwood Lake North Colonial Park Launch near	369	
Wasilla Creek near Palmer	325, 338	
Whitehorse, Takhini River near Mouth near	340	
Teslin River near Mouth near	340	
Yukon river above Takhini River near	340	
White River near Mouth near Dawson	341	
Whittier, Portage Creek at Portage Lake outlet near	177	
Shakespeare Creek at	324, 337	
Willow, Nancy Lake Central Basin near	371	
Nancy Lake Tributary near	325, 338	
Red Shirt Lake 0.4 mi West of Lynx Creek near	373	
Willow Creek near	203	
Windy, Nenana River near	340	
Wiseman, Dietrich River Tributary near	344	
Nugget Creek near	329, 344	
Snowden Creek near	329, 344	
Wolverine Creek near Lawing	142	
Wrangell, Clear Creek at Mouth near	322, 334	
Cripple Creek near Mouth near	322, 334	
Gene Creek above Gene Lake near	334	
Harding River near	44	
Stikine River near	46	
Tyee Lake outlet near	41	
Unuk River below Blue River near	34	
Upper Earl West Creek near	96	
Wulik River below Tutak Creek near Kivalina	309	
Yakutat, Alsek River near	122	
Drain at Airport Approach 2 near	335	
Drain at Airport Approach 29 near	335	
Old Situk River near	127	
Ophir Creek near	130	
Situk River near	123	
Yukon Alaska, crest-stage partial-record stations in	326	
discharge measurements at miscellaneous sites in	339	
gaging-station records for	236	
Yukon River, above Takhini River near Whitehorse	340	
above White River near Dawson	341	
at Carmacks	341	
at Eagle	237	
at Pilot Station	285	
near Stevens Village	246	