Data on Surface-Water Quality and Quantity, Truckee River System, Nevada and California, 1979-81

By Richard J. La Camera, Ray J. Hoffman, Jon O. Nowlin, Lawrence H. Smith, and Suzanne M. Lima

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"Inch-pound" units of measure used in this report may be converted to International System (metric) units by using the following factors:

Multiply	*By*	*To obtain*
Cubic feet per second (ft^3/s)	0.02832	Cubic meters per second (m^3/s)
Feet (ft)	0.3048	Meters (m)
Feet per second (ft/s)	0.3048	Meters per second (m/s)
Miles (mi)	1.609	Kilometers (km)
Miles per hour (mi/hr)	1.609	Kilometers per hour (km/hr)
Square feet (ft^2)	0.09290	Square meters (m^2)

For temperature, degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) by using the formula °F = [(1.8)(°C)] + 32.

Symbols, acronyms, and additional abbreviations used in this report are as follows:

BOD = biochemical oxygen demand
$CACO_3$ = calcium carbonate
DEG C, °C = degrees Celsius
DO = dissolved oxygen
G/KG = grams per kilogram
g/L = grams per liter
HG = mercury

$HgCl_2$ = mercuric chloride
HNO_3 = nitric acid
kg = kilograms
MG/KG = milligrams per kilogram
MG/L = milligrams per liter
MICROMHOS = micromhos per centimeter at 25°C
ML, mL = milliliters

MM = millimeters
MM OF HG = Millimeters of mercury
N = nitrogen
NH_4 = ammonium
NO_2 = nitrite
NO_3 = nitrate
NTU = nephelometric turbidity units

UG/G = micrograms per gram
UG/KG = micrograms per kilogram
UG/L, ug/L = micrograms per liter
UM, um = micrometers
USGS = United States Geological Survey
WATSTORE = National Water Data Storage and Retrieval System of the U.S. Geological Survey

ALTITUDE DATUM

The term "National Geodetic Vertical Datum of 1929" replaces the formerly used term "mean sea level" to describe the datum for altitude measurements. The geodetic datum is derived from a general adjustment of the first-order leveling networks of both the United States and Canada. For convenience in this report, the datum also is referred to as "sea level."

DATA ON SURFACE-WATER QUALITY AND QUANTITY, TRUCKEE RIVER SYSTEM, NEVADA AND CALIFORNIA, 1979-81

By Richard J. La Camera, Ray J. Hoffman, Jon O. Nowlin, Lawrence H. Smith, and Suzanne M. Lima

ABSTRACT

Selected hydrologic data were collected between May 1979 and October 1981 at 59 sites on the Truckee River, 10 sites on selected tributaries and smaller diversions, and 9 sites on the Truckee Canal. The data were collected in support of the water-quality and hydrologic-investigation components of the Truckee-Carson River-Quality Assessment by the U.S. Geological Survey.

This report contains information based on: (1) four water-quality studies during which data were collected nearly simultaneously at several sites over a 24-hour period; (2) analyses of phytoplankton samples to supplement other biological data collected during the synoptic studies; (3) an investigation of surface and intragravel water quality to determine the suitability of the river as a spawning habitat for Lahontan cutthroat trout; (4) records from 10 water-temperature recorders; (5) 14 dye-tracer studies; (6) 5 gas-tracer reaeration studies; (7) traveltime calculations derived from results of the dye and reaeration studies; and (8) discharge and associated channel-geometry measurements at 46 miscellaneous sites on the river, selected tributaries, and the canal.

INTRODUCTION

Purpose and Scope

The purpose of this report is to present, in tabular form, the physical, chemical, and biological data collected as part of the Truckee-Carson River-Quality Assessment (Nowlin and others, 1980), in support of mathematical streamflow modeling, mathematical water-quality modeling, and a detailed investigation of trout-spawning habitats in the Truckee River system.

In scope, this report includes data collected from seven types of field investigations during the period from May 1979 to October 1981: (1) Synoptic water-quality studies (approximately simultaneous data collection at several sites), consisting of diel measurements (a series of measurements made over a 24-hour period), to obtain data for water-quality modeling; (2) analyses of phytoplankton samples to supplement synoptic water-quality data; (3) evaluation of trout-spawning habitats in the Truckee River; (4) daily monitoring of water temperature for the water-quality modeling and trout-habitat studies; (5) dye-tracer studies to determine traveltimes for flow and water-quality modeling;

(6) gas-tracer reaeration studies to quantify reaeration capacities of typical reaches in the Truckee River; and (7) measurements of discharge and characterizations of channel geometry for flow and water-quality modeling.

Data-collection dates are summarized herein, by data category, in the list of tables (pages *iv-v*). Almost all of the data listed in this report were collected between May 1979 and October 1980. Only limited supplemental information was obtained in 1981 (table 32).

Data collection was limited to 78 sites in the Truckee River basin and on the Truckee Canal, generally during seasonal high- and low-flow periods.

Acknowledgments

The authors appreciate the assistance of many people in collecting data for the Truckee-Carson River-Quality Assessment.

Geological Survey personnel from California who disrupted their schedules to assist in the data collection included Wendell Ayers, William M. Brown III, Kristin D. Evenson, Rick T. Iwatsubo, Gail L. Keeter, Gerald L. Rockwell, Timothy G. Rowe, John Shay, Stephen K. Sorenson, Gregory F. Susich, Ann L. Tabor, and Gregory G. Tom. Michael P. Schroeder and Johnson J. S. Yee, from the Geological Survey Central Laboratory in Arvada, Colo., and the Geological Survey District Office in Hawaii, respectively, also participated in the data-collection activities.

Geological Survey personnel from Nevada who aided in the field work were Rose Aquino, Freddy E. Arteaga, Leo A. Bohner, Kathy A. Bolduc, Robert E. Bostic, Sherwood B. Browning, Rita L. Carman, Michael Crambes, Cheryl Y. Edwards, George Fry, Kerry T. Garcia, Marta W. Garcia, Linda J. Giraudo, Patrick A. Glancy, Rosemary Hunter, Terry Katzer, Susan J. Mathews, Dana Mitchell, Robert N. Pennington, Alan M. Preissler, Kenneth Pringle, Valerie L. Schacher, Margaret K. Silva, Jon Sjoberg, Robert R. Squires, Jan M. Surface, Thomas B. Tucker, A. S. Van Denburgh, Stephen J. Walmsley, and David B. Wood.

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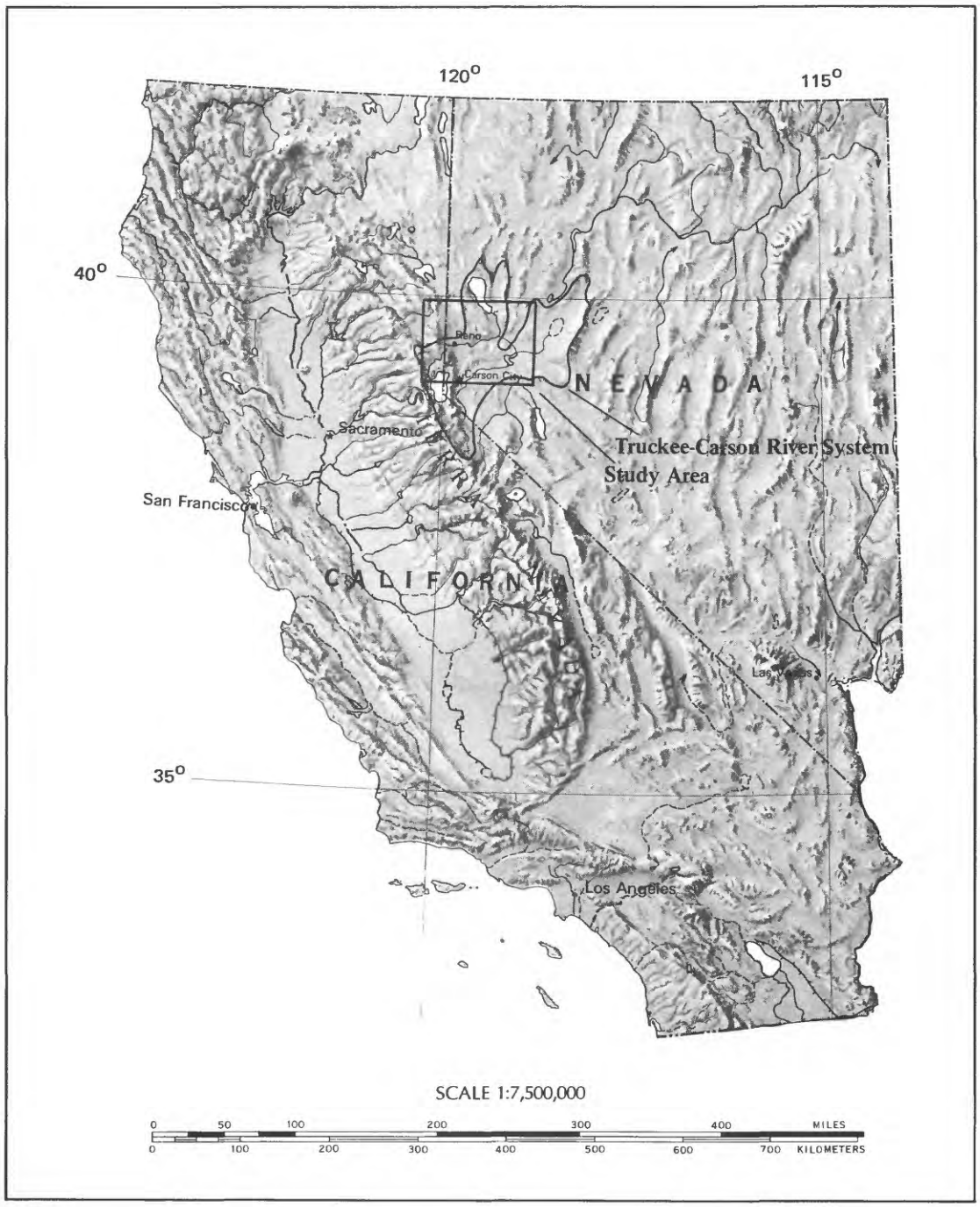
Special thanks and credit go to Mary O. Regan and Thomas K. Edwards of the Geological Survey in California and Idaho, respectively, whose involvement in all phases of preparation and execution of the field work was invaluable.

DESCRIPTION OF THE STUDY AREA

The study area included: (1) the 116-mile length of the Truckee River from its outlet at Lake Tahoe to Marble Bluff Dam (approximately 4 miles above its terminous at Pyramid Lake); (2) selected tributaries to the river; and (3) the 31-mile length of the Truckee Canal (figure 1).



Base from U.S. Department of Interior, Geological Survey,
National Atlas Of The United States, 1:7,500,000, 1970

FIGURE 1.--Location of the study area for field data collection.

Streamflow in the river is derived primarily from snowmelt in its headwaters on the east slope of the Sierra Nevada. Flow in the river system is largely regulated by a control structure at the outlet from Lake Tahoe and by five reservoirs on tributaries in the upper portion of the basin. Flow decreases downstream due to numerous agricultural, municipal, and power-generation diversions. The largest of these is the Truckee Canal which diverts water from the Truckee River at Derby Dam to Lahontan Reservoir in the Carson River basin for irrigation near Fallon. Agricultural diversions and returns, releases from the canal, and ground-water inflow are the major influences on streamflow in the river below Derby Dam.

Water quality generally deteriorates with increasing distance from the outlet of Lake Tahoe due to urban runoff, agricultural waste-water returns, inputs of treated municipal wastes, and ground-water inflow.

A hydrologic description of the study area is given by Brown and others (in press). For the dye and reaeration studies in this report, the Truckee River system conceptually was divided into four components: the "upper reach," from Truckee, Calif., to Vista, Nev.; the "middle reach," from the mouth of Steamboat Creek (0.13 mile above Vista) to Derby Dam; the "lower reach," from Derby Dam to Marble Bluff Dam; and the Truckee Canal.

DATA-COLLECTION SITES

The objectives of the river-quality assessment required extensive data collection within the Truckee River system. Most data were collected on the river itself, with a more limited amount obtained on selected tributaries and diversions. This report includes data from 59 sites on the Truckee River, 10 sites on selected tributaries and smaller diversions, and 9 sites on the Truckee Canal. Figure 2 (see fold-out in back) shows the approximate locations of the sites included in this report.

Table 1 provides a complete listing of the data-collection sites in downstream order. The site number assigned may be used to determine the approximate location by referring to figure 2, and it serves as an index for all sites found in the tables of hydrologic data. The eight-digit Geological Survey identification numbers in table 1 are those used for site identification in other Geological Survey reports and for data retrieval from the WATSTORE data system.

The data types listed for each site provide an overview of the information available and a guide to the appropriate table(s) where specific information may be found in this report.

TABLE 1.--*Index to data-collection sites*

Local designation: Based on the rectangular subdivision of lands as referenced to the Mount Diablo base line and meridian. Designations listed are abbreviations of the full designation. For example, NENW07, 15N, 17E indicates that the site is in the northeast quarter of the northwest quarter of section 7, Township 15 North, Range 17 East.
River mile: For Truckee River, mileage above the spillway at Marble Bluff Dam (a minus river mile indicates distance below the spillway); for Truckee Canal, mileage above weir and control gates to drop flume into Lahontan Reservoir.
Altitude: Expressed as feet above sea level. Altitudes reported to 0.01 foot are surveyed gage datums; all others are rounded to nearest foot. For Truckee River sites above river mile 57.0, altitudes are interpolated from largest-scale topographic maps available in 1980. For river sites below river mile 57.0, altitudes are for approximate water surfaces based on U.S. Geological Survey channel surveys, September to December 1980. For Truckee Canal sites, altitudes are for approximate water surfaces during irrigation season.
Data types: A, non-synoptic sites prior to synoptic studies (table 3); S, synoptic studies (table 4); P, phytoplankton taxa and cell counts (tables 5-8); H, study of trout-spawning habitat (table 9); T, daily measurements of water temperature (table 10); D, dye study (tables 11-23) and traveltime summaries (tables 29-32); R, reaeration study (tables 24-28) and traveltime summaries (tables 33, 34); Q, miscellaneous water-discharge and channel-geometry data (tables 35, 36).

Site number (see figure 2)	USGS identification number	Site name	Site location: Latitude longitude	Site location: Local designation	Site location: River mile	Altitude (feet)	Data types	Remarks
				Truckee River Basin Sites				
1	10337500	Truckee River at Tahoe City	390959 1200836	NENW07, 15N, 17E	116.20	6,216.59	A	Sampled near cableway at USGS gage
2	10337850	Squaw Creek at Squaw Valley Road at Squaw Valley	391225 1201232	SENW28, 16N, 16E	--	6,200	A	Sampled from first road bridge upstream from Highway 89
3	10338500	Donner Creek at Donner Lake near Truckee	391925 1201400	SWNW17, 17N, 16E	--	5,930	AQ	Data type (A) collected near road bridge just upstream from USGS gage; see table 35 for site information, data type (Q)
4	10339010	Truckee River at State Highway 267 at Truckee	391936 1201100	NENE15, 17N, 16E	100.86	5,783	AD	Data type (A) collected at highway bridge; dye injections (D) from downstream side of bridge
5	10339400	Martis Creek near Truckee	391942 1200659	NENW17, 17N, 17E	--	5,740	A	Sampled at cableway near USGS gage
6	10339498	Truckee River at old U.S. Highway 40 Bridge below Truckee	392111 1200717	NESW05, 17N, 17E	96.17	5,629	ADQ	Data types (A) and (D) collected off right bank just upstream from road bridge; see table 35 for site information, data type (Q)
7	10340500	Prosser Creek below Prosser Creek Dam	392222 1200756	NWNE31, 18N, 17E	--	5,602.31	A	Sampled 100-200 feet above USGS gage
8	10340900	Truckee River at Interstate 80 above Little Truckee River	392237 1200610	SWSW28, 18N, 17E	92.35	5,509	T	Thermograph (T) on right bank bridge abutment
9	10344500	Little Truckee River below Boca Dam	392310 1200540	NENW28, 18N, 17E	--	5,500	AT	All data collected 100 feet above USGS gage
10	10344505	Truckee River at Boca bridge	392307 1200512	NENE28, 18N, 17E	91.24	5,472	AD	All data collected from downstream side of road bridge
11	10346000	Truckee River at Farad	392541 1200159	SENE12, 18N, 17E	81.89	5,153.21	PT	Data type (P) collected from cableway below USGS gage; thermograph (T) on left bank 400 feet above gage
12	--	Truckee River below Farad	392600 1200133	SWSW07, 18N, 18E	81.28	5,129	D	Sampled off left bank 0.80 mile below USGS gage in 1979 and 0.61 mile below gage in 1980
13	10347050	Truckee River at Crystal Peak Park at Verdi	393050 1195942	SENE18, 19N, 18E	74.30	4,852	SP	Sampled from old U.S. Highway 40 bridge 0.45 mile above State fish hatchery
14	10347336	Truckee River near Verdi	393110 1195819	NENE17, 19N, 18E	72.00	4,794	HT	Data type (H) collected near picnic area about 1,000 feet below old U.S. Highway 40 bridge near Viking Metals Plant; thermograph (T) on left bank bridge abutment
14A	10347337	Truckee River intragravel site near Verdi	393110 1195819	NENE17, 19N, 18E	72.00	4,794	H	Sampled near picnic area about 1,000 feet below old U.S. Highway 40 bridge
15	10347690	Truckee River at Mayberry Drive	393024 1195317	SWSE18, 19N, 19E	65.70	4,611	SPDQ	Data types (S), (P), and (D) collected from downstream side of bridge; see table 35 for site information, data type (Q)

TABLE 1.--*Index to data-collection sites*--Continued

Site number (see figure 2)	USGS identification number	Site name	Site location: Latitude longitude	Site location: Local designation	River mile	Altitude (feet)	Data types	Remarks
			Truckee River Basin Sites--Continued					
16	10348200	Truckee River near Sparks	393103 1194427	NWNE16, 19N, 20E	56.12	4,384	SPHTDQ	Data types (S) and (P) collected from McCarran Blvd. bridge 150 feet below USGS gage; data type (H) collected 0.54 mile below bridge; data types (T) and (D) collected at gage; data type (Q) location--see table 35
16A	10348201	Truckee River intragravel site near Sparks	393048 1194356	SWNW15, 19N, 20E	55.58	4,379	H	Sampled 0.54 mile below McCarran Blvd. bridge
17	--	Truckee River at University farms	393052 1194320	SWNE15, 19N, 20E	54.85	4,375	Q	Measurement location--see table 35
18	--	Truckee River above North Truckee drain	393113 1194237	SWSW11, 19N, 20E	54.01	4,372	Q	Measurement location--see table 35
19	10348300	North Truckee drain at Kleppe Lane near Sparks	393130 1194218	NESW11, 19N, 20E	--	4,375	SPQ	Data types (S) and (P) collected from Kleppe Lane bridge 0.26 mile above confluence with Truckee River; data type (Q) location--see table 35
20	10349980	Steamboat Creek at Kimlick Lane near Reno	393047 1194241	SWNW14, 19N, 20E	--	4,375	SPQ	Data types (S) and (P) collected from road bridge 0.75 mile above confluence with Truckee River; data type (Q) location--see table 35
21	10349989	Reno-Sparks Sewage Treatment Plant outfall near Reno	393107 1194213	NWNE14, 19N, 20E	--	4,374	SD	Samples collected and dye injected at outfall on Steamboat Creek 675 feet above confluence with Truckee River
22	10350000	Truckee River at Vista	393104 1194059	NWNE13, 19N, 20E	52.23	4,368.59	SPD	Data types (S) and (P) collected from cableway at USGS gage; data type (D) collected off left bank at gage
23	10350050	Truckee River at Lockwood	393036 1193852	SESE17, 19N, 21E	50.05	4,345	SPTDRQ	Data types (S), (P), (D), and (R) collected from bridge at Lockwood; thermograph (T) on left bank approximately 1,000 feet below bridge; data type (Q) location--see table 35
24	--	Truckee River at upper bridge near Mustang	393048 1193708	NESW15, 19N, 21E	48.25	4,316	RQ	Data type (R) collected from upstream bridge near Mustang Ranch; data type (Q) location--see table 35
25	10350157	Truckee River at McCarran diversion dam	393158 1193553	NENW11, 19N, 21E	46.40	4,305	R	Sampled off left bank immediately above dam
26	--	Truckee River below McCarran diversion dam	393200 1193550	NWNE11, 19N, 21E	46.35	4,300	R	Sampled approximately 250 feet below dam
27	10350200	Truckee River at Patrick	393249 1193459	SWNW01, 19N, 21E	44.92	4,279	SPDRQ	Data types (S), (P), (D), and (R) collected from road bridge on McCarran Ranch; data type (Q) location--see table 35
28	--	Truckee River at McCarran Ranch	393249 1193435	NWNE01, 19N, 21E	44.58	4,275	Q	Measurement location--see table 35
29	10350345	Truckee River at Hill diversion dam	393346 1193226	NENW32, 20N, 22E	42.02	4,258	R	Near gravel plant above Tracy; sampled off left bank immediately above dam
30	--	Truckee River below Hill diversion dam	393344 1193225	NENW32, 20N, 22E	42.00	4,254	RQ	Data type (R) collected approximately 100 feet below dam; data type (Q) location--see table 35
31	--	Truckee River at Tracy diversion dam	393353 1193120	NENW33, 20N, 22E	40.76	4,247	RQ	About 700 feet upstream from Tracy Power Plant; data type (R) collected off left bank immediately above dam; data type (Q) location--see table 35
32	--	Truckee River below Tracy diversion dam	393353 1193115	NENW33, 20N, 22E	40.73	4,244	R	Sampled approximately 150 feet below dam

TABLE 1.—*Index to data-collection sites*—Continued

Site number (see figure 2)	USGS identification number	Site name	Site location: Latitude longitude	Site location: Local designation	River mile	Altitude (feet)	Data types	Remarks
			Truckee River Basin Sites--Continued					
33	10350400	Truckee River below Tracy	393352 1193112	NWNE33, 20N, 22E	40.62	4,243	SPDR	All data collected from road bridge at Tracy Power Plant
34	10350500	Truckee River at Clark	393354 1192909	SESW26, 20N, 22E	38.60	4,229	SPRQ	Data types (S), (P), and (R) collected off road bridge to Eagle Picher Plant; data type (Q) location--see table 35
35	—	Truckee River below Clark	393419 1192810	SWNW25, 20N, 22E	37.21	4,213	Q	Measurement location--see table 35
36	10351000	Truckee River at Derby Dam	393508 1192654	NESW19, 20N, 23E	34.88	4,204	SPTDR	All data collected off upstream side of dam near center gates
37	10351600	Truckee River below Derby Dam	393507 1192628	NWSE19, 20N, 23E	34.49	4,187	SPQ	Data types (S) and (P) collected at USGS gage 0.39 mile below Derby Dam; data type (Q) location--see table 35
38	—	Truckee River above Orchard	393511 1192339	NWSW22, 20N, 23E	31.81	4,148	Q	Measurement location--see table 35
39	10351619	Truckee River at Painted Rock bridge	393528 1192159	NWNE23, 20N, 23E	29.97	4,117	SPDQ	Data types (S), (P), and (D) collected from road bridge at Painted Rock; data type (Q) location--see table 35
40	—	Truckee River below Gregory-Monte diversion dam	393553 1192034	SESE13, 20N, 23E	28.50	4,096	Q	Measurement location--see table 35
41	—	Truckee River below Pierson diversion dam	393648 1191816	NESE08, 20N, 24E	25.93	4,071	Q	Measurement location--see table 35
42	—	Truckee River above Proctor diversion dam	393739 1191656	NWSW03, 20N, 24E	24.12	4,053	Q	Measurement location--see table 35
43	10351646	Herman Ditch return at Wadsworth	393755 1191658	SWNW03, 20N, 24E	—	4,050	SP	Irrigation return flow sampled 50 feet above confluence with Truckee River approximately 150 feet above old U.S. Highway 40 bridge
44	10351648	Truckee River at old U.S. Highway 40 bridge at Wadsworth	393755 1191654	SWNW03, 20N, 24E	23.69	4,047	SPDR	Data types (S) and (P) collected from highway bridge; data type (D) collected 25 feet below bridge; data type (R) collected at railroad bridge approximately 100 feet below highway bridge
45	10351650	Truckee River at Wadsworth	393823 1191655	SWSW34, 21N, 24E	23.11	4,037.90	T	Thermograph (T) on right bank at USGS gage
46	—	Truckee River at Fellnagle diversion dam at Wadsworth	393838 1191727	SWNE33, 21N, 24E	22.55	4,041	R	0.56 mile below USGS gage at Wadsworth; sampled off left bank immediately above dam
47	—	Truckee River below Fellnagle diversion dam at Wadsworth	393837 1191725	NWSE33, 21N, 24E	22.53	4,038	RQ	Data type (R) collected approximately 100 feet below dam; data type (Q) location--see table 35
48	—	Truckee River below Cerosola Ranch near Wadsworth	393927 1191640	NWSW27, 21N, 24E	21.31	4,024	Q	Measurement location--see table 35
49	—	Truckee River at S Bar S diversion dam	394010 1191623	SWSE22, 21N, 24E	19.84	4,013	RQ	Data type (R) collected off left bank immediately above S Bar S (Gardella) diversion dam; data type (Q) location--see table 35
50	—	Truckee River below S Bar S diversion dam	394027 1191615	SWNE22, 21N, 24E	19.54	4,007	Q	Measurement location--see table 35
51	—	Truckee River at S Bar S Ranch	394129 1191707	SENE16, 21N, 24E	17.82	3,990	DQ	Data type (D) collected off left bank at irrigation pump; data type (Q) location--see table 35
52	10351684	Truckee River below S Bar S Ranch	394146 1191759	SWSW09, 21N, 24E	16.75	3,983	HQ	Data type (H) collected 0.25 mile below S Bar S (Gardella) diversion return to river; data type (Q) location--see table 35

TABLE 1.--*Index to data-collection sites*--Continued

Site number (see figure 2)	USGS identification number	Site name	Site location: Latitude longitude	Site location: Local designation	Site location: River mile	Site location: Altitude (feet)	Data types	Remarks
				Truckee River Basin Sites--Continued				
52A	10351685	Truckee River intragravel site below S Bar S Ranch	394146 1191759	SWSW09, 21N, 24E	16.75	3,983	H	Sampled 0.25 mile below S Bar S (Gardella) diversion return to river
53	--	Truckee River at river mile 15.8	394223 1191819	NENE08, 21N, 24E	15.82	3,976	R	Sampled off left bank
54	--	Truckee River at river mile 15.4	394239 1191835	SWSE05, 21N, 24E	15.43	3,947	Q	Measurement location--see table 35
55	--	Truckee River at river mile 13.8	394345 1191908	NWSW32, 22N, 24E	13.79	3,964	Q	Measurement location--see table 35
56	10351690	Truckee River at Dead Ox Wash near Nixon	394414 1191924	NENE31, 22N, 24E	13.18	3,960	SPHDRQ	Data types (S), (P), (D), and (R) collected near lone cottonwood tree on left bank 1.12 miles below Numana Hatchery; data type (H) collected 0.27 mile farther downstream; data type (Q) location--see table 35
56A	10351691	Truckee River intragravel site at Dead Ox Wash near Nixon	394414 1191924	NENE31, 22N, 24E	13.18	3,960	H	Sampled at same location as for site 56
57	--	Truckee River at river mile 12.0	394459 1191939	NWNE30, 22N, 24E	11.99	3,954	Q	Measurement location--see table 35
58	--	Truckee River at river mile 11.0	394541 1192001	SENW19, 22N, 24E	11.02	3,948	Q	Measurement location--see table 35
59	10351725	Truckee River at Numana Dam near Nixon	394723 1192054	SWNE12, 22N, 23E	8.21	3,920	DQ	Data type (D) collected off left bank approximately 500 feet below dam; data type (Q) location--see table 35
60	--	Truckee River at Little Nixon bridge	394828 1192047	SWNE01, 22N, 23E	5.73	3,899	Q	Measurement location--see table 35
61	--	Truckee River below Little Nixon	394854 1192047	SWSE36, 23N, 23E	5.09	3,894	Q	Measurement location--see table 35
62	10351750	Truckee River at State Highway 447 at Nixon	394945 1192136	SESE26, 23N, 23E	3.22	3,877	SPDQ	Data types (S), (P), and (D) collected from upstream side of highway bridge; data type (Q) location--see table 35
63	10351775	Truckee River at Marble Bluff Dam	395120 1192332	SESW15, 23N, 23E	.00	3,855	SPTD	All data collected off left or right wing wall of dam, depending on flow conditions
64	10351778	Truckee River fishway at Marble Bluff Dam	395119 1192335	SWSW15, 23N, 23E	-.07	3,845	PQ	Data type (P) collected from road bridge 375 feet below diversion from Truckee River; data type (Q) location--see table 35
65	10351780	Truckee River below Marble Bluff Dam	395111 1192344	NWNW22, 23N, 23E	-.05	3,835	DQ	Data type (D) collected off left bank 275 feet below dam; data type (Q) location--see table 35
				Truckee Canal Sites				
66	--	Truckee Canal at Derby Dam	393511 1192655	NWSW19, 20N, 23E	31.42	4,201	DQ	Data type (D) collected from downstream side of canal gates; data type (Q) location--see table 36
67	--	Truckee Canal at Pyramid Check Dam near Wadsworth	393538 1192047	SWSE13, 20N, 23E	25.38	4,196	D	Sampled at upstream side of check dam
68	10351300	Truckee Canal auxiliary gage near Wadsworth	393624 1191815	NENE17, 20N, 24E	22.54	4,190	D	Sampled at gage below end of tunnel #3
69	10351320	Truckee Canal at U.S. Highway 95A near Fernley	393528 1191457	NENE23, 20N, 24E	18.23	4,190	SPDQ	Data types (S), (P) and (D) collected off left bank at diversion gate TC-4, approximately 150 feet above highway bridge. Exceptions were dye samples in 1981, taken from upstream side of Fernley Check Dam (0.21 mile below bridge). Data type (Q) location--see table 36
70	--	Truckee Canal at Anderson Check Dam near Fernley	393454 1191154	SWSE20, 20N, 25E	15.07	4,186	DQ	Data type (D) collected from upstream side of check dam; data type (Q) location--see table 36

TABLE 1.—*Index to data-collection sites*—Continued

Site number (see figure 2)	USGS identification number	Site name	Site location: Latitude longitude	Site location: Local designation	Site location: River mile	Site location: Altitude (feet)	Data types	Remarks
				Truckee Canal Sites--Continued				
71	10351367	Truckee Canal at Allendale Check Dam near Fernley	393447 1190739	SESW24, 20N, 25E	11.07	4,181	SPDQ	Data types (S), (P), and (D) collected from upstream side of check dam; data type (Q) location--see table 36
72	—	Truckee Canal at Mason Check Dam near Hazen	393221 1190426	NESW04, 19N, 26E	6.39	4,179	DQ	Data type (D) collected from footbridge at check dam; data type (Q) location--see table 36
73	—	Truckee Canal at Bango Check Dam near Hazen	393014 1190241	NENE22, 19N, 26E	3.25	4,177	PDQ	Data type (P) collected from footbridge 1.23 miles above check dam; data type (D) collected from upstream side of check dam; data type (Q) location--see table 36
74	10351590	Truckee Canal at U.S. Highway 50 above Lahontan Reservoir	392809 1190400	SENE33, 19N, 26E	0.44	4,170	SPTDQ	Data types (S) and (P) collected from downstream side of highway bridge at high flows and at rock riffle 150 feet downstream at low flows; thermograph (T) on right bank approximately 300 feet below bridge; data type (D) collected under bridge; data type (Q)location--see table 36

METHODS, MATERIALS, AND LABORATORY ANALYSES

The methods and the materials used for data-collection activities are summarized in table 2.

Suspended-sediment and particle-size determinations were made at the Geological Survey Sediment Laboratory in Sacramento, Calif. Most of the chemical analyses of water samples were determined at the Geological Survey Central Laboratory in Arvada, Colo. BOD, turbidity, and Rhodamine WT dye analyses, however, were determined by Geological Survey personnel in the field or at the laboratory in Carson City. Phytoplankton identifications and cell counts were determined by Susswasser Laboratory, Paso Robles, Calif.; all other biological analyses were made at the Geological Survey Central Laboratory in Atlanta, Ga.

More detailed discussions of the individual data-collection activities are given in the following sections.

Data Collection Prior to the Synoptic Studies

Immediately before the synoptic studies of June and August 1980, water-quality and water-quantity data were collected throughout the river system to provide both background information and an indication of whether steady-state conditions prevailed during the synoptic investigations. All methods employed were consistent with those used in the synoptics.

Antecedent data were collected only during the 1980 sampling program, and included information for nine nonsynoptic sites in the "upper reach." Analyses from the nonsynoptic sites are presented in table 3, whereas the data from antecedent sampling at regular synoptic sites are included with the diel data for those stations in table 4.

Synoptic Studies

The synoptic data sets (table 4) were collected to assist in calibration and verification of a water-quality transport model. The synoptic studies were made during two seasons: (1) Spring high flows, when water quality is critical to fishery interests, and (2) late summer low flows, when extremes in water quality are likely to occur. Sampling consisted of diel measurements at 17 to 22 sites in June and August of 1979 and 1980. Cross-sectional measurements of dye concentrations, determined during the dye studies, and a reconnaissance survey of water temperature, specific conductance, and dissolved oxygen in May 1980 indicated that grab samples near the centroid of flow were sufficiently representative of the total flow at each station for dissolved water-quality characteristics.

All water samples were chilled to 4°C or less and placed in the dark immediately after collection. BOD determinations, and filtration of water samples that required such treatment, were started at a centralized field laboratory less than 6 hours after sample collection. Samples to be analyzed by the Geological Survey Central Laboratories were shipped within 24 hours of collection.

TABLE 2.--*Methods and materials used for water-data acquisition*

Determination	Collection method[a]	Sample treatment and preservation	Analytical method
Field measurements			
Discharge	--	--	Rating curve or current-meter measurement; see Corbett and others (1943)
Temperature	1	--	Calibrated mercury thermometer or electronic meter with thermistor probe
Dissolved oxygen (DO)	1	--	Modified Winkler method or dissolved-oxygen meter calibrated onsite using air-calibration chamber in water (Skougstad and others, 1979)
Specific conductance	1	None	Standard meters and probes
pH	1	None	Standard meters and probes
Alkalinity	1	None	Electrometric titration with standardized sulfuric acid solution using standard meters and probes
Laboratory measurements		--	Methods according to Skougstad and others (1979) except where noted
Turbidity	2	None	Nephelometric turbidimeter
Dissolved solids	2	Field filtration through pre-rinsed 0.45-um pore-size membrane filter	Gravimetric (evaporation at 180°C)
Nitrogen and phosphorus species		Prior to June 1980, chilled to $\leq$ 4°C; June-August 1980, added $HgCl_2$ and chilled to $\leq$ 4°C	--
Total	2	Same as above	--
Dissolved	2	Field filtration through pre-rinsed 0.45-um pore-size membrane filter and treated as above	--
Total in bottom material	3	Chilled to $\leq$ 4°C	--
Carbon		Chilled to $\leq$ 4°C; glass container for water samples, plastic container for bottom material	Goerlitz and Brown, 1972, pages 4-6
Total organic	2	Same as above	--
Total organic in bottom material	--	--	Calculated difference between inorganic and organic-plus-inorganic determinations
Total inorganic in bottom material	3	Same as above	--
Total organic plus inorganic in bottom material	3	Same as above	--
Trace elements		Acidified to pH <2 with HNO_3 in acid-rinsed plastic bottle (except bottom-material samples)	--
Total	4	Same as above	--
Suspended	--	--	Calculated difference between total and dissolved determinations
Dissolved	4	Field filtration through pre-rinsed 0.45-um pore-size membrane filter and treated as above	--
Total in bottom material	3	Chilled to $\leq$ 4°C in plastic container	--
Sediment			Guy, 1969, pages 11, 12, 47-51
Suspended, concentration	4	None	Gravimetric (evaporation at 110°C)
Bed material, size	3	None	Sieves
Biochemical oxygen demand (BOD)	2	Standard BOD bottle (300 mL) stored in dark at 20°C ± 1°C	Stamer and others, 1979; John K. Stamer, U.S. Geological Survey, written communication, 1979; Jon O. Nowlin, U.S. Geological Survey, written communication, 1980

TABLE 2.--*Methods and materials used for water-data acquisition*--Continued

Determination	Collection method[a]	Sample treatment and preservation	Analytical method
Biological		--	Greeson and others, 1977
Chlorophyll	2	Laboratory filtration through glass fiber filter, filter frozen prior to analysis	--
Seston	2	Same as above	--
Algal growth potential	2	Laboratory filtration through pre-rinsed 0.22-um pore-size membrane filter and chilled to $\leq$ 4°C	--
Phytoplankton taxa and cell counts	2	Added 1 mL Lugol's Solution per 100 mL sample	Taxa by inverted-microscope method; filamentous algae cell-counts determined by dividing average filament length by length of component cell
Other substances			
Rhodamine WT	5	Glass container, chilled and stored in dark	Wilson, 1968
Ethylene	6	Formalin solution added in glass container with no air space and chilled to $\leq$ 4°C	Schultz and others, 1976

[a] Collection methods:

1. Onsite determination. Samples for modified Winkler analysis of dissolved oxygen were transferred from standard DO and BOD samplers (American Public Health Association, 1980, pages 389, 934) to 300-mL BOD bottles using submerged orifices to prevent reaeration of sample. Exceptions were in June 1979, when synoptic measurements of pH and dissolved oxygen ("fixed" onsite) were made in a centralized field laboratory.

2. Grab sample collected at mid-depth near the centroid of flow using standard DO and BOD samplers (American Public Health Association, 1980, pages 389, 934). Exceptions were turbidity, nitrogen species, and phosphorus species for analysis in the trout spawning study, which were discharge-integrated samples or collected from intragravel pipes. Samples for BOD analysis were transferred to standard 300-mL BOD bottles using submerged orifices to prevent reaeration.

3. Sample collected using McNeil-Ahnell sampler (Ray J. Hoffman, U.S. Geological Survey, written communication, 1984).

4. Discharge-integrated sample using standard suspended-sediment techniques (Guy and Norman, 1970).

5. Samples collected near centroid of flow using one or more of: pumped flow-through apparatus, grab sample, or automatic sampler.

6. Grab sample at mid-depth near centroid of flow using 60-mL version of a standard DO sampler (American Public Health Association, 1980, page 389). Ethylene sample bottles were capped while submerged in sampler.

Phytoplankton Taxa and Cell Counts

Water samples for phytoplankton analyses were collected to provide an indication of primary productivity in the river system, and to aid in the interpretation of data on suspended chlorophyll-*a*, which were to be incorporated into the water-quality model. A preservative was added to the samples immediately after collection. Organisms were identified and counted, to the species level whenever possible, by using appropriate taxonomic keys. The results of the phytoplankton analyses are presented in tables 5-8.

Trout-Spawning Habitat

In February-March 1980, an intensive investigation at selected sites in the Truckee River was made in cooperation with the U.S. Fish and Wildlife Service to evaluate the suitability of the river as a spawning habitat for the Lahontan cutthroat trout. Surface water, streambed material, and intragravel water were analyzed in an attempt to answer fundamental questions concerning the quality of the river in relation to the survival of incubating salmonid eggs. The data collected during the egg study are presented in table 9.

Sampling methods, including the use of an intragravel sampler developed for this study, are described by Hoffman and Scoppettone (1984). Further details regarding the sampler will be presented in a forthcoming report (Ray J. Hoffman, U.S. Geological Survey, written communication, 1984).

Daily Water Temperatures

Digital thermographs were installed at 10 locations throughout the river system to provide information for both the spawning-habitat study and the water-quality model. Daily maximum, minimum, and mean water temperatures for these sites are listed in table 10. Other daily temperature information from regularly maintained Geological Survey thermographs on the Truckee River are not included in this report but may be found in the annual water-data reports for Nevada (U.S. Geological Survey, 1980, 1982).

Dye Studies

The data in tables 11-23 were collected during 12 dye studies made from May 1979 through September 1980 to define traveltimes under various flow conditions. The information in tables 16 and 19 was collected during extreme high flows that occurred after warm rains fell on the upper basin snowpack. Data for the Truckee Canal in table 21 are for a downstream continuation of a dye study initiated at the Reno-Sparks Sewage Treatment Plant in the "middle reach" (table 14). Two supplemental dye studies were done on the Truckee Canal in October 1981 to further define traveltime characteristics for high flows greater than 500 ft^3/s. Summary data for these supplemental studies are included in table 32; however, individual concentrations such as those listed for earlier studies in tables 11-23 are not available because the fluorometer was not calibrated to absolute concentrations of Rhodamine WT dye for the 1981 studies.

Instantaneous injections of concentrated Rhodamine WT solution (160 grams of dye per liter of solution) were made with a tipping bucket near the centroid of flow. In tables 11-23, the dye volumes injected are reported to the nearest half liter and streamflows are reported for the period when dye was present, on the basis of (1) data from instantaneous measurements and (2) mean discharges derived from nearby gages.

Sample times are corrected for any lag time through a flow-through apparatus when appropriate. All dye concentrations reported were determined after first subtracting any background fluorescence; the determinations were generally made within 1 week of collection. Beginning in January 1980, acquisition of a fluorometer with increased sensitivity allowed laboratory determination of concentrations to the nearest 0.1 microgram per liter.

Reaeration Studies

Five gas-tracer reaeration studies were made on the Truckee River to obtain data for water-quality modeling. Ethylene and Rhodamine WT concentrations from these studies are listed in tables 24-28.

Except for injection techniques, dye data for the reaeration studies were collected and analyzed using the methods described above. For the reaeration studies, however, dye was injected continuously at a constant rate over a specific length of time. Concurrently, ethylene was injected into the river using flat, passive-plate diffusers. Gas sampling was performed according to methods described by Rathbun and Grant (1978), with a formalin preservative added by syringe through Teflon[1] lined septums on the gas-sample bottles. Determinations of ethylene concentrations were generally made within 4-6 weeks of sample collection.

Discharges and water temperatures shown in tables 24-28 are based on means of instantaneous measurements, or extrapolations and interpolations from nearby gages or thermographs.

Summaries of Traveltime Data

Tables 29-32 summarize traveltime information determined from the 14 dye studies, and tables 33 and 34 summarize traveltime information based on the five reaeration studies. The cumulative traveltimes since injection, the durations of dye-cloud presence, and the peak and average dye concentrations were derived from graphical analyses of the raw data according to the methods described by Kilpatrick and others (1970).

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[1] The use of trade names in this report is for identification purposes only and does not constitute endorsement by the U.S. Geological Survey.

Discharge Measurements and Associated Channel-Geometry Data at Miscellaneous Sites

Listed in tables 35 and 36 are discharges and associated channel-geometry measurements for 36 sites on the Truckee River, 3 on tributaries to the river, and 7 sites on the Truckee Canal. These measurements were made to obtain discharge data in support of the water-quality, traveltime, and reaeration studies and to obtain channel-geometry data for the mathematical models.

River miles, altitudes, and cross-section locations given in tables 35 and 36 are specific to the cross sections used for the discharge and channel-geometry measurements, and thus may differ from the data in table 1. Cross sections used for stream gaging are commonly selected at the discretion of the hydrographer and may vary from measurement to measurement at the same general location; therefore, the channel-geometry data for a gaging station may not be directly comparable between measurements.

To further define channel-geometry characteristics for the Truckee River below river mile 56.00, a number of fixed cross sections were established for discharge measurements. These sites are noted in the remarks for table 35.

Not included in the tables are the routine stream-discharge measurements performed at Geological Survey continual-record gaging stations. These data were collected at approximately monthly intervals and are available at Geological Survey offices in Carson City, Nev., and Sacramento, Calif.

page 17 follows

HYDROLOGIC DATA

TABLE 3.--*Data from non-synoptic sites prior to synoptic studies of June and August 1980*

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH FIELD (UNITS)	TUR-BID-ITY (NTU)
Site 1 - TRUCKEE RIVER AT TAHOE CITY											
JUN, 1980											
02...	0900	69	10.5	600	9.0	8.1	89	104	52	8.2	--
AUG											
08...	0845	335	--	606	18.5	7.8	104	87	58	8.2	.95
Site 2 - SQUAW CREEK AT SQUAW VALLEY ROAD AT SQUAW VALLEY											
AUG, 1980											
08...	1000	--	--	606	12.0	7.8	103	60	43	8.6	3.5
Site 3 - DONNER CREEK AT DONNER LAKE NEAR TRUCKEE											
JUN, 1980											
02...	1100	67	9.5	607	11.0	8.4	95	84	60	7.1	--
AUG											
08...	1105	2.0	23.5	613	20.0	7.3	100	80	47	8.1	.70
Site 4 - TRUCKEE RIVER AT STATE HIGHWAY 267 AT TRUCKEE											
JUN, 1980											
02...	1400	--	13.0	609	9.0	8.8	95	65	47	7.1	--
AUG											
08...	1245	--	--	607	18.0	7.7	101	89	61	8.6	2.7
Site 5 - MARTIS CREEK NEAR TRUCKEE											
JUN, 1980											
02...	1215	91	10.0	608	12.0	7.1	83	90	73	7.2	--
Site 6 - TRUCKEE RIVER AT OLD U.S. HIGHWAY 40 BRIDGE BELOW TRUCKEE											
JUN, 1980											
02...	1445	--	9.0	613	9.0	7.7	83	82	59	8.1	--
AUG											
08...	1330	--	--	619	18.5	7.6	100	103	66	7.8	--
Site 7 - PROSSER CREEK BELOW PROSSER CREEK DAM											
JUN, 1980											
02...	1600	550	13.0	615	9.0	8.5	90	51	46	8.1	--
AUG											
08...	1455	12	--	620	19.2	9.8	129	45	37	9.3	--
Site 9 - LITTLE TRUCKEE RIVER BELOW BOCA DAM											
JUN, 1980											
02...	1655	852	9.5	617	8.0	9.4	98	65	48	7.3	--
AUG											
08...	1600	96	30.0	622	11.5	8.9	99	54	43	7.4	--
Site 10 - TRUCKEE RIVER AT BOCA BRIDGE											
JUN, 1980											
02...	1700	--	9.5	617	8.0	9.4	98	64	74	7.2	7.3
AUG											
08...	1645	--	28.0	622	18.5	7.7	101	91	60	7.6	--

TABLE 3.—*Data from non-synoptic sites prior to synoptic studies of June and August 1980*—Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
Site 1 - TRUCKEE RIVER AT TAHOE CITY										
JUN, 1980										
02...	0900	.52	.07	.45	.02	.01	.01	.54	.04	—
AUG										
08...	0845	.33	.06	.27	.00	.00	.00	.33	.00	.03
Site 2 - SQUAW CREEK AT SQUAW VALLEY ROAD AT SQUAW VALLEY										
AUG, 1980										
08...	1000	.19	.04	.15	.00	.00	.00	.19	.01	.03
Site 3 - DONNER CREEK AT DONNER LAKE NEAR TRUCKEE										
JUN, 1980										
02...	1100	.98	.00	.98	.01	.00	.01	.99	.01	.01
AUG										
08...	1105	.40	.05	.35	.00	.00	.00	.40	.00	.03
Site 4 - TRUCKEE RIVER AT STATE HIGHWAY 267 AT TRUCKEE										
JUN, 1980										
02...	1400	.32	.09	.23	.03	.01	.02	.35	.00	.01
AUG										
08...	1245	.42	.03	.39	.00	.00	.00	.42	.00	.03
Site 5 - MARTIS CREEK NEAR TRUCKEE										
JUN, 1980										
02...	1215	.89	.04	.85	.04	.01	.03	.93	.04	.08
Site 6 - TRUCKEE RIVER AT OLD U.S. HIGHWAY 40 BRIDGE BELOW TRUCKEE										
JUN, 1980										
02...	1445	.57	.00	.57	.04	.01	.03	.61	.04	—
AUG										
08...	1330	.27	.08	.19	.05	.00	.05	.32	.01	.03
Site 7 - PROSSER CREEK BELOW PROSSER CREEK DAM										
JUN, 1980										
02...	1600	.32	.00	.32	.01	.01	.00	.33	.05	—
AUG										
08...	1455	.26	.04	.22	.01	.00	.01	.27	.01	.03
Site 9 - LITTLE TRUCKEE RIVER BELOW BOCA DAM										
JUN, 1980										
02...	1655	.37	.04	.33	.07	.01	.06	.44	.01	.03
AUG										
08...	1600	.26	.06	.20	.00	.00	.00	.26	.01	.03
Site 10 - TRUCKEE RIVER AT BOCA BRIDGE										
AUG, 1980										
08...	1645	.45	.04	.41	.02	.00	.02	.47	.01	.03

TABLE 3.—*Data from non-synoptic sites prior to synoptic studies of June and August 1980*—Continued

DATE	TIME	NITRO-GEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, NH_4 DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO_2+NO_3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO_2 DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO_3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
Site 1 - TRUCKEE RIVER AT TAHOE CITY										
JUN, 1980										
02...	0900	.46	.08	.38	.03	.01	.02	.49	.00	.01
AUG										
08...	0845	--	.08	--	.00	.00	.00	--	.00	.03
Site 2 - SQUAW CREEK AT SQUAW VALLEY ROAD AT SQUAW VALLEY										
AUG, 1980										
08...	1000	--	.03	--	.02	.01	.01	--	.01	.04
Site 3 - DONNER CREEK AT DONNER LAKE NEAR TRUCKEE										
JUN, 1980										
02...	1100	1.0	.00	1.0	--	.00	--	--	.01	.01
AUG										
08...	1105	--	.05	--	.00	.00	.00	--	.00	.03
Site 4 - TRUCKEE RIVER AT STATE HIGHWAY 267 AT TRUCKEE										
AUG, 1980										
08...	1245	.43	.04	.39	.01	.01	.00	.44	.02	.03
Site 6 - TRUCKEE RIVER AT OLD U.S. HIGHWAY 40 BRIDGE BELOW TRUCKEE										
AUG, 1980										
08...	1330	--	.03	--	.03	.01	.02	--	.01	.03
Site 7 - PROSSER CREEK BELOW PROSSER CREEK DAM										
AUG, 1980										
08...	1455	--	.03	--	.02	.01	.01	--	.00	.03
Site 9 - LITTLE TRUCKEE RIVER BELOW BOCA DAM										
AUG, 1980										
08...	1600	--	.06	--	.01	.01	.00	--	--	.03
Site 10 - TRUCKEE RIVER AT BOCA BRIDGE										
JUN, 1980										
02...	1700	.63	.13	.50	--	.01	--	--	--	.02
AUG										
08...	1645	.40	.03	.37	.02	.01	.01	.42	.00	.03

TABLE 3.—*Data from non-synoptic sites prior to synoptic studies of June and August 1980*—Continued

DATE	TIME	CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5 DAY (MG/L)	20 DAY (MG/L)	ULTIMATE (MG/L)	DECAY RATE BASE E, PER DAY AT 20°C	DECAY RATE BASE 10, PER DAY AT 20°C	5 DAY (MG/L)	20 DAY (MG/L)	ULTIMATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTIMATE (MG/L)
Site 1 - TRUCKEE RIVER AT TAHOE CITY												
JUN, 1980												
02...	0900	1.0	.4	1.3	2.0	.05	.02	--	--	4.2	--	2.2
AUG												
08...	0845	--	--	--	--	--	--	.4	1.0	1.5	--	--
Site 2 - SQUAW CREEK AT SQUAW VALLEY ROAD AT SQUAW VALLEY												
AUG, 1980												
08...	1000	--	.4	1.4	2.7	.04	.02	.3	1.1	3.2	--	--
Site 3 - DONNER CREEK AT DONNER LAKE NEAR TRUCKEE												
JUN, 1980												
02...	1100	.22	.9	2.0	2.2	.11	.05	.8	1.8	2.3	--	--
Site 4 - TRUCKEE RIVER AT STATE HIGHWAY 267 AT TRUCKEE												
JUN, 1980												
02...	1400	.26	1.0	1.9	2.0	.15	.06	.6	1.2	1.4	--	--
Site 5 - MARTIS CREEK NEAR TRUCKEE												
JUN, 1980												
02...	1215	--	1.4	2.7	3.0	.13	.06	1.6	2.9	3.1	--	--
Site 6 - TRUCKEE RIVER AT OLD U.S. HIGHWAY 40 BRIDGE BELOW TRUCKEE												
JUN, 1980												
02...	1445	.82	1.5	2.2	2.2	.23	.10	.6	1.4	1.6	--	--
AUG												
08...	1330	.14	.6	1.7	2.5	.06	.03	.5	1.6	2.9	--	--
Site 7 - PROSSER CREEK BELOW PROSSER CREEK DAM												
JUN, 1980												
02...	1600	1.5	.5	.8	.9	.16	.07	.5	1.1	1.2	--	--
AUG												
08...	1455	--	.8	2.0	2.5	.08	.03	1.0	2.6	3.4	--	--
Site 9 - LITTLE TRUCKEE RIVER BELOW BOCA DAM												
JUN, 1980												
02...	1655	.62	.6	1.7	2.3	.07	.03	--	--	3.5	--	1.2
AUG												
08...	1600	--	--	--	--	--	--	.5	.9	1.0	--	--
Site 10 - TRUCKEE RIVER AT BOCA BRIDGE												
JUN, 1980												
02...	1700	.61	.8	1.9	2.4	.09	.04	.8	1.5	1.6	--	--
AUG												
08...	1645	--	.5	1.4	2.3	.05	.02	--	--	--	--	--

TABLE 3.--*Data from non-synoptic sites prior to synoptic studies of June and August 1980*--Continued

DATE	TIME	CHLORO-PHYLL *a*, SUS-PENDED (UG/L)	CHLORO-PHYLL *b*, SUS-PENDED (UG/L)	BIOMASS/ CHLORO-PHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	ALGAL GROWTH POTEN-TIAL, BOTTLE TEST (MG/L)
Site 1 - TRUCKEE RIVER AT TAHOE CITY							
JUN, 1980							
02...	0900	.084	<.086	35710	298	295	.4
AUG							
08...	0845	.103	<.170	38840	614	610	--
Site 2 - SQUAW CREEK AT SQUAW VALLEY ROAD AT SQUAW VALLEY							
AUG, 1980							
08...	1000	.140	<.139	14290	484	482	--
Site 3 - DONNER CREEK AT DONNER LAKE NEAR TRUCKEE							
JUN, 1980							
02...	1100	.157	<.081	25480	282	278	.4
AUG							
08...	1105	.137	<.193	43800	637	631	--
Site 4 - TRUCKEE RIVER AT STATE HIGHWAY 267 AT TRUCKEE							
JUN, 1980							
02...	1400	.708	.091	7062	352	347	--
AUG							
08...	1245	.175	<.173	28570	637	632	--
Site 5 - MARTIS CREEK NEAR TRUCKEE							
JUN, 1980							
02...	1215	1.14	<.078	3509	295	291	--
Site 6 - TRUCKEE RIVER AT OLD U.S. HIGHWAY 40 BRIDGE BELOW TRUCKEE							
AUG, 1980							
08...	1330	<.199	<.196	--	614	609	--
Site 7 - PROSSER CREEK BELOW PROSSER CREEK DAM							
JUN, 1980							
02...	1600	.842	.173	--	--	--	.3
AUG							
08...	1455	.303	.200	17751	615	609	--
Site 9 - LITTLE TRUCKEE RIVER BELOW BOCA DAM							
JUN, 1980							
02...	1655	.451	<.093	6652	287	284	.5
AUG							
08...	1600	.338	<.223	17750	624	618	--
Site 10 - TRUCKEE RIVER AT BOCA BRIDGE							
AUG, 1980							
08...	1645	.263	<.200	34220	631	622	--

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*

Site 13 - TRUCKEE RIVER AT CRYSTAL PEAK PARK AT VERDI

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH FIELD (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1980												
02...	1825	--	10.0	631	8.0	7.7	79	72	51	7.2	--	--
04...	0930	--	6.5	636	8.5	9.9	101	70	--	--	--	--
05...	0930	[a]1590	10.5	636	8.5	9.7	104	64	--	7.2	--	--
05...	1140	--	14.0	636	9.0	9.7	100	66	--	7.6	--	8.0
05...	1415	--	13.5	636	10.0	9.5	100	65	--	7.7	--	--
05...	1615	--	16.0	636	11.0	9.4	101	64	--	7.6	--	--
05...	1800	--	14.0	636	11.0	9.4	101	65	--	7.7	--	--
05...	1930	--	9.5	636	10.5	9.3	99	63	--	7.5	--	9.0
05...	2220	--	8.5	636	10.0	9.4	99	62	--	--	--	--
06...	0005	--	5.5	636	9.5	9.5	99	64	--	7.5	--	8.0
06...	0215	--	5.5	637	9.0	9.5	98	61	--	7.4	--	--
06...	0410	--	2.0	637	9.0	--	--	62	--	7.4	--	11
06...	0610	--	4.0	637	8.5	9.8	100	62	--	7.5	--	--
06...	0905	--	12.0	638	8.5	9.9	101	64	--	7.7	--	8.0
06...	1110	--	14.5	638	9.5	9.6	100	65	--	7.8	--	--
06...	1305	--	17.5	638	11.0	9.3	100	66	--	7.9	--	5.0
AUG, 1980												
11...	1005	--	29.0	638	15.0	10.8	127	89	70	8.0	--	3.3
13...	1005	[a]410	21.5	636	14.0	8.6	99	103	--	7.8	--	--
13...	1155	--	28.0	635	16.5	8.6	105	102	--	8.3	--	4.7
13...	1345	--	29.5	636	20.0	8.8	114	102	--	8.6	--	--
13...	1522	--	26.0	635	20.5	8.6	114	102	--	8.5	--	2.0
13...	1715	--	24.5	635	20.0	8.2	107	103	--	8.4	--	--
13...	1930	--	18.5	634	17.5	7.7	98	101	--	8.2	--	1.5
13...	2115	--	--	635	17.5	7.8	98	102	--	8.0	--	--
13...	2325	--	15.0	635	15.5	7.7	93	102	--	7.9	--	1.7
14...	0115	--	14.0	635	--	8.0	--	101	--	7.8	--	--
14...	0320	--	11.0	635	14.0	8.2	95	101	--	7.8	--	3.6
14...	0515	--	13.5	635	13.5	8.4	96	102	--	7.8	--	--
14...	0730	--	14.5	635	12.5	8.7	98	102	--	7.8	--	3.2
14...	0925	--	18.5	635	13.0	9.0	103	102	--	8.0	--	--
14...	1120	--	19.5	635	15.0	9.2	109	101	--	8.3	--	3.9

[a] Average streamflow estimated for the synoptic sampling period.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 13 - TRUCKEE RIVER AT CRYSTAL PEAK PARK AT VERDI--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1980										
02...	1825	--	.00	--	--	.01	--	--	.00	.02
05...	1140	--	.09	--	.08	.01	.07	--	.03	.04
05...	1930	--	.10	--	.14	.01	.13	--	.03	--
06...	0410	--	.09	--	.09	.01	.08	--	.02	.01
06...	1305	--	.09	--	.08	.01	.07	--	.03	--
AUG, 1980										
11...	1005	.54	--	--	.01	.01	.00	.55	.01	.04
13...	1155	.42	.07	.35	.00	--	--	.42	.01	.05
13...	2325	.79	.01	.78	.00	.01	.00	.79	.00	.04

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
JUN, 1980										
02...	1825	.46	.00	.46	.13	.01	.12	.59	.00	.01
05...	1140	.36	.06	.30	.05	.00	.05	.41	.03	.03
05...	1615	.49	.17	.32	.10	.00	.10	.59	.03	--
05...	1930	.31	.10	.21	.04	.01	.03	.35	.03	.02
06...	0005	.69	.10	.59	--	.00	--	--	--	.02
06...	0410	.45	.10	.35	.07	.00	.07	.52	.01	.01
06...	0905	.30	.08	.22	.08	.00	.08	.38	.01	--
06...	1305	.39	.04	.35	.07	.00	.07	.46	.01	.01
AUG, 1980										
11...	1005	.35	.01	.34	.00	.00	.00	.35	.01	.02
13...	1155	--	.03	--	.00	.02	.00	--	.00	.06
13...	1522	.49	.01	.48	.00	.02	.00	.49	.00	.04
13...	1930	.36	.07	.29	.00	.00	.00	.36	.01	.02
13...	2325	.66	.02	.64	.00	.00	.00	.66	--	.03
14...	0320	.42	.05	.37	.00	.02	.00	.42	.01	.05
14...	0730	.50	.04	.46	.00	.01	.00	.50	.01	.05
14...	1120	.36	.02	.34	.01	.02	.00	.37	.00	.04

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 13 - TRUCKEE RIVER AT CRYSTAL PEAK PARK AT VERDI--Continued

		CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
DATE	TIME	LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTI-MATE (MG/L)
JUN, 1980												
02...	1825	1.0	.7	1.2	1.2	.19	.08	.7	1.4	1.5	--	--
05...	1615	.48	1.2	2.2	2.3	.15	.06	.9	2.0	2.4	--	--
05...	1930	.55	.9	1.8	1.9	.14	.06	.9	1.8	1.9	--	--
06...	0005	--	.3	.8	.9	.09	.04	.8	1.8	2.1	--	--
06...	0410	.52	.6	1.2	1.4	.11	.05	.5	1.2	1.4	--	--
06...	0905	1.0	.7	1.4	1.6	.11	.05	.6	1.3	1.4	--	--
06...	1305	1.0	.7	1.6	1.8	.10	.04	.5	1.5	2.0	--	--
AUG, 1980												
11...	1005	.52	.6	1.7	2.3	.07	.03	.8	2.4	3.0	--	--
13...	1155	.22	1.1	2.0	2.1	.15	.06	.9	1.8	2.0	--	--
13...	1522	--	.7	1.4	1.6	.13	.06	1.1	2.1	2.3	--	--
13...	1930	--	.9	1.6	1.7	.15	.06	.7	1.4	1.5	--	--
13...	2325	.06	.8	1.6	1.8	.13	.06	.9	1.7	1.9	--	--
14...	0320	--	.8	1.5	1.6	.14	.06	.6	1.2	1.3	--	--
14...	0730	--	--	--	--	--	--	1.3	2.2	2.3	--	--
14...	1120	.45	.9	1.6	1.7	.14	.06	.1	1.8	2.0	--	--

DATE	TIME	CHLORO-PHYLL *a*, SUS-PENDED (UG/L)	CHLORO-PHYLL *b*, SUS-PENDED (UG/L)	BIOMASS/ CHLORO-PHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTEN-TIAL, BOTTLE TEST (MG/L)
JUN, 1980								
02...	1825	.381	.069	7874	283	280	--	.4
05...	1140	.979	.251	2043	280	278	635	--
06...	0005	.641	.129	6240	274	270	407	.8
AUG, 1980								
11...	1005	.275	--	25450	639	632	--	--
13...	1155	.185	<.183	32430	677	671	301	2.3
13...	1522	--	--	--	--	--	200	--
13...	1930	--	--	--	--	--	176	--
13...	2325	<.170	--	--	662	654	175	--
14...	0320	--	--	--	--	--	229	--
14...	0730	--	--	--	--	--	168	--
14...	1120	--	--	--	--	--	203	--

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 15 - TRUCKEE RIVER AT MAYBERRY DRIVE

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH FIELD (UNITS)	ALKA-LINITY MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1980												
02...	1930	—	10.5	637	9.0	8.3	86	76	59	7.3	—	—
05...	1050	[a]1900	12.1	642	9.0	9.8	101	69	—	7.4	—	--
05...	1300	—	15.5	642	10.0	9.8	103	68	—	7.6	—	7.0
05...	1520	—	16.0	642	10.0	9.3	98	64	—	7.9	—	--
05...	1710	—	15.0	642	11.5	—	—	66	—	7.8	—	5.0
05...	1840	—	12.5	643	11.5	9.3	101	67	—	7.7	—	--
05...	2020	—	11.0	643	11.0	9.2	99	66	—	7.6	—	8.0
05...	2315	—	7.0	644	10.0	9.3	98	65	—	7.3	—	--
06...	0125	—	7.0	643	9.5	9.4	98	62	—	7.3	—	10
06...	0315	—	3.5	642	9.0	9.6	99	64	—	7.4	—	—
06...	0520	—	2.0	643	9.0	9.5	98	63	—	7.4	—	11
06...	0805	—	9.0	644	9.0	9.9	102	68	—	7.7	—	9.0
06...	1020	—	16.0	644	9.5	9.8	102	69	—	7.8	—	--
06...	1205	—	15.0	644	10.0	9.7	103	69	—	7.9	—	8.0
AUG, 1980												
11...	1120	—	31.5	644	17.5	11.8	139	111	75	8.8	—	4.0
13...	1105	[a]340	26.5	641	17.0	9.6	118	107	—	8.8	—	—
13...	1300	—	30.0	640	18.5	9.7	123	107	—	9.1	—	2.9
13...	1426	—	33.5	642	18.5	—	—	106	—	9.2	—	--
13...	1600	—	27.5	640	19.5	9.6	122	106	—	9.2	—	2.5
13...	1752	--	--	640	19.0	9.0	115	105	—	9.2	—	--
13...	2015	—	23.5	640	18.5	7.7	98	108	—	8.6	—	1.7
13...	2200	—	21.5	640	18.0	7.6	95	108	—	8.0	—	--
14...	0015	—	20.0	641	18.0	7.6	95	114	—	7.9	—	--
14...	0200	—	16.5	640	17.0	7.8	96	114	—	7.8	—	--
14...	0405	—	11.5	640	16.0	8.0	96	105	—	7.8	—	4.7
14...	0600	—	10.0	640	15.0	8.0	95	119	—	7.8	—	--
14...	0815	—	14.0	640	15.0	8.8	104	118	—	8.0	—	3.4
14...	1005	—	22.0	640	15.0	9.6	112	105	—	8.6	—	--
14...	1200	—	22.0	640	15.5	9.8	116	107	—	9.0	—	5.4

[a] Average streamflow estimated for the synoptic sampling period.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 15 - TRUCKEE RIVER AT MAYBERRY DRIVE--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1980										
02...	1930	.35	.00	.35	.03	.01	.02	.38	--	.02
05...	1300	.30	--	--	.07	.01	.06	.37	.03	.03
05...	2020	--	.10	--	.15	.01	.14	--	.03	.05
06...	0520	.45	.10	.35	.11	.01	.10	.56	.03	.02
06...	1205	.40	.10	.30	.02	.01	.01	.42	.04	--
AUG, 1980										
11...	1120	.56	.01	.55	.00	.00	.00	.56	.01	.04
13...	1300	--	.06	--	.00	.00	.00	--	.02	.04
14...	0015	.86	.08	.78	.00	.02	.00	.86	.02	.05

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
JUN, 1980										
02...	1930	.30	.00	.30	.05	.00	.05	.35	.02	.01
05...	1300	--	.10	--	--	.01	--	--	--	.02
05...	1710	.41	.10	.31	--	.00	--	--	.03	.01
05...	2020	.33	.12	.21	--	.00	--	--	.01	.01
06...	0125	.64	.12	.52	.13	.00	.13	.77	--	.01
06...	0520	.38	.08	.30	.07	.00	.07	.45	.01	.01
06...	0805	.31	.06	.25	--	.00	--	--	--	.00
06...	1205	.38	.06	.30	.03	.00	.03	.41	.03	.01
AUG, 1980										
11...	1120	.34	--	--	.00	.00	.00	.34	.03	.02
13...	1300	.46	.00	.46	.00	.01	.00	.46	.00	.04
13...	1600	.41	.04	.37	.00	.01	.00	.41	.01	.05
13...	2015	--	--	--	.00	.00	.00	--	.01	.03
14...	0015	.49	--	--	.00	.00	.00	.49	.01	.04
14...	0405	.39	.01	.38	.00	.01	.00	.39	.04	.05
14...	0815	.38	.03	.35	.00	.01	.00	.38	.02	.05
14...	1200	--	.04	--	.00	.02	.00	--	.00	.08

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 15 - TRUCKEE RIVER AT MAYBERRY DRIVE--Continued

		CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
DATE	TIME	LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTI-MATE (MG/L)
JUN, 1980												
02...	1930	.24	.9	1.8	1.9	.13	.06	.8	1.5	1.6	--	--
05...	1300	.03	.8	1.7	1.8	.12	.05	.6	1.7	2.4	--	--
05...	1710	1.2	.6	1.5	2.0	.07	.03	1.0	2.1	2.3	--	--
05...	2020	--	.7	1.5	1.7	.11	.05	.8	1.7	1.9	--	--
06...	0125	--	.6	1.6	2.2	.06	.03	.8	1.6	1.8	--	--
06...	0520	.52	.6	1.4	2.0	07	.03	.5	1.5	2.0	--	--
06...	0805	--	.6	1.6	2.2	.06	.03	.7	1.5	1.7	--	--
06...	1205	--	.6	1.4	1.6	.09	.04	.7	1.7	2.1	--	--
AUG, 1980												
11...	1120	.52	.8	1.8	2.2	.08	.03	1.0	2.2	2.6	--	--
13...	1300	--	1.1	2.0	2.0	.15	.06	1.1	2.4	2.8	--	--
13...	1600	--	1.2	2.4	2.6	.12	.05	1.1	2.1	2.3	--	--
13...	2015	--	1.4	2.3	2.4	.17	.07	2.1	3.2	3.3	--	--
14...	0015	--	1.3	2.6	2.8	.13	.06	1.0	1.8	2.0	--	--
14...	0405	--	1.0	1.7	1.8	.16	.07	1.2	2.0	2.0	--	--
14...	0815	.22	1.3	2.6	2.9	.12	.05	1.5	2.7	2.8	--	--
14...	1200	.10	1.0	1.9	2.0	.14	.06	1.1	2.1	2.3	--	--

DATE	TIME	CHLORO-PHYLL *a*, SUS-PENDED (UG/L)	CHLORO-PHYLL *b*, SUS-PENDED (UG/L)	BIOMASS/ CHLORO-PHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTEN-TIAL, BOTTLE TEST (MG/L)
JUN, 1980								
02...	1930	1.12	.165	--	--	--	--	.4
05...	1300	--	--	--	--	--	539	.8
06...	0125	--	--	--	--	--	492	.6
AUG, 1980								
11...	1120	.270	--	29630	623	615	--	--
13...	1300	.252	--	31750	687	679	184	2.1
13...	1600	--	--	--	--	--	198	--
13...	2015	--	--	--	--	--	196	--
14...	0015	.150	--	46670	667	660	190	2.4
14...	0405	--	--	--	--	--	222	--
14...	0815	--	--	--	--	--	245	--
14...	1200	--	--	--	--	--	235	--

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 16 - TRUCKEE RIVER NEAR SPARKS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
06...	0545	370	15.0	649	14.0	8.6	98	102	--	--	28	--
06...	0900	400	21.0	649	14.5	8.7	100	92	--	--	--	--
06...	1130	415	24.5	649	16.0	8.6	101	91	--	8.4	--	--
06...	1350	410	28.0	648	17.5	8.5	104	90	--	--	28	--
06...	1555	390	28.0	647	18.5	8.5	100	88	--	--	27	--
06...	1815	385	25.5	647	18.5	7.6	95	89	--	--	--	--
06...	2045	350	21.5	648	17.0	7.4	92	88	--	--	27	--
07...	0530	320	14.0	652	12.0	--	--	93	--	--	--	--
07...	0720	340	11.5	652	12.0	--	--	90	--	--	28	--
07...	0955	380	16.0	652	11.5	8.8	95	91	--	--	--	--
07...	1150	380	18.0	653	14.5	9.4	106	88	--	--	28	--
07...	1345	365	20.5	652	15.5	9.2	107	88	--	--	--	--
07...	1530	345	22.0	652	16.5	8.9	106	87	--	--	28	--
07...	1810	330	22.0	651	17.0	8.6	104	88	--	--	--	--
07...	2010	315	18.0	652	16.0	8.1	95	85	--	--	28	--
AUG, 1979												
06...	1800	e155	--	651	24.0	8.2	114	122	76	8.9	54	--
07...	1700	e145	--	e650	21.5	7.6	100	120	83	8.8	60	--
08...	0800	e165	19.5	e653	17.0	7.8	94	143	--	7.5	--	--
08...	0950	e170	24.0	e653	18.5	8.4	104	130	--	8.3	56	--
08...	1200	e170	28.0	e652	20.5	8.8	113	129	--	8.2	52	--
08...	1405	e155	28.5	e651	22.5	9.2	123	120	--	9.0	--	--
08...	1550	e150	31.0	e651	23.5	8.8	122	124	--	9.1	53	--
08...	1800	e145	28.5	e651	22.5	7.5	100	125	--	9.0	--	--
08...	2000	e145	26.5	e652	22.0	7.2	96	123	--	9.0	--	--
08...	2200	e145	23.0	e653	21.0	6.4	84	128	--	8.4	--	--
08...	2400	e145	20.5	e653	21.0	6.4	84	132	--	8.0	--	--
09...	0200	e160	18.5	e654	20.0	6.6	85	132	--	7.9	--	--
09...	0400	e155	14.0	e654	19.0	6.8	85	128	--	7.8	--	--
09...	0600	e160	13.5	e654	18.0	7.0	86	126	--	7.9	--	--
09...	0800	e160	18.5	e654	18.0	7.5	93	116	--	7.8	56	--
JUN, 1980												
03...	1100	1940	13.5	645	9.0	10.4	106	76	62	8.1	--	--
05...	1000	1870	11.0	647	8.0	9.4	93	76	--	8.2	--	--
05...	1420	1840	17.0	647	12.0	9.2	100	69	--	7.9	--	--
05...	1655	1840	16.0	647	--	9.2	--	78	--	8.0	--	16
05...	1855	1780	17.5	647	12.5	--	--	71	--	8.1	--	--
05...	2110	1770	10.5	648	11.0	9.4	100	72	--	7.8	--	--
05...	2245	1770	6.5	648	10.0	9.4	97	76	--	7.8	--	--
06...	0055	1770	5.0	648	10.0	9.8	101	78	--	7.7	--	12
06...	0235	1750	3.5	648	10.0	10.0	103	76	--	7.7	--	--
06...	0525	1750	3.5	648	9.0	10.4	105	76	--	7.6	--	12
06...	0730	1750	3.5	649	9.0	10.0	101	76	--	7.8	--	--
06...	0910	1750	--	649	10.5	10.1	106	76	--	7.8	--	--
06...	1045	1750	13.5	649	10.5	10.2	107	76	--	7.8	--	--
06...	1315	1750	19.0	649	11.0	9.2	98	76	--	8.0	--	8.0
AUG, 1980												
11...	1500	150	33.5	648	22.0	11.2	149	121	84	8.8	--	7.4
13...	1000	150	--	e648	17.0	9.0	108	126	--	8.2	--	--
13...	1200	145	21.0	e646	18.5	9.5	117	126	--	8.3	--	3.5
13...	1400	150	33.5	e647	20.5	9.7	126	126	--	8.5	--	--
13...	1600	150	33.0	e645	21.5	9.4	125	124	--	8.8	--	2.8
13...	1800	145	30.0	e645	21.0	8.8	116	124	--	8.9	--	--
13...	2000	150	24.0	e645	20.0	7.5	96	126	--	8.9	--	2.3
13...	2200	150	23.0	e645	19.0	6.8	86	126	--	8.6	--	--
13...	2400	150	16.0	e646	18.0	6.9	85	126	--	8.4	--	3.5
14...	0200	150	15.0	e645	16.5	7.0	82	127	--	8.1	--	--
14...	0400	155	8.5	e645	16.0	7.3	87	130	--	7.7	--	5.6
14...	0545	165	9.5	e645	15.0	7.4	86	127	--	7.6	--	--
14...	0800	165	14.0	e645	14.5	8.2	95	128	--	7.6	--	6.3
14...	1000	165	20.0	e645	16.0	9.2	110	127	--	8.0	--	--
14...	1145	165	26.0	e645	17.0	9.5	114	126	--	8.2	--	4.0

e Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 16 - TRUCKEE RIVER NEAR SPARKS--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
06...	0545	.36	.00	.36	.02	.00	.02	.38	.02	.02
06...	1130	—	.03	—	.02	.02	.00	—	.01	.03
06...	1350	.37	.04	.33	.02	.02	.00	.39	.03	.03
06...	1555	.37	.02	.35	.01	.02	.00	.38	.02	.03
06...	2045	.39	.04	.35	.00	.00	.00	.39	.00	.03
07...	0720	.28	.01	.27	.02	.02	.00	.30	.01	.02
07...	1150	.26	.01	.25	.03	.00	.03	.29	.02	.02
07...	1530	.34	.05	.29	.01	.02	.00	.35	.05	.02
07...	2010	.48	.03	.45	.01	.02	.00	.49	.05	.04
AUG, 1979										
06...	1800	.30	.01	.29	.02	.00	.02	.32	.02	.07
07...	1700	.68	.03	.65	.02	.02	.00	.70	—	—
JUN, 1980										
03...	1100	.37	.07	.30	.05	.00	.05	.42	.05	.04
05...	2110	.48	.15	.33	.18	.01	.17	.66	—	.06
06...	0525	—	.09	—	—	.01	—	—	.06	.04
06...	1315	.44	.12	.32	.34	.01	.33	.78	—	.05
AUG, 1980										
11...	1500	.46	.02	.44	.00	.00	.00	.46	.02	.03
13...	1200	—	.08	—	.00	.00	.00	—	.02	.07
13...	2400	.58	.04	.54	.01	.02	.00	.59	.01	.07

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITRO GEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
06...	1800	.30	.01	.29	.01	.01	.00	.31	.03	.03
07...	1700	.65	.02	.63	.00	.00	.00	.65	.07	.06
08...	0800	.10	.00	.10	.06	.01	.05	.16	.08	.06
08...	1200	.16	.03	.13	.04	.00	.04	.20	.03	.10
08...	1550	.21	.09	.12	.03	.00	.03	.24	.13	—
08...	2000	.22	.00	.22	.03	.01	.02	.25	.07	.03
08...	2400	.55	.00	.55	.03	.00	.03	.58	.04	.03
09...	0400	.38	.01	.37	.05	.00	.05	.43	.07	.02
09...	0800	.10	.03	.07	.04	.00	.04	.14	.04	.01
JUN, 1980										
05...	1420	.48	.15	.33	.11	.00	.11	.59	.01	.02
05...	1655	.53	.17	.36	.27	.00	.27	.80	.07	.04
05...	2110	.32	.16	.16	.16	.00	.16	.48	.05	—
06...	0055	.52	.12	.40	.25	.01	.24	.77	.04	.03
06...	0525	—	.12	—	.29	.00	.29	—	—	.01
06...	0910	.58	.12	.46	.36	.00	.36	.94	.04	.06
06...	1315	.48	—	—	.27	.00	.27	.75	.05	.02
AUG, 1980										
11...	1500	.47	.05	.42	.00	.00	.00	.47	.02	.03
13...	1200	.49	.03	.46	.00	.02	.00	.49	.01	.07
13...	1600	.30	.03	.27	.00	.02	.00	.30	-	.10
13...	2000	.39	.01	.38	.00	.01	.00	.39	.02	.04
13...	2400	.41	.06	.35	.00	.02	.00	.41	.01	.04
14...	0400	.46	-	—	.01	.02	.00	.47	.04	.08
14...	0800	.41	.01	.40	.00	.01	.00	.41	.01	.04
14...	1145	.27	.04	.23	.00	.02	.00	.27	.01	.06

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 16 - TRUCKEE RIVER NEAR SPARKS--Continued

DATE	TIME	CARBONACEOUS BOD					TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTIMATE (MG/L)
JUN, 1979												
06...	0545	--	1.0	2.4	2.9	.08	.03	.9	2.0	2.3	--	--
06...	0900	--	.8	2.1	2.8	.07	.03	1.1	2.6	3.2	--	--
06...	1130	.15	1.6	2.9	3.1	.14	.06	1.4	3.2	3.7	--	--
06...	1350	--	1.7	3.1	3.3	.15	.06	1.6	2.9	3.1	--	--
06...	1555	--	1.4	2.6	2.8	.15	.06	1.5	2.9	3.1	--	--
06...	1815	2.4	1.1	2.2	2.5	.12	.05	1.0	2.2	2.7	--	--
06...	2045	2.3	1.2	2.9	3.8	.07	.03	--	--	--	--	--
07...	0530	2.3	1.3	2.1	2.2	.17	.07	1.3	2.5	2.7	--	--
07...	0955	1.9	1.2	2.2	2.3	.15	.06	1.2	2.4	2.6	--	--
07...	1345	2.2	1.1	1.8	1.9	.17	.07	1.2	2.4	2.5	--	--
07...	1810	1.9	.9	2.3	2.9	.08	.03	1.0	2.0	2.2	--	--
07...	2010	1.6	1.2	2.1	2.2	.17	.07	1.1	2.0	2.1	--	--
AUG, 1979												
06...	1800	.48	1.8	3.0	3.1	.18	.08	1.6	2.7	2.7	--	--
07...	1700	--	1.9	3.9	4.4	.11	.05	2.5	4.0	4.2	--	--
08...	0800	.32	1.6	2.4	2.5	.21	.09	1.5	2.7	2.8	--	--
08...	1200	--	1.7	2.2	2.2	.28	.12	--	--	--	--	--
08...	1550	.21	1.6	2.0	2.0	.32	.14	1.8	2.7	2.7	--	--
08...	2000	--	1.8	2.4	2.4	.26	.11	--	--	--	--	--
08...	2400	--	.8	2.2	3.2	.06	.03	1.1	2.5	2.9	--	--
09...	0400	--	1.0	2.0	2.3	.11	.05	--	--	--	--	--
09...	0800	--	1.1	2.2	2.4	.12	.05	1.4	2.6	2.8	--	--
JUN, 1980												
03...	1100	--	1.1	2.4	2.8	.10	.04	1.1	2.0	2.1	--	--
05...	1420	--	.7	1.7	2.2	.08	.03	1.2	2.3	2.4	--	--
05...	1655	.49	.8	1.5	1.6	.13	.06	1.2	2.4	2.8	--	--
05...	2110	--	.5	1.2	1.4	.09	.04	.8	1.8	2.1	--	--
06...	0055	--	.5	1.3	1.6	.08	.03	.8	1.7	1.8	--	--
06...	0525	--	.5	1.2	1.5	.08	.03	.5	1.6	2.4	--	--
06...	0910	.49	.9	2.2	2.9	.07	.03	.7	2.0	2.9	--	--
06...	1315	--	.9	2.0	2.2	.10	.04	.6	1.6	2.0	--	--
AUG, 1980												
11...	1500	.07	1.6	2.9	3.0	.15	.06	.9	2.3	2.9	--	--
13...	1200	.27	1.3	2.3	2.4	.15	.06	1.4	2.8	3.1	--	--
13...	1600	--	1.1	2.3	2.5	.12	.05	1.3	2.6	3.0	--	--
13...	2000	.04	1.5	2.4	2.5	.18	.08	2.0	3.2	3.3	--	--
13...	2400	.51	1.2	1.9	1.9	.19	.08	1.2	2.4	2.6	--	--
14...	0400	.23	1.3	2.4	2.6	.14	.06	1.3	2.4	2.6	--	--
14...	0800	.51	1.2	2.1	2.3	.15	.06	1.9	3.2	3.3	--	--
14...	1145	--	1.5	2.8	3.0	.14	.06	1.3	2.3	2.5	--	--

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
AUG, 1979								
06...	1800	.708	<.209	12710	434	425	--	--
07...	1700	1.31	.117	6107	409	401	--	--
08...	0800	1.95	.209	8205	388	372	--	--
08...	1200	.963	.048	11420	362	351	365	--
08...	1550	.263	<.181	49430	373	360	265	2.6
08...	2000	1.21	.095	4132	361	356	--	--
08...	2400	.724	<.238	12430	379	370	330	--
09...	0400	2.36	.266	5085	378	366	--	4.0
09...	0800	.709	.090	16930	367	355	484	--
JUN, 1980								
03...	1100	5.46	<.112	2198	347	335	--	.4
05...	1420	1.43	.270	--	--	--	--	.5
06...	0055	--	--	--	--	--	413	--
AUG, 1980								
11...	1500	.714	<.252	8403	637	631	--	--
13...	1200	--	--	--	--	--	419	1.4
13...	1600	--	--	--	--	--	478	--
13...	2000	--	--	--	--	--	302	--
13...	2400	.179	--	44690	670	662	405	1.6
14...	0400	--	--	--	--	--	330	--
14...	0800	--	--	--	--	--	361	--
14...	1145	--	--	--	--	--	454	--

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 19 - NORTH TRUCKEE DRAIN AT KLEPPE LANE NEAR SPARKS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
06...	0545	e40	14.0	650	17.0	5.0	60	385	--	--	140	--
06...	0755	e45	19.0	650	16.0	6.6	78	348	--	--	--	--
06...	1000	e45	22.5	650	16.5	8.2	98	340	--	--	130	--
06...	1155	e40	22.5	650	18.0	--	--	--	--	8.5	129	--
06...	1335	e40	--	650	19.5	11.4	144	321	--	--	120	--
06...	1525	e40	26.5	650	21.0	--	--	327	--	--	--	--
06...	1720	e40	27.5	650	22.0	10.4	139	342	--	--	130	--
06...	1910	e40	24.0	650	21.0	9.2	121	345	--	--	--	--
06...	2035	e40	17.5	650	20.0	7.6	97	348	--	--	130	--
07...	0535	e40	8.0	650	14.5	5.6	64	369	--	--	140	--
07...	0720	e40	10.5	650	13.5	5.8	65	355	--	--	--	--
07...	0925	e40	15.5	650	14.0	8.1	92	345	--	--	130	--
07...	1125	e40	18.0	650	15.0	10.8	126	320	--	--	--	--
07...	1325	e40	18.5	650	17.0	11.4	137	309	--	--	120	--
07...	1515	e40	20.0	650	18.5	12.2	152	310	--	--	--	--
07...	1720	e35	20.0	650	19.5	11.0	139	328	--	--	--	--
07...	1915	e35	16.0	650	19.0	9.7	121	303	--	--	--	--
07...	2050	e35	13.0	650	18.0	7.7	96	336	--	--	--	--
AUG, 1979												
06...	1600	48	--	651	24.0	11.1	154	332	239	8.5	142	--
07...	1800	48	--	e650	20.5	8.2	106	340	241	8.3	174	--
08...	0900	51	19.5	e652	17.0	6.2	75	396	--	7.7	155	--
08...	1050	51	24.0	e652	18.0	8.5	105	361	--	7.6	--	--
08...	1250	51	28.0	e651	20.5	9.8	126	342	--	7.9	136	--
08...	1445	51	33.0	e650	22.0	11.0	147	328	--	8.9	--	--
08...	1650	51	28.5	e650	22.5	9.6	128	337	--	8.7	132	--
08...	1900	51	28.0	e650	21.5	7.8	104	357	--	8.5	--	--
08...	2045	52	24.5	e651	21.0	7.0	92	358	--	8.4	--	--
08...	2240	52	21.0	e652	21.0	5.6	74	340	--	8.1	--	--
09...	0100	51	18.5	e652	20.0	4.4	56	364	--	7.9	--	--
09...	0230	50	15.5	e652	19.0	4.6	56	382	--	7.8	--	--
09...	0440	50	14.0	e653	18.5	4.6	57	368	--	7.8	--	--
09...	0640	49	15.0	e653	18.0	4.8	59	374	--	7.8	--	--
JUN, 1980												
03...	1130	46	16.0	645	12.0	10.8	117	357	264	8.0	--	--
05...	1020	50	13.0	645	11.5	8.1	84	--	--	8.0	--	--
05...	1250	51	13.0	645	14.0	9.7	111	357	--	8.3	--	30
05...	1510	50	16.0	645	15.0	10.3	120	347	--	8.4	--	--
05...	1645	48	18.5	645	17.0	9.6	116	344	--	8.4	--	45
05...	1825	48	13.0	646	--	8.7	--	391	--	8.4	--	--
05...	2025	47	8.0	647	13.5	7.9	89	381	--	8.2	--	51
05...	2235	44	8.0	647	--	7.2	--	--	--	8.2	--	--
06...	0040	46	6.5	648	11.5	--	--	402	--	8.0	--	44
06...	0300	47	4.5	648	10.5	--	--	390	--	7.9	--	--
06...	0410	45	2.0	647	9.5	7.5	77	377	--	7.9	--	61
06...	0805	47	10.5	649	10.0	8.0	82	406	--	7.8	--	31
06...	1010	46	--	650	10.5	9.4	98	406	--	8.3	--	--
06...	1135	48	13.5	648	12.5	9.8	108	389	--	8.4	--	52
AUG, 1980												
11...	1530	36	32.0	648	21.5	11.9	157	370	243	8.7	--	25
13...	1100	33	22.5	e648	16.0	8.9	105	307	--	7.9	--	--
13...	1230	38	26.0	e648	18.5	10.4	128	299	--	8.2	--	32
13...	1430	39	31.5	e646	20.5	10.8	140	338	--	8.4	--	--
13...	1645	37	31.0	e646	22.0	10.7	143	345	--	8.5	--	--
13...	1830	37	27.5	e646	21.5	9.6	128	348	--	8.6	--	--
13...	2045	37	24.5	e646	20.0	7.3	94	365	--	8.2	--	--
13...	2230	39	17.5	e646	19.0	6.2	78	384	--	7.9	--	--
14...	0045	41	15.0	e646	17.5	5.6	68	370	--	7.8	--	36
14...	0245	41	12.0	e646	16.0	5.6	66	363	--	7.6	--	--
14...	0445	41	7.0	e646	15.0	5.7	66	359	--	7.6	--	16
14...	0615	41	7.0	e645	14.0	6.0	68	361	--	7.5	--	--
14...	0845	41	13.5	e646	13.5	6.9	78	352	--	7.5	--	26
14...	1030	41	21.5	e646	15.0	8.6	100	352	--	7.8	--	--
14...	1215	40	25.5	e646	16.5	10.4	124	335	--	8.0	--	--

e Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 19 - NORTH TRUCKEE DRAIN AT KLEPPE LANE NEAR SPARKS--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
06...	0545	1.3	.06	1.2	.41	.02	.39	1.7	.08	.14
06...	1000	.88	.04	.84	.30	.02	.28	1.2	.09	.13
06...	1155	.81	.06	.75	.32	.02	.30	1.1	.09	.14
06...	1335	1.1	.06	1.0	.32	.02	.30	1.4	.10	.12
06...	1720	.90	.05	.85	.27	.02	.25	1.2	.10	.14
06...	2035	1.1	.05	1.1	.30	.02	.28	1.4	.12	.15
07...	0535	.71	.05	.66	.38	.04	.34	1.1	.08	--
07...	0925	.73	.06	.67	.32	.04	.28	1.1	.10	.20
07...	1325	.78	.05	.73	.25	.02	.23	1.0	.10	.13
AUG, 1979										
06...	1600	.68	.05	.63	.23	.02	.21	.91	.07	.15
07...	1800	.58	.01	.57	.43	.02	.41	1.0	.07	.11
JUN, 1980										
03...	1130	.97	.10	.87	.39	.01	.38	1.4	.08	.18
05...	1250	.93	.10	.83	.38	.01	.37	1.3	.08	.17
05...	2025	.93	.12	.81	--	.03	--	--	.12	.20
06...	0410	1.4	.14	1.3	.41	.01	.40	1.8	.07	.07
06...	0805	.80	.00	.80	.43	.01	.42	1.2	.08	.14
AUG, 1980										
11...	1530	1.1	.11	.99	.49	.01	.48	1.6	.08	.10
13...	1230	.95	.12	.83	.34	.01	.33	1.3	.06	.17
14...	0045	.94	.06	.88	.53	.01	.52	1.5	.08	.11

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
06...	1600	.70	.01	.69	.24	.01	.23	.94	.08	.09
07...	1800	.55	.03	.52	.45	.01	.44	1.0	.07	.08
08...	0900	.41	.00	.41	.39	.01	.38	.80	.10	.09
08...	1250	.45	.03	.42	--	.01	--	--	.11	--
08...	1650	.45	.03	.42	.29	.01	.28	.74	.14	--
08...	2045	.44	.00	.44	.46	.01	.45	.90	.10	.09
09...	0100	.54	.00	.54	.47	.01	.46	1.0	.08	.08
09...	0440	.50	.03	.47	.47	.01	.46	.97	--	--
JUN, 1980										
05...	1250	.76	.10	.66	.38	.00	.38	1.1	.10	.14
05...	1645	1.3	.23	1.1	--	.01	--	--	.10	.14
05...	2025	--	.13	--	.60	.01	.59	--	.08	.11
06...	0040	.66	.13	.53	.26	.00	.26	.92	--	.11
06...	0410	1.0	.14	.86	.37	.01	.36	1.4	.07	.07
06...	0805	.70	.00	.70	--	.01	--	--	.05	.07
06...	1135	1.1	.13	.97	.63	.01	.62	1.7	.12	.08
AUG, 1980										
11...	1530	1.1	.14	.96	.52	.01	.51	1.6	.08	.11
13...	1230	.38	.04	.34	.37	.02	.35	.75	.04	.09
13...	1645	.87	.05	.82	.51	.02	.49	1.4	.06	.14
13...	2045	.53	.04	.49	.42	.01	.41	.95	.05	.09
14...	0045	.85	.01	.84	.54	.03	.51	1.4	.02	.08
14...	0445	.90	.07	.83	.45	.01	.44	1.4	.04	.09
14...	0845	1.0	.04	.96	.45	.01	.44	1.5	.04	.08
14...	1215	.53	.01	.52	.50	.04	.46	1.0	.00	.10

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 19 - NORTH TRUCKEE DRAIN AT KLEPPE LANE NEAR SPARKS—Continued

		CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
DATE	TIME	LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTI-MATE (MG/L)
JUN, 1979												
06...	0545	—	1.7	3.8	4.4	.10	.04	—	—	—	—	—
06...	1000	—	1.9	4.0	4.5	.11	.05	—	—	5.0	—	.5
06...	1335	—	1.9	4.2	5.0	.09	.04	—	—	5.0	—	.0
06...	2035	1.8	2.0	4.4	5.0	.10	.04	—	—	—	—	—
07...	0535	1.1	2.1	4.0	4.2	.14	.06	—	—	4.2	1.1	.0
07...	0925	2.1	1.5	3.1	3.5	.11	.05	—	—	4.4	1.5	.9
07...	1325	.84	1.5	3.4	4.0	.10	.04	—	—	5.3	.69	1.3
07...	1720	.23	1.6	3.2	3.5	.13	.06	—	—	5.8	.44	2.3
07...	2050	1.3	1.8	3.6	4.0	.12	.05	—	—	5.3	1.3	1.3
AUG, 1979												
06...	1600	.01	3.4	7.2	8.1	.11	.05	—	—	4.8	.09	—
07...	1800	.19	4.1	6.1	6.2	.22	.10	—	—	4.9	.31	—
08...	0900	.31	1.8	3.4	3.7	.14	.06	—	—	5.6	.27	1.9
08...	1650	—	2.5	4.4	4.6	.15	.06	—	—	4.4	—	—
08...	2045	—	1.7	3.2	3.4	.13	.06	—	—	—	—	—
09...	0100	—	1.5	3.2	3.6	.10	.04	—	—	4.5	.06	.9
09...	0440	—	1.4	3.4	4.3	.08	.03	—	—	—	—	—
JUN, 1980												
03...	1130	—	1.0	2.9	4.4	.05	.02	—	—	5.7	—	1.7
05...	1250	—	1.6	3.9	4.8	.08	.03	—	—	6.4	.00	1.6
05...	1645	.28	1.9	4.1	4.7	.10	.04	—	—	6.7	.08	2.0
05...	2025	—	1.6	3.3	3.7	.11	.05	—	—	5.8	—	2.1
06...	0040	.26	1.7	4.0	5.0	.08	.03	—	—	—	—	—
06...	0410	—	1.9	4.3	5.1	.10	.04	—	—	6.0	.03	.9
06...	0805	—	1.4	3.7	5.0	.07	.03	—	—	5.8	—	.8
06...	1135	—	1.6	3.5	4.1	.10	.04	—	—	5.1	.14	1.0
AUG, 1980												
11...	1530	.12	1.9	3.9	4.3	.12	.05	—	—	5.6	—	1.3
13...	1230	.07	1.7	3.6	4.0	.11	.05	—	—	4.9	.15	.9
13...	1645	—	1.8	3.8	4.4	.11	.05	—	—	5.1	—	.7
13...	2045	—	1.8	3.8	4.4	.11	.05	—	—	6.1	.14	1.7
14...	0045	—	1.6	3.4	3.8	.10	.04	—	—	5.8	.10	2.0
14...	0445	—	1.5	3.3	3.8	.10	.04	—	—	5.3	.27	1.5
14...	0845	.51	1.6	3.4	3.7	.11	.05	—	—	4.9	.51	1.2
14...	1215	.16	1.5	3.4	4.0	.10	.04	—	—	4.3	—	.3

DATE	TIME	CHLORO-PHYLL *a*, SUS-PENDED (UG/L)	CHLORO-PHYLL *b*, SUS-PENDED (UG/L)	BIOMASS/ CHLORO-PHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTEN-TIAL, BOTTLE TEST (MG/L)
AUG, 1979								
06...	1600	1.24	.209	8871	434	423	—	—
07...	1800	2.18	.351	7798	—	—	—	—
08...	0900	3.89	.943	3599	380	366	—	—
08...	1250	1.28	.193	10940	373	359	535	—
08...	1650	1.47	.181	8844	377	364	—	11
08...	2045	1.45	.238	5517	394	386	359	—
09...	0100	1.69	.404	5325	310	301	—	—
09...	0440	—	—	—	382	373	319	15
JUN, 1980								
03...	1130	1.68	<.144	6548	505	494	—	15
05...	1250	1.74	.136	3448	324	318	1453	13
06...	0040	.848	.109	11790	608	598	2070	13
AUG, 1980								
11...	1530	1.45	.382	7586	644	633	—	—
13...	1230	1.01	.120	4951	635	630	1696	13
13...	1645	—	—	—	—	—	1740	—
13...	2045	—	—	—	—	—	1375	—
14...	0045	.866	.197	13860	701	689	1847	12
14...	0445	—	—	—	—	—	1472	—
14...	0845	—	—	—	—	—	1838	—
14...	1215	—	—	—	—	—	1610	—

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 20 - STEAMBOAT CREEK AT KIMLICK LANE NEAR RENO

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
06...	0655	e45	17.5	649	17.0	4.6	58	413	--	--	130	--
06...	0950	e50	21.5	649	17.5	5.8	71	383	--	--	--	--
06...	1230	e55	25.0	649	20.0	8.0	103	377	--	--	120	--
06...	1455	e55	27.0	648	23.0	8.6	116	352	--	--	--	--
06...	1645	e55	26.0	647	23.5	8.1	111	371	--	--	120	--
06...	1900	e55	24.0	647	23.0	7.6	103	374	--	--	--	--
06...	2120	e50	15.0	648	21.0	6.5	86	378	--	--	120	--
07...	0615	e40	10.0	652	14.0	5.5	62	400	--	--	130	--
07...	0815	e45	11.0	652	14.0	6.2	70	381	--	--	--	--
07...	1040	e50	14.5	652	14.5	8.0	92	359	--	--	--	--
07...	1250	e55	18.0	652	17.0	9.2	111	336	--	--	--	--
07...	1420	e55	20.0	652	18.0	10.2	126	339	--	--	--	--
07...	1630	e50	18.5	652	21.0	10.3	136	335	--	--	110	--
07...	1900	e45	15.5	651	22.0	9.6	128	351	--	--	--	--
07...	2050	e50	17.0	652	21.0	8.4	111	352	--	--	--	--
AUG, 1979												
06...	1920	37	--	e650	26.0	8.6	125	245	188	8.4	108	--
07...	1600	34	--	e650	23.5	8.3	114	270	184	8.1	110	--
08...	0815	37	23.0	e653	18.5	4.5	56	284	195	7.8	--	--
08...	1000	38	28.5	e653	19.0	5.0	62	285	--	7.9	--	--
08...	1200	41	--	e652	21.0	6.0	79	272	--	8.0	--	--
08...	1400	42	33.0	e651	24.0	7.4	103	276	--	8.1	--	--
08...	1600	42	32.5	e651	25.0	8.1	114	263	--	8.2	--	--
08...	1800	42	29.5	e651	25.0	8.2	115	268	--	8.2	--	--
08...	2000	42	22.5	e652	25.5	6.8	98	273	--	8.3	--	--
08...	2300	37	22.0	e652	24.0	5.2	72	276	--	8.2	--	--
09...	0025	35	18.5	e653	22.5	4.4	59	294	--	8.0	--	--
09...	0240	32	17.5	e652	21.5	4.0	53	289	--	7.8	--	--
09...	0600	31	14.0	e654	18.5	4.0	49	291	--	7.7	--	--
JUN, 1980												
03...	1000	170	16.0	644	11.0	9.1	97	493	319	7.8	--	--
05...	1145	165	16.0	647	11.5	7.7	83	538	--	8.0	--	--
05...	1230	165	16.0	647	11.5	--	--	529	--	7.9	--	--
05...	1630	150	18.0	647	16.0	8.8	104	500	--	8.1	--	51
05...	1840	150	17.5	647	17.0	8.7	105	519	--	8.2	--	--
05...	2025	150	11.5	648	16.0	--	--	483	--	8.2	--	53
05...	2220	145	6.5	648	16.0	7.8	92	515	--	8.2	--	--
06...	0025	145	5.0	648	14.5	7.1	82	504	--	8.1	--	35
06...	0220	140	3.5	648	13.0	6.7	75	500	--	8.0	--	--
06...	0440	140	4.5	648	11.0	6.7	71	480	--	7.8	--	52
06...	0715	135	4.5	649	10.0	8.0	82	487	--	7.8	--	--
06...	0850	135	15.0	649	10.5	8.1	85	474	--	7.8	--	43
06...	1030	145	--	649	10.5	8.2	86	455	--	7.8	--	--
06...	1300	125	19.0	649	13.0	8.8	98	458	--	8.0	--	35
AUG, 1980												
11...	1410	72	33.0	649	22.5	10.5	144	290	191	8.7	--	20
13...	1200	70	30.0	648	20.5	7.4	96	293	--	8.0	--	--
13...	1330	68	34.0	647	22.0	8.3	111	297	--	8.0	--	--
13...	1515	66	33.0	647	23.0	8.8	119	277	--	8.2	--	--
13...	1630	66	32.0	646	24.0	9.0	126	285	--	8.4	--	--
13...	1830	67	30.0	646	24.0	8.9	124	290	--	8.2	--	--
13...	2100	67	24.0	646	22.5	7.5	101	282	--	8.6	--	26
13...	2230	67	21.5	646	21.0	6.3	83	289	--	8.5	--	--
14...	0100	64	13.0	646	19.0	5.3	67	282	--	8.2	--	27
14...	0230	64	8.0	646	18.0	5.0	62	285	--	8.0	--	--
14...	0500	65	6.0	646	16.0	5.1	60	297	--	8.0	--	--
14...	0645	69	8.5	646	15.0	5.1	59	302	--	7.8	--	--
14...	0830	73	20.0	646	15.0	5.7	67	299	--	7.8	--	--
14...	1030	77	26.0	646	17.0	6.6	80	297	--	7.6	--	--
14...	1200	79	27.0	646	18.0	7.6	94	288	--	7.8	--	30

e Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 20 - STEAMBOAT CREEK AT KIMLICK LANE NEAR RENO--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
06...	0655	1.6	.08	1.5	.11	.06	.05	1.7	.24	.28
06...	1230	.98	.05	.93	.10	.04	.06	1.1	.20	.25
06...	1455	.97	.04	.93	.08	.02	.06	1.1	.19	.29
06...	1645	1.2	.03	1.2	.08	.04	.04	1.3	.23	.27
06...	2120	1.3	.06	1.2	.09	.06	.03	1.4	.25	.30
07...	0615	1.6	.10	1.5	.15	.06	.09	1.8	.24	.29
07...	1040	1.0	.07	.94	.14	.04	.10	1.1	.20	.24
07...	1630	1.2	.05	1.2	.08	.04	.04	1.3	.19	.25
07...	2050	1.1	.05	1.1	.09	.06	.03	1.2	.21	.26
AUG, 1979										
06...	1920	.60	.01	.59	.05	.02	.03	.65	.14	--
07...	1600	.82	.03	.79	.09	--	--	.91	.15	.19
JUN, 1980										
03...	1000	1.2	.14	1.1	--	.00	--	--	.17	.22
05...	1201	1.2	.07	1.1	.10	.02	.08	1.3	.19	.27
05...	1601	1.1	.04	1.1	.08	.01	.07	1.2	.18	.25
05...	2001	1.3	.03	1.3	.06	.01	.05	1.4	.18	.25
05...	2025	1.2	-	--	--	.01	--	--	.19	.29
06...	0001	1.2	.07	1.1	.09	.01	.08	1.3	.18	.25
06...	0025	1.2	.13	1.1	.08	.01	.07	1.3	.18	.26
06...	0401	1.2	.06	1.1	.10	.02	.08	1.3	.15	.22
06...	0440	1.3	.15	1.2	.15	.01	.14	1.5	.22	.23
06...	0801	1.6	.04	1.6	.10	.01	.09	1.7	.15	.20
06...	1201	1.2	.03	1.2	.09	.01	.08	1.3	.15	.19
06...	1300	1.1	.11	.99	.14	.01	.13	1.2	.18	.31
AUG, 1980										
11...	1410	1.1	.02	1.1	.08	.01	.07	1.2	.11	.12
13...	1330	1.6	.14	1.5	.13	-	--	1.7	.12	.19
13...	2100	2.7	.12	2.6	--	-	--	--	-	.18
14...	0100	2.2	.06	2.1	.11	.02	.09	2.3	.15	--

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
06...	1920	.63	.04	.59	.06	.00	.06	.69	.17	.17
07...	1600	.75	.01	.74	.10	.01	.09	.85	.17	.19
08...	0815	.79	.12	.67	.14	.02	.12	.93	.24	.24
08...	1200	.76	.09	.67	.12	.01	.11	.88	.21	.19
08...	1600	.58	.04	.54	.12	.01	.11	.70	.22	.25
08...	2000	.57	.06	.51	.06	.01	.05	.63	.20	.20
09...	0025	.66	.12	.54	.06	.02	.04	.72	.21	.22
09...	0600	.81	.16	.65	.11	.01	.10	.92	.20	.20
JUN, 1980										
03...	1000	.92	.10	.82	.14	.00	.14	1.1	.17	.18
05...	1230	1.3	.26	1.0	--	.02	--	--	.20	.19
05...	1630	1.0	.12	.88	.22	.00	.22	1.2	.18	.18
05...	2025	.91	.12	.79	.17	.01	.16	1.1	.19	.20
06...	0025	1.0	.15	.85	--	.01	--	--	--	--
06...	0440	1.0	--	--	.18	.01	.17	1.2	--	--
06...	0850	1.2	.15	1.1	.26	.01	.25	1.5	.16	--
06...	1300	1.1	.08	1.0	.13	.00	.13	1.2	.16	.14
AUG, 1980										
11...	1410	1.0	.03	.97	.11	.01	.10	1.1	.11	.13
13...	1330	1.1	.04	1.1	.12	.03	.09	1.2	.05	.13
13...	1630	1.1	.03	1.1	.08	.02	.06	1.2	.05	.15
13...	2100	1.2	.09	1.1	.07	.03	.04	1.3	.12	.19
14...	0100	1.1	.09	1.0	.09	.02	.07	1.2	.13	.17
14...	0830	.92	.07	.85	.09	.01	.08	1.0	.10	.15
14...	1200	1.9	.04	1.9	.09	.01	.08	2.0	.09	.13

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 20 - STEAMBOAT CREEK AT KIMLICK LANE NEAR RENO--Continued

DATE	TIME	CARBONACEOUS BOD: LAGTIME AT 20°C (DAYS)	CARBONACEOUS BOD: 5-DAY (MG/L)	CARBONACEOUS BOD: 20-DAY (MG/L)	CARBONACEOUS BOD: ULTIMATE (MG/L)	CARBONACEOUS BOD: DECAY RATE, BASE E, PER DAY AT 20°C	CARBONACEOUS BOD: DECAY RATE, BASE 10, PER DAY AT 20°C	TOTAL BOD: 5-DAY (MG/L)	TOTAL BOD: 20-DAY (MG/L)	TOTAL BOD: ULTIMATE (MG/L)	NITROGENOUS BOD: LAGTIME AT 20°C (DAYS)	NITROGENOUS BOD: ULTIMATE (MG/L)
JUN, 1979												
06...	0655	--	2.1	5.4	7.5	.06	.03	--	--	10	--	2.5
06...	0950	--	2.4	6.4	9.3	.06	.03	--	--	--	--	--
06...	1230	--	3.2	8.0	10	.07	.03	--	--	10	--	.0
06...	1645	.30	4.0	9.0	11	.09	.04	--	--	--	--	--
06...	2120	.81	3.6	6.7	7.1	.14	.06	--	--	11	--	3.9
07...	0615	.82	3.8	7.0	7.5	.14	.06	--	--	--	--	--
07...	1040	.93	3.1	5.6	5.9	.15	.06	--	--	7.7	.64	1.8
07...	1420	1.2	3.2	5.9	6.3	.15	.06	--	--	6.1	1.6	--
07...	1900	.97	2.8	5.4	5.8	.13	.06	--	--	--	--	--
07...	2050	1.5	2.4	4.9	5.5	.12	.05	--	--	7.6	1.1	2.1
AUG, 1979												
06...	1920	--	3.8	9.4	12	.07	.03	3.6	6.8	7.2	--	--
07...	1600	--	5.0	7.9	8.0	.20	.09	5.2	8.7	9.0	--	--
08...	0815	.20	3.5	6.8	7.3	.13	.06	4.5	6.8	6.9	--	--
08...	1200	.04	3.1	5.7	6.0	.15	.06	--	--	--	--	--
08...	1600	--	--	--	--	--	--	3.3	5.8	6.1	--	--
08...	2000	--	2.8	5.2	5.6	.14	.06	--	--	--	--	--
09...	0025	.01	3.7	6.4	6.6	.16	.07	--	--	--	--	--
09...	0600	--	3.3	7.5	8.8	.09	.04	--	--	--	--	--
JUN, 1980												
03...	1000	.04	2.0	4.9	6.0	.08	.03	--	--	7.3	--	1.3
05...	1230	--	2.2	5.0	5.9	.09	.04	--	--	7.3	--	1.4
05...	1630	--	--	--	--	--	--	--	--	8.8	.48	--
05...	2025	--	2.0	4.1	4.6	.11	.05	--	--	7.1	--	2.5
06...	0025	--	2.2	4.8	5.6	.10	.04	--	--	7.1	.14	1.5
06...	0440	--	2.4	5.5	6.6	.09	.04	--	--	9.3	--	2.7
06...	0850	--	1.8	4.8	6.4	.07	.03	--	--	--	--	--
06...	1300	--	1.5	3.9	5.3	.07	.03	--	--	6.3	--	1.0
AUG, 1980												
11...	1410	.10	1.7	3.2	3.4	.14	.06	--	--	4.5	.15	1.1
13...	1330	--	2.6	4.7	4.9	.15	.06	--	--	6.5	--	1.6
13...	1630	--	2.5	4.9	5.4	.12	.05	--	--	8.1	--	2.7
13...	2100	.16	3.4	5.6	5.7	.18	.08	--	--	7.7	--	2.0
14...	0100	--	2.5	5.4	6.1	.11	.05	--	--	8.4	--	2.3
14...	0500	--	3.2	5.9	6.3	.14	.06	--	--	8.2	.16	1.9
14...	0830	.19	2.5	5.3	6.0	.11	.05	--	--	7.5	.16	1.5
14...	1200	.03	2.7	5.5	6.0	.12	.05	--	--	7.7	.01	1.7

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
AUG, 1979								
06...	1920	2.12	.209	4245	428	419	--	--
07...	1600	3.70	.468	2703	433	423	--	--
08...	0815	3.01	.419	5648	400	383	--	--
08...	1200	1.90	.241	6842	381	368	2908	--
08...	1600	--	--	--	375	359	--	6.5
08...	2000	1.21	.238	5785	377	370	1261	--
09...	0025	1.45	.238	76550	392	281	--	--
09...	0600	1.08	.090	13890	401	386	2345	3.6
JUN, 1980								
03...	1000	.657	<.084	6088	295	291	--	--
05...	1230	.947	.083	--	--	--	1590	4.4
05...	1630	1.92	.160	--	--	--	--	--
06...	0025	2.20	.094	4545	342	332	1246	5.6
AUG, 1980								
11...	1410	1.65	.348	5455	641	632	--	--
13...	1330	.892	.315	10090	693	684	1160	4.5
13...	1630	--	--	--	--	--	1471	--
14...	0100	2.60	.493	3846	680	670	2056	3.1
14...	0500	--	--	--	--	--	1972	--
14...	0830	--	--	--	--	--	1998	--
14...	1200	--	--	--	--	--	1838	--

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 21 - RENO-SPARKS SEWAGE TREATMENT PLANT OUTFALL NEAR RENO

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
06...	0750	18	19.5	649	22.0	7.3	97	509	--	--	130	--
06...	1050	30	21.0	649	22.0	7.2	96	493	--	9.6	139	--
06...	1300	32	26.0	649	22.0	7.0	93	488	--	--	110	--
06...	1520	15	28.0	648	22.0	7.1	95	484	--	--	--	--
06...	1715	30	--	647	22.5	7.0	95	520	--	--	140	--
06...	2010	31	20.0	648	22.0	7.0	93	583	--	--	--	--
06...	2150	32	19.0	649	22.0	7.1	95	583	--	--	130	--
07...	0650	1	--	--	--	--	--	--	--	--	--	--
07...	0830	2	--	--	--	--	--	--	--	--	--	--
07...	1110	29	21.5	653	22.0	5.0	66	509	--	--	120	--
07...	1315	28	23.0	653	22.0	7.6	100	482	--	--	120	--
07...	1445	29	24.5	652	22.0	--	--	493	--	--	120	--
07...	1730	28	21.0	651	22.0	7.6	101	525	--	--	120	--
07...	1935	34	17.5	651	22.0	7.6	101	583	--	--	120	--
07...	2110	33	14.0	652	22.0	7.6	101	562	--	--	120	--
AUG, 1979												
06...	2030	21	--	652	26.0	6.8	98	520	314	7.9	181	--
07...	1445	34	--	e650	25.5	7.2	102	450	271	8.0	120	--
08...	0900	23	23.0	e652	24.5	6.7	93	500	281	8.0	--	--
08...	1030	31	25.5	e653	25.0	6.6	93	495	--	8.0	--	--
08...	1230	34	31.0	e652	25.0	6.4	90	495	--	8.0	--	--
08...	1430	33	--	e651	25.5	6.5	94	490	--	7.8	--	--
08...	1630	32	28.0	e651	26.0	6.4	93	510	307	7.7	--	--
08...	1830	28	27.0	e651	25.5	6.3	91	515	--	7.7	--	--
08...	2030	31	22.5	e652	25.0	6.6	93	530	358	7.9	--	--
08...	2335	32	21.0	e652	24.0	6.6	92	530	--	7.8	--	--
09...	0115	31	15.0	e652	24.0	6.5	90	520	282	7.8	--	--
09...	0355	31	13.0	e654	24.0	6.6	92	510	--	7.8	--	--
09...	0640	32	12.0	e654	24.0	6.8	94	500	278	7.8	--	--
JUN, 1980												
03...	0915	32	16.0	644	15.0	7.4	86	492	242	7.8	--	--
05...	1130	34	16.0	647	19.0	9.0	112	484	--	7.8	--	--
05...	1300	32	17.0	647	--	8.8	--	507	--	7.9	--	10
05...	1615	30	18.0	647	19.5	--	--	483	--	7.7	--	11
05...	1830	35	17.5	647	20.0	8.5	109	512	--	7.7	--	--
05...	2000	35	11.5	648	19.0	8.6	108	538	--	7.7	--	10
05...	2200	44	6.5	648	19.0	8.6	108	535	--	7.8	--	--
06...	0001	35	5.0	648	18.5	8.8	109	515	--	7.7	--	13
06...	0210	34	3.5	648	18.0	8.6	106	520	--	7.7	--	--
06...	0435	32	4.5	648	18.0	8.6	106	526	--	7.7	--	20
06...	0650	24	4.5	649	17.0	8.6	104	498	--	7.8	--	--
06...	0825	17	--	649	18.0	8.3	102	506	--	7.4	--	16
06...	1020	33	13.5	649	18.5	8.6	107	488	--	7.8	--	--
AUG, 1980												
11...	1300	35	34.0	648	24.0	9.0	125	544	267	7.8	--	15
13...	1030	36	25.0	648	24.0	8.5	118	540	--	7.6	--	--
13...	1245	37	35.0	648	24.5	8.4	117	525	--	7.5	--	7.8
13...	1445	33	35.0	646	24.5	7.4	103	541	--	7.7	--	--
13...	1600	35	35.0	646	25.0	7.2	102	562	--	7.7	--	--
13...	1800	36	31.0	645	24.5	7.4	102	594	--	7.7	--	--
13...	2015	36	26.0	646	24.0	7.4	103	599	--	7.6	--	9.4
13...	2200	36	23.0	646	23.5	7.4	101	614	--	7.7	--	--
13...	2400	40	20.0	645	23.0	7.5	103	610	--	7.6	--	--
14...	0200	37	8.5	646	22.5	7.6	101	621	--	7.7	--	--
14...	0430	34	9.5	645	22.0	7.7	103	573	--	7.7	--	11
14...	0600	19	8.0	645	22.0	7.5	100	579	--	7.7	--	--
14...	0800	25	19.0	646	22.0	7.4	99	568	--	7.8	--	9.2
14...	1000	36	27.0	646	22.0	7.6	101	536	--	7.6	--	--
14...	1130	37	27.0	646	23.0	7.4	101	541	--	7.6	--	14

e Estimated.

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 21 - RENO-SPARKS SEWAGE TREATMENT PLANT OUTFALL NEAR RENO—Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
06...	0750	12	11	1.0	1.7	1.1	.60	14	5.4	6.2
06...	1050	12	11	1.0	2.9	2.3	.60	15	3.8	4.2
06...	1300	10	10	.00	3.9	3.1	.80	14	3.8	4.3
06...	1715	16	16	.00	2.6	2.2	.40	19	—	5.5
06...	2150	15	14	1.0	1.9	2.0	.00	17	6.1	6.8
07...	1110	11	11	.00	1.6	1.7	.00	13	5.6	6.9
07...	1315	11	10	1.0	1.5	1.8	.00	13	3.6	4.0
07...	1445	—	—	—	1.9	—	—	—	3.8	4.8
07...	1730	15	15	.00	1.7	1.7	.00	17	5.7	7.8
07...	1935	15	15	.00	2.1	2.1	.00	17	5.4	6.9
07...	2110	15	15	.00	2.5	2.5	.00	18	5.7	6.8
JUN, 1980										
03...	0915	—	12	—	.23	.20	.03	—	5.3	5.0
05...	2000	23	16	7.0	.67	.21	.46	24	—	6.8
06...	0001	19	15	4.0	.19	.17	.02	19	5.5	7.4
06...	0435	19	12	7.0	—	.38	—	—	5.5	5.4
AUG, 1980										
11...	1300	21	—	—	.14	.14	.00	21	4.3	4.4
13...	1245	16	—	—	.12	.12	.00	16	—	3.0
13...	2015	29	—	—	.12	.17	.00	29	4.0	6.3
13...	2400	15	—	—	.12	.13	.00	15	5.5	5.7

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
07...	1445	15	13	2.0	.17	.14	.03	15	2.0	1.9
08...	0900	16	14	2.0	.22	.19	.03	16	—	—
08...	1230	15	12	3.0	.16	.14	.02	15	3.7	4.4
08...	1630	19	16	3.0	.15	.14	.01	19	2.3	2.7
08...	2030	18	16	2.0	.17	.15	.02	16	3.9	4.2
09...	0115	16	14	2.0	.14	.15	.00	14	—	4.5
09...	0640	15	12	3.0	.15	.15	.00	12	3.9	3.9
JUN, 1980										
03...	0915	—	12	—	.33	.19	.14	—	4.3	4.6
05...	1300	—	12	—	.67	.42	.25	—	3.3	3.1
05...	1615	18	16	2.0	.56	.35	.21	19	3.5	3.5
05...	2000	17	16	1.0	.73	.22	.51	18	—	5.0
06...	0001	17	14	3.0	.22	.19	.03	17	—	6.9
06...	0435	16	14	2.0	.36	.20	.16	16	5.5	5.4
AUG, 1980										
11...	1300	16	—	—	.15	.14	.01	16	—	3.6
13...	1245	11	—	—	.11	.13	.00	11	1.6	2.1
13...	1600	19	—	—	.13	.18	.00	19	1.8	2.1
13...	2015	20	—	—	.11	.10	.01	20	3.9	4.1
13...	2400	16	—	—	.11	.18	.00	16	5.1	5.4
14...	0430	13	—	—	.10	.15	.00	13	5.4	5.6
14...	0800	12	—	—	.22	.20	.02	12	—	—
14...	1130	12	—	—	.14	.14	.00	12	1.1	2.6

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 21 - RENO-SPARKS SEWAGE TREATMENT PLANT OUTFALL NEAR RENO--Continued

DATE	TIME	CARBONACEOUS BOD: LAGTIME AT 20°C (DAYS)	CARBONACEOUS BOD: 5-DAY (MG/L)	CARBONACEOUS BOD: 20-DAY (MG/L)	CARBONACEOUS BOD: ULTIMATE (MG/L)	CARBONACEOUS BOD: DECAY RATE, BASE E, PER DAY AT 20°C	CARBONACEOUS BOD: DECAY RATE, BASE 10, PER DAY AT 20°C	TOTAL BOD: 5-DAY (MG/L)	TOTAL BOD: 20-DAY (MG/L)	TOTAL BOD: ULTIMATE (MG/L)	NITROGENOUS BOD: LAGTIME AT 20°C (DAYS)	NITROGENOUS BOD: ULTIMATE (MG/L)
JUN, 1979												
06...	0750	—	3.2	8.7	13	.06	.03	--	--	88	4.2	75
06...	1050	--	--	--	--	--	--	--	--	75	1.3	--
06...	1300	1.7	6.9	19	30	.05	.02	--	--	71	1.6	41
06...	1715	--	3.1	9.6	18	.04	.02	--	--	89	2.8	71
06...	2150	--	4.6	15	37	.03	.01	--	--	81	1.8	44
07...	1110	.48	5.1	13	17	.07	.03	--	--	--	--	--
07...	1445	.92	4.7	14	23	.04	.02	--	--	80	2.8	57
07...	1935	1.1	4.8	15	27	.04	.02	--	--	92	2.4	65
07...	2110	.16	4.4	14	27	.04	.02	--	--	90	1.6	63
AUG, 1979												
06...	2030	.11	4.5	11	14	.08	.03	--	--	109	12	95
07...	1445	—	10	23	27	.09	.04	--	--	57	6.9	29
08...	0900	.29	8.2	25	46	.04	.02	--	--	98	2.0	51
08...	1230	.31	15	30	33	.13	.06	--	--	87	6.9	53
08...	1630	.53	6.3	18	47	.04	.02	--	--	65	5.2	18
08...	2030	.47	8.1	22	44	.05	.02	--	--	70	7.0	26
09...	0115	--	7.2	21	35	.04	.02	--	--	82	4.0	46
09...	0640	.27	4.9	10	12	.10	.04	--	--	83	4.7	71
JUN, 1980												
03...	0915	.25	11	27	34	.08	.03	--	--	57	9.3	23
05...	1300	.13	11	27	35	.08	.03	--	--	67	2.8	32
05...	1615	.83	9.9	24	32	.08	.03	--	--	--	--	--
05...	2000	.17	8.4	22	30	.06	.03	--	--	97	--	67
06...	0001	—	9.9	25	34	.07	.03	--	--	91	--	57
06...	0435	.01	10	29	43	.06	.03	--	--	98	2.4	55
06...	0825	—	14	31	36	.10	.04	--	--	89	--	53
AUG , 1980												
11...	1300	.42	8.3	21	28	.07	.03	--	--	69	13	40
13...	1245	.58	10	26	35	.06	.03	--	--	--	--	--
13...	1600	.32	9.8	24	31	.08	.03	--	--	--	--	--
13...	2015	.42	13	33	43	.07	.03	--	--	99	7.6	56
13...	2400	.77	13	33	45	.07	.03	--	--	--	--	--
14...	0430	.39	11	31	46	.05	.02	--	--	121	7.9	75
14...	0800	.35	10	26	35	.07	.03	--	--	104	7.1	69
14...	1130	.45	13	32	39	.08	.03	--	--	115	8.7	76

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
AUG, 1979								
06...	2030	—	—	—	436	420	—	--
07...	1445	2.61	.468	4981	423	410	—	--
08...	0900	.531	.209	30130	379	363	—	--
08...	1230	.874	.048	19450	361	344	—	--
08...	1630	--	--	--	354	340	—	--
08...	2030	<.246	<.224	<28460	279	272	--	--
09...	0115	<.246	<.224	<40650	367	357	—	--
09...	0640	--	--	--	—	--	--	54
JUN, 1980								
03...	0915	--	--	--	--	--	--	140
05...	1300	--	--	--	--	--	--	123
AUG, 1980								
13...	1245	.337	.050	20770	672	665	—	--
13...	2400	<.229	—	—	687	671	—	11

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 22 - TRUCKEE RIVER AT VISTA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
06...	0640	450	17.0	650	16.0	—	—	156	—	—	60	—
06...	0840	500	19.0	650	15.0	7.3	85	152	—	—	58	—
06...	1035	545	23.5	650	16.0	—	—	160	—	—	—	—
06...	1225	560	26.0	650	17.0	8.2	99	160	—	—	57	—
06...	1405	560	28.0	650	18.5	8.6	108	162	—	—	58	—
06...	1610	540	26.0	650	19.5	8.4	106	155	—	—	57	—
06...	1750	515	25.5	650	20.0	8.1	104	157	—	—	60	—
06...	1930	520	23.5	650	18.5	7.8	98	164	—	—	65	—
06...	2105	490	19.5	650	18.5	7.5	94	162	—	—	59	—
07...	0605	425	9.5	650	14.0	7.2	82	167	—	—	51	—
07...	0755	435	10.0	650	13.0	7.3	81	150	—	—	—	—
07...	1000	470	15.0	650	13.5	8.2	92	140	—	—	48	—
07...	1155	510	18.0	650	15.0	8.8	102	156	—	—	—	—
07...	1350	510	17.5	650	16.0	9.4	111	155	—	—	50	—
07...	1540	490	17.0	650	17.5	9.4	115	159	—	—	—	—
07...	1800	455	18.5	650	18.5	9.1	114	159	—	—	50	—
07...	1945	440	17.5	650	18.0	8.7	107	170	—	—	—	—
07...	2130	425	—	650	17.0	8.1	98	173	—	—	—	—
AUG, 1979												
08...	0825	280	24.5	653	18.5	6.2	76	246	—	7.8	—	—
08...	1000	285	25.0	653	19.0	6.6	82	244	—	7.8	—	—
08...	1215	290	29.0	652	20.5	7.5	96	240	—	7.9	68	—
08...	1400	285	30.0	651	22.0	7.2	96	244	—	7.9	—	—
08...	1610	280	29.0	651	24.0	8.2	114	253	145	8.3	70	—
08...	1805	270	25.5	651	24.5	8.0	111	244	—	8.4	—	—
08...	2020	270	26.0	652	24.0	7.0	96	245	145	8.3	—	—
08...	2215	265	23.0	653	23.0	6.6	89	250	—	7.9	—	—
09...	0015	260	15.5	653	21.0	6.0	78	250	153	7.8	—	—
09...	0205	260	13.5	654	20.5	5.8	74	222	—	7.5	—	—
09...	0415	265	—	654	18.5	5.4	67	226	152	7.5	—	—
09...	0610	270	14.5	654	18.5	5.8	71	251	—	—	—	—
09...	0755	270	17.0	654	19.0	5.8	72	252	152	7.4	—	—
JUN, 1980												
03...	1205	2130	15.0	645	10.0	10.0	80	121	81	7.5	—	—
05...	1125	2090	18.0	646	10.5	9.8	103	111	—	7.8	—	—
05...	1400	2060	19.5	646	12.0	9.8	107	107	—	8.1	—	13
05...	1535	2050	20.0	646	12.5	9.4	104	113	—	8.0	—	—
05...	1730	2020	16.5	646	12.0	9.6	105	106	—	8.0	—	15
05...	1900	2000	13.5	646	—	9.4	—	116	—	8.2	—	—
05...	2130	1990	9.0	646	11.0	8.9	95	120	—	8.1	—	19
05...	2305	1990	6.5	647	11.0	9.1	97	123	—	8.0	—	—
06...	0130	1990	6.0	647	10.0	9.5	99	121	—	7.9	—	12
06...	0330	1990	3.5	646	9.5	9.4	97	118	—	7.9	—	—
06...	0510	1990	4.5	648	9.0	9.4	95	115	—	7.5	—	11
06...	0855	1960	16.5	649	10.0	9.4	97	112	—	7.5	—	10
06...	1215	2050	16.5	647	12.5	9.8	108	114	—	8.1	—	12
AUG, 1980												
13...	0945	e300	21.5	e648	17.0	6.7	81	215	—	7.8	—	—
13...	1200	e300	26.0	e648	19.5	7.4	94	245	—	7.9	—	6.2
13...	1400	e305	33.0	e647	21.0	8.2	108	229	—	8.0	—	—
13...	1600	e300	34.5	e646	22.5	8.4	114	233	—	8.3	—	4.9
13...	1815	e295	26.5	e645	23.0	8.5	115	240	—	8.4	—	—
13...	2000	e295	25.0	e646	22.0	7.7	103	242	—	8.5	—	—
13...	2215	e300	18.0	e646	21.0	7.4	97	252	—	8.5	—	—
13...	2400	e300	16.5	e645	20.0	6.5	83	250	—	8.5	—	—
14...	0215	e310	11.0	e646	19.0	6.0	75	253	—	—	—	—
14...	0415	e300	8.5	e645	18.0	6.0	74	247	—	8.0	—	8.7
14...	0800	e305	9.5	e646	16.0	6.4	75	234	—	7.8	—	—
14...	1000	e320	20.0	e646	16.5	6.6	79	233	—	7.8	—	—
14...	1200	e325	26.5	e646	18.5	7.1	88	249	—	7.9	—	—

e Estimated.

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 22 - TRUCKEE RIVER AT VISTA--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
06...	0640	1.0	.52	.48	.13	.10	.03	1.1	.28	.39
06...	1035	.95	.54	.41	.15	.14	.01	1.1	.29	.35
06...	1225	.88	.53	.35	.25	.26	.00	1.1	.25	.34
06...	1405	.91	.52	.39	.29	.28	.01	1.2	.25	.31
06...	1610	.99	.61	.38	.28	.28	.00	1.3	.29	.35
06...	1750	1.2	.76	.44	.23	.25	.00	1.4	.32	.41
06...	1930	1.2	.84	.36	.18	.19	.00	1.4	.36	.43
06...	2105	1.3	.90	.40	.17	.18	.00	1.5	.39	.49
07...	0605	.57	.57	.00	.32	.12	.20	.89	.56	.52
07...	1000	.37	--	--	.08	.06	.02	.45	.04	.06
07...	1350	.98	.58	.40	.18	.14	.04	1.2	.30	.35
07...	1800	1.3	.78	.52	.26	.25	.01	1.6	.38	.53
JUN, 1980										
03...	1205	.72	.23	.49	--	--	--	--	.08	.11
05...	1400	.64	.26	.38	--	.01	--	--	.08	.16
05...	2130	.87	.30	.57	.10	.01	.09	.97	.10	.07
06...	0510	.70	.28	.42	.09	.02	.07	.79	.11	.14
06...	1215	.60	.25	.35	.07	.01	.06	.67	.07	.12
AUG, 1980										
13...	1200	--	1.30	--	.18	.03	.15	--	.45	.53
13...	2400	2.6	.89	1.7	.17	.06	.11	2.8	.62	.76

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
08...	0825	1.5	.97	.53	.16	.04	.12	1.7	.64	.82
08...	1215	1.8	1.4	.40	.18	.04	.14	2.0	.68	.72
08...	1610	1.8	1.5	.30	.19	.05	.14	2.0	.47	.97
08...	2020	2.1	1.7	.40	.18	.06	.12	2.3	.37	.42
09...	0015	2.1	1.8	.30	.18	.06	.12	2.3	.58	.57
09...	0415	2.0	1.7	.30	.21	.05	.16	2.2	.57	.60
09...	0755	1.9	1.5	.40	.18	.05	.13	2.1	.53	--
JUN, 1980										
03...	1205	--	--	--	.19	.04	.15	--	--	--
05...	1400	--	--	--	.30	.01	.29	--	.10	.08
05...	1730	.60	.42	.18	.33	.00	.33	.94	.08	.07
05...	2130	.74	.22	.52	.11	.01	.10	.85	.13	.10
06...	0130	.47	.35	.12	--	.01	--	--	.14	.11
06...	0510	.59	--	--	--	.02	--	--	.12	.11
06...	0855	--	.25	--	--	.00	--	--	.08	.06
06...	1215	.59	--	--	--	.01	--	--	.10	.07
AUG, 1980										
13...	1200	--	--	--	.18	.04	.14	--	.42	.42
13...	1600	--	--	--	.18	.07	.11	--	.18	.27
13...	2000	--	--	--	.12	.05	.07	--	.26	.29
13...	2400	--	--	--	--	.08	--	--	.61	.64
14...	0415	--	--	--	.15	.05	.10	--	.69	.72
14...	0800	--	--	--	.14	.04	.10	--	.42	.44
14...	1200	--	--	--	.17	.06	.11	--	.38	.47

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 22 - TRUCKEE RIVER AT VISTA--Continued

DATE	TIME	CARBONACEOUS BOD: LAGTIME AT 20°C (DAYS)	CARBONACEOUS BOD: 5-DAY (MG/L)	CARBONACEOUS BOD: 20-DAY (MG/L)	CARBONACEOUS BOD: ULTIMATE (MG/L)	CARBONACEOUS BOD: DECAY RATE, BASE E, PER DAY AT 20°C	CARBONACEOUS BOD: DECAY RATE, BASE 10, PER DAY AT 20°C	TOTAL BOD: 5-DAY (MG/L)	TOTAL BOD: 20-DAY (MG/L)	TOTAL BOD: ULTIMATE (MG/L)	NITROGENOUS BOD: LAGTIME AT 20°C (DAYS)	NITROGENOUS BOD: ULTIMATE (MG/L)
JUN, 1979												
06...	0640	--	.9	2.1	2.6	.08	.03	--	--	--	--	--
06...	1035	--	.7	1.5	1.7	.12	.05	--	--	--	--	--
06...	1405	3.7	1.4	2.8	3.1	.12	.05	--	--	9.2	4.3	6.1
06...	1750	5.0	1.0	2.4	3.0	.09	.04	--	--	1.0	5.0	8.0
06...	2105	5.0	.7	1.6	1.9	.10	.04	--	--	8.8	8.0	6.9
07...	0605	2.6	1.9	3.0	3.1	.19	.08	--	--	8.2	4.0	5.2
07...	1000	2.6	.8	1.6	1.8	.12	.05	--	--	2.9	5.4	1.1
07...	1350	3.7	1.0	1.6	1.7	.17	.07	--	--	11	2.2	9.3
07...	1800	3.0	1.1	1.7	1.7	.22	.09	--	--	7.1	7.4	5.4
07...	2130	2.3	1.3	2.6	3.0	.11	.05	--	--	12	2.9	9.0
AUG, 1979												
08...	0825	.28	3.2	5.8	6.1	.15	.06	--	--	--	--	--
08...	1215	.02	3.0	5.7	6.0	.14	.06	--	--	--	--	--
08...	1610	--	3.2	6.1	6.5	.14	.06	--	--	--	--	--
08...	2020	--	3.0	5.7	6.1	.14	.06	--	--	--	--	--
09...	0015	--	2.9	5.8	6.3	.12	.05	--	--	--	--	--
09...	0415	--	2.9	5.8	6.3	.13	.06	--	--	--	--	--
09...	0755	--	2.5	4.7	5.0	.13	.06	--	--	--	--	--
JUN, 1980												
03...	1205	--	1.0	2.2	2.7	.09	.04	--	--	--	--	--
05...	1400	--	.9	2.2	2.7	.09	.04	--	--	--	--	--
05...	1730	--	1.1	2.3	2.7	.10	.04	--	--	--	--	--
05...	2130	--	1.3	2.5	2.7	.13	.06	--	--	--	--	--
06...	0130	--	.7	1.9	2.5	.07	.03	--	--	--	--	--
06...	0510	--	.8	2.0	2.4	.09	.04	--	--	--	--	--
06...	0855	--	.9	1.8	2.0	.12	.05	--	--	--	--	--
06...	1215	--	.8	1.9	2.2	.10	.04	--	--	--	--	--
AUG, 1980												
13...	1200	.13	3.2	6.3	6.9	.12	.05	--	--	--	--	--
13...	1600	--	2.9	5.7	6.1	.13	.06	--	--	--	--	--
13...	2000	.06	3.1	5.5	5.7	.16	.07	--	--	--	--	--
13...	2400	.08	3.5	6.7	7.3	.14	.06	--	--	--	--	--
14...	0415	.08	2.7	5.8	6.7	.10	.04	--	--	--	--	--
14...	0800	.33	2.8	5.2	5.4	.15	.06	--	--	--	--	--
14...	1200	.27	2.5	5.0	5.4	.13	.06	--	--	--	--	--

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
AUG, 1979								
08...	0825	1.06	.105	14150	392	377	--	--
08...	1215	.269	.048	59480	377	361	--	--
08...	1610	.263	<.181	53230	370	356	--	--
08...	2020	.614	.224	11400	307	300	--	--
09...	0015	.368	.224	5435	374	372	--	--
09...	0415	.731	<.207	13680	374	364	--	--
09...	0755	.420	.181	3095	364	351	--	--
JUN, 1980								
03...	1205	.339	<.087	11800	347	343	--	9.9
05...	1400	--	--	--	--	--	458	7.8
06...	0130	.565	.097	7080	302	298	483	12
AUG, 1980								
13...	1200	--	--	--	--	--	1071	55
13...	1600	--	--	--	--	--	692	--
13...	2000	--	--	--	--	--	1162	--
13...	2400	.364	<.207	90660	698	665	950	42
14...	0415	--	--	--	--	--	1161	--
14...	0800	--	--	--	--	--	1204	--
14...	1200	--	--	--	--	--	1059	--

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 23 - TRUCKEE RIVER AT LOCKWOOD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
06...	0715	a470	19.5	650	17.0	7.0	96	169	--	7.8	62	--
06...	0915	--	21.5	650	16.5	7.7	92	156	--	7.9	60	--
06...	1115	540	24.5	650	17.0	8.2	99	152	--	7.9	57	--
06...	1310	--	27.0	650	18.0	8.6	106	162	--	8.1	56	--
06...	1455	--	28.5	650	19.0	8.2	102	163	--	7.8	56	--
06...	1640	--	28.0	650	19.5	8.0	101	161	--	--	--	--
06...	1835	--	26.5	650	19.5	7.8	99	165	--	8.3	56	--
06...	2005	--	23.5	650	19.0	7.3	91	161	--	8.3	56	--
06...	2150	--	19.0	650	18.5	7.2	90	163	--	8.3	56	--
07...	0655	--	11.0	650	15.0	7.2	90	174	--	--	52	--
07...	0820	--	12.5	650	14.5	7.7	88	168	--	--	--	--
07...	1055	--	17.0	650	15.0	9.0	105	145	--	--	48	--
07...	1230	--	19.5	650	15.5	9.3	108	144	--	--	--	--
07...	1430	--	22.0	650	17.0	9.4	113	158	--	--	51	--
07...	1610	--	19.0	650	17.5	9.2	112	157	--	--	--	--
07...	1845	--	16.5	650	18.0	8.7	107	160	--	--	49	--
07...	2020	--	16.0	650	17.5	7.9	96	160	--	--	--	--
07...	2215	--	12.0	650	17.0	7.6	92	166	--	--	--	--
AUG, 1979												
07...	1100	--	--	--	21.0	7.7	--	258	148	7.8	74	--
07...	2009	--	--	e650	22.0	6.6	88	230	140	7.7	--	--
08...	0900	a255	24.5	653	20.0	6.8	87	256	--	7.7	--	--
08...	1100	263	28.0	653	21.0	7.3	96	246	--	7.9	--	--
08...	1300	--	28.5	652	21.5	7.8	104	243	--	8.0	67	--
08...	1510	--	--	651	21.5	7.2	96	235	--	7.9	--	--
08...	1700	--	25.0	651	24.0	7.0	97	230	--	7.9	69	--
08...	1900	--	26.5	651	23.5	6.5	90	247	--	7.8	--	--
08...	2115	--	23.0	652	24.0	5.1	71	245	--	7.4	--	--
08...	2300	--	22.0	653	22.5	5.1	68	250	--	7.3	--	--
09...	0100	--	21.0	653	21.0	4.6	61	255	--	7.3	--	--
09...	0230	--	19.5	653	21.0	4.5	59	252	--	7.2	--	--
09...	0500	--	15.5	654	19.0	4.6	58	259	--	7.2	--	--
09...	0630	--	21.5	654	19.5	4.6	59	261	--	7.1	--	--
09...	0830	--	26.0	655	20.0	6.2	79	258	--	7.2	--	--
JUN, 1980												
05...	1010	a1990	15.0	e648	9.5	9.0	92	109	--	7.6	--	--
05...	1210	--	17.5	e648	10.5	9.4	98	109	--	7.7	--	--
05...	1350	--	17.0	e648	11.0	9.7	103	115	--	7.7	--	--
05...	1600	--	--	e648	11.0	9.6	102	121	--	7.8	--	21
05...	1805	--	17.0	e648	12.0	9.2	100	113	--	7.7	--	--
05...	2025	--	10.5	e648	12.0	9.2	100	113	--	7.7	--	17
05...	2215	--	10.5	e648	11.5	8.6	92	112	--	7.7	--	--
05...	2400	--	8.0	e647	11.5	8.8	95	109	--	7.6	--	12
06...	0420	--	4.0	e647	10.0	8.9	92	114	--	7.5	--	--
06...	0605	--	3.5	e647	10.0	9.3	96	114	--	7.5	--	--
06...	0755	--	6.5	e652	9.0	9.4	95	117	--	7.6	--	13
06...	1005	--	14.5	e653	10.0	9.4	97	102	--	7.6	--	--
06...	1200	--	17.0	e653	10.5	9.8	103	109	--	7.7	--	12
AUG, 1980												
11...	1620	--	35.0	e649	22.0	8.2	109	236	152	8.2	--	--
13...	1100	a285	24.5	e649	19.0	7.7	96	--	--	7.9	--	--
13...	1300	--	34.0	e649	20.5	8.0	104	234	--	8.0	--	5.3
13...	1445	--	36.0	e649	22.0	8.0	107	246	--	8.0	--	--
13...	1700	--	31.0	e647	22.0	7.4	99	234	--	8.1	--	7.4
13...	1845	--	31.0	e647	22.5	7.0	93	241	--	8.0	--	--
13...	2045	--	24.5	e647	22.0	6.4	85	244	--	7.9	--	--
14...	0100	--	19.0	e647	21.0	6.0	79	254	--	8.1	--	--
14...	0300	--	19.0	e647	20.0	6.1	78	252	--	8.1	--	--
14...	0500	--	9.0	e647	17.5	5.6	68	254	--	7.9	--	11
14...	0715	--	18.5	e647	18.0	6.0	74	250	--	7.8	--	--
14...	0900	--	20.0	e647	18.0	6.5	80	249	--	7.8	--	--
14...	1045	--	26.5	e647	18.0	7.5	93	253	--	7.8	--	--
14...	1245	--	33.0	e647	18.5	7.9	98	237	--	7.8	--	--

[a] Average streamflow estimated for the synoptic sampling period.
[e] Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 23 - TRUCKEE RIVER AT LOCKWOOD—Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
06...	0715	1.3	.84	.46	.23	.14	.09	1.5	.44	.52
06...	0915	.87	.47	.40	.17	.08	.09	1.0	.26	.33
06...	1115	.81	.47	.44	.15	.08	.07	.96	.21	.28
06...	1310	1.1	.57	.53	.21	.16	.05	1.3	.28	.35
06...	1455	.95	.49	.46	.29	.23	.05	1.2	.24	.31
06...	1640	.96	.50	.46	.33	.27	.06	1.3	.25	.32
06...	1835	1.1	.60	.50	.33	.27	.06	1.5	.28	.35
06...	2005	1.1	.70	.40	.31	.23	.08	1.4	.30	.36
06...	2150	1.3	.83	.47	.27	.21	.06	1.6	.25	.42
07...	0655	.62	.63	.00	.42	.04	.38	1.0	.55	.56
07...	1055	.28	.11	.17	.14	.12	.02	.42	.08	.08
07...	1430	1.3	.58	.72	.18	.14	.04	1.5	.36	.42
07...	1845	1.3	.62	.68	.26	.04	.22	1.6	.29	.35
AUG, 1979										
07...	1100	1.9	1.3	.60	.46	.33	.13	2.4	—	1.1
07...	2009	2.0	1.1	.90	.54	—	--	2.5	.30	.35
JUN, 1980										
05...	1210	1.1	--	--	--	.02	—	--	--	.12
05...	2025	—	.36	--	--	.01	—	--	.09	--
06...	0420	.87	.39	.48	.21	.01	.20	1.1	.11	—
06...	1200	1.0	.26	.74	.51	.01	.50	1.5	.09	.15
AUG, 1980										
11...	1620	1.8	1.20	.60	.38	.08	.30	2.2	.39	.46
13...	1300	1.8	--	--	.33	.06	.27	2.1	.52	.56
14...	0100	1.7	—	—	.45	.11	.34	2.2	.54	.57

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
07...	2009	1.7	1.2	.50	.49	.15	.34	2.2	.28	.35
08...	0900	1.8	1.3	.50	.46	.15	.31	2.3	—	--
08...	1300	1.2	.79	.41	.43	.10	.33	1.6	.76	.79
08...	1700	1.6	.99	.61	.53	.14	.39	2.1	.57	—
08...	2115	1.6	1.2	.40	.60	.19	.41	2.2	.38	.41
09...	0100	1.6	1.3	.30	.58	.19	.39	2.2	.44	.48
09...	1500	1.9	1.5	.40	.55	.17	.38	2.5	.60	.59
09...	0830	1.5	1.2	.30	.56	.15	.41	2.1	.58	.60
JUN, 1980										
05...	1210	.58	.34	.24	.23	.01	.22	.81	.11	.09
05...	1600	—	.26	—	.23	.01	.22	--	.10	.08
05...	2025	.67	.39	.28	.27	.01	.26	.94	.12	.11
05...	2400	—	.37	--	—	.00	—	--	.13	.11
06...	0420	—	.32	—	.14	.01	.13	—	.13	.15
06...	0755	.59	.30	.29	—	.01	—	--	.13	.10
06...	1200	.59	.30	.29	.18	.01	.17	.77	.11	.10
AUG, 1980										
11...	1620	.99	.63	.36	.40	.09	.31	1.4	.38	.39
13...	1300	1.6	--	--	.35	-	--	2.0	.45	.54
13...	1700	--	--	--	.39	.12	.27	--	.28	.33
13...	2045	1.3	--	--	.45	.14	.31	1.8	.24	.30
14...	0100	1.7	.62	1.1	.46	—	--	2.2	.52	.53
14...	0500	--	--	--	—	.03	—	--	.13	.18
14...	0900	--	--	--	.31	.10	.21	--	.70	.74
14...	1245	--	--	--	.34	.10	.24	—	.36	.43

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 23 - TRUCKEE RIVER AT LOCKWOOD--Continued

DATE	TIME	CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTI-MATE (MG/L)
JUN, 1979												
06...	0715	—	1.6	3.8	4.7	.08	.03	—	—	9.1	1.1	4.4
06...	1115	—	1.2	2.5	2.8	.12	.05	—	—	9.0	.34	6.2
06...	1455	—	1.3	3.0	3.7	.08	.03	—	—	7.8	.29	4.1
06...	1835	1.6	1.6	3.2	3.5	.13	.06	—	—	9.6	.84	6.1
06...	2150	—	1.5	3.8	4.8	.07	.03	—	—	9.6	1.2	4.8
07...	0655	.95	2.1	3.9	4.1	.14	.06	—	—	9.9	1.2	5.8
07...	1055	1.4	1.9	3.2	3.3	.18	.08	—	—	3.6	1.4	.3
07...	1430	.82	1.6	3.4	3.8	.11	.05	—	—	7.8	1.2	4.0
07...	1845	.32	1.6	3.2	3.4	.12	.05	—	—	10	.72	6.6
07...	2215	1.7	1.3	2.7	3.0	.12	.05	—	—	12	1.6	9.0
AUG, 1979												
07...	2009	—	3.4	6.0	6.2	.16	.07	—	—	—	--	--
08...	0900	—	3.3	6.3	6.7	.14	.06	—	—	--	--	--
08...	1300	.11	2.6	4.5	4.6	.17	.07	—	—	—	—	—
08...	2115	.22	2.4	4.2	4.4	.16	.07	—	—	—	—	—
09...	0500	—	2.4	5.0	5.6	.11	.05	—	—	—	—	—
09...	0830	—	2.2	4.4	4.8	.12	.05	—	—	—	—	—
JUN, 1980												
05...	1210	—	.9	2.1	2.5	.09	.04	—	—	4.5	.54	2.0
05...	1600	—	1.1	2.0	2.1	.15	.06	—	—	4.0	.17	1.9
05...	2025	.35	1.2	2.7	3.0	.10	.04	—	—	3.9	.55	.9
05...	2400	.71	1.0	2.1	2.3	.11	.05	—	—	4.8	.92	2.5
06...	0420	--	--	—	--	—	—	—	—	3.3	—	—
06...	0755	—	.8	1.8	2.2	.08	.03	—	—	4.3	.02	2.1
06...	1200	.76	1.0	1.8	2.0	.14	.06	—	—	2.9	—	.9
AUG, 1980												
11...	1620	.05	1.6	3.3	3.6	.12	.05	—	—	10	4.5	6.4
13...	1300	.40	2.6	5.0	5.4	.13	.06	—	—	11	3.4	5.6
13...	1700	—	2.3	4.5	5.0	.12	.05	—	—	14	1.2	9.0
13...	2045	—	2.5	4.6	4.9	.14	.06	—	—	14	1.9	9.1
14...	0100	—	2.9	5.5	5.8	.14	.06	—	—	16	4.0	10
14...	0500	.02	2.9	5.4	5.7	.15	.06	—	—	18	5.9	12
14...	0900	.28	3.2	6.2	6.7	.13	.06	—	—	14	4.8	7.3
14...	1245	.01	2.8	5.4	5.8	.13	.06	—	—	—	--	—

DATE	TIME	CHLORO-PHYLL *a*, SUS-PENDED (UG/L)	CHLORO-PHYLL *b*, SUS-PENDED (UG/L)	BIOMASS/ CHLORO-PHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTEN-TIAL, BOTTLE TEST (MG/L)
AUG, 1979								
07...	2009	2.39	.234	3766	421	412	—	—
08...	0900	2.83	.209	3534	378	368	—	—
08...	1300	2.71	.410	5166	374	360	724	—
08...	1700	.525	.018	22860	369	357	559	54
08...	2115	.982	.067	79430	389	311	549	—
09...	0100	1.47	.112	6803	380	370	658	—
09...	0500	.784	.169	16580	364	351	513	54
09...	0830	1.37	.145	8029	371	360	650	--
JUN, 1980								
05...	1210	1.28	.201	3906	293	288	355	9.2
05...	2400	—	—	—	—	—	596	9.1
AUG, 1980								
11...	1620	1.26	.266	7937	—	—	—	—
13...	1300	—	—	—	—	—	1281	52
13...	1700	—	—	—	—	—	951	—
13...	2045	—	—	—	—	—	1016	—
14...	0100	.519	<.197	19270	683	673	955	58
14...	0500	—	—	—	—	—	1312	—
14...	0900	—	—	—	—	—	1337	—
14...	1245	—	—	—	—	—	1315	—

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 27 - TRUCKEE RIVER AT PATRICK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
06...	0545	[a]455	15.5	650	16.5	7.5	89	173	--	7.2	62	--
06...	0715	--	18.0	650	16.0	7.0	82	184	--	7.4	59	--
06...	0948	--	19.0	650	18.0	7.6	94	175	--	7.9	66	--
06...	1120	--	24.5	650	20.5	8.2	106	166	--	8.0	61	--
06...	1355	--	--	650	19.0	8.4	105	159	--	--	--	--
06...	1520	--	26.0	650	19.0	8.7	109	158	--	8.5	53	--
06...	2055	--	14.5	650	18.0	7.6	94	161	--	8.0	55	--
07...	0600	--	7.5	650	15.5	7.2	84	166	--	--	48	--
07...	0720	--	10.0	650	15.0	7.0	81	153	--	--	--	--
07...	0945	--	12.5	650	15.5	8.0	93	171	--	--	48	--
07...	1120	--	13.5	650	16.0	8.6	101	169	--	--	--	--
07...	1350	--	16.0	650	17.5	9.1	108	151	--	--	--	--
07...	1520	--	19.0	650	17.5	9.2	112	148	--	--	48	--
07...	1745	--	18.0	650	18.0	8.8	109	155	--	--	50	--
07...	1920	--	15.0	650	16.5	8.4	100	155	--	--	50	--
07...	2030	--	12.5	650	16.0	8.0	94	157	--	--	--	--
AUG, 1979												
08...	0830	[a]260	27.0	[e]655	20.0	5.6	72	244	--	7.5	82	--
08...	1015	--	26.0	[e]655	20.0	6.9	88	253	157	7.8	86	--
08...	1300	--	28.0	[e]654	23.0	8.6	116	258	154	8.1	84	--
08...	1500	--	28.0	[e]653	24.0	9.0	125	255	148	8.5	83	--
08...	1700	--	--	[e]653	24.0	8.3	119	245	145	8.6	84	--
08...	1900	--	--	[e]653	23.0	7.1	96	242	148	8.2	84	--
08...	2100	--	26.0	656	21.5	5.8	77	229	--	7.7	83	--
09...	0045	--	23.0	655	21.0	4.9	64	230	--	7.6	80	--
09...	0300	--	20.5	655	20.5	4.5	57	230	--	7.6	82	--
09...	0555	--	21.0	656	20.0	4.8	61	242	--	7.5	82	--
JUN, 1980												
03...	1835	--	14.5	649	11.5	9.3	100	118	79	--	--	--
05...	1050	[a]1990	13.0	[e]648	10.0	9.0	93	111	--	7.6	--	--
05...	1250	--	16.5	[e]649	10.0	9.2	95	116	--	7.6	--	23
05...	1420	--	--	[e]648	--	9.4	--	114	--	7.7	--	--
05...	1645	--	18.0	[e]648	11.0	9.5	101	119	--	7.7	--	15
05...	1835	--	12.5	[e]648	11.0	9.2	98	116	--	7.7	--	--
05...	2120	--	9.0	[e]648	11.5	8.8	95	110	--	7.7	--	23
05...	2310	--	8.0	[e]649	11.5	8.7	94	112	--	7.6	--	--
06...	0120	--	8.0	[e]649	11.5	8.8	95	109	--	7.6	--	20
06...	0245	--	7.5	[e]648	11.0	8.8	94	110	--	7.6	--	--
06...	0515	--	2.5	[e]650	10.0	9.0	93	116	--	7.5	--	16
06...	0855	--	8.5	[e]651	10.0	9.4	97	111	--	7.6	--	13
06...	1100	--	14.0	[e]654	10.0	9.6	99	105	--	7.6	--	--
06...	1300	--	17.0	[e]654	11.0	9.7	103	108	--	7.7	--	10
AUG, 1980												
11...	1800	--	33.0	649	23.0	8.4	114	233	149	8.3	--	9.0
13...	1000	[a]280	23.5	[e]651	20.5	7.4	96	258	--	7.8	--	--
13...	1200	--	29.0	[e]651	22.0	8.2	109	257	--	8.1	--	7.4
13...	1400	--	29.0	[e]650	23.0	8.6	124	260	--	8.2	--	--
13...	1600	--	29.5	[e]649	24.0	9.2	128	253	--	8.5	--	7.0
13...	1800	--	27.0	[e]649	23.0	8.5	115	242	--	8.5	--	--
13...	2000	--	--	[e]649	21.5	7.4	99	243	--	8.0	--	--
13...	2200	--	23.5	[e]649	20.5	6.2	80	242	--	7.7	--	--
13...	2400	--	21.5	[e]648	19.5	5.8	73	241	--	7.7	--	--
14...	0200	--	--	[e]649	19.5	5.5	70	240	--	7.4	--	--
14...	0400	--	--	[e]648	18.5	5.4	68	240	--	7.4	--	6.8
14...	0600	--	15.5	[e]648	18.5	5.7	71	240	--	7.4	--	--
14...	0800	--	18.0	[e]649	18.0	6.0	73	259	--	7.6	--	--
14...	0945	--	23.5	[e]649	19.0	7.0	88	268	--	7.8	--	--
14...	1200	--	27.5	[e]649	20.5	8.3	108	268	--	8.2	--	--

[a] Average streamflow estimated for the synoptic sampling period.
[e] Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 27 - TRUCKEE RIVER AT PATRICK--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
06...	0545	.90	.48	.42	.41	.19	.22	1.3	.37	.43
06...	0715	.90	.49	.41	.44	.21	.23	1.3	.39	.47
06...	0948	1.0	.57	.43	.45	.19	.26	1.5	.43	.51
06...	1120	.90	.51	.39	.41	.18	.23	1.3	.42	.50
06...	1520	.59	.24	.35	.28	.12	.16	.87	.24	.31
06...	2055	.73	.30	.43	.48	.21	.27	1.2	.28	.35
07...	0600	.41	.13	.28	.94	.06	.88	1.4	.62	.58
07...	0945	.68	.03	.65	1.1	.02	1.1	1.8	.42	.50
07...	1350	.50	.04	.46	.40	.02	.38	.90	.18	.21
07...	1520	.74	.04	.70	.16	.06	.10	.90	.11	.12
07...	1745	.75	.23	.52	.29	.04	.25	1.0	.33	.38
07...	1920	.78	.27	.51	.34	.02	.32	1.1	.37	.43
JUN, 1980										
03...	1835	.55	.27	.28	.01	.02	.00	.56	.04	.10
05...	1250	.60	.22	.38	.56	.01	.55	1.2	.10	.12
05...	2120	.61	.28	.33	.73	.03	.70	1.3	.07	.14
06...	0515	.63	.26	.37	.10	.01	.09	.73	.10	.12
06...	1300	.87	.13	.74	.10	.01	.09	.97	.05	.17
AUG, 1980										
11...	1800	1.4	.34	1.1	.66	.14	.52	2.1	.33	.41
13...	1200	2.1	1.00	1.1	.87	.23	.64	3.0	1.00	1.40
13...	2400	1.4	-	--	1.1	-	--	2.5	.20	.34

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
08...	0830	1.4	.89	.51	1.0	.32	.68	2.4	.91	.97
08...	1015	1.4	.94	.46	1.1	.31	.79	2.5	1.1	1.10
08...	1300	1.3	.72	.58	1.1	.29	.81	2.4	1.3	1.30
08...	1500	.95	.52	.43	1.1	.28	.82	2.1	1.3	1.30
08...	1700	.70	.39	.31	1.0	.23	.77	1.7	.93	.96
08...	1900	.72	.33	.39	.93	.21	.72	1.7	.75	.80
08...	2100	.87	.40	.47	1.0	.24	.76	1.9	.57	.62
09...	0045	.92	.44	.48	1.1	.28	.82	2.0	.52	.57
09...	0300	1.0	.53	.47	1.1	.32	.78	2.1	.40	.45
09...	0555	1.2	.60	.60	1.1	.33	.77	2.3	.47	.47
JUN, 1980										
03...	1835	.45	.25	.20	.02	.04	.00	.47	.05	.12
05...	1250	--	.22	--	.13	.01	.12	--	.08	.09
05...	1645	.66	.28	.38	.13	.01	.13	.79	.07	.06
05...	2120	.52	--	--	.47	.02	.45	1.0	.10	.09
06...	0120	.86	.36	.50	.21	.01	.20	1.1	.13	.11
06...	0515	--	.29	--	--	.01	--	--	.12	.12
06...	0855	.53	.26	.27	.24	.01	.23	.77	.13	.11
06...	1300	.59	.15	.44	.11	.01	.10	.70	.07	--
AUG, 1980										
11...	1800	1.4	.27	1.1	.64	.13	.51	2.0	.32	.37
13...	1200	--	--	--	--	.25	--	--	.90	.95
13...	1600	1.0	.53	.47	.90	--	--	1.9	.75	.77
13...	2000	--	--	--	.36	.10	.26	--	.32	.36
13...	2400	1.2	.54	.66	1.1	.28	.82	2.3	--	.35
14...	0400	1.1	.56	.54	1.0	.31	.69	2.1	.36	.39
14...	0800	1.2	--	--	.94	.25	.69	2.1	.55	.60
14...	1200	.92	--	--	.91	.22	.69	1.8	.66	.70

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 27 - TRUCKEE RIVER AT PATRICK--Continued

DATE	TIME	CARBONACEOUS BOD					TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTIMATE (MG/L)
JUN, 1979												
06...	0545	.81	2.4	4.0	4.2	.17	.07	--	--	11	4.2	6.6
06...	0948	--	2.4	4.2	4.4	.16	.07	--	--	7.8	3.5	3.4
06...	1355	1.4	1.9	3.9	4.3	.12	.05	--	--	8.6	1.0	4.3
06...	1520	.30	1.9	4.0	4.6	.11	.05	--	--	9.6	4.1	5.0
06...	2055	.88	1.8	4.0	4.6	.10	.04	--	--	7.2	.36	2.6
07...	0600	.81	1.9	3.5	3.7	.15	.06	--	--	7.6	1.9	3.9
07...	0945	.54	2.1	4.3	4.7	.12	.05	--	--	9.5	1.8	4.8
07...	1350	2.0	1.2	2.5	2.8	.12	.05	--	--	5.9	1.6	3.1
07...	1745	2.2	1.4	2.2	2.2	.19	.08	--	--	7.2	1.2	5.0
07...	1920	1.9	1.3	2.3	2.4	.15	.06	--	--	6.8	1.1	4.4
07...	2030	1.4	1.3	3.0	3.4	.10	.04	--	--	6.6	1.2	3.2
AUG, 1979												
08...	1300	.28	2.9	5.2	5.4	.15	.06	--	--	--	--	--
08...	2100	.10	2.7	5.4	6.0	.12	.05	--	--	--	--	--
09...	0045	--	3.0	5.8	6.2	.13	.06	--	--	--	--	--
09...	0300	--	2.3	4.2	4.4	.14	.06	--	--	--	--	--
09...	0555	.28	2.6	5.1	5.5	.13	.06	--	--	--	--	--
JUN, 1980												
03...	1835	--	1.3	3.0	3.6	.09	.04	--	--	--	--	--
05...	1250	--	.7	1.9	2.8	.06	.03	--	--	--	--	--
05...	1645	--	.9	2.0	2.4	.09	.04	--	--	--	--	--
05...	2120	--	.9	2.0	2.5	.09	.04	--	--	--	--	--
06...	0120	--	.9	2.1	2.5	.09	.04	--	--	--	--	--
06...	0515	--	1.0	2.2	2.7	.09	.04	--	--	--	--	--
06...	0855	--	1.8	3.0	3.1	.18	.08	--	--	--	--	--
06...	1300	--	.9	2.1	2.4	.10	.04	--	--	--	--	--
AUG, 1980												
11...	1800	.14	2.0	3.9	4.2	.13	.06	--	--	--	--	--
13...	1200	.48	3.2	6.0	6.5	.14	.06	--	--	--	--	--
13...	1600	--	2.7	5.5	6.0	.12	.05	--	--	--	--	--
13...	2000	.14	2.1	4.1	4.5	.12	.05	--	--	--	--	--
13...	2400	.09	2.5	4.7	5.0	.14	.06	--	--	--	--	--
14...	0400	.15	2.9	5.1	5.3	.16	.07	--	--	--	--	--
14...	0800	.12	3.2	5.7	6.0	.15	.06	--	--	--	--	--
14...	1200	.16	3.2	6.0	6.3	.14	.06	--	--	--	--	--

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
AUG, 1979								
08...	0830	2.12	.209	4245	372	363	--	--
08...	1015	.525	<.181	26670	379	365	--	--
08...	1300	1.58	.199	6962	350	339	--	--
08...	1500	.919	.181	17410	376	360	--	--
08...	1700	.525	.054	24760	376	363	--	--
08...	1900	1.23	.090	10570	364	351	--	--
08...	2100	.800	.076	5000	402	398	--	--
09...	0045	.800	.095	7500	377	371	--	--
09...	0300	1.38	.190	7246	498	488	--	--
09...	0555	.784	.024	16580	394	381	--	--
JUN, 1980								
03...	1835	.277	<.095	21660	298	292	--	17
06...	0120	--	--	--	--	--	512	--
AUG, 1980								
11...	1800	1.97	.416	5076	643	633	--	--
13...	1200	1.35	.266	4444	674	668	1806	39
13...	1600	--	--	--	--	--	1609	--
13...	2000	--	--	--	--	--	1313	--
13...	2400	.641	<.339	12480	681	673	1098	56
14...	0400	--	--	--	--	--	1421	--
14...	0800	--	--	--	--	--	1411	--
14...	1200	--	--	--	--	--	1916	--

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 33 - TRUCKEE RIVER BELOW TRACY

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
06...	0520	420	13.0	655	18.5	6.3	78	162	—	7.6	56	—
06...	0740	415	21.0	655	18.0	7.3	89	172	—	7.6	56	—
06...	0920	425	27.0	655	18.5	7.2	89	173	—	7.8	60	—
06...	1140	460	31.0	655	19.5	8.1	101	181	—	8.2	61	—
06...	1320	500	29.0	655	20.0	8.3	106	183	—	8.5	61	—
06...	1545	505	26.0	655	20.5	9.0	115	174	—	8.7	61	—
06...	1720	480	25.0	655	20.5	8.6	110	164	—	8.7	57	—
06...	1935	505	20.0	655	19.0	8.1	104	163	—	8.4	56	—
06...	2020	500	17.0	655	19.0	7.9	94	164	—	8.3	54	—
07...	0525	435	7.0	650	16.0	6.6	78	162	—	—	48	—
07...	0745	415	12.5	650	16.0	7.1	84	167	—	—	—	—
07...	0920	420	12.5	650	16.0	7.5	88	166	—	—	49	—
07...	1150	425	15.5	650	17.0	9.2	111	169	—	—	—	—
07...	1320	445	17.0	650	17.5	9.2	112	171	—	—	53	—
07...	1545	470	17.0	650	18.5	9.7	117	171	—	—	—	—
07...	1720	470	17.5	650	18.5	9.4	118	165	—	—	48	—
07...	2000	450	12.5	650	17.0	8.8	106	159	—	—	—	—
07...	2100	440	10.0	650	16.5	8.4	100	149	—	—	47	—
JUN, 1980												
05...	1000	e2070	11.5	650	10.0	9.1	94	118	—	7.0	—	—
05...	1215	e2080	17.0	650	11.0	9.1	97	117	—	7.1	—	14
05...	1430	e2060	—	650	11.0	9.5	101	119	—	7.2	—	—
05...	1620	e2040	18.5	650	12.0	9.3	101	121	—	7.2	—	—
05...	1810	e2020	16.0	650	11.5	9.1	98	123	—	7.2	—	—
05...	2015	e1980	11.0	650	11.0	9.0	96	121	—	7.3	—	14
05...	2230	e1970	9.0	650	11.0	8.8	94	121	—	7.3	—	—
06...	0015	e1970	8.5	650	11.0	8.8	94	124	—	7.2	—	13
06...	0225	e1990	6.5	650	10.5	8.7	91	125	—	7.1	—	—
06...	0415	e1980	4.0	650	10.0	9.0	93	122	—	7.3	—	15
06...	0630	e1980	4.0	650	9.5	9.1	93	122	—	7.3	—	—
06...	0810	e1980	7.0	655	10.0	9.1	94	121	—	7.2	—	—
06...	1015	e1960	15.0	655	11.0	9.2	97	117	—	7.2	—	—
06...	1210	e2040	21.0	655	12.0	9.9	106	118	—	7.2	—	12

e Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 33 - TRUCKEE RIVER BELOW TRACY--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
06...	0920	.89	.50	.39	.58	.25	.33	1.5	.39	.49
06...	1140	.98	.54	.44	.56	.25	.31	1.5	.44	.52
06...	1545	.63	.22	.41	.36	.16	.20	.99	.27	.34
06...	1935	.57	.19	.38	.36	.16	.20	.93	.26	.32
06...	2020	.61	.20	.41	.39	.16	.23	1.0	.27	.38
07...	0525	.20	.05	.15	.94	.04	.90	1.1	.32	.40
07...	0920	.38	.12	.26	.93	.08	.85	1.3	.38	.35
07...	1320	1.1	.42	.68	.58	.14	.44	1.7	.44	.51
07...	1720	.65	.20	.45	.42	.08	.34	1.1	.29	.34
07...	2100	.97	.03	.94	.28	.02	.26	1.3	.15	.52
JUN, 1980										
05...	1215	.50	.10	.40	.19	.03	.16	.69	.10	.11
06...	1210	1.2	.17	1.0	.12	.01	.11	1.3	.09	.18

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
JUN, 1980										
05...	1215	--	--	--	.18	.01	.17	--	.04	.07
05...	1620	.76	.28	.48	.49	.02	.47	1.3	.10	.11
05...	2015	.79	.29	.50	.30	.02	.28	1.1	.11	.08
06...	0015	.91	.32	.59	.13	.02	.11	1.0	.14	.12
06...	0415	.58	.25	.33	.23	.02	.21	.81	.14	.12
06...	0810	.33	.28	.05	.17	.01	.16	.50	.10	.11
06...	1210	.69	.14	.55	--	.02	--	--	.11	.12

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 33 - TRUCKEE RIVER BELOW TRACY—Continued

DATE	TIME	CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTI-MATE (MG/L)
JUN, 1979												
06...	0520	—	1.7	3.7	4.3	.10	.04	—	--	9.4	2.1	5.1
06...	0920	--	1.4	3.6	4.7	.07	.03	—	--	8.3	2.8	3.6
06...	1320	--	2.0	3.9	4.2	.13	.06	--	--	7.7	4.6	3.5
06...	1545	—	1.0	2.4	3.2	.07	.03	--	--	7.0	.04	3.8
06...	2020	--	1.6	3.7	4.4	.09	.04	—	--	9.0	5.2	4.6
07...	0525	.95	2.0	3.5	3.7	.15	.06	--	--	6.7	3.1	3.0
07...	0920	1.4	1.8	3.3	3.6	.14	.06	—	—	--	--	--
07...	1320	2.1	1.6	3.3	3.7	.11	.05	—	--	11	1.0	7.3
07...	1720	1.4	1.4	3.2	3.7	.10	.04	—	--	13	1.1	9.3
07...	2000	.10	1.6	3.2	3.5	.12	.05	—	—	5.2	.04	1.7
07...	2100	1.7	1.8	3.3	3.5	.15	.06	—	--	6.1	1.6	2.6
JUN, 1980												
05...	1215	—	.9	2.1	2.4	.10	.04	--	--	--	—	—
05...	1620	--	1.5	2.7	3.0	.14	.06	—	--	—	--	—
05...	2015	—	1.0	2.0	2.2	.12	.05	—	--	--	--	--
06...	0015	—	1.5	3.8	5.0	.08	.03	—	--	--	--	—
06...	0415	--	1.5	3.3	3.9	.10	.04	—	--	--	--	--
06...	0810	.29	1.1	2.1	2.3	.13	.06	—	--	--	--	—
06...	1210	.13	1.3	2.3	2.4	.14	.06	—	--	--	--	—

DATE	TIME	CHLORO-PHYLL *a*, SUS-PENDED (UG/L)	CHLORO-PHYLL *b*, SUS-PENDED (UG/L)	BIOMASS/ CHLORO-PHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTEN-TIAL, BOTTLE TEST (MG/L)
JUN, 1980								
05...	1215	--	--	--	—	--	412	—
06...	0015	—	--	--	--	--	665	—
06...	0415	.147	<.133	88440	1194	1181	--	—

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 34 - TRUCKEE RIVER AT CLARK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
AUG, 1979												
08...	0930	[a]260	27.0	[e]654	21.0	5.7	75	241	--	7.8	82	--
08...	1200	--	30.0	[e]655	23.0	8.6	111	252	--	8.2	82	--
08...	1425	--	28.0	[e]654	23.0	9.1	123	252	--	8.4	84	--
08...	1630	--	29.5	[e]654	24.0	8.4	121	261	--	8.4	84	--
08...	1820	--	28.0	[e]654	23.0	7.8	105	268	--	8.3	86	--
08...	2035	--	28.0	656	23.0	5.8	77	253	160	7.9	82	--
08...	2320	--	24.5	655	22.5	4.6	61	243	154	7.7	80	--
09...	0215	--	21.0	655	21.0	4.2	55	--	--	7.6	80	--
09...	0445	--	21.0	655	20.0	3.8	48	242	152	7.5	82	--
09...	0740	--	--	656	20.0	4.6	59	248	144	7.6	83	--
AUG, 1980												
12...	0835	--	24.8	652	19.5	9.4	119	242	155	8.2	--	9.3
13...	1100	[a]275	31.0	[e]651	21.0	8.2	108	265	--	8.0	--	--
13...	1300	--	30.5	[e]651	23.5	8.8	120	257	--	8.3	--	3.9
13...	1500	--	--	[e]649	24.0	9.9	138	248	--	8.5	--	--
13...	1630	--	28.5	[e]649	24.5	9.7	137	254	--	8.6	--	5.3
13...	1845	--	26.5	[e]649	23.5	8.6	118	259	--	8.6	--	--
13...	2030	--	22.0	[e]647	22.0	7.4	99	261	--	8.2	--	3.4
13...	2230	--	--	[e]649	21.5	6.6	87	258	--	8.1	--	--
14...	0030	--	20.0	[e]650	20.0	6.0	77	249	--	7.6	--	3.0
14...	0230	--	18.0	[e]650	19.0	5.6	70	244	--	7.6	--	--
14...	0430	--	16.0	[e]649	18.0	5.2	64	248	--	7.4	--	7.3
14...	0630	--	12.5	[e]650	17.5	5.6	68	239	--	7.3	--	--
14...	0830	--	20.0	[e]649	17.5	6.5	79	252	--	7.6	--	--
14...	1015	--	24.5	[e]649	19.0	7.6	95	243	--	7.8	--	--
14...	1230	--	29.5	[e]649	21.0	8.8	116	264	--	8.2	--	--

[a] Average streamflow estimated for the synoptic sampling period.
[e] Estimated.

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 34 - TRUCKEE RIVER AT CLARK—Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
AUG, 1980										
12...	0835	1.4	.48	.92	1.1	.26	.84	2.5	.43	.48
13...	1300	1.4	.47	.93	1.0	.26	.74	2.4	.61	.69
14...	0030	1.1	-	—	.99	.20	.79	2.1	-	.75

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
08...	0930	.47	.10	.37	1.2	.23	.97	1.7	.56	.55
08...	1200	.46	.16	.30	1.3	.23	1.1	1.8	.43	.67
08...	1425	.61	.26	.35	1.4	.29	1.1	2.0	.49	.60
08...	1630	.66	.31	.35	1.4	.31	1.1	2.1	.60	—
08...	1820	.67	.32	.35	1.4	.33	1.1	2.1	.74	.79
08...	2035	.97	.23	.74	1.5	.32	1.2	2.5	.85	.94
08...	2320	.74	.28	.46	1.7	.28	1.4	2.4	.98	1.10
09...	0445	.57	.10	.47	1.1	.16	.94	1.7	.75	.81
09...	0740	.60	.14	.46	1.1	.18	.92	1.7	.63	.68
AUG, 1980										
12...	0835	1.1	.51	.59	1.1	.27	.83	2.2	.42	.43
13...	1300	1.2	.43	.77	—	—	—	—	.61	.71
13...	1630	—	.36	—	1.3	—	.45	—	.85	.88
13...	2030	1.2	.30	.90	1.2	.30	.90	2.4	.81	.86
14...	0030	.84	.19	.65	1.0	.21	.79	1.8	.60	.61
14...	0430	1.0	.28	.72	1.2	.26	.94	2.2	.49	.50
14...	0830	1.1	.38	.72	1.3	.33	.97	2.4	.34	.36
14...	1230	1.3	.49	.81	1.4	.34	1.1	2.7	.36	.40

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 34 - TRUCKEE RIVER AT CLARK—Continued

DATE	TIME	CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTIMATE (MG/L)
AUG, 1979												
08...	0930	.68	2.0	3.8	4.0	.14	.06	—	—	—	—	—
08...	1200	.22	2.3	3.8	3.9	.17	.07	—	—	—	—	—
08...	2035	—	4.0	6.8	7.1	.17	.07	—	—	—	—	—
08...	2320	—	3.5	5.8	6.0	.17	.07	—	—	—	—	—
09...	0445	—	2.4	4.5	4.8	.14	.06	—	—	—	—	—
09...	0740	—	3.3	5.8	6.0	.16	.07	—	—	—	—	—
AUG, 1980												
12...	0835	.04	2.2	5.0	5.9	.10	.04	—	—	—	—	—
13...	1300	—	2.4	4.8	5.2	.12	.05	—	—	—	—	—
13...	1630	—	2.0	4.2	4.7	.12	.05	—	—	—	—	—
13...	2030	—	2.9	5.8	6.3	.12	.05	—	—	—	—	—
14...	0030	.04	2.3	4.3	4.6	.14	.06	—	—	—	—	—
14...	0430	.22	2.4	4.2	4.4	.16	.07	—	—	—	—	—
14...	0830	.32	2.7	4.8	5.1	.16	.07	—	—	—	—	—
14...	1230	.19	2.8	5.2	5.6	.14	.06	—	—	—	—	—

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
AUG, 1979								
08...	0930	4.07	.838	1966	366	358	—	—
08...	1200	.210	.018	66670	366	352	—	—
08...	1425	.473	.018	31710	366	351	—	—
08...	1630	.263	<.181	45630	373	361	—	53
08...	1820	1.97	.269	6091	387	375	—	—
08...	2035	.960	.228	11460	398	387	—	—
08...	2320	1.34	.314	11190	400	385	—	—
09...	0215	1.40	.285	8571	397	385	—	—
09...	0445	1.84	.437	4348	407	399	—	43
09...	0740	1.80	.380	5000	406	397	—	—
AUG, 1980								
12...	0835	.794	.181	12590	663	653	—	—
13...	1300	1.27	.420	5512	667	660	1900	39
13...	1630	—	—	—	—	—	1671	—
13...	2030	—	—	—	—	—	1678	—
14...	0030	<.238	—	—	671	664	1799	25
14...	0430	—	—	—	—	—	1813	—
14...	0830	—	—	—	—	—	2233	—
14...	1230	—	—	—	—	—	2640	—

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 36 - TRUCKEE RIVER AT DERBY DAM

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
06...	0645	a460	16.5	655	18.0	--	--	161	--	--	--	--
06...	0920	--	20.0	655	19.0	6.8	83	160	--	7.7	56	--
06...	1115	--	27.5	655	20.0	7.2	92	170	--	7.7	57	--
06...	1330	--	27.5	655	22.5	8.3	109	170	--	8.4	--	--
06...	1505	--	28.5	655	22.5	8.9	117	178	--	8.4	59	--
06...	1715	--	26.5	655	22.0	8.6	113	186	--	8.5	60	--
06...	1915	--	22.5	655	21.0	8.4	109	178	--	8.5	65	--
06...	2015	--	20.5	655	20.0	8.0	103	178	--	8.4	61	--
07...	0550	--	8.5	650	17.0	6.8	81	159	--	--	49	--
07...	0715	--	8.5	650	16.5	6.8	80	163	--	--	--	--
07...	0915	--	12.0	650	16.5	7.3	86	163	--	--	48	--
07...	1110	--	15.5	650	17.5	8.0	96	162	--	--	--	--
07...	1315	--	25.0	650	19.5	9.0	113	162	--	--	55	--
07...	1515	--	22.0	650	20.0	9.4	119	169	--	--	--	--
07...	1715	--	21.5	650	20.5	9.6	123	184	--	--	51	--
07...	1915	--	19.0	650	19.5	9.3	121	168	--	--	--	--
07...	2015	--	15.0	650	19.0	8.6	106	168	--	--	48	--
AUG, 1979												
08...	2235	--	23.0	e657	22.5	6.0	79	248	--	8.1	84	--
09...	0150	a260	21.5	e658	22.0	5.2	69	244	--	7.8	--	--
09...	0420	--	18.0	e658	21.0	4.5	59	242	--	7.7	84	--
09...	0635	--	18.0	e658	21.0	4.4	58	240	--	7.7	--	--
09...	1125	--	--	e657	22.0	7.4	99	--	--	7.9	--	--
09...	1225	--	31.0	e657	22.5	8.1	108	230	--	8.2	84	--
09...	1355	--	32.0	e656	23.5	9.2	128	230	--	8.5	--	--
09...	1615	--	31.5	e656	25.0	10.2	144	226	--	8.8	82	--
09...	1800	--	30.0	e655	24.5	9.1	126	223	--	8.8	--	--
09...	2000	--	24.5	e650	24.0	7.8	108	235	--	8.3	--	--
09...	2200	--	20.5	e655	24.5	6.4	89	237	--	8.2	--	--
09...	2400	--	20.5	e656	23.0	5.3	72	239	--	8.0	--	--
10...	0200	--	22.0	e656	23.0	4.6	62	239	--	7.8	--	--
10...	0400	--	21.0	e656	22.0	4.4	59	240	169	7.7	--	--
10...	0600	--	20.0	e657	22.0	4.4	59	242	--	7.8	--	--
10...	0800	--	--	e657	22.0	4.4	59	238	--	7.8	--	--
JUN, 1980												
03...	1745	--	15.5	651	12.0	9.6	104	119	81	--	--	--
05...	1100	a2040	15.5	650	10.5	9.2	96	119	--	7.1	--	--
05...	1325	--	15.5	650	11.0	9.4	100	120	--	6.8	--	--
05...	1515	--	17.5	650	11.0	--	--	116	--	7.1	--	--
05...	1700	--	15.5	650	11.5	9.2	99	120	--	7.0	--	15
05...	1900	--	14.5	650	11.5	8.9	96	123	--	7.2	--	--
05...	2115	--	11.0	650	10.5	8.8	92	122	--	7.4	--	20
05...	2315	--	11.0	650	10.5	--	--	122	--	7.3	--	--
06...	0110	--	8.5	650	10.0	8.7	90	125	--	7.4	--	--
06...	0310	--	5.0	650	10.0	8.7	90	126	--	7.3	--	--
06...	0515	--	3.5	655	10.0	8.6	89	125	--	7.3	--	20
06...	0715	--	6.0	655	10.0	8.8	90	122	--	7.2	--	--
06...	0900	--	11.0	655	11.0	8.9	94	117	--	7.2	--	22
06...	1100	--	15.5	655	11.5	9.2	98	118	--	7.2	--	--
06...	1300	--	20.5	655	13.0	9.4	103	115	--	7.3	--	20
AUG, 1980												
12...	0920	--	25.5	652	19.5	7.6	96	241	157	8.6	--	--
13...	1000	a270	24.5	e650	19.5	6.4	81	259	--	--	--	--
13...	1300	--	33.0	e650	22.0	7.1	95	256	--	8.3	--	--
13...	1400	--	32.5	e650	23.0	8.5	115	257	--	8.4	--	--
13...	1730	--	31.0	e650	23.0	9.0	122	257	--	8.8	--	--
13...	2130	--	24.0	e650	22.0	7.2	96	263	--	8.8	--	--
13...	2215	--	24.0	e650	22.0	6.6	88	264	--	8.6	--	--
14...	0100	--	22.0	e650	21.0	5.6	74	265	--	8.5	--	--
14...	0200	--	21.0	e650	20.5	5.6	73	272	--	8.5	--	--
14...	0415	--	19.0	e650	19.0	5.5	69	262	--	8.4	--	--
14...	0600	--	17.5	e650	19.0	5.5	69	259	--	8.4	--	--
14...	0930	--	23.5	e650	18.5	5.7	70	257	--	--	--	--
14...	1100	--	25.0	e650	19.0	7.1	89	256	--	8.4	--	--
14...	1145	--	26.0	e650	19.0	7.4	92	259	--	8.4	--	--

a Average streamflow estimated for the synoptic sampling period.
e Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 36 - TRUCKEE RIVER AT DERBY DAM--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
06...	0645	.64	.19	.45	.54	.16	.38	1.2	.25	.37
06...	0920	.71	.23	.48	.59	.25	.34	1.3	.28	.37
06...	1115	.82	.29	.53	.63	.26	.37	1.5	.31	.39
06...	1330	.74	.33	.41	.63	.26	.37	1.4	.35	.43
06...	1505	.77	.34	.43	.65	.27	.38	1.4	.39	.49
06...	1715	.85	.33	.52	.64	.27	.37	1.5	.41	.51
06...	1915	.81	.29	.52	.61	.25	.36	1.4	.41	.49
06...	2015	.72	.26	.46	.59	.25	.34	1.3	.40	.50
07...	0550	.57	.00	.57	.75	.02	.73	1.3	.25	.29
07...	0915	.98	.01	.97	.82	.02	.80	1.8	.28	.33
07...	1315	.94	.17	.77	.72	.10	.62	1.7	.35	.40
07...	1715	1.1	.18	.92	.70	.18	.52	1.8	.41	.46
07...	2015	.43	.06	.37	.84	.02	.82	1.3	.17	.21
JUN, 1980										
03...	1745	1.6	.21	1.4	.17	.01	.16	1.8	.08	.12
05...	2115	.82	.19	.63	.17	.02	.15	.99	.08	—
06...	0515	1.5	—	—	.18	.03	.15	1.7	.14	.15
AUG, 1980										
13...	1300	1.8	.27	1.5	1.6	—	—	3.4	.41	.52

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
08...	2235	.55	.23	.32	1.4	.27	1.1	2.0	.70	.77
09...	0150	.68	.28	.40	1.4	.26	1.1	2.1	.86	.94
09...	0420	.55	.21	.34	1.4	.21	1.2	2.0	.89	.98
09...	1225	.63	.06	.57	1.1	.14	.96	1.7	.69	.70
09...	1615	.50	.01	.49	1.1	.15	.95	1.6	.52	.61
09...	2000	.55	.04	.51	1.2	.17	1.0	1.8	.47	.53
09...	2400	.71	.10	.61	1.3	.18	1.1	2.0	.48	.56
10...	0400	.47	.04	.43	1.3	.17	1.1	1.8	.53	.62
10...	0800	.42	.04	.38	1.2	.14	1.1	1.6	.53	.64
JUN, 1980										
03...	1745	—	—	—	—	.01	—	—	.09	.10
05...	1325	.62	—	—	.27	.01	.26	.89	.05	.10
05...	1700	—	.34	—	.13	.01	.12	—	.08	.07
05...	2115	.53	.22	.31	.19	.01	.18	.72	.08	.07
06...	0110	.57	.25	.32	.24	.02	.22	.81	.13	.11
06...	0515	.83	.23	.60	—	.03	—	—	.08	.11
06...	1300	.73	.26	.47	.61	.01	.60	1.3	.12	.11
AUG, 1980										
12...	0920	.74	.28	.46	1.0	.19	.81	1.7	.35	.37
13...	1300	.72	.12	.60	1.3	.27	1.0	2.0	.36	.44
13...	1730	1.0	.26	.74	1.4	.31	1.1	2.4	.56	.62
13...	2130	1.2	.34	.86	1.6	.39	1.2	2.8	.83	.88
14...	0100	1.1	.29	.81	1.5	.34	1.2	2.6	.90	.94
14...	0415	1.0	.20	.80	1.3	.26	1.0	2.3	.73	.77
14...	0930	1.6	.28	1.3	1.2	.24	.96	2.8	.43	.49
14...	1145	1.4	.24	1.2	1.3	.28	1.0	2.7	.40	.43

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 36 - TRUCKEE RIVER AT DERBY DAM--Continued

DATE	TIME	CARBONACEOUS BOD: LAGTIME AT 20°C (DAYS)	CARBONACEOUS BOD: 5-DAY (MG/L)	CARBONACEOUS BOD: 20-DAY (MG/L)	CARBONACEOUS BOD: ULTIMATE (MG/L)	CARBONACEOUS BOD: DECAY RATE, BASE E, PER DAY AT 20°C	CARBONACEOUS BOD: DECAY RATE, BASE 10, PER DAY AT 20°C	TOTAL BOD: 5-DAY (MG/L)	TOTAL BOD: 20-DAY (MG/L)	TOTAL BOD: ULTIMATE (MG/L)	NITROGENOUS BOD: LAGTIME AT 20°C (DAYS)	NITROGENOUS BOD: ULTIMATE (MG/L)
JUN, 1979												
06...	0645	--	1.3	3.0	3.6	.09	.04	--	--	5.4	3.2	1.8
06...	0920	--	1.7	3.4	3.7	.12	.05	--	--	6.5	4.2	2.8
06...	1330	--	1.3	3.0	3.6	.09	.04	--	--	6.6	4.5	3.0
06...	1715	1.1	1.8	4.2	5.2	.08	.03	--	--	8.5	4.3	3.3
06...	2015	--	1.6	3.8	4.9	.08	.03	--	--	7.4	4.1	2.5
07...	0550	1.0	1.7	3.2	3.4	.14	.06	--	--	7.1	.90	3.7
07...	0915	1.3	1.8	3.1	3.2	.17	.07	--	--	4.6	3.9	1.4
07...	1315	1.9	1.7	3.0	3.1	.15	.06	--	--	6.6	1.5	3.5
07...	1715	1.6	1.8	3.4	3.7	.13	.06	--	--	7.5	3.7	3.8
07...	2015	1.9	1.6	3.0	3.2	.13	.06	--	--	9.4	1.4	6.2
AUG, 1979												
08...	2235	--	1.4	3.3	4.0	.09	.04	--	--	--	--	--
09...	0150	.11	2.0	3.8	4.0	.13	.06	--	--	--	--	--
09...	1225	.08	1.5	4.0	5.4	.07	.03	--	--	--	--	--
09...	1615	--	2.3	3.7	3.8	.18	.08	--	--	11	1.9	7.2
09...	2400	.27	1.6	3.5	3.9	.11	.05	--	--	4.5	.72	.6
10...	0400	.03	1.7	3.9	4.6	.09	.04	--	--	--	--	--
10...	0800	--	1.8	4.1	4.8	.09	.04	--	--	7.0	--	2.2
JUN, 1980												
03...	1745	--	1.8	3.1	3.2	.16	.07	--	--	3.2	--	--
05...	1325	--	1.1	2.2	2.4	.12	.05	--	--	4.8	--	2.4
05...	1700	.09	1.1	2.3	2.7	.10	.04	--	--	3.4	--	.7
05...	2115	.14	1.2	2.2	2.4	.13	.06	--	--	3.4	--	1.0
06...	0110	--	1.4	3.1	3.6	.09	.04	--	--	4.0	--	.4
06...	0515	.47	1.2	2.7	3.1	.09	.04	--	--	4.8	--	1.7
06...	0900	--	1.2	2.4	2.6	.12	.05	--	--	4.1	--	1.5
06...	1300	--	.9	2.1	2.5	.09	.04	--	--	3.2	--	.7
AUG, 1980												
12...	0920	--	1.8	3.9	4.4	.10	.04	--	--	6.6	2.9	2.2
13...	1300	.12	2.0	4.1	4.6	.11	.05	--	--	6.8	2.2	2.2
13...	1730	--	2.2	4.5	4.9	.12	.05	--	--	9.3	1.8	4.4
13...	2130	.16	3.2	6.2	6.7	.13	.06	--	--	8.7	2.2	2.0
14...	0100	.25	3.2	5.6	5.9	.15	.06	--	--	8.9	1.8	3.0
14...	0415	.31	3.6	5.9	6.0	.18	.08	--	--	9.1	2.0	3.1
14...	0930	.08	2.7	4.6	4.7	.17	.07	--	--	7.0	2.1	2.3
14...	1145	.19	2.7	5.0	5.3	.14	.06	--	--	6.8	1.5	1.5

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
AUG, 1979								
08...	2235	.652	.047	10740	364	357	1010	--
09...	0420	.672	<.241	17860	355	343	712	57
09...	1225	1.32	.181	7576	360	350	--	--
09...	1615	2.06	.269	4369	425	416	1144	--
09...	2000	1.66	.226	--	--	--	1175	--
09...	2400	1.29	.247	7752	433	423	--	--
10...	0400	1.15	.178	7826	419	410	--	40
10...	0800	2.06	.297	4854	417	407	1126	--
JUN, 1980								
03...	1745	1.00	.147	4000	258	254	--	--
05...	1325	.108	<.076	55560	309	303	478	10
06...	0110	1.50	.171	2667	359	355	526	11
AUG, 1980								
12...	0920	1.24	.283	8871	668	657	--	--
13...	1300	.997	.173	8024	662	654	3332	43
13...	1730	--	--	--	--	--	2114	--
13...	2130	--	--	--	--	--	2219	--
14...	0100	.677	<.358	13290	679	670	2173	43
14...	0415	--	--	--	--	--	2565	--
14...	0930	--	--	--	--	--	3261	--
14...	1145	--	--	--	--	--	2763	--

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 37 - TRUCKEE RIVER BELOW DERBY DAM

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
06...	0800	70	20.0	660	18.5	--	--	152	--	--	--	--
06...	1000	65	24.0	660	19.5	8.3	104	166	--	7.9	56	--
06...	1145	65	27.5	660	21.0	8.6	110	159	--	--	--	--
06...	1410	75	26.0	660	22.0	8.2	108	175	--	--	--	--
06...	1540	90	28.0	660	22.5	8.2	108	178	--	--	--	--
06...	1750	105	27.0	660	22.0	7.8	103	182	--	--	--	--
06...	1950	110	20.5	660	20.5	7.4	95	177	--	--	53	--
06...	2035	105	18.5	660	20.0	7.1	90	175	--	--	--	--
07...	0620	90	8.5	660	15.0	7.6	86	170	--	--	49	--
07...	0745	85	12.0	660	15.5	8.1	93	167	--	--	--	--
07...	0945	75	14.0	660	17.0	8.2	98	164	--	--	49	--
07...	1135	70	16.0	660	18.0	--	--	162	--	--	--	--
07...	1345	65	22.5	660	19.5	8.2	103	167	--	--	51	--
07...	1545	65	20.5	660	19.5	9.0	113	171	--	--	--	--
07...	1745	80	21.0	660	19.5	8.5	106	169	--	--	--	--
07...	1945	90	16.0	660	18.5	8.0	98	168	--	--	--	--
07...	2045	95	14.0	660	18.0	7.6	93	171	--	--	53	--
AUG, 1979												
08...	2055	39	23.0	e655	23.0	6.3	85	239	154	8.3	--	--
08...	2355	39	18.5	e656	23.5	5.8	80	244	156	7.8	--	--
09...	0305	40	16.0	e657	21.5	5.6	75	246	--	7.7	--	--
09...	0535	40	15.0	e658	21.5	5.5	73	242	158	7.8	--	--
09...	0740	40	20.0	e658	21.0	6.4	84	244	161	7.8	--	--
09...	1200	40	30.0	e657	22.0	7.2	96	234	--	8.0	--	--
09...	1300	40	31.5	e657	22.5	7.4	99	225	--	8.2	84	--
09...	1415	40	32.0	e657	24.0	8.1	112	234	--	8.4	--	--
09...	1650	40	31.5	e656	24.5	8.2	114	232	--	8.7	83	--
09...	1830	40	30.0	e656	25.0	7.9	111	237	--	8.7	--	--
09...	2030	40	24.0	e656	24.5	7.0	97	237	156	8.6	--	--
09...	2230	40	20.0	e655	24.0	6.6	92	237	--	8.4	--	--
10...	0030	40	19.5	e656	24.0	6.2	86	239	157	8.0	--	--
10...	0230	39	22.5	e656	24.0	5.8	80	239	--	7.8	--	--
10...	0430	39	21.0	e657	23.0	5.8	78	240	182	7.8	--	--
10...	0630	39	20.0	e656	23.0	5.8	78	239	--	7.8	--	--
10...	0830	39	25.0	e657	22.5	6.0	80	238	--	7.8	--	--
JUN, 1980												
05...	1130	e1960	15.5	650	11.0	9.4	100	--	--	--	--	--
05...	1345	e1960	15.5	650	11.0	9.4	100	--	--	--	--	--
05...	1530	e1960	17.5	650	12.0	9.4	102	121	--	7.2	--	--
05...	1720	e1960	15.5	650	11.5	9.2	99	123	--	7.1	--	--
05...	1910	e1940	14.5	650	11.5	9.0	97	124	--	7.2	--	--
05...	2135	e1920	11.0	650	10.0	9.0	93	125	--	7.2	--	--
05...	2330	e1900	14.5	650	10.0	--	--	126	--	7.1	--	--
06...	0130	e1890	8.5	650	10.0	9.0	93	125	--	7.4	--	--
06...	0320	e1880	5.0	650	10.0	9.0	93	131	--	7.2	--	--
06...	0540	e1880	3.5	655	9.5	9.1	94	129	--	7.2	--	--
06...	0715	e1880	6.0	655	10.0	9.0	93	128	--	7.1	--	--
06...	0915	e1880	11.0	655	11.0	9.1	96	126	--	7.2	--	--
06...	1105	e1880	15.5	655	11.5	9.5	101	118	--	7.2	--	--
06...	1300	e1870	20.5	655	13.0	9.7	107	117	--	7.2	--	--

e Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 37 - TRUCKEE RIVER BELOW DERBY DAM--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
06...	0800	--	.10	--	.60	.04	.56	--	.27	.30
06...	1000	.67	.19	.48	.60	.25	.35	1.3	.28	.36
06...	1145	.63	.23	.40	.63	.19	.44	1.3	.30	.35
06...	1540	.69	.23	.46	.73	.18	.55	1.4	.37	.45
06...	1950	.66	.12	.54	.75	.12	.63	1.4	.40	.47
07...	0620	.61	.01	.60	.69	.02	.67	1.3	.24	.29
07...	0945	.75	.03	.72	.74	.02	.72	1.5	.26	.32
07...	1345	.97	.23	.74	.60	.16	.44	1.6	.33	.37
07...	1745	.75	.23	.52	.63	.18	.45	1.4	.39	.44
07...	2045	.77	.19	.58	.62	.12	.50	1.4	.41	.47

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
08...	2055	.79	--	--	1.3	--	--	2.1	--	.51
08...	2355	.66	.19	.47	1.4	.23	1.2	2.1	.64	.70
09...	0535	.56	.23	.33	1.4	.21	1.2	2.0	.90	.94
09...	0740	.55	.14	.41	1.3	.18	1.1	1.9	.97	.99
09...	1300	.56	.06	.50	1.1	.13	.97	1.7	.73	1.00
09...	1650	.42	.06	.36	1.2	.14	1.1	1.6	.58	.64
09...	2030	.47	.07	.40	1.2	.16	1.0	1.7	.46	.51
10...	0030	.55	.12	.43	1.3	.17	1.1	1.9	.46	.51
10...	0430	.40	.12	.28	1.3	.18	1.1	1.7	.54	.61
10...	0830	.42	.07	.35	1.2	.15	1.1	1.6	.56	.66

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 37 - TRUCKEE RIVER BELOW DERBY DAM--Continued

DATE	TIME	CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20C	DECAY RATE, BASE 10, PER DAY AT 20C	5 DAY (MG/L)	20 DAY (MG/L)	ULTI-MATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTI-MATE (MG/L)
JUN, 1979												
06...	0800	--	1.4	3.2	3.7	.10	.04	--	--	5.3	--	1.6
06...	1000	--	1.2	2.6	2.9	.10	.04	--	--	8.1	--	5.2
06...	1410	--	1.4	2.7	2.9	.13	.06	--	--	5.7	4.2	2.8
06...	1750	1.5	1.5	3.2	3.7	.10	.04	--	--	9.7	1.0	6.0
06...	2035	.95	2.2	4.5	5.0	.12	.05	--	--	8.7	4.0	3.7
07...	0620	1.8	1.5	3.2	3.6	.10	.04	--	--	5.0	1.5	1.4
07...	0945	1.2	1.9	3.3	3.4	.16	.07	--	--	5.1	1.5	1.7
07...	1345	1.3	1.5	3.0	3.4	.12	.05	--	--	8.3	1.1	4.9
07...	1745	2.4	1.3	2.6	2.9	.12	.05	--	--	9.7	.40	6.8
07...	2045	1.8	2.0	3.3	3.4	.18	.08	--	--	6.7	1.6	3.3
AUG, 1979												
08...	2055	--	1.2	2.6	3.0	.11	.05	--	--	--	--	--
08...	2355	--	1.9	3.7	4.0	.13	.06	--	--	--	--	--
09...	0535	--	1.5	3.5	4.4	.08	.03	--	--	--	--	--
09...	0740	--	1.8	3.9	4.5	.10	.04	--	--	--	--	--
09...	2030	.72	1.7	3.6	4.0	.11	.05	--	--	--	--	--
10...	0030	--	1.5	2.8	2.9	.14	.06	--	--	--	--	--
10...	0430	.10	1.8	3.5	3.8	.13	.06	--	--	--	--	--
10...	0830	.18	1.6	3.3	3.7	.12	.05	--	--	--	--	--

DATE	TIME	CHLORO-PHYLL *a*, SUS-PENDED (UG/L)	CHLORO-PHYLL *b*, SUS-PENDED (UG/L)	BIOMASS/ CHLORO-PHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTEN-TIAL, BOTTLE TEST (MG/L)
AUG, 1979								
08...	2055	.483	<.238	14490	362	355	--	--
08...	2355	1.31	.234	--	--	--	--	--
09...	0535	1.00	.285	9000	361	352	--	--
09...	0740	.656	.054	22870	372	357	--	--
09...	1300	.263	.018	38020	366	356	--	--
09...	1650	2.03	.329	4434	425	416	--	44
09...	2030	1.51	.206	6623	427	417	--	--
10...	0030	1.47	.190	6803	432	422	--	--
10...	0430	.509	.118	27500	419	405	--	48
10...	0830	.933	.295	10720	428	418	--	--

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 39 - TRUCKEE RIVER AT PAINTED ROCK BRIDGE

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH FIELD (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1980												
05...	1055	[a]1940	17.5	[e]652	10.5	--	--	127	--	7.5	--	--
05...	1245	--	14.0	[e]652	11.0	9.5	101	127	--	7.4	--	15
05...	1445	--	17.5	[e]652	12.5	--	--	122	--	7.7	--	--
05...	1655	--	20.5	[e]652	12.5	--	--	127	--	7.6	--	21
05...	1850	--	20.0	[e]652	12.0	9.4	102	128	--	7.8	--	--
05...	2050	--	13.0	[e]652	11.5	--	--	125	--	7.5	--	--
05...	2240	--	11.0	[e]652	10.5	9.3	97	129	--	8.0	--	--
06...	0045	--	9.0	[e]652	10.0	--	--	128	--	7.8	--	23
06...	0240	--	6.0	[e]652	10.0	9.1	94	130	--	7.7	--	--
06...	0500	--	7.5	[e]657	10.5	8.9	93	129	--	7.6	--	36
06...	0640	--	7.5	[e]657	11.0	9.2	96	125	--	7.4	--	--
06...	0900	--	14.5	[e]657	11.0	--	--	127	--	7.6	--	39
06...	1035	--	16.0	[e]657	11.5	9.3	98	134	--	7.3	--	--
06...	1235	--	21.0	[e]657	12.5	9.2	99	131	--	7.4	--	30
AUG, 1980												
12...	0940	--	28.0	654	20.0	9.4	120	246	156	8.4	--	6.0
13...	1115	[a]70	30.0	[e]650	21.5	9.2	123	264	--	8.5	--	--
13...	1200	--	32.0	[e]650	22.5	9.6	128	266	--	8.7	--	5.6
13...	1445	--	35.0	[e]650	24.5	9.9	138	259	--	9.0	--	--
13...	1600	--	34.0	[e]650	25.0	9.8	138	252	--	9.1	--	7.0
13...	1830	--	31.0	[e]650	24.0	8.3	115	257	--	9.0	--	--
13...	2000	--	25.0	653	23.0	7.3	99	258	--	9.0	--	6.6
13...	2245	--	22.0	653	20.0	6.6	85	264	--	8.6	--	--
13...	2400	--	21.0	[e]650	20.0	6.3	81	264	--	8.4	--	--
14...	0845	--	22.0	[e]650	18.0	7.7	95	270	--	8.2	--	--
14...	1030	--	27.0	[e]650	19.0	8.6	108	269	--	8.4	--	--
14...	1230	--	30.0	[e]650	21.0	9.7	128	268	--	8.6	--	--

[a] Average streamflow estimated for the synoptic sampling period.
[e] Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 39 - TRUCKEE RIVER AT PAINTED ROCK BRIDGE--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
AUG, 1980										
12...	0940	1.1	.06	1.0	.97	.13	.84	2.1	.44	.49
13...	1200	2.1	.12	2.0	1.1	.12	.98	3.2	.50	.54

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
JUN, 1980										
05...	1245	.64	.22	.42	.23	.02	.21	.87	.12	.11
05...	1655	--	.23	--	.19	.01	.18	--	.11	.09
05...	2050	.50	.18	.32	.50	.02	.48	1.0	.12	.10
06...	0045	.37	.13	.24	.47	.03	.44	.84	.11	.10
06...	0500	.53	.23	.30	.39	.02	.37	.92	.14	.11
06...	0900	.54	.20	.34	.20	.02	.18	.74	.13	.10
06...	1235	--	.20	--	.29	.02	.27	--	.13	.13
AUG, 1980										
12...	0940	1.0	.06	.94	.98	.14	.84	2.0	.43	.44
13...	1200	.82	.04	.78	1.1	-	--	1.9	.45	.54
13...	1600	1.1	.10	1.0	.76	.08	.68	1.9	.45	.47
13...	2000	1.1	.05	1.1	.75	.11	.64	1.9	.31	.41
13...	2400	1.4	.06	1.3	1.1	.14	.96	2.5	.41	.48
14...	0845	1.7	.10	1.6	1.4	.24	1.2	3.1	.65	.68
14...	1230	1.5	.09	1.4	1.3	.19	1.1	2.8	.70	.73

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 39 - TRUCKEE RIVER AT PAINTED ROCK BRIDGE--Continued

DATE	TIME	CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20C	DECAY RATE, BASE 10, PER DAY AT 20C	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTI-MATE (MG/L)
JUN, 1980												
05...	1245	--	1.2	2.6	3.0	.10	.04	--	--	4.2	.08	1.2
05...	1655	--	1.3	2.3	2.4	.15	.06	--	--	3.1	.20	.7
05...	2050	.16	1.3	2.8	3.2	.10	.04	--	--	--	--	--
06...	0045	--	1.3	2.5	2.7	.13	.06	--	--	4.2	.55	1.5
06...	0500	--	1.4	2.5	2.7	.15	.06	--	--	4.3	--	1.6
06...	0900	--	.8	1.8	2.1	.09	.04	--	--	3.1	.19	1.0
06...	1235	--	1.0	2.3	2.8	.08	.03	--	--	3.5	--	.7
AUG, 1980												
12...	0940	--	1.8	3.7	4.0	.12	.05	--	--	6.9	--	2.9
13...	1200	--	2.8	5.1	5.4	.14	.06	--	--	6.7	.16	1.3
13...	1600	--	2.4	4.5	4.8	.14	.06	--	--	5.9	--	1.1
13...	2000	--	2.5	4.6	4.9	.14	.06	--	--	6.0	.06	1.1
13...	2400	--	2.3	4.0	4.1	.17	.07	--	--	7.7	.24	3.6
14...	0845	.31	2.3	4.3	4.5	.14	.06	--	--	8.8	.29	4.3
14...	1230	.18	2.5	4.7	5.1	.14	.06	--	--	--	--	--

DATE	TIME	CHLORO-PHYLL *a*, SUS-PENDED (UG/L)	CHLORO-PHYLL *b*, SUS-PENDED (UG/L)	BIOMASS/ CHLORO-PHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTEN-TIAL, BOTTLE TEST (MG/L)
JUN, 1980								
05...	1245	.995	.179	5025	320	315	382	17
05...	2050	1.50	.171	4000	361	355	--	--
06...	0045	.578	.087	8651	283	278	516	20
AUG, 1980								
12...	0940	2.95	.611	2712	658	650	--	--
13...	1200	1.41	.460	6383	674	665	3001	29
13...	2000	--	--	--	--	--	2815	--
13...	2400	.641	.339	14040	679	670	1745	37
14...	0845	--	--	--	--	--	3191	--
14...	1230	--	--	--	--	--	2783	--

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 43 - HERMAN DITCH RETURN AT WADSWORTH

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH FIELD (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
AUG, 1980												
12...	1045	—	29.5	656	21.0	7.7	95	287	190	8.5	--	4.4
13...	1015	—	30.0	e650	20.5	7.2	94	288	--	7.2	--	--
13...	1230	—	31.5	e650	--	8.7	--	302	—	8.0	--	3.7
13...	1430	2.3	34.5	e650	—	7.3	—	--	—	8.1	--	--
13...	1630	—	35.0	e650	—	6.7	--	308	—	7.6	--	4.6
13...	1830	—	32.5	e650	27.5	--	--	320	--	7.7	--	--
13...	2015	—	28.0	e650	22.0	5.4	72	--	--	7.0	--	3.8
13...	2215	--	25.0	655	22.0	5.0	66	284	--	7.0	--	--
14...	0015	--	23.0	e650	18.5	—	--	278	--	—	--	--
14...	0215	--	21.0	e650	17.5	4.4	54	310	--	6.8	--	--
14...	0445	--	19.5	e650	16.0	--	--	316	--	6.9	--	--
14...	0615	--	18.0	e650	16.0	5.8	68	304	--	6.8	--	--
14...	0830	—	--	e650	16.0	6.3	74	312	--	6.9	--	8.6
14...	1030	--	26.0	655	19.5	7.1	90	293	--	7.1	--	--
14...	1245	—	29.5	e650	20.5	--	--	318	--	7.1	--	--

DATE	TIME	NITRO-GEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH_4 TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITRO-GEN, NO_2 TOTAL (MG/L AS N)	NITRO-GEN, NO_3 TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, TOTAL (MG/L AS P)
AUG, 1980										
12...	1045	1.3	.02	1.3	.62	.09	.53	1.9	.53	.63
13...	1230	1.9	.11	1.8	.20	.04	.16	2.1	.42	.55
14...	0015	1.2	.11	1.1	.83	.08	.75	2.0	.53	.59

DATE	TIME	NITRO-GEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, NH_4 DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO_2+NO_3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO_2 DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO_3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
AUG, 1980										
12...	1045	1.1	.04	1.1	.59	.08	.51	1.7	.50	.53
13...	1230	--	.09	--	.20	.06	.14	--	.37	.43
13...	1630	.97	.10	.87	.56	.12	.44	1.5	.35	.44
13...	2015	.76	.12	.64	.29	.07	.22	1.1	.36	.41
14...	0015	.77	.03	.74	.67	.10	.57	1.4	.30	.40
14...	0445	1.2	.10	1.1	--	.16	--	--	.57	.61
14...	0830	1.8	.07	1.7	.79	.11	.68	2.6	.52	.56
14...	1245	1.2	.06	1.1	.51	.11	.40	1.7	.58	.62

e Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 43 - HERMAN DITCH RETURN AT WADSWORTH--Continued

DATE	TIME	CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTIMATE (MG/L)
AUG, 1980												
12...	1045	--	6.9	12	12	.17	.07	--	--	--	--	--
13...	1230	--	5.0	9.5	10	.14	.06	--	--	--	--	--
13...	1630	--	5.5	10	10	.14	.06	--	--	--	--	--
13...	2015	--	2.4	4.9	5.4	.11	.05	--	--	--	--	--
14...	0015	--	4.2	7.3	7.6	.16	.07	--	--	--	--	--
14...	0445	--	6.6	12	12	.16	.07	--	--	--	--	--
14...	0830	--	5.2	10	12	.13	.06	--	--	--	--	--
14...	1245	--	8.8	15	15	.17	.07	--	--	--	--	--

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/ CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
AUG, 1980								
12...	1045	.900	.171	10000	675	666	--	--
13...	1230	2.33	.611	3863	659	650	3841	8.1
13...	1630	--	--	--	--	--	3261	--
13...	2015	--	--	--	--	--	2354	--
14...	0015	.277	<.158	28880	686	678	1579	24
14...	0445	--	--	--	--	--	1453	--
14...	0830	--	--	--	--	--	2683	--
14...	1245	--	--	--	--	--	5326	--

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 44 - TRUCKEE RIVER AT OLD U.S. HIGHWAY 40 BRIDGE AT WADSWORTH

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
06...	0530	e55	17.5	660	18.5	--	--	188	--	7.6	70	--
06...	0730	e60	18.0	660	18.0	--	--	190	--	7.8	70	--
06...	1000	e80	17.5	660	18.5	--	--	183	--	8.9	71	--
06...	1145	e90	20.0	660	20.0	--	--	183	--	9.5	69	--
06...	1400	e95	20.0	660	22.0	--	--	180	--	9.8	70	--
06...	1545	e95	18.0	660	24.0	--	--	157	--	10.1	68	--
06...	1745	e90	20.0	660	23.5	--	--	176	--	10.4	68	--
06...	1900	e90	23.0	660	22.5	--	--	181	--	10.4	68	--
06...	2045	e85	--	660	21.5	--	--	180	--	10.1	69	--
07...	0545	e70	--	665	15.5	--	--	152	--	--	67	--
07...	0715	e65	9.0	665	15.0	--	--	164	--	--	--	--
07...	0900	e65	11.0	665	15.5	--	--	174	--	--	--	--
07...	1100	e70	13.5	665	18.0	--	--	178	--	--	--	--
07...	1230	e75	13.0	665	19.5	--	--	166	--	--	65	--
07...	1500	e70	16.0	665	22.0	--	--	170	--	--	--	--
07...	1630	e70	17.5	665	22.5	--	--	173	--	--	63	--
07...	1800	e70	14.5	665	22.0	--	--	181	--	--	--	--
07...	1915	e65	14.0	665	21.0	--	--	160	--	--	63	--
AUG, 1979												
09...	0900	46	21.5	e658	21.0	5.0	66	265	--	7.8	--	--
09...	1045	41	25.5	e658	21.0	6.6	87	270	--	8.0	--	--
09...	1300	33	--	e658	21.5	8.8	117	278	--	8.3	--	--
09...	1500	27	30.5	e658	23.5	11.6	161	273	--	8.8	--	--
09...	1645	25	--	e657	25.0	11.8	166	250	--	9.0	--	--
09...	2115	26	--	661	26.0	10.0	141	260	--	9.3	102	--
09...	2345	31	22.0	660	25.0	8.0	111	263	--	9.2	102	--
10...	0200	31	21.5	660	24.0	5.4	68	250	--	8.8	103	--
10...	0400	31	21.0	661	22.5	4.1	53	249	159	8.3	105	--
10...	0600	31	--	661	22.0	3.4	45	254	--	7.9	107	--
10...	0730	34	24.0	661	22.0	3.6	47	254	--	7.8	107	--
10...	0900	38	--	662	23.0	4.8	64	259	--	7.8	107	--
JUN, 1980												
03...	1650	2060	18.0	654	11.0	9.9	104	119	91	--	--	--
05...	1000	2020	13.0	e654	11.0	9.6	101	111	--	7.4	--	--
05...	1200	2030	18.0	e654	11.5	--	--	116	--	7.3	--	--
05...	1410	2030	--	e654	12.0	--	--	148	--	7.4	--	--
05...	1620	2030	19.0	e654	13.0	--	--	132	--	7.7	--	22
05...	1805	2030	18.0	e654	13.0	9.2	101	124	--	7.7	--	--
05...	2015	2010	13.0	e654	12.0	9.2	99	128	--	7.7	--	41
05...	2200	2000	11.5	e654	--	9.2	--	130	--	7.6	--	--
06...	0010	1970	9.0	e654	11.0	9.2	97	127	--	7.7	--	35
06...	0200	1970	9.0	e654	10.5	9.3	97	125	--	7.6	--	--
06...	0420	1950	6.5	e659	10.5	9.2	95	125	--	7.6	--	34
06...	0615	1950	5.5	e659	10.5	9.2	95	129	--	7.6	--	--
06...	0815	1950	11.0	e659	11.5	9.3	98	125	--	7.6	--	--
06...	1000	1940	14.5	e659	12.0	9.3	99	127	--	7.6	--	--
06...	1200	1950	20.0	e659	13.0	9.2	100	136	--	7.6	--	24
AUG, 1980												
12...	1030	75	29.5	656	20.0	9.7	123	248	153	8.6	--	5.0
13...	1015	55	29.0	e650	20.0	7.7	99	259	--	--	--	--
13...	1215	60	31.5	e650	21.5	10.2	136	256	--	8.0	--	3.4
13...	1445	55	34.5	e650	24.5	13.1	182	256	--	8.8	--	--
13...	1615	55	35.0	e650	26.0	13.0	188	254	--	8.6	--	5.0
13...	1815	55	32.5	e650	26.0	11.8	171	257	--	8.7	--	--
13...	2000	50	28.0	e650	25.5	9.8	140	259	--	8.7	--	3.5
13...	2200	50	25.0	655	24.0	7.6	106	264	--	8.6	--	--
13...	2400	50	23.0	e650	22.0	5.8	77	--	--	8.0	--	--
14...	0200	50	21.0	e650	21.0	5.0	65	269	--	--	--	--
14...	0430	50	19.5	e650	19.5	5.1	64	270	--	--	--	4.7
14...	0600	55	18.0	e650	18.0	5.4	66	272	--	--	--	--
14...	0815	55	--	e650	18.0	6.0	74	274	--	--	--	5.9
14...	1015	60	26.0	655	18.5	8.0	99	274	--	--	--	--
14...	1230	60	29.5	e650	20.0	11.2	144	269	--	--	--	7.5

e Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 44 - TRUCKEE RIVER AT OLD U.S. HIGHWAY 40 BRIDGE AT WADSWORTH--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
06...	0530	.54	.04	.50	.34	.12	.22	.88	.22	.29
06...	0730	.53	.05	.48	.34	.14	.20	.87	.24	.32
06...	1000	.51	.04	.47	.18	.12	.06	.69	.28	.36
06...	1145	.65	.06	.59	.10	.10	.00	.75	.28	.36
06...	1400	.51	.02	.49	.03	.04	.00	.54	.29	.37
06...	1545	.64	.02	.62	.05	.06	.00	.69	.29	.36
06...	1745	.50	.05	.45	.05	.06	.00	.55	.28	.34
06...	1900	.44	.04	.40	.04	.04	.00	.48	.27	.32
06...	2045	.72	.07	.65	.04	.04	.00	.76	.25	.32
07...	0545	.67	.09	.58	.16	.10	.06	.83	.14	.19
07...	0900	.87	.10	.77	.16	.10	.06	1.0	.19	.25
07...	1230	.49	.12	.37	.10	.06	.04	.59	.25	.33
07...	1630	.79	.01	.78	.05	.06	.00	.84	.28	.33
07...	1915	.66	.04	.62	.03	.04	.00	.69	.25	.30
JUN, 1980										
03...	1650	.51	.10	.41	.19	.03	.16	.70	--	.16
AUG, 1980										
12...	1030	1.4	.02	1.4	.44	.04	.40	1.8	.26	.30
13...	1215	1.1	.07	1.0	.36	.03	.33	1.5	.31	.40
13...	2400	1.2	.04	1.2	--	--	--	--	.24	.38

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
09...	0900	.27	.03	.24	.09	.01	.08	.36	.34	.45
09...	1300	.31	.03	.28	.04	.01	.03	.35	.36	--
09...	1645	.50	.03	.47	.01	.01	.00	.51	.35	.41
09...	2115	.39	.03	.36	.00	.01	.00	.39	.32	.43
09...	2345	.43	.04	.39	.00	.01	.00	.43	.40	.45
10...	0200	.40	.01	.39	.01	.01	.00	.41	.35	.45
10...	0400	.37	.01	.36	.03	.00	.03	.40	.33	.41
10...	0730	.33	.03	.30	.05	.01	.04	.38	.36	.44
10...	0900	.33	.00	.33	.04	.01	.03	.37	.36	.45
JUN, 1980										
03...	1650	.53	.13	.40	.13	.02	.11	.66	.08	.13
05...	1200	.89	.25	.64	.36	.02	.34	1.3	.08	.11
05...	1620	.49	.26	.23	.45	.02	.43	.94	.13	.12
05...	2015	.44	.13	.31	.19	.01	.18	.63	.11	.08
06...	0010	.74	--	--	.23	.04	.19	.97	.19	.19
06...	0420	.64	.15	.49	.24	.04	.20	.88	.11	.09
06...	0815	.60	.22	.38	.30	.02	.28	.90	.12	.11
06...	1200	--	.18	--	.28	.03	.25	--	.13	.12
AUG, 1980										
12...	1030	.94	.03	.91	.44	.04	.40	1.4	.25	.26
13...	1215	.79	.03	.76	.35	.06	.29	1.1	.22	.34
13...	1615	1.1	.03	1.1	--	.02	--	--	.23	.26
13...	2000	.59	.03	.56	.40	.07	.33	.99	.35	.39
13...	2400	.63	.02	.61	.47	.08	.39	1.1	.26	.36
14...	0430	.72	.06	.66	.60	.08	.52	1.3	.42	.45
14...	0815	.51	.06	.45	.50	.06	.44	1.0	.36	.38
14...	1230	.51	.02	.49	.40	.09	.31	.91	.27	.36

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 44 - TRUCKEE RIVER AT OLD U.S. HIGHWAY 40 BRIDGE AT WADSWORTH—Continued

DATE	TIME	CARBONACEOUS BOD					TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTIMATE (MG/L)
JUN, 1979												
06...	0530	—	1.8	4.2	5.1	.09	.04	2.9	5.2	5.4	—	—
06...	0730	—	—	—	—	—	—	1.8	3.8	4.3	—	—
06...	1000	—	2.0	4.4	5.1	.10	.04	2.1	4.6	5.2	—	—
06...	1400	—	2.1	4.5	5.1	.10	.04	2.2	4.6	5.0	—	—
06...	1745	—	2.0	4.8	5.9	.09	.04	2.4	5.9	7.3	—	—
06...	2045	—	1.7	4.0	5.0	.08	.03	2.0	4.7	5.8	—	—
07...	0545	—	1.6	3.9	5.0	.08	.03	1.8	5.1	7.6	—	—
07...	0900	.45	2.2	4.5	5.0	.12	.05	2.9	5.1	5.3	—	—
07...	1230	—	—	—	—	—	—	3.5	7.4	8.4	—	—
07...	1630	1.3	3.0	4.7	4.8	.20	.09	3.3	5.6	5.8	—	—
07...	1915	1.2	2.4	4.4	4.8	.14	.06	3.1	4.8	4.9	—	—
AUG, 1979												
09...	0900	.30	1.6	2.8	2.9	.15	.06	—	—	—	—	—
09...	1645	.03	2.3	3.9	4.0	.16	.07	—	—	—	—	—
09...	2115	—	1.1	3.0	4.2	.06	.03	—	—	—	—	—
10...	0200	—	1.6	3.4	4.0	.10	.04	—	—	—	—	—
10...	0900	—	2.1	4.6	5.4	.10	.04	—	—	—	—	—
JUN, 1980												
03...	1650	—	1.7	2.8	2.9	.18	.08	—	—	2.6	—	—
05...	1200	—	1.1	2.3	2.5	.12	.05	—	—	3.4	—	.9
05...	1620	.50	1.2	2.2	2.3	.14	.06	—	—	—	—	—
05...	2015	.04	.9	2.2	2.6	.09	.04	—	—	4.0	.14	1.4
06...	0010	—	1.0	2.3	2.7	.10	.04	—	—	3.3	—	.6
06...	0420	—	—	—	—	—	—	—	—	3.0	—	—
06...	0815	.47	1.0	1.9	2.1	.13	.06	—	—	3.9	.14	1.8
06...	1200	.64	1.5	2.6	2.8	.16	.07	—	—	3.4	—	.6
AUG, 1980												
12...	1030	—	2.0	3.8	4.0	.14	.06	—	—	5.7	—	1.7
13...	1215	—	3.3	6.2	6.6	.14	.06	—	—	7.5	—	.9
13...	1615	—	3.2	6.4	7.0	.13	.06	—	—	8.0	—	1.0
13...	2000	—	2.9	6.0	6.2	.13	.06	—	—	7.4	—	1.2
13...	2400	.08	3.0	5.2	5.4	.15	.06	—	—	6.3	—	.9
14...	0430	—	2.0	3.6	3.8	.15	.06	—	—	6.4	.04	2.6
14...	0815	.10	2.2	4.1	4.4	.15	.06	—	—	6.0	.09	1.6
14...	1230	.02	2.7	4.9	5.1	.15	.06	—	—	6.1	—	1.0

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
AUG, 1979								
09...	0900	.446	.036	33630	353	338	—	—
09...	1300	.473	.090	29600	338	324	—	—
09...	1645	.914	.207	8753	412	404	—	42
09...	2115	1.05	.207	10480	423	412	—	—
09...	2345	4.20	1.23	2857	419	407	—	—
10...	0400	.836	.212	9569	420	412	—	—
10...	0730	1.15	.238	6087	423	416	—	—
JUN, 1980								
03...	1650	1.19	.222	5042	369	363	—	14
05...	1200	.930	.186	7527	367	360	666	12
05...	2015	1.47	.249	4762	311	304	—	—
06...	0010	.977	.153	7165	304	297	462	9.7
AUG, 1980								
12...	1030	2.36	1.04	3814	665	656	—	—
13...	1215	4.11	1.87	1946	664	656	3597	12
13...	1615	—	—	—	—	—	4236	—
13...	2000	—	—	—	—	—	2019	—
13...	2400	1.35	.769	6667	664	655	3025	20
14...	0430	—	—	—	—	—	2984	—
14...	0815	—	—	—	—	—	3255	—
14...	1230	—	—	—	—	—	3513	—

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
06...	0700	a105	18.0	660	18.0	--	--	276	--	9.0	82	--
06...	0900	--	17.0	665	18.0	--	--	275	--	9.0	82	--
06...	1115	--	22.0	665	19.5	--	--	265	--	9.2	82	--
06...	1330	--	21.0	665	21.5	--	--	268	--	9.1	84	--
06...	1500	108	22.0	660	23.0	--	--	270	--	9.4	80	--
06...	1700	--	26.0	660	23.0	--	--	291	--	--	--	--
06...	1815	--	24.5	660	22.5	--	--	268	--	9.6	81	--
06...	2015	--	16.0	660	21.0	--	--	300	--	9.6	--	--
07...	0630	--	9.0	665	13.0	--	--	311	--	9.0	88	--
07...	0745	--	10.5	665	12.5	--	--	304	--	8.9	84	--
07...	0945	--	12.0	665	14.0	--	--	305	--	--	--	--
07...	1145	--	13.0	665	16.5	--	--	292	--	--	--	--
07...	1330	--	14.5	665	19.5	--	--	300	--	--	78	--
07...	1530	--	16.5	665	21.5	--	--	294	--	--	--	--
07...	1715	--	15.5	665	21.5	--	--	294	--	--	--	--
07...	1845	--	15.5	665	22.0	--	--	292	--	--	--	--
07...	2015	--	12.0	665	20.5	--	--	292	--	--	80	--
AUG, 1979												
09...	0945	a35	25.5	662	21.5	6.6	87	460	--	8.4	--	--
09...	1145	47	24.5	e662	23.5	8.4	115	458	--	8.4	--	--
09...	1400	--	29.5	e661	27.0	10.1	146	442	--	8.7	--	--
09...	1550	--	33.5	e661	28.0	10.4	153	442	--	8.8	--	--
09...	1700	--	33.5	e662	29.0	10.2	152	431	281	8.9	--	--
09...	1945	--	27.5	e660	28.0	8.4	123	456	--	8.8	--	--
09...	2200	--	18.0	e660	26.0	6.8	96	446	--	8.7	--	--
10...	0010	--	16.0	e661	25.5	5.7	80	453	287	8.5	--	--
10...	0200	--	13.5	e661	23.0	5.1	68	463	--	8.5	--	--
10...	0400	--	15.5	e661	20.0	4.6	58	477	--	8.2	--	--
10...	0610	--	19.0	e662	21.5	4.6	58	466	--	8.1	--	--
10...	0800	--	26.0	e662	21.5	5.0	63	460	--	8.2	--	--
JUN, 1980												
05...	1015	a2040	22.0	e660	11.5	9.2	99	124	--	7.7	--	--
05...	1205	--	20.0	e658	13.0	8.9	97	118	--	--	--	--
05...	1415	--	16.0	e658	13.5	8.9	98	124	--	7.4	--	--
05...	1615	--	16.5	e658	13.5	9.0	99	126	--	7.5	--	31
05...	1800	--	16.0	e658	13.5	--	--	129	--	--	--	--
05...	2000	--	14.5	e658	12.5	9.0	97	129	--	--	--	36
05...	2200	--	9.2	e659	11.5	--	--	124	--	--	--	--
05...	2400	--	7.5	e658	10.5	8.9	92	130	--	--	--	31
06...	0200	--	5.5	e659	10.0	9.0	92	133	--	--	--	--
06...	0400	--	2.0	e659	9.5	9.1	92	131	--	7.9	--	25
06...	0600	--	4.5	e659	9.5	9.3	94	127	--	8.0	--	--
06...	0800	--	11.0	e659	10.5	9.3	96	136	--	7.9	--	21
06...	1000	--	15.5	e660	12.0	9.4	100	134	--	8.0	--	--
06...	1200	--	17.5	e660	14.0	9.3	103	139	--	7.9	--	30
AUG, 1980												
12...	1125	--	30.5	--	20.5	9.4	--	369	201	7.7	--	3.6
13...	1000	a55	26.5	e660	19.5	7.2	89	--	--	--	--	--
13...	1200	--	31.0	e660	21.0	8.0	103	377	--	8.2	--	3.5
13...	1400	--	31.0	657	23.5	10.0	137	--	--	8.6	--	--
13...	1600	--	32.0	e660	25.5	11.2	158	368	--	9.0	--	4.5
13...	1800	--	32.0	655	26.0	11.0	155	387	--	9.1	--	--
13...	2000	--	25.0	e660	25.0	9.8	136	384	--	9.2	--	--
13...	2200	--	24.5	e660	23.5	8.0	110	380	--	9.3	--	--
13...	2400	--	23.5	e660	21.5	6.5	86	377	--	9.2	--	5.8
14...	0200	--	15.5	e660	20.5	5.5	70	385	--	8.9	--	--
14...	0400	--	8.5	e660	19.5	5.2	64	394	--	8.7	--	7.8
14...	0600	--	7.0	e660	18.5	4.8	59	398	--	8.4	--	--
14...	0800	--	22.0	657	18.0	5.2	63	398	--	8.1	--	5.5
14...	1000	--	24.5	e660	18.5	6.4	79	404	--	8.0	--	--
14...	1200	--	30.0	e660	20.0	8.0	101	406	--	8.8	--	7.9

a Average streamflow estimated for the synoptic sampling period.
e Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
06...	0700	.60	.01	.59	.03	.02	.01	.63	.18	.29
06...	0900	.54	.04	.50	.02	.00	.02	.56	.19	.27
06...	1115	.46	.04	.42	.01	.00	.01	.47	.17	.27
06...	1330	.58	.02	.56	.02	.02	.00	.60	.14	.27
06...	1500	.56	.03	.53	.01	.00	.01	.57	.14	.22
06...	1700	.48	.03	.45	.01	.00	.01	.49	.15	.20
06...	1815	.52	.03	.49	.01	.02	.00	.53	.15	.22
06...	2015	—	.08	—	.01	.00	.01	—	.14	.22
07...	0630	.68	.05	.63	.00	.00	.00	.68	.18	.25
07...	0945	.73	.01	.72	.02	.02	.00	.75	.15	.18
07...	1330	.66	.04	.62	.01	.02	.00	.67	.19	.23
07...	1715	.59	.06	.53	.01	.00	.01	.60	.14	.18
07...	2015	.66	.03	.63	.00	.00	.00	.66	.15	.18
JUN, 1980										
05...	1205	.62	.10	.52	.25	.03	.22	.87	.10	.16
05...	2000	.77	.13	.64	.23	.02	.21	1.0	.12	—
06...	0400	.50	—	—	—	.03	—	—	.10	.14
06...	1200	.57	.10	.47	.25	.03	.22	.82	.13	.18
AUG, 1980										
12...	1125	—	.07	—	.01	.01	.00	—	.20	.24
13...	1200	.65	.09	.56	.00	.00	.00	.65	.20	.28
13...	2400	.79	—	—	.00	.00	.00	.79	.26	.34

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
09...	0945	.29	.07	.22	.00	.00	.00	.29	—	.23
09...	1400	.18	.00	.18	.00	.00	.00	.18	.22	.26
09...	1700	.34	.01	.33	.00	.00	.00	.34	.22	.21
10...	0010	.25	.01	.24	.00	.00	.00	.25	.21	.20
10...	0400	.27	.00	.27	.00	.01	.00	.27	.20	.23
10...	0800	.37	.01	.36	.01	.01	.00	.38	.21	.26
JUN, 1980										
05...	1205	—	.10	—	.25	.03	.22	—	.10	.10
05...	1615	.46	.18	.28	.28	.02	.26	.74	.14	.11
05...	2000	—	-	—	—	.02	—	—	.13	.12
05...	2400	.23	.10	.13	.21	.01	.20	.44	.11	.08
06...	0400	—	.10	—	—	.02	—	—	.11	.09
06...	0800	.57	.17	.40	.54	.02	.52	1.1	.11	.08
06...	1200	—	.13	—	—	.03	—	—	.08	.11
AUG, 1980										
12...	1125	.86	.05	.81	.00	.00	.00	.86	.19	.21
13...	1200	.58	.03	.55	.00	.01	.00	.58	.17	.22
13...	1600	.43	.00	.43	.00	.01	.00	.43	.14	.24
13...	2000	.61	.06	.55	.00	.02	.00	.61	.18	.28
13...	2400	.63	.05	.58	.00	.01	.00	.63	.21	.22
14...	0400	.77	.07	.70	.00	.01	.00	.77	.25	.26
14...	0800	.50	.03	.47	.00	.01	.00	.50	.22	.27
14...	1200	.48	.04	.44	.00	.02	.00	.48	.22	.25

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON—Continued

DATE	TIME	CARBONACEOUS BOD: LAGTIME AT 20°C (DAYS)	CARBONACEOUS BOD: 5-DAY (MG/L)	CARBONACEOUS BOD: 20-DAY (MG/L)	CARBONACEOUS BOD: ULTIMATE (MG/L)	CARBONACEOUS BOD: DECAY RATE, BASE E, PER DAY AT 20°C	CARBONACEOUS BOD: DECAY RATE, BASE 10, PER DAY AT 20°C	TOTAL BOD: 5-DAY (MG/L)	TOTAL BOD: 20-DAY (MG/L)	TOTAL BOD: ULTIMATE (MG/L)	NITROGENOUS BOD: LAGTIME AT 20°C (DAYS)	NITROGENOUS BOD: ULTIMATE (MG/L)
JUN, 1979												
06...	0700	--	4.2	8.6	9.6	.11	.05	3.8	7.9	8.8	--	--
06...	1115	--	3.5	6.4	6.7	.15	.06	1.8	4.6	5.8	--	--
06...	1330	--	1.8	4.7	6.1	.07	.03	2.9	6.0	6.6	--	--
06...	1700	.13	3.8	7.3	7.8	.14	.06	2.8	6.7	8.1	--	--
06...	2015	--	2.2	5.6	7.6	.07	.03	2.9	7.3	9.6	--	--
07...	0630	--	1.8	5.1	7.7	.05	.02	2.3	5.6	7.0	--	--
07...	0945	.41	3.1	4.6	4.7	.22	.10	3.2	6.7	7.6	--	--
07...	1330	.56	3.3	5.2	5.3	.20	.09	3.5	7.4	8.3	--	--
07...	1715	.82	2.8	4.8	5.0	.16	.07	2.9	5.2	5.4	--	--
07...	2015	.82	3.0	6.1	6.8	.11	.05	3.0	6.5	7.4	--	--
AUG, 1979												
09...	0945	--	2.0	3.9	4.3	.13	.06	--	--	--	--	--
09...	1400	.75	1.9	3.4	3.5	.16	.07	--	--	--	--	--
09...	1700	--	2.4	4.1	4.2	.17	.07	--	--	--	--	--
10...	0400	.10	1.8	3.0	3.1	.17	.07	--	--	--	--	--
JUN, 1980												
05...	1205	.02	1.6	3.4	3.8	.12	.05	--	--	--	--	--
05...	1615	.46	1.3	2.6	2.8	.13	.06	--	--	--	--	--
05...	2000	.45	1.1	2.2	2.4	.12	.09	--	--	--	--	--
05...	2400	.53	1.1	2.6	3.0	.09	.04	--	--	--	--	--
06...	0400	.44	.9	1.8	2.0	.11	.05	--	--	--	--	--
06...	0800	.22	1.2	2.3	2.5	.13	.06	--	--	--	--	--
06...	1200	.25	1.1	2.2	2.4	.12	.05	--	--	--	--	--
AUG, 1980												
12...	1125	--	2.3	4.7	5.2	.12	.05	--	--	--	--	--
13...	1200	--	2.4	4.5	4.8	.14	.06	--	--	--	--	--
13...	1600	--	2.9	5.6	6.0	.14	.06	--	--	--	--	--
13...	2000	--	3.0	5.4	5.7	.15	.06	--	--	--	--	--
13...	2400	--	3.2	6.2	6.7	.13	.06	--	--	--	--	--
14...	0400	--	3.2	5.6	5.8	.16	.07	--	--	--	--	--
14...	0800	--	3.0	5.5	5.9	.14	.06	--	--	--	--	--
14...	1200	.12	3.4	5.9	6.1	.16	.07	--	--	--	--	--

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
AUG, 1979								
09...	0945	1.05	.181	10480	378	367	--	--
09...	1400	1.37	.207	6569	363	354	--	--
09...	1700	.525	.095	22860	413	401	--	--
10...	0010	1.58	.190	7595	425	413	--	--
10...	0400	1.92	.212	4688	446	437	--	--
10...	0800	2.31	.297	6061	416	402	--	--
JUN, 1980								
05...	1205	--	--	--	--	--	348	--
05...	2400	--	--	--	--	--	426	--
AUG, 1980								
12...	1125	.865	.305	9249	637	629	--	--
13...	1200	1.24	.329	5645	671	664	3605	2.0
13...	1600	--	--	--	--	--	4035	--
13...	2000	--	--	--	--	--	3568	--
13...	2400	.975	.344	9231	685	676	3353	2.6
14...	0400	--	--	--	--	--	3154	--
14...	0800	--	--	--	--	--	3295	--
14...	1200	--	--	--	--	--	3893	--

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 62 - TRUCKEE RIVER AT STATE HIGHWAY 447 AT NIXON

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
07...	0540	[a]65	10.0	665	14.0	7.4	82	381	--	--	84	--
07...	0740	--	9.5	665	14.5	7.8	87	393	--	--	--	--
07...	0940	--	--	665	15.0	8.4	95	378	--	--	--	--
07...	1130	--	13.0	665	18.0	--	--	399	--	--	--	--
07...	1330	--	18.0	665	21.0	8.9	114	394	--	--	88	--
07...	1530	--	22.0	665	22.0	8.8	114	403	--	--	--	--
07...	1730	--	21.0	665	22.0	8.8	114	413	--	--	81	--
07...	1930	--	21.0	665	21.0	8.5	109	432	--	--	--	--
08...	0615	--	11.5	670	13.5	7.9	86	390	--	--	86	--
08...	0745	--	14.5	670	13.5	8.1	88	394	--	--	--	--
08...	0910	--	19.5	670	15.5	8.3	94	378	--	--	85	--
08...	1110	52	22.0	670	18.0	8.6	102	413	--	--	--	--
08...	1310	--	23.0	670	21.5	9.0	115	401	--	--	--	--
08...	1510	--	21.5	665	23.5	8.7	116	405	--	--	--	--
08...	1710	--	20.0	665	24.0	8.3	112	401	--	--	84	--
08...	1910	--	19.5	665	22.0	8.2	104	406	--	--	--	--
08...	2010	--	19.0	665	23.0	7.9	96	443	--	--	84	--
AUG, 1979												
09...	1005	[a]30	24.5	664	23.0	9.0	120	649	--	8.4	112	--
09...	1200	31	33.0	664	25.0	10.0	139	648	--	8.5	--	--
09...	1400	--	38.5	663	28.0	10.4	153	639	--	8.7	121	--
09...	1600	--	38.5	663	30.0	10.4	158	598	--	8.9	126	--
09...	1800	--	34.0	662	29.5	9.6	145	619	--	8.9	--	--
09...	2000	--	31.0	662	27.5	7.4	109	614	--	8.8	--	--
09...	2200	--	24.5	662	25.5	6.1	85	594	--	8.6	--	--
10...	0015	--	20.0	663	23.0	5.7	75	564	--	8.4	--	--
10...	0205	--	18.5	663	22.5	5.2	68	588	--	8.3	--	--
10...	0405	--	18.0	663	21.0	5.4	69	587	400	8.2	--	--
10...	0605	--	22.5	664	21.0	5.7	73	596	--	8.0	--	--
10...	0820	--	27.0	664	22.5	7.0	92	588	--	8.1	--	--
JUN, 1980												
03...	1605	--	16.5	657	11.0	9.9	104	135	90	--	--	--
05...	1000	[a]2050	14.0	661	11.0	9.5	99	--	--	7.7	--	--
05...	1200	--	13.0	659	12.0	9.5	101	--	--	7.7	--	27
05...	1400	--	16.0	659	12.5	9.3	100	135	--	7.7	--	--
05...	1550	--	17.0	659	14.0	9.2	102	141	--	7.7	--	30
05...	1755	--	19.0	659	14.0	9.1	101	142	--	7.8	--	--
05...	2000	--	14.0	659	13.0	9.0	98	140	--	7.8	--	--
05...	2200	--	12.0	660	12.0	8.9	95	142	--	7.8	--	--
05...	2355	--	10.0	659	11.5	9.1	96	140	--	7.9	--	--
06...	0200	--	10.0	660	11.0	9.3	97	138	--	7.8	--	--
06...	0400	--	9.5	660	10.0	9.4	96	145	--	7.8	--	52
06...	0555	--	5.5	660	10.0	9.5	97	143	--	7.8	--	--
06...	0755	--	11.0	660	11.0	9.6	100	141	--	7.9	--	40
06...	0955	--	14.0	661	11.0	9.7	101	145	--	7.7	--	--
06...	1150	--	19.0	661	12.0	9.6	102	142	--	7.7	--	33
AUG, 1980												
12...	1015	--	--	--	21.0	--	--	--	278	8.0	--	5.6
13...	1035	[a]45	28.5	660	21.5	8.4	109	477	--	8.4	--	--
13...	1245	--	--	[e]660	24.0	9.0	123	490	--	8.4	--	3.4
13...	1430	--	32.5	[e]660	25.5	9.2	130	502	--	8.5	--	--
13...	1645	--	32.5	[e]660	26.5	9.1	128	505	--	8.5	--	3.2
13...	1830	--	30.0	[e]660	25.0	8.4	117	520	--	8.5	--	--
13...	2045	--	26.0	[e]660	23.0	6.4	85	528	--	8.3	--	7.5
13...	2230	--	22.5	[e]660	21.0	6.1	78	520	--	8.3	--	--
14...	0030	--	19.5	[e]660	20.0	6.0	76	527	--	8.1	--	6.6
14...	0245	--	--	[e]660	19.0	5.9	73	529	--	8.0	--	--
14...	0445	--	18.5	[e]660	18.5	6.0	73	521	--	7.9	--	3.5
14...	0645	--	18.0	[e]660	18.0	6.2	76	532	--	7.8	--	--
14...	0830	--	23.0	[e]660	18.0	7.3	89	528	--	8.0	--	6.0
14...	1030	--	25.0	[e]660	19.5	8.4	105	530	--	8.3	--	--
14...	1200	--	28.5	[e]660	21.0	9.2	118	525	--	8.4	--	7.2

[a] Average streamflow estimated for the synoptic sampling period.
[e] Estimated.

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 62 - TRUCKEE RIVER AT STATE HIGHWAY 447 AT NIXON—Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
07...	0540	.48	.05	.43	.01	.02	.00	.49	.15	.18
07...	0940	.41	.04	.37	.02	.02	.00	.43	.15	.19
07...	1330	.64	.05	.59	.01	.02	.00	.65	.15	.18
07...	1730	.66	.01	.65	.01	.00	.01	.67	.14	.19
07...	1930	.48	.02	.46	.02	.02	.00	.50	.15	.16
08...	0615	.73	.01	.72	.01	.02	.00	.74	.14	.19
08...	0910	.49	.01	.48	.00	.00	.00	.49	.15	.19
08...	1710	.70	.06	.64	.02	.02	.00	.72	.17	—
08...	2010	.49	.03	.46	.02	.02	.00	.51	.16	.20
JUN, 1980										
03...	1605	—	—	—	.32	.04	.28	—	.23	—
05...	1200	.58	.04	.54	—	.03	—	—	.11	.16
05...	2000	.48	.10	.38	.37	.03	.34	.85	.13	.13
06...	0400	.63	—	—	.23	.02	.21	.86	.12	.16
06...	1150	.41	.04	.37	.28	.03	.25	.69	.10	.16
AUG, 1980										
12...	1015	.99	.02	.97	.00	.00	.00	.99	.23	.26
13...	1245	—	.02	—	.00	.00	.00	—	.20	.28
14...	0030	.92	.01	.91	.00	.02	.00	.92	.21	.27

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
09...	1200	.67	.01	.66	.03	.00	.03	.70	.18	—
09...	1600	.52	.00	.52	.03	.01	.02	.55	.10	.11
09...	2000	.48	.01	.47	.00	.00	.00	.48	.13	.16
10...	0015	.45	.01	.44	.00	.00	.00	.45	.13	.12
10...	0405	.32	.00	.32	.00	.00	.00	.32	.12	.14
10...	0820	.26	.01	.25	.00	.00	.00	.26	.10	.17
JUN, 1980										
03...	1605	.40	.16	.24	.30	.02	.28	.70	.17	.18
05...	1200	—	-	—	.34	.03	.31	—	.05	.09
05...	1550	.33	.13	.20	.24	.02	.22	.57	.14	.11
05...	2000	—	.04	—	.32	.03	.29	—	.13	.13
05...	2355	.40	.13	.27	.18	.02	.16	.58	.14	.14
06...	0400	.52	.04	.48	—	.02	—	—	.05	.09
06...	0755	.37	.12	.25	—	.02	—	—	.09	.08
06...	1150	—	.04	—	—	.03	—	—	.11	.09
AUG, 1980										
12...	1015	.71	.01	.70	.00	.00	.00	.71	.22	.23
13...	1245	—	.03	—	.00	.00	.00	—	.20	.23
13...	1645	.60	.04	.56	.00	.00	.00	.60	.12	.15
13...	2045	1.0	.07	.93	.00	.01	.00	1.0	.16	.20
14...	0030	.75	.01	.74	.00	.01	.00	.75	.19	.22
14...	0445	.71	.05	.66	.00	.02	.00	.71	.22	.25
14...	0830	.72	.03	.69	.00	.00	.00	.72	.21	.26
14...	1200	.86	.05	.81	.00	.02	.00	.86	.23	.26

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 62 - TRUCKEE RIVER AT STATE HIGHWAY 447 AT NIXON—Continued

DATE	TIME	CARBONACEOUS BOD: LAGTIME AT 20°C (DAYS)	CARBONACEOUS BOD: 5-DAY (MG/L)	CARBONACEOUS BOD: 20-DAY (MG/L)	CARBONACEOUS BOD: ULTIMATE (MG/L)	CARBONACEOUS BOD: DECAY RATE, BASE E, PER DAY AT 20°C	CARBONACEOUS BOD: DECAY RATE, BASE 10, PER DAY AT 20°C	TOTAL BOD: 5-DAY (MG/L)	TOTAL BOD: 20-DAY (MG/L)	TOTAL BOD: ULTIMATE (MG/L)	NITROGENOUS BOD: LAGTIME AT 20°C (DAYS)	NITROGENOUS BOD: ULTIMATE (MG/L)
JUN, 1979												
07...	0540	.19	2.9	5.1	5.3	.16	.07	2.2	4.8	5.6	—	—
07...	0940	1.2	1.9	3.7	4.0	.13	.06	1.8	3.7	4.1	—	—
07...	1330	1.4	2.4	4.2	4.4	.16	.07	2.4	5.4	6.2	—	—
07...	1730	.68	2.0	4.3	4.9	.10	.04	2.1	5.8	8.4	—	—
07...	1930	1.4	3.0	4.7	4.8	.20	.09	2.4	4.4	4.6	—	—
08...	0615	—	3.8	6.5	6.8	.17	.07	—	—	—	—	—
08...	1310	—	2.5	4.3	4.5	.16	.07	2.5	4.5	4.7	—	—
08...	1710	—	2.4	5.3	6.0	.11	.05	2.6	4.6	4.7	—	—
08...	2010	.69	2.6	4.0	4.1	.21	.09	2.8	4.8	4.9	—	—
AUG, 1979												
09...	1200	.80	2.2	3.3	3.4	.21	.09	—	—	—	—	—
09...	1600	—	2.4	4.2	4.3	.16	.07	—	—	—	—	—
09...	2000	—	1.6	3.5	4.0	.10	.04	—	—	—	—	—
10...	0015	—	1.8	3.3	3.5	.15	.06	—	—	—	—	—
10...	0405	—	1.8	2.8	2.8	.20	.09	—	—	—	—	—
10...	0820	—	1.2	3.0	3.7	.08	.03	—	—	—	—	—
JUN, 1980												
03...	1605	.19	1.8	3.1	3.2	.16	.07	1.9	3.2	3.3	—	—
05...	1200	.08	1.0	2.4	2.9	.09	.04	1.2	2.7	3.2	—	—
05...	1550	.49	1.1	2.6	3.1	.09	.04	—	—	—	—	—
05...	2000	—	1.0	2.5	3.6	.06	.03	1.4	3.6	4.9	—	—
05...	2355	—	1.3	2.7	3.1	.11	.05	1.4	3.0	3.3	—	—
06...	0400	.13	1.2	2.5	2.8	.12	.05	.7	1.9	2.5	—	—
06...	0755	—	.9	1.9	2.1	.11	.05	1.1	2.4	2.8	—	—
06...	1150	—	1.1	2.2	2.5	.11	.05	1.1	2.6	3.1	—	—
AUG, 1980												
12...	1015	—	1.3	3.3	4.2	.08	.03	—	—	4.7	—	.5
13...	1245	—	1.8	3.4	3.6	.14	.06	—	—	4.6	—	1.0
13...	1645	—	1.9	4.0	4.5	.11	.05	—	—	5.9	—	1.4
13...	2045	—	2.2	3.7	3.8	.17	.07	—	—	5.2	.15	1.4
14...	0030	—	2.1	4.0	4.3	.13	.06	—	—	—	—	—
14...	0445	—	1.5	3.3	4.0	.09	.04	—	—	4.7	.04	.7
14...	0830	.10	1.9	3.7	4.0	.13	.06	—	—	4.9	.04	.9
14...	1200	.58	1.9	3.9	4.4	.11	.05	—	—	5.2	—	.8

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
AUG, 1979								
09...	1200	1.50	.199	6667	367	357	—	—
09...	1600	2.29	.530	4367	425	415	—	9.6
09...	2000	2.76	.342	3261	—	—	—	—
10...	0015	2.23	.304	4484	—	—	—	—
10...	0405	2.01	.283	2985	403	397	—	3.1
10...	0820	2.51	.495	2789	431	424	—	—
JUN, 1980								
03...	1605	.168	<.087	35710	303	297	—	16
05...	1200	1.23	.202	5691	361	354	442	10
05...	2355	—	—	—	—	—	360	11
AUG, 1980								
12...	1015	1.44	.305	4861	672	665	—	—
13...	1245	.865	.305	10400	674	665	4433	1.9
13...	1645	—	—	—	—	—	4643	—
13...	2045	—	—	—	—	—	3522	—
14...	0030	.346	<.197	26010	668	659	4444	1.0
14...	0445	—	—	—	—	—	3930	—
14...	0830	—	—	—	—	—	4733	—
14...	1200	—	—	—	—	—	3892	—

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 63 - TRUCKEE RIVER AT MARBLE BLUFF DAM

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
07...	0640	a75	11.0	665	15.0	6.8	77	419	--	--	--	--
07...	0840	--	11.5	665	17.0	6.8	81	389	--	--	--	--
07...	1040	--	14.5	665	16.0	--	--	415	--	--	85	--
07...	1230	--	17.0	665	16.0	--	--	411	--	--	--	--
07...	1430	--	20.0	665	17.0	7.1	85	418	--	--	--	--
07...	1630	--	19.5	665	17.5	7.8	94	404	--	--	--	--
07...	1830	--	19.0	665	18.0	9.0	108	406	--	--	--	--
07...	2030	--	16.0	665	17.5	8.8	105	404	--	--	--	--
08...	0700	--	10.5	670	17.5	6.3	75	374	--	--	87	--
08...	0820	--	15.0	670	17.5	6.7	80	369	--	--	--	--
08...	1000	--	19.0	--	18.5	--	--	420	--	--	--	--
08...	1200	67	22.5	670	20.0	6.8	89	380	--	--	--	--
08...	1410	--	23.0	665	20.0	--	--	385	--	--	85	--
08...	1610	--	24.5	665	20.0	7.8	105	396	--	--	--	--
08...	1810	--	24.5	665	19.5	8.1	101	405	--	--	87	--
08...	2010	--	21.5	665	19.0	7.8	95	399	--	--	86	--
AUG, 1979												
09...	1030	a30	31.0	665	23.0	9.1	121	664	--	9.0	104	--
09...	1230	33	36.5	665	24.0	9.6	130	653	--	9.0	140	--
09...	1430	--	--	665	23.5	9.8	134	659	--	9.0	125	--
09...	1630	--	35.0	664	24.0	10.2	140	662	--	9.1	140	--
09...	1830	--	--	664	24.5	8.0	110	642	--	9.2	--	--
09...	2025	--	31.0	664	23.0	8.2	109	649	--	9.0	--	--
09...	2230	--	23.5	663	22.0	8.1	106	577	--	8.9	--	--
10...	0035	--	22.0	664	22.0	8.0	105	610	--	8.9	--	--
10...	0220	--	20.5	664	21.5	6.6	87	616	--	8.8	--	--
10...	0435	--	22.0	665	21.5	6.7	88	616	--	8.9	--	--
10...	0620	--	22.5	664	22.0	6.6	87	627	--	8.8	--	--
10...	0800	--	25.0	665	23.0	7.0	93	632	--	8.8	--	--
JUN, 1980												
03...	1505	--	17.0	660	13.5	9.9	109	136	98	7.8	--	--
05...	1050	a2060	17.0	661	12.0	9.3	99	--	--	7.6	--	--
05...	1300	--	16.0	660	12.0	9.2	98	--	--	7.6	--	27
05...	1420	--	16.0	659	13.0	9.3	101	138	--	7.8	--	--
05...	1635	--	17.5	659	14.0	9.1	101	140	--	7.7	--	33
05...	1830	--	17.0	660	15.0	8.8	100	137	--	7.8	--	--
05...	2040	--	13.5	660	13.0	8.7	95	142	--	7.7	--	48
05...	2250	--	10.5	660	12.0	8.6	91	145	--	7.8	--	--
06...	0045	--	10.0	660	10.5	8.8	91	145	--	7.8	--	29
06...	0235	--	9.0	660	10.0	9.0	92	148	--	7.8	--	--
06...	0430	--	9.0	660	9.0	9.2	92	146	--	7.7	--	29
06...	0615	--	6.0	660	9.0	9.4	94	149	--	7.8	--	--
06...	0840	--	16.0	661	12.0	9.3	99	145	--	7.7	--	31
06...	1020	--	18.5	662	12.5	9.4	101	147	--	7.7	--	--
06...	1230	--	19.0	662	13.0	9.4	102	148	--	7.7	--	30
AUG, 1980												
12...	0900	--	--	--	21.0	8.2	--	482	294	8.2	--	9.9
13...	1000	a45	26.0	662	21.0	5.2	66	--	--	8.1	--	--
13...	1200	--	29.0	660	21.0	5.7	73	514	--	8.1	--	6.8
13...	1400	--	31.5	e660	22.0	7.5	99	517	--	8.3	--	--
13...	1600	--	--	e660	22.0	8.8	116	511	--	8.4	--	4.5
13...	1800	--	31.5	e660	22.5	--	--	520	--	8.4	--	--
13...	2000	--	27.0	e660	--	10.4	--	528	--	8.5	--	8.4
13...	2200	--	25.5	e660	21.0	10.3	132	536	--	8.6	--	--
13...	2400	--	23.5	e660	21.0	8.0	103	--	--	8.6	--	6.1
14...	0200	--	21.5	658	20.0	7.5	95	551	--	8.5	--	--
14...	0400	--	20.5	e660	20.0	7.4	94	552	--	8.5	--	4.7
14...	0615	--	18.5	e660	19.5	--	--	--	--	8.3	--	--
14...	0800	--	22.5	e660	19.5	6.8	85	541	--	--	--	5.1
14...	1000	--	25.0	659	19.5	6.0	75	541	--	8.2	--	--
14...	1130	--	27.0	e660	19.5	5.6	70	557	--	8.1	--	--

a Average streamflow estimated for the synoptic sampling period.
e Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 63 - TRUCKEE RIVER AT MARBLE BLUFF DAM--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
07...	0640	.59	.12	.47	.01	.02	.00	.60	.19	.23
07...	1040	.82	.11	.71	.01	.02	.00	.83	.19	.23
07...	1430	.88	.15	.73	.01	.02	.00	.89	.18	.24
07...	1830	.67	.06	.61	.00	.00	.00	.67	.16	.20
07...	2030	.56	.07	.49	.02	.00	.02	.58	.18	.22
08...	0700	.66	.16	.50	.01	.02	.00	.67	.20	.25
08...	1000	.57	.11	.46	.02	.02	.00	.59	.18	.24
08...	1410	.73	.12	.61	.02	.02	.00	.75	.18	.23
08...	1810	.64	.13	.51	.01	.02	.00	.65	.17	.20
08...	2010	.65	.06	.59	.01	.00	.01	.66	.17	.21
JUN, 1980										
03...	1505	.62	--	--	.23	.01	.22	.85	.10	.17
05...	1300	.54	--	--	--	.03	--	--	.11	.15
05...	2040	.67	--	--	.42	.03	.39	1.1	.12	.12
06...	1230	.51	--	--	.24	.03	.21	.75	.08	.15
AUG , 1980										
12...	0900	1.0	.04	.96	.00	.01	.00	1.0	.26	.23
13...	1200	.86	.11	.75	.00	.00	.00	.86	.25	.32
13...	2400	.74	.03	.71	.00	.02	.00	.74	.29	.35

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AN N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
09...	1230	.50	.01	.49	.00	.00	.00	.50	.23	.22
09...	1630	.45	.03	.42	.00	.00	.00	.45	.22	.25
09...	2025	.41	.00	.41	.00	.00	.00	.41	.22	.26
10...	0035	.39	.03	.36	.00	.00	.00	.39	.22	.26
10...	0435	.37	.00	.37	.01	.01	.00	.38	.18	.25
10...	0800	.44	.00	.44	.01	.01	.00	.45	.22	.26
JUN, 1980										
03...	1505	--	.35	--	--	.02	--	--	.10	.10
05...	1300	.42	--	--	.45	.03	.42	.87	.08	.09
05...	1635	.54	.20	.34	.90	.03	.87	1.4	.09	.11
05...	2040	.45	.29	.16	.38	.03	.35	.83	.13	.13
06...	0045	--	.22	--	--	.02	--	--	.14	.11
06...	0430	.41	.25	.16	.31	.02	.29	.72	.11	.10
06...	0840	.27	.10	.17	--	.02	--	--	.10	.08
06...	1230	--	--	--	.27	.03	.24	--	.11	.09
AUG, 1980										
12...	0900	.97	.06	.91	--	.01	--	--	.23	.24
13...	1200	.79	.05	.74	.00	.01	.00	.79	.21	.27
13...	1600	.86	.03	.83	.00	.00	.00	.86	.16	.21
13...	2000	.80	.03	.77	.00	.00	.00	.80	.22	.26
13...	2400	.38	.02	.36	.00	.00	.00	.38	.12	.18
14...	0400	.44	.02	.42	.00	.00	.00	.44	.22	.26
14...	0800	.93	.09	.86	.00	.01	.00	.95	.22	.27
14...	1130	.96	.10	.86	.00	.01	.00	.96	.21	.25

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 63 - TRUCKEE RIVER AT MARBLE BLUFF DAM--Continued

DATE	TIME	CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTIMATE (MG/L)
JUN, 1979												
07...	0640	.65	2.2	4.1	4.4	.14	.06	3.4	6.3	6.7	--	--
07...	1040	.82	2.4	4.6	5.0	.13	.06	2.4	4.3	4.5	--	--
07...	1430	.84	2.8	4.4	4.6	.19	.08	2.7	4.5	4.6	--	--
07...	1830	.42	3.4	5.8	6.1	.16	.07	--	--	--	--	--
07...	2030	.54	2.7	5.0	5.3	.14	.06	3.3	4.7	4.8	--	--
08...	1410	--	2.7	4.6	4.7	.17	.07	3.2	4.9	5.0	--	--
08...	1810	.07	4.2	6.1	6.2	.22	.10	3.5	6.1	6.4	--	--
08...	2010	.17	3.4	5.6	5.7	.19	.08	2.8	4.9	5.1	--	--
AUG, 1979												
09...	1630	--	4.8	7.8	8.1	.18	.08	--	--	--	--	--
09...	2025	1.3	2.3	3.5	3.6	.20	.09	--	--	--	--	--
10...	0035	--	3.0	6.6	7.7	.10	.04	--	--	--	--	--
10...	0435	.16	3.6	5.2	5.2	.23	.10	--	--	--	--	--
10...	0800	--	3.1	4.8	4.9	.20	.09	--	--	--	--	--
JUN, 1980												
03...	1505	.03	1.9	3.2	3.3	.17	.07	2.5	4.3	4.5	--	--
05...	1300	--	.7	1.9	2.6	.07	.03	.9	2.3	3.0	--	--
05...	1635	--	.8	2.0	2.9	.06	.03	1.3	2.9	3.4	--	--
05...	2040	--	1.0	2.4	3.0	.08	.03	1.1	2.5	2.9	--	--
06...	0045	--	1.1	2.5	3.0	.09	.04	.8	2.4	3.5	--	--
06...	0430	.44	.9	2.0	2.3	.10	.04	.8	2.0	2.6	--	--
06...	0840	.44	.8	1.9	2.2	.10	.04	1.2	2.4	2.7	--	--
06...	1230	--	.9	2.1	2.5	.09	.04	.7	1.9	2.3	--	--
AUG, 1980												
12...	0900	--	1.0	2.9	4.5	.05	.02	1.7	3.5	3.9	--	--
13...	1200	--	1.7	3.3	3.6	.13	.06	2.0	4.3	4.9	--	--
13...	1600	--	1.7	3.1	3.3	.14	.06	2.1	3.9	4.1	--	--
13...	2000	--	1.8	3.4	3.7	.14	.06	2.4	4.1	4.2	--	--
13...	2400	.03	2.2	3.5	3.6	.19	.08	2.0	3.8	4.0	--	--
14...	0400	.22	1.4	2.8	3.1	.12	.05	2.2	3.9	4.1	--	--
14...	0800	.76	1.3	2.6	2.8	.13	.06	1.8	3.2	3.4	--	--
14...	1130	--	1.6	3.2	3.5	.13	.06	1.9	3.8	4.1	--	--

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/ CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
AUG, 1979								
09...	1230	9.71	.326	1545	349	334	3973	--
09...	1630	4.20	.323	2381	426	416	4844	3.9
09...	2025	7.25	.414	1379	416	406	4885	--
10...	0035	4.69	.372	2132	414	404	4599	--
10...	0435	5.52	.283	1993	419	408	3351	2.8
10...	0800	7.36	.495	1359	415	404	7262	--
JUN, 1980								
03...	1505	1.01	<.130	7921	493	485	--	18
05...	1300	.691	.089	7236	319	314	331	19
06...	0045	.767	.088	9126	337	330	311	11
AUG, 1980								
12...	0900	.769	.271	9103	681	674	--	--
13...	1200	1.60	.260	5625	668	659	4197	6.8
13...	1600	--	--	--	--	--	5193	--
13...	2000	--	--	--	--	--	4245	--
13...	2400	.658	.187	12160	662	654	3877	1.5
14...	0400	--	--	--	--	--	3877	--
14...	0800	--	--	--	--	--	5426	--
14...	1130	--	--	--	--	--	3884	--

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 69 - TRUCKEE CANAL AT U.S. HIGHWAY 95A NEAR FERNLEY

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF RG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
06...	0635	a360	--	--	--	5.7	--	--	--	--	--	--
06...	0745	--	21.0	650	19.5	6.2	78	--	--	--	--	--
06...	0815	--	--	650	19.0	7.3	91	--	--	--	--	--
06...	0955	--	21.5	650	19.0	7.2	90	--	--	--	--	--
06...	1145	--	23.0	650	19.0	7.2	90	158	--	7.7	56	--
06...	1330	--	--	650	19.5	7.4	94	160	--	--	--	--
06...	1540	--	--	650	20.0	6.8	87	161	--	7.7	54	--
06...	1635	--	--	650	20.0	7.0	90	164	--	7.7	--	--
06...	1850	--	--	650	19.5	6.9	87	--	--	--	--	--
06...	1900	--	--	650	19.5	6.9	87	--	--	--	--	--
06...	2025	--	--	650	19.5	7.1	90	--	--	--	57	--
06...	2250	--	--	650	19.5	7.1	90	--	--	--	60	--
07...	0545	--	12.5	655	18.5	--	--	--	--	--	52	--
07...	0745	--	14.0	655	18.0	6.8	83	182	--	--	--	--
07...	0840	--	--	655	17.5	6.8	83	175	--	--	--	--
07...	0945	--	16.0	655	17.5	6.8	83	--	--	--	--	--
07...	1145	--	17.0	655	17.0	6.9	82	178	--	--	--	--
07...	1345	--	18.0	655	17.5	7.0	85	183	--	--	50	--
07...	1545	--	19.5	655	17.5	7.2	88	182	--	--	--	--
07...	1745	--	21.0	655	17.5	7.5	91	185	--	--	50	--
07...	1945	--	21.0	655	17.5	7.7	94	185	--	--	--	--
07...	2145	--	19.0	655	17.5	7.9	96	185	--	--	--	--
08...	1200	--	--	655	17.5	--	--	161	--	--	--	--
08...	1530	--	--	655	17.5	8.0	98	171	--	--	--	--
08...	1600	--	--	655	17.5	7.8	95	175	--	--	--	--
08...	1645	--	--	655	17.0	7.7	92	179	--	--	--	--
08...	1700	--	--	655	17.0	7.6	90	177	--	--	--	--
AUG, 1979												
09...	1000	a170	--	e657	23.0	6.4	85	241	--	8.3	83	--
09...	1200	--	29.0	e657	24.0	6.0	80	253	152	8.3	84	--
09...	1400	--	30.5	e656	24.0	5.9	81	252	--	8.1	84	--
09...	1600	--	31.0	e656	24.5	6.3	86	250	--	8.1	83	--
09...	1800	--	31.0	e655	24.5	7.0	96	252	162	8.2	83	--
09...	2000	--	28.5	e655	24.0	7.6	104	--	160	8.2	84	--
09...	2215	--	24.0	657	24.0	8.5	117	258	155	8.2	81	--
10...	0100	--	21.0	658	23.0	8.6	115	238	--	8.3	83	--
10...	0300	--	22.0	658	23.0	9.0	120	243	--	8.4	83	--
10...	0500	--	23.0	662	23.0	8.4	117	243	144	8.4	82	--
10...	0645	--	--	658	23.0	8.4	112	231	--	8.3	80	--
10...	0815	--	26.0	658	23.0	7.8	104	232	--	8.4	82	--
JUN, 1980												
05...	1005	a115	--	654	11.0	8.4	88	--	--	7.8	--	--
05...	1205	--	16.5	653	11.5	8.4	88	122	--	7.8	--	10
05...	1400	--	17.0	656	12.0	--	--	121	--	7.7	--	--
05...	1600	--	19.0	655	12.5	8.2	88	126	--	7.7	--	15
05...	1810	--	18.5	655	12.0	8.2	88	128	--	7.8	--	--
05...	2010	--	11.0	654	12.0	8.3	88	128	--	7.9	--	20
05...	2200	--	9.5	654	--	8.7	--	129	--	7.8	--	--
06...	0010	--	8.0	655	12.0	8.8	95	--	--	7.9	--	20
06...	0215	--	--	655	12.0	8.6	92	--	--	7.8	--	--
06...	0400	--	6.0	655	11.0	8.7	91	137	--	7.7	--	18
06...	0600	--	3.0	655	10.0	8.7	90	142	--	7.8	--	--
06...	0810	--	10.0	656	11.0	8.4	88	131	--	7.8	--	19
06...	1000	--	15.5	655	11.5	8.3	88	129	--	7.7	--	--
06...	1200	--	22.0	655	12.0	8.5	91	128	--	7.8	--	11
AUG, 1980												
13...	1130	a150	30.0	e650	22.0	6.4	85	238	--	7.4	--	--
13...	1400	--	33.5	e650	23.0	--	--	244	--	7.4	--	4.6
13...	1530	--	34.0	e650	23.0	6.8	92	244	--	7.3	--	--
13...	1730	--	33.5	e650	--	6.9	--	246	--	7.4	--	6.0
13...	1900	--	32.0	e650	23.0	6.9	93	248	--	7.3	--	--
13...	2100	--	25.5	e650	22.0	--	--	245	--	7.3	--	5.3
13...	2300	--	25.0	e650	21.5	6.9	92	238	--	7.3	--	--
14...	0100	--	23.0	e650	21.0	6.9	91	240	--	7.4	--	--
14...	0300	--	19.0	e650	21.0	7.0	92	243	--	--	--	--
14...	0530	--	19.0	e650	20.0	7.0	90	249	--	7.2	--	9.6
14...	0645	--	18.0	e650	20.0	7.0	90	244	--	7.2	--	--
14...	0930	--	28.0	e650	21.0	6.8	89	250	--	7.4	--	--
14...	1145	--	29.0	e650	21.0	6.6	87	251	--	7.5	--	--
14...	1330	--	30.0	e650	22.0	6.6	114	251	--	7.5	--	--

[a] Average streamflow estimated for the synoptic sampling period.
[e] Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 69 - TRUCKEE CANAL AT U.S. HIGHWAY 95A NEAR FERNLEY--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
06...	0635	.74	.16	.58	.63	.19	.44	1.4	.40	.50
06...	0745	.72	.15	.57	.57	.19	.38	1.3	.36	.44
06...	0955	.52	.08	.44	.46	.14	.32	.98	.28	.35
06...	1330	.56	.09	.47	.53	.19	.34	1.1	.27	.35
06...	1850	.56	.12	.44	.63	.21	.42	1.2	.27	.32
06...	2250	.68	.20	.48	.75	.25	.50	1.4	.33	.42
07...	0545	.80	.03	.77	.89	.02	.87	1.7	.39	.47
07...	0945	.60	.07	.53	.69	.08	.61	1.3	.26	.31
07...	1345	.78	.02	.76	.57	.08	.49	1.4	.27	.31
07...	1745	.44	.01	.43	.53	.02	.51	.97	.27	.32
JUN, 1980										
05...	1205	.41	.12	.29	.25	.02	.23	.66	.11	.11
05...	2010	.53	.17	.36	.23	.03	.20	.76	.08	.11
06...	0010	.63	.15	.48	--	.03	--	--	.11	.14
06...	0400	1.1	.19	.91	.41	.02	.39	1.5	.11	.09
06...	1200	1.2	.15	1.1	.51	.02	.49	1.7	.11	--
AUG, 1980										
13...	1400	1.0	.22	.78	1.3	.23	1.1	2.3	.64	.70
14...	0100	1.1	.13	.97	.91	.11	.80	2.0	.41	.49

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
09...	1000	.43	.06	.37	1.3	.15	1.2	1.7	.47	.48
09...	1200	.62	.06	.56	1.4	.18	1.2	2.0	.56	.57
09...	1400	.49	.12	.37	1.4	.19	1.2	1.9	.66	.70
09...	1600	.61	.07	.54	1.4	.18	1.2	2.0	.77	.82
09...	1800	.82	.07	.75	1.5	.18	1.3	2.3	.84	.89
09...	2000	.74	.09	.65	1.4	.16	1.2	2.1	.90	.94
09...	2215	.46	.06	.40	1.3	.14	1.2	1.8	.89	.94
10...	0100	.37	.01	.36	1.1	.10	1.0	1.5	.78	.91
10...	0500	.37	.00	.37	.69	.05	.64	1.1	.35	.54
10...	0815	.38	.03	.35	1.1	.10	1.0	1.5	.59	.70
JUN, 1980										
05...	1205	--	.15	--	.27	.02	.25	--	.10	.08
05...	1600	.72	.26	.46	.23	.02	.21	.95	.11	.09
05...	2010	.38	.17	.21	.23	.03	.20	.61	.08	.08
06...	0010	--	--	--	.35	.03	.32	--	--	.10
06...	0400	.53	--	--	.34	.02	.32	.87	.11	.12
06...	0810	--	.25	--	.23	.02	.21	--	.11	--
06...	1200	.64	.12	.52	.18	.02	.16	.82	.11	.09
AUG, 1980										
13...	1400	.89	.13	.76	1.5	.28	1.2	2.4	.57	.65
13...	1730	1.1	.10	1.0	1.4	--	--	2.5	.58	.60
13...	2100	.55	.09	.46	1.1	.17	.93	1.7	.44	.47
14...	0100	.50	.04	.46	--	.15	--	--	.27	.32
14...	0530	.71	.11	.60	1.3	.20	1.1	2.0	.36	.40
14...	0930	.92	.15	.77	1.6	.29	1.3	2.5	.57	.60
14...	1330	.82	.14	.68	1.6	.31	1.3	2.4	.78	.79

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 69 - TRUCKEE CANAL AT US 95A NEAR FERNLEY--Continued

DATE	TIME	CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5-DAY (MG/L)	20-DAY (MG/L)	ULTI-MATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTI-MATE (MG/L)
JUN, 1979												
06...	0635	.72	2.1	4.0	4.3	.13	.06	--	--	6.4	.31	2.1
06...	0745	.52	1.8	3.4	3.6	.13	.06	--	--	10	3.8	6.4
06...	0955	--	1.6	3.3	3.7	.12	.05	--	--	--	--	--
06...	1145	--	1.3	2.5	2.7	.13	.06	--	--	5.7	--	3.0
06...	1330	--	1.5	3.2	3.5	.11	.05	--	--	5.8	--	2.3
06...	1540	--	1.1	2.3	2.6	.12	.05	--	--	4.6	5.2	2.0
06...	1850	--	1.3	3.0	3.7	.08	.03	--	--	6.3	2.3	2.6
06...	2025	.05	1.2	3.1	4.0	.07	.03	--	--	5.2	6.6	1.2
06...	2250	.41	1.1	2.8	3.8	.07	.03	--	--	9.5	2.1	5.7
07...	0545	1.0	1.6	3.2	3.4	.12	.05	--	--	5.0	2.3	1.6
07...	0745	--	1.1	2.7	3.4	.08	.03	--	--	5.7	--	2.3
07...	0945	.96	.9	2.4	3.5	.06	.03	--	--	5.4	2.0	1.9
07...	1145	1.4	1.9	3.3	3.5	.16	.07	--	--	5.3	4.5	1.8
07...	1545	1.8	1.5	2.6	2.7	.16	.07	--	--	6.8	3.6	4.1
07...	1945	1.7	1.4	2.7	2.8	.14	.06	--	--	3.8	1.8	1.0
AUG, 1979												
09...	1200	.07	2.5	4.5	4.8	.15	.06	--	--	--	--	--
09...	1600	--	1.9	4.2	4.9	.10	.04	--	--	--	--	--
09...	2000	--	1.5	3.3	4.0	.09	.04	--	--	--	--	--
09...	2215	.11	2.0	3.8	4.1	.13	.06	--	--	--	--	--
10...	0100	--	1.8	3.6	4.0	.11	.05	--	--	--	--	--
10...	0815	--	1.8	4.1	4.9	.09	.04	--	--	--	--	--
JUN, 1980												
05...	1205	--	.7	1.9	3.0	.06	.03	--	--	--	--	--
05...	1600	--	1.3	2.7	3.0	.12	.05	--	--	--	--	--
05...	2010	--	1.0	2.1	2.5	.10	.04	--	--	--	--	--
06...	0010	.38	.9	1.9	2.1	.12	.05	--	--	--	--	--
06...	0400	.36	1.1	2.8	3.9	.06	.03	--	--	--	--	--
06...	0810	--	.8	1.9	2.4	.08	.03	--	--	--	--	--
06...	1200	--	.8	1.9	2.4	.08	.03	--	--	--	--	--
AUG, 1980												
13...	1400	--	2.2	4.7	5.4	.10	.04	--	--	--	--	--
13...	1730	--	2.1	4.7	5.4	.10	.04	--	--	--	--	--
13...	2100	--	1.5	3.1	3.9	.10	.04	--	--	--	--	--
14...	0100	.23	1.5	3.1	3.6	.10	.04	--	--	--	--	--
14...	0530	.15	1.6	3.2	3.5	.12	.05	--	--	--	--	--
14...	0930	.60	1.7	3.3	3.6	.14	.06	--	--	--	--	--
14...	1330	.32	2.0	4.4	5.0	.10	.04	--	--	--	--	--

DATE	TIME	CHLORO-PHYLL *a*, SUS-PENDED (UG/L)	CHLORO-PHYLL *b*, SUS-PENDED (UG/L)	BIOMASS/ CHLORO-PHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTEN-TIAL, BOTTLE TEST (MG/L)
AUG, 1979								
09...	1000	1.23	.163	10570	365	352	--	--
09...	1200	.638	.036	26650	370	353	--	--
09...	1400	.656	<.181	18290	358	346	--	--
09...	1600	.525	<.181	20950	356	345	--	--
09...	1800	2.31	.226	--	--	--	--	--
09...	2000	1.72	.226	4651	457	449	--	--
09...	2215	3.99	.411	3008	455	443	--	--
10...	0100	1.92	.212	4688	430	421	--	--
10...	0500	--	--	--	--	--	--	20
10...	0815	3.79	.517	2639	428	418	--	--
JUN, 1980								
05...	1205	--	--	--	491	486	377	13
06...	0010	.791	.104	5057	294	290	348	12
AUG, 1980								
13...	1400	.987	.375	5066	658	653	3615	43
13...	1730	--	--	--	--	--	3223	--
13...	2100	--	--	--	--	--	2772	--
14...	0100	.352	<.201	22730	674	666	2819	33
14...	0530	--	--	--	--	--	2449	--
14...	0930	--	--	--	--	--	2449	--
14...	1330	--	--	--	--	--	3583	--

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

SITE 71 - TRUCKEE CANAL AT ALLENDALE CHECK DAM NEAR FERNLEY

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH FIELD (UNITS)	ALKA-LINITY (MG/L AS CACO3)	TUR-BID-ITY (NTU)
JUN, 1980												
05...	1005	[a]100	21.0	654	12.0	8.8	95	126	—	7.6	—	—
05...	1230	—	19.5	653	13.0	8.8	97	132	—	7.6	—	15
05...	1450	—	18.5	652	14.0	9.0	102	134	—	7.6	—	—
05...	1645	—	21.5	652	14.0	9.0	102	134	—	7.6	—	14
05...	1900	—	17.5	652	14.0	9.1	103	129	—	7.7	—	—
05...	2125	—	11.0	652	13.0	9.1	101	126	—	7.8	—	—
05...	2400	—	9.5	652	13.0	9.1	101	124	—	7.8	—	—
06...	0215	—	9.0	653	12.5	9.1	100	125	—	7.6	—	17
06...	0450	—	6.0	653	12.0	8.9	97	126	—	7.8	—	—
06...	0740	—	11.0	654	11.5	8.8	94	126	—	7.6	—	—
06...	1005	—	20.0	654	12.0	8.8	95	130	—	7.6	—	16
AUG, 1980												
13...	1130	[a]70	29.0	654	23.0	7.9	107	233	—	—	—	—
13...	1330	—	30.5	653	24.0	8.5	118	231	—	—	—	4.9
13...	1530	—	31.5	653	24.0	9.4	131	225	—	8.1	—	—
13...	1715	—	31.0	652	23.5	9.6	132	228	—	8.4	—	7.5
13...	1830	—	29.5	652	23.0	9.7	131	232	—	8.6	—	—
13...	2115	—	24.0	652	22.5	9.8	132	236	—	8.4	—	—
13...	2315	—	22.5	653	22.0	9.4	125	232	—	7.8	—	—
14...	0115	—	20.0	653	21.5	9.0	117	240	—	8.0	—	—
14...	0300	—	19.0	652	21.5	8.5	113	240	—	8.0	—	—
14...	0500	—	18.0	652	21.0	8.2	108	234	—	8.0	—	—
14...	0649	—	18.5	652	21.0	7.8	103	229	—	8.0	—	—
14...	0915	—	22.5	652	21.0	8.0	105	236	—	8.2	—	—
14...	1030	—	26.0	652	21.5	8.3	111	242	—	8.4	—	—
14...	1230	—	27.5	652	22.0	9.2	123	240	—	8.6	—	8.5

[a] Average streamflow estimated for the synoptic sampling period.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

SITE 71 - TRUCKEE CANAL AT ALLENDALE CHECK DAM NEAR FERNLEY--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1980										
05...	1230	.37	.15	.22	--	.02	--	--	.08	--
05...	2125	.45	.12	.33	--	.03	--	--	.13	.12
06...	1005	.77	.18	.59	--	.02	--	--	.09	.16
AUG, 1980										
13...	1330	.69	.13	.56	--	--	--	--	.45	.53

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
JUN, 1980										
05...	1230	--	--	--	.32	.01	.31	--	--	.09
05...	1645	.52	.25	.27	.40	.02	.38	.92	.11	.08
05...	2125	--	.13	--	.35	.03	.32	--	.10	.08
06...	0215	.42	.20	.22	.22	.02	.20	.64	.12	.09
06...	1005	.77	.17	.60	.33	.02	.31	1.1	.09	.10
AUG, 1980										
13...	1330	.55	.02	.53	1.3	.20	1.1	1.9	.39	.54
13...	1715	1.0	.02	.98	--	.05	--	--	--	--
14...	0115	.85	.00	.85	1.3	.17	1.1	2.2	.33	.39
14...	0500	.54	.05	.49	1.4	.20	1.2	1.9	.36	.39
14...	0915	.64	.07	.57	1.5	.24	1.3	2.1	.43	.46
14...	1230	.57	.03	.54	1.5	.26	1.2	2.1	.53	.56

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 71 - TRUCKEE CANAL AT ALLENDALE CHECK DAM NEAR FERNLEY--Continued

DATE	TIME	CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTIMATE (MG/L)
JUN, 1980												
05...	1230	--	.8	1.7	2.1	.08	.03	--	--	--	--	--
05...	1645	--	1.0	2.3	2.7	.10	.04	--	--	--	--	--
05...	2125	--	.7	1.5	1.8	.12	.05	--	--	--	--	--
06...	0215	.49	.9	1.6	1.9	.12	.05	--	--	--	--	--
06...	0740	.68	.9	1.8	2.0	.12	.05	--	--	--	--	--
06...	1005	.39	.8	1.9	2.3	.09	.04	--	--	--	--	--
AUG, 1980												
13...	1330	--	2.8	5.2	5.4	.14	.06	--	--	--	--	--
13...	1715	--	2.4	4.3	4.6	.16	.07	--	--	--	--	--
13...	2115	--	2.7	4.7	4.9	.16	.07	--	--	--	--	--
14...	0115	.11	2.6	4.8	5.1	.14	.06	--	--	--	--	--
14...	0500	.50	2.0	3.8	4.1	.14	.06	--	--	--	--	--
14...	0915	.38	2.1	3.9	4.1	.14	.06	--	--	--	--	--
14...	1230	--	2.9	5.3	5.6	.14	.06	--	--	--	--	--

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/ CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
JUN, 1980								
05...	1230	--	--	--	--	--	582	--
AUG, 1980								
13...	1330	3.35	1.38	3881	666	653	6401	34
13...	1715	--	--	--	--	--	9652	--
13...	2115	--	--	--	--	--	8998	--
14...	0115	.794	.362	13850	658	647	11114	29
14...	0500	--	--	--	--	--	7369	--
14...	0915	--	--	--	--	--	7799	--
14...	1230	--	--	--	--	--	11317	--

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 74 - TRUCKEE CANAL AT U.S. HIGHWAY 50 ABOVE LAHONTAN RESERVOIR

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	PH (UNITS)	ALKA-LINITY (MG/L AS $CACO_3$)	TUR-BID-ITY (NTU)
JUN, 1979												
07...	0650	[a]290	13.0	655	17.5	7.2	87	176	--	8.0	--	--
07...	0800	--	13.0	655	17.5	7.4	88	159	--	--	--	--
07...	0940	--	14.0	655	18.0	7.5	91	160	--	8.2	--	--
07...	1136	--	16.0	655	19.0	7.8	98	165	--	8.1	--	--
07...	1335	--	18.5	655	19.0	7.9	99	166	--	8.1	--	--
07...	1536	--	19.0	655	20.0	8.1	104	164	--	8.2	--	--
07...	1740	--	19.5	655	20.5	8.1	104	166	--	8.1	--	--
07...	1934	--	17.0	655	20.0	7.9	100	164	--	8.3	--	--
07...	2028	--	15.0	655	20.0	7.8	100	158	--	8.3	--	--
08...	0550	--	6.0	655	17.0	7.5	89	157	--	8.2	51	--
08...	0732	--	10.5	655	17.0	7.5	89	159	--	8.1	--	--
08...	0935	--	15.0	655	17.0	7.8	91	158	--	8.1	54	--
08...	1137	--	19.0	655	18.0	8.1	99	175	--	8.0	--	--
08...	1345	--	24.5	655	19.0	8.0	100	175	--	8.1	50	--
08...	1532	--	24.0	655	19.5	--	--	175	--	8.1	--	--
08...	1728	--	21.5	655	20.0	--	--	170	--	8.2	50	--
08...	1927	--	20.5	655	19.5	8.0	101	168	--	8.2	--	--
08...	2023	--	19.0	655	19.5	8.0	100	170	--	8.3	--	--
AUG, 1979												
09...	2035	[a]50	25.0	[e]657	24.5	10.1	140	238	--	9.3	--	--
09...	2225	--	23.0	[e]656	24.0	9.0	125	237	--	9.0	--	--
10...	0040	--	22.0	[e]657	23.5	8.8	122	234	--	9.2	87	--
10...	0320	--	24.0	[e]656	22.0	8.2	109	237	--	8.9	--	--
10...	0435	--	24.5	[e]658	22.0	7.7	103	239	155	8.9	86	--
10...	0620	--	22.0	[e]657	21.5	7.5	100	243	--	8.8	--	--
10...	0805	--	26.0	[e]658	21.0	8.7	114	261	--	8.9	92	--
10...	1000	--	31.0	[e]660	23.0	9.1	121	252	--	8.9	--	--
10...	1200	--	35.0	[e]660	24.5	10.8	148	252	--	8.9	--	--
10...	1400	--	38.0	[e]660	26.0	13.1	184	255	--	8.9	--	--
10...	1600	--	36.0	[e]660	28.0	14.1	207	245	--	9.1	--	--
10...	1800	--	37.0	[e]660	25.0	14.0	197	252	--	9.1	--	--
10...	2020	--	--	[e]660	24.5	--	--	253	--	9.3	--	--
JUN, 1980												
05...	1125	[a]90	18.5	653	13.5	9.8	110	136	--	8.3	--	--
05...	1345	--	20.0	652	14.0	10.0	114	137	--	8.2	--	17
05...	1550	--	22.0	652	15.0	10.2	119	136	--	8.2	--	--
05...	1755	--	19.0	653	15.0	10.2	119	136	--	8.4	--	15
05...	2005	--	16.0	652	14.0	9.5	108	130	--	8.4	--	--
05...	2240	--	11.5	653	13.5	9.3	104	125	--	8.1	--	14
06...	0105	--	10.0	653	13.0	9.2	102	126	--	8.4	--	--
06...	0335	--	9.5	653	12.5	--	--	126	--	8.4	--	--
06...	0620	--	9.0	654	12.0	9.2	99	126	--	8.4	--	--
06...	0850	--	17.0	654	13.0	9.7	107	125	--	8.4	--	--
06...	1200	--	23.0	655	15.0	10.2	117	132	--	8.5	--	--
AUG, 1980												
11...	1030	--	--	--	22.5	7.9	--	230	135	8.6	79	--
13...	1015	[a]20	27.0	653	18.5	8.5	105	220	--	8.4	--	--
13...	1230	--	35.0	654	23.0	11.2	151	214	--	--	--	3.2
13...	1430	--	--	653	25.0	13.0	183	210	--	--	--	--
13...	1630	--	35.5	653	26.0	14.2	203	218	--	9.0	--	4.5
13...	1800	--	33.0	652	26.0	14.2	206	220	--	9.2	--	--
13...	2030	--	25.0	652	23.0	10.5	142	226	--	9.2	--	4.6
13...	2215	--	23.5	652	21.0	8.8	116	222	--	8.1	--	--
13...	2400	--	19.5	653	20.0	--	--	220	--	8.2	--	3.9
14...	0215	--	--	653	20.0	8.4	108	218	--	8.5	--	--
14...	0400	--	19.5	652	19.5	8.2	104	212	--	8.4	--	5.1
14...	0600	--	17.5	652	19.0	7.8	98	218	--	8.2	--	--
14...	0815	--	20.5	652	19.0	7.8	98	212	--	8.5	--	--
14...	1000	--	24.5	652	20.0	9.2	118	212	--	9.0	--	--
14...	1130	--	27.5	652	21.5	10.9	143	220	--	9.0	--	4.9

[a] Average streamflow estimated for the synoptic sampling period.
[e] Estimated.

TABLE 4.--*Data from synoptic studies, June and August, 1979 and 1980*--Continued

Site 74 - TRUCKEE CANAL AT U.S. HIGHWAY 50 ABOVE LAHONTAN RESERVOIR--Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN, 1979										
07...	1335	.47	.04	.43	.70	.14	.56	1.2	.27	.32
07...	1740	.58	.04	.54	.83	.16	.67	1.4	.33	.41
07...	2028	.66	.05	.61	.86	.16	.70	1.5	.38	.43
08...	0550	.55	.02	.53	.48	.06	.42	1.0	.24	.30
08...	0935	.60	.02	.58	.58	.08	.50	1.2	.25	.30
08...	1345	.60	.03	.57	.63	.12	.51	1.2	.25	.30
08...	1728	.58	.05	.53	.76	.18	.58	1.3	.30	.35
08...	2023	.63	.05	.58	.80	.14	.66	1.4	.35	.40
AUG, 1979										
10...	2020	.67	.01	.66	--	--	--	--	.66	.72
JUN, 1980										
05...	1345	.76	--	--	--	.02	--	--	.08	.12
05...	2240	--	--	--	.20	.02	.18	--	.13	.14
06...	1200	--	.09	--	--	.01	--	--	.08	.16
AUG, 1980										
11...	1030	.99	.02	.97	--	--	--	--	--	.37
13...	1230	1.5	.09	1.4	.48	.03	.45	2.0	.22	.29

DATE	TIME	NITROGEN, NH_4 + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH_4 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, NO_2+NO_3 DISSOLVED (MG/L AS N)	NITROGEN, NO_2 DISSOLVED (MG/L AS N)	NITROGEN, NO_3 DISSOLVED (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
AUG, 1979										
09...	2035	.39	.01	.38	.83	.07	.76	1.2	.56	--
10...	0040	.34	.00	.34	.73	.05	.68	1.1	.54	.63
10...	0435	.96	.01	.95	1.0	.09	.91	2.0	.59	.68
10...	0805	.40	.00	.40	.93	.12	.81	1.3	.48	.56
10...	1200	.79	.00	.79	.96	.23	.73	1.8	.68	.81
10...	1600	.48	.00	.48	.90	.18	.72	1.4	.75	.86
10...	2020	.64	.00	.64	.81	.11	.70	1.5	.68	.76
JUN, 1980										
05...	1345	.30	.04	.26	.36	.03	.33	.66	.10	.08
05...	1755	.46	.10	.36	.28	.02	.26	.74	.10	.08
05...	2240	.43	.04	.39	--	.02	--	--	.12	.10
06...	0335	.40	.12	.28	.29	.00	.29	.69	.15	.14
06...	1200	.51	.10	.41	.36	.01	.35	.87	.10	.08
AUG, 1980										
11...	1030	.79	.04	.75	.81	.08	.73	1.6	.24	.33
13...	1230	.56	.04	.52	.48	.04	.44	1.0	.18	.24
13...	1630	.56	.05	.51	.58	.05	.53	1.1	.24	.26
13...	2030	.62	.03	.59	.79	.07	.72	1.4	.32	.39
13...	2400	.76	.00	.76	.89	.09	.80	1.7	.27	.33
14...	0400	.80	.06	.74	1.0	.11	.89	1.8	.25	.29
14...	0815	.63	.03	.60	1.2	.13	1.1	1.8	.32	.35
14...	1130	.41	.03	.38	1.1	.12	.98	1.5	.34	.39

TABLE 4.—*Data from synoptic studies, June and August, 1979 and 1980*—Continued

Site 74 - TRUCKEE CANAL AT U.S. HIGHWAY 50 ABOVE LAHONTAN RESERVOIR—Continued

DATE	TIME	CARBONACEOUS BOD						TOTAL BOD			NITROGENOUS BOD	
		LAGTIME AT 20°C (DAYS)	5-DAY (MG/L)	20-DAY (MG/L)	ULTIMATE (MG/L)	DECAY RATE, BASE E, PER DAY AT 20°C	DECAY RATE, BASE 10, PER DAY AT 20°C	5 DAY (MG/L)	20 DAY (MG/L)	ULTIMATE (MG/L)	LAGTIME AT 20°C (DAYS)	ULTIMATE (MG/L)
JUN, 1979												
07...	0650	.85	1.5	3.5	4.3	.09	.04	—	—	7.5	—	3.2
07...	0940	1.6	2.1	3.6	3.8	.17	.07	—	—	3.7	—	—
07...	1335	1.7	2.0	3.2	3.2	.20	.09	—	—	6.2	.51	3.0
07...	1740	.28	1.9	3.5	3.8	.14	.06	—	—	6.6	—	2.8
07...	2028	1.6	1.9	3.4	3.6	.16	.07	—	—	5.0	1.7	1.4
08...	0550	—	2.8	5.1	5.4	.15	.06	—	—	4.5	—	—
08...	0935	—	2.2	4.0	4.2	.15	.06	—	—	5.8	—	1.6
08...	1345	—	2.8	4.9	5.1	.15	.06	—	—	—	—	—
08...	1728	—	1.8	3.5	3.7	.13	.06	—	—	6.1	—	2.4
08...	2023	—	1.9	3.4	3.6	.15	.06	—	—	—	—	—
AUG, 1979												
09...	2035	—	2.7	5.4	5.9	.12	.05	—	—	—	—	—
10...	0435	—	1.7	3.9	4.6	.09	.04	—	—	—	—	—
10...	0805	—	2.4	5.3	6.1	.10	.04	—	—	—	—	—
10...	1200	—	3.5	6.3	6.6	.15	.06	—	—	—	—	—
10...	2020	—	3.2	6.6	7.3	.12	.05	—	—	—	—	—
JUN, 1980												
05...	1345	—	.8	1.8	2.1	.10	.04	1.3	2.7	2.9	—	—
05...	1755	.73	1.1	2.1	2.2	.15	.06	.9	2.2	2.7	—	—
05...	2240	—	1.2	2.4	2.6	.12	.05	1.1	2.4	2.8	—	—
06...	0335	.50	.9	1.9	2.1	.11	.05	1.1	2.5	3.1	—	—
06...	0850	—	1.1	2.2	2.4	.12	.05	.8	2.0	2.4	—	—
06...	1200	.04	1.1	2.2	2.4	.12	.05	1.2	2.4	2.6	—	—
AUG, 1980												
13...	1230	—	2.1	3.9	4.2	.14	.06	—	—	4.6	—	.4
13...	1630	—	1.8	3.4	3.6	.14	.06	—	—	5.2	—	1.6
13...	2030	—	2.1	3.7	3.8	.16	.07	—	—	5.1	—	1.3
13...	2400	—	2.1	3.4	3.5	.19	.08	—	—	4.6	.06	1.1
14...	0400	—	1.9	3.4	3.6	.16	.07	—	—	4.8	—	1.2
14...	0815	.20	2.5	4.1	4.2	.18	.08	—	—	5.1	.19	.9
14...	1130	.06	2.5	4.2	4.4	.17	.07	—	—	4.8	—	.4

DATE	TIME	CHLOROPHYLL *a*, SUSPENDED (UG/L)	CHLOROPHYLL *b*, SUSPENDED (UG/L)	BIOMASS/CHLOROPHYLL RATIO (UNITS)	SESTON DRY WEIGHT (MG/L)	SESTON ASH WEIGHT (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)
AUG, 1979								
09...	2035	9.98	1.90	1603	449	433	—	—
10...	0040	10.1	1.65	1089	427	416	17453	—
10...	0435	16.0	2.28	563	450	441	12528	23
10...	0805	11.4	1.55	1053	429	417	12389	—
10...	1200	21.3	2.90	610	421	408	10287	—
10...	1600	38.9	5.69	334	431	418	11759	36
10...	2020	16.2	2.69	802	446	433	7900	—
JUN, 1980								
05...	1345	1.71	.149	1754	289	286	1441	11
06...	0335	.510	.087	9804	259	254	1006	10
AUG, 1980								
11...	1030	1.05	.151	2857	—	—	—	14
13...	1230	2.83	.466	2120	630	624	2338	16
13...	1630	—	—	—	—	—	3871	—
13...	2030	—	—	—	—	—	5391	—
13...	2400	.159	—	69180	657	646	2846	25
14...	0400	—	—	—	—	—	3964	—
14...	0815	—	—	—	—	—	3912	—
14...	1130	—	—	—	—	—	5312	—

TABLE 5.--*Phytoplankton taxa and cell counts, May 1979*

[Phytoplankton cells per milliliter]

Taxa	May 9, 1979 (1030 hr)
Site 11 - TRUCKEE RIVER AT FARAD	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Actinastrum gracilimum	1
Ankistrodesmus falcatus	7
Chlorophyta flagellate	9
Closterium sp.	1
Coelastrum microsporum	2
Cosmarium sp.	1
Golenkinia radiata	6
Pediastrum Boryanum	1
Scenedesmus bijuga	4
S. opoliensis	4
Schroederia setigera	2
Staurastrum sebaldi	1
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes lanceolata	6
A. minutissima	8
Asterionella formosa	40
Cocconeis placentula	2
Cyclotella bodanica	2
C. ocellata	2
Cymatapleura solea	1
Cymbella cistula	7
C. minuta	26
Diatoma hiemale	5
D. vulgare	10
Epithemia sp.	2
Fragilaria construens	18
F. crotonensis	3
F. vaucheriae	46
Gomphoneis herculeana	12
Hannaea arcus	2
Melosira granulata	62
M. varians	15
Meridion circulare	2
Navicula exigua	3
N. radiosa	9
N. salinarium	8
Nitzschia amphibia	5
N. dissipata	2
N. linearis	8
N. palea	5
Rhoicosphenia curvata	1
Synedra cyclopum	1
S. ulna	8
Tabellaria fenestrata	16
Chrysophyceae	
Chrysophyta cyst	4
Dinobryon sertularia	3
Synura uvella	1
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Cryptomonas sp.	5
EUGLENOPHYTA (euglenoids)	
Euglena sp.	8
Phacus sp.	5
PYRRHOPHYTA (fire algae)	
Dinophyceae	
Peridinium sp.	3
Miscellaneous flagellates	77
TOTAL	482

Taxa	May 9, 1979 (0930 hr)
Site 19 - NORTH TRUCKEE DRAIN AT KLEPPE LANE NEAR SPARKS	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Actinastrum gracilimum	2
Ankistrodesmus falcatus	15
Chlorophyta flagellate	10
Coelastrum microsporum	2
Elakathothrix gelatinosa	2
Golenkinia radiata	2
Scenedesmus bijuga	3
S. opolieneis	1
Tetrastrum staurogeniaeforme	1
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes lanceolata	7
A. minutissima	1
Cyclotella ocellata	2
Cymbella sinuata	3
Diatoma vulgare	5
Fragilaria conetruens	88
F. vaucheriae	45
Melosira varians	2
Navicula capitata	1
N. salinarium	25
N. viridula	7
Nitzschia acicularis	69
N. amphibia	8
N. dissipata	9
N. linearis	2
N. ovalis	1
N. stagnorum	36
Rhoicosphenia curvata	3
Rhopalodia sp.	1
Surirella ovata	4
Synedra minuscula	13
S. ulna	6
Chrysophyceae	
Chrysophyta cyst	3
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Cryptomonas sp.	7
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Anabaena sp.	2
Dactylococcopsis Smithii	4
EUGLENOPHYTA (euglenoids)	
Euglena sp.	14
Miscellaneous flagellates	41
TOTAL	447

TABLE 5.--*Phytoplankton taxa and cell counts, May 1979*--Continued

[Phytoplankton cells per milliliter]

Taxa	May 9, 1979 (1345 hr)	May 16, 1979 (1230 hr)
Site 22 - TRUCKEE RIVER AT VISTA		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Actinastrum gracilimum	1	--
Dictyosphoerium sp.	--	1
Pediastrum Boryanum	1	--
Scenedesmus opolieneis	8	8
Schroederia setigera	1	2
Spondylosium planum	--	3
Tetraedron minimum	1	1
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes lanceolata	1	8
A. minutissima	2	9
Asterionella formosa	6	72
Cocconeis placentula	1	2
Cyclotella ocellata	1	10
Cymbella cistula	--	24
C. mexicana	1	--
C. minuta	5	--
C. sinuata	1	8
Diatoma vulgare	5	18
Epithemia turgida	--	2
Fragilaria construens	42	54
F. crotonensis	11	--
F. vaucheriae	27	8
Gomphoneis herculeana	--	2
Gomphonema parvulum	--	3
Gyrosigma sp.	1	--
Hannaea arcus	--	5
Melosira granulata	5	--
M. italica	--	8
M. varians	1	13
Meridion circulare	1	2
Navicula exigua	6	3
N. viridula	11	20
Nitzschia acicularis	5	5
N. amphibia	4	6
N. dissipata	2	7
N. linearis	2	4
N. palea	2	11
N. stagnorum	5	--
Rhoicosphenia curvata	1	5
Stephanodiscus sp.	2	6
Surirella ovata	--	9
Synedra amphicephala	2	--
S. Gaillonii	1	--
S. ulna	--	11
S. sp.	3	--
Tabellaria fenestrata	2	16
Chrysophyceae		
Chrysophyta cyst	1	--
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Cryptomonas sp.	1	2
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Dactylococcopsis Smithii	1	--
Merismopedia tenuissima	1	--
EUGLENOPHYTA (euglenoids)		
Phacus sp.	1	--
PYRRHOPHYTA (fire algae)		
Dinophyceae		
Peridinium sp.	1	--
Miscellaneous flagellates	14	15
TOTAL	191	383

Taxa	May 10, 1979 (1030 hr)
Site 37 - TRUCKEE RIVER BELOW DERBY DAM	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Arkistrodesmus falcatus	4
Coelastrum microsporum	1
Scenedesmus bijuga	2
S. dimorphus	2
S. opolieneis	4
Schroederia setigera	3
Tetraedron minimum	1
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes lanceolata	1
A. minutissima	2
Asterionella formosa	10
Cocconeis placentula	3
Cymbella cistula	4
C. mexicana	1
C. minuta	17
C. sinuata	1
Diatoma vulgare	10
Epithemia sp.	1
Fragilaria conetruens	122
F. crotonsis	4
F. vaucheriae	86
Gomphoneis herculeana	2
Melosira distans	9
M. granulata	13
M. varians	7
Navicula capitata	2
N. mutica	2
N. salinarium	17
N. viridula	26
Nitzschia acicularis	11
N. amphibia	9
N. dissipata	6
N. filiformis	3
N. ovalis	2
N. palea	7
N. stagnorum	17
Pinnularia borealis	2
P. sp.	1
Rhoicosphenia curvata	6
Stephanodiscus sp.	4
Surirella ovata	1
Synedra ulna	8
S. sp.	2
Tabellaria fenestrata	3
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Cryptomonas sp.	1
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Dactylococcopsis Smithii	2
Miscellaneous flagellates	15
TOTAL	457

TABLE 5.—*Phytoplankton taxa and cell counts, May 1979*—Continued

[Phytoplankton cells per milliliter]

Taxa	May 10, 1979 (1330 hr)	May 17, 1979 (1045 hr)
Site 44 - TRUCKEE RIVER AT OLD US 40 BRIDGE AT WADSWORTH		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Actinastrum gracilimum	—	4
Ankistrodesmus falcatus	8	4
Chlorophyta flagellate	8	—
Scenedesmus opolieneis	—	16
Tetraedron minimum	4	—
Tetrastrum staurogeniaeforme	—	4
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes lanceolata	8	—
A. minutissima	4	7
Asterionella formosa	—	83
Cocconeis placentula	4	—
Cyclotella ocellata	4	14
Cymatapleura solea	4	4
Cymbella mexicana	—	7
C. minuta	12	14
Diatoma vulgare	31	18
Epithemia sp.	—	7
Fragilaria construens	1970	617
F. crotonensis	—	36
F. vaucheriae	967	530
Gomphoneis herculeana	4	4
Gomphonema olivaceum	—	4
Melosira granulata	27	32
M. variane	8	50
Navicula decussis	—	25
N. salinarium	43	—
N. secura	—	4
N. viridula	15	54
Nitzschia amphibia	8	—
N. acicularis	8	7
N. clausii	12	—
N. dissipata	4	4
N. palea	12	18
N. stagnorum	—	14
Rhoicosphenia curvata	8	4
Rhopalodia sp.	4	—
Stephanodiscus sp.	—	7
Surirella ovata	12	—
Synedra ulna	4	14
Tabellaria fenestrata	4	4
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Cryptomonas sp.	—	7
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Merismopedia tenuissima	4	—
Miscellaneous flagellates	—	36
TOTAL	3201	1653

Taxa	May 17, 1979 (1500 hr)
Site 63 - TRUCKEE RIVER AT MARBLE BLUFF DAM	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Actinastrum gracilium	2
Ankistrodesmus falcatus	14
Chlorophyta flagellate	33
Golenkinia radiata	2
Scenedesmus bijuga	16
S. opolieneis	8
Schroederia setigera	4
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes lanceolata	16
A. minutissima	6
Asterionella formosa	67
Cocconeis placentula	4
Cyclotella ocellata	10
Cymbella mexicana	2
C. minuta	20
Diatoma elongatum	2
D. vulgare	59
Epithemia sorex	2
Fragilaria construens	451
F. crotonensis	30
Gomphoneis herculeana	2
Gomphonema parvulum	2
Hannaea arcus	2
Melosira granulata	20
M. varians	12
Navicula cuspidata	8
N. decussis	35
N. inflexa	22
N. placentula	18
N. pupula	4
Nitzschia acicularis	18
N. dissipata	2
N. filiformis	6
N. gracilis	12
N. palea	22
Pinnulania sp.	4
Rhoicosphenia curvata	14
Stephanodiscus sp.	2
Surirella ovalis	2
S. ovata	4
Synedra ulna	12
Tabellaria fenestrata	8
Chrysophyceae	
Chrysophyta cyst	4
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Cryptomonas sp.	4
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Merismopedia tenuissima	2
Miscellaneous flagellates	12
TOTAL	1001

TABLE 5.--*Phytoplankton taxa and cell counts, May 1979*--Continued

[Phytoplankton cells per milliliter]

Taxa	May 17, 1979 (1400 hr)	Taxa	May 10, 1979 (1645 hr)
Site 64 - TRUCKEE RIVER FISHWAY AT MARBLE BLUFF DAM		Site 73 - TRUCKEE CANAL AT BANGO CHECK DAM NEAR HAZEN	
CHLOROPHYTA (green algae)		CHLOROPHYTA (green algae)	
Chlorophyceae		Chlorophyceae	
Arkistrodesmus falcatus	16	*Arkistrodesmus falcatus*	4
Chlorophyta flagellate	2	Chlorophyta flagellate	7
Scenedesmus opoliensis	7	*Coelastrum microsporum*	1
CHRYSOPHYTA		*Pediastrum sp.*	1
Bacillariophyceae (diatoms)		*Scensdesmus opoliensis*	1
Achnanthes lanceolata	5	*Schroederia setigera*	2
Asterionella formosa	37	*Tetraedron minimum*	1
Cocconeis placentula	5	CHRYSOPHYTA	
Cyclotella bodanica	2	Bacillariophyceae (diatoms)	
Cymbella minuta	9	*Achnanthes lanceolata*	3
Diatoma vulgare	7	*A. minutissima*	1
Epithemia sorex	2	*Asterionella formosa*	12
Fragilaria conetruens	869	*Cocconeis placentula*	2
F. vaucheriae	142	*Cyclotella bodanica*	3
Gomphoneis herculeana	5	*C. ocellata*	5
Gomphonema dichotomum	2	*Cymbella mexicana*	2
G. parvulum	2	*C. minuta*	7
Melosira granulata	20	*C. sinuata*	1
M. varians	12	*Diatoma vulgare*	18
Navicula cuspidata	8	*Epithemia sp.*	2
N. decussis	35	*Fragilaria construens*	166
N. inflexa	22	*F. crotonensis*	4
N. placentula	18	*F. vaucheriae*	50
N. pupula	2	*Gomphoneis herculeana*	5
N. salinarium	33	*Melosira granulata*	18
N. viridula	19	*M. variane*	4
Nitzschia amphibia	2	*Meridion circulare*	1
N. acicularis	16	*Navicula salinarium*	25
N. dissipata	2	*N. viridula*	36
N. palea	9	*Nitzschia amphibia*	12
N. stagnorum	9	*N. acicularis*	2
Rhoicosphenia curvata	2	*N. dissipata*	2
Rhopalodia sp.	5	*N. ovalis*	2
Stephanodiscus sp.	2	*N. palea*	7
Surirella ovata	2	*N. thermalis*	10
Synedra ulna	5	*Rhoicosphenia curvata*	3
S. sp.	2	*Surirella ovata*	6
CYANOPHYTA (blue-green algae)		*Synedra ulna*	7
Myxophyceae		*Tabellaria fenestrata*	1
Meriamopedia tenuissima	2	Chrysophyceae	
		Chrysophyceae cyst	1
		CYANOPHYTA (blue-green algae)	
		Myxophyceae	
		Dactylococcopsis Smithii	2
		Miscellaneous flagellates	4
TOTAL	1339	TOTAL	441

TABLE 6.—*Phytoplankton taxa and cell counts, August 1979*

[Phytoplankton cells per milliliter]

Taxa	Aug. 8, 1979 (1200 hr)	Aug. 8, 1979 (1550 hr)	Aug. 8, 1979 (2400 hr)	Aug. 9, 1979 (0800 hr)
Site 16 - TRUCKEE RIVER NEAR SPARKS				
CHLOROPHYTA (green algae)				
Chlorophyceae				
Actinastrum Hantzschii	4	—	—	—
Ankistrodesmus falcatus	1	—	—	—
Cosmarium sp.	—	—	1	—
Scenedesmus abundans	—	4	8	4
S. dimorphus	—	4	8	4
S. opoliensis	—	—	4	12
S. quadricauda	—	3	4	12
CHRYSOPHYTA				
Bacillariophyceae (diatoms)				
Achnanthis minutissima	2	2	1	5
A. sp.	—	—	—	1
Amphora sp.	—	1	—	—
Cocconsis placentula	33	14	11	16
Cyclotella Meneghiana	10	7	7	10
C. stelligera	—	1	—	—
C. ocellata	2	1	4	2
Cymatopleura solea	1	—	—	—
Cymbella cistula	14	10	4	10
C. mexicana	1	—	—	—
C. minuta	2	—	—	—
C. sinuata	—	1	—	—
Diatoma vulgare	4	2	2	3
Epithemia sorex	—	1	1	—
Fragilaria construens	27	31	109	148
Gomphoneis herculeana	1	2	4	1
Gomphonema parvulum	—	—	—	2
G. ventricosum	1	—	1	—
Melosira italica	1	1	—	—
M. varians	1	1	7	4
Navicula decussis	6	1	1	1
N. heutleri	16	10	6	16
N. pupula	—	2	2	1
N. salinarum	109	60	65	104
N. tripunctata	6	2	6	10
N. viridula	3	6	1	8
Nitzschia acicularis	3	1	—	1
N. amphibia	19	17	13	13
N. communis	3	2	1	2
N. dissipata	18	12	8	18
N. linearis	—	1	2	3
N. palea	49	33	28	54
N. sp.	14	19	9	15
Rhoicasphenia curvata	3	2	7	3
CYANOPHYTA (blue-green algae)				
Myxophyceae				
Merismopedia punctata	—	1	—	—
Oscillatoria sp.	1	2	1	1
EUGLENOPHYTA (euglenoids)				
Euglena sp.	1	—	—	—
Miscellaneous flagellates	6	2	3	—
TOTAL	365	265	330	484

Taxa	August 8, 1979 (1250 hr)	August 8, 1979 (2045 hr)	Aug. 9, 1979 (0440 hr)
Site 19 - NORTH TRUCKEE DRAIN AT KLEPPE LANE NEAR SPARKS			
CHLOROPHYTA (green algae)			
Chlorophyceae			
Ankistrodesmus falcatus	4	—	1
Chodatella quadriseta	—	1	—
Chlorophyta flagellate	3	1	—
Closterium sp.	—	1	—
Coelastrum microsporum	—	8	—
Cosmarium sp.	—	1	—
Crucigenia quadrata	—	12	—
Mougeotia sp.	—	1	—
Oocystis sp.	8	—	4
Pandoria morum	16	—	—
Pediastrum duplex	—	24	—
Scenedesmus abundans	4	—	—
S. dimorphus	8	—	4
S. opolienus	8	6	—
S. quadricauda	—	2	—
Staurastrum sp.	—	1	—
Tetradon minimum	1	—	—
Tetrastrum staurogeniaeforme	—	—	1
CHRYSOPHYTA			
Bacillariophyceae (diatoms)			
Achnanthes lancelata	2	1	3
A. sp.	—	—	2
Cocconeis placentula	128	40	38
Coecinmodiscus lacustris	—	4	—
Cyclotella bodanica	—	—	1
C. Maneghiniana	29	16	12
Cymatopleuea solea	—	—	1
Cymbella minuta	—	—	2
Diatoma vulgare	65	25	28
Fragilaria construens	—	30	23
F. vaucheriae	—	42	—
Gomphonema acuminatum	—	—	1
G. olivaceum	19	—	—
G. parvulum	11	9	2
G. truncatum	1	1	—
Gyrosigma sp.	1	—	—
Melosira varians	28	31	31
Navicula capitata	1	—	—
N. graciloides	4	4	3
N. heutleri	—	1	—
N. mutica	—	1	2
N. pupula	1	2	—
N. salinarum	13	4	7
N. tripunctata	8	2	7
N. viridula	—	—	3
Nitzschia acicularis	44	5	40
N. amphibia	5	4	14
N. dissipata	—	—	7
N. filiformus	1	—	—
N. linearis	6	—	5
N. palea	35	16	27
N. palaecea	—	—	1
N. sublinearis	—	—	2
N. sp.	13	4	4
Rhoicosphenia curvata	21	12	5
Stephanodiscus Hantzschii	—	1	—
Synedra ulna	14	4	4
CRYPTOPHYTA (cryptomonads)			
Cryptophyceae			
Cryptomonas sp.	2	3	3
CYANOPHYTA (blue-green algae)			
Myxophyceae			
Anabaena spiroides	5	6	2
A. sp.	12	30	20
Oscillatoria sp.	2	2	2
EUGLENOPHYTA (Euglenoids)			
Euglena sp.	—	—	2
Miscellaneous flagellates	12	1	5
TOTAL	535	359	319

TABLE 6.—*Phytoplankton taxa and cell counts, August 1979*—Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 8, 1979 (1200 hr)	Aug. 8, 1979 (2000 hr)	Aug. 9, 1979 (0600 hr)
Site 20 - STEAMBOAT CREEK AT KIMLICK LANE NEAR RENO			
CHLOROPHYTA (green algae)			
Chlorophyceae			
Actinastrum Hantzschii	16	--	--
Ankistrodesmus falcatus	32	24	--
Chodatella quadriseta	7	11	--
Chlorophyta flagellate	18	18	--
Closteropeis longissima	69	63	76
Coelastrum microsporum	56	80	32
Dictyosphaerium pulchellum	56	56	--
Micractinium pusillum	--	8	--
Pediastrum duplex	--	--	64
P. tetras	32	--	32
Scenedesmus abundans	16	32	192
S. dimorphus	28	8	48
S. opoliensis	64	18	64
S. quadricauda	72	24	56
S. sp.	8	4	16
Tetraedron caudatum	--	--	4
T. minimum	11	11	4
Tetrastrum staurogeniaeforme	4	5	4
Treubaria setigerum	--	2	--
Tetraedron trigonium	--	2	--
CHRYSOPHYTA			
Bacillariophyceae (diatoms)			
Achnanthes lanceolata	--	3	--
A. sp.	7	--	--
Amphora ovalis	--	2	--
Cocconeis placentula	90	39	48
Coscinodiscus lacustris	83	98	92
Cyclotella Meneghiniana	50	68	40
Cymatopleura solea	--	2	--
Cymbella sp.	4	--	--
Epithemia sp.	--	3	4
Eunotia sp.	--	2	--
Fragilaria construens	790	185	977
F. vaucheriae	--	13	--
Gomphonema parvulum	--	6	--
G. tergestinium	4	--	4
Melosira granulata	54	20	44
M. varians	7	3	16
Navicula decussis	--	3	4
N. graciloides	22	13	16
N. mutica	--	2	--
N. pupula	7	8	--
N. salinarum	7	15	4
N. tripunctata	--	2	--
N. viridula	--	--	4
Nitzschia acicularis	61	29	32
N. amphibia	14	3	16
N. communis	4	6	--
N. dissipata	--	2	--
N. filiformis	4	--	--
N. linearis	--	2	--
N. palea	51	21	24
N. sp.	25	11	24
Rhoicosphenia curvata	7	10	4
Rhopalodia giberula	--	3	--
Synedra ulna	7	5	4
CRYPTOPHYTA			
Cryptophyceae (cryptomonads)			
Chroomonas sp.	87	5	--
Cryptomonas sp.	25	18	--
CYANOPHYTA (blue-green algae)			
Myxophyceae			
Anabaena sp.	7	11	8
Coelosphaerium Kuetzingianum	168	--	--
Dactylococcopsis Smithii	7	3	--
Gomphosphaenia lacustris	--	64	160
Menismopedia tenuissima	672	160	64
Oscillatoria sp.	32	15	16
Rhaphidiopsis mediterranea	51	24	100
Miscellaneous flagellates	72	16	48
TOTAL	2908	1261	2345

Taxa	Aug. 8, 1979 (1300 hr)	Aug. 8, 1979 (1700 hr)	Aug. 8, 1979 (2115 hr)	Aug. 9, 1979 (0100 hr)	Aug. 9, 1979 (0500 hr)	Aug. 9, 1979 (0830 hr)
Site 23 - TRUCKEE RIVER AT LOCKWOOD						
CHLOROPHYTA (green algae)						
Chlorophyceae						
Ankistrodesmus faculatus	4	3	2	--	5	--
Chodatella quadriseta	--	--	--	1	--	--
Closteriopsis longissima	10	3	7	7	10	6
Closterium sp.	--	--	--	--	--	1
Coelastrum microsporum	8	8	--	8	--	--
Dictyosphaerium pulchellum	--	--	8	--	--	--
Macratinium pusillum	--	4	--	4	--	--
Oocystis sp.	--	1	4	1	4	--
Pediastrum Boryanum	16	--	--	--	--	--
P. tetras	16	--	8	--	8	8
Scenedesmus abundans	4	6	--	14	20	16
S. dimorphus	4	--	4	4	8	8
S. opoliensis	12	6	--	--	8	12
S. quadricauda	4	12	18	8	12	24
S. sp.	16	12	--	4	--	--
Tetraedron minimum	1	6	2	2	--	1
T. trigonum	--	--	1	--	--	--
Tetrastrum staurogeniaeforme	--	1	--	--	1	1
Ulothrix sp.	--	--	1	--	--	--
Staurastrum sp.	--	--	--	--	--	1
CHRYSOPHYTA						
Bacillariophyceae (diatoms)						
Achnanthes lanceolata	--	3	--	--	--	--
A. minutissima	1	1	--	--	1	--
A. sp.	3	4	2	--	--	--
Amphipleura sp.	--	--	1	--	--	--
Cocconeis placentula	13	12	15	14	12	12
Coscinodiscus denarius	7	5	2	3	1	--
C. sp.	1	6	9	8	10	13
Cyclotella bodanica	--	--	--	1	--	--
C. Meneghiniana	23	32	15	15	20	24
C. ocellata	19	10	27	14	10	11
Cymatopleura solea	2	--	--	--	--	--
Cymbella cistula	3	4	4	4	5	2
C. minuta	2	1	--	1	1	2
C. sinuata	--	1	1	1	--	--
Diatoma vulgare	1	4	1	--	4	5
Eunotia sp.	--	--	1	--	--	--
Fragilaria construens	182	125	95	270	101	186
Gomphoneis herculeana	--	--	2	2	1	1
Gomphonema angustatum	--	3	8	--	--	--
G. parvulum	2	3	3	6	9	5
G. tergestimum	--	1	2	4	--	--
G. ventricosum	--	--	1	--	--	--
Melosira granulata	5	--	12	2	31	11
M. italica	2	--	--	--	--	--
M. varians	3	1	9	16	16	14
Navicula capitata	--	--	1	1	--	--
N. decussis	2	1	--	--	--	--
N. heufleri	--	1	5	1	--	--
N. mutica	50	56	42	56	53	54
N. papula	14	6	8	15	12	28
N. salinarum	50	46	40	30	44	60
N. tripunitata	2	1	1	--	--	1
N. viridula	--	--	3	--	2	4
Nitzschia acicularis	16	8	1	2	7	4
N. amphibia	23	31	14	24	12	18
N. communis	6	5	7	8	2	1
N. dissipata	9	10	6	16	5	8
N. filiformis	1	--	--	1	--	1
N. holsatica	--	--	--	8	--	--
N. linearis	--	4	1	--	3	--
N. palea	45	42	35	27	26	56
N. sp.	14	9	13	13	7	7
Rhoicosphenia curvata	10	9	6	4	17	6
Stauroneis sp.	--	--	--	1	--	--
Synedra ulna	3	4	3	6	4	6
CRYPTOPHYTA						
Cryptophyceae						
Chroomonas sp.	9	3	4	1	--	2
Cryptomonas sp.	6	5	3	2	3	1
CYANOPHYTA (blue-green algae)						
Myxophyceae						
Anabaena sp.	1	--	--	2	--	2
Gomphosphaena lucustris	48	--	64	--	--	--
Merismopedia punctata	8	--	--	--	--	--
Oscillatoria sp.	13	1	11	7	4	10
EUGLENOPHYTA (euglenoids)						
Euglena sp.	1	--	--	1	1	--
Miscellaneous flagellates	29	39	16	18	13	17
TOTAL	724	559	549	658	513	650

TABLE 6.—*Phytoplankton taxa and cell counts, August 1979*—Continued

[Phytoplankton cells per milliliter]

Site 36 - TRUCKEE RIVER AT DERBY DAM

Taxa	Aug. 8, 1979 (2235 hr)	Aug. 9, 1979 (0420 hr)	Aug. 9, 1979 (1615 hr)	Aug. 9, 1979 (2000 hr)	Aug. 10, 1979 (0800 hr)
CHLOROPHYTA (green algae)					
Chlorophyceae					
Arkistrodesmus falcatus	21	6	27	16	11
Chlamydomonad flagellate	—	1	45	34	7
Chlorophyta unicell	4	7	10	—	5
Chodatella quadriseta	—	—	2	—	—
Closteriopsis longissima	9	5	4	16	23
Closterium sp.	—	1	—	—	2
Coelastrum microsporum	8	16	36	—	60
Cosmarium botrytis	—	—	2	—	—
C. sp.	1	—	—	—	—
Crucigentia quadrata	—	—	—	6	—
C. tetrapedia	—	5	—	4	—
Dictyosphaerium pulchellum	12	—	—	—	—
Franceia Droescheri	—	80	—	—	24
Gonium pectorale	—	—	2	—	—
Kirchneriella contorta	—	—	8	—	—
Micratinium pusillum	—	4	—	—	—
Pediastrum Boryanum	—	16	—	—	32
P. tetras	—	16	—	16	32
Oocystis sp.	6	1	9	—	—
Scendesmus abundans	18	34	36	8	36
S. denticulatus	—	—	8	—	—
S. bijuga	4	4	—	—	8
S. dimorphus	20	34	48	24	72
S. opoliensis	78	28	16	24	48
S. quadricauda	6	4	32	38	12
S. sp.	12	8	28	28	24
Schroederia setigera	—	—	4	—	—
Staurastrum sp.	—	—	—	—	2
Tetraedon caudatum	—	1	6	2	—
T. minimum	4	4	31	8	7
T. trigonum	1	—	4	—	—
Tetrastrum staurogeniaeforme	8	3	8	4	—
CHRYSOPHYTA					
Bacillariophyceae (diatoms)					
Achnanthes lanceolata	—	—	—	4	—
A. minutissima	—	—	—	—	4
Cocconeis placentula	30	22	47	26	16
Cyclotella Bodanica	1	—	—	—	—
C. Meneghiniana	127	115	379	321	319
C. ocellata	8	5	10	10	4
C. stelligera	1	2	—	2	—
C. sinuata	—	1	—	—	—
C. sp.	—	—	—	4	—
Diatoma vulgare	10	1	2	4	9
Eunotia sp.	14	2	2	8	2
Fragilaria construens	94	43	33	—	76
Gomphonels herculeana	—	—	—	4	—
Gomphonema parvulum	10	5	4	10	5
G. tergestinum	4	2	14	16	4
Melosira granulata sp.	8	9	—	6	2
M. varians	3	4	4	—	2
Navicula decussis	—	—	2	—	—
N. mutica	—	6	2	2	2
N. pupula	1	3	—	—	4
N. salinarum	14	13	29	32	34
N. tripunctata	3	—	—	—	—
Navicula viridula	1	—	—	4	—
Nitzschia acicularis	17	8	16	6	11
N. amphibia	45	26	45	44	56
N. communis	8	2	8	14	7
N. dissipata	4	1	10	6	5
N. linearis	1	—	—	4	2
N. palea	26	22	16	24	36
N. sp.	13	5	6	8	13
Rhoicosphenia curvata	—	3	2	6	5
Synedra masameanels	—	—	2	—	—
S. ulna	1	—	4	2	2
Chrysophyceae					
Dinobryon sp.	—	—	2	—	—
Mallamonas sp.	—	—	2	—	2
CRYPTOPHYTA (cryptomonads)					
Cryptophyceae					
Chroomonas sp.	12	8	2	12	9
Cryptomonas sp.	12	8	33	26	20
CYANOPHYTA (blue-green algae)					
Myxophyceae					
Anabaena sp.	1	1	—	2	—
Coelosphaerium Kuetzingianum	180	—	—	240	—
Gomphosphaeria lacustris	64	24	—	—	—
Merismopedia punctata	—	24	16	—	16
M. tenuissima	—	—	—	32	—
Oscillatoria sp.	4	—	4	—	9
EUGLENOPHYTA (euglenoids)					
Euglena sp.	—	—	2	4	—
Miscellaneous flagellates	81	69	80	64	45
TOTAL	1010	712	1144	1175	1126

Site 63 - TRUCKEE RIVER AT MARBLE BLUFF DAM

Taxa	Aug. 9, 1979 (1230 hr)	Aug. 9, 1979 (1630 hr)	Aug. 9, 1979 (2025 hr)	Aug. 10, 1979 (0035 hr)	Aug. 10, 1979 (0435 hr)	Aug. 10, 1979 (0800 hr)
CHLOROPHYTA (green algae)						
Chlorophyceae						
Actinastrum Hantzschii	—	—	—	15	—	48
Arkistrodesmus falcatus	191	141	180	124	158	180
Chlamydomonad flagellate	73	76	39	—	61	—
Closteriopsis longissima	—	—	—	5	6	6
Coelastrum microsporum	48	128	—	88	96	48
Cosmarium sp.	—	—	6	—	—	—
Golenkinia radiata	6	—	—	—	—	—
Kirchneriella contorta	24	64	44	—	24	—
Oocystis sp.	6	—	67	5	24	—
Pediastrum Boryanum	96	—	176	—	—	—
P. duplex	—	80	96	—	—	—
P. tetras	—	—	—	20	—	—
Scenedesmus abundans	24	88	136	—	24	158
S. armatus	—	—	—	64	—	—
S. bijuga	22	52	100	44	—	44
S. dimorphus	48	44	—	—	24	—
S. opolieneis	200	88	136	240	192	336
S. quadricauda	90	44	66	32	—	66
S. sp.	12	20	24	88	108	432
Schroederia setigera	79	59	34	60	54	62
Selenastrum minutum	62	146	146	76	127	90
Tetraedron caudatum	6	5	6	16	—	—
T. minimum	6	5	—	—	12	11
T. trigonum	—	5	11	11	12	11
Tetrastrum staurogeniaeforme	22	16	6	32	24	50
Treubaria setigerum	6	—	6	5	6	—
CHRYSOPHYTA						
Bacillariophyceae (diatoms)						
Cocconeis placentula	11	5	6	11	—	6
Cyclotella Kuetzingiana	112	97	135	54	61	107
C. Meneghiniana	196	206	152	157	97	208
C. pseudostelligera	—	—	—	22	—	—
Epithemia sorex	6	11	—	—	—	17
Fragilaria capucina	—	325	—	465	—	—
Melosira granulata	673	947	673	800	370	1,117
Navicula pupula	—	—	—	—	—	6
Nitzschia acicularis	17	11	6	5	6	6
N. amphibia	—	—	—	5	—	—
N. palea	11	54	6	16	18	22
N. stagnorum	—	—	—	—	—	11
N. sp.	56	70	84	11	18	28
Synedra ulna	—	16	—	—	—	—
Chrysophyceae						
Mallomonas sp.	—	11	—	—	—	—
CRYPTOPHYTA (cryptomonads)						
Cryptophyceae						
Chroomonas sp.	208	216	1,072	1,071	830	3,013
Cryptomonas sp.	17	249	73	141	48	297
CYANOPHYTA (blue-green algae)						
Myxophyceae						
Anabaena circinalis	965	476	168	114	303	258
A. sp.	152	43	90	16	42	17
Merismopedia tenuissima	96	608	720	256	—	96
EUGLENOPHYTA (euglenoids)						
Phacus sp.	—	—	—	—	—	6
Miscellaneous flagellates	432	438	421	530	606	505
TOTAL	3973	4844	4885	4599	3351	7262

TABLE 6.--*Phytoplankton taxa and cell counts, August 1979*—Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 10, 1979 (0040 hr)	(0435 hr)	(0805 hr)	(1200 hr)	(1600 hr)	(2020 hr)
Site 74 - TRUCKEE CANAL AT US 50 ABOVE LAHONTAN RESERVOIR						
CHLOROPHYTA (green algae)						
Chlorophyceae						
Actinastrum Hantzschii	80	32	56	88	—	—
Ankistrodesmus falcatus	119	111	241	101	46	—
Chlamydomonad flagellate	81	40	97	280	370	145
Chlorophyta unicell	105	76	86	255	231	159
Chodatella quadriseta	110	25	—	25	249	134
Closteriopsis longissima	62	58	97	162	85	44
Coelastrum microsporum	288	732	996	942	600	396
Dictyosphaerium pulchellum	592	432	144	44	100	44
Elakotothrix gelatinosa	—	—	4	—	—	—
Eudorina elegans	—	—	—	96	—	—
Franceia Droescheri	—	—	—	4	—	—
Gloeocystis vesiculosa	—	128	—	—	—	—
Kirchneriella contorta	724	116	216	16	—	—
Micractinium pusillum	5696	2848	2244	1768	2720	1364
Oocystis sp.	67	111	54	—	11	70
Pediastrum Boryanum	160	112	224	224	112	352
P. duplex	—	112	64	64	64	112
P. tetras	40	88	—	88	56	120
Scenedesmus abundans	60	16	168	96	16	16
S. armatus	228	16	—	—	—	—
S. bijuga	152	84	60	104	146	194
S. dimorphus	420	120	248	548	272	100
S. opoliensis	1710	1352	1042	750	396	240
S. quadricauda	234	140	570	400	598	306
S. sp.	538	496	518	316	128	60
Schroederia setigera	10	4	22	14	7	7
Selenastrum minutum	95	273	539	107	377	111
CHRYSOPHYTA						
Bacillariophyceae (diatoms)						
Achnanthes lanceolata	—	—	4	4	—	—
Cocconeis placentula	14	4	7	11	7	7
Cyclotella Meneghiniana	4728	3858	3329	2880	4438	3464
Cymatopleura solea	5	—	—	—	—	—
Fragilaria sp.	—	25	29	—	11	18
Gomphonema sp.	—	4	—	—	—	—
Melosira granulata	86	100	93	205	50	86
Navicula mutica	5	—	—	—	4	—
N. viridula	—	7	25	14	14	—
Nitzschia acicularis	414	194	208	72	32	59
N. amphibia	29	4	14	7	7	—
N. communis	5	—	4	7	—	—
N. holsatica	38	—	11	—	—	—
N. palea	19	14	36	32	18	7
N. stagnorum	29	11	40	36	18	11
N. spp.	33	18	—	36	14	—
Stephanodiscus astraea	—	4	14	—	—	—
Synedra ulna	14	25	29	14	39	44
CRYPTOPHYTA (cryptomonads)						
Cryptophyceae						
Chroomonas sp.	62	58	18	57	11	18
Cryptomonas sp.	219	194	119	190	46	33
CYANOPHYTA (blue-green algae)						
Myxophyceae						
Anabaena sp.	5	—	—	—	—	4
Aphanocapsa sp.	5	7	32	29	28	22
Coelosphaerium Kuetzingianum	—	4	—	—	—	—
Merismopedia punctata	5	—	4	—	—	4
M. tenuissima	38	22	32	25	89	37
Oscillatoria sp.	5	4	4	—	—	—
EUGLENOPHYTA (euglenoids)						
Euglena sp.	—	—	11	—	—	—
Phacus sp.	—	—	—	—	—	4
Miscellaneous flagellates	124	449	636	176	349	108
TOTAL	17453	12528	12389	10287	11759	7900

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*

[Phytoplankton cells per milliliter]

Taxa	June 5, 1980 (1140 hr)	June 6, 1980 (0005 hr)
Site 13 - TRUCKEE RIVER AT CRYSTAL PEAK PARK AT VERDI		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Ankistrodesmus falcatus	--	1
Carteria sp.	165	25
Eudorina elegans	--	32
Oocystis sp.	--	1
Schroederia setigera	8	8
Staurastrum sebaldi	--	1
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes lanceolata	--	1
A. minutissima	17	18
Asterionella formosa	9	--
Cocconeis placentula	2	1
Cyclotella Bodanica	2	--
C. Meneghiniana	--	2
Cymbella cistula	14	3
C. minuta	18	12
C. sinuata	--	1
Diatoma hiemale	--	2
D. vulgare	11	1
Fragilaria construens	--	11
F. crotonensis	--	1
F. vaucheriae	2	4
Gomphonema truncatum	5	4
Melosira italica	3	6
M. varians	2	--
Meridion circulare	2	1
Navicula heufleri	2	1
N. salinarum	3	--
N. viridula	3	--
Nitzschia acicularis	8	7
N. communis	--	1
N. dissipata	--	1
N. gracilis	6	3
N. palea	2	6
N. sp.	2	4
Surirella ovata	2	--
Tabellaria fenestrata	9	6
Chrystophyceae		
Mallomonas akrokomos	104	29
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	38	13
Cryptomonas sp.	28	4
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Aphanizomenon flos-aquae	15	10
Immature cyanophyta trichome	5	6
Oscillatoria sp.	2	--
PYRRHOPHYTA (fire algae))		
Dinophyceae		
Peridinium sp.	2	4
Miscellaneous flagellates	144	176
TOTAL	635	407

Taxa	June 5, 1980 (1300 hr)	June 6, 1980 (0125 hr)
Site 15 - TRUCKEE RIVER AT MAYBERRY DRIVE		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Carteria sp.	32	20
Elakatothrix gelatinosa	2	--
Mougeotia sp.	1	--
Oocystis sp.	1	2
Schroederia setigera	8	9
Tetraedron caudatum	--	1
Ulothrix sp.	1	--
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes lanceolata	1	4
A. minutissima	13	13
A. sp.	2	--
Asterionella formosa	1	3
Cocconeis placentula	4	--
Cyclotella Bodanica	1	1
Cymbella cistula	3	11
C. minuta	46	14
C. sinuata	2	5
Diatoma hiemale	2	1
D. vulgare	--	2
Fragilaria capucina	4	4
F. construens	2	8
F. crotonensis	--	1
F. vaucheriae	7	4
Gomphoneis herculeana	2	--
Gomphonema truncatum	3	--
G. parvulum	--	2
Hannaea arcus	1	3
Melosira granulata	4	14
M. italica	--	14
M. varians	1	--
Meridion circulare	2	1
Navicula peregrina	--	1
N. rhynchocephala	1	--
N. tripunctata	3	1
N. viridula	2	3
Nitzschia acicularis	4	8
N. dissipata	3	--
N. gracilis	3	--
N. holsatica	--	4
N. palea	10	10
N. sp.	4	--
Rhoicosphenia curvata	1	--
Stephanodiscus Hantzschii	1	4
S. ovata	1	1
Synedra cyclopum	1	--
Tabellaria fenestrata	18	18
Chrysophyceae		
Dinobryon sp.	3	--
Mallomonas akrokomos	52	41
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	37	7
Cryptomonas sp.	25	9
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Aphanizomenon flos-aquae	17	11
Dactylococcopsis Smithii	1	1
Immature cyanophyta trichome	6	11
Oscillatoria sp.	2	1
PYRRHOPHYTA (fire algae)		
Dinophyceae		
Gymnodinium sp.	1	--
Peridunium sp.	--	4
Miscellaneous flagellates	197	220
TOTAL	539	492

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 13, 1980 (0930 hr)
Site 15 - TRUCKEE RIVER AT MAYBERRY DRIVE	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Schroederia setigera	2
Ulothrix sp.	1
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes clerei	1
A. lanceolata	1
A. minutissima	8
A. sp.	1
Asterionella formosa	3
Cocconeis placentula	10
Cyclotella Bodanica	3
C. Kuetzingiana	1
C. Meneghiniana	3
Cymbella cistula	21
C. minuta	19
C. sinuata	3
Diatoma hiemale	1
D. vulgare	12
Eunotia sp.	1
Fragilaria crotonensis	26
F. vaucheriae	12
Gomphoneis herculeana	2
Gomphonema angustatum	4
Hannaea arcus	2
Melosira granulata	8
M. varians	2
Navicula heufleri	2
N. salinarium	2
N. tripunctata	1
N. viridula	1
Nitzschia acicularis	3
N. amphibia	1
N. communis	1
N. dissipata	2
N. linearis	1
N. palea	5
N. sublinearis	2
N. sp.	2
Rhoicosphenia curvata	4
Synedra radians	2
S. ulna	2
Tabellaria fenestrata	6
Chrysophyceae	
Chrysophyta flagellates	1
Dinobryon sertularia	4
Mallomonas sp.	1
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	2
Cryptomonas sp.	5
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Oscillatoria sp.	4
PYRRHOPHYTA (fire algae)	
Dinophyceae	
Gymnodinium sp.	1
Miscellaneous flagellates	70
TOTAL	272

Taxa	June 6, 1980 (0055 hr)
Site 16 - TRUCKEE RIVER NEAR SPARKS	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Cartera sp.	55
Oocystis sp.	1
Schroederia setigera	1
Ulothrix sp.	1
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes lanceolata	1
A. minutissima	16
Asterionella formosa	15
Cyclotella Bodanica	2
Cymbella cistula	9
C. minuta	28
Diatoma vulgare	4
Fragilaria capucina	2
F. construens	22
F. vaucheriae	13
Gomphoneis herculeana	5
Gomphonema truncatum	4
G. parvulum	1
Hannaea arcus	2
Melosira granulata	7
M. italica	10
Navicula hambergii	1
N. heufleri	1
N. salinarum	8
N. tripunctata	3
N. viridula	3
Nitzschia amphibia	2
N. dissipata	7
N. palea	13
N. sp.	3
Rhoicosphenia curvata	2
Stephanodiscus Hantzschii	1
Synedra ulna	1
Tabellaria fenestrata	9
Chrysophyceae	
Mallamonas akrokomos	19
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	8
Cryptomonas sp.	6
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Aphanizomenon flos-aquae	9
Immature cyanophyta trichome	11
Oscillatoria sp.	2
PYRRHOPHYTA (fire algae)	
Dinophyceae	
Gymnadinium sp.	1
Miscellaneous flagellates	104
TOTAL	413

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 13, 1980 (1035 hr)
Site 16 - TRUCKEE RIVER NEAR SPARKS	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Scenedesmus abundans	4
Schroederia setigera	2
Ulothrix sp.	1
Zygnema sp.	2
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes lanceolata	2
A. minutissima	13
A. sp.	2
Asterionella formosa	7
Cocconeis placentula	11
Cyclotella Bodanica	1
C. Kuetzingiana	2
C. Meneghiniana	2
C. ocellata	2
Cymbella cistula	26
C. mexicana	2
C. minuta	11
C. sinuata	2
Diatoma vulgare	11
Epithemia sorex	2
Fragilaria construens	9
F. vaucheriae	4
Gomphonema herculeana	1
Hannaea arcus	3
Melosira granulata	5
M. varians	2
Navicula heufleri	1
N. salinarium	2
N. tripunctata	1
N. viridula	4
Nitzschia acicularis	1
N. amphibia	1
N. dissipata	2
N. linearis	1
N. palea	7
N. sublinearis	1
N. sp.	1
Rhoicosphenia curvata	4
Stephanodiscus Hantzschii	2
Synedra ulna	2
Tabellaria fenestrata	2
Chrysophyceae	
Chrysophyta flagellates	2
Dinobryon sertularia	11
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	2
Cryptomonas sp.	4
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Dactylococcopsis Smithii	2
Miscellaneous flagellates	39
TOTAL	221

Taxa	June 5, 1980 (1250 hr)	June 6, 1980 (0040 hr)
Site 19 - NORTH TRUCKEE DRAIN AT KLEPPE LANE NEAR SPARKS		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Chlorophyta flagellates	24	7
Pandorina morum	--	32
CHRYSOPHYTA (diatoms)		
Bacillariophyceae		
Achnanthes lanceolata	—	7
Cocconeis placentula	5	11
Cyclotella Meneghiniana	17	11
Cymbella minuta	—	2
Diatoma vulgare	43	5
Fragilaria capucina	5	5
F. construens	1020	1780
F. vaucheriae	--	5
Gomphonema angustatum	--	14
Hannaea arcus	--	2
Melosira italica	5	--
M. varians	9	25
Navicula heufleri	21	7
N. peregrina	2	2
N. pupula	5	--
N. salinarum	38	5
N. tripunitata	2	--
N. viridula	26	25
Nitzschia acicularis	9	9
N. commutata	7	--
N. dissipata	12	2
N. linearis	12	2
N. palea	59	23
N. sp.	17	11
Rhoicosphenia curvata	--	9
Stephanodiscus Hantzschii	9	—
Surirella ovata	2	5
Synedra ulna	—	11
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	24	2
Cryptomonas sp.	24	--
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Anabaena sp.	2	2
Dactylococcopsis Smithii	--	5
Miscellaneous flagellates	54	44
TOTAL	1453	2070

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 5, 1980 (1230 hr)	June 6, 1980 (0025 hr)
Site 20 - STEAMBOAT CREEK AT KIMLICK LANE NEAR RENO		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Carteria sp.	6	—
Chlorophyta flagellates	12	16
Closteropsis longissima	—	2
Coelastrum microsporum	32	72
Oocystis sp.	12	—
Pediastrum Boryanum	112	16
P. tetras	8	8
Scenedesmus abundans	20	—
S. dimorphus	8	—
S. opolienels	32	40
S. quadricauda	32	84
S. sp.	8	—
Selenastrum minutum	—	4
Tetraedrom minimum	31	7
Tetrastrum staurogeniaeforme	8	11
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes lanceolata	4	7
A. minutissima	12	—
Amphora ovalis	12	2
Caloneis amphisbaena	1	2
Cocconeis placentula	4	11
Cyclotella Meneghiniana	43	65
Cymbella cistula	2	—
C. minuta	6	2
Diatoma vulgare	14	4
Fragilaria capucina	4	9
F. construens	581	439
F. vaucheriae	—	22
Gomphonema parvulum	4	—
Gyrosigma sp.	—	2
Melosira granulata	4	—
M. italica	2	—
M. varians	23	11
Navicula graciloides	4	4
N. heufleri	25	42
N. peregrina	2	—
N. pupula	1	—
N. pygmaea	2	2
N. salinarum	10	18
N. viridula	4	18
Nitzschia acicularis	25	—
N. amphibia	—	2
N. dissipata	1	11
N. filiformis	2	—
N. holsatica	—	8
N. linearis	2	7
N. palea	35	22
N. tryblionella	6	7
N. sp.	10	—
Pinnularia sp.	—	4
Rhoicosphenia curvata	2	4
Rhopalodia giberula	4	—
Stephanodiscus Hantzschii	8	13
Surirella ovata	3	4
Synedra ulna	20	13
Chrysophyceae		
Mallomonas akrokomos	—	2
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	96	36
Cryptomonas sp.	49	31
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Anabaena sp.	—	4
Dactylococcopsis Smithii	2	—
Immature cyanophyta trichome	—	4
Menismopedia teruissima	64	—
Oscillatoria sp.	2	11
Miscellaneous flagellates	174	143
TOTAL	1,590	1,246

Taxa	June 5, 1980 (1400 hr)	June 6, 1980 (0130 hr)
Site 22 - TRUCKEE RIVER AT VISTA		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Arkistrodesmus falcatus	—	1
Carteria sp.	49	38
Kirchneriella subsolitaria	—	4
Pediastrum tetras	—	4
Scenedesmus opolienus	4	4
S. quadricauda	—	4
Schroederia setigera	—	2
Tetrastrum staurogeniaeforme	1	—
Ulothrix sp.	—	1
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes lanceolata	1	4
A. minutissima	14	9
Asterionella formosa	3	1
Cocconeis placentula	2	3
Coscinodiscus sp.	1	—
Cyclotella Meneghiniana	8	6
Cymbella cistula	8	9
C. mexicana	—	1
C. minuta	22	13
C. sinuata	—	1
Diatoma vulgare	1	2
Fragilaria construens	37	37
F. vaucheriae	2	1
Gomphoneis herculeana	1	—
Gomphonema truncatum	3	2
G. parvulum	—	1
Hannaea arcus	1	3
Melosira granulata	2	1
M. italica	—	6
M. varians	—	1
Navicula graciloides	1	2
N. heufleri	4	8
N. pupula	1	1
N. pygmaea	—	1
N. salinarum	4	4
N. tripunctata	2	—
N. viridula	2	2
Nitzschia acicularis	8	—
N. dissipata	4	—
N. gracilis	3	2
N. holsatica	—	6
N. palea	8	9
N. tryblionella	—	1
N. sp.	4	5
Rhoicosphenia curvata	2	2
Stephanodiscus Hantzschii	2	3
Surirella ovata	1	1
Synedra ulna	1	1
Tabellaria fenestrata	4	8
Chrysophyceae		
Mallomonas akrokomas	38	27
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	16	13
Cryptomonas sp.	17	9
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Anabaena sp.	1	2
Aphanizomenon flos-aquae	3	10
Immature cyanophyta trichome	—	4
PYRRHOPHYTA (fire algae)		
Dinophyceae		
Ceratium hirundinella	—	1
Miscellaneous flagellates	172	202
TOTAL	458	483

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 5, 1980 (1210 hr)	June 5, 1980 (2400 hr)	Taxa	June 13, 1980 (0850 hr)
Site 23 - TRUCKEE RIVER AT LOCKWOOD			Site 23 - TRUCKEE RIVER AT LOCKWOOD	
CHLOROPHYTA (green algae)			CHLOROPHYTA (green algae)	
Chlorophyceae			Chlorophyceae	
Arkistrodesmus falcatus	1	4	*Arkistrodesmus falcatus*	1
Carteria sp.	6	18	*Closteriopsis longissima*	1
Elakatothrix gelatinosa	--	2	*Pediastrum tetras*	16
Oocystis sp.	2	--	*Scenedesmus abundans*	8
Scenedesmus opoliensis	4	12	*S. opoliensis*	12
S. quadricauda	4	--	*Schroederia setigera*	6
Schroederia setigera	6	6	*Tetraedron minimum*	1
Tetrastrum staurogeniaeforme	1	--	*Tetrastrum staurogeniaeforme*	3
CHRYSOPHYTA			*Zygnema sp.*	2
Bacillariophyceae (diatoms)			CHRYSOPHYTA	
Achnanthes lanceolata	1	--	Bacillariophyceae (diatoms)	
A. minutissima	12	9	*Achnanthes lanceolata*	3
Amphora ovalis	1	--	*A. minutissima*	14
Asterionella formosa	2	3	*A. sp.*	3
Cocconeis placentula	1	3	*Amphora ovalis*	1
Cyclotella Bodanica	1	--	*Asterionella formosa*	8
C. Meneghiniana	1	1	*Cocconeis placentula*	7
Cymbella cistula	12	9	*Coscinodiscus sp.*	3
C. minuta	18	19	*Cymatopleura solea*	1
C. sinuata	--	1	*Cyclotella Meneghiniana*	9
Diatoma vulgare	2	3	*Cymbella cistula*	18
Fragilaria construens	8	220	*C. cymbiformis*	2
F. vaucheriae	3	3	*C. minuta*	13
Gomphoneis herculeana	1	--	*Diatoma hiemale*	2
Gomphonema truncatum	1	3	*D. vulgare*	5
Melosira granulata	5	--	*Fragilaria construens*	148
M. italica	--	12	*F. vaucheriae*	4
M. varians	1	--	*Gomphoneis herculeana*	8
Navicula graciloides	2	--	*Gomphonema parvulum*	5
N. heufleri	--	6	*G. sp.*	3
N. pupula	1	--	*Hannaea arcus*	1
N. rhynchocephala	--	1	*Melosira granulata*	10
N. salinarum	9	4	*M. varians*	6
N. tripunctata	1	--	*Navicula heufleri*	6
N. viridula	3	1	*N. salinarium*	8
Nitzschia acicularis	5	3	*N. tripunctata*	2
N. capitellata	1	--	*N. viridula*	3
N. dissipata	5	1	*Nitzschia acicularis*	4
N. gracilis	1	--	*N. amphibia*	2
N. linearis	1	3	*N. dissipata*	5
N. palea	6	6	*N. linearis*	1
N. sublinearis	1	--	*N. filiformis*	1
N. tryblionella	2	--	*N. palea*	4
N. sp.	1	--	*N. parvula*	1
Stephanodiscus Hantzschii	3	--	*N. sp.*	1
Surirella ovata	1	3	*Synedra ulna*	2
Synedra ulna	1	3	*Tabellaria fenestrata*	6
Tabellaria fenestrata	5	9	Chrysophyceae	
Chrysophyceae			Chrysophyta flagellates	4
Mallomonas akrokomos	34	25	*Dinobryon sertularia*	1
CRYPTOPHYTA (cryptomonads)			CRYPTOPHYTA (cryptomonads)	
Cryptophyceae			Cryptophyceae	
Chroomonas sp.	10	15	*Chroomonas*	1
Cryptomonas sp.	3	18	*Cryptomonas sp.*	1
CYANOPHYTA (blue-green algae)			CYANOPHYTA (blue-green algae)	
Myxophyceae			Myxophyceae	
Aphanizomenon flos-aquae	4	3	*Dactylococcopsis Smithii*	1
Dactylococcopsis Smithii	--	1	Miscellaneous flagellates	130
Immature cyanophyta trichome	6	6		
Oscillatoria sp.	1	--	TOTAL	508
PYRRHOPHYTA (fire algae)				
Dinophyceae				
Gymnodinium sp.	--	1		
Miscellaneous flagellates	154	159		
TOTAL	355	596		

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 6, 1980 (0120 hr)	Taxa	June 13, 1980 (1000 hr)
Site 27 - TRUCKEE RIVER AT PATRICK		Site 27 - TRUCKEE RIVER AT PATRICK	
CHLOROPHYTA (green algae)		CHLOROPHYTA (green algae)	
Chlorophyceae		Chlorophyceae	
Arkistrodesmus falcatus	3	*Arkistrodesmus falcatus*	1
Carteria sp.	9	*Closteriopsis longissima*	1
Cosmarium sp.	1	*Pediastrum tetras*	8
Scenedesmus opoliensis	2	*Scenedesmus dimorphus*	4
Schroederia setigera	3	*S. opolieneis*	16
Tetrastrum staurogeniaeforme	2	*Tetrastrum staurogeniaeforme*	5
CHRYSOPHYTA		*Ulothrix sp.*	1
Bacillariophyceae (diatoms)		*Zygnema sp.*	1
Achnanthes lanceolata	2	CHRYSOPHYTA	
A. minutissima	16	Bacillariophyceae (diatoms)	
Asterionella formosa	8	*Achnanthes clevei*	1
Cocconeis placentula	2	*A. lanceolata*	2
Coscenodiscus sp.	1	*A. minutissima*	8
Cyclotella Bodanica	3	*Asterionella formosa*	5
C. Meneghiniana	4	*Cocconeis placentula*	5
Cymbella cistula	10	*Coscinodiscus sp.*	4
C. minuta	23	*Cyclotella Kuetzingiana*	2
Diatoma vulgare	4	*C. Meneghiniana*	7
Epithemia sorex	1	*Cymbella cistula*	14
E. turgida	2	*C. minuta*	17
Fragilaria capucina	2	*Diatoma vulgare*	5
F. construens	47	*Fragilaria construens*	165
F. vaucheriae	3	*F. vaucheriae*	2
Gomphoneis herculeana	1	*Gomphoneis herculeana*	3
Gomphonema truncatum	3	*Gomphonema parvulum*	3
G. ventricosum	1	*Hannaea arcus*	1
Hannaea arcus	1	*Melosira granulata*	6
Melosira granulata	4	*M. variane*	9
M. italica	8	*Navicula heufleri*	4
M. varians	2	*N. salinarium*	5
Navicula graciloides	2	*N. tripunctata*	5
N. heufleri	5	*N. viridula*	5
N. pupula	2	*Nitzschia acicularis*	3
N. pygmaea	1	*N. dissipata*	4
N. salinarum	1	*N. palea*	14
N. tripunctata	1	*N. sublinearis*	1
N. vanheurekii	1	*Rhoicosphenia curvata*	3
N. viridula	5	*Synedra ulna*	3
Nitzschia acicularis	5	*Tabellaria fenestrata*	3
N. amphibia	3	CRYPTOPHYTA (cryptomonads)	
N. capitellata	2	Cryptophyceae	
N. dissipata	6	*Chroomonas sp.*	5
N. palea	6	*Cryptomonas sp.*	4
N. tryblionella	1	Miscellaneous flagellates	120
N. sp.	3		
Rhoicosphenia curvata	2	TOTAL	475
Stephanodiscus Hantzschii	4		
Surirella ovata	1		
Synedra ulna	1		
Tabellaria fenestrata	15		
Chrysophyceae			
Mallomonas akrokomos	38		
CRYPTOPHYTA (cryptomonads)			
Cryptophyceae			
Chroomonas sp.	17		
Cryptomonas sp.	9		
CYANOPHYTA (blue-green algae)			
Myxophyceae			
Aphanizomenon flos-aquae	5		
Immature cyanophyta trichome	5		
Miscellaneous flagellates	203		
TOTAL	512		

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 5, 1980 (1215 hr)	June 6, 1980 (0015 hr)
Site 33 - TRUCKEE RIVER BELOW TRACY		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Ankistrodesmus falcatus	--	1
Carteria sp.	3	49
Oocystis sp.	1	1
Scenedesmus dimorphus	--	8
S. opoliensis	--	16
S. quadricauda	2	--
Schroederia setigera	1	3
Tetraedron minimum	1	--
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes clevei	--	1
A. lanceolata	--	1
A. minutissima	13	13
Asterionella formosa	7	7
Coscenodiscus sp.	3	--
Cyclotella Bodanica	2	--
C. Meneghiniana	4	7
Cymbella cistula	3	11
C. minuta	37	27
C. sinuata	1	3
Diatoma vulgare	8	--
Epithemia turgida	1	3
Fragilaria construens	63	161
F. vaucheriae	2	--
Gomphoneis herculeana	--	1
Gomphonema constrictum	2	--
Melosira granulata	5	--
M. italica	2	--
M. varians	3	--
Navicula graciloides	1	--
N. heufleri	4	1
N. pygmaea	1	--
N. rhynchocephala	1	--
N. salinarum	8	10
N. tripunctata	2	--
N. viridula	8	18
Nitzschia acicularis	4	7
N. amphibia	1	--
N. dissipata	8	7
N. linearis	--	3
N. palea	10	6
N. tryblionella	--	1
N. sp.	10	4
Rhoicosphenia curvata	1	6
Stephanodiscus Hantzschii	4	4
Surirella ovata	2	4
Synedra ulna	4	3
Tabellaria fenestrata	3	8
Chrysophyceae		
Mallomonas akrokomos	20	41
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	12	17
Cryptomonas sp.	7	13
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Aphanizomenon flos-aquae	12	10
Immature cyanophyta trichome	3	4
Oscillatoria sp.	2	3
Miscellaneous flagellates	120	182
TOTAL	412	665

Taxa	June 13, 1980 (1100 hr)
Site 34 - TRUCKEE RIVER AT CLARK	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Closteriopsis longissima	1
Coelastrum microsporum	8
Scenedesmus abundans	4
S. sp.	4
Schroederia setigera	3
Tetraedron minimum	1
Zygnema sp.	3
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes lanceolata	4
A. minutissima	3
A. sp.	1
Asterionella formosa	16
Cocconeis placentula	12
Cymatopleura solea	1
Cyclotella Meneghiniana	13
Cymbella cistula	30
C. minuta	18
Diatoma vulgare	19
Epithemia sorex	1
Eunotia sp.	1
Fragilaria construens	193
F. vaucheriae	6
Gomphoneis herculeana	1
Gomphonema parvulum	7
Melosira granulata	18
M. varians	6
Navicula heufleri	1
N. salinarium	10
N. tripunctata	7
N. viridula	10
N. linearis	3
N. palea	21
N. sp.	3
Rhoicosphenia curvata	1
Surirella ovata	1
Synedra ulna	4
Chrysophyceae	
Chrysophyta flagellates	1
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	6
Cryptomonas sp.	12
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Oscillatoria sp.	1
PYRRHOPHYTA (fire algae)	
Dinophyceae	
Gymnodinium sp.	3
Miscellaneous flagellates	143
TOTAL	601

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 5, 1980 (1325 hr)	June 6, 1980 (0110 hr)
Site 36 - TRUCKEE RIVER AT DERBY DAM		
CHLOROPHYTA (green algae)		256
Chlorophyceae		
Ankistrodesmus falcatus	2	—
Carteria sp.	5	24
Coelastrum microsporum	8	—
Dictyosphaerium pulchellum	—	12
Eudorina elegans	—	16
Oocystis sp.	2	1
Pediastrum boryanum	16	—
P. tetras	4	—
Scenedesmus abundans	—	4
S. quadricauda	6	14
Schroederia setigera	6	2
Tetraedron minimum	2	—
Tetrastrum staurogeniaeforme	1	1
Ulothrix sp.	1	—
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes lanceolata	1	2
A. minutissima	23	17
Amphora ovalis	1	1
Asterionella formosa	4	1
Cocconeis placentula	—	1
Coscenodiscus sp.	1	2
Cyclotella Bodanica	1	1
C. Meneghiniana	2	7
Cymatopleura solea	1	—
Cymbella cistula	8	7
C. minuta	22	24
Diatoma vulgare	1	1
Epithemia sorex	1	—
Fragilaria construens	22	52
F. vaucheriae	7	2
Gomphoneis herculeana	—	1
Gomphonema truncatum	2	—
Hannaea arcus	—	3
Melosira granulata	6	—
M. italica	12	4
M. varians	—	3
Meridion circulare	1	—
Navicula graciloides	—	1
N. heufleri	2	3
N. pulula	1	—
N. salinarum	14	6
N. tripunctata	1	2
N. vanheurckii	—	1
N. viridula	7	7
Nitzschia acicularis	3	1
N. dissipata	10	18
N. gracilis	4	—
N. hungarica	—	1
N. linearis	1	1
N. palea	17	12
N. sublinearis	1	—
N. sp.	7	9
Rhoicosphenia curvata	2	4
Rhopalodia gibberula	—	1
Stephanodiscus Hantzschii	4	4
Surirella ovata	2	2
Synedra ulna	2	2
Tabellaria fenestrata	5	9
Chrysophyceae		
Mallomonas akrokomos	20	28
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	7	24
Cryptomonas sp.	9	6
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Anabaena sp.	1	—
Aphanizomenon flos-aquae	6	12
Immature cyanophyta trichome	9	7
Merismopedia tenuissima	—	16
Oscillatoria sp.	1	1
PYRRHOPHYTA (fire algae)		
Dinophyceae		
Gymnodinium sp.	2	—
Miscellaneous flagellates	171	145
TOTAL	478	526

Taxa	June 12, 1980 (0850 hr)
Site 37 - TRUCKEE RIVER BELOW DERBY DAM	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Schroederia setigera	3
Ulothrix sp.	3
Zygnema sp.	3
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes lanceolata	3
A. minutissima	5
Asterionella formosa	7
Cocconeis placentula	2
Coscinodiscus sp.	7
Cyclotella Bodanica	2
C. Meneghiniana	23
C. ocellata	2
Cymbella cistula	16
C. minuta	12
Diatoma vulgare	7
Fragilaria construens	228
F. vaucheriae	77
Melosira granulata	3
M. varians	7
Navicula heufleri	9
N. salinarium	9
N. viridula	19
Nitzschia acicularis	3
N. amphibia	5
N. dissipata	3
N. palea	19
N. sublinearis	5
Rhoicosphenia curvata	5
Surirella ovata	3
Synedra ulna	2
Tabellaria fenestrata	12
Chrysophyceae	
Chrysophyta flagellates	3
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	7
Cryptomonas sp.	7
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Oscillatoria sp.	3
Miscellaneous flagellates	223
TOTAL	747

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 5, 1980 (1245 hr)	June 6, 1980 (0045 hr)
Site 39 - TRUCKEE RIVER AT PAINTED ROCK BRIDGE		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Arkistrodesmus falcatus	1	2
Carteria sp.	2	11
Crucigenia tetrapedia	2	—
Dictyosphaerium pulchellum	—	16
Eudorina elegans	—	16
Scenedesmus dimorphus	4	—
S. opoliensis	4	8
S. quadricauda	—	2
Schroederia setigera	4	3
Selenastrum minutum	1	—
Tetraedron minimum	1	—
Tetrastrum staurogeniaeforme	1	1
Ulothrix sp.	2	1
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes lanceolata	1	2
A. minutissima	15	6
Amphora ovalis	2	—
Asterionella formosa	7	4
Caloneis amphishaena	1	—
Cocconeis placentula	1	3
Coscenodiscus	2	1
Cyclotella Bodanica	1	1
C. Meneghiniana	5	5
Cymbella cistula	5	9
C. mexicana	1	—
C. minuta	33	16
C. sinuata	1	—
Diatoma vulgare	2	2
Epithemia sorex	1	—
E. turgida	1	—
Eunothia sp.	1	—
Fragilaria construens	69	130
F. crotonensis	11	—
F. vaucheriae	2	3
Gomphoneis herculeana	2	1
Gomphonema constrictum	2	2
G. parvulum	1	1
Hannaea arcus	1	1
Melosira granulata	3	4
M. italica	8	—
M. varians	2	1
Meridion circulare	1	—
Navicula graciloides	2	—
N. heufleri	2	1
N. salinarum	10	8
N. tripunctata	3	4
N. vanheurckii	—	1
N. viridula	5	9
Nitzschia acicularis	2	3
N. amphibia	—	3
N. capitella	—	1
N. dissipata	8	2
N. gracilis	2	1
N. linearis	1	—
N. palea	10	8
N. tryblionella	—	1
N. sp.	2	5
Rhoicosphenia curvata	2	—
Stephanodiscus Hantzschii	2	2
Surirella ovata	2	1
Synedra ulna	2	3
Tabellaria fenestrata	10	16
Chrysophyceae		
Mallomonas akrokomos	15	16
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	4	6
Cryptomonas sp.	5	10
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Aphanizomenon flos-aquae	10	11
Immature cyanophyta trichome	4	3
Oscillatoria sp.	1	—
PYRRHOPHYTA (fire algae)		
Dinophyceae		
Gymnodinium sp.	2	—
Miscellaneous flagellates	72	149
TOTAL	382	516

Taxa	June 12, 1980 (1020 hr)
Site 39 - TRUCKEE RIVER AT PAINTED ROCK BRIDGE	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Arkistrodesmus falcatus	1
Scenedesmus quadricauda	4
Schroederia setigera	3
Selenastrum minutum	3
Tetrastrum staurogeniaeforme	1
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes clerei	1
A. lanceolata	1
A. minutissima	10
Asterionella formosa	13
Cocconeis placentula	4
Cyclotella Meneghiniana	6
Cymbella cistula	28
C. minuta	7
Diatoma hiemale	1
D. vulgare	7
Fragilaria conetruene	198
F. vaucheriae	3
Gomphoneis herculeana	3
Hannaea arcus	1
Melosira granulata	10
M. varians	6
Meridion circulare	1
Navicula capitata	3
N. heufleri	1
N. salinarium	13
N. tripunctata	3
N. viridula	12
Nitzschia acicularis	3
N. amphibia	6
N. dissipata	9
N. palea	17
N. sublinearis	1
N. sp.	1
Rhoicosphenia curvata	3
Synedra ulna	3
Tabellaria fenestrata	16
Chrysophyceae	
Chrysophyta flagellates	3
Dinobryon sertolaria	3
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	3
Cryptomonas sp.	7
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Oscillatoria sp.	6
Miscellaneous flagellates	185
TOTAL	610

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 5, 1980 (1200 hr)	June 6, 1980 (0010 hr)
Site 44 - TRUCKEE RIVER AT OLD U.S. HIGHWAY 40 BRIDGE AT WADSWORTH		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Ankistrodesmus falcatus	1	—
Carteria sp.	17	5
Oocystis sp.	4	3
Pediastrum Boryanum	24	—
P. tetras	—	4
Schroederia setigera	4	1
Tetrastrum staurogeniaeforme	2	—
Ulothrix sp.	—	2
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes lanceolata	5	—
A. minutissima	28	8
Amphora ovalis	3	2
Asterionella formosa	—	7
Cocconeis placentula	1	2
Coscenodiscus sp.	1	—
Cyclotella Meneghiniana	3	3
Cymbella cistula	13	6
C. mexicana	1	—
C. minuta	45	26
C. sinuata	1	—
Diatoma vulgare	—	5
Epithemia turgida	1	—
Fragilaria construens	180	132
F. vaucheriae	1	—
Gomphoneis herculeana	—	1
Gomphonema constrictum	1	3
Hannaea arcus	—	1
Melosira granulata	6	—
M. italica	8	—
M. variane	6	—
Navicula graciloides	1	1
N. heufleri	6	1
N. pupula	1	—
N. rhynchocephala	—	1
N. salinarum	6	12
N. vanheurekii	1	—
N. viridula	10	13
Nitzschia acicularis	5	3
N. capitella	4	—
N. communis	3	—
N. dissipata	13	15
N. filiformis	1	—
N. gracilis	3	5
N. linearis	—	1
N. palea	4	14
N. sublinearis	1	—
N. sp.	6	4
Rhoicosphenia curvata	4	3
Stephanodiscus Hantzschii	9	5
Surirella ovata	4	7
Synedra ulna	1	1
Tabellaria fenestrata	13	9
Chrysophyceae		
Mallomonas akrokomos	27	25
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	8	10
Cryptomonas sp.	6	8
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Anabaena sp.	1	—
Aphanizomenon flos-aquae	14	8
Immature cyanophyta trichome	5	6
PYRRHOPHYTA (fire algae)		
Dinophyceae		
Peridinium sp.	1	—
Miscellaneous flagellates	152	99
TOTAL	666	462

Taxa	June 12, 1980 (1220 hr)
Site 44 - TRUCKEE RIVER AT OLD U.S. HIGHWAY 40 BRIDGE AT WADSWORTH	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Pediastrum tetras	8
Scenedesmus dimorphus	8
S. quadricauda	4
Schroederia setigera	5
Tetrastrum staurogeniaeforme	2
Zygnema sp.	2
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes lanceolata	2
A. minutissima	3
Asterioriella formosa	6
Cocconeis placentula	6
Coscinodiscus sp.	3
Cyclotella Bodanica	2
C. Meneghiniana	14
Cymbella cistula	9
C. minuta	24
C. sinuata	3
Diatoma vulgare	9
Fragilaria construene	171
F. vaucheriae	26
Gomphoneis herculeana	9
Melosira granulata	20
M. varians	21
Navicula decussis	2
N. salinarium	6
N. tripunctata	6
N. viridula	15
Nitzschia amphibia	5
N. dissipata	14
N. linearis	2
N. palea	24
N. sublinearis	2
N. sp.	5
Rhoicosphenia curvata	5
Synedra ulna	5
Chrysophyceae	
Chrysophyta flagellates	3
Dinobryon sertularia	3
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	2
Cryptomonas sp.	5
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Oscillatoria sp.	3
PYRRHOPHYTA (fire algae)	
Dinophyceae	
Gymnodinium sp.	2
Miscellaneous flagellates	183
TOTAL	649

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 5, 1980 (1205 hr)	June 5, 1980 (2400 hr)
Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Ankistrodesmus falcatus	2	—
Chlorophyta flagellate	4	—
Oocystis sp.	12	—
Pediastrum tetras	—	8
Scenedesmus opoliensis	4	—
S. quadricauda	—	8
Schroederia setigera	2	3
Tetraedron minimum	1	—
Tetrastrum staurogeniaeforme	—	2
Treubaria setigerum	1	—
CHRYSOPHYTA		
Bacillariophycese (diatoms)		
Achnanthes curta	2	5
A. lanceolata	2	2
A. minutissima	15	18
Amphora ovalis	1	1
Asterionella formosa	6	2
Cocconeis placentula	1	2
Coscinodiscus sp.	1	1
Cyclotella bodanica	—	2
C. Meneghiniana	5	2
Cymbella cistula	2	4
C. mexicana	1	—
C. minuta	20	14
Diatoma vulgare	2	1
Fragilaria construene	51	94
F. crotoneneis	—	8
F. vaucheriae	2	1
Gomphoneis herculeana	2	1
Gomphonema constrictum	2	2
G. sp.	1	—
Melosira granulata	3	7
M. italica	2	2
M. variane	2	—
Navicula graciloides	—	1
N. heufleri	4	8
N. pupula	1	1
N. salinarium	9	14
N. tripunctata	2	2
N. vanheurckii	—	2
N. viridula	7	7
Nitzschia acicularis	2	1
N. amphibia	1	—
N. dissipata	6	13
N. gracilis	1	2
N. linearis	2	1
N. palea	12	10
N. sp.	12	6
Rhoicosphenia curvata	2	1
Surirella angustata	—	1
S. ovata	3	1
Synedra ulna	1	—
Stephanodiscus Hantzschii	3	4
Tabellaria fenestrata	5	16
Chrysophyceae		
Mallomonas akrokomos	28	21
M. sp.	—	1
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	3	7
Cryptomonas sp.	9	3
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Aphanizomenon flos-aquae	8	9
Dactylococcopsis Smithii	—	1
Immature cyanophyta trichome	—	1
Oscillatoria sp.	—	2
Miscellaneous flagellates	78	100
TOTAL	348	426

Taxa	June 12, 1980 (0830 hr)
Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Ankistrodesmus falcatus	6
Pediastrum tetras	16
Scenedesmus quadricauda	8
CHRYSOPHYTA	
Bacillariophycese (diatoms)	
Achnanthes lanceolata	4
A. minutissima	19
Amphora ovalis	2
Asterionella formosa	21
Cocconeis placentula	9
Coscinodiscus sp.	2
Cyclotella Bodanica	2
C. Meneghiniana	32
Cymbella cistula	7
C. minuta	13
Diatoma vulgare	7
Diploneis pseudoralis	2
Fragilaria conetruens	344
F. vaucheriae	9
Gomphoneis herculeana	2
Hannaea arcus	4
Melosira variane	4
Navicula decussis	2
N. salinarium	7
N. viridula	21
Nitzschia acicularis	4
N. amphibia	4
N. communis	2
N. dissipata	15
N. palea	21
N. sp.	9
Rhoicosphenia curvata	9
Synedra ulna	2
Tabellaria fenestrata	2
Chrysophyceae	
Chrysophyta flagellates	9
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	19
Cryptomonas sp.	11
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Oscillatoria sp.	2
Miscellaneous flagellates	163
TOTAL	815

TABLE 7.—*Phytoplankton taxa and cell counts, June 1980*—Continued

[Phytoplankton cells per milliliter]

Taxa	June 5, 1980 (1200 hr)	June 5, 1980 (2355 hr)
Site 62 - TRUCKEE RIVER AT STATE HIGHWAY 447 AT NIXON		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Arkistrodesmus falcatus	2	1
Carteria sp.	3	—
Closteriopsis longissima	1	—
Coelastrum microsporum	—	8
Gloeocystis planctonica	—	4
Scenedesmus opoliensis	4	8
Schroederia setigera	8	1
Tetraedron minimum	1	—
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes curta	1	—
A. lanceolata	3	1
A. minutissima	6	5
Amphora ovalis	—	1
Asterionella formosa	5	2
Cocconeis placentula	2	2
Cyclotella bodanica	1	1
C. Meneghiniana	7	5
Cymbella cistula	4	—
C. minuta	13	19
C. sinuata	1	—
Diatoma vulgare	4	6
Epithemia sorex	—	1
E. turgida	2	—
Fragilaria construens	112	96
F. vaucheriae	5	2
Gomphoneis herculeana	4	4
Gomphonema constrictum	1	1
Hannaea arcus	—	2
Melosira granulata	5	7
M. italica	2	—
M. variane	3	2
Navicula heufleri	1	6
N. pupula	1	—
N. salinarium	14	12
N. viridula	12	15
Nitzschia acicularis	6	2
N. amphibia	1	—
N. dissipata	4	7
N. gracilis	—	2
N. linearis	—	2
N. palea	16	13
N. sp.	7	4
Rhopalodia gibba	—	2
R. gibberula	1	1
Stephanodiscus Hantzschii	9	2
Surirella angustata	—	1
S. ovata	2	1
Synedra ulna	2	3
Tabellaria fenestrata	15	2
Chrysophyceae		
Mallomonas akrokomos	25	20
M. sp.	—	1
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	6	2
Cryptomonas sp.	11	1
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Anabaena sp.	—	2
Aphanizomenon flos-aqae	6	9
Immature cyanophyta trichome	—	1
Oscillatoria sp.	1	—
PYRRHOPHYTA (fire algae)		
Dinophyceae		
Gymnodinium sp.	2	—
Peridinium sp.	1	—
Miscellaneous flagellates	99	70
TOTAL	442	360

Taxa	June 12, 1980 (1030 hr)
Site 62 - TRUCKEE RIVER AT STATE HIGHWAY 447 AT NIXON	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Arkistrodesmus falcatus	1
Pediastrum tetras	4
Scenedesmus opolieneis	30
Schroederia setigera	3
Tetrastrum staurogeniaeforme	6
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes lanceolata	4
A. minutissima	3
Asterionella formosa	3
Cocconeis placentula	6
Coscinodiscus sp.	3
Cyclotella Meneghiniana	17
Cymbella cistula	20
C. minuta	7
C. sinuata	1
Diatoma vulgare	4
Fragilaria conetruene	246
F. vaucheriae	4
Gomphoneis herculeana	3
Hannaea arcus	4
Melosira granulata	3
Meridion circulare	3
Navicula heufleri	9
N. pupula	1
N. salinarium	12
N. viridula	10
Nitzschia acicularis	4
N. amphibia	1
N. communis	1
N. dissipata	12
N. palea	16
N. sp.	3
Rhoicosphenia curvata	1
Surirella ovata	6
Synedra delicatissima	1
S. ulna	3
Chrysophyceae	
Dinobryon sertularia	6
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	1
Cryptomonas sp.	7
Miscellaneous flagellates	140
TOTAL	609

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 5, 1980 (1300 hr)	June 6, 1980 (0045 hr)
Site 63 - TRUCKEE RIVER AT MARBLE BLUFF DAM		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Ankistrodesmus falcatus	1	4
Carteria sp.	1	--
Oocystis sp.	8	1
Scenedesmus opolieneis	4	4
S. quadricauda	2	2
Schroederia setigera	2	2
Tetraedron minimum	1	1
Tetrastrum staurogeniaeforme	--	1
Ulothrix sp.	--	1
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes curta	1	1
A. minutissima	--	23
Amphora ovalis	--	1
Asterionella formosa	1	2
Cocconeis placentula	1	2
Cyclotella bodanica	1	1
C. Kuetzingiana	1	--
C. Meneghiniana	4	1
Cymbella cistula	3	4
C. minuta	12	17
Diatoma vulgare	3	1
Fragilaria construens	84	84
F. crotonensis	11	--
F. vaucheriae	1	2
Gomphoneis herculeana	1	1
Hannaea arcus	1	1
Melosira granulata	--	3
M. italica	3	3
M. varians	3	1
Navicula heufleri	3	5
N. mutica	2	--
N. pupula	1	--
N. salinarium	14	17
N. tripunctata	--	1
N. vanheurckii	1	--
N. viridula	12	9
Nitzschia acicularis	1	1
N. amphibia	1	--
N. dissipata	7	3
N. gracilis	2	1
N. linearis	2	--
N. palea	9	7
N. sp.	3	3
Rhoicosphenia curvata	1	1
Stephanodiscus Hantzschii	3	1
Surirella ovata	2	6
Synedra ulna	1	2
Tabellaria fenestrata	4	2
Chrysophyceae		
Mallomonas akrokomos	21	9
M. sp.	1	--
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	6	4
Cryptomonas sp.	4	2
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Anabaena sp.	1	1
Aphanizomenon flos-aquae	4	8
Immature cyanophyta trichome	1	--
Oscillatoria sp.	--	1
PYRRHOPHYTA (fire algae)		
Dinophyceae		
Peridinium sp.	1	--
Miscellaneous flagellates	73	63
TOTAL	331	311

Taxa	June 12, 1980 (1200 hr)
Site 63 - TRUCKEE RIVER AT MARBLE BLUFF DAM	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Pediastrum tetras	8
Scenedesmus dimorphus	4
S. opoliensis	2
S. quadricauda	4
Schroederia setigera	4
Ulothrix sp.	1
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes lanceolata	1
A. minutissima	2
A. sp.	1
Amphora ovalis	1
Asterionella formosa	9
Cocconeis placentula	1
Cyclotella Bodanica	1
C. Kuetzingiana	4
C. Meneghiniana	22
Cymbella cistula	6
C. minuta	6
Diatoma vulgare	1
Epithemia sorex	3
Fragilaria conetruene	165
F. vaucheriae	4
Gomphoneis herculeana	1
Hannaea arcus	1
Melosira granulata	8
M. variane	4
Navicula heufleri	2
N. mutica	1
N. salinarium	7
N. tripunctata	1
N. viridula	17
Nitzschia acicularis	5
N. amphibia	1
N. dissipata	6
N. palea	24
N. sublinearis	1
N. sp.	2
Rhoicosphenia curvata	2
Stephanodiscus Hantzschii	5
Surirella ovata	4
Synedra ulna	3
Tabellaria fenestrata	1
Chrysophyceae	
Chrysophyta flagellates	1
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	9
Cryptomonas sp.	12
PYRRHOPHYTA (fire algae)	
Dinophyceae	
Gymnodinium sp.	1
Miscellaneous flagellates	58
TOTAL	427

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 5, 1980 (1205 hr)	June 6, 1980 (0010 hr)
Site 69 - TRUCKEE CANAL AT U.S. HIGHWAY 95A NEAR FERNLEY		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Ankistrodesmus falcatus	2	1
Carteria sp.	2	1
Coelastrum microsporum	8	8
Crucigenia tetrapedia	3	--
Gloeocystis plastonica	--	4
Oocystis sp.	1	1
Scenedesmus opoliensis	8	12
S. quadricauda	10	4
Schroederia setigera	2	3
Sphaerocystis schroeteri	16	--
Tetrastrum staurogeniaeforme	3	2
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes curta	2	1
A. lanceolata	--	2
A. minutissima	6	2
Asterionella formosa	6	13
Cocconeis placentula	3	3
Coscinodiscus sp.	1	--
Cyclotella bodanica	2	1
C. Kuetzingiana	1	--
C. Meneghiniana	3	7
Cymbella cistula	1	3
C. minuta	18	19
Diatoma vulgare	6	4
Fragilaria construens	12	25
F. vaucheriae	2	--
Gomphoneis herculeana	1	3
Gomphonema constrictum	1	--
Hannaea arcus	2	1
Melosira granulata	1	1
M. italica	10	--
M. varians	1	2
Meridion circulare	--	1
Navicula heufleri	1	3
N. mutica	1	1
MN. pupula	1	--
N. salinarium	30	21
N. tripunctata	--	1
N. viridula	13	17
Nitzschia acicularis	2	1
N. amphibia	1	--
N. dissipata	7	5
N. gracilis	--	2
N. linearis	2	3
N. palea	20	7
N. sublinearis	1	--
N. tryblionella	--	2
N. sp.	6	3
Pinnularia sp.	1	--
Rhoicosphenia curvata	--	1
Surirella ovata	6	6
Synedra ulna	2	2
Stephanodiscus Hantzschii	9	3
Tabellaria fenestrata	2	8
Chrysophyceae		
Mallomonas akrokomos	19	23
M. sp.	1	1
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	17	22
Cryptomonas sp.	8	5
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Anabaena sp.	2	1
Aphanizomenon flos-aquae	10	10
Dactylococcopsis Smithii	--	1
Oscillatoria sp.	--	1
Miscellaneous flagellates	80	74
TOTAL	377	348

Taxa	June 19, 1980 (0930 hr)
Site 69 - TRUCKEE CANAL AT U.S. HIGHWAY 95A NEAR FERNLEY	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Coelastrum microsporum	18
Elakatothrix viridis	4
Pediastrum tetras	8
Scenedesmus dimorphus	4
S. opoliensis	12
S. quyadricauda	28
Schroederia setigera	8
Tetraedron minimum	9
T. trigonum	1
Tetrastrum staurogeniaeforme	18
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes lanceolata	4
A. minutissima	2
Amphora ovalis	2
Asterionella formosa	5
Cocconeis placentula	15
Coscinodiscus sp.	2
Cyclotella Kuetzingiana	1
C. Meneghiniana	55
Cymbella cistula	4
C. minuta	5
Diatoma vulgare	5
Fragilaria construens	25
F. vaucheriae	3
Hannaea arcus	2
Melosira granulata	3
M. varians	6
Navicula capitata	1
N. salinarium	11
N. tripunctata	1
N. viridula	14
Nitzschia acivularis	16
N. amphibia	2
N. communis	1
N. dissipata	10
N. linearis	1
N. palea	29
N. sp.	5
Rhoicosphenia curvata	1
Stephanodiscus Hantzschii	3
Surirella ovata	4
Synedra ulna	3
Chrysophyceae	
Mallomonas sp.	1
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	11
Cryptomonas sp.	10
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Oscillatoria sp.	1
Miscellaneous flagellates	102
TOTAL	476

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 5, 1980 (1230 hr)
Site 71 - TRUCKEE CANAL AT ALLENDALE CHECK DAM NEAR FERNLEY	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Carteria sp.	6
Elakatothrix gelatinosa	6
Pediastrum Boryanum	8
P. tetras	4
Scenedesmus dimorphus	4
S. opoliensis	4
S. quadricauda	2
S. sp.	4
Schroederia setigera	3
Tetrastrum staurogeniaeforme	1
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthis lanceolata	1
A. minutissima	5
Asterionella formosa	13
Cyclotella Meneghiana	14
Cymbella minuta	3
C. sinuata	1
Diatoma vulgare	2
Fragilaria conetruens	93
F. vaucheriae	1
Gomphonema truncatum	2
Melosira granulata	5
M. italica	10
Navicula capitata	1
N. pupula	1
N. salinarum	20
N. viridula	9
Nitzschia acicularis	3
N. amphibia	7
N. dissipata	5
N. gracilis	1
N. palea	6
N. sp.	13
Rhoicasphenia curvata	2
Stephanodiscus Hantzschii	39
Surirella ovata	2
Tabellaria fenestrata	6
Chrysophyceae	
Mallomonas akrokomos	55
CRYPTOPHYTHA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	55
Cryptomonas sp.	9
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Anabaena sp.	1
Aphanizomenon flos-aquae	1
Dactylococcopeis Smithii	1
PYRRHOPHYTA (fire algae)	
Dinophyceae	
Peridinium sp.	1
Miscellaneous flagellates	152
TOTAL	582

Taxa	June 19, 1980 (1100 hr)
Site 71 - TRUCKEE CANAL AT ALLENDALE CHECK DAM NEAR FERNLEY	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Ankistrodesmus falcatus	5
Closteriopeis longissima	2
Coelastrum microsporum	64
Elakatothrix viridus	74
Gonium pertorale	32
Pediastrum tetras	32
Scenedesmus dimorphus	16
S. opolieneis	24
S. quadricauda	36
S. sp.	8
Schroederia setigera	40
Tetrastrum staurogeniaeforme	11
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes minutissima	7
Amphora ovalis	4
Asterionella formosa	63
Cocconeis placentula	11
Cyclotella Kuetzingiana	7
C. Meneghiniana	238
Cymbella cistula	5
C. minuta	2
Fragilaria construens	207
F. vaucheriae	7
Gomphonema parvulum	2
Melosira granulata	12
M. varians	20
Navicula salinarium	11
N. viridula	7
Nitzschia acicularis	22
N. amphibia	5
N. dissipata	7
N. linearis	2
N. palea	16
N. tryblionella	4
N. sp.	2
Rhoicosphenia curvata	2
Stephanodiscus Hantzschii	27
Surirella ovata	5
Synedra ulna	4
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	43
Cryptomonas sp.	51
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Merismopedia tenuissima	64
Miscellaneous flagellates	269
TOTAL	1470

TABLE 7.--*Phytoplankton taxa and cell counts, June 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	June 5, 1980 (1345 hr)	June 6, 1980 (0335 hr)
Site 74 - TRUCKEE CANAL AT U.S. HIGHWAY 50 ABOVE LAHONTAN RESERVOIR		
CHLOROPHYTA (green algae)		
Chlorophyceae		
Arkistrodesmus falcatus	4	6
Dictyosphaerium pulchellum	--	8
Oocystis sp.	8	--
Pediastrum Boryanum	--	64
P. tetras	--	16
Scenedesmus opoliensis	24	--
S. quadricauda	4	8
S. sp.	8	36
Schroederia setigera	8	9
Sphaerocystis schroeteri	16	--
Tetrastrum staurogeniaeforme	6	--
CHRYSOPHYTA		
Bacillariophyceae (diatoms)		
Achnanthes curta	8	--
A. minutissima	2	4
Asterionella formosa	35	4
Cocconeis amphisbaena	25	24
Cyclotella bodanica	--	2
C. Meneghiniana	23	28
Cymbella minuta	4	13
Epithemia turgida	--	2
Fragilaria construene	195	84
Gomphoneis herculeana	2	--
Gomphonema constrictum	4	11
G. parvulum	10	--
Melosira granulata	12	4
M. varians	4	--
Navicula heufleri	2	2
N. salinarium	18	17
N. viridula	--	6
Nitzschia acicularis	12	4
N. amphibia	4	4
N. communis	2	--
N. dissipata	2	9
N. filiformis	2	--
N. gracilis	--	6
N. palea	16	15
N. sublinearis	4	--
N. tryblionella	2	2
N. sp.	27	28
Rhoicosphenia curvata	2	6
Surirella ovata	--	2
Stephanodiscus Hantzschii	117	121
Tabellaria fenestrata	2	9
Chrysophyceae		
Mallomonas akrokomos	295	126
M. sp.	2	2
CRYPTOPHYTA (cryptomonads)		
Cryptophyceae		
Chroomonas sp.	215	87
Cryptomonas sp.	25	24
CYANOPHYTA (blue-green algae)		
Myxophyceae		
Anabaena sp.	4	2
Aphanizomenon flos-aquae	--	4
Dactylococcopsis Smithii	2	--
PYRRHOPHYTA (fire algae)		
Dinophyceae		
Gymnodinium sp.	--	2
Peridinium sp.	--	6
Miscellaneous flagellates	284	199
TOTAL	1441	1006

Taxa	June 19, 1980 (1200 hr)
Site 74 - TRUCKEE CANAL AT U.S. HIGHWAY 50 ABOVE LAHONTAN RESERVOIR	
CHLOROPHYTA (green algae)	
Chlorophyceae	
Arkistrodesmus falcatus	20
Chodatella quadriseta	22
Elakatothrix viridis	39
Scenedesmus abundans	56
S. dimorphus	12
S. opoliensis	48
S. quadricauda	36
Schroederia setigera	53
Tetraedron regulare	3
Tetrastrum staurogeniaeforme	25
CHRYSOPHYTA	
Bacillariophyceae (diatoms)	
Achnanthes lanceolata	3
A. minutissima	6
A. sp.	3
Amphora ovalis	3
Asterionella formosa	48
Cocconeis placentula	104
Cyclotella Kuetzingiana	219
C. Meneghiniana	278
Diatoma vulgare	17
Fragilaria construens	104
Gomphonema parvulum	6
Melosira varians	8
Navicula heufleri	8
N. salinarium	34
Nitzschia acicularis	14
N. amphibia	3
N. palea	20
N. tryblionella	3
N. sp.	8
Stephanodiscus Hantzschii	460
Chrysophyceae	
Chrysophyta flagellates	3
Dinobryon sertularia	3
CRYPTOPHYTA (cryptomonads)	
Cryptophyceae	
Chroomonas sp.	59
Cryptomonas sp.	53
CYANOPHYTA (blue-green algae)	
Myxophyceae	
Microcystis incerta	8
Miscellaneous flagellates	236
TOTAL	2025

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1155 hr)	(1522 hr)	(1930 hr)	(2325 hr)	Aug. 14, 1980 (0320 hr)	(0730 hr)	(1120 hr)
Site 13 - TRUCKEE RIVER AT CRYSTAL PEAK PARK AT VERDI							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Arkistrodesmus falcatus	--	1	--	--	--	--	--
Coelastrum microsporum	4	--	--	--	--	--	--
Eudorina elegans	--	--	--	--	--	5	--
Scenedesmus denticulatus	--	4	--	--	--	3	2
S. dimorphus	--	--	--	3	--	3	--
S. quadricauda	--	2	--	--	--	--	--
Staurastrum dilatatrum	--	--	--	--	--	1	1
Tetraedron minimum	--	--	--	--	1	--	1
Tetrastrum staurogeniaeforme	1	--	--	--	--	--	--
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes curta	1	1	1	1	2	2	1
A. lanceolata	2	1	--	1	1	1	1
A. minutissima	22	23	19	14	27	13	14
Cocconeis placentula	18	23	19	18	7	10	24
Cyclotella bodanica	--	--	--	1	1	1	--
C. Meneghiniana	4	2	1	1	1	1	2
C. ocellata	--	1	1	--	1	1	--
C. stelligera	3	2	2	1	7	2	2
Cymbella cistula	5	4	3	5	2	3	3
C. mexicana	--	--	1	1	--	--	1
C. minuta	9	7	10	11	8	7	5
C. sinuata	2	3	5	1	2	1	1
Diatoma hiemale	--	--	--	1	--	1	--
D. vulgare	1	--	1	5	2	1	2
Epithemia sorex	1	--	--	--	--	--	1
Fragilaria construens	5	4	7	3	1	8	13
F. crotonensis	--	--	--	--	3	--	2
F. vaucheriae	--	--	1	2	1	1	--
Gomphonema acuminatum	1	--	--	--	--	--	--
G. parvulum	--	2	--	1	2	--	--
G. truncatum	2	3	2	1	2	1	2
Gomphoneis herculeana	1	1	1	1	--	--	2
Hannaea arcus	--	1	--	--	--	--	--
Melosira granulata	--	--	--	2	1	1	--
M. italica	--	--	4	4	--	1	--
M. varians	6	2	6	4	2	4	3
Navicula capitata	--	--	--	--	1	--	--
N. cryptocephala	11	4	4	1	3	7	5
N. heufleri	2	2	3	1	2	2	1
N. pupula	--	--	1	1	--	--	--
N. rynchocephala	1	--	1	1	1	--	1
N. salinarium	19	8	9	7	5	7	12
N. tripunctata	2	1	1	1	1	1	2
N. vanheurckii	--	1	1	1	--	1	1
N. viridula	--	--	--	--	--	1	--
Nitzschia acicularis	2	1	--	--	--	1	1
N. amphibia	4	1	--	2	5	1	3
N. communis	1	--	1	--	--	--	--
N. dissipata	6	8	4	4	4	2	4
N. gracilis	--	--	--	--	--	--	1
N. holsatica	--	--	--	--	--	3	--
N. Kuetzingiana	12	4	2	1	3	3	3
N. linearis	4	1	1	2	2	--	1
N. palea	22	5	3	5	4	5	11
N. sublinearis	--	--	--	--	--	1	--
N. sp.	7	4	2	5	1	1	3
Pinnularia sp.	--	--	--	1	--	--	--
Rhoicosphenia curvata	3	2	1	3	2	1	3
Stauroneis sp.	--	--	1	--	--	--	1
Stephanodiscus Hantzschii	2	--	--	2	3	--	1
Surirella angustata	--	--	--	--	1	--	--
S. ovata	1	--	--	--	--	--	--
Synedra rumpens	15	9	6	6	9	6	7
S. ulna	--	1	1	2	--	1	1
Tabellaria fenestrata	11	4	6	7	5	6	7
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	--	--	--	--	1	--	1
Cryptomonas sp.	--	--	1	1	--	--	1
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Dactylococcopsis Smithii	--	--	--	--	--	--	1
Immature cyanophyta trichome	--	1	--	--	1	--	--
Oscillatoria sp.	--	--	--	1	--	1	--
PYRRHOPHYTA (fire algae)							
Dinophyceae							
Gymnodinium sp.	1	2	2	3	3	--	5
Peridinium sp.	1	1	3	2	2	2	--
Miscellaneous flagellates	86	53	38	33	96	43	43
TOTAL	301	200	176	175	229	168	203

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1300 hr)	(1600 hr)	(2015 hr)	Aug. 14, 1980 (0015 hr)	(0405 hr)	(0815 hr)	(1200 hr)
Site 15 - TRUCKEE RIVER AT MAYBERRY DRIVE							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Closterium sp.	--	--	--	--	--	1	--
Pediastrum tetras	--	--	--	--	--	4	--
Scenedesmus abundans	--	--	--	8	--	--	--
S. denticulatus	--	8	4	--	4	4	8
S. dimorphus	12	--	--	--	12	8	--
S. quadricauda	4	--	--	8	8	--	--
Staurastrum dilatatum	--	--	1	--	--	--	--
Tetraedron minimum	1	--	1	--	1	1	1
Tetrastrum staurogeniaeforme	--	--	--	--	1	--	--
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes clevei	1	--	--	--	--	--	--
A. curta	1	1	2	1	1	1	1
A. lanceolata	2	1	1	1	1	1	--
A. minutissima	7	10	14	14	20	15	17
Caloneis amphisbaena	--	1	--	--	--	--	--
Cocconeis placentula	15	28	21	13	13	21	15
Coscinodiscus sp.	--	--	--	--	1	1	--
Cyclotella bodanica	1	--	--	1	1	1	--
C. Meneghiniana	1	1	1	2	1	1	2
C. ocellata	--	2	1	--	--	2	--
C. stelligera	1	2	2	2	1	1	2
Cymatopleura solea	1	--	--	--	--	--	--
Cymbella cistula	1	2	2	2	2	1	1
C. mexicana	3	2	1	2	10	3	1
C. minuta	7	9	6	11	7	12	13
C. sinuata	2	--	1	3	1	2	1
Diatoma hiemale	1	--	--	--	--	--	--
D. vulgare	--	--	--	--	1	1	--
Diploneis oblongella	1	--	--	--	--	--	--
Epithemia sorex	--	--	--	1	--	1	--
Fragilaria construens	2	--	2	6	8	19	2
F. crotonensis	--	3	2	--	--	--	--
F. vaucheriae	1	--	1	--	2	--	--
Gomphoneis herculeana	1	--	--	--	--	--	--
Gomphonema dichotomum	--	--	--	--	--	--	1
G. parvulum	2	2	--	1	1	3	1
G. truncatum	--	--	2	--	--	2	1
Melosira granulata	1	2	2	--	2	--	2
M. italica	2	5	--	3	3	3	3
M. varians	2	3	2	3	7	5	--
Meridion circulare	--	--	--	--	1	--	--
Navicula cryptocephala	4	2	3	3	3	4	4
N. exigua	1	--	--	1	--	--	1
N. heufleri	1	1	4	1	3	4	2
N. pupula	1	1	1	1	--	1	--
N. rhynchocephala	1	--	--	--	--	--	--
N. salinarium	23	21	22	17	19	20	25
N. tripunctata	1	2	1	1	2	1	2
N. vanheurckii	1	1	--	1	--	--	--
N. viridula	3	1	1	1	1	--	1
Nitzschia acicularis	1	1	--	--	2	--	1
N. amphibia	2	5	2	1	3	1	1
N. communis	1	1	1	--	1	2	1
N. dissipata	3	3	6	5	7	4	5
N. holsatica	4	3	2	2	6	3	1
N. Kuetzingiana	12	16	7	10	11	8	25
N. linearis	2	2	1	2	2	--	4
N. palea	3	5	7	2	4	5	7
N. sp.	6	1	4	2	3	2	8
Rhoicosphenia curvata	1	2	2	3	3	3	2
Stauroneis sp.	1	--	--	1	--	--	--
Stephanodiscus Hantzschii	1	--	1	2	1	1	2
Surirella ovata	--	--	--	--	--	1	--
Synedra rumpens	4	7	5	5	7	9	4
S. ulna	--	--	--	--	1	--	--
Tabellaria fenestrata	2	5	2	5	4	4	4
Chrysophyceae							
Dinobryon sp.	--	--	--	--	--	1	--
Mallomonas sp.	1	--	--	--	--	--	--
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	--	1	1	--	--	1	--
Cryptomonas sp.	--	1	2	1	--	3	2
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Dactylococcopsis Smithii	--	--	3	1	1	--	1
Immature cyanophyta trichome	--	--	--	--	1	--	--
Oscillatoria sp.	--	--	--	1	1	--	--
PYRRHOPHYTA (fire algae)							
Dinophyceae							
Gymnodinium sp.	1	2	2	2	3	4	4
Peridinium sp.	2	1	1	1	1	3	1
Miscelianeous flagellates	28	31	46	36	22	46	55
TOTAL	184	198	196	190	222	245	235

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1200 hr)	(1600 hr)	(2000 hr)	(2400 hr)	Aug. 14, 1980 (0400 hr)	(0800 hr)	(1145 hr)
Site 16 - TRUCKEE RIVER NEAR SPARKS							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Closteriopsis sp.	--	--	--	--	--	1	--
Coelastrum microsporum	--	--	--	8	--	--	--
Pediastrum tetras	--	--	--	--	--	8	--
Scenedesmus abundans	--	--	--	4	--	--	--
S. denticulatus	--	--	--	4	--	4	12
S. dimorphus	--	8	8	--	--	--	--
S. opoliensis	4	4	--	--	--	--	--
Staurastrum dilatatum	--	--	--	--	--	--	1
Tetraedron minimum	1	1	1	1	--	1	1
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes curta	1	1	1	1	2	1	--
A. lanceolata	--	--	--	--	--	1	--
A. minutissima	26	19	19	10	15	10	20
Cocconeis placentula	18	13	15	12	13	7	15
Coscinodiscus sp.	--	--	--	--	--	1	--
Cyclotella Meneghiniana	4	2	1	4	2	4	--
C. ocellata	--	--	--	--	--	--	1
C. stelligera	--	2	1	1	1	1	5
Cymatopleura solea	--	--	--	--	--	--	1
Cymbella cistula	22	31	20	15	21	12	28
C. mexicana	--	--	--	1	3	1	--
C. minuta	6	7	8	6	5	8	8
C. sinuata	4	2	1	2	--	1	1
Diatoma vulgare	--	2	1	3	2	--	1
Fragilaria construens	--	33	2	48	12	22	--
F. crotonensis	--	--	--	--	--	1	--
F. vaucheriae	--	--	--	1	2	--	--
Gomphonema parvulum	--	--	2	1	--	--	--
G. truncatum	3	--	--	--	1	--	1
Gomphonsis herculeana	2	6	2	8	8	1	2
Melosira granulata	1	--	--	--	--	--	--
M. italica	--	--	--	--	2	--	--
M. varians	3	6	3	7	14	3	1
Navicula cryptocephala	8	6	14	10	8	10	9
N. graciliodes	--	--	--	1	--	--	--
N. heufleri	--	--	--	1	--	1	2
N. pupula	2	3	1	1	2	1	1
N. salinarium	154	154	93	117	35	132	172
N. tripunctata	4	2	4	3	3	2	2
N. vanheurckii	--	--	--	1	--	1	--
N. viridula	--	--	1	1	1	1	5
Nitzschia acicularis	--	1	--	--	3	3	--
N. amphibia	2	--	6	5	--	2	2
N. communis	4	--	2	6	2	1	6
N. dissipata	4	9	12	9	12	10	9
N. gracilis	1	--	1	3	1	2	--
N. holeatica	12	9	4	11	18	14	15
N. Kuetzingiana	31	25	17	17	27	16	32
N. linearis	5	2	3	4	3	1	3
N. palea	23	17	13	18	24	25	20
N. sublinearis	2	--	2	--	--	--	--
N. sp.	4	13	3	4	8	2	5
Rhoicosphenia curvata	--	4	2	4	3	1	3
Surirella ovata	--	--	--	--	--	1	--
Synedra ulna	--	--	1	1	--	1	--
Tabellaria fenestrata	--	1	1	1	1	1	1
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	1	--	1	1	1	--	1
Cryptomonas sp.							
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Dactylococcopeis Smithii	--	--	--	--	1	--	--
Immature cyanophyta trichome	6	12	2	3	4	2	9
Oscillatoria sp.	1	3	1	2	3	1	--
PYRRHOPHYTA (fire algae)							
Dinophyceae							
Peridinium sp.	1	--	1	--	--	1	--
Miscellaneous flagellates	59	80	32	44	67	41	59
TOTAL	419	478	302	405	330	361	454

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1230 hr)	Aug. 13, 1980 (1645 hr)	Aug. 13, 1980 (2045 hr)	Aug. 14, 1980 (0045 hr)	Aug. 14, 1980 (0445 hr)	Aug. 14, 1980 (0845 hr)	Aug. 14, 1980 (1215 hr)
Site 19 - NORTH TRUCKEE DRAIN AT KLEPPE LANE NEAR SPARKS							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Ankistrodesmus falcatus	--	--	--	--	--	9	3
Chlorophyta flagellate	21	7	17	8	2	13	6
Closterium sp.	--	--	--	--	2	--	--
Coelastrum microsporum	72	--	16	24	16	48	24
Cosmarium botrytis	--	--	--	--	--	3	--
C. reniforme	--	--	--	3	--	--	--
C. sp.	--	3	--	--	--	--	--
Oocystis sp.	8	--	--	--	--	--	--
Pediastrum Boryanum	--	--	--	--	--	--	48
P. duplex	--	48	--	--	--	--	--
Scenedesmus abundans	--	12	--	--	--	--	18
S. denticulatus	8	--	--	--	--	--	--
S. dimorphus	--	12	--	--	--	--	12
S. opolienesis	8	12	8	20	8	--	--
S. quadricauda	--	12	16	--	--	--	--
S. sp.	4	--	8	--	--	--	--
Schroederia setigera	--	--	4	3	2	3	--
Selenastrum minutum	--	3	--	--	--	--	--
Staurastrum sebaldi	--	--	--	--	--	3	--
Tetraedron minimum	--	--	--	--	--	3	--
T. trigonum	2	3	--	--	--	3	--
Tetrastrum staurogeniaeforme	2	--	--	3	--	--	--
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes curta	--	--	--	--	--	--	3
A. lanceolata	2	7	2	--	6	--	3
A. minutissima	7	--	--	3	4	--	13
Cocconeis placentula	303	251	188	146	111	120	230
Cyclotella Meneghiniana	34	7	9	14	2	9	6
Cymatopleura solea	--	--	--	--	2	--	3
Cymbella mexicana	--	--	--	--	2	--	--
C. minuta	2	--	2	3	2	--	--
C. sinuata	--	3	--	--	--	--	3
Diatoma vulgare	7	17	22	14	8	25	16
Epithemia sorex	--	--	--	--	4	6	--
Fragilaria construens	537	786	606	1074	796	701	319
Gomphonema dichotomum	--	--	--	3	--	--	--
G. parvulum	11	10	22	8	8	13	16
G. tenellum	9	24	17	3	4	22	19
G. truncatum	2	--	--	--	--	--	--
Melosira italica	--	--	--	11	--	--	--
M. varians	5	7	11	27	31	38	6
Meridion circulare	--	--	--	5	--	--	--
Navicula cryptocephala	2	3	--	--	4	9	3
N. heufleri	14	7	2	16	12	13	28
N. pupula	14	--	2	11	--	6	6
N. rhynchocephala	--	--	--	11	--	--	--
N. salinarium	62	76	41	43	45	88	38
N. tripunctata	5	10	--	--	--	--	3
N. viridula	2	14	--	5	4	6	13
Nitzschia acicularis	--	21	--	11	8	41	13
N. amphibia	9	10	4	16	8	19	16
N. communis	5	3	--	--	2	3	--
N. dissipata	21	7	4	3	--	--	--
N. holsatica	--	3	--	--	--	3	9
N. Kuetzingiana	67	83	32	32	31	66	104
N. linearis	--	7	2	--	4	--	--
N. palea	34	65	26	38	29	79	66
N. tryblionella	--	--	--	--	2	--	--
N. sp.	28	17	22	11	6	9	28
Pinnularia sp.	--	--	--	3	--	--	--
Rhoicosphenia curvata	32	--	13	5	10	32	6
Rhopalodia gibba	--	--	--	--	2	3	--
R. gibberula	--	3	--	--	--	--	--
Stephanodiscus Hantzschii	16	10	30	24	16	38	16
Surirella ovata	7	3	4	11	4	6	3
Synedra ulna	11	14	--	3	--	3	3
Chrysophyceae							
Mallomonas sp.	2	10	--	--	8	57	69
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	30	--	--	5	--	16	41
Cryptomonas sp.	7	14	52	30	18	60	44
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Dactylococcopsis Smithii	5	--	--	--	--	3	3
Oscillatoria sp.	--	--	--	--	4	--	3
PYRRHOPHYTA (fire algae)							
Dinophyceae							
Gymnodinium sp.	4	2	3	2	5	--	3
Miscellaneous flagellates	275	134	190	195	240	259	344
TOTAL	1696	1740	1375	1847	1472	1838	1610

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1330 hr)	Aug. 13, 1980 (1630 hr)	Aug. 14, 1980 (0100 hr)	Aug. 14, 1980 (0500 hr)	Aug. 14, 1980 (0830 hr)	Aug. 14, 1980 (1200 hr)
Site 20 - STEAMBOAT CREEK AT KIMLICK LANE NEAR RENO						
CHLOROPHYTA (green algae)						
Chlorophyceae						
Arkistrodesmus falcatus	4	2	2	—	—	10
Chlorophyta flagellate	—	13	—	—	4	7
Closteriopsis longissima	—	4	—	—	—	—
Coelastrum microsporum	—	—	—	16	—	—
Cosmarium reniforme	—	2	—	—	—	—
C. sp.	—	—	2	2	—	2
Dictyosphaerium pulchellum	—	—	72	32	48	—
Eudorina elegans	—	128	—	—	—	32
Golenkinia radiata	2	—	—	—	—	—
Oocystis sp.	—	2	5	—	24	—
Panderina morum	—	—	—	32	—	—
Pediastrum Boryanum	16	—	—	—	32	—
P. tetras	8	—	—	8	16	20
Scenedesmus abundane	8	16	—	—	—	—
S. bijuga	24	24	—	8	8	—
S. dimorphus	—	—	20	—	—	—
S. opoliensis	8	—	8	28	20	—
S. quadricauda	—	—	—	—	14	—
S. sp.	8	—	—	—	—	—
Schroederia setigera	4	4	—	—	4	—
Selenastrum minutum	—	4	7	—	2	—
Spirogyra sp.	—	2	—	—	—	2
Staurastrum sebaldi	—	2	—	—	—	—
Tetraedron minimum	—	2	—	2	6	2
T. trigonum	—	—	2	—	—	—
Tetrastrum staurogeniaeforme	2	2	—	—	—	2
Ulothrix sp.	—	—	34	—	—	—
CHRYSOPHYTA						
Bacillariophyceae (diatoms)						
Achnanthes clevei	—	—	2	—	—	—
A. lanceolata	2	—	5	2	—	2
A. minutissima	7	—	2	—	—	—
Amphora ovalis	2	2	2	2	9	2
Caloneis amphisbaena	—	—	—	—	2	—
Cocconeis placentula	96	95	55	91	54	61
Coscinodiscus sp.	2	—	—	—	—	—
Cyclotella Meneghiniana	38	24	28	27	52	66
Cymatopleura solea	—	—	—	—	—	2
Cymbella minuta	2	4	2	4	9	2
Diatoma vulgare	—	2	9	4	4	5
Fragilaria conetruens	169	180	388	550	320	440
F. crotonensis	4	—	145	33	15	—
Gomphonema parvulum	11	6	2	13	11	12
G. subclavatum	4	11	2	11	9	5
G. tenellum	4	2	5	2	4	5
Melosira granulata	—	—	14	—	13	7
M. italica	4	—	7	—	—	—
M. varians	11	19	18	22	17	17
Navicula cryptocephala	7	4	2	2	6	5
N. heufleri	18	22	18	16	13	27
N. pupula	7	6	2	2	17	7
N. pygmaea	—	—	—	—	2	—
N. rhynchocephala	—	—	—	—	2	2
N. salinarium	38	22	7	9	15	17
N. tripunctata	11	2	5	2	6	—
N. viridula	11	6	7	16	6	20
Nitzschia acicularis	9	30	11	2	13	12
N. amphibia	9	19	80	11	26	12
N. apiculata	—	2	—	—	—	—
N. communis	—	2	—	—	—	2
N. dissipata	—	—	2	—	—	—
N. Kuetzingiana	11	9	9	11	19	12
N. linearis	—	—	2	—	2	2
N. palea	18	13	5	11	24	12
N. sp.	—	4	5	4	4	5
Rhoicosphenia curvata	9	4	7	13	13	7
Rhopalodia gibberula	—	—	—	—	2	—
Stephanodiscus Hantzschii	4	11	2	4	2	22
Surirella ovata	—	—	—	—	2	—
Synedra ulna	—	6	2	2	9	—
Chrysophyceae						
Mallomonas sp.	2	2	—	—	—	—
CRYPTOPHYTA (cryptomonads)						
Cryptophyceae						
Chroomonas sp.	25	50	28	13	74	120
Cryptomonas sp.	33	65	39	29	113	90

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1330 hr)	Aug. 13, 1980 (1630 hr)	Aug. 14, 1980 (0100 hr)	Aug. 14, 1980 (0500 hr)	Aug. 14, 1980 (0830 hr)	Aug. 14, 1980 (1200 hr)
Site 20 - STEAMBOAT CREEK AT KIMLICK LANE NEAR RENO--Continued						
CYANOPHYTA (blue-green algae)						
Myxophyceae						
Anabaena spiroides	270	357	562	611	587	396
A. sp.	7	4	23	22	6	17
Dactylococcopsis Smithii	--	4	2	--	--	--
Gomphosphaeria lacustris	--	--	128	--	--	--
Merismopedia tenuissima	--	--	--	--	--	16
Microcystis incerta	7	19	25	7	28	24
Oscillatoria sp.	11	26	39	22	13	17
Raphidiopsis mediterranea	33	63	110	169	139	115
Miscellaneous flagellates	180	167	96	105	158	176
TOTAL	1160	1471	2056	1972	1998	1838

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1200 hr)	(1600 hr)	(2000 hr)	(2400 hr)	Aug. 14, 1980 (0415 hr)	(0800 hr)	(1200 hr)
Site 22 - TRUCKEE RIVER AT VISTA							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Ankistrodesmus falcatus	—	5	3	9	5	6	2
Chlorophyta flagellate	2	11	8	3	—	—	2
Chodatella quadriseta	—	—	—	3	—	—	—
Closteriopsis longissima	—	—	—	2	—	—	—
Coelastrum microsporum	—	—	—	—	24	—	16
Cosmarium sp.	2	—	—	—	—	—	—
Eudorina elegans	—	—	96	—	—	—	—
Oocystis sp.	—	—	—	—	3	—	—
Pediastrum Boryanum	—	—	—	16	—	—	—
P. tetras	—	—	—	8	—	8	—
Scenedesmus abundans	—	8	—	—	12	—	—
S. bijuga	—	—	—	—	12	—	—
S. denticulatus	8	8	—	—	—	—	—
S. dimorphus	—	—	—	—	—	—	8
S. opoliensis	—	8	12	—	—	20	28
S. quadricauda	—	4	12	12	6	24	8
S. sp.	—	—	—	8	—	—	—
Schroederia setigera	—	—	5	2	—	4	4
Selenastrum minutum	6	8	—	2	—	8	—
Tetraedron minimum	—	—	3	—	—	—	—
Tetrastrum staurogeniaeforme	—	—	—	—	—	—	2
Treubaria setigerum	—	—	—	2	—	—	—
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes lanceolata	6	—	—	3	—	2	2
A. minutissima	8	—	8	9	20	8	29
Amphora ovalis	6	2	—	2	5	2	—
Bacillaria paradoxa	—	—	—	25	—	—	—
Caloneis amphisbaena	—	2	—	2	—	—	—
Cocconeis placentula	45	50	64	57	33	54	55
Cyclotella Meneghiniana	16	8	27	17	18	26	15
C. stelligera	—	—	—	—	13	—	—
Cymbella cistula	10	23	19	7	25	20	15
C. minuta	12	8	5	15	15	14	4
C. sinuata	8	—	8	2	—	2	—
Diatoma vulgare	6	—	5	2	5	6	—
Epithemia sorex	—	—	—	—	—	2	—
E. turgida	—	—	—	—	3	—	—
Fragilaria construens	208	32	114	79	91	64	61
F. crotonensis	—	—	—	—	8	—	—
Gomphoneis herculeana	4	—	8	5	3	—	—
Gomphonema parvulum	10	—	8	10	—	10	2
G. subclavatum	4	5	5	—	3	6	1
G. tenellum	4	5	11	3	13	4	11
G. ventricosum	—	—	—	—	—	—	2
Melosira granulata	6	5	—	17	—	—	4
M. italica	—	—	—	5	5	—	—
M. varians	6	11	5	3	5	10	9
Navicula capitata	2	—	—	—	—	2	2
N. cryptocephala	4	—	—	2	—	8	11
N. cuspidata	—	—	—	—	—	—	2
N. heufleri	8	11	16	12	10	20	11
N. mutica	2	5	—	2	—	—	—
N. pupula	17	5	5	2	8	18	15
N. rhynchocephala	4	—	—	—	—	—	—
N. salinarium	140	91	117	86	106	159	143
N. tripunctata	6	2	—	—	—	4	2
N. vanheurckii	4	2	—	—	—	—	—
N. viridula	16	3	8	14	3	14	7
Nitzschia acicularis	4	2	11	2	5	18	11
N. amphibia	17	12	19	10	20	24	4
N. communis	4	2	5	2	—	—	2
N. dissipata	4	3	—	5	3	12	9
N. holsatica	4	—	11	—	5	—	9
N. Kuetzingiana	29	18	29	15	25	46	22
N. linearis	2	2	3	5	—	2	2
N. palea	31	17	48	28	15	60	33
N. sp.	10	2	11	3	20	8	11
Pinnularia sp.	—	—	3	—	—	—	—
Rhoicosphenia curvata	10	5	11	9	8	8	9
Rhopalodia gibba	—	—	3	—	—	—	—
R. gibberula	2	—	—	2	—	2	—
Stephanodiscus Hantzschii	—	2	—	2	—	2	—
Surirella ovata	6	5	—	5	5	—	2
Synedra ulna	—	3	3	2	5	2	—
Tabellaria fenestrata	—	2	—	2	8	2	—
Chrysophyceae							
Mallomonas sp.	—	2	—	—	—	—	2
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	6	2	—	—	8	18	22
Cryptomonas sp.	12	11	11	7	8	20	35

TABLE 8.—*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1200 hr)	(1600 hr)	(2000 hr)	(2400 hr)	Aug. 14, 1980 (0415 hr)	(0800 hr)	(1200 hr)
Site 22 - TRUCKEE RIVER AT VISTA--Continued							
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Anabaena spiroides	62	55	106	108	96	124	152
A. sp.	—	2	—	2	5	6	11
Dactylococcopsis Smithii	--	--	3	7	—	—	—
Immature cyanophyta trichome	2	5	8	—	15	6	4
Meriamopedia tenuissima	--	--	—	—	96	96	—
Microcystis incerta	—	2	3	2	3	—	—
Oscillatoria sp.	2	5	5	—	13	6	—
Raphidiopsis mediterranea	4	9	5	19	18	28	40
Miscellaneous flagellates	280	202	292	265	326	189	206
TOTAL	1071	692	1162	950	1161	1204	1059

TABLE 8.—*Phytoplankton taxa and cell counts, August 1980*—Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1300 hr)	(1700 hr)	(2045 hr)	Aug. 14, 1980 (0100 hr)	(0500 hr)	(0900 hr)	(1245 hr)
Site 23 - TRUCKEE RIVER AT LOCKWOOD							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Ankistrodesmus falcatus	--	4	--	--	4	--	2
Chlorophyta flagellate	--	2	--	2	6	3	4
Closteriopsis longissima	3	--	--	--	--	--	--
Coelastrum microsporum	--	--	--	--	--	72	--
Cosmarium sp.	--	--	--	2	--	--	--
Dictyosphaerium pulchellum	--	--	8	16	--	--	--
Eudorina elegans	--	32	--	--	--	--	--
Kirchneriella subsolitaria	--	8	--	--	--	--	--
Oocystis sp.	6	--	--	--	--	--	--
Pediastrum Boryanum	--	--	--	--	16	--	--
P. duplex	--	--	--	64	--	--	--
Scenedesmus abundans	6	--	8	--	--	--	8
S. bijuga	--	--	24	24	--	24	--
S. denticulatus	--	--	8	--	8	--	8
S. dimorphus	--	--	8	--	16	8	24
S. opoliensis	--	8	8	8	20	12	36
S. quadricauda	--	--	8	--	--	8	--
S. sp.	--	--	--	--	--	--	8
Schroederia setigera	--	2	2	2	6	6	--
Selenastrum minutum	3	6	13	--	--	--	--
Staurodesmus sp.	--	--	--	--	--	--	2
Tetrastrum staurogeniaeforme	--	--	--	2	--	3	--
Traedron caudatum	--	--	--	2	--	--	--
T. minimum	--	2	2	--	2	--	2
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes lanceolata	--	--	2	2	--	--	--
A. minutissima	18	20	9	18	17	6	18
Amphora ovalis	--	2	4	--	4	--	--
Cocconeis placentula	21	30	34	48	33	38	33
Cyclotella Meneghiniana	33	22	36	22	19	38	37
Cymbella cistula	15	6	16	10	14	20	13
C. minuta	9	4	11	8	12	15	13
C. sinuata	6	2	9	--	2	--	2
Diatoma vulgare	--	2	2	--	4	15	--
Fragilaria conetruens	242	12	87	48	111	79	200
F. crotonensis	--	--	--	--	--	6	33
Gomphoneis herculeana	--	2	--	--	--	--	--
Gomphonema parvulum	24	4	20	8	10	9	11
G. subclavatum	33	--	--	2	2	9	4
G. tenellum	6	14	11	10	6	--	20
Gomphonema truncatum	--	--	--	--	4	--	--
Melosira italica	--	--	--	4	--	--	--
M. varians	--	4	--	--	14	3	9
Navicula capitata	3	2	--	--	--	--	--
N. cryptocephala	--	6	5	8	--	15	--
N. exigua	--	--	--	--	--	--	2
N. heufleri	24	10	2	18	14	26	11
N. minuscula	9	8	4	8	12	2	7
N. mutica	3	8	--	2	6	--	7
N. pupula	18	24	13	8	12	9	35
N. pygmaea	3	--	--	--	--	--	--
N. rynchocephala	3	--	--	2	--	--	--
N. salinarium	200	137	150	103	89	143	83
N. tripunctata	6	6	7	--	2	--	2
N. viridula	9	2	--	4	6	--	2
Nitzschia acicularis	6	22	9	4	6	3	15
N. amphibia	52	4	29	18	33	20	53
N. communis	6	4	--	4	4	--	2
N. dissipata	3	6	9	14	6	--	15
N. holsatica	12	18	--	10	12	6	--
N. Kuetzingiana	106	77	85	46	54	105	53
N. linearis	3	4	5	--	6	3	4
N. palea	97	97	52	51	49	87	119
N. tryblionella	--	2	--	--	--	--	--
N. sp.	15	2	7	12	10	--	15
Rhoicosphenia curvata	--	8	14	8	12	6	11
Stephanodiscus Hantzschii	15	--	--	4	--	6	7
Surirella angustata	--	--	--	--	2	--	--
S. ovata	--	6	4	8	--	2	9
Synedra rumpens	3	--	--	4	--	--	--
S. ulna	6	--	4	6	--	--	7
Chrysophyceae							
Mallomonas akrokomos	--	--	--	2	21	--	--
M. sp.	3	--	--	--	2	--	2
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	6	--	2	--	4	6	9
Cryptomonas sp.	--	4	14	--	14	12	13

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1300 hr)	Aug. 13, 1980 (1700 hr)	Aug. 13, 1980 (2045 hr)	Aug. 14, 1980 (0100 hr)	Aug. 14, 1980 (0500 hr)	Aug. 14, 1980 (0900 hr)	Aug. 14, 1980 (1245 hr)
Site 23 - TRUCKEE RIVER AT LOCKWOOD--Continued							
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Anabaena spiroides	18	36	41	71	109	111	77
A. sp.	3	--	2	--	--	--	--
Gomphosphaeria lacustris	--	--	--	--	160	48	--
Immature cyanophyta trichome	27	26	4	8	17	3	44
Microcystis incerta	--	2	--	--	16	12	9
Oscillatoria sp.	6	10	2	4	4	12	--
Raphidiopsis mediterranea	--	6	4	20	20	20	20
PYRRHOPHYTA (fire algae)							
Dinophyceae							
Peridinium sp.	3	--	--	--	--	--	--
Miscellaneous flagellates	188	226	218	206	280	306	195
TOTAL	1281	951	1016	955	1312	1337	1315

TABLE 8.—*Phytoplankton taxa and cell counts, August 1980*—Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1200 hr)	(1600 hr)	(2000 hr)	(2400 hr)	Aug. 14, 1980 (0400 hr)	(0800 hr)	(1200 hr)
Site 27 - TRUCKEE RIVER AT PATRICK							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Actinastrum Hantzschii	--	--	--	--	24	20	--
Arkistrodesmus falcatus	--	3	5	2	--	2	28
Chlorophyta flagellate	14	--	--	5	--	--	10
Closteriopsis longissima	--	3	--	--	--	--	5
Coelastrum microsporum	--	24	--	--	--	16	40
Dictyosphaerium pulchellum	--	--	--	8	--	--	--
Eudorina elegans	32	--	--	--	--	--	96
Kirchneriella subsolitaria	8	--	--	--	--	--	--
Micractimium pusillum	8	--	--	16	12	8	--
Pediastrum Boryanum	--	--	--	16	--	48	--
P. duplex	--	--	48	--	--	--	--
Scenedesmus abundans	--	--	--	8	12	24	--
S. bijuga	--	16	--	8	--	--	20
S. denticulatus	8	--	--	--	--	8	--
S. dimorphus	8	12	--	--	12	--	12
S. opoliensis	--	--	12	16	--	--	6
S. quadricauda	--	6	24	--	6	8	12
S. sp.	--	--	--	8	--	--	12
Schroederia setigera	2	--	--	--	--	2	5
Selenastrum minutum	7	48	8	2	3	--	--
Tetraedron minimum	2	--	3	--	3	2	3
T. trigonum	2	--	--	2	--	--	3
Tetrastrum staurogeniaeforme	--	3	--	--	3	2	--
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes lanceolata	2	--	3	2	3	--	3
A. minutissima	5	5	21	5	11	7	8
Amphora ovalis	2	--	3	2	3	--	--
Cocconeis placentula	64	28	42	34	32	51	35
Cyclotella Meneghiniana	59	48	47	18	16	37	40
Cymbella cistula	9	15	10	--	11	2	--
C. mexicana	9	8	5	--	--	5	3
C. minuta	12	10	16	8	14	5	5
C. sinuata	--	3	3	--	3	--	--
Diatoma vulgare	--	3	3	2	--	--	--
Diploneis oblongella	--	--	--	2	--	--	--
Fragilaria construens	256	88	26	60	290	66	126
F. crotonensis	--	--	42	--	24	17	--
Gomphoneis herculeana	9	3	10	5	3	2	10
Gomphonema parvulum	69	18	21	28	35	17	30
G. subclavatum	--	8	3	5	3	7	15
G. tenellum	2	8	10	2	3	7	5
Melosira granulata	14	--	13	11	5	--	15
M. variane	14	5	26	2	5	12	10
Navicula cryptocephala	5	3	8	6	3	7	8
N. exigua	--	--	3	--	--	--	--
N. heufleri	17	15	21	8	8	15	13
N. minuscula	7	30	13	8	19	7	5
N. mutica	9	5	26	13	14	12	8
N. pupula	19	35	37	37	30	34	30
N. salinarium	308	273	196	143	195	164	270
N. tripunctata	5	3	--	--	5	7	3
N. viridula	9	5	8	2	3	2	--
Nitzschia acicularis	21	13	10	15	--	10	10
N. amphibia	57	25	29	75	60	24	104
N. apiculata	2	--	--	--	--	--	--
N. communis	2	3	5	2	8	--	3
N. dissipata	12	30	47	26	5	20	38
N. holsatica	9	--	10	13	5	--	--
N. Kuetzingiana	180	141	97	93	124	164	174
N. linearis	--	5	5	2	3	--	5
N. palea	218	210	138	127	122	215	250
N. sp.	26	23	34	15	11	39	56
Rhoicosphenia curvata	9	18	16	3	16	15	20
Stephanodiscus Hantzschii	--	8	3	5	3	10	5
Surirella angustata	--	--	--	--	--	2	3
S. ovata	2	3	3	5	--	--	--
Synedra ulna	2	8	--	2	14	7	3
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	9	23	3	16	14	5	15
Cryptomonas sp.	14	10	13	15	5	15	13
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Anabaena spiroides	45	18	47	44	73	54	93
A. sp.	--	--	--	2	8	2	--
Gomphospheria lacustris	--	--	--	--	--	48	--
Immature cyanophyta trichome	5	8	8	5	8	7	5
Merismopedia tenuissima	--	84	--	32	--	--	--
Microcystis incerta	7	--	3	5	5	5	15
Oscillatoria sp.	5	3	3	5	5	7	8
Raphidiopsis mediterranea	5	5	--	3	8	27	13
Miscellaneous flagellates	180	237	123	94	111	112	189
TOTAL	1806	1609	1313	1098	1421	1411	1916

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1300 hr)	(1630 hr)	(2030 hr)	Aug. 14, 1980 (0030 hr)	(0430 hr)	(0830 hr)	(1230 hr)
Site 34 - TRUCKEE RIVER AT CLARK							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Actinastrum Hantzschii	256	272	188	212	148	264	232
Ankistrodesmus falcatus	—	10	2	2	—	8	5
Chlorophyta flagellate	12	10	9	—	—	8	18
Closterium sp.	—	—	2	5	—	—	—
Coelastrum microsporum	16	—	16	40	—	24	—
Dictyosphaerium pulchellum	—	—	—	—	—	—	32
Golenkinia radiata	—	—	—	—	—	—	3
Kirchneriella subsolitaria	—	—	—	8	—	—	—
Micractinium pusillum	52	24	24	64	74	60	40
Oocystis sp.	2	—	10	—	—	9	12
Pandorina morum	—	—	—	16	—	—	—
Pediastrum Boryanum	—	—	—	—	—	96	—
P. duplex	—	—	—	—	—	—	96
P. tetras	—	16	—	—	16	—	24
Scenedesmus abundans	4	8	—	4	—	12	—
S. bijuga	4	4	26	—	8	24	12
S. denticulatus	—	—	—	8	—	—	20
S. dimorphus	20	—	36	20	24	24	—
S. opoliensis	20	—	36	4	24	28	40
S. quadricauda	20	10	18	8	16	12	—
S. sp.	—	—	—	—	—	32	—
Schroederia setigera	—	—	—	—	—	3	—
Selenastrum minutum	44	27	121	17	—	—	23
Staurastrum dilatum	—	—	—	5	—	—	—
Tetraedron caudatum	—	2	—	—	—	—	—
T. minimum	—	5	—	2	—	—	3
T. trigonum	—	—	—	—	—	—	3
Tetrastrum staurogeniaeforme	2	2	5	—	—	—	—
Treubaria setigerum	—	2	—	—	—	—	—
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes clevei	—	—	—	—	2	—	—
A. lanceolata	2	2	—	2	5	3	5
A. minutissima	—	10	7	7	10	10	10
Amphora ovalis	—	—	2	—	—	3	3
Caloneis amphisbaena	—	—	2	—	—	—	—
Cocconis placentula	90	59	40	29	56	56	114
Cyclotella Meneghiniana	73	93	90	42	34	56	66
Cymbella cistula	2	—	5	5	15	3	13
C. minuta	—	5	7	5	5	10	—
C. sinuata	—	—	2	2	—	—	5
C. tumida	17	15	24	12	5	15	8
Epithemia sorex	—	2	—	—	—	—	—
Fragilaria construens	86	12	111	374	296	121	225
F. crotonensis	—	—	—	12	—	8	—
F. vaucheriae	—	2	—	—	—	—	—
Gomphoneis herculeana	7	2	—	5	5	—	5
Gomphonema parvulum	54	53	57	39	66	58	76
G. subclavatum	32	17	14	27	22	18	20
G. tenellum	7	10	2	—	—	3	—
Melosira granulata	—	—	—	10	27	5	23
M. varians	2	2	2	20	2	5	3
Navicula capitata	2	—	—	—	—	—	—
N. cryptocephala	—	5	—	2	12	13	5
N. cuspidata	—	—	—	—	—	—	3
N. heufleri	—	12	7	5	7	15	8
N. minuscula	17	17	7	15	12	10	28
N. mutica	5	5	—	5	15	3	15
N. pupula	54	39	33	49	64	81	73
N. pygmaea	—	2	—	—	—	—	—
N. rhynchocephala	—	—	2	2	—	—	—
N. salinarum	164	159	152	159	144	210	225
N. tripunctata	2	—	2	10	2	—	5
N. viridula	2	—	2	5	—	—	3
Nitzschia acicularis	27	34	14	5	22	33	25
N. amphibia	103	83	66	71	64	73	96
N. apiculata	2	—	—	—	—	—	5
N. communis	7	10	9	2	2	5	8
N. dissipata	46	22	14	15	39	53	33
N. holsatica	24	5	9	10	15	5	25
N. Kuetzingiana	122	147	90	125	137	222	152
N. linearis	—	—	—	5	2	—	3
N. palea	186	142	128	122	152	212	235
N. sp.	20	44	36	24	22	51	43
Pinnularia sp.	—	—	2	—	—	—	—
Rhoicosphenia curvata	15	12	7	10	7	13	20
Stephanodiscus Hantzschii	12	2	14	2	12	10	15
Surirella angustata	—	—	2	—	—	—	—
S. ovata	—	—	—	5	2	—	—
Synedra ulna	15	5	9	5	5	5	88
Tabellaria fenestrata	—	2	2	2	5	—	—
Chrysophyceae							
Mallomonas sp.	—	—	—	—	—	3	—
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	10	17	5	7	10	23	33
Cryptomonas sp.	10	24	9	12	22	8	18

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1300 hr)	(1630 hr)	(2030 hr)	Aug. 14, 1980 (0030 hr)	(0430 hr)	(0830 hr)	(1230 hr)
Site 34 - TRUCKEE RIVER AT CLARK--Continued							
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Anabaena spiroides	17	12	38	22	34	30	66
A. sp.	2	--	--	--	--	--	3
Dactylococcopsis Smithii	--	--	2	--	--	--	--
Immature cyanophyta trichome	5	10	5	10	10	5	3
Merismopedia tenuissima	32	80	48	--	32	--	48
Microcystis incerta	--	5	2	--	10	5	3
Oscillatoria sp.	2	5	7	2	7	13	5
Raphidiopsis mediterranea	7	7	5	12	5	23	10
Miscellaneous flagellates	166	88	92	73	81	131	199
TOTAL	1900	1671	1678	1799	1813	2233	2640

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1300 hr)	(1730 hr)	(2130 hr)	Aug. 14, 1980 (0100 hr)	(0415 hr)	(0930 hr)	(1145 hr)
Site 36 - TRUCKEE RIVER AT DERBY DAM							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Actinastrum Hantzschii	252	264	192	216	136	224	116
Ankistrodesmus falcatus	31	3	8	15	10	--	--
Chlorophyta flagellate	26	8	15	--	15	10	
Chodatella quadriseta	--	--	--	2	--	--	--
Closteriopsis longissima	--	--	--	--	--	5	--
Coelastrum microsporum	--	24	--	--	40	--	--
Cosmarium sp.	--	--	3	--	--	--	--
Crucigenia crucifera	--	8	--	--	--	--	--
Eudorina elegans	--	--	--	--	--	80	--
Golenkinia radiata	10	3	8	5	--	--	--
Micractinium pusillum	120	44	68	20	100	100	40
Pandorina morum	80	--	--	16	--	--	--
Pediastrum Boryanum	--	24	--	--	40	160	--
P. duplex	--	--	--	160	--	--	--
P. simplex	--	24	--	--	--	--	--
P. tetras	20	24	--	--	--	--	--
Scenedesmus abundans	20	36	6	--	--	--	--
S. denticulatus	--	20	20	--	--	--	--
S. dimorphus	--	52	20	8	--	--	--
S. opoliensis	--	12	32	--	--	20	30
S. quadricauda	20	6	--	40	10	10	80
S. sp.	--	--	32	--	--	--	--
Schroederia setigera	--	--	--	--	--	5	--
Selenastrum minutum	42	40	45	20	59	25	39
Tetraedron caudatum	--	--	3	--	--	--	--
T. minimum	--	5	3	5	10	--	--
Tetrastrum staurogeniaeforme	5	--	3	2	5	--	--
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes lanceolata	--	5	--	--	5	--	--
A. minutissima	5	3	5	--	--	--	5
Amphora ovalis	5	--	5	2	--	5	--
Caloneis amphisbaena	--	--	--	--	--	5	5
Cocconeis placentula	146	76	78	39	78	45	112
Cyclotella Meneghiniana	167	91	68	71	64	162	83
Cymbella cistula	5	--	3	10	24	--	--
C. mexicana	--	--	--	--	--	--	5
C. minuta	21	3	13	2	15	--	5
C. sinuata	--	--	3	2	5	10	5
C. tumida	21	25	28	15	15	25	34
Diatoma vulgare	5	5	3	--	5	--	--
Epithemia sorex	--	--	--	--	--	--	5
Fragilaria construens	502	63	434	474	640	682	606
F. crotonensis	--	--	--	5	--	--	--
Gomphoneis herculeana	--	8	3	15	5	10	--
Gomphonema parvulum	73	73	76	68	93	111	39
G. subclavatum	37	30	23	20	30	20	29
G. tenellum	10	3	3	--	5	5	--
Melosira granulata	42	3	10	--	--	--	16
M. varians	5	5	--	22	20	5	10
Navicula capitata	--	--	--	--	--	--	5
N. cryptocephala	10	3	18	5	15	5	15
N. cuspidata	5	--	--	--	--	--	--
N. heufleri	5	5	5	5	5	--	--
N. minuscula	31	33	18	20	39	15	44
N. mutica	--	3	18	10	10	25	20
N. pupula	131	68	76	46	78	91	117
N. rhynchocephala	--	--	--	--	--	5	--
N. salinarium	272	220	126	127	191	232	220
N. tripunctata	10	--	10	2	--	--	--
N. vanheurckii	--	--	--	--	--	5	--
N. viridula	10	5	3	5	--	--	--
Neidium sp.	--	--	--	2	--	--	--
Nitzschia acicularis	10	35	30	112	20	30	39
N. amphibia	99	114	88	90	122	81	93
N. apiculata	--	--	--	--	--	5	--
N. communis	16	3	3	10	24	10	10
N. dissipata	31	23	18	17	44	25	29
N. holsatica	57	5	5	5	10	10	29
N. Kuetzingiana	251	98	152	130	171	263	152
N. linearis	--	3	3	15	5	5	5
N. palea	214	139	136	112	166	222	220
N. tryblionella	5	--	--	--	--	--	--
N. sp.	26	40	30	20	15	81	64
Rhoicosphenia curvata	21	8	5	2	5	15	24
Stephanodiscue Hantzschii	42	8	8	10	24	10	--
Surirella ovata	--	--	3	2	--	--	--
Synedra delicatissima	--	3	--	5	10	--	5
S. ulna	--	8	3	5	10	20	--
Tabellaria fenestrata	--	--	--	2	--	--	--
Chrysophyceae							
Mallomonas sp.	--	--	3	--	--	--	5
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	5	5	10	17	5	10	10
Cryptomonas sp.	47	18	13	12	15	40	44

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1300 hr)	(1730 hr)	(2130 hr)	Aug. 14, 1980 (0100 hr)	(0415 hr)	(0930 hr)	(1145 hr)
Site 36 - TRUCKEE RIVER AT DERBY DAM--Continued							
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Anabaena spiroides	16	5	20	12	10	10	29
Immature cyanophyta trichome	5	3	--	12	--	5	5
Merismopedia tenuissima	165	123	60	--	--	80	80
Miscellaneous flagellates	178	146	139	105	142	237	235
TOTAL	3332	2114	2219	2173	2565	3261	2763

TABLE 8.—*Phytoplankton taxa and cell counts, August 1980*—Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1200 hr)	Aug. 13, 1980 (2000 hr)	Aug. 13, 1980 (2400 hr)	Aug. 14, 1980 (0845 hr)	Aug. 14, 1980 (1230 hr)
Site 39 - TRUCKEE RIVER AT PAINTED ROCK BRIDGE					
CHLOROPHYTA (green algae)					
Chlorophyceae					
Actinastrum Hantzschii	116	304	228	224	360
Ankistrodesmus falcatus	59	33	28	20	33
Chlorophyta flagellate	5	—	—	5	5
Chodatella quadriseta	5	—	2	—	5
Closteriopsis longissima	5	—	—	—	—
Coelastrum microsporum	40	80	40	160	—
Cosmarium sp.	—	—	2	—	—
Eudorina elegans	80	80	—	—	—
Micractinium pusillum	40	20	24	60	60
Oocystis sp.	—	—	7	—	25
Pandorina morum	—	—	16	—	—
Pediastrum Boryanum	120	40	—	—	—
P. duplex	—	240	16	—	—
P. tetras	60	—	—	40	—
Scenedesmus abundans	130	20	24	90	18
S. bijuga	10	50	10	—	—
S. denticulatus	20	—	20	—	36
S. dimorphus	20	—	—	80	132
S. opoliensis	20	60	20	60	56
S. quadricauda	60	86	12	20	—
S. sp.	—	20	—	40	36
Schroederia setigera	—	5	2	5	—
Selenastrum minutum	73	85	40	51	213
Tetraedron caudatum	—	5	—	—	5
T. minimum	—	14	—	10	5
T. trigonum	—	—	—	10	—
Tetrastrum staurogeniaeforme	—	—	2	—	14
CHRYSOPHYTA					
Bacillariophyceae (diatoms)					
Achnanthes lanceolata	—	—	2	5	5
A. minutissima	—	9	2	10	—
Amphora ovalis	—	—	—	5	—
Caloneis amphisbaena	—	5	—	—	—
Cyclotella Meneghiniana	342	8	116	217	180
Cymbella cistula	—	5	—	—	—
C. tumida	34	9	28	40	19
Diatoma vulgare	—	28	9	—	9
Fragilaria construens	117	237	78	222	208
Gomphoneis herculeana	—	5	2	5	5
Gomphonema parvulum	112	90	102	51	66
G. subclavatum	34	14	17	20	5
G. tenellum	15	—	—	—	—
Melosira granulata	20	9	10	25	33
M. varians	20	28	5	51	9
Navicula cryptocephala	—	5	12	—	9
N. cuspidata	—	5	2	—	—
N. heufleri	—	5	—	—	—
N. minuscula	24	14	24	15	33
N. mutica	5	—	—	—	9
N. pupula	127	123	83	96	123
N. pygmaea	—	5	2	5	5
N. salinarium	259	170	121	278	194
N. tripunctata	—	—	2	—	—
N. vanheurckii	—	5	—	—	—
N. viridula	5	—	—	10	—
Nitzschia acicularis	20	19	36	30	48
N. amphibia	147	147	88	141	71
N. communis	20	9	2	10	14
N. dissipata	29	28	19	5	20
N. holsatica	10	28	9	40	—
N. Kuetzingiana	152	128	83	202	152
N. linearis	—	9	—	—	—
N. palea	239	133	130	258	142
N. tryblionella	—	5	—	5	—
N. sp.	54	24	33	51	43
Rhoicosphenia curvata	5	19	5	15	24
Stephanodiscus Hantzschii	24	43	36	35	28
Synedra delicatissima	—	—	5	—	—
S. ulna	64	85	38	56	9
Chrysophyceae					
Mallomonas sp.	—	—	—	5	—
CRYPTOPHYTA (cryptomonads)					
Cryptophyceae					
Chroomonas sp.	10	19	5	30	14
Cryptomonas sp.	20	9	5	35	19
CYANOPHYTA (blue-green algae)					
Myxophyceae					
Anabaena spiroides	20	9	5	10	9
Immature cyanophyta trichome	—	—	5	—	14
Merismopedia tenuissima	—	—	24	40	—
Microcystis incerta	—	9	—	10	5
Oscillatoria sp.	10	5	—	—	5
Miscellaneous flagellates	200	166	107	283	251
TOTAL	3001	2815	1745	3191	2783

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1230 hr)	(1630 hr)	(2015 hr)	Aug. 14, 1980 (0015 hr)	(0445 hr)	(0830 hr)	(1245 hr)
Site 43 - HERMAN DITCH RETURN AT WADSWORTH							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Actinastrum Hantzschii	112	36	72	120	88	192	80
Ankistrodesmus falcatus	--	28	14	18	5	30	5
Chlorophyta flagellate	46	28	--	5	--	32	29
Chodatella quadriseta	--	5	--	2	--	--	--
Coelastrum microsporum	--	--	--	--	--	80	--
Eudorina elegans	40	--	--	--	--	--	--
Kirchperiella subcolitaria	--	20	--	28	--	--	20
Micractinium pusillum	--	--	--	100	24	20	--
Oocystis sp.	--	--	--	--	--	--	10
Pandorina morum	--	--	--	--	--	--	80
Pediastrum duplex	40	40	72	--	48	--	--
Scenedesmus abundans	--	20	--	--	8	54	--
S. bijuga	28	--	18	22	--	18	20
S. denticulatus	20	--	--	--	--	--	20
S. dimorphus	--	296	--	--	16	20	40
S. opoliensis	20	--	--	8	48	36	--
S. quadricauda	76	46	--	44	20	20	60
S. sp.	36	--	--	--	8	10	40
Schroederia setigera	--	5	5	--	--	--	--
Selenastrum minutum	142	266	78	51	27	73	122
Tetraedron caudatum	--	--	--	2	--	--	5
T. minimum	5	--	5	2	--	32	5
T. regulare	--	--	5	--	--	--	--
T. trigonum	5	--	5	--	--	--	24
Tetrastrum staurogeniaeforme	--	--	5	--	--	--	--
Treubaria setigerum	--	--	--	--	2	--	--
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes curta	--	--	--	--	--	5	--
Cocconeis placentula	32	--	9	2	5	14	34
Coscinodiscus sp.	--	5	--	--	--	--	--
Cyclotella Meneghiniana	73	69	9	53	56	55	68
C. ocellata	--	--	--	2	--	--	--
Cymbella minuta	--	--	5	--	--	--	--
C. sinuata	--	--	--	2	2	5	--
C. tumida	--	--	--	5	--	--	--
Fragilaria construens	--	--	--	9	7	--	--
Gomphoneis herculeana	5	--	--	--	--	--	--
Gomphonema parvulum	9	14	5	28	37	5	54
G. subclavatum	9	9	--	7	44	32	39
G. tenellum	5	--	9	--	--	5	--
Melosira granulata	--	--	9	--	7	32	20
M. varians	--	--	--	5	--	--	--
Navicula cryptocephala	--	--	--	--	2	--	10
N. heufleri	60	32	18	9	15	18	49
N. minuscula	--	--	--	9	2	9	5
N. pupula	60	18	18	53	32	73	78
N. pygmaea	--	--	--	9	2	--	--
N. salinarium	--	14	9	32	20	5	10
Nitzschia acicularis	9	14	5	9	--	18	15
N. amphibia	--	--	--	9	22	14	15
N. communis	--	--	--	--	2	--	5
N. dissipata	5	--	--	--	5	9	10
N. holsatica	28	41	9	--	29	9	--
N. Kuetzingiana	248	367	28	34	122	413	230
N. linearis	--	--	--	--	--	--	5
N. palea	33	161	60	78	78	280	147
N. tryblionella	--	--	--	--	--	5	--
N. sp.	14	9	--	--	15	41	20
Rhoicosphenia curvata	--	--	--	--	--	--	5
Stephanodiscus Hantzschii	78	73	64	76	56	46	29
Synedra ulna	--	5	--	2	2	--	15
Chrysophyceae							
Mallomonas sp.	--	9	--	2	--	--	15
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	18	5	5	18	12	51	39
Cryptomonas sp.	18	32	5	14	23	14	15
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Anabaena spiroides	--	--	--	2	7	--	5
A. sp.	14	46	--	--	2	--	--
Dactylococcopsis Smithii	37	18	9	2	15	--	20
Gomphosphaeria lacustris	--	--	--	--	32	--	--
Immature cyanophyta trichome	9	5	--	21	2	28	10
Merismopedia tenuissima	--	--	160	88	16	80	--
Microcystis incerta	--	--	5	5	2	5	--
Oscillatoria sp.	41	14	9	9	12	5	--
Raphidiopsis mediterranea	--	5	--	--	--	--	10
EUGLENOPHYTA (euglenoids)							
Euglena sp.	5	--	--	--	--	--	--
Phacus sp.	5	--	--	--	--	--	--
Miscellaneous flagellates	2456	1506	1625	583	474	790	3789
TOTAL	3841	3261	2354	1579	1453	2683	5326

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1215 hr)	(1615 hr)	(2000 hr)	(2400 hr)	Aug. 14, 1980 (0430 hr)	(0815 hr)	(1230 hr)
Site 44 - TRUCKEE RIVER AT OLD U.S. HIGHWAY 40 BRIDGE AT WADSWORTH							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Actinastrum Hanzschii	176	284	76	80	196	360	56
Ankistrodesmus falcatus	274	232	104	78	142	19	115
Chlorophyta flagellate	20	15	5	5	20	—	9
Chodatella quadriseta	5	5	—	—	—	—	—
Closteriopsis longissima	—	5	—	—	—	—	—
Closterium sp.	—	—	5	—	—	5	—
Coelastrum microsporum	120	—	—	120	40	40	—
Cosmarium botrytis	—	—	—	5	—	—	—
Dictyosphaerium pulchellum	—	—	—	—	20	—	—
Eudorina elegans	—	80	—	—	—	—	—
Gloeocystis vesiculosa	—	—	—	—	—	90	—
Golenkinia radiata	5	5	—	—	—	—	—
Kirchneriella subsolitaria	20	80	—	—	20	20	—
Micractinium pusillum	—	20	80	80	180	76	40
Oocystis sp.	—	—	—	5	20	—	—
Pediastrum Boryanum	80	40	—	80	—	—	80
P. duplex	80	—	—	80	80	72	—
P. simplex	—	—	72	—	—	—	—
P. tetras	80	—	—	—	40	40	40
Quadrigula chodatii	—	—	—	—	20	20	—
Scenedesmus abundans	196	140	66	80	156	76	140
S. bijuga	30	40	18	20	40	76	96
S. denticulatus	80	80	—	—	—	20	—
S. dimorphus	176	180	36	240	240	324	204
S. opoliensis	146	224	76	136	176	182	160
S. quadricauda	70	90	64	80	20	—	76
S. sp.	—	40	—	—	20	20	—
Schroederia setigera	10	—	—	—	—	—	—
Selenastrum minutum	186	298	156	64	93	175	174
Staurastrum sebaldi	—	—	—	5	—	—	—
Tetraedron caudatum	5	5	—	—	5	—	—
T. minimum	34	56	9	10	34	24	28
T. regulare	—	—	—	—	5	5	—
T. trigonum	6	—	—	—	5	—	14
Tetrastrum staurogeniaeforme	—	15	—	5	10	19	23
Treubaria setigerum	—	5	—	5	—	—	—
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes curta	—	—	—	5	—	—	—
A. minutissima	5	—	—	—	—	—	—
Caloneis amphisbaena	5	5	—	—	—	—	—
Cocconeis placentula	44	25	28	44	54	14	28
Cyclotella Meneghiniana	244	384	218	181	152	213	275
Cymbella minuta	—	—	5	—	—	—	—
C. sinuata	—	—	5	—	—	—	—
C. tumida	29	50	14	54	15	9	32
Diatoma vulgare	5	10	5	20	10	5	28
Fragilaria construens	10	—	80	332	205	47	367
F. vaucheriae	5	—	—	—	—	—	—
Gomphoneis herculeana	5	5	—	—	—	9	—
Gomphonema parvulum	15	40	24	44	54	38	73
G. subclavatum	15	15	24	10	15	5	14
G. tenellum	15	15	9	5	20	—	5
Melosira granulata	—	40	19	—	—	—	28
M. varians	24	20	—	5	—	24	9
Navicula cryptocephala	—	10	9	—	10	5	5
N. heufleri	—	—	5	10	—	—	—
N. minuscula	10	—	24	5	10	9	41
N. mutica	—	—	—	—	—	5	—
N. pupula	68	56	57	78	24	71	60
N. pygmaea	—	—	—	—	—	—	5
N. salinarium	122	157	80	112	83	109	142
N. viridula	—	10	—	—	—	—	9
Nitzschia acicularis	44	66	24	54	34	43	18
N. amphibia	137	162	156	137	103	85	161
N. communis	24	10	5	24	10	9	9
N. dissipata	20	25	—	24	34	19	32
N. holsatica	20	10	19	20	15	9	28
N. Kuetzingiana	235	121	71	142	127	175	133
N. linearis	—	—	—	—	5	—	—
N. palea	171	141	85	142	98	128	174
N. sp.	29	30	14	29	15	47	32
Rhoicosphenia curvata	—	—	—	—	5	—	—
Stephanodiscus Hantzschii	132	76	47	64	137	104	87
Synedra ulna	196	399	147	137	68	95	363
Chrysophyceae							
Mallomonas sp.	10	—	—	5	—	—	—
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	15	10	5	24	24	24	32
Cryptomonas sp.	34	30	9	10	10	14	9

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1215 hr)	(1615 hr)	(2000 hr)	(2400 hr)	Aug. 14, 1980 (0430 hr)	(0815 hr)	(1230 hr)
Site 44 - TRUCKEE RIVER AT OLD U.S. HIGHWAY 40 BRIDGE AT WADSWORTH--Continued							
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Anabaena spiroides	5	30	5	5	10	--	5
A. sp.	--	5	--	--	--	--	--
Dactylococcopsis Smithii	--	5	--	--	--	--	9
Immature cyanophyta trichome	10	5	--	--	5	5	--
Merismopedia tenuissima	80	320	40	120	40	272	40
Microcystis incerta	5	5	14	5	10	--	5
Oscillatoria sp.	--	5	5	--	--	--	--
Raphidiopsis mediterranea	10	--	--	--	--	--	--
TOTAL	3597	4236	2019	3025	2984	3255	3513

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1200 hr)	(1600 hr)	(2000 hr)	(2400 hr)	Aug. 14, 1980 (0400 hr)	(0800 hr)	(1200 hr)
Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Actinastrum Hantzschii	164	60	112	180	160	176	300
Ankistrodesmus falcatus	119	170	119	96	147	200	161
Chlorophyta flagellate	5	28	9	45	18	68	33
Chodatella quadriseta	--	--	--	--	4	--	--
Closterium sp.	--	9	5	--	4	5	5
Coelastrum microsporum	--	--	--	--	32	--	--
Cosmarium botrytis	--	--	5	--	--	--	--
Dictyosphaerium pulchellum	--	--	140	140	--	80	80
Elakotothrix gelatinosa	--	--	--	10	--	--	--
E. viridis	--	10	--	20	--	--	--
Eudorina elegans	--	--	--	--	80	--	--
Kirchneriella subsolitaria	36	20	20	--	36	--	56
Micractinium pusillum	--	36	--	--	72	20	20
Oocystis sp.	--	--	20	5	--	--	--
Pediastrum Boryanum	80	224	80	--	192	80	80
P. duplex	40	184	--	80	--	80	--
P. simplex	80	--	--	--	64	--	--
P. tetras	--	--	72	80	32	120	92
Scenedesmus abundans	128	228	108	40	52	256	230
S. bijuga	76	96	96	110	50	80	106
S. denticulatus	36	96	36	40	72	40	36
S. dimorphus	188	76	108	60	180	160	188
S. opoliensis	184	130	92	150	124	196	172
S. quadricauda	56	106	94	--	34	30	54
S. sp.	--	36	10	--	18	40	--
Schroederia setigera	--	--	--	--	--	5	--
Selenastrum minutum	92	194	138	66	22	64	118
Tetraedron caudatum	5	--	--	--	4	--	--
T. minimum	55	28	37	25	18	15	5
T. regulare	--	--	5	--	--	--	--
T. trigonum	5	--	5	5	--	--	14
Tetrastrum staurogeniaeforme	--	5	18	5	13	15	9
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes lanceolata	--	--	5	--	--	5	5
Cocconeis placentula	28	33	51	71	40	20	62
Cyclotella Meneghiniana	165	227	216	227	120	137	170
Cymbella sinuata	--	--	--	5	--	5	--
C. tumida	9	9	--	10	4	10	9
Diatoma vulgare	83	114	32	76	49	29	71
Fragilaria construens	138	137	142	152	205	98	128
Gomphonema parvulum	64	52	78	116	49	73	47
G. subclavatum	41	28	32	25	9	39	57
G. tenellum	--	5	--	5	4	--	5
Melosira distans	--	--	--	15	--	--	--
M. granulata	9	9	--	--	--	10	19
M. varians	--	--	--	9	--	--	--
Navicula cryptocephala	5	5	--	--	--	--	5
N. cuspidata	--	5	--	--	--	--	--
N. exigua	--	--	5	--	--	--	--
N. heufleri	5	--	--	--	--	--	--
N. minuscula	9	5	--	10	--	5	5
N. pupula	9	28	--	35	4	20	9
N. pygmaea	--	--	--	5	--	--	5
N. salinarum	46	33	64	35	40	44	43
N. tripunctata	--	--	5	5	--	--	--
N. viridula	--	--	5	--	4	--	--
Nitzschia acicularis	41	38	64	30	31	15	57
N. amphibia	51	33	32	35	36	34	43
N. communis	5	--	--	10	4	--	--
N. dissipata	--	14	--	--	--	--	--
N. holsatica	--	--	9	--	--	--	--
N. Kuetzingiana	119	33	51	35	36	83	97
N. linearis	5	--	5	--	--	10	5
N. palea	51	47	41	25	36	44	14
N. sp.	14	--	14	5	--	--	--
Stephanodiscus Hantzschii	138	161	179	136	160	127	313
Synedra ulna	340	450	455	727	624	332	587
Chrysophyceae							
Mallomonas sp.	5	5	5	5	--	--	--
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	5	33	28	15	13	15	33
Cryptomonas sp.	23	24	28	20	22	39	38
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Anabaena spiroides	5	5	5	--	9	--	5
Coelosphaerium Kuetzingianum	320	--	320	100	--	--	--
Gomphosphaeria lacustris	--	--	--	--	--	140	--
Merismopedia tenuissima	160	344	120	--	--	40	80
Microcystis incerta	9	19	18	5	4	10	9
Oscillatoria sp.	--	5	--	--	--	--	--
Rapidiopsis mediterranea	5	--	--	--	--	--	--

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1200 hr)	(1600 hr)	(2000 hr)	(2400 hr)	Aug. 14, 1980 (0400 hr)	(0800 hr)	(1200 hr)
Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON--Continued							
EUGLENOPHYTA (euglenoides)							
Euglena sp.	--	5	--	--	--	--	--
Phacus sp.	5	--	--	--	--	--	--
PYRRHOPHYTA (fire algae)							
Dinophyceae							
Peridinium sp.	--	5	--	--	--	--	--
Miscellaneous flagellates	344	388	230	247	223	181	213
TOTAL	3605	4035	3568	3353	3154	3295	3893

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1245 hr)	Aug. 13, 1980 (1645 hr)	Aug. 13, 1980 (2045 hr)	Aug. 14, 1980 (0030 hr)	Aug. 14, 1980 (0445 hr)	Aug. 14, 1980 (0830 hr)	Aug. 14, 1980 (1200 hr)
Site 62 - TRUCKEE RIVER AT STATE HIGHWAY 447 AT NIXON							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Actinastrum Hantzschii	292	328	96	520	480	504	236
Arkistrodesmus falcatus	496	367	427	275	352	290	261
Chlorophyta flagellate	51	23	18	9	13	38	25
Chodatella quadriseta	—	5	—	5	—	4	—
Closteriopsis longissima	—	5	—	—	—	—	—
Closterium sp.	5	—	—	—	4	—	—
Coelastrum microsporum	—	—	40	—	32	32	—
Dictyosphaerium pulchellum	184	20	60	80	88	—	84
Golenkinia radiata	—	23	14	—	9	—	—
Kirchneriella subsolitana	—	56	72	92	—	36	—
Micractinium pusillum	132	176	20	108	128	68	48
Oocystis sp.	9	40	—	45	9	36	20
Pandorina morum	80	40	—	—	—	—	—
Pediastrum Boryanum	—	80	240	—	—	352	96
P. duplex	—	—	—	80	84	64	—
P. tetras	72	40	60	112	120	136	80
Scenedesmus abundans	164	240	82	36	72	52	116
S. bijuga	150	212	120	64	24	124	108
S. denticulatus	20	36	20	36	36	16	16
S. dimorphus	148	36	36	56	144	104	104
S. opoliensis	192	46	122	302	132	148	152
S. quadricauda	100	112	56	46	70	24	68
S. sp.	90	18	54	72	—	44	110
Schroederia setigera	—	—	—	—	—	9	4
Selenastrum minutum	161	308	184	51	27	43	76
S. westii	36	—	20	—	36	—	32
Tetraedron caudatum	5	5	5	—	4	—	4
T. minimum	18	28	28	9	22	9	34
T. regulare	—	—	—	5	4	—	—
T. trigonum	14	5	5	—	4	—	4
Tetrastrum staurogeniaeforme	28	23	18	14	36	22	8
Treubaria setigerum	—	5	—	—	4	—	—
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Amphora ovalis	—	—	—	—	—	—	8
Cocconeis pediculus	46	28	37	87	49	69	101
C. placentula	32	18	23	28	31	13	34
Cyclotella Meneghiniana	147	115	92	106	98	87	105
Cymbella tumida	5	—	—	—	—	—	—
Diatoma vulgare	—	14	5	5	4	4	—
Epithemia sorex	—	—	—	—	—	4	—
Fragilaria construens	9	—	18	225	62	56	17
F. crotonensis	—	—	9	—	—	—	—
Gomphonema parvulum	37	23	14	37	9	26	38
G. subclavatum	5	9	—	—	4	—	4
G. tenellum	9	5	5	—	13	—	8
Gyrosigma sp.	5	—	—	—	—	4	—
Melosira distans	—	—	9	—	—	—	—
M. granulata	23	23	14	14	18	9	55
M. varians	—	—	—	—	9	—	—
Navicula heufleri	—	5	—	9	9	4	—
N. pupula	—	—	14	—	4	4	8
N. salinarium	5	9	9	5	9	13	—
Nitzschia acicularis	165	197	119	124	129	143	198
N. amphibia	9	5	—	9	00	4	13
N. apiculata	—	—	5	—	—	—	—
N. communis	5	18	9	—	—	—	8
N. gracilis	5	—	—	—	—	22	—
N. holsatica	64	46	64	28	9	35	34
N. Kuetzingiana	129	161	67	37	80	134	147
N. palea	23	28	32	23	27	26	29
N. sp.	—	—	5	—	4	—	—
Stephanodiscus Hantzschii	455	381	556	399	339	333	387
Synedra ulna	9	5	18	28	4	17	4
Chrysophyceae							
Mallomonas sp.	5	5	—	—	—	—	—
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	73	60	32	18	—	17	21
Cryptomonas sp.	32	37	23	55	18	22	25
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Anabaena spiroides	5	5	5	—	—	4	—
Coelasphaerium Kuetzingianum	—	320	—	500	616	976	416
Dactylococcopsis Smithii	—	—	5	—	—	—	—
Immature cyanophyta trichome	5	5	—	—	—	4	13
Merismopedia tenuissima	192	288	72	392	32	224	256
Microcystis incerta	60	60	23	32	27	56	42
Raphidiopsis mediterranea	—	9	5	—	—	—	—
EUGLENOPHYTA (euglenoids)							
Euglena sp.	—	—	—	—	—	—	4
Phacus sp.	5	5	—	—	—	—	—

TABLE 8.—*Phytoplankton taxa and cell counts, August 1980*—Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1245 hr)	Aug. 13, 1980 (1645 hr)	Aug. 13, 1980 (2045 hr)	Aug. 14, 1980 (0030 hr)	Aug. 14, 1980 (0445 hr)	Aug. 14, 1980 (0830 hr)	Aug. 14, 1980 (1200 hr)
Site 62 - TRUCKEE RIVER AT STATE HIGHWAY 447 AT NIXON—Continued							
PYRRHOPHYTA (fire algae)							
Dinophyceae							
Gymnodinium sp.	18	--	--	--	31	--	--
Peridinium sp.	5	--	--	--	--	--	4
Miscellaneous flagellates	399	482	436	266	361	268	227
TOTAL	4433	4643	3522	4444	3930	4733	3892

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1200 hr)	(1600 hr)	(2000 hr)	(2400 hr)	Aug. 14, 1980 (0400 hr)	(0800 hr)	(1130 hr)
Site 63 - TRUCKEE RIVER AT MARBLE BLUFF DAM							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Actinastrum Hantzschii	464	624	432	260	816	700	312
Ankistrodesmus falcatus	267	298	294	264	308	175	197
Chlorophyta flagellate	9	—	4	10	—	14	5
Closteriopsis longissima	—	5	—	—	—	—	—
Coelastrum microsporum	—	—	—	—	40	—	—
Crucigenia crucifera	—	—	—	60	—	—	—
Dictyosphaerium puchellum	16	20	216	40	80	60	136
Elakotothrix viridis	—	10	—	20	—	—	—
Glosocystis vesiculosa	—	—	40	—	—	—	—
Kirchneriella subsolitana	72	—	—	40	36	20	36
Micractinium pusillum	48	40	32	80	116	40	180
Nephrocytium Agardhianum	—	—	—	—	40	—	—
Oocystis sp.	64	60	16	70	5	9	9
Pandorina morum	—	—	144	—	80	—	—
Pediastrum Boryanum	64	—	272	80	144	40	80
P. duplex	32	—	—	160	40	160	—
P. simplex	—	—	—	40	—	—	40
P. tetras	88	224	176	80	40	188	72
Scenedesmus abundans	126	56	60	126	76	142	92
S. armatus	88	36	16	60	—	36	—
S. bijuga	54	336	170	108	18	140	96
S. denticulatus	52	20	16	40	56	36	112
S. dimorphus	104	76	52	40	40	76	56
S. opoliensis	186	112	164	174	106	170	202
S. quadricauda	70	64	18	68	18	112	102
S. sp.	34	46	8	96	20	134	64
Schroederia setigera	—	5	—	15	—	9	5
Selenastrum minutum	45	147	104	93	43	33	37
S. westii	16	36	—	—	40	—	—
Staurastrum sebaldi	—	5	—	—	—	—	—
Tetraedron caudatum	9	5	17	5	5	9	5
T. minimum	80	64	69	34	24	62	5
T. trigonum	4	9	—	20	—	9	5
Tetrastrum staurogeniaeforme	58	41	9	39	24	47	32
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Amphora ovalis	4	—	—	—	—	—	—
Cocconeis pediculus	4	9	4	—	—	5	18
C. placentula	—	—	—	10	—	—	—
Cyclotella Meneghiniana	89	73	48	64	95	43	78
Cymatopleura solea	—	—	—	—	—	—	5
Diatoma vulgare	—	—	—	—	—	—	9
Fragilaria construens	9	46	9	—	104	20	41
F. vaucheriae	—	—	—	5	—	—	—
Gomphonema parvulum	—	—	4	5	9	9	—
Gyrosigma sp.	4	—	—	—	—	—	—
Melosira granulata	71	9	43	147	109	142	18
M. varians	—	—	4	—	—	—	—
Navicula haufleri	—	—	4	—	—	—	5
N. minuscula	9	—	—	5	—	—	—
N. mutica	—	—	—	—	—	—	5
N. pupula	4	—	4	5	9	—	23
N. salinarium	9	9	9	10	—	19	5
N. tripunctata	—	5	—	—	—	—	—
N. vanheurchii	9	—	—	5	—	—	9
Neidium sp.	—	—	—	—	5	—	—
Nitzschia acicularis	169	197	156	186	137	166	161
N. apiculata	—	—	—	—	5	—	5
N. communis	4	—	—	5	—	—	—
N. dissipata	—	—	4	5	—	—	5
N. filiformia	—	—	—	—	5	—	—
N. gracilis	9	14	13	5	—	19	5
N. holsatica	18	73	26	—	104	66	—
N. Kuetzingiana	98	129	108	83	19	57	92
N. linearis	—	—	—	—	5	—	—
N. palea	9	51	43	29	14	28	69
N. sp.	—	5	13	10	—	—	5
Rhopalodia gibba	—	—	—	—	—	—	5
Stephanodiscus Hantzschii	428	372	403	401	502	440	523
Surirella ovata	4	—	—	10	—	5	—
Synedra delicatissima	—	5	—	—	—	—	—
S. ulna	18	—	13	15	5	9	9
Chrysophyceae							
Mallomonas sp.	4	5	4	—	9	5	—
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	281	441	177	264	109	199	119
Cryptomonas sp.	94	60	117	88	43	52	41

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1200 hr)	(1600 hr)	(2000 hr)	(2400 hr)	Aug. 14, 1980 (0400 hr)	(0800 hr)	(1130 hr)
Site 63 - TRUCKEE RIVER AT MARBLE BLUFF DAM--Continued							
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Anabaena spiroides	--	18	4	--	--	9	--
A. sp.	--	--	4	--	--	--	--
Coelosphaerium Kuetzingianum	--	320	--	--	--	576	200
Gomphosphaeria lacustris	72	488	--	40	--	--	--
Merismopedia tenuissima	264	80	256	40	--	600	144
Microcystis incerta	31	18	22	10	28	--	23
Raphidiopsis mediterranea	--	--	4	10	5	--	5
EUGLENOPHYTA (euglenoids)							
Euglena sp.	--	--	--	--	--	--	5
PYRRHOPHYTA (fire algae)							
Dinophyceae							
Gymnodinium sp.	--	--	13	--	--	5	5
Peridinium sp.	--	--	4	10	--	5	--
Miscellaneous flagellates	432	427	403	288	341	526	367
TOTAL	4197	5193	4245	3877	3877	5426	3884

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*—Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1400 hr)	(1730 hr)	(2100 hr)	Aug. 14, 1980 (0010 hr)	(0530 hr)	(0930 hr)	(1330 hr)
Site 69 - TRUCKEE CANAL AT U.S. HIGHWAY 95A NEAR FERNLEY							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Actinastrum Hantzschii	368	368	172	340	336	280	472
Arkistrodesmus falcatus	83	46	85	5	--	9	47
Chlorophyta flagellate	9	9	5	--	--	5	43
Chodatella quadriseta	9	9	14	--	--	--	9
Closteriopsis longissima	23	--	--	--	--	--	--
Coelastrum microsporum	184	--	152	--	144	80	--
Elakotothrix viridis	--	10	--	--	--	--	--
Eudorina elegans	--	80	--	--	--	--	216
Golenkinia radiata	--	5	--	--	--	--	--
Kirchneriella subsolitaria	--	--	--	--	16	--	--
Micractinium pusillum	200	148	36	240	144	96	112
Oocystis sp.	45	5	29	--	--	5	--
Pandorina morum	--	--	40	40	--	--	--
Pediastrum Boryanum	120	80	--	--	--	80	--
P. duplex	--	--	--	40	--	--	--
P. tetras	--	--	40	--	--	--	--
Scenedesmus abundans	36	20	--	--	--	--	--
S. armatus	--	--	20	--	--	--	--
S. bijuga	56	56	--	10	8	18	70
S. denticulatus	--	20	--	40	52	--	--
S. dimorphus	20	20	76	92	16	20	--
S. opoliensis	--	--	76	--	44	48	--
S. quadricauda	36	82	28	66	56	20	96
S. sp.	18	46	18	--	--	38	18
Schroederia setigera	5	5	--	--	--	5	--
Selenastrum minutum	239	239	204	24	9	41	161
S. Westii	20	--	--	--	--	--	--
Tetraedron caudatum	--	--	--	--	4	--	--
T. minimum	--	18	--	--	--	--	--
T. trigonum	5	--	--	--	4	--	5
Tetrastrum staurogeniaeforme	9	9	--	9	--	--	5
Treubaria setigerum	5	5	5	--	--	--	--
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes minutissima	--	5	--	5	4	--	--
Amphora ovalis	5	--	--	5	9	--	--
Cocconeis pediculis	5	5	--	--	--	9	--
C. placentula	32	60	28	47	58	46	38
Cyclotella bodanica	--	--	5	--	--	--	--
C. Meneghiniana	422	459	275	284	241	285	355
Cymatopleura solea	--	--	5	--	--	--	--
Cymbella cistula	--	--	14	5	--	9	--
C. minuta	5	--	9	14	--	--	5
C. sinuata	5	5	--	--	--	5	--
C. tumida	5	9	--	24	18	9	14
Diatoma vulgare	--	5	--	24	13	9	--
Diploneis sp.	--	--	--	5	--	--	--
Epithemia sorex	--	--	--	--	13	--	--
Fragilaria construens	--	18	19	24	134	--	--
F. crotonensis	--	--	--	90	45	--	--
F. vaucheriae	5	--	--	--	--	--	--
Gomphoneis herculeana	--	--	--	--	4	--	--
Gomphonema parvulum	41	55	52	52	22	46	57
G. subclavatum	9	18	5	5	13	9	14
G. tenellum	--	--	--	5	--	--	--
Melosira distans	9	--	--	19	--	--	--
M. granulata	147	--	24	71	--	--	66
M. varians	--	--	--	19	9	--	--
Navicula cryptocephala	--	--	--	5	9	--	5
N. heufleri	5	5	--	5	--	9	14
N. minuscula	5	5	9	9	9	23	19
N. mutica	9	9	5	--	9	5	9
N. pupula	51	60	5	57	76	46	76
N. pygmaea	--	--	--	--	4	5	--
N. salinarium	87	73	123	128	107	78	109
N. tripunctata	9	--	5	--	4	--	5
N. viridula	9	9	--	9	13	9	9
Neidium sp.	--	--	--	5	--	--	--
Nitzschia acicularis	32	73	43	66	22	23	28
N. amphibia	37	23	43	24	31	51	5
N. apiculata	5	--	--	--	9	5	--
N. communis	9	5	9	5	4	14	5
N. dissipata	55	18	38	43	31	32	19
N. filiformis	--	5	--	--	--	5	--
N. holsatica	14	9	19	24	18	18	9
N. Kuetzingiana	165	83	134	133	138	147	118
N. linearis	--	--	--	5	4	--	5
N. palea	133	92	133	133	111	87	208
N. sublinearis	9	14	--	5	4	9	9
N. sp.	60	101	62	38	18	41	80
N. vermicularis	--	--	9	--	--	--	--
Rhoicosphenia curvata	--	9	9	9	--	5	14
Stephanodiscus Hantzschii	129	129	137	166	89	60	62
Surirella ovata	--	--	--	--	--	5	--
Synedra delicatissima	--	--	9	5	9	--	--
S. rumperis	5	--	5	--	--	9	9
S. ulna	9	--	19	--	9	28	9
Tabellaria fenestrata	5	--	--	--	--	--	--

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1400 hr)	(1730 hr)	(2100 hr)	Aug. 14, 1980 (0100 hr)	(0530 hr)	(0930 hr)	(1330 hr)
Site 69 - TRUCKEE CANAL AT U.S. HIGHWAY 95A NEAR FERNLEY--Continued							
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	18	46	43	14	4	37	38
Cryptomonas sp.	46	46	14	5	27	69	28
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Anabaena circinalis	--	--	--	9	--	--	9
A. spiroides	18	--	--	--	9	5	--
Gomphosphaeria lacutris	100	120	--	--	--	--	--
Merismopedia tenuissima	--	80	112	80	96	80	472
Microcystis incerta	9	9	5	--	--	14	9
Oscillatoria sp.	--	5	--	--	--	--	--
Raphidiopsis mediterranea	5	5	--	5	4	--	5
EUGLENOPHYTA (euglenoids)							
Euglena sp.	5	--	5	--	--	--	9
PYRRHOPHYTA (fire algae)							
Dinophyceae							
Gymnodinium sp.	5	--	--	5	--	--	--
Peridinium sp.	5	--	--	--	--	--	5
Miscellaneous flagellates	381	271	341	223	165	358	379
TOTAL	3615	3223	2772	2819	2449	2449	3583

TABLE 8.—*Phytoplankton taxa and cell counts, August 1980*—Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1330 hr)	(1715 hr)	(2115 hr)	Aug. 14, 1980 (0115 hr)	(0500 hr)	(0915 hr)	(1230 hr)
Site 71 - TRUCKEE CANAL AT ALLENDALE CHECK DAM NEAR FERNLEY							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Actinastrum Hantzschii	548	636	520	2004	1424	1640	1512
Arkistrodesmus falcatus	66	129	115	114	57	102	106
Chlorophyta flagellate	66	144	14	38	19	89	106
Chodatella quadriseta	33	53	36	15	9	27	121
C. longiseta	—	8	14	—	—	—	—
Closteriopsis longissima	5	8	7	—	—	13	—
Coelastrum microsporum	—	120	112	128	456	240	304
Dictyosphaerium pulchellum	36	240	168	368	120	32	—
Eudorina elegans	160	256	—	—	40	64	—
Golenkinia radiata	—	—	43	23	—	—	8
Kirchneriella subsolitaria	—	—	—	32	20	—	92
Micractinium pusillum	92	180	552	516	498	904	608
Oocystis sp.	20	40	—	32	40	9	8
Pandorina morum	—	—	56	184	40	—	—
Pediastrum Boryanum	144	—	56	128	—	64	—
P. duplex	196	192	—	—	232	32	128
P. simplex	—	—	—	128	—	—	—
P. tetras	—	—	—	—	—	32	—
Scenedesmus abundans	112	60	28	244	112	180	64
S. bijuga	116	30	130	140	68	—	154
S. denticulatus	36	32	—	—	—	36	—
S. dimorphus	172	60	144	276	148	84	212
S. opoliensis	152	932	84	92	248	132	308
S. quadricauda	74	244	344	32	—	106	76
S. sp.	76	76	58	92	74	60	136
Schroederia setigera	9	—	—	23	28	13	30
Selenastrum minutum	450	727	231	83	57	98	417
S. Westii	—	—	28	—	—	—	32
Tetraedron caudatum	—	8	—	—	—	4	8
T. minimum	5	15	14	23	—	49	—
T. regulare	5	—	7	—	5	—	8
T. trigonum	5	—	22	8	5	9	15
Tetrastrum staurogeniaeforme	9	15	7	—	28	4	38
Treubaria setigerum	—	—	7	23	5	—	—
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes lanceolata	5	8	—	8	—	9	—
A. minutissima	5	—	7	8	—	—	—
Amphora ovalis	—	8	—	—	5	—	—
Cocconeis pediculus	—	—	7	—	—	—	—
C. placentula	14	38	43	—	19	13	8
Cyclotella Meneghiniana	1075	2174	2403	1720	1155	1399	2295
Cymbella cistula	—	—	—	—	—	—	15
C. minuta	—	—	—	8	—	—	—
C. tumida	9	—	7	—	—	—	—
Diatoma vulgare	—	8	—	23	5	—	15
Fragilaria conetruene	—	182	—	76	284	85	30
F. crotonensis	—	—	—	—	9	34	—
Gomphoneis herculeana	—	—	—	8	—	—	—
Gomphonema parvulum	28	15	65	30	14	18	30
G. subclavatum	—	—	—	—	9	—	—
G. tenellum	—	—	—	8	—	—	—
Melosira distane	9	—	—	—	—	—	23
M. granulata	28	68	94	121	52	116	106
M. varians	—	—	—	—	5	4	—
Navicula cryptocephala	—	8	—	23	—	—	8
N. heufleri	—	8	14	—	—	4	8
N. minuscula	9	—	—	8	5	9	8
N. mutica	—	—	—	8	—	—	8
N. pupula	19	45	51	38	—	4	15
N. pygmaea	—	8	—	—	—	—	8
N. salinarium	47	30	79	23	24	22	38
N. tripunctata	—	8	7	—	5	—	—
N. viridula	—	—	—	—	—	—	8
Nitzschia acicularis	57	174	115	159	189	129	121
N. amphibia	28	83	79	38	28	40	53
N. communis	5	23	22	8	5	—	23
N. dissipata	28	23	36	8	19	4	8
N. holsatica	33	—	—	30	—	18	—
N. Kuetzingiana	284	379	325	295	180	250	288
N. linearis	—	—	—	8	—	—	—
N. palea	95	265	209	98	128	169	212
N. sublinearis	5	8	—	15	5	—	15
N. sp.	14	68	58	—	76	80	311
Rhoicosphenia curvata	14	—	14	8	5	—	8
Stephanodiscus Hantzschii	450	515	1118	629	488	272	644
Surirella ovata	—	8	—	—	—	—	8
Synedra delicatissima	9	15	—	30	19	4	30
S. rumpens	9	—	—	—	—	—	—
S. ulna	—	23	36	8	—	—	8
Chrysophyceae							
Mallomonas sp.	—	—	—	15	—	—	8

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1330 hr)	(1715 hr)	(2115 hr)	Aug. 14, 1980 (0115 hr)	(0500 hr)	(0915 hr)	(1230 hr)
Site 71 - TRUCKEE CANAL AT ALLENDALE CHECK DAM NEAR FERNLEY--Continued							
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	175	189	144	212	62	134	167
Cryptomonas sp.	156	136	79	182	71	125	144
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Anabaena circinalis	5	8	7	8	5	9	23
A. spiroides	14	8	7	—	--	4	23
Coelosphaerium Kuitzingianum	200	—	--	800	—	--	--
Gomphosphaeria lacustris	100	--	--	64	--	176	—
Merismopedia tenuissima	80	368	728	1384	344	248	1336
Microcystis incerta	24	68	51	23	33	13	23
Oscillatoria sp.	—	--	--	--	5	--	—
Raphidiopsis mediterranea	9	8	7	8	9	9	—
PYRRHOPHYTA (fire algae)							
Dinophyceae							
Gymnodinium sp.	--	--	7	--	--	--	--
Peridinium sp.	--	—	22	8	—	--	—
Miscellaneous flagellates	772	470	360	220	374	375	750
TOTAL	6401	9652	8998	11114	7369	7799	11317

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1230 hr)	(1630 hr)	(2030 hr)	(2400 hr)	Aug. 14, 1980 (0400 hr)	(0815 hr)	(1130 hr)
Site 74 - TRUCKEE CANAL AT U.S. HIGHWAY 50 ABOVE LAHONTAN RESERVOIR							
CHLOROPHYTA (green algae)							
Chlorophyceae							
Actinastrum Hantzschii	56	104	120	24	224	64	80
Ankistrodesmus falcatus	176	193	136	86	131	148	72
Chlorophyta flagellate	24	72	19	3	14	45	80
Chodatella quadriseta	--	19	4	7	--	4	11
Closteriopsis longissima	--	--	--	--	10	--	--
Closterium ceratium	3	--	4	28	7	4	15
C. Kuetzingii	--	--	--	--	3	--	--
Coelastrum microsporum	--	--	98	--	--	--	128
Dictyosphaerium pulchellum	36	--	--	24	48	112	416
Eudorina elegans	--	--	--	--	--	--	128
Golenkinia radiata	3	15	11	--	--	--	8
Kirchneriella subsoliteria	28	32	32	--	28	16	16
Micractinium pusillum	92	108	--	264	220	120	132
Oocystis sp.	17	132	44	26	19	4	47
Pandorina morum	--	--	--	56	--	--	--
Pediastrum Boryanum	--	64	--	--	48	--	64
P. duplex	48	--	128	128	--	--	--
P. simplex	--	--	--	112	--	64	--
P. tetras	--	--	--	36	24	32	32
Scenedesmus abundans	28	92	24	--	74	140	164
S. armatus	28	--	16	12	12	32	32
S. bijuga	42	54	46	52	18	32	86
S. denticulatus	--	16	16	12	28	32	--
S. dimorphus	--	16	32	68	96	80	32
S. opoliensis	56	92	40	12	120	84	92
S. quadricauda	--	40	44	112	28	--	96
S. sp.	48	32	8	18	84	24	122
Schroederia setigera	--	19	--	14	28	53	8
Selenastrum minutum	158	303	235	41	14	80	98
Tetraedron caudatum	3	--	--	--	3	--	4
T. minimum	3	--	--	--	--	42	4
T. regulare	--	--	--	--	--	--	4
T. trigonum	7	8	--	3	3	11	15
Tetrastrum staurogeniaeforme	3	4	4	77	77	4	15
Treubaria setigerum	--	--	--	--	--	--	8
CHRYSOPHYTA							
Bacillariophyceae (diatoms)							
Achnanthes lanceolata	3	--	--	--	--	--	4
A. minutissima	21	--	--	10	17	--	11
Amphora ovalis	--	--	--	--	--	4	--
Cocconeis pediculus	--	4	--	21	3	8	--
C. placentula	186	155	49	59	52	42	186
Cyclotella Meneghiniana	79	201	117	207	203	303	371
Cymbella sinuata	--	4	4	3	--	--	--
Diatoma vulgare	--	--	--	--	3	--	--
Diploreis sp.	--	--	--	--	--	4	--
Fragilaria construens	--	--	--	17	55	61	11
F. crotonensis	--	--	--	--	--	--	45
Gomphonema parvulum	14	19	8	--	3	15	4
G. tenellum	--	8	--	--	--	--	--
Melosira distans	7	--	--	3	21	8	4
M. granulata	17	53	53	148	59	30	19
M. varians	--	--	--	--	7	11	--
Navicula cryptocephala	14	4	19	--	7	8	--
N. exigua	--	--	--	3	--	--	--
N. heufleri	7	--	11	17	14	11	23
N. minuscula	7	27	15	10	7	8	15
N. mutica	3	--	--	3	--	--	--
N. pupula	--	--	8	7	7	15	--
N. salinarium	--	15	15	24	21	15	27
N. tripunctata	--	4	--	7	3	--	8
Nitzschia acicularis	31	80	76	21	69	98	49
N. amphibia	7	--	8	--	14	--	11
N. communis	10	11	4	3	--	4	--
N. dissipata	7	--	--	--	--	--	--
N. graulis	--	--	8	--	3	4	4
N. holsatica	--	--	--	7	--	--	--
N. Kuetzingiana	38	64	27	31	38	121	110
N. palea	3	45	23	52	52	45	49
N. sublinearis	3	4	--	--	21	--	8
N. sp.	10	38	11	10	7	30	42
Rhoicosphenia curvata	--	8	--	--	3	4	8
Stephanodiscus Hantzschii	289	511	330	303	548	504	822
Synedra ulna	--	--	--	7	3	--	--
Chrysophyceae							
Mallomonas sp.	--	--	4	--	3	--	4

TABLE 8.--*Phytoplankton taxa and cell counts, August 1980*--Continued

[Phytoplankton cells per milliliter]

Taxa	Aug. 13, 1980 (1230 hr)	(1630 hr)	(2030 hr)	(2400 hr)	Aug. 14, 1980 (0400 hr)	(0815 hr)	(1130 hr)
Site 74 - TRUCKEE CANAL AT U.S. HIGHWAY 50 ABOVE LAHONTAN RESERVOIR--Continued							
CRYPTOPHYTA (cryptomonads)							
Cryptophyceae							
Chroomonas sp.	76	114	163	103	255	311	269
Cryptomonas sp.	86	80	117	86	41	201	189
CYANOPHYTA (blue-green algae)							
Myxophyceae							
Anabaena circinalis	7	—	11	10	10	15	—
A. spiroides	—	11	—	14	7	—	11
A. sp.	—	—	—	3	3	—	4
Coelosphaerium Kuetzingianum	120	—	—	—	192	256	160
Gomphosphaeria lacustris	—	64	—	264	468	80	112
Merismopedia tenuissima	—	216	264	—	96	128	408
Microcystis incerta	10	49	30	10	10	23	19
Oscillatoria sp.	—	—	—	—	—	4	—
Raphidiopsis mediterranea	—	—	—	3	3	—	4
Synechocystis aquatilis	—	—	2667	—	—	—	—
EUGLENOPHYTA (euglenoids)							
Euglena sp.	—	—	—	—	—	—	4
PYRRHOPHYTA (fire algae)							
Dinophyceae							
Gymnodinium sp.	—	—	—	3	—	—	—
Peridinium sp.	7	15	—	—	—	—	4
Miscellaneous flagellates	417	652	288	162	275	314	284
TOTAL	2338	3871	5391	2846	3964	3912	5312

TABLE 9.—*Data from study of trout-spawning habitat, February-April 1980*

DATE	TIME	TEMPERATURE, AIR (DEG C)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	ALKALINITY (MG/L AS $CACO_3$)	TURBIDITY (NTU)	SEDIMENT, SUSPENDED (MG/L)
Site 14 - TRUCKEE RIVER NEAR VERDI										
FEB, 1980										
06...	0930	10.0	5.0	10.8	100	125	8.2	--	--	11
26...	1530	--	6.5	10.8	105	112	8.8	--	--	15
MAR										
13...	1030	6.5	3.0	11.6	107	126	8.0	--	4.5	7
21...	1100	1.0	3.0	12.2	108	125	8.7	--	5.9	5
APR										
03...	1200	11.0	5.7	11.6	107	118	9.7	--	--	--
09...	1130	--	7.8	10.8	93	110	8.3	--	--	47
17...	1030	--	6.2	10.4	99	89	7.7	--	12	28
Site 14A - TRUCKEE RIVER INTRAGRAVEL SITE NEAR VERDI										
FEB, 1980										
26...	1230	--	4.3	--	--	118	7.6	--	--	--
MAR										
21...	1030	--	3.0	10.0	--	118	8.4	42	--	--
APR										
03...	1100	--	5.7	9.1	--	--	7.3	--	--	--
09...	1030	--	7.2	8.7	--	111	7.8	47	--	--
17...	1000	--	6.5	8.7	--	93	7.3	36	--	--
Site 16 - TRUCKEE RIVER NEAR SPARKS										
FEB, 1980										
01...	1600	--	3.0	12.0	--	127	--	--	--	--
05...	1000	6.5	5.5	11.0	102	143	--	--	--	26
08...	1500	--	5.0	11.5	106	139	--	--	--	--
28...	1130	9.5	5.5	10.5	97	125	8.4	--	18	23
MAR										
12...	1030	8.0	4.0	12.5	112	134	8.3	--	4.0	14
20...	1200	--	7.0	12.2	117	136	8.8	--	6.5	14
APR										
04...	0945	11.5	6.5	11.3	108	129	8.6	--	--	5
10...	1030	10.5	8.0	9.8	96	122	8.2	--	--	9
16...	1030	15.0	7.8	10.5	103	100	7.8	--	16	--
Site 16A - TRUCKEE RIVER INTRAGRAVEL SITE NEAR SPARKS										
FEB, 1980										
08...	1600	--	5.0	11.0	--	138	8.1	--	--	--
28...	1130	--	5.2	9.9	--	123	8.0	--	13	--
MAR										
20...	1200	--	6.3	10.7	--	140	8.4	42	--	--
APR										
04...	1000	--	7.5	7.1	--	165	7.6	39	--	--
10...	1045	--	7.2	6.2	--	132	7.8	34	--	--
16...	1000	--	8.0	7.9	--	110	7.4	50	--	--
Site 52 - TRUCKEE RIVER BELOW S BAR S RANCH										
FEB, 1980										
04...	1700	--	7.0	10.7	98	277	--	--	--	--
26...	1200	15.5	7.9	10.4	100	248	8.0	--	--	--
Site 52A - TRUCKEE RIVER INTRAGRAVEL SITE BELOW S BAR S RANCH										
FEB, 1980										
08...	1130	--	5.5	10.0	--	300	8.0	--	--	--
Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON										
FEB, 1980										
26...	1030	--	6.5	10.6	98	242	8.2	--	--	--
MAR										
11...	1130	9.0	8.2	10.4	102	247	8.4	--	--	28
19...	1030	10.0	6.0	12.0	110	245	8.2	--	13	34
APR										
03...	1015	11.0	8.0	11.8	115	282	8.2	--	--	15
07...	1200	--	9.8	10.9	110	--	--	--	--	--
09...	1045	19.5	11.4	11.0	118	253	8.4	--	--	--
15...	1430	--	14.5	10.2	113	193	8.4	--	13	130
Site 56A - TRUCKEE RIVER INTRAGRAVEL SITE AT DEAD OX WASH NEAR NIXON										
MAR, 1980										
19...	1030	--	6.0	9.3	--	194	--	--	--	--
APR										
03...	1130	--	7.2	4.6	--	264	7.4	66	--	--
07...	1200	--	10.0	2.4	--	--	--	--	--	--
09...	1145	--	11.0	2.1	--	281	7.4	75	--	--
15...	1330	--	12.6	2.5	--	211	7.5	68	--	--

TABLE 9.—*Data from study of trout-spawning habitat, February-April 1980*—Continued

DATE	TIME	NITROGEN, NH_4 + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH_4 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N)	NITROGEN, NO_2 TOTAL (MG/L AS N)	NITROGEN, NO_3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
Site 14 - TRUCKEE RIVER NEAR VERDI										
FEB, 1980										
06...	0930	.23	.00	.23	.21	.00	.21	.44	.05	2.1
26...	1530	.02	.02	.00	.16	.01	.15	.18	.01	2.3
MAR										
13...	1030	.37	.10	.27	.10	.01	.09	.47	.06	2.7
21...	1100	.35	.08	.27	.05	.01	.04	.40	.02	2.7
APR										
03...	1200	.39	.00	.39	.02	.00	.02	.41	.03	3.8
09...	1130	.36	.12	.24	.05	.01	.00	.36	.02	1.4
17...	1030	.66	.00	.66	.02	.01	.01	.68	.04	3.3
Site 14A - TRUCKEE RIVER INTRAGRAVEL SITE NEAR VERDI										
FEB, 1980										
26...	1230	.02	.02	.00	.17	.01	.16	.19	.02	2.5
MAR										
21...	1030	.27	.00	.27	.03	.01	.02	.30	.03	3.7
APR										
03...	1100	.39	.00	.39	.02	.00	.02	.41	.03	3.8
09...	1030	.31	.10	.21	.04	.01	.03	.35	.02	--
17...	1000	.48	.04	.44	.07	.01	.06	.55	.03	2.3
Site 16 - TRUCKEE RIVER NEAR SPARKS										
FEB, 1980										
05...	1000	.31	.00	.31	.74	.00	.74	1.1	.05	2.9
28...	1130	.14	.04	.10	.18	.01	.17	.32	.02	2.6
MAR										
12...	1030	.33	.00	.33	.13	.00	.13	.46	.07	1.4
20...	1200	.54	.00	.54	.02	.02	.00	.56	.01	2.6
APR										
04...	0945	.51	.06	.45	.01	.00	.01	.52	.02	3.4
10...	1030	.33	.10	.23	.03	.03	.00	.36	.03	2.4
16...	1030	.88	.00	.88	.01	.01	.00	.89	.06	4.2
Site 16A - TRUCKEE RIVER INTRAGRAVEL SITE NEAR SPARKS										
FEB, 1980										
08...	1600	.26	.00	.26	.27	.01	.26	.53	.02	2.5
28...	1130	.02	.02	.00	.18	.01	.17	.20	.01	1.9
MAR										
20...	1200	.53	.00	.53	.28	.01	.27	.81	.02	2.7
APR										
04...	1000	1.9	.10	1.8	.07	.00	.07	2.0	.13	2.9
10...	1045	.47	.12	.35	.06	.01	.05	.53	.05	3.1
16...	1000	.54	.02	.52	.04	.01	.03	.58	.07	2.3
Site 52 - TRUCKEE RIVER BELOW S BAR S RANCH										
FEB, 1980										
04...	1700	1.4	.80	.60	.52	.02	.50	1.9	.38	6.1
Site 52A - TRUCKEE RIVER INTRAGRAVEL SITE BELOW S BAR S RANCH										
FEB, 1980										
08...	1130	1.1	.63	.47	.56	.02	.54	1.7	.25	3.7
Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON										
MAR, 1980										
11...	1130	.79	.40	.39	.41	.03	.38	1.2	.28	2.7
19...	1030	1.2	.70	.50	.41	.04	.37	1.6	.34	3.7
APR										
03...	1015	2.5	.70	1.8	.46	.04	.42	3.0	.39	3.5
09...	1045	1.3	.32	.98	.39	.05	.34	1.7	.30	3.0
15...	1430	1.5	.34	1.2	.45	.05	.40	2.0	.40	6.9
Site 56A - TRUCKEE RIVER INTRAGRAVEL SITE AT DEAD OX WASH NEAR NIXON										
MAR, 1980										
19...	1030	.76	.30	.46	.83	.02	.81	1.6	.29	3.2
APR										
03...	1130	.60	.13	.47	.87	.02	.85	1.5	.34	8.2
09...	1145	.81	.27	.54	.38	.02	.36	1.2	.37	4.9
15...	1330	.81	.35	.46	.47	.05	.42	1.3	.44	4.0

TABLE 9.--*Data from study of trout-spawning habitat, February-April 1980*--Continued

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)
Site 14 - TRUCKEE RIVER NEAR VERDI										
FEB, 1980										
06...	0930	0	0	3	0	0	1	4	4	0
26...	1530	3	0	3	0	0	<1	4	4	0
MAR										
13...	1030	4	1	3	0	0	1	2	0	2
21...	1100	2	0	2	0	0	<1	4	2	2
APR										
03...	1200	1	0	1	0	0	<1	6	4	2
09...	1130	0	0	0	0	0	<1	7	6	1
17...	1030	1	0	2	1	0	<1	1	0	1
Site 14A - TRUCKEE RIVER INTRAGRAVEL SITE NEAR VERDI										
FEB, 1980										
26...	1230	2	0	3	0	--	--	10	5	5
MAR										
21...	1030	3	1	2	0	0	<1	3	3	0
APR										
03...	1100	1	0	1	0	0	<1	6	4	2
09...	1030	0	--	--	0	--	--	4	--	--
17...	1000	1	0	2	1	0	1	3	0	4
Site 16 - TRUCKEE RIVER NEAR SPARKS										
FEB, 1980										
05...	1000	1	0	2	0	0	<1	5	5	0
28...	1130	3	0	3	0	0	1	7	6	1
MAR										
12...	1030	3	0	4	0	0	<1	8	7	1
20...	1200	4	0	4	0	0	<1	4	3	1
APR										
04...	0945	1	0	3	0	0	<1	4	2	2
10...	1030	1	0	4	0	0	<1	4	0	4
16...	1030	2	0	2	0	0	<1	3	2	1
Site 16A - TRUCKEE RIVER INTRAGRAVEL SITE NEAR SPARKS										
FEB, 1980										
08...	1600	3	0	3	0	0	1	2	--	--
28...	1130	3	0	3	1	0	2	10	7	3
MAR										
20...	1200	3	0	3	0	0	1	3	2	1
APR										
04...	1000	2	0	3	1	0	1	4	1	3
10...	1045	1	0	--	0	0	1	2	0	2
16...	1000	1	0	2	0	0	2	2	0	3
Site 52 - TRUCKEE RIVER BELOW S BAR S RANCR										
FEB, 1980										
04...	1700	16	0	7	0	0	1	4	4	0
Site 52A - TRUCKEE RIVER INTRAGRAVEL SITE BELOW S BAR S RANCH										
FEB, 1980										
08...	1130	13	0	14	0	0	1	6	6	0
Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON										
MAR, 1980										
11...	1130	16	0	16	0	0	<1	5	3	2
19...	1030	12	0	12	0	0	<1	--	--	3
APR										
03...	1015	15	0	15	0	0	1	4	2	2
09...	1045	--	--	--	0	0	<1	2	--	--
15...	1430	11	3	8	1	0	<1	3	2	1
Site 56A - TRUCKEE RIVER INTRAGRAVEL SITE AT DEAD OX WASH NEAR NIXON										
MAR, 1980										
19...	1030	13	1	12	0	0	<1	5	0	6
APR										
03...	1130	12	0	13	0	0	<1	4	2	2
09...	1145	--	--	--	0	0	<1	4	2	2
15...	1330	12	0	12	1	0	1	4	2	2

TABLE 9.--*Data from study of trout-spawning habitat, February-April 1980*--Continued

DATE	TIME	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
Site 14 - TRUCKEE RIVER NEAR VERDI								
FEB, 1980								
06...	0930	280	240	40	3	3	0	8
26...	1530	410	330	80	8	8	0	10
MAR								
13...	1030	280	210	70	3	3	0	10
21...	1100	260	210	50	4	2	2	10
APR								
03...	1200	400	350	50	4	4	0	9
09...	1130	1300	1200	70	1	0	1	10
17...	1030	700	690	<10	3	3	0	<1
Site 14A - TRUCKEE RIVER INTRAGRAVEL SITE NEAR VERDI								
FEB, 1980								
26...	1230	480	380	100	--	--	0	4
MAR								
21...	1030	190	160	30	4	4	0	4
APR								
03...	1100	400	350	50	4	4	0	9
09...	1030	120	--	--	1	--	--	--
17...	1000	240	200	40	2	1	1	9
Site 16 - TRUCKEE RIVER NEAR SPARKS								
FEB, 1980								
05...	1000	670	620	50	4	4	0	9
28...	1130	680	630	50	8	8	0	9
MAR								
12...	1030	320	270	50	2	2	0	9
20...	1200	330	290	40	4	4	0	20
APR								
04...	0945	260	230	30	3	3	0	10
10...	1030	390	350	40	0	0	2	9
16...	1030	1000	950	50	5	3	2	6
Site 16A - TRUCKEE RIVER INTRAGRAVEL SITE NEAR SPARKS								
FEB, 1980								
08...	1600	210	170	40	8	6	2	4
28...	1130	400	370	30	7	7	0	2
MAR								
20...	1200	150	120	30	4	4	0	7
APR								
04...	1000	90	80	10	3	3	0	--
10...	1045	110	90	20	0	0	0	30
16...	1000	190	150	40	1	0	1	10
Site 52 - TRUCKEE RIVER BELOW S BAR S RANCH								
FEB, 1980								
04...	1700	760	710	50	3	3	0	50
Site 52A - TRUCKEE RIVER INTRAGRAVEL SITE BELOW S BAR S RANCH								
FEB, 1980								
08...	1130	230	190	40	5	3	2	8
Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON								
MAR, 1980								
11...	1130	730	680	50	0	0	0	20
19...	1030	660	630	30	6	6	0	20
APR								
03...	1015	420	390	30	3	3	0	30
09...	1045	240	210	30	0	0	0	30
15...	1430	2800	2800	30	7	6	1	30
Site 56A - TRUCKEE RIVER INTRAGRAVEL SITE AT DEAD OX WASH NEAR NIXON								
MAR, 1980								
19...	1030	140	120	20	4	2	2	4
APR								
03...	1130	120	110	10	3	3	0	20
09...	1145	140	100	40	2	1	1	120
15...	1330	220	190	30	8	7	1	220

TABLE 9.--*Data from study of trout-spawning habitat, February-April 1980*--Continued

DATE	TIME	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
Site 14 - TRUCKEE RIVER NEAR VERDI							
FEB, 1980							
06...	0930	.0	.0	.0	20	20	5
26...	1530	.1	.1	.0	30	30	5
MAR							
13...	1030	.0	.0	.1	10	5	5
21...	1100	.0	.0	.0	20	10	6
APR							
03...	1200	.1	.1	.0	20	10	6
09...	1130	.1	.1	.0	10	5	5
17...	1030	.0	.0	.0	30	30	<3
Site 14A - TRUCKEE RIVER INTRAGRAVEL SITE NEAR VERDI							
FEB, 1980							
26...	1230	.1	.1	.0	40	20	20
MAR							
21...	1030	.0	.0	.0	10	7	<3
APR							
03...	1100	.1	.1	.0	20	10	6
09...	1030	.1	--	--	0	--	--
17...	1000	.3	.2	.1	40	10	30
Site 16 - TRUCKEE RIVER NEAR SPARKS							
FEB, 1980							
05...	1000	.0	.0	.0	80	80	3
28...	1130	.1	.1	.0	20	10	6
MAR							
12...	1030	.0	.0	.1	20	10	9
20...	1200	.0	.0	.0	20	20	5
APR							
04...	0945	.0	.0	.0	20	10	10
10...	1030	.1	.1	.0	30	30	5
16...	1030	.1	.1	.0	30	30	<3
Site 16A - TRUCKEE RIVER INTRAGRAVEL SITE NEAR SPARKS							
FEB, 1980							
08...	1600	.0	.0	.0	20	10	8
28...	1130	.1	.1	.0	20	10	6
MAR							
20...	1200	.0	.0	.0	10	5	5
APR							
04...	1000	--	--	--	40	10	30
10...	1045	.1	.0	.1	20	10	10
16...	1000	.1	.1	.0	30	20	10
Site 52 - TRUCKEE RIVER BELOW S BAR S RANCH							
FEB, 1980							
04...	1700	.1	.1	.0	10	6	4
Site 52A - TRUCKEE RIVER INTRAGRAVEL SITE BELOW S BAR S RANCH							
FEB, 1980							
08...	1130	.0	.0	.0	30	10	20
Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON							
MAR, 1980							
11...	1130	.1	.0	.1	20	10	9
19...	1030	.0	.0	.0	20	10	7
APR							
03...	1015	.1	.1	.0	30	20	10
09...	1045	.1	.1	.0	10	1	9
15...	1430	.1	.1	.0	60	60	<3
Site 56A - TRUCKEE RIVER INTRAGRAVEL SITE AT DEAD OX WASH NEAR NIXON							
MAR, 1980							
19...	1030	.0	.0	.0	20	0	20
APR							
03...	1130	.0	.0	.0	10	1	9
09...	1145	.2	.1	.1	20	10	10
15...	1330	.1	.0	.1	30	20	8

TABLE 9.--*Data from study of trout-spawning habitat, February-April 1980*--Continued

DATE	TIME	NITROGEN, NH_4 + ORG. TOTAL IN BED MAT. (MG/KG AS N)	NITROGEN, NH_4 TOTAL IN BED MAT. (MG/KG AS N)	NITROGEN, NO_2+NO_3 TOTAL IN BED MAT. (MG/KG AS N)	NITROGEN, NO_2 TOTAL IN BED MAT. (MG/KG AS N)	NITROGEN, NO_3 TOTAL IN BED MAT. (MG/KG AS N)	NITROGEN, TOTAL IN BED MAT. (MG/KG AS N)	PHOSPHORUS, TOTAL IN BED MAT. (MG/KG AS P)	CARBON, ORGANIC TOTAL IN BED MAT. (G/KG AS C)	CARBON, INORGANIC, TOTAL IN BED MAT. (G/KG AS C)	CARBON, INORG + ORGANIC TOTAL IN BED MAT. (G/KG AS C)
Site 14 - TRUCKEE RIVER NEAR VERDI											
FEB, 1980 06...	0930	74	24	11	.0	11	85	700	1.0	.1	1.1
MAR 13...	1030	23	1.6	1.6	.0	1.6	25	430	.5	.1	.6
Site 16 - TRUCKEE RIVER NEAR SPARKS											
FEB, 1980 01...	1600	28	17	10	.0	10	38	650	1.1	.0	1.1
MAR 12...	1030	22	3.9	25	.0	25	47	450	.7	.1	.8
Site 52 - TRUCKEE RIVER BELOW S BAR S RANCH											
FEB, 1980 04...	1700	35	11	3.5	--	--	39	700	.8	.2	1.0
Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON											
MAR, 1980 11...	1130	20	2.7	5.3	.0	5.3	25	320	.6	.1	.7

DATE	TIME	ARSENIC TOTAL IN BED MAT. (UG/G AS AS)	CADMIUM RECOV. FROM BED MAT. (UG/G AS CD)	COPPER, RECOV. FROM BED MAT. (UG/G AS CU)	IRON, RECOV. FROM BED MAT. (UG/G AS FE)	LEAD, RECOV. FROM BED MAT. (UG/G AS PB)	MERCURY RECOV. FROM BED MAT. (UG/G AS HG)	ZINC, RECOV. FROM BED MAT. (UG/G AS ZN)
Site 14 - TRUCKEE RIVER NEAR VERDI								
FEB, 1980 06...	0930	3	1	12	4800	0	.01	20
MAR 13...	1030	4	0	16	14	0	.02	33
Site 16 - TRUCKEE RIVER NEAR SPARKS								
FEB, 1980 01...	1600	3	1	12	5800	0	.02	27
MAR 12...	1030	3	0	16	11000	0	.01	29
Site 52 - TRUCKEE RIVER BELOW S BAR S RANCH								
FEB, 1980 04...	1700	5	1	7	5200	0	.02	20
Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON								
MAR, 1980 11...	1130	10	0	10	9400	0	.01	25

TABLE 9.--*Data from study of trout-spawning habitat, February-April 1980*--Continued

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 128 MM
Site 14 - TRUCKEE RIVER NEAR VERDI													
FEB, 1980													
06...	0930	0	1	2	5	13	21	24	27	34	65	100	--
MAR													
13...	1030	0	0	2	6	14	24	31	38	57	84	100	--
Site 16 - TRUCKEE RIVER NEAR SPARKS													
FEB, 1980													
01...	1600	0	1	2	7	18	24	27	36	53	100	--	--
MAR													
12...	1030	0	0	2	6	14	21	26	33	41	86	100	--
APR													
16...	1030	0	0	1	4	14	21	27	38	64	94	100	--
Site 56 - TRUCKEE RIVER AT DEAD OX WASH NEAR NIXON													
MAR, 1980													
11...	1130	0	0	2	9	18	21	23	27	30	34	40	100
APR													
15...	1430	0	0	1	6	15	20	25	32	44	62	100	--

TABLE 10.--*Daily measurements of water temperature (in degree C) at selected sites, January-September 1980*

Site 8 - TRUCKEE RIVER AT INTERSTATE 80 ABOVE LITTLE TRUCKEE RIVER

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		APRIL			MAY			JUNE	
1	--	--	--	10.0	5.0	7.0	--	--	--
2	--	--	--	10.5	5.5	7.5	--	--	--
3	--	--	--	10.5	5.5	7.5	--	--	--
4	--	--	--	11.0	5.5	7.5	--	--	--
5	--	--	--	9.0	5.5	7.0	--	--	--
6	--	--	--	10.0	5.5	7.5	--	--	--
7	--	--	--	9.0	5.5	7.0	--	--	--
8	--	--	--	9.0	5.5	7.0	--	--	--
9	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--
12	10.0	4.0	7.0	--	--	--	--	--	--
13	10.0	5.0	7.5	--	--	--	--	--	--
14	9.0	5.5	7.5	--	--	--	--	--	--
15	9.0	4.0	6.5	--	--	--	--	--	--
16	9.5	4.5	7.0	--	--	--	--	--	--
17	9.5	4.5	7.0	--	--	--	--	--	--
18	9.5	4.5	7.0	--	--	--	--	--	--
19	10.0	4.5	7.0	--	--	--	--	--	--
20	7.0	5.0	6.0	--	--	--	--	--	--
21	7.0	4.0	5.5	--	--	--	--	--	--
22	6.0	4.5	5.5	--	--	--	--	--	--
23	8.5	5.0	6.5	--	--	--	--	--	--
24	10.0	5.0	7.5	--	--	--	--	--	--
25	10.5	5.0	7.5	--	--	--	--	--	--
26	10.5	5.0	7.5	--	--	--	--	--	--
27	11.0	5.5	8.0	--	--	--	--	--	--
28	9.0	5.5	7.0	--	--	--	--	--	--
29	9.5	5.5	7.5	--	--	--	--	--	--
30	9.0	4.5	7.0	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JULY			AUGUST			SEPTEMBER	
1	--	--	--	21.0	16.5	18.5	19.0	13.5	16.0
2	--	--	--	20.5	14.5	17.5	19.0	13.5	16.0
3	--	--	--	20.0	14.0	17.0	17.5	13.0	15.5
4	--	--	--	20.5	14.0	17.5	17.0	13.0	15.0
5	--	--	--	20.5	15.0	18.0	19.5	12.5	14.5
6	--	--	--	19.5	14.5	17.0	17.0	13.0	14.5
7	--	--	--	20.0	14.5	17.0	15.5	13.0	14.0
8	--	--	--	20.5	14.5	17.5	16.0	13.0	14.0
9	--	--	--	20.0	14.5	17.5	16.0	12.5	14.0
10	--	--	--	21.0	14.5	18.0	14.5	12.5	13.5
11	--	--	--	21.0	15.5	18.5	15.0	12.0	13.5
12	--	--	--	21.0	15.0	18.0	15.5	12.5	13.5
13	--	--	--	20.0	14.5	17.5	14.5	12.0	13.0
14	--	--	--	19.0	14.0	16.5	13.5	11.5	12.5
15	--	--	--	19.5	14.0	17.0	15.5	12.0	13.5
16	19.0	--	--	20.5	14.5	17.5	16.0	12.5	14.0
17	19.5	13.0	16.5	20.0	15.5	18.0	16.5	14.0	15.0
18	18.5	12.5	16.0	19.0	15.5	17.0	16.5	15.0	15.5
19	19.0	12.0	15.5	19.5	13.5	16.5	17.0	14.0	15.0
20	20.5	13.5	17.0	20.5	14.0	17.0	16.5	14.0	15.0
21	20.0	14.5	17.5	20.0	14.5	17.5	16.5	13.5	15.0
22	19.5	14.0	17.0	19.5	15.0	17.0	16.5	13.5	14.5
23	19.5	14.0	17.0	18.5	15.0	17.0	17.0	12.5	14.5
24	20.0	14.0	17.0	19.0	14.5	17.0	17.0	13.0	14.5
25	19.5	13.5	17.0	19.0	14.5	17.0	17.0	13.0	15.0
26	20.0	14.0	17.0	19.5	14.0	17.0	15.5	13.5	14.5
27	20.5	15.0	18.0	19.0	13.5	16.5	17.0	12.0	14.5
28	18.5	16.5	17.5	17.5	12.5	15.5	17.0	12.0	14.5
29	20.5	14.5	17.5	18.0	12.5	14.5	17.5	11.5	14.5
30	21.0	15.5	18.5	18.0	13.0	15.5	17.5	11.5	14.5
31	22.0	17.0	19.0	18.5	12.5	15.5	--	--	--

TABLE 10.--*Daily measurements of water temperature (in degree C) at selected sites, January-September 1980*--Continued

Site 9 - LITTLE TRUCKEE RIVER BELOW BOCA DAM

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		APRIL			MAY			JUNE	
1	--	--	--	11.0	7.5	8.5	8.0	7.5	8.0
2	--	--	--	8.0	7.5	7.5	8.5	7.5	8.0
3	--	--	--	8.0	7.5	8.0	9.0	7.5	8.5
4	--	--	--	8.0	7.5	8.0	9.0	8.0	8.5
5	--	--	--	8.0	7.5	8.0	9.0	7.5	8.5
6	--	--	--	8.5	7.5	8.0	8.5	7.5	8.0
7	--	--	--	8.0	7.5	8.0	8.5	7.5	8.0
8	--	--	--	8.0	8.0	8.0	8.5	8.0	8.0
9	--	--	--	9.0	7.5	8.0	8.5	8.0	8.0
10	--	--	--	8.0	8.0	8.0	9.0	8.0	8.0
11	--	--	--	8.5	8.0	8.0	9.0	8.0	8.5
12	--	--	--	8.5	8.0	8.0	9.0	8.0	8.5
13	--	--	--	8.5	8.0	8.5	8.5	7.5	8.0
14	--	--	--	9.0	8.0	8.5	8.5	8.0	8.5
15	--	--	--	9.5	8.5	9.0	18.0	8.0	12.5
16	--	--	--	10.5	8.5	9.5	19.0	9.5	14.0
17	--	--	--	10.0	9.0	10.0	19.0	9.5	13.5
18	--	--	--	11.0	9.5	10.0	19.0	10.5	13.5
19	8.0	6.5	7.0	11.0	9.5	10.5	18.5	10.5	13.5
20	8.5	7.0	7.5	11.5	10.0	11.0	19.0	10.0	13.5
21	8.0	7.5	7.5	11.5	10.5	11.0	19.0	10.5	14.0
22	8.0	7.5	7.5	11.5	10.5	11.0	18.0	10.0	13.5
23	11.0	7.5	8.5	11.0	10.0	10.5	18.5	10.5	14.0
24	14.5	7.5	10.5	9.5	9.0	9.0	19.0	11.0	14.5
25	15.5	8.0	11.5	9.0	8.5	9.0	18.0	11.0	14.0
26	16.5	8.5	12.0	9.0	7.5	8.5	19.0	11.0	14.5
27	16.5	9.5	13.0	8.5	7.5	8.0	18.5	11.0	14.0
28	14.0	10.5	12.0	9.0	7.5	8.0	21.0	11.5	15.5
29	13.0	10.0	11.5	8.5	7.5	8.0	19.5	13.0	15.5
30	15.0	8.0	11.0	8.0	7.5	8.0	18.0	13.5	15.5
31	--	--	--	8.0	7.5	8.0	--	--	--

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JULY			AUGUST			SEPTEMBER	
1	19.0	13.0	15.5	12.0	10.5	11.0	12.0	10.5	11.5
2	15.0	13.0	14.0	11.5	10.0	10.5	12.5	10.5	12.0
3	20.5	12.0	15.0	11.5	9.5	10.5	12.5	11.5	12.0
4	20.5	13.0	16.0	11.5	9.5	10.5	13.0	10.5	12.0
5	20.5	12.0	16.0	11.5	9.5	10.5	12.5	11.5	12.0
6	15.0	9.5	11.0	11.5	10.0	11.0	13.0	11.0	12.0
7	10.0	9.5	9.5	11.5	10.5	11.0	13.0	11.0	11.5
8	11.0	9.5	10.0	11.5	9.5	10.5	18.0	11.0	14.0
9	11.0	9.5	10.0	12.0	9.5	11.0	19.0	13.5	16.0
10	11.0	9.5	10.0	12.0	10.5	11.0	16.0	12.0	14.0
11	11.0	9.5	10.0	11.5	10.5	11.0	19.0	13.5	16.0
12	10.0	9.5	9.5	12.0	10.0	11.0	15.5	12.0	13.5
13	10.0	9.5	9.5	11.5	10.5	11.0	13.0	12.0	12.5
14	10.5	9.5	10.0	11.5	10.5	11.0	13.0	11.0	12.0
15	10.5	9.5	10.0	11.5	10.0	11.0	13.5	12.0	12.5
16	10.0	9.5	10.0	11.5	10.5	11.0	13.0	12.0	12.5
17	10.0	9.5	9.5	11.5	10.0	11.0	12.5	11.5	12.0
18	10.0	9.5	10.0	11.0	10.0	10.5	13.0	11.5	12.0
19	10.5	9.5	10.0	12.0	10.5	11.0	12.5	11.5	12.0
20	10.5	9.5	10.0	12.0	11.0	11.0	13.0	12.0	12.5
21	11.0	9.5	10.0	12.0	10.5	11.0	13.0	11.0	12.0
22	11.0	10.0	10.0	12.0	10.5	11.0	12.5	11.0	12.0
23	11.5	9.5	10.5	12.0	10.0	11.5	12.5	11.5	12.0
24	11.5	10.0	10.5	12.0	10.0	11.0	13.0	11.5	12.5
25	11.5	9.5	10.5	12.0	10.5	11.5	13.0	12.0	12.5
26	11.0	10.0	10.5	12.0	11.0	11.5	13.0	11.5	12.0
27	11.0	10.0	10.5	12.0	11.0	11.5	13.5	12.0	12.5
28	10.5	10.0	10.5	12.0	10.5	11.5	13.5	12.0	12.5
29	11.0	9.5	10.5	12.0	11.0	11.5	14.0	12.0	13.0
30	11.5	9.5	10.5	12.5	10.5	11.5	14.0	12.5	13.5
31	12.0	10.5	11.0	12.0	11.0	12.0	--	--	--

TABLE 10.--*Daily measurements of water temperature (in degree C) at selected sites, January-September 1980*--Continued

Site 11 - TRUCKEE RIVER AT FARAD

DAY	MAX	MIN MAY	MEAN	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN
1	--	--	--	10.5	8.5	9.5	13.0	10.5	11.5
2	--	--	--	9.5	8.5	8.5	11.5	9.0	10.0
3	--	--	--	10.5	8.0	9.0	13.0	8.0	10.5
4	--	--	--	9.5	8.5	9.0	14.5	10.0	12.0
5	--	--	--	10.5	8.5	9.0	14.0	9.0	11.5
6	--	--	--	11.0	8.0	9.5	14.5	10.0	12.0
7	--	--	--	11.5	8.5	10.0	15.0	11.0	13.0
8	--	--	--	12.0	8.5	10.0	14.5	10.5	12.5
9	--	--	--	12.0	8.0	10.0	15.0	10.5	12.5
10	--	--	--	11.5	8.0	10.0	--	--	--
11	--	--	--	11.5	8.0	10.0	--	--	--
12	--	--	--	11.5	7.5	9.5	--	--	--
13	--	--	--	10.0	7.0	8.5	--	--	--
14	--	--	--	12.0	8.0	10.0	--	--	--
15	--	--	--	13.0	8.0	10.5	--	--	--
16	10.5	7.5	9.0	13.5	8.5	11.5	--	--	--
17	11.0	7.5	9.5	14.0	8.5	11.5	--	--	--
18	11.0	7.0	9.5	13.5	8.5	11.5	--	--	--
19	11.5	7.5	9.5	13.0	8.5	11.0	--	--	--
20	11.0	7.5	9.5	13.5	8.5	11.0	--	--	--
21	11.0	7.5	9.5	13.0	8.5	11.0	--	--	--
22	10.5	7.5	9.0	12.5	8.5	10.5	--	--	--
23	8.5	7.0	7.5	13.0	8.5	10.5	--	--	--
24	8.5	6.5	7.5	13.0	8.5	11.0	--	--	--
25	9.0	7.0	8.0	13.0	9.5	11.0	--	--	--
26	10.0	7.0	8.5	13.0	8.5	11.0	--	--	--
27	9.5	8.0	8.5	13.0	8.5	11.0	--	--	--
28	10.0	8.0	9.0	14.5	10.0	12.5	--	--	--
29	10.5	8.0	9.0	14.0	11.0	12.5	--	--	--
30	10.0	8.5	9.0	13.0	11.0	12.0	--	--	--
31	10.5	8.5	9.0	--	--	--	--	--	--

DAY	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	--	--	--	17.0	12.5	14.5
2	--	--	--	16.5	12.5	14.5
3	--	--	--	16.5	12.0	14.5
4	--	--	--	17.0	12.0	14.5
5	--	--	--	16.5	12.0	14.5
6	--	--	--	16.5	12.5	14.5
7	--	--	--	14.5	13.0	13.5
8	--	--	--	16.0	12.0	14.0
9	--	--	--	16.0	12.0	14.0
10	--	--	--	14.0	12.5	13.0
11	--	--	--	15.5	11.5	13.5
12	--	--	--	15.5	11.5	13.5
13	18.0	13.5	16.0	14.0	11.0	12.5
14	17.0	12.5	15.0	13.5	10.0	12.0
15	17.0	13.0	15.0	15.0	10.5	13.0
16	18.0	13.5	16.0	16.0	11.0	13.5
17	18.0	14.5	16.5	17.0	12.5	14.5
18	17.0	14.0	15.5	15.5	14.0	14.5
19	17.5	13.0	15.0	16.0	12.0	14.0
20	18.0	13.0	15.5	15.5	11.5	13.5
21	17.5	13.5	15.5	15.5	11.5	13.5
22	16.5	13.5	15.0	15.5	11.0	13.0
23	17.0	13.5	15.0	15.0	10.5	13.0
24	17.5	13.0	15.0	15.5	11.0	13.0
25	17.0	13.5	15.0	15.5	11.5	13.5
26	17.5	13.0	15.0	14.0	12.0	13.0
27	16.5	12.5	14.5	14.5	10.5	13.0
28	16.0	11.5	14.0	15.0	11.0	13.5
29	13.5	11.5	12.5	15.0	10.5	13.0
30	15.5	12.0	13.5	15.0	10.5	13.0
31	16.0	11.5	14.0	--	--	--

TABLE 10.--*Daily measurements of water temperature (in degree C) at selected sites, January-September 1980*--Continued

Site 14 - TRUCKEE RIVER NEAR VERDI

DAY	MAX	MIN	MEAN
		APRIL	
1	6.0	4.0	5.0
2	6.5	3.5	5.0
3	7.5	4.5	5.5
4	8.0	4.5	6.0
5	6.0	5.0	5.5
6	6.0	4.0	5.0
7	7.5	3.5	5.5
8	8.5	4.0	6.5
9	9.5	5.5	7.0
10	10.0	5.0	7.5
11	9.0	5.0	7.0
12	10.0	5.0	7.5
13	10.5	6.0	8.5
14	10.0	7.0	8.5
15	9.5	5.5	7.5
16	10.0	5.5	8.0
17	10.0	6.0	8.0
18	10.0	6.0	8.0
19	10.0	5.5	8.0
20	8.5	6.5	7.5
21	7.5	5.5	6.5
22	7.0	5.5	6.0
23	9.5	6.0	7.5
24	10.5	7.0	9.0
25	10.5	7.0	9.0
26	10.5	7.5	9.5
27	10.5	8.0	9.5
28	10.0	8.0	9.0
29	10.5	7.5	9.0
30	--	--	--
31	--	--	--

TABLE 10.—*Daily measurements of water temperature (in degree C) at selected sites, January-September 1980*—Continued

Site 16 - TRUCKEE RIVER NEAR SPARKS

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11.5	9.0	10.0	18.5	14.5	16.5	23.0	19.0	21.0	19.5	14.0	17.0
2	11.0	9.0	9.5	16.5	12.5	14.5	22.5	17.5	20.5	19.5	15.0	17.0
3	11.0	8.0	9.5	16.0	10.5	13.5	22.0	17.0	19.5	19.5	14.5	17.0
4	11.0	8.5	9.5	18.5	12.5	15.5	22.0	17.0	19.5	19.5	14.5	17.0
5	12.5	8.0	9.5	18.5	12.5	15.5	21.5	16.0	19.0	20.5	15.0	17.5
6	12.0	8.0	10.0	19.0	13.5	16.0	20.0	15.5	18.0	19.5	15.5	17.5
7	13.0	9.0	11.0	19.0	14.0	16.5	20.5	15.5	18.0	18.5	15.5	16.5
8	13.5	9.5	12.0	20.0	14.5	17.5	21.0	16.0	18.5	17.5	14.0	15.5
9	13.5	10.0	12.0	20.5	14.0	17.0	21.0	16.0	18.0	18.5	14.5	16.5
10	13.5	10.5	12.0	--	--	--	21.5	16.0	18.5	18.0	14.5	16.0
11	13.0	9.5	11.5	--	--	--	22.0	16.0	19.0	18.5	13.5	16.0
12	13.5	9.0	11.5	--	--	--	22.5	16.5	19.5	17.5	14.0	16.0
13	12.5	9.5	11.0	--	--	--	21.5	16.0	19.0	15.5	13.0	14.0
14	14.0	9.0	10.5	--	--	--	20.0	14.5	17.5	15.0	11.0	13.5
15	16.0	10.5	13.0	--	--	--	20.5	14.5	17.5	17.0	11.5	14.0
16	17.0	11.5	14.0	23.0	16.5	19.5	21.5	15.5	18.5	17.5	12.5	15.0
17	17.0	12.0	14.0	22.5	16.5	19.5	21.5	16.5	19.0	18.0	13.5	16.0
18	17.5	12.5	14.5	21.5	16.5	19.0	20.0	16.0	18.5	16.5	15.0	15.5
19	16.5	12.0	14.0	22.0	15.5	18.5	20.5	14.5	17.5	17.5	13.0	15.0
20	17.0	11.5	14.0	23.0	16.5	20.0	21.5	15.0	18.0	16.5	12.5	14.5
21	17.0	12.0	14.0	24.0	17.5	20.5	21.5	16.0	18.5	16.0	12.0	14.0
22	17.0	11.5	14.0	24.5	18.0	21.0	19.5	15.5	17.5	16.0	11.5	13.5
23	16.5	11.0	13.5	23.5	17.5	20.5	20.0	15.0	17.0	16.0	11.5	14.0
24	17.5	11.5	14.5	23.5	17.5	20.5	20.5	15.0	17.5	16.0	12.0	14.0
25	17.5	12.0	14.5	24.0	17.5	20.5	20.5	15.5	18.0	16.5	12.5	14.5
26	17.5	11.5	14.5	24.0	17.5	20.5	20.0	15.0	17.5	16.0	13.0	14.5
27	18.0	11.5	15.0	24.0	18.0	21.0	19.5	14.5	17.0	16.5	12.0	14.5
28	19.5	13.0	16.0	21.5	19.0	20.5	18.5	13.5	16.0	16.5	12.5	14.5
29	18.0	15.5	17.0	21.5	17.0	19.5	16.0	13.0	14.5	16.5	12.0	14.5
30	18.5	14.5	16.5	22.0	17.5	20.0	17.5	12.5	15.0	17.0	12.5	14.5
31	--	--	--	23.0	19.0	21.0	18.5	13.0	16.0	---	---	---

TABLE 10.--*Daily measurements of water temperature (in degree C) at selected sites, January-September 1980*--Continued

Site 23 - TRUCKEE RIVER AT LOCKWOOD

DAY	MAY MAX	MAY MIN	MAY MEAN	JUNE MAX	JUNE MIN	JUNE MEAN	JULY MAX	JULY MIN	JULY MEAN
1	--	--	--	13.0	9.5	11.5	20.0	17.0	18.5
2	--	--	--	11.0	8.0	9.5	19.5	15.5	17.5
3	--	--	--	12.0	9.0	10.5	18.0	13.5	16.0
4	--	--	--	11.0	8.5	10.0	20.5	15.5	18.0
5	--	--	--	12.0	8.5	10.5	20.5	16.0	18.0
6	--	--	--	13.0	9.0	11.5	21.0	16.5	18.5
7	--	--	--	14.5	11.0	13.0	21.0	17.0	19.0
8	--	--	--	15.0	11.0	13.5	21.5	18.0	20.0
9	10.0	7.5	8.5	15.5	11.5	13.5	22.0	17.5	20.0
10	8.0	6.0	7.0	15.0	11.0	13.0	21.5	17.5	21.0
11	8.5	6.5	7.5	15.0	11.0	13.0	22.5	17.5	20.0
12	11.0	6.5	8.5	14.5	11.0	12.5	21.5	18.0	20.0
13	11.0	8.0	9.5	13.0	10.5	12.0	21.5	18.0	20.0
14	12.0	9.0	10.5	16.0	12.5	14.0	22.0	18.0	20.0
15	14.0	9.5	11.5	17.5	13.0	15.5	23.0	18.0	20.5
16	13.5	10.0	12.0	18.5	13.5	16.0	24.0	20.5	22.0
17	12.5	9.5	10.5	--	--	--	24.0	20.5	22.0
18	13.5	11.0	12.0	--	--	--	23.0	20.0	22.0
19	14.0	11.0	12.5	18.0	14.0	16.0	23.0	18.5	21.0
20	14.0	11.0	12.5	18.5	13.5	16.0	24.0	20.0	22.0
21	13.0	11.0	12.0	18.5	14.0	16.0	24.5	21.0	23.0
22	13.0	8.0	11.0	18.0	13.5	16.0	24.5	21.5	23.0
23	9.0	6.5	8.0	18.0	13.0	15.5	24.5	20.5	23.0
24	9.5	7.5	8.5	19.0	14.0	16.5	23.5	20.5	22.5
25	9.5	7.5	8.5	19.0	14.5	16.5	24.5	20.5	22.5
26	11.5	9.0	10.0	18.5	14.5	16.5	24.5	20.5	23.0
27	11.5	9.0	10.5	19.0	14.5	17.0	25.5	21.5	23.5
28	13.0	9.5	11.0	20.5	16.0	18.5	25.0	21.5	23.0
29	12.5	10.0	11.5	20.5	18.0	19.0	23.5	19.5	21.5
30	12.0	9.5	11.0	19.5	17.0	18.5	23.5	20.5	22.0
31	12.0	9.5	11.0	--	--	--	24.5	21.5	23.0

DAY	AUGUST MAX	AUGUST MIN	AUGUST MEAN	SEPTEMBER MAX	SEPTEMBER MIN	SEPTEMBER MEAN
1	24.5	21.0	23.0	20.5	16.5	18.5
2	23.0	18.0	20.5	20.0	17.5	19.0
3	23.0	17.5	21.0	20.0	16.5	18.5
4	23.0	18.0	21.0	20.5	17.0	19.0
5	23.0	18.0	21.0	20.5	17.0	19.0
6	22.0	17.5	20.0	20.5	17.0	19.0
7	22.0	18.0	20.0	19.5	17.0	18.5
8	22.5	18.5	20.5	19.0	15.5	17.5
9	22.0	18.0	20.0	19.0	16.0	17.5
10	21.0	18.0	19.0	18.5	16.5	17.5
11	22.5	19.0	21.0	19.5	15.5	17.5
12	22.5	19.0	21.0	19.0	17.0	18.0
13	22.5	19.0	20.5	17.5	14.5	16.0
14	--	--	--	16.0	13.0	14.5
15	--	--	--	17.0	14.0	15.5
16	22.0	18.5	20.0	18.5	14.5	16.5
17	22.0	19.0	21.0	18.5	16.0	17.5
18	21.0	19.0	20.0	--	--	--
19	21.0	17.0	19.0	--	--	--
20	22.0	17.5	20.0	--	--	--
21	22.0	19.0	20.5	--	--	--
22	21.0	18.5	19.5	--	--	--
23	20.5	17.0	18.5	--	--	--
24	21.0	17.0	19.0	--	--	--
25	21.5	18.0	20.0	--	--	--
26	21.0	18.0	19.5	--	--	--
27	20.0	17.0	19.0	--	--	--
28	19.5	16.5	18.0	--	--	--
29	18.5	14.5	16.0	--	--	--
30	18.5	14.5	16.5	--	--	--
31	19.5	15.5	17.5	--	--	--

TABLE 10.--*Daily measurements of water temperature (in degree C) at selected sites, January-September 1980*--Continued

Site 36 - TRUCKEE RIVER AT DERBY DAM

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	5.0	3.0	4.0	7.5	7.0	7.0	--	--	--	13.0	9.5	11.0
2	6.5	4.5	5.5	8.5	7.0	7.5	9.5	6.5	8.0	14.5	10.5	12.5
3	7.5	6.0	6.5	--	--	--	9.5	7.0	8.0	13.5	11.0	12.5
4	9.5	7.0	8.0	--	--	--	10.5	8.0	9.0	13.5	10.0	12.0
5	9.5	8.5	9.0	--	--	--	11.5	8.0	9.0	13.0	11.5	12.0
6	10.0	8.0	9.0	--	--	--	10.5	8.0	9.0	13.0	9.5	11.5
7	8.0	6.5	7.0	--	--	--	11.0	7.5	9.0	12.5	10.5	11.5
8	7.5	5.5	6.5	--	--	--	11.5	8.0	10.0	12.5	10.5	11.5
9	7.5	5.0	6.0	--	--	--	13.0	9.5	11.0	11.5	9.0	10.0
10	7.0	5.5	6.5	--	--	--	14.0	9.5	11.5	9.5	7.5	8.0
11	7.5	5.0	6.5	--	--	--	12.5	9.0	10.5	8.5	7.5	8.0
12	8.5	6.0	7.0	--	--	--	13.5	9.0	11.0	11.0	7.5	9.0
13	9.0	6.0	7.0	--	--	--	14.5	10.0	12.0	11.5	9.5	10.5
14	8.5	6.5	7.5	--	--	--	14.5	11.5	13.0	12.0	10.0	11.0
15	9.5	7.0	8.0	--	--	--	13.0	10.5	12.0	14.0	11.0	12.5
16	8.0	7.0	7.5	--	--	--	13.0	9.5	11.5	14.0	12.0	13.0
17	8.0	6.5	7.0	--	--	--	--	--	--	14.0	11.5	13.0
18	7.5	6.0	7.0	--	--	--	--	--	--	14.5	12.0	13.0
19	6.0	5.5	6.0	--	--	--	--	--	--	15.0	13.0	14.0
20	6.0	5.0	5.5	--	--	--	--	--	--	15.5	13.5	14.5
21	6.0	5.0	5.5	--	--	--	--	--	--	14.5	12.5	13.0
22	6.0	4.5	5.5	--	--	--	--	--	--	14.0	12.0	13.0
23	7.5	5.5	6.5	--	--	--	--	--	--	12.0	9.0	10.5
24	7.5	6.5	7.0	--	--	--	13.5	9.5	11.5	10.0	8.0	9.0
25	8.5	6.5	7.5	--	--	--	14.0	11.0	12.5	10.5	8.5	9.5
26	9.5	7.0	8.5	--	--	--	14.5	12.0	13.0	11.5	9.0	10.0
27	10.0	8.5	9.0	--	--	--	14.5	12.0	13.5	12.0	10.5	11.0
28	9.5	8.0	9.0	--	--	--	13.5	12.5	13.0	12.5	10.5	11.5
29	--	--	--	--	--	--	13.5	10.5	12.0	13.0	11.5	12.0
30	--	--	--	--	--	--	12.5	10.0	11.0	13.0	12.0	12.5
31	--	--	--	--	--	--	--	--	--	12.5	11.0	12.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	12.5	11.0	12.0	20.5	17.5	19.0	26.0	21.5	24.0	21.0	16.5	18.5
2	12.5	10.5	11.5	20.0	17.0	18.5	25.5	21.0	23.0	21.5	17.5	19.5
3	12.5	9.5	10.5	17.5	14.5	16.0	25.0	20.0	22.5	21.0	17.0	19.0
4	12.0	10.0	11.0	19.0	15.5	17.5	25.0	20.5	22.5	21.5	17.5	19.5
5	12.0	10.0	11.0	19.5	16.5	18.0	24.5	20.0	22.0	21.5	18.0	19.5
6	13.0	10.0	12.0	20.5	16.5	18.5	23.5	19.0	21.0	20.5	18.0	19.5
7	14.0	12.0	13.0	20.5	17.5	18.5	23.0	19.0	21.0	19.5	18.5	19.0
8	15.5	13.5	14.5	21.5	18.0	19.5	23.5	19.5	21.5	20.0	17.5	18.5
9	15.5	13.5	14.5	21.0	17.0	19.0	23.5	19.0	21.5	19.0	17.0	18.0
10	15.5	13.5	14.5	22.0	17.0	19.5	23.5	19.0	21.0	19.5	17.5	18.5
11	15.5	13.0	14.5	22.5	18.0	19.5	24.0	19.5	22.0	20.0	16.5	18.5
12	15.0	13.0	14.0	21.5	18.0	19.5	24.0	19.5	22.0	20.5	17.5	19.0
13	14.0	12.5	13.5	21.5	18.0	19.5	24.0	19.0	21.5	18.5	16.0	17.5
14	15.5	12.5	13.5	22.0	18.0	20.0	22.0	18.0	20.0	16.0	14.0	15.0
15	17.5	14.0	16.0	22.5	18.5	20.5	20.0	17.5	18.5	17.5	14.0	15.5
16	18.5	15.5	17.0	23.5	19.5	21.5	23.0	18.5	21.0	18.5	14.5	16.5
17	19.0	16.5	17.5	24.0	20.0	22.0	23.5	19.5	21.5	19.0	15.5	17.5
18	19.0	16.5	17.5	23.0	20.5	22.0	21.5	19.0	20.5	18.5	17.0	17.5
19	--	--	--	23.5	19.0	21.0	22.0	17.0	19.5	17.5	15.0	16.5
20	18.5	15.5	17.0	24.0	20.0	22.0	22.5	17.5	20.5	17.5	15.0	16.5
21	18.5	16.0	17.0	25.5	21.0	23.0	23.5	19.0	21.0	17.0	13.5	15.5
22	18.0	16.0	17.0	25.5	21.5	23.5	20.5	19.0	20.0	16.5	13.5	15.0
23	18.0	15.0	16.5	25.5	21.5	23.5	21.5	17.5	19.5	17.0	13.0	15.0
24	19.0	15.5	17.0	25.0	21.0	23.0	21.5	17.5	19.5	17.5	13.5	15.5
25	19.0	15.5	17.0	25.5	21.0	23.0	22.0	18.0	20.0	17.5	14.0	16.0
26	19.5	16.0	17.5	26.0	21.5	23.5	22.0	18.5	20.0	18.0	14.5	16.5
27	19.5	15.5	17.5	26.0	22.0	24.0	21.0	17.5	19.5	17.5	14.5	16.0
28	21.0	16.5	18.5	25.0	22.5	23.5	20.5	16.5	18.5	18.0	14.5	16.5
29	21.0	18.5	19.5	24.0	20.5	22.5	18.0	15.5	17.0	17.5	14.0	16.0
30	19.0	18.0	18.5	24.5	21.0	23.5	18.5	14.5	16.5	--	--	--
31	--	--	--	25.5	21.5	23.5	20.0	15.5	17.5	--	--	--

TABLE 10.--*Daily measurements of water temperature (in degree C) at selected sites, January-September 1980*—Continued

Site 45 - TRUCKEE RIVER AT WADSWORTH

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	MAY		JUNE		JULY		AUGUST	
1	13.5	9.5	13.0	11.0	21.5	18.0	--	--
2	14.5	11.0	--	--	21.0	19.0	--	--
3	14.5	12.0	--	--	19.0	17.5	--	--
4	13.5	11.5	11.0	10.0	20.5	15.5	--	--
5	13.5	12.0	11.5	10.0	21.5	16.0	--	--
6	13.5	10.0	13.5	10.5	22.0	16.5	--	--
7	13.0	11.5	15.0	--	22.5	17.5	--	--
8	13.5	10.0	16.5	13.0	23.5	18.0	--	--
9	11.5	9.0	17.0	13.5	23.0	17.0	--	--
10	9.5	7.5	16.5	13.5	23.5	16.5	26.5	20.0
11	9.5	7.5	16.5	13.5	--	--	26.5	20.0
12	11.0	8.0	15.5	13.0	--	--	26.5	20.5
13	12.0	9.0	15.0	--	--	--	26.5	20.0
14	11.5	10.5	17.0	11.5	--	--	23.0	18.5
15	14.0	11.0	19.0	13.5	25.5	18.5	--	--
16	13.5	12.0	20.0	14.5	26.5	19.5	--	--
17	14.0	11.5	21.0	16.0	26.0	19.5	--	--
18	14.0	11.5	20.5	16.0	26.0	20.5	--	--
19	15.0	12.5	18.5	16.0	26.0	19.0	--	--
20	15.5	13.0	20.0	15.5	27.0	19.5	--	--
21	14.5	12.5	21.0	16.0	27.5	20.5	--	--
22	14.5	12.0	20.5	15.5	28.0	21.5	--	--
23	11.5	8.5	20.0	17.0	28.0	21.5	--	--
24	9.5	8.0	21.0	16.5	27.5	21.0	--	--
25	10.0	8.0	20.5	15.5	27.5	21.0	--	--
26	11.0	8.5	21.0	17.0	27.5	21.5	--	--
27	12.0	10.5	21.5	15.5	28.5	21.5	--	--
28	12.5	10.5	23.5	16.5	26.0	22.5	--	--
29	13.0	11.5	22.0	19.0	--	--	--	--
30	13.0	11.5	20.0	18.5	--	--	--	--
31	12.5	11.0	--	--	--	--	--	--

TABLE 10.--*Daily measurements of water temperature (in degree C) at selected sites, January-September 1980*--Continued

Site 63 - TRUCKEE RIVER AT MARBLE BLUFF DAM

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		MARCH			APRIL			MAY			JUNE	
1	--	--	--	9.0	7.0	8.0	15.5	10.5	13.0	--	--	--
2	--	--	--	10.0	6.5	8.0	16.0	12.0	14.0	--	--	--
3	--	--	--	10.5	6.5	8.5	16.5	13.0	15.0	--	--	--
4	--	--	--	11.0	8.5	9.5	16.5	12.5	15.0	13.5	--	--
5	--	--	--	12.5	8.5	10.0	15.5	13.0	14.5	15.0	10.0	11.5
6	--	--	--	12.0	9.0	10.5	15.5	12.5	14.0	15.0	9.0	12.5
7	--	--	--	12.5	8.5	10.0	15.5	12.0	13.5	16.5	11.5	14.0
8	--	--	--	12.5	9.0	11.0	14.0	12.0	13.0	18.0	13.0	15.5
9	--	--	--	12.5	10.5	11.5	13.0	10.5	12.0	18.5	14.0	16.5
10	--	--	--	14.0	11.0	12.0	12.0	10.0	10.5	18.5	14.5	16.5
11	--	--	--	15.0	10.5	12.5	10.0	8.0	9.0	--	--	--
12	--	--	--	14.5	10.5	12.0	13.5	8.5	10.5	--	--	--
13	--	--	--	14.5	11.0	12.5	13.5	10.0	12.0	--	--	--
14	--	--	--	15.5	12.5	13.5	15.0	11.0	13.0	--	--	--
15	--	--	--	15.0	11.5	13.5	16.0	11.0	13.5	--	--	--
16	--	--	--	15.0	11.0	13.0	16.0	12.0	13.5	--	--	--
17	--	--	--	15.5	11.5	13.5	--	--	--	--	--	--
18	8.0	6.5	7.5	15.5	12.0	14.0	--	--	--	--	--	--
19	9.0	5.0	7.0	15.5	11.5	13.5	--	--	--	--	--	--
20	9.0	6.5	7.5	14.5	12.0	13.0	--	--	--	21.5	--	--
21	7.5	6.0	7.0	12.0	8.0	9.5	--	--	--	21.0	17.0	18.5
22	9.0	5.5	7.0	9.5	7.5	8.0	--	--	--	21.5	17.5	18.5
23	9.0	6.0	7.5	12.0	8.5	10.0	--	--	--	20.5	16.5	18.0
24	8.5	6.0	7.5	14.0	9.5	11.5	--	--	--	21.5	17.0	18.5
25	8.5	5.5	7.0	16.0	11.5	14.0	--	--	--	21.5	17.5	19.5
26	9.5	5.5	7.5	16.5	13.0	15.0	--	--	--	21.0	17.5	19.0
27	10.0	7.0	8.0	17.5	13.5	15.5	--	--	--	21.0	16.0	18.5
28	10.5	6.5	8.5	16.0	13.5	15.0	--	--	--	22.5	18.0	20.0
29	12.5	8.0	10.0	15.5	12.5	14.0	--	--	--	22.0	20.0	21.0
30	11.0	8.5	9.5	15.5	10.5	13.0	--	--	--	21.5	19.5	20.0
31	10.0	7.5	8.5	---	---	---	--	--	--	--	--	--

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JULY			AUGUST			SEPTEMBER	
1	22.0	19.0	20.5	23.5	21.0	22.5	18.5	17.0	18.0
2	21.0	19.5	20.0	24.0	20.0	22.0	19.5	17.5	18.5
3	22.5	18.0	20.5	23.5	19.5	21.5	19.5	18.0	18.5
4	22.0	17.5	19.5	22.5	19.5	21.5	20.0	18.5	19.0
5	22.0	17.5	19.5	22.5	19.5	21.0	20.0	18.5	19.5
6	22.0	18.5	20.0	21.0	18.5	20.0	21.5	19.0	20.0
7	22.5	18.5	20.0	22.5	19.0	20.5	20.0	19.0	19.5
8	22.5	18.5	20.5	23.0	19.5	21.0	20.5	18.0	19.0
9	23.0	19.0	20.5	22.0	19.0	21.0	21.5	18.5	20.0
10	23.0	19.0	20.5	22.0	19.5	21.0	20.5	18.5	19.5
11	23.5	18.5	20.5	23.0	20.0	21.5	21.5	17.5	19.0
12	22.0	19.0	20.5	22.5	20.5	21.5	20.5	17.5	19.0
13	22.0	18.5	20.5	22.5	20.0	21.0	19.5	16.0	17.5
14	22.0	19.0	20.5	21.0	18.5	19.5	17.5	15.0	16.0
15	23.5	19.0	21.0	19.5	18.0	19.0	17.5	15.5	16.0
16	24.0	20.0	22.0	21.5	18.5	19.5	18.5	15.5	16.5
17	23.5	20.5	22.5	21.0	19.5	20.0	17.5	16.5	17.0
18	23.5	21.0	22.5	20.0	19.0	19.5	18.5	16.5	17.5
19	24.0	20.0	22.0	19.5	18.0	18.5	17.0	15.5	16.5
20	25.0	20.5	22.5	19.5	17.5	18.5	17.0	15.0	16.0
21	26.0	21.5	23.5	20.0	18.5	19.5	17.0	15.5	16.0
22	24.5	22.0	23.5	19.5	18.5	19.0	17.0	14.5	15.5
23	25.0	22.5	24.0	21.5	18.0	19.0	17.0	14.5	15.5
24	25.0	22.5	23.5	20.5	18.0	19.0	18.0	14.5	16.0
25	25.0	22.0	23.5	20.0	18.5	19.5	18.0	15.0	16.5
26	25.5	21.5	23.5	21.0	19.5	20.0	18.0	15.0	16.5
27	25.5	22.0	24.0	20.5	18.5	19.5	17.5	15.5	16.5
28	25.5	22.5	23.0	19.0	17.5	18.5	18.0	16.0	16.5
29	24.5	21.0	22.5	18.5	16.0	17.5	18.5	16.0	17.0
30	25.0	20.5	22.5	17.0	15.5	16.5	19.0	15.5	17.0
31	24.5	21.5	23.0	20.0	16.5	17.5	--	--	--

TABLE 10.--*Daily measurements of water temperature (in degree C) at selected sites, January-September 1980*--Continued

Site 74 - TRUCKEE CANAL AT U.S. HIGHWAY 50 ABOVE LAHONTAN RESERVOIR

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		MAY			JUNE			JULY	
1	--	--	--	15.5	13.5	14.0	21.5	18.5	20.0
2	--	--	--	14.0	12.5	13.0	22.5	19.5	20.5
3	--	--	--	14.5	11.5	12.5	21.5	18.0	20.0
4	--	--	--	14.5	11.0	12.5	22.5	18.0	20.5
5	--	--	--	15.0	12.0	13.5	20.5	17.5	19.0
6	--	--	--	16.0	12.0	14.5	21.5	18.0	19.5
7	--	--	--	18.0	13.5	16.0	22.5	18.0	20.0
8	--	--	--	18.5	15.5	17.0	23.0	18.5	20.5
9	--	--	--	20.0	16.0	18.0	23.5	18.5	20.5
10	--	--	--	21.0	16.5	18.5	27.5	18.0	22.0
11	--	--	--	19.5	17.0	18.0	23.5	20.5	22.0
12	--	--	--	19.0	16.0	17.5	24.0	19.0	21.0
13	--	--	--	18.5	16.0	17.5	26.5	18.0	22.0
14	--	--	--	18.5	14.0	16.0	23.5	19.0	21.5
15	--	--	--	20.0	16.0	18.0	24.5	19.5	22.0
16	--	--	--	21.0	17.0	19.0	24.0	21.0	22.5
17	--	--	--	22.0	19.0	20.5	28.0	21.0	24.0
18	--	--	--	22.5	19.5	21.0	27.0	20.5	23.5
19	--	--	--	23.5	19.5	21.0	27.0	18.0	22.5
20	--	--	--	23.0	17.5	20.0	25.5	22.0	24.0
21	--	--	--	25.0	17.5	20.5	26.0	22.0	24.5
22	18.0	14.5	16.5	25.5	16.0	20.0	26.5	22.0	24.0
23	14.0	11.0	13.0	21.0	16.0	18.5	26.5	22.5	24.5
24	14.5	9.5	11.5	21.5	16.5	19.0	26.5	23.0	24.5
25	14.5	7.5	11.0	21.0	16.5	18.5	27.0	22.5	25.0
26	14.5	10.0	12.0	20.5	16.5	18.0	27.0	24.0	25.5
27	14.5	10.5	12.5	21.0	16.5	18.5	28.5	23.0	25.5
28	15.5	11.5	13.5	22.5	18.0	20.0	25.0	23.5	24.5
29	20.0	13.0	15.5	22.0	19.0	20.5	27.5	22.5	24.5
30	19.0	14.0	16.0	21.0	19.5	20.0	26.0	23.0	24.0
31	16.0	13.5	14.5	--	--	--	26.5	22.5	24.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN
		AUGUST			SEPTEMBER	
1	27.0	22.5	24.5	20.0	17.0	18.5
2	27.5	22.0	24.0	21.5	18.0	19.5
3	27.5	21.0	23.5	22.0	18.5	20.0
4	25.5	22.5	24.0	22.0	19.0	20.5
5	25.5	22.0	23.5	22.5	19.0	20.5
6	24.5	20.5	22.0	22.0	19.0	20.5
7	25.0	20.5	22.5	20.5	18.5	20.0
8	24.5	21.5	22.5	20.5	18.5	19.5
9	23.5	20.0	22.0	20.0	19.0	19.5
10	24.5	20.0	22.0	19.0	18.0	18.5
11	24.0	21.5	22.5	20.0	18.0	19.0
12	24.5	21.0	22.0	20.5	18.5	19.5
13	26.0	17.5	21.5	19.5	17.5	18.5
14	24.5	19.0	21.5	18.5	16.0	17.5
15	23.0	16.0	20.0	17.0	15.5	16.5
16	23.5	19.0	21.0	18.0	15.0	16.5
17	25.5	20.0	22.5	18.5	16.0	17.5
18	22.0	20.5	21.0	18.5	16.5	17.5
19	22.0	19.0	20.5	19.0	16.0	17.0
20	24.5	19.5	21.5	18.0	16.0	17.0
21	27.0	19.5	22.5	18.0	15.0	16.5
22	23.0	18.5	20.5	17.0	15.0	15.5
23	23.0	18.0	20.0	17.0	15.0	15.5
24	21.5	18.5	20.0	17.5	15.0	16.0
25	21.5	19.0	20.0	17.0	15.0	16.0
26	22.5	19.5	20.5	17.5	15.5	16.5
27	22.5	18.5	20.5	17.5	16.0	16.5
28	22.0	17.5	19.5	18.0	16.0	17.0
29	20.0	17.5	18.5	17.5	16.0	16.5
30	20.0	17.0	18.0	--	--	--
31	19.5	16.0	18.0	--	--	--

TABLE 11.--*Data from dye study in upper reach of river, May 31-June 1, 1979*

Injection site: Truckee River at State Highway 267 at Truckee
Site number: 4
Date of injection: May 31, 1979
Time of injection: 0935
Dye volume (liters): 10.0

Sampling site:	At old U.S. Hwy. 40 bridge below Truckee		At Boca bridge		Below Farad		At Mayberry Drive		At Vista	
Site number:	6		10		12		15		22	
River miles below injection:	4.69		9.62		19.58		35.16		48.63	
Estimated discharge during sampling period (ft^3/s):	440		520		680		510		450	
Date(s):	May 31, 1979		May 31, 1979		May 31, 1979		June 1, 1979		June 1, 1979	
Rhodamine WT dye concentrations:	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L
	1158	0.00	1436	0.00	1940	0.00	0343	0.00	1350	0.00
	1200	.4	1438	.1	1952	.3	0354	.2	1420	.4
	1202	.8	1440	.1	2000	.9	0403	.2	1440	.6
	1204	1.6	1442	.3	2010	2.3	0413	.5	1500	1.0
	1206	3.5	1444	.5	2020	4.0	0423	.8	1525	1.2
	1208	6.9	1446	.8	2030	6.4	0433	1.0	1540	1.6
	1210	12	1448	1.3	2040	8.4	0443	1.5	1600	1.9
	1212	20	1450	2.0	2050	10	0453	2.0	1620	2.2
	1214	25	1452	3.3	2100	11	0503	2.6	1640	2.4
	1216	34	1454	4.7	2110	10	0513	3.2	1700	2.2
	1218	42	1456	13	2120	9.6	0523	3.1	1720	2.2
	1220	44	1458	13	2140	7.8	0533	3.8	1825	1.6
	1222	52	1502	8.8	2200	6.3	0543	3.8	1910	1.2
	1224	44	1504	7.5	2220	4.4	0553	4.2	1950	.9
	1226	58	1506	6.5	2240	2.5	0603	4.1	2030	.7
	1228	51	1508	14	2300	1.7	0613	4.3	2125	.4
	1230	61	1510	20	2320	.9	0623	4.3	2200	.4
	1232	59	1512	18	2340	.6	0634	4.3	2230	.2
	1234	62	1515	21	2400	.4	0644	4.3	2300	.2
	1236	56	1520	32			0653	4.1	2330	.0
	1238	52	1525	33			0703	3.8		
	1240	49	1530	33			0723	3.7		
	1242	44	1535	30			0743	3.2		
	1244	40	1545	24			0803	2.9		
	1248	29	1555	16			0823	2.1		
	1252	22	1605	8.6			0843	1.8		
	1256	16	1615	6.5			0903	1.5		
	1300	11	1626	2.1			0926	1.0		
	1304	9.7	1635	1.8			0943	.8		
	1308	5.7	1645	1.0			1003	.6		
	1312	4.0	1655	.6						
			1705	.5						
			1715	.5						
			1730	.3						

TABLE 12.--*Data from dye study in upper reach of river, May 21-22, 1980*

Injection site: Truckee River at State Highway 267 at Truckee
Site number: 4
Date of injection: May 21, 1980
Time of injection: 0735
Dye volume (liters): 21.5

Sampling site:	At old U.S. Hwy. 40 bridge below Truckee	At Boca bridge	Below Farad	At Mayberry Drive	At Vista
Site number:	6	10	12	15	22
River miles below injection:	4.69	9.62	19.58	35.16	48.63
Estimated discharge during sampling period (ft^3/s):	740	1,700	2,300	2,300	2,400
Date(s):	May 21, 1980	May 21, 1980	May 21, 1980	May 21, 1980	May 21-22, 1980

Rhodamine WT dye concentrations:	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L
	0915	0.00	1030	0.00	1330	0.00	1755	0.00	2255	0.00
	0917	.06	1045	.01	1340	.01	1810	.03	2300	.2
	0919	.5	1056	.03	1345	.01	1818	.1	2305	.4
	0921	1.9	1100	.2	1350	.1	1823	.2	2310	.5
	0923	5.5	1104	.9	1355	.4	1828	.3	2315	.8
	0925	11	1110	4.6	1400	1.0	1833	.6	2325	1.2
	0927	19	1112	7.0	1405	2.0	1838	1.0	2330	2.1
	0929	29	1114	9.6	1410	3.9	1843	1.5	2350	4.5
	0931	36	1116	13	1415	6.1	1848	2.3	0005	5.4
	0933	44	1118	17	1420	4.3	1853	3.1	0010	5.5
	0935	51	1122	23	1425	10	1858	4.2	0015	5.5
	0937	57	1124	26	1430	12	1903	5.1	0020	5.4
	0939	59	1126	30	1435	13	1908	5.8	0025	5.1
	0941	59	1128	31	1440	14	1913	6.6	0051	3.0
	0943	56	1130	32	1445	13	1918	7.2	0120	1.3
	0945	50	1132	34	1453	10	1923	7.6	0135	2.9
	0949	40	1134	34	1455	9.6	1928	7.6	0205	.4
	0953	29	1136	32	1500	8.0	1933	7.6	0220	.3
	0957	20	1138	31	1510	5.0	1938	7.2		
	1001	14	1140	28	1520	2.7	1948	6.6		
	1005	8.0	1142	26	1530	1.6	1958	5.1		
	1009	5.0	1144	25	1540	.9	2008	3.7		
	1013	2.8	1146	23	1550	.6	2018	2.6		
	1017	1.9	1148	20	1600	.4	2028	1.8		
	1021	1.2	1150	18	1610	.3	2038	1.3		
	1025	.7	1154	13	1625	.2	2048	1.3		
	1029	.5	1156	11						
			1158	9.6						
			1200	8.3						
			1202	6.7						
			1206	4.8						
			1210	3.3						
			1214	2.2						
			1222	1.0						

TABLE 13.--*Data from dye study in upper reach of river, October 14-16, 1980*

Injection site: Truckee River at State Highway 267 at Truckee
Site number: 4
Date of injection: October 14, 1980
Time of injection: 0722
Dye volume (liters): 12.5

Sampling site:	At old U.S. Hwy. 40 bridge below Truckee		At Boca bridge		Below Farad		At Mayberry Drive		Near Sparks		At Vista	
Site number:	6		10		12		15		16		22	
River miles below injection:	4.69		9.62		19.58		35.16		44.74		48.63	
Estimated discharge during sampling period (ft^3/s):	40		310		380		240		240		420	
Date(s):	Oct. 14, 1980		Oct. 14-15, 1980		Oct. 15, 1980		Oct. 15-16, 1980		Oct. 16, 1980		Oct. 16, 1980	
Rhodamine WT dye concentrations:	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L
	1430	0.00	2135	0.00	0435	0.00	1800	2.2	0010	0.00	0620	0.00
	1434	.03	2140	.03	0525	.03	1810	2.5	0030	.03	0640	.04
	1446	.13	2145	.03	0535	.06	1825	3.0	0050	.03	0700	.10
	1510	3.5	2150	.06	0545	.06	1840	3.5	0110	.03	0720	.19
	1514	5.4	2155	.10	0555	.13	1855	3.9	0130	.03	0740	.26
	1518	7.7	2200	.16	0605	.22	1910	4.2	0150	.06	0800	.45
	1520	8.9	2205	.16	0615	.35	1925	4.3	0210	.13	0820	.64
	1524	12	2215	.57	0625	.60	1940	4.4	0230	.22	0840	.83
	1528	16	2220	.79	0635	.92	1955	4.4	0250	.38	0900	1.0
	1532	21	2225	1.2	0645	1.4	2010	4.2	0310	.66	0920	1.3
	1538	29	2230	1.6	0655	2.0	2025	4.2	0330	.98	0940	1.4
	1544	39	2235	2.1	0705	5.9	2040	4.0	0350	1.4	1000	1.6
	1550	50	2240	2.5	0715	6.9	2055	3.8	0410	1.8	1020	1.6
	1554	56	2245	3.4	0725	7.8	2110	3.4	0430	2.3	1040	1.7
	1556	61	2250	4.3	0735	8.6	2125	3.1	0450	2.6	1100	1.6
	1600	68	2255	5.2	0745	9.3	2140	2.8	0510	3.0	1120	1.5
	1602	71	2300	6.5	0755	9.6	2155	2.5	0530	3.2	1140	1.4
	1604	71	2305	7.4	0805	9.5	2210	2.3	0550	3.3	1145	1.4
	1608	79	2310	8.8	0815	9.5	2225	2.0	0610	3.4	1220	1.2
	1610	82	2315	10	0825	9.5	2240	1.8	0730	2.8	1300	1.0
	1612	86	2320	11	0835	9.2	2255	1.6	0750	2.7	1340	.80
	1614	90	2325	13	0845	8.5	2310	1.5	0810	2.4	1420	.67
	1616	92	2330	15	0855	8.2	2325	1.3	0830	2.2	1500	.58
	1618	93	2335	16	0905	7.8	2340	1.3	0850	2.0	1540	.51
	1620	94	2340	18	0925	6.6	2355	1.1	0910	1.7	1620	.48
	1622	a95	2345	20	0945	5.4	0015	1.1	0930	1.6	1700	.45
	1624	a101	2350	20	1005	4.2	0030	1.1	0950	1.5	1740	.42
	1626	a101	2400	22	1025	3.2	0045	1.0	1010	1.3	1820	.38
	1628	a101	0005	23	1045	2.5	0100	1.0	1030	1.2	1900	.32
	1630	a101	0010	23	1105	2.0	0115	.98	1050	1.1	1940	.32
	1632	a101	0015	24	1125	1.6	0130	.95	1110	1.0	2020	.26
	1634	a100	0020	25	1145	1.3	0145	.92	1130	1.0	2100	.26
	1636	a100	0025	25	1205	1.0	0200	.89	1150	.95	2140	.23
	1638	a100	0030	25	1225	.86	0215	.83	1210	.89	2220	.23
	1640	a100	0035	26	1320	.57	0230	.78	1230	.83	2300	.19
	1642	a100	0040	25	1340	.51	0245	.78	1250	.76	2340	.16
	1644	a100	0045	25			0300	.72	1310	.70		
	1646	a100	0050	24			0315	.66	1330	.70		
	1648	a99	0055	24			0330	.63	1350	.63		
	1650	a99	0100	23			0345	.56	1410	.60		
	1652	a99	0110	21			0400	.53	1430	.54		
	1654	a95	0120	18			0415	.53	1450	.51		
	1656	a95	0130	17			0430	.50	1510	.48		
	1658	a95	0140	15			0445	.47	1525	.41		
	1700	93	0150	13			0500	.44	1605	.38		
	1710	86	0200	11			0515	.44	1645	.35		
	1720	78	0210	10			0530	.41	1725	.32		
	1730	67	0220	8.9			0545	.38	1805	.29		
	1740	57	0230	7.6			0600	.38	1845	.25		
	1750	49	0240	6.4					1925	.22		
	1800	40	0250	5.6					2005	.19		
	1810	33	0300	4.7								
	1820	27	0310	4.0								
	1831	21	0320	3.4								
	1840	18	0330	3.0								
	1850	14	0340	2.6								
	1900	12	0350	2.3								
	1910	9.8	0400	2.1								
	1920	8.2	0410	1.8								

[a] Concentration less accurate because above range of instrument calibration.

TABLE 14.--*Data from dye study in middle reach of river, May 29-30, 1979*

Injection site: Reno-Sparks Sewage Treatment Plant outfall near Reno
Site number: 21
Date of injection: May 29, 1979
Time of injection: 1158
Dye volume (liters): 12.0

Sampling site:	At Vista	At Lockwood	At Patrick	Below Tracy	At Derby Dam
Site number:	22	23	27	33	36
River miles below injection:	1.43	3.61	8.74	13.04	18.78
Estimated discharge during sampling period (ft^3/s):	800	780	770	770	760
Date(s):	May 29, 1979	May 29, 1979	May 29, 1979	May 29, 1979	May 30, 1979

Rhodamine WT dye concentrations:	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L
	1302	0.00	1414	0.00	1657	0.00	1943	0.00	0013	0.00
	1304	.8	1419	.8	1700	.5	1953	.8	0018	1.2
	1306	5.7	1424	5.1	1702	.6	2003	2.6	0023	1.4
	1307	14	1429	12	1704	1.0	2013	5.6	0028	2.4
	1310	19	1439	23	1706	1.3	2023	8.0	0033	3.1
	1312	41	1444	28	1708	2.0	2033	12	0038	4.0
	1314	43	1446	29	1710	2.4	2043	12	0048	5.6
	1316	47	1449	28	1712	2.9	2053	14	0053	5.8
	1319	48	1454	29	1714	3.9	2103	14	0103	7.6
	1324	44	1501	28	1716	4.9	2115	12	0113	8.5
	1329	32	1504	22	1718	5.9	2123	10	0123	10
	1334	25	1517	18	1720	6.5	2153	6.0	0133	11
	1339	19	1522	13	1722	7.7	2213	3.2	0143	12
	1341	12	1527	10	1724	8.5	2235	1.5	0153	9.4
	1345	8.0	1537	7.6	1726	9.3	2253	.7	0213	7.4
	1355	4.2	1547	4.5	1728	11	2313	.3	0233	4.6
	1400	1.8	1557	2.4	1730	11			0302	3.4
	1410	1.2	1607	1.2	1732	12			0320	2.0
			1617	.7	1734	13			0340	1.0
			1627	.2	1736	14				
			1630	.1	1738	16				
					1740	16				
					1742	18				
					1744	18				
					1747	20				
					1750	21				
					1755	19				
					1800	18				
					1805	16				
					1810	14				
					1815	13				
					1826	10				
					1830	8.5				
					1835	7.7				
					1840	6.7				
					1845	5.3				
					1850	4.6				
					1855	3.9				
					1900	3.0				
					1905	2.2				
					1925	.9				

TABLE 15.--*Data from dye study in middle reach of river, September 4-5, 1979*

Injection site: Reno-Sparks Sewage Treatment Plant outfall near Reno
Site number: 21
Date of injection: September 4, 1979
Time of injection: 0900
Dye volume (liters): 4.5

Sampling site:	At Vista		At Lockwood		At Patrick		At Derby Dam	
Site number:	22		23		27		36	
River miles below injection:	1.43		3.61		8.74		18.78	
Estimated discharge during sampling period (ft^3/s):	260		240		230		220	
Date(s):	Sept. 4, 1979		Sept. 4, 1979		Sept. 4-5, 1979		Sept. 5, 1979	
Rhodamine WT dye concentrations:	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L
	1036	3.8	1305	0.00	1850	0.00	0845	0.00
	1039	8.6	1345	6.5	1900	1.0	0902	.1
	1042	18	1350	8.7	1910	1.8	0917	.1
	1044	24	1355	10	1920	2.6	0930	.4
	1046	26	1400	11	1930	3.4	0945	.5
	1048	29	1405	13	1940	4.4	1000	1.0
	1050	29	1410	14	1950	4.4	1015	1.2
	1052	32	1415	14	2000	6.0	1030	1.7
	1054	32	1420	14	2010	6.7	1045	2.0
	1056	31	1425	14	2020	7.1	1100	2.5
	1058	31	1430	14	2030	7.1	1115	2.8
	1100	29	1440	13	2040	7.2	1130	3.0
	1102	28	1450	11	2050	7.2	1145	2.9
	1104	28	1500	9.5	2100	7.3	1200	3.3
	1106	25	1510	8.1	2110	6.9	1215	3.7
	1108	24	1520	6.7	2120	6.4	1230	3.6
	1110	23	1530	5.2	2130	6.0	1245	3.6
	1115	19	1540	4.5	2140	5.5	1300	3.6
	1120	15	1550	3.5	2150	5.2	1315	3.4
	1125	14	1600	2.8	2200	4.7	1330	3.3
	1130	10	1610	2.1	2210	4.2	1345	3.1
	1135	9.2	1620	1.6	2220	3.8	1400	2.9
	1140	6.8	1630	1.1	2230	3.3	1415	2.8
	1145	5.6	1640	.9	2240	2.9	1430	2.7
	1150	4.4			2250	2.6	1445	2.2
	1155	3.8			2300	2.3	1500	2.1
	1200	2.5			2310	1.9	1515	1.9
	1205	2.5			2320	1.7	1530	1.8
	1215	1.9			2330	1.4	1545	1.6
	1220	1.3			2340	1.2	1600	1.3
	1225	.7			2355	1.0	1630	1.3
	1230	.7			0005	.7	1700	.9
					0015	.7	1730	.7
					0025	.6	1800	.4
					0035	.4		
					0045	.3		
					0055	.2		

TABLE 16.--*Data from dye study in middle reach of river, January 18, 1980*

Injection site: Reno-Sparks Sewage Treatment Plant outfall near Reno
Site number: 21
Date of injection: January 18, 1980
Time of injection: 0820
Dye volume (liters): 16.0

Sampling site:	At Vista	At Lockwood	At Patrick	Below Tracy	At Derby Dam
Site number:	22	23	27	33	36
River miles below injection:	1.43	3.61	8.74	13.04	18.78
Estimated discharge during sampling period (ft^3/s):	2,900	2,900	3,200	3,200	3,300
Date(s):	Jan. 18, 1980	Jan. 18, 1980	Jan. 18, 1980	Jan. 18, 1980	Jan. 18, 1980

Rhodamine WT dye concentrations:	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L
	0900	0.00	0900	0.00	1058	0.00	1210	0.00	1422	0.00
	0901	.2	0942	.09	1100	.03	1220	.06	1425	.06
	0902	.6	0944	.2	1102	.2	1228	.3	1432	.3
	0903	1.9	0945	.3	1104	.4	1230	.6	1445	2.8
	0904	3.0	0946	.7	1106	1.0	1235	1.4	1455	5.8
	0905	5.6	0947	1.7	1108	1.7	1240	2.9	1500	5.8
	0906	10	0948	3.0	1110	2.8	1245	5.2	1505	6.1
	0907	13	0949	4.7	1112	3.7	1250	7.4	1510	6.4
	0908	16	0950	6.0	1114	5.8	1256	8.4	1515	6.4
	0909	19	0951	7.3	1116	6.8	1303	8.4	1520	6.2
	0910	19	0952	8.2	1118	8.0	1308	7.4	1525	5.8
	0911	19	[a]0953	9.7	1120	8.6	1313	6.2	1530	4.8
	0913	21	[a]0954	10	1122	9.6	1318	5.2	1540	3.5
	0915	21	[a]0956	12	1124	10	1323	4.4	1550	2.0
	0916	19	[a]0957	12	1126	10	1330	3.3	1600	1.5
	0917	19	[a]0958	13	1128	10	1340	2.3	1610	1.1
	0918	17	[a]0959	14	1130	10	1350	.9	1620	.7
	0920	15	[a]1000	14	1132	10	1400	.5	1630	.4
	0922	13	[a]1001	15	1135	10	1410	.3		
	0924	11	1012	7.3	1140	8.6	1420	.3		
	0926	8.7	1013	6.4	1145	6.8	1430	.2		
	0928	7.2	1015	6.0	1150	5.2	1440	.1		
	0930	5.7	1016	5.3	1155	3.9	1450	.09		
	0932	4.4	1018	4.8	1201	2.5	1500	.06		
	0934	3.6	1019	4.6	1205	1.9				
	0936	3.0	1020	4.2	1210	1.4				
	0938	2.3	1022	3.6	1215	1.0				
	0940	1.9	1024	2.9	1220	.7				
	0942	1.7	1026	2.5						
	0944	1.3	1028	1.8						
	0946	1.1	1030	1.5						
			1032	1.4						
			1034	1.0						
			1036	.9						
			1038	.8						
			1040	.6						
			1042	.5						
			1044	.4						

[a] Approximate time based on graphical analysis of data.

TABLE 17.--*Data from dye study in lower reach of river, May 23-25, 1979*

Injection site: Truckee River at Derby Dam
Site number: 36
Date of injection: May 23, 1979
Time of injection: 1136
Dye volume (liters): 15.0

Sampling site:	At Painted Rock bridge	At old U.S. Hwy. 40 bridge at Wadsworth	At Dead Ox Wash near Nixon	At State Hwy. 447 at Nixon	At Marble Bluff Dam	Below Marble Bluff Dam
Site number:	39	44	56	62	63	65
River miles below injection:	4.91	11.19	21.70	31.66	34.88	34.93
Estimated discharge during sampling period (ft^3/s):	370	370	310	270	240	240
Date(s):	May 23, 1979	May 23, 1979	May 24, 1979	May 24, 1979	May 24-25, 1979	May 24-25, 1979

Rhodamine WT dye concentrations:	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L
	1430	0.00	1822	0.00	0123	0.00	1035	0.00	1645	0.00	1730	0.4
	1435	1.8	1832	.8	0138	.3	1050	.2	1710	.3	1750	.9
	1440	10	1842	4.1	0153	1.6	1105	.6	1730	.9	1812	1.1
	1445	24	1852	9.3	0208	3.7	1120	1.4	1750	1.8	1830	2.2
	1450	35	1902	20	0223	7.0	1135	2.3	1810	2.8	1850	2.8
	1455	60	1912	24	0238	10	1150	3.6	1830	4.7	1910	3.2
	1500	66	1922	34	0253	15	1205	5.2	1850	6.2	1934	4.0
	1505	67	1932	37	0308	20	1220	6.8	1910	5.3	1950	4.1
	1510	69	1942	39	0323	22	1235	8.5	1930	6.1	2010	3.7
	1515	65	1952	29	0338	23	1250	10	1950	5.6	2030	4.1
	1520	61	2002	27	0353	22	1305	11	2010	4.0	2050	4.0
	1525	54	2012	23	0408	20	1320	14	2030	2.5	2110	3.8
	1535	41	2022	20	0425	15	1322	15	2050	3.5	2134	3.3
	1544	30	2032	16	0438	14	1350	15	2110	4.0	2230	3.5
	1550	19	2042	12	0453	11	1405	16	2130	3.8	2250	3.3
	1602	12	2102	6.2	0508	8.0	1425	16	2150	3.8	2310	3.4
	1610	7.7	2122	3.3	0538	5.4	1440	12	2210	3.9	2330	3.4
	1620	4.7	2123	3.0	0608	3.4			2230	4.0	2350	3.5
	1630	2.6			0638	2.9			2250	3.9	0010	3.2
	1640	2.6			0713	1.4			2330	3.1	0030	3.0
					0741	1.0			2350	3.1	0050	2.9
					0810	.7			0010	2.9	0110	2.8
									0030	3.0	0130	2.6
									0050	3.0	0150	2.6
									0110	3.0	0230	2.2
									0130	2.8	0250	2.0
									0150	2.8	0310	2.1
									0210	2.7	0350	2.2
									0250	2.9	0430	2.1
									0312	2.9	0510	1.9
									0350	2.7	0550	1.7
									0430	2.6	0715	1.2
									0510	1.3	0750	1.1
									0550	1.5	0850	.8
									0712	1.3	1020	.8
									0750	1.2	1050	.7
									0850	1.5	1120	.6
									0950	1.5	1150	.5
									1057	1.0	1220	.5
									1127	1.0	1250	.4
									1150	.5	1350	.4
									1220	.8	1445	.3
									1250	1.1		
									1320	.3		
									1350	.2		

TABLE 18.--*Data from dye study in lower reach of river, August 20-24, 1979*

Injection site: Truckee River at Derby Dam
Site number: 36
Date of injection: August 20, 1979
Time of injection: 0900
Dye volume (liters): 2.0

Sampling site:	At Painted Rock bridge		At old U.S. Hwy. 40 bridge at Wadsworth		At Dead Ox Wash near Nixon	
Site number:	39		44		56	
River miles below injection:	4.91		11.19		21.70	
Estimated discharge during sampling period (ft^3/s):	47		38		36	
Date(s):	Aug. 20-21, 1979		Aug. 21-22, 1979		Aug. 23-24, 1979	
Rhodamine WT dye concentrations:	Time	ug/L	Time	ug/L	Time	ug/L
	2123	0.00	1945	0.00	1030	0.00
	2200	.2	2000	.1	1145	.1
	2210	.4	2015	.1	1230	.2
	2220	.7	2025	.1	1330	.2
	2230	1.1	2030	.2	1430	.3
	2240	1.5	2050	.2	1530	.4
	2250	2.0	2100	.2	1630	.5
	2300	2.4	2115	.2	1745	.4
	2310	2.9	2130	.2	1830	.5
	2320	3.5	2145	.2	2000	.4
	2330	3.9	2200	.3	2100	.5
	2340	5.2	2215	.3	2203	.5
	2350	5.7	2230	.4	2310	.3
	2400	7.0	2245	.4	0040	.3
	0010	6.2	2300	.4	0203	.3
	0020	5.8	2330	.5	0307	.3
	0030	6.2	2400	.8	0405	.1
	0040	6.5	0030	.9	0501	.1
	0050	6.5	0100	1.1	0610	.1
	0100	6.3	0130	1.3	0718	.1
	0110	6.6	0200	1.4	0810	.1
	0120	6.5	0230	1.6		
	0130	6.4	0300	1.7		
	0140	6.2	0330	1.8		
	0150	6.0	0400	1.7		
	0200	5.8	0430	1.7		
	0210	5.3	0500	1.7		
	0230	4.9	0530	1.6		
	0250	4.5	0600	1.6		
	0310	3.8	0630	1.5		
	0330	3.3	0700	1.3		
	0350	2.8	0800	1.2		
	0400	2.4	0900	1.2		
	0430	2.1	1000	.9		
	0450	1.8	1100	.6		
	0510	1.4	1200	.5		
	0530	1.2	1300	.4		
	0610	1.0	1400	.6		
	0630	.8	1500	.5		
	0700	.6	1600	.5		
	0732	.5	1700	.4		
			1800	.3		
			1900	.3		
			2100	.2		

TABLE 19.--*Data from dye study in lower reach of river, January 16, 1980*

Injection site: Truckee River at Derby Dam
Site number: 36
Date of injection: January 16, 1980
Time of injection: 0914
Dye volume (liters): 20.0

Sampling site:	At Painted Rock bridge	At old U.S. Hwy. 40 bridge at Wadsworth	At S Bar S Ranch	At Dead Ox Wash near Nixon	At State Hwy. 447 at Nixon	Below Marble Bluff Dam
Site number:	39	44	51	56	62	65
River miles below injection:	4.91	11.19	17.06	21.70	31.66	34.93
Estimated discharge during sampling period (ft^3/s):	3,700	3,700	3,800	3,800	3,800	3,800
Date(s):	Jan. 16, 1980	Jan. 16, 1980	Jan. 16, 1980	Jan. 16, 1980	Jan. 16, 1980	Jan. 16, 1980

Rhodamine WT dye concentrations:	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L
	0915	0.00	1134	0.00	1324	0.00	1442	0.00	1725	0.00	1950	1.1
	1020	.03	1150	.06	1330	.1	1457	.09	1750	.01	2001	1.4
	1022	.5	1152	.2	1335	.3	1500	.2	1800	.08	2010	1.9
	1024	2.6	1154	.2	1340	.8	1505	.4	1810	.3	2023	2.7
	1026	4.9	1156	.4	1345	1.6	1510	.7	1820	1.0	2040	2.6
	1029	11	1158	.7	1350	2.7	1515	1.3	1830	2.0	2050	2.9
	1030	13	1200	.9	1355	4.0	1520	1.9	1840	3.0	2110	2.2
	1032	16	1204	8.9	1400	5.5	1525	2.9	1850	4.2	2130	1.9
	1034	19	1206	8.9	1405	6.8	1530	3.7	1900	4.8	2145	1.2
	1036	20	1208	12	1410	7.7	1535	4.4	1910	5.0	2200	1.0
	1038	20	1210	12	1415	8.0	1540	5.0	1930	3.2	2217	.7
	1040	19	1213	13	1420	8.0	1545	5.8	1940	2.6	2230	.5
	1045	15	1215	13	1425	8.1	1550	6.0	1950	2.0	2245	.4
	1050	10	1217	13	1430	6.8	1555	6.1	2003	1.5	2300	.3
	1055	6.8	1219	13	1440	5.0	1600	5.9	2010	1.2	2315	.3
	1100	4.4	1221	12	1450	3.5	1605	5.7	2020	.9		
	1105	3.1	1223	12	1500	2.5	1610	5.1	2030	.8		
	1110	1.9	1225	12	1510	1.7	1615	4.8	2045	.6		
	1115	1.4	1227	11	1520	1.1	1620	4.4	2100	.5		
	1120	1.0	1229	10	1530	.8	1630	3.4	2115	.3		
	1125	.7	1230	9.5	1540	.6	1640	2.3	2135	.2		
	1130	.5	1236	7.7	1550	.5	1650	1.7	2200	.2		
			1241	6.5	1600	.3	1700	1.2	2237	.1		
			1246	5.8			1710	.9				
			1251	3.4			1720	.6				
			1256	2.4			1730	.5				
			1301	1.6			1740	.4				
							1750	.4				
							1800	.3				

TABLE 20.--*Data from dye study in lower reach of river, September 21-26, 1980*

Injection site: Truckee River at old U.S. Highway 40 bridge at Wadsworth
Site number: 44
Date of injection: September 21, 1980
Time of injection: 1900
Dye volume (liters): 10.0

Sampling site:	At Dead Ox Wash near Nixon		At Numana Dam near Nixon		At State Hwy. 447 at Nixon		Below Marble Bluff Dam	
Site number:	56		59		62		65	
River miles below injection:	10.51		15.48		20.47		23.74	
Estimated discharge during sampling period (ft^3/s):	76		80		71		71	
Date(s):	Sept. 22-23, 1980		Sept. 23-24, 1980		Sept. 23-24, 1980		Sept. 24-26, 1980	
Rhodamine WT dye concentrations:	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L
	1345	0.00	0620	0.00	1900	1.9	0935	1.4
	1400	.02	0640	.01	1930	3.0	1020	1.6
	1415	.03	0700	.10	2000	4.2	1105	1.7
	1430	.21	0720	.19	2030	5.3	1150	1.9
	1445	.56	0740	.38	2100	6.0	1235	2.0
	1500	1.1	0800	.76	2130	7.3	1320	2.1
	1515	2.0	0820	1.1	2200	8.0	1405	2.1
	1530	2.9	0840	1.6	2230	8.6	1500	2.0
	1545	4.5	0900	2.1	2300	8.6	1545	2.0
	1600	6.2	0920	3.0	2330	8.6	1630	2.1
	1615	8.2	0940	4.0	2400	8.6	1715	2.2
	1630	10	1000	5.4	0030	8.3	1800	2.1
	1645	12	1020	6.6	0100	8.0	1845	2.0
	1700	14	1040	7.8	0130	7.3	1930	1.9
	1715	16	1100	8.8	0200	6.7	2015	1.7
	1730	17	1120	9.7	0230	6.4	2100	1.6
	1745	18	1140	11	0300	5.9	2230	1.3
	1800	19	1200	11	0330	5.3	2400	1.2
	1815	18	1220	11	0400	4.7	0130	1.1
	1830	18	1240	12	0430	4.1	0300	1.1
	1845	18	1300	12	0500	3.6	0430	1.1
	1900	18	1320	12	0530	3.1	0600	1.1
	1915	16	1340	11	0600	2.7	0730	.98
	1930	16	1400	11	0705	1.9	1115	.98
	2000	14	1420	11	0805	1.5	1245	.86
	2030	12	1440	10	0905	1.1	1415	.73
	2100	11	1500	10	1005	.85	1545	.54
	2130	9.8	1520	9.4	1105	.55	1715	.37
	2200	8.8	1540	9.1			1845	.37
	2230	8.2	1600	8.8			2015	.34
	2300	7.5	1620	8.1			2145	.28
	2330	6.3	1640	7.8			2315	.22
	2400	5.8	1700	7.5			0045	.15
	0030	5.0	1720	6.9			0215	.15
	0100	4.2	1740	6.2			0345	.12
	0130	3.6	1800	6.3			0515	.15
	0200	2.9	1820	5.7			0645	.15
	0230	2.4	1900	4.6			0815	.12
	0300	1.9	1940	3.8				
	0330	1.7	2020	3.0				
	0400	1.4	2100	2.5				
	0430	1.1	2140	1.9				
			2220	1.6				
			2300	1.4				
			2340	1.1				
			0020	.92				

TABLE 21.--*Data from dye study in Truckee Canal, May 29-30, 1979*

Injection site: Reno-Sparks Sewage Treatment Plant outfall near Reno
Site number: 21
Date of injection: May 29, 1979
Time of injection: 1158
Dye volume (liters): 12.0

Sampling site:	At U.S. Hwy. 95A near Fernley
Site number:	69
River miles below injection:	31.97
Estimated discharge during sampling period (ft^3/s):	630
Dates(s):	May 30, 1979

Rhodamine WT dye concentrations:	Time	ug/L
	0750	0.00
	0800	.2
	0810	.5
	0820	1.2
	0830	2.2
	0840	3.1
	0850	4.3
	0900	5.6
	0910	7.0
	0920	7.7
	0930	8.7
	0940	9.5
	0950	10
	1000	10
	1010	9.5
	1020	7.5
	1030	6.6
	1050	4.9
	1113	3.5
	1130	2.4
	1150	1.6
	1213	.8
	1233	.4
	1250	.3

TABLE 22.--*Data from dye study in Truckee Canal, September 4-6, 1979*

Injection site: Truckee Canal at Derby Dam
Site number: 66
Date of injection: September 4, 1979
Time of injection: 1119
Dye volume (liters): 7.5

Sampling site:	At U.S. Hwy. 50 above Lahontan Reservoir
Site number:	74
River miles below injection:	30.98
Estimated discharge during sampling period (ft^3/s):	140
Date(s):	Sept. 6, 1979

Rhodamine WT dye concentrations:	Time	ug/L
	1130	0.00
	1200	.2
	1230	.6
	1300	4.6
	1330	12
	1400	18
	1430	19
	1500	14
	1530	7.9
	1600	3.9
	1630	1.5
	1700	.6
	1730	.1

TABLE 23.--*Data from dye study in Truckee Canal, May 12-15, 1980*

Injection site: Truckee Canal at Derby Dam
Site number: 66
Date of injection: May 12, 1980
Time of injection: 2315
Dye volume (liters): 8.0

Sampling site:	At U.S. Hwy. 95A near Fernley	At Anderson Check Dam near Fernley	At Allendale Check Dam near Fernley	At Mason Check Dam near Hazen	At Bango Check Dam near Hazen	At U.S. Hwy. 50 above Lahontan Reservoir
Site number:	69	70	71	72	73	74
River miles below injection:	13.19	16.35	20.35	25.03	28.17	30.98
Estimated discharge during sampling period (ft^3/s):	170	140	120	120	110	110
Date(s):	May 13, 1980	May 13-14, 1980	May 14, 1980	May 14-15, 1980	May 14-15, 1980	May 15, 1980

Rhodamine WT dye concentrations:	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L	Time	ug/L
	1400	0.00	2200	0.00	0701	0.00	1532	0.00	2155	0.00	0043	0.00
	1440	.03	2230	.03	0716	.03	1547	.03	2210	.03	0058	.03
	1450	.1	2240	.03	0731	.2	1602	.06	2225	.03	0113	.06
	1500	.3	2255	.2	0746	.6	1617	.1	2240	.06	0128	.1
	1510	1.0	2310	1.1	0801	1.9	1632	.5	2255	.1	0143	.2
	1520	2.6	2325	2.9	0816	4.0	1647	1.0	2310	.2	0258	.5
	1530	5.1	2340	6.5	0831	6.8	1702	1.8	2325	.5	0313	.8
	1540	8.2	2355	10	0846	10	1717	3.1	2340	.9	0328	1.3
	1550	12	0010	14	0901	13	1732	5.0	2355	1.5	0343	2.0
	1600	15	0025	14	0916	13	1747	6.6	0010	2.1	0358	2.8
	1610	17	0040	14	0931	11	1802	8.0	0025	3.1	0413	3.8
	1620	17	0055	12	0946	9.1	1817	9.2	0040	4.3	0428	5.0
	1630	16	0130	5.6	1001	6.8	1832	11	0055	5.6	0443	6.0
	1640	14	0200	2.4	1033	5.3	1847	12	0110	6.6	0458	7.0
	1700	4.5	0230	.9	1045	3.6	1902	12	0125	7.3	0513	7.9
	1720	4.3	0300	.3	1100	2.4	1917	11	0210	9.3	0528	8.8
	1740	1.6			1115	1.6	1932	9.9	0225	9.9	0543	8.8
	1800	.7			1145	.9	1945	8.9	0240	9.9	0558	9.2
	1820	.4			1200	.6	2000	8.0	0255	9.3	0613	9.2
	1840	.2			1215	.4	2015	6.6	0310	8.6	0628	8.5
	1900	.1			1230	.3	2030	5.8	0325	7.6	0643	8.5
							2045	4.6	0340	6.9	0658	7.6
							2100	3.9	0355	6.1	0713	7.0
							2115	3.1	0410	5.0	0728	6.1
							2130	2.4	0440	3.4	0743	5.0
							2145	2.0	0455	2.9	0800	4.0
							2200	1.5	0510	2.1	0815	3.4
							2215	1.2	0525	1.7	0830	2.8
							2230	.9	0540	1.4	0845	2.3
							2245	.7	0555	1.0	0900	2.0
							2300	.5	0610	.8	0915	1.6
							2315	.4	0625	.7	0930	1.3
							2330	.4	0640	.5	0945	1.1
							2345	.4	0655	.4	1000	.9
							2400	.3	0710	.3	1015	.8
							0015	.3	0725	.3	1030	.6
							0045	.2	0740	.3	1045	.5
							0100	.2	0755	.2	1100	.4
							0115	.2	0810	.2	1115	.4
									0825	.2	1130	.3
									0840	.1	1145	.2
									0855	.1	1200	.2
											1215	.2
											1230	.2
											1245	.2
											1300	.2
											1315	.1
											1330	.1
											1345	.1
											1400	.1
											1415	.1
											1430	.09

TABLE 24.--*Data from reaeration study in middle reach of river, October 18, 1979*

Injection site: Truckee River at Lockwood
Site number: 23
Date of injection: October 18, 1979
Discharge (ft^3/s): 380
Water temperature (°C): 11.5
Begin injection time: 0828 End injection time: 1026
Dye volume (liters): 20.0 Dye concentration (g/L): 80

Sampling site:	At upper bridge near Mustang	At Patrick	Below Tracy
Site number:	24	27	33
River miles below injection:	1.80	5.13	9.43
Estimated discharge during sampling period (ft^3/s):	380	360	360
Water temperature (°C):	12.5	12.5	13.0
Date(s):	Oct. 18, 1979	Oct. 18, 1979	Oct. 18, 1979

Rhodamine WT dye and ethylene concentrations:

Time	Dye (ug/L)[a]	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)
0940	2.4	--	1230	0.00	--	1730	0.00	--
0945	6.3	--	1240	.6	--	1745	.1	--
0950	11	--	1250	2.9	--	1800	1.0	--
0955	14	--	1300	4.9	--	1815	2.0	--
1000	16	--	1310	7.9	--	1824	3.8	--
1005	20	--	1320	10	--	1830	4.7	--
1010	21	--	1330	13	4.9	1840	6.3	--
1015	23	20	1340	15	5.8	1851	8.3	--
1020	22	--	1350	16	6.1	1900	9.5	--
1025	24	21	1355	18	--	1910	12	--
1030	24	22	1400	19	7.6	1920	13	--
1035	24	22	1405	19	7.8	1921	--	1.2
1040	26	21	1410	20	7.8	1926	--	1.4
1045	26	--	1415	21	7.6	1930	14	1.5
1050	28	21	1420	--	7.8	1935	--	1.5
1055	28	22	1425	22	7.6	1940	15	1.5
1100	--	22	1430	--	7.1	1945	--	1.4
1105	--	22	1435	24	7.1	1950	16	1.5
1110	29	21	1440	--	7.1	2000	16	1.3
1120	30	21	1445	20	6.2	2005	--	1.3
1130	30	20	1450	--	5.9	2010	16	1.3
1140	29	--	1455	18	5.3	2015	--	1.2
1150	17	--	1505	15	--	2020	16	--
1200	10	--	1515	12	--	2030	15	--
			1525	7.4	--	2040	14	--
			1555	4.0	--	2100	10	--
			1615	2.0	--	2130	7.2	--
						2200	4.5	--
						2230	2.5	--
						2300	1.0	--
						2330	.6	--
						2400	.1	--

[a] Relative rather than absolute dye concentrations due to problems in equipment calibration.

TABLE 25.--*Data from reaeration study in middle reach of river, July 31-August 1, 1980*

Injection site: Truckee River at Lockwood
Site number: 23
Date of injection: July 31, 1980
Discharge (ft^3/s): 320
Water temperature (°C): 22.0
Begin injection time: 0901 End injection time: 1101
Dye volume (liters): 14.0 Dye concentration (g/L): 160

Sampling site:	At upper bridge near Mustang	At McCarran diversion dam	Below McCarran diversion dam	At Patrick
Site number:	24	25	26	27
River miles below injection:	1.80	3.65	3.70	5.13
Estimated discharge during sampling period (ft^3/s):	320	340	330	330
Water temperature (°C):	e22.5	e24.0	e24.0	e24.5
Date(s):	July 31, 1980	July 31, 1980	July 31, 1980	July 31, 1980

Rhodamine WT dye and ethylene concentrations

Time	Dye (ug/L)	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)
1010	0.00	--	1115	0.00	--	1115	0.00	--	1303	0.00	--
1020	3.9	--	1200	.03	--	1205	.8	--	1315	.7	--
1025	16	--	1205	.4	--	1210	2.0	--	1320	1.4	--
1030	23	--	1210	1.0	--	1215	3.7	--	1325	2.7	--
1035	28	--	1215	2.7	--	1220	6.4	--	1330	4.5	--
1040	33	16	1220	5.1	--	1225	9.9	--	1335	5.5	--
1045	34	18	1225	8.3	--	1230	13	--	1340	9.0	--
1050	36	19	1230	11	--	1235	16	--	1345	10	--
1055	37	19	1235	14	--	1240	19	--	1350	14	--
1100	37	21	1240	18	--	1245	21	--	1355	17	--
1105	36	20	1245	22	--	1250	23	--	1400	18	--
1110	36	18	1250	25	--	1255	25	--	1405	20	--
1115	35	20	1255	25	--	1300	27	12	1410	21	--
1120	34	21	1300	27	12	1305	28	11	1415	24	--
1125	34	21	1305	29	13	1310	28	12	1420	26	2.9
1130	35	20	1310	29	13	1315	29	12	1425	26	5.5
1135	34	20	1315	29	13	1320	30	13	1430	27	5.6
1140	35	20	1320	30	14	1325	30	13	1435	28	5.7
1145	34	20	1325	32	14	1330	30	13	1440	29	5.7
1150	35	20	1330	32	14	1335	30	13	1445	30	5.8
1155	--	20	1335	32	14	1340	30	13	1450	31	6.1
1200	33	20	1340	32	14	1345	31	14	1455	31	6.1
1205	--	19	1345	32	14	1350	31	--	1500	31	6.8
1210	34	19	1350	30	14	1355	30	12	1505	30	6.6
1215	--	19	1355	32	13	1400	31	12	1510	31	6.3
1220	27	--	1400	32	14	1405	31	13	1515	31	6.0
1223	--	13	1405	32	14	1410	30	13	1520	30	6.1
1230	14	--	1410	30	13	1415	28	11	1525	29	5.7
1240	6.9	--	1415	30	14	1420	25	11	1530	27	5.5
1250	3.1	--	1420	28	12	1425	22	--	1535	26	4.9
1300	2.1	--	1430	20	--	1430	19	--	1540	23	--
1310	1.1	--	1440	16	--	1440	14	--	1545	21	--
			1450	12	--	1450	9.8	--	1550	20	--
			1500	7.4	--	1500	6.9	--	1600	15	--
			1510	5.1	--	1510	4.8	--	1610	12	--
			1520	3.7	--	1520	3.3	--	1620	8.8	--
			1530	2.6	--	1530	2.5	--	1630	6.5	--
			1540	1.8	--	1540	1.7	--	1640	4.8	--
			1550	1.4	--	1550	1.2	--	1650	3.5	--
									1700	2.7	--
									1710	2.1	--
									1720	1.5	--

TABLE 25.--*Data from reaeration study in middle reach of river, July 31-August 1, 1980*—Continued

Injection site: Truckee River at Lockwood
Site number: 23
Date of injection: July 31, 1980
Discharge (ft^3/s): 320
Water temperature (°C): 22.0
Begin injection time: 0901 End injection time: 1101
Dye volume (liters): 14.0 Dye concentration (g/L): 160

Samplings site:	At Hill diversion dam	Below Hill diversion dam	At Clark	At Derby Dam
Site number:	29	30	34	36
River miles below injection:	8.03	8.05	11.45	15.17
Estimated discharge during sampling period (ft^3/s):	330	320	330	330
Water temperature (°C):	e24.5	e24.5	23.5	22.5
Date(s):	July 31, 1980	July 31, 1980	July 31-Aug. 1, 1980	Aug. 1, 1980

Rhodamine WT dye and ethylene concentrations:	Time	Dye (ug/L)	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)
	1440	0.00	—	1605	0.00	—	1935	0.00	—	2400	0.00	—
	1605	.03	—	1610	.06	—	1940	.03	—	0010	.1	—
	1610	.06	—	1615	.2	—	1950	.1	—	0020	.2	—
	1615	.2	—	1620	.4	—	2000	.3	—	0030	.4	—
	1620	.5	—	1625	.6	—	2010	.8	—	0040	.9	—
	1625	.5	—	1630	.9	—	2020	1.4	—	0050	1.2	—
	1630	1.0	—	1635	1.5	—	2030	2.4	—	0100	1.7	—
	1635	1.6	—	1640	2.0	—	2040	3.7	—	0110	2.3	—
	1640	2.4	—	1645	4.1	—	2050	5.1	—	0120	3.3	—
	1645	3.0	—	1650	4.7	—	2100	7.0	—	0130	4.2	—
	1650	3.7	—	1700	6.2	—	2110	8.8	—	0140	5.1	—
	1655	5.4	—	1705	7.4	—	2120	10	—	0150	6.5	—
	1700	7.5	—	1710	8.4	—	2130	12	—	0200	8.2	—
	1705	7.7	—	1715	11	—	2140	14	—	0210	9.1	—
	1710	9.2	—	1720	12	—	2145	—	0.72	0220	10	—
	1715	12	—	1725	13	—	2150	16	.75	0230	12	0.29
	1720	8.9	—	1730	15	—	2155	—	.78	0235	—	.28
	1725	12	—	1735	16	—	2200	17	.77	0240	13	.31
	1730	16	—	1740	16	—	2205	—	.82	0245	—	.30
	1735	16	—	1745	18	2.3	2210	18	.86	0250	14	.30
	1740	17	2.3	1750	20	2.5	2215	—	.84	0255	—	.32
	1745	18	2.4	1755	20	2.2	2220	18	.83	0300	14	.33
	1750	20	2.7	1800	21	2.3	2225	—	.87	0310	15	.32
	1755	21	2.6	1805	21	2.6	2230	18	.82	0315	—	.33
	1800	23	2.8	1810	22	2.8	2235	—	.80	0320	15	.31
	1805	23	2.9	1815	23	2.8	2240	18	.71	0325	—	.34
	1810	23	2.8	1820	23	2.6	2245	—	.79	0330	15	.33
	1815	23	3.0	1825	23	2.5	2250	18	.76	0335	—	.31
	1820	23	3.0	1830	23	2.4	2255	—	.76	0340	15	.28
	1825	23	2.9	1835	23	2.6	2300	17	.75	0350	14	.28
	1830	22	3.0	1840	22	2.5	2310	—	.66	0400	13	.27
	1835	22	3.1	1845	22	2.4	2320	17	.58	0410	12	—
	1840	22	2.9	1850	21	2.3	2340	13	—	0430	11	—
	1845	22	2.9	1855	—	2.1	2400	10	—	0450	10	—
	1850	22	2.5	1900	—	2.0	0020	8.4	—	0510	7.9	—
	1855	—	2.5	1905	18	1.9	0030	6.6	—	0530	6.9	—
	1900	—	2.5	1920	15	—	0050	5.4	—	0550	5.0	—
	1905	21	2.2	1935	12	—	0110	4.0	—	0610	3.8	—
	1920	15	—	1950	9.4	—	0130	2.9	—	0630	4.3	—
	1935	12	—	2005	7.1	—	0150	2.2	—	0650	3.4	—
	1950	9.1	—	2020	5.5	—	0210	1.6	—	0710	2.2	—
	2005	8.2	—	2035	4.2	—	0230	1.2	—	0730	1.3	—
	2020	4.4	—	2050	3.0	—	0250	.9	—	0750	2.3	—
	2035	3.4	—	2105	2.4	—	0310	.7	—	0810	1.2	—
	2050	2.7	—	2120	1.7	—	0330	.5	—	0830	1.1	—
	2105	2.2	—	2135	1.3	—	0350	.4	—	0850	.8	—
	2120	1.9	—				0410	.4	—	0910	.7	—
	2135	1.2	—				0430	.4	—	0930	.6	—
							0450	.3	—	0950	.5	—
										1010	.5	—
										1030	.4	—

e Estimated.

TABLE 26.--*Data from reaeration study in middle reach of river, August 28, 1980*

Injection site: Truckee River below Hill diversion dam
Site number: 30
Date of injection: August 28, 1980
Discharge (ft^3/s): 360
Water temperature (°C): e20.0
Begin injection time: 1318 End injection time: 1348
Dye volume (liters): 3.5 Dye concentration (g/L): 160

Sampling site:	At Tracy diversion dam	Below Tracy diversion dam
Site number:	31	32
River miles below injection:	1.24	1.27
Estimated discharge during sampling period (ft^3/s):	360	360
Water temperature (°C):	e20.5	e20.5
Date(s):	Aug. 28, 1980	Aug. 28, 1980

Rhodamine WT dye and ethylene concentrations:

Time	Dye (ug/L)	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)
1133	0.00	--	1420	0.48	--
1420	.92	--	1423	2.0	--
1423	2.7	--	1425	3.6	0.24
1425	3.4	0.27	1428	6.3	--
1428	3.4	--	1430	7.6	.67
1430	7.9	.76	1433	11	--
1433	8.8	--	1435	12	1.5
1435	12.6	2.0	1438	14	--
1438	14	--	1440	15	2.5
1440	14	2.3	1443	17	--
1443	14	--	1445	17	3.0
1445	19	4.0	1448	19	--
1448	17	--	1450	19	3.7
1450	20	--	1453	18	--
1453	19	--	1455	18	3.9
1455	17	4.1	1458	16	--
1458	14	--	1500	15	3.4
1500	14	3.5	1503	13	--
1503	13	--	1505	11	--
1505	11	--	1508	9.1	--
1508	11	--	1510	8.5	--
1510	8.2	--	1513	6.3	--
1513	6.9	--	1515	6.3	--
1515	7.6	--	1520	4.7	--
1520	4.5	--	1525	3.7	--
1525	3.2	--	1530	2.5	--
1530	1.6	--	1535	2.0	--
1535	1.8	--	1540	1.4	--
1540	1.5	--	1545	1.1	--
1545	1.1	--	1550	.79	--
1550	.47	--	1555	.48	--
1555	.54	--			

e Estimated.

TABLE 27.--*Data from reaeration study in lower reach of river, October 10-12, 1979*

Injection site: Truckee River at old U.S. Highway 40 bridge at Wadsworth
Site number: 44
Date of injection: October 10, 1979
Discharge (ft^3/s): 47
Water temperature (°C): 14.5
Begin injection time: 1011 End injection time: 1211
Dye volume (liters): 5.5 Dye concentration (g/L): 107

Sampling site:	Below Fellnagle diversion dam at Wadsworth	At river mile 15.8	At Dead Ox Wash near Nixon
Site number:	47	53	56
River miles below injection:	1.14	7.85	10.49
Estimated discharge during sampling period (ft^3/s):	45	59	59
Water temperature (°C):	16.0	15.0	16.0
Date(s):	Oct. 10-11, 1979	Oct. 11, 1979	Oct. 11-12, 1979

Rhodamine WT dye and ethylene concentrations:

Time	Dye (ug/L)	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)
1505	0.00	--	0645	0.00	--	1140	0.00	--
1511	.7	--	0705	.2	--	1150	.1	--
1520	1.0	--	0710	.2	--	1200	.2	--
1525	2.0	--	0715	.4	--	1202	.3	--
1530	3.0	--	0720	.4	--	1205	.3	--
1535	3.9	--	0730	.9	--	1210	.3	--
1540	4.2	--	0750	1.8	--	1215	.6	--
1545	5.1	--	0800	2.3	--	1220	.6	--
1550	6.1	--	0810	2.4	--	1230	.8	--
1555	6.7	--	0820	2.9	--	1245	1.3	--
1600	7.9	--	0830	3.5	--	1300	1.7	--
1615	13	--	0840	3.9	--	1315	2.3	--
1620	15	--	0850	4.6	--	1330	2.9	--
1625	15	--	0900	5.0	--	1345	3.4	--
1630	17	--	0910	5.7	0.34	1400	4.0	--
1636	16	--	0920	6.0	.36	1415	4.5	0.12
1640	18	--	0930	6.4	--	1430	5.0	.11
1645	19	--	0940	6.7	.38	1445	5.5	.12
1656	20	--	0950	7.1	--	1500	6.1	.13
1700	21	--	0952	--	.39	1515	6.4	.14
1706	23	--	1000	7.2	.43	1530	6.5	.13
1710	24	--	1010	7.6	.43	1545	6.8	.13
1715	26	51	1020	7.6	.42	1600	6.9	.12
1722	26	--	1030	7.6	.42	1615	6.9	.13
1726	27	--	1040	7.6	.42	1630	6.8	.11
1730	--	59	1050	7.6	.40	1645	6.7	.10
1735	28	--	1100	7.6	.39	1705	6.5	.10
1740	28	--	1130	7.4	.35	1715	6.4	.10
1745	--	62	1200	6.2	--	1730	6.1	.09
1750	29	--	1215	6.2	--	1750	5.8	.08
1755	--	66	1230	6.0	--	1803	5.4	.07
1800	29	--	1245	5.7	--	1815	5.2	--
1805	29	66	1300	5.1	--	1830	4.9	--
1810	30	65	1315	4.7	--	1900	4.4	--
1815	--	61	1330	4.2	--	1930	4.0	--
1820	30	61	1345	4.0	--	2000	3.4	--
1825	30	64	1400	3.7	--	2030	3.1	--
1830	30	61	1415	3.5	--	2100	2.8	--
1835	30	64	1430	3.3	--	2130	2.4	--
1840	30	--	1445	3.1	--	2200	2.2	--
1845	27	59	1500	2.8	--	2230	2.1	--
1855	22	--	1515	2.6	--	2300	2.0	--
1905	20	--	1530	2.4	--	2330	1.9	--
1915	19	--	1545	2.2	--	2400	1.8	--
1925	17	--	1600	2.1	--	0030	1.7	--
1935	16	--	1615	1.9	--	0100	1.4	--
1950	15	--	1630	2.0	--	0130	1.4	--
2005	15	--	1645	2.0	--	0200	1.3	--
2020	13	--	1700	1.8	--	0230	1.2	--
2035	10	--				0300	1.1	--
2050	8.2	--				0530	.4	--
2105	6.2	--				0600	.4	--
2120	4.9	--				0630	.3	--
2135	4.3	--				0730	.1	--
2150	3.0	--						
2205	2.4	--						
2220	1.7	--						
2235	1.7	--						
2250	1.1	--						
2305	1.1	--						
2320	1.1	--						
2335	1.1	--						
0035	.4	--						

TABLE 28.--*Data from reaeration study in lower reach of river, July 28-29, 1980*

Injection site: Truckee River at old U.S. Highway 40 bridge at Wadsworth
Site number: 44
Date of injection: July 28, 1980
Discharge (ft^3/s): 64
Water temperature (°C): 23.5
Begin injection time: 0846 End injection time: 1046
Dye volume (liters): 5.0 Dye concentration (g/L): 80

Sampling site:	At Fellnagle diversion dam at Wadsworth	Below Fellnagle diversion dam at Wadsworth	At S Bar S diversion dam	At Dead Ox Wash near Nixon
Site number:	46	47	49	56
River miles below injection:	1.12	1.14	3.83	10.49
Estimated discharge during sampling period (ft^3/s):	72	60	72	90
Water temperature (°C):	e24.5	e24.5	e23.5	e21.5
Date(s):	July 28, 1980	July 28, 1980	July 28-29, 1980	July 29, 1980

Rhodamine WT dye and ethylene concentrations:

Time	Dye (ug/L)	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)	Time	Dye (ug/L)	Ethylene (ug/L)
1227	0.00	--	1227	0.00	--	1655	0.00	--	0610	0.00	--
1230	.4	--	1240	1.1	--	1705	.08	--	0620	2.1	--
1240	1.1	--	1245	1.7	--	1715	.2	--	0630	2.3	--
1245	2.1	--	1250	2.8	--	1725	.4	--	0640	2.7	--
1250	2.9	--	1255	4.6	--	1735	.8	--	0650	2.9	--
1255	4.1	--	1300	6.0	--	1745	1.2	--	0700	3.3	--
1300	5.4	--	1305	7.5	--	1755	1.9	--	0710	3.6	--
1305	6.7	--	1310	9.0	--	1805	2.5	--	0715	--	0.26
1310	7.4	--	1315	11	95	1815	3.5	--	0720	3.9	.26
1315	10	110	1320	13	--	1825	4.3	--	0725	--	.26
1320	11	120	1325	14	110	1835	5.2	--	0730	4.1	.28
1325	13	--	1330	15	110	1845	6.2	--	0735	--	.30
1330	14	120	1335	16	110	1850	--	14	0740	4.4	.28
1335	14	130	1340	16	120	1855	7.1	14	0745	--	.29
1340	15	140	1345	16	120	1900	--	16	0750	4.6	.28
1345	15	140	1350	17	110	1905	8.2	18	0755	--	.29
1350	17	140	1355	16	110	1915	8.9	--	0800	4.7	.29
1355	17	140	1400	18	110	1925	9.1	--	0805	--	.29
1400	18	130	1405	18	110	1935	9.6	19	0810	4.9	.28
1405	18	130	1410	18	110	1940	--	19	0815	--	.28
1410	18	--	1415	19	110	1945	10	19	0820	5.0	.27
1415	18	140	1420	20	110	1950	--	19	0825	--	.27
1420	20	140	1425	20	110	1955	10	19	0830	5.0	.27
1425	20	120	1430	20	110	2000	--	19	0835	--	.25
1430	18	120	1435	19	100	2005	10	18	0840	4.9	.25
1435	18	120	1440	19	97	2010	--	18	0845	--	.33
1440	17	100	1445	18	95	2015	10	18	0850	4.9	.24
1445	16	100	1450	16	89	2020	--	17	0900	4.8	.23
1450	14	95	1455	15	81	2025	9.9	16	0910	4.6	--
1455	12	86	1500	15	89	2030	--	17	0925	4.3	--
1500	12	88	1510	13	--	2035	9.2	16	0940	4.1	--
1510	12	--	1520	13	--	2040	--	15	0955	3.7	--
1520	12	--	1530	9.9	--	2045	8.7	14	1010	3.5	--
1530	10	--	1540	7.3	--	2050	--	14	1025	3.1	--
1540	7.4	--	1550	6.2	--	2055	8.1	14	1040	2.7	--
1550	6.6	--	1600	4.5	--	2118	7.0	--	1055	2.6	--
1600	5.6	--	1610	4.8	--	2135	5.8	--	1110	2.2	--
1610	5.2	--	1620	3.3	--	2155	4.7	--	1115	2.3	--
1620	3.6	--	1630	2.4	--	2215	3.6	--	1125	2.2	--
1630	2.4	--	1640	1.8	--	2235	.7	--	1145	1.9	--
1640	1.9	--				2255	.6	--	1205	1.6	--
						2315	.4	--	1225	1.4	--
						2335	.4	--	1245	1.2	--
						2355	.3	--	1305	1.0	--
						0015	.3	--	1325	.9	--
						0035	.2	--	1345	.7	--
						0055	.2	--	1405	.6	--
									1425	.6	--
									1445	.6	--
									1505	.5	--
									1525	.5	--
									1545	.4	--
									1605	.4	--
									1625	.4	--
									1645	.3	--

e Estimated.

TABLE 29.--*Summary of traveltime data from dye studies in upper reach of river, 1979-80*

Site No. (table 1)	Site	Distance below injection point (miles)	Date (mo/day/yr)	Stream discharge (ft^3/s)	Traveltime of dye cloud, in hours since injection				Mean velocity between sites (mi/hr)	Duration of dye cloud at site (hours)	Peak dye concentration (ug/L)	Average dye concentration (ug/L)	Recovered mass of dye (kg)	Dye recovery (percent)
					Lead edge	Peak	Centroid	Trail edge						
4	At State Highway 267 at Truckee	0.0	05/31/79	--	--	--	0.0	--	--	0.0	--	--	[a]1.63	[a]100
6	At old U.S. Highway 40 bridge below Truckee	4.69	05/31/79	440	2.3	2.9	3.0	4.0	1.6	1.7	61	22	1.59	98
10	At Boca bridge	9.62	05/31/79	520	4.9	5.8	6.0	8.5	1.6	3.6	33	11	1.45	89
12	Below Farad	19.77	05/31/79	680	10.3	11.5	11.9	14.8	1.7	4.5	11	3.7	1.34	82
15	At Mayberry Drive	35.16	06/01/79	510	18.3	20.8	21.4	25.4	1.6	7.1	4.5	1.6	.83	51
22	At Vista	48.63	06/01/79	450	27.8	31.2	32.3	39.1	1.2	11.4	2.5	.8	.50	31
4	At State Highway 267 at Truckee	0.0	05/21/80	640	--	--	0.0	--	--	0.0	--	--	[a]3.50	[a]100
6	At old U.S. Highway 40 bridge below Truckee	4.69	05/21/80	740	1.7	2.1	2.1	3.1	2.2	1.4	59	20	--	(b)
10	At Boca bridge	9.62	05/21/80	1700	3.4	4.0	4.1	6.0	2.5	2.6	35	12	--	(c)
12	Below Farad	19.58	05/21/80	2300	6.2	7.1	7.2	9.1	3.2	2.9	14	4.6	2.72	78
15	At Mayberry Drive	35.16	05/21/80	2300	10.3	11.9	12.1	14.2	3.2	3.9	7.6	2.7	2.34	67
22	At Vista	48.63	05/21-22/80	2400	15.3	16.6	16.9	20.6	2.8	5.3	5.5	1.5	2.06	59
4	At State Highway 267 at Truckee	0.0	10/14/80	32	--	--	0.0	--	--	0.0	--	--	[a]2.04	[a]100
6	At old U.S. Highway 40 bridge below Truckee	4.69	10/14/80	40	7.2	9.2	9.7	14.3	0.48	7.1	101	35	--	(d)
10	At Boca bridge	9.62	10/14-15/80	310	14.5	17.1	17.5	22.0	.63	7.5	25	8.3	--	(c)
12	Below Farad	19.58	10/15/80	380	22.1	24.7	25.7	33.1	1.2	11.0	9.6	3.3	1.22	60
15	At Mayberry Drive	35.16	10/15-16/80	240	32.5	36.4	38.3	48.3	1.2	15.8	4.4	1.4	.59	29
16	Near Sparks	44.74	10/16/80	240	42.1	46.8	48.9	60.6	.90	18.7	3.4	1.1	.55	27
22	At Vista	48.63	10/16/80	420	47.3	51.3	53.7	69.0	.81	21.7	1.7	.5	.49	24

[a] Injected dye mass.
[b] Large inflow from Martis Creek probably caused poor mixing at this site. Accurate calculation of percent recovery not possible.
[c] Large inflow from Little Truckee River caused poor mixing at this site. Accurate calculation of percent recovery not possible.
[d] Fluorometer quenching occurred because of high dye concentrations. Estimates of dye concentrations probably too low. Accurate calculation of percent recovery not possible.

TABLE 30.--*Summary of traveltime data from dye studies in middle reach of river, 1979-80*

Site No. (table 1)	Site	Distance below injection point (miles)	Date (mo/day/yr)	Stream discharge (ft^3/s)	Traveltime of dye cloud, in hours since injection				Mean velocity between sites (mi/hr)	Duration of dye cloud at site (hours)	Peak dye concentration (ug/L)	Average dye concentration (ug/L)	Recovered mass of dye (kg)	Dye recovery (percent)
					Lead edge	Peak	Centroid	Trail edge						
21	Reno-Sparks Sewage Treatment Plant outfall, near Reno	0.0	05/29/79	[a]81	--	--	0.0	--	--	0.0	--	--	[b]1.95	[b]100
22	At Vista	1.43	05/29/79	800	1.1	1.3	1.5	2.3	0.95	1.2	48	17	1.79	92
23	At Lockwood	3.61	05/29/79	780	2.3	2.8	3.1	4.7	1.4	2.4	29	9.7	1.90	98
27	At Patrick	8.74	05/29/79	770	4.9	5.9	6.1	8.2	1.7	3.3	21	6.5	1.68	86
33	Below Tracy	13.04	05/29/79	770	7.8	8.9	9.2	11.5	1.4	3.7	14	4.7	1.59	81
36	At Derby Dam	18.78	05/30/79	760	12.3	13.6	13.9	16.1	1.2	3.8	12	3.7	1.47	75
21	Reno-Sparks Sewage Treatment Plant outfall, near Reno	0.0	09/04/79	[a]78	--	--	0.0	--	--	0.0	--	--	[b]0.73	[b]100
22	At Vista	1.43	09/04/79	260	1.5	1.9	2.2	4.0	0.65	2.5	32	11	.63	86
23	At Lockwood	3.61	09/04/79	240	4.3	5.3	5.7	8.2	.62	3.9	14	5.0	.57	78
27	At Patrick	8.74	09/04-05/79	230	9.8	11.8	12.2	15.9	.79	6.1	7.4	2.6	.52	71
36	At Derby Dam	18.78	09/05/79	220	24.0	27.5	28.1	32.8	.59	8.8	3.5	1.4	.39	53
21	Reno-Sparks Sewage Treatment Plant outfall, near Reno	0.0	01/18/80	[a,d]220	--	--	0.0	--	--	0.0	--	--	[b]2.60	[b]100
22	At Vista	1.43	01/18/80	2900	0.7	0.9	1.0	1.7	1.4	1.0	21	7.1	2.06	79
23	At Lockwood	3.61	01/18/80	2900	1.3	1.8	1.8	2.8	2.7	1.5	15	5.0	1.77	[c]68
27	At Patrick	8.74	01/18/80	3200	2.7	3.2	3.3	4.3	3.4	1.6	11	3.8	2.24	86
33	Below Tracy	13.04	01/18/80	3200	4.0	4.7	4.8	6.7	2.9	2.7	8.5	2.9	2.16	83
36	At Derby Dam	18.78	01/18/80	3300	6.0	6.9	7.0	8.5	2.6	2.5	6.4	2.3	2.17	83

[a] Combined discharge of Sewage Treatment Plant and Steamboat Creek.
[b] Injected dye mass.
[c] Loss of samples near peak dye concentration make percent recovery uncertain.
[d] Estimated.

TABLE 31.--*Summary of traveltime data from dye studies in lower reach of river, 1979-80*

Site No. (table 1)	Site	Distance below injection point (miles)	Date (mo/day/yr)	Stream discharge (ft^3/s)	Traveltime of dye cloud, in hours since injection				Mean velocity between sites (mi/hr)	Duration of dye cloud at site (hours)	Peak dye concentration (ug/L)	Average dye concentration (ug/L)	Recovered mass of dye (kg)	Dye recovery (percent)
					Lead edge	Peak	Centroid	Trail edge						
36	At Derby Dam	0.0	05/23/79	370	--	--	0.0	--	--	0.0	--	--	[a]2.44	[a]100
39	At Painted Rock bridge	4.91	05/23/79	370	3.0	3.5	3.7	5.4	1.3	2.4	69	25	2.34	96
44	At old U.S. Highway 40 bridge at Wadsworth	11.19	05/23/79	370	6.9	8.0	8.3	10.2	1.4	3.3	38	13	2.02	83
56	At Dead Ox Wash near Nixon	21.70	05/24/79	310	14.0	16.1	16.4	20.8	1.3	6.8	23	7.8	1.79	73
62	At State Highway 447 at Nixon	31.66	05/24/79	270	22.9	26.7	27.0	33.4	.94	10.5	17	5.6	1.76	72
63	At Marble Bluff Dam	34.88	05/24-25/79	240	29.2	31.8	37.2	50.7	.32	21.5	6.0	1.5	1.27	52
65	Below Marble Bluff Dam	34.93	05/24-25/79	240	29.4	32.7	37.3	51.2	[b].32	21.8	4.5	1.4	1.06	43
36	At Derby Dam	0.0	08/20/79	48	--	--	0.0	--	--	0.0	--	--	[a]0.33	[a]100
39	At Painted Rock bridge	4.91	08/20-21/79	47	12.5	16.0	17.0	25.0	.29	12.5	6.5	2.3	.15	47
44	At old U.S. Highway 40 bridge at Wadsworth	11.19	08/21-22/79	38	35.0	43.0	46.3	60.0	.21	25.0	1.8	.6	.08	23
56	At Dead Ox Wash near Nixon	21.70	08/23-24/79	36	73.3	82.3	83.7	96.0	.28	22.7	.5	.2	.02	7
36	At Derby Dam	0.0	01/16/80	3700	--	--	0.0	--	--	0.0	--	--	[a]3.26	[a]100
39	At Painted Rock bridge	4.91	01/16/80	3700	1.1	1.4	1.5	2.6	3.3	1.5	20	6.5	3.20	98
44	At old U.S. Highway 40 bridge at Wadsworth	11.19	01/16/80	3700	2.6	3.0	3.2	4.1	3.7	1.5	13	4.9	3.10	95
51	At S Bar S Ranch	17.06	01/16/80	3800	4.2	5.1	5.3	7.4	2.8	3.2	8.0	2.7	3.04	93
56	At Dead Ox Wash near Nixon	21.70	01/16/80	3800	5.7	6.7	6.9	9.3	2.9	3.6	6.2	2.1	2.91	89
62	At State Highway 447 at Nixon	31.66	01/16/80	3800	8.6	9.9	10.2	13.7	3.0	5.1	5.0	1.6	2.65	81
65	Below Marble Bluff Dam	34.93	01/16/80	3800	10.1	11.5	11.9	15.0	1.9	4.9	3.0	1.0	2.17	67
44	At old U.S. Highway 40 bridge at Wadsworth	0.0	09/21/80	76	--	--	0.0	--	--	0.0	--	--	[a]1.63	[a]100
56	At Dead Ox Wash near Nixon	10.51	09/22-23/80	76	19.0	23.1	25.1	35.5	0.42	16.5	19	6.1	.89	55
59	At Numana Dam near Nixon	15.48	09/23-24/80	80	35.7	41.9	44.0	56.7	.26	21.0	12	4.1	.82	50
62	At State Highway 447 at Nixon	20.47	09/23-24/80	71	47.2	52.5	54.0	67.6	.50	20.4	8.6	3.1	.55	33
65	Below Marble Bluff Dam	23.74	09/24-26/80	71	[c]61.1	66.3	76.2	109	.15	47.9	2.2	.7	.34	21

[a] Injected dye mass.
[b] Velocity computed from State Highway 447 bridge at Nixon.
[c] Estimated.

TABLE 32.--*Summary of traveltime data from dye studies in Truckee Canal, 1979-81*

Site No. (table 1)	Site	Distance below injection point (miles)	Date (mo/day/yr)	Stream discharge (ft^3/s)	Traveltime of dye cloud, in hours since injection				Mean velocity between sites (mi/hr)	Duration of dye cloud at site (hours)	Peak dye concentration (ug/L)	Average dye concentration (ug/L)	Recovered mass of dye (kg)	Dye recovery (percent)
					Lead edge	Peak	Centroid	Trail edge						
66	At Derby Dam	[a]18.78	05/30/79	700	12.3	13.6	13.9	16.1	--	3.8	12	3.7	1.47	75
69	At U.S. Highway 95A near Fernley	[a]31.97	05/30/79	630	19.9	21.9	22.1	26.1	1.6	6.2	10	3.4	1.32	68
66	At Derby Dam	0.0	09/04/79	200	--	--	0.0	--	--	0.0	--	--	[b]1.22	[b]100
74	At U.S. Highway 50 above Lahontan Reservoir	30.98	09/06/79	140	49.0	51.1	51.2	56.6	0.61	7.6	19	6.6	.59	48
66	At Derby Dam	0.0	05/12/80	200	--	--	0.0	--	--	0.0	--	--	[b]1.30	[b]100
69	At U.S. Highway 95A near Fernley	13.19	05/13/80	170	15.3	17.0	17.2	20.1	0.77	4.8	17	6.1	.43	33
70	At Anderson Check Dam near Fernley	16.35	05/13-14/80	140	23.1	25.2	25.4	28.6	.39	5.5	14	5.1	.36	28
71	At Allendale Check Dam near Fernley	20.35	05/14/80	120	32.1	34.0	34.3	38.0	.45	5.9	14	4.4	.30	23
72	At Mason Check Dam near Hazen	25.03	05/14-15/80	120	40.5	43.7	44.2	50.8	.47	10.3	12	3.9	.42	32
73	At Bango Check Dam near Hazen	28.17	05/14-15/80	110	46.7	51.3	51.5	58.2	.43	11.5	10	3.4	.40	31
74	At U.S. Highway 50 above Lahontan Reservoir	30.98	05/15/80	110	49.8	54.7	55.2	63.5	.76	13.7	9.3	3.2	.40	31
66	At Derby Dam	0.0	10/20/81	655	--	--	0.0	--	--	--	--	--	--	--
67	At Pyramid Check Dam near Wadsworth[c]	6.04	10/20/81	640	4.0	4.4	4.5	5.6	1.3	1.6	--	--	--	--
68	At Auxiliary gage near Wadsworth[c]	8.88	10/20/81	635	5.1	5.7	5.8	6.9	2.2	1.8	--	--	--	--
69	At U.S. Highway 95A near Fernley[c,d]	13.40	10/20/81	620	8.1	9.0	9.1	11.2	1.4	3.1	--	--	--	--
70	At Anderson Check Dam[c]	16.35	10/20/81	605	10.5	11.6	11.7	13.9	1.1	3.4	--	--	--	--
71	At Allendale Check Dam[c]	20.35	10/20-21/81	590	13.6	14.6	14.8	18.7	1.3	5.1	--	--	--	--
72	At Mason Check Dam[c]	25.03	10/21/81	570	16.8	18.4	18.5	21.4	1.3	4.6	--	--	--	--
72	At Mason check dam[c]	0.0	10/21/81	570	--	--	0.0	--	--	--	--	--	--	--
73	At Bango check dam[c]	3.14	10/21/81	560	1.9	2.2	2.2	2.9	1.4	1.0	--	--	--	--
74	At U.S. Highway 50 above Lahontan Reservoir[c]	5.95	10/21/81	550	3.4	3.8	3.9	4.9	1.6	1.5	--	--	--	--

[a] Continuation of injection at Reno-Sparks Sewage Treatment Plant.
[b] Injected dye masa.
[c] Cumulative traveltime, mean velocity, and duration of dye cloud based on uncalibrated field fluorometer readings rather than actual laboratory determinations of dye concentrations.
[d] Data shown is for samples collected at Fernley Check Dam, which is .21 mile downstream from highway bridge.

TABLE 33.--*Summary of traveltime data from reaeration studies in middle reach of river, 1979-80*

Site No. (table 1)	Site	Distance below injection point (miles)	Date (mo/day/yr)	Stream discharge (ft^3/s)	Traveltime of dye cloud, in hours since injection				Mean velocity between sites (mi/hr)	Duration of dye cloud at site (hours)	Peak dye concentration (ug/L)	Average dye concentration (ug/L)	Recovered mass of dye (kg)	Dye recovery (percent)
					Lead edge	Peak	Centroid	Trail edge						
23	At Lockwood	0.0	10/18/79	380	0.0	--	1.0	--	--	[a]2.0	--	--	[b]1.63	[b]100
24	At upper bridge near Mustang	1.80	10/18/79	380	1.2	3.0	2.7	5.2	1.1	4.0	(c)	(c)	(c)	(c)
27	At Patrick	5.13	10/18/79	360	4.1	6.0	6.0	8.7	1.0	4.6	21	7.8	1.60	98
33	Below Tracy	9.43	10/18/79	360	9.2	11.5	11.8	15.5	.74	6.3	17	5.8	1.61	99
23	At Lockwood	0.0	07/31/80	320	0.0	--	1.0	--	--	[a]2.0	--	--	[b]2.28	[b]100
24	At upper bridge near Mustang	1.80	07/31/80	320	1.2	2.0	2.5	4.5	1.2	3.3	37	15.8	2.34	102
25	At McCarran diversion dam	3.65	07/31/80	340	3.0	4.7	4.7	7.5	.84	4.5	32	12.7	2.33	102
26	Below McCarran diversion dam	3.70	07/31/80	330	3.0	4.7	4.7	7.5	--	4.5	31	12.1	2.18	96
27	At Patrick	5.13	07/31/80	330	4.1	6.0	5.9	8.7	1.2	4.6	31	11.6	2.25	98
29	At Hill diversion dam	8.03	07/31/80	330	7.1	9.2	9.6	13.5	.78	6.4	23	8.4	1.96	86
30	Below Hill diversion dam	8.05	07/31/80	320	7.1	9.4	9.7	13.5	--	6.4	23	8.1	1.87	82
34	At Clark	11.45	07/31-8/01/80	330	10.8	13.4	14.0	19.8	.79	9.0	19	6.5	2.00	88
36	At Derby Dam	15.17	08/01/80	330	15.0	18.4	19.0	25.5	.75	10.5	16	5.1	1.88	82
30	Below Hill diversion dam	0.0	08/28/80	360	0.0	--	0.3	--	--	[a]0.5	--	--	[b]0.57	[b]100
31	At Tracy diversion dam	1.24	08/28/80	360	1.0	1.5	1.6	2.9	0.95	1.9	20	6.5	.46	81
32	Below Tracy diversion dam	1.27	08/28/80	360	1.0	1.5	1.6	2.9	--	1.9	19	6.5	.46	81

[a] Constant dye injection for indicated length of time.
[b] Injected dye mass.
[c] Calibration problems with analytical equipment made accurate determination of concentrations and percent recovery impossible.

TABLE 34.--*Summary of traveltime data from reaeration studies in lower reach of river, 1979-80*

Site No. (table 1)	Site	Distance below injection point (miles)	Date (mo/day/yr)	Stream discharge (ft^3/s)	Traveltime of dye cloud, in hours since injection				Mean velocity between sites (mi/hr)	Duration of dye cloud at site (hours)	Peak dye concentration (ug/L)	Average dye concentration (ug/L)	Recovered mass of dye (kg)	Dye recovery (percent)
					Lead edge	Peak	Centroid	Trail edge						
44	At old U.S. Highway 40 bridge at Wadsworth	0.0	10/10/79	47	0.0	--	1.0	--	--	[a]2.0	--	--	[b]0.60	[b]100
47	Below Fellnagle diversion dam at Wadsworth	1.14	10/10-11/79	45	4.7	8.2	8.3	15.1	0.16	10.4	30	10	.50	84
53	At river mile 15.8	7.85	10/11/79	59	20.8	24.6	26.6	37.4	.37	16.6	7.8	2.5	.31	51
56	At Dead Ox Wash near Nixon	10.49	10/11-12/79	59	25.7	30.2	32.3	43.7	.46	18.0	6.9	2.2	.31	51
44	At old U.S. Highway 40 bridge at Wadsworth	0.0	07/28/80	64	0.0	--	1.0	--	--	[a]2.0	--	--	[b]0.41	[b]100
46	At Fellnagle diversion dam at Wadsworth	1.12	07/28/80	72	3.6	5.6	5.7	8.5	0.24	4.9	25	6.8	.32	79
47	Below Fellnagle diversion dam at Wadsworth	1.14	07/28/80	60	3.6	5.6	5.7	8.5	--	4.9	24	7.1	.28	68
49	At S Bar S diversion dam	3.83	07/28-29/80	72	8.2	11.2	11.8	19.6	.44	11.4	10	3.5	.27	66
56	At Dead Ox Wash near Nixon	10.49	07/29/80	90	20.2	23.7	24.9	35.2	.49	15.0	5.0	1.6	.23	57

[a] Constant dye injection for indicated length of time.
[b] Injected dye mass.

TABLE 35.--*Discharge measurements and associated channel-geometry data at miscellaneous sites in Truckee River basin, 1979-80*

Site No. (see fig. 2, table 1)	Site name	River mile	Altitude (feet)	Location of cross section	Date	Discharge (ft^3/s)	Width (ft)	Area (ft^2)	Mean velocity (ft/s)	Mean depth (ft)
3	Donner Creek at Donner Lake near Truckee	--	5,930	40 ft below bridge at State Hwy 89	5-31-79	91	36	33	2.7	.9
6	Truckee River at old U.S. Hwy 40 bridge below Truckee	96.17	5,629	300 ft above bridge	5-31-79	435	103	230	1.9	2.2
15	Truckee River at Mayberry Drive	65.70	4,611	Downstream side of Mayberry Drive bridge	5-03-79	1,460	109	300	4.9	2.8
				do.	5-16-79	2,610	114	399	6.5	3.5
				250 ft below bridge	6-01-79	508	137	237	2.1	1.7
				Upstream side of bridge	1-14-80	5,030	132	674	7.5	5.1
				do.	6-04-80	1,990	113	384	5.2	3.4
				25 ft below bridge	8-13-80	315	90	122	2.6	1.4
				do.	10-15-80	248	88	110	2.3	1.2
16	Truckee River near Sparks	55.75	4,380	Fixed cross section 0.37 mile below McCarran Blvd. bridge, 0.40 mile below gage	9-16-80	242	68	75	3.2	1.1
17	Truckee River at University farms	54.85	4,375	Fixed cross section 1.27 miles below McCarran Blvd. bridge	9-16-80	227	103	123	1.9	1.2
18	Truckee River above North Truckee drain	54.01	4,372	Fixed cross section 0.35 miles above confluence of drain and river	9-16-80	207	94	170	1.2	1.8
19	North Truckee drain at Kleppe Lane near Sparks	--	4,375	Below Kleppe Lane bridge	5-09-79	27	11	20	1.4	1.7
				do.	6-06-79	48	16	27	1.8	1.7
				do.	8-08-79	51	29	55	.92	1.9
				Upstream side of bridge	1-14-80	217	12	77	2.8	6.4
				Above bridge	6-04-80	54	15	35	1.6	2.3
				Below bridge	8-13-80	33	17	24	1.4	1.4
20	Steamboat Creek at Kimlick Lane near Reno	--	4,375	Downstream side of Kimlick Lane bridge	5-04-79	60	34	68	.88	2.0
				15 ft below bridge	5-16-79	72	31	87	.82	2.8
				5 ft above bridge	6-06-79	54	28	54	1.0	1.9
				Upstream side of bridge	8-08-79	36	16	21	1.7	1.4
				5 ft above bridge	1-04-80	1,160	58	478	2.4	8.2
				40 ft above bridge	6-04-80	140	35	93	1.5	2.7
				do.	8-13-80	66	35	59	1.2	1.7
23	Truckee River at Lockwood	50.05	4,345	Downstream side of Lockwood bridge	5-29-79	816	100	241	3.4	2.4
				50 ft below bridge	6-06-79	539	115	247	2.2	2.1
				200 ft below bridge	6-07-79	489	110	234	2.1	2.1
				do.	8-08-79	263	105	171	1.5	1.6
				do.	10-18-79	384	104	210	1.8	2.0
		50.11	4,346	Fixed cross section 0.06 mile above bridge	9-18-80	346	86	150	2.4	1.7
24	Truckee River at upper bridge near Mustang	48.22	4,316	Fixed cross section 0.03 mile below bridge	9-17-80	363	105	150	2.4	1.4
27	Truckee River at Patrick	44.92	4,281	Upstream side of Patrick bridge	5-29-79	781	90	227	3.4	2.5
				200 ft above bridge	6-06-79	522	150	210	2.5	1.4
				do.	6-07-79	454	151	201	2.3	1.3
				do.	8-08-79	263	130	166	1.6	1.3
				150 ft above bridge	10-18-79	361	150	203	1.8	1.4
		45.04	4,282	Fixed cross section 0.12 mile above bridge	9-17-80	336	125	235	1.5	1.9

TABLE 35.--*Discharge measurements and associated channel-geometry data at miscellaneous sites in Truckee River basin, 1979-80*--Continued

Site No. (see fig. 2, table 1)	Site name	River mile	Altitude (feet)	Location of cross section	Date	Discharge (ft^3/s)	Width (ft)	Area (ft^2)	Mean velocity (ft/s)	Mean depth (ft)
28	Truckee River at McCarran Ranch	44.58	4,275	Fixed cross section 0.34 mile below Patrick bridge	9-17-80	346	128	318	1.1	2.5
30	Truckee River below Hill diversion dam	41.54	4,252	Fixed cross section 0.48 mile below dam	9-16-80	353	114	222	1.6	1.9
31	Truckee River at Tracy diversion dam	40.87	4,248	Fixed cross section 0.11 mile above dam	9-16-80	346	154	299	1.2	1.5
34	Truckee River at Clark	38.60	4,229	100 ft above Clark road bridge	8-08-79	271	122	210	1.3	1.7
		38.65	4,230	Fixed cross section 0.05 mile above bridge	9-16-80	338	112	200	1.7	1.8
35	Truckee River below Clark	37.21	4,213	Fixed cross section 0.69 mile below railroad bridge at Clark	9-16-80	346	82	147	2.4	1.8
37	Truckee River below Derby Dam	33.95	4,178	Fixed cross section 0.54 mile below USGS gage	7-02-80	397	92	230	1.7	2.5
				do.	9-17-80	58	88	136	.43	1.5
38	Truckee River above Orchard	31.81	4,148	Fixed cross section 0.53 mile above Washburn (Orchard) diversion dam	7-02-80	427	77	116	3.7	1.5
				do.	9-18-80	70	54	45	1.5	.8
39	Truckee River at Painted Rock bridge	29.97	4,117	Downstream side of bridge	5-23-79	371	78	170	2.2	2.2
				25 ft below bridge	8-20-79	47	71	62	.76	.9
				Upstream side of bridge	1-16-80	3,290	97	640	5.1	6.6
40	Truckee River below Gregory-Monte diversion dam	28.50	4,096	Fixed cross section 0.85 mile below Gregory-Monte diversion dam	7-20-80	374	85	182	2.1	2.1
				do.	9-17-80	63	74	83	.76	1.1
41	Truckee River below Pierson diversion dam	25.93	4,071	Fixed cross section 0.02 mile below dam	7-02-80	356	117	252	1.4	2.2
				do.	9-17-80	58	100	115	.5	1.1
42	Truckee River above Proctor diversion dam	24.12	4,053	Fixed cross section 0.22 mile above dam	7-02-80	374	87	186	2.0	2.1
				do.	9-17-80	55	84	167	.33	2.0
47	Truckee River below Fellnagle diversion dam at Wadsworth	22.53	4,038	0.02 mile below dam	10-10-79	45	28	23	1.9	.8
		22.50	4,037	Fixed cross section below dam	7-02-80	366	70	110	3.3	1.6
				do.	9-18-80	62	46	31	2.0	.7
48	Truckee River below Cerosola Ranch near Wadsworth	21.31	4,024	Fixed cross section 1.24 mile below Fellnagle diversion dam	7-02-80	375	115	221	1.7	1.9
				do.	9-18-80	66	84	118	.56	1.4
49	Truckee River at S Bar S diversion dam	19.84	4,011	50 ft below dam	10-10-79	52	34	29	1.8	.8
				Below dam	7-28-80	66	38	41	1.6	1.1
50	Truckee River below S Bar S diversion dam	19.54	4,007	Fixed cross section 0.30 mile below dam	7-02-80	422	84	209	2.0	2.5
				do.	9-18-80	77	81	128	.60	1.6
51	Truckee River at S Bar S Ranch	17.82	3,990	Below pump on left bank	10-10-79	52	60	82	.64	1.4
52	Truckee River below S Bar S Ranch	17.04	3,984	Fixed cross section 0.46 mile below Olinghouse No. 3 diversion	7-02-80	419	84	115	3.6	1.4
				0.29 mile above spawning-habitat study site	9-18-80	74	48	29	2.5	.6

TABLE 35.--*Discharge measurements and associated channel-geometry data at miscellaneous sites in Truckee River basin, 1979-80*--Continued

Site No. (see fig. 2, table 1)	Site name	River mile	Altitude (feet)	Location of cross section	Date	Discharge (ft^3/s)	Width (ft)	Area (ft^2)	Mean velocity (ft/s)	Mean depth (ft)
54	Truckee River at river mile 15.4	15.43	3,974	Fixed cross section	7-02-80	420	87	146	2.9	1.7
				do.	9-18-80	71	48	54	1.3	1.1
55	Truckee River at river mile 13.8	13.79	3,964	Fixed cross section	7-02-80	404	111	144	2.8	1.3
				do.	9-18-80	69	--	--	--	--
56	Truckee River st Dead Ox Wash near Nixon	13.18	3,960	20 ft below lone cottonwood on right bank	5-24-79	302	72	99	3.0	1.4
				15 ft below lone cottonwood on right bank	6-06-79	108	44	42	2.6	1.0
				Below lone cottonwood on right bank	8-09-79	47	42	33	1.4	.8
				10 ft below lone cottonwood on right bank	8-23-79	43	38	28	1.5	.7
				do.	10-11-79	59	42	34	1.7	.8
				Fixed cross section at lone cottonwood on right bank	7-02-80	604	133	193	3.1	1.4
				do.	9-16-80	113	46	49	2.3	1.1
				do.	9-22-80	79	45	43	1.8	1.0
57	Truckee River at river mile 12.0	11.99	3,954	Fixed cross section	7-02-80	518	80	212	2.4	2.6
				do.	9-16-80	80	72	90	.89	1.2
58	Truckee River at river mile 11.0	11.02	3,948	Fixed cross section	7-02-80	440	96	215	2.0	2.2
				do.	9-16-80	82	75	101	.81	1.3
59	Truckee River at Numana Dam near Nixon	8.16	3,917	Fixed cross section 0.05 mile below dam	7-02-80	435	113	158	2.8	1.4
				do.	9-16-80	76	93	68	1.1	.7
60	Truckee River at Little Nixon bridge	5.73	3,899	Fixed cross section 0.02 mile above bridge site	9-17-80	61	90	154	.40	1.7
61	Truckee River below Little Nixon	5.09	3,894	Fixed cross section 0.62 mile below bridge site at Little Nixon	7-02-80	602	96	201	3.3	2.1
				do.	9-19-80	64	74	51	1.3	.7
62	Truckee River at State Highway 447 at Nixon	3.55	3,881	Fixed cross section 0.33 mile above Highway 447 bridge	7-02-80	578	115	155	3.7	1.3
				do.	9-23-80	73	54	45	1.6	.8
		3.22	3,877	200 ft above bridge	4-24-79	278	85	97	2.9	1.1
				Above bridge	6-06-79	99	50	33	3.0	.7
				30 ft below bridge	6-08-79	52	56	24	2.2	.4
				100 ft below bridge	8-09-79	31	51	45	.68	.9
				100 ft above bridge	8-23-79	25	39	44	.58	1.1
		3.18	3,876	Fixed cross section 0.04 mile below bridge	7-02-80	467	87	161	2.9	1.8
				do.	9-17-80	64	62	71	.91	1.1
64	Truckee River fishway at Marble Bluff Dam	-.07	3,845	20 ft above road bridge over fishway upstream side of bridge	4-13-79	17	16	28	.62	1.8
					5-24-79	29	20	49	.60	2.5
				do.	5-25-79	38	22	57	.69	2.6
				do.	6-06-79	38	21	63	.61	3.0
				20 ft above bridge	6-08-79	40	20	62	.65	3.1
				15 ft above bridge	3-08-80	28	19	49	.58	2.6
65	Truckee River below Marble Bluff Dam	-.05	3,835	300 ft below dam	4-13-79	20	48	61	.33	1.3
				200 ft below dam	5-24-79	211	62	124	1.7	2.0
				do.	5-25-79	166	62	112	1.5	1.8
				do.	6-06-79	73	51	86	.85	1.7
				do.	6-08-79	26	49	70	.38	1.4
				300 ft below dam	8-07-79	33	48	61	.54	1.3
				200 ft below dam	8-29-79	37	53	71	.52	1.3

TABLE 36.--*Discharge measurements and associated channel-geometry data at miscellaneous sites in Truckee Canal, 1979-80*

Site No. (see fig. 2, table 1)	Site name	River mile	Altitude (feet)	Location of cross section	Date	Discharge (ft^3/s)	Width (ft)	Area (ft^2)	Mean velocity (ft/s)	Mean depth (ft)
66	Truckee Canal at Derby Dam	30.41	4,198	Upstream side of bridge at Federal Watermaster's gage, 1.01 mile below canal gates	5-13-80	285	26	131	2.2	4.9
				do.	6-05-80	279	27	136	2.0	5.0
				do.	8-14-80	219	26	126	1.7	4.8
69	Truckee Canal at U.S. Highway 95A near Fernley	18.01	4,187	150 ft below Fernley check dam	5-13-80	166	52	229	.73	4.4
				60 ft below check dam	8-14-80	152	48	158	.96	3.3
70	Truckee Canal at Anderson Check Dam near Fernley	14.96	4,183	600 ft below check dam	5-13-80	144	51	194	.74	3.8
71	Truckee Canal at Allendale Check Dam near Fernley	11.05	4,179	100 ft below check dam	5-14-80	120	48	127	.94	2.6
				50 ft below check dam	6-05-80	97	48	138	.70	2.9
				100 ft below check dam	8-14-80	61	37	54	1.1	1.5
72	Truckee Canal at Mason Check Dam near Hazen	6.38	4,178	75 ft below check dam	5-14-80	112	43	89	1.3	2.1
				50 ft below check dam	6-06-80	100	43	86	1.2	2.0
				Below check dam	8-14-80	56	32	38	1.5	1.2
73	Truckee Canal at Bango Check Dam near Hazen	3.23	4,173	150 ft below check dam. USGS gage installed in October 1981	5-14-80	111	24	32	3.5	1.3
74	Truckee Canal at U.S. Highway 50 above Lahontan Reservoir	.42	4,170	30 ft below U.S. Hwy 50 bridge	8-09-79	43	31	35	1.2	1.1
				100 ft below bridge	10-19-79	230	38	100	2.3	2.6
				do.	11-20-79	347	42	129	2.7	3.1
				do.	3-12-80	31	22	21	1.5	1.0
				do.	4-23-80	46	29	31	1.5	1.1
				Under bridge	5-14-80	116	48	196	.59	4.1
				100 ft below bridge	5-20-80	88	32	43	2.0	1.4
				150 ft below bridge	6-05-80	108	35	54	2.0	1.5
				10 ft below bridge	8-14-80	22	26	18	1.2	.7

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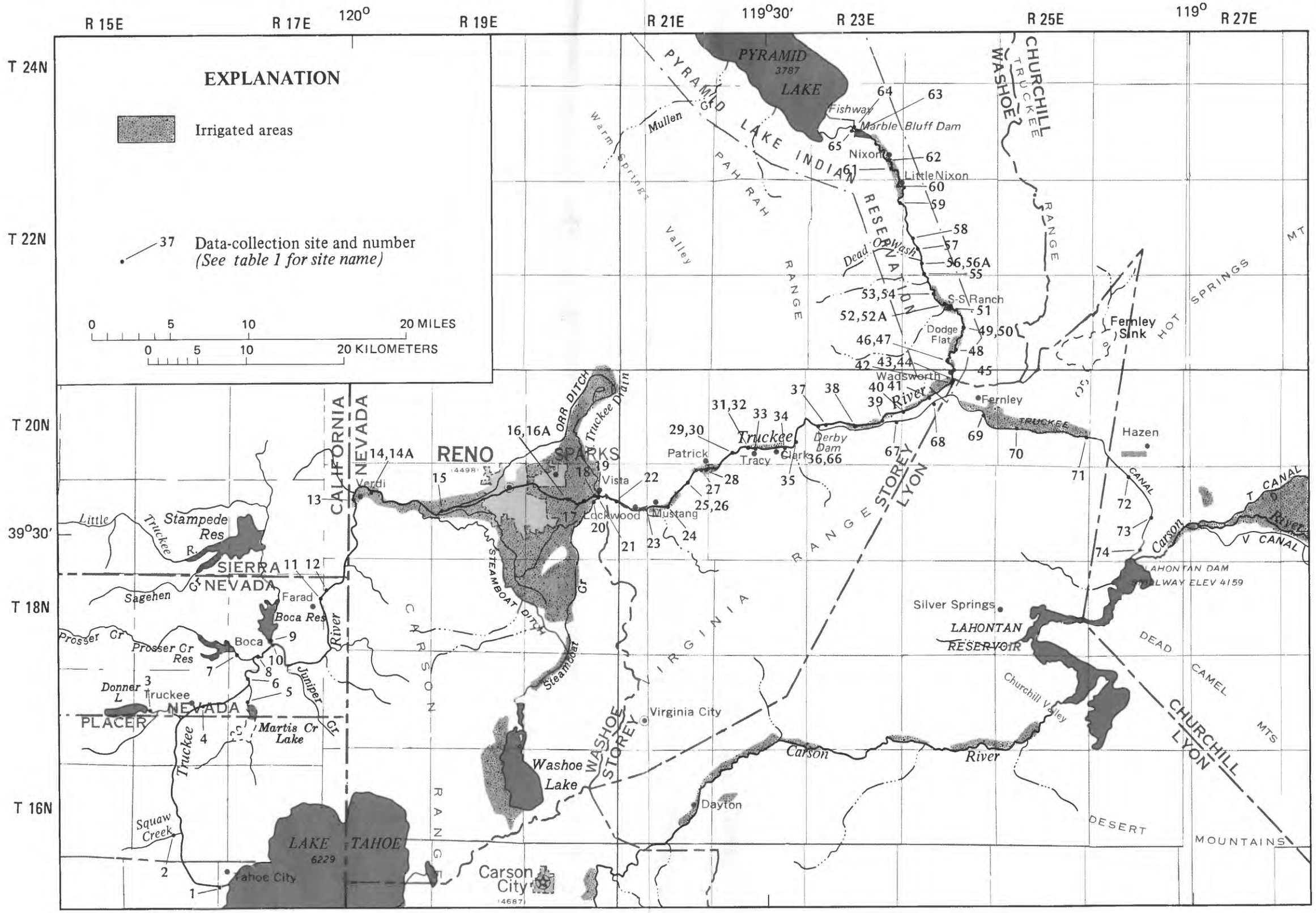

FIGURE 2.–Location of data-collection sites.