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

Physical Data and Biological Data for Algae, Aquatic Invertebrates, and Fish from Selected Reaches on the Carson and Truckee Rivers, Nevada and California, 1993–97

Open-File Report 02–012

Prepared as part of the
NATIONAL WATER-QUALITY ASSESSMENT PROGRAM

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U.S. DEPARTMENT OF THE INTERIOR
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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
centimeter (cm)	0.39370	inch
millimeter (mm)	0.03937	inch
micrometer (µm)	0.00003937	inch
meter (m)	3.28084	foot
square centimeter (cm^2)	0.15500	square inch
square meter (m^2)	10.76391	square foot
milliliter (mL)	0.000264179	gallon
liter (L)	0.264179	gallon
cubic meter per second (m^3/s)	35.31467	cubic foot per second

Other units used in this report:

g	gram
g/m^2	gram per square meter
mg	milligram
mg/m^2	milligram per square meter

Temperature: Degrees Celsius (^oC) can be converted to degrees Fahrenheit (^oF) by using the formula $^oF = [1.8(^oC)]+32$. Degrees Fahrenheit can be converted to degrees Celsius by using the formula $^oC = 0.556(^oF-32)$.

Sea level: In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929, formerly called "Sea-Level Datum of 1929"), which is derived from a general adjustment of the first-order leveling networks of the United States and Canada.

Physical Data and Biological Data for Algae, Aquatic Invertebrates, and Fish from Selected Reaches on the Carson and Truckee Rivers, Nevada and California, 1993–97

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ABSTRACT

This report, a product of the National Water-Quality Assessment Program, is a compilation of physical data and biological data for algae, aquatic invertebrates, and fish collected in the Carson and Truckee River Basins, Nevada and California. Most of the data were collected between 1993 and 1996 at selected reaches on the Carson and Truckee Rivers. Algae and aquatic invertebrate samples were collected from cobble riffles, submerged woody-snag habitats, and from depositional areas such as pools. Between 1993 and 1996, fish and crayfish were collected from all wadeable habitats at each of seven basic-fixed sites using either electroshocking methods or seining. Additional fish and crayfish were collected at one site on the Truckee River in 1997. Fish were identified to species, measured for total and standard length, checked for anomalies, and weighed at the collection site. Fish were returned to the stream after measurements were taken. Measurements of water depth, stream velocity, determinations of substrate type and substrate embeddedness were made at each sampling site. Algae and aquatic invertebrate samples were sent to the U.S. Geological Survey National Water-Quality Laboratory for identification and enumeration.

A total of 103 semi-quantitative and 55 qualitative algae samples were collected at 20 river reaches on the Carson and Truckee Rivers between 1993 and 1996. These samples represent algae in cobble riffles, on submerged woody snags, and on sediment surfaces in depositional areas. In those 158 samples, 514 algal species, varieties, or forms were identified. Of the 8 algal phyla represented, the diatoms (Phylum Bacillariophyta) were the most abundant with 351 species, varieties, or forms. The green algae (Phylum Chlorophyta) were next in abundance with 108 species, varieties, or forms followed by the blue-green algae (Phylum Cyanophyta) with 41 species, varieties, or forms.

A total of 49 semi-quantitative aquatic invertebrate samples were collected at 27 river reaches on the Carson and Truckee Rivers between 1993 and 1996. These samples represent invertebrates in cobble riffles and on submerged woody snags. In those 49 samples, members of 6 phyla were identified. Roundworms were identified only to phylum (Nematoda) and free-living flatworms and snails were identified only to class (Turbellaria and Gastroda). Organisms were identified as belonging to 19 invertebrate orders. Most of the invertebrates that could be identified to genus or species belonged in the orders Ephemeroptera, Plecoptera, and Trichoptera of the arthropod class Insecta.

Fish and crayfish populations in the Carson and Truckee Rivers were sampled 29 times between 1993 and 1997. These collections resulted in the identification of 18 fish species and one endemic crayfish species. Twelve of the 18 fish species identified are not native to the Carson and Truckee River Basins.

INTRODUCTION

Background

In 1991, the U.S. Geological Survey (USGS) began a nationwide study of water quality in 20 areas across the United States. The National Water-Quality Assessment Program (NAWQA), is designed to assess the status of, and trends in, the Nation's water quality, and to develop an understanding of the major factors that affect water quality (Gilliom and others, 1995; Hirsch and others, 1988; Leahy and others, 1990). To accomplish these goals, NAWQA will assess 51 study areas on a staggered time scale (20 started in 1991, 16 in 1994, 13 in 1997, and 2 in 1999) by collecting physical, chemical, and biological data from large river basins affected by natural and human-created processes. By integrating the physical, chemical, and biological data, a comprehensive determination of aquatic ecosystem health in these river basins may be made.

The Nevada Basin and Range Study unit (NVBR) was among the first 20 areas to begin the NAWQA study in 1991 (Bevans and Kilroy, 1991). Physical data for sites in the NVBR are compiled in Lawrence and Pennington (1998), trace element data for bed sediment and crayfish samples are compiled in Lawrence (1998), and surface water-quality data are compiled in Emett and others (1994), Clary and others (1995); and Bauer and others (1996).

Biological data-collection activities within NVBR consisted of sample collection, identification, and enumeration of algae, aquatic invertebrate, and fish populations at select sites in the Carson and Truckee River Basins. The sampling protocols developed were designed to identify species distribution and community structure in algae (Porter and others, 1993), aquatic invertebrate (Cuffney and others, 1993a), and fish populations (Meador and others, 1993). The distribution of species, in particular, community structure, provides the only means for directly identifying ecosystem health that is sensitive to both toxicological influence and habitat degradation (Cuffney and others, 1993a).

Purpose and Scope

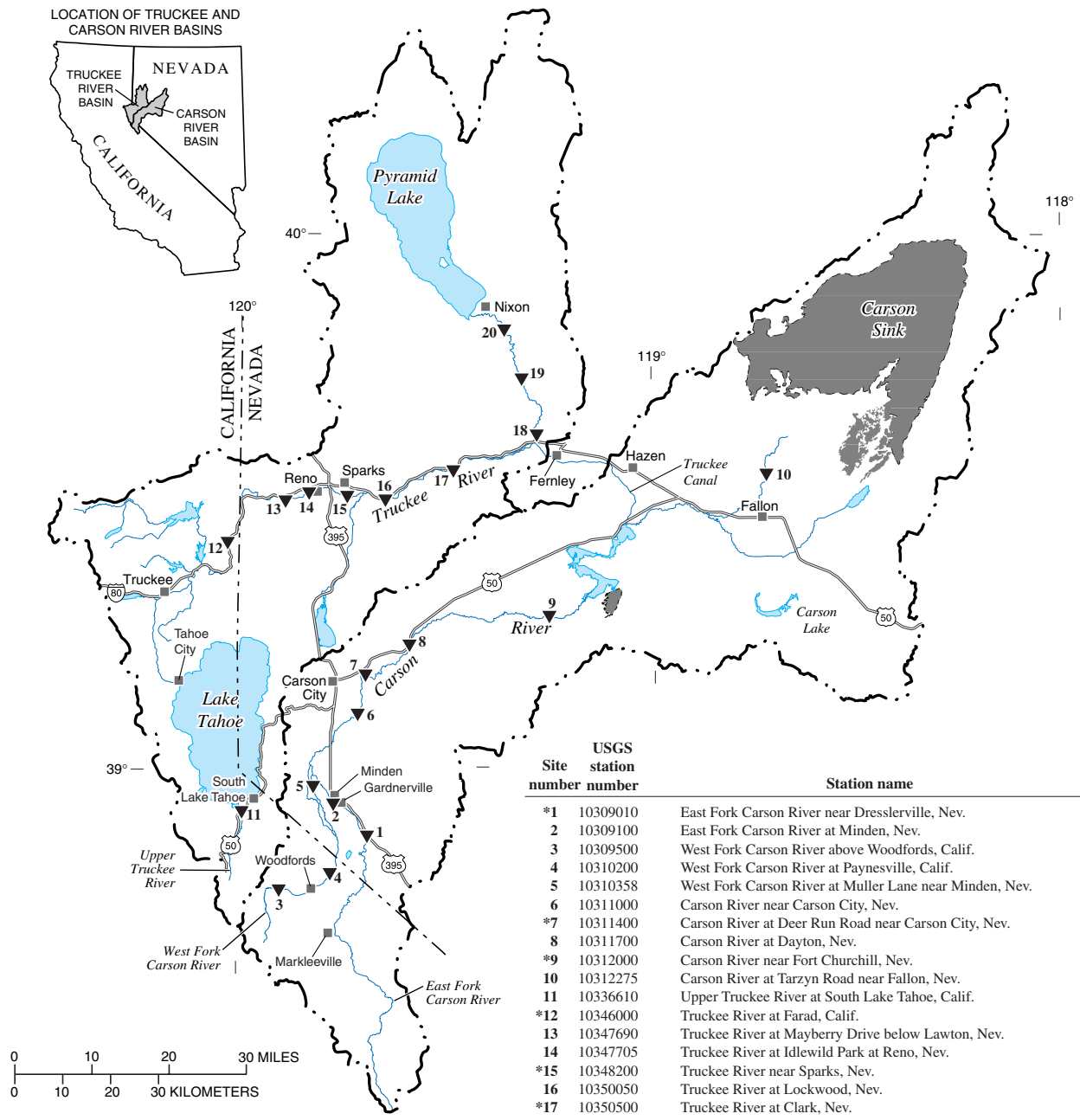
This report presents a compilation of physical and biological data collected from 20 sites that were sampled principally between 1993 and 1996 in the Carson and Truckee Rivers, Nevada and California. Biological data also are included for one site on the Truckee River where additional samples were collected in 1997. The physical data describe the stream habitat and the biological data describe the algal, aquatic invertebrate, and fish populations in the streams. The biological data for algae and small aquatic invertebrates were derived from 103 semi-quantitative and 55 qualitative samples for algae and 49 semi-quantitative samples for aquatic invertebrates. Fish and crayfish populations were sampled 29 times using electroshocking and seining.

The only chemical data presented are concentrations of chlorophyll *a* and *b* in algae. Chemical data for asiatic clams (*Corbicula sp.*), caddisfly larva (*Hydropsyche sp.*), and crayfish (*Pacifastacus leniusculus*) were published by Bonner and others (1998, p. 558–560). The relation between trace element concentrations in bottom sediment and crayfish tissue was interpreted by Lawrence (1998).

STUDY AREA AND DATA COLLECTION SITES

The study area consists of the Carson and Truckee River Basins in Nevada and California and the Upper Truckee River Basin upstream from South Lake Tahoe, Calif. (fig. 1). The Upper Truckee River at South Lake Tahoe, Calif., was the only site sampled within the Lake Tahoe Basin. The environmental setting is described in detail by Covay and others (1996) and detailed physical and geomorphological measurements in selected reaches of the Carson and Truckee Rivers are given by Lawrence and Pennington (1998).

NAWQA data-collection sites are classified as basic-fixed sites and as synoptic sites. Basic-fixed sites are sites where a broad suite of chemicals are analyzed in water, bed sediment, and aquatic biota, where continuous discharge measurements are made; and where ecological surveys are completed (Porter and others, 1993). Basic-fixed sites form the backbone of NAWQA's long-term trend and transport evaluations, and the integrated physical, chemical, and biological studies within and among assessment cycles within NAWQA. Synoptic sites are those sites where limited chemical, physical, and biological data samples are collected only once in a NAWQA cycle (Porter and others, 1993).



Base from U.S. Geological Survey digital data, 1:100,000
Universal Transverse Mercator projection
Zone 11

Site number	USGS station number	Station name
*1	10309010	East Fork Carson River near Dresslerville, Nev.
2	10309100	East Fork Carson River at Minden, Nev.
3	10309500	West Fork Carson River above Woodfords, Calif.
4	10310200	West Fork Carson River at Paynesville, Calif.
5	10310358	West Fork Carson River at Muller Lane near Minden, Nev.
6	10311000	Carson River near Carson City, Nev.
*7	10311400	Carson River at Deer Run Road near Carson City, Nev.
8	10311700	Carson River at Dayton, Nev.
*9	10312000	Carson River near Fort Churchill, Nev.
10	10312275	Carson River at Tarzyn Road near Fallon, Nev.
11	10336610	Upper Truckee River at South Lake Tahoe, Calif.
*12	10346000	Truckee River at Farad, Calif.
13	10347690	Truckee River at Mayberry Drive below Lawton, Nev.
14	10347705	Truckee River at Idlewild Park at Reno, Nev.
*15	10348200	Truckee River near Sparks, Nev.
16	10350050	Truckee River at Lockwood, Nev.
*17	10350500	Truckee River at Clark, Nev.
18	10351650	Truckee River at Wadsworth, Nev.
*19	10351690	Truckee River at Dead Ox Wash near Nixon, Nev.
20	10351750	Truckee River at Highway 447 at Nixon, Nev.

* Basic-fixed site

EXPLANATION

Hydrographic area boundary

Biological sampling site and number

Figure 1. Location of data collection sites on the Carson and Truckee Rivers, Nevada and California.

A total of seven basic-fixed sites (three on the Carson River and four on the Truckee River) were sampled between 1993 and 1996 (fig. 1). Thirteen additional synoptic sites (seven on the Carson and six on the Truckee River) were sampled in 1994 and 1995. Additional data were collected at one basic-fixed site on the Truckee River in 1997. Selected physical data also were collected at all sites used for biological sampling in the Carson and Truckee River Basins.

At some of the data-collection sites the length of the river where samples were collected was uniform with regard to depth, slope, and bottom. At other sites the length of the river sampled was not uniform and at those sites the river was broken into segments or "reaches" that were uniform. Descriptions of the reaches are given by Lawrence and Pennington (1998).

DATA COLLECTION METHODS

Physical Data

Physical data such as water depth, velocity, dominant and subdominant substrate type, substrate embeddedness, water temperature, and mean daily discharge were collected to provide information describing the habitat where the organisms were collected. Water-quality parameters such as dissolved oxygen, pH, and specific conductance were not measured during collection of biological material; however, they were measured at many of the data collection sites between 1993 and 1997 (Emett and others, 1994; Clary and others, 1995; Bauer and others, 1996; Bostic and others, 1997; and Bonner and others, 1998).

Physical measurements, except water temperature and mean daily discharge, were taken at the location where an algae and aquatic invertebrate sample was collected. Water depth was measured using the USGS top-setting wading rod and stream velocity was measured with a rated pygmy meter attached to the wading rod (Rantz and others, 1982a and b). Dominant and subdominant substrate type and embeddedness were determined visually. Water temperature was measured continuously at the nearest USGS gaging station using a USGS minimonitor and datalogger. Mean daily discharge was derived from stream discharge records from the nearest USGS gaging station.

Semi-Quantitative Samples of Algae and Aquatic Invertebrates

Semi-quantitative samples for algae and aquatic invertebrate were collected from a richest-targeted habitat (RTH), usually cobble or gravel riffles. Algae and aquatic-invertebrate samples also were collected from a depositional-targeted habitat (DTH), usually pools. In the DTH, however, only the algae samples were analyzed. Because sand and silt were the predominant substrates at two sites in the study area, submerged woody snags were considered the RTH at those sites. In each of the habitats, subsamples were collected at locations that were representative of the entire habitat within the reach. The surface area of the subsample was known or calculated from the sampling equipment. Three to five subsamples were collected from each habitat and composited in the field. Stream depth and velocity were measured at the location of each subsample, and substrate type and embeddedness were determined. Additional details about the semi-quantitative sample collection methods used are given in Porter and others (1993) and Cuffney and others (1993a and b).

For some algal samples collected at the depositional-targeted habitats, not all data required for calculating dilutions were collected. For these samples, the density of the populations in cells, per square centimeter, of habitat could not be calculated. The density of algal populations for these samples is given as a percent of the cells counted during the algal identification and enumeration.

Qualitative Samples of Algae and Aquatic Invertebrates

Qualitative multihabitat (QMH) samples for algae and aquatic invertebrate were collected at basic-fixed sites and at synoptic sites. Qualitative sampling involved sampling all available habitats without regard to a known areal dimension: riffles both mid-channel and along the edges, pool environments, macrophyte and macroalgae beds, and woody debris and snags. Details for the qualitative sample collection methods used are given in Porter and others (1993) and Cuffney and others (1993a).

Algae

Sampling Methods

Algae were semi-quantitatively sampled in the cobble-riffle habitat by selecting one or two representative stones from each RTH subsample location. For those sites where only three subsamples were collected, a minimum of six stones was selected. A small area on the surface of each stone was isolated by a periphyton sampler and periphyton removed within that area with a stiff-bristled brush. An "O" ring gasket on the sampler/stone interface isolated an area of the stone and allowed the sampler to hold stream water. Water was added to the sampler to aid in scraping and produce an algal slurry that was transferred to a container for compositing of each subsample.

Depositional-targeted habitats were sampled using a 47-mm plastic, disposable microbiological petri dish pushed into the surface layer of sediment. The petri dish defined a circular sample area of 17.35 cm^2 and a depth of 3 mm. While the petri dish with its trapped sediment remained in the stream bottom, a flat, plastic spatula was slid into the stream bottom and under the petri dish and both the dish and sediment were removed. Five subsamples were collected at different locations within the depositional habitat and composited into a wide-mouth, polyethylene bottle. A solution of 5-percent buffered formalin was used as a preservative. Samples were then shipped to the Biological Unit at the USGS National Water-Quality Laboratory (NWQL).

Sample Processing, Identification, and Enumeration

After algae scrapings from each stone were composited, a 15-mL aliquot of sample material was transferred to a 20-mL polyethylene vial. Eight to ten drops of formaldehyde were added to the vial to produce a 5 percent formalin solution for preservation of algal cells. Samples were then shipped to the Biological Unit at the USGS-NWQL and from there to the Philadelphia Academy of Sciences in Philadelphia, Penn., for algae identification and enumeration.

Aliquots of the preserved material were diluted and examined under the microscope. Cells were identified to species where possible, but often cells could only be identified to a higher level taxa. In these cases the cells may represent plants new to science, or the cells may belong to known species but could not be identified for various reasons. Such unidentifiable cells could have been lacking necessary diagnostic characteristic because they were immature. Cells were enumerated by diluting the aliquots and counting under the microscope the number and types of cells in known volumes.

Two 25- to 50-mL aliquots of sample material were filtered through glass-fiber filters at the collection site to collect algae cells for ash-free dry weight and chlorophyll *a* and *b* measurements. Each filter was folded into fourths, wrapped in aluminum foil, placed in a labeled, 20-mL polyethylene vial, frozen, and shipped to the USGS–NWQL for analysis. USGS analytical methods used for ash-free dry weight and chlorophyll *a* and *b* determinations were those published in Britton and Greeson (1988).

Aquatic Invertebrates

Sampling Methods

Detailed discussion about all aspects of aquatic invertebrate sampling in the NAWQA program are given by Cuffney and others (1993a). Aquatic invertebrate RTH samples were collected in the same general habitat area that algae RTH samples were collected. Precise sample locations were different, however, to ensure sampling activities for algae had not disturbed the invertebrate community.

In cobble riffles, a rectangular dip net, 30 cm in depth and 51 cm in width, was used to collect an RTH subsample. The net bag was nylon with a mesh of 425 µm. The open end of the net was placed facing upstream and a 45-cm area of the riffle upstream from the net was disturbed to a depth of about 8 cm. Submerged woody snags were sampled by placing the net downstream from the snag and brushing invertebrates off the wood with a small, nylon brush. Burrowing invertebrates visually detected in the substrate were removed using forceps.

Qualitative multihabitat samples were collected from all wadeable habitats using a D-frame net with a net-bag mesh of 210 µm. Dimensions of the area sampled were not measured. Sample processing was similar to RTH sample processing.

Sample Processing, Identification, and Enumeration

For both RTH and QMH samples, the contents of the net at each subsample location were composited in a 9.5-liter bucket. These composite samples were processed on the stream bank using an elutriation method whereby the bucket, with streamwater, is vigorously swirled to wash invertebrates out of the accumulated sand, algae, and detritus (elutriation). After swirling, water with suspended invertebrates was poured through a 425-µm mesh nylon sieve (RTH sample) or a 210-µm mesh brass sieve (QMH sample). This processing allowed three subsets of the sample to be identified and preserved separately. One subset contained large and rare invertebrates, another contained the main body or bulk of the sample, and the third subset contained the sands and gravels remaining after elutriation. These three subsets facilitated identification and enumeration by separating out large and rare invertebrates that might be missed when the main body of the sample was split and subsampled in the laboratory. The sands and gravels were further processed in the USGS Nevada District laboratory to ensure that clams, snails, cased caddisfly larvae, or other "heavy" invertebrates were not missed.

After sieving and removing large and rare invertebrates, the remaining contents on the sieve were placed in a sample bottle and labeled as the main body. Aquatic insect samples were preserved at the stream site by adding Kahle's solution to each bottle. Kahle's solution is a mixture of glacial acetic acid, formaldehyde, ethanol, and water (Pennak, 1989, p. 608). After several weeks in Kahle's solution samples were placed in 80 percent ethanol. Clams and snails were preserved at the stream site with 80 percent ethanol because the acetic acid in Kahle's solution can dissolve the shell. All samples were shipped to the Biological Unit at the USGS NWQL for analysis. Methods used by the USGS NWQL for processing aquatic invertebrate samples are given in Cuffney and others, 1993b).

The invertebrates were identified to species where possible but often only could be identified to a higher level taxa. In these cases the invertebrates may represent organisms new to science or may belong to a known species but could not be identified for various reasons. For example, such unidentifiable organisms could have been lacking necessary diagnostic characteristics because they were immature or were damaged during sample collection.

Crayfish were collected using the electroshocking procedure described in the following section (Fish Sampling Methods) and by "minnow-type" traps (Hubert, 1983), built by study unit personnel. These traps were 25 x 51 x 91 cm in size and constructed of 1.25-cm hardware cloth. Traps were open at both ends and the openings were tapered inward with hardware cloth from the 25 x 51 cm original opening to a 5 x 7.5 cm opening which prevented the crayfish from escaping. All traps were baited with beef heart and left in the stream overnight. Crayfish collected in the traps were processed in the same manner as those collected by electroshocking.

Fish Sampling Methods

Detailed descriptions of fish sampling methods used in the NAWQA program are given in Meador and others (1993). Fish populations were sampled at each site using a combination of electroshocking methods and seining. A backpack-mounted electroshocker was used to collect fish within stream reaches where a seine could not be used because of rocks, debris, or water with high velocity. A sampled reach ranged from 91 to 365 m in length. Multiple passes were not attempted because of the length of the reaches and the stress incurred by fish inhabiting water with temperatures above 25°C. As fish were stunned by the pulsed direct current, they were collected with dip nets or a 3-m seine placed downstream from the electroshocker. Fish were placed in buckets and ice chests and kept alive by aerating the water with battery-operated pumps. If possible, up to 30 fish were measured for total length, standard length, weight, and observed for external anomalies such as lesions, tumors, parasites, fungus, fin erosion or other deformities, and disease. NAWQA protocols for measuring total and standard length and evaluating external anomalies on fish are described by Meader and others (1993). If more than 30 fish were collected, the remaining were counted. Most fish collected were returned alive to the river where they were collected. Fish were identified in the field by the senior author. Some specimens were retained in a preserved state to confirm the field identification. Confirmation of field identifications were made by Larry Brown (USGS, Sacramento, Calif., written commun., 1994 and 1995) or locally in the USGS Nevada District Laboratory by the senior author.

COMPILATIONS OF PHYSICAL AND BIOLOGICAL DATA

Data presented in this report are for the following: Physical characteristics of the richest-targeted habitat (table 1); a taxonomic list of the algae identified and the habitats in which they were found (table 2); algal abundance from the Carson River (tables 3–12) and the Truckee River (tables 13–21); ash-free dry weight and chlorophyll concentration in algae samples from the Carson and Truckee Rivers (table 22); a taxonomic list of aquatic invertebrates identified in samples collected at the Carson and Truckee Rivers (table 23); abundance of aquatic invertebrates from the Carson River (tables 24–26) and the Truckee River (tables 27–29); a taxonomic list of fish identified (table 30); and data for fish and crayfish collected from the Carson River (tables 31–33) and Truckee River (tables 34–38).

For the invertebrates, a binomial listed with a name after the species name (for example, *Pacifastus leniusculus* Dana) shows the name of the first person to validly publish the species name as given. A binomial listed with a name in parentheses after the species name [for example, *Hyallela azteca* (Saussure)] shows the name of the first person to validly publish the species name, but under a different genus. For aquatic invertebrates and fish, the validity of a species name is determined by the International Committee on Zoological Nomenclature.

Values presented in tables 6–33 are rounded to only two significant figures. Sampling algae and benthic invertebrates directly from natural substrates presents special sampling challenges and the uncertainty in the numbers is an inherent limitation of the sampling process. Precisely determining the area sampled is difficult for rocks and submerged branches. Some samplers like those used in this study have precisely defined areas, however, irregularities in the surfaces of rock can cause leakage of sample material around the edges.

A total of 103 semi-quantitative and 55 qualitative algae samples were collected at sites on the Carson and Truckee Rivers between 1993 and 1996. These samples represent algae in cobble riffles, on submerged woody snags, and on sediment surfaces in depositional areas. In those 158 samples, 514 algal species, varieties, or forms were identified. Of the 8 algal phylum represented, the diatoms (Phylum Bacillariophyta) were the most abundant with 351 species, varieties, or forms. The green algae (Phylum Chlorophyta) were next in abundance with 108 species, varieties, or forms followed by the blue-green algae (Phylum Cyanophyta) with 41 species, varieties, or forms.

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APPENDIX

Table 1. Physical characteristics of the richest-targeted habitat during algae and aquatic invertebrate sample collection at sites on the Carson and Truckee Rivers, 1993-1996. [Some site numbers use a letter (a, b, or c) to designate a specific reach (Lawrence and Pennington, 1998)] [Abbreviations and symbols: BO, boulder; CO, cobble; GV, gravel; SA, sand; Snag, submerged woody debris; N, number of measurements; ^{0}C, degrees celsius; ft, feet; ft/s, feet per second, ft^3/s, cubic feet per second; --, not measured; <, less than]

Site (fig 1)	Dates of sample collection	Mean velocity (ft/s)	Mean depth (ft)	Substrate		Water temper-ature (°C)	Range of mean daily discharges (ft³/s)
				Dominant/ codominant	Embeddedness (percent)		
Carson River Basin							
1a	Aug. 30-Sept. 2, 1993	1.89	0.61	CO/SA	25 - 50	[a]17.0	[a]128-142
1b	Aug. 30 - Sept. 1, 1993	1.78	.64	CO/SA	25 - 50	[a]17.0	[a]128-138
1b	July 26, 1994	2.22	0.46	CO/GV	<25	[a]21.5	[a]681
1b	Sept. 15, 1995	2.78	0.88	CO/GV	<25	[a]15.5	[a]183
1b	Oct. 11, 1996	2.34	0.34	CO/GV	<25	--	[a]79
1c	Aug. 30 - Sept. 1, 1993	2.68	.40	CO/SA	25 - 50	[a]17.0	[a]128-138
2	July 25, 1994	1.62	.27	CO/GV	25 - 50	--	1.2
2	Sept. 15, 1995	2.18	.38	CO/GV	<25	--	15
3	July 21, 1994	2.47	.58	CO/GV	25 - 50	--	[b]38
3	Sept. 13, 1995	2.19	.84	CO/GV	<25	--	[b]75
4	July 22, 1994	1.54	.94	BO/CO	25 - 50	--	--
4	Sept. 13, 1995	1.91	.95	CO/BO	25 - 50	--	--
5	July 20, 1994	1.62	.30	CO/GV	25 - 50	--	0.85
5	Sept. 19, 1995	2.46	.70	CO/SA	<25	--	11
6	July 19, 1994	1.67	.48	BO/GV	25 - 50	--	21
6	Sept. 12, 1995	1.18	.48	CO/GV	25 - 50	--	62
7	Sept. 7-8, 1993	1.24	1.04	BO/SA	50 - 75	--	5.4-5.7
7	July 15, 1994	1.88	.45	BO/SA	25 - 50	--	2.2
7	Sept. 12, 1995	2.08	.92	CO/GV	25 - 50	--	47
8	July 14, 1994	--	--	--	--	--	0.53
8	Sept. 19, 1995	2.91	.41	CO/GV	<25	--	65
9a	Sept. 13, 1993	.10	[c].91	Snag/SA	--	--	1.4
9b	Sept. 13, 1993	.85	[d].52	Snag/SA	--	--	1.4
9b	July 12, 1994	1.0	[d].68	Snag/SA	--	--	3.6
9b	Sept. 28, 1995	1.1	[e].92	Snag/SA	--	--	68
9b	Oct. 10, 1996	1.27	[f].89	Snag/SA	--	18.0	25
9c	Sept. 20, 1993	.62	[g]1.0	Snag/SA	--	--	0.70
Truckee River Basin							
11	Sept. 8, 1993	.66	[h]1.13	Snag/GV	--	--	9.6
12a	Sept. 9, 1993	1.80	.79	BO/CO	25 - 50	17.0	397
12a	June 30, 1994	2.3	1.0	BO/CO	25 - 50	14.0	133
12a	Oct. 2, 1995	1.4	.83	BO/CO	25 - 50	13.0	458
12a	Oct. 8, 1996	1.41	1.54	CO/BO	25 - 50	14.0	395

Table 1. Physical characteristics of the richest-targeted habitat during algae and aquatic invertebrate sample collection at sites on the Carson and Truckee Rivers, 1993-1996--Continued

Site (fig 1)	Date	Mean velocity (ft/s)	Mean depth (ft)	Substrate		Water temper-ature (^{0}C)	Mean daily discharge (ft^3/s)
				Dominant/ codominant	Embeddedness (percent)		
			Truckee River Basin				
12b	Sept. 9, 1993	1.30	.89	BO/CO	50 - 75	17.0	397
12c	Sept. 9-10, 1993	2.03	1.00	BO/CO	25 - 50	17.0	397-400
13	July 1, 1994	2.25	.66	CO/GV	25 - 50	[i]19.0	[i]47
13	Sept. 21, 1995	2.15	1.0	BO/CO	<25	--	[i]344
14	July 5, 1994	2.1	.41	CO/GV	25 - 50	[j]21.0	[j]31
14	Sept. 21-22, 1995	1.9	.77	CO/GV	25 - 50	--	[j]247-256
15	Sept. 3, 1993	1.50	1.16	CO/BO	50 - 75	19.0	114
15	June 29, 1994	2.5	.52	CO/SA	25 - 50	22.5	7.4
15	Sept. 22, 25, 1995	3.0	.47	CO/GV	<25	15.0	229&245
16	July 6, 1994	2.76	.49	CO/SA	<25	[k]22.5	[k]56
16	Sept. 26, 1995	2.33	.75	CO/SA	25 - 50	--	[k]363
17a	Sept. 21, 1993	1.80	.57	CO/GV	50 - 75	21.0	270
17b	Sept. 7, 1993	--	--	--	--	--	230
17b	Sept. 21, 1993	2.06	.68	CO/GV	25 - 50	21.0	270
17c	Sept. 7, 1993	1.29	.55	CO/GV	50 - 75	16.0	230
17c	Sept. 21, 1993	--	--	--	--	--	270
17c	July 7, 1994	.42	1.0	CO/GV	25 - 50	--	64
17c	Oct. 3, 1995	1.03	1.0	GV/SA	<25	14.5	401
17c	Oct. 8, 1996	2.14	.63	CO/GV	50 - 75	17.0	357
18	Oct. 13, 1995	2.31	1.0	CO/GV	25 - 50	12.0	248
19	July 8, 1993	--	--	--	--	--	[l]266
19	Sept. 16, 1993	1.68	.62	CO/GV	25 - 50	[l]17.0	[l]88
19	July 8, 1994	2.5	.2	GV/CO	<25	--	[l]37
19	Sept. 16, 1994	--	--	--	--	--	[l]12
19	Oct. 6, 1995	2.62	.87	GV/CO	<25	[l]13.0	[l]243
20	Oct. 12, 1995	2.72	.85	CO/GV	25 - 50	--	[l]278

[a] Data collected at USGS station number 10309000, East Fork Carson River near Gardnerville, Nev.
[b] Data collected at USGS station number 1031000, West Fork Carson River at Woodfords, Calif.
[c] Depth to snag= 0.32 ft.
[d] Depth to snag= 0.09 ft.
[e] Depth to snag= 0.37 ft.
[f] Depth to snag= 0.22 ft.
[g] Depth to snag= 0.21 ft.
[h] Depth to snag= 0.52 ft.
[i] Data collected at USGS station number 10347460, Truckee River near Mogul, Nev.
[j] Data collected at USGS station number 10348000, Truckee River at Reno, Nev.
[k] Data collected at USGS station number 10350000, Truckee River at Vista, Nev.
[l] Data collected at USGS station number 10351700, Truckee River near Nixon, Nev.

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96. [Abbreviations: RTH, richest-targeted habita; DTH, depositional-targeted habitat; QMH, qualitative multiple habitat; sp., species; X, algae was present in samples from the particular habitat type]

Taxon	Habitat Types		
	RTH	DTH	QMH
PHYLUM			
Class			
Order			
Family			
Genus species			
CYANOPHYTA (Blue-green algae)			
Undetermined sp.	X	X	X
Cyanophyceae			
Chroococcales			
Chroococcacaeae			
Aphanocapsa sp.			X
Aphanocapsa pulchra			X
Chroococcus dispersus			X
Dactylococcopsis rhaphidioides	X	X	X
Gomphosphaeria aponina	X		X
Gomphosphaeria lacustris	X	X	X
Merismopedia elegans			X
Merismopedia glauca	X	X	X
Merismopedia punctata			X
Merismopedia tenuissima	X	X	X
Microcystis aeruginosa			X
Chamaesiphonales			
Chamaesiphonaceae			
Chamaesiphon incrustans	X		X
Nostocales			
Nostocaceae			
Anabaena sp.	X	X	X
Anabaena affinis	X	X	X
Anabaena oscillarioides	X	X	X
Cylindrospermum marchicum			X
Cylindrospermum minutum	X	X	X
Nodularia harveyana			X
Nostoc sp.			X
Nostoc pruniforme	X	X	X
Nostoc spongiiforme			X
Raphidiopsis curvata			X
Oscillatoriaceae			
Hydrocoleum brebissonii	X	X	X
Lyngbya sp.	X	X	X
Lyngbya diguetii			X

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Lyngbya epiphytica	X		X
Lyngbya martensiana	X		X
Microcoleus vaginatus	X		X
Oscillatoria sp.	X	X	X
Oscillatoria princeps			X
Oscillatoria tenuis		X	X
Oscillatoria terebriformi			X
Porphyrosiphon splendidus			X
Schizothrix arenaria			X
Schizothrix friesii	X	X	X
Spirulina laxa	X		X
Spirulina subsalsa		X	X
Rivulariaceae			
Calothrix sp.	X	X	X
Calothrix fusca	X		
Calothrix parietina	X	X	X
RHODOPHYTA (Red Algae)			
Florideophyceae			
Nemaliales			
Acrochaetiaceae			
Audouinella hermanii	X		X
CRYPTOPHYTA (Cryptomonads)			
Undetermined sp.	X	X	X
Cryptophyceae			
Cryptomonadales			
Cryptomonadaceae			
Cryptomonas sp.		X	X
PYRROPHYTA (Dinoglagellates)			
Undetermined sp.			
Pyrrophyceae			
Peridiniales			
Glenodiniaceae			
Glenodinium sp.			X
EUGLENOPHYTA (Euglenoids)			
Undetermined sp.			X
Euglenophyceae			
Euglenales			
Euglenaceae			
Euglena sp.	X	X	X
Euglena spirogyra			X
Lepocinclis sp.		X	X

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Lepocinclis fusiformis	X	X	X
Lepocinclis ovum			X
Phacus sp.		X	X
Phacus longicauda			X
Trachelomonas sp.	X	X	X
Trachelomonas abrupta			X
Trachelomonas cylindrica		X	X
Trachelomonas hispida	X	X	X
Trachelomonas volvocina	X	X	X
CHRYSOPHYTA (Yellow-green algae)			
Undetermined sp.			X
Chrysophyceae			
Chromulinales			
Chrysococcaceae			
Dinobryon sp.			X
BACILLARIOPHYTA (Diatoms)			
Coscinodiscophyceae			
Thalassiosirales			
Stephanodiscaceae			
Cyclostephanos invisitatus	X	X	X
Cyclostephanos tholiformis		X	X
Cyclotella atomus		X	X
Cyclotella bodanica	X		
Cyclotella bodanica affinis			X
Cyclotella meneghiniana	X	X	X
Cyclotella pseudostelligera	X	X	X
Cyclotella radiosa	X	X	X
Cyclotella stelligera	X	X	
Stephanodiscus hantzschii	X	X	X
Stephanodiscus minutulus			X
Stephanodiscus subtransylvanicus			X
Thalassiosiraceae			
Thalassiosira weissflogii	X	X	
Melosirales			
Melosiraceae			
Melosira varians	X	X	X
Aulacoseirales			
Aulacoseiraceae			
Aulacoseira sp.	X		
Aulacoseira alpigena	X	X	X
Aulacoseira ambigua	X	X	X

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Aulacoseira distans			X
Aulacoseira granulata	X	X	X
Aulacoseira italica	X	X	X
Aulacoseira italica tenuissima	X	X	X
Triceratiales			
Triceratiaceae			
Pleurosira laevis	X	X	
Fragilariophyceae			
Fragilariales			
Fragilariaceae			
Asterionella formosa		X	X
Ctenophora pulchella	X	X	X
Ctenophora pulchella lacerata		X	
Diatoma anceps		X	
Diatoma hiemale			X
Diatoma mesodon	X	X	X
Diatoma tenue elongatum		X	
Diatoma vulgare	X	X	X
Fragilaria capucina	X		
Fragilaria capucina mesolepta	X	X	X
Fragilaria crotonensis	X	X	X
Fragilaria exiguiformis	X	X	X
Fragilaria intermedia	X	X	
Fragilaria vaucheriae	X	X	X
Fragilariforma bicapitata	X	X	X
Hannaea arcus	X	X	X
Hannaea arcus amphioxys		X	
Martyana martyi	X	X	X
Meridion circulare	X	X	X
Meridion circulare constrictum			X
Pseudostaurosira brevistriata	X	X	X
Pseudostaurosira brevistriata inflata	X	X	X
Staurosira construens	X	X	X
Staurosira construens binodis	X	X	X
Fragilaria construens pumila	X	X	X
Fragilaria construens subsalina	X	X	
Staurosira construens venter	X	X	X
Staurosirella leptostauron	X	X	X
Staurosirella pinnata	X	X	X
Fragilaria pinnata lancettula	X	X	X
Fragilaria pinnata subcapitata		X	

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Synedra acus	X	X	X
Synedra delicatissima	X		X
Synedra delicatissima angustissima	X		X
Synedra fasciculata		X	X
Synedra mazamaensis	X	X	X
Synedra minuscula	X	X	X
Synedra parasitica		X	X
Synedra parasitica subconstricta	X	X	X
Synedra rumpens	X	X	X
Synedra rumpens familiaris	X	X	X
Synedra rumpens fragilariodes	X	X	X
Synedra rumpens meneghiniana	X	X	X
Synedra tenera		X	X
Synedra ulna	X	X	X
Synedra ulna contracta	X	X	X
Synedra ulna danica	X	X	
Synedra ulna oxyrhynchus	X	X	X
Tabellariales			
Tabellariaceae			
Tabellaria fenestrata		X	X
Tabellaria flocculosa	X	X	X
Bacillariophyceae			
Eunotiales			
Eunotiaceae			
Eunotia exigua	X	X	X
Eunotia incisa			X
Eunotia major			X
Eunotia naegelii			X
Eunotia tenella	X	X	
Cymbellales			
Anomoeonneidaceae			
Anomoeoneis sphaerophora			X
Cymbellaceae			
Cymbella sp.	X	X	X
Cymbella affinis	X	X	X
Cymbella brehmii	X	X	X
Cymbella cistula	X	X	X
Cymbella cuspidata		X	X
Cymbella hauckii		X	
Cymbella leptoceros		X	
Cymbella mexicana	X		X

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Cymbella mexicana janischii	X	X	X
Cymbella naviculiformis	X	X	X
Cymbella tumida	X	X	X
Cymbella turgidula	X	X	X
Encyonema latens		X	
Encyonema lunatum			X
Encyonema minutum	X	X	X
Encyonema muelleri	X	X	X
Encyonema prostratum	X	X	X
Encyonema silesiacum	X	X	X
Encyonema triangulum		X	X
Encyonopsis microcephala			X
Cymbella microcephala crassa	X	X	X
Navicula elginensis neglecta		X	
Navicula exigua capitata		X	X
Placoneis gastrum			X
Placoneis placentula		X	X
Reimeria sinuata	X	X	X
Reimeria sinuata antiqua	X	X	X
Gomphonemataceae			
Gomphoneis eriense		X	X
Gomphoneis eriense angularis			X
Gomphoneis eriense canadensis		X	
Gomphoneis eriense variabilis	X	X	X
Gomphoneis herculeana	X	X	X
Gomphoneis minuta		X	X
Gomphoneis olivacea	X	X	X
Gomphonema sp.	X	X	X
Gomphonema acuminatum		X	X
Gomphonema acuminatum pusillum			X
Gomphonema affine		X	X
Gomphonema angustatum	X	X	X
Gomphonema angustatum intermedia	X	X	X
Gomphonema angustatum productum			X
Gomphonema cf. clevei	X	X	X
Gomphonema gracile	X	X	
Gomphonema grunowii	X	X	X
Gomphonema intricatum	X	X	X
Gomphonema olivaceoides hutchinsoniana			X
Gomphonema parvulum	X	X	X
Gomphonema cf. rhombicum	X		

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Gomphonema subclavatum	X	X	X
Gomphonema subtile	X		
Gomphonema truncatum	X		X
Gomphonema truncatum capitatum	X	X	X
Gomphosphenia grovei	X		
Gomphosphenia tackei			X
Rhoicospheniaceae			
Rhoicosphenia abbreviata	X	X	X
Achanthales			
Achanthaceae			
Lemnicola hungarica		X	X
Achnanthidiaceae			
Achnanthes calcar			X
Achnanthes grana	X	X	X
Achnanthes lauenburgiana	X	X	X
Achnanthes lemmermannii		X	X
Achnanthes pinnata	X	X	X
Achnanthes pseudolinearis	X	X	
Achnanthes subhudsonis kraeuselli			X
Achnanthes tenera		X	
Achnanthidium affine	X		
Achnanthidium biporomum		X	
Achnanthidium exiguum	X	X	X
Achnanthidium exiguum heterovalvum	X	X	X
Achnanthidium minutissimum	X	X	X
Karayevia clevei	X	X	X
Achnanthidium clevei rostrata		X	X
Karayevia laterostrata			X
Planothidium dubium	X	X	X
Achnanthes hauckiana rostrata	X	X	X
Planothidium lanceolatum	X	X	X
Planothidium peragallii	X	X	X
Psammothidium bioretii		X	X
Psammothidium marginulatum		X	X
Psammothidium subatomoides		X	X
Rossithidium pusillum	X	X	X
Cocconeidaceae			
Cocconeis fluviatilis			X
Cocconeis pediculus	X	X	X
Cocconeis placentula			X
Cocconeis placentula euglypta	X	X	X

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Cocconeis placentula lineata	X	X	X
Naviculales			
Amphipleuraceae			
Amphipleura pellucida	X	X	X
Frustulia rhomboides amphipleuroides			X
Frustulia rhomboides crassinervia	X		
Frustulia vulgaris	X	X	X
Brachysiraceae			
Brachysira apiculata			X
Brachysira brebissonii	X		
Cavinulaceae			
Cavinula cocconeiformis	X		
Cavinula pseudoscutiformis		X	X
Diadesmidaceae			
Diadesmis confervacea	X	X	
Navicula contenta biceps		X	
Diadesmis gallica			X
Luticola cohnii	X	X	X
Luticola mutica	X	X	X
Diploneidaceae			
Diploneis elliptica		X	X
Diploneis puella	X	X	X
Diploneis smithii	X		
Naviculaceae			
Fistulifera pelliculosa	X	X	X
Geissleria decussis	X	X	X
Geissleria schoenfeldii	X	X	X
Hippodonta capitata	X	X	X
Mayamaea atomus		X	X
Navicula sp.	X	X	X
Navicula anglica	X	X	X
Navicula arvensis	X	X	X
Navicula biconica		X	X
Navicula bryophila			X
Navicula canalis	X	X	X
Navicula canoris	X	X	X
Navicula capitata		X	X
Navicula cari	X	X	X
Navicula cincta		X	X
Navicula cincta rostrata	X	X	X
Navicula circumtexta		X	

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Navicula clementioides	X		X
Navicula clementis	X	X	X
Navicula convergens	X	X	X
Navicula cryptocephala	X	X	X
Navicula cryptocephala veneta	X	X	X
Navicula detenta	X	X	X
Navicula genovefae	X	X	X
Navicula gibbosa		X	
Navicula graciloides	X	X	X
Navicula gregaria	X	X	X
Navicula grimmii			X
Navicula hustedtii		X	X
Navicula indifferens			X
Navicula lanceolata	X	X	X
Navicula luzonensis	X	X	X
Navicula menisculus	X	X	X
Navicula minima	X	X	X
Navicula oblonga			X
Navicula ochridana	X	X	X
Navicula paucivisitata	X	X	X
Navicula perminuta		X	X
Navicula perpusilla			X
Navicula protracta		X	
Navicula pseudolanceolata	X	X	X
Navicula radiosa	X	X	X
Navicula radiosa parva			X
Navicula radiosa tenella		X	
Navicula rhynchocephala	X	X	X
Navicula rhynchocephala germainii	X	X	X
Navicula salinarum intermedia	X	X	X
Navicula secreta apiculata	X	X	X
Navicula symmetrica	X	X	X
Navicula tantula	X	X	X
Navicula tripunctata	X	X	X
Navicula tripunctata schizonemoides	X	X	X
Navicula viridula	X	X	
Navicula viridula avenacea	X	X	X
Navicula viridula linearis		X	X
Navicula viridula rostellata	X	X	X
Neidiaceae			
Neidium affine	X	X	X

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Neidium affine longiceps			X
Neidium apiculatum	X		
Neidium binode			X
Neidium dubium	X	X	X
Neidium hankensis			X
Pinnulariaceae			
Caloneis amphisbaena	X	X	X
Caloneis bacillum	X	X	X
Caloneis hyalina	X		X
Caloneis lewisii	X	X	X
Caloneis tenuis			X
Caloneis ventricosa truncatula	X	X	X
Pinnularia biceps			X
Pinnularia biceps petersenii			X
Pinnularia borealis	X		X
Pinnularia lundii		X	
Pinnularia mesogongyla			X
Pinnularia mesolepta			X
Pinnularia nodosa	X	X	
Pinnularia obscura	X		X
Pleurosigmataceae			
Gyrosigma acuminatum			X
Gyrosigma nodiferum	X		X
Pleurosigma delicatulum			X
Pleurosigma elongatum		X	X
Sellaphoraceae			
Fallacia pygmaea		X	X
Sellaphora americana	X		
Sellaphora bacillum	X	X	X
Sellaphora laevissima	X	X	X
Sellaphora mutata	X	X	X
Sellaphora pupula	X	X	X
Sellaphora pupula capitata		X	
Sellaphora pupula rectangularis	X	X	X
Sellaphora seminulum	X	X	X
Stauroneidaceae			
Craticula cuspidata		X	X
Stauroneis anceps gracili			X
Stauroneis kriegeri			X
Stauroneis phoenicenteron			X
Stauroneis smithii	X		

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Thalassiophysales			
Catenulaceae			
Amphora normanii			X
Amphora ocellata		X	
Amphora ovalis	X	X	X
Amphora ovalis pediculus	X	X	X
Amphora perpusilla	X	X	X
Amphora submontana			X
Amphora veneta	X	X	X
Bacillarales			
Bacillariaceae			
Bacillaria paxillifer		X	X
Cymbellonitzschia diluviana	X	X	X
Denticula elegans	X	X	X
Denticula tenuis			X
Hantzschia amphioxys	X	X	X
Hantzschia virgata	X		X
Nitzschia accommodata		X	X
Nitzschia acicularis	X	X	X
Nitzschia acula	X		X
Nitzschia admissa			X
Nitzschia amphibia	X	X	X
Nitzschia angustata			X
Nitzschia bacata	X	X	X
Nitzschia capitellata		X	
Nitzschia circumsuta			X
Nitzschia compressa vexans			X
Nitzschia confinis			X
Nitzschia constricta	X	X	X
Nitzschia diserta	X	X	X
Nitzschia dissipata	X	X	X
Nitzschia dissipata media	X	X	X
Nitzschia filiformis	X		X
Nitzschia fonticola	X	X	X
Nitzschia frequens	X	X	X
Nitzschia frustulum	X	X	X
Nitzschia frustulum perminuta	X	X	X
Nitzschia frustulum subsalina	X	X	X
Nitzschia gracilis			X
Nitzschia intermedia		X	X
Nitzschia kuetzingiana	X	X	X
Nitzschia linearis	X	X	X
Nitzschia linearis tenuis	X	X	X

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Nitzschia mediastalsis			X
Nitzschia palea	X	X	X
Nitzschia pura	X		
Nitzschia recta	X		X
Nitzschia reversa	X	X	X
Nitzschia romana	X	X	X
Nitzschia sigma			X
Nitzschia sigmoidea			X
Nitzschia siliqua	X		X
Nitzschia sinuata delognei		X	
Nitzschia sinuata tabellaria	X		X
Nitzschia sociabilis	X	X	X
Nitzschia stagnorum		X	X
Nitzschia subtilis	X	X	X
Nitzschia tropica	X	X	X
Tryblionella debilis	X	X	X
Nitzschia tryblionella maxima		X	
Tryblionella hungarica	X	X	X
Tryblionella levidensis	X	X	X
Tryblionella victoriae	X	X	X
Rhopalodiales			
Rhopalodiaceae			
Epithemia adnata	X	X	X
Epithemia sorex	X	X	X
Epithemia turgida	X	X	X
Rhopalodia gibba	X	X	X
Rhopalodia gibba ventricosa	X	X	X
Rhopalodia gibberula	X	X	X
Rhopalodia musculus		X	X
Surirellales			
Surirellaceae			
Cymatopleura solea	X	X	X
Surirella angusta	X	X	X
Surirella brightwellii			X
Surirella minuta	X	X	X
Surirella ovata		X	X
Surirella suecica		X	X

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
CHLOROPHYTA (Green algae)			
Undetermined sp.	X	X	X
Chlorophyceae			
Volvocales			
Chlamydomonadaceae			
Chlamydomonas sp.	X	X	X
Volvocaceae			
Eudorina elegans			X
Pandorina morum			X
Tetrasporales			
Gloeocystaceae			
Gloeocystis gigas			X
Gloeocystis major			X
Chlorococcales			
Chlorococcaceae			
Characium ambiguum			X
Characium obtusum			X
Characium pringsheimii			X
Sphaerocystis schroeteri			X
Tetraedron sp.			X
Tetraedron caudatum			X
Tetraedron minimum	X		X
Tetraedron muticum			X
Tetraedron pentaedricum			X
Tetraedron trigonum			X
Dictyosphaeriaceae			
Dictyosphaerium ehrenbergianum	X		X
Dictyosphaerium pulchellum	X		X
Hydrodictyaceae			
Hydrodictyon reticulatum			X
Pediastrum sp.			X
Pediastrum boryanum	X	X	X
Pediastrum duplex	X	X	X
Pediastrum integrum			X
Pediastrum obtusum			X
Pediastrum simplex			X
Pediastrum tetras	X		X
Micractiniaceae			
Micractinium pusillum	X	X	X
Oocystaceae			
Ankistrodesmus falcatus	X	X	X
Ankistrodesmus spiralis			X
Dactylococcus infusionum			X

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Kirchneriella lunaris	X	X	X
Kirchneriella obesa			X
Lagerheimia ciliata			X
Nephrocytium limneticum			X
Oocystis sp.			X
Oocystis pusilla			X
Quadrigula lacustris	X		X
Selenastrum minutum			X
Selenastrum westii			X
Treubaria crassipina			X
Treubaria setigerum			X
Scenedesmaceae			
Actinastrum hantzschii			X
Coelastrum microporum	X	X	X
Scenedesmus sp			X
Scenedesmus abundans			X
Scenedesmus acuminatus	X		X
Scenedesmus acutus	X	X	X
Scenedesmus arcuatus			X
Scenedesmus bicaudatus			X
Scenedesmus bijuga	X	X	X
Scenedesmus denticulatus	X	X	X
Scenedesmus dimorphus	X	X	X
Scenedesmus ecornis	X	X	X
Scenedesmus hystrix			X
Scenedesmus obliquus			X
Scenedesmus quadricauda	X	X	X
Scenedesmus serratus		X	
Scenedesmus spinosus		X	X
Tetrastrum staurogeniaeforme			X
Microsporales			
Microsporaceae			
Microspora sp.			X
Microspora pachyderma			X
Microspora stagnorum	X	X	X
Chaetophorales			
Chaetophoraceae			
Schizomeris leibleinii	X		X
Stigeoclonium lubricum	X	X	X

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Chlorosarcinales			
Aphanochaetaceae			
Aphanochaete repens			X
Oedogoniales			
Oedogoniaceae			
Bulbochaete sp.			X
Oedogonium sp.	X	X	X
Ulvophyceae			
Cladophorales			
Cladophoraceae			
Cladophora sp.	X	X	X
Cladophora glomerata	X		X
Rhizoclonium sp.			X
Ulotrichales			
Ulotrichaceae			
Geminella interrupta			X
Stichococcus subtilis			X
Ulothrix sp.			X
Ulothrix subconstricta			X
Ulothrix subtilissima			X
Ulothrix tenerrima			X
Ulothrix zonata			X
Charophyceae			
Zygnemateles			
Desmidiaceae			
Closterium sp.			X
Closterium acerosum			X
Closterium ehrenbergii			X
Closterium leibleinii	X	X	X
Closterium littorale			X
Closterium lunula			X
Closterium moniliferum	X	X	X
Closterium venus			X
Cosmarium sp.	X	X	X
Cosmarium botrytis	X	X	X
Cosmarium galeritum			X
Cosmarium granatum			X
Cosmarium margaritatum			X
Cosmarium punctulatum	X		X
Cosmarium subcrenatum	X	X	X
Cosmarium trilobulatum		X	X
Cosmarium turpinii			X
Euastrum turneri			X

Table 2. Algae identified in samples collected at sites on the Carson and Truckee Rivers, 1993-96--Continued.

Taxon	Habitat Types		
	RTH	DTH	QMH
Spondylosium planum			X
Staurastrum sp.		X	X
Staurastrum alternans			X
Staurastrum anatinum parvum		X	X
Staurastrum brevispinum			X
Staurastrum chaetoceras			X
Staurastrum orbiculare			X
Staurastrum paradoxum			X
Staurastrum punctulatum	X	X	X
Staurastrum turgescens		X	X
Zygnemataceae			
Mougeotia sp.	X	X	X
Spirogyra sp.	X		X
Zygnema sp.			X

Table 3. Algal density in richest-targeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96. Habitats sampled were cobble riffles. [Abbreviation: cm^2, square centimeter; sp., species]

Taxon	Reach A Sept. 1, 1993 (cells/cm^2)	Reach B Sept. 1, 1993 (cells/cm^2)	Reach C Sept. 1, 1993 (cells/cm^2)	Reach B July 26 1994 (cells/cm^2)	Reach B Sept. 15, 1995 (cells/cm^2)	Reach B Oct. 11 1996 (cells/cm^2)
Total number of cells (rounded)	5,900,000	27,000,000	49,000,000	15,000,000	2,400,000	1,700,000
CYANOPHYTA						
Undetermined sp.				22,000	4,600	
Cyanophyceae						
Chamaesiphonales						
Chamaesiphonaceae						
Chamaesiphon incrustans					1,200	
Nostocales						
Nostacaceae						
Anabaena sp.				190,000	15,000	
Anabaena affinis						18,000
Anabaena oscillarioides	29,000					
Nostoc pruniforme		730,000				
Oscillatoriaceae						
Hydrocoleum brebissonii				1,100,000	18,000	
Lyngbya sp.				1,600,000	130,000	180,000
Lyngbya epiphytica				55,000		
Lyngbya martensiana					7,000	
Oscillatoria sp.				3,800,000	230,000	330,000
Rivulariaceae						
Calothrix sp.				4,800,000	1,700,000	
Calothrix parietina	5,700,000	25,000,000				410,000
Nemaliales						
Acrochaetiaceae						
Audouinella hermanii				74,000	18,000	46,000

Table 3. Algal density in richest-targeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 1, 1993 (cells/cm^2)	Reach B Sept. 1, 1993 (cells/cm^2)	Reach C Sept. 1, 1993 (cells/cm^2)	Reach B July 26 1994 (cells/cm^2)	Reach B Sept. 15, 1995 (cells/cm^2)	Reach B Oct. 11 1996 (cells/cm^2)
EUGLENOPHYTA						
Euglenophyceae						
Euglenales						
Euglenaceae						
Euglena sp.						2,100
BACILLARIOPHYTA						
Coscinodiscophyceae						
Thalassiosirales						
Stephanodiscophyceae						
Cyclotella meneghiniana	1,600					980
Aulacoseirales						
Aulacoseiraceae						
Aulacoseira italica					560	
Fragilariophyceae						
Fragilariales						
Fragilariaceae						
Ctenophora pulchella					280	
Diatoma vulgare					280	23,000
Fragilaria vaucheriae	930					17,000
Fragilaria virescens exigua				8,200		
Martyana martyi	470					
Pseudostaurosira brevistriata						3,900
Fragilaria construens pumila	470					
Staurosira construens				8,200		
Staurosira construens venter	230			16,000		
Staurosirella pinnata	4,700		8,700	120,000	560	7,900
Synedra mazamaensis						68,000
Synedra ulna				4,100		3,900

Table 3. Algal density in richest-targeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 1, 1993 (cells/cm^2)	Reach B Sept. 1, 1993 (cells/cm^2)	Reach C Sept. 1, 1993 (cells/cm^2)	Reach B July 26 1994 (cells/cm^2)	Reach B Sept. 15, 1995 (cells/cm^2)	Reach B Oct. 11 1996 (cells/cm^2)
Bacillariophyceae						
Eunotiales						
Eunotiaceae						
Eunotia exigua	230					
Cymbellales						
Cymbellaceae						
Cymbella sp.	700		200,000	49,000	280	
Cymbella affinis	1,200				850	21,000
Cymbella cistula					280	
Cymbella mexicana janischii				8,200		
Cymbella tumida			8,700			
Encyonema minutum	2,600		8,700		280	
Encyonema silesiacum				8,200		
Reimeria sinuata	2,100		110,000	210,000	9,900	13,000
Gomphonemataceae						
Gomphoneis eriense variabilis			8,700	33,000		
Gomphoneis herculeana			18,000	25,000		7,900
Gomphoneis olivacea	230		8,800		560	
Gomphonema sp.	19,000		300,000	710,000	32,000	
Gomphonema cf. clevei						20,000
Gomphonema intricatum					1,100	2,000
Rhoicospeniaceae						
Rhoicosphenia abbreviata	700		18,000	58,000	1,100	2,000
Achnanthales						
Acnanthidiaceae						
Achnanthes grana						2,000
Achnanthidium minutissimum			8,700	21,000	560	16,000
Planothidium dubium						3,000

Table 3. Algal density in richest-targeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 1, 1993 (cells/cm^2)	Reach B Sept. 1, 1993 (cells/cm^2)	Reach C Sept. 1, 1993 (cells/cm^2)	Reach B July 26 1994 (cells/cm^2)	Reach B Sept. 15, 1995 (cells/cm^2)	Reach B Oct. 11 1996 (cells/cm^2)
Planothidium lanceolatum	700		8,700			
Cocconeidaceae						
Cocconeis pediculus				8,200		4,900
Cocconeis placentula euglypta	13,000		96,000	41,000	1,100	21,000
Cocconeis placentula lineata	3,000		35,000			2,000
Naviculales						
Naviculaceae						
Geissleria schoenfeldii				16,000		
Navicula sp.						15,000
Navicula lanceolata					280	
Navicula menisculus	700					950
Navicula minima				4,100		
Navicula salinarum intermedia	940			45,000		25,000
Navicula tripunctata			18,000	8,200		
Pinnulariaceae						
Caloneis bacillum				41,000	850	5,900
Caloneis hyalina	230					
Pinnularia borealis					280	
Sellaphoraceae						
Sellaphora pupula				16,000		
Thalassiophysales						
Catenulaceae						
Amphora perpusilla				4,100		3,900
Bacillarales						
Bacillariaceae						
Nitzschia amphibia				4,100		
Nitzschia dissipata media	230					
Nitzschia frustulum	1,400		8,700	120,000	280	53,000

Table 3. Algal density in richest-targeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 1, 1993 (cells/cm^2)	Reach B Sept. 1, 1993 (cells/cm^2)	Reach C Sept. 1, 1993 (cells/cm^2)	Reach B July 26 1994 (cells/cm^2)	Reach B Sept. 15, 1995 (cells/cm^2)	Reach B Oct. 11 1996 (cells/cm^2)
Nitzschia frustulum perminuta	930			33,000		19,000
Nitzschia kuetzingiana	470					2,000
Rhopalodiales						
Rhopalodiaceae						
Epithemia adnata						2,000
Epithemia sorex	72,000			830,000	120,000	220,000
Epithemia turgida	11,000		26,000	4,100	1,100	2,000
Rhopalodia gibba	700		35,000	4,100		
Rhopalodia gibba ventricosa				4,100	280	
Surirellaceae						
Surirella minuta	230					
CHLOROPHYTA						
Undetermined sp.						
Chlorophyceae						
Chlorococcales						
Oocystaceae						
Ankistrodesmus falcatus			26,000	11,000		2,100
Kirchneriella lunaris				11,000		6,200
Chaetophorales						
Chaetophoraceae						
Stigeoclonium lubricum	49,000	1,500,000	280,000	270,000	72,000	75,000
Oedogoniales						
Oedogoniaceae						
Oedogonium sp.			190,000			
Ulvophyceae						
Cladophorales						
Cladophoraceae						
Cladophora sp.				20,000		

Table 3. Algal density in richest-targeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 1, 1993 (cells/cm^2)	Reach B Sept. 1, 1993 (cells/cm^2)	Reach C Sept. 1, 1993 (cells/cm^2)	Reach B July 26 1994 (cells/cm^2)	Reach B Sept. 15, 1995 (cells/cm^2)	Reach B Oct. 11 1996 (cells/cm^2)
Charophyceae						
Zygnemateles						
Zygnemataceae						
Spirogyra sp.						15,000

Table 4. Algal density in richest-targeted habitat at sites on the Carson River: East Fork Carson River near Minden, Nev. (site 2, fig. 1) and Carson River near Carson City, Nev. (site 6, fig. 1), 1994-95. Habitats at sampling sites were cobble riffles. [Abbreviation: cm^2, square centimeter; sp., species]

Taxon	Site 2		Site 6	
	July 25, 1994 (cells/cm^2)	**Sept. 15, 1995** (cells/cm^2)	**July 19, 1994** (cells/cm^2)	**Sept. 12, 1995** (cells/cm^2)
Total number of cells (rounded)	33,000,000	8,400,000	15,000,000	5,200,000
CYANOPHYTA.				
Undetermined sp.	81,000	8,400	71,000	21,000
Cyanophyceae				
Chroococcales				
Chroococcaceae				
Dactylococcopsis rhaphidioides			8,900	
Gomphosphaeria lacustris			6,300,000	
Merismopedia tenuissima				43,000
Nostocales				
Nostocaceae				
Anabaena sp.			300,000	63,000
Cylindrospermum minutum			370,000	
Oscillatoriaceae				
Hydrocoleum brebissonii				
Lyngbya sp.	6,300,000	1,800,000	990,000	660,000
Oscillatoria sp.	5,300,000	1,200,000	1,700,000	620,000
Spirulina laxa				7,200
Rivulariaceae				
Calothrix sp.	17,000,000	2,400,000		1,300,000
RHODOPHYTA				
Florideophyceae				
Nemaliales				
Acrochaetiaceae				
Audouinella hermanii	160,000		210,000	37,000
CRYPTOPHYTA				
Undetermined sp.			8,900	
BACILLARIOPHYTA				
Coscinodiscophyceae				
Thalassiosirales				
Stephanodiscaceae				
Cyclotella meneghiniana	35,000		21,000	36,000
Thalassiosiraceae				
Thalassiosira weissflogii				4,000
Melosirales				
Melosiraceae				
Melosira varians	47,000	6,500	6,800	550,000

Table 4. Algal density in richest-targeted habitat at sites on the Carson River: East Fork Carson River near Minden, Nev. (site 2, fig. 1) and Carson River near Carson City, Nev. (site 6, fig. 1), 1994-95--Continued

Taxon	Site 2		Site 6	
	July 25, 1994 (cells/cm^2)	Sept. 15, 1995 (cells/cm^2)	July 19, 1994 (cells/cm^2)	Sept. 12, 1995 (cells/cm^2)
Fragilariophyceae				
Fragilariales				
Fragilariaceae				
Diatoma vulgare	120,000	6,500	82,000	550,000
Fragilaria vaucheriae	76,000	16,000	20,000	16,000
Fragilaria virescens exigua	12,000			
Pseudostaurosira brevistriata				32,000
Fragilaria construens pumila	47,000	6,500	180,000	28,000
Staurosira construens binodis	65,000		670,000	16,000
Staurosira construens venter	53,000	6,500	620,000	55,000
Staurosirella leptostauron	5,900			
Staurosirella pinnata	260,000	3,300	620,000	43,000
Synedra acus	35,000			
Synedra delicatissima	5,900			
Synedra mazamaensis		3,300		
Synedra minuscula	12,000			
Synedra parasitica subconstricta				4,000
Synedra rumpens	5,900			
Synedra rumpens familiaris	5,900			
Synedra ulna	450,000	9,800	160,000	24,000
Synedra ulna oxyrhynchus	150,000	3,300		
Bacillariophyceae				
Cymbellales				
Cymbellaceae				
Cymbella sp.		62,000		
Cymbella affinis	12,000	710,000		
Cymbella brehmii	5,900			
Cymbella turgidula				7,900
Encyonema minutum	160,000	36,000		
Encyonema muelleri	18,000			
Encyonema silesiacum	5,900			
Cymbella microcephala crassa			14,000	
Reimeria sinuata	23,000	470,000	14,000	7,900
Reimeria sinuata antiqua			69,000	
Gomphonemataceae				
Gomphoneis eriense variabilis		26,000		
Gomphoneis herculeana	88,000	180,000		
Gomphoneis olivacea		16,000	6,800	16,000
Gomphonema angustatum intermedia			6,800	

Table 4. Algal density in richest-targeted habitat at sites on the Carson River: East Fork Carson River near Minden, Nev. (site 2, fig. 1) and Carson River near Carson City, Nev. (site 6, fig. 1), 1994-95--Continued

Taxon	Site 2		Site 6	
	July 25, 1994 (cells/cm^2)	Sept. 15, 1995 (cells/cm^2)	July 19, 1994 (cells/cm^2)	Sept. 12, 1995 (cells/cm^2)
Gomphonema cf. clevei	570,000	210,000	89,000	99,000
Gomphonema gracile	12,000			
Gomphonema parvulum	47,000			
Rhoicospheniaceae				
Rhoicosphenia abbreviata	140,000	3,300	170,000	51,000
Achanthales				
Achnanthidiaceae				
Achnanthes lauenburgiana				4,000
Achnanthidium affine		6,500		
Achnanthidium exiguum heterovalvum				4,000
Achnanthidium minutissimum	65,000	20,000		32,000
Planothidium dubium	5,900	3,300	41,000	
Achnanthes hauckiana rostrata				4,000
Planothidium lanceolatum			34,000	7,900
Cocconeidaceae				
Cocconeis pediculus	200,000		160,000	16,000
Cocconeis placentula euglypta	12,000	13,000	380,000	20,000
Cocconeis placentula lineata			21,000	28,000
Naviculales				
Amphipleuraceae				
Frustulia vulgaris	5,900			
Naviculaceae				
Geissleria decussis		3,300	6,800	
Geissleria schoenfeldii	12,000			
Navicula sp.				40,000
Navicula cari	5,900		41,000	
Navicula cincta rostrata			6,800	7,900
Navicula clementioides			14,000	
Navicula clementis			6,800	
Navicula genovefae	5,900			
Navicula gregaria				12,000
Navicula lanceolata			6,800	7,900
Navicula luzonensis			6,800	4,000
Navicula minima				7,900
Navicula rhynchocephala germainii				24,000
Navicula salinarum intermedia	18,000	26,000		44,000
Navicula secreta apiculata				16,000
Navicula tantula			6,800	

Table 4. Algal density in richest-targeted habitat at sites on the Carson River: East Fork Carson River near Minden, Nev. (site 2, fig. 1) and Carson River near Carson City, Nev. (site 6, fig. 1), 1994-95--Continued

Taxon	Site 2		Site 6	
	July 25, 1994 (cells/cm^2)	Sept. 15, 1995 (cells/cm^2)	July 19, 1994 (cells/cm^2)	Sept. 12, 1995 (cells/cm^2)
Navicula tripunctata	12,000		160,000	32,000
Navicula tripunctata schizonemoides			6,800	
Navicula viridula avenacea				20,000
Pinnulariaceae				
Caloneis bacillum	47,000	3,300	14,000	7,900
Caloneis ventricosa truncatula			6,800	7,900
Sellaphoraceae				
Sellaphora pupula	5,900		14,000	7,900
Sellaphora pupula rectangularis	12,000			
Catenulaceae				
Amphora ovalis	5,900			
Amphora ovalis pediculus			34,000	
Amphora perpusilla	5,900			
Bacillarales				
Bacillariaceae				
Nitzschia amphibia			27,000	7,900
Nitzschia bacata				7,900
Nitzschia constricta				7,900
Nitzschia dissipata		3,300		120,000
Nitzschia dissipata media				7,900
Nitzschia frustulum	94,000	52,000	55,000	43,000
Nitzschia frustulum perminuta	18,000	39,000	27,000	210,000
Nitzschia frustulum subsalina	5,900		27,000	12,000
Nitzschia kuetzingiana		6,500		
Nitzschia linearis				7,690
Nitzschia linearis tenuis				4,000
Nitzschia palea	5,900		6,800	4,000
Nitzschia recta				4,000
Nitzschia romana				4,000
Nitzschia tropica	12,000			
Tryblionella hungarica				4,000
Tryblionella levidensis				7,900
Rhopalodiales				
Rhopalodiaceae				
Epithemia sorex	470,000	13,000	240,000	20,000
Epithemia turgida	12,000			
Rhopalodia gibba ventricosa	5,900		6,800	
Rhopalodia gibberula				4,000

Table 4. Algal density in richest-targeted habitat at sites on the Carson River: East Fork Carson River near Minden, Nev. (site 2, fig. 1) and Carson River near Carson City, Nev. (site 6, fig. 1), 1994-95--Continued

Taxon	Site 2		Site 6	
	July 25, 1994 (cells/cm^2)	Sept. 15, 1995 (cells/cm^2)	July 19, 1994 (cells/cm^2)	Sept. 12, 1995 (cells/cm^2)
CHLOROPHYTA				
Undetermined sp.	16,000		18,000	29,000
Chlorophyceae				
Volvocales				
Chlamydomonadaceae				
Chlamydomonas sp.			8,900	
Chlorococcales				
Dictyosphaeriaceae				
Dictyosphaerium ehrenbergianum		130,000	36,000	
Dictyosphaerium pulchellum			36,000	
Oocystaceae				
Ankistrodesmus falcatus	97,000	8,400	27,000	14,000
Kirchneriella lunaris			80,000	
Quadrigula lacustris				14,000
Scenedesmaceae				
Scenedesmus acutus	220,000			
Scenedesmus bijuga		34,000		
Scenedesmus denticulatus		67,000	41,000	
Scenedesmus dimorphus			36,000	
Chaetophorales				
Chaetophoraceae				
Stigeoclonium lubricum	600,000	850,000	660,000	
Ulvophyceae				
Cladophorales				
Cladophoraceae				
Cladophora sp.			16,000	
Charophyceae				
Zygnemateles				
Desmidiaceae				
Closterium leibleinii				7,200
Cosmarium botrytis		8,400		
Cosmarium punctulatum			8,900	

Table 5. Algal density in richest-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig. 1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95. Habitats sampled were cobble riffles. [Abbreviations: cm^2, square centimeter; sp., species]

	Site 3		Site 4	Site 5	
Taxon	**July 21, 1994** (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**July 20, 1994** (cells/cm^2)	**Sept. 19, 1995** (cells/cm^2)
Total number of cells (rounded)	16,000,000	19,000	110,000	10,000,000	6,400,000
CYANOPHYTA					
Undetermined sp.	12,000		2,400	250,000	95,000
Cyanophyceae					
Chroococcales					
Chroococcaceae					
Dactylococcopsis rhaphidioides	5,800				
Chamaesiphonales					
Chamaesiphonaceae					
Chamaesiphon incrustans	17,000				
Nostocales					
Oscillatoriaceae					
Hydrocoleum brebissonii					320,000
Lyngbya sp.	220,000			380,000	970,000
Oscillatoria sp.	3,200,000	5,600	3,700	2,800,000	570,000
Rivulariaceae					
Calothrix sp.	12,000,000	8,000		210,000	1,200,000
CRYPTOPHYTA					
Undetermined sp.	5,800			210,000	
EUGLENOPHYTA					
Euglenophyceae					
Euglenales					
Euglenaceae					
Euglena sp.	5,800				
Lepocinclis fusiformis				21,000	
Trachelomonas volvocina				41,000	

Table 5. Algal density in richest-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig.1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

Taxon	Site 3		Site 4	Site 5	
	July 21, 1994 (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**July 20, 1994** (cells/cm^2)	**Sept. 19, 1995** (cells/cm^2)
BACILLARIOPHYTA					
Coscinodiscophyceae					
Thalassiosirales					
Stephanodiscaceae					
Cyclotella meneghiniana	3,600	38	540	50,000	21,000
Cyclotella radiosa	890				
Cyclotella stelligera	890				
Melosirales					
Melosiraceae					
Melosira varians	1,800			140,000	110,000
Aulacoseirales					
Aulacoseiraceae					
Aulacoseira alpigena	890				
Aulacoseira italica	890		360		
Fragilariophyceae					
Fragilariales					
Fragilariaceae					
Ctenophora pulchella				30,000	
Diatoma mesodon			180		
Diatoma vulgare	890	19	180	30,000	420,000
Fragilaria vaucheriae	1,800	19	1,400	10,000	
Fragilaria virescens exigua	8,900				
Hannaea arcus		9			
Meridion circulare	1,800		180		
Pseudostaurosira brevistriata		56			
Staurosira construens	1,800				
Fragilaria construens pumila	61,000				

Table 5. Algal density in richest-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig.1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

	Site 3		Site 4	Site 5	
Taxon	**July 21, 1994** (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**July 20, 1994** (cells/cm^2)	**Sept. 19, 1995** (cells/cm^2)
Staurosira construens binodis	27,000			20,000	
Staurosira construens venter	73,000			30,000	
Staurosirella leptostauron	1,800		540		
Staurosirella pinnata	90,000			50,000	
Fragilaria pinnata lancettula			360		
Synedra acus				30,000	
Synedra rumpens			180		
Synedra ulna	3,600		540	140,000	
Bacillariophyceae					
Cymbellales					
Cynbellaceae					
Cymbella sp.			720		5,200
Cymbella affinis					10,000
Cymbella brehmii	890				21,000
Cymbella cistula	890				
Encyonema minutum	1,800	85	6,500	310,000	88,000
Encyonema muelleri			540		
Encyonema silesiacum			360		
Reimeria sinuata	5,300	690	1,800	30,000	42,000
Reimeria sinuata antiqua				30,000	
Gomphonemataceae					
Gomphoneis herculeana			720		
Gomphoneis olivacea	600				
Gomphonema sp.	26,000	4,000	39,000	420,000	160,000
Gomphonema angustatum intermedia			360		
Gomphonema intricatum		38	2,200		
Gomphonema parvulum	12,000	19	360	280,000	

Table 5. Algal density in richest-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig.1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

Taxon	Site 3		Site 4	Site 5	
	July 21, 1994 (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**July 20, 1994** (cells/cm^2)	**Sept. 19, 1995** (cells/cm^2)
Gomphonema subclavatum				10,000	
Gomphonema truncatum capitatum	2,700			40,000	
Gomphosphenia grovei					10,000
Rhoicospheniaceae					
Rhoicosphenia abbreviata	52,000		5,400	2,100,000	1,100,000
Achanthales					
Achnanthidiaceae					
Achnanthes pseudolinearis		170	360		
Achnanthidium minutissimum	1,800	170	26,000	10,000	
Karayevia clevei	890				
Planothidium dubium	1,800	66	1,400		
Planothidium lanceolatum		56			
Rossithidium pusillum			3,400		
Cocconeidaceae					
Cocconeis pediculus	23,000	66	360	50,000	
Cocconeis placentula euglypta	20,000	19	720	40,000	
Cocconeis placentula lineata	4,400		1,100	60,000	42,000
Naviculales					
Amphipleuraceae					
Frustulia vulgaris		19			
Diploneidaceae					
Diploneis puella	890				
Naviculaceae					
Geissleria decussis	890		180		
Geissleria schoenfeldii	5,300			20,000	
Hippodonta capitata				10,000	
Navicula sp.		47	1,600		73,000

Table 5. Algal density in richest-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig.1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

Taxon	Site 3		Site 4	Site 5	
	July 21, 1994 (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**July 20, 1994** (cells/cm^2)	**Sept. 19, 1995** (cells/cm^2)
Navicula cari				40,000	
Navicula cincta rostrata				20,000	
Navicula cryptocephala	890				5,200
Navicula cryptocephala veneta				20,000	21,000
Navicula gregaria	890				
Navicula lanceolata				20,000	
Navicula menisculus			900		
Navicula minima	890		540	10,000	10,000
Navicula rhynchocephala germainii	1,800				20,000
Navicula salinarum intermedia	8,900			100,000	88,000
Navicula secreta apiculata	2,700		720		
Navicula symmetrica	890				
Navicula tripunctata			360	20,000	5,200
Pinnulariaceae					
Caloneis bacillum				50,000	83,000
Sellaphoraceae					
Sellaphora pupula	2,700		180		5,200
Sellaphora pupula rectangularis	890				
Sellaphora seminulum			180	20,000	
Thalassiophysales					
Catenulaceae					
Amphora ovalis		9			
Amphora ovalis pediculus				20,000	
Amphora perpusilla		9	360	90,000	10,000
Bacillarales					
Bacillariaceae					
Hantzschia amphioxys	890				

Table 5. Algal density in richest-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig.1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

Taxon	Site 3		Site 4	Site 5	
	July 21, 1994 (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**July 20, 1994** (cells/cm^2)	**Sept. 19, 1995** (cells/cm^2)
Nitzschia amphibia	3,600			250,000	5,200
Nitzschia bacata	650			30,000	
Nitzschia dissipata			3,600		110,000
Nitzschia dissipata media	890		360		
Nitzschia fonticola	1,800				
Nitzschia frustulum	8,000		720	80,000	62,000
Nitzschia frustulum perminuta	8,000		1,400	240,000	560,000
Nitzschia frustulum subsalina	16,000			20,000	
Nitzschia kuetzingiana	5,400				
Nitzschia linearis tenuis			360	10,000	
Nitzschia palea	890			10,000	
Tryblionella debilis	890				
Rhopalodiales					
Rhopalodiaceae					
Epithemia sorex	21,000			980,000	42,000
Epithemia turgida	890		180		
CHLOROPHYTA					
Undetermined sp.	4,200		330	76,000	10,000
Chlorophyceae					
Volvocales					
Chlamydomonadaceae					
Chlamydomonas sp.					11,000
Chlorococcales					
Oocystaceae					
Ankistrodesmus falcatus				21,000	

Table 5. Algal density in richest-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig.1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

	Site 3		Site 4	Site 5	
Taxon	**July 21, 1994** (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**Sept. 13, 1995** (cells/cm^2)	**July 20, 1994** (cells/cm^2)	**Sept. 19, 1995** (cells/cm^2)
Scenedesmaceae					
Coelastrum microporum				62,000	
Scenedesmus acutus				190,000	
Scenedesmus dimorphus					34,000

Table 6. Algal density in richest-targeted habitat at sites on the Carson River: Carson River at Deer Run Road near Carson City, Nev. (site 7, fig. 1) and Carson River at Dayton, Nev. (site 8, fig. 1), 1993-95. Habitats at sampling sites were cobble riffles. [Abbreviations: cm^2, square centimeter; sp., species]

Taxon	Site 7			Site 8	
	Sept. 8,1993 (cells/cm^2)	July 15, 1994 (cells/cm^2)	Sept. 12, 1995 (cells/cm^2)	July 14, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
Total number of cells (rounded)	6,100,000	3,600,000	7,100,000	15,000,000	6,500,000
CYANOPHYTA					
Undetermined sp.		28,000		170,000	13,000
Cyanophyceae					
Chroococcales					
Chroococcaceae					
Dactylococcopsis rhaphidioides		4,000		21,000	6,700
Chamaesiphonales					
Chamaesiphonaceae					
Chamaesiphon incrustans					6,700
Nostocales					
Nostocaceae					
Anabaena sp.		69,000	13,000	1,600,000	
Anabaena oscillarioides	290,000				
Oscillatoriaceae					
Lyngbya sp.		820,000	1,200,000	740,000	790,000
Oscillatoria sp.		440,000	2,000,000	740,000	860,000
Rivulariaceae					
Calothrix sp.		240,000	3,300,000	4,300,000	2,800,000
Calothrix parietina	3,200,000				
RHODOPHYTA					
Florideophyceae					
Nemaliales					
Acrochaetiaceae					
Audouinella hermanii		14,000			
EUGLENOPHYTA					
Euglenophyceae					
Euglenales					
Euglenaceae					
Euglena sp.		4,000			
Trachelomonas hispida					6,700
BACILLARIOPHYTA					
Coscinodiscophyceae					
Thalassiosirales					
Stephanodiscaceae					
Cyclotella meneghiniana		32,000			

Table 6. Algal density in richest-targeted habitat at sites on the Carson River: Carson River at Deer Run Road near Carson City, Nev. (site 7, fig. 1) and Carson River at Dayton, Nev. (site 8, fig. 1), 1993-95--Continued.

Taxon	Site 7			Site 8	
	Sept. 8,1993 (cells/cm^2)	July 15, 1994 (cells/cm^2)	Sept. 12, 1995 (cells/cm^2)	July 14, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
Melosirales					
Melosiraceae					
Melosira varians	4,340	17,000	4,000	39,000	2,600
Aulacoseirales					
Aulacoseiraceae					
Aulacoseira ambigua		2,900	1,600		
Aulacoseira italica			810		
Aulacoseira italica tenuissima		5,700			
Triceratiales					
Triceratiaceae					
Pleurosira laevis			810		
Fragilariophyceae					
Fragilariales					
Fragilariaceae					
Ctenophora pulchella		2,900			
Diatoma vulgare	4,400	26,000	3,200		
Fragilaria exiguiformis		8,600	810		
Fragilaria vaucheriae		2,900	3,200		
Pseudostaurosira brevistriata			29,000		7,800
Fragilaria brevistriata inflata			4,000		
Staurosira construens			1,600	9,800	
Fragilaria construens pumila	18,000	23,000	11,000		16,000
Fragilaria construens subsalina	89,000				
Staurosira construens binodis	58,000	180,000	7,200		10,000
Staurosira construens venter	120,000	160,000	37,000		37,000
Staurosirella pinnata	1,700,000	340,000	20,000	49,000	10,000
Synedra delicatissima angustissima				9,800	
Synedra ulna	18,000	20,000	32,000	39,000	
Cymbellales					
Cynbellaceae					
Cymbella sp.			1,600		
Cymbella affinis	4,500	2,900	5,600		44,000
Cymbella mexicana					2,600
Cymbella tumida	8,900				
Encyonema minutum		8,600		9,180	
Encyonema silesiacum		2,900			
Reimeria sinuata		2,900	15,000	9,800	5,200
Reimeria sinuata antiqua		8,600	15,000		
Gomphonemataceae					
Gomphoneis eriense variabilis			810		

Table 6. Algal density in richest-targeted habitat at sites on the Carson River: Carson River at Deer Run Road near Carson City, Nev. (site 7, fig. 1) and Carson River at Dayton, Nev. (site 8, fig. 1), 1993-95--Continued.

Taxon	Site 7			Site 8	
	Sept. 8,1993 (cells/cm^2)	July 15, 1994 (cells/cm^2)	Sept. 12, 1995 (cells/cm^2)	July 14, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
Gomphoneis olivacea		2,900	1,600	9,800	
Gomphonema angustatum			810		
Gomphonema intricatum			4,000		2,600
Gomphonema parvulum		5,700		29,000	2,600
Gomphonema subtile			810		
Gomphonema truncatum capitatum		11,000		20,000	
Rhoicospheniaceae					
Rhoicosphenia abbreviata	98,000	320,000	6,400	800,000	84,000
Achanthales					
Achnanthidiaceae					
Achnanthidium exiguum			810		
Planothidium dubium		17,000	8,000		2,600
Planothidium lanceolatum			810		2,600
Cocconeidaceae					
Cocconeis pediculus	13,000	77,000	77,000	29,000	110,000
Cocconeis placentula euglypta	8,900	52,000	17,000		120,000
Cocconeis placentula lineata		5,700	3,200		
Naviculales					
Diadesmidaceae					
Luticola cohnii		2,900	2,400		
Naviculaceae					
Hippodonta capitata			1,600		
Navicula sp.			17,000		2,600
Navicula clementioides		2,900			
Navicula salinarum intermedia		160,000	810	9,800	7,800
Navicula tripunctata		34,000	10,000	9,800	13,000
Navicula tripunctata schizonemoides		2,900			
Navicula viridula avenacea			810		
Pinnulariaceae					
Caloneis lewisii	8,900				2,600
Caloneis ventricosa truncatula			1,600		
Pinnularia obscura					1,800
Pleurosigmataceae					
Gyrosigma nodiferum					890
Sellaphoraceae					
Sellaphora pupula	4,500				
Stauroneidaceae					
Stauroneis smithii	8,900				

Table 6. Algal density in richest-targeted habitat at sites on the Carson River: Carson River at Deer Run Road near Carson City, Nev. (site 7, fig. 1) and Carson River at Dayton, Nev. (site 8, fig. 1), 1993-95--Continued.

Taxon	Site 7			Site 8	
	Sept. 8,1993 (cells/cm^2)	July 15, 1994 (cells/cm^2)	Sept. 12, 1995 (cells/cm^2)	July 14, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
Thalassiosirales					
Catenulaceae					
Amphora ovalis pediculus		2,900	810	9,800	
Bacillarales					
Bacillariaceae					
Denticula elegans			1,600		
Hantzschia amphioxys			1,600		
Nitzschia amphibia	4,500	2,900		29,000	5,200
Nitzschia dissipata			2,400		
Nitzschia frustulum	18,000	23,000		9,800	
Nitzschia frustulum perminuta		5,700	2,400		2,600
Nitzschia frustulum subsalina		2,900	4,000		
Nitzschia kuetzingiana		2,900	1,600	9,800	
Nitzschia linearis tenuis				9,800	
Nitzschia subtilis		2,900			
Nitzschia tropica		2,900			
Rhopalodiales					
Rhopalodiaceae					
Epithemia adnata				9,100	
Epithemia sorex	490,000	83,000	97,000	4,600,000	1,000,000
Epithemia turgida	18,000		3,200	39,000	42,000
Rhopalodia gibba			810		
Rhopalodia gibba ventricosa			3,200	9,800	2,600
Rhopalodia gibberula			2,400		
CHLOROPHYTA					
Undetermined sp.		12,000	6,000	260,000	13,000
Chlorophyceae					
Chlorococcales					
Chlorococcaceae					
Tetraedron minimum					6,700
Hydrodictyaceae					
Pediastrum boryanum				300,000	
Pediastrum duplex				470,000	
Micractiniaceae					
Micractinium pusillum		36,000			
Oocystaceae					
Ankistrodesmus falcatus			12,000		40,000
Kirchneriella lunaris					13,000
Scenedesmaceae					
Scenedesmus bijuga		16,000			

Table 6. Algal density in richest-targeted habitat at sites on the Carson River: Carson River at Deer Run Road near Carson City, Nev. (site 7, fig. 1) and Carson River at Dayton, Nev. (site 8, fig. 1), 1993-95--Continued

Taxon	Site 7			Site 8	
	Sept. 8,1993 (cells/cm^2)	**July 15, 1994** (cells/cm^2)	**Sept. 12, 1995** (cells/cm^2)	**July 14, 1994** (cells/cm^2)	**Sept. 19, 1995** (cells/cm^2)
Scenedesmus dimorphus				85,000	22,000
Scenedesmus quadricauda		32,000			
Chaetophorales					
Chaetophoraceae					
Stigeoclonium lubricum		50,000	47,000		360,000
Ulvophyceae					
Cladophorales					
Cladophoraceae					
Cladophora sp.		94,000			
Charophyceae					
Zygnemateles					
Desmidiaceae					
Closterium leibleinii					6,700
Closterium moniliferum	3,700				
Cosmarium botrytis			6,000		
Zygnemataceae					
Mougeotia sp.				32,000	

Table 7. Algal density in richest-targeted habitat at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96. Habitats sampled were submerged woody snags. [Abbreviations: cm^2, square centimeter; sp., species]

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (cells/cm^2)	Reach B Oct. 10, 1996 (cells/cm^2)
Total number of cells (rounded)	2,200,000	1,800,000	1,000,000	14,000,000	1,800,000	4,000,000
CYANOPHYTA						
Undetermined sp.				170,000		
Cyanophyceae						
Chroococcales						
Chroococcaceae						
Dactylococcopsis rhaphidioides				13,000	3,100	
Gomphosphaeria aponina				360,000		
Merismopedia tenuissima				390,000		
Nostocales						
Nostocaceae						
Anabaena sp.				2,600,000	150,000	
Anabaena affinis						110,000
Anabaena oscillarioides	550,000	640,000	420,000			130,000
Cylindrospermum minutum				460,000		
Oscillatoriaceae						
Lyngbya sp.	810,000	710,000	270,000		280,000	160,000
Oscillatoria sp.	410,000			7,500,000	360,000	900,000
Melosirales						
Melosiraceae						
Melosira varians				6,200		
Fragilariophyceae						
Fragilariales						
Fragilariaceae						
Diatoma vulgare				3,100	17,000	12,000
Fragilaria exiguiformis	6,600					99,000
Fragilaria vaucheriae	2,700		1,000			

Table 7. Algal density in richest-targeted habitat at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96--Continued

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (cells/cm^2)	Reach B Oct. 10, 1996 (cells/cm^2)
Pseudostaurosira brevistriata				62,000		150,000
Peudostaurosira brevistriata inflata				15,000		6,000
Rivulariaceae						
Calothrix sp.					79,000	
Calothrix parietina		93,000	19,000			630,000
CRYPTOPHYTA						
Undetermined sp.				6,600		
EUGLENOPHYTA						
Euglenophyceae						
Euglenales						
Euglenaceae						
Euglena sp.						4,200
Trachelomonas sp.	1,200					
Trachelomonas volvocina						13,000
BACILLARIOPHYTA						
Coscinodiscophyceae						
Thalassiosirales						
Stephanodiscaceae						
Cyclotella invisitatus						36,000
Cyclotella meneghiniana	670	970			1,500	18,000
Staurosira construens			1,000	6,200	3,000	
Fragilaria construens pumila				12,000	47,000	33,000
Staurosira construens binodis	27,000	8,700	2,000	100,000	15,000	
Staurosira construens venter	4,700	2,400	9,200	400,000	27,000	280,000
Staurosirella leptostauron	1,300					
Staurosirella pinnata	67,000	77,000	13,000	510,000	35,000	250,000
Synedra ulna			1,500	16,000	4,500	
Synedra ulna oxyrhynchus				3,100		

Table 7. Algal density in richest-targeted habitat at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96--Continued

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (cells/cm^2)	Reach B Oct. 10, 1996 (cells/cm^2)
Bacillariophyceae						
Cymbellales						
Cynbellaceae						
Cymbella affinis		970	1,000		30,000	69,000
Cymbella tumida	1,300					
Encyonema minutum				6,200		
Reimeria sinuata	1,300	970	1,000		24,000	
Reimeria sinuata antiqua				19,000		
Gomphonemataceae						
Gomphoneis herculeana					1,500	
Gomphoneis olivacea	2,000			3,100		12,000
Gomphonema sp.	45,000	970	7,700	56,000	30,000	
Gomphonema angustatum intermedia	1,300					
Gomphonema cf. clevei						9,000
Gomphonema grunowii	1,300					
Gomphonema intricatum					4,500	
Gomphonema parvulum	1,300	970		9,300	1,500	
Gomphonema subclavatum		490	510		3,000	6,000
Gomphonema truncatum			1,000			
Gomphonema truncatum capitatum	1,300	4,400	2,000	3,100		
Rhoicospheniaceae						
Rhoicosphenia abbreviata	44,000	2,400	19,000	40,000	81,000	57,000
Achanthales						
Achnanthidiaceae						
Achnanthidium exiguum	1,300			9,300		
Achnanthidium exiguum heterovalvum				9,300		
Achnanthidium minutissimum				25,000		24,000
Planothidium dubium	670					

Table 7. Algal density in richest-targeted habitat at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96--Continued

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (cells/cm^2)	Reach B Oct. 10, 1996 (cells/cm^2)
Achnanthes hauckiana rostrata					1,500	6,000
Planothidium lanceolatum			510			
Cocconeidaceae						
Cocconeis pediculus	2,700	1,500		6,200	1,500	3,000
Cocconeis placentula euglypta	4,700	490	21,000	9,300	18,000	36,000
Cocconeis placentula lineata				3,100		
Naviculales						
Diadesmidaceae						
Luticola cohnii				3,100		
Diploneidaceae						
Diploneis smithii				6,200		
Naviculaceae						
Geissleria decussis		970		6,200		6,000
Hippodonta capitata			510	3,100		
Navicula sp.					1,500	
Navicula canalis						12,000
Navicula cincta rostrata			510	3,100	4,500	24,000
Navicula convergens	670					
Navicula cryptocephala veneta			510		3,000	
Navicula detenta				6,200		
Navicula graciloides		970	2,000			
Navicula gregaria				6,200		21,000
Navicula minima				6,200		
Navicula rhynchocephala germainii	4,000			16,000	6,000	15,000
Navicula salinarum intermedia	1,300	970	510	6,200	6,000	15,000
Navicula secreta apiculata	2,700		1,000		9,000	6,000
Navicula symmetrica						6,000
Navicula tantula			510	3,100		

Table 7. Algal density in richest-targeted habitat at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96--Continued

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (cells/cm^2)	Reach B Oct. 10, 1996 (cells/cm^2)
Navicula tripunctata		970	2,000	16,000	1,500	6,000
Navicula tripunctata schizonemoides	4,000		510		3,000	9,000
Navicula viridula rostellata	8,000	1900				
Neidiaceae						
Neidium dubium	1,300		510	6,200		
Pinnulariaceae						
Caloneis bacillum				3,100	3,000	6,000
Caloneis lewisii			1,000		3,000	
Caloneis ventricosa truncatula	6,000	2,400	1,500			
Sellaphoraceae						
Sellaphora bacillum				9,300		
Sellaphora mutata			1,000			
Sellaphora pupula		490		16,000	1,500	
Catenulaceae						
Amphora ovalis pendiculus						60,000
Amphora perpusilla		490				
Amphora veneta	1,300					
Bacillarales						
Bacillariaceae						
Nitzschia amphibia		970	1,000			
Nitzschia bacata					3,000	
Nitzschia constricta						9,000
Nitzschia dissipata			2,600		9,000	
Nitzschia filiformis						3,000
Nitzschia frustulum	2,000			9,300		27,000
Nitzschia frustulum perminuta	1,300		510	16,000	3,000	3,000
Nitzschia frustulum subsalina				3,100		27,000
Nitzschia kuetzingiana					3,000	36,000

Table 7. Algal density in richest-targeted habitat at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96--Continued

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (cells/cm^2)	Reach B Oct. 10, 1996 (cells/cm^2)
Nitzschia linearis					1,500	
Nitzschia palea	1,300				3,000	
Nitzschia subtilis					3,000	
Tryblionella hungarica	670		510	12,000		6,000
Rhopalodiales						
Rhopalodiaceae						
Epithemia sorex	130,000	170,000	170,000	300,000	430,000	400,000
Epithemia turgida	2,700	2,900	6,600			
Rhopalodia gibba	5,300	970	20,000	25,000	9,000	51,000
Rhopalodia gibba ventricosa				31,000	11,000	
Rhopalodia gibberula	4,000	3,400	10,000	16,000	36,000	12,000
Surirellaceae						
Cymatopleura solea	1,300					
CHLOROPHYTA						
Undetermined sp.				63,000	6,100	
Chlorophyceae						
Chlorococcales						
Hydrodictyaceae						
Pediastrum duplex	19,000	49,000				
Oocystaceae						
Ankistrodesmus falcatus	1,200	9,200		130,000	18,000	25,000
Kirchneriella lunaris				20,000		
Scenedesmaceae						
Scenedesmus acutus					20,000	
Scenedesmus dimorphus					10,000	
Scenedesmus ecornis		6,100				
Scenedesmus quadricauda	9,400			53,000		70,000

Table 7. Algal density in richest-targeted habitat at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96--Continued

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (cells/cm^2)	Reach B Oct. 10, 1996 (cells/cm^2)
Microsporales						
Microsporaceae						
Microspora stagnorum		5,500				
Chaetophorales						
Chaetophoraceae						
Stigeoclonium lubricum		11,000				
Charophyceae						
Zygnemateles						
Desmidiaceae						
Cosivarium subcreanatum						4,200
Staurastrum punctulatum					3,000	

Table 8. Algal density in the depositional-tarrgeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96. Habitats sampled were sediments from pools. [Abbreviations and symbols: cm^2, square centimeter; sp. species; <, less than]

Taxon	**Reach A** Aug. 30, 1993 (cells/cm^2)	**Reach B** Aug. 30, 1993 (cells/cm^2)	**Reach C** Aug. 30, 1993 (percent)	**Reach B** July 26, 1994 (cells/cm^2)	**Reach C** Sept. 15, 1995 (percent)	**Reach C** Oct. 11, 1996 (cells/cm^2)
Total number of cells (rounded)	13,000,000	22,000,000	--	11,000,000	--	11,000,000
CYANOPHYTA						
Cyanophyceae						
Chroococcales						
Chroococcaceae						
Merismopedia tenuissima				150,000		
Nostocales						
Nostocaceae						
Anabaena affinis						1,500,000
Anabaena oscillarioides	1,100,000		2.9			
Oscillatoriaceaea						
Oscillatoria sp.					16.9	5,100,000
Rivulariaceae						
Calothrix parietina			79.0			
CRYPTOPHYTA						
Cryptophyceae						
Cryptomonadales						
Cryptomonadaceae						
EUGLENOPHYTA						
Euglenophyceae						
Euglenales						
Euglenaceae						
Euglena sp.						66,000
Trachelomonas hispida					0.3	
Cryptomonas sp.					0.5	

Table 8. Algal density in the depositional-tarrgeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96--Continued

Taxon	**Reach A** Aug. 30, 1993 (cells/cm^2)	**Reach B** Aug. 30, 1993 (cells/cm^2)	**Reach C** Aug. 30, 1993 (percent)	**Reach B** July 26, 1994 (cells/cm^2)	**Reach C** Sept. 15, 1995 (percent)	**Reach C** Oct. 11, 1996 (cells/cm^2)
BACILLARIOPHYTA						
Coscinodiscophyceae						
Thalassiosirales						
Stephanodiscaceae						
Cyclotella meneghiniana				35,000		76,000
Cyclotella pseudostelligera				18,000		
Cyclotella stelligera	130,000	140,000	0.2		0.3	
Melosirales						
Melosiraceae						
Melosira varians				71,000		
Coscinodiscophyceae						
Aulacoseirales						
Aulacoseiraceae						
Aulacoseira italica				53,000		38,000
Fragilariophyceae						
Fragilariales						
Fragilariaceae						
Diatoma mesodon					1.5	
Diatoma vulgare	64,000				0.7	
Fragilaria exiguformis			0.1	140,000	0.3	
Fragilaria vaucheriae	95,000	570,000	0.1		2.7	
Hannaea arcus	16,000	71,000			0.9	
Hannaea arcus amphioxys					0.3	
Martyana martyi		140,000	0.1	200,000		
Meridion circulare			<0.1		0.3	13,000
Pseudostaurosira brevistriata					0.3	

Table 8. Algal density in the depositional-tarrgeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96--Continued

Taxon	**Reach A** Aug. 30, 1993 (cells/cm^2)	**Reach B** Aug. 30, 1993 (cells/cm^2)	**Reach C** Aug. 30, 1993 (percent)	**Reach B** July 26, 1994 (cells/cm^2)	**Reach C** Sept. 15, 1995 (percent)	**Reach C** Oct. 11, 1996 (cells/cm^2)
Fragillaria brevistriata inflata					0.5	
Fragilaria construens pumila		140,000		35,000	0.5	51,000
Staurosira construens venter	96,000	180,000	<0.1	160,000		100,000
Staurosirella leptostauron	32,000		0.2			
Staurosirella pinnata	890,000	2,100,000	1.5	1,300,000	0.5	250,000
Fragilaria pinnata lancettula		36,000				13,000
Synedra mazamaensis	350,000	930,000	0.1	71,000		57,000
Synedra minuscula		110,000	<0.1			
Synedra rumpens					0.3	
Synedra rumpens familiaris					0.3	
Synedra rumpens meneghiniana					0.3	
Synedra ulna	79,000	71,000	0.1			6,300
Synedra ulna danica	64,000					
Synedra ulna oxyrhynchus					0.5	
Cymbellales						
Cymbellaceae						
Cymbella sp	79,000	570,000				
Cymbella affinis					1.0	
Cymbella hustedii						
Cymbella turgidula						6,300
Encyonema minutum		110,000			0.5	
Encyonema silesiacum			0.2		0.8	
Navicula exigua capitata	32,000			36,000		
Reimeria sinuata	290,000	750,000	0.3	35,000	1.6	32,000
Gomphonemataceae						
Gomphoneis eriense variabilis		570,000			1.1	

Table 8. Algal density in the depositional-tarrgeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96--Continued

Taxon	**Reach A** Aug. 30, 1993 (cells/cm^2)	**Reach B** Aug. 30, 1993 (cells/cm^2)	**Reach C** Aug. 30, 1993 (percent)	**Reach B** July 26, 1994 (cells/cm^2)	**Reach C** Sept. 15, 1995 (percent)	**Reach C** Oct. 11, 1996 (cells/cm^2)
Gomphoneis herculeana	64,000		0.1	35,000	0.3	13,000
Gomphoneis minuta		71,000				
Gomphoneis olivacea	32,000	920,000	0.2		4.3	
Gomphonema sp	190,000	140,000	<0.1	440,000	4.6	
Gomphonema affine	32,000					
Gomphonema cf. clevei						57,000
Gomphonema gracile	64,000					
Gomphonema intricatum	32,000				0.3	
Gomphonema parvulum	64,000	36,000	<0.1			
Gomphonema subclavatum		35,000				13,000
Rhoicospheniaceae						
Rhoicosphenia abbreviata	470,000	71,000	0.3	350,000	2.6	51,000
Achnanthales						
Achnanthaceae						
Lemnicola hungarica					0.3	
Achnanthidiaceae						
Achnanthes grana						38,000
Achnanthes lemmermannii				250,000		
Achnanthes pinnata	16,000	71,000				
Achnanthes tenera		250,000	<0.1			
Achnanthidium biporomum			<0.1			
Achnanthidium exiguum	32,000	71,000	<0.1	71,000		
Achnanthidium exiguum heterovalvum					0.3	
Achnanthidium minutissimum	1,100,000	2,200,000	1.0	410,000	5.4	340,000
Planothidium dubium	79,000	570,000	0.1	570,000	0.5	25,000
Achanthes hauckiana rostrata	16,000		0.1	35,000	0.3	

Table 8. Algal density in the depositional-tarrgeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96--Continued

Taxon	**Reach A** Aug. 30, 1993 (cells/cm^2)	**Reach B** Aug. 30, 1993 (cells/cm^2)	**Reach C** Aug. 30, 1993 (percent)	**Reach B** July 26, 1994 (cells/cm^2)	**Reach C** Sept. 15, 1995 (percent)	**Reach C** Oct. 11, 1996 (cells/cm^2)
Planothidium lanceolatum	210,000	210,000	0.1	120,000	2.2	
Cocconeidaceae						
Cocconeis pediculus			<0.1			
Cocconeis placentula euglypta	64,000	2,000,000	0.5	140,000	0.5	100,000
Cocconeis placentula lineata	650,000	180,000	0.3		0.1	13,000
Naviculales						
Amphipleuraceae						
Amphipleura pellucida		36,000	<0.1			19,000
Frustulia vulgaris		140,000			0.3	
Naviculaceae						
Fistulifera pelliculosa						19,000
Geissleria decussis	48,000		0.2	320,000	0.1	6,300
Geissleria schoenfeldii	32,000			35,000		
Hippodonta capitata			0.1		1.8	
Navicula sp.	29,000		0.2	320,000		150,000
Navicula canalis			<0.1			
Navicula canoris		250,000	5.3			
Navicula cari				350,000		
Navicula cincta				71,000		
Navicula cincta rostrata					0.3	
Navicula clementis					0.5	
Navicula cryptocephala		71,000		35,000		
Navicula cryptocephala veneta	64,000		<0.1	71,000		38,000
Navicula graciloides	32,000		0.1			
Navicula gregaria		140,000	0.1	110,000	1.0	210,000
Navicula lanceolata					0.3	

Table 8. Algal density in the depositional-tarrgeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96--Continued

Taxon	**Reach A** Aug. 30, 1993 (cells/cm^2)	**Reach B** Aug. 30, 1993 (cells/cm^2)	**Reach C** Aug. 30, 1993 (percent)	**Reach B** July 26, 1994 (cells/cm^2)	**Reach C** Sept. 15, 1995 (percent)	**Reach C** Oct. 11, 1996 (cells/cm^2)
Navicula menisculus	130,000	210,000	0.2	71,000		51,000
Navicula minima	64,000	210,000	0.3	110,000		32,000
Navicula ochridana			<0.1			
Navicula paucivisitata						13,000
Navicula perminuta						32,000
Navicula protracta				35,000		
Navicula radiosa						13,000
Navicula radiosa tenella		71,000				
Navicula rhynchocephala	32,000		<0.1		0.3	
Navicula rhynchocephala germainii				89,000	2.2	44,000
Navicula salinarum intermedia	490,000	570,000	0.7	430,000		190,000
Navicula secreta apiculata	480,000	140,000	0.7	140,000	6.1	51,000
Navicula symmetrica					0.3	
Navicula tantula		71,000				6,300
Navicula tripunctata				18,000	0.3	
Navicula viridula linearis						6,300
Neidiaceae						
Neidium affine					0.7	
Neidium dubium				35,000	0.5	63,000
Pinnulariaceae						
Caloneis bacillum	64,000	71,000		110,000		38,000
Caloneis lewisii		71,000				
Caloneis ventricosa truncatula		71,000				
Pinnularia nodosa					0.1	
Sellaphoraceae						
Fallacia pygmaea						13,000

Table 8. Algal density in the depositional-tarrgeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96--Continued

Taxon	**Reach A** Aug. 30, 1993 (cells/cm^2)	**Reach B** Aug. 30, 1993 (cells/cm^2)	**Reach C** Aug. 30, 1993 (percent)	**Reach B** July 26, 1994 (cells/cm^2)	**Reach C** Sept. 15, 1995 (percent)	**Reach C** Oct. 11, 1996 (cells/cm^2)
Sellaphora bacillum		71,000				
Sellaphora laevissima					0.3	
Sellaphora mutata		71,000				
Sellaphora pupula	95,000		<0.1	300,000	19.6	150,000
Sellaphora pupula rectangularis	32,000		0.2	71,000	1.1	
Sellaphora seminulum						13,000
Thalassiophysales						
Catenulaceae						
Amphora ocellata			<0.1			
Amphora perpusilla	32,000	140,000				38,000
Bacillariales						
Bacillariaceae						
Hantzschia amphioxys		71,000				
Nitzschia acicularis	32,000		<0.1			160,000
Nitzschia capitellata						6,300
Nitzschia dissipata	95,000	250,000	0.3		3.3	13,000
Nitzschia dissipata media		71,000	<0.1	18,000	0.3	6,400
Nitzschia frustulum	370,000	280,000	0.5	900,000	0.7	300,000
Nitzschia frustulum perminuta	590,000	710,000	0.6	570,000	0.4	25,000
Nitzschia frustulum subsalina		430,000		120,000	0.7	76,000
Nitzschia kuetzingiana	540,000	1,800,000	0.3	110,000	1.5	240,000
Nitzschia linearis tenuis		71,000			0.3	
Nitzschia palea	64,000	71,000	0.1	35,000		51,000
Nitzschia romana					0.1	13,000
Nitzschia subtilis						25,000

Table 8. Algal density in the depositional-tarrgeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96--Continued

Taxon	**Reach A** Aug. 30, 1993 (cells/cm^2)	**Reach B** Aug. 30, 1993 (cells/cm^2)	**Reach C** Aug. 30, 1993 (percent)	**Reach B** July 26, 1994 (cells/cm^2)	**Reach C** Sept. 15, 1995 (percent)	**Reach C** Oct. 11, 1996 (cells/cm^2)
Rhopalodiales						
Rhopalodiaceae						
Epithemia adnata						13,000
Epithemia sorex	790,000	1,500,000	0.6	1,500,000	1.6	340,000
Epithemia turgida				35,000		
Rhopalodia gibba	64,000	430,000	<0.1	180,000		
Rhopalodia gibba ventricosa				71,000		
Rhopalodia gibberula	32,000				0.1	
Surirellales						
Surirellaceae						
Cymatopleura solea						13,000
Surirella minuta						13,000
CHLOROPHYTA						
Chlorophyceae						
Chlorococcales						
Oocystaceae						
Ankistrodesmus falcatus			<0.1	93,000	0.3	26,000
Scenedesmaceae						
Scenedesmus acutus				140,000		
Scenedesmus denticulatus				140,000		
Scenedesmus ecornis		120,000				
Scenedesmus quadricauda				250,000		140,000
Scenedesmus spinosus			0.2			
Chaetophorales						
Chaetophoraceae						
Stigeoclonium lubricum	2,200,000		1			

Table 8. Algal density in the depositional-tarrgeted habitat at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-96--Continued

Taxon	**Reach A** Aug. 30, 1993 (cells/cm^2)	**Reach B** Aug. 30, 1993 (cells/cm^2)	**Reach C** Aug. 30, 1993 (percent)	**Reach B** July 26, 1994 (cells/cm^2)	**Reach C** Sept. 15, 1995 (percent)	**Reach C** Oct. 11, 1996 (cells/cm^2)
Zygnematales						
Desmidiaceae						
Cosmarium subcrenatum		60,000				

Table 9. Algal density in the depositional-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig. 1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95. Habitats sampled were sediments from pools. [Abbreviations: cm^2, square centimeter; sp. species]

	Site 3		Site 4		Site 5	
Taxon	July 21, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 22, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 20, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
Total number of cells (rounded)	1,500,000	--	12,000,000	--	3,200,000	1,300,000
CYANOPHYTA						
Undetermined sp.		1.8				
Cyanophyceae						
Chroococcales						
Chroococcaceae						
Merismopedia tenuissima					37,000	
Nostocales						
Nostocaceae						
Anabaena sp.	75,000	1.1				
Cylindrospermum minutum	40,000					
Oscillatoriaceae						
Oscillatori sp.	100,000	2.8		3.0	130,000	120,000
Rivulariaceae						
CRYPTOPHYTA						
Undetermined sp.	2,900				7,600	
Cryptophyceae						
Cryptomonadales						
Cryptomonadaceae						
Cryptomonas sp.				0.8		
Calothrix sp.	29,000					

Table 9. Algal density in the depositional-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig. 1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

Taxon	Site 3		Site 4		Site 5	
	July 21, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 22, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 20, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
EUGLENOPHYTA						
Euglenophyceae						
Euglenales						
Euglenaceae						
Euglena sp.		0.3			7,600	
Phacus sp.					7,600	
Trachelomonas cylindrica			28,000		7,600	
Trachelomonas hispida			28,000			
Trachelomonas volvocina			56,000			
BACILLARIOPHYTA						
Coscinodiscophyceae						
Thalassiosirales						
Stephanodiscaceae						
Cyclotella meneghiniana	4,100	1.1	19,000		150,000	70,000
Cyclotella radiosa	8,200					
Thalassiosiraceae						
Thalassiosira weissflogii						6,200
Melosirales						
Melosiraceae						
Melosira varians	2,000		270,000	2.1	130,000	12,000
Aulacoseirales						
Aulacoseiraceae						
Aulacoseira alpigena	2,000			0.3		
Aulacoseira ambigua		0.5		0.3		
Aulacoseira italica	18,000	0.9	38,000	0.3		

Table 9. Algal density in the depositional-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig. 1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

Taxon	Site 3		Site 4		Site 5	
	July 21, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 22, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 20, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
Fragilariophyceae						
Fragilariales						
Fragilariaceae						
Asterionella formosa		0.5				
Ctenophora pulchella					9,000	16,000
Diatoma mesodon	4,100	1.5	38,000	0.3		
Diatoma vulgare		0.3			120,000	36,000
Fragilaria capacina mesolepta						30,000
Fragilaria crotonensis	14,000					
Fragilaria exiguiformis				0.3		
Fragilaria vaucheriae	20,000	4.0	440,000	2.2	36,000	36,000
Hannaea arcus			38,000	0.3		
Martyana martyi			38,000		9,000	
Meridion circulare	49,000	0.2		1.3		2,000
Pseudostaurosira brevistriata		2.6				4,000
Staurosira construens	4,100				9,000	
Fragilaria construens pumila	71,000	2.8	1,400,000		23,000	
Staurosira construens venter	41,000	0.9	250,000	1.0	190,000	36,000
Staurosirella leptostauron	8,200	0.9	19,000	0.5		
Staurosirella pinnata	140,000	6.5	1,100,000	2.1	190,000	44,000
Fragilaria pinnata lancettula		0.2	77,000			
Synedra fasciculata					18,000	
Synedra mazamaensis	4,100					2,000

Table 9. Algal density in the depositional-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig. 1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

Taxon	Site 3		Site 4		Site 5	
	July 21, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 22, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 20, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
Synedra minuscula	4,100	2.2	77,000	0.6	9,000	4,000
Synedra parasitica subconstricta						2,000
Synedra rumpens	12,000	2.8	120,000	0.6	9,000	
Synedra rumpens familiaris			38,000			
Synedra rumpens meneghiniana						12,000
Synedra ulna	29,000	0.2		1.0	32,000	4,000
Synedra ulna contracta			77,000			
Tabellariales						
Tabellariaceae						
Tabellaria fenestrata	2,000					
Bacillariophyceae						
Eunotiales						
Eunotiaceae						
Eunotia exigua	4,100					
Eunotia tenella			38,000			
Cymbellales						
Cymbellaceae						
Cymbella sp.		0.3				
Cymbella affinis		0.6				6,000
Cymbella brehmii		0.6	38,000	0.3		
Cymbella cistula	4,100					
Cymbella cuspidata	8,200					
Cymbella hauckii		0.3				

Table 9. Algal density in the depositional-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig. 1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

Taxon	Site 3		Site 4		Site 5	
	July 21, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 22, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 20, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
Cymbella naviculiformis	24,000	0.6	38,000			
Encyonema latens		0.6				
Encyonema minutum	37,000	3.7	460,000	0.8	81,000	36,000
Encyonema muelleri						4,000
Navicula exigua capitata	4,100					
Encyonema silesiacum		0.6	77,000	0.3		
Reimeria sinuata	49,000	1.2	230,000	1.0		8,000
Gomphonemataceae						
Gomphoneis herculeana	16,000		120,000	1.1		
Gomphoneis olivacea					27,000	
Gomphonema sp.	77,000	7.2	730,000	17.7	150,000	130,000
Gomphonema angustatum			38,000			
Gomphonema angustatum intermedia						8,000
Gomphonema grunowii						4,000
Gomphonema intricatum				0.6		
Gomphonema parvulum	4,100	1.2		0.3	150,000	58,000
Gomphonema truncatum capitatum						4,000
Rhoicospheniaceae						
Rhoicosphenia abbreviata	12,000	0.2	400,000	2.4	190,000	70,000
Achnanthales						
Achnanthaceae						
Lemnicola hungarica						6,000

Table 9. Algal density in the depositional-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig. 1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

Taxon	Site 3		Site 4		Site 5	
	July 21, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 22, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 20, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
Achnanthidiaceae						
Achnanthes lauenburgiana		0.2				
Achnanthes pseudolinearis		1.1		0.3		
Achnanthidium exiguum	4,100					
Achnanthidium exiguum heterovalvum			38,000	0.2		
Achnanthidium minutissimum	49,000	12.7	650,000	28.8		
Planothidium dubium	20,000	2.2	350,000	5.6	81,000	
Planothidium lanceolatum	20,000	2.2	270,000	6.1		8,000
Planothidium peragallii		0.3				
Psammothidium bioretii	8,200		38,000			
Psammothidium marginulatum	8,200		38,000			
Psammothidium subatomoides		0.6				4,000
Rossithidium pusillum	4,100		120,000			
Cocconeidaceae						
Cocconeis pediculus						2,000
Cocconeis placentula euglypta	4,100	0.6	310,000	2.7	45,000	6,000
Cocconeis placentula lineata	4,100	0.3	120,000	0.8	160,000	88,000
Naviculales						
Amphipleuraceae						
Frustulia vulgaris	4,100		38,000			
Naviculaceae						
Fistulifera pelliculosa		1.1		0.3		8,000
Geissleria decussis	84,000	1.5	150,000	1.0		

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Taxon	Site 3		Site 4		Site 5	
	July 21, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 22, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 20, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
Geissleria schoenfeldii	8,200		77,000			
Hippodonta capitata	20,000					4,000
Navicula sp.		0.6		1.6		19,000
Navicula arvensis		0.3	58,000			
Navicula cari	49,000		580,000		54,000	
Navicula cincta						4,000
Navicula cincta rostrata		0.3			36,000	6,000
Navicula circumtexta		0.3				
Navicula convergens	4,100		19,000	0.3		
Navicula cryptocephala	18,000	0.2	77,000		4,500	18,000
Navicula cryptocephala veneta						4,000
Navicula detenta		0.3				
Navicula gregaria	43,000		96,000			8,000
Navicula lanceolata					23,000	
Navicula luzonensis					9,000	2,000
Navicula menisculus	4,100	0.3		0.5		
Navicula minima	10,000	1.9	120,000	0.3	36,000	2,000
Navicula paucivisitata		0.9				
Navicula radiosa	4,100					
Navicula rhynchocephala	8,200	0.3	38,000			
Navicula rhynchocephala germainii	4,100					12,000
Navicula salinarum intermedia	4,100	0.3	230,000		110,000	28,000
Navicula secreta apiculata	61,000	5.6	400,000			8,000

Table 9. Algal density in the depositional-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig. 1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

Taxon	Site 3		Site 4		Site 5	
	July 21, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 22, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 20, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
Navicula tantula		0.3	38,000			4,000
Navicula tripunctata			19,000		9,000	
Navicula tripunctata schizonemoides					9,000	
Navicula viridula avenacea						10,000
Neidiaceae						
Neidium affine		0.3				
Neidium dubium					14,000	
Pinnulariaceae						
Caloneis bacillum						10,000
Caloneis ventricosa truncatula	4,100		38,000			
Sellaphoraceae						
Sellaphora laevissima		0.3			9,000	
Sellaphora mutata		0.2				
Sellaphora pupula	24,000	0.8	190,000			28,000
Sellaphora seminulum		0.3				
Thalassiophycales						
Catenulaceae						
Amphora ovalis	18,000					
Amphora ovalis pediculus	8,200	0.9				
Amphora perpusilla					14,000	
Amphora veneta						10,000

Table 9. Algal density in the depositional-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig. 1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

Taxon	Site 3		Site 4		Site 5	
	July 21, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 22, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 20, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
Bacillariales						
Bacillariaceae						
Nitzschia acicularis		0.3				2,000
Nitzschia amphibia					32,000	12,000
Nitzschia bacata					9,000	4,000
Nitzschia constricta						4,000
Nitzschia dissipata		2.0	540,000			
Nitzschia dissipata media			96,000	1.9		2,000
Nitzschia fonticola						4,000
Nitzschia frustulum		0.8	120,000	1.3	72,000	12,000
Nitzschia frustulum perminuta	14,000	2.9	330,000	0.6	190,000	32,000
Nitzschia frustulum subsalina	4,100	0.5		1.3	36,000	57,000
Nitzschia intermedia						4,000
Nitzschia kuetzingiana	18,000	3.1	38,000	2.7	81,000	82,000
Nitzschia linearis tenuis				0.6	9,000	2,000
Nitzschia palea	4,100	0.6	38,000	0.6	9,000	22,000
Nitzschia romana		0.2				
Rhopalodiales						
Rhopalodiaceae						
Epithemia sorex			77,000		110,000	12,000
Rhopalodia gibberula				0.3		

Table 9. Algal density in the depositional-targeted habitat at sites on the Carson River: West Fork Carson River above Woodfords, Calif. (site 3, fig. 1), West Fork Carson River at Paynesville, Calif. (site 4, fig. 1), and West Fork Carson River at Muller Lane near Minden, Nev. (site 5, fig. 1), 1994-95--Continued

Taxon	Site 3		Site 4		Site 5	
	July 21, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 22, 1994 (cells/cm^2)	Sept. 13, 1995 (percent)	July 20, 1994 (cells/cm^2)	Sept. 19, 1995 (cells/cm^2)
Surirellales						
Surirellaceae						
Surirella angusta	4,100			0.3	9,000	4,000
Surirella ovata					9,000	4,000
CHLOROPHYTA						
Chlorophyceae						
Chlorococcales						
Oocystaceae						
Ankistrodesmus falcatus	2,900	0.3				3,600
Scenedesmaceae						
Scenedesmus acutus					140,000	
Scenedesmus quadricauda					61,000	
Oedongiales						
Oedononiacea						
Oedogonium sp.		1.0				
Zygnematales						
Desmidiaceae						
Cosmarium sp.		0.3				
Cosmarium botrytis	2,900					
Cosmarium trilobulatum						3,600
Staurastrum sp.			28,000			
Staurastrum punctulatum				0.3		

Table 10. Algal density in the depositional-targeted habitat at sites on the Carson River: East Fork Carson River at Minden, Nev. (site 2, fig. 1), Carson River near Carson City, Nev. (site 6, fig. 1) and Carson River at Deer Run Road near Carson City (site 7, fig. 1), 1993-95. Habitats sampled were sediments from pools. [Abbreviations: cm^2, square centimeter; sp. species]

		Site 6		Site 7		
Taxon	**Site 2 July 25, 1994 (cells/cm^2)**	**July 19, 1994 (cells/cm^2)**	**Sept. 12, 1995 (percent)**	**Sept. 8, 1993 (cells/cm^2)**	**July 15, 1994 (cells/cm^2)**	**Sept. 12, 1995 (cells/cm^2)**
Total number of cells (rounded)	13,000,000	13,000,000	--	7,800,000	23,000,000	4,800,000
CYANOPHYTA						
Undetermined sp.					41,000	
Cyanophyceae						
Nostocales						
Nostocaceae						
Anabaena sp.	300,000	1,100,000			700,000	190,000
Cylindrospermum minutum		1,000,000				
Oscillatoriaceae						
Hydrocoleum brebissonii			1.4			
Lyngbya sp.	330,000				1,900,000	
Oscillatoria sp.	1,500,000	870,000	1.9		4,600,000	
Rivulariaceae						
Calothrix sp.		150,000				
EUGLENOPHYTA						
Euglenophyceae						
Euglenales						
Euglenaceae						
Euglena sp.		15,000				8,700
Lepocinclis fusiformis		15,000				
Trachelomonas hispida						8,700
Calothrix parietina				1,100,000		

Table 10. Algal density in the depositional-targeted habitat at sites on the Carson River: East Fork Carson River at Minden, Nev. (site 2, fig. 1), Carson River near Carson City, Nev. (site 6, fig. 1) and Carson River at Deer Run Road near Carson City (site 7, fig. 1), 1993-95--Continued

Taxon	Site 2 July 25, 1994 (cells/cm^2)	Site 6 July 19, 1994 (cells/cm^2)	Site 6 Sept. 12, 1995 (percent)	Site 7 Sept. 8, 1993 (cells/cm^2)	Site 7 July 15, 1994 (cells/cm^2)	Site 7 Sept. 12, 1995 (cells/cm^2)
BACILLARIOPHYTA						
Coscinodiscophyceae						
Thalassiosirales						
Stephanodiscaceae						
Cyclotella atomus						30,000
Cyclotella meneghiniana	260,000	140,000	4.0	33,000	430,000	260,000
Cyclotella pseudostelligera					25,000	
Thalassiosiraceae						
Thalassiosira weissflogii			0.3			
Fragilariophyceae						
Melosirales						
Melosiraceae						
Melosira varians	570,000	190,000	11.2	22,000		570,000
Aulacoseirales						
Aulacoseiraceae						
Aulacoseira ambigua			0.8			15,000
Fragilariales						
Fragilariaceae						
Ctenophora pulchella lacerata						7,600
Diatoma vulgare	130,000	96,000	3.1			68,000
Fragilaria capucina mesolepta			0.6			
Fragilaria exiguiformis	54,000	140,000	0.3	89,000	530,000	120,000
Fragilaria vaucheriae	150,000			22,000		
Hannaea arcus		32,000	0.3			

Table 10. Algal density in the depositional-targeted habitat at sites on the Carson River: East Fork Carson River at Minden, Nev. (site 2, fig. 1), Carson River near Carson City, Nev. (site 6, fig. 1) and Carson River at Deer Run Road near Carson City (site 7, fig. 1), 1993-95--Continued

Taxon	Site 2 July 25, 1994 (cells/cm^2)	Site 6 July 19, 1994 (cells/cm^2)	Site 6 Sept. 12, 1995 (percent)	Site 7 Sept. 8, 1993 (cells/cm^2)	Site 7 July 15, 1994 (cells/cm^2)	Site 7 Sept. 12, 1995 (cells/cm^2)
Pseudostaurosira brevistriata			1.3			160,000
Pseudostaurosira brevistriata inflata		64,000				
Staurosira construens			2.3	89,000	250,000	30,000
Staurosira construens binodis	200,000	770,000		89,000	100,000	440,000
Fragillaria construens pumila	570,000	260,000	0.8		230,000	91,000
Fragillaria construens subsalina				110,000		
Staurosira construens venter	660,000	3,500,000	19.0	160,000	4,600,000	600,000
Staurosirella pinnata	1,100,000	1,100,000	14.3	4,800,000	4,100,000	260,000
Fragillaria pinnata lancettula	240,000		0.2			9,200
Synedra mazamaensis	27,000		1.0			
Synedra minuscula	27,000	32,000				
Synedra rumpens			0.3			
Synedra ulna	310,000		0.5			23,000
Synedra ulna oxyrhynchus	54,000		0.3			
Cymbellales						
Cymbellaceae						
Cymbella sp.			0.2			
Cymbella affinis	27,000					
Encyonema minutum	160,000		0.5			15,000
Encyonema silesiacum	13,000					
Navicula elginensis neglecta		32,000				
Reimeria sinuata	110,000	130,000			51,000	
Reimeria sinuata antiqua						15,000

Table 10. Algal density in the depositional-targeted habitat at sites on the Carson River: East Fork Carson River at Minden, Nev. (site 2, fig. 1), Carson River near Carson City, Nev. (site 6, fig. 1) and Carson River at Deer Run Road near Carson City (site 7, fig. 1), 1993-95--Continued

Taxon	Site 2 July 25, 1994 (cells/cm^2)	Site 6 July 19, 1994 (cells/cm^2)	Site 6 Sept. 12, 1995 (percent)	Site 7 Sept. 8, 1993 (cells/cm^2)	Site 7 July 15, 1994 (cells/cm^2)	Site 7 Sept. 12, 1995 (cells/cm^2)
Gomphonemataceae						
Gomphoneis herculeana	27,000					
Gomphoneis olivacea	13,000	96,000	1.9	67,000		30,000
Gomphonema sp.	400,000	260,000	1.3	89,000	51,000	120,000
Gomphonema angustum intermedia			0.3			
Gomphonema grunowii					51,000	
Gomphonema intricatum						15,000
Gomphonema parvulum	81,000	32,000		22,000	25,000	
Rhoicospheniaceae						
Rhoicosphenia abbreviata	81,000	80,000	0.3	89,000	250,000	76,000
Achnanthales						
Achnanthaceae						
Lemnicola hungarica		16,000				
Achnanthidiaceae						
Achnanthes pinnata	54,000					
Achnanthidium exiguum				33,000		
Achnanthidium minutissimum	550,000	32,000	0.6		51,000	30,000
Planothidium dubium	130,000	64,000	1.0		230,000	
Achnanthes hauckiana rostrata	27,000	64,000		56,000	150,000	23,000
Planothidium lanceolatum	27,000		0.5	23,000		
Cocconeidaceae						
Cocconeis pediculus	180,000	96,000		67,000	280,000	68,000
Cocconeis placentula euglypta	81,000	96,000	1.0	89,000	330,000	53,000
Cocconeis placentula lineata		32,000	2.3			200,000

Table 10. Algal density in the depositional-targeted habitat at sites on the Carson River: East Fork Carson River at Minden, Nev. (site 2, fig. 1), Carson River near Carson City, Nev. (site 6, fig. 1) and Carson River at Deer Run Road near Carson City (site 7, fig. 1), 1993-95--Continued.

		Site 6		Site 7		
Taxon	**Site 2 July 25, 1994 (cells/cm^2)**	**July 19, 1994 (cells/cm^2)**	**Sept. 12, 1995 (percent)**	**Sept. 8, 1993 (cells/cm^2)**	**July 15, 1994 (cells/cm^2)**	**Sept. 12, 1995 (cells/cm^2)**
Naviculales						
Amphipleuraceae						
Amphipleura pellucida	27,000					
Frustulia vulgaris						15,000
Diadesmidaceae						
Luticola cohnii						15,000
Diploneidaceae						
Diploneis puella		32,000				
Naviculaceae						
Mayamaea atomus		32,000				
Geissleria decussis					51,000	15,000
Hippodonta capitata	27,000		0.3		150,000	
Navicula sp.			2.7			170,000
Navicula cari	13,000					
Navicula cincta rostrata		410,000	0.3	22,000		45,000
Navicula convergens	13,000			22,000		
Navicula cryptocephala		48,000	0.3			
Navicula genovefae					51,000	
Navicula gregaria	27,000		0.6	33,000	51,000	7,600
Navicula lanceolata						15,000
Navicula luzonensis				22,000		
Navicula menisculus					100,000	
Navicula minima	130,000		0.3	45,000	51,000	
Navicula rhynchocephala germainii	54,000	80,000	3.7		200,000	200,000

Table 10. Algal density in the depositional-targeted habitat at sites on the Carson River: East Fork Carson River at Minden, Nev. (site 2, fig. 1), Carson River near Carson City, Nev. (site 6, fig. 1) and Carson River at Deer Run Road near Carson City (site 7, fig. 1), 1993-95--Continued.

Taxon	Site 2	Site 6		Site 7		
	July 25, 1994 (cells/cm^2)	July 19, 1994 (cells/cm^2)	Sept. 12, 1995 (percent)	Sept. 8, 1993 (cells/cm^2)	July 15, 1994 (cells/cm^2)	Sept. 12, 1995 (cells/cm^2)
Navicula salinarum intermedia	160,000	64,000	2.4	67,000	150,000	150,000
Navicula secreta apiculata	54,000	32,000	0.8		50,000	53,000
Navicula tripunctata schizonenoides		48,000				
Navicula viridula avenacea			0.3			15,000
Neidiaceae						
Neidium dubium					25,000	
Pinnulariaceae						
Caloneis amphisbaena			0.3		51,000	
Caloneis bacillum			0.3			45,000
Coloneis ventricosa truncatula					51,000	15,000
Pleurosigmataceae						
Pleurosigma elongatum					51,000	
Sellaphoraceae						
Sellaphora pupula	27,000	80,000		22,000	150,000	22,000
Sellaphora pupula rectangularis	27,000		0.3			
Thalassiophysales						
Catenulaceae						
Amphora ovalis pediculus		32,000			51,000	23,000
Bacillariales						
Bacillariaceae						
Nitzschia acicularis			0.8			18,000
Nitzschia amphibia		32,000			51,000	
Nitzschia bacata			1.3			15,000
Nitzschia dissipata			1.6	22,000		

Table 10. Algal density in the depositional-targeted habitat at sites on the Carson River: East Fork Carson River at Minden, Nev. (site 2, fig. 1), Carson River near Carson City, Nev. (site 6, fig. 1) and Carson River at Deer Run Road near Carson City (site 7, fig. 1), 1993-95--Continued.

Taxon	Site 2	Site 6		Site 7		
	July 25, 1994 (cells/cm^2)	July 19, 1994 (cells/cm^2)	Sept. 12, 1995 (percent)	Sept. 8, 1993 (cells/cm^2)	July 15, 1994 (cells/cm^2)	Sept. 12, 1995 (cells/cm^2)
Nitzschia dissipata media			0.3			15,000
Nitzschia frequens	13,000		0.6			
Nitzschia frustulum	270,000	540,000	0.6	45,000	250,000	15,000
Nitzschia frustulum perminuta	390,000	64,000	0.5	56,000	100,000	15,000
Nitzschia frustulum subsalina	27,000	380,000	2.3	89,000	280,000	61,000
Nitzschia kuetzingiana	54,000	110,000	1.9	45,000	100,000	36,000
Nitzschia linearis						15,000
Nitzschia linearis tenuis			0.2			
Nitzschia palea	81,000	64,000	2.1	22,000		110,000
Nitzschia reversa					25,000	7,600
Nitzschia romana				22,000		
Nitzschia subtilis		32,000	0.3	11,000		
Tryblionella hungarica			0.2		100,000	
Tryblionella levidensis		48,000				
Tryblionella victoriae				11,000		
Rhopalodiales						
Rhopalodiaceae						
Epithemia sorex	310,000	130,000	0.5	67,000	230,000	
Epithemia turgida				22,000		15,000
Rhopalodia gibba				33,000		
Rhopalodia gibberula	13,000					23,000
Rhopalodia musculus		32,000				

Table 10. Algal density in the depositional-targeted habitat at sites on the Carson River: East Fork Carson River at Minden, Nev. (site 2, fig. 1), Carson River near Carson City, Nev. (site 6, fig. 1) and Carson River at Deer Run Road near Carson City (site 7, fig. 1), 1993-95--Continued.

		Site 6		Site 7		
Taxon	**Site 2 July 25, 1994 (cells/cm^2)**	**July 19, 1994 (cells/cm^2)**	**Sept. 12, 1995 (percent)**	**Sept. 8, 1993 (cells/cm^2)**	**July 15, 1994 (cells/cm^2)**	**Sept. 12, 1995 (cells/cm^2)**
Surirellales						
Surirellaceae						
Cymatopleura solea				22,000		15,000
Surirella angusta					51,000	
Surirella ovata						30,000
Surirella suecica		16,000		22,000	51,000	
CHLOROPHYTA						
Chlorophyceae						
Chlorococcales						
Micractiniaceae						
Micractinium pusillum					120,000	
Oocystaceae						
Ankistrodesmus falcatus	18,000					
Scenedesmaceae						
Scenedesmus acutus	1,200,000					
Scenedesmus bijuga	71,000					
Scenedesmus denticulatus	170,000				96,000	
Scenedesmus dimorphus	570,000	60,000				
Scenedesmus quadricauda	140,000				160,000	35,000
Scenedesmus serratus	71,000					

Table 11. Algal density in depositional-targeted habitat at sites on the Carson River: Carson River at Dayton, Nev. (site 8, fig. 1) and Carson River at Tarzyn Road near Fallon, Nev. (site 10, fig. 1), 1993 and 1995. Habitats sampled were sediment in pools. [Abbreviations: cm^2, square centimeter; sp., species].

Taxon	Site 8		Site 10
	July 14, 1994 (cells/cm^2)	Sept. 19, 1995 (percent)	Sept. 17, 1993 (cells/cm^2)
Total number of cells	4,700,000	--	19,000,000
CYANOPHYTA			
Undetermined sp.	37,000	0.3	
Cyanophyceae			
Chroococcales			
Chroococcaceae			
Dactylococcopsis rhaphidioides		0.2	
Nostocales			
Nostocaceae			
Anabaena sp.	2,200,000	21.7	
Nostoc pruniforme			680,000
Oscillatoriaceae			
Lyngbya sp.	85,000	2.6	
Oscillatoria sp.1		14.7	
CRYPTOPHYTA			
Undetermined sp.	18,000		
Cryptophyceae			
Cryptomonadales			
Cryptomonadaceae			
Cryptomonas sp.		0.2	
EUGLENOPHYTA			
Euglenophyceae			
Euglenales			
Euglenaceae			
Euglena sp.	18,000	0.3	
BACILLARIOPHYTA			
Coscinodiscophyceae			
Thalassiosirales			
Stephanodiscaceae			
Cyclotella meneghiniana	3,800	0.9	110,000
Stephanodiscus hantzschii	7,700		
Melosirales			
Melosiraceae			
Melosira varians		1.3	
Lepocinclis sp.		0.2	

Table 11. Algal density in depositional-targeted habitat at sites on the Carson River: Carson River at Dayton, Nev. (site 8, fig. 1) and Carson River at Tarzyn Road near Fallon, Nev. (site 10, fig. 1), 1993 and 1995--Continued.

Taxon	Site 8		Site 10
	July 14, 1994 (cells/cm^2)	Sept. 19, 1995 (percent)	Sept. 17, 1993 (cells/cm^2)
Aulacoseirales			
Aulacoseiraceae			
Aulacoseira alpigena		0.1	
Fragilariophyceae			
Fragilariales			
Fragilariaceae			
Diatoma vulgare	7,700		
Fragilaria exiguiformis	180,000	1.2	
Martyana martyi	7,700		
Pseudostaurosira brevistriata	31,000	0.4	
Fragilaria construens pumila	96,000	1.2	
Fragilaria construens subsalina			110,000
Staurosira construens venter	490,000	5.6	
Staurosirella pinnata	600,000	5.0	15,000,000
Synedra ulna	7,700		29,000
Synedra ulna danica			29,000
Synedra ulna oxyrhynchus	7,700		
Bacillariophyceae			
Cymbellales			
Cymbellaceae			
Navicula elginensis neglecta	7,700		
Reimeria sinuata	7,700	0.6	
Gomphonemataceae			
Gomphonema sp.			57,000
Gomphonema cf. clevei		1.2	
Gomphonema parvulum			290,000
Gomphonema truncatum capitatum	7,700		
Rhoicospheniaceae			
Rhoicosphenia abbreviata	15,000	0.2	57,000
Achnanthales			
Achnanthidiaceae			
Achnanthidium exiguum	19,000	0.2	
Achnanthidium minutissimum	7,700	0.2	110,000
Planothidium dubium	84,000	0.4	
Achnanthes hauckiana rostrata	23,000	0.2	170,000
Planothidium lanceolatum	7,700	0.4	57,000
Cocconeidaceae			

Table 11. Algal density in depositional-targeted habitat at sites on the Carson River: Carson River at Dayton, Nev. (site 8, fig. 1) and Carson River at Tarzyn Road near Fallon, Nev. (site 10, fig. 1), 1993 and 1995--Continued.

Taxon	Site 8		Site 10
	July 14, 1994 (cells/cm^2)	Sept. 19, 1995 (percent)	Sept. 17, 1993 (cells/cm^2)
Cocconeis pediculus	61,000	0.4	140,000
Cocconeis placentula euglypta	35,000	1.9	86,000
Cocconeis placentula lineata	12,000	0.2	260,000
Naviculales			
Amphipleuraceae			
Amphipleura pellucida	7,700		
Naviculaceae			
Hippodonta capitata	7,700		
Navicula sp.		1.0	
Navicula biconica		0.2	
Navicula cincta rostrata		0.2	
Navicula clementis	7,700		
Navicula cryptocephala veneta	15,000		
Navicula gregaria	3,800	0.4	
Navicula minima	3,800		57,000
Navicula minisculus	3,800		
Navicula rhynchocephala germainii	19,000	11.7	57,000
Navicula salinarum intermedia	11,000	1.6	
Navicula secreta apiculata	46,000	0.7	140,000
Navicula tantula	7,700		
Navicula tripunctata	7,700		
Navicula tripunctata schizonemoides	7,700		
Navicula viridula avenaceae	7,700		
Neidiaceae			
Neidium dubium		2.4	
Pinnulariaceae			
Caloneis amphisblaena	27,000		
Caloneis ventricosa truncatula			29,000
Sellaphoraceae			
Fallacia pygmaea			29,000
Sellaphora pupula	7,700	0.9	86,000
Stauroneidaceae			
Craticula cuspidata		0.1	

Table 11. Algal density in depositional-targeted habitat at sites on the Carson River: Carson River at Dayton, Nev. (site 8, fig. 1) and Carson River at Tarzyn Road near Fallon, Nev. (site 10, fig. 1), 1993 and 1995--Continued.

Taxon	Site 8		Site 10
	July 14, 1994 (cells/cm^2)	Sept. 19, 1995 (percent)	Sept. 17, 1993 (cells/cm^2)
Thalassiophysales			
Catenulaceae			
Amphora ovalis		0.2	29,000
Amphora ovalis pediculus		0.8	
Amphora perpusilla		0.1	
Bacillariales			
Bacillariaceae			
Bacillaria paxillifer			29,000
Nitzschia acicularis		2.4	
Nitzschia amphibia	7,700	0.3	86,000
Nitzschia dissipata		0.2	
Nitzschia frustulum	1,500	0.2	57,000
Nitzschia frustulum perminuta	54,000		230,000
Nitzschia frustulum subsalina	31,000	0.2	
Nitzschia kuetzingiana	35,000	12.0	57,000
Nitzschia palea	7,700	1.1	
Nitzschia romana	7,700		
Nitzschia subtilis		0.2	
Rhopalodiales			
Rhopalodiaceae			
Epithemia sorex	120,000	0.8	140,000
Epithemia turgida	15,000		
Rhopalodia gibba ventricosa	12,000		
Rhopalodia gibberula	15,000		
Surirellales			
Surirellaceae	3,800		
Cymatopleura solea		0.1	
Surirella minuta			29,000
CHLOROPHYTA			
Undetermined sp.	32,000	0.2	
Chlorophyceae			
Chlorococcales			
Oocystaceae			
Ankistrodesmus falcatus	23,000	0.3	
Kirchneriella lunaris		0.3	

Table 11. Algal density in depositional-targeted habitat at sites on the Carson River: Carson River at Dayton, Nev. (site 8, fig. 1) and Carson River at Tarzyn Road near Fallon, Nev. (site 10, fig. 1), 1993 and 1995--Continued.

Taxon	Site 8		Site 10
	July 14, 1994 (cells/cm^2)	Sept. 19, 1995 (percent)	Sept. 17, 1993 (cells/cm^2)
Scenedesmaceae			
Scenedesmus bijuga	18,000		
Scenedesmus denticulatus	21,000		
Scenedesmus quadricauda			1,000,000
Charophyceae			
Zygnematales			
Desmidiaceae			
Cosmarium subcrenatum			15,000

Table 12. Algal density in depositional-targeted habitat at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96. Habitats sampled were sediments in pools. [Abbreviations:cm^2, square centimeter; sp., species].

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (percent)	Reach B Oct. 10, 1996 (cells/cm^2)
Total number of cells (rounded)	18,000,000	12,000,000	13,000,000	4,200,000	--	22,000,000
CYANOPHYTA						
Undetermined sp.				4,600	0.2	
Cyanophyceae						
Chroococcales						
Chroococcaceae						
Dactylococcopsis rhaphidioides				14,000	0.2	
Gomphosphaeria lacustris					4.3	
Merismopedia glauca				320,000		
Merismopedia tenuissima	330,000	170,000	130,000	66,000		
Nostocales						
Nostocaceae						
Anabaena sp.				350,000	0.9	
Anabaena oscillarioides	2,800,000	1,800,000	1,800,000			3,900,000
Cylindrospermum minutum				690,000		
Oscillatoriaceae						
Lyngbya sp.	5,500,000	2,000,000	4,500,000			
Oscillatoria sp.	1,700,000			240,000	2.1	3,800,000
Schizothrix friesii						680,000

Table 12. Algal density in depositional-tarrgeted habitats at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (percent)	Reach B Oct. 10, 1996 (cells/cm^2)
EUGLENOPHYTA						
Euglenophyceae						
Euglenales						
Euglenacea						
Euglena sp.	10,000				0.2	
Phacus sp.						22,000
BACILLARIOPHYTA						
Coscinodiscophyceae						
Thalassiosirales						
Stephanodiscaceae						
Cyclostephanos invisitatus						170,000
Cyclotella atomus						42,000
Cyclotella meneghiniana	110,000	130,000	61,000	8,400	1.4	42,000
Thalassiosiraceae						
Thalassiosira weissflogii				8,400		
Triceratiales						
Triceratiaceae						
Pleurosira laevis			10,000			
Fragilariophyceae						
Fragilariales						
Fragilariaceae						
Diatoma vulgare	23,000					62,000
Fragilaria exiguiformis	160,000	91,000	180,000	450,000		620,000
Fragilaria vaucheriae		52,000				170,000
Pseudostaurosira brevistriata					7.2	960,000
Fragilaria brevistriata inflata						1,800,000

Table 12. Algal density in depositional-tarrgeted habitats at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (percent)	Reach B Oct. 10, 1996 (cells/cm^2)
Staurosira construens		26,000				21,000
Fragilaria construens pumila				72,000	2.3	330,000
Fragilaria construens subsalina	230,000	520,000	470,000			
Staurosira construens binodis	900,000	270,000	220,000	72,000	0.6	83,000
Staurosira construens venter	770,000	1,200,000	1,400,000	300,000	9.6	120,000
Staurosirella leptostauron		26,000				
Staurosirella pinnata	1,300,000	2,100,000	2,000,000	620,000	14.1	1,700,000
Synedra mazamaensis		26,000				
Synedra rumpens familiaris						42,000
Synedra ulna					0.3	21,000
Bacillariophyceae						
Cymbellales						
Cymbellaceae						
Cymbella affinis					1.4	42,000
Encyonema minutum				8,400		
Reimeria sinuata	23,000		21,000		2.9	21,000
Reimeria sinuata antiqua					0.3	
Gomphonemataceae						
Gomphoneis olivacea	23,000					
Gomphonema sp.		78,000	20,000		0.3	
Gomphonema cf clevei						330,000
Gomphonema intricatum					0.3	
Gomphonema parvulum	23,000	52,000				
Gomphonema truncatum capitatum		52,000	20,000	8,400		
Rhoicospheniaceae						
Rhoicosphenia abbreviata		26,000	41,000		8.3	83,000

Table 12. Algal density in depositional-tarrgeted habitats at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (percent)	Reach B Oct. 10, 1996 (cells/cm^2)
Achnanthales						
Achnanthaceae						
Lemnicola hungarica					0.3	
Achnanthidiaceae						
Achnanthes grana						21,000
Achnanthidium exiguum	68,000	130,000				
Achnanthidium exiguum heterovalvum						21,000
Achnanthidium minutissimum		26,000				170,000
Planothidium dubium	45,000	78,000	170,000	42,000		150,000
Achnanthes hauckiana rostrata	79,000	52,000				120,000
Planothidium lanceolatum		26,000		8,400	0.3	42,000
Cocconeidaceae						
Cocconeis pediculus	34,000	130,000	41,000		0.4	42,000
Cocconeis placentula euglypta		160,000	61,000	13,000	5.4	230,000
Cocconeis placentula lineata		26,000				21,000
Naviculales						
Naviculaceae						
Fistulifera pelliculosa	23,000					
Geissleria decussis	23,000	180,000	20,000	17,000		83,000
Hippodonta capitata	23,000			8,400		
Navicula canalis		26,000	10,000			83,000
Navicula capitata						42,000
Navicula cincta rostrata		26,000			0.3	42,000
Navicula cryptocephala						42,000
Navicula cryptocephala veneta	23,000		20,000		0.3	
Navicula graciloides	23,000		20,000			

Table 12. Algal density in depositional-tarrgeted habitats at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (percent)	Reach B Oct. 10, 1996 (cells/cm^2)
Navicula gregaria	23,000	130,000	61,000		0.6	120,000
Navicula luzonensis			20,000			
Navicula minima		26,000		8,400	0.3	
Navicula paucivisitata			20,000			
Navicula rhynchocephala germainii	110,000	400,000	120,000	38,000	8.0	290,000
Navicula salinarum intermedia	90,000	26,000	61,000		1.4	145,000
Navicula secreta apiculata	140,000	310,000	20,000	17,000	2.3	170,000
Navicula symmetrica	23,000					
Navicula tripunctata schizonemoides	23,000		41,000	8,400		83,000
Navicula viridula rostellata	400,000	450,000	81,000			
Neidiaceae						
Neidium dubium		52,000	10,000		0.6	
Pinnulariaceae						
Caloneis amphisbaena		26,000	10,000			
Caloneis bacillum						42,000
Caloneis lewisii		52,000	41,000			
Caloneis ventricosa truncatula	120,000	180,000	91,000		0.6	42,000
Sellaphoraceae						
Sellaphora pupula	23,000	100,000		17,000	0.6	83,000
Sellaphora pupula rectangularis	23,000					
Stauroneidaceae						
Craticula cuspidata	23,000			8,400		
Thalassiophysales						
Catenulaceae						
Amphora ovalis			20,000			

Table 12. Algal density in depositional-tarrgeted habitats at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (percent)	Reach B Oct. 10, 1996 (cells/cm^2)
Bacillariales						
Bacillariaceae						
Denticula elegans					1.7	
Nitzschia accommodata	45,000					
Nitzschia amphibia		26,000				
Nitzschia constricta					0.6	120,000
Nitzschia dissipata	23,000		20,000		1.2	42,000
Nitzschia frequens	23,000					
Nitzschia frustulum	450,000			25,000		150,000
Nitzschia frustulum perminuta	79,000	52,000	20,000	25,000	1.2	230,000
Nitzschia frustulum subsalina	820,000	130,000	320,000	630,000	1.2	250,000
Nitzschia kuetzingiana	110,000	160,000	120,000	30,000	0.9	190,000
Nitzschia palea	45,000		30,000		2.5	21,000
Nitzschia reversa				8,400		
Nitzschia romana						100,000
Nitzschia subtilis	23,000			8,400		
Nitzschia tryblionella maxima	23,000					
Tryblionella hungarica			41,000	17,000		
Tryblionella levidensis					0.1	
Rhopalodiales						
Rhopalodiaceae						
Epithemia sorex	180,000	26,000	41,000	17,000	6.4	770,000
Rhopalodia gibba	11,000	52,000	81,000			120,000
Rhopalodia gibba ventricosa				21,000	0.3	
Rhopalodia gibberula		77,000	20,000	8,400		170,000

Table 12. Algal density in depositional-tarrgeted habitats at sites on the Carson River: Carson River near Fort Churchill, Nev. (site 9, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 13, 1993 (cells/cm^2)	Reach B Sept. 13, 1993 (cells/cm^2)	Reach C Sept. 20, 1993 (cells/cm^2)	Reach B July 12, 1994 (cells/cm^2)	Reach B Sept. 28, 1995 (percent)	Reach B Oct. 10, 1996 (cells/cm^2)
Surirellales						
Surirellaceae						
Cymatopleura solea			20,000		0.4	42,000
Surirella angusta	45,000		20,000			
Surirella suecica	23,000			8,400	0.3	
CHLOROPHYTA						
Undetermined sp.			4,600			
Chlorophyceae						
Volvocales						
Chlamydonadaceae						
Chlamydomanas sp.	20,000		25,000			
Chlorococcales						
Hydrodictyaceae						
Pediastrum duplex	330,000	170,000				
Oocystaceae						
Ankistrodesmus falcatus	10,000			9,100	1.2	
Kirchneriella lunaris				14,000	0.2	
Scenedesmaceae						
Scenedesmus acutus					2.5	
Scenedesmus dimorphus	82,000		34,000		0.6	
Scenedesmus quadricauda	82,000				0.8	600,000
Charophyceae						
Zygnematales						
Desmidiaceae						
Closterium moniliferum		10,000				
Cosmarium subcrenatum		21,000				

Table 13. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River at Farad, Calif. (site 12, fig. 1), 1993-96. Habitats sampled were cobble riffles. [Abbreviations: cm^2, square centimeter; sp., species]

Taxon	Reach A Sept. 9, 1993 (cells/cm^2)	Reach B Sept. 9, 1993 (cells/cm^2)	Reach C Sept. 10, 1993 (cells/cm^2)	Reach A June 30, 1994 (cells/cm^2)	Reach A Oct. 2, 1995 (cells/cm^2)	Reach A Oct. 8, 1996 (cells/cm^2)
Total number of cells (rounded)	1,900,000	400,000	4,300,000	8,300,000	2,700,000	2,500,000
CYANOPHYTA						
Cyanophyceae						
Chamaesiphonales						
Chamaesiphonaceae						
Chamaesiphon incrustans				4,200		
Nostocales						
Nostocaceae						
Anabaena sp.				250,000	38,000	
Nostoc pruniforme	16,000	31,000	3,700,000			
Oscillatoriaceae						
Hydrocoleum brebissonii				1,100,000	44,000	280,000
Lyngbya sp.	1,600,000	240,000	470,000	310,000	220,000	120,000
Microcoleus vaginatus	16,000					
Oscillatoria sp.				4,000,000	810,000	480,000
Schizothrix friesii				17,000		
Rivulariaceae						
Calothrix sp.				1,300,000	740,000	
RHODOPHYTA						
Florideophyceae						
Nemaliales						
Acrochaetiaceae						
Audouinella hermanii				14,000		
CRYPTOPHYTA.						
Undetermined sp.				4,200		
Calothrix fusca						95,000

Table 13. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River at Farad, Calif. (site 12, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 9, 1993 (cells/cm^2)	Reach B Sept. 9, 1993 (cells/cm^2)	Reach C Sept. 10, 1993 (cells/cm^2)	Reach A June 30, 1994 (cells/cm^2)	Reach A Oct. 2, 1995 (cells/cm^2)	Reach A Oct. 8, 1996 (cells/cm^2)
EUGLENOPHYTA						
Euglenophyceae						
Euglenales						
Euglenaceae						
Euglena sp.						3,300
Trachelomonas sp.			940			
Trachelomonas volvocina						6,600
BACILLARIOPHYTA						
Coscinodiscophyceae						
Thalassiosirales						
Stephanodiscaceae						
Cyclotella bodanica					7,400	
Cyclotella meneghiniana	380		230		5,900	6,200
Cyclotella pseudostilligera						6,200
Cyclotella radiosa	380		470			
Melosirales						
Melosiraceae						
Melosira varians	3,800	2,500	470	2,100	10,000	6,200
Aulacoseirales						
Aulacoseiraceae						
Aulacoseira alpigena				4,300		
Aulacoseira ambigua			470	8,500	7,400	
Aulacoseira granulata				8,500		
Aulacoseira italica				8,500		

Table 13. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River at Farad, Calif. (site 12, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 9, 1993 (cells/cm^2)	Reach B Sept. 9, 1993 (cells/cm^2)	Reach C Sept. 10, 1993 (cells/cm^2)	Reach A June 30, 1994 (cells/cm^2)	Reach A Oct. 2, 1995 (cells/cm^2)	Reach A Oct. 8, 1996 (cells/cm^2)
Fragilariophyceae						
Fragilariales						
Fragilariaceae						
Diatoma mesodon					1,500	4,100
Diatoma vulgare			230			
Fragilaria capucina			230			
Fragilaria capucina mesolepta			230			
Fragilaria crotonensis	760		230			
Fragilaria exiguiformis			470	4,300	1,500	12,000
Fragilaria intermedia					1,500	
Fragilaria vaucheriae	5,300	740	1,400	4,300	18,000	21,000
Fragilariforma bicapitata					3,000	
Hannaea arcus			470			
Martyana martyi				2,100		
Meridion circulare	380		700			
Pseudostaurosira brevistriata					50,000	94,000
Fragilaria brevistriata inflata					3,000	39,000
Staurosira construens			230	17,000		
Fragilaria construens pumila	3,400		3,000	68,000	50,000	88,000
Fragilaria construens subsalina	5,300	4,200	3,300			
Staurosira construens binodis	2,300		2,100	32,000	3,000	
Staurosira construens venter	20,000	9,800	4,700	210,000	27,000	10,000
Staurosirella leptostauron				6,400		
Staurosirella pinnata	40,000	9,300	14,000	200,000	24,000	99,000
Synedra acus				2,100		
Synedra mazamaensis	760					4,100
Synedra minuscula					1,500	

Table 13. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River at Farad, Calif. (site 12, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 9, 1993 (cells/cm^2)	Reach B Sept. 9, 1993 (cells/cm^2)	Reach C Sept. 10, 1993 (cells/cm^2)	Reach A June 30, 1994 (cells/cm^2)	Reach A Oct. 2, 1995 (cells/cm^2)	Reach A Oct. 8, 1996 (cells/cm^2)
Synedra rumpens	380					
Synedra rumpens familiaris		490		8,500		4,100
Synedra rumpens fragilarioides					5,900	
Synedra ulna				2,100	1,500	6,200
Synedra ulna contracta		740	230			
Synedra ulna oxyrhynchus				2,100		
Tabellariales						
Tabellariaceae						
Tabellaria flocullosa						4,100
Bacillariophyceae						
Cymbellales						
Cynbellaceae						
Cymbella sp.	3,400				5,900	
Cymbella affinis			230	2,100	8,900	12,000
Cymbella mexicana janischii	1,900	980	1,900	4,300	7,400	
Cymbella naviculiformis					3,000	
Cymbella turgidula						3,000
Encyonema minutum	16,000	15,000	17,000	10,000	52,000	45,000
Encyonema muelleri	12,000	6,700	14,000	120,000	7,400	4,100
Encyonema silesiacum	2,300	5,200			7,400	4,100
Reimeria sinuata	5,000	5,900	4,700	15,000	25,000	57,000
Reimeria sinuata antiqua				4,300		
Gomphonemataceae						
Gomphoneis eriense variabilis		490	930	4,300	13,000	
Gomphoneis herculeana	5,000			8,500	3,000	
Gomphoneis olivacea				11,000		
Gomphonema sp.	1,900	2,500	940	15,000	16,000	

Table 13. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River at Farad, Calif. (site 12, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 9, 1993 (cells/cm^2)	Reach B Sept. 9, 1993 (cells/cm^2)	Reach C Sept. 10, 1993 (cells/cm^2)	Reach A June 30, 1994 (cells/cm^2)	Reach A Oct. 2, 1995 (cells/cm^2)	Reach A Oct. 8, 1996 (cells/cm^2)
Gomphonema angustatum					3,000	
Gomphonema cf. clevei	740	700	680	4,000	10,000	24,000
Gomphonema parvulum	380	490		6,400	5,900	8,200
Gomphonema cf. rhombicum						27,000
Gomphonema truncatum capitatum	380					
Rhoicospheniaceae						
Rhoicosphenia abbreviata	1,500	5,700	2,100	15,000	46,000	49,000
Achanthales						
Achnanthidiaceae						
Achnanthidium minutissimum	4,200	1,700	2,600	8,500	120,000	140,000
Karayevia clevei	380	250			1,500	
Planothidium dubium	1,900	250	470		4,400	4,100
Planothidium lanceolatum	380	740			18,000	4,100
Planothidium peragallii	380					
Rossithidium pusillum	1,500	490	230	2,100	4,400	14,000
Cocconeidaceae						
Cocconeis pediculus	380		230	130,000		
Cocconeis placentula euglypta	16,000	18,000	13,000	8,500	43,000	86,000
Cocconeis placentula lineata	6,100	5,400	1,900	8,500	12,000	16,000
Naviculales						
Amphipleuraceae						
Frustulia rhomboides crassinervia				2,100		
Brachysiraceae						
Brachysira brebissonii				4,300		
Cavinulaceae						
Cavinula cocconeiformis				2,100		
Diploneidaceae						

Table 13. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River at Farad, Calif. (site 12, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 9, 1993 (cells/cm^2)	Reach B Sept. 9, 1993 (cells/cm^2)	Reach C Sept. 10, 1993 (cells/cm^2)	Reach A June 30, 1994 (cells/cm^2)	Reach A Oct. 2, 1995 (cells/cm^2)	Reach A Oct. 8, 1996 (cells/cm^2)
Diploneis puella						4,100
Diploneis smithii				2,100		
Naviculaceae						
Fistulifera pelliculosa	380					
Geissleria decussis	1,200					9,800
Hippodonta capitata	760			6,400	3,000	
Navicula sp.					61,000	33,000
Navicula anglica				4,300		
Navicula canoris	1,100					
Navicula cari				2,100		
Navicula cryptocephala				2,100		
Navicula detenta	760			4,300		
Navicula graciloides	5,700	8,600	6,800			
Navicula gregaria					5,900	
Navicula lanceolata		490				
Navicula menisculus	760		1,200			4,100
Navicula minima	380	250				8,200
Navicula pseudolanceolata					10,000	
Navicula radiosa	380		230			
Navicula rhynchocephala germainii						4,100
Navicula salinarum intermedia	15,000	19,000	18,000		18,000	12,000
Navicula secreta apiculata	380	740	930		5,900	16,000
Navicula tantula	380					
Navicula tripunctata	3,800	5,900	9,600	21,000	30,000	33,000
Navicula tripunctata schizonemoides				2,100		
Navicula viridula avenacea					1,500	

Table 13. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River at Farad, Calif. (site 12, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 9, 1993 (cells/cm^2)	Reach B Sept. 9, 1993 (cells/cm^2)	Reach C Sept. 10, 1993 (cells/cm^2)	Reach A June 30, 1994 (cells/cm^2)	Reach A Oct. 2, 1995 (cells/cm^2)	Reach A Oct. 8, 1996 (cells/cm^2)
Neidiaceae						
Neidium affine						4,100
Neidium dubium						4,100
Pinnulariaceae						
Caloneis bacillum			230	2,100		
Sellaphoraceae						
Sellaphora bacillum				4,300		
Sellaphora laevissima			230			
Sellaphora pupula		490		2,100		
Sellaphora pupula rectangularis	760			4,300	3,000	
Thalassiophysales						
Catenulaceae						
Amphora ovalis	380					
Amphora ovalis pediculus			230	2,100	1,500	
Amphora perpusilla	1,100					14,000
Bacillarales						
Bacillariaceae						
Cymbellonitzschia diluviana	760	490	230			
Denticula elegans				2,100		
Hantzschia virgata					1,500	
Nitzschia amphibia	380	250	700		3,000	
Nitzschia bacata						4,100
Nitzschia dissipata	760		1,400	4,300	44,000	25,000
Nitzschia dissipata media	1,900	250			8,900	16,000
Nitzschia frustulum	14,000	5,200	4,400	55,000	16,000	25,000
Nitzschia frustulum perminuta	7,600	4,400	1,200	19,000	21,000	49,000
Nitzschia frustulum subsalina	1,900	490	930	8,500	8,900	8,200

Table 13. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River at Farad, Calif. (site 12, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 9, 1993 (cells/cm^2)	Reach B Sept. 9, 1993 (cells/cm^2)	Reach C Sept. 10, 1993 (cells/cm^2)	Reach A June 30, 1994 (cells/cm^2)	Reach A Oct. 2, 1995 (cells/cm^2)	Reach A Oct. 8, 1996 (cells/cm^2)
Nitzschia kuetzingiana	380	490		13,000	5,900	
Nitzschia linearis tenuis		250	470			18,000
Nitzschia palea					1,500	
Nitzschia pura					1,500	
Nitzschia recta		740				
Nitzschia romana		250			1,500	
Nitzschia sinuata tabellaria	760					
Nitzschia sociabilis						4,100
Nitzschia tropica	1,500			4,300		
Rhopalodiaceae						
Epithemia adnata				8,500		
Epithemia sorex	760		230	110,000	2,900	29,000
Epithemia turgida		1,500		15,000		
Rhopalodia gibba	380			6,400		
Rhopalodia gibba ventricosa				2,100		
CHLOROPHYTA						
Undetermined sp.				4,200		
Chlorophyceae						
Chlorococcales						
Oocystaceae						
Ankistrodesmus falcatus				4,200		6,600
Scenedesmaceae						
Scenedesmus ecornis		880				
Scenedesmus quadricauda		8,800				
Chaetophorales						
Chaetophoraceae						
Schizomeris leibleinii						79,000

Table 13. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River at Farad, Calif. (site 12, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 9, 1993 (cells/cm^2)	Reach B Sept. 9, 1993 (cells/cm^2)	Reach C Sept. 10, 1993 (cells/cm^2)	Reach A June 30, 1994 (cells/cm^2)	Reach A Oct. 2, 1995 (cells/cm^2)	Reach A Oct. 8, 1996 (cells/cm^2)
Stigeoclonium lubricum						200,000
Charophyceae						
Zygnemateles						
Desmidiaceae						
Cosmarium subcrenatum	670					

Table 14. Algal density in richest-targeted habitat at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1), Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), and Truckee River at Idlewild Park at Reno, Nev. (site 14, fig. 1), 1993-95. Habitats sampled were cobble riffles. [Abbreviations: cm^2, square centimeter; sp., species]

Taxon	Site 11	Site 13		Site 14	
	Sept. 8, 1993 (cells/cm^2)	July 1, 1994	Sept. 21, 1995	July 5, 1994	Sept. 22, 1995
Total number of cells (rounded)	700,000	1,100,000	2,600,000	3,500,000	5,900,000
CYANOPHYTA					
Undetermined sp.		40,000			
Cyanophyceae					
Chroococcales					
Chroococcaceae					
Dactylococcopsis rhaphidioides		2,700			
Merismopedia tenuissima					13,000
Nostocales					
Nostocaceae					
Anabaena sp.				100,000	
Anabaena oscillarioides	300,000				
Cylindrospermum minutum		37,000			
Oscillatoriaceae					
Hydrocoleum brebissonii		53,000	27,000		51,000
Lyngbya sp.			490,000	220,000	510,000
Oscillatoria sp.		320,000	420,000	620,000	1,800,000
Rivulariaceae					
Calothrix sp.			640,000	360,000	3,300,000
Calothrix fusca		66,000			
BACILLARIOPHYTA					
Coscinodiscophyceae					
Thalassiosirales					
Stephanodiscaceae					
Cyclotella meneghiniana	1,900			6,000	

Table 14. Algal density in richest-targeted habitat at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1), Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), and Truckee River at Idlewild Park at Reno, Nev. (site 14), 1993-95--Continued.

Taxon	Site 11	Site 13		Site 14	
	Sept. 8, 1993 (cells/cm^2)	July 1, 1994	Sept. 21, 1995	July 5, 1994	Sept. 22, 1995
Cyclotella radiosa					420
Melosirales					
Melosiraceae					
Melosira varians	71,000				
Aulacoseirales					
Aulacoseiraceae					
Aulacoseira sp.	1,300				
Aulacoseira ambigua	1,300				
Aulacoseira italica	4,400	3,800			
Fragilariophyceae					
Fragilariales					
Fragilariaceae					
Fragilaria exiguiformis	1,300	950			
Fragilaria vaucheriae	5,100		23,000	54,000	1,700
Hannaea arcus	2,500				
Martyana martyi				3,000	
Meridion circulare	1,300				
Pseudostaurosira brevistriata			3,500		1,300
Fragilaria brevistriata inflata				30,000	850
Staurosira construens		3,800			
Fragilaria construens pumila		44,000	3,500	36,000	1,300
Fragilaria construens subsalina	5,100				
Staurosira construens binodis	1,300	31,000			
Staurosira construens venter	5,700	150,000	84,000	120,000	5,500
Staurosirella pinnata	58,000	76,000		100,000	6,800
Synedra rumpens	2,500			9,000	

Table 14. Algal density in richest-targeted habitat at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1), Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), and Truckee River at Idlewild Park at Reno, Nev. (site 14), 1993-95--Continued.

Taxon	Site 11	Site 13		Site 14	
	Sept. 8, 1993 (cells/cm^2)	July 1, 1994	Sept. 21, 1995	July 5, 1994	Sept. 22, 1995
Synedra rumpens familiaris			3,500		850
Synedra rumpens meneghiniana			14,000		
Synedra ulna		2,900			420
Synedra ulna oxyrhynchus			3,500		2,100
Bacillariophyceae					
Eunotiales					
Eunotiaceae					
Eunotia tenella	1,300				
Cymbellales					
Cynbellaceae					
Cymbella sp.	3,800		85,000		420
Cymbella affinis	1,300			72,000	4,200
Cymbella cistula			3,500		
Cymbella mexicana janischii		950		69,000	
Cymbella tumida	630				
Encyonema minutum	74,000		200,000	27,000	24,000
Encyonema muelleri		950	7,000	520,000	1,300
Encyonema silesiacum			3,500		420
Reimeria sinuata	1,300		28,000	15,000	10,000
Reimeria sinuata antiqua		950		3,000	
Gomphonemataceae					
Gomphoneis eriense variabilis			3,500		
Gomphoneis herculeana			3,500	6,000	2,100
Gomphonema sp.	24,000	1,900	3,500	24,000	13,000
Gomphonema parvulum					420
Gomphosphenia grovei		950			

Table 14. Algal density in richest-targeted habitat at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1), Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), and Truckee River at Idlewild Park at Reno, Nev. (site 14), 1993-95--Continued.

Taxon	Site 11	Site 13		Site 14	
	Sept. 8, 1993 (cells/cm^2)	July 1, 1994	Sept. 21, 1995	July 5, 1994	Sept. 22, 1995
Rhoicospheniaceae					
Rhoicosphenia abbreviata	3,200	950	10,000	72,000	130,000
Achanthales					
Achnanthidiaceae					
Achnanthidium minutissimum		1,900	130,000	36,000	8,000
Karayevia clevei					1,300
Planothidium dubium	1,300		3,500	6,000	
Planothidium lanceolatum	2,500		3,500		
Rossithidium pusillum	35,000				420
Cocconeidaceae					
Cocconeis pediculus		3,800		160,000	
Cocconeis placentula euglypta		2,800	3,500	45,000	3,000
Cocconeis placentula lineata	2,500		10,000		2,100
Naviculales					
Amphipleuraceae					
Frustulia vulgaris	1,300				420
Naviculaceae					
Fistulifera pelliculosa	1,300				
Geissleria decussis	14,000	950			
Hippodonta capitata	1,300				
Navicula sp.			63,000		
Navicula canoris	4,400				
Navicula cari				6,000	
Navicula cincta rostrata	1,300	950			
Navicula cryptocephala veneta				6,000	
Navicula detenta	1,300				

Table 14. Algal density in richest-targeted habitat at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1), Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), and Truckee River at Idlewild Park at Reno, Nev. (site 14), 1993-95--Continued.

Taxon	Site 11	Site 13		Site 14	
	Sept. 8, 1993 (cells/cm^2)	July 1, 1994	Sept. 21, 1995	July 5, 1994	Sept. 22, 1995
Navicula graciloides	10,000				
Navicula gregaria			3,500	12,000	
Navicula lanceolata	1,300		3,500		
Navicula menisculus	13,000				
Navicula minima	1,300		3,500		
Navicula rhynchocephala germainii	1,300			3,000	850
Navicula salinarum intermedia			17,000	88,000	17,000
Navicula secreta apiculata	1,300		3,500		
Navicula tripunctata		1,900	16,000	180,000	3,800
Navicula viridula avenacea			14,000		4,200
Neidiaceae					
Neidium apiculatum		950			
Pinnulariaceae					
Caloneis amphisbaena		950			
Caloneis bacillum		950		9,000	
Caloneis ventricosa truncatula		950			
Sellaphoraceae					
Sellaphora americana	630				
Sellaphora pupula rectangularis	1,900				
Thalassiophysales					
Catenulaceae					
Amphora ovalis	630				
Amphora ovalis pediculus		950	1,700		
Amphora perpusilla				15,000	
Bacillarales					
Bacillariaceae					

Table 14. Algal density in richest-targeted habitat at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1), Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), and Truckee River at Idlewild Park at Reno, Nev. (site 14), 1993-95--Continued.

Taxon	Site 11	Site 13		Site 14	
	Sept. 8, 1993 (cells/cm^2)	July 1, 1994	Sept. 21, 1995	July 5, 1994	Sept. 22, 1995
Nitzschia acula		1,900			
Nitzschia amphibia				6,000	
Nitzschia diserta				6,000	
Nitzschia dissipata	1,300		190,000		420
Nitzschia dissipata media			17,000		
Nitzschia frustulum	1,300	3,800	63,000	12,000	
Nitzschia frustulum perminuta	1,300	1,900	14,000	6,000	3,400
Nitzschia frustulum subsalina					2,100
Nitzschia kuetzingiana		1,900			
Nitzschia linearis tenuis					850
Nitzschia palea			3,500		
Nitzschia reversa		950			
Nitzschia romana	630				
Tryblionella hungarica		1,900			
Rhopalodiales					
Rhopalodiaceae					
Epithemia adnata				6,000	
Epithemia sorex		150,000		30,000	2,100
Epithemia turgida	2,500	3,800			
Rhopalodia gibba	2,500	1,900		6,000	
Rhopalodia gibba ventricosa		47,000			
Rhopalodia gibberula		18,000			
Surirellales					
Surirellaceae					
Surirella angusta	1,300				

Table 14. Algal density in richest-targeted habitat at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1), Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), and Truckee River at Idlewild Park at Reno, Nev. (site 14), 1993-95--Continued.

Taxon	Site 11	Site 13		Site 14	
	Sept. 8, 1993 (cells/cm^2)	July 1, 1994	Sept. 21, 1995	July 5, 1994	Sept. 22, 1995
CHLOROPHYTA					
Unidentified species		5,300		12,000	
Chlorophyceae					
Chlorococcales					
Hydrodictyaceae					
Pediastrum boryanum				83,000	
Pediastrum tetras				24,000	
Oocystaceae					
Ankistrodesmus falcatus		5,300		140,000	
Scenedesmaceae					
Scenedesmus denticulatus		12,000		140,000	
Scenedesmus ecornis	1,800				
Scenedesmus quadricauda	11,000				
Ulvophyceae					
Cladophorales					
Cladophoraceae					
Cladophora sp.				21,000	
Charophyceae					
Zygnemateles					
Desmidiaceae					
Cosmarium sp.	6,400				
Cosmarium botrytis				6,000	

Table 15. Algal density in richest-targeted habitat at sites on the Truckee River: Truckee River near Sparks, Nev. (site 15, fig. 1), and Truckee River at Lockwood, Nev. (site 16, fig. 1), 1993-95. Habitats sampled were cobble riffles. [Abbreviations: cm 2, square centimeter; sp., species]

Taxon	Site 15			Site 16	
	Sept. 3, 1993 (cells/cm^2)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (cells/cm^2)	July 6, 1994 (cells/cm^2)	Sept. 26, 1995 (cells/cm^2)
Total number of cells (rounded)	4,300,000	16,000,000	1,700,000	4,400,000	7,000,000
CYANOPHYTA					
Unidentified sp.		26,000		76,000	7,400
Cyanophyceae					
Chroococcales					
Chroococcaceae					
Dactylococcopsis rhaphidioides		6,500			
Merismopedia tenuissima				61,000	
Chamaesiphonales					
Chamaesiphonaceae					
Chamaesiphon incrustans				25,000	
Nostocales					
Oscillatoriaceae					
Hydrocoleum brebissonii					34,000
Lyngbya sp.		1,800,000	190,000		
Oscillatoria sp.		1,500,000	290,000	220,000	32,000
Rivulariaceae					
Calothrix sp.		11,000,000	660,000		
Calothrix parietina	3,000,000				

Table 15. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River near Sparks, Nev. (site 15, fig. 1), and Truckee River at Lockwood, Nev. (site 16, fig. 1), 1993-95--Continued.

Taxon	Site 15			Site 16	
	Sept. 3, 1993 (cells/cm^2)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (cells/cm^2)	July 6, 1994 (cells/cm^2)	Sept. 26, 1995 (cells/cm^2)
RHODOPHYTA					
Florideophyceae					
Nemaliales					
Acrochaetiaceae					
Audouinella hermanii					15,000
BACILLARIOPHYTA					
Coscinodiscophyceae					
Thalassiosirales					
Stephanodiscaceae					
Cyclotella meneghiniana	9,000	2,200		350,000	2,900
Stephanodiscus hantzschii		2,200			
Melosirales					
Melosiraceae					
Melosira varians		7,600	880	66,000	1,900
Aulacoseirales					
Aulacoseiraceae					
Aulacoseira ambigua	2,200		880		
Aulacoseira italica tenuissima				6,000	
Fragilariophyceae					
Fragilariales					
Fragilariaceae					
Diatoma vulgare	4,500	2,200	3,500	24,000	930
Fragilaria capucina mesolepta	4,500				
Fragilaria crotonensis			880		
Fragilaria vaucheriae	2,200	5,500	880		4,600
Hannaea arcus	4,500				

Table 15. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River near Sparks, Nev. (site 15, fig. 1), and Truckee River at Lockwood, Nev. (site 16, fig. 1), 1993-95--Continued.

Taxon	Site 15			Site 16	
	Sept. 3, 1993 (cells/cm^2)	**June 29, 1994** (cells/cm^2)	**Sept. 25, 1995** (cells/cm^2)	**July 6, 1994** (cells/cm^2)	**Sept. 26, 1995** (cells/cm^2)
Pseudostaurosira brevistriata			6,200		13,000
Fragilaria brevistriata inflata					3,700
Staurosira construens		4,400			
Fragilaria construens pumila	67,000	8,700	1,800	60,000	24,000
Fragilaria construens subsalina	20,000				
Staurosira construens binodis	16,000				7,400
Staurosira construens venter	110,000	15,000	2,600	12,000	19,000
Staurosirella pinnata	240,000	30,000	2,600	36,000	57,000
Synedra rumpens		3,300	1,800		
Synedra rumpens fragilarioides					930
Synedra ulna	22,000	40,000		90,000	
Synedra ulna contracta	2,200				
Synedra ulna danica	4,500				
Synedra ulna oxyrhynchus	4,500	5,500	5,300		
Bacillariophyceae					
Cymbellales					
Cynbellaceae					
Cymbella sp.	220,000				
Cymbella affinis		26,000	130,000	6,000	930
Cymbella brehmii			1,800		
Cymbella mexicana janischii		1,100			
Encyonema minutum	11,000	25,000	46,000	30,000	17,000
Encyonema muelleri		1,100	1,800		
Encyonema prostratum		2,200			
Encyonema silesiacum			880		930
Reimeria sinuata	13,000		36,000	18,000	29,000

Table 15. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River near Sparks, Nev. (site 15, fig. 1), and Truckee River at Lockwood, Nev. (site 16, fig. 1), 1993-95--Continued.

Taxon	Site 15			Site 16	
	Sept. 3, 1993 (cells/cm^2)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (cells/cm^2)	July 6, 1994 (cells/cm^2)	Sept. 26, 1995 (cells/cm^2)
Gomphonemataceae					
Gomphoneis eriense variabilis	9,000		3,500		
Gomphoneis herculeana	4,500		1,800		
Gomphoneis olivacea	6,700	2,200			
Gomphonema sp.	6,700	35,000	5,300	260,000	3,700
Gomphonema parvulum				18,000	
Rhoicospheniaceae					
Rhoicosphenia abbreviata	27,000	3,300	58,000	740,000	100,000
Achanthales					
Achnanthidiaceae					
Achnanthes pinnata					930
Achnanthidium exiguum		2,200			
Achnanthidium minutissimum	72,000	27,000	90,000	100,000	28,000
Karayevia clevei	6,700	2,200			930
Planothidium dubium	18,000	6,600	1,800		1,900
Rossithidium pusillum	2,200		3,500		2,800
Cocconeidaceae					
Cocconeis pediculus	11,000		1,800	72,000	25,000
Cocconeis placentula euglypta	40,000	37,000	19,000	130,000	20,000
Cocconeis placentula lineata		23,000	7,000	24,000	11,000
Naviculales					
Amphipleuraceae					
Amphipleura pellucida		4,400			
Diploneidaceae					
Diploneis puella	2,200				

Table 15. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River near Sparks, Nev. (site 15, fig. 1), and Truckee River at Lockwood, Nev. (site 16, fig. 1), 1993-95--Continued.

Taxon	Site 15			Site 16	
	Sept. 3, 1993 (cells/cm^2)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (cells/cm^2)	July 6, 1994 (cells/cm^2)	Sept. 26, 1995 (cells/cm^2)
Naviculaceae					
Fistulifera pelliculosa					930
Geissleria schoenfeldii	6,700				
Hippodonta capitata		2,200			
Navicula sp.			5,300		6,500
Navicula arvensis		1,100			
Navicula canalis		2,200			
Navicula cari		8,700		120,000	
Navicula cincta rostrata					1,900
Navicula cryptocephala		4,400			
Navicula graciloides	18,000				
Navicula gregaria			880	6,000	
Navicula luzonensis		2,200			
Navicula menisculus	4,500	4,400			
Navicula minima	9,000	2,200			1,900
Navicula pseudolanceolata			1,800		
Navicula rhynchocephala	2,200				
Navicula rhynchocephala germainii					1,900
Navicula salinarum intermedia	160,000	15,000	49,000	990,000	29,000
Navicula secreta apiculata	2,200		1,800	6,000	2,800
Navicula tantula		2,200			
Navicula tripunctata	18,000	8,700	7,100	84,000	22,000
Navicula viridula	26,000				
Navicula viridula avenacea			6,200	6,000	3,700
Pinnulariaceae					
Caloneis bacillum	4,500				

Table 15. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River near Sparks, Nev. (site 15, fig. 1), and Truckee River at Lockwood, Nev. (site 16, fig. 1), 1993-95--Continued.

Taxon	Site 15			Site 16	
	Sept. 3, 1993 (cells/cm^2)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (cells/cm^2)	July 6, 1994 (cells/cm^2)	Sept. 26, 1995 (cells/cm^2)
Sellaphoraceae					
Sellaphora pupula	2,200	4,400		12,000	7,400
Thalassiophysales					
Catenulaceae					
Amphora ovalis pediculus	2,200		1,800		
Amphora perpusilla	4,500	8,700	930		3,700
Amphora veneta					930
Bacillarales					
Bacillariaceae					
Cymbellonitzschia diluviana	9,000				
Nitzschia acicularis		2,200			
Nitzschia amphibia	2,200			42,000	27,000
Nitzschia bacata		2,200			
Nitzschia diserta		2,200			
Nitzschia dissipata		110,000	17,000		1,900
Nitzschia dissipata media		2,200	7,900		930
Nitzschia fonticola		2,200			
Nitzschia frustulum	52,000	8,700	880	66,000	5,600
Nitzschia frustulum perminuta	38,000	4,400	1,800	110,000	42,000
Nitzschia frustulum subsalina	13,000	2,200		18,000	11,000
Nitzschia kuetzingiana	2,200	11,000	3,500	54,000	1,900
Nitzschia palea		8,700		36,000	3,700
Nitzschia siliqua		8,700			
Nitzschia subtilis		31,000			
Tryblionella hungarica		2,200			

Table 15. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River near Sparks, Nev. (site 15, fig. 1), and Truckee River at Lockwood, Nev. (site 16, fig. 1), 1993-95--Continued.

Taxon	Site 15			Site 16	
	Sept. 3, 1993 (cells/cm^2)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (cells/cm^2)	July 6, 1994 (cells/cm^2)	Sept. 26, 1995 (cells/cm^2)
Rhopalodiales					
Rhopalodiaceae					
Epithemia sorex		6,600			
Epithemia turgida		4,400			
Surirellales					
Surirellaceae					
Surirella angusta		24,000		12,000	
Surirella minuta		34,000	880		
CHLOROPHYTA					
Unidentified sp.				100,000	4,400
Chlorophyceae					
Chlorococcales					
Oocystaceae					
Ankistrodesmus falcatus		33,000		76,000	
Kirchneriella lunaris				38,000	
Quadrigula lacustris		20,000		38,000	
Scenedesmaceae					
Scenedesmus acutus			13,000		
Scenedesmus denticulatus				59,000	
Chaetophorales					
Chaetophoraceae					
Stigeoclonium lubricum		730,000			
Oedogoniales					
Oedogoniaceae					
Oedogonium sp.				93,000	5,700

Table 15. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River near Sparks, Nev. (site 15, fig. 1), and Truckee River at Lockwood, Nev. (site 16, fig. 1), 1993-95--Continued.

Taxon	Site 15			Site 16	
	Sept. 3, 1993 (cells/cm^2)	**June 29, 1994** (cells/cm^2)	**Sept. 25, 1995** (cells/cm^2)	**July 6, 1994** (cells/cm^2)	**Sept. 26, 1995** (cells/cm^2)
Ulvophyceae					
Cladophorales					
Cladophoraceae					
Cladophora sp.					3,000
Charophyceae					
Zygnemateles					
Desmidiaceae					
Cosmarium botrytis				25,000	
Cosmarium subcrenatum	3,700				

Table 16. Algal density in the richest-targeted habitat at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96. Habitats sampled were cobble riffles. [Abbreviations: cm^2, square centimeter; sp., species]

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 7, 1993 (cells/cm^2)	Reach C Sept. 7, 1993 (cells/cm^2)	Reach C July 7, 1994 (cells/cm^2)	Reach C Oct. 3, 1995 (cells/cm^2)	Reach C Oct. 8,1996 (cells/cm^2)
Total number of cells (rounded)	800,000	480,000	1,300,000	8,900,000	2,000,000	3,700,000
CYANOPHYTA						
Unidenitified sp.				210,000		
Cyanophyceae						
Chroococcales						
Chroococcaceae						
Dactylococcopsis rhaphidioides				26,000	5,000	
Nostocales						
Oscillatoriaceae						
Hydrocoleum brebissonii						750,000
Lyngbya sp.	450,000	110,000				140,000
Oscillatoria sp.					53,000	610,000
Rivulariaceae						
Calothrix parietina						940,000
EUGLENOPHYTA						
Euglenophyceae						
Euglenales						
Euglenaceae						
Euglena sp.					4,900	3,800
BACILLARIOPHYTA						
Coscinodiscophyceae						
Thalassiosirales						
Stephanodiscaceae						
Cyclotella meneghiniana	590	2,200			6,300	

Table 16. Algal density in the richest targeted habitat at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 7, 1993 (cells/cm^2)	Reach C Sept. 7, 1993 (cells/cm^2)	Reach C July 7, 1994 (cells/cm^2)	Reach C Oct. 3, 1995 (cells/cm^2)	Reach C Oct. 8,1996 (cells/cm^2)
Melosirales						
Melosiraceae						
Melosira varians		2,200			3,000	
Aulacoseirales						
Aulacoseiraceae						
Aulacoseira ambigua					69,000	
Fragilariophyceae						
Fragilariales						
Fragilariaceae						
Diatoma vulgare	4,700	5,600			9,400	32,000
Fragilaria vaucheriae		2,200		14,000	9,400	3,600
Hannaea arcus	590					
Martyana martyi				28,000		
Pseudostaurosira brevistriata					9,400	
Fragilaria brevistriata inflata					6,300	3,600
Staurosira construens		4,500				
Fragilaria construens pumila		2,200			120,000	20,000
Fragilaria construens subsalina	4,100	4,500				
Staurosira construens binodis	7,000		5,600		16,000	
Staurosira construens venter	21,000	3,400	3,700	170,000	110,000	
Staurosirella pinnata	44,000	40,000	28,000	170,000	100,000	11,000
Fragilaria pinnata lancettula					13,000	
Synedra mazamaensis		1,100				3,600
Synedra rumpens				14,000		
Synedra ulna	4,100	5,000				

Table 16. Algal density in the richest targeted habitat at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 7, 1993 (cells/cm^2)	Reach C Sept. 7, 1993 (cells/cm^2)	Reach C July 7, 1994 (cells/cm^2)	Reach C Oct. 3, 1995 (cells/cm^2)	Reach C Oct. 8,1996 (cells/cm^2)
Cymbellales						
Cynbellaceae						
Cymbella affinis	1,200	1,100				45,000
Cymbella tumida						1,800
Cymbella turgidula					6,300	
Encyonema minutum	2,300	560		14,000	16,000	3,600
Encyonema muelleri				28,000		
Reimeria sinuata		1,700	1,900		47,000	14,000
Gomphonemataceae						
Gomphoneis herculeana	590				6,300	5,400
Gomphoneis olivacea					6,300	
Gomphonema sp.	14,000	4,500		1,600,000		
Gomphonema angustatum		560				
Gomphonema cf. clevei						110,000
Gomphonema parvulum				28,000		
Gomphonema cf. rhombicum						3,600
Gomphonema truncatum capitatum	1,200	2,800				
Rhoicospheniaceae						
Rhoicosphenia abbreviata	18,000	16,000	11,000	610,000	210,000	350,000
Achanthales						
Achnanthidiaceae						
Achnanthidium exiguum		560				
Achnanthidium minutissimum	3,500	7,800	3,700		53,000	
Karayevia clevei	590	560				
Planothidium dubium		1,100	7,500			
Planothidium lanceolatum					9,400	

Table 16. Algal density in the richest targeted habitat at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 7, 1993 (cells/cm^2)	Reach C Sept. 7, 1993 (cells/cm^2)	Reach C July 7, 1994 (cells/cm^2)	Reach C Oct. 3, 1995 (cells/cm^2)	Reach C Oct. 8,1996 (cells/cm^2)
Rossithidium pusillum		1,100			19,000	
Cocconeidaceae						
Cocconeis pediculus	83,000	57,000	940,000	4,700,000	63,000	18,000
Cocconeis placentula euglypta	66,000	84,000	79,000	710,000	230,000	14,000
Cocconeis placentula lineata	12,000	27,000	28,000	28,000	56,000	11,000
Naviculales						
Diadesmidaceae						
Diadesmis confervacea						3,600
Luticola mutica			1,900		6,300	
Bacillariophyceae						
Naviculales						
Naviculaceae						
Navicula sp.					29,000	1,800
Navicula cincta rostrata				28,000		
Navicula convergens		560				
Navicula cryptocephala veneta	590					
Navicula graciloides	4,700	3,400				
Navicula gregaria	1,200	560				
Navicula luzonensis	1,200					
Navicula minima		560				
Navicula rhynchocephala germainii	590	1,100			37,000	
Navicula salinarum intermedia	5,900	10,000	1,900	55,000	160,000	120,000
Navicula secreta apiculata	1,100				13,000	
Navicula symmetrica		560				
Navicula tripunctata	2,300	4,500		14,000	53,000	27,000
Navicula tripunctata schizonemoides	590					

Table 16. Algal density in the richest targeted habitat at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 7, 1993 (cells/cm^2)	Reach C Sept. 7, 1993 (cells/cm^2)	Reach C July 7, 1994 (cells/cm^2)	Reach C Oct. 3, 1995 (cells/cm^2)	Reach C Oct. 8,1996 (cells/cm^2)
Navicula viridula	1,200	1,100				
Navicula viridula avenacea				28,000	31,000	
Sellaphoraceae						
Sellaphora pupula					38,000	
Thalassiophysales						
Catenulaceae						
Amphora ovalis pediculus		540			3,000	
Amphora perpusilla	570			26,000	6,100	
Bacillarales						
Bacillariaceae						
Cymbellonitzschia diluviana				28,000		
Nitzschia amphibia		2,200			110,000	170,000
Nitzschia bacata		1,100				
Nitzschia dissipata					22,000	
Nitzschia dissipata media					9,400	
Nitzschia frustulum	4,100	1,100		69,000	16,000	12,000
Nitzschia frustulum perminuta	19,000	13,000		14,000	110,000	79,000
Nitzschia frustulum subsalina	4,100	4,500				7,100
Nitzschia kuetzingiana	590	5,600			6,300	
Nitzschia linearis tenuis					3,100	
Nitzschia palea		1,100			25,000	
Nitzschia subtilis	590					
Tryblionella debilis					3,100	
Rhopalodiales						
Rhopalodiaceae						
Epithemia sorex	13,000	3,400	7,500			7,100

Table 16. Algal density in the richest targeted habitat at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96--Continued.

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 7, 1993 (cells/cm^2)	Reach C Sept. 7, 1993 (cells/cm^2)	Reach C July 7, 1994 (cells/cm^2)	Reach C Oct. 3, 1995 (cells/cm^2)	Reach C Oct. 8,1996 (cells/cm^2)
Epithemia turgida	1,200					
Rhopalodia gibba	590					
Surirellales						
Surirellaceae						
Surirella angusta					6,300	
Surirella minuta		560				
CHLOROPHYTA						
Unidentified sp.				26,000	4,900	
Chlorophyceae						
Volvocales						
Chlamydomonadaceae						
Chlamydomonas sp.						3,800
Chlorococcales						
Oocystaceae						
Ankistrodesmus falcatus						7,600
Kirchneriella lunaris				78,000		
Scenedesmaceae						
Scenedesmus dimorphus				100,000		
Scenedesmus quadricauda	4,100					63,000
Chaetophorales						
Chaetophoraceae						
Stigeoclonium lubricum	22,000	10,000				46,000
Oedogoniales						
Oedogoniaceae						
Oedogonium sp.		20,000	130,000	95,000	38,000	

Table 16. Algal density in the richest targeted habitat at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96--Continued.

Taxon	**Reach A** **Sept. 21, 1993** (cells/cm^2)	**Reach B** **Sept. 7, 1993** (cells/cm^2)	**Reach C** **Sept. 7, 1993** (cells/cm^2)	**Reach C** **July 7, 1994** (cells/cm^2)	**Reach C** **Oct. 3, 1995** (cells/cm^2)	**Reach C** **Oct. 8,1996** (cells/cm^2)
Ulvophyceae						
Cladophorales						
Cladophoraceae						
Cladophora glomerata		6,000				

Table 17. Algal density in richest-targeted habitat at sites on the Truckee River: Truckee River at Wadsworth, Nev. (site 18, fig. 1), Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), and Truckee River at Highway 447 at Nixon, Nev. (site 20, fig. 1), 1993-95. Habitats sampled were gravel and cobble riffles. [Abbreviations: cm^2, square centimeter; sp., species]

Taxon	Site 18 Oct. 13, 1995 (cells/cm^2)	Site 19			Site 20 Oct. 12, 1995 (cells/cm^2)
		July 8, 1993 (cells/cm^2)	Sept. 16, 1994 (cells/cm^2)	Oct. 6, 1995 (cells/cm^2)	
Total number of cells (rounded)	3,900,000	2,400,000	27,000,000	5,400,000	2,500,000
CYANOPHYTA					
Unidentified sp.	11,000		390,000		
Cyanophyceae					
Chroococcales					
Chroococcaceae					
Merismopedia tenuissima			410,000		
Chamaesiphonales					
Chamaesiphonaceae					
Chamaesiphon incrustans	11,000				
Nostocales					
Nostocaceae					
Anabaena sp.			13,000,000		
Cylindrospermum minutum			390,000		
Oscillatoriaceae					
Lyngbya sp.	420,000	640,000	520,000	210,000	94,000
Rivulariaceae					
Calothrix sp.	1,400,000		280,000		
Calothrix parietina		71,000			
Oscillatoria sp.	350,000		380,000	150,000	

Table 17. Algal density in richest-targeted habitat at sites on the Truckee River: Truckee River at Wadsworth, Nev. (site 18, fig. 1), Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), and Truckee River at Highway 447 at Nixon, Nev. (site 20, fig. 1), 1993-95--Continued.

Taxon	Site 18 Oct. 13, 1995 (cells/cm^2)	Site 19			Site 20 Oct. 12, 1995 (cells/cm^2)
		July 8, 1993 (cells/cm^2)	Sept. 16, 1994 (cells/cm^2)	Oct. 6, 1995 (cells/cm^2)	
CRYPTOPHYTA					
Undetermined sp.			28,000		
BACILLARIOPHYTA					
Coscinodiscophyceae					
Thalassiosirales					
Stephanodiscaceae					
Cyclotella meneghiniana	5,300	5,700		48,000	19,000
Melosirales					
Melosiraceae					
Melosira varians			790,000		
Aulacoseirales					
Aulacoseiraceae					
Aulacoseira ambigua			73,000	32,000	12,000
Aulacoseira granulata					7,700
Aulacoseira italica				16,000	
Triceratiales					
Triceratiaceae					
Pleurosira laevis	24,000			7,900	3,800
Fragilariophyceae					
Fragilariales					
Fragilariaceae					
Diatoma vulgare	96,000	5,700	37,000	32,000	140,000
Fragilaria exiguiformis		5,700	640,000		
Fragilaria vaucheriae				16,000	
Hannaea arcus				16,000	

Table 17. Algal density in richest-targeted habitat at sites on the Truckee River: Truckee River at Wadsworth, Nev. (site 18, fig. 1), Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), and Truckee River at Highway 447 at Nixon, Nev. (site 20, fig. 1), 1993-95--Continued.

Taxon	Site 18 Oct. 13, 1995 (cells/cm^2)	Site 19			Site 20 Oct. 12, 1995 (cells/cm^2)
		July 8, 1993 (cells/cm^2)	Sept. 16, 1994 (cells/cm^2)	Oct. 6, 1995 (cells/cm^2)	
Pseudostaurosira brevistriata	5,300			95,000	85,000
Fragilaria brevistriata inflata	11,000			95,000	
Fragilaria construens pumila	8,000		440,000	40,000	31,000
Staurosira construens binodis	11,000	85,000	920,000	32,000	35,000
Staurosira construens venter	110,000	79,000	1,300,000	200,000	190,000
Staurosirella pinnata	27,000	450,000	1,900,000	300,000	190,000
Fragilaria pinnata lancettula	5,300			32,000	
Synedra acus			37,000		
Synedra ulna	2,700	88,000	55,000		
Bacillariophyceae					
Cymbellales					
Cynbellaceae					
Cymbella affinis	16,000			71,000	31,000
Encyonema minutum	8,000			7,900	
Reimeria sinuata	35,000	5,700		56,000	35,000
Gomphonemataceae					
Gomphoneis eriense variabilis	11,000				
Gomphoneis olivacea	16,000	5,700	37,000	64,000	
Gomphonema sp.	8,000	11,000	200,000	150,000	23,000
Gomphonema angustatum intermedia				7,900	
Gomphonema parvulum	5,300		73,000		7,700
Gomphonema truncatum			37,000		
Gomphonema truncatum capitatum		2,800			
Rhoicospheniaceae					
Rhoicosphenia abbreviata	260,000	23,000	73,000	440,000	85,000

Table 17. Algal density in richest-targeted habitat at sites on the Truckee River: Truckee River at Wadsworth, Nev. (site 18, fig. 1), Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), and Truckee River at Highway 447 at Nixon, Nev. (site 20, fig. 1), 1993-95--Continued.

Taxon	Site 18 Oct. 13, 1995 (cells/cm^2)	Site 19			Site 20 Oct. 12, 1995 (cells/cm^2)
		July 8, 1993 (cells/cm^2)	Sept. 16, 1994 (cells/cm^2)	Oct. 6, 1995 (cells/cm^2)	
Achanthales					
Achnanthidiaceae					
Achnanthidium exiguum			37,000		
Achnanthidium minutissimum	24,000	2,800		48,000	
Planothidium dubium			37,000		7,700
Planothidium lanceolatum				7,900	
Rossithidium pusillum	2,700			7,900	7,700
Cocconeidaceae					
Cocconeis pediculus	210,000	57,000	240,000	490,000	260,000
Cocconeis placentula euglypta	200,000	97,000		300,000	300,000
Cocconeis placentula lineata	32,000			24,000	15,000
Naviculales					
Naviculaceae					
Geissleria decussis		5,700			
Hippodonta capitata	2,700			7,900	
Navicula sp.	13,000			64,000	35,000
Navicula cincta rostrata			37,000		
Navicula genovefae				7,900	
Navicula graciloides		5,700			
Navicula gregaria			37,000		3,800
Navicula minima			37,000		
Navicula ochridana			37,000		
Navicula paucivisitata			37,000		
Navicula radiosa			37,000		
Navicula rhynchocephala germainii	19,000	17,000	73,000	170,000	54,000

Table 17. Algal density in richest-targeted habitat at sites on the Truckee River: Truckee River at Wadsworth, Nev. (site 18, fig. 1), Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), and Truckee River at Highway 447 at Nixon, Nev. (site 20, fig. 1), 1993-95--Continued.

Taxon	Site 18 Oct. 13, 1995 (cells/cm^2)	Site 19			Site 20 Oct. 12, 1995 (cells/cm^2)
		July 8, 1993 (cells/cm^2)	Sept. 16, 1994 (cells/cm^2)	Oct. 6, 1995 (cells/cm^2)	
Navicula salinarum intermedia	120,000	28,000		550,000	190,000
Navicula secreta apiculata	11,000			7,900	7,700
Navicula tripunctata	24,000	5,700	37,000	95,000	140,000
Navicula tripunctata schizonemoides	2,700	14,000			
Navicula viridula avenacea	16,000			40,000	35,000
Pinnulariaceae					
Caloneis ventricosa truncatula		5,700			
Sellaphoraceae					
Sellaphora pupula	24,000	5,700	18,000	16,000	15,000
Thalassiophysales					
Catenulaceae					
Amphora ovalis pediculus				32,000	7,700
Amphora perpusilla					7,700
Bacillarales					
Bacillariaceae					
Nitzschia acicularis			37,000		
Nitzschia amphibia	40,000			710,000	77,000
Nitzschia dissipata		11,000	73,000	56,000	23,000
Nitzschia dissipata media	11,000				15,000
Nitzschia fonticola				140,000	7,700
Nitzschia frequens				16,000	7,700
Nitzschia frustulum	24,000		110,000	48,000	
Nitzschia frustulum perminuta	140,000	2,800	220,000	130,000	170,000
Nitzschia frustulum subsalina			73,000		
Nitzschia kuetzingiana			110,000		7,700

Table 17. Algal density in richest-targeted habitat at sites on the Truckee River: Truckee River at Wadsworth, Nev. (site 18, fig. 1), Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), and Truckee River at Highway 447 at Nixon, Nev. (site 20, fig. 1), 1993-95--Continued.

Taxon	Site 18 Oct. 13, 1995 (cells/cm^2)	Site 19 July 8, 1993 (cells/cm^2)	Site 19 Sept. 16, 1994 (cells/cm^2)	Site 19 Oct. 6, 1995 (cells/cm^2)	Site 20 Oct. 12, 1995 (cells/cm^2)
Nitzschia linearis tenuis	5,300			7,900	7,700
Nitzschia palea	11,000				
Nitzschia romana	2,700				
Tryblionella hungarica				16,000	
Tryblionella victoriae				7,900	
Rhopalodiales					
Rhopalodiaceae					
Epithemia sorex		650,000	3,000,000		3,800
Epithemia turgida		17,000	91,000		
Rhopalodia gibba ventricosa			37,000		
Rhopalodia gibberula		8,500			
Surirellales					
Surirellaceae					
Cymatopleura solea			37,000		3,800
Surirella angusta					7,700
Surirella minuta	2,700				
CHLOROPHYTA					
Undetermined spp.	22,000		430,000	68,000	
Chlorophyceae					
Volvocales					
Chlamydomonadaceae					
Chlamydomonas sp.			28,000		
Chlorococcales					
Oocystaceae					
Ankistrodesmus falcatus	5,400		200,000	14,000	

Table 17. Algal density in richest-targeted habitat at sites on the Truckee River: Truckee River at Wadsworth, Nev. (site 18, fig. 1), Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), and Truckee River at Highway 447 at Nixon, Nev. (site 20, fig. 1), 1993-95--Continued.

Taxon	Site 18 Oct. 13, 1995 (cells/cm^2)	Site 19			Site 20 Oct. 12, 1995 (cells/cm^2)
		July 8, 1993 (cells/cm^2)	Sept. 16, 1994 (cells/cm^2)	Oct. 6, 1995 (cells/cm^2)	
Kirchneriella lunaris	5,400		28,000		
Scenedesmaceae					
Scenedesmus denticulatus			130,000		
Chaetophorales					
Chaetophoraceae					
Stigeoclonium lubricum	42,000				
Oedogoniales					
Oedogoniaceae					
Oedogonium sp.	21,000			160,000	70,000
Ulvophyceae					
Cladophorales					
Cladophoraceae					
Cladophora sp.	22,000				
Charophyceae					
Zygnemateles					
Zygnemataceae					
Mougeotia sp.			42,000		

Table 18. Algal density in depositional-targeted habitats at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1) and Truckee River at Farad, Calif. (site 12, fig. 1), 1993 and 1995. Habitats sampled were sediment in pools. [Aabbreviations: cm^2, square centimeter; sp., species]

Taxon	Site 11 Sept. 8, 1993 (cells/cm^2)	Site 12 Reach A Sept. 9, 1993 (cells/cm^2)	Site 12 Reach B Sept. 9, 1993 (cells/cm^2)	Site 12 Reach C Sept. 9, 1993 (cells/cm^2)	Site 12 Reach A Oct. 2, 1995 (percent)
Total number of cells (rounded)	14,000,000	7,100,000	4,600,000	4,300,000	--
CYANOPHYTA					
Cyanophyceae					
Chroococcales					
Chroococcaceae					
Dactylococcopsis rhaphidioides					0.2
Merismopedia glauca					5.5
Nostocales					
Nostocaceae					
Anabaena sp.					5.1
Anabaena oscillarioides	2,500,000				
Nostoc pruniforme			280,000		
Oscillatoriaceae					
Lyngbya sp.	690,000		680,000	1,200,000	
Oscillatoria sp.					5.0
Cyanophyceae					
Nostocales					
Rivulariaceae					
Calothrix parietina		520,000			

Table 18. Algal density in depositional-targeted habitats at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1) and Truckee River at Farad, Calif. (site 12, fig. 1), 1993 and 1995--Continued.

Taxon	Site 11 Sept. 8, 1993 (cells/cm^2)	Site 12 Reach A Sept. 9, 1993 (cells/cm^2)	Site 12 Reach B Sept. 9, 1993 (cells/cm^2)	Site 12 Reach C Sept. 9, 1993 (cells/cm^2)	Site 12 Reach A Oct. 2, 1995 (percent)
EUGLENOPHYTA					
Euglenophyceae					
Euglenales					
Euglenaceae					
Trachelomonas sp.				6,300	
BACILLARIOPHYTA					
Coscinodiscophyceae					
Thalassiosirales					
Stephanodiscaceae					
Cyclotella meneghiniana		11,000	37,000	5,700	0.1
Cyclotella pseudostelligera	37,000				0.3
Cyclotella radiosa		22,000	18,000	11,000	0.3
Melosirales					
Melosiraceae					
Melosira varians	220,000	140,000	49,000	40,000	0.5
Aulacosirales					
Aulacoseiraceae					
Aulacoseira ambigua	150,000				0.7
Aulacoseira italica	150,000				
Aulacoseira italica tenuissima	300,000		12,000		
Fragilariophyceae					
Fragilariales					
Fragilariaceae					
Diatoma anceps	74,000				
Diatoma tenue elongatum			6,100		

Table 18. Algal density in depositional-targeted habitats at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1) and Truckee River at Farad, Calif. (site 12, fig. 1), 1993 and 1995--Continued.

Taxon	Site 11 Sept. 8, 1993 (cells/cm^2)	Site 12 Reach A Sept. 9, 1993 (cells/cm^2)	Site 12 Reach B Sept. 9, 1993 (cells/cm^2)	Site 12 Reach C Sept. 9, 1993 (cells/cm^2)	Site 12 Reach A Oct. 2, 1995 (percent)
Diatoma vulgare		22,000		5,700	0.3
Fragilaria crotonensis		54,000	25,000	23,000	
Fragilaria exiguiformis	37,000	43,000			
Fragilaria intermedia					0.3
Fragilaria vaucheriae	550,000	87,000	150,000	75,000	1.2
Fragilariforma bicapitata					0.3
Hannaea arcus	110,000				
Martyana martyi				23,000	
Meridion circulare	37,000				
Pseudostaurosira brevistriata					3.0
Staurosira construens	37,000		6,100		
Fragilaria construens pumila	150,000	300,000	86,000	80,000	0.5
Fragilaria construens subsalina	300,000	370,000	210,000	110,000	
Staurosira construens binodis	74,000		180,000	92,000	
Staurosira construens venter	1,400,000	310,000	290,000	410,000	
Staurosirella leptostauron		22,000	25,000		
Staurosirella pinnata	3,200,000	990,000	1,000,000	970,000	1.6
Synedra rumpens	150,000				
Synedra rumpens familiaris	74,000		25,000		
Synedra rumpens fragilarioides			12,000	23,000	
Synedra rumpens meneghiniana				11,000	
Synedra ulna	37,000				
Tabellariales					
Tabellariaceae					
Tabellaria fenestrata	37,000				

Table 18. Algal density in depositional-targeted habitats at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1) and Truckee River at Farad, Calif. (site 12, fig. 1), 1993 and 1995--Continued.

Taxon	Site 11 Sept. 8, 1993 (cells/cm^2)	Site 12 Reach A Sept. 9, 1993 (cells/cm^2)	Site 12 Reach B Sept. 9, 1993 (cells/cm^2)	Site 12 Reach C Sept. 9, 1993 (cells/cm^2)	Site 12 Reach A Oct. 2, 1995 (percent)
Tabellaria flocculosa	37,000				
Bacillariophyceae					
Eunotiales					
Eunotiaceae					
Eunotia exigua	37,000				
Eunotia tenella	110,000				
Cymbellales					
Cymbellaceae					
Cymbella affinis		22,000	18,000		0.5
Cymbella leptoceros				11,000	
Cymbella mexicana janischii		65,000	25,000	23,000	
Cymbella naviculaformis					0.8
Encyonema minutum	260,000	350,000	120,000	200,000	4.9
Encyonema silesiacum		43,000	12,000		0.3
Reimeria sinuata	74,000	97,000	80,000	130,000	5.5
Gomphonemataceae					
Gomphoneis eriense canadensis		43,000			
Gomphoneis eriense variabilis				46,000	
Gomphoneis herculeana			18,000		0.1
Gomphoneis minuta					0.3
Gomphonema sp.	74,000	65,000	6,100	5,700	0.3
Gomphonema acuminatum					0.3
Gomphonema angustatum				12,000	
Gomphonema angustatum intermedia		22,000			
Gomphonema intricatum				11,000	

Table 18. Algal density in depositional-targeted habitats at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1) and Truckee River at Farad, Calif. (site 12, fig. 1), 1993 and 1995--Continued.

Taxon	Site 11	Site 12			
	Sept. 8, 1993 (cells/cm^2)	Reach A Sept. 9, 1993 (cells/cm^2)	Reach B Sept. 9, 1993 (cells/cm^2)	Reach C Sept. 9, 1993 (cells/cm^2)	Reach A Oct. 2, 1995 (percent)
Gomphonema parvulum	74,000		12,000	11,000	0.3
Rhoicospheniaceae					
Rhoicosphenia abbreviata			25,000	34,000	0.7
Achanthales					
Achnanthidiaceae					
Achnanthidium minutissimum	890,000	600,000	98,000	120,000	9.7
Karayevia clevei			18,000		
Achnanthidium clevei rostratum	37,000				
Planothidium dubium	150,000	65,000	18,000		
Achnanthes hauckiana rostrata				5,700	
Planothidium lanceolatum		150,000	31,000	11,000	2.2
Planothidium peragallii			12,000		
Rossithidium pusillum	370,000	32,000	31,000	29,000	0.5
Cocconeidaceae					
Cocconeis pediculus		22,000			
Cocconeis placentula euglypta		300,000	100,000	230,000	1.1
Cocconeis placentula lineata	370,000	200,000	37,000	23,000	
Naviculales					
Amphipleuraceae					
Frustulia vulgaris	18,000		12,000		
Diadesmidaceae					
Navicula contenta biceps			12,000		
Naviculaceae					
Geissleria decussis	370,000	110,000	6,100		0.8
Geissleria schoenfeldii					

Table 18. Algal density in depositional-targeted habitats at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1) and Truckee River at Farad, Calif. (site 12, fig. 1), 1993 and 1995--Continued.

Taxon	Site 11 Sept. 8, 1993 (cells/cm^2)	Site 12 Reach A Sept. 9, 1993 (cells/cm^2)	Site 12 Reach B Sept. 9, 1993 (cells/cm^2)	Site 12 Reach C Sept. 9, 1993 (cells/cm^2)	Site 12 Reach A Oct. 2, 1995 (percent)
Hippodonta capitata	37,000	33,000	86,000	46,000	2.2
Navicula sp.					7.0
Navicula arvensis		11,000			
Navicula canoris	150,000				
Navicula clementis			12,000		
Navicula cryptocephala				11,000	0.3
Navicula genovefae			12,000		2.6
Navicula graciloides	74,000	43,000	31,000	34,000	
Navicula gregaria	37,000	65,000			0.3
Navicula menisculus		110,000	31,000	23,000	0.5
Navicula minima	220,000	22,000	31,000	11,000	0.5
Navicula pseudolanceolata					0.4
Navicula rhynchocephala					0.3
Navicula rhynchocephala germainii					0.3
Navicula salinarum intermedia		260,000	49,000	92,000	0.8
Navicula secreta apiculata		130,000	98,000	46,000	16.6
Navicula tripunctata		43,000		11,000	0.3
Navicula viridula		43,000			
Neidiaceae					
Neidium affine					0.3
Sellaphoraceae					
Sellaphora pupula		43,000		23,000	0.8
Sellaphora pupula rectangularis	37,000		25,000		

Table 18. Algal density in depositional-targeted habitats at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1) and Truckee River at Farad, Calif. (site 12, fig. 1), 1993 and 1995--Continued

Taxon	Site 11 Sept. 8, 1993 (cells/cm^2)	Site 12 Reach A Sept. 9, 1993 (cells/cm^2)	Site 12 Reach B Sept. 9, 1993 (cells/cm^2)	Site 12 Reach C Sept. 9, 1993 (cells/cm^2)	Site 12 Reach A Oct. 2, 1995 (percent)
Thalassiophysales					
Catenulaceae					
Amphora ovalis		11,000	12,000	11,000	
Amphora ovalis pediculus	110,000		18,000	11,000	
Amphora perpusilla			12,000		0.3
Bacillarales					
Bacillariaceae					
Hantzschia amphioxys	37,000				
Nitzschia amphibia	37,000		12,000		
Nitzschia dissipata		65,000	49,000	23,000	1.6
Nitzschia dissipata media		150,000			0.3
Nitzschia fonticola				11,000	
Nitzschia frustulum	74,000	260,000	110,000	52,000	0.6
Nitzschia frustulum perminuta	55,000	300,000	190,000	210,000	3.3
Nitzschia frustulum subsalina		43,000	6,100	11,000	
Nitzschia kuetzingiana		260,000	25,000	11,000	3.7
Nitzschia linearis				5,700	
Nitzschia palea		43,000			0.5
Nitzschia romana	74,000			11,000	0.3
Tryblionella hungarica	37,000				
Rhopalodiales					
Rhopalodiaceae					
Epithemia sorex	37,000			11,000	
Epithemia turgida	74,000				

Table 18. Algal density in depositional-targeted habitats at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1) and Truckee River at Farad, Calif. (site 12, fig. 1), 1993 and 1995--Continued

Taxon	Site 11 Sept. 8, 1993 (cells/cm^2)	Site 12 Reach A Sept. 9, 1993 (cells/cm^2)	Site 12 Reach B Sept. 9, 1993 (cells/cm^2)	Site 12 Reach C Sept. 9, 1993 (cells/cm^2)	Site 12 Reach A Oct. 2, 1995 (percent)
Surirellales					
Surirellaceae					
Surirella angusta					0.8
Surirella minuta					0.1
CHLOROPHYTA					
Undetermined sp.					0.5
Chlorophyceae					
Chlorococcales					
Oocystaceae					
Ankistrodesmus falcatus				19,000	0.7
Scenedesmaceae					
Scenedesmus ecornis	72,000				
Scenedesmus quadricauda	72,000	57,000			0.9
Microsporales					
Microsporaceae					
Microspora stagnorum				68,000	
Charophyceae					
Zygnemateles					
Desmidiaceae					
Closterium moniliferum		14,000			
Staurastrum anatinum parvum				6,300	
Staurastrum turgescens				6,300	

Table 19. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), Truckee River at Idlewild Park at Reno, Nev. (site 14, fig. 1), and Truckee River near Sparks, Nev. (site 15, fig. 1), 1994-95. Habitats sampled were sediment from pools. [Abbreviations: cm^2, square centimeter; sp. species].

	Site 13		Site 14		Site 15	
	July 1, 1994 (cells/cm^2)	Sept. 21, 1995 (Percent)	July 5, 1994 (cells/cm^2)	Sept. 22, 1995 (percent)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (percent)
Total number of cells (rounded)	3,000,000	--	1,700,000	--	2,400,000	--
CYANOPHYTA						
Undetermined sp.					5,500	
Cyanophyceae						
Chroococcales						
Chroococcaceae						
Merismopedia glauca				6.1		
Nostocales						
Nostocaceae						
Anabaena sp.						1.3
Oscillatoriaceae						
Oscillatoria sp.	100,000	2.9				
CRYPTOPHYTA						
Cryptophyceae						
Cryptomonadales						
Cryptomonadaceae						
Cryptomonas sp.				0.3		
EUGLENOPHYTA						
Euglenophyceae						
Euglenales						
Euglenaceae						
Euglena sp.	5,900				5,500	
Trachelomonas cylindrica						0.3
Trachelomonas hispida						0.3

Table 19. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), Truckee River at Idlewild Park at Reno, Nev. (site 14, fig. 1), and Truckee River near Sparks, Nev. (site 15, fig. 1), 1994-95--Continued

	Site 13		Site 14		Site 15	
	July 1, 1994 (cells/cm^2)	Sept. 21, 1995 (Percent)	July 5, 1994 (cells/cm^2)	Sept. 22, 1995 (percent)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (percent)
BACILLARIOPHYTA						
Coscinodiscophyceae						
Thalassiosirales						
Stephanodiscaceae						
Cyclotella meneghiniana	55,000	0.6	16,000	1.2	13,000	0.3
Cyclotella pseudostelligera		0.3			7,800	0.3
Cyclotella radiosa		0.8		0.3		
Melosirales						
Melosiraceae						
Melosira varians	4,600	2.1		0.9	7,800	0.5
Aulacosirales						
Aulacoseiraceae						
Aulacoseira ambigua		0.2	5,200	0.3		
Aulacoseira italica				0.6	15,000	0.2
Fragilariophyceae						
Fragilariales						
Fragilariaceae						
Asterionella formosa	4,600					0.3
Diatoma mesodon		0.3				
Diatoma tenue elongatum					7,800	
Diatoma vulgare	41,000				8,100	1.3
Fragilaria vaucheriae	64,000	1.5	21,000	2.4	23,000	0.3
Martyana martyi	9,200	0.3		0.3	7,800	
Pseudostaurosira brevistriata	18,000	2.1		0.8	35,000	4.2
Fragilaria brevistriata inflata	9,200		10,000			0.3

Table 19. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), Truckee River at Idlewild Park at Reno, Nev. (site 14, fig. 1), and Truckee River near Sparks, Nev. (site 15, fig. 1), 1994-95--Continued

	Site 13		Site 14		Site 15	
	July 1, 1994 (cells/cm^2)	Sept. 21, 1995 (Percent)	July 5, 1994 (cells/cm^2)	Sept. 22, 1995 (percent)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (percent)
Staurosira construens			5,200			
Fragilaria construens pumila	150,000	2.7	31,000	0.3	81,000	1.6
Staurosira construens venter	400,000	6.8	220,000	3.5	240,000	3.3
Staurosirella leptostauron		0.3	5,200		3,900	
Staurosirella pinnata	390,000	2.1	360,000	4.1	370,000	3.3
Synedra mazamaensis	46,000		16,000		62,000	
Synedra minuscula		0.3				
Synedra rumpens			10,000			0.3
Synedra rumpens familiaris					7,800	
Synedra rumpens fragilarioides				0.3		
Synedra rumpens meneghiniana	9,200	0.3				
Synedra tenera	9,200					
Synedra ulna						0.5
Synedra ulna oxyrhynchus		0.3		0.3		
Cymbellales						
Cymbellaceae						
Cymbella affinis				0.9		0.3
Cymbella brehmii				0.3		
Cymbella mexicana janischii			7,800			0.7
Cymbella naviculiformis						0.3
Cymbella tumida				0.3		
Cymbella turgidula						0.7
Encyonema minutum	120,000	8.7	42,000		50,000	3.3
Encyonema muelleri	60,000		26,000		27,000	
Encyonema prostratum				0.3		

Table 19. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), Truckee River at Idlewild Park at Reno, Nev. (site 14, fig. 1), and Truckee River near Sparks, Nev. (site 15, fig. 1), 1994-95--Continued

	Site 13		Site 14		Site 15	
	July 1, 1994 (cells/cm^2)	Sept. 21, 1995 (Percent)	July 5, 1994 (cells/cm^2)	Sept. 22, 1995 (percent)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (percent)
Encyonema silesiacum	9,200	2.1		0.6		2.0
Reimeria sinuata	74,000	1.9	10,000	3.3	23,000	2.9
Reimeria sinuata antiqua	9,200		5,200			
Gomphonemataceae						
Gomphoneis eriense				0.6		
Gomphoneis eriense variabilis	9,200					
Gomphoneis herculeana	18,000	0.8	5,200	0.6		0.7
Gomphoneis olivacea					15,000	
Gomphonema sp.	18,000	3.7	16,000	0.9	47,000	1.3
Gomphonema angustatum				0.2		
Gomphonema grunowii	9,200					
Gomphonema intricatum	9,200			0.3		
Gomphonema parvulum		1.0		0.9	7,700	0.3
Rhoicospheniaceae						
Rhoicosphenia abbreviata	28,000	4.2	65,000		16,000	3.3
Achanthales						
Achnanthidiaceae						
Achnanthes grana		0.3				
Achnanthes pinnata		0.2				
Achnanthidium minutissimum	100,000	13.4	49,000	9.3	290,000	16.0
Karayevia clevei	9,200	1.5	13,000	0.3	23,000	
Planothidium dubium		0.3	5,200	0.9	23,000	
Planothidium lanceolatum	18,000	0.6		0.9		
Rossithidium pusillum	9,200	1.3		0.6	7,800	0.3
Cocconeidaceae						
Cocconeis pediculus	4,600		10,000		7,800	0.3

Table 19. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), Truckee River at Idlewild Park at Reno, Nev. (site 14, fig. 1), and Truckee River near Sparks, Nev. (site 15, fig. 1), 1994-95--Continued

	Site 13		Site 14		Site 15	
	July 1, 1994 (cells/cm^2)	Sept. 21, 1995 (Percent)	July 5, 1994 (cells/cm^2)	Sept. 22, 1995 (percent)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (percent)
Cocconeis placentula euglypta	100,000	5.5	81,000	7.4	62,000	2.3
Cocconeis placentula lineata	18,000	2.3	5,200	0.9		1.0
Naviculales						
Cavinulaceae						
Cavinula pseudoscutiformis	9,200					
Diadesmidaceae						
Luticola cohnii	9,200					
Diploneidaceae						
Diploneis elliptica			2,600			
Naviculaceae						
Geissleria decussis	9,200	0.3	18,000	0.3		1.0
Geissleria schoenfeldii	9,200		5,200			
Mayamaea atomus		0.3				
Hippodonta capitata	9,200	1.8	10,000	0.9		3.3
Navicula sp.		2.6		0.9		1.0
Navicula arvensis	23,000				15,000	
Navicula cari	60,000		42,000		16,000	
Navicula clementis			5,200			
Navicula cryptocephala					7,800	0.3
Navicula cryptocephala veneta					7,800	
Navicula genovefae					7,800	1.8
Navicula gibbosa						0.3
Navicula gregaria	28,000		34,000	0.5		1.0
Navicula menisculus			10,000	0.6	23,000	
Navicula minima	28,000	1.0			16,000	
Navicula rhynchocephala germainii				0.3		0.7

Table 19. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), Truckee River at Idlewild Park at Reno, Nev. (site 14, fig. 1), and Truckee River near Sparks, Nev. (site 15, fig. 1), 1994-95--Continued

	Site 13		Site 14		Site 15	
	July 1, 1994 (cells/cm^2)	Sept. 21, 1995 (Percent)	July 5, 1994 (cells/cm^2)	Sept. 22, 1995 (percent)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (percent)
Navicula salinarum intermedia	28,000	4.4	49,000	4.4	47,000	6.0
Navicula secreta apiculata	23,000	0.3	18,000	1.8	7,800	1.3
Navicula tripunctata	28,000	1.1	52,000	0.3	8,100	1.0
Navicula viridula avenacea	18,000		16,000	0.3	39,000	0.7
Pinnulariaceae						
Caloneis bacillum			10,000			
Caloneis ventricosa truncatula	9,200					
Pinnularia lundii						0.3
Sellaphoraceae						
Sellaphora mutata						0.3
Sellaphora pupula	28,000			0.3	7,900	5.2
Sellaphora pupula capitata						0.7
Sellaphora pupula rectangularis						2.9
Sellaphora seminulum				0.3		
Thalassiophysales						
Catenulaceae						
Amphora ovalis						
Amphora ovalis pediculus						2.1
Amphora perpusilla	9,200	1.6	18,000	1.7	31,000	1.0
Bacillarales						
Bacillariaceae						
Cymbellonitzschia diluviana	28,000				7,700	
Hantzschia amphioxys		0.2				
Nitzschia acicularis						0.3
Nitzschia amphibia	18,000		5,200		78,000	0.3
Nitzschia bacata	9,200	0.3				

Table 19. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), Truckee River at Idlewild Park at Reno, Nev. (site 14, fig. 1), and Truckee River near Sparks, Nev. (site 15, fig. 1), 1994-95--Continued

	Site 13		Site 14		Site 15	
	July 1, 1994 (cells/cm^2)	Sept. 21, 1995 (Percent)	July 5, 1994 (cells/cm^2)	Sept. 22, 1995 (percent)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (percent)
Nitzschia dissipata	46,000	5.0	10,000	3.0	23,000	2.6
Nitzschia dissipata media		2.1		1.8		2.0
Nitzschia frustulum	110,000	0.6	65,000	1.2	160,000	2.3
Nitzschia frustulum perminuta	200,000	1.3	86,000	3.8	150,000	4.9
Nitzschia frustulum subsalina	28,000	2.6	10,000	2.7	35,000	1.0
Nitzschia kuetzingiana	130,000	1.0	52,000	2.6	110,000	0.7
Nitzschia linearis					15,000	
Nitzschia linearis tenuis	4,600	0.3				
Nitzschia palea			5,200	0.3	19,000	0.7
Nitzschia romana		0.3				
Nitzschia sinuata delognei		0.2				
Nitzschia subtilis	9,200		5,200			
Surirellales						
Surirellaceae						
Surirella angusta	9,200	0.5		0.6		
Surirella minuta		0.2				
CHLOROPHYTA						
Undetermined sp.	5,900		9,700		16,000	
Chlorophyceae						
Volvocales						
Chlamydomonadaceae						
Chlamydomonas sp.						0.3
Chloroccales						
Oocystaceae						
Ankistrodesmus falcatus				0.3	5,500	

Table 19. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Mayberry Drive below Lawton, Nev. (site 13, fig. 1), Truckee River at Idlewild Park at Reno, Nev. (site 14, fig. 1), and Truckee River near Sparks, Nev. (site 15, fig. 1), 1994-95--Continued.

	Site 13		Site 14		Site 15	
	July 1, 1994 (cells/cm^2)	Sept. 21, 1995 (Percent)	July 5, 1994 (cells/cm^2)	Sept. 22, 1995 (percent)	June 29, 1994 (cells/cm^2)	Sept. 25, 1995 (percent)
Scenedesmaceae						
Coelastrum microporum				1.5		
Scenedesmus acutus			30,000	1.6		
Scenedesmus denticulatus	55,000		30,000			
Scenedesmus dimorphus			13,000			
Scenedesmus quadricauda	48,000					
Charophyceae						
Zygnemateles						
Desmidiaceae						
Closterium leibleinii		0.3				

Table 20. Algal density in depositional-targeted habitas at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96. Habitats sampled were sediment in pools. [Abbreviations: cm^2, square centimeter; sp, species]

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 21, 1993 (cells/cm^2)	Reach C			
			Sept. 7, 1993 (cells/cm^2)	July 7, 1994 (cells/cm^2)	Oct. 3, 1995 (cells/cm^2)	Oct. 9, 1996 (cells/cm^2)
Total number of cells (rounded)	23,000,000	25,000,000	8,000,000	2,000,000	8,700,000	32,000,000
CYANOPHYTA						
Cyanophyceae						
Chroococcales						
Chroococcaceae						
Dactylococcopsis rhaphidioides				4,800		
Nostocales						
Nostocaceae						
Anabaena oscillarioides		5,100,000				
Nostoc pruniforme			880,000			
Oscillatoriaceae						
Hydrocoleum brebissonii						4,400,000
Lyngbya sp.	12,000,000	13,000,000	3,500,000	88,000		
Oscillatoria sp.				160,000	150,000	8,300,000
Rivulariaceae						
Calothrix parietina	3,200,000					
EUGLENOPHYTA						
Euglenophyceae						
Euglenales						
Euglenaceae						
Euglena sp.			7,600			100,000
Phacus sp.		14,000	7,600			39,000
Trachelomonas hispida				4,800		
Trachelomonas volvocina						52,000

Table 20. Algal density in depositional targeted habitats at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96--Continued

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 21, 1993 (cells/cm^2)	Reach C			
			Sept. 7, 1993 (cells/cm^2)	July 7, 1994 (cells/cm^2)	Oct. 3, 1995 (cells/cm^2)	Oct. 9, 1996 (cells/cm^2)
BACILLARIOPHYTA						
Coscinodiscophyceae						
Thalassiosirales						
Stephanodiscaceae						
Cyclostephanos tholiformis			12,000			
Cyclotella meneghiniana	24,000	28,000	6,000	26,000	86,000	200,000
Cyclotella radiosa				2,900		
Melosirales						
Melosiraceae						
Melosira varians	24,000		36,000		71,000	57,000
Aulacoseirales						
Aulacoseiraceae						
Aulacoseira ambigua					86,000	
Aulacoseira italica					29,000	57,000
Aulacoseira italica tenuissima				2,900		
Ctenophora pulchella		19,000				
Diatoma mesodon						57,000
Diatoma vulgare		38,000	12,000	5,700	71,000	57,000
Fragilaria capucina mesolepta				29,000		
Fragilaria crotonensis					57,000	
Fragilaria exiguiformis			12,000			
Fragilaria vaucheriae	71,000	19,000	24,000			460,000
Pseudostaurosira brevistriata					57,000	
Pseudostaurosira brevistriata inflata						630,000
Fragilaria construens pumila	24,000		78,000	17,000	110,000	200,000
Fragilaria construens subsalina	24,000	76,000	48,000			
Staurosira construens binodis	470,000	270,000		5,700		

Table 20. Algal density in depositional targeted habitats at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96--Continued

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 21, 1993 (cells/cm^2)	Reach C			
			Sept. 7, 1993 (cells/cm^2)	July 7, 1994 (cells/cm^2)	Oct. 3, 1995 (cells/cm^2)	Oct. 9, 1996 (cells/cm^2)
Staurosira construens venter	710,000	720,000	350,000	23,000		340,000
Staurosirella pinnata	2,200,000	1,300,000	1,100,000	210,000	230,000	1,700,000
Synedra acus				5,700		
Synedra fasciculata				5,700		
Synedra mazamaensis	12,000		12,000		29,000	
Synedra rumpens				5,700		
Synedra ulna	24,000		12,000			570,000
Synedra ulna oxyrhynchus					29,000	
Tabellariales						
Tabellariaceae						
Tabellaria fenestrata					29,000	
Bacillariophyceae						
Cymbellales						
Cymbellaceae						
Cymbella affinis		19,000			29,000	27,000
Cymbella cistula				5,700		
Cymbella mexicana janischii				2,900		
Encyonema minutum	59,000	47,000				85,000
Encyonema muelleri					57,000	
Encyonema silesiacum	24,000		12,000			
Reimeria sinuata	12,000	19,000	42,000		29,000	340,000
Reimeria sinuata antiqua				2,900		
Gomphonemataceae						
Gomphoneis herculeana			12,000		170,000	57,000
Gomphoneis olivacea	24,000	9,500				57,000
Gomphonema sp.	59,000	85,000		86,000	57,000	
Gomphonema angustatum		9,500				

Table 20. Algal density in depositional targeted habitats at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96--Continued

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 21, 1993 (cells/cm^2)	Reach C			
			Sept. 7, 1993 (cells/cm^2)	July 7, 1994 (cells/cm^2)	Oct. 3, 1995 (cells/cm^2)	Oct. 9, 1996 (cells/cm^2)
Gomphonema cf. clevei						170,000
Gomphonema grunowii		9,500				
Gomphonema parvulum	36,000	38,000	12,000		86,000	170,000
Gomphonema subclavatum		19,000				
Gomphonema truncatum capitatum			12,000	11,000		
Rhoicospheniaceae						
Rhoicosphenia abbreviata	71,000	76,000	66,000	97,000	340,000	1,200,000
Achnanthales						
Achnanthidiaceae						
Achnanthidium exiguum		19,000				
Achnanthidium minutissimum	47,000	47,000	36,000	86,000	290,000	340,000
Karayevia clevei	12,000	38,000		5,700		
Planothidium dubium	24,000	57,000		29,000	29,000	
Achnanthes hauckiana rostrata		19,000				57,000
Planothidium lanceolatum			24,000	23,000	29,000	29,000
Rossithidium pusillum	24,000		6,000			57,000
Cocconeidaceae						
Cocconeis pediculus	270,000	130,000	330,000	290,000	470,000	110,000
Cocconeis placentula euglypta	920,000	430,000	530,000	100,000	530,000	520,000
Cocconeis placentula lineata	200,000	380,000	130,000	57,000	110,000	400,000
Naviculales						
Diadesmidaceae						
Diadesmis confervacea			42,000			110,000
Naviculaceae						
Fistulifera pelliculosa	12,000				14,000	230,000
Hippodonta capitata	36,000	19,000		5,700	57,000	
Navicula sp.					190,000	110,000

Table 20. Algal density in depositional targeted habitats at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96--Continued

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 21, 1993 (cells/cm^2)	Reach C			
			Sept. 7, 1993 (cells/cm^2)	July 7, 1994 (cells/cm^2)	Oct. 3, 1995 (cells/cm^2)	Oct. 9, 1996 (cells/cm^2)
Navicula biconica		9,500				
Navicula canalis	24,000	19,000				
Navicula canoris			12,000			
Navicula cari				26,000		
Navicula cincta rostrata	36,000	19,000		34,000		57,000
Navicula cryptocephala					29,000	
Navicula genovefae				5,700		
Navicula graciloides	24,000		30,000			
Navicula gregaria					230,000	57,000
Navicula hustedtii						57,000
Navicula luzonensis	12,000					86,000
Navicula menisculus			12,000	5,700		
Navicula minima				11,000	29,000	
Navicula ochridana	47,000					
Navicula paucivisitata	24,000					
Navicula rhynchocephala germainii	36,000	76,000	30,000		1,300,000	370,000
Navicula salinarum intermedia	320,000	170,000	140,000	14,000	1,300,000	200,000
Navicula secreta apiculata	36,000	38,000	6,000	17,000	230,000	110,000
Navicula symmetrica						57,000
Navicula tantula					29,000	
Navicula tripunctata	47,000		12,000		340,000	57,000
Navicula tripunctata schizonemoides	36,000	470,000	12,000	5,700		57,000
Navicula viridula	12,000	66,000	18,000			
Navicula viridula avenacea				23,000	370,000	320,000
Neidiaceae						
Neidium dubium		38,000				

Table 20. Algal density in depositional targeted habitats at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96--Continued

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 21, 1993 (cells/cm^2)	Reach C			
			Sept. 7, 1993 (cells/cm^2)	July 7, 1994 (cells/cm^2)	Oct. 3, 1995 (cells/cm^2)	Oct. 9, 1996 (cells/cm^2)
Pennulariaceae						
Caloneis ventricosa truncatula				14,000		
Sellaphoraceae						
Fallacia pygmaea					29,000	57,000
Sellaphora pupula	95,000	76,000			29,000	
Sellaphora pupula rectangularis	24,000				57,000	
Stauroneidaceae						
Craticula cuspidata			12,000		29,000	
Thalassiophysales						
Catenulaceae						
Amphora ovalis		19,000				
Amphora ovalis pediculus				2,900	29,000	57,000
Amphora perpusilla	36,000	19,000	12,000	8,600		
Bacillariales						
Bacillariaceae						
Denticula elegans		19,000	12,000			29,000
Nitzschia acicularis		19,000				
Nitzschia amphibia	24,000		36,000	20,000	110,000	720,000
Nitzschia bacata	12,000			2,900		110,000
Nitzschia constricta						57,000
Nitzschia dissipata	83,000		24,000	26,000	29,000	57,000
Nitzschia fonticola	24,000					
Nitzschia frequens		28,000	6,000		29,000	57,000
Nitzschia frustulum	71,000	38,000	12,000	54,000	14,000	800,000
Nitzschia frustulum perminuta	210,000	190,000	110,000	88,000	210,000	1,700,000
Nitzschia frustulum subsalina	250,000	95,000	36,000	51,000	110,000	340,000
Nitzschia intermedia						57,000

Table 20. Algal density in depositional targeted habitats at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96--Continued

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 21, 1993 (cells/cm^2)	Reach C			
			Sept. 7, 1993 (cells/cm^2)	July 7, 1994 (cells/cm^2)	Oct. 3, 1995 (cells/cm^2)	Oct. 9, 1996 (cells/cm^2)
Nitzschia kuetzingiana	120,000	120,000	42,000	88,000	470,000	800,000
Nitzschia linearis tenuis					29,000	
Nitzschia palea		38,000		14,000	170,000	340,000
Tryblionella hungarica		19,000				57,000
Tryblionella levidensis		57,000				57,000
Tryblionella victoriae			12,000			
Rhopalodiales						
Rhopalodiaceae						
Epithemia sorex	47,000			57,000		
Epithemia turgida		28,000		5,700		
Rhopalodia gibberula	24,000	9,500				
Surirellales						
Surirellaceae						
Cymatopleura solea		9,500				57,000
Surirella minuta			6,000		29,000	
Surirella ovata	24,000					
CHLOROPHYTA						
Chlorophyceae						
Volvocales						
Chlamydomonadaceae						
Chlamydomonas sp.		14,000				100,000
Chlorococcales						
Hydrodictyaceae						
Pediastrum boryanum		450,000				
Oocystaceae						
Ankistrodesmus falcatus						260,000

Table 20. Algal density in depositional targeted habitats at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-96--Continued

Taxon	Reach A Sept. 21, 1993 (cells/cm^2)	Reach B Sept. 21, 1993 (cells/cm^2)	Reach C			
			Sept. 7, 1993 (cells/cm^2)	July 7, 1994 (cells/cm^2)	Oct. 3, 1995 (cells/cm^2)	Oct. 9, 1996 (cells/cm^2)
Scenedesmaceae						
Scenedesmus ecornis			46,000			
Scenedesmus quadricauda	240,000	610,000				860,000

Table 21. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Lockwood, Nev. (site 16, fig. 1), Truckee River at Wadsworth, Nev. (site 18, fig. 1), and Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), 1993-95. Habitats sampled were sediment in pools. [Abbreviations: cm^2, square centimeter; sp., species]

	Site 16		Site 18	Site 19		
Taxon	**July 6, 1994** (cells/cm^2)	**Sept. 26, 1995** (percent)	**Oct. 13, 1995** (percent)	**Sept. 16, 1993** (cells/cm^2)	**July 8, 1994** (cells/cm^2)	**Oct. 6, 1995** (percent)
Total number of cells (rounded)	14,000,000	--	--	24,000,000	860,000	--
CYANOPHYTA						
Cyanophyceae						
Chroococcales						
Chroococcaceae						
Dactylococcopsis rhaphidioides	23,000					
Nostocales						
Nostocaceae						
Anabaena oscillarioides				2,400,000		
Oscillatoriaceae						
Hydrocoleum brebissonii	450,000					
Lyngbya sp.				8,000,000		
Oscillatoria sp.		2.8	6.9			
Oscillatoria tenuis	1,700,000					
Spirulina subsalsa	23,000					
CRYPTOPHYTA						
Undetermined sp.	23,000					
EUGLENOPHYTA						
Euglenophyceae						
Euglenales						
Euglenaceae						
Euglena sp.				17,000		
Lepocinclis fusiformis	45,000					

Table 21. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Lockwood, Nev. (site 16, fig. 1), Truckee River at Wadsworth, Nev. (site 18, fig. 1), and Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), 1993-95--Continued

Taxon	Site 16		Site 18	Site 19		
	July 6, 1994 (cells/cm^2)	**Sept. 26, 1995** (percent)	**Oct. 13, 1995** (percent)	**Sept. 16, 1993** (cells/cm^2)	**July 8, 1994** (cells/cm^2)	**Oct. 6, 1995** (percent)
Trachelomonas sp.				17,000		
Trachelomonas hispida	23,000					
CHRYSOPHYTA						
Coscinodiscophyceae						
Thalassiosirales						
Stephanodiscaceae						
Cyclotella meneghiniana	410,000	1.1	2.5			0.8
Melosirales						
Melosiraceae						
Melosira varians	860,000	0.5	1.4	70,000		0.3
Aulacosirales						
Aulacoseiraceae						
Aulacoseira ambigua		0.3	0.6			0.3
Aulacoseira italica		0.3	0.2			
Fragilariophyceae						
Fragilariales						
Fragilariaceae						
Diatoma vulgare	470,000	0.3	3.7		4,300	1.3
Fragilaria capucina mesolepta			1.8			
Fragilaria exiguiformis	37,000					
Fragilaria vaucheriae	490,000		0.6	140,000		1.3
Hannaea arcus	37,000					
Martyana martyi						
Pseudostaurosira brevistriata		2.8	5.1		14,000	14.3

Table 21. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Lockwood, Nev. (site 16, fig. 1), Truckee River at Wadsworth, Nev. (site 18, fig. 1), and Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), 1993-95--Continued

Taxon	Site 16		Site 18	Site 19		
	July 6, 1994 (cells/cm^2)	**Sept. 26, 1995** (percent)	**Oct. 13, 1995** (percent)	**Sept. 16, 1993** (cells/cm^2)	**July 8, 1994** (cells/cm^2)	**Oct. 6, 1995** (percent)
Fragilaria brevistriata inflata		0.3				1.3
Staurosira construens		0.5				
Fragilaria construens pumila	620,000	0.3	1.2	93,000	54,000	2.0
Fragilaria construens subsalina				46,000		
Staurosira construens binodis			1.4	970,000	59,000	
Staurosira construens venter	990,000	1.0	11.8	3,200,000	93,000	3.0
Staurosirella leptostauron			0.3	46,000		
Staurosirella pinnata	1,900,000	14.4	4.5	5,800,000	300,000	6.2
Fragilaria pinnata lancettula		0.7	0.3			
Fragilaria pinnata subcapitata					2,800	
Synedra acus			0.3			
Synedra mazamaensis	220,000	0.7				0.3
Synedra parasitica	37,000	0.3				
Synedra rumpens familiaris		0.5				
Synedra rumpens meneghiniana			0.3			0.3
Synedra ulna	37,000	0.5	0.3	190,000		0.3
Synedra ulna oxyrhynchus			0.3			
Cymbellales						
Cymbellaceae						
Cymbella sp.		0.3	0.3			
Cymbella brehmii	37,000					
Encyonema minutum	150,000	3.4	0.6	46,000	2,800	1.3
Encyonema muelleri	75,000					
Encyonema silesiacum	75,000					

Table 21. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Lockwood, Nev. (site 16, fig. 1), Truckee River at Wadsworth, Nev. (site 18, fig. 1), and Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), 1993-95--Continued

Taxon	Site 16		Site 18	Site 19		
	July 6, 1994 (cells/cm^2)	**Sept. 26, 1995** (percent)	**Oct. 13, 1995** (percent)	**Sept. 16, 1993** (cells/cm^2)	**July 8, 1994** (cells/cm^2)	**Oct. 6, 1995** (percent)
Encyonema triangulum						0.3
Cymbella microcephala crassa	37,000					
Placoneis placentula					2,800	
Reimeria sinuata	37,000	0.8	1.8		2,800	0.8
Reimeria sinuata antiqua						0.3
Gomphonemataceae						
Gomphoneis herculeana	37,000	1.0				0.3
Gomphoneis minuta			0.3			
Gomphoneis olivacea	37,000	0.3				0.8
Gomphonema sp.	190,000	0.7	2.5	46,000	2,800	1.5
Gomphonema angustatum intermedia			0.3			
Gomphonema parvulum	19,000	0.3				0.3
Gomphonema subclavatum					5,700	
Gomphonema truncatum capitatum				46,000		
Rhoicospheniaceae						
Rhoicosphenia abbreviata	500,000	4.0	4.5	330,000	27,000	6.2
Achanthales						
Achnanthaceae						
Lemnicola hungarica			0.3			0.3
Achnanthidiaceae						
Achnanthes pinnata		0.3				0.3
Achnanthidium exiguum	37,000	0.3		47,000		
Achnanthidium exiguum heterovalvum			0.2			
Achnanthidium minutissimum	210,000	8.6	1.1	190,000	2,800	2.0

Table 21. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Lockwood, Nev. (site 16, fig. 1), Truckee River at Wadsworth, Nev. (site 18, fig. 1), and Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), 1993-95--Continued

Taxon	Site 16		Site 18	Site 19		
	July 6, 1994 (cells/cm^2)	Sept. 26, 1995 (percent)	Oct. 13, 1995 (percent)	Sept. 16, 1993 (cells/cm^2)	July 8, 1994 (cells/cm^2)	Oct. 6, 1995 (percent)
Karayevia clevei	37,000	0.5				
Planothidium dubium	37,000	1.3	0.3		2,800	0.3
Planothidium lanceolatum	110,000	0.3				
Rossithidium pusillum			0.3			
Cocconeidaceae						
Cocconeis pediculus	170,000		0.9	790,000	180,000	2.7
Cocconeis placentula euglypta	350,000	2.9	2.6	230,000	71,000	6.0
Cocconeis placentula lineata	150,000	0.7	0.6	46,000	8,500	0.3
Naviculales						
Diadesmidaceae						
Luticola mutica				47,000		
Diploneidaceae						
Diploneis puella	37,000					
Naviculaceae						
Fistulifera pelliculosa		0.3				
Geissleria decussis	37,000					
Hippodonta capitata		1.9	0.6			0.3
Navicula sp.		1.3	0.9			
Navicula anglica						0.2
Navicula biconica			0.3			0.7
Navicula cari	75,000				2,800	
Navicula cincta		0.3				
Navicula cincta rostrata	37,000	1.0				
Navicula cryptocephala	37,000					

Table 21. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Lockwood, Nev. (site 16, fig. 1), Truckee River at Wadsworth, Nev. (site 18, fig. 1), and Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), 1993-95--Continued

Taxon	Site 16		Site 18	Site 19		
	July 6, 1994 (cells/cm^2)	Sept. 26, 1995 (percent)	Oct. 13, 1995 (percent)	Sept. 16, 1993 (cells/cm^2)	July 8, 1994 (cells/cm^2)	Oct. 6, 1995 (percent)
Navicula cryptocephala veneta	37,000				5,700	
Navicula gregaria			0.3		2,800	
Navicula luzonensis						0.7
Navicula minima	37,000			70,000		0.3
Navicula paucivisitata			0.3			
Navicula rhynchocephala germainii		5.2	4.5	140,000	2,800	2.8
Navicula salinarum intermedia	350,000	15.5	3.7	23,000	2,800	9.0
Navicula secreta apiculata	37,000	3.1	3.1		14,000	2.2
Navicula tantula		0.3				
Navicula tripunctata	37,000		1.5			
Navicula tripunctata schizonemoides			0.6	46,000	5,700	
Navicula viridula				23,000		
Navicula viridula avenacea	37,000	1.1	2.8		11,000	2.0
Pinnulariaceae						
Caloneis amphisbaena			0.2			
Caloneis lewisii			0.2			
Sellaphoraceae						
Fallacia pygmaea	37,000					
Sellaphora pupula	110,000	0.6	3.4	46,000	5,700	0.8
Sellaphora pupula rectangularis			0.3			
Sellaphora seminulum		0.2	0.3			
Stauroneidaceae						
Craticula cuspidata				23,000		

Table 21. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Lockwood, Nev. (site 16, fig. 1), Truckee River at Wadsworth, Nev. (site 18, fig. 1), and Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), 1993-95--Continued

Taxon	Site 16		Site 18	Site 19		
	July 6, 1994 (cells/cm^2)	Sept. 26, 1995 (percent)	Oct. 13, 1995 (percent)	Sept. 16, 1993 (cells/cm^2)	July 8, 1994 (cells/cm^2)	Oct. 6, 1995 (percent)
Thalassiophysales						
Catenulaceae						
Amphora ovalis pediculus	37,000	0.5				
Amphora perpusilla	37,000	0.2	0.3			
Amphora veneta				46,000		
Bacillarales						
Bacillariaceae						
Nitzschia acicularis	37,000			46,000		0.3
Nitzschia amphibia	150,000	3.6	0.6		2,800	5.2
Nitzschia bacata	37,000					
Nitzschia dissipata	37,000	1.3	1.7			1.2
Nitzschia dissipata media		0.7				1.0
Nitzschia fonticola						0.3
Nitzschia frequens		0.3				
Nitzschia frustulum	490,000	0.7	1.2	140,000	1,400	3.5
Nitzschia frustulum perminuta	340,000	2.6	7.7	46,000	5,700	10.3
Nitzschia frustulum subsalina	56,000	1.3		93,000		0.7
Nitzschia kuetzingiana	320,000	1.3	1.8		2,800	0.7
Nitzschia linearis tenuis	37,000		0.9			
Nitzschia palea		1.9	0.6		2,800	
Nitzschia sociabilis	37,000					
Nitzschia stagnorum		0.2				
Nitzschia subtilis	75,000					0.3
Tryblionella debilis	37,000					

Table 21. Algal density in depositional-targeted habitat at sites on the Truckee River: Truckee River at Lockwood, Nev. (site 16, fig. 1), Truckee River at Wadsworth, Nev. (site 18, fig. 1), and Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), 1993-95--Continued

Taxon	Site 16		Site 18	Site 19		
	July 6, 1994 (cells/cm^2)	**Sept. 26, 1995** (percent)	**Oct. 13, 1995** (percent)	**Sept. 16, 1993** (cells/cm^2)	**July 8, 1994** (cells/cm^2)	**Oct. 6, 1995** (percent)
Tryblionella hungarica	75,000			93,000		
Rhopalodiales						
Rhopalodiaceae						
Epithemia sorex	75,000	0.6		350,000	1,400	0.3
Epithemia turgida			0.3	140,000		
Rhopalodia gibba	37,000			230,000		
Rhopalodia gibberula				23,000		
Surirellales						
Surirellaceae						
Cymatopleura solea		0.3		46,000		
Surirella angusta						0.3
Surirella minuta			0.6			
CHLOROPHYTA						
Undetermined sp.	23,000				1400	
Chlorophyceae						
Volvocales						
Chlamydomonadaceae						
Chlamydomonas sp.	23,000					
Chloroccoales						
Oocystaceae						
Ankistrodesmus falcatus	23,000				23,000	
Scenedesmaceae						
Scenedesmus denticulatus					22,000	
Scenedesmus quadricauda	180,000		0.9	210,000		

Table 22. Ash-free dry weight, dry weight, and chlorophyll concentrations in algal samples collected at sites on the Carson and Truckee Rivers, Nevada and California, 1993-96 [Abbreviations and symbols: g, grams; m^2, square meter; mg, milligrams; --, no data; <, less than]

Site number (fig.1)	Site name		Date	Ash-free dry weight g/m^2	Dry weight g/m^2	Chlorophyll (mg/m^2)	
						a	b
1	East Fork Carson River near Dresslerville, Nev.,	Reach A	Sept. 2, 1993	77	83	10	0.2
		Reach B	Sept. 1, 1993	48	51	3.3	< 0.1
		Reach C	Aug. 30, 1993	313	355	92	1.7
		Reach B	Jul 26, 1994	300	320	13	5.9
		Reach B	Sept. 15, 1995	31	33	2.7	0.2
		Reach B	Oct. 11, 1996	122	130	1.1	0.7
2	East Fork Carson River near Minden, Nev		Jul 25, 1994	480	510	42	9.6
			Sept. 15, 1995	69.5	83	61	4.5
3	West Fork Carson River above Woodfords, Calif.		Jul 21, 1994	56	59	2.7	0.2
			Sept. 13, 1995	27	28	0.6	<0.1
4	West Fork Carson River at Paynesville, Calif.		Jul 22, 1994	140	140	9.1	1.2
			Sept. 13, 1995	35	36	2	<0.1
5	West Fork Carson River at Muller Lane near Minden, Nev.		Jul 20, 1994	370	410	31	13
			Sept. 19, 1995	330	370	130	13
6	Carson River near Carson City, Nev.		Jul 19, 1994	220	230	12	2.6
			Sept. 14, 1995	243	258	27	1.5
7	Carson River at Deer Run Road near Carson City, Nev.		Sept. 8, 1993	130	140	43	2.5
			Jul 15, 1994	280	300	35	--
8	Carson River at Dayton State Park near Dayton, Nev.		July 14, 1994	630	690	42	12
			Sept. 19, 1995	162	172	12	1.4
9	Carson River at Fort Churchill State Park, Nev.,	Reach A	Sept. 13, 1993	94	110	8	0.4
		Reach B	Sept. 13, 1993	30	34	6.7	0.3
		Reach C	Sept. 20, 1993	63	73	9.4	0.3
		Reach B	Sept. 28, 1995	108	127	7.5	1.0
		Reach B	Oct. 10, 1996	106	115	2.2	0.70

Table 22. Ash-free dry weight, dry weight, and chlorophyll concentrations in algal samples collected at sites on the Carson and Truckee Rivers, Nevada and California, 1993-96—Continued

Site number (fig.1)	Site name		Date	Ash-free dry weight g/m^2	Dry weight g/m^2	Chlorophyll (mg/m^2)	
						a	b
9	Carson River at Fort Churchill State Park, Nev.,	Reach B	Sept. 12,	96	102	8.1	1.0
11	Upper Truckee River at South Lake Tahoe, Calif.		Sept. 8, 1993	51	57	--	--
12	Truckee River at Farad, Calif.,	Reach A	Sept. 10, 1993	59	63	6.0	0.30
		Reach B	Sept. 9, 1993	53	55	3.2	<0.10
		Reach C	Sept. 10, 1993	46	50	11	0.20
		Reach A	June 30, 1994	68	71	2.1	0.10
		Reach A	Oct. 2, 1995	208	219	6.6	<0.10
		Reach A	Oct. 8, 1996	229	237	2.2	0.40
13	Truckee River at Circle C Ranch near Lawton, Nev.		July 1, 1994	290	300	2.2	0.40
			Sep 21, 1995	114	119	11.0	<0.10
14	Truckee River at Idlewild Park near Reno, Nev.		July 5, 1994	390	410	8.7	4.7
			Sept. 22, 1995	47	49	6.0	0.50
15	Truckee River near Sparks, Nev.		Sept. 3, 1993	150	160	20	0.50
			June 29, 1994	73	78	3.8	1.5
			Sept. 25, 1995	58	63	8.5	<0.10

Table 23. Aquatic invertebrates identified in samples collected at sites on the Carson and Truckee Rivers, 1993-95. The habitat sampled at the stream sites was the richest-targeted habitat, generally a cobble or gravel riffle but sometimes a submerged wooden snag. [Common names are provided in braces.]

PHYLUM--Subphylum
- **Class**--Subclass
  - Order--Suborder
    - Family
      - *Genus species*

PLATYHELMINTHES
- **Turbellaria** {Free-living flatworms}

NEMATODA {Roundworms}

ANNELIDA {Segmented worms}
- **Clitellata**--Hirudinea {Leeches}
  - Arynchobdellida
    - Erpobdellidae
- **Clitellata**--Oligochaeta {Aquatic earthworms}
  - Haplotaxida
    - Enchytraeidae
    - Naididae
    - Tubificidae
  - Lumbriculida
    - Lumbriculidae

NEMERTEA {Ribbon Worms}
- **Enopla**
  - Hoplonemertea
    - Tetrastemmatidae
      - *Prostoma sp.*

MOLLUSCA
- **Bivalvia** {Clams and Mussels}
  - Veneroida
    - Corbiculidae
      - *Corbicula sp.*
  - Paleoheterodonta
    - Margaritiferidae
- **Gastropoda** {Snails}

ARTHROPODA--Chelicerata
- Arachnida (Spiders, scorpions, mites)
  - Tromidiformes
    - Hydrachnoidea {Water Mites}
      - *Hydrachna sp.*

Table 23. Aquatic invertebrates identified in samples collected from the Carson and Truckee Rivers, 1993-95--Continued.

ARTHROPODA--Crustacea {Crustaceans}
- Malacostraca
  - Amphipoda {Freshwater Shrimp}
    - Hyalellidae
      - *Hyalella azteca* (Saussure)
  - Decapoda {Crayfish}
    - Astacidae
      - *Pacifastacus leniusculus* Dana

ARTHROPODA--Hexapoda
- **Insecta** {Insects}
  - Coleoptera {Beetles}
    - Curculionidae
    - Dytiscidae
    - Elmidae
      - *Narpus sp.*
      - *Optioservus sp.*
      - *Zaitzevia parvula* (Horn)
    - Hydrophilidae
      - *Enochrus sp.*
      - *Tropisternus sp.*
    - Psephenidae {Water-penny beetles}
      - *Psephenus falli* Casey
  - Collembola {Springtails}
  - Diptera {True Flies}
    - Ceratopogonidae { Biting midges or “no-see-ums”}
    - Chironomidae {Non-biting midges}
    - Culicidae {Mosquitos}
    - Empididae {Dance Flies}
      - *Chelifera/Hemerodromia sp.*
      - *Hemerodromia sp.*
    - Ephydridae {Shore flies and Brine Flies}
    - Muscidae
    - Psychodidae {Moth Flies}
    - Simuliidae {Black Flies and Buffalo Gnats}
      - *Simulium sp.*
    - Stratiomyidae {Soldier Flies}
    - Tabanidae {Horse or Deer Flies}
    - Tipulidae {Craneflies}
      - *Antocha sp.*
      - *Dicranota sp.*
      - *Hexatoma sp.*
      - *Tipula sp.*
  - Ephemeroptera {Mayflies}
    - Baetidae
      - *Baetis tricaudatus* Dodds
      - *Callibaetis sp.*
    - Caenidae
      - *Caenis sp.*

Table 23. Aquatic invertebrates identified in samples collected from the Carson and Truckee Rivers, 1993-95--Continued.

- Ephemerellidae
  - *Caudatella sp.*
  - *Drunella sp.*
  - *Drunella coloradensis* (Dodds)
  - *Drunella doddsi* (Needham)
  - *Ephemerella sp.*
  - *Ephemerella mollitia* Seemann
  - *Serratella sp.*
  - *Serratella micheneri* (Traver)
  - *Serratella teresa* (Traver)
  - *Serratella tibialis* (McDunnough)
  - *Timpanoga hecuba* (Eaton)
- Heptageniidae
  - *Cinygma sp.*
  - *Epeorus sp.*
  - *Epeorus albertae* (McDunnough)
  - *Epeorus longimanus* (Eaton)
  - *Heptagenia sp.*
  - *Leucrocuta sp.*
  - *Rhithrogena sp.*
- Leptophlebiidae
  - *Choroterpes sp.*
  - *Paraleptophlebia sp.*
- Siphlonuridae
  - *Ameletus sp.*
- Leptohyphidae
  - *Tricorythodes minutus* Traver

Heteroptera {True Bugs}

- Corixidae {Water Boatmen}
- Gerridae {Water Striders}

Lepidoptera {Moths}

- Pyralidae
  - *Petrophila sp.*

Megaloptera {Dobsonflies}

- Corydalidae
  - *Orohermes sp.*

Plecoptera {Stoneflies}

- Chloroperlidae
  - *Sweltsa sp.*
- Nemouridae
  - *Malenka sp.*
  - *Zapada cinctipes* (Banks)
- Peltoperlidae
- Perlidae
  - *Calineuria californica* (Banks)
  - *Claassenia sabulosa* (Banks)
  - *Doroneuria baumanni* Stark and Gaufin
  - *Hesperoperla pacifica* (Banks)

Table 23. Aquatic invertebrates identified in samples collected from the Carson and Truckee Rivers, 1993-95--Continued.

- Perlodidae
  - *Cultus sp.*
  - *Isoperla quinquepunctata* (Frison)
  - *Skwala sp.*
  - *Skwala americana* (Klapálek)
  - *Osobenus yakimae* (Hoppe)
  - *Perlinodes aureus* (Smith)
- Pteronarcyidae
  - *Pteronarcella sp.*
  - *Pteronarcys sp.*
  - *Pteronarcys princeps* Banks
- Trichoptera {Caddisflies}
- Brachycentridae
  - *Brachycentrus americanus* (Banks)
  - *Micrasema sp.*
- Glossosomatidae
  - *Glossosoma oregonense* Ling
  - *Glossosoma sp.*
  - *Protoptila sp.*
- Hydropsychidae
  - *Arctopsyche sp.*
  - *Ceratopsyche sp.*
  - *Ceratopsyche cockerelli* (Banks)
  - *Ceratopsyche morosa* group
  - *Cheumatopsyche sp.*
  - *Cheumatopsyche campyla* Ross
  - *Hydropsyche sp.*
  - *Hydropsyche californica* Banks
  - *Hydropsyche sp. nr. californica* Banks
  - *Hydropsyche occidentalis* Banks
- Hydroptilidae
  - *Hydroptila sp.*
  - *Hydroptila arctia* Ross
  - *Hydroptila argosa* Ross
  - *Hydroptila consimilis* Morton
  - *Leucotrichia sp.*
  - *Ochrotrichia sp.*
- Lepidostomatidae
  - *Lepidostoma sp.*
- Leptoceridae
  - *Nectopsyche sp.*
  - *Nectopsyche gracilis* (Banks)
  - *Oecetis sp.*
  - *Oecetis avara* (Banks)
- Limnephilidae
  - *Onocosmoecus sp.*
  - *Psychoglypha sp.*

Table 23. Aquatic invertebrates identified in samples collected from the Carson and Truckee Rivers, 1993-95--Continued.

Philopotamidae
Dolophilodes sp.
Wormaldia sp.
Rhyacophilidae
Rhyacophila sp. 1
Rhyacophila sp. 2
Rhyacophila sierra Denning
Odonata--Anisoptera {Dragonflies}
Gomphidae
Erpetogomphus sp.
Odonata--Zygoptera {Damselflies}
Coenagrionidae
Argia sp.

Table 24. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Carson River, August to September 1993. Habitats sampled were cobble riffles for sites 1 and 7 and submerged woody snags for site 9 (fig. 1). [Abbreviations: cm^2, square centimeter; sp., species]

	Site 1				Site 9		
Taxon	Reach A Sept. 2	Reach B Sept. 1	Reach C Aug. 30	Site 7, Sept. 7	Reach A Sept. 13	Reach B Sept. 13	Reach C Sept. 20
PLATYHELMINTHES							
Turbellaria				240			7
NEMATODA					11	1	
ANNELIDA							
Clitellita--Oligochaeta	180	150	70	110	60	2	
MOLLUSCA							
Bivalvia				1			2
ARTHROPODA-Chelicerata							
Hydrachna sp.				160		60	260
ARTHROPODA-Crustacea							
Astacidae				1			1
Pacifastacus leniusculus Dana	1						
ARTHROPODA-Hexapoda-Insecta							
Coleoptera							
Curculionidae				1			
Elmidae	3						
Optioservus sp.	90	10	50	20			
Zaitzevia parvula (Horn)	180	130	120	20			70
Hydrophilidae					30		
Enochrus sp.							1
Tropisternus sp.							2
Diptera						8	
Ceratopogonidae						7	
Chironomidae	3,100	960	1,500	1,000	1,200	450	4,600
Empididae			20				
Simuliidae	830	90	210	390		90	330

Table 24. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Carson River, August to September 1993--Continued

Taxon	Site 1			Site 7, Sept. 7	Site 9		
	Reach A Sept. 2	Reach B Sept. 1	Reach C Aug. 30		Reach A Sept. 13	Reach B Sept. 13	Reach C Sept. 20
Stratiomyidae				20			
Tipulidae							
Dicranota sp.					20		
Hexatoma sp.		11		1		3	
Ephemeroptera		3		50		1	
Baetidae	1,800	1,100	1,600	360	180	480	2,500
Ephemerellidae							
Serratella tibialis (McDunnough)			1				
Serratella sp.	90						
Heptageniidae	740	500	120		11	7	
Cinygma sp.		2					
Heptagenia sp.				30		3	
Heptagenia sp.							8
Leptohyphidae							
Tricorythodes minutus Traver		12	1	350	20	40	200
Heteroptera						1	
Plecoptera							
Perlidae	90	1	80				
Claassenia sabulosa (Banks)	1		1				
Perlodidae		80					
Skwala sp.	120	80	130			1	
Trichoptera							
Glossosomatidae							
Glossosoma sp.	1		2				
Glossosoma oregonense Ling		1					

Table 24. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Carson River, August to September 1993--Continued

Taxon	Site 1			Site 7, Sept. 7	Site 9		
	Reach A Sept. 2	Reach B Sept. 1	Reach C Aug. 30		Reach A Sept. 13	Reach B Sept. 13	Reach C Sept. 20
Hydropsychidae	3,300	740	1,200	900		40	1,300
Ceratopsyche cockerelli (Banks)	280	10					
Cheumatopsyche campyla Ross	1						
Cheumatopsyche sp.	1	10					
Hydropsyche sp.	370					50	
Hydropsyche californica Banks						50	
Hydropsyche sp. nr. californica Banks				10		3	2
Hydroptilidae				110	11		
Hydroptila sp.						7	4
Ochrotrichia sp.					20		70
Lepidostomatidae							
Lepidostoma sp.	6	4	4				
Leptoceridae				3			
Nectopsyche sp.				230		50	70
Odonata-Anisoptera							
Gomphidae						7	
Erpetogomphus sp.						4	1
Odonata-Zygoptera					3		
Coenagrionidae							
Argia sp.						6	3

Table 25 Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Carson River, July 1994. Habitats sampled were cobble riffles for sites 1 through 8 and submerged woody snags for site 9 (fig. 1). [Abbreviations: cm^2, square centimeter; sp., species]

Taxon	Site 1, Reach B, July 26	Site 2, July 25	Site 3 July 21	Site 4 July 22	Site 5 July 20	Site 6 July 19	Site 7 July 15	Site 9, Reach B July 12
PLATYHELMINTHES								
Turbellaria		2,200			4,500	440	8	
ANNELIDA								
Clitellita--Oligochaeta	1,600	390	96	290	1,400	3,700	880	
MOLLUSCA								
Bivalvia					1			
Gastropoda		150			290	1	140	
ARTHROPODA-Chelicerata								
Hydrachna sp.	110	530	31	28	370	490	1,300	61
ARTHROPODA-Crustacea								
Amphipoda					180	220		
Decapoda								
Astacidae								
Pacifastacus leniusculus Dana				28	1	2	1	
ARTHROPODA-Hexapoda-Insecta								
Coleoptera				1				
Dytiscidae				2				
Elmidae		93	1					
Narpus sp.			28					
Optioservus sp.		46	320	28			140	
Zaitzevia parvula (Horn)	60		10	28				
Hydrophilidae								9
Collembola				28				
Diptera								
Ceratopogonidae		92						
Chironomidae	4,200	1,240	510	620	3,500	1,400	3,200	480
Culicidae								1
Empididae	57	46			92		160	

Table 25. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Carson River, July 1994--Continued

Taxon	Site 1, Reach B, July 26	Site 2, July 25	Site 3 July 21	Site 4 July 22	Site 5 July 20	Site 6 July 19	Site 7 July 15	Site 9, Reach B July 12
								17
Simuliidae			31	28	92	220		
Tipulidae			28					
Antocha sp.	56			57				
Hexatoma sp.	2		6	2		1		17
Tipula sp.				1				
Ephemeroptera								
Baetidae	1,400		260	190		440	2,200	300
Ephemerellidae				28				
Serratella sp.			65					
Serratella micheneri (Traver)			28					
Timpanoga hecuba (Eaton)				1				
Heptageniidae	170		470	55				
Epeorus longimanus (Eaton)			7					
Heptagenia sp.						4	1	22
Leucrocuta sp.				1				
Rhithrogena sp.			140					
Leptophlebiidae			140	110			140	
Ameletus sp.			1					
Choroterpes sp.								2
Paraleptophlebia sp.				30				
Tricorythodes minutus Traver	57	350		28	1,600	7,500	2,900	
Plecoptera			140					
Chloroperlidae				170				
Sweltsa sp.			7					
Nemouridae				55				
Malenka sp.				3				
Perlidae	55							
Calineuria californica (Banks)			1					

Table 25. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Carson River, July 1994--Continued

Taxon	Site 1, Reach B, July 26	Site 2, July 25	Site 3 July 21	Site 4 July 22	Site 5 July 20	Site 6 July 19	Site 7 July 15	Site 9, Reach B July 12
Claassenia sabulosa (Banks)	85							
Hesperoperla pacifica (Banks)				1				
Perlodidae	110			56				
Perlinodes aureus (Smith)	2							
Skwala sp.	5			7				
Pteronarcidae								
Pteronarcys princeps Banks			1					
Trichoptera	770							
Glossosomatidae								
Glossosoma sp.	110			4				
Hydropsychidae	46		95	83			4,700	390
Arctopsyche sp.			1					
Ceratopsyche morosa group			94				1	
Cheumatopsyche sp.	4					220		
Hydropsyche sp.	1			3		7	430	6
Hydropsyche californica Banks				60		2	1	
Hydropsyche occidentalis Banks								2
Hydroptilidae	280				92			27
Hydroptila sp.		70			92		550	
Hydroptila argosa Ross		11						
Hydroptila consimilis Morton		6						
Philopotamidae			250					
Dolophilodes sp.			8	5				
Rhyacophilidae								
Rhyacophila sp.				28				
Odonata-Zygoptera								1

Table 26. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Carson River, September 1995. Habitats sampled were cobble riffles for sites 1 through 8 and submerged woody snags for site 9 (fig. 1). [Abbreviations: cm^2, square centimeter; sp., species]

Taxon	Site 1, Reach B, Sept. 15	**Site 2, Sept. 15**	**Site 3, Sept. 13**	**Site 4, Sept. 13**	**Site 5, Sept. 19**	**Site 6, Sept. 12**	**Site 7, Sept. 12**	**Site 8, Sept. 19**	**Site 9, Reach B, Sept. 28**
PLATYHELMINTHES									
Turbellaria					3,900		1		
NEMATODA			33		140		15	4	
ANNELIDA									
Clitellata--Oligochaeta	280	350	550	140	3,500	2,800	2	140	
Enchytraeidae							3		
Lumbriculidae							1		
Naididae							170		
Tubificidae							350		
MOLLUSCA									
Bivalvia								1	1
Gastropoda					280				
ARTHROPODA-Chelicerata									
Hydrachna sp			3	28	1	920	220	140	140
ARTHROPODA--Crustacea									
Amphipoda					92				
Talitridae									
Hyalella azteca (Saussure)					12				
Decapoda									
Astacidae				2					
Pacifastacus leniusculus Dana					1				
ARTHROPODA-Hexapoda-Insecta									
Coleoptera									
Elmidae	28						3		
Optioservus sp.	30		150	130					

Table 26. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Carson River, September 1995--Continued.

Taxon	Site 1, Reach B, Sept. 15	Site 2, Sept. 15	Site 3, Sept. 13	Site 4, Sept. 13	Site 5, Sept. 19	Site 6, Sept. 12	Site 7, Sept. 12	Site 8, Sept. 19	Site 9, Reach B, Sept. 28
Zaitzevia parvula (Horn)	30	52	61	29		390			
Collembola				14			55		
Diptera									
Ceratopogonidae				14					
Chironomidae	1,700	4,200	180	140	5,000	6,800	4,900	300	2,200
Empididae		46						1	9
Hemerodromia sp.							1		
Ephydridae									
Simuliidae	110	280	28	69	190	6,500	1,500	2,200	340
Simulium sp.							1,600		
Tipulidae					1				
Antocha sp.				28					
Hexatoma sp.		200	29				1	1	
Ephemeroptera							1		
Baetidae	910	1,900	1,100	370			550	6,500	820
Baetis tricaudatus Dodds							55		
Callibaetis sp.					23				
Ephemerellidae	55								
Drunella sp.				15					
Drunella doddsi (Needham)			29						
Serratella tibialis (McDunnough)	5								
Heptageniidae	940	1,400	58	96			110	69	240
Epeorus sp.			28						
Heptagenia sp.	1	47					110		1
Rhithrogena sp.	1	6	55						
Leptophlebiidae			1						
Choroterpes sp.								200	

Table 26. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Carson River, September 1995--Continued.

Taxon	Site 1, Reach B, Sept. 15	Site 2, Sept. 15	Site 3, Sept. 13	Site 4, Sept. 13	Site 5, Sept. 19	Site 6, Sept. 12	Site 7, Sept. 12	Site 8, Sept. 19	Site 9, Reach B, Sept. 28
Leptophyidae			1						
Tricorythodes minutus Traver.		47				7,143	1,163	73	137
Lepidoptera									
Pyralidae									
Petrophila sp.							1		
Megaloptera									
Corydalidae									
Orohermes sp.			1						
Plecoptera				110					
Chloroperlidae			29						
Perlidae	140	550							
Claassenia sabulosa (Banks)	6	13					1		
Perlodidae		280	29						34
Perlinodes aureus (Smith)	3	46							
Skwala sp.	12	7		4					
Trichoptera									
Glossosomatidae			1						
Glossosoma sp.				110			1		
Hydropsychidae	410	1,700	84	28		1,600	1,200	4,100	1,600
Arctopsyche sp.			34						
Hydropsyche sp.						210			68
Hydropsyche californica Banks						92	11	6	
Hydropsyche occidentalis Banks							2		
Hydroptilidae		46			230		1		
Hydroptila sp.						95	55		34
Leucotrichia sp.									
Lepidostomatidae									
Lepidostoma sp.	4								

Table 26. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Carson River, September 1995--Continued.

Taxon	Site 1, Reach B, Sept. 15	Site 2, Sept. 15	Site 3, Sept. 13	Site 4, Sept. 13	Site 5, Sept. 19	Site 6, Sept. 12	Site 7, Sept. 12	Site 8, Sept. 19	Site 9, Reach B, Sept. 28
Leptoceridae									
Nectopsyche gracilis (Banks)							64		
Nectopsyche sp.						92	5		34
Oecetis sp.							61		
Oecetis avara (Banks)							4		
Philopotamidae			1						
Dolophilodes sp.			83						
Rhyacophilidae									
Rhyacophila sp.			120	4					
Odonata-Anisoptera									
Gomphidae									34
Odonata-Zygoptera					23				

Table 27. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Truckee River, September 1993. Richest-targeted habitat for all sites was cobble riffles except site 11 (fig. 1) which was submerged woody snags. [Abbreviations: c m^2, square centimeter; sp., species]

Taxon	Site 11, Sept. 8	Site 12			Site 15, Sept. 3	Site 17			Site 19 Sept. 16
		Reach A Sept. 9	Reach B Sept. 9	Reach C Sept. 10		Reach A Sept. 21	Reach B Sept. 7	Reach C Sept. 21	
PLATYHELMINTHES									
Turbellaria						990	900	610	230
NEMATODA			3						
ANNELIDA									
Clitellita--Oligochaeta		490	450	310	550	110	440	15	110
MOLLUSCA									
Bivalvia				4			1		220
ARTHROPODA--Chelicerata									
Hydrachna sp.	180	84	0	3		440	330		330
ARTHROPODA--Crustacea									
Decapoda									
Astacidae									
Pacifastacus leniusculus Dana			1			1		1	
ARTHROPIDA--Hexapoda--Insecta									
Coleoptera									
Elmidae									
Zaitzevia parvula (Horn)		1	2	1	110	56	6	110	7
Diptera									
Chironomidae	900	420	730	1,100	940	2,600	2,900	1,400	1,900
Empididae	23								
Psychodidae		1							
Simuliidae	45	140				1,200	140	1,700	110
Tipulidae									
Antocha sp.				55					
Ephemeroptera		84				55			
Baetidae	310	1,500	1,400	1,700	440	9,200	12,000	8,600	6,500

Table 27. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Truckee River, September 1993--Continued

Taxon	Site 11, Sept. 8	Site 12			Site 15, Sept. 3	Site 17			Site 19 Sept. 16
		Reach A Sept. 9	Reach B Sept. 9	Reach C Sept. 10		Reach A Sept. 21	Reach B Sept. 7	Reach C Sept. 21	
Ephemerellidae									
Drunella sp.	230	140	65	170					
Serratella sp.			1						
Timpanoga hecuba (Eaton)	1								
Leptophlebiidae		55	55	1				14	
Ameletus sp.	1								
Choroterpes sp.								110	
Paraleptophlebia sp.			1						
Leptohyphidae						1,300	1,300		
Tricorythodes minutus Traver	60				220	170	28	2,200	440
Heteroptera	5	1							
Corixidae				55					
Gerridae				1					
Lepidoptera									
Pyralidae									
Petrophila sp.							110		
Plecoptera			55						
Peltoperlidae		55							
Perlidae				55					
Hesperoperla pacifica (Banks)				1					
Perlodidae	3	55	1	1					
Skwala sp.		130	19	13	1,000	2	3	5	
Trichoptera									
Glossosomatidae									
Glossosoma oregonense Ling		3		1					
Glossosoma sp.		72	66	470					

Table 27. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Truckee River, September 1993--Continued

Taxon	Site 11, Sept. 8	Site 12			Site 15, Sept. 3	Site 17			Site 19 Sept. 16
		Reach A Sept. 9	Reach B Sept. 9	Reach C Sept. 10		Reach A Sept. 21	Reach B Sept. 7	Reach C Sept. 21	
Hydropsychidae	110	670	780	1,300	440	5,300	5,200	3,300	1,700
Ceratopsyche cockerelli (Banks)		29	2	3					
Hydropsyche sp.		2			1		11	15	
Hydropsyche californica Banks									240
Hydropsyche sp. nr. californica Banks						2			
Hydroptilidae	1		110						220
Hydroptila sp.	20				55				
Hydroptila arctia Ross									17
Leucotrichia sp.			3						
Ochrotrichia sp.				1					
Lepidostomatidae									
Lepidostoma sp.	1			120					
Leptoceridae						2	1	7	17
Nectopsyche sp.							28		
Limnephilidae									
Psychoglypha sp.			1						
Philopotamidae									
Wormaldia sp.				2					
Rhyacophilidae									
Rhyacophila sp.		4	120	4					
Odonata--Anisoptera									
Gomphidae									110
Erpetogomphus sp.									1
Odonata--Zygoptera									
Coenagrionidae							1		

Table 28. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Truckee River, June-July 1994. Richest-targeted habitat for all sites was cobble riffles. [Abbreviations: sp., species]

Taxon	Site 12, Reach A, June 30	Site 13, July 1	Site 14, July 5	Site 15, June 29	Site 16, July 6	Site 17, Reach C July 7	Site 19, July 8
PLATYHELMINTHES							
Turbellaria		110	1		990	230	14
NEMATODA	3		7	94		480	
ANNELIDA							
Clitellita--Hirudinea		2					
Erpobdellidae				1			
Clitellita--Oligochaeta	630	950	1,700	1	4,100	1,100	470
Enchytraeidae				4			
Naididae				480			
Tubificidae				47			
NEMERTEA							
Prostoma sp.				1			
MOLLUSCA							
Bivalvia							14
Corbiculidae							
Corbicula sp.						27	
Gastropoda			80		19		1
ARTHROPODA—Chelicerata							
Hydrachna sp.	28	680	550	930	230	330	460
ARTHROPODA—Crustacea							
Amphipoda					1		
Decapoda							
Astacidae						1	
Pacifastacus leniusculus Dana			1		1		

Table 28. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Truckee River, June-July 1994--Continued

Taxon	Site 12, Reach A, June 30	Site 13, July 1	Site 14, July 5	Site 15, June 29	Site 16, July 6	Site 17, Reach C July 7	Site 19, July 8
ARTHROPODA--Hexapoda--Insecta							
Coleoptera							
Elmidae							
Zaitzevia parvula (Horn)	110	1,200	140	1,300	220	110	
Diptera							
Chironomidae	480	1,900	590	530	14,000	8,400	1,200
Empididae							92
Chelifera/Hemerodromia sp.				1			
Hemerodromia sp.				46			
Simuliidae	28	900	1,800	510		230	
Simulium sp.				880			
Tipulidae							
Antocha sp.	29	2	220	140			
Ephemeroptera							
Baetidae	1,700	1,000	2,100	1,500	660	13,000	4,000
Baetis tricaudatus Dodds				94			
Callibaetis sp.			1				
Ephemerellidae	110						
Drunella coloradensis (Dodds)	17						
Drunella doddsi (Needham)	2						
Ephemerella sp.		26	2				
Ephemerella mollitia Seemann		1					
Serratella sp.		14					
Serratella teresa (Traver)		150					
Heptageniidae	170	660	1,100	46			
Epeorus sp.	150	110	1				
Epeorus albertae (McDunnough)				3			
Epeorus longimanus (Eaton)		1					
Leucrocuta sp.		1					

Table 28. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Truckee River, June-July 1994--Continued

Taxon	Site 12, Reach A, June 30	Site 13, July 1	Site 14, July 5	Site 15, June 29	Site 16, July 6	Site 17, Reach C July 7	Site 19, July 8
Leptophlebiidae	140						
Paraleptophlebia sp.	2	1					
Leptohyphidae							
Tricorythodes minutus Traver		130	220	46	1,400	1,400	1,200
Lepidoptera			1				
Pyralidae							
Petrophila sp.				1	1		
Plecoptera		1,000					
Perlidae							
Claassenia sabulosa (Banks)	5		2	19			
Doroneuria baumanni Stark and Gaufin	1						
Hesperoperla pacifica (Banks)	4	1		1			
Perlodidae	170		220	510		1	
Cultus sp.	4						
Isoperla quinquepunctata (Frison)	1	4	3				
Osobenus yakimae (Hoppe)	8						
Skwala sp.			2				
Trichoptera	55						
Brachycentridae					2		
Glossosomatidae							
Glossosoma oregonense Ling		1					
Glossosoma sp.	150	120	340	52			
Protoptila sp.	1	1					
Hydropsychidae	280	3,900	5,000	4,700	5,400	3,500	180
Hydropsyche sp.	580	3	560	4	39	1	92
Hydropsyche californica Banks				1,100	1,600		96
Hydropsyche occidentalis Banks	4	150	3	4			
Hydroptilidae							
Hydroptila sp.			3				180

Table 28. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Truckee River, June-July 1994--Continued

Taxon	Site 12, Reach A, June 30	Site 13, July 1	Site 14, July 5	Site 15, June 29	Site 16, July 6	Site 17, Reach C July 7	Site 19, July 8
Leptoceridae		2	3			3	4
Oecetis sp.		1					
Oecetis avara (Banks)				1			
Limnephilidae							
Onocosmoecus sp.	1	1					
Philopotamidae							
Wormaldia sp.		5	2	1			
Rhyacophilidae							
Rhyacophila sp.	55		110				
Rhyacophila sp.	11						
Rhyacophila sierra Denning	5						
Odonata--Anisoptera							
Gomphidae							
Erpetogomphus sp.							3
Odonata--Zygoptera							
Coenagrionidae							
Argia sp.					1		

Table 29. Number of aquatic invertebrates per square meter in the richest-targeted habitat at sites on the Truckee River, September to October 1995. Richest-targeted habitat for all sites was cobble riffles. [Abbreviations: sp., species]

Taxon	Site 12, Reach A, Oct. 2	Site 13, Sept. 21	Site 14, Sept. 22	Site 15, Sept. 22	Site 16, Sept. 26	Site 17, Reach C, Oct. 3	Site 18, Oct. 13	Site 19, Oct. 6	Site 20, Oct. 12
PLATYHELMINTHES									
Turbellaria					690	210	28		220
NEMATODA			4	1	28		2	9	17
ANNELIDA									
Clitellita--Hirudinea					1				
Clitellita--Oligochaeta	98	4	320		9,200	1,600	720	1,200	
Lumbriculidae				1					
Naididae				1,500					
Tubificidae				1					
NEMERTEA									
Prostoma sp.									
MOLLUSCA									
Bivalvia			1						
ARTHROPODA--Chelicerata									
Hydrachna sp.	34	17		34		180	300	970	340
ARTHROPODA—Crustacea									
Amphipoda									
Talitridae									
Hyalella azteca (Saussure)								1	69
ARTHROPODA--Hexapoda--Insecta									
Coleoptera									
Elmidae		17							
Optioservus sp.	34								
Zaitzevia parvula (Horn)	2	49	250	220	250		7		
Psephenidae									
Psephenus falli Casey	11								

Table 29. Number of aquatic invertebrates per square meter for the richest-targeted habitat at sites on the Truckee River, September to October 1995--Continued.

Taxon	Site 12, Reach A, Oct. 2	Site 13, Sept. 21	Site 14, Sept. 22	Site 15, Sept. 22	Site 16, Sept. 26	Site 17, Reach C, Oct. 3	Site 18, Oct. 13	Site 19, Oct. 6	Site 20, Oct. 12
Diptera									
Chironomidae	120	170	360	1,100	4,300	2,000	1,400	2,100	740
Empididae	58							140	150
Simuliidae	11	71	5	280	440	370	200	420	220
Tabanidae			4						
Tipulidae									
Antocha sp.				34					
Ephemeroptera									
Baetidae	140	890	700	1,500	15,000	8,700	11,000	13,000	6,000
Baetis tricaudatus Dodds				110					
Ephemerellidae	140	17		280	470	180			
Drunella sp.	15								
Drunella doddsi (Needham)	38			1					
Heptageniidae	92			100	220	180			
Rhithrogena sp.	1	89	100	250					
Leptophlebiidae				100			1		
Ameletus sp.	1								
Choroterpes sp.							110	420	
Paraleptophlebia sp.				34					
Leptohyphidae				1		440			
Tricorythodes minutus Traver			140	550	5,300	3,000	940	2,500	440
Plecoptera				410					
Nemouridae									
Zapada cinctipes (Banks)				35					
Perlidae		17	35	34	28				
Claassenia sabulosa (Banks)	3	1							
Hesperoperla pacifica (Banks)	1		4						

Table 29. Number of aquatic invertebrates per square meter for the richest-targeted habitat at sites on the Truckee River, September to October 1995--Continued.

Taxon	Site 12, Reach A, Oct. 2	Site 13, Sept. 21	Site 14, Sept. 22	Site 15, Sept. 22	Site 16, Sept. 26	Site 17, Reach C, Oct. 3	Site 18, Oct. 13	Site 19, Oct. 6	Site 20, Oct. 12
Perlodidae	2			2					
Skwala americana (Klapálek)				210					
Skwala sp.	44	84	210		170	11	1	11	
Trichoptera									
Brachycentridae			2						
Glossosomatidae									
Glossosoma sp.	130	120	45	9					
Glossosoma oregonense Ling				1					
Protoptila sp.							28		
Hydropsychidae	530	1,200	1,100	1,600	660	13,000	3,500	9,500	600
Ceratopsyche morosa group			1						
Ceratopsyche sp.				2					
Cheumatopsyche sp.				100	1				
Hydropsyche sp.		2			83				
Hydropsyche sp.						480			
Hydropsyche californica Banks			2	590	1		227	27	34
Hydropsyche sp. nr. californica Banks									
Hydropsyche occidentalis Banks				250					
Hydroptilidae	11								
Lepidostomatidae									
Lepidostoma sp.	69	18	2	71					
Leptoceridae									
Nectopsyche sp.							2		
Oecetis sp.				34					
Limnephilidae	1								
Philopotamidae		1							
Rhyacophilidae									
Rhyacophila sp.	15		1						
Rhyacophila sp.	4								

Table 30. Fish identified in samples collected at sites on the Carson and Truckee Rivers, 1993-97. [X, present in a particular river; --, not present]

Scientific name (*Genus species*)	**Common name**	**Carson River**	**Truckee River**	**Native**
Ameiurus melas	black bullhead	X	--	No
Catostomus platyrhynchus	mountain sucker	X	X	Yes
Catostomus tahoensis	Tahoe sucker	X	X	Yes
Cottus beldingi	Paiute sculpin	--	X	Yes
Cyprinus carpio	common carp	X	X	No
Gambusia sp.	mosquitofish	X	X	No
Lepomis cyanellus	green sunfish	X	X	No
Micropterus dolomieu	smallmouth bass	X	--	No
Micropterus salmoides	largemouth bass	X	--	No
Morone chrysops	white bass	X	--	No
Oncorhynchus clarki henshawi	Lahontan cutthroat trout	--	X	Yes
Oncorhynchus mykiss	rainbow trout	--	X	No
Orthodon microlepidotus	Sacramento blackfish	X	--	No
Perca flavescens	yellow perch	X	--	No
Pimephales promelas	Fathead minnow	X	X	No
Rhinichthys osculus	speckled dace	X	X	Yes
Richardsonius egregius	Lahontan redside	X	X	Yes
Salmo trutta	brown trout	X	X	No

Table 31. Data for fish and crayfish collected at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-1995. [Symbols and abbreviations:--, not determined; N, number; SD, standard deviation; m, meter]

Scientific name (Genus species)	Common name	N	Length, in millimeters				Weight, in grams		Percent abnormal
			[a]Mean Total	SD	[b]Mean Standard	SD	Mean	SD	
Reach A (216 m sampled on September 28, 1993)									
Catostomus platyrhynchus	mountain sucker	52	93	15.2	78	12.6	9.3	5.2	[c]3.8
Pacifastacus leniusculus	crayfish	79	82	7.1	--	--	--	--	0
Rhinichthys osculus	speckled dace	137	62	6.9	52	5.8	2.7	1.0	0
Richardsonius egregius	Lahontan redside	13	74	10.2	63	8.8	5.1	2.3	0
Reach B (183 m sampled on September 28, 1993)									
Catostomus platyrhynchus	mountain sucker	12	89	12.5	74.1	10.4	8.3	3.4	0
Catostomus tahoensis	Tahoe sucker	3	147	46.8	121	39.7	22.8	19.7	0
Pacifastacus leniusculus	crayfish	34	83	8.4	--	--	--	--	0
Rhinichthys osculus	speckled dace	109	60	11.5	50	10.5	2.9	1.8	0
Richardsonius egregius	Lahontan redside	10	68	11.2	56	9.2	4.0	2.2	0
Salmo trutta	brown trout	1	327	--	282	--	372	--	0
Reach B (183 m sampled on August 24, 1994)									
Catostomus platyrhynchus	mountain sucker	56	98	30.3	86	22.3	14.8	11.0	[c]1.8
Catostomus tahoensis	Tahoe sucker	36	128	52.3	109	45.5	36.9	36.8	[c]2.8
Pacifastacus leniusculus	crayfish	10	78	14.9	--	--	--	--	0
Rhinichthys osculus	speckled dace	105	60	14.3	50	12.3	3.0	2.5	0

Table 31. Data for fish and crayfish collected at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-1995--Continued.

Scientific name (Genus species)	Common name	N	Length, in millimeters				Weight, in grams		Percent abnormal
			[a]Mean Total	SD	[b]Mean Standard	SD	Mean	SD	
Reach B (183 m sampled on August 24, 1994)									
Richardsonius egregius	Lahontan redside	32	69	20.2	58	18	4.9	4.6	[c,d]6.2
Salmo trutta	brown trout	2	160	123	142	115	87.9	120	0
Reach B (183 m sampled on September 27, 1995)									
Catostomus platyrhynchus	mountain sucker	29	96	20.6	80	18.8	10.8	10.4	[a,e]13.8
Catostomus tahoensis	Tahoe sucker	2	91	28.3	76	24.7	8.4	6.7	0
Pacifastacus leniusculus	crayfish	20	78	13.3	--	--	--	--	0
Rhinichthys osculus	speckled dace	121	57	11.8	47	11	2.2	1.2	[c]2.5
Richardsonius egregius	Lahontan redside	70	78	17.1	62	14	4.1	2.6	[c]2.9
Salmo trutta	brown trout	9	174	37.3	149	33	54.5	43.8	0
Reach B (183 m sampled on October 11, 1996)									
Catostomus platyrhynchus	mountain sucker	20	104	48.3	89	43	22.4	23.8	0
Catostomus tahoensis	Tahoe sucker	4	182	23.2	156	18	76.3	25.1	0
Rhinichthys osculus	speckled dace	37	68	10.1	57	8.6	3.8	1.5	0
Richardsonius egregius	Lahontan redside	38	84	5.3	71	5.4	6.5	1.7	0
Salmo trutta	brown trout	11	139	31.9	118	26.4	30.1	21.0	0

Table 31. Data for fish and crayfish collected at sites on the Carson River: East Fork Carson River near Dresslerville, Nev. (site 1, fig. 1), 1993-1995--Continued.

Scientific name (Genus species)	Common name	N	Length, in millimeters				Weight, in grams		Percent abnormal
			[a]Mean Total	SD	[b]Mean Standard	SD	Mean	SD	
Reach C (137 m sampled on September 28, 1993)									
Catostomus platyrhynchus	mountain sucker	28	92	18.2	78	16.2	9.4	6.2	0
Catostomus tahoensis	Tahoe sucker	9	162	53.3	135	45.9	58.2	60.7	0
Pacifastacus leniusculus	crayfish	19	74	21.7	--	--	--	--	0
Rhinichthys osculus	speckled dace	83	61	9.9	51	8.2	2.7	1.4	[c]2.4
Richardsonius egregius	Lahontan redside	74	84	11.4	68	9.7	6.4	2.8	[c,d]2.7

a--For fish, total length, measured from tip of snout to end of caudal (tail) fin; for crayfish, total length measured from tip of rostrum to posterior edge of telson.

b--Standard length measured from snout to end of backbone in the caudal peduncle.

c--Fin erosion. Mild fin-erosion is considered part of the normal 'wear and tear' on fish. The type of fin erosion considered an abnormality is more severe and indicates fungal or bacterial infections, various types of stress, and poor overall health (Meador and others, 1993).

d--Tumor.

e--Anchor worm.

Table 32. Data for fish and crayfish collected at sites on the Carson River: Carson River at Deer Run Road near Carson City, Nev. (site 7, fig. 1), October 6, 1993. [Symbols and abbreviations:--, not determined; <, less than; N, number; SD, standard deviation; m, meter]

Scientific name (Genus species)	Common name	N	Length, in millimeters				Weight, in grams		Percent abnormal
			[a]Mean Total	SD	[b]Mean Standard	SD	Mean	SD	
Ameiurus melas	black bullhead	1	168	--	140	--	69.0	--	[c]100
Catostomus platyrhynchus	mountain sucker	3	148	30.4	127	24.6	43.4	23.1	0
Catostomus tahoensis	Tahoe sucker	5	238	50.5	203	39.3	163	106	[c]20
Cyprinus carpio	common carp	2	128	4.9	102	4.9	32.7	4.1	0
Lepomis cyanellus	green sunfish	16	83	11.6	66	9.4	10.7	4.8	[d]12.5
Micropterus dolomieu	smallmouth bass	12	[e]<30	--	--	--	--	--	0
Micropterus salmoides	largemouth bass	5	123	8.1	99	7.5	25.6	3.6	[d]20.0
Pacifastacus leniusculus	crayfish	35	70	27.7	--	--	--	--	0
Rhinichthys osculus	speckled dace	1	91	--	73	--	7.8	--	0

a--For fish, total length, measured from tip of snout to end of caudal (tail) fin; for crayfish, total length measured from tip of rostrum to posterior edge of telson.
b--Standard length measured from snout to end of backbone in the caudal peduncle.
c--Lesion.
d--Anchor worm.
e--Young of the year.

Table 33. Data for fish and crayfish collected at sites on the Carson River: Carson River at Fort Churchill State Park, Nev. (site 9, fig. 1), 1993-1996. [Symbols and abbreviations:--, not determined; N, number; SD, standard deviation; m, meter]

Scientific name (Genus species)	Common name	N	Length, in millimeters				Weight, in grams		Percent abnormal
			[a]Mean Total	SD	[b]Mean Standard	SD	Mean	SD	
Reach A (61 m sampled on October 7, 1993)									
Catostomus tahoensis	Tahoe sucker	9	64	10.4	53	7.9	2.8	1.2	[f]10.0
Cyprinus carpio	common carp	65	176	153	140	124	244	400	0
Morone chrysops	white bass	1	152	--	122	--	47.0	--	0
Pimephales promelas	fathead minnow	16	53	6.7	44	6.3	1.6	0.7	0
Rhinichthys osculus	speckled dace	11	52	6.1	43	5.1	1.5	0.5	0
Richardsonius egregius	Lahontan redside	449	63	9.3	51	7.6	2.2	0.9	[f]0.9
Reach B (91 m sampled on October 7, 1993)									
Catostomus platyrhynchus	mountain sucker	44	94	26.7	79	23.0	10.4	7.1	[e]6.8
Catostomus tahoensis	Tahoe sucker	78	79	22.5	64	19.4	6.2	6.6	[e,f]2.6
Cyprinus carpio	common carp	43	84	10.4	66	8.1	9.3	3.7	0
Lepomis cyanellus	green sunfish	2	72	14.1	58	10.6	6.2	3.4	0
Pimephales promelas	fathead minnow	69	52	6.6	42	5.4	1.3	0.6	0
Orthodon microlepidotus	Sacramento blackfish	5	54	6.3	41	6.4	1.7	0.5	0
Rhinichthys osculus	speckled dace	86	57	7.4	48	6.8	2.0	1.0	0
Richardsonius egregius	Lahontan redside	168	64	9.9	51	8.0	2.4	0.8	[e]1.2

Table 33. Data for fish and crayfish collected at sites on the Carson River: Carson River at Fort Churchill State Park, Nev. (site 9, fig. 1), 1993-1996--Continued.

Scientific name (Genus species)	Common name	N	Length, in millimeters				Weight, in grams		Percent abnormal
			[a]Mean Total	SD	[b]Mean Standard	SD	Mean	SD	
Reach B (91 m sampled on August 1, 1994)									
Catostomus platyrhynchus	mountain sucker	17	69	19.3	57	12.7	3.2	2.2	[e,f]18.0
Catostomus tahoensis	Tahoe sucker	10	69	46.4	56	38.4	7.4	14.3	[e]20.0
Cyprinus carpio	common carp	13	273	158	217	131	468	526	[e,f]31.0
Gambusia sp.	mosquitofish	1	40	--	35	--	0.8	--	0
Orthodon microlepidotus	Sacramento blackfish	7	81	11.2	64	9.6	5.3	2.6	[e]14.0
Pimephales promelas	fathead minnow	57	38	5.6	32	5.1	0.6	0.3	[e]1.8
Rhinichthys osculus	speckled dace	97	52	11.9	42	9.8	1.4	0.8	[e]1.0
Reach B (91 m sampled on September 28, 1995)									
Catostomus platyrhynchus	mountain sucker	29	106	17.9	87	14.6	10.6	6.0	[e]10.0
Catostomus tahoensis	Tahoe sucker	21	122	54.7	99	44.8	28.9	45.3	[e]28.6
Cyprinus carpio	common carp	202	134	107	113	111	166	468	[e]4.0
Lepomis cyanellus	green sunfish	11	69	21.2	55	17.1	7.7	9.4	0
Micropterus dolomieu	smallmouth bass	2	158	36.1	127	31.1	65.8	51.0	0
Orthodon microlepidotus	Sacramento blackfish	19	61	7.0	49	7.6	2.2	0.8	0
Pimephales promelas	fathead minnow	18	49	5.2	40	4.4	1.2	0.3	0
Rhinichthys osculus	speckled dace	30	56	5.9	46	4.8	1.9	0.7	0
Richardsonius egregius	Lahontan redside	3	68	2.9	55	2.6	3.4	0.5	0

Table 33. Data for fish and crayfish collected at sites on the Carson River: Carson River at Fort Churchill State Park, Nev. (site 9, fig. 1), 1993-1996--Continued.

Scientific name (Genus species)	Common name	N	Length, in millimeters				Weight, in grams		Percent abnormal
			[a]Mean Total	SD	[b]Mean Standard	SD	Mean	SD	
Reach B (91 m sampled on October 10, 1996) at sites on									
Catostomus platyrhynchus	mountain sucker	68	96	10.5	83	9.4	9.3	3.5	[f]1.5
Catostomus tahoensis	Tahoe sucker	20	136	31.9	114	26.3	30.4	21.2	[e,f]40
Cyprinus carpio	common carp	11	239	170	190	137	451	717	[c]18
Micropterus dolomieu	smallmouth bass	1	57	--	49	--	2.9	--	0
Morone chrysops	white bass	1	137	--	108	--	34.8	--	0
Orthodon microlepidotus	Sacramento blackfish	4	105	11.8	3	12.7	9.1	1.9	0
Lepomis cyanellus	green sunfish	7	83	20.7	69	17.8	11.8	10.1	0
Perca flavescens	yellow perch	1	96	--	83	--	8.1	--	0
Pimephales promelas	fathead minnow	78	54	5.4	43	4.2	1.6	0.5	[f]1.3
Rhinichthys osculus	speckled dace	98	68	5.1	57	4.9	3.1	0.8	0
Richardsonius egregius	Lahontan redside	5	88	5.5	72	5.6	7.2	2.1	0
Reach C (122 m sampled on October 7, 1993)									
Catostomus platyrhynchus	mountain sucker	29	67	19.9	54	16.9	3.7	3.8	0
Catostomus tahoensis	Tahoe sucker	108	72	15.1	58	12.2	4.0	4.5	[e]1.0
Cyprinus carpio	common carp	72	102	71.5	80	57.3	47.0	149	0
Lepomis cyanellus	green sunfish	5	81	12.0	66	10.7	9.9	5.3	0

Table 33. Data for fish and crayfish collected at sites on the Carson River: Carson River at Fort Churchill State Park, Nev. (site 9, fig. 1), 1993-1996--Continued.

Scientific name (Genus species)	Common name	N	Length, in millimeters				Weight, in grams		Percent abnormal
			[a]Mean Total	SD	[b]Mean Standard	SD	Mean	SD	
Reach C (122 m sampled on October 7, 1993)									
Pimephales promelas	fathead minnow	30	54	6.7	44	5.6	1.6	0.6	0
Rhinichthys osculus	speckled dace	48	54	6.3	45	4.9	1.7	0.6	0
Richardsonius egregius	Lahontan redside	162	65	9.4	51	7.3	2.5	1.0	0

a—For fish, total length, meassured from tip of snout to end of caudal (tail) fin; for crayfish, total length measured from tip of rostrum to posterior edge of telson.

b--Standard length measured from snout to end of backbone in the caudal peduncle.

c--Fin erosion. Mild fin-erosion is considered part of the normal 'wear and tear' on fish. The type of fin erosion considered an abnormality is more severe and indicates fungal or bacterial infections, various types of stress, and poor overall health (Meador and others, 1993).

d--Tumor.

e--Lesion.

f--Anchor worm.

Table 34. Data for fish and crayfish collected at sites on the Truckee River: Upper Truckee River at South Lake Tahoe, Calif. (site 11, fig. 1), October 1, 1993. [Symbols and abbreviations:--, not determined; N, number; SD, standard deviation; m, meter]

Scientific name (Genus species)	Common name	N	Length,in millimeters				Weight, in grams		Percent abnormal
			[a]Mean Total	SD	[b]Mean Standard	SD	Mean	SD	
Reach A (91 m sampled on October 1, 1993)									
Catostomus platyrhynchus	mountain sucker	2	80.5	7.8	66.5	4.9	5.5	0.9	0
Catostomus tahoensis	Tahoe sucker	13	128	47.3	104	40.1	31.2	33.6	[c]7.7
Cottus beldingi	Paiute sculpin	1	78	--	63.0	--	5.8	--	0
Oncorhynchus mykiss	rainbow trout	4	175	44.6	147	39.7	60.2	46.6	0
Pacifastacus leniusculus	crayfish	1	85	--	--	--	--	--	0
Rhinichthys osculus	speckled dace	79	45.6	8.2	37.6	7.0	1.1	0.7	0
Richardsonius egregius	Lahontan redside	25	80.6	8.2	64.6	7.0	5.4	1.4	0
Salmo trutta	brown trout	10	137	18.3	138	16.5	44.8	16.3	0

a--For fish, total length, measured from tip of snout to end of caudal (tail) fin; for crayfish, total length measured from tip of rostrum to posterior edge of telson.

b--Standard length measured from snout to end of backbone in the caudal peduncle.

c--Deformity.

Table 35. Data for fish and crayfish collected at sites on the Truckee River: Truckee River at Farad, Calif. (site 12, fig. 1), 1993-1996.
[Symbols and abbreviations:--, not determined; N, number; SD, standard deviation; m, meter]

Scientific name (Genus species)	Common name	N	Length,in millimeters				Weight, in grams		Percent abnormal
			[a]Mean Total	SD	[b]Mean Standard	SD	Mean	SD	
Reach A (297 m sampled on September 29, 1993)									
Catostomus platyrhynchus	mountain sucker	1	126	--	100	--	24.4	--	0
Cottus beldingi	Paiute sculpin	19	68	26.5	55	21.9	6.3	7.7	0
Oncorhynchus mykiss	rainbow trout	1	95	--	77	--	8.4	--	0
Pacifastacus leniusculus	crayfish	8	89	12.1	--	--	--	--	0
Rhinichthys osculus	speckled dace	7	34	2.9	29	2.1	0.5	0.3	0
Salmo trutta	brown trout	3	129	15.1	104	11.5	21.5	8.6	0
Reach A (297 m sampled on August 1, 1994)									
Catostomus platyrhynchus	mountain sucker	1	95	--	80	--	10.4	--	0
Cottus beldingi	Paiute sculpin	62	79	19.1	66	16.8	8.6	4.9	0
Oncorhynchus mykiss	rainbow trout	1	69	--	60	--	2.9	--	0
Rhinichthys osculus	speckled dace	1	56	--	49	--	1.7	--	0
Reach A (297 m sampled on October 2, 1995)									
Cottus beldingi	Paiute sculpin	75	83	17.3	69	14.5	9.0	4.6	0
Oncorhynchus mykiss	rainbow trout	4	134	99.4	111	84.7	59.4	107	0
Reach A (297 m sampled on October 7, 1996)									
Cottus beldingi	Paiute sculpin	89	[c]44	[d]4.5	--	--	[c]1.2	[d]0.25	0
Oncorhynchus mykiss	rainbow trout	2	81	4.2	--	--	5.0	0.49	0
Pacifastacus leniusculus	crayfish	2	--	--	--	--	--	--	0
Rhinichthys osculus	speckled dace	1	68	--	--	--	--	--	0
Salmo trutta	brown trout	6	112	5.6	--	--	13.2	2.4	0
Reach B (425 m sampled on September 29, 1993)									
Cottus beldingi	Paiute sculpin	22	72	23.8	58	19.6	7.3	6.5	0
Oncorhynchus mykiss	rainbow trout	1	79	--	65	--	4.6	--	0
Pacifastacus leniusculus	crayfish	23	87	15.5	--	--	--	--	0
Rhinichthys osculus	speckled dace	1	70	--	68	--	3.6	--	0

Table 35. Data for fish and crayfish collected at sites on the Truckee River: Truckee River at Farad, Calif. (site 12, fig. 1), 1993-1996--Continued.

Scientific name (Genus species)	Common name	N	Length,in millimeters [a]Mean Total	SD	[b]Mean Standard	SD	Weight, in grams Mean	SD	Percent abnormal
Reach C (271 m sampled on September 29, 1993)									
Cottus beldingi	Paiute sculpin	34	57	19.2	47	16.1	3.6	5.3	0
Oncorhynchus mykiss	rainbow trout	3	107	16.5	88	12.8	13.2	6.4	0
Pacifastacus leniusculus	crayfish	18	75	21.3	--	--	--	--	0
Salmo trutta	brown trout	2	136	13.4	113	10.6	23.9	6.1	0

a--For fish, total length, measured from tip of snout to end of caudal (tail) fin. For crayfish, total length measured from tip of rostrum to posterior edge of telson.
b--Standard length measured from snout to end of backbone in the caudal peduncle.
c--Median.
d--Interquartile range.

Table 36. Data for fish and crayfish collected at sites on the Truckee River: Truckee River near Sparks, Nev. (site 15, fig. 1), September 30, 1993. [Symbols and abbreviations:--, not determined; N. number; SD, standard deviation]

Scientific name (Genus species)	Common name	N	Length,in millimeters				Weight, in grams		Percent abnormal
			[a]Mean Total	SD	[b]Mean Standard	SD	Mean	SD	
Reach A (sampled Sept. 30, 1993)									
Catostomus platyrhynchus	mountain sucker	163	111	28.1	94	24.2	20	12.3	0
Catostomus tahoensis	Tahoe sucker	4	150	29.7	128	26.4	47	24.9	0
Lepomis cyanellus	green sunfish	1	85	--	69	--	10	--	0
Oncorhynchus mykiss	rainbow trout	1	245	--	190	--	154	--	0
Pacifastacus leniusculus	crayfish	22	94	13.0	--	--	--	--	0
Rhinichthys osculus	speckled dace	1	46	--	37	--	1.1	--	0
Richardsonius egregius	Lahontan redside	38	86	14.5	72	12.1	7.2	3.3	0

a--For fish, total length measured from tip of snout to end of caudal (tail) fin; For crayfish, total length measured from tip of rostrum to posterior edge of telson.

b--Standard length measured from snout to end of backbone in the caudal peduncle.

Table 37. Data for fish and crayfish collected at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-1997.
[Symbols and abbreviations:--, not determined; N, number; SD, standard deviation; m, meter]

Scientific name (Genus species)	Common name	N	Length,in millimeters				Weight, in grams		Percent abnormal
			[a]Mean Total	SD	[b]Mean Standard	SD	Mean	SD	
Reach A (116 m sampled on October 6, 1993)									
Catostomus platyrhynchus	mountain sucker	16	52.5	9.1	42.9	8.2	--	--	[c]6.3
Catostomus tahoensis	Tahoe sucker	61	56.6	21.9	47.0	18.7	--	--	[c,d,e]14.8
Cyprinus carpio	common carp	7	56.0	13.7	45.7	10.8	--	--	[c]14.3
Lepomis cyanellus	green sunfish	3	60.3	4.5	49.3	2.3	--	--	0
Pacifastacus leniusculus	crayfish	39	65.2	21.2	--	--	--	--	0
Pimephales promelas	fathead minnow	24	49.9	5.6	40.7	4.7	--	--	[c]16.7
Rhinichthys osculus	speckled dace	36	47.3	3.7	39.5	2.9	--	--	0
Richardsonius egregius	Lahontan redside	56	44.9	15.7	36.4	13.1	--	--	[c]6.7
Reach B (239 m sampled on October 4, 1993)									
Catostomus platyrhynchus	mountain sucker	14	60.6	18.6	51.2	17.9	3.3	4.3	[c,d]14.3
Catostomus tahoensis	Tahoe sucker	21	53.2	18.5	44.0	15.2	2.7	5.7	[c,d]14.3
Pacifastacus leniusculus	crayfish	18	74.7	21.7	--	--	--	--	0
Pimephales promelas	fathead minnow	5	38.2	6.3	31.4	5.4	0.5	0.2	0
Rhinichthys osculus	speckled dace	40	47.4	8.8	39.7	6.8	1.4	0.9	[c,d]7.5
Richardsonius egregius	Lahontan redside	1	70.0	--	59.0	--	3.3	--	0
Reach C (244 m sampled on October 4, 1993)									
Catostomus tahoensis	Tahoe sucker	47	101	41.2	81.4	34.2	17.3	14.2	[c,d,e]42.5
Pacifastacus leniusculus	crayfish	26	81.2	14.9	88.0	12.8	13.2	6.4	0
Pimephales promelas	fathead minnow	7	61.7	13.1	50.7	10.9	2.5	1.8	0
Rhinichthys osculus	speckled dace	14	46.2	12.1	38.0	10.5	1.4	1.2	0
Richardsonius egregius	Lahontan redside	48	61.5	21.1	50.4	17.7	3.2	2.9	[e]4.3

Table 37. Data for fish and crayfish collected at sites on the Truckee River: Truckee River at Clark, Nev. (site 17, fig. 1), 1993-1997--Continued.

Scientific name (Genus species)	Common name	N	Length,in millimeters [a]Mean Total	SD	[b]Mean Standard	SD	Weight, in grams Mean	SD	Percent abnormal
Reach C (244 m sampled on August 3, 1994)									
Catostomus platyrhynchus	mountain sucker	8	89	15.4	77	13.2	8.1	3.6	0
Catostomus tahoensis	Tahoe sucker	21	104	26.9	87	24.1	15.0	13.6	[c]4.8
Cyprinus carpio	common carp	20	55	13.1	46	10.7	3.4	2.3	[d]5.0
Gambusia sp.	mosquito-fish	1	44	--	35	--	1.2	--	0
Pacifastacus leniusculus	crayfish	15	80	16.5	--	--	--	--	0
Rhinichthys osculus	speckled dace	12	58	7.8	49	6.6	2.1	0.9	[e]8.3
Richardsonius egregius	Lahontan redside	105	79	16.7	66	13.8	5.6	3.3	[e]1.0
Salmo trutta	brown trout	1	222	--	197	--	121	--	[d]100.0
Reach C (244 m sampled on October 3, 1995)									
Catostomus tahoensis	Tahoe sucker	27	111	41.1	95	36.5	23.5	29.1	[c,e]22.2
Lepomis cyanellus	green sunfish	1	121	--	101	--	33.3	--	0
Pimephales promelas	fathead minnow	1	48	--	38	--	0.9	--	0
Rhinichthys osculus	speckled dace	11	37	1.6	30	1.4	1.1	1.4	0
Richardsonius egregius	Lahontan redside	114	84	8.0	69	7.5	6.2	2.0	[d]1.0
Salmo trutta	brown trout	2	195	29.0	167	24.0	79.3	38.2	0
Reach C (244 m sampled on October 8, 1996)									
Catostomus tahoensis	Tahoe sucker	62	125	50.6	105	44.4	36.3	41.8	[c,e]11.3
Catostomus platyrhynchus	mountain sucker	38	70	20.8	59	17.7	5.0	5.2	[c]2.6
Lepomis cyanellus	green sunfish	1	93	--	77	--	14.3	--	0
Rhinichthys osculus	speckled dace	7	60	7.3	51	6.2	2.5	.85	0
Richardsonius egregius	Lahontan redside	157	92	16.1	76	13.8	8.3	4.6	[e]1
Reach C (244 m sampled on August 27, 1997)									
Catostomus platyrhynchus	mountain sucker	87	94	18.6	--	--	10.3	5.3	[c,d]2.3
Catostomus tahoensis	Tahoe sucker	151	130	39.4	--	--	33.5	36.0	[c,e]8.6
Cyprinus carpio	common carp	13	53	10.5	--	--	2.6	1.2	0
Oncorhynchus clarki henshawi	Lahontan cutthroat trout	1	213	--	--	--	67.2	--	0

Table 37. Data for fish and crayfish collected at sites on the Truckee River: Truckee River at Clark, Nev. (Site 17, fig. 1), 1993-1997--Continued.

Scientific name (Genus species)	Common name	N	Length,in millimeters [a]Mean Total	SD	[b]Mean Standard	SD	Weight, in grams Mean	SD	Percent abnormal
Reach C (244 m sampled on August 27, 1997)									
Pacifastacus leniusculus	crayfish	20	67	29.7	--	--	--	--	0
Rhinichthys osculus	speckled dace	11	48	13.8	--	--	1.4	1.3	0
Richardsonius egregius	Lahontan redside	111	74	7.0	--	--	4.3	1.4	0
Salmo trutta	brown trout	2	150	19.1	--	--	36.5	9.5	0

a--For fish, total length measured from tip of snout to end of caudal (tail) fin; for crayfish, total length measured from tip of rostrum to posterior edge of telson.

b--Standard length measured from snout to end of backbone in the caudal peduncle.

c--Anchor worm.

d--Fin erosion Mild fin-erosion is considered part of the normal 'wear and tear' on fish. The type of fin erosion considered an abnormality is more severe and indicates fungal or bacterial infections, various types of stress, and poor overall health (Meador and others, 1993).

e--Tumor.

Table 38. Data for fish and crayfish collected at sites on the Truckee River: Truckee River at Dead Ox Wash near Nixon, Nev. (site 19, fig. 1), October 5, 1993. [Symbols and abbreviations:--, not determined; N, number; SD, standard deviation]

Scientific name (Genus species)	Common name	N	Length,in millimeters				Weight, in grams		Percent abnormal	Resident
			[a]Mean Total	SD	[b]Mean Standard	SD	Mean	SD		
Reach A (sampled on October 5, 1993)										
Catostomus platyrhynchus	mountain sucker	2	79	3.5	52	21.2	3.8	3.6	[c]50.0	Native
Catostomus tahoensis	Tahoe sucker	39	63	28.7	51	23.8	5.2	12.1	[c]17.9	Native
Gambusia sp.	mosquitofish	1	40	--	32	--	0.7	--	0	Nonnative
Pacifastacus leniusculus	crayfish	1	88	--	--	--	--	--	0	Native
Pimephales promelas	fathead minnow	9	51	7.8	42	6.7	1.5	0.8	[c]11.1	Nonnative
Richardsonius egregius	Lahontan redside	15	37	6.2	31	4.7	0.6	0.3	0	Native

a--For fish, total length, measured from tip of snout to end of caudal (tail) fin. For crayfish, total length measured from tip of rostrum to posterior edge of telson.

b--Standard length measured from snout to end of backbone in the caudal peduncle.

c--Anchor worm.