

Physical, Chemical, and Biological Data for Detailed Study of Irrigation Drainage in and near Stillwater, Fernley, and Humboldt Wildlife Management Areas and Carson Lake, West-Central Nevada, 1987-89

By Timothy G. Rowe¹, Michael S. Lico¹, Robert J. Hallock²,
Ann S. Maest¹, and Ray J. Hoffman¹

¹ U.S. Geological Survey

² U.S. Fish and Wildlife Service

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For additional information
write to:

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Room 227, Federal Building
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Carson City, NV 89701

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CONVERSION FACTORS AND VERTICAL DATUM

<i>Multiply</i>	<i>By</i>	<i>To obtain</i>
acre-foot	1,233	cubic meter
cubic foot per second (ft ³ /s)	0.02832	cubic meter per second
foot (ft)	0.3048	meter
inch (in.)	2.54	centimeter
mile (mi)	1.609	kilometer

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

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By

*Timothy G. Rowe¹, Michael S. Lico¹, Robert J. Hallock²,
Ann S. Maest¹, and Ray J. Hoffman¹*

ABSTRACT

Physical, chemical, and biological data associated with irrigation drainage were collected between September 1987 and December 1989 at several sites in and near Stillwater, Fernley, and Humboldt Wildlife Management Areas, and Carson Lake, Nevada. The data were collected in support of the U.S. Department of the Interior program of detailed studies of irrigation-drainage projects in the western United States.

This report contains data on trace-element concentrations in samples of surface water, ground water, drift and detritus, bottom sediment, pore water, and biota (plants, invertebrates, fish, and waterfowl). Other data presented in the report include surface-water discharge; ground-water levels; lithology of wells; mineralogy of cores and bottom sediment; concentrations of major dissolved constituents, nitrogen, phosphorus, organic carbon, and radiochemical constituents in water; and particle-size determinations and concentrations of organochlorine pesticides and organic carbon in bottom sediment.

INTRODUCTION

Background

A reconnaissance investigation by the U.S. Department of the Interior (DOI) in 1986-87 (Hoffman and others, 1990) indicated that potentially toxic contaminants in irrigation drain water could pose a threat to human health, fish, and wildlife in and near Stillwater Wildlife Management Area (WMA), Nevada. The study results indicated that samples of water, bottom sediment, and biota in areas affected by irrigation drainage contained concentrations of arsenic, boron, mercury, and selenium that exceeded either background levels or Federal and State criteria for the protection of human health, fish, and wildlife. Furthermore, the authors indicated (p. 75) that other contaminants in the study area were of environmental concern--namely, chromium, copper, zinc, un-ionized ammonia, sodium, and salinity.

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² U.S. Fish and Wildlife Service.

Because the 1986-87 reconnaissance investigation was not designed to determine cause-and-effect relations, and because of continued concern expressed by DOI regarding the possible adverse effects of irrigation drainage on wildlife resources, a more detailed study of the source, transport, and fate of potentially toxic contaminants in and near Stillwater WMA commenced in 1988. The working objective for this detailed study was to determine the extent, magnitude, and effects of contaminants associated with agricultural drainage and, where effects are documented, the sources and exposure pathways that cause contamination.

The genesis of the Stillwater WMA investigation, one of several reconnaissance-level studies initiated by DOI in 1986, is described in detail by Deason (1986). For additional background information on the potential adverse effect of poor-quality agricultural drainage on fish and wildlife, and its relation to the DOI irrigation drainage program, the reader is encouraged to consult articles by Presser and Ohlendorf (1987), Deason (1987), and Sylvester and others (1988).

Purpose and Scope of This Report

The purpose of this report is to present, in tabular and graphical form, much of the physical, chemical, and biological data collected as part of the detailed study of irrigation drainage in Stillwater, Fernley, and Humboldt WMA's and in Carson Lake. Some of the project data are published elsewhere (see section on "Sources of study-funded data not tabulated herein" in this report). In scope, this report includes hydrological and geochemical data from 84 sampling sites (surface water plus ground water) and biological data from 100 sampling sites. Data were collected in 1987-89, either discretely or continuously, on the basis of seasonal irrigation practices and (or) biological productivity and life-cycle patterns of resident and migratory waterfowl in the study area. These data represent a collective effort by scientists of the U.S. Fish and Wildlife Service (USFWS) and the U.S. Geological Survey (USGS).

Acknowledgments

The authors gratefully acknowledge the assistance of the following individuals in the design of the data-collection program and the collection of data in the three WMA's and Carson Lake: Norman A. Saake of the Nevada Department of Wildlife; Ronald M. Anglin, Timothy D. Bowman, Howard L. Burge, Gerald L. Deutscher, Leslie J. Dubuc, William G. Henry, C. Anne Janik, Linda L. Kerley, and Steven P. Thompson of the U.S. Fish and Wildlife Service; Theodore G. Roefs of the U.S. Bureau of Reclamation; and Robert E. Bostic, Jennifer L. Hughes, and Laurence G. Miller of the U.S. Geological Survey.

STUDY AREAS

The study areas (fig. 1) are part of the Basin and Range physiographic province in west-central Nevada. Stillwater WMA and Carson Lake are terminal-sink areas in the lower Carson River drainage system; Fernley WMA is adjacent to the Fernley Sink, about 20 mi southeast of Pyramid Lake and 30 mi west of the Stillwater WMA. Humboldt WMA is part of the Humboldt Sink, which, except during unusually high runoff, is the terminus of the Humboldt River drainage system. Humboldt WMA is about 40 mi east of Pyramid Lake and 20 mi north of Stillwater Wildlife Management Area. Relevant sources of technical information about the study areas include Eakin and Lamke (1966), Glancy and Katzer (1976), Hallock and others (1981), Van Denburgh and Arteaga (1985), Brown and others (1986), and Hoffman and others (1990).

DATA-COLLECTION SITES

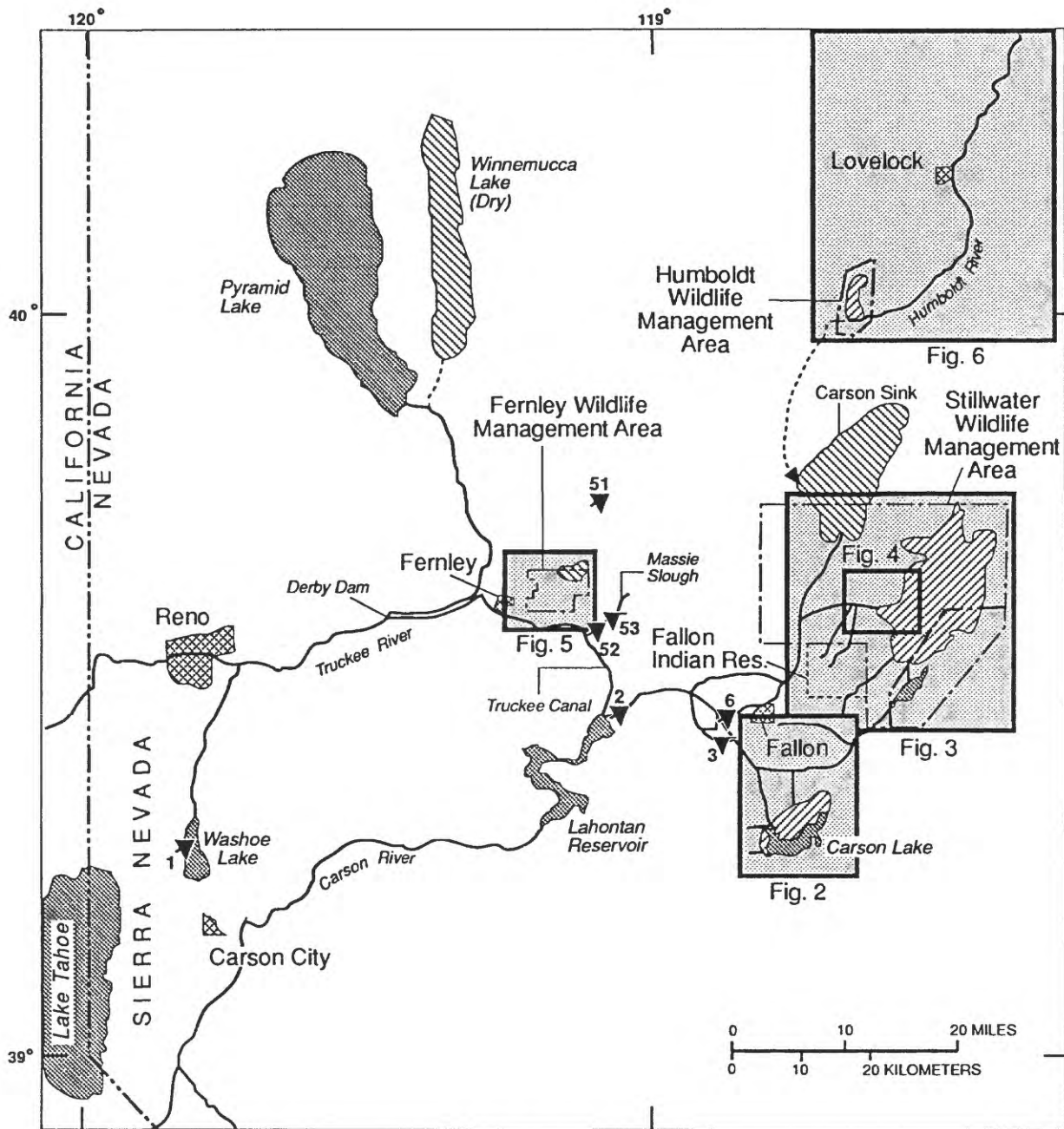
The principal data-collection sites for the detailed study are listed in tables 1 and 22, in downstream/downgradient order, for the most part. Site locations are shown in figures 1-7. Of the principal sampling sites, 37 were in Stillwater WMA, 22 in Fernley WMA, 5 in Humboldt WMA, 13 in the Carson Lake area, and 5 were background sites (reference sites unaffected by irrigation drainage). Additional sites were sampled by USFWS on a "one-time" basis for drift, detritus, and, if present, attached algae in agricultural drains throughout the Fallon agricultural area. Data for these additional sites are listed in tables 20 and 21 and site locations are shown in figures 5 through 7.

SAMPLE COLLECTION, PRESERVATION, AND ANALYSIS

Instantaneous onsite measurements of surface-water discharge and quality, and collection of water samples for laboratory analysis, began in September 1987 and ended in December 1989. Measurements of water temperature, specific conductance, pH, and dissolved oxygen were recorded at six sites during the period from July 1988 to December 1989; surface-water discharge was recorded at four of the six sites. Samples of intra-sediment pore water were collected in August 1989 as part of an investigation to quantify arsenic and selenium speciation in selected aquatic environments. Core materials were collected from November 1987 to January 1989, and biological samples for trace-element analysis were collected from October 1987 to November 1989.

The field and laboratory procedures used for onsite measurements of ambient flow and water quality (water temperature, specific conductance, dissolved oxygen, Eh, pH, and alkalinity) and collection, preservation, and analysis of samples of surface water, ground water, bottom sediment, and biota mostly were the same as those used during the 1986-87 reconnaissance investigation (Hoffman and others, 1990, p. 19-24). Exceptions or additions to those procedures are elaborated below.

Measurements of flow were made by using a float-type gage with digital recorder (Rantz and others, 1982, p. 26 and 36). Measurements of water temperature, specific conductance, pH, and dissolved oxygen were made by using a USGS minimonitor (Gordon and Katzenbach, 1983) and a digital recorder.



EXPLANATION






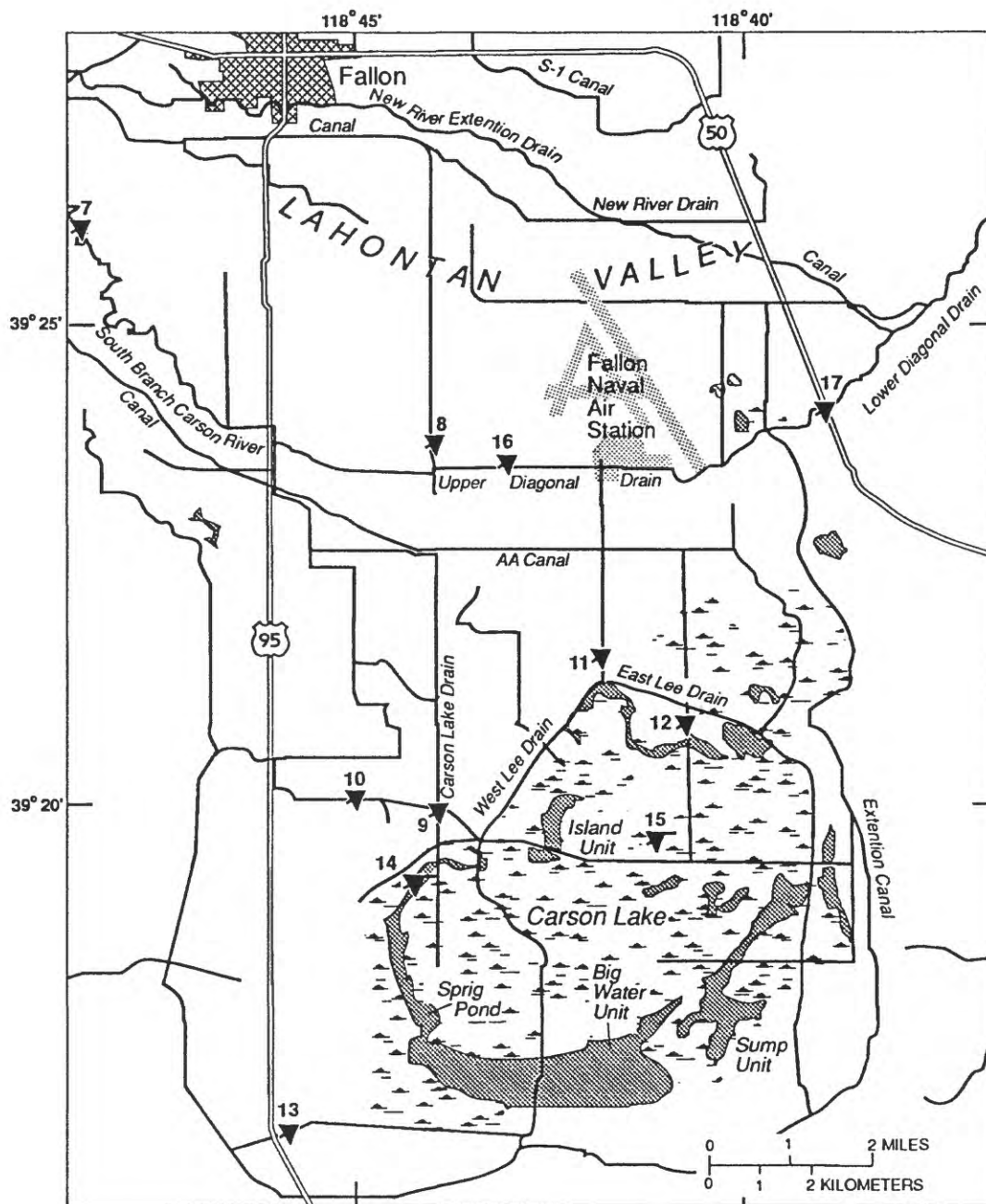
- | | | | |
|---|------------|---|--|
|  | OPEN WATER |  | SURFACE-WATER SAMPLING SITE--
Numbers are sites listed in table 1 |
|  | WETLANDS |  | BOTTOM-SEDIMENT SAMPLING SITE--
Numbers are sites listed in table 1 |
|  | PLAYA | | |

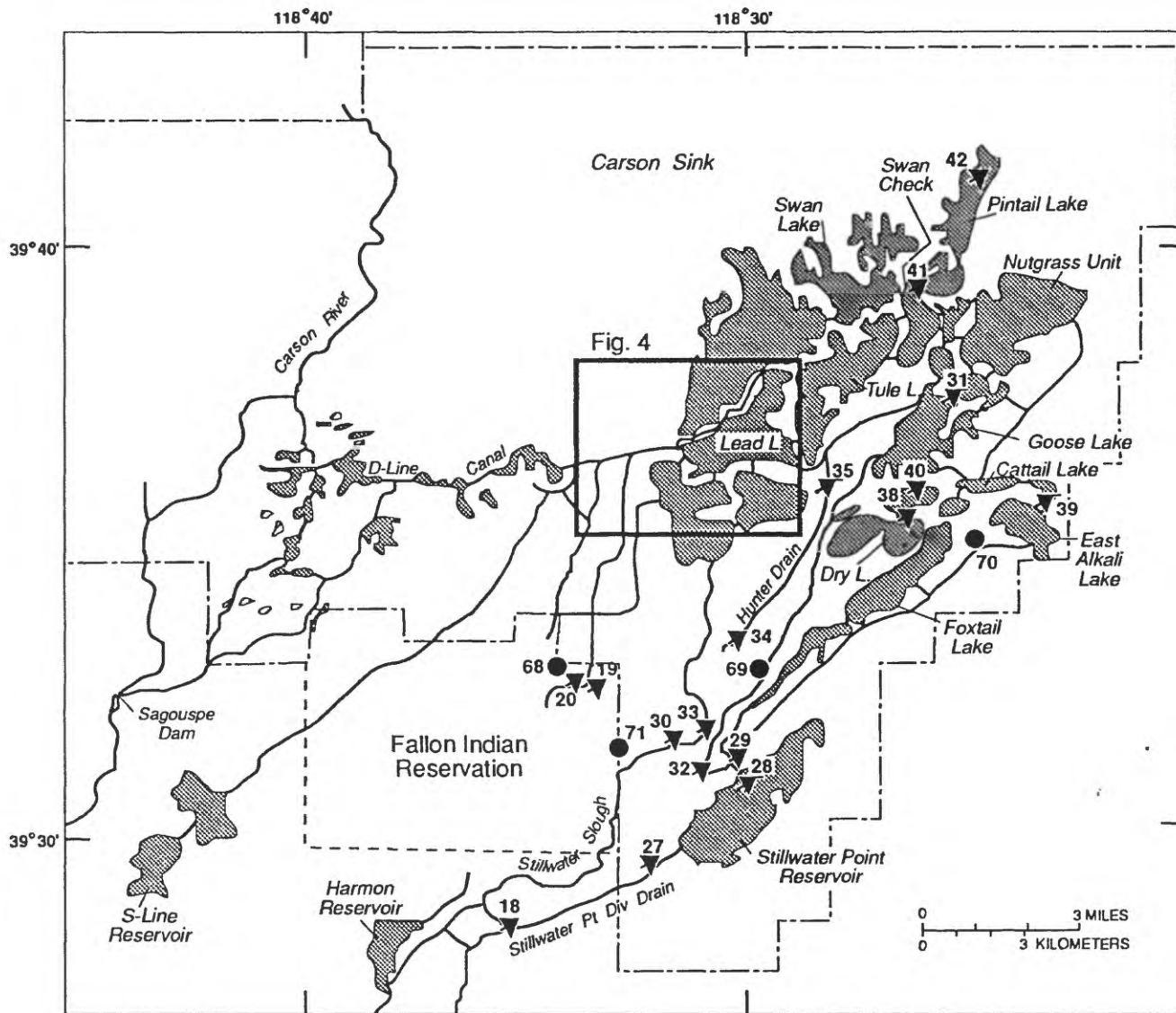
FIGURE 1. --Study areas and location of surface-water and bottom-sediment sampling sites not shown in figures 2-6.



EXPLANATION

- 16 ▾ SURFACE-WATER SAMPLING SITE--
Numbers are sites listed in table 1
- 15 ▾ BOTTOM-SEDIMENT SAMPLING SITE--
Numbers are sites listed in table 1

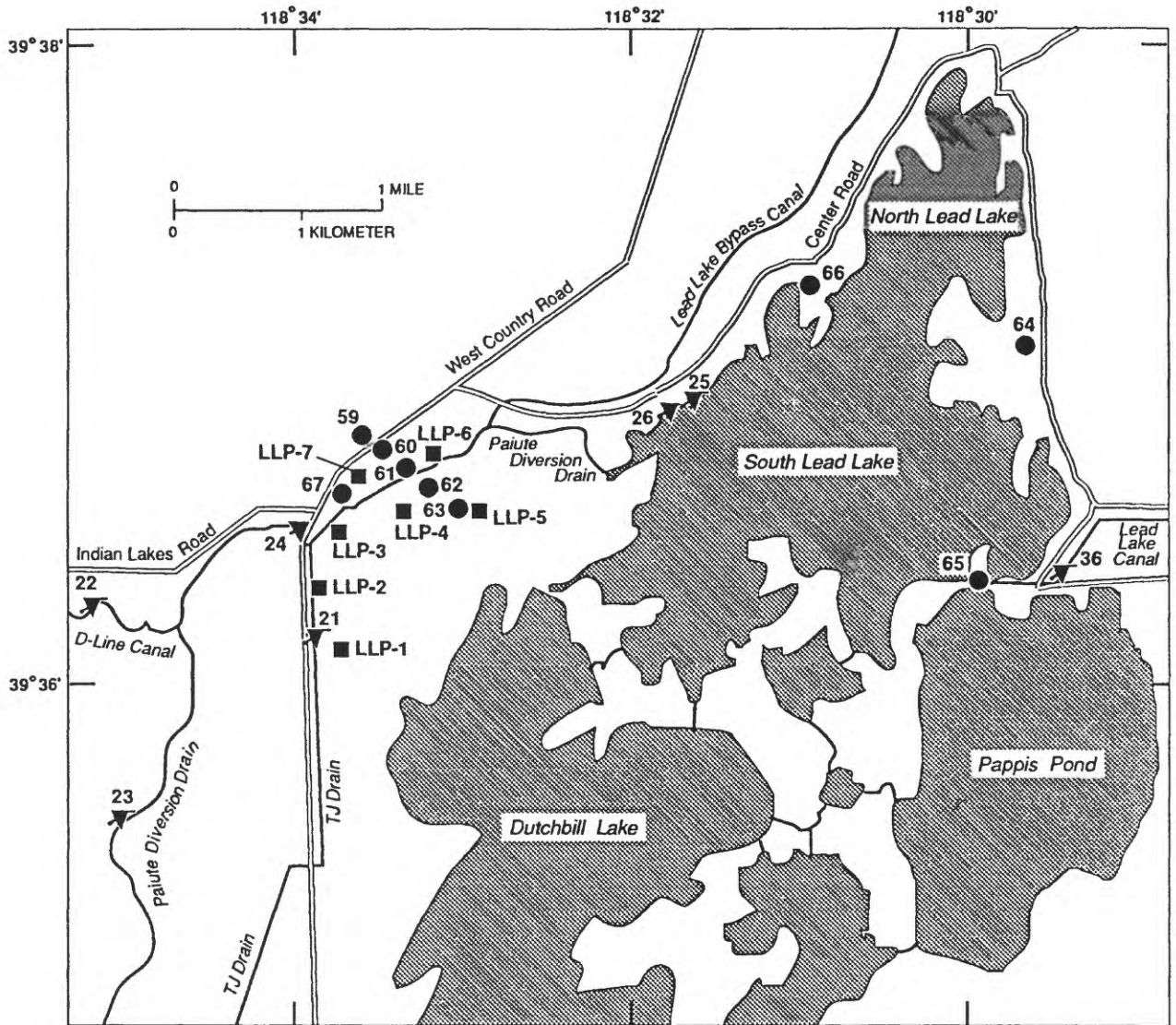
FIGURE 2. --Surface-water and bottom-sediment sampling sites in and near the Carson Lake area.



EXPLANATION

- BOUNDARY OF WILDLIFE MANAGEMENT AREA
- 18 ▾ SURFACE-WATER SAMPLING SITE--
Numbers are sites listed in table 1
- 23 ▾ BOTTOM-SEDIMENT SAMPLING SITE--
Numbers are sites listed in table 1
- 69 ● GROUND-WATER SAMPLING SITE--
Numbers are sites listed in table 22

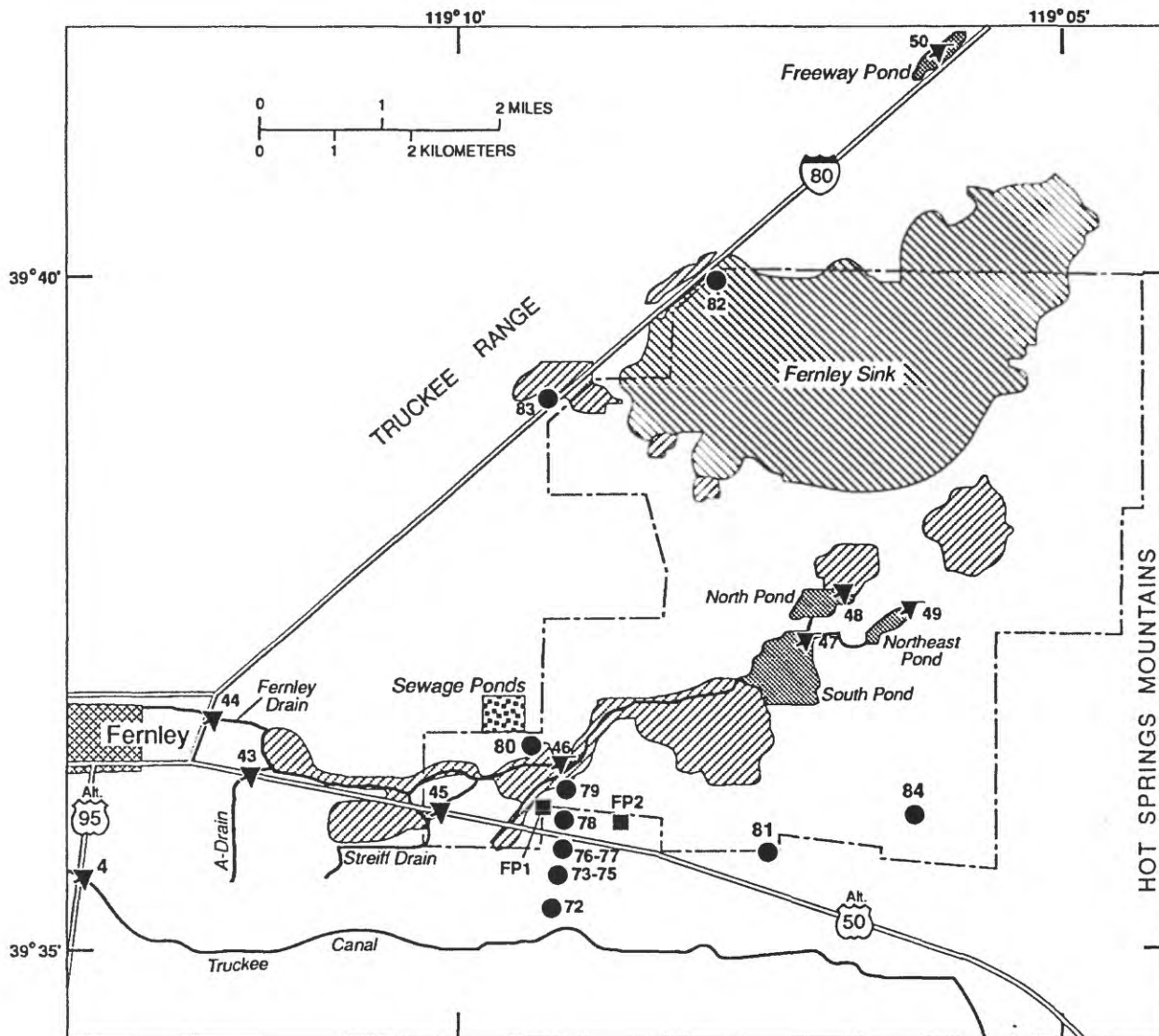
FIGURE 3. --Surface-water, bottom-sediment, and ground-water sampling sites in and near the Stillwater Wildlife Management Area.



EXPLANATION

- | | |
|---|---|
| <p>24 ▼ SURFACE-WATER SAMPLING SITE--
Numbers are sites listed in table 1</p> <p>21 ▼ BOTTOM-SEDIMENT SAMPLING SITE--
Numbers are sites listed in table 1</p> | <p>60 ● GROUND-WATER SAMPLING SITE--
Numbers are sites listed in table 22</p> <p>LLP-1 ■ PIEZOMETER SITES--Numbers are
sites listed in table 25</p> |
|---|---|

FIGURE 4. --Surface-water, bottom-sediment, and ground-water sampling sites and piezometer locations near Lead Lake area of the Stillwater Wildlife Management Area.



EXPLANATION









- | | | | |
|---|--------------------------------------|---|--|
|  | OPEN WATER |  44 | SURFACE-WATER SAMPLING SITE--
Numbers are sites listed in table 1 |
|  | WETLANDS |  49 | BOTTOM-SEDIMENT SAMPLING SITE--
Numbers are sites listed in table 1 |
|  | PLAYA |  80 | GROUND-WATER SAMPLING SITE--
Numbers are sites listed in table 22 |
|  | BOUNDARY OF WILDLIFE MANAGEMENT AREA |  FP1 | PIEZOMETER SITES--Numbers are
sites listed in table 25 |

FIGURE 5. --Surface-water, bottom-sediment, and ground-water sampling sites and piezometer locations in and near the Fernley Wildlife Management Area.

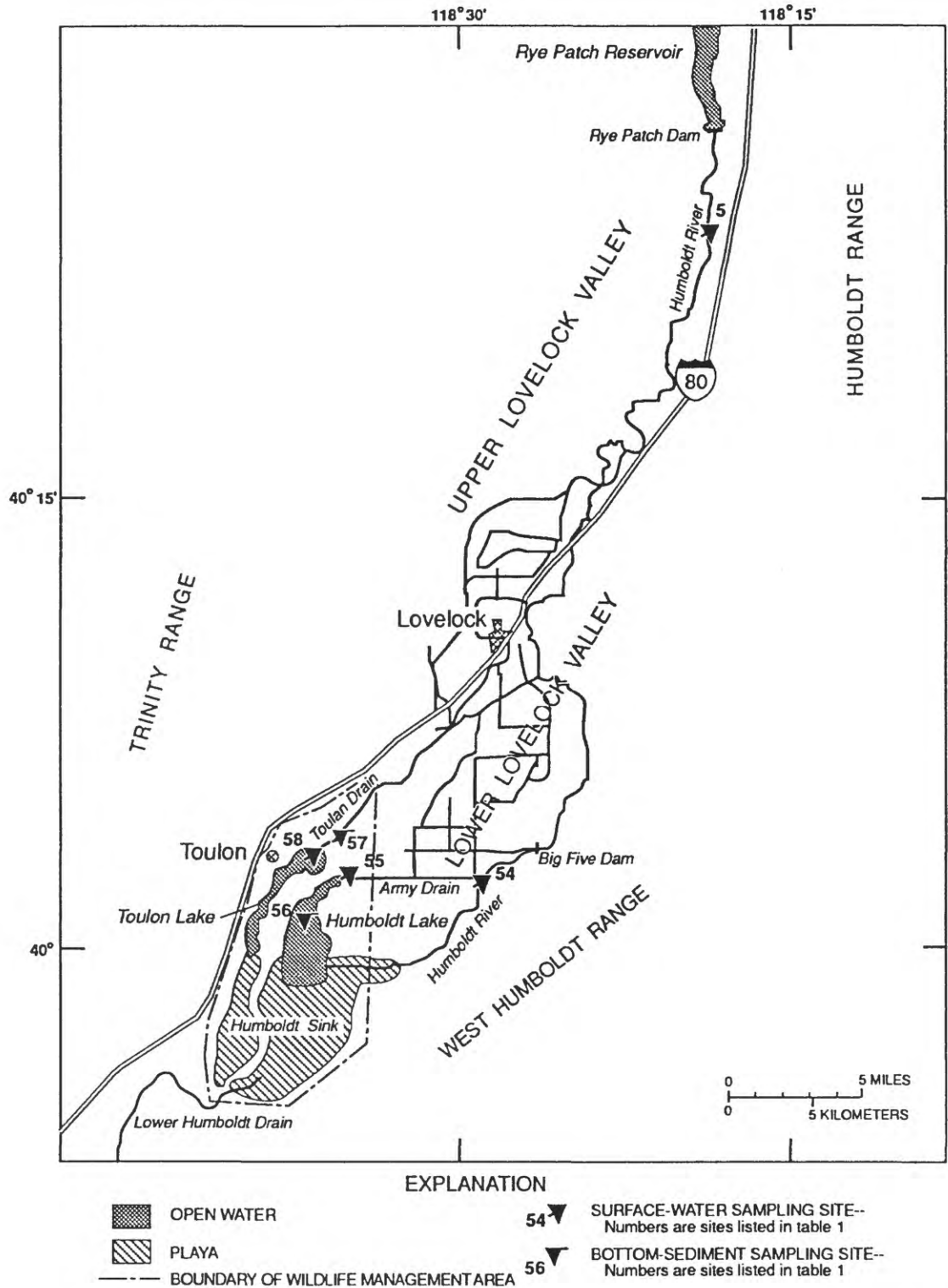
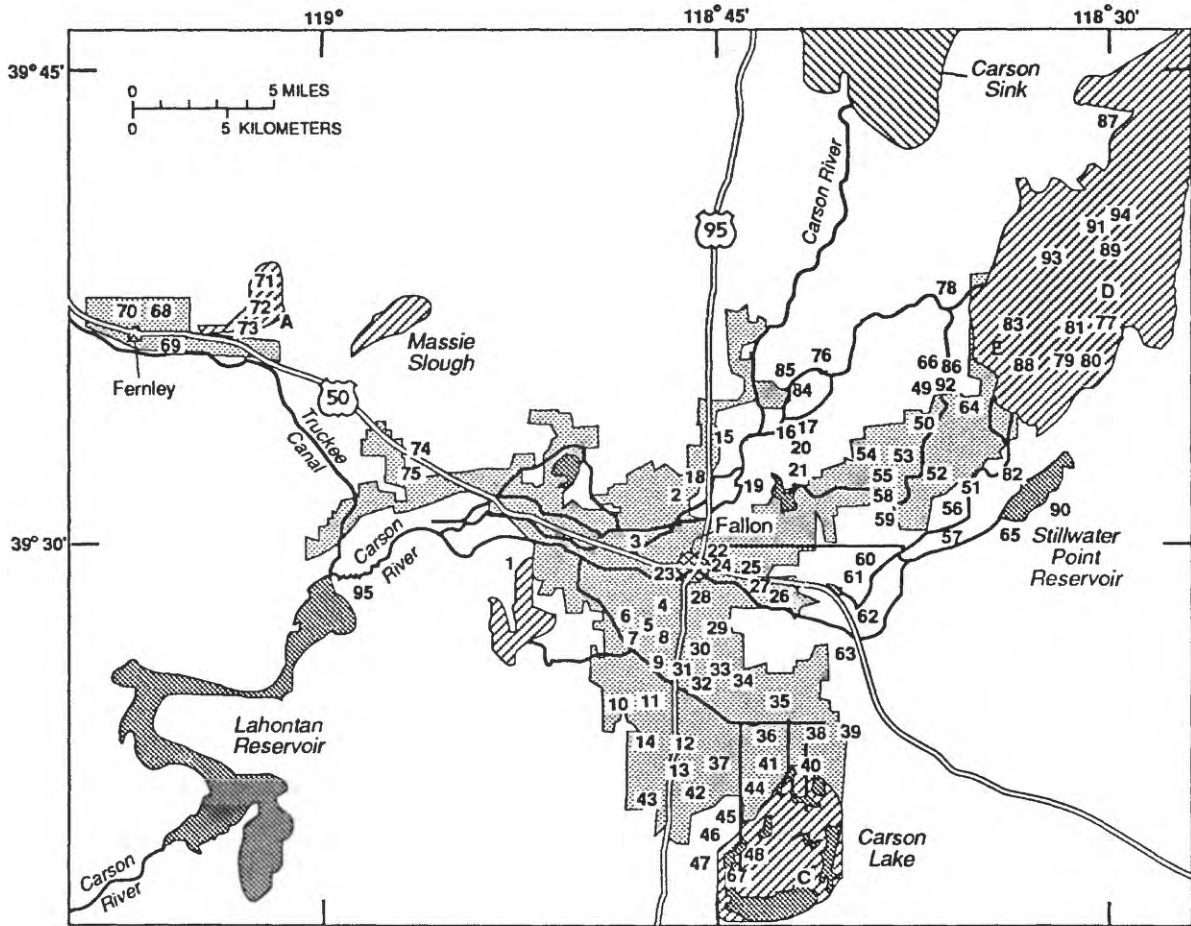


FIGURE 6. --Surface-water and bottom-sediment sampling sites in and near the Humboldt Wildlife Management Area.



EXPLANATION

-  OPEN WATER
-  WETLANDS
-  PLAYA
-  AGRICULTURAL AREA

FIGURE 7. --Sampling sites for drift, detritus, and biota in and near Stillwater and Fernley Wildlife Management Areas and Carson lake. Numbers refer to sites listed in tables 20 and 21.

Samples for determination of stable-isotope ratios (oxygen-18/16, hydrogen-2/1, carbon-13/12, and sulfur-34/32) in ground water were obtained according to the procedures described by Wood (1976, p. 2-8), and were analyzed using the procedures of the U.S. Geological Survey (Pritt and Jones, 1990, table 5.2). Iron species were determined colorimetrically using a modified version of the ferrozine method described by Stookey (1970). Arsenic species were determined by hydride-generation atomic-absorption spectrometry. Mineral analysis of sediment cores was done using X-ray diffraction techniques (Carroll, 1970, p. 51-61; Nuffield, 1966, p. 130-137) and an optical petrographic microscope for the examination of thin sections.

Total analyses of bottom sediment and core material were made as described by Hoffman and others (1990). Total-recoverable analysis of bottom sediment and core material represents a partial dissolution of sediment using methods described by Fishman and Friedman (1985) in which organic matter in the sediment was destroyed with hydrogen peroxide, then the sediment was extracted with a hot hydrochloric-acid solution. The resulting solution was analyzed for specified trace elements by atomic-absorption spectrometry or, in the case of boron, a colorimetric procedure.

Cores were collected from Hunter Drain (two sites), Massie Slough, and Lead Lake at South Lead Lake landing (one site each) in polyvinyl-chloride tubes by physically pushing the tube into the sediment. The cores were vertically extruded in 0.8-in. segments and placed in a nitrogen-pressurized squeezer which expressed the pore waters through a 0.45- μ m sterile filter directly into collection syringes. Temperature, pH, and Eh were measured on pore-fluid extracts. Pore waters were analyzed for chloride and sulfate with a Waters liquid chromatograph equipped with an IC-PAC A 10 polymethacrylate column (Oremland and others, 1990). Sulfide was determined colorimetrically after fixing with zinc acetate (Cline, 1969). Nitrate was determined by autoanalyzer (Oremland and others, 1990), iron and arsenic by graphite-furnace atomic absorption spectrometry (Slavin and others, 1983; Schlemmer and Welz, 1986), and selenite by flow-through hydride-generation, atomic absorption spectrometry (Oremland and others, 1990).

Samples of plant and animal drift (suspended material in water) were collected in drains₂ using stationary nylon nets with frame openings of about 212 in.² and netting with a 0.02-in. mesh size. The nets were placed in flowing water for about 24 hours to retain both living and dead plant and animal material in transit. The drift samples were classified as plant or animal depending on the dominant biota captured.

Samples of detritus for trace-element analysis were collected using a "slurp-tube" suction device (fig. 8) in shallow water (depths less than 6 in.). Detritus, which is defined as the upper 0.8 in. of oxic bottom sediment, consists of fine particulate debris, mostly organic. The sampling apparatus was constructed of two interlocking polyethylene funnels and an 18-in.-long polyethylene tube. Prior to submergence in water, the "funnel" was inverted with thumb held firmly over the tube opening. After gently contacting the sediment surface, thumb pressure was released. This action caused entrained air to rush out the tube and water and detritus to rush in to fill the vacuum created. About 20 detrital samples were collected at each site and

subsequently composited in a polyethylene bottle. After the sample was allowed to settle, excess water was decanted. The samples were then frozen in 1.5-in.-diameter plastic tubes, whereafter the frozen sample was extruded from the tube and sliced to separate the uppermost (lightest weight) fraction from the bottom (heaviest weight) fraction. The lighter weight component was refrozen in acid-rinsed bottles and shipped to the U.S. Fish and Wildlife Service Laboratory in Laurel, Md., for chemical analysis.

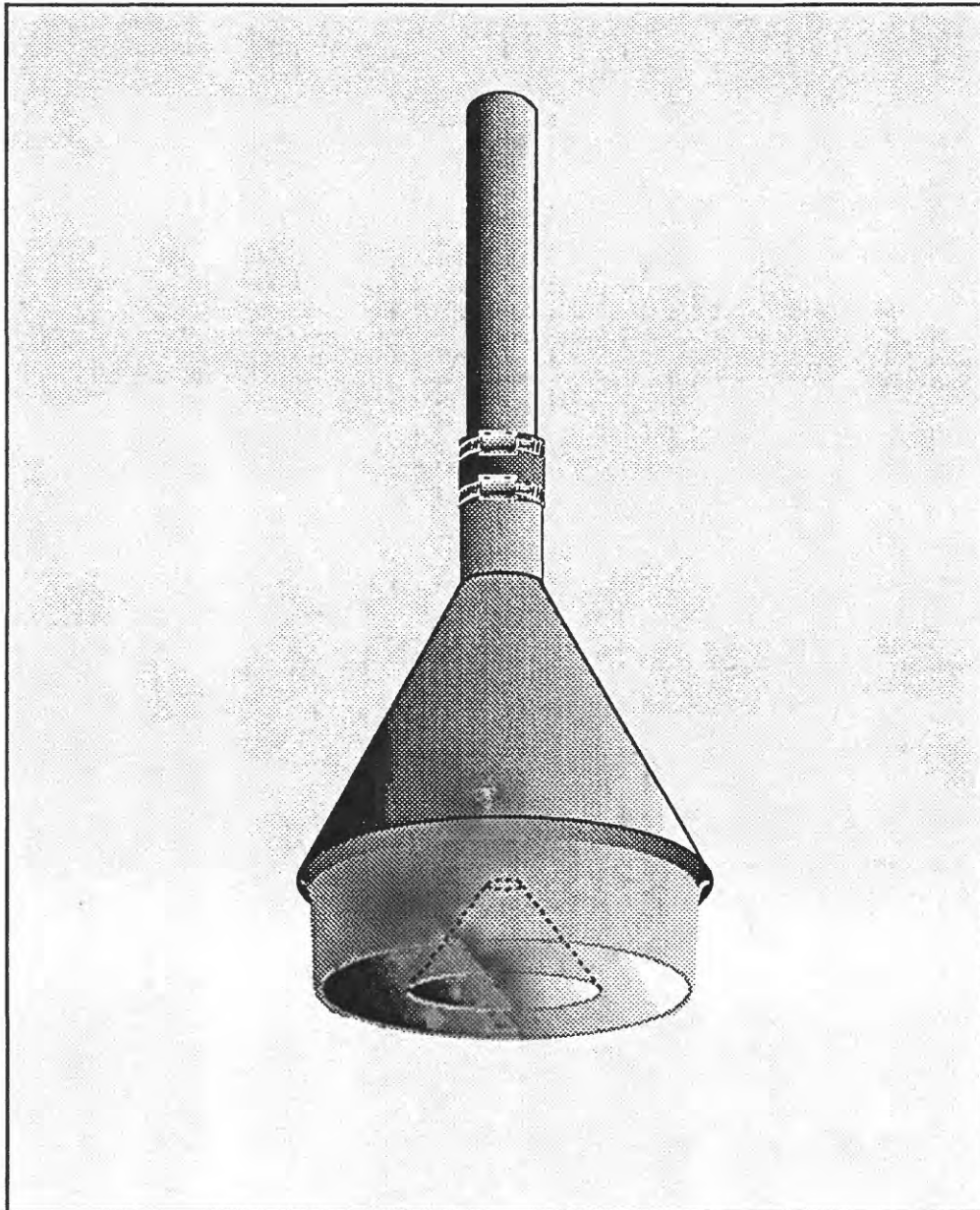


Figure 8. --Detritus sampling device, or "slurp tube" (shown about one-sixth actual size).

Adult brine-fly larvae, *Ephydra* species, were collected by using a commercially supplied vacuum-generation apparatus. The opening of an attached vacuum hose (suction tube) was covered with a piece of nylon window screen. Under vacuum, the suction tube was passed rapidly above both resting and near-surface airborne flies. Captured flies were held fast against the screen by the vacuum suction until the vacuum was terminated, after which large clusters of stunned flies were released into 1-gallon, wide-mouth polyethylene jars and immediately frozen. About a day later, the samples were picked free of litter, weighed, and placed in 2-ounce jars for subsequent shipment and chemical analysis.

The same stringent quality-assurance practices that were used in the 1986-87 reconnaissance investigation (Hoffman and others, 1990, p. 21-24) were continued in the 1987-89 detailed study. Quality-control data for trace-element analyses were obtained using field blanks. A field blank is a volume of deionized water that is treated as a water sample in all aspects, including exposure to water-sample containers (collecting bottle and churn splitter), filtration apparatus, chemical preservatives, holding times, and laboratory processing.

COMPILATIONS OF PHYSICAL, CHEMICAL, AND BIOLOGICAL DATA

Data listed herein are for the following: Surface-water and bottom-sediment--tables 1-19; biological, drift, and detritus sites--tables 20 and 21; ground water sites--tables 22-36; and quality-assurance field blanks--table 37. Site names listed in tables 1 and 22 correspond to those in WATSTORE (the USGS National WATER data STORage and RETrieval system). Representative daily discharge and water-quality data, for TJ Drain (site 21, fig. 4), are shown in figures 9-13.

SOURCES OF STUDY-FUNDED DATA NOT TABULATED HEREIN

The results of several technical investigations that were an integral part of the 3-yr detailed study were published prior to this report. Those already-published reports, which contain data that are not included herein, are by Ingersoll and others (1988), Harms and others (1990), Oremland and others (1990), and Tidball and others (1990). Daily statistics of streamflow at TJ Drain (station no. 10312274), Paiute Diversion Drain (10312250), and D-Line Canal (10312267) in Stillwater WMA; and A-Drain (10351356) in Fernley WMA are listed by Pupacko and others (1990, p. 138-140 and 253).

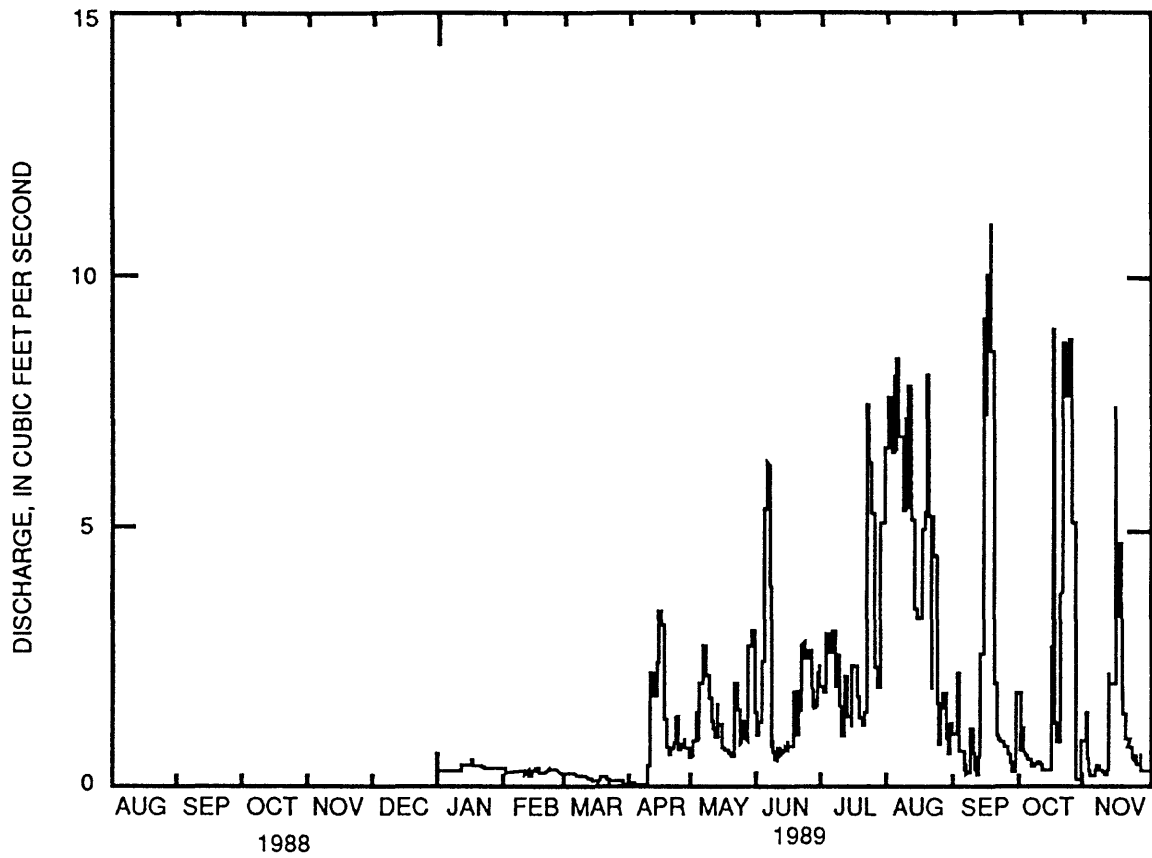


FIGURE 9 --Daily mean discharge at site 21, TJ Drain in Stillwater Wildlife Management Area (figure 4), from January through November 1989. Data are listed in table 8. Note: No data are available for August-December 1988.

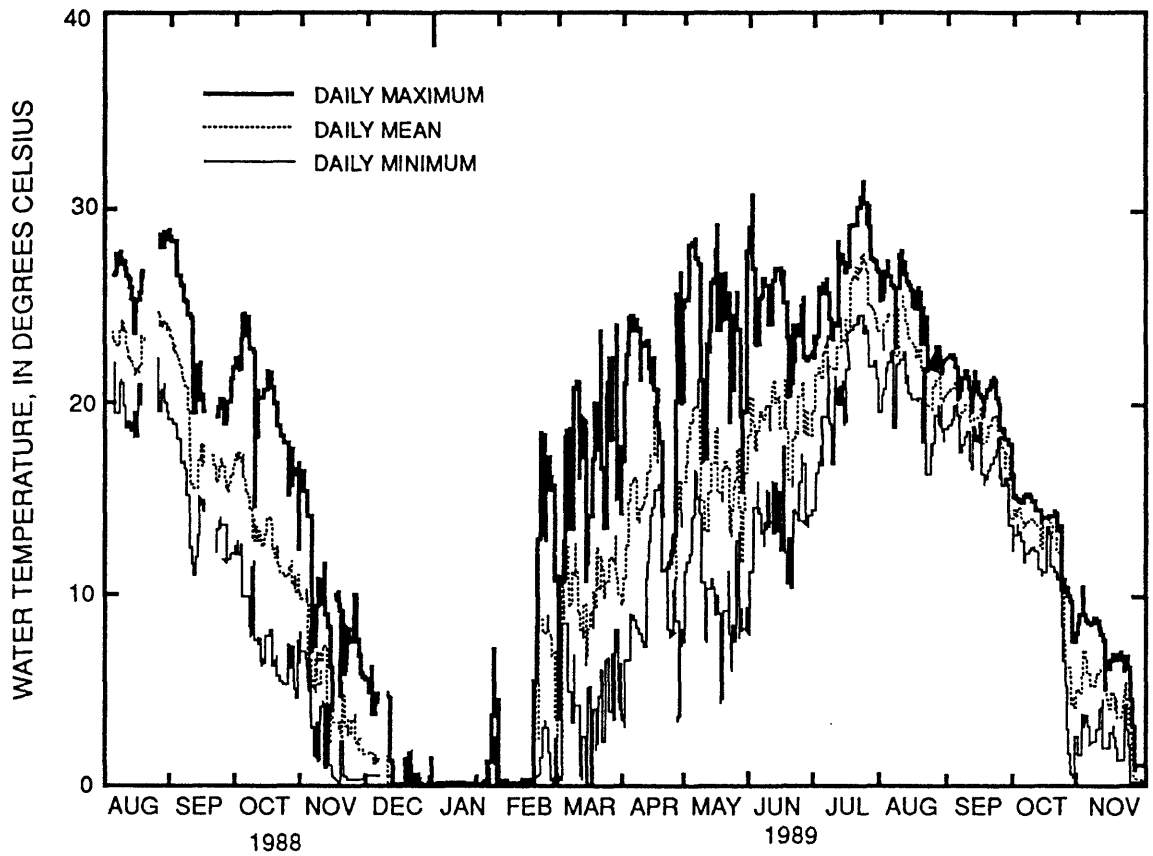


FIGURE 10 --Daily maximum, mean, and minimum water temperature at site 21, TJ Drain in Stillwater Wildlife Management Area, from August 1988 through November 1989. Data are listed in table 8. Periods of missing record are indicated by breaks in lines.

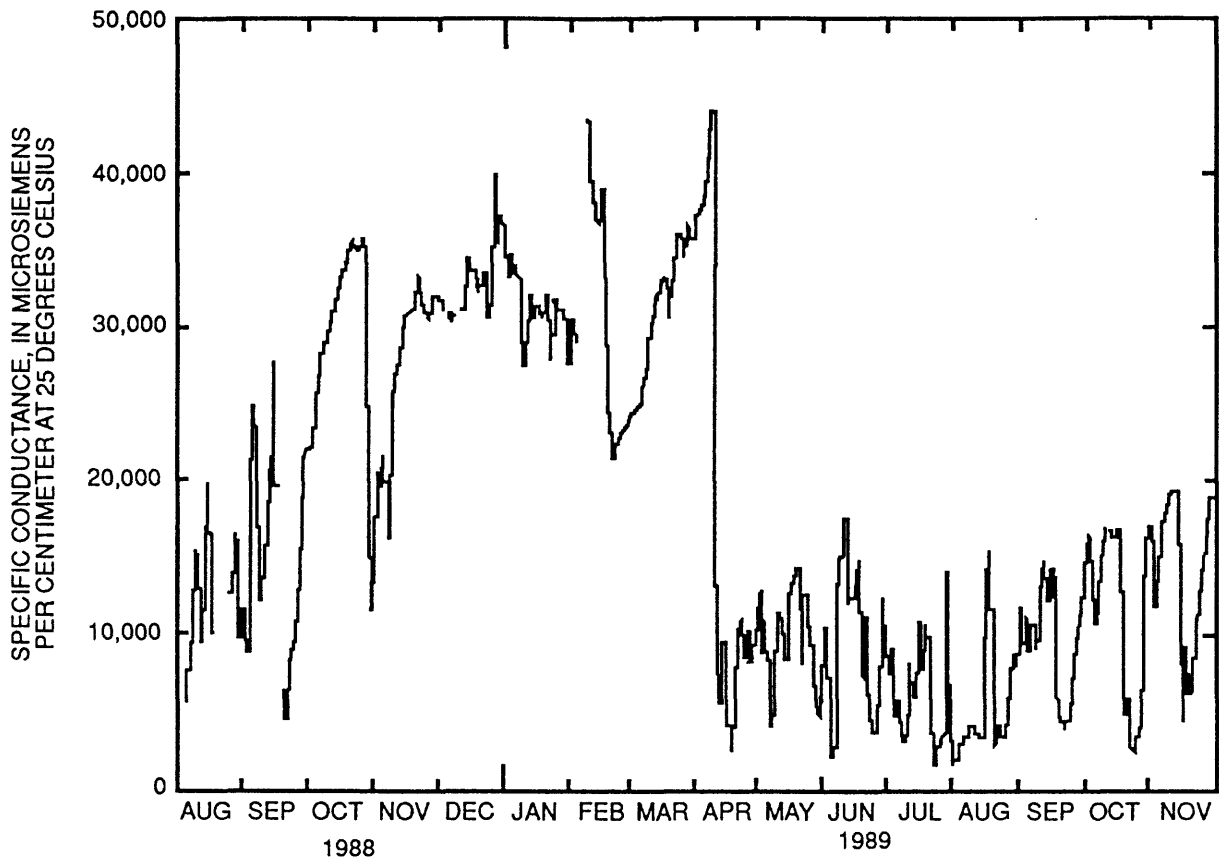


FIGURE 11 --Daily mean specific conductance of water at site 21, TJ Drain in Stillwater Wildlife Management Area, from August 1988 through November 1989. Data are listed in table 8. Periods of missing record are indicated by breaks in line.

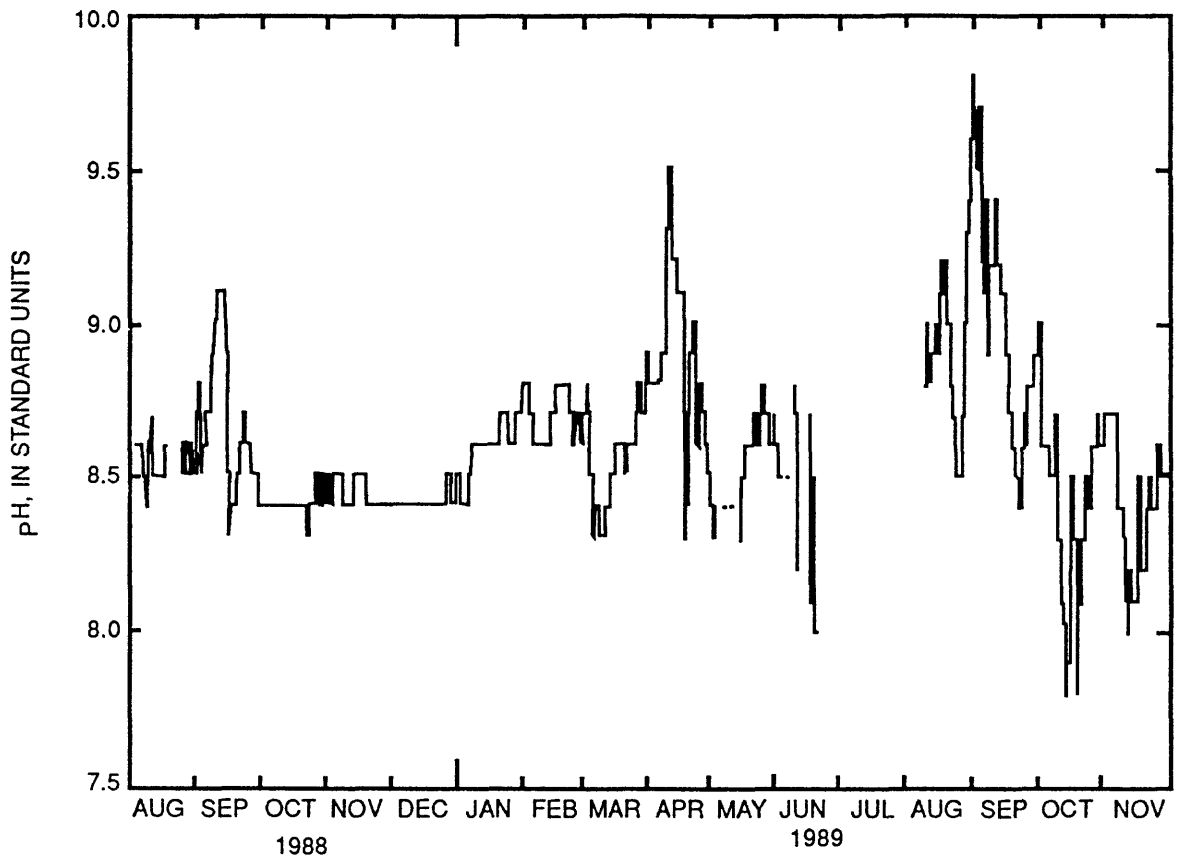


FIGURE 12 --Daily mean pH of water at site 21, TJ Drain in Stillwater Wildlife Management Area, from August 1988 through November 1989. Data are listed in table 8. Periods of missing records are indicated by breaks in line.

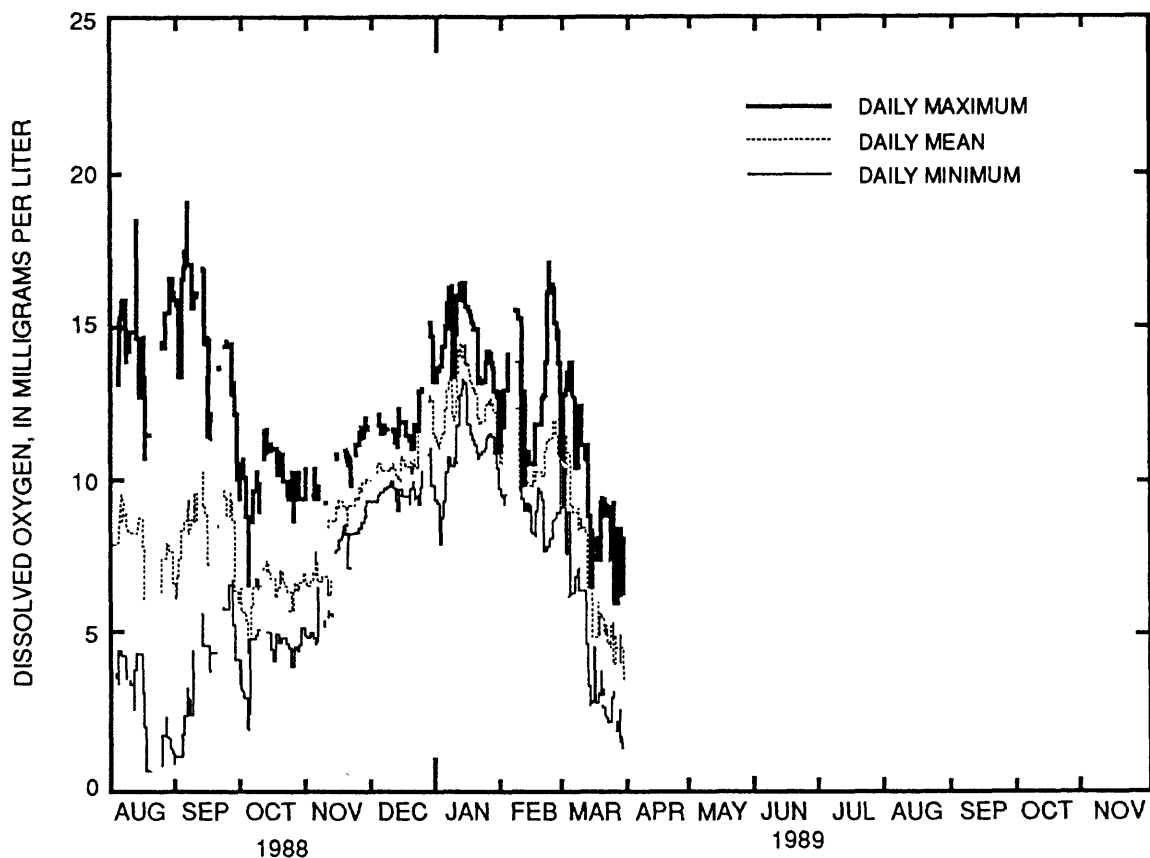


FIGURE 13 --Daily maximum, mean, and minimum dissolved-oxygen concentration at site 21, TJ Drain in Stillwater Wildlife Management Area, from August 1988 through March 1989. Data are listed in table 8. Periods of missing record are indicated by breaks in lines.

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TABLE 1. --Principal surface-water and bottom-sediment sampling sites in the study area, 1987-89

(Abbreviations: abv, above; Alt, Alternate; blw, below; Div, Diversion; FIR, Fallon Indian Reservation; I, Interstate highway; nr, near; NAS, Naval Air Station; Pt, Point; QW, water-quality; Res, Reservoir; sw, southwest; Rd, Road; US 95, U.S. numbered highway; WMA, Wildlife Management Area)

Site number ¹ (figs. 1-6)	Previous site number ²	Site name	U.S. Geological Survey site identification ¹	Rationale for site selection
		<u>Background Sites</u>		
1	(2)	WASHOE LAKE nr Carson City, NV	391448119472201	Background site for Truckee River system
2	(3)	CARSON RIVER blw Lahontan Res nr Fallon, NV	10312150	Background site, initial input of irrigation to Newlands Project area; historical QW data
3	(4)	SCHECKLER RESERVOIR at outlet nr Fallon, NV	10312165	Background site for reservoir QW in Newlands Project area and upgraded from applied irrigation water
4		TRUCKEE CANAL at US 95 Alt nr Fernley, NV	10351320	Background site, input to Lahontan Reservoir and, via canal leakage, to Fernley WMA
5		HUMBOLDT RIVER at Upper Valley Rd nr Lovelock	10335300	Background site for Humboldt River system
		<u>Carson Lake/Diagonal Drain Sites</u>		
6		UPPER WEST SIDE DRAIN at St Claire Rd	10312167	Upstream input to Diagonal Drain
7		SOUTH BRANCH CARSON RIVER at St Claire Rd	10312173	Upstream input to Diagonal Drain; historical stream channel
8	(5)	"L" DRAIN abv Diagonal Drain nr Fallon, NV	10312178	Upstream input to Diagonal Drain
9		CARSON LAKE DRAIN abv Carson Lake nr Fallon	10312180	Main input to Carson Lake, Sprig Pond
10		HOLMES DRAIN at gage nr Fallon, NV	10312170	Input to north Carson Lake area
11		"L" DRAIN abv Lee Drain nr Fallon, NV	10312183	Input to north Carson Lake area
12		RICE DRAIN at gage nr Fallon, NV	10312185	Main input to Carson Lake, Island Unit
13		G-LINE EXTENSION DRAIN at US 95 nr Fallon, NV	10312171	Input to south Carson Lake area
14	(6)	CARSON LAKE, Sprig Pond Unit, nr Fallon, NV	391951118445001	Terminal drainage; wildlife concern
15	(7)	CARSON LAKE, Island Unit, nr Fallon, NV	392108118413501	Terminal drainage; wildlife concern; historical deposition area for former channels of Carson River
16		LOWER DIAGONAL DRAIN at Pasture Rd nr Fallon	10312182	Mid Diagonal Drain site, upgradient of industrial areas
17	(14)	LOWER DIAGONAL DRAIN at US 50 nr Fallon, NV	10312190	Mid Diagonal Drain site, downgradient of Fallon NAS
18		LOWER DIAGONAL DRAIN at gage nr Fallon, NV	10312200	Lower Diagonal Drain site, downgradient of City of Fallon inputs; historical stream channel

TABLE 1.--Principal surface-water and bottom-sediment sampling sites in the study area, 1987-89--Continued

Site number (figs. 1-6)	Previous site number ²	Site name	U.S. Geological Survey site identification ¹	Rationale for site selection
<u>Stillwater Wildlife Management Area Sites</u>				
19		TJ DRAIN abv TJ-1 Drain nr FIR boundary	10312230	Input to main TJ Drain; high trace element concentrations
20		TJ-1 DRAIN abv TJ Drain nr FIR boundary	10312235	Input to main TJ Drain; high trace element concentrations
21	(10)	TJ DRAIN at wildlife entrance nr Stillwater	10312274	Input to Paiute Drain; high trace element concentrations; QW monitor site
22		D-LINE CANAL blw East Lake nr Stillwater	10312267	Input to Paiute Drain; QW monitor site
23		PAIUTE DIVERSION DRAIN abv D-Line Canal	10312250	Input to main Paiute Drain; QW monitor site
24	(9)	PAIUTE DRAIN at wildlife entrance nr Stillwater	10312270	Input to Lead Lake
25	(13)	SOUTH LEAD LAKE at landing nr Stillwater	393643118310501	Secondary impoundment; wildlife concern, historical recreational use area
26		SOUTH LEAD LAKE sw of landing nr Stillwater, NV	393652118311201	QW monitor site
27	(15)	STILLWATER Pt Div DRAIN nr Stillwater, NV	10312215	Main input to Stillwater WMA; QW monitor site
28		STILLWATER Pt Res nr center	393054118303801	Primary impoundment for Stillwater WMA; wildlife concern
29		STILLWATER EAST-WEST CANAL blw outlet	10312216	Output of Stillwater Pt. Reservoir
30	(18)	STILLWATER SLOUGH at Stillwater	10312218	Main input to Canvasback area; historical stream channel
31	(32)	GOOSE LAKE at landing nr Stillwater	393713118254001	Secondary impoundment; wildlife concern
32		HUNTER DRAIN abv Stillwater Rd nr Stillwater	1031221850	Upgradient site; seepage input area; high salinity levels
33		HUNTER DRAIN at Finger site nr Stillwater, NV	1031221880	Bioassay site; high salinity levels
34		HUNTER DRAIN at canal crossing nr Stillwater	1031221905	Midgradient site; high salinity levels
35	(20)	HUNTER DRAIN at Division Rd nr Stillwater, NV	1031221920	Downgradient site; high salinity levels; wildlife concerns
36	(21)	LEAD LAKE CANAL at Hunter Rd nr Stillwater, NV	1031221930	Main output of Lead Lake; wildlife concern
37		FOXTAIL LAKE nr Inlet nr Stillwater, NV	393333118283401	Secondary impoundment; wildlife concern
38	(33)	DRY LAKE nr Inlet nr Stillwater, NV	393515118264801	Secondary impoundment; wildlife concern
39	(31)	EAST ALKALI LAKE at outlet nr Stillwater, NV	393546118233301	Secondary impoundment; wildlife concern
40	(22)	CATTAIL LAKE at outlet nr Stillwater, NV	393601118255401	Secondary impoundment; wildlife concern
41	(23)	SWAN CHECK at outlet nr Stillwater, NV	393907118263101	Secondary/terminal impoundment; wildlife concern
42	(24)	PINTAIL BAY nr center nr Stillwater, NV	394115118253201	Terminal impoundment; wildlife concern; high salinity

TABLE 1.--Principal surface-water and bottom-sediment sampling sites in the study area, 1987-89--Continued

Site number ¹ (figs. 1-6)	Previous site number ²	Site name	U. S. Geological Survey site identification ¹	Rationale for site selection
Fernley Wildlife Management Area Sites				
43		"A" DRAIN at US 50 Alt nr Fernley, NV	10351345	Input to main "A" Drain
44		FERNLEY DRAIN at US 95 Alt nr Fernley, NV	10351335	Input to "A" Drain
45		STREIFF DRAIN at US 50 Alt nr Fernley, NV	10351353	Input to "A" Drain
46		"A" DRAIN at powerline crossing nr Fernley, NV	10351356	Main input to Fernley MMA ponds
47	(36)	SOUTH POND at outlet nr Fernley, NV	393708119073801	Main secondary/terminal impoundment; wildlife concerns
48		NORTH POND at outlet nr Fernley, NV	393730119072301	Terminal drainage; wildlife concerns
49		NORTH-EAST POND at outlet nr Fernley, NV	393730119064101	Terminal drainage; wildlife concerns; high salinity
50		FREWAY POND north of I-80 at Mile 58	394228119054301	Background pond for nonirrigated area
51		BRADYS HOT SPRINGS CREEK at road crossing	10336150	Input from north to Fernley sink
Massie Slough Sites				
52		HAZEN DRAIN abv Massie Slough nr Hazen, NV	393448119001001	Main input to Massie Slough
53	(35)	MASSIE SLOUGH at Massie	393609118575401	Terminal impoundment; wildlife concerns
Humboldt Wildlife Management Area Sites				
54		HUMBOLDT RIVER at Derby Rd nr Lovelock, NV	10336000	Input to Upper/Lower Humboldt Lake; historical flow data
55		ARMY DRAIN at Iron Bridge nr Toulon, NV	10336040	Major input to Upper Humboldt Lake
56	(37)	UPPER HUMBOLDT LAKE nr center nr Toulon, NV	400009118372001	Terminal impoundment; wildlife concerns
57		TOULON DRAIN at Derby Field Rd nr Toulon, NV	10336035	Major input to Toulon Lake
58	(38)	TOULON LAKE, WESTERGARD POND, nr Toulon, NV	400307118363001	Terminal impoundment; wildlife concerns

¹ Each data-collection site is assigned a unique identification number on the basis of geographic location. In this table, lakes and miscellaneous stream sites are identified by a standard 15-digit "latitude-longitude" system; stream- and spring-measuring stations use a "downstream order" system, an 8- to 10-digit number. For example, station number 10312150 consists of a two-digit part number (10) followed by a 6- to 8-digit downstream-order number, 312150. The part number refers to a drainage area or group of areas that is generally regional in extent. Records in this report are for sites in Part 10 (the Great Basin). The downstream-order number is assigned according to the geographic location of the station in the drainage network; larger number stations are downstream from smaller number stations.

The standard site identification is based on the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude; the next seven digits denote the degrees, minutes, and seconds of longitude; and the last two digits (assigned sequentially) identify the sites within a 1-second grid. The assigned number is retained as a permanent identifier even if a more precise latitude and longitude are later determined. For convenience, a short site number also is used in this report and those short numbers are shown in figures 1-6.

² Previous site numbers from Hoffman and others (1990, pl. 1).

TABLE 2.--Particle-size distribution in bottom-sediment samples from in and near Stillwater, Fernley, and Humboldt Wildlife Management Areas, 1988

[Symbol: --, all sediment is finer than indicated particle size]

Site number (table 1)	Date	Percent finer than particle size (in millimeters) indicated								
		16	8	4	2	1	0.50	0.25	0.125	0.063
31	03-10-88	--	--	--	--	--	100	99.8	99.4	97.5
39	03-10-88	100	98.9	98.5	96.9	94.0	90.5	86.0	81.4	74.9
47	03-23-88	--	--	--	--	--	100	98.2	92.5	77.2
49	03-23-88	--	--	--	--	--	100	97.0	79.2	49.2
50	03-22-88	--	--	--	--	--	100	99.4	97.9	93.4
56	03-17-88	--	--	--	--	--	100	99.4	98.4	89.9
58	03-17-88	--	--	--	--	--	100	99.3	95.5	76.5

TABLE 3.--Mineralogy of bottom-sediment samples¹ from in and near Stillwater and Fernley Wildlife Management Areas, 1987-88

Site name and number (figs. 4, 5)	Minerals present ²	Minerals possibly present
<u>Stillwater Wildlife Management Area</u>		
TJ Drain (site 21)	Plagioclase, quartz; chlorite, illite, smectite	Calcite
D-Line Canal (site 22)	Calcite, plagioclase, quartz; illite, kaolinite, smectite; muscovite	
Paiute Diversion Drain (site 23)	Calcite, plagioclase, quartz; illite, kaolinite, smectite	Chlorite
South Lead Lake (site 25)	Calcite, plagioclase, quartz; illite, kaolinite, smectite	Chlorite
<u>Fernley Wildlife Management Area</u>		
A-Drain (site 46)	Plagioclase, quartz; illite, kaolinite, smectite	
South Pond (site 47)	Plagioclase, quartz; illite, kaolinite, smectite	Calcite

¹ Upper 6 in. of bottom sediment.

² Minerals preceding first semicolon are major components (make up most of the sediment); minerals following first semicolon are clays; minerals following second semicolon are minor components (make up a few percent of sediment).

TABLE 4.--Total trace-element concentrations¹ in bottom-sediment samples from in and near Stillwater and Fernley Wildlife Management Areas, 1987-89

[Concentrations expressed in milligrams per kilogram, dry weight. Abbreviations and symbols: particle-size code 1, <2 mm; particle-size code 2, <0.062 mm; mm, millimeter; <, less than; --, not determined]

Site number (figs. 1, 3, 4, 5)	Date	Particle size code	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Cerium	Chromium	Cobalt	Copper	Europium
<u>Stillwater Wildlife Management Area</u>													
21	01-22-89	1	35	747	2	<10	50	<2	36	22	10	24	<2
		2	43	639	1	<10	--	<2	48	32	13	33	<2
22	01-12-89	1	10	887	2	<10	15	<2	42	25	10	20	<2
		2	11	852	2	<10	--	<2	49	31	11	21	<2
23	01-12-89	1	23	765	2	<10	12	<2	51	37	16	45	<2
		2	22	795	2	<10	19	<2	52	37	15	41	<2
25	01-12-89	1	33	662	2	<10	43	<2	43	29	13	43	<2
		2	35	641	2	<10	67	<2	45	32	13	44	<2
31	08-17-88	1	26	550	2	<10	88	<2	42	30	15	53	<2
		2	27	550	2	<10	104	<2	41	31	15	67	<2
35	07-22-87	1	37	640	2	<10	59	<2	45	33	13	36	<2
		2	38	640	2	<10	60	<2	47	39	13	39	<2
36	07-23-87	1	20	780	2	<10	12	<2	45	31	12	33	<2
		2	20	730	2	<10	17	<2	49	40	12	35	<2
39	08-17-88	1	11	960	2	<10	24	<2	50	27	13	34	<2
		2	14	850	2	<10	28	<2	55	33	16	42	<2
40	07-22-87	1	13	950	2	<10	13	<2	47	26	11	22	<2
		2	16	820	2	<10	15	<2	57	39	13	31	<2
41	07-23-87	1	30	780	1	<10	21	<2	37	23	8	36	<2
		2	25	810	1	<10	20	<2	48	36	11	28	<2
42	07-24-87	1	31	680	2	<10	89	<2	40	25	10	27	<2
		2	34	610	1	<10	86	<2	39	33	12	33	<2
<u>Fernley Wildlife Management Area</u>													
46	01-20-89	1	42	726	1	<10	16	<2	34	35	15	34	<2
		2	56	--	--	<10	--	<2	--	--	--	--	<2
47	01-20-89	1	33	717	1	<10	40	<2	39	33	16	40	<2
		2	40	682	1	<10	43	<2	39	34	16	42	<2
49	08-23-88	1	20	730	1	<10	59	<2	30	33	14	25	<2
		2	45	680	1	<10	100	<2	41	43	19	49	<2
50	08-24-88	1	41	460	<1	<10	360	<2	23	20	11	32	<2
		2	47	570	1	<10	390	<2	29	24	12	34	<2
53	08-22-88	1	52	440	2	<10	9.9	<2	34	37	12	180	<2
		2	120	1,200	2	<10	19	<2	45	52	18	400	<2

TABLE 4.--Total trace-element concentrations¹ in bottom-sediment samples from in and near Stillwater and Fernley Wildlife Management Areas, 1987-89--Continued

Site number (figs. 1, 3, 4, 5)	Particulate size code	Gallium	Gold	Holmium	Lanthanum	Lead	Lithium	Manganese	Mercury	Molybdenum	Neodymium	Nickel	Niobium
<u>Stillwater Wildlife Management Area</u>													
21	1	17	<8	<4	22	18	39	560	0.16	34	17	12	8
	2	17	<8	<4	28	17	50	930	.26	42	25	17	8
22	1	17	<8	<4	25	19	39	440	.16	<2	21	13	9
	2	18	<8	<4	29	20	43	530	.18	2	24	16	11
23	1	20	<8	<4	30	22	61	940	.76	3	27	22	10
	2	21	<8	<4	30	22	58	900	.72	3	27	21	9
25	1	17	<8	<4	26	22	62	560	3.6	8	23	19	8
	2	17	<8	<4	28	20	65	590	3.9	8	23	18	7
31	1	17	<8	<4	25	15	130	640	.30	9	20	21	5
	2	16	<8	<4	25	16	120	640	.28	9	21	22	<4
35	1	16	<8	<4	28	30	88	630	.18	54	22	20	4
	2	17	<8	<4	29	15	94	690	1.1	55	23	21	<4
36	1	17	<8	<4	28	35	79	570	.72	3	21	19	7
	2	18	<8	<4	30	16	78	660	.18	3	24	19	6
39	1	16	<8	<4	29	15	75	830	.04	5	27	15	<4
	2	19	<8	<4	33	19	97	850	.06	6	26	20	4
40	1	16	<8	<4	29	15	61	630	.12	<2	21	14	7
	2	19	<8	<4	34	15	85	760	.08	<2	28	20	8
41	1	13	<8	<4	23	190	43	430	.96	4	17	10	<4
	2	15	<8	<4	30	16	70	600	.92	4	23	15	<4
42	1	14	<8	<4	26	17	110	530	.68	8	20	17	5
	2	14	<8	<4	24	18	180	640	1	8	19	21	<4
<u>Fernley Wildlife Management Area</u>													
46	1	18	<8	<4	20	16	26	690	0.06	5	18	16	7
	2	--	<8	<4	--	--	--	--	--	--	--	--	--
47	1	19	<8	<4	23	16	47	930	.06	5	21	19	7
	2	20	<8	<4	23	17	49	1,000	.04	6	23	19	7
49	1	17	<8	<4	21	13	27	590	.02	15	16	16	<4
	2	18	<8	<4	24	15	55	940	.04	32	22	21	6
50	1	11	<8	<4	15	11	200	710	.04	37	14	13	<4
	2	13	<8	<4	18	12	220	830	<.02	44	18	16	6
53	1	15	<8	<4	19	30	31	490	.04	22	17	13	5
	2	17	<8	<4	22	32	57	850	.14	73	21	24	7

TABLE 4.--Total trace-element concentrations¹ in bottom-sediment samples from in and near Stillwater and Fernley Wildlife Management Area, 1987-89--Continued

Site number (figs. 1, 3, 4, 5)	Particulate size code	Scandium	Selenium	Silver	Strontium	Tantalum	Thorium	Tin	Uranium	Vanadium	Ytterbium	Yttrium	Zinc
<u>Stillwater Wildlife Management Area</u>													
21	1	8	0.80	<2	710	<40	<9.3	<10	34.4	77	1	10	55
	2	10	1.1	<2	900	<40	13	<10	<56.6	110	1	14	73
22	1	8	.10	<2	670	<40	8.7	<10	5.21	67	1	12	54
	2	10	.10	<2	700	<40	9.53	<10	6.58	82	2	15	61
23	1	13	.60	<2	480	<40	16	<10	6.54	120	2	15	100
	2	12	.60	<2	520	<40	15.4	<10	6.39	110	2	15	99
25	1	10	.80	<2	610	<40	15.5	<10	9.55	100	2	12	73
	2	11	.90	<2	620	<40	14.7	<10	10.6	110	2	14	75
31	1	10	.40	<2	630	<40	10	<10	5.1	120	1	11	87
	2	10	.50	<2	660	<40	9	<10	6.7	110	1	11	85
35	1	12	1	<2	740	<40	17.4	<10	12.4	96	2	13	110
	2	12	1.1	<2	750	<40	17.4	<10	14.4	100	2	14	89
36	1	11	.20	<2	640	<40	11.1	<10	5.62	86	2	12	86
	2	12	.40	<2	660	<40	13.6	<10	6.44	91	2	14	71
39	1	9	.20	<2	780	<40	12	<10	6.1	81	2	15	69
	2	11	.20	<2	630	<40	13	<10	8	100	2	15	90
40	1	10	.10	<2	680	<40	11.1	<10	4.75	67	2	15	58
	2	12	.10	<2	570	<40	14.1	<10	5.87	94	2	17	82
41	1	9	.40	<2	1,200	<40	11.1	<10	8.73	54	1	11	41
	2	11	.30	<2	930	<40	14.4	<10	9.74	80	2	14	57
42	1	9	.40	<2	710	<40	14.6	<10	8.55	89	1	11	73
	2	11	.30	<2	860	<40	14.7	<10	9.92	110	1	11	84
<u>Fernley Wildlife Management Area</u>													
46	1	12	5	<2	520	<40	8.84	<10	3.43	110	2	13	75
	2	--	5.9	<2	--	<40	7.5	<10	4.58	--	--	--	--
47	1	13	5	<2	590	<40	7.5	<10	5.52	120	1	14	77
	2	13	4.9	<2	600	<40	8.8	<10	5.92	130	2	14	78
49	1	11	.80	<2	590	<40	6	<10	2.5	89	2	11	57
	2	13	1.8	<2	720	<40	8	<10	5.3	130	2	13	87
50	1	7	.60	<2	1,400	<40	5	<10	16	120	1	8	52
	2	8	.80	<2	1,600	<40	5	<10	21	140	1	9	59
53	1	8	4	<2	470	<40	7	<10	6.2	140	2	12	87
	2	11	8.3	<2	430	<40	8	<10	18	310	2	14	160

¹ The total amount of a given constituent in a bottom-sediment sample, regardless of its physical or chemical form. This term is used only when the analytical procedure assures the measurement of at least 95 percent of the constituent present in the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total."

TABLE 5.--Total-recoverable¹ trace-element concentrations in bottom-sediment samples from in and near Stillwater and Fernley Wildlife Management Areas, 1989

[Concentrations expressed as milligrams per kilogram, dry weight;
Symbols: <, less than; --, not determined]

Site number (figs. 3-5)	Date	Arsenic	Boron	Chromium	Iron	Lead	Lithium	Manganese	Mercury	Molybdenum	Selenium
<u>Stillwater Wildlife Management Area</u>											
21	01-12-89	19	100	20	13,000	<100	22	450	0.15	29	<1.0
22	01-12-89	8	30	10	9,000	<100	20	260	.16	2.9	<1.0
23	01-12-89	18	50	30	16,000	<100	35	890	.88	<6.0	<1.0
25	01-12-89	23	140	20	18,000	<100	41	420	4.5	<12	<1.0
<u>Fernley Wildlife Management Area</u>											
46	01-20-89	44	30	10	12,000	<100	10	330	0.05	5.2	1.0
47	01-20-89	22	90	20	12,000	<100	23	600	.03	4.1	2.0

¹ "Total-recoverable" is the amount of a given constituent that is in solution after a bottom-sediment sample has been extracted or digested by a method that results in dissolution of readily soluble substances. Complete dissolution of all particulate matter is not achieved by the extraction or digestion treatment employed and there is reason to suspect that the determination actually represents something less than the "total" amount (95 percent) of the constituent sought in both phases of the sample.

TABLE 6.--Concentrations of organochlorine compounds and carbon in bottom-sediment samples from the study area, 1987-88

[Abbreviations and symbols: g/kg, grams per kilogram, dry weight; µg/kg, micrograms per kilogram, dry weight ; --, not determined; <, less than]

Site number (figs. 1, 2, 3, 5, 6)	Date	Carbon, inorganic, total (g/kg as C)	Carbon, organic, total (g/kg as C)	PCB, ¹ total (µg/kg)	PCN, ² total (µg/kg)	Aldrin, total (µg/kg)	Chlor-dane, total (µg/kg)	DDD, total (µg/kg)	DDE, total (µg/kg)	DDT, total (µg/kg)
3 ^a	10-02-87	--	--	<1.0	<1.0	<0.1	2.0	<0.1	<0.1	<0.1
14	10-01-87	--	--	<1.0	<1.0	<.1	<1.0	<.1	.2	<.1
15	10-01-87	--	--	<1.0	<1.0	.3	<1.0	<.1	.4	<.1
28	10-01-87	--	--	6.0	<1.0	<.1	1.0	.4	1.4	<1.0
31	03-10-88	17	21	<1.0	<1.0	<.1	<1.0	<.1	<.1	<.1
39	03-10-88	6.6	7.4	<1.0	<1.0	<.1	<1.0	<.1	.1	<.1
47	03-23-88	4.1	12	<1.0	<1.0	<.1	<1.0	<.1	.1	<.1
49	03-23-88	5.9	52	<1.0	<1.0	<.1	<1.0	<.1	.3	<.1
56	03-17-88	90	10	<1.0	<1.0	<.1	<1.0	<.1	<.1	<.1
58	03-17-88	50	9	<1.0	<1.0	<.1	<1.0	<.1	.1	<.1

Site number (figs. 1, 2, 3, 5, 6)	Dieldrin, total (µg/kg)	Endo-sulfan, total (µg/kg)	Endrin, total (µg/kg)	Hepta-chlor, total (µg/kg)	Hepta-chlor, epoxide, total (µg/kg)	Lindane, total (µg/kg)	Meth-oxy-chlor, total (µg/kg)	Mirex, total (µg/kg)	Per-thane (µg/kg)	Toxa-phene, total (µg/kg)
3 ^a	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<10
14	<.1	<.1	<.1	<.10	<.10	<.10	<.10	<.10	<1.0	<10
15	<.1	<.1	<.1	<.10	<.10	<.10	<.10	<.10	<1.0	<10
28	<.1	<.1	<.1	<.10	<.10	<.10	<.10	<.10	<1.0	<10
31	<.1	<.1	<.1	<.10	<.10	.20	<.10	<.10	<1.0	<10
39	<.1	<.1	<.1	<.10	<.10	<.10	<.10	<.10	<1.0	<10
47	<.1	<.1	<.1	<.10	<.10	<.10	<.10	<.10	<1.0	<10
49	<.1	<.1	<.1	<.10	<.10	<.10	<.10	<.10	<1.0	<10
56	<.1	<.1	<.1	<.10	<.10	<.10	<.10	<.10	<1.0	<10
58	<.1	<.1	<.1	<.10	<.10	<.10	<.10	<.10	<1.0	<10

¹ PCB, gross measure of polychlorinated biphenyl compounds.

² PCN, gross measure of polychlorinated naphthalene compounds.

^a Background site.

TABLE 7.--Physical and chemical character of pore-fluid samples from shallow cores, and of associated surface-water samples, from in and near Stillwater Wildlife Management Area, August 1989

(Abbreviations and symbols: abv, above; blw, below; cm, centimeters; mg/L, milligrams per liter; mV, millivolts; °C, degrees Celsius; µg/L, micrograms per liter; --, not determined; <, less than)

Laboratory sample identification	Sample depth (cm)	Fraction of water lost on drying	Pore-fluid temperature (°C)	pH (standard units)	Eh (mV)	Chloride (mg/L as Cl)	Sulfate (mg/L as SO ₄)	Sulfide (mg/L as S)	Nitrate (mg/L as NO ₃)	Arsenic (µg/L as As)	Iron (µg/L as Fe)	Selenium-IV (µg/L as Se)
HUNTER DRAIN blw Stillwater Road (no site number)												
ST-HD1	grab ²		22.3	7.98	+280	--	--	1.2	--	--	610	2.8
ST-HD2	overlying ³		23.1	7.85	+230	--	--	1.4	--	--	77	2.4
ST-HD3	0-1	0.501	22.6	7.64	-140	--	--	21	--	--	<5.0	.5
ST-HD4	1-3	.432	22.3	7.37	-190	--	--	110	--	--	<5.0	11
ST-HD5	3-5	.733	23.3	7.47	-200	--	--	140	--	--	<5.0	11
ST-HD6	5-7	.604	22.9	7.36	-180	--	--	150	--	--	<5.0	12
HUNTER DRAIN abv Stillwater Road (site 32)												
ST-HDB1	grab		17.1	8.20	+290	24,000	8,600	--	<1.1	150	17	10
ST-HDB2	overlying		25.2	7.50	+230	25,000	9,300	--	<1.1	100	<5.0	--
ST-HDB3	0-2	0.661	24.7	7.22	+220	26,000	9,700	--	<1.1	98	410	.6
ST-HDB4	2-4	.763	--	--	--	27,000	9,900	--	<1.1	--	--	--
ST-HDB5	4-6	.786	--	--	--	27,000	8,200	--	<1.1	--	--	--
ST-HDB6	6-8	.745	--	--	--	28,000	10,000	--	<1.1	200	280	--
SOUTH LEAD LAKE at landing (site 25)												
ST-LL1	grab		26.2	8.81	+280	1,100	740	1.6	<5.4	97	7	<0.2
ST-LL2	overlying		26.3	8.42	+260	1,300	920	1.5	<5.4	100	17	<0.2
ST-LL3	0-2	0.354	26.6	7.69	-110	1,400	860	21	<5.4	110	76	2.9
ST-LL4	2-4	.544	26.6	7.53	-110	1,400	500	12	<5.4	140	33	5.8
ST-LL5	4-6	.563	27.0	7.35	-150	1,600	60	84	<5.4	120	44	12
ST-LL6	6-8	.514	27.0	7.43	-150	1,500	0	81	<5.4	140	72	8.9
MASSIE SLOUGH at Massie (site 53)												
ST-MS1	grab		21.8	8.03	+240	210	800	1.7	<3.8	550	250	0.8
ST-MS2	overlying		22.8	7.98	+240	--	--	1.6	<3.8	550	170	.7
ST-MS3	0-2	0.447	23.0	7.45	+87	--	--	2.7	<3.8	580	360	.4
ST-MS4	2-4	.560	22.9	7.53	-45	190	330	18	<3.8	490	150	1.3
ST-MS5	4-6	.448	22.9	7.59	-64	160	360	28	<3.8	440	80	3.1
ST-MS6	6-8	.621	22.8	7.82	-68	190	430	19	<3.8	500	110	1.8

¹ Represents fraction of water contained within core sample as pore fluid.

² Represents water sample collected from drain in vicinity of where core sample was obtained.

³ Represents water sample collected adjacent to the top of the core.

TABLE 8.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in TJ Drain (site 21), Stillwater Wildlife Management Area, 1988-89

(Abbreviations and symbol: ACRE-FT, acre-feet; e, estimated; MAX, maximum; MIN, minimum; μ S/cm, microsiemens per centimeter at 25 °Celsius; mg/L, milligrams per liter; --, not determined)

DAY	WATER TEMPERATURE (DEGREES CELSIUS)																	
	AUGUST 1988			SEPTEMBER 1988			OCTOBER 1988			NOVEMBER 1988			DECEMBER 1988			JANUARY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	28.4	19.2	23.4	21.8	12.1	16.5	16.9	6.4	10.9	5.8	0.3	1.6	0.1	0.1	0.1
2	--	--	--	28.0	18.3	23.1	22.2	12.1	16.9	12.3	7.9	9.9	--	--	--	.1	.1	.1
3	--	--	--	26.6	18.2	22.5	22.2	12.7	17.2	16.3	7.0	10.7	5.6	.4	1.7	.1	.1	.1
4	--	--	--	26.7	18.8	22.6	21.5	12.0	16.8	--	--	--	4.9	.4	1.3	.1	.1	.1
5	26.6	21.9	23.6	26.1	18.0	22.0	23.3	12.5	17.2	14.8	5.0	9.7	6.3	.4	1.7	.1	.1	.1
6	27.6	19.5	23.0	26.3	18.0	21.8	24.6	9.6	16.0	14.0	8.1	10.2	3.7	.4	1.2	.1	.1	.1
7	27.1	19.4	23.0	25.3	16.8	21.1	23.7	10.0	15.7	9.4	4.1	6.5	4.3	.4	1.5	.1	.1	.1
8	27.8	19.8	23.8	25.3	16.5	20.8	23.8	8.4	15.0	7.2	2.9	5.1	4.8	.4	1.4	.1	.1	.1
9	27.2	21.1	24.2	24.6	17.2	20.8	22.8	8.1	14.4	8.3	1.5	4.9	4.5	.4	1.3	.2	.1	.1
10	26.9	20.9	23.7	24.4	15.1	19.6	22.7	7.7	14.0	10.8	3.3	6.9	--	--	--	.2	.2	.2
11	26.5	19.5	22.7	20.3	11.9	15.7	14.5	11.6	12.7	9.4	1.3	5.5	--	--	--	.2	.2	.2
12	26.4	18.9	22.3	19.4	11.2	15.0	20.7	7.4	13.4	9.5	4.1	6.5	4.9	.5	1.5	.2	.2	.2
13	25.9	18.5	22.1	20.7	10.9	15.5	18.2	7.7	12.7	11.6	4.3	7.2	4.7	.0	1.3	.2	.2	.2
14	25.3	18.8	21.9	22.0	11.8	16.8	20.3	7.6	13.2	8.9	3.3	5.7	1.3	.0	.2	.2	.2	.2
15	23.5	19.4	21.4	20.2	13.3	16.9	20.2	6.3	12.5	8.3	1.0	4.2	.0	.0	.0	.2	.2	.2
16	25.1	18.1	21.6	20.5	14.9	17.7	20.7	6.9	13.0	6.2	1.1	3.5	.1	.0	.0	.2	.2	.2
17	25.6	18.3	21.9	19.5	14.4	16.7	21.6	7.7	13.8	3.9	.6	2.1	.0	.0	.0	.2	.2	.2
18	26.8	20.8	23.4	--	--	--	21.6	7.7	13.9	--	--	--	.0	.0	.0	.2	.2	.2
19	26.7	19.8	23.2	14.6	12.2	13.5	20.8	8.1	13.6	9.7	.2	3.3	.0	.0	.0	.2	.2	.2
20	--	--	--	--	--	--	19.9	6.2	12.2	10.0	.2	3.3	.0	.0	.0	.2	.2	.2
21	--	--	--	17.1	11.8	14.3	19.9	6.2	11.9	4.5	.2	2.1	.0	.0	.0	.2	.2	.2
22	--	--	--	--	--	--	20.0	6.7	12.4	9.1	2.5	5.4	1.4	.0	.2	.2	.2	.2
23	--	--	--	19.2	12.2	15.8	18.8	5.7	11.3	5.9	.5	4.6	.1	.1	.1	.2	.2	.2
24	--	--	--	19.7	13.5	16.6	18.3	5.4	11.0	8.2	.2	2.6	1.8	.1	.3	.2	.2	.2
25	--	--	--	20.1	13.8	16.9	17.9	5.5	10.9	7.4	1.0	3.5	.1	.1	.1	.2	.2	.2
26	28.1	22.1	24.6	19.8	13.4	16.6	17.9	5.3	10.9	8.7	.3	3.1	.1	.1	.1	.2	.2	.2
27	28.7	19.5	23.9	18.9	13.4	16.0	15.2	7.2	11.0	7.7	.3	2.6	.6	.1	.2	.2	.2	.2
28	28.0	20.4	24.0	19.0	11.6	15.2	15.7	6.2	10.5	9.9	.3	3.7	.2	.1	.1	.3	.3	.3
29	28.3	20.8	24.2	20.0	11.7	15.6	17.5	7.1	11.6	7.6	.3	2.2	.2	.1	.1	.2	.2	.2
30	28.9	19.9	23.9	21.2	12.0	16.2	16.5	4.7	10.5	6.7	.3	1.9	.1	.1	.1	.3	.3	.4
31	28.9	19.3	23.8	--	--	--	16.2	4.6	10.0	--	--	--	.1	.1	.1	3.7	.3	1.2
MONTH	--	--	--	--	--	--	24.6	4.6	13.3	--	--	--	--	--	--	3.7	.1	.2

TABLE 8.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in TJ Drain (site 21), Stillwater Wildlife Management Area, 1988-89

DAY	WATER TEMPERATURE (DEGREES CELSIUS)														
	FEBRUARY 1989			MARCH 1989			APRIL 1989			MAY 1989			JUNE 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.2	0.3	2.6	15.7	0.6	7.5	17.6	4.1	10.0	25.0	7.3	15.9	29.1	8.1	18.3
2	4.6	.3	1.0	10.5	2.5	7.3	14.2	6.3	9.6	25.4	7.6	16.7	30.9	11.1	20.3
3	.3	.3	.3	11.0	.4	4.0	21.0	3.1	11.0	25.6	11.6	18.1	27.0	14.5	18.9
4	.3	.3	.3	3.7	.4	1.8	22.6	3.1	12.5	28.2	11.0	19.0	23.2	14.2	17.6
5	.4	.3	.3	10.6	1.3	5.6	24.3	5.4	14.4	28.3	13.9	19.8	23.0	15.8	18.6
6	.4	.3	.3	18.2	6.0	11.2	24.5	7.0	15.2	28.5	13.7	20.0	25.4	14.6	19.6
7	.4	.3	.3	18.7	8.4	12.5	23.8	8.9	15.9	27.5	16.3	21.2	25.5	13.6	18.6
8	.3	.3	.3	14.0	8.0	10.9	24.3	8.6	16.0	27.2	15.4	20.6	26.5	12.6	19.3
9	.3	.3	.3	13.5	5.0	9.5	23.9	8.2	15.9	21.2	14.1	16.8	26.2	15.4	19.9
10	.3	.3	.3	20.7	3.4	11.0	21.1	8.2	13.7	19.8	12.3	15.1	26.0	13.4	19.9
11	.3	.3	.3	20.6	6.9	12.6	22.9	7.9	14.5	17.1	10.5	13.3	24.1	15.3	18.6
12	.3	.3	.3	21.0	3.8	11.2	23.0	7.5	14.7	23.7	7.6	14.8	26.4	13.6	20.0
13	.3	.3	.3	16.0	4.2	9.0	23.1	7.3	15.1	22.7	10.3	15.3	27.0	15.9	21.2
14	.3	.3	.3	17.4	.5	7.8	23.3	11.5	16.4	26.3	10.3	16.8	27.0	13.2	20.0
15	.4	.3	.4	19.3	.9	9.4	21.8	12.7	17.1	26.4	10.8	16.8	27.0	15.4	20.3
16	.4	.4	.4	10.7	2.6	6.3	21.1	14.1	17.3	27.9	9.0	18.1	26.3	12.3	18.8
17	.4	.4	.4	15.7	.2	6.9	22.4	14.9	18.5	29.3	10.0	18.7	26.9	12.1	19.2
18	.4	.4	.4	14.2	5.2	9.1	20.8	14.3	17.4	23.8	8.9	15.4	25.2	17.7	21.1
19	.4	.4	.4	17.1	4.1	10.1	18.9	15.6	16.9	26.4	4.5	14.9	23.4	14.6	18.7
20	5.5	.4	1.7	19.9	.2	8.3	18.0	15.1	16.4	26.7	8.9	16.6	20.4	12.5	16.5
21	8.3	.4	3.2	17.7	2.3	9.3	17.0	13.7	15.3	24.4	9.6	16.9	21.1	10.4	15.1
22	13.0	.7	6.5	23.8	3.7	12.4	14.1	11.2	12.3	25.7	11.1	16.7	24.1	14.2	18.6
23	18.4	1.1	8.6	16.6	4.8	10.3	--	--	--	19.0	8.5	13.2	22.2	14.4	18.1
24	15.0	2.6	8.1	20.2	6.3	11.8	11.5	9.3	10.0	20.6	6.1	13.1	23.5	13.9	18.5
25	12.7	3.4	7.6	13.5	6.6	9.9	11.6	7.9	9.4	24.6	8.5	15.5	25.1	15.9	20.3
26	17.1	2.9	8.9	22.4	2.4	10.7	12.2	8.6	10.1	25.8	7.7	16.1	25.5	17.2	21.0
27	16.2	1.7	8.1	22.3	3.9	11.9	13.2	9.0	10.7	23.8	13.2	17.6	22.5	16.9	19.7
28	15.3	.4	7.0	18.1	6.9	11.8	25.6	9.6	15.9	19.3	10.1	14.6	22.2	13.9	18.3
29	--	--	--	22.3	3.6	11.5	26.8	3.5	14.4	15.4	8.2	11.7	22.5	13.5	18.4
30	--	--	--	24.1	4.5	13.0	20.0	8.2	13.6	19.7	9.6	14.3	22.6	14.2	18.3
31	--	--	--	15.0	8.1	11.2	--	--	--	27.9	9.4	16.4	--	--	--
MONTH	18.4	.3	2.5	24.1	.2	9.5	--	--	--	29.3	4.5	16.5	30.9	8.1	19.1

TABLE 8.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in TJ Drain (site 21), Stillwater Wildlife Management Area, 1988-89

DAY	WATER TEMPERATURE (DEGREES CELSIUS)														
	JULY 1989			AUGUST 1989			SEPTEMBER 1989			OCTOBER 1989			NOVEMBER 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.3	14.4	18.3	25.4	20.0	22.8	22.3	18.7	20.5	18.0	13.8	16.1	8.0	2.7	5.2
2	23.5	16.0	19.8	25.7	19.7	22.7	22.5	18.7	20.7	16.4	14.0	15.3	8.6	2.1	5.0
3	26.1	16.6	21.5	26.7	20.7	23.6	22.6	18.9	20.8	15.1	12.3	14.0	9.1	1.8	5.0
4	25.7	17.8	21.8	26.9	21.5	24.3	22.6	18.9	20.8	15.2	13.1	14.2	10.4	2.4	6.1
5	26.3	16.8	21.2	27.4	21.9	24.6	22.4	19.9	21.2	15.1	13.9	14.6	10.6	3.9	7.2
6	25.7	19.4	22.7	26.5	22.3	24.6	21.9	19.3	20.7	14.9	13.3	14.2	8.8	3.8	6.7
7	26.5	19.4	23.0	26.1	22.7	24.2	20.3	17.4	18.9	14.9	12.8	14.0	8.7	3.4	5.9
8	25.8	21.7	23.6	22.9	20.5	21.4	20.8	17.5	19.1	15.0	11.7	13.6	8.5	2.3	5.4
9	24.4	18.7	21.4	26.0	18.8	22.1	21.4	17.8	19.7	15.3	12.2	13.8	8.7	2.2	5.4
10	23.3	16.9	19.9	27.8	22.0	24.9	21.8	18.3	20.0	15.3	12.3	13.9	9.0	2.8	5.8
11	24.2	18.9	21.4	28.0	22.7	25.6	21.5	18.6	20.0	15.2	12.5	14.0	8.9	3.0	6.0
12	24.0	20.4	22.9	27.4	22.6	25.1	20.8	17.4	19.1	14.9	12.5	13.8	8.4	3.5	6.2
13	28.4	20.0	22.9	26.7	21.1	24.0	19.6	16.6	18.4	14.9	12.4	13.8	8.1	4.0	6.2
14	27.8	20.9	24.4	26.4	21.4	24.0	20.6	18.8	19.6	14.5	12.4	13.5	7.7	4.7	6.0
15	27.3	21.2	24.4	26.1	20.5	23.4	21.8	18.1	20.0	14.4	11.7	13.1	5.3	3.4	4.3
16	26.8	19.0	22.9	25.8	20.4	23.2	21.2	18.7	20.2	13.8	11.1	12.5	6.4	2.1	4.1
17	27.1	22.0	24.2	25.0	20.4	22.9	20.5	19.0	19.8	14.1	11.2	12.6	6.2	2.6	4.5
18	29.2	23.8	26.2	25.0	20.2	22.5	20.3	16.7	18.5	14.0	13.3	13.6	6.8	3.3	5.0
19	29.3	23.8	26.6	26.0	20.3	23.2	19.9	15.9	17.9	14.2	13.5	13.9	7.0	2.7	4.8
20	29.2	24.6	27.1	23.2	20.5	21.7	20.4	16.0	18.3	14.2	13.5	13.8	7.0	2.1	4.3
21	29.3	24.0	26.5	25.1	18.1	21.5	20.8	16.5	18.8	14.1	11.6	13.1	6.8	1.5	3.8
22	30.2	24.5	27.0	24.5	20.3	22.6	21.0	16.6	18.9	14.5	11.2	12.7	7.2	1.6	3.9
23	30.7	23.7	26.9	22.1	18.8	20.5	21.2	16.9	19.2	13.3	11.4	12.2	6.1	1.4	3.7
24	31.5	24.8	27.8	21.8	16.3	19.1	21.4	17.3	19.4	13.7	10.9	12.0	7.0	4.5	5.5
25	30.4	23.7	27.1	22.1	17.4	19.7	20.3	18.1	19.1	10.9	8.6	10.1	7.0	3.1	5.0
26	29.3	23.9	26.7	22.4	17.9	20.1	20.0	16.1	18.1	10.2	6.6	8.4	6.3	2.7	4.7
27	28.1	21.9	25.2	23.1	19.0	21.0	18.8	16.6	17.9	11.0	5.2	7.7	4.8	.4	2.1
28	27.6	21.9	25.0	23.2	19.1	21.2	18.8	16.0	17.6	10.5	3.1	6.3	3.2	.4	1.0
29	27.5	21.9	24.8	23.0	20.0	21.6	18.1	16.1	17.2	10.0	1.9	5.3	1.1	.4	.6
30	26.9	22.2	24.5	21.7	18.7	20.4	18.2	15.2	16.7	9.7	.7	4.8	1.4	.4	.6
31	27.0	21.3	23.8	22.2	18.1	20.1	--	--	--	7.7	.7	4.3	--	--	--
MONTH	31.5	14.4	23.9	28.0	16.3	22.5	22.6	15.2	19.2	18.0	.7	12.1	10.6	.4	4.7

TABLE 8.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in TJ Drain (site 21), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	AUGUST 1988					SEPTEMBER 1988					OCTOBER 1988					NOVEMBER 1988								
	MAX	MIN	MEAN	MAX	MEAN	MAX	MIN	MEAN	MAX	MIN	MAX	MIN	MEAN	MAX	MIN	MAX	MIN	MEAN	MAX	MIN	MEAN			
	SPECIFIC CONDUCTANCE (µS/cm)																							
1	--	--	--	11,800	11,300	11,700	22,200	21,700	21,900	16,900	14,600	15,600												
2	--	--	--	11,100	8,420	9,810	23,000	22,100	22,400	18,800	17,000	17,800												
3	--	--	--	15,600	6,920	9,000	24,300	23,000	23,500	20,600	18,900	19,600												
4	--	--	--	23,900	16,400	21,300	25,400	24,300	24,800	21,300	20,500	20,800												
5	6,150	5,360	5,660	25,300	24,000	24,800	26,300	25,300	25,800	22,100	21,300	21,700												
6	8,830	6,350	7,740	25,000	21,300	23,600	27,500	26,300	26,900	22,200	16,800	19,900												
7	10,400	8,930	9,570	20,900	13,700	17,000	28,400	27,100	27,700	18,400	15,600	16,300												
8	14,500	10,600	13,000	13,500	11,900	12,300	29,000	28,000	28,400	22,900	17,800	20,100												
9	16,800	14,300	15,500	12,900	12,000	12,500	29,700	28,600	29,100	24,900	22,100	23,700												
10	16,100	13,900	15,100	14,700	13,000	13,700	30,400	29,300	29,800	26,700	24,900	25,800												
11	15,500	10,700	13,000	17,200	14,700	15,800	30,700	30,200	30,400	27,400	26,500	27,000												
12	10,400	9,150	9,580	19,900	17,400	18,500	31,500	30,700	31,000	28,200	27,100	27,600												
13	14,700	9,940	11,600	21,600	20,000	20,800	31,600	31,100	31,300	29,700	28,200	28,800												
14	17,700	15,100	16,900	21,700	21,400	21,600	32,300	31,600	31,900	30,600	29,800	30,100												
15	22,500	17,800	19,800	24,800	20,300	21,500	33,000	32,100	32,500	30,900	29,900	30,800												
16	18,100	13,600	16,600	29,600	25,200	27,800	33,600	32,900	33,300	31,000	30,300	30,700												
17	13,300	7,560	10,100	29,700	11,500	19,700	34,200	32,000	33,700	31,700	30,200	31,000												
18	20,200	3,940	10,100	--	--	--	34,600	33,800	34,200	--	--	--												
19	--	--	--	9,380	4,590	6,420	35,200	34,400	34,700	32,000	29,900	31,200												
20	--	--	--	5,190	4,390	4,560	35,400	35,000	35,200	33,000	32,000	32,400												
21	--	--	--	7,700	5,390	6,450	35,800	35,200	35,500	34,200	31,700	33,100												
22	--	--	--	9,010	7,700	8,360	36,300	34,800	35,400	32,700	31,800	32,200												
23	--	--	--	9,430	9,010	9,220	36,600	34,900	35,300	32,800	30,000	31,400												
24	--	--	--	10,100	9,440	9,650	35,400	34,800	35,100	32,600	30,700	31,700												
25	--	--	--	11,900	10,200	10,800	35,800	34,800	35,500	31,600	30,600	31,000												
26	13,500	12,400	12,800	14,200	12,000	13,000	36,200	35,500	35,900	30,800	29,800	30,600												
27	14,300	13,500	14,000	17,600	14,400	15,800	36,100	31,300	33,300	32,100	30,100	30,800												
28	17,900	13,900	16,600	20,400	17,700	19,100	30,700	19,800	24,700	31,500	30,500	30,900												
29	18,300	11,800	15,900	22,100	20,500	21,300	19,300	11,900	15,000	33,500	31,100	32,000												
30	11,500	9,210	9,800	22,300	21,900	22,100	12,200	11,000	11,600	34,000	30,700	32,100												
31	11,400	9,410	10,400	--	--	--	14,500	12,300	13,300	--	--	--												
MONTH	--	--	--	--	--	--	36,600	11,000	29,100	--	--	--												

TABLE 8.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in TJ Drain (site 21), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{cm}$)																			
	DECEMBER 1988					JANUARY 1989					FEBRUARY 1989					MARCH 1989				
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN
1	34,200	30,500	32,000	36,100	35,000	35,500	29,800	26,600	27,700	24,300	23,900	24,100								
2	34,100	30,100	31,800	35,200	33,500	34,500	33,300	28,900	30,600	25,200	24,300	24,600								
3	32,300	30,100	31,100	34,300	32,500	33,300	30,100	28,900	29,600	25,600	23,700	24,500								
4	--	--	--	36,000	33,300	34,700	30,300	27,600	29,100	25,500	23,900	24,700								
5	32,400	29,600	30,600	34,900	32,200	33,500	--	--	--	24,700	24,000	24,400								
6	32,600	29,700	30,600	36,000	32,500	33,700	--	--	--	25,300	24,700	25,000								
7	33,300	29,100	31,000	36,600	31,600	34,000	--	--	--	26,700	25,300	26,000								
8	32,200	29,300	30,400	35,700	30,200	33,100	--	--	--	26,900	26,500	26,600								
9	32,400	29,800	30,800	31,300	26,300	29,200	44,300	42,500	43,500	28,500	26,600	27,300								
10	--	--	--	28,600	26,500	27,500	42,900	39,600	41,800	29,700	28,600	29,300								
11	--	--	--	31,100	27,900	29,100	40,200	38,500	39,600	30,600	29,600	30,300								
12	32,900	30,200	31,300	33,600	28,200	30,600	38,500	37,400	38,200	31,000	30,500	30,700								
13	33,000	30,200	31,500	35,000	29,800	32,200	37,400	36,700	37,100	32,200	30,800	31,400								
14	35,300	31,100	32,700	32,500	29,300	30,600	37,000	36,600	36,800	32,500	31,800	32,100								
15	35,500	33,300	34,600	33,900	29,800	31,800	38,100	37,000	37,600	32,600	31,700	32,300								
16	36,700	33,300	34,500	33,200	30,400	31,500	45,500	35,000	39,000	33,900	32,200	32,900								
17	35,800	32,400	33,700	34,000	30,200	31,600	36,100	29,400	33,300	33,800	32,600	33,300								
18	35,000	32,500	33,600	33,400	29,800	31,000	31,200	25,500	28,800	33,800	31,700	32,700								
19	34,500	30,600	33,100	32,900	29,600	30,800	27,200	21,600	24,500	31,400	30,000	30,500								
20	33,300	30,700	32,300	32,900	30,100	31,000	24,900	22,100	23,100	32,200	31,100	31,800								
21	34,200	31,700	32,600	33,600	30,700	31,900	23,900	21,300	22,500	32,300	31,800	32,100								
22	33,700	31,700	32,900	32,800	27,100	30,500	21,600	21,200	21,400	33,800	32,300	33,100								
23	36,000	31,300	33,600	29,100	26,800	28,000	22,300	21,700	22,000	35,700	33,800	34,700								
24	31,600	29,600	30,700	30,600	28,800	29,600	23,300	22,400	22,900	37,400	35,500	36,200								
25	32,400	30,000	31,500	33,800	30,200	31,600	23,700	23,300	23,500	37,400	34,300	36,000								
26	37,300	32,700	35,100	33,300	29,400	31,200	23,500	23,000	23,200	35,300	33,900	34,600								
27	42,000	36,400	39,800	32,500	29,100	31,000	23,800	23,200	23,500	35,700	34,600	35,200								
28	38,600	35,700	36,600	32,100	28,100	31,000	24,200	23,700	23,900	36,500	34,400	35,300								
29	36,400	35,000	35,800	32,400	27,900	31,100	--	--	--	37,000	35,900	36,600								
30	37,900	36,600	37,200	32,400	26,900	30,500	--	--	--	37,600	34,600	36,200								
31	37,400	36,000	36,700	31,000	27,000	29,600	--	--	--	36,400	35,100	35,700								
MONTH	--	--	--	36,600	26,300	31,500	--	--	--	37,600	23,700	31,000								

TABLE 8.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in TJ Drain (site 21), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	SPECIFIC CONDUCTANCE (µS/cm)											
	APRIL 1989			MAY 1989			JUNE 1989			JULY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	37,100	36,000	36,400	12,600	11,300	12,000	9,480	6,920	8,330	10,400	7,490	8,690
2	37,700	36,800	37,300	13,700	12,600	12,900	12,200	9,580	10,500	8,270	7,180	7,520
3	38,200	37,400	37,700	11,900	7,700	8,860	11,200	4,600	7,110	12,200	5,050	9,020
4	38,500	37,600	38,100	12,000	9,220	11,100	6,530	1,250	3,520	6,040	3,950	4,760
5	39,500	37,900	38,600	11,600	7,230	9,210	2,410	1,460	1,950	6,520	4,830	5,670
6	40,500	38,500	39,500	10,400	5,050	4,380	3,240	1,940	2,730	6,820	4,410	5,780
7	42,200	40,100	41,100	4,850	3,800	4,100	12,300	2,580	7,890	4,890	3,900	4,290
8	43,900	41,800	42,900	5,670	3,980	4,790	14,100	12,500	13,300	4,590	2,780	3,460
9	45,100	43,000	44,200	7,320	4,800	6,070	16,000	14,200	15,200	3,360	2,970	3,140
10	45,400	43,200	44,000	11,200	6,880	9,100	17,800	16,000	16,900	3,940	3,360	3,530
11	20,600	8,410	13,200	11,800	10,700	11,500	18,500	16,400	17,500	6,430	4,040	5,030
12	8,410	6,910	7,690	11,500	10,600	11,100	15,600	11,200	12,200	9,310	6,630	8,290
13	7,730	3,530	5,480	11,400	7,280	10,000	14,100	11,100	12,500	8,810	6,000	6,970
14	11,800	5,740	9,500	9,450	7,380	8,420	14,100	11,700	12,600	6,200	5,800	6,000
15	8,960	3,980	5,230	12,000	9,560	10,600	14,500	11,500	13,200	9,200	6,400	7,630
16	6,180	2,400	4,050	13,200	12,000	12,700	14,500	13,900	14,300	11,800	9,400	10,900
17	2,910	2,000	2,410	13,900	13,200	13,500	15,500	14,500	15,000	11,400	6,300	7,800
18	3,630	2,520	2,990	14,400	13,800	14,000	15,700	6,690	11,600	10,600	7,000	8,910
19	5,750	3,540	4,060	14,800	14,200	14,500	9,080	6,490	7,290	11,000	10,500	10,800
20	10,300	5,950	7,930	14,400	14,100	14,300	13,700	9,380	12,000	10,500	9,500	9,940
21	11,500	10,100	10,600	14,000	6,960	11,700	12,500	9,350	11,200	10,800	9,200	9,350
22	11,500	9,600	10,600	9,320	7,060	8,130	8,750	4,330	6,220	14,500	1,200	3,600
23	11,100	10,400	10,900	11,500	9,420	10,500	5,120	4,010	4,520	1,900	1,600	1,720
24	11,100	8,440	10,000	14,800	11,600	12,700	6,700	4,010	5,020	2,300	1,600	1,770
25	9,960	8,140	8,700	12,800	9,310	10,400	4,590	3,180	3,790	3,000	2,300	2,740
26	10,700	10,100	10,300	10,200	9,090	9,400	6,470	3,580	5,430	3,400	3,000	3,190
27	11,600	7,990	9,600	10,400	4,940	6,890	9,450	6,570	8,080	3,590	3,390	3,480
28	8,640	7,890	8,340	6,310	4,930	5,400	10,300	9,550	9,950	4,880	3,590	3,790
29	10,200	8,540	9,440	7,170	5,100	6,460	14,400	10,400	12,500	18,200	5,280	14,200
30	11,400	9,920	10,600	6,660	4,330	5,020	14,500	8,210	10,600	14,000	3,970	6,680
31	--	--	--	6,720	5,020	5,780	--	--	--	3,960	1,560	3,170
MONTH	45,400	2,000	18,400	14,800	3,800	9,660	18,500	1,250	9,760	18,200	1,200	6,190

TABLE 8.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in TJ Drain (site 21), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	AUGUST 1989										SEPTEMBER 1989										OCTOBER 1989										NOVEMBER 1989									
	MAX		MIN		MEAN		MAX		MIN		MEAN		MAX		MIN		MEAN		MAX		MIN		MEAN		MAX		MIN		MEAN		MAX		MIN		MEAN					
	SPECIFIC CONDUCTANCE (µS/cm)																																							
1	1,960	1,160	1,760	1,600	12,800	10,500	11,800	15,400	13,600	14,600	18,000	13,400	16,100																											
2	2,050	1,760	1,970	1,970	12,800	9,600	11,400	16,500	15,300	15,900	13,300	11,400	12,000																											
3	2,440	1,650	1,970	1,970	10,700	9,100	9,550	16,700	16,000	16,400	12,700	11,500	12,000																											
4	3,540	2,640	3,140	3,140	11,300	10,600	11,100	15,900	14,000	14,900	14,300	12,700	13,600																											
5	4,730	2,030	2,670	2,670	10,500	8,600	9,200	13,800	11,200	12,400	15,700	14,400	15,100																											
6	4,930	2,220	3,250	3,250	10,700	9,000	9,820	11,200	10,600	10,900	16,900	15,800	16,400																											
7	3,120	2,320	2,740	2,740	10,900	10,400	10,800	12,600	10,800	11,600	18,300	17,000	17,500																											
8	3,410	3,110	3,220	3,220	10,300	7,700	8,970	14,500	12,700	13,600	18,400	17,800	18,000																											
9	3,510	3,200	3,380	3,380	12,200	7,700	9,640	15,700	14,600	15,100	18,900	18,300	18,600																											
10	4,600	3,590	4,150	4,150	14,100	12,400	13,400	16,700	15,700	16,100	19,300	18,900	19,100																											
11	4,280	2,690	3,610	3,610	14,600	14,100	14,400	17,900	16,700	17,100	19,600	19,300	19,400																											
12	4,270	3,460	3,720	3,720	14,800	14,600	14,700	17,200	16,900	17,000	19,600	19,400	19,500																											
13	3,650	3,440	3,550	3,550	14,600	12,700	13,800	17,000	16,700	16,800	19,600	19,300	19,500																											
14	3,540	3,120	3,300	3,300	14,000	11,700	12,400	16,700	16,400	16,600	19,000	12,800	16,000																											
15	5,110	3,020	3,400	3,400	15,000	13,900	14,400	16,600	16,400	16,500	12,600	3,810	8,160																											
16	13,200	5,510	9,950	9,950	15,300	9,870	13,900	17,100	16,500	16,700	8,590	3,700	4,290																											
17	15,400	13,300	14,300	14,300	9,270	4,490	5,950	17,700	13,800	16,900	10,500	8,370	9,320																											
18	16,000	15,200	15,500	15,500	5,800	3,920	4,710	15,700	6,870	12,800	8,670	5,850	7,480																											
19	16,100	5,240	11,700	11,700	5,140	3,920	4,730	6,770	4,760	5,490	6,730	5,850	6,160																											
20	5,040	2,030	2,910	2,910	5,040	4,150	4,450	5,140	4,840	4,940	8,010	6,730	7,340																											
21	3,610	2,230	3,120	3,120	4,570	4,180	4,340	16,000	1,630	5,940	9,290	8,010	8,580																											
22	4,600	3,500	4,140	4,140	4,180	3,790	3,980	3,120	1,920	2,750	10,700	9,390	9,940																											
23	4,300	3,200	3,440	3,440	4,820	3,900	4,280	2,900	2,110	2,650	12,300	10,700	11,500																											
24	3,500	3,300	3,350	3,350	6,350	4,830	5,550	2,940	2,360	2,710	13,800	12,200	13,000																											
25	3,900	3,500	3,640	3,640	8,070	6,450	7,260	2,790	1,800	2,450	14,700	13,800	14,300																											
26	4,900	3,900	4,270	4,270	9,390	8,270	8,790	3,950	2,100	3,370	16,000	14,700	15,300																											
27	7,000	5,000	5,960	5,960	10,400	9,490	9,850	4,290	3,950	4,020	17,300	16,000	16,600																											
28	8,600	7,100	7,870	7,870	11,100	10,300	10,700	10,500	4,390	6,560	18,100	17,300	17,700																											
29	8,900	8,600	8,830	8,830	12,100	11,100	11,500	15,600	10,900	13,800	18,900	18,000	18,500																											
30	8,800	7,500	7,990	7,990	13,500	12,000	12,500	16,900	15,600	16,400	19,400	18,600	19,000																											
31	10,300	7,700	8,710	8,710	--	--	--	17,700	16,900	17,100	--	--	--																											
MONTH	16,100	1,160	5,200	5,200	15,300	3,790	9,600	17,900	1,630	11,600	19,600	3,700	14,000																											

TABLE 8.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in TY Drain (site 21), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	AUGUST 1988			SEPTEMBER 1988			OCTOBER 1988			NOVEMBER 1988			DECEMBER 1988			JANUARY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	PH (STANDARD UNITS)																	
1	--	--	--	8.8	8.2	8.5	8.4	8.3	8.4	8.5	8.4	8.5	8.4	8.4	8.4	8.5	8.4	8.4
2	--	--	--	9.0	8.5	8.8	8.5	8.3	8.4	8.5	8.4	8.5	8.4	8.4	8.4	8.5	8.4	8.5
3	--	--	--	8.7	8.4	8.5	8.4	8.3	8.4	8.5	8.4	8.4	8.4	8.4	8.4	8.5	8.4	8.5
4	--	--	--	8.6	8.4	8.5	8.4	8.3	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.5	8.4	8.4
5	8.8	8.3	8.6				8.4	8.3	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.5	8.3	8.4
6	8.8	8.4	8.6	8.8	8.4	8.6	8.4	8.3	8.4	8.5	8.4	8.5	8.4	8.4	8.4	8.4	8.3	8.4
7	8.8	8.4	8.6	9.0	8.6	8.7	8.5	8.3	8.4	8.5	8.4	8.5	8.4	8.4	8.4	8.5	8.3	8.4
8	8.6	8.3	8.5	9.1	8.7	8.9	8.5	8.4	8.4	8.6	8.4	8.5	8.4	8.4	8.4	8.6	8.4	8.5
9	8.6	8.3	8.4	9.1	8.7	8.9	8.4	8.4	8.4	8.5	8.3	8.5	8.4	8.3	8.4	8.7	8.5	8.6
10	8.6	8.2	8.4	9.2	8.7	9.0	8.4	8.4	8.4	8.5	8.3	8.4	8.4	8.3	8.4	8.7	8.5	8.6
11	8.8	8.3	8.6	9.2	8.9	9.1	8.4	8.3	8.4	8.5	8.4	8.4	8.4	8.3	8.4	8.6	8.5	8.6
12	8.9	8.4	8.7	9.2	9.0	9.1	8.4	8.3	8.4	8.5	8.4	8.4	8.4	8.3	8.4	8.6	8.5	8.6
13	8.7	8.2	8.5	9.2	9.0	9.1	8.4	8.3	8.4	8.5	8.4	8.4	8.4	8.3	8.4	8.6	8.5	8.6
14	8.7	8.3	8.5	9.2	9.0	9.1	8.4	8.3	8.4	8.5	8.4	8.4	8.4	8.3	8.4	8.6	8.5	8.6
15	8.6	8.3	8.5	9.0	8.6	8.9	8.5	8.4	8.4	8.5	8.4	8.5	8.4	8.3	8.4	8.6	8.5	8.6
16	8.6	8.3	8.5	8.6	8.4	8.5	8.4	8.4	8.4	8.5	8.4	8.5	8.4	8.3	8.4	8.6	8.5	8.6
17	8.9	8.3	8.6	8.5	8.2	8.4	8.4	8.4	8.4	8.6	8.4	8.5	8.4	8.3	8.4	8.6	8.5	8.6
18	8.8	8.2	8.5	8.5	8.2	8.3	8.4	8.4	8.4	8.6	8.4	8.5	8.4	8.4	8.4	8.6	8.5	8.6
19	8.9	8.2	8.6	8.6	8.3	8.4	8.4	8.3	8.4	8.6	8.4	8.5	8.4	8.4	8.4	8.6	8.5	8.6
20	--	--	--	8.7	8.1	8.4	8.4	8.3	8.4	8.5	8.4	8.4	8.4	8.4	8.4	8.7	8.5	8.6
21	--	--	--	8.6	8.2	8.5	8.4	8.3	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.7	8.6	8.6
22	--	--	--	8.7	8.4	8.6	8.4	8.3	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.7	8.6	8.7
23	--	--	--	8.8	8.5	8.6	8.4	8.3	8.4	8.5	8.4	8.4	8.4	8.4	8.4	8.8	8.7	8.7
24	--	--	--	8.7	8.6	8.7	8.4	8.3	8.3	8.4	8.3	8.4	8.4	8.4	8.4	8.7	8.7	8.7
25	--	--	--	8.7	8.5	8.6	8.4	8.3	8.3	8.4	8.4	8.4	8.4	8.4	8.4	8.7	8.6	8.7
26	8.7	8.4	8.5	8.7	8.5	8.6	8.4	8.3	8.4	8.4	8.4	8.4	8.4	8.3	8.4	8.7	8.6	8.6
27	8.8	8.4	8.6	8.6	8.5	8.5	8.4	8.4	8.4	8.5	8.3	8.4	8.4	8.4	8.4	8.7	8.6	8.6
28	8.7	8.5	8.6	8.5	8.4	8.5	8.4	8.4	8.4	8.4	8.3	8.4	8.4	8.4	8.5	8.7	8.6	8.6
29	8.7	8.4	8.5	8.5	8.4	8.5	8.5	8.4	8.5	8.4	8.3	8.4	8.4	8.4	8.5	8.7	8.6	8.7
30	8.8	8.3	8.6	8.4	8.4	8.4	8.6	8.4	8.5	8.4	8.4	8.4	8.4	8.4	8.4	8.7	8.6	8.7
31	8.8	8.2	8.5	--	--	--	8.5	8.3	8.4	--	--	--	8.5	8.4	8.4	8.7	8.6	8.7
MONTH	--	--	--	9.2	8.1	8.7	8.6	8.3	8.4	8.6	8.3	8.4	--	--	--	8.8	8.3	8.6

TABLE 8.--Daily maximum, minimum, and mean water temperature, specific conductance, PH, and dissolved oxygen, and daily mean discharge in TJ Drain (site 21), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	FEBRUARY 1989			MARCH 1989			APRIL 1989			MAY 1989			JUNE 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.8	8.7	8.7	8.7	8.5	8.6	8.9	8.7	8.8	8.7	8.2	8.4	8.9	8.4	8.7
2	8.9	8.8	8.8	8.7	8.6	8.6	8.9	8.8	8.9	8.6	8.1	8.3	8.8	8.4	8.6
3	8.8	8.8	8.8	8.8	8.6	8.7	8.9	8.8	8.8	8.7	8.2	8.4	8.9	8.2	8.5
4	8.8	8.8	8.8	8.8	8.8	8.8	8.9	8.8	8.8	8.6	8.2	8.4	8.6	7.9	8.1
5	8.8	8.7	8.7	8.8	8.6	8.7	8.8	8.7	8.8	8.4	8.0	8.3	8.0	7.8	7.9
6	--	--	--	8.6	8.3	8.5	8.9	8.8	8.8	8.2	7.9	8.1	8.5	7.6	8.0
7	--	--	--	8.4	8.2	8.3	8.9	8.7	8.8	8.3	7.9	8.1	8.7	8.2	8.4
8	8.7	8.6	8.6	8.4	8.3	8.3	8.9	8.8	8.9	8.2	8.0	8.0	8.8	8.2	8.5
9	8.6	8.6	8.6	8.4	8.3	8.4	8.9	8.8	8.9	8.3	7.9	8.1	8.9	8.4	8.6
10	8.6	8.6	8.6	8.4	8.1	8.3	9.0	8.7	8.9	8.1	7.9	8.0	8.9	8.6	8.8
11	8.6	8.6	8.6	8.4	8.2	8.3	9.2	8.9	9.0	8.1	7.9	8.0	8.9	8.6	8.7
12	8.6	8.6	8.6	8.5	8.2	8.3	9.4	9.1	9.3	8.1	7.9	8.0	8.9	7.4	8.2
13	8.6	8.5	8.6	8.5	8.3	8.4	9.6	9.3	9.5	8.3	8.0	8.1	8.1	7.5	7.6
14	8.7	8.5	8.6	8.6	8.4	8.5	9.6	9.1	9.2	8.3	8.0	8.1	8.0	7.7	7.8
15	8.7	8.6	8.7	8.6	8.4	8.4	9.5	9.0	9.2	8.6	7.8	8.1	8.1	7.8	7.9
16	8.7	8.6	8.7	8.5	8.3	8.4	9.4	8.9	9.1	8.6	8.1	8.3	8.9	8.1	8.5
17	8.8	8.7	8.8	8.6	8.4	8.5	9.3	8.7	9.1	8.7	8.2	8.5	8.8	8.4	8.7
18	8.8	8.8	8.8	8.6	8.5	8.5	9.4	8.4	9.1	8.8	8.3	8.6	8.8	7.6	8.1
19	8.9	8.8	8.8	8.6	8.5	8.6	9.0	8.1	8.7	8.7	8.4	8.6	8.6	7.8	8.1
20	8.9	8.8	8.8	8.6	8.5	8.6	8.5	8.1	8.3	8.8	8.4	8.6	8.8	8.3	8.5
21	8.9	8.8	8.8	8.6	8.5	8.6	8.6	8.2	8.4	8.7	8.4	8.6	8.5	7.6	8.0
22	8.9	8.7	8.8	8.6	8.5	8.5	9.3	8.5	8.9	8.9	8.4	8.6	--	--	--
23	8.9	8.6	8.8	8.7	8.5	8.6	9.2	8.6	9.0	8.9	8.4	8.7	--	--	--
24	8.8	8.6	8.7	8.7	8.6	8.6	9.1	8.4	8.9	8.7	8.4	8.6	--	--	--
25	8.7	8.6	8.7	8.7	8.6	8.6	9.1	8.3	8.6	9.0	8.4	8.7	--	--	--
26	8.7	8.5	8.6	8.6	8.6	8.6	9.2	8.3	8.8	8.9	8.4	8.7	--	--	--
27	8.7	8.5	8.6	8.7	8.6	8.6	9.2	8.2	8.8	9.1	8.5	8.8	--	--	--
28	8.7	8.6	8.7	8.8	8.7	8.7	8.8	8.6	8.7	8.9	8.4	8.7	--	--	--
29	--	--	--	8.8	8.7	8.8	8.7	8.4	8.6	8.9	8.4	8.7	--	--	--
30	--	--	--	8.7	8.7	8.7	8.7	8.3	8.5	8.8	8.4	8.6	--	--	--
31	--	--	--	8.8	8.6	8.7	--	--	--	8.9	8.3	8.6	--	--	--
MONTH	9.6	8.1	8.9	9.1	7.8	8.4	8.9	6.8	7.9	9.0	6.7	7.4	--	--	--

TABLE 8.--Daily maximum, minimum, and mean water temperature, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in TJ Drain (site 21), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	JULY 1989			AUGUST 1989			SEPTEMBER 1989			OCTOBER 1989			NOVEMBER 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	--	--	--	9.8	9.7	9.8	9.0	8.7	8.9	8.7	8.6	8.6
2	--	--	--	--	--	--	9.7	9.2	9.6	9.1	8.9	9.0	8.8	8.6	8.7
3	--	--	--	--	--	--	9.7	9.3	9.5	9.2	8.7	8.9	8.8	8.6	8.7
4	--	--	--	--	--	--	9.7	9.6	9.7	8.7	8.6	8.6	8.7	8.6	8.7
5	--	--	--	--	--	--	9.7	8.9	9.2	8.6	8.6	8.6	8.8	8.7	8.7
6	--	--	--	--	--	--	9.6	8.9	9.1	8.6	8.6	8.6	8.7	8.6	8.7
7	--	--	--	--	--	--	9.5	8.9	9.4	8.6	8.5	8.6	8.5	8.4	8.5
8	--	--	--	--	--	--	8.9	8.8	8.9	8.7	8.5	8.5	8.5	8.4	8.4
9	--	--	--	--	--	--	9.5	8.7	9.0	8.9	8.6	8.7	8.5	8.4	8.4
10	--	--	--	--	--	--	9.6	9.2	9.4	8.8	8.5	8.7	8.4	8.2	8.3
11	--	--	--	9.0	8.7	8.8	9.4	9.0	9.2	8.5	8.0	8.3	8.2	8.1	8.1
12	--	--	--	9.1	8.8	9.0	9.5	8.9	9.2	8.4	7.8	8.1	8.1	8.0	8.0
13	--	--	--	9.0	8.8	8.9	9.1	8.7	8.9	7.9	7.6	7.8	8.1	8.0	8.0
14	--	--	--	9.0	8.6	8.8	9.3	8.8	8.9	8.0	7.8	7.9	8.2	8.1	8.2
15	--	--	--	9.1	8.8	9.0	9.4	8.9	9.1	8.0	7.8	7.9	8.2	8.1	8.1
16	--	--	--	9.0	8.8	8.9	9.1	8.8	8.9	8.4	8.0	8.2	8.3	8.1	8.1
17	--	--	--	9.2	9.1	9.1	8.8	8.7	8.8	8.7	8.3	8.5	8.7	8.3	8.5
18	--	--	--	9.2	9.1	9.2	8.8	8.7	8.7	8.6	8.1	8.4	8.7	8.3	8.5
19	--	--	--	9.2	9.1	9.1	8.7	8.6	8.7	8.4	8.0	8.3	8.3	8.2	8.2
20	--	--	--	9.2	9.1	9.2	8.6	8.5	8.6	8.0	7.7	7.8	8.3	8.2	8.2
21	--	--	--	9.1	8.8	9.0	8.5	8.5	8.5	8.8	7.6	8.2	8.4	8.2	8.4
22	--	--	--	8.8	8.7	8.8	8.5	8.5	8.5	8.5	7.6	8.1	8.5	8.4	8.5
23	--	--	--	8.8	8.7	8.7	8.5	8.3	8.4	8.6	7.9	8.3	8.6	8.5	8.5
24	--	--	--	8.7	8.4	8.6	8.5	8.3	8.4	8.8	8.3	8.5	8.5	8.4	8.4
25	--	--	--	8.6	8.5	8.5	8.6	8.3	8.6	8.8	8.3	8.5	8.5	8.3	8.4
26	--	--	--	8.6	8.4	8.5	8.8	8.6	8.7	8.7	8.0	8.4	8.5	8.4	8.4
27	--	--	--	8.9	8.6	8.7	8.8	8.6	8.6	8.7	8.4	8.6	8.7	8.5	8.6
28	--	--	--	9.3	8.9	9.0	9.0	8.6	8.8	8.8	8.3	8.6	8.5	8.4	8.5
29	--	--	--	9.6	9.1	9.3	9.0	8.6	8.8	8.8	8.7	8.7	8.6	8.4	8.5
30	--	--	--	9.5	9.3	9.4	9.2	8.7	8.9	8.8	8.6	8.7	8.5	8.4	8.5
31	--	--	--	9.8	9.4	9.6	--	--	--	8.8	8.4	8.6	--	--	--
MONTH	--	--	--	9.8	6.8	8.4	9.8	8.3	9.0	9.2	7.6	8.4	8.8	8.0	8.4

TABLE 8.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in TJ Drain (site 21), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	DISSOLVED OXYGEN (mg/L)												
	AUGUST 1988			SEPTEMBER 1988			OCTOBER 1988			NOVEMBER 1988			
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
1	--	--	--	15.9	0.8	6.6	6.6	9.4	3.5	5.6	10.5	5.1	7.0
2	--	--	--	15.8	1.0	6.9	6.9	10.6	4.3	6.4	9.4	5.2	6.8
3	--	--	--	13.4	1.0	6.2	6.0	10.8	3.2	6.0	9.6	5.0	6.6
4	--	--	--	16.5	1.0	7.7	7.7	10.1	3.0	5.5	--	--	--
5	13.2	3.8	8.0	16.9	1.8	8.4	8.4	8.8	2.0	4.2	10.4	5.1	7.1
6	15.4	3.4	8.6	17.5	2.4	8.9	8.9	6.6	2.5	4.4	9.4	4.7	6.8
7	15.9	4.5	9.6	19.1	3.3	9.4	9.4	8.6	4.6	5.9	9.9	6.2	7.7
8	15.6	4.3	9.3	17.0	2.9	8.4	8.4	9.7	4.9	6.6	9.4	6.6	7.6
9	13.9	4.3	8.6	15.7	2.5	8.5	8.5	10.3	4.9	6.9	--	--	--
10	14.3	3.6	8.4	16.0	2.4	8.7	8.7	10.0	5.0	6.9	9.3	5.4	6.8
11	14.9	3.5	8.6	16.2	4.5	9.7	9.7	9.0	5.2	6.5	--	--	--
12	14.7	3.6	8.4	--	--	--	--	--	--	--	8.7	5.7	6.9
13	18.6	2.6	8.4	--	--	--	--	10.8	5.3	7.2	8.6	5.6	6.4
14	14.7	4.0	8.6	16.9	5.7	10.3	10.3	11.7	5.1	7.4	--	--	--
15	12.7	4.4	8.1	14.5	5.5	9.1	9.1	11.0	5.1	7.1	--	--	--
16	14.7	4.4	8.8	14.7	4.6	9.2	9.2	11.3	5.2	7.3	10.9	7.7	8.9
17	13.4	3.2	7.8	11.5	4.6	7.7	7.7	11.0	4.8	6.9	10.7	8.1	9.3
18	10.7	2.0	6.1	12.3	3.8	7.3	7.3	11.1	4.4	6.8	--	--	--
19	11.5	.6	6.9	--	--	--	--	10.2	4.2	6.3	10.9	8.6	9.4
20	--	--	--	--	--	--	--	11.0	5.0	7.1	11.0	8.3	9.3
21	--	--	--	13.7	4.4	8.6	8.6	--	--	--	10.6	8.3	9.2
22	--	--	--	--	--	--	--	10.9	4.9	7.0	10.9	7.2	8.5
23	--	--	--	--	--	--	--	10.0	4.8	6.6	9.9	7.2	8.3
24	--	--	--	14.4	6.0	9.7	9.7	9.6	4.9	6.5	--	--	--
25	--	--	--	14.4	5.8	9.5	9.5	9.5	4.6	6.1	10.9	8.3	9.3
26	14.4	.8	6.4	14.6	6.0	9.7	9.7	10.4	4.5	6.4	11.3	8.3	9.5
27	15.5	.9	7.5	12.8	5.4	8.8	8.8	8.7	4.0	5.8	11.7	8.6	9.8
28	15.5	1.8	7.7	13.3	6.8	9.5	9.5	--	--	--	11.4	8.7	9.7
29	15.5	2.3	8.0	12.2	5.7	8.5	8.5	10.3	4.6	6.7	12.1	8.9	10.0
30	16.6	1.3	7.8	10.1	4.2	6.6	6.6	9.4	4.5	6.5	11.9	9.4	10.1
31	16.2	1.2	7.6	--	--	--	--	--	--	--	--	--	--
MONTH	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 8.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in TJ Drain (site 21), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	DISSOLVED OXYGEN (mg/L)											
	DECEMBER 1988			JANUARY 1989			FEBRUARY 1989			MARCH 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.7	9.4	10.1	13.3	10.0	11.6	11.2	10.0	10.4	13.9	9.1	10.9
2	--	--	--	13.5	9.4	11.2	11.8	9.8	10.8	10.9	7.7	9.3
3	--	--	--	13.8	9.3	11.6	13.0	9.3	11.2	12.9	9.6	11.0
4	--	--	--	13.7	8.0	11.0	14.2	9.6	11.9	13.4	10.4	11.5
5	11.9	9.5	10.3	14.4	8.8	11.6	--	--	--	13.6	9.0	11.0
6	12.2	9.6	10.6	15.1	9.4	12.3	--	--	--	13.9	7.6	10.1
7	11.5	9.7	10.4	15.8	10.1	13.0	--	--	--	12.8	6.3	9.2
8	11.9	9.7	10.4	16.4	10.8	13.4	--	--	--	12.2	6.4	9.0
9	11.7	9.8	10.4	15.0	10.6	12.7	15.6	12.5	13.9	10.5	6.9	8.7
10	11.7	9.8	10.4	13.5	10.7	12.1	15.5	12.3	13.9	12.5	7.1	9.1
11	--	--	--	14.8	10.6	12.7	15.3	12.9	13.6	12.0	6.5	8.8
12	11.8	10.0	10.6	16.2	11.8	13.8	13.0	10.2	11.6	11.1	6.6	8.4
13	11.7	9.8	10.4	16.5	12.8	14.5	10.1	9.3	9.8	10.7	6.5	8.5
14	11.2	9.6	10.2	15.9	12.0	14.0	10.8	9.1	9.9	11.2	4.6	8.3
15	11.5	9.1	10.4	16.5	13.3	14.5	11.1	9.3	10.2	8.9	3.3	5.5
16	12.4	10.2	11.0	15.7	12.9	13.9	10.6	8.4	9.9	6.4	2.8	4.7
17	12.0	9.8	10.8	15.6	11.9	13.5	11.6	8.3	9.8	8.5	4.5	6.3
18	11.8	9.5	10.7	15.4	11.6	13.3	12.0	9.1	10.6	8.2	3.2	5.0
19	11.5	9.3	10.5	15.2	11.4	13.1	11.9	9.7	10.8	7.5	2.9	4.9
20	11.4	9.7	10.5	15.1	11.3	13.0	11.8	9.7	10.6	9.4	3.8	6.1
21	11.5	10.0	10.6	15.0	11.2	12.9	12.8	9.4	10.8	9.6	3.3	5.6
22	11.1	9.4	10.3	13.4	10.8	12.1	13.9	7.9	10.2	9.5	2.7	5.4
23	12.0	9.8	10.7	13.2	10.9	11.9	16.2	7.8	11.3	8.9	2.3	5.1
24	11.6	9.8	10.5	13.2	11.0	12.0	17.2	7.9	11.4	9.2	2.8	5.3
25	11.8	9.3	10.6	13.9	11.4	12.4	16.4	8.2	11.6	7.6	2.3	4.7
26	13.1	10.3	11.7	14.3	11.2	12.6	16.3	8.8	12.0	9.4	3.2	5.4
27	--	--	--	14.3	11.5	12.7	15.2	8.8	11.5	9.5	2.3	5.3
28	--	--	--	13.9	11.6	12.6	14.8	9.2	11.5	6.1	2.0	4.1
29	--	--	--	13.7	11.5	12.4	--	--	--	8.5	2.6	5.0
30	15.2	10.9	12.7	12.9	11.2	12.0	--	--	--	8.3	2.3	4.6
31	14.7	11.1	12.7	12.7	10.5	11.6	--	--	--	6.3	1.4	3.6
MONTH	--	--	--	16.5	8.0	12.6	--	--	--	13.9	1.4	7.1

TABLE 8.--Daily maximum, minimum, and mean water temperature, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in TJ Drain (site 21), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	MEAN DISCHARGE (CUBIC FEET PER SECOND)											
	JANUARY 1989	FEBRUARY 1989	MARCH 1989	APRIL 1989	MAY 1989	JUNE 1989	JULY 1989	AUGUST 1989	SEPTEMBER 1989	OCTOBER 1989	NOVEMBER 1989	
1	e0.30	0.27	0.21	0.06	0.49	0.97	1.9	7.6	1.0	1.8	1.4	
2	e.30	.25	e.20	.06	.83	1.2	1.8	7.2	1.3	1.1	.55	
3	e.30	e.24	e.20	.07	1.4	2.4	2.9	8.0	2.2	.70	.27	
4	e.30	e.23	e.20	.06	.89	5.4	2.6	6.5	1.5	.55	.19	
5	e.30	e.23	e.20	.04	2.0	6.3	3.0	8.3	.64	.57	.17	
6	e.30	e.23	e.20	.03	1.8	3.9	2.5	8.2	.36	.52	.29	
7	e.30	e.23	.19	.03	2.7	.76	1.9	6.8	.24	.43	.41	
8	e.30	e.23	.19	.03	2.1	.62	2.5	6.7	.73	.40	.36	
9	e.30	e.23	.19	.03	1.7	.49	1.5	5.4	1.1	.45	.30	
10	.31	e.23	.18	.38	1.2	.44	.97	7.2	.61	.45	.26	
11	e.31	e.23	.19	2.2	1.1	.72	1.5	7.8	.27	.46	.25	
12	e.33	e.22	.17	1.8	.89	.58	2.1	5.2	.21	.40	.27	
13	e.34	.21	.14	1.7	1.6	.69	1.3	4.0	.56	.36	2.2	
14	e.35	.19	.13	2.4	1.2	.74	1.1	3.4	2.6	.33	2.0	
15	.37	.19	.12	2.4	.74	.82	2.2	3.2	9.1	.29	7.4	
16	.38	.23	.11	3.4	.67	.74	1.7	3.2	7.2	2.7	3.3	
17	.42	e.25	.08	3.1	.62	.79	2.3	5.0	10	8.9	4.7	
18	.40	e.24	.10	1.3	.55	1.8	1.7	5.3	11	3.7	4.6	
19	.38	e.22	.12	.72	.55	.96	1.3	8.0	8.5	1.2	1.4	
20	.38	e.21	.11	.53	.73	1.8	1.2	4.3	2.0	.82	.93	
21	.39	e.23	.12	.65	2.0	1.4	1.4	1.9	1.0	7.8	.77	
22	.39	e.25	.09	.72	1.5	2.7	7.4	5.2	.89	8.6	.67	
23	.34	.28	.08	.83	.80	2.5	6.3	4.5	.86	7.6	.59	
24	.31	.28	.08	1.3	1.2	2.5	5.3	1.6	.82	7.7	.61	
25	e.30	.29	.11	.69	1.0	2.6	3.6	.79	.74	8.7	.42	
26	e.29	.28	.11	.75	.87	1.9	2.3	1.5	.61	5.1	.63	
27	e.29	.23	.12	.87	2.7	1.6	1.9	1.8	.60	.22	.65	
28	e.29	.21	.11	.74	2.7	1.5	2.1	.89	.48	.12	.44	
29	.29	--	.10	.56	1.8	2.2	5.1	.62	.31	.14	.27	
30	.29	--	.08	.53	3.0	2.3	6.6	1.1	.63	.11	.33	
31	.29	--	.06	--	1.4	--	6.5	1.2	--	.90	--	
TOTAL	10.14	6.61	4.29	27.98	42.73	53.32	86.47	142.40	68.06	73.12	36.63	
MEAN	.33	.24	.14	.93	1.38	1.78	2.79	4.59	2.27	2.36	1.22	
MAX	.42	.29	.21	3.4	3.0	6.3	7.4	8.3	11	8.9	7.4	
MIN	.29	.19	.06	.03	.49	.44	.97	.62	.21	.11	.17	
ACRE-FT	20	13	8.5	55	85	106	172	282	135	145	73	

TABLE 9.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in D-Line Canal (site 22), Stillwater Wildlife Management Area, 1989

[Abbreviations and symbol: ACRE-FT, acre-feet; e, estimated; MAX, maximum; MIN, minimum; μ S/cm, microsiemens per centimeter at 25 °Celsius; mg/L, milligrams per liter; --, not determined]

DAY	WATER TEMPERATURE (DEGREES CELSIUS)														
	MARCH 1989			APRIL 1989			MAY 1989			JUNE 1989			JULY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	17.9	5.3	10.9	28.0	9.2	18.0	30.6	10.6	20.5	29.1	14.6	21.5
2	--	--	--	16.2	6.9	10.6	28.2	10.8	18.8	30.3	14.6	22.1	32.0	16.8	24.2
3	--	--	--	23.0	4.8	12.2	28.2	12.2	19.1	27.7	16.7	20.8	33.1	18.2	25.3
4	--	--	--	26.5	3.5	14.3	26.4	11.2	18.1	21.8	16.6	18.7	32.9	19.0	25.4
5	--	--	--	--	--	--	28.9	12.9	19.2	28.6	15.2	20.0	31.4	18.9	24.9
6	--	--	--	--	--	--	--	--	--	34.1	14.8	23.1	32.3	19.3	25.5
7	--	--	--	--	--	--	--	--	--	--	--	--	33.1	20.2	26.4
8	--	--	--	--	--	--	--	--	--	--	--	--	30.0	22.2	25.6
9	--	--	--	--	--	--	--	--	--	--	--	--	31.3	19.6	24.4
10	--	--	--	--	--	--	--	--	--	--	--	--	33.8	16.9	24.5
11	--	--	--	24.0	7.4	14.9	--	--	--	--	--	--	--	--	--
12	--	--	--	24.9	9.0	16.2	--	--	--	--	--	--	--	--	--
13	--	--	--	25.4	9.4	17.1	--	--	--	--	--	--	--	--	--
14	--	--	--	26.7	12.2	18.4	--	--	--	--	--	--	--	--	--
15	--	--	--	26.5	11.7	18.5	25.5	13.3	19.0	30.8	18.8	23.6	--	--	--
16	11.6	3.3	7.7	26.6	12.2	19.1	26.3	13.3	19.7	31.3	16.0	22.7	--	--	--
17	15.9	1.2	7.8	28.1	13.6	20.4	28.9	14.6	20.9	34.0	16.1	24.1	--	--	--
18	14.3	6.4	9.9	29.3	13.6	20.9	24.9	11.8	17.8	--	--	--	--	--	--
19	16.8	4.8	10.5	26.5	14.6	19.5	27.9	7.4	17.0	--	--	--	--	--	--
20	18.9	.7	9.1	27.5	13.2	19.1	30.4	10.4	19.2	--	--	--	--	--	--
21	16.8	4.6	10.2	23.3	11.1	16.0	30.1	11.4	19.4	--	--	--	--	--	--
22	24.0	5.6	13.3	19.7	7.9	13.5	30.6	11.3	17.9	--	--	--	--	--	--
23	17.7	6.4	11.6	18.7	8.0	12.7	24.2	8.2	15.4	--	--	--	--	--	--
24	22.9	7.1	13.2	10.3	4.9	7.4	--	--	--	--	--	--	--	--	--
25	20.0	.7	7.8	15.1	4.3	10.0	--	--	--	33.1	13.9	22.2	--	--	--
26	19.1	.2	9.7	16.4	7.1	11.8	--	--	--	--	--	--	--	--	--
27	21.4	5.5	12.6	21.6	6.6	13.5	--	--	--	--	--	--	--	--	--
28	18.5	7.7	12.4	--	--	--	--	--	--	--	--	--	--	--	--
29	22.2	5.1	12.6	26.1	6.9	15.8	17.7	8.2	12.8	--	--	--	--	--	--
30	23.4	6.3	14.2	21.1	9.3	14.9	27.3	9.0	17.2	--	--	--	--	--	--
31	16.1	9.4	12.2	--	--	--	30.1	8.5	18.5	--	--	--	--	--	--
MONTH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 9.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in D-Line Canal (site 22), Stillwater Wildlife Management Area, 1989--Continued

DAY	SPECIFIC CONDUCTANCE (µS/cm)														
	MARCH 1989			APRIL 1989			MAY 1989			JUNE 1989			JULY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	2,020	1,930	1,980	1,160	1,060	1,110	1,090	844	953	706	666	681
2	--	--	--	2,020	1,950	1,980	1,340	1,140	1,260	903	854	881	734	685	705
3	--	--	--	--	--	--	1,320	1,240	1,280	882	821	857	752	703	724
4	--	--	--	--	--	--	1,410	1,270	1,320	879	820	832	761	721	740
5	--	--	--	--	--	--	--	--	--	988	889	935	779	730	752
6	--	--	--	--	--	--	--	--	--	1,160	928	1,060	798	748	767
7	--	--	--	--	--	--	--	--	--	--	--	--	816	757	782
8	--	--	--	--	--	--	--	--	--	--	--	--	804	764	777
9	--	--	--	--	--	--	--	--	--	--	--	--	873	773	823
10	--	--	--	--	--	--	--	--	--	--	--	--	1,030	842	974
11	--	--	--	1,770	1,700	1,760	--	--	--	--	--	--	--	--	--
12	--	--	--	1,700	1,630	1,680	--	--	--	--	--	--	--	--	--
13	--	--	--	1,630	1,560	1,600	--	--	--	--	--	--	--	--	--
14	--	--	--	1,640	1,550	1,590	--	--	--	--	--	--	--	--	--
15	--	--	--	1,630	1,530	1,580	988	959	970	772	672	689	--	--	--
16	1,680	1,590	1,630	1,530	1,430	1,480	971	931	949	740	691	713	--	--	--
17	1,660	1,610	1,640	1,420	1,380	1,400	1,070	913	960	908	710	804	--	--	--
18	1,700	1,660	1,680	1,580	1,380	1,440	1,250	956	1,060	--	--	--	--	--	--
19	1,710	1,640	1,660	1,580	1,450	1,490	1,180	1,080	1,120	--	--	--	--	--	--
20	1,760	1,670	1,710	1,520	1,270	1,400	1,270	1,100	1,180	--	--	--	--	--	--
21	1,780	1,730	1,760	1,280	1,200	1,240	1,200	1,120	1,170	--	--	--	--	--	--
22	1,800	1,670	1,760	1,270	1,140	1,190	1,280	1,160	1,220	--	--	--	--	--	--
23	--	--	--	1,120	1,060	1,090	1,430	1,260	1,340	--	--	--	--	--	--
24	--	--	--	1,110	981	1,030	--	--	--	--	--	--	--	--	--
25	--	--	--	1,400	1,000	1,160	--	--	--	945	746	802	--	--	--
26	--	--	--	1,330	1,140	1,220	--	--	--	--	--	--	--	--	--
27	2,680	2,080	2,490	1,150	990	1,090	--	--	--	--	--	--	--	--	--
28	2,600	2,360	2,510	--	--	--	--	--	--	--	--	--	--	--	--
29	2,400	2,140	2,280	1,110	994	1,050	888	869	879	--	--	--	--	--	--
30	2,270	2,090	2,160	1,350	1,050	1,170	1,100	860	976	--	--	--	--	--	--
31	2,080	2,010	2,040	--	--	--	1,100	923	961	--	--	--	--	--	--
MONTH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 9.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in D-Line Canal (site 22), Stillwater Wildlife Management Area, 1989--Continued

DAY	PH (STANDARD UNITS)														
	MARCH 1989			APRIL 1989			MAY 1989			JUNE 1989			JULY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	--	--	--	9.8	9.3	9.6	9.4	9.3	9.4	9.3	9.1	9.2
2	--	--	--	--	--	--	9.8	9.3	9.6	9.3	9.0	9.2	9.0	8.9	8.9
3	--	--	--	--	--	--	9.8	9.2	9.5	9.1	8.8	9.0	8.9	8.6	8.8
4	--	--	--	--	--	--	9.5	9.0	9.3	8.8	8.4	8.7	8.7	8.5	8.6
5	--	--	--	--	--	--	9.9	8.7	9.1	9.0	8.2	8.6	8.5	8.3	8.4
6	--	--	--	--	--	--	--	--	--	9.0	8.3	8.7	8.5	8.0	8.3
7	--	--	--	--	--	--	--	--	--	--	--	--	8.6	7.9	8.3
8	--	--	--	--	--	--	--	--	--	--	--	--	8.5	8.0	8.3
9	--	--	--	--	--	--	--	--	--	--	--	--	8.4	7.9	8.2
10	--	--	--	--	--	--	--	--	--	--	--	--	8.7	7.8	8.2
11	--	--	--	9.4	9.1	9.3	--	--	--	--	--	--	--	--	--
12	--	--	--	9.5	9.2	9.3	--	--	--	--	--	--	--	--	--
13	--	--	--	9.4	9.2	9.3	--	--	--	--	--	--	--	--	--
14	--	--	--	9.4	9.0	9.2	--	--	--	--	--	--	--	--	--
15	--	--	--	9.6	9.0	9.3	9.4	9.4	9.4	9.3	9.0	9.2	--	--	--
16	9.6	9.4	9.5	9.3	9.0	9.1	9.4	9.3	9.4	9.2	8.9	9.1	--	--	--
17	9.6	9.4	9.5	9.3	8.9	9.1	9.5	9.2	9.4	9.2	8.9	9.0	--	--	--
18	9.7	9.3	9.5	9.5	8.9	9.2	9.7	9.2	9.5	--	--	--	--	--	--
19	9.8	9.1	9.5	--	--	--	9.8	9.4	9.6	--	--	--	--	--	--
20	9.7	9.4	9.6	--	--	--	9.8	9.3	9.6	--	--	--	--	--	--
21	9.7	9.5	9.6	--	--	--	9.9	9.5	9.7	--	--	--	--	--	--
22	9.8	9.5	9.7	9.4	9.2	9.3	--	--	--	--	--	--	--	--	--
23	--	--	--	9.4	9.0	9.2	--	--	--	--	--	--	--	--	--
24	--	--	--	9.4	8.9	9.2	--	--	--	--	--	--	--	--	--
25	--	--	--	9.3	9.0	9.1	--	--	--	9.3	8.6	9.1	--	--	--
26	--	--	--	9.3	9.0	9.2	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	9.8	8.9	9.3	9.6	9.4	9.5	--	--	--	--	--	--
30	--	--	--	9.8	9.0	9.4	9.7	9.4	9.5	--	--	--	--	--	--
31	--	--	--	--	--	--	9.6	9.4	9.5	--	--	--	--	--	--
MONTH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 9.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in D-Line Canal (site 22), Stillwater Wildlife Management Area, 1989--Continued

DAY	DISSOLVED OXYGEN (mg/L)														
	MARCH 1989			APRIL 1989			MAY 1989			JUNE 1989			JULY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	13.6	5.6	9.2	15.1	3.3	8.3	14.0	3.4	8.5	9.1	4.1	6.2
2	--	--	--	12.4	5.8	8.8	13.8	5.2	8.8	12.7	2.8	7.5	11.0	3.7	6.8
3	--	--	--	14.0	3.7	9.0	11.2	7.1	8.8	10.7	2.5	6.4	12.4	3.5	7.4
4	--	--	--	14.8	3.1	8.2	9.8	6.0	7.6	7.5	3.5	5.6	12.0	3.5	7.2
5	--	--	--	--	--	--	9.2	5.8	7.3	11.8	3.0	6.9	9.9	3.6	6.4
6	--	--	--	--	--	--	--	--	--	14.1	2.7	7.5	10.8	2.9	6.5
7	--	--	--	--	--	--	--	--	--	--	--	--	11.8	3.0	7.1
8	--	--	--	--	--	--	--	--	--	--	--	--	8.5	3.2	5.8
9	--	--	--	--	--	--	--	--	--	--	--	--	10.3	2.4	5.7
10	--	--	--	--	--	--	--	--	--	--	--	--	13.3	2.1	6.6
11	--	--	--	16.9	4.9	10.2	--	--	--	--	--	--	--	--	--
12	--	--	--	18.4	4.8	10.6	--	--	--	--	--	--	--	--	--
13	--	--	--	18.5	4.5	10.5	--	--	--	--	--	--	--	--	--
14	--	--	--	18.5	3.7	10.0	--	--	--	--	--	--	--	--	--
15	--	--	--	18.6	3.5	9.9	12.9	5.1	8.4	10.0	3.8	6.4	--	--	--
16	--	--	--	17.2	3.6	9.2	14.2	4.4	8.9	12.8	3.5	7.7	--	--	--
17	--	--	--	17.2	3.4	9.3	14.2	4.1	8.5	14.1	3.8	8.1	--	--	--
18	--	--	--	17.1	2.3	8.9	14.0	3.9	8.7	--	--	--	--	--	--
19	--	--	--	16.1	2.2	8.1	14.9	3.8	9.1	--	--	--	--	--	--
20	--	--	--	15.2	2.1	7.6	14.9	3.0	8.1	--	--	--	--	--	--
21	--	--	--	14.6	2.4	7.0	13.7	2.1	7.1	--	--	--	--	--	--
22	14.4	6.8	10.1	13.2	3.7	8.1	16.2	1.9	7.8	--	--	--	--	--	--
23	14.8	6.8	10.1	12.3	4.7	7.9	9.8	5.2	7.1	--	--	--	--	--	--
24	15.6	5.2	9.5	12.8	3.9	8.2	--	--	--	--	--	--	--	--	--
25	10.2	6.7	9.0	13.0	5.3	8.5	--	--	--	9.6	2.0	5.5	--	--	--
26	13.9	8.0	11.5	12.0	4.1	7.9	--	--	--	--	--	--	--	--	--
27	15.1	6.6	10.2	12.2	2.8	7.5	--	--	--	--	--	--	--	--	--
28	12.0	5.1	8.9	--	--	--	--	--	--	--	--	--	--	--	--
29	15.0	6.2	9.9	17.8	4.0	9.7	13.3	5.6	9.3	--	--	--	--	--	--
30	14.8	5.3	9.1	17.3	3.0	9.2	16.5	6.3	11.0	--	--	--	--	--	--
31	13.1	4.4	8.4	--	--	--	15.3	4.8	9.3	--	--	--	--	--	--
MONTH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 9.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in D-Line Canal (site 22), Stillwater Wildlife Management Area, 1989--Continued

DAY	MEAN DISCHARGE (CUBIC FEET PER SECOND)											
	MARCH 1989	APRIL 1989	MAY 1989	JUNE 1989	JULY 1989	AUGUST 1989	SEPTEMBER 1989					
1	e0.00	0.64	0.82	0.04	0.74	0.38	0.00					
2	e.00	.47	.50	.06	1.0	.09	.00					
3	e.00	.27	.49	.39	.74	.27	.00					
4	e.00	.09	.18	2.0	1.2	1.5	.00					
5	e.00	.00	.01	.57	2.7	1.6	.00					
6	e.00	.00	.00	.04	2.3	1.5	.00					
7	e.00	.00	.00	.00	1.8	.36	.00					
8	e.00	.00	.00	.00	2.6	.08	.00					
9	e.20	.00	.00	.00	1.4	.05	.00					
10	e.40	2.2	.00	.00	.07	.40	.00					
11	e.80	3.7	.00	.00	.00	.43	.00					
12	e1.8	4.4	.00	.00	.00	.07	.00					
13	e3.4	4.7	.00	.00	.12	.01	.00					
14	e2.4	4.6	1.5	.07	.16	.00	.00					
15	e1.7	3.6	3.0	.79	.03	.00	.02					
16	e1.2	4.9	2.6	.37	.00	.00	.30					
17	e.90	5.8	2.0	.08	.00	.00	.91					
18	e.65	4.3	1.3	.00	.00	.00	.88					
19	e.45	1.9	.54	.00	.00	.00	.46					
20	e.32	1.8	.42	.00	.00	.00	.17					
21	e.22	4.2	.89	.00	1.3	.00	.15					
22	.36	5.5	.33	.00	1.2	.00	.39					
23	.23	7.3	.01	.00	.39	.00	.94					
24	.10	3.3	.00	.01	.11	.00	1.5					
25	.01	9.0	.00	.02	.02	.00	1.9					
26	.30	7.9	.00	.00	.00	.00	2.0					
27	.47	3.3	.13	.00	.00	.00	2.1					
28	.75	1.9	.46	.00	.00	.00	2.0					
29	1.1	1.4	.13	.00	.00	.00	1.9					
30	.95	1.1	.06	.09	.02	.00	1.9					
31	.79	--	.04	--	.73	.00	--					
TOTAL	19.50	88.27	15.41	4.53	18.63	6.74	17.52					
MEAN	.63	2.94	.50	.15	.60	.22	.58					
MAX	3.4	9.0	3.0	2.0	2.7	1.6	2.1					
MIN	.00	.00	.00	.00	.00	.00	.00					
ACRE-FT	39	175	31	9.0	37	13	35					

TABLE 10.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in Paute Diversion Drain (site 23), Stillwater Wildlife Management Area, 1988-89

[Abbreviations and symbol: ACRE-FT, acre feet; e, estimated; MAX, maximum; MIN, minimum; µS/cm, microsiemens per centimeter at 25 °Celsius; mg/L, milligrams per liter; --, not determined]

DAY	WATER TEMPERATURE (DEGREES CELSIUS)														
	AUGUST 1988			SEPTEMBER 1988			OCTOBER 1988			DECEMBER 1988			JANUARY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	30.9	15.5	23.0	25.9	7.4	14.7	--	--	--	0.2	0.2	0.2
2	--	--	--	31.3	15.2	22.7	25.9	7.8	15.1	--	--	--	.6	.2	.2
3	--	--	--	30.4	15.3	22.0	25.8	9.0	15.3	--	--	--	.6	.2	.2
4	--	--	--	30.6	15.6	21.9	22.2	8.2	14.5	--	--	--	.6	.1	.2
5	--	--	--	27.6	15.3	21.3	22.4	9.8	15.6	--	--	--	.5	.1	.1
6	--	--	--	28.6	15.3	21.3	21.4	9.5	14.6	--	--	--	.5	.1	.2
7	--	--	--	27.7	13.8	20.3	18.5	9.8	13.5	--	--	--	.1	.1	.1
8	--	--	--	27.5	10.7	20.1	18.3	10.1	13.9	--	--	--	.5	.1	.1
9	--	--	--	27.5	15.2	20.5	18.5	10.0	14.1	--	--	--	.5	.0	.1
10	--	--	--	25.9	10.6	18.2	18.4	9.5	13.4	--	--	--	.4	.0	.0
11	--	--	--	20.9	9.5	14.4	14.3	9.9	12.4	--	--	--	.0	.0	.0
12	--	--	--	18.8	10.9	14.2	17.6	9.0	12.8	--	--	--	.4	.0	.0
13	--	--	--	20.9	10.3	14.6	15.7	9.7	12.5	--	--	--	.4	.0	.0
14	--	--	--	22.6	9.2	15.2	23.9	8.7	14.2	1.4	0.6	0.7	.4	.0	.0
15	--	--	--	22.2	10.0	16.2	23.6	4.3	11.8	1.1	.6	.7	.4	.0	.1
16	27.6	16.3	21.2	22.2	10.2	16.8	23.3	5.1	12.7	.5	.5	.5	.4	.0	.1
17	28.3	15.7	22.3	20.9	10.2	16.0	25.3	6.0	13.5	.9	.5	.5	.1	.1	.1
18	28.5	15.6	22.4	18.3	8.5	12.9	--	--	--	.5	.5	.5	.5	.1	.1
19	28.4	16.1	22.9	13.4	7.8	11.0	--	--	--	.5	.5	.5	.5	.1	.2
20	28.3	15.8	23.0	18.1	10.2	12.8	--	--	--	.9	.5	.6	.5	.1	.1
21	27.6	15.4	22.3	18.7	10.2	13.5	--	--	--	.8	.4	.4	.5	.1	.2
22	27.6	14.8	21.5	27.0	9.6	14.4	--	--	--	.8	.4	.4	.5	.1	.1
23	28.5	14.7	22.6	28.0	6.5	15.2	--	--	--	.4	.4	.4	.5	.1	.1
24	--	--	--	27.4	8.1	16.4	--	--	--	.8	.4	.4	.5	.1	.2
25	--	--	--	27.8	8.0	16.2	--	--	--	.8	.4	.4	.6	.1	.2
26	28.4	19.9	23.4	27.2	7.1	15.3	--	--	--	.7	.3	.3	.6	.2	.3
27	28.9	15.5	23.3	23.5	7.6	13.8	--	--	--	.3	.3	.3	.6	.2	.2
28	28.6	15.7	23.1	22.3	5.1	12.8	--	--	--	.3	.3	.3	.2	.2	.2
29	29.5	20.2	24.1	25.2	5.8	13.4	--	--	--	.7	.3	.3	.6	.2	.2
30	29.4	15.9	23.5	26.2	6.6	14.5	--	--	--	.3	.2	.3	.6	.2	.2
31	30.9	15.2	22.9	--	--	--	--	--	--	.6	.2	.2	.6	.2	.3
MONTH	--	--	--	31.3	5.1	16.7	--	--	--	--	--	--	.6	.0	.1

TABLE 10.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in Paiute Diversion Drain (site 23), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	WATER TEMPERATURE (DEGREES CELSIUS)																								
	FEBRUARY 1989					MARCH 1989					APRIL 1989					MAY 1989					JUNE 1989				
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
1	2.1	0.2	0.6	20.0	0.5	8.1	18.8	4.0	9.4	27.6	9.1	17.7	---	---	---	---	---	---	---	---	---	---	---		
2	1.8	.2	.5	12.6	.2	6.2	17.4	6.2	10.1	25.4	10.3	17.4	---	---	---	---	---	---	---	---	---	---	---		
3	.7	.3	.4	14.6	.1	4.6	24.0	4.4	11.7	31.4	10.8	19.6	---	---	---	---	---	---	---	---	21.7	15.2	19.3		
4	.7	.3	.3	5.4	.1	2.3	26.8	4.7	14.0	---	---	---	---	---	---	---	---	---	---	---	19.0	15.2	17.0		
5	.3	.3	.3	13.0	1.3	6.2	28.9	6.2	15.9	---	---	---	---	---	---	---	---	---	---	---	21.2	15.3	18.0		
6	.3	.3	.3	21.7	5.4	11.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
7	.3	.3	.3	23.0	7.3	12.6	28.1	8.4	16.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
8	.4	.3	.3	15.2	5.8	10.2	28.7	7.4	16.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
9	.7	.3	.4	15.2	4.3	9.0	26.9	6.7	15.6	21.3	10.2	17.5	---	---	---	---	---	---	---	---	---	---	---		
10	.7	.3	.4	22.7	2.6	10.9	23.9	7.9	14.3	19.7	10.1	15.0	---	---	---	---	---	---	---	---	---	---	---		
11	.8	.3	.5	22.2	6.2	12.3	23.5	5.7	14.1	17.2	10.0	13.5	---	---	---	---	---	---	---	---	---	---	---		
12	.8	.4	.4	23.6	3.2	11.4	25.5	7.8	15.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
13	.8	.4	.5	18.6	3.8	9.7	26.7	8.7	16.4	21.8	10.2	15.9	---	---	---	---	---	---	---	---	---	---	---		
14	1.1	.4	.7	21.1	.8	8.7	---	---	---	22.3	10.3	17.1	---	---	---	---	---	---	---	---	---	---	---		
15	1.3	.5	.8	23.9	1.5	10.3	28.7	5.3	16.2	23.5	10.2	17.3	---	---	---	---	---	---	---	---	---	---	---		
16	2.0	.6	1.2	12.4	.3	5.9	29.0	5.6	17.4	22.7	10.3	17.6	---	---	---	---	---	---	---	---	---	---	---		
17	2.0	.6	1.2	19.6	.0	7.8	30.3	10.7	18.4	25.0	15.2	18.8	---	---	---	---	---	---	---	---	---	---	---		
18	3.0	.7	1.6	16.4	5.4	9.5	---	---	---	23.1	15.1	18.4	---	---	---	---	---	---	---	---	---	---	---		
19	5.4	1.1	2.7	18.5	3.3	10.4	23.2	15.2	18.8	20.9	10.3	15.5	---	---	---	---	---	---	---	---	---	---	---		
20	8.3	.8	3.9	23.2	.0	8.9	25.2	11.1	18.9	22.3	10.1	17.1	---	---	---	---	---	---	---	22.0	15.1	18.1	---		
21	9.1	.3	4.1	20.8	2.4	9.9	22.2	10.3	15.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
22	12.3	1.7	5.9	26.8	3.0	13.0	21.4	10.2	14.0	22.0	15.0	18.2	---	---	---	---	---	---	---	---	---	---	---		
23	19.3	.8	7.9	18.8	4.4	10.6	17.7	7.8	12.3	20.3	10.2	15.1	---	---	---	---	---	---	---	23.9	15.6	18.8	---		
24	16.0	1.4	7.4	23.5	6.7	12.3	11.0	6.6	8.7	21.6	10.3	15.2	---	---	---	---	---	---	---	---	---	---	---		
25	13.7	2.5	7.3	16.0	6.2	10.4	17.4	4.9	10.1	21.0	10.1	16.6	---	---	---	---	---	---	---	---	---	---	---		
26	20.4	2.1	9.0	23.5	2.2	11.3	15.1	7.3	11.2	23.8	10.5	17.5	---	---	---	---	---	---	---	---	---	---	---		
27	18.9	.7	8.1	25.1	3.6	12.4	18.7	7.7	12.7	22.2	15.3	18.3	---	---	---	---	---	---	---	23.6	15.4	19.8	---		
28	20.1	.3	7.7	19.6	5.4	11.0	22.8	8.9	15.2	18.8	14.9	16.7	---	---	---	---	---	---	---	---	---	---	---		
29	---	---	---	25.1	4.4	12.4	24.0	7.6	14.8	16.0	10.3	14.3	---	---	---	---	---	---	---	---	---	---	---		
30	---	---	---	26.9	4.6	14.0	20.3	10.4	14.2	18.5	10.2	14.8	---	---	---	---	---	---	---	---	---	---	---		
31	---	---	---	18.2	8.9	12.4	---	---	---	21.0	10.3	17.1	---	---	---	---	---	---	---	---	---	---	---		
MONTH	20.4	.2	2.7	26.9	.0	9.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		

TABLE 10. ---Daily maximum, minimum, and mean water temperature, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in Palute Diversion Drain (site 23), Stillwater Wildlife Management Area, 1988-89---Continued

DAY	WATER TEMPERATURE (DEGREES CELSIUS)											
	AUGUST 1989			SEPTEMBER 1989			OCTOBER 1989			NOVEMBER 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	--	--	--	20.8	10.4	15.3	10.1	2.1	5.0
2	--	--	--	23.1	15.2	19.8	17.6	10.1	13.4	9.0	1.8	4.9
3	--	--	--	23.6	15.1	19.9	17.1	5.1	11.6	10.1	1.7	4.8
4	--	--	--	--	--	--	18.4	5.3	12.3	10.4	3.2	5.8
5	--	--	--	--	--	--	18.1	8.0	12.5	10.9	4.0	6.7
6	--	--	--	22.5	15.1	19.0	18.7	9.6	13.3	9.4	3.8	6.4
7	25.0	20.6	23.0	23.4	10.1	16.8	19.0	9.1	13.3	10.1	3.3	5.7
8	23.0	16.4	20.8	24.1	10.2	15.8	20.3	5.2	13.0	11.9	.1	4.3
9	--	--	--	25.7	10.3	17.2	20.3	10.3	13.8	12.4	.1	4.4
10	--	--	--	25.8	10.3	17.9	20.4	10.3	14.4	10.8	2.9	6.0
11	--	--	--	23.7	10.3	16.7	20.4	10.1	14.5	10.9	3.0	5.9
12	--	--	--	23.5	10.2	17.0	21.6	5.7	14.3	10.5	3.1	6.3
13	--	--	--	23.7	5.1	14.6	18.7	6.0	13.7	11.0	3.2	6.6
14	--	--	--	22.1	10.1	17.4	17.5	10.3	13.9	9.8	2.6	5.5
15	--	--	--	--	--	--	18.2	10.3	13.7	6.6	3.2	4.7
16	--	--	--	21.7	13.1	17.2	17.5	5.7	12.5	8.3	1.9	4.7
17	--	--	--	20.4	15.1	17.2	17.6	5.6	12.1	8.9	2.7	5.3
18	--	--	--	18.6	10.1	15.3	18.1	5.9	12.6	9.3	2.3	5.2
19	--	--	--	20.7	10.7	15.7	18.3	9.2	13.3	8.9	1.5	4.6
20	23.6	20.0	21.5	21.3	10.1	17.0	13.8	8.2	11.6	8.6	1.2	4.4
21	--	--	--	21.8	10.1	17.1	15.4	10.4	12.3	6.5	.4	3.0
22	--	--	--	22.5	10.3	17.0	16.2	5.6	11.5	7.0	.3	3.2
23	22.1	15.2	19.6	24.0	10.7	18.5	13.7	5.3	10.4	6.5	.1	3.1
24	21.6	15.5	18.4	--	--	--	15.6	5.4	10.1	8.1	5.2	6.1
25	22.4	14.9	19.0	22.9	10.6	17.0	10.7	7.1	9.0	7.0	2.2	4.8
26	--	--	--	22.2	6.2	14.7	12.5	3.6	7.1	7.0	1.6	4.4
27	--	--	--	20.9	10.2	16.0	11.1	2.7	6.4	2.7	.2	1.0
28	--	--	--	21.0	10.1	16.0	10.4	3.3	5.9	.6	.1	.3
29	--	--	--	19.0	10.7	15.6	10.4	2.2	5.2	.2	.1	.1
30	23.9	15.0	18.8	21.0	10.1	15.9	10.2	1.6	5.1	--	--	--
31	22.8	10.8	18.4	--	--	--	10.2	1.5	5.1	--	--	--
MONTH	--	--	--	--	--	--	21.6	1.5	11.4	--	--	--

TABLE 10.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in Paiute Diversion Drain (site 23), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{cm}$)														
	AUGUST 1988			SEPTEMBER 1988			OCTOBER 1988			DECEMBER 1988			JANUARY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	--	--	--	2,340	1,740	2,000	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	--	630	580	604	--	--	--	--	--	--	--	--	--
4	--	--	--	650	590	623	--	--	--	--	--	--	--	--	--
5	--	--	--	630	540	562	2,600	2,060	2,300	--	--	--	--	--	--
6	--	--	--	560	530	549	--	--	--	--	--	--	--	--	--
7	--	--	--	580	540	564	2,660	2,230	2,410	--	--	--	--	--	--
8	--	--	--	630	560	587	--	--	--	--	--	--	--	--	--
9	--	--	--	620	580	593	--	--	--	--	--	--	--	--	--
10	--	--	--	780	580	629	--	--	--	--	--	--	--	--	--
11	--	--	--	830	770	793	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	630	590	611	--	--	--	4,330	3,600	3,910	--	--	--
15	--	--	--	710	620	664	3,890	3,070	3,790	--	--	--	--	--	--
16	--	--	--	670	630	646	3,970	3,110	3,570	--	--	--	--	--	--
17	614	510	551	680	620	644	4,130	3,210	3,930	--	--	--	--	--	--
18	855	499	583	690	570	621	--	--	--	--	--	--	--	--	--
19	679	571	622	570	550	556	--	--	--	--	--	--	--	--	--
20	784	550	703	570	550	557	--	--	--	--	--	--	--	--	--
21	--	--	--	580	540	562	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	744	496	622	1,440	1,160	1,350	--	--	--	--	--	--	--	--	--
24	--	--	--	1,620	1,240	1,420	--	--	--	6,930	6,450	6,750	--	--	--
25	--	--	--	1,800	1,020	1,560	--	--	--	--	--	--	--	--	--
26	700	590	651	1,780	1,040	1,440	--	--	--	--	--	--	--	--	--
27	730	520	584	--	--	--	--	--	--	--	--	--	--	--	--
28	650	540	565	--	--	--	--	--	--	--	--	--	--	--	--
29	630	580	609	2,310	1,650	1,930	--	--	--	--	--	--	4,580	3,800	4,200
30	--	--	--	--	--	--	--	--	--	--	--	--	4,840	3,940	4,260
31	730	660	678	--	--	--	--	--	--	--	--	--	5,400	4,430	4,940
MONTH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 10.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in Paiute Diversion Drain (site 23), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	FEBRUARY 1989					APRIL 1989					MAY 1989					JUNE 1989					JULY 1989				
	MAX	MIN	MEAN	SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{cm}$)		MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN		
				MAX	MIN																				
1	5,660	3,720	4,730	--	--	1,420	1,090	1,230	--	--	789	708	725	520	490	506									
2	7,560	5,730	6,600	--	--	--	--	--	--	--	717	617	659	510	430	465									
3	8,740	7,810	8,320	--	--	--	--	--	--	--	646	585	610	610	490	561									
4	--	--	--	--	--	720	580	626	--	--	575	513	548	619	459	526									
5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--									
6	--	--	--	--	--	700	580	652	--	--	573	492	511	659	599	627									
7	--	--	--	--	--	740	590	674	--	--	570	461	499	599	459	519									
8	--	--	--	--	--	780	740	765	--	--	778	570	670	609	479	573									
9	--	--	--	--	--	--	--	--	--	--	--	--	--	569	459	520									
10	--	--	--	--	4,450	1,070	2,640	--	--	--	--	--	--	469	409	430									
11	--	--	--	--	1,950	746	997	--	--	--	705	544	629	548	479	519									
12	--	--	--	--	--	--	--	--	--	--	554	473	517	558	478	530									
13	--	--	--	--	--	1,090	1,040	1,060	--	--	573	483	538	488	388	434									
14	--	--	--	--	657	547	585	1,140	1,090	1,110	543	503	520	447	368	409									
15	--	--	--	--	--	1,150	1,120	1,140	--	--	533	512	523	467	426	451									
16	--	--	--	--	--	1,340	1,130	1,190	--	--	512	502	507	525	425	455									
17	--	--	--	--	--	1,220	1,170	1,190	--	--	522	502	511	444	363	384									
18	--	--	--	--	--	1,280	1,160	1,200	--	--	542	522	539	472	373	396									
19	--	--	--	--	--	--	--	--	--	--	582	542	554	440	401	416									
20	--	--	--	--	--	588	508	540	--	--	752	592	680	599	429	510									
21	--	--	--	--	--	807	507	680	--	--	672	612	635	538	437	468									
22	--	--	--	--	939	599	682	691	--	--	631	561	607	466	425	451									
23	--	--	--	--	699	559	613	640	--	--	581	501	565	585	435	512									
24	--	--	--	--	609	539	580	596	--	--	591	481	530	544	468	468									
25	--	--	--	--	689	589	645	598	--	--	491	461	482	611	492	551									
26	--	--	--	--	710	599	647	542	--	--	471	441	456	670	611	638									
27	--	--	--	--	--	626	537	591	--	--	561	461	483	749	699	670									
28	--	--	--	--	--	626	564	599	--	--	570	491	511	--	--	--									
29	--	--	--	--	--	603	564	579	--	--	640	470	531	--	--	--									
30	--	--	--	--	--	612	601	604	--	--	520	470	490	644	614	632									
31	--	--	--	--	--	--	--	--	--	--	594	472	--	--	--	526									
MONTH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--									

TABLE 10.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in Paiute Diversion Drain (site 23), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	SPECIFIC CONDUCTANCE (µS/cm)											
	AUGUST 1989			SEPTEMBER 1989			OCTOBER 1989			NOVEMBER 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	481	362	412	624	453	587	500	450	474	651	571	595
2	519	440	470	592	423	506	499	469	484	690	548	591
3	509	428	489	571	390	453	588	488	541	595	534	566
4	536	428	472	518	390	433	618	457	505	623	504	584
5	525	426	468	777	390	657	--	--	--	601	539	556
6	535	444	478	--	--	--	597	446	521	548	517	533
7	502	473	490	--	--	--	686	436	503	517	497	503
8	531	502	517	672	584	647	555	515	535	517	487	503
9	659	530	590	771	661	690	915	484	593	537	497	513
10	--	--	--	770	559	627	584	524	561	587	497	544
11	620	462	538	559	518	540	683	403	578	677	577	642
12	452	363	398	627	446	512	582	491	543	737	567	598
13	--	--	--	716	475	512	621	500	549	677	617	635
14	528	499	514	767	526	633	600	529	568	657	567	626
15	500	441	467	581	439	489	808	508	583	587	567	575
16	574	462	487	681	492	559	657	537	614	557	557	557
17	577	486	517	--	--	--	636	576	606	577	547	564
18	548	419	475	488	447	472	734	565	611	607	567	588
19	542	431	496	489	430	460	1,030	393	629	717	597	626
20	605	484	542	513	458	499	--	--	--	667	637	652
21	517	386	448	476	424	444	--	--	--	977	657	754
22	569	439	493	487	447	464	--	--	--	1,380	1,010	1,190
23	588	467	490	590	479	508	767	668	715	1,610	1,400	1,490
24	596	475	508	601	531	556	766	674	710	1,830	937	1,620
25	655	374	475	626	575	593	763	612	691	1,930	1,060	1,710
26	593	384	490	689	626	642	--	--	--	2,040	1,940	1,980
27	611	461	518	--	--	--	847	595	697	2,170	2,040	2,110
28	780	460	586	--	--	--	595	562	578	2,220	2,170	2,190
29	729	467	535	--	--	--	622	541	580	2,280	2,230	2,250
30	--	--	--	754	471	536	578	558	569	--	--	--
31	--	--	--	--	--	--	593	545	567	--	--	--
MONTH	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 10.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in Paiute Diversion Drain (site 23), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	AUGUST 1988			SEPTEMBER 1988			OCTOBER 1988			MARCH 1989			APRIL 1989			
	MAX	MIN	MEAN	MAX	MIN	MEAN	PH (STANDARD UNITS)	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	--	--	--	--	--	--	--	--	--	--	8.7	8.1	8.4
2	--	--	--	--	--	--	--	--	--	--	--	--	--	8.7	8.2	8.5
3	--	--	--	--	--	--	--	--	--	--	--	--	--	8.8	8.0	8.5
4	--	--	--	--	--	--	--	--	--	--	--	--	--	8.7	8.4	8.6
5	--	--	--	--	--	--	--	--	--	--	--	--	--	8.7	8.3	8.5
6	--	--	--	--	--	--	--	--	--	--	--	--	--	8.7	8.3	8.6
7	--	--	--	--	--	--	--	--	--	--	--	--	--	8.8	8.0	8.5
8	--	--	--	--	--	--	--	--	--	--	--	--	--	8.8	8.6	8.7
9	--	--	--	--	--	--	--	--	--	--	--	--	--	8.6	7.1	8.1
10	--	--	--	--	--	--	--	--	--	--	--	--	--	9.0	8.0	8.3
11	--	--	--	--	--	--	--	--	--	--	--	--	--	9.2	8.0	8.6
12	--	--	--	--	--	--	--	--	--	--	--	--	--	9.8	8.2	9.0
13	--	--	--	--	--	--	--	--	--	--	--	--	--	9.7	8.1	8.9
14	--	--	--	--	--	--	--	--	--	--	--	--	--	9.8	8.9	9.3
15	--	--	--	--	--	--	9.3	8.1	9.0	--	--	--	--	9.7	9.2	9.5
16	8.9	7.9	8.3	--	--	--	9.4	8.9	9.1	8.7	7.6	8.2	9.6	8.1	9.2	
17	9.2	7.7	8.5	--	--	--	9.5	9.0	9.2	8.6	7.7	8.2	9.2	8.1	8.7	
18	8.9	7.2	8.3	--	--	--	--	--	--	8.4	7.2	7.9	8.8	8.0	8.4	
19	8.7	7.1	7.9	--	--	--	--	--	--	8.7	7.0	8.1	8.1	7.0	7.5	
20	8.8	7.2	8.0	--	--	--	--	--	--	8.6	7.6	8.1	8.5	7.2	8.0	
21	9.1	7.4	8.2	--	--	--	--	--	--	8.4	7.1	8.0	8.7	7.0	7.8	
22	9.1	7.3	8.3	--	--	--	--	--	--	8.5	7.0	8.0	8.8	7.1	7.9	
23	9.3	7.5	8.3	8.0	7.0	7.6	--	--	--	9.1	7.1	8.3	8.1	7.1	7.7	
24	--	--	--	8.1	7.0	7.7	--	--	--	8.9	8.0	8.4	--	--	--	
25	--	--	--	8.4	7.0	7.8	--	--	--	8.5	7.9	8.3	8.3	7.1	7.9	
26	8.0	7.4	7.7	8.5	7.0	7.9	--	--	--	8.8	7.7	8.2	8.2	7.1	7.8	
27	8.9	7.5	7.9	8.5	7.0	8.1	--	--	--	8.7	7.9	8.4	8.4	7.1	7.8	
28	8.3	7.5	7.9	8.5	7.1	8.0	--	--	--	8.8	7.2	8.3	9.3	7.2	8.3	
29	8.2	7.4	7.8	8.2	6.0	7.2	--	--	--	8.8	8.2	8.5	9.2	8.0	8.6	
30	--	--	--	7.4	6.0	6.6	--	--	--	8.8	8.2	8.5	9.3	8.0	8.8	
31	--	--	--	--	--	--	--	--	--	8.6	8.3	8.5	--	--	--	
MONTH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 10.--Daily maximum, minimum, and mean water temperature, specific conductance, PH, and dissolved oxygen, and daily mean discharge in Paiute Diversion Drain (site 23), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	PH (STANDARD UNITS)														
	MAY 1989			JUNE 1989			JULY 1989			AUGUST 1989			SEPTEMBER 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.5	8.0	8.9	9.4	9.2	9.4	9.2	8.4	8.9	9.1	7.2	8.4	9.1	8.0	8.6
2	9.4	8.0	8.8	9.4	9.1	9.3	9.3	8.4	8.9	9.2	8.0	8.7	9.0	7.0	8.1
3	9.7	8.0	9.1	9.4	9.0	9.2	9.3	8.4	8.9	9.1	8.0	8.5	8.8	7.0	8.0
4	9.7	8.2	9.2	8.8	8.0	8.3	9.2	8.6	8.9	9.1	7.1	8.3	8.9	7.0	8.1
5	9.4	7.1	8.4	9.5	8.1	9.0	9.1	8.4	8.8	8.8	7.0	8.1	---	---	---
6	9.3	7.2	8.4	9.9	9.3	9.6	9.1	8.4	8.8	8.6	7.0	7.9	9.1	8.0	8.6
7	9.5	7.2	8.8	9.9	9.1	9.7	9.2	8.5	8.9	8.6	7.0	8.0	9.4	8.0	8.8
8	9.7	8.1	9.3	10.0	9.2	9.7	8.9	8.6	8.8	8.4	7.0	7.8	9.5	8.0	8.8
9	10.0	9.2	9.6	10.0	9.2	9.6	9.0	7.4	8.5	8.8	7.1	8.3	---	---	---
10	9.9	9.2	9.6	---	---	---	9.1	8.4	8.8	8.7	7.0	8.2	---	---	---
11	10.0	9.2	9.6	---	---	---	9.2	8.4	8.9	8.7	7.0	8.1	9.4	8.0	8.5
12	---	---	---	10.0	9.8	9.9	9.2	8.4	8.9	8.8	7.0	8.3	---	---	---
13	9.8	8.3	9.4	10.0	9.7	9.8	9.0	7.6	8.5	8.9	8.0	8.5	---	---	---
14	9.8	8.3	9.4	9.6	9.4	9.5	8.8	7.6	8.5	9.0	8.0	8.5	9.1	9.0	9.1
15	10.0	8.4	9.4	9.5	8.4	9.2	8.9	8.2	8.5	8.8	8.0	8.4	9.0	8.1	8.5
16	10.0	9.5	9.7	9.5	8.3	9.0	8.9	8.1	8.4	8.9	7.1	8.2	8.9	8.0	8.2
17	10.0	9.3	9.7	9.5	8.3	9.0	8.9	8.1	8.6	8.8	8.0	8.5	8.1	8.0	8.1
18	9.9	8.4	9.4	9.6	8.3	9.0	8.9	7.3	8.5	8.7	8.2	8.4	8.1	8.0	8.1
19	9.6	8.0	9.0	9.8	8.4	9.4	9.1	8.1	8.5	8.7	7.1	8.0	8.1	8.0	8.1
20	9.2	8.0	8.8	9.9	9.4	9.7	8.8	8.1	8.5	8.6	7.0	8.0	8.1	8.0	8.1
21	9.1	8.0	8.4	9.9	9.5	9.6	8.7	7.1	7.9	8.8	7.1	8.0	8.2	8.0	8.1
22	8.8	8.0	8.3	9.8	9.3	9.5	8.5	7.2	7.9	9.0	7.0	8.1	8.8	8.0	8.3
23	9.7	8.0	8.8	9.9	9.3	9.6	8.7	7.1	8.1	8.8	7.0	8.1	8.8	8.0	8.4
24	9.8	9.0	9.4	9.5	8.3	8.8	8.9	7.0	8.2	9.0	7.0	8.1	8.7	8.5	8.6
25	9.8	8.9	9.3	9.4	8.3	9.0	9.0	8.0	8.5	9.1	7.0	8.3	---	---	---
26	9.7	9.0	9.3	9.7	8.3	9.0	9.2	8.1	8.7	9.1	8.0	8.7	8.8	8.6	8.7
27	9.8	9.0	9.4	9.8	8.3	9.2	9.3	8.0	8.8	---	---	---	---	---	---
28	---	---	---	10.0	8.5	9.6	9.1	8.0	8.6	9.1	8.0	8.6	---	---	---
29	9.3	9.0	9.2	9.7	9.4	9.5	9.1	8.0	8.5	9.1	8.0	8.5	---	---	---
30	9.4	8.1	9.1	9.5	8.4	9.0	9.3	8.1	8.8	9.4	8.0	8.8	---	---	---
31	9.5	9.2	9.4	---	---	---	8.7	7.0	8.0	9.0	8.0	8.4	---	---	---
MONTH	---	---	---	---	---	---	9.3	7.0	8.6	---	---	---	---	---	---

TABLE 10.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in Paiute Diversion Drain (site 23), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	AUGUST 1988			SEPTEMBER 1988			OCTOBER 1988			DECEMBER 1988			JANUARY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	12.9	0.0	4.9	8.5	1.7	3.8	--	--	--	7.8	7.5	7.6
2	--	--	--	12.2	.1	4.7	9.0	.1	4.2	--	--	--	7.7	7.5	7.6
3	--	--	--	10.2	1.0	4.1	8.8	2.0	4.1	--	--	--	7.6	7.4	7.5
4	--	--	--	11.3	.3	4.4	9.5	.3	4.1	--	--	--	7.7	7.3	7.5
5	--	--	--	10.4	.7	4.5	7.1	2.0	3.4	--	--	--	10.2	7.2	7.9
6	--	--	--	10.8	.1	4.6	8.5	2.1	4.6	--	--	--	8.7	7.6	8.1
7	--	--	--	10.7	.1	4.8	9.4	2.0	4.7	--	--	--	8.6	7.9	8.1
8	--	--	--	11.3	.2	4.9	9.2	2.1	4.7	--	--	--	8.7	8.0	8.2
9	--	--	--	11.3	1.2	5.1	10.1	2.1	5.2	--	--	--	11.1	8.2	9.8
10	--	--	--	11.0	1.3	4.2	9.6	3.2	5.2	--	--	--	11.2	9.5	10.3
11	--	--	--	13.1	.3	5.3	10.4	2.1	5.0	--	--	--	11.9	10.0	10.7
12	--	--	--	5.6	2.3	4.4	10.9	3.8	5.9	--	--	--	12.3	10.3	11.4
13	--	--	--	5.5	1.8	3.7	9.4	2.3	5.6	--	--	--	12.4	10.6	11.3
14	--	--	--	--	--	--	18.2	2.2	8.9	14.4	12.4	13.2	13.0	10.7	11.4
15	--	--	--	--	--	--	16.3	6.2	9.8	13.9	13.2	13.5	13.5	11.5	12.4
16	15.0	2.1	7.4	--	--	--	15.2	6.6	9.3	10.5	8.5	9.0	13.8	5.5	9.7
17	14.2	1.1	6.9	--	--	--	13.5	6.3	8.7	10.2	8.8	9.4	8.5	7.3	7.9
18	15.0	.8	6.4	--	--	--	--	--	--	11.2	9.4	10.2	9.8	6.5	8.5
19	11.8	1.9	5.9	--	--	--	--	--	--	12.1	10.3	11.3	6.4	5.6	6.1
20	12.3	.8	5.9	--	--	--	--	--	--	12.2	11.5	11.9	7.5	6.2	6.9
21	13.3	.5	6.2	--	--	--	--	--	--	13.2	12.1	12.4	8.5	7.6	8.1
22	13.5	.8	6.7	--	--	--	--	--	--	13.2	12.3	12.7	10.4	8.5	9.5
23	14.9	.7	6.3	5.8	.0	2.5	--	--	--	14.8	9.4	12.1	10.6	9.4	9.9
24	--	--	--	3.8	.0	1.9	--	--	--	9.5	8.4	9.1	12.3	10.6	11.1
25	--	--	--	6.2	.3	3.0	--	--	--	10.7	5.6	9.5	13.1	11.4	12.3
26	14.3	.0	5.0	7.1	1.7	3.7	--	--	--	5.3	4.1	4.8	13.4	11.6	12.6
27	15.3	.2	6.4	6.8	1.9	3.9	--	--	--	6.6	5.3	6.0	13.5	11.6	12.7
28	16.2	.0	6.5	6.6	2.0	4.3	--	--	--	7.9	6.7	7.2	13.6	9.2	11.9
29	16.2	.1	6.6	9.4	1.9	4.2	--	--	--	8.4	7.3	7.7	10.1	4.9	7.7
30	16.0	.0	6.6	8.7	1.6	3.7	--	--	--	8.1	7.3	7.6	11.9	3.3	7.0
31	14.5	.0	6.0	--	--	--	--	--	--	7.7	7.4	7.5	12.5	4.2	8.0
MONTH	--	--	--	--	--	--	--	--	--	--	--	--	13.8	3.3	9.3

TABLE 10.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in Paiute Diversion Drain (site 23), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	DISSOLVED OXYGEN (mg/L)															
	FEBRUARY 1989			MARCH 1989			APRIL 1989			MAY 1989			JUNE 1989			
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
1	11.1	6.9	9.1	--	--	--	--	--	--	--	--	16.3	4.3	9.5	--	--
2	12.5	5.4	9.1	20.7	4.2	10.5	18.3	6.0	10.5	--	--	15.5	4.3	8.6	--	--
3	14.9	4.8	8.7	--	--	--	--	--	--	--	--	14.8	2.3	7.3	--	--
4	16.4	5.1	9.5	--	--	--	19.6	4.6	10.4	--	--	15.7	2.1	8.2	13.6	3.2
5	18.6	4.8	10.1	--	--	--	16.6	1.4	7.8	--	--	15.4	.1	6.8	--	--
6	18.5	3.3	9.4	--	--	--	16.1	3.5	7.7	--	--	15.4	2.1	7.1	--	--
7	19.2	3.1	9.9	--	--	--	17.1	3.6	8.5	--	--	15.1	2.2	7.3	18.3	6.4
8	18.6	3.5	10.4	--	--	--	13.1	3.1	6.9	--	--	16.6	2.6	8.4	19.5	2.2
9	19.1	4.6	11.6	--	--	--	9.1	4.3	6.6	--	--	13.5	2.1	7.9	18.4	.0
10	20.6	5.8	12.8	--	--	--	14.1	4.3	8.0	--	--	17.2	4.2	10.4	19.5	4.1
11	16.6	6.8	11.8	--	--	--	17.1	4.4	9.2	--	--	--	--	--	15.5	1.2
12	13.4	6.3	9.7	--	--	--	--	--	--	--	--	--	--	--	19.2	2.0
13	17.1	5.9	11.3	--	--	--	17.3	4.7	10.2	--	--	17.6	4.3	10.4	--	--
14	22.0	6.7	13.9	--	--	--	15.1	2.5	8.3	--	--	18.1	4.3	11.6	--	--
15	--	--	--	--	--	--	--	--	--	--	--	18.8	4.1	11.1	--	--
16	--	--	--	19.6	3.5	10.6	14.3	2.2	7.8	--	--	16.9	4.4	10.6	--	--
17	--	--	--	--	--	--	14.6	2.2	7.3	--	--	19.2	4.2	11.2	--	--
18	--	--	--	--	--	--	13.4	1.3	7.1	--	--	18.2	4.1	10.7	19.6	2.0
19	--	--	--	--	--	--	10.6	1.5	5.7	--	--	18.6	5.3	11.3	--	--
20	--	--	--	--	--	--	13.1	2.2	7.0	--	--	19.2	6.6	12.1	--	--
21	--	--	--	--	--	--	11.4	2.6	6.5	--	--	18.6	5.7	11.9	--	--
22	--	--	--	--	--	--	14.3	4.0	8.1	--	--	19.6	6.3	12.0	--	--
23	--	--	--	--	--	--	12.0	4.8	7.5	--	--	--	--	--	--	--
24	--	--	--	--	--	--	15.6	5.0	9.6	--	--	--	--	--	--	--
25	--	--	--	19.0	4.0	10.1	16.4	6.3	10.6	--	--	--	--	--	--	--
26	--	--	--	--	--	--	13.9	6.0	9.5	--	--	--	--	--	--	--
27	--	--	--	--	--	--	14.3	5.9	9.2	--	--	--	--	--	--	--
28	--	--	--	16.1	3.8	9.6	18.1	4.7	10.1	--	--	--	--	--	--	--
29	--	--	--	--	--	--	17.4	5.7	10.1	--	--	--	--	--	--	--
30	--	--	--	--	--	--	16.8	5.1	9.9	--	--	--	--	--	--	--
31	--	--	--	19.6	3.4	10.5	--	--	--	--	--	--	--	--	--	--
MONTH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 10.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in Painte Diversion Drain (site 23), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	MEAN DISCHARGE (CUBIC FEET PER SECOND)											
	DECEMBER 1988	JANUARY 1989	FEBRUARY 1989	MARCH 1989	APRIL 1989	MAY 1989	JUNE 1989	JULY 1989	AUGUST 1989	SEPTEMBER 1989	OCTOBER 1989	NOVEMBER 1989
1	--	0.00	2.1	0.43	0.00	2.8	6.2	6.2	4.5	4.9	4.0	7.6
2	--	.00	1.8	.38	.00	3.6	6.5	6.2	4.5	8.1	2.4	8.0
3	--	.00	e1.0	.38	.00	1.9	7.5	5.9	6.0	11	2.4	7.5
4	--	.00	e.50	.42	.00	2.9	9.2	7.1	7.8	5.8	2.3	11
5	--	.00	e.37	.43	.00	5.6	6.6	9.1	7.8	3.2	2.7	10
6	--	.00	e.30	.45	.00	5.7	4.2	8.3	7.5	2.3	3.1	11
7	--	.00	e.29	.37	.00	5.0	2.4	7.7	5.5	.35	3.3	5.6
8	--	.00	e.27	.39	.00	3.3	.58	9.2	4.9	.05	.70	.00
9	--	.00	e.26	.29	.20	3.0	1.8	6.5	5.2	.11	3.4	2.0
10	0.17	.00	e.25	.26	2.1	3.9	2.5	2.7	6.8	.09	2.3	5.5
11	.12	.00	e.25	.27	4.1	3.8	.79	1.1	6.7	.12	1.8	4.4
12	.17	.00	e.25	.26	4.3	6.1	.71	2.4	5.1	.41	.20	4.7
13	.33	.00	e.26	.20	4.1	6.6	1.8	6.2	3.5	.81	.86	3.8
14	.14	.00	e.27	.18	3.1	6.4	6.4	5.3	2.6	4.9	6.9	7.0
15	.00	.00	e.28	.19	1.4	5.4	7.1	3.0	2.3	5.8	4.8	12
16	.00	2.4	e.29	.13	1.5	7.1	5.9	2.7	1.7	3.0	3.9	9.5
17	.00	1.7	e.31	.09	1.9	7.2	3.7	2.4	3.6	3.5	4.6	8.3
18	.00	.00	e.32	.15	2.1	9.7	1.7	.58	7.2	3.5	4.5	7.6
19	.00	.00	e.33	.16	7.2	12	.61	.15	8.4	3.4	4.5	7.1
20	.00	.00	e.35	.04	5.4	14	.54	1.4	10	3.4	2.6	6.8
21	.00	.00	e.37	.02	4.8	16	.46	9.0	11	3.2	6.8	3.3
22	.00	.00	e.39	.02	5.1	13	.19	7.0	9.2	2.9	4.9	2.0
23	.62	.00	e.41	.21	5.4	2.0	.33	5.4	8.8	1.9	4.7	2.0
24	.12	.00	e.44	.08	3.9	.84	4.4	3.8	9.2	.94	5.2	2.0
25	.00	.00	.46	.06	4.7	3.7	2.3	2.0	8.4	.72	5.9	2.0
26	.00	.00	.47	.02	6.1	1.5	.47	.67	4.5	.65	2.9	2.0
27	.00	.00	.48	.01	5.0	5.9	.09	.68	2.3	1.3	4.1	2.0
28	.00	.18	.44	.00	3.4	6.8	.12	.95	4.8	1.9	5.4	2.0
29	.00	2.2	--	.00	3.7	6.5	2.7	2.9	4.6	2.8	7.6	1.9
30	.00	2.8	--	.00	3.2	5.7	5.5	2.7	1.4	3.0	6.8	e1.8
31	.00	2.5	--	.00	--	5.9	--	6.8	3.2	--	6.8	--
TOTAL	--	11.78	13.51	5.89	82.70	183.84	93.29	136.03	179.0	84.05	122.36	160.40
MEAN	--	.38	.48	.19	2.76	5.93	3.11	4.39	5.77	2.80	3.95	5.35
MAX	--	2.8	2.1	.45	7.2	16	9.2	9.2	11	11	7.6	12
MIN	--	.00	.25	.00	.00	.84	.09	.15	1.4	.05	.20	.00
ACRE-FT	--	23	27	12	164	365	185	270	355	167	243	318

TABLE 11.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in South Lead Lake (site 26), Stillwater Wildlife Management Area, 1988-89

[Abbreviations and symbol: MAX, maximum; MIN, minimum; μ S/cm, microsiemens per centimeter at 25 °Celsius; mg/L, milligrams per liter; --, not determined]

DAY	WATER TEMPERATURE (DEGREES CELSIUS)																	
	JULY 1988			AUGUST 1988			SEPTEMBER 1988			OCTOBER 1988			NOVEMBER 1988			DECEMBER 1988		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	30.6	22.3	26.4	--	--	--	25.7	13.7	19.3	20.5	7.9	13.3	10.0	3.4	5.5
2	--	--	--	--	--	--	--	--	--	26.1	14.6	19.8	13.9	9.0	11.3	8.2	2.4	4.8
3	--	--	--	--	--	--	--	--	--	26.6	14.6	20.2	16.7	8.2	11.4	7.2	3.0	4.6
4	--	--	--	--	--	--	--	--	--	25.2	13.7	19.2	18.1	7.4	12.1	9.6	2.2	4.9
5	--	--	--	28.9	21.1	24.1	--	--	--	24.0	14.6	18.8	18.5	8.0	12.4	9.3	.4	4.3
6	--	--	--	30.7	19.5	23.3	--	--	--	25.7	11.8	18.0	14.4	8.4	11.1	6.2	2.3	3.6
7	--	--	--	27.0	18.9	22.8	--	--	--	24.6	12.2	17.8	9.8	4.8	7.3	7.0	1.1	3.5
8	--	--	--	31.4	20.1	25.4	--	--	--	25.5	10.3	16.7	8.1	4.0	5.8	8.3	.8	4.0
9	--	--	--	31.6	20.6	25.8	--	--	--	24.4	9.4	16.0	8.2	2.3	5.4	7.6	2.2	4.4
10	--	--	--	29.4	19.8	24.1	--	--	--	24.5	9.9	15.9	10.4	3.7	6.6	7.3	2.0	4.2
11	--	--	--	28.8	19.5	23.1	--	--	--	15.6	11.7	13.7	11.6	2.4	6.7	7.0	2.0	3.9
12	--	--	--	--	--	--	--	--	--	25.3	7.5	15.0	10.1	5.0	7.2	9.2	.7	4.6
13	--	--	--	--	--	--	--	--	--	22.4	8.0	15.1	14.0	4.3	7.1	8.9	2.4	5.0
14	--	--	--	--	--	--	--	--	--	19.8	10.7	15.0	8.6	2.6	5.5	5.5	.0	2.0
15	33.0	23.5	28.2	--	--	--	--	--	--	20.6	9.8	14.8	8.1	.5	4.1	4.1	.3	2.0
16	32.8	23.9	28.3	--	--	--	--	--	--	22.1	10.4	16.1	8.2	2.6	5.1	4.2	.3	2.2
17	33.8	24.3	28.2	--	--	--	--	--	--	23.3	12.1	16.7	4.5	2.0	3.6	4.0	2.1	3.1
18	33.7	24.9	28.4	--	--	--	--	--	--	23.7	11.9	17.6	9.8	2.6	4.6	3.8	2.3	3.0
19	32.4	21.3	26.6	--	--	--	--	--	--	23.4	11.9	17.1	11.0	2.0	5.8	3.1	1.6	2.4
20	32.1	22.6	27.0	--	--	--	--	--	--	22.3	10.3	15.5	12.6	4.1	7.1	2.9	1.8	2.3
21	34.5	24.1	28.2	--	--	--	--	--	--	21.5	9.8	15.7	8.0	2.1	5.4	4.7	1.8	3.1
22	33.6	23.9	28.2	--	--	--	--	--	--	21.9	10.8	15.9	12.5	5.0	7.9	4.4	2.2	3.2
23	33.8	23.0	28.6	--	--	--	--	--	--	24.2	11.5	17.7	6.8	.9	5.2	3.9	1.8	3.0
24	31.1	23.2	26.6	--	--	--	--	22.7	13.8	18.3	8.6	14.1	10.1	2.0	4.8	4.8	2.0	3.1
25	29.7	21.3	24.7	--	--	--	--	24.1	13.6	18.4	9.5	14.6	7.8	2.1	4.4	5.8	2.6	4.0
26	--	--	--	--	--	--	--	24.7	13.3	18.2	9.1	15.1	7.6	1.6	4.4	4.5	1.3	3.4
27	28.8	20.4	23.9	--	--	--	--	22.6	13.3	17.6	9.7	13.7	9.3	3.8	6.0	1.3	.0	.5
28	33.2	21.5	26.5	--	--	--	--	24.1	10.5	16.2	8.4	13.2	9.1	2.7	5.6	.2	.0	.2
29	34.9	23.5	28.8	--	--	--	--	23.1	10.9	17.0	10.3	14.5	9.1	1.9	5.6	.2	.0	.0
30	33.1	25.1	27.8	--	--	--	--	25.7	13.0	18.7	19.3	13.1	8.5	4.5	5.8	.1	.0	.0
31	31.2	22.8	26.6	--	--	--	--	--	--	19.7	8.4	13.1	--	--	--	.9	.0	.3
MONTH	--	--	--	--	--	--	--	--	--	26.6	7.5	16.0	20.5	.5	7.0	10.0	.0	3.1

TABLE 11.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in South Lead Lake (site 26), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	WATER TEMPERATURE (DEGREES CELSIUS)																	
	JANUARY 1989			FEBRUARY 1989			MARCH 1989			APRIL 1989			MAY 1989			JUNE 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.8	0.4	0.6	0.0	0.0	0.0	--	--	--	16.2	8.7	12.0	25.0	13.1	18.5	25.1	17.0	20.5
2	.8	.3	.5	.0	.0	.0	--	--	--	13.8	8.4	10.7	26.5	15.3	20.1	24.5	18.6	21.3
3	1.1	.5	.7	.0	.0	.0	--	--	--	16.9	6.6	11.5	27.3	15.2	20.2	21.8	16.6	19.3
4	.9	.7	.8	.0	.0	.0	--	--	--	22.0	7.8	14.9	26.5	14.7	20.6	20.6	16.9	18.5
5	1.0	.6	.7	.0	.0	.0	--	--	--	26.7	11.4	18.5	28.7	17.0	21.5	22.3	16.9	18.9
6	1.2	.5	.8	.0	.0	.0	--	--	--	27.7	12.1	19.2	23.3	18.7	20.5	24.3	18.1	20.7
7	1.3	.6	1.0	.0	.0	.0	--	--	--	25.6	14.1	19.4	28.2	18.3	22.3	22.4	19.7	20.7
8	1.4	.8	1.1	--	--	--	--	--	--	25.1	12.1	18.5	25.9	19.9	22.6	23.4	17.6	19.6
9	1.6	.9	1.2	--	--	--	--	--	--	24.8	12.5	18.5	20.4	15.6	18.4	22.0	18.5	20.1
10	1.5	.9	1.2	--	--	--	--	--	--	22.9	12.4	16.8	17.7	13.4	15.5	25.6	17.9	20.9
11	2.2	.9	1.4	--	--	--	--	--	--	22.7	10.2	16.0	15.7	13.2	14.4	24.4	21.1	22.5
12	1.4	.0	.7	--	--	--	--	--	--	26.7	11.2	17.8	21.2	11.1	15.7	31.6	20.1	24.2
13	.6	.0	.3	--	--	--	--	--	--	28.0	9.8	18.9	20.3	13.9	16.8	29.0	22.4	25.7
14	.3	.0	.2	--	--	--	--	--	--	28.0	13.8	20.2	17.6	13.6	15.6	29.5	21.4	24.9
15	.1	.0	.0	--	--	--	20.8	8.6	13.4	24.7	14.1	18.7	20.3	13.2	16.5	29.2	21.1	24.2
16	.0	.0	.0	--	--	--	10.7	4.0	8.2	26.0	12.9	19.0	20.2	14.2	17.3	27.9	18.7	22.7
17	.0	.0	.0	--	--	--	16.5	2.5	9.3	29.6	15.6	21.8	24.7	15.4	19.1	28.5	20.3	23.7
18	.0	.0	.0	--	--	--	13.9	8.1	10.7	29.7	16.8	22.5	19.5	15.6	17.7	29.9	22.5	25.5
19	.0	.0	.0	--	--	--	13.1	6.8	10.3	27.0	18.7	21.6	19.5	12.5	15.6	26.8	21.3	23.5
20	.0	.0	.0	--	--	--	17.6	4.0	10.4	25.3	17.3	20.1	22.6	14.8	18.1	22.1	17.8	20.2
21	.0	.0	.0	--	--	--	16.1	8.2	11.9	22.5	11.6	16.6	22.1	16.2	18.9	24.1	15.1	18.4
22	.0	.0	.0	--	--	--	19.7	9.4	14.8	19.4	10.0	13.8	20.9	16.3	18.3	22.4	16.5	19.2
23	.0	.0	.0	--	--	--	17.4	10.1	13.4	18.9	10.8	13.8	16.5	13.5	15.2	21.2	18.5	19.9
24	.0	.0	.0	--	--	--	18.8	10.6	13.5	10.4	6.3	8.3	17.9	12.1	14.8	21.6	17.4	19.4
25	.0	.0	.0	--	--	--	14.4	10.3	12.2	16.6	4.5	10.1	19.0	12.5	15.5	23.2	18.1	20.3
26	.0	.0	.0	--	--	--	17.3	6.4	12.2	14.3	8.5	10.9	19.8	12.4	15.2	22.9	20.9	22.0
27	.0	.0	.0	--	--	--	19.8	9.6	14.3	22.3	7.9	13.4	22.3	17.2	19.2	22.1	20.5	21.3
28	.0	.0	.0	--	--	--	18.3	10.4	13.4	21.5	9.8	15.6	18.0	14.7	16.4	22.4	19.2	20.6
29	.0	.0	.0	--	--	--	17.1	8.5	12.7	24.7	11.1	16.7	14.4	12.7	13.7	22.3	18.9	20.7
30	.0	.0	.0	--	--	--	23.7	9.2	15.9	20.9	12.7	16.1	16.7	12.0	14.3	21.6	18.5	20.1
31	.0	.0	.0	--	--	--	15.2	11.6	13.6	--	--	--	20.9	13.7	17.1	--	--	--
MONTH	2.2	.0	.4	--	--	--	--	--	--	29.7	4.5	16.4	28.7	11.1	17.6	31.6	15.1	21.3

TABLE 11.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in South Lead Lake (site 26), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	WATER TEMPERATURE (DEGREES CELSIUS)																								
	JULY 1989					AUGUST 1989					SEPTEMBER 1989					OCTOBER 1989					NOVEMBER 1989				
	MAX	MIN	MEAN	MAX	MEAN	MIN	MAX	MEAN	MIN	MAX	MEAN	MIN	MAX	MEAN	MIN	MAX	MEAN	MIN	MAX	MEAN	MIN	MAX	MEAN		
1	23.1	18.7	20.5	23.5	20.5	22.0	20.3	17.6	19.0	17.9	15.6	16.7	10.0	7.4	8.5										
2	25.1	21.2	22.7	27.0	18.5	22.2	22.8	17.6	19.7	17.6	15.3	16.4	9.1	6.6	7.9										
3	24.9	22.0	23.4	27.0	21.9	24.0	21.6	18.8	19.9	15.8	14.6	15.3	10.6	7.4	8.5										
4	24.7	22.1	23.3	25.7	21.5	23.3	20.1	17.5	18.7	15.3	13.7	14.5	12.8	7.3	9.3										
5	24.4	22.2	23.4	26.8	22.6	24.3	20.9	17.4	18.9	16.5	13.2	14.6	12.4	8.8	10.3										
6	26.2	23.1	24.1	27.2	22.9	25.1	20.9	17.4	19.4	18.0	14.2	15.4	10.3	8.0	9.3										
7	26.5	24.0	25.2	27.5	23.4	25.1	17.3	15.1	16.3	17.0	14.2	15.3	9.9	6.8	8.4										
8	26.3	24.5	25.5	23.4	21.8	22.3	18.2	14.5	15.8	16.5	13.5	14.8	9.5	6.7	7.9										
9	24.2	22.7	23.3	26.4	21.1	22.7	18.1	16.3	17.2	17.9	14.7	15.7	11.1	6.9	8.7										
10	25.0	21.4	22.6	29.9	23.2	24.8	19.1	15.6	17.0	20.1	15.1	16.5	11.8	7.4	9.4										
11	24.8	22.5	23.3	26.4	22.9	24.2	19.1	16.1	17.5	20.3	16.6	18.3	10.8	8.3	9.4										
12	24.4	22.6	23.3	27.5	23.2	24.9	17.9	14.6	16.2	22.8	15.9	18.6	12.0	8.5	9.7										
13	23.8	21.9	22.6	29.6	23.0	24.9	21.7	14.4	17.3	21.8	16.3	18.6	11.2	7.0	9.4										
14	28.0	21.1	23.9	27.4	21.6	24.6	23.5	13.7	19.0	18.8	15.5	17.2	10.4	7.6	8.8										
15	26.9	22.2	24.0	26.4	22.2	23.9	22.7	17.0	19.6	16.7	14.1	15.4	8.1	6.4	7.2										
16	29.1	19.6	23.5	25.8	22.5	24.0	24.1	17.4	19.9	18.7	13.8	15.9	8.7	6.1	7.2										
17	26.4	21.8	23.6	24.8	21.5	22.8	19.4	16.7	18.0	17.8	13.5	15.4	10.2	6.8	8.1										
18	25.4	23.4	24.4	25.2	19.1	21.0	20.1	14.6	16.6	16.3	11.9	14.3	8.9	6.0	7.4										
19	26.6	22.8	24.5	23.7	20.2	22.1	18.7	14.8	16.9	18.2	12.8	14.9	9.0	6.1	7.3										
20	26.7	24.4	25.4	23.6	20.7	21.9	21.1	15.5	17.7	15.4	13.8	14.6	9.5	6.2	7.6										
21	26.9	24.9	25.7	22.7	18.7	20.3	20.8	16.2	18.0	14.9	13.2	13.9	10.2	6.0	7.6										
22	25.8	24.2	24.8	24.3	21.8	22.5	18.8	16.4	17.3	16.1	11.4	13.3	10.4	6.8	8.2										
23	24.9	23.8	24.3	22.4	18.4	20.6	19.4	16.2	17.7	13.0	10.6	12.2	10.3	5.9	8.4										
24	25.8	23.9	24.5	18.5	17.3	18.0	20.4	17.5	18.6	13.6	12.1	12.8	12.4	9.8	11.0										
25	25.4	23.8	24.4	18.1	16.8	17.4	21.1	19.0	20.1	12.1	10.8	11.3	10.3	7.2	9.0										
26	25.6	23.2	24.3	20.1	16.9	17.9	21.2	17.4	19.1	11.0	9.6	10.2	9.7	5.3	7.9										
27	27.7	21.3	24.0	20.3	17.7	18.5	21.0	18.8	19.8	10.4	8.7	9.7	6.2	3.6	4.9										
28	25.9	21.3	23.5	19.8	18.5	19.0	20.8	19.0	19.8	10.0	8.5	9.2	5.1	2.3	3.6										
29	26.2	22.0	23.9	21.3	18.1	19.2	18.9	17.4	18.1	9.5	8.0	8.7	3.9	1.6	2.7										
30	23.9	21.8	22.9	21.1	17.0	18.9	18.6	16.9	17.7	8.6	6.8	7.8	--	--	--										
31	28.6	20.1	22.9	19.3	16.3	17.7	--	--	--	10.4	7.4	8.5	--	--	--										
MONTH	29.1	18.7	23.8	29.9	16.3	21.9	24.1	13.7	18.2	22.8	6.8	14.1	--	--	--										

TABLE 11.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in South Lead Lake (site 26), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	JULY 1988			AUGUST 1988			SEPTEMBER 1988			OCTOBER 1988		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
					SPECIFIC CONDUCTANCE (µS/cm)	SPECIFIC CONDUCTANCE (µS/cm)	SPECIFIC CONDUCTANCE (µS/cm)	SPECIFIC CONDUCTANCE (µS/cm)	SPECIFIC CONDUCTANCE (µS/cm)	SPECIFIC CONDUCTANCE (µS/cm)		
1	--	--	--	4,750	3,460	4,160	--	--	--	8,260	7,740	8,050
2	--	--	--	4,660	3,900	4,320	--	--	--	8,390	7,810	8,100
3	--	--	--	4,430	3,340	3,940	--	--	--	8,480	8,070	8,270
4	--	--	--	--	--	--	--	--	--	8,580	8,100	8,280
5	--	--	--	4,400	1,430	3,620	--	--	--	8,450	8,000	8,270
6	--	--	--	3,940	1,470	2,960	--	--	--	9,130	8,040	8,290
7	--	--	--	4,160	2,640	3,450	--	--	--	8,910	8,150	8,570
8	--	--	--	4,570	3,100	3,950	--	--	--	8,530	8,160	8,350
9	--	--	--	4,620	3,460	4,140	--	--	--	8,600	8,070	8,330
10	--	--	--	5,170	3,820	4,680	--	--	--	8,720	8,100	8,350
11	--	--	--	5,790	5,060	5,350	--	--	--	8,780	8,040	8,360
12	--	--	--	--	--	--	--	--	--	8,340	7,920	8,060
13	--	--	--	--	--	--	--	--	--	9,090	7,920	8,290
14	--	--	--	--	--	--	--	--	--	8,990	8,750	8,830
15	5,470	1,890	3,480	--	--	--	--	--	--	9,000	8,860	8,930
16	5,560	3,770	5,060	--	--	--	--	--	--	8,990	8,880	8,930
17	5,150	1,210	3,940	--	--	--	--	--	--	9,040	8,910	8,960
18	4,860	1,970	3,750	--	--	--	--	--	--	9,120	8,910	9,000
19	3,930	1,670	2,870	--	--	--	--	--	--	9,140	8,960	9,060
20	4,430	1,670	3,450	--	--	--	--	--	--	9,140	8,970	9,050
21	4,980	3,650	4,500	--	--	--	--	--	--	9,140	8,960	9,080
22	5,430	4,430	4,880	--	--	--	--	--	--	9,190	9,010	9,100
23	5,560	4,280	5,050	--	--	--	--	--	--	9,240	9,070	9,140
24	5,170	4,660	4,980	--	--	--	7,650	7,130	7,470	9,250	9,060	9,190
25	5,070	3,880	4,690	--	--	--	7,710	7,300	7,530	9,320	9,100	9,210
26	5,180	4,860	5,070	--	--	--	7,880	7,580	7,690	9,360	9,160	9,260
27	4,910	3,990	4,410	--	--	--	7,930	7,490	7,760	9,350	9,240	9,270
28	4,490	2,640	3,820	--	--	--	8,090	7,840	7,920	9,620	9,230	9,360
29	4,890	2,920	3,940	--	--	--	8,080	7,870	7,960	10,200	9,780	10,200
30	4,870	3,920	4,510	2,970	1,660	2,290	8,270	7,880	8,040	--	--	--
31	4,840	3,130	4,040	--	--	--	--	--	--	9,990	9,770	9,890

TABLE 11.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in South Lead Lake (site 26), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	NOVEMBER 1988					DECEMBER 1988					JANUARY 1989					FEBRUARY 1989				
	MAX	MIN	MEAN	SPECIFIC CONDUCTANCE (µS/cm)		MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN			
				MAX	MEAN															
1	10,200	9,850	10,000	10,200	9,950	10,100	12,900	12,700	12,800	5,900	4,600	5,180								
2	10,200	9,770	9,920	10,200	9,680	10,000	12,700	12,500	12,600	5,900	5,700	5,790								
3	10,200	10,200	10,200	10,200	10,100	10,200	12,700	12,400	12,500	6,400	5,800	6,000								
4	10,200	9,220	9,640	10,200	10,100	10,200	12,700	12,500	12,600	6,900	6,400	6,670								
5	9,410	9,120	9,230	10,200	10,100	10,200	12,600	12,500	12,500	7,000	6,900	6,940								
6	9,790	9,130	9,480	10,200	10,100	10,200	12,500	12,200	12,400	6,900	4,500	6,110								
7	9,980	9,770	9,840	10,200	10,100	10,200	12,200	12,000	12,200	4,300	1,800	2,680								
8	10,200	9,850	9,950	10,200	9,470	10,100	12,200	11,800	11,900	--	--	--								
9	10,200	10,100	10,200	10,200	9,990	10,200	11,900	11,700	11,800	--	--	--								
10	10,200	10,000	10,100	10,200	10,000	10,200	11,800	11,500	11,700	--	--	--								
11	10,200	9,890	10,100	--	--	--	11,600	11,100	11,500	--	--	--								
12	10,200	10,100	10,200	10,200	10,000	10,100	11,900	11,300	11,600	--	--	--								
13	--	--	--	11,200	10,100	10,600	12,400	11,400	12,000	--	--	--								
14	10,200	10,200	10,200	11,200	10,600	10,900	12,300	12,000	12,200	--	--	--								
15	10,200	10,100	10,200	11,900	11,200	11,600	13,000	12,000	12,600	--	--	--								
16	10,200	9,960	10,200	12,800	11,900	12,500	13,400	12,800	13,100	--	--	--								
17	10,200	10,100	10,200	12,600	12,400	12,500	13,900	13,000	13,400	--	--	--								
18	10,200	9,840	10,200	12,600	12,400	12,500	14,000	13,400	13,700	--	--	--								
19	10,200	10,200	10,200	12,600	12,400	12,500	14,500	13,700	14,100	--	--	--								
20	10,200	10,200	10,200	12,600	12,200	12,400	15,000	14,300	14,700	--	--	--								
21	10,200	10,200	10,200	12,300	12,000	12,100	15,400	13,200	14,600	--	--	--								
22	10,200	10,200	10,200	12,200	11,800	12,000	13,000	8,700	10,400	--	--	--								
23	10,200	9,420	9,990	12,100	11,800	12,000	8,700	8,000	8,280	--	--	--								
24	10,200	10,100	10,200	12,200	11,900	12,000	9,800	8,000	8,700	--	--	--								
25	10,200	10,200	10,200	12,200	11,200	11,700	11,700	9,900	10,900	--	--	--								
26	10,200	10,100	10,200	11,800	11,100	11,400	11,700	6,500	8,520	--	--	--								
27	10,200	9,100	10,000	14,200	11,700	13,200	6,400	2,600	4,200	--	--	--								
28	10,200	10,000	10,200	14,300	13,900	14,100	4,500	1,500	2,970	--	--	--								
29	10,200	10,200	10,200	13,900	13,500	13,700	3,900	1,400	2,690	--	--	--								
30	10,200	9,830	10,100	13,500	13,100	13,300	3,900	1,800	2,990	--	--	--								
31	--	--	--	13,100	12,900	13,000	4,600	3,400	3,990	--	--	--								
MONTH	--	--	--	--	--	--	15,400	1,400	10,600	--	--	--								

TABLE 11.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in South Lead Lake (site 26), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	SPECIFIC CONDUCTANCE (µS/cm)											
	MARCH 1989			APRIL 1989			MAY 1989			JUNE 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	9,200	8,800	8,980	3,900	2,100	3,020	6,100	4,800	5,250
2	--	--	--	9,100	8,800	8,890	3,100	1,800	2,520	6,900	5,800	6,320
3	--	--	--	9,200	8,800	8,980	4,900	3,000	4,120	6,800	6,100	6,470
4	--	--	--	9,400	8,900	9,070	5,700	4,800	5,200	6,200	6,100	6,180
5	--	--	--	9,500	8,900	9,190	6,000	4,000	5,160	6,300	6,200	6,220
6	--	--	--	9,600	9,000	9,290	5,000	3,800	4,400	6,300	6,200	6,250
7	--	--	--	9,700	9,100	9,370	5,200	600	3,600	6,300	6,200	6,270
8	--	--	--	9,700	9,100	9,360	3,500	900	2,300	6,300	6,200	6,270
9	--	--	--	9,700	9,200	9,450	3,900	3,200	3,640	6,300	6,200	6,290
10	--	--	--	9,800	9,200	9,470	4,300	3,200	3,710	6,400	6,200	6,300
11	--	--	--	10,000	8,000	9,510	5,400	4,300	5,020	6,400	6,300	6,340
12	--	--	--	9,300	5,700	8,120	5,500	4,600	5,280	6,400	2,500	5,850
13	--	--	--	9,400	3,100	6,980	5,100	4,200	4,740	--	--	--
14	--	--	--	5,700	2,900	4,350	5,600	4,900	5,270	--	--	--
15	7,100	3,900	5,580	7,000	3,400	5,010	5,100	4,000	4,440	--	--	--
16	6,500	3,600	5,440	5,700	4,300	5,160	5,100	4,600	4,800	--	--	--
17	7,500	5,700	6,710	5,200	1,200	3,300	5,100	2,900	3,960	--	--	--
18	5,900	5,400	5,710	3,100	400	1,850	4,900	3,300	3,800	--	--	--
19	7,400	5,600	6,390	4,500	400	2,490	5,200	4,100	4,630	--	--	--
20	7,800	7,200	7,460	4,800	2,000	3,990	4,500	3,900	4,200	--	--	--
21	7,500	7,200	7,300	5,700	1,600	3,300	4,200	3,400	3,720	--	--	--
22	7,700	7,400	7,460	7,100	4,300	6,140	3,900	3,300	3,630	--	--	--
23	7,900	7,400	7,690	6,700	3,100	5,620	3,900	3,100	3,370	--	--	--
24	8,200	7,700	7,930	6,500	4,000	5,320	4,900	3,900	4,380	--	--	--
25	8,200	7,900	7,970	4,500	2,300	3,520	5,500	4,800	5,160	--	--	--
26	8,400	7,900	8,060	5,500	2,900	4,110	5,500	4,900	5,350	--	--	--
27	8,500	8,100	8,290	5,700	3,700	4,860	4,900	4,800	4,840	--	--	--
28	8,700	8,100	8,320	5,700	1,300	3,700	5,300	4,800	5,010	--	--	--
29	9,400	8,300	8,690	4,700	1,900	3,170	5,400	5,200	5,260	--	--	--
30	9,800	8,900	9,360	3,900	2,200	3,430	5,600	5,300	5,470	--	--	--
31	9,300	8,900	9,100	--	--	--	5,600	4,900	5,220	--	--	--
MONTH	--	--	--	10,000	400	6,200	6,000	600	4,360	--	--	--

TABLE 11. --Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in South Lead Lake (site 26), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	JULY 1988			AUGUST 1988			SEPTEMBER 1988			OCTOBER 1988			NOVEMBER 1988			DECEMBER 1988		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	--	--	--	--	--	8.9	8.5	8.7	8.3	8.2	8.3	9.2	8.9	9.0	
2	--	--	--	--	--	--	--	--	8.6	8.0	8.4	8.4	8.3	8.3	9.1	8.8	9.0	
3	--	--	--	--	--	--	--	--	8.7	8.0	8.4	8.4	8.3	8.4	9.1	8.9	9.0	
4	--	--	--	--	--	--	--	--	8.5	7.8	8.2	8.5	8.3	8.4	9.0	8.9	9.0	
5	--	--	--	8.8	7.8	8.4	--	--	8.0	7.7	7.9	8.4	8.3	8.4	9.1	8.9	9.0	
6	--	--	--	8.8	7.9	8.6	--	--	8.2	7.5	7.9	8.5	8.4	8.5	9.1	9.0	9.1	
7	--	--	--	8.7	7.7	8.1	--	--	8.2	7.6	7.9	8.7	8.5	8.6	9.2	9.0	9.1	
8	--	--	--	9.0	8.4	8.7	--	--	8.6	7.8	8.1	9.2	8.7	8.7	9.2	9.0	9.1	
9	--	--	--	8.9	7.9	8.6	--	--	8.6	8.0	8.3	9.2	8.9	9.0	9.2	9.0	9.1	
10	--	--	--	8.9	8.1	8.5	--	--	8.4	7.7	8.1	9.0	8.7	8.9	9.2	8.9	9.0	
11	--	--	--	9.1	8.6	8.8	--	--	8.3	7.8	8.0	8.9	8.7	8.8	9.3	8.9	9.1	
12	--	--	--	--	--	--	--	--	8.2	7.6	7.8	8.8	8.8	8.8	9.1	9.0	9.1	
13	--	--	--	--	--	--	--	--	9.1	7.8	8.2	8.9	8.8	8.9	9.0	8.8	8.9	
14	--	--	--	--	--	--	--	--	8.9	8.4	8.7	9.0	8.9	8.9	8.9	8.7	8.8	
15	8.4	7.8	8.1	--	--	--	--	--	8.8	8.6	8.7	9.1	8.9	9.0	8.9	8.7	8.8	
16	--	--	--	--	--	--	--	--	8.9	8.7	8.8	9.0	8.9	9.0	9.0	8.7	8.8	
17	--	--	--	--	--	--	--	--	8.8	8.2	8.4	9.0	8.6	8.9	9.0	8.7	8.8	
18	--	--	--	--	--	--	--	--	8.2	7.9	8.1	9.0	8.7	8.8	8.9	8.7	8.8	
19	--	--	--	--	--	--	--	--	8.0	7.9	7.9	9.0	8.8	8.9	8.9	8.7	8.8	
20	--	--	--	--	--	--	--	--	8.0	7.9	8.0	9.0	8.8	9.0	9.0	8.7	8.9	
21	--	--	--	--	--	--	--	--	8.1	8.0	8.0	9.0	8.8	9.0	9.0	8.8	9.0	
22	--	--	--	--	--	--	--	--	8.0	7.8	8.0	9.1	8.8	8.9	9.1	8.9	9.0	
23	--	--	--	--	--	--	9.3	9.0	8.1	7.9	8.0	9.0	8.7	8.9	9.2	9.0	9.0	
24	--	--	--	--	--	--	9.2	9.0	8.0	7.9	8.0	9.1	8.7	8.9	9.2	9.0	9.1	
25	--	--	--	--	--	--	9.3	8.7	8.2	8.0	8.1	9.0	8.9	9.0	9.3	9.0	9.2	
26	--	--	--	--	--	--	9.4	8.9	8.2	8.1	8.1	9.0	8.7	9.0	9.3	9.1	9.2	
27	--	--	--	--	--	--	9.4	8.9	8.2	8.1	8.2	9.0	8.7	8.9	9.1	9.0	9.1	
28	--	--	--	--	--	--	9.4	9.1	8.3	8.2	8.2	9.0	8.8	9.0	9.2	9.1	9.2	
29	--	--	--	--	--	--	9.3	8.7	8.3	8.1	8.2	9.1	8.8	9.0	9.2	9.1	9.1	
30	--	--	--	9.0	8.0	8.4	9.0	8.7	8.3	8.1	8.2	9.1	8.8	9.0	9.1	9.1	9.1	
31	--	--	--	--	--	--	--	--	8.3	8.2	8.2	--	--	--	9.1	9.0	9.1	
MONTH	--	--	--	--	--	--	--	--	9.1	7.5	8.2	9.2	8.2	8.8	9.3	8.7	9.0	

TABLE 11.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in South Lead Lake (site 26), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	PH (STANDARD UNITS)														
	JANUARY 1989			FEBRUARY 1989			MARCH 1989			APRIL 1989			JUNE 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.0	9.0	9.0	--	--	--	--	--	--	9.5	8.8	9.1	--	--	--
2	9.1	9.0	9.0	8.9	7.5	8.1	--	--	--	9.5	9.1	9.3	9.1	8.4	8.8
3	9.0	8.9	8.9	8.7	8.3	8.4	--	--	--	9.5	9.1	9.3	8.7	7.6	8.1
4	9.0	8.9	8.9	8.9	8.6	8.8	--	--	--	9.5	9.0	9.2	--	--	--
5	8.9	8.8	8.9	8.9	8.7	8.8	--	--	--	9.3	8.9	9.1	--	--	--
6	9.0	8.7	8.8	8.5	7.2	7.6	--	--	--	9.1	8.7	8.9	--	--	--
7	8.9	8.7	8.8	--	--	--	--	--	--	9.1	8.5	8.7	--	--	--
8	8.8	8.6	8.7	--	--	--	--	--	--	9.0	8.4	8.6	--	--	--
9	8.8	8.5	8.7	--	--	--	--	--	--	9.0	8.3	8.5	--	--	--
10	8.8	8.6	8.7	--	--	--	--	--	--	9.3	8.7	9.0	--	--	--
11	8.9	8.7	8.8	--	--	--	--	--	--	9.2	8.5	8.7	--	--	--
12	9.0	8.7	8.8	--	--	--	--	--	--	8.7	8.2	8.4	--	--	--
13	9.1	8.7	8.9	--	--	--	--	--	--	8.6	7.6	8.1	9.4	8.7	9.1
14	9.0	8.8	8.9	--	--	--	--	--	--	9.0	7.8	8.3	9.4	8.8	9.1
15	9.2	8.7	9.0	--	--	--	9.4	8.9	9.2	8.5	8.1	8.3	9.4	8.6	9.1
16	9.3	8.9	9.1	--	--	--	9.2	8.8	8.9	8.8	8.4	8.5	9.4	8.8	9.1
17	9.4	9.0	9.2	--	--	--	9.3	8.5	8.8	8.7	7.9	8.3	9.2	8.5	8.8
18	9.4	9.1	9.2	--	--	--	9.2	8.5	8.8	8.8	7.7	8.2	9.2	8.5	8.9
19	9.3	9.1	9.2	--	--	--	9.3	8.5	8.9	8.8	8.1	8.5	9.3	8.4	8.8
20	9.0	7.9	8.6	--	--	--	9.2	8.9	9.0	8.8	8.2	8.5	9.1	8.5	8.8
21	--	--	--	--	--	--	9.1	8.7	8.9	8.8	8.5	8.7	9.0	8.6	8.7
22	--	--	--	--	--	--	9.3	8.6	8.9	8.8	8.2	8.4	9.2	8.8	9.0
23	--	--	--	--	--	--	9.2	8.8	9.0	8.4	8.0	8.2	8.6	7.8	8.1
24	9.2	8.8	9.0	--	--	--	9.5	8.8	9.0	8.2	8.0	8.2	7.8	7.7	7.8
25	9.0	7.5	8.6	--	--	--	9.5	9.0	9.2	8.5	7.9	8.2	7.7	7.6	7.7
26	--	--	--	--	--	--	9.5	9.1	9.3	8.8	8.3	8.6	7.7	7.6	7.7
27	--	--	--	--	--	--	9.5	9.1	9.3	8.9	8.5	8.7	8.0	7.6	7.8
28	--	--	--	--	--	--	9.6	8.8	9.2	--	--	--	8.1	7.8	7.9
29	--	--	--	--	--	--	9.2	8.7	9.0	8.6	8.0	8.3	8.0	7.7	7.8
30	--	--	--	--	--	--	9.4	8.8	9.1	--	--	--	--	--	--
31	--	--	--	--	--	--	9.4	8.8	9.1	--	--	--	--	--	--

TABLE 11.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in South Lead Lake (site 26), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	PH (STANDARD UNITS)															
	JULY 1989			AUGUST 1989			SEPTEMBER 1989			OCTOBER 1989			NOVEMBER 1989			
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
1	--	--	--	8.8	8.6	8.7	--	--	--	--	--	--	--	8.1	8.0	8.1
2	--	--	--	8.9	8.5	8.7	--	--	--	--	--	--	--	8.0	8.0	8.0
3	--	--	--	8.8	8.1	8.6	--	--	--	--	--	--	--	8.0	8.0	8.0
4	--	--	--	8.7	8.1	8.5	--	--	--	--	--	--	--	8.0	7.9	8.0
5	--	--	--	8.7	8.3	8.6	--	--	--	--	--	--	--	8.0	7.9	8.0
6	--	--	--	8.8	8.1	8.5	--	--	--	--	--	--	--	8.0	7.9	8.0
7	--	--	--	8.6	8.2	8.4	--	--	--	--	--	--	--	8.0	7.9	8.0
8	--	--	--	8.7	8.1	8.4	--	--	--	--	--	--	--	8.0	7.9	8.0
9	--	--	--	9.8	8.2	8.7	--	--	--	--	--	--	--	8.0	7.9	8.0
10	--	--	--	9.8	8.7	9.3	--	--	--	--	--	--	--	8.0	7.9	7.9
11	--	--	--	9.5	8.4	8.9	--	--	--	--	--	--	--	7.9	7.9	7.9
12	--	--	--	8.8	8.5	8.6	--	--	--	8.6	6.9	8.0	--	8.0	7.9	7.9
13	--	--	--	9.0	8.5	8.7	--	--	--	8.5	6.4	7.9	--	8.0	7.9	7.9
14	--	--	--	8.9	8.3	8.7	--	--	--	8.7	7.3	8.4	--	8.0	7.9	7.9
15	--	--	--	8.8	8.6	8.7	9.3	8.7	9.0	9.2	8.2	8.8	--	7.9	7.9	7.9
16	--	--	--	8.9	8.7	8.8	9.3	8.7	9.0	9.1	8.1	8.9	--	7.9	7.9	7.9
17	--	--	--	8.9	8.6	8.7	9.2	8.7	8.9	9.0	7.2	8.4	--	8.0	7.9	7.9
18	--	--	--	8.9	8.7	8.8	9.0	8.5	8.8	8.5	7.9	8.4	--	7.9	7.9	7.9
19	--	--	--	8.9	8.6	8.8	9.0	8.3	8.6	8.6	8.4	8.4	--	7.9	7.9	7.9
20	--	--	--	9.0	8.1	8.8	9.2	8.3	8.9	8.6	8.5	8.5	--	7.9	7.9	7.9
21	--	--	--	8.6	7.5	7.9	9.0	7.6	8.2	8.6	8.5	8.6	--	7.9	7.9	7.9
22	--	--	--	--	--	--	8.0	7.4	7.8	8.5	8.3	8.5	--	7.9	7.9	7.9
23	--	--	--	--	--	--	--	--	--	8.5	8.3	8.4	--	7.9	7.9	7.9
24	--	--	--	--	--	--	--	--	--	8.4	8.3	8.4	--	7.9	7.9	7.9
25	--	--	--	--	--	--	--	--	--	8.3	8.3	8.3	--	7.9	2.5	7.6
26	--	--	--	--	--	--	--	--	--	8.3	8.2	8.2	--	--	--	--
27	8.8	8.4	8.6	--	--	--	--	--	--	8.2	8.2	8.2	--	--	--	--
28	8.8	8.3	8.6	--	--	--	--	--	--	8.2	8.1	8.1	--	--	--	--
29	8.9	8.4	8.6	--	--	--	--	--	--	8.1	8.1	8.1	--	--	--	--
30	9.0	8.6	8.7	--	--	--	--	--	--	8.1	8.0	8.1	--	--	--	--
31	9.0	8.4	8.7	--	--	--	--	--	--	8.1	8.0	8.1	--	--	--	--

TABLE 11.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in South Lead Lake (site 26), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	DISSOLVED OXYGEN (mg/L)										
	SEPTEMBER 1988			NOVEMBER 1988			DECEMBER 1988			MIN	MEAN
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN		
1	--	--	--	--	--	--	20.0	1.9	7.5	--	--
2	--	--	--	--	--	--	20.0	1.6	11.1	--	--
3	--	--	--	--	--	--	14.8	3.3	9.2	--	--
4	--	--	--	--	--	--	15.6	6.7	10.2	--	--
5	--	--	--	--	--	--	14.2	5.3	10.9	--	--
6	--	--	--	--	--	--	15.9	5.0	10.2	--	--
7	--	--	--	--	--	--	16.3	6.5	11.4	--	--
8	--	--	--	--	--	--	20.0	7.9	11.6	--	--
9	--	--	--	--	--	--	20.0	5.1	11.1	--	--
10	--	--	--	--	--	--	20.0	3.7	10.1	--	--
11	--	--	--	--	--	--	20.0	5.7	11.3	--	--
12	--	--	--	--	--	--	16.3	9.4	12.0	--	--
13	--	--	--	--	--	--	17.6	7.8	11.9	--	--
14	--	--	--	13.8	6.2	9.6	16.1	8.9	11.7	--	--
15	--	--	--	--	--	--	16.5	7.6	10.8	--	--
16	--	--	--	--	--	--	19.7	9.6	15.2	--	--
17	--	--	--	--	--	--	20.0	6.8	15.6	--	--
18	--	--	--	--	--	--	20.0	8.8	13.9	--	--
19	--	--	--	--	--	--	19.7	9.1	15.9	--	--
20	--	--	--	20.0	1.9	8.1	18.0	9.4	13.7	--	--
21	--	--	--	13.1	2.2	7.0	20.0	10.3	16.4	--	--
22	--	--	--	20.0	1.9	13.8	20.0	14.0	18.8	--	--
23	9.2	1.7	5.3	13.6	5.2	9.5	20.0	14.0	18.7	--	--
24	5.7	1.1	3.3	20.0	1.7	11.7	--	--	--	--	--
25	9.6	.6	3.7	20.0	2.3	11.5	--	--	--	--	--
26	10.0	1.4	3.7	20.0	2.2	8.9	--	--	--	--	--
27	10.3	1.1	4.9	20.0	2.7	13.4	--	--	--	--	--
28	12.3	2.2	5.4	20.0	2.2	9.8	--	--	--	--	--
29	6.2	1.1	3.1	20.0	1.6	12.7	--	--	--	--	--
30	5.6	.9	2.3	20.0	2.2	8.9	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--

TABLE 12.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in Stillwater Point Diversion Drain (site 27), Stillwater Wildlife Management Area, 1988-89

(Abbreviations and symbol: MAX, maximum; MIN, minimum; μ S/cm, microsiemens per centimeter at 25 °Celsius; mg/L, milligrams per liter; --, not determined)

DAY	AUGUST 1988			SEPTEMBER 1988			OCTOBER 1988			NOVEMBER 1988			DECEMBER 1988		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	27.0	21.2	23.7	23.7	11.9	17.5	15.3	8.8	11.3	--	--	--
2	--	--	--	--	--	--	24.0	12.5	17.9	13.3	9.1	11.2	--	--	--
3	--	--	--	--	--	--	23.6	13.2	18.1	15.9	8.5	11.8	--	--	--
4	--	--	--	--	--	--	23.1	13.0	17.7	15.2	7.4	11.1	--	--	--
5	--	--	--	--	--	--	23.0	13.7	17.9	13.7	7.0	10.5	--	--	--
6	--	--	--	--	--	--	22.9	12.2	17.2	12.9	9.2	10.9	--	--	--
7	--	--	--	--	--	--	21.0	12.2	16.0	10.2	5.8	7.8	--	--	--
8	--	--	--	--	--	--	22.1	11.2	16.2	8.4	4.6	6.5	--	--	--
9	--	--	--	--	--	--	21.4	10.7	15.7	8.8	4.1	6.6	--	--	--
10	--	--	--	--	--	--	21.1	10.3	15.0	8.8	5.5	7.2	--	--	--
11	--	--	--	--	--	--	14.8	12.5	13.4	8.0	3.8	5.9	--	--	--
12	--	--	--	--	--	--	19.9	9.7	14.2	8.6	5.4	7.0	--	--	--
13	--	--	--	--	--	--	17.0	10.0	13.6	9.9	6.5	8.3	--	--	--
14	--	--	--	--	--	--	19.3	10.3	14.3	8.4	6.1	6.8	1.5	0.3	0.9
15	--	--	--	--	--	--	18.9	9.3	13.7	6.5	4.0	5.4	1.5	.3	.7
16	--	--	--	--	--	--	19.5	9.7	14.1	6.1	3.9	4.8	1.4	.3	.8
17	--	--	--	--	--	--	19.9	10.2	14.7	4.9	2.8	3.7	.9	.3	.6
18	--	--	--	--	--	--	20.1	10.4	14.8	3.7	1.1	2.4	.7	.3	.5
19	--	--	--	--	--	--	19.0	11.3	15.0	4.7	2.5	3.6	.7	.3	.4
20	--	--	--	--	--	--	17.9	10.0	13.7	5.0	2.6	3.9	.5	.3	.3
21	--	--	--	--	--	--	17.6	9.8	13.4	5.1	2.3	3.4	.9	.3	.5
22	--	--	--	--	--	--	16.6	10.9	13.6	6.7	4.0	5.0	.9	.4	.6
23	--	--	--	23.0	10.9	16.4	15.7	10.6	12.9	6.7	4.3	5.7	1.2	.4	.7
24	--	--	--	23.5	12.4	17.4	15.4	10.0	12.5	4.7	1.7	3.2	1.1	.4	.6
25	--	--	--	23.7	13.0	17.9	15.6	9.2	12.3	5.7	2.9	4.4	.8	.4	.6
26	28.1	23.9	25.3	23.4	12.5	17.6	15.8	9.2	12.5	5.7	3.1	4.1	.8	.4	.5
27	28.1	21.5	24.5	21.1	12.9	16.8	14.6	9.7	12.3	4.1	1.5	2.9	.4	.4	.4
28	27.7	20.9	24.0	21.0	11.4	15.6	14.8	8.7	11.6	5.1	2.8	4.0	.4	.4	.4
29	27.9	20.9	24.0	22.8	10.8	16.3	14.3	9.6	11.8	5.0	1.7	3.0	.4	.4	.4
30	27.5	21.2	23.8	23.3	11.1	16.8	14.8	10.0	11.9	3.4	1.2	2.4	.4	.4	.4
31	27.1	21.2	23.9	--	--	--	14.5	8.2	11.2	--	--	--	.4	.4	.4
MONTH	--	--	--	--	--	--	24.0	8.2	14.4	15.9	1.1	6.2	--	--	--

TABLE 12.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in Stillwater Point Diversion Drain (site 27), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	WATER TEMPERATURE (DEGREES CELSIUS)														
	JANUARY 1989			FEBRUARY 1989			MARCH 1989			APRIL 1989			MAY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.4	0.4	0.4	0.7	0.3	0.4	19.1	0.2	7.8	13.3	10.3	11.6	24.2	11.5	17.3
2	.4	.4	.4	.8	.3	.4	10.8	1.9	7.4	11.5	9.7	10.5	23.8	12.4	18.1
3	.4	.4	.4	.3	.3	.3	9.2	.3	4.5	14.8	8.8	11.5	25.8	14.4	19.6
4	--	--	--	.7	.3	.3	3.9	.2	2.3	17.2	10.5	13.7	26.8	15.4	20.5
5	--	--	--	.3	.3	.3	10.7	2.3	6.3	18.2	12.4	15.1	27.1	16.5	21.2
6	--	--	--	.3	.3	.3	16.4	7.0	11.3	19.7	13.9	16.8	26.7	17.7	21.5
7	--	--	--	.3	.3	.3	16.6	9.5	12.7	20.5	15.9	17.8	27.4	17.7	22.0
8	--	--	--	.3	.3	.3	12.6	9.6	11.2	20.4	15.7	17.9	28.4	18.3	22.3
9	--	--	--	.3	.2	.3	13.0	7.3	10.3	23.6	12.9	18.3	22.3	17.1	19.7
10	--	--	--	.2	.2	.2	16.0	6.5	10.8	21.5	12.9	16.9	20.6	14.8	17.3
11	--	--	--	.2	.2	.2	15.9	9.1	12.7	22.6	10.2	15.9	15.9	13.0	14.7
12	--	--	--	.2	.2	.2	15.2	7.8	11.9	22.8	10.7	16.1	20.8	11.7	15.7
13	.5	.5	.5	.2	.2	.2	13.5	7.5	10.7	23.8	10.6	16.7	20.7	13.0	16.2
14	.5	.5	.5	.2	.2	.2	12.5	5.3	9.1	24.0	13.0	17.9	22.9	12.9	17.0
15	.5	.5	.5	.2	.2	.2	13.7	6.5	10.7	24.3	13.7	18.6	24.6	13.4	18.2
16	.5	.5	.5	.2	.2	.2	13.0	6.7	9.2	24.8	14.3	19.2	24.9	13.1	18.9
17	.5	.5	.5	.2	.2	.2	10.8	3.1	6.9	26.5	14.2	19.9	28.1	14.1	20.3
18	.5	.4	.4	.2	.2	.2	10.8	7.9	9.6	26.1	14.5	20.0	24.1	13.1	18.2
19	.4	.4	.4	.2	.2	.2	13.5	8.7	11.1	24.3	16.6	19.9	25.6	10.5	17.5
20	.4	.4	.4	.3	.2	.2	12.5	5.5	9.2	25.2	16.1	19.8	26.7	11.8	18.3
21	.4	.4	.4	.2	.2	.2	13.0	7.8	10.6	22.3	13.8	17.5	26.5	13.4	19.1
22	.4	.4	.4	1.8	.2	.7	14.1	9.8	12.4	21.1	11.6	15.5	25.2	13.9	18.6
23	.4	.4	.4	10.2	.2	4.5	13.9	11.3	12.4	19.3	9.2	13.7	20.4	14.2	16.8
24	.4	.4	.4	11.5	.2	5.6	14.5	10.8	12.6	11.4	7.7	9.4	21.3	11.8	16.1
25	.5	.4	.4	14.1	1.6	6.3	13.2	10.3	12.0	16.1	6.2	10.6	23.5	11.7	16.9
26	.5	.4	.4	16.8	.2	6.6	13.7	8.5	10.9	16.0	6.7	11.2	24.1	12.4	17.8
27	.5	.4	.4	18.4	.2	5.6	14.0	10.3	12.8	20.4	7.8	13.4	24.6	15.6	19.1
28	.5	.4	.4	16.9	.2	5.1	15.6	12.5	14.2	--	--	--	22.4	13.9	17.4
29	.4	.3	.4	--	--	--	15.2	10.8	12.7	22.6	9.0	15.3	17.1	12.3	14.2
30	.4	.3	.3	--	--	--	16.6	11.1	13.9	19.4	11.7	15.3	21.8	10.2	15.5
31	.4	.3	.3	--	--	--	15.1	12.5	13.9	--	--	--	24.9	11.1	17.6
MONTH	--	--	--	18.4	.2	1.4	19.1	.2	10.5	--	--	--	28.4	10.2	18.2

TABLE 12.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in Stillwater Point Diversion Drain (site 27), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	WATER TEMPERATURE (DEGREES CELSIUS)														
	JULY 1989			AUGUST 1989			SEPTEMBER 1989			OCTOBER 1989			NOVEMBER 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	25.8	19.3	22.0	22.9	17.6	19.8	19.6	13.0	15.6	9.7	4.3	6.2
2	--	--	--	25.9	19.0	21.7	22.9	17.6	19.9	17.8	13.2	14.8	9.9	3.6	6.0
3	--	--	--	26.0	19.9	22.5	23.2	17.6	19.9	16.6	11.7	13.6	9.5	3.3	5.8
4	--	--	--	26.2	20.8	23.1	23.3	17.8	20.1	--	--	--	10.7	3.8	6.6
5	--	--	--	27.4	21.0	23.7	25.5	17.9	21.0	17.3	10.3	13.0	10.6	5.2	7.5
6	--	--	--	26.5	21.6	23.8	23.9	16.5	19.7	17.6	11.0	13.6	9.6	5.1	6.9
7	--	--	--	26.5	22.0	23.3	20.7	16.2	17.9	18.3	11.0	13.9	9.5	4.5	6.4
8	--	--	--	22.1	19.7	20.9	20.5	16.3	18.2	18.8	11.0	14.1	--	--	--
9	--	--	--	25.6	18.9	21.9	21.7	16.8	18.9	18.9	11.2	14.3	9.9	3.2	5.9
10	--	--	--	27.6	22.0	24.3	21.6	17.1	19.1	19.8	11.5	14.9	9.2	4.6	6.3
11	--	--	--	28.0	22.6	24.8	21.0	17.5	19.0	19.5	11.9	15.0	9.3	5.5	6.9
12	--	--	--	28.8	22.2	24.9	21.3	15.9	18.1	17.2	12.6	14.4	8.9	6.2	7.4
13	--	--	--	28.8	20.3	24.0	20.8	15.0	17.3	17.8	12.5	14.6	--	--	--
14	--	--	--	28.6	20.6	24.1	21.3	15.4	18.0	17.0	12.4	14.1	--	--	--
15	28.0	21.7	24.2	28.5	20.6	24.0	23.5	16.2	19.1	--	--	--	5.9	4.0	4.9
16	26.4	20.1	22.9	28.9	19.4	23.5	21.5	17.3	18.8	16.1	11.1	12.9	6.7	4.1	5.2
17	28.1	20.7	23.9	26.7	20.3	22.8	20.6	16.4	18.1	16.1	10.3	12.5	8.0	4.2	5.6
18	29.7	22.0	25.4	--	--	--	19.8	14.9	16.6	16.4	10.4	12.7	9.0	3.3	5.6
19	29.3	23.3	26.1	26.1	20.0	22.6	20.4	14.2	16.6	17.1	10.5	13.1	9.2	2.8	5.4
20	29.6	24.4	26.4	23.9	19.2	21.5	21.3	14.6	17.2	--	--	--	--	--	--
21	28.7	23.7	25.6	24.4	18.7	21.1	22.1	15.1	17.8	13.7	11.6	12.3	8.5	1.7	4.6
22	28.5	22.7	24.6	25.4	20.3	22.2	22.3	15.4	18.1	--	--	--	8.9	1.9	4.7
23	28.4	21.6	24.6	22.6	17.7	20.1	23.5	15.6	18.7	--	--	--	--	--	--
24	29.3	22.7	25.6	21.4	16.2	18.4	23.1	16.1	18.7	14.9	10.3	11.8	8.0	5.1	6.1
25	29.2	22.9	25.7	21.9	16.6	18.9	20.2	16.1	17.8	11.9	7.9	10.0	7.9	3.9	5.8
26	29.0	22.6	25.3	23.4	17.2	19.7	22.2	14.0	17.2	10.5	6.7	8.1	7.2	3.0	5.2
27	28.3	21.7	24.7	23.9	18.3	20.5	--	--	--	--	--	--	6.4	.7	3.0
28	28.1	21.6	24.4	23.7	18.7	20.9	--	--	--	9.7	5.6	7.0	4.9	.0	1.4
29	28.4	21.0	24.0	24.5	19.1	21.1	18.8	15.4	16.8	8.8	4.8	6.3	2.6	.0	.6
30	26.4	20.6	23.1	23.1	17.3	19.8	19.8	14.5	16.5	8.8	4.4	6.0	2.3	.0	.6
31	26.7	20.5	22.9	22.4	16.4	19.0	--	--	--	9.1	3.9	5.8	--	--	--

TABLE 12.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in Stillwater Point Diversion Drain (site 27), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	JANUARY 1989					FEBRUARY 1989					MARCH 1989					APRIL 1989					MAY 1989				
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN				
																						SPECIFIC CONDUCTANCE (µS/cm)			
1	2,470	1,520	1,830	2,100	1,070	1,980	--	--	--	4,060	4,000	4,030	1,240	1,110	1,190										
2	1,490	1,040	1,230	--	--	--	--	--	4,010	3,990	4,000	1,260	1,180	1,210											
3	999	530	748	--	--	--	2,990	2,740	2,820	4,030	3,980	4,010	1,310	1,250	1,270										
4	--	--	--	--	--	--	2,990	2,900	2,930	4,020	3,970	4,000	1,270	1,020	1,170										
5	--	--	--	2,550	2,020	2,290	3,030	2,950	3,000	4,080	3,990	4,030	998	918	965										
6	--	--	--	--	--	--	3,130	2,980	3,080	4,160	4,060	4,110	988	898	943										
7	--	--	--	--	--	--	3,200	3,020	3,170	4,250	4,120	4,180	977	897	921										
8	--	--	--	--	--	--	3,170	2,990	3,130	4,200	3,830	3,980	997	877	962										
9	--	--	--	--	--	--	3,150	2,900	3,070	4,190	3,440	3,790	897	827	871										
10	--	--	--	--	--	--	3,200	3,040	3,120	3,540	1,620	2,720	1,050	827	911										
11	--	--	--	--	--	--	3,230	3,100	3,170	1,580	1,380	1,460	1,040	906	993										
12	--	--	--	--	--	--	3,330	3,170	3,240	1,740	1,250	1,360	906	846	863										
13	2,220	2,070	2,130	--	--	--	3,410	3,280	3,350	1,850	1,560	1,720	1,040	856	968										
14	2,170	2,030	2,100	--	--	--	3,450	3,370	3,410	1,540	1,180	1,350	1,290	1,020	1,170										
15	2,190	2,080	2,140	--	--	--	4,270	3,420	3,750	1,170	1,040	1,110	1,210	1,090	1,150										
16	2,130	2,010	2,070	--	--	--	4,420	4,270	4,320	1,050	952	999	1,210	1,130	1,160										
17	2,110	1,950	2,020	--	--	--	4,490	4,430	4,470	1,050	932	954	1,380	1,200	1,310										
18	2,310	2,090	2,190	--	--	--	4,480	4,320	4,400	1,120	1,000	1,080	1,420	1,350	1,390										
19	2,320	2,210	2,270	--	--	--	4,310	4,050	4,140	1,140	904	1,020	1,420	1,370	1,410										
20	2,350	2,250	2,290	--	--	--	4,050	3,940	4,000	1,050	904	988	1,360	1,150	1,280										
21	2,270	2,150	2,200	2,220	1,830	2,090	3,940	3,880	3,910	1,040	1,000	1,020	1,260	1,120	1,190										
22	2,180	2,080	2,130	2,480	1,560	1,850	3,960	3,880	3,920	1,040	976	1,010	1,270	1,140	1,230										
23	2,110	2,020	2,090	--	--	--	3,960	3,920	3,940	976	947	958	1,140	943	1,050										
24	2,150	2,030	2,080	--	--	--	3,990	3,950	3,960	1,010	927	946	942	902	921										
25	2,270	2,030	2,140	--	--	--	4,040	3,990	4,010	1,100	1,030	1,080	962	912	936										
26	2,240	2,060	2,120	--	--	--	4,080	3,980	4,010	1,230	1,100	1,180	952	912	934										
27	2,320	2,150	2,220	--	--	--	4,090	4,040	4,070	1,230	1,160	1,210	961	911	939										
28	2,420	2,210	2,290	--	--	--	4,090	4,050	4,070	--	--	--	971	901	932										
29	2,470	2,280	2,350	--	--	--	4,140	4,060	4,100	1,330	1,070	1,170	1,050	861	890										
30	2,420	2,180	2,300	--	--	--	4,150	4,100	4,130	1,330	1,130	1,290	1,050	921	989										
31	2,270	2,070	2,170	--	--	--	4,100	4,060	4,080	--	--	--	1,200	1,050	1,110										
MONTH	--	--	--	--	--	--	--	--	--	--	--	--	1,420	827	1,070										

TABLE 12.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in Stillwater Point Diversion Drain (site 27), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	JULY 1989					AUGUST 1989					SEPTEMBER 1989					OCTOBER 1989					NOVEMBER 1989				
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
	SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{cm}$)																								
1	--	--	--	848	828	834	881	840	853	883	844	844	944	963	1,030	928	947								
2	--	--	--	888	848	870	880	850	863	863	1,020	972	998	1,040	968	1,000									
3	--	--	--	--	--	--	870	849	860	860	980	909	940	1,130	1,040	1,060									
4	--	--	--	877	847	859	879	849	864	864	977	936	952	1,140	1,050	1,080									
5	--	--	--	866	846	855	918	858	889	--	--	--	--	1,140	1,060	1,090									
6	--	--	--	866	846	859	957	918	940	940	1,010	941	976	1,130	1,020	1,060									
7	--	--	--	865	845	855	947	907	931	--	--	--	--	--	--	--									
8	--	--	--	855	824	842	917	866	895	--	--	--	--	1,040	968	993									
9	--	--	--	894	834	866	876	836	858	1,070	1,040	1,050	1,050	1,140	1,050	1,100									
10	--	--	--	973	853	886	845	835	839	1,130	1,040	1,060	1,060	1,140	938	1,020									
11	--	--	--	973	913	953	845	824	833	1,330	1,090	1,190	918	878	885										
12	--	--	--	982	892	916	854	834	845	1,200	908	1,060	--	--	--										
13	--	--	--	1,090	932	993	963	854	875	1,030	918	950	--	--	--										
14	--	--	--	1,090	1,000	1,020	873	693	788	1,020	958	986	1,040	948	977										
15	947	864	915	1,000	950	974	982	827	924	--	--	--	1,020	808	945										
16	854	811	828	1,080	960	988	1,080	907	969	1,030	898	946	--	--	--										
17	859	800	831	1,080	929	977	1,000	881	923	1,020	848	919	828	778	797										
18	925	847	880	929	868	889	973	867	891	1,110	958	1,020	1,040	838	916										
19	935	852	896	878	848	862	1,000	889	947	--	--	--	--	--	--										
20	890	829	853	848	837	844	1,000	957	978	1,140	988	1,080	1,170	1,090	1,120										
21	859	836	847	847	827	834	990	965	976	968	838	902	--	--	--										
22	893	836	858	827	816	824	989	921	976	938	808	843	--	--	--										
23	922	893	914	826	806	817	1,030	882	965	938	838	883	1,340	1,290	1,310										
24	900	847	863	815	785	800	1,130	1,020	1,060	--	--	--	1,440	1,350	1,390										
25	876	854	861	885	785	806	1,130	983	1,030	1,240	1,110	1,160	1,510	1,370	1,440										
26	902	833	865	--	--	--	1,130	929	1,010	1,220	1,010	1,140	1,440	1,340	1,360										
27	892	862	882	864	823	842	1,130	1,040	1,060	--	--	--	1,430	1,330	1,380										
28	871	831	848	853	833	840	1,150	992	1,030	1,030	928	949	1,440	1,040	1,310										
29	880	830	851	862	842	853	1,000	938	963	938	848	883	1,340	858	1,100										
30	--	--	--	892	852	870	955	933	946	--	--	--	1,300	808	1,050										
31	849	829	842	981	871	896	--	--	--	--	--	--	--	--	--										
MONTH	--	--	--	--	--	--	1,150	693	926	--	--	--	--	--	--	--									

TABLE 12.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in Stillwater Point Diversion Drain (site 27), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	AUGUST 1988			SEPTEMBER 1988			OCTOBER 1988			NOVEMBER 1988			DECEMBER 1988		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	8.8	8.6	8.7	9.2	8.4	8.8	8.8	8.0	8.3	--	--	--
2	--	--	--	--	--	--	9.2	8.3	8.7	8.4	8.1	8.3	--	--	--
3	--	--	--	--	--	--	9.2	8.3	8.7	8.4	7.9	8.2	--	--	--
4	--	--	--	--	--	--	9.2	8.3	8.7	8.5	8.1	8.2	--	--	--
5	--	--	--	--	--	--	9.1	8.3	8.7	8.4	7.9	8.1	--	--	--
6	--	--	--	--	--	--	9.2	8.4	8.8	8.4	8.0	8.2	--	--	--
7	--	--	--	--	--	--	9.2	8.4	8.7	8.5	8.0	8.2	--	--	--
8	--	--	--	--	--	--	9.2	8.6	8.9	8.6	8.2	8.4	--	--	--
9	--	--	--	--	--	--	9.2	8.5	8.8	8.6	8.2	8.3	--	--	--
10	--	--	--	--	--	--	8.8	8.4	8.7	8.6	8.1	8.3	--	--	--
11	--	--	--	--	--	--	8.7	8.3	8.5	8.6	8.1	8.3	--	--	--
12	--	--	--	--	--	--	8.9	8.4	8.6	8.6	8.2	8.4	--	--	--
13	--	--	--	--	--	--	8.7	8.3	8.6	8.5	8.2	8.4	--	--	--
14	--	--	--	--	--	--	8.6	8.2	8.4	8.7	8.3	8.4	9.0	8.8	8.9
15	--	--	--	--	--	--	8.5	8.2	8.3	8.6	8.3	8.4	9.0	8.8	8.9
16	--	--	--	--	--	--	8.6	8.1	8.3	8.6	8.2	8.4	9.0	8.9	8.9
17	--	--	--	--	--	--	8.6	8.2	8.4	8.6	8.3	8.4	8.9	8.8	8.9
18	--	--	--	--	--	--	8.6	8.2	8.4	8.7	8.4	8.5	8.9	8.7	8.8
19	--	--	--	--	--	--	8.6	8.2	8.4	8.7	8.4	8.5	8.9	8.8	8.9
20	--	--	--	--	--	--	8.6	8.2	8.4	8.7	8.4	8.5	8.9	8.7	8.8
21	--	--	--	--	--	--	8.5	8.1	8.3	8.7	8.4	8.6	8.8	8.6	8.7
22	--	--	--	--	--	--	8.5	8.2	8.4	8.7	8.4	8.6	8.8	8.7	8.8
23	--	--	--	9.0	8.2	8.6	8.6	8.3	8.4	8.7	8.4	8.5	8.9	8.7	8.8
24	--	--	--	9.0	8.3	8.6	8.6	8.3	8.4	8.7	8.4	8.5	8.9	8.7	8.8
25	--	--	--	9.0	8.3	8.6	8.5	8.2	8.4	8.8	8.4	8.6	8.8	8.7	8.7
26	--	--	--	9.1	8.3	8.7	8.4	8.2	8.3	8.7	8.4	8.5	8.8	8.7	8.8
27	--	--	--	9.1	8.4	8.7	8.2	8.0	8.1	8.7	8.4	8.5	8.8	8.7	8.7
28	--	--	--	9.2	8.4	8.7	8.2	7.9	8.1	8.7	8.4	8.6	8.7	7.8	8.4
29	--	--	--	9.3	8.4	8.8	8.1	7.8	7.9	8.8	8.5	8.6	8.1	7.7	7.9
30	8.6	8.5	8.6	9.3	8.4	8.9	8.0	7.8	7.9	8.8	8.6	8.7	8.2	7.8	8.0
31	8.7	8.5	8.6	--	--	--	8.2	7.9	8.1	--	--	--	8.2	7.8	8.0
MONTH	--	--	--	--	--	--	9.2	7.8	8.5	8.8	7.9	8.4	--	--	--

TABLE 12.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in Stillwater Point Diversion Drain (site 27), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	PH (STANDARD UNITS)														
	JANUARY 1989			JULY 1989			AUGUST 1989			SEPTEMBER 1989			OCTOBER 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.9	7.6	7.8	--	--	--	8.1	7.9	8.1	7.9	7.4	7.7	7.9	7.4	7.7
2	8.2	7.5	7.9	--	--	--	8.2	7.9	8.1	8.1	7.9	7.5	7.7	7.5	7.1
3	8.5	7.6	8.1	--	--	--	8.1	7.9	8.0	8.0	7.8	7.4	7.6	7.1	6.9
4	--	--	--	--	--	--	8.1	7.7	7.9	7.9	7.9	7.2	7.5	--	--
5	--	--	--	--	--	--	7.9	7.7	7.8	7.8	7.4	6.8	7.2	--	--
6	--	--	--	--	--	--	8.0	7.7	7.9	7.9	7.7	6.7	7.1	7.3	7.0
7	--	--	--	--	--	--	8.0	7.7	7.8	7.8	7.4	6.8	7.0	7.2	6.9
8	--	--	--	--	--	--	7.8	7.6	7.7	7.7	7.4	6.6	7.0	--	--
9	--	--	--	--	--	--	8.1	7.5	7.7	7.7	7.3	6.4	6.9	--	--
10	--	--	--	--	--	--	8.0	7.7	7.9	7.9	7.5	6.5	7.0	--	--
11	--	--	--	--	--	--	8.1	7.7	7.9	7.9	7.4	6.5	6.9	--	--
12	--	--	--	--	--	--	8.2	7.9	8.1	8.1	7.6	6.9	7.3	--	--
13	--	--	--	--	--	--	8.3	7.9	8.1	8.1	8.1	7.4	7.8	--	--
14	--	--	--	--	--	--	8.0	7.9	7.9	7.9	8.2	7.5	7.9	7.7	7.5
15	--	--	--	8.1	8.0	8.1	8.0	7.5	7.7	7.7	8.3	7.9	8.1	--	--
16	--	--	--	8.0	7.9	8.0	8.2	7.9	8.1	8.1	8.2	8.0	8.1	--	--
17	--	--	--	7.9	7.7	7.8	--	--	--	--	--	--	--	7.4	7.2
18	--	--	--	7.9	7.6	7.8	8.2	7.9	8.0	8.0	--	--	--	7.5	7.3
19	--	--	--	7.9	7.7	7.8	7.9	7.7	7.8	7.8	--	--	--	7.6	7.3
20	--	--	--	8.1	7.7	7.9	7.9	7.7	7.8	7.8	--	--	--	7.6	7.4
21	--	--	--	8.1	8.0	8.0	7.9	7.6	7.8	7.8	7.9	7.8	7.9	--	--
22	--	--	--	8.2	8.0	8.1	7.7	7.4	7.5	7.5	--	--	--	--	--
23	--	--	--	8.1	8.1	8.1	7.7	7.2	7.4	7.4	--	--	--	--	--
24	--	--	--	8.2	8.1	8.2	7.6	7.0	7.4	7.4	--	--	--	--	--
25	--	--	--	8.3	8.1	8.2	--	--	--	--	--	--	--	--	--
26	--	--	--	8.2	8.1	8.2	--	--	--	--	--	--	--	--	--
27	--	--	--	8.3	8.1	8.2	--	--	--	--	--	--	--	--	--
28	--	--	--	8.1	7.7	8.0	--	--	--	--	8.1	7.9	8.0	--	--
29	--	--	--	8.2	7.7	8.0	--	--	--	--	8.0	7.7	7.9	--	--
30	--	--	--	8.2	7.8	8.0	--	--	--	--	--	--	--	--	--
31	--	--	--	8.2	7.7	7.9	--	--	--	--	--	--	--	--	--

TABLE 12.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen in Stillwater Point Diversion Drain (site 27), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	DISSOLVED OXYGEN (mg/L)																	
	AUGUST 1988			SEPTEMBER 1988			OCTOBER 1988			NOVEMBER 1988			DECEMBER 1988			JANUARY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	8.4	4.9	6.3	20.3	1.4	8.2	8.1	4.9	6.0	--	--	--	16.2	0.3	5.5
2	--	--	--	--	--	--	20.7	1.3	7.5	7.4	5.3	6.1	--	--	--	17.4	.0	5.4
3	--	--	--	--	--	--	19.5	1.2	7.0	8.7	4.8	6.4	--	--	--	--	--	--
4	--	--	--	--	--	--	20.7	.8	7.5	9.1	5.0	6.9	--	--	--	--	--	--
5	--	--	--	--	--	--	20.6	1.1	7.8	9.2	4.8	7.3	--	--	--	--	--	--
6	--	--	--	--	--	--	20.3	1.0	6.6	10.3	5.2	7.7	--	--	--	--	--	--
7	--	--	--	--	--	--	17.7	1.8	6.6	12.8	5.6	9.1	--	--	--	--	--	--
8	--	--	--	--	--	--	18.8	.5	6.6	11.7	6.6	8.9	--	--	--	--	--	--
9	--	--	--	--	--	--	20.1	.7	6.3	13.9	6.7	9.9	--	--	--	--	--	--
10	--	--	--	--	--	--	17.1	1.8	7.0	14.0	7.0	10.2	--	--	--	--	--	--
11	--	--	--	--	--	--	7.5	1.6	3.9	14.1	7.2	9.9	--	--	--	--	--	--
12	--	--	--	--	--	--	11.9	.2	4.6	14.3	7.4	10.4	--	--	--	--	--	--
13	--	--	--	--	--	--	12.6	.7	5.9	12.6	6.7	9.2	--	--	--	--	--	--
14	--	--	--	--	--	--	10.7	3.4	6.2	11.1	6.8	8.2	18.4	15.6	17.3	--	--	--
15	--	--	--	--	--	--	9.9	3.0	6.0	13.0	8.6	10.4	19.2	14.5	16.5	--	--	--
16	--	--	--	--	--	--	8.9	3.1	5.6	13.0	7.4	9.7	19.9	18.7	19.6	--	--	--
17	--	--	--	--	--	--	8.1	2.8	5.2	11.2	7.9	9.4	19.9	15.8	18.6	--	--	--
18	--	--	--	--	--	--	7.5	2.5	4.7	13.0	9.2	11.0	19.9	13.4	17.0	--	--	--
19	--	--	--	--	--	--	7.8	2.1	4.6	14.6	9.7	11.7	19.8	13.1	16.2	--	--	--
20	--	--	--	--	--	--	7.5	2.6	4.8	14.3	9.9	11.8	19.9	12.7	15.9	--	--	--
21	--	--	--	--	--	--	6.9	2.4	4.6	14.9	9.4	12.1	19.5	9.9	14.1	--	--	--
22	--	--	--	--	--	--	7.2	2.3	4.3	14.6	9.0	11.5	18.7	13.9	16.7	--	--	--
23	--	--	--	16.5	5.6	9.8	7.8	3.1	5.3	12.9	7.4	9.9	19.9	14.1	16.6	--	--	--
24	--	--	--	15.1	5.4	9.1	10.0	3.5	6.3	15.7	8.7	11.1	19.9	14.8	17.4	--	--	--
25	--	--	--	15.8	5.1	9.1	9.8	3.5	6.2	16.1	9.6	12.1	18.5	11.7	14.3	--	--	--
26	10.7	4.0	6.6	18.2	4.8	9.7	9.6	4.0	6.3	14.1	8.2	11.0	19.6	14.1	17.4	--	--	--
27	10.2	4.5	6.8	18.3	4.7	10.0	9.4	3.5	5.9	14.3	9.3	11.9	20.0	13.6	17.7	--	--	--
28	10.2	5.0	7.0	20.7	4.9	10.2	8.7	4.2	5.8	14.9	10.2	12.5	16.9	8.2	12.2	--	--	--
29	10.7	5.2	7.3	20.8	5.0	11.4	6.7	4.0	4.8	15.2	9.7	12.5	19.0	1.6	9.0	--	--	--
30	8.3	5.0	6.3	20.9	4.8	11.5	6.5	4.4	5.3	15.8	10.9	13.6	20.1	1.9	12.0	--	--	--
31	8.2	4.9	6.2	--	--	--	8.3	5.3	6.5	--	--	--	17.6	.0	6.0	--	--	--
MONTH	--	--	--	--	--	--	20.7	.2	5.9	16.1	4.8	9.9	--	--	--	--	--	--

TABLE 12.--Daily maximum, minimum, and mean water temperature, and mean water temperature, specific conductance, pH, and dissolved oxygen in Stillwater Point Diversion Drain (site 27), Stillwater Wildlife Management Area, 1988-89--Continued

DAY	JULY 1989			AUGUST 1989			SEPTEMBER 1989			OCTOBER 1989			NOVEMBER 1989			
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
1	--	--	--	7.7	6.1	6.9	8.6	6.5	7.5	8.1	6.5	7.3	10.2	8.2	9.0	
2	--	--	--	8.0	6.4	7.0	8.9	6.9	7.7	8.1	6.9	7.3	--	--	--	
3	--	--	--	7.7	6.1	6.8	9.0	6.7	7.7	--	--	--	--	--	--	
4	--	--	--	7.3	6.1	6.6	8.7	6.6	7.6	8.7	7.5	8.1	11.7	7.5	9.5	
5	--	--	--	7.7	6.2	6.8	9.8	6.6	7.9	9.0	7.6	8.2	11.5	7.3	9.0	
6	--	--	--	7.6	6.2	6.8	9.6	6.6	7.9	--	--	--	--	--	--	
7	--	--	--	7.9	5.9	6.8	8.5	6.7	7.6	--	--	--	--	--	--	
8	--	--	--	6.4	5.4	5.8	8.1	6.1	7.3	9.1	7.2	8.0	--	--	--	
9	--	--	--	7.4	5.6	6.3	8.6	5.9	7.0	9.2	7.0	8.0	--	--	--	
10	--	--	--	6.9	5.2	6.1	8.2	6.1	7.0	9.0	6.6	7.7	--	--	--	
11	--	--	--	6.8	5.1	5.9	7.7	6.1	6.8	9.7	5.2	7.6	9.8	6.7	8.0	
12	--	--	--	7.9	5.5	6.5	8.8	6.3	7.4	7.1	5.8	6.3	8.4	6.4	7.3	
13	--	--	--	8.9	6.1	7.3	8.7	6.7	7.6	7.2	6.1	6.6	9.6	6.7	7.7	
14	--	--	--	9.2	6.3	7.4	9.8	6.4	8.1	7.8	6.3	6.9	10.2	6.8	7.9	
15	7.6	5.4	6.3	9.5	6.3	7.5	10.8	7.6	8.9	7.3	6.2	6.8	9.1	7.6	8.1	
16	7.5	5.5	6.2	10.4	6.7	8.1	9.5	6.8	8.0	7.4	6.6	7.0	8.8	7.6	8.1	
17	7.9	5.3	6.4	8.2	6.3	7.1	7.9	5.3	6.8	--	--	--	10.4	7.4	8.5	
18	8.2	5.3	6.5	9.2	6.3	7.5	8.2	5.5	6.9	8.1	6.0	7.3	12.2	6.6	9.0	
19	7.7	4.9	6.1	8.8	6.6	7.5	10.0	7.2	8.3	--	--	--	--	--	--	
20	6.5	4.0	5.2	8.7	6.7	7.5	9.2	7.2	8.1	8.0	6.4	7.0	14.8	7.1	9.6	
21	6.7	4.4	5.3	9.2	7.0	7.8	9.1	7.1	7.9	--	--	--	15.7	7.1	10.0	
22	7.5	5.1	5.9	9.1	7.0	7.8	9.0	6.8	7.7	--	--	--	16.8	7.2	10.2	
23	7.0	4.1	5.6	8.4	6.9	7.5	9.1	6.7	7.6	7.6	6.9	7.1	16.9	6.7	10.0	
24	7.0	5.4	6.1	8.6	7.4	8.0	8.7	6.1	7.4	--	--	--	16.8	6.5	9.7	
25	6.5	4.0	5.6	8.7	7.6	8.1	8.6	6.2	7.1	--	--	--	17.7	6.4	10.0	
26	7.6	5.4	6.4	9.0	7.3	8.0	8.7	6.4	7.4	8.9	7.4	8.1	--	--	--	
27	7.5	5.8	6.5	8.6	7.2	7.8	9.0	6.5	7.5	8.6	7.7	8.2	--	--	--	
28	7.6	5.8	6.5	8.6	6.8	7.7	7.2	5.9	6.6	9.2	7.9	8.4	16.8	7.2	10.6	
29	8.5	5.4	6.7	8.7	7.3	7.8	7.3	5.9	6.5	9.3	8.3	8.7	16.0	7.8	10.0	
30	7.6	6.1	6.7	9.6	7.4	8.2	8.0	6.1	7.0	9.4	8.4	8.8	15.4	7.0	10.0	
31	7.6	6.1	6.7	9.3	7.5	8.2	--	--	--	9.8	7.8	9.0	--	--	--	
MONTH:	--	--	--	10.4	5.1	7.3	10.8	5.3	7.5	--	--	--	--	--	--	--

TABLE 13.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in "A" Drain (site 46), Fernley Wildlife Management Area, 1988-89

(Abbreviations and symbol: ACRE-FT, acre-feet; e, estimated; MAX, maximum; MIN, minimum; μ S/cm, microsiemens per centimeter at 25° Celsius; mg/L, milligrams per liter; --, not determined)

DAY	WATER TEMPERATURE (DEGREES CELSIUS)																	
	SEPTEMBER 1988			JANUARY 1989			FEBRUARY 1989			MARCH 1989			APRIL 1989			MAY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	--	--	--	0.1	0.0	0.0	--	--	--	12.1	4.1	7.7	20.4	7.5	13.6
2	--	--	--	--	--	--	.1	.0	.0	--	--	--	11.6	6.0	8.2	19.1	8.6	13.8
3	--	--	--	--	--	--	.0	.0	.0	--	--	--	18.4	4.9	9.9	24.1	9.5	15.8
4	--	--	--	--	--	--	.1	.0	.0	--	--	--	20.0	4.1	10.9	26.5	10.1	17.4
5	--	--	--	--	--	--	.4	.0	.1	--	--	--	21.1	4.1	11.9	28.0	11.6	18.3
6	--	--	--	--	--	--	--	--	--	--	--	--	22.5	6.9	13.6	27.5	12.9	18.3
7	--	--	--	--	--	--	--	--	--	--	--	--	23.6	8.0	14.4	28.6	13.6	19.9
8	--	--	--	--	--	--	--	--	--	--	--	--	24.6	7.6	14.5	21.0	14.6	18.0
9	--	--	--	--	--	--	--	--	--	--	--	--	23.9	7.5	14.3	17.1	14.1	15.8
10	21.1	14.5	17.5	--	--	--	--	--	--	--	--	--	21.4	6.4	12.8	17.5	11.5	13.9
11	--	--	--	--	--	--	--	--	--	--	--	--	23.1	5.6	13.2	19.0	10.0	13.3
12	--	--	--	--	--	--	--	--	--	--	--	--	23.1	4.9	12.8	22.5	10.1	15.1
13	--	--	--	--	--	--	--	--	--	--	--	--	23.0	4.6	13.0	16.6	10.5	13.2
14	--	--	--	--	--	--	--	--	--	--	--	--	23.0	8.5	14.8	20.9	9.1	14.3
15	--	--	--	--	--	--	--	--	--	--	--	--	24.9	8.0	15.1	22.6	10.4	15.6
16	--	--	--	--	--	--	--	--	--	--	--	--	25.6	8.1	15.9	26.1	10.1	16.8
17	--	--	--	--	--	--	--	--	--	--	--	--	27.0	9.6	17.1	28.4	11.4	17.7
18	--	--	--	--	--	--	--	--	--	--	--	--	27.1	9.4	16.8	22.6	10.6	15.3
19	--	--	--	--	--	--	--	--	--	--	--	--	25.1	10.0	15.9	22.6	7.6	13.9
20	--	--	--	--	--	--	--	--	--	--	--	--	21.1	10.6	14.8	23.6	7.6	14.9
21	--	--	--	0.3	0.2	0.2	--	--	--	--	--	--	18.1	8.6	12.9	23.5	10.5	16.2
22	--	--	--	.3	.1	.3	--	--	--	--	--	--	13.1	6.5	9.5	19.5	9.5	14.4
23	--	--	--	.2	.2	.2	--	--	--	--	--	--	10.1	5.5	7.5	20.0	9.6	13.6
24	--	--	--	.3	.1	.2	--	--	--	--	--	--	7.6	5.5	6.3	15.6	7.9	11.4
25	--	--	--	.3	.2	.3	--	--	--	--	--	--	9.1	3.0	6.4	17.0	9.1	12.5
26	--	--	--	.3	.0	.1	--	--	--	--	--	--	12.1	3.6	7.4	21.5	9.4	14.5
27	--	--	--	.1	.0	.1	--	--	--	--	--	--	16.4	5.0	9.8	23.1	10.6	15.9
28	--	--	--	.1	.0	.1	--	--	--	--	--	--	19.0	4.4	10.8	17.1	10.6	13.6
29	--	--	--	.1	.0	.1	--	--	--	--	--	--	20.0	3.9	11.3	12.9	9.1	10.9
30	--	--	--	.1	.0	.1	--	--	--	18.0	4.4	10.2	16.1	7.1	10.6	19.6	8.5	13.0
31	--	--	--	.1	.0	.1	--	--	--	14.0	7.0	10.0	--	--	--	22.6	7.5	14.7
TOTAL	--	--	--	--	--	--	--	--	--	--	--	--	27.1	3.0	12.0	28.6	7.5	15.0

TABLE 13. --Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in "A" Drain (site 46), Fernley Wildlife Management Area, 1988-89--Continued

DAY	WATER TEMPERATURE (DEGREES CELSIUS)																	
	JUNE 1989			JULY 1989			AUGUST 1989			SEPTEMBER 1989			OCTOBER 1989			NOVEMBER 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	25.6	9.5	16.6	21.9	12.5	16.9	21.6	12.1	16.8	18.7	11.6	15.1	13.0	7.3	10.4	4.5	0.5	2.3
2	28.0	11.0	18.4	22.0	13.5	17.8	21.4	12.5	17.2	19.3	11.5	15.4	10.9	9.0	9.8	3.4	.3	1.9
3	26.4	14.6	18.3	25.0	15.0	19.5	23.9	14.4	18.9	22.6	11.1	16.2	11.4	8.3	9.8	3.2	.2	1.7
4	18.0	13.1	15.5	26.5	14.0	19.4	24.9	15.4	19.8	17.9	10.7	14.5	11.2	6.2	8.7	5.1	.3	2.6
5	21.1	10.4	16.2	28.6	11.6	19.0	25.9	16.5	20.6	18.3	12.5	15.5	10.9	5.4	8.0	6.0	1.9	3.9
6	25.0	14.0	18.8	29.6	11.0	19.4	26.9	17.1	21.3	17.7	11.6	14.7	11.2	5.6	8.5	4.4	1.5	3.2
7	25.1	14.9	18.4	26.5	13.0	19.5	21.0	18.6	20.0	16.0	11.7	13.9	11.3	6.2	8.7	5.1	2.0	3.4
8	28.0	13.0	19.3	28.6	16.0	21.5	19.5	17.0	18.6	16.6	10.1	13.3	10.3	5.5	8.1	3.9	.8	2.5
9	30.0	15.0	20.6	27.9	14.9	19.9	21.4	15.6	18.6	16.8	10.6	13.7	11.5	6.1	8.7	4.8	.6	2.4
10	31.0	13.4	20.0	22.0	13.1	17.7	21.1	17.5	19.2	17.6	11.2	14.5	11.7	6.2	9.0	4.0	.5	2.3
11	22.0	16.0	18.7	22.5	15.4	19.0	23.1	15.6	19.2	16.8	11.0	14.0	12.1	7.1	9.6	4.6	1.2	3.0
12	24.0	15.0	19.4	22.9	17.1	19.8	23.5	16.6	19.6	15.8	9.9	13.0	12.1	7.0	9.6	5.1	1.6	3.4
13	27.0	16.0	20.7	25.9	15.1	19.9	25.0	14.5	19.3	15.0	7.9	11.5	12.9	7.2	9.8	5.1	2.4	4.0
14	30.1	14.4	20.9	26.4	16.1	20.7	22.6	16.6	19.2	15.9	8.3	12.1	12.3	7.8	9.9	5.3	2.3	4.1
15	29.1	14.6	19.6	26.6	15.5	20.0	22.7	14.6	18.5	17.3	11.2	13.9	12.1	8.4	10.1	3.3	1.0	2.2
16	32.1	11.5	19.9	26.6	12.5	18.6	22.6	13.5	18.0	16.7	12.8	14.7	10.5	6.3	8.5	3.3	.8	2.1
17	34.6	10.9	21.1	23.6	15.9	19.7	22.8	14.8	18.2	15.5	12.4	14.1	9.9	5.2	7.6	4.2	1.7	2.9
18	26.9	11.6	19.0	25.6	18.5	21.8	22.3	13.5	17.8	13.2	9.5	11.4	10.8	5.0	7.6	4.0	.9	2.5
19	22.4	13.1	17.4	28.0	19.5	23.4	21.9	14.7	18.3	14.9	10.4	12.6	10.5	5.2	8.0	3.2	.5	2.0
20	24.6	12.9	17.2	27.6	20.0	23.3	20.8	15.8	18.0	15.6	10.4	13.0	9.4	6.7	8.1	2.7	.3	1.6
21	30.9	9.6	18.7	27.5	18.9	22.5	22.0	14.5	18.2	15.1	9.5	12.3	10.7	8.6	9.5	3.2	.6	1.9
22	33.0	8.5	19.7	25.5	17.0	20.5	21.4	14.9	17.9	15.5	8.9	12.3	11.5	8.1	9.7	4.0	.5	1.9
23	29.5	11.1	18.1	25.0	16.5	20.7	19.5	14.5	16.6	15.3	8.9	12.3	11.5	7.5	9.5	3.5	.8	2.3
24	30.6	11.6	18.9	25.1	17.9	21.2	18.2	10.5	14.4	15.7	10.0	12.8	10.0	8.2	9.1	5.3	3.1	4.2
25	32.1	10.1	19.9	27.1	17.5	21.8	17.0	10.5	13.8	14.5	11.1	12.7	8.4	5.2	7.0	4.4	2.2	3.5
26	30.5	13.0	19.3	27.6	17.5	21.7	17.5	11.1	14.5	14.2	9.1	11.8	6.0	2.8	4.6	4.1	1.9	3.5
27	19.1	16.0	17.3	27.6	15.5	20.9	19.7	12.9	16.3	15.1	10.6	12.7	6.5	3.4	4.9	2.4	.2	1.1
28	20.6	13.0	16.6	27.4	15.5	20.5	19.6	12.9	16.3	14.7	10.4	12.8	4.9	2.0	3.5	1.3	.2	.7
29	22.0	12.9	16.9	26.6	14.5	19.7	20.0	13.5	16.6	13.7	11.4	12.5	3.4	.3	2.0	.9	.2	.5
30	24.4	12.1	17.2	26.5	12.6	18.4	20.8	12.1	15.7	13.7	9.9	11.6	3.0	.3	1.5	.5	.1	.3
31	--	--	--	25.5	14.0	18.3	21.5	11.2	16.0	--	--	--	3.1	.2	1.6	--	--	--
MONTH	34.6	8.5	18.6	29.6	11.0	20.1	26.9	10.5	17.9	22.6	7.9	13.4	13.0	.2	7.8	6.0	.1	2.5

TABLE 13.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in "A" Drain (site 46), Fernley Wildlife Management Area, 1988-89--Continued

DAY	SEPTEMBER 1988				JANUARY 1989				FEBRUARY 1989				MARCH 1989			
	MAX	MIN	MEAN		MAX	MIN	MEAN		MAX	MIN	MEAN		MAX	MIN	MEAN	
	SPECIFIC CONDUCTANCE (µS/cm)				SPECIFIC CONDUCTANCE (µS/cm)				SPECIFIC CONDUCTANCE (µS/cm)				SPECIFIC CONDUCTANCE (µS/cm)			
1	--	--	--	--	--	--	--	--	1,560	1,350	1,440	--	--	--	--	--
2	--	--	--	--	--	--	--	--	1,670	1,550	1,600	--	--	--	--	--
3	--	--	--	--	--	--	--	--	1,670	1,630	1,650	--	--	--	--	--
4	--	--	--	--	--	--	--	--	1,680	1,550	1,620	--	--	--	--	--
5	--	--	--	--	--	--	--	--	1,720	1,550	1,610	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	890	810	860	--	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	--	--	1,650	1,430	1,570	--	--	--	--	--	--	--	--	--
22	--	--	--	--	1,700	1,640	1,670	--	--	--	--	--	--	--	--	--
23	--	--	--	--	1,730	1,680	1,700	--	--	--	--	--	--	--	--	--
24	--	--	--	--	1,770	1,730	1,750	--	--	--	--	--	--	--	--	--
25	--	--	--	--	1,880	1,780	1,830	--	--	--	--	--	--	--	--	--
26	--	--	--	--	1,790	1,570	1,720	--	--	--	--	--	--	--	--	--
27	--	--	--	--	1,600	1,560	1,580	--	--	--	--	--	--	--	--	--
28	--	--	--	--	1,600	1,560	1,580	--	--	--	--	--	--	--	--	--
29	--	--	--	--	1,500	1,440	1,480	--	--	--	--	--	--	--	--	--
30	--	--	--	--	1,490	1,360	1,410	--	--	--	--	--	1,770	1,600	1,690	--
31	--	--	--	--	1,450	1,340	1,380	--	--	--	--	--	1,710	1,600	1,680	--

TABLE 13.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in "A" Drain (site 46), Fernley Wildlife Management Area, 1988-89--Continued

DAY	APRIL 1989					MAY 1989					JUNE 1989					JULY 1989				
	MAX	MIN	MEAN	SPECIFIC CONDUCTANCE (µS/cm)		MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN			
				MAX	MIN															
1	1,700	1,580	1,660	1,500	1,220	1,310	930	900	913	556	506	527								
2	1,710	1,600	1,680	1,530	1,200	1,340	--	--	--	555	445	515								
3	1,710	1,580	1,670	1,220	1,120	1,170	937	416	725	555	445	524								
4	1,710	1,580	1,670	1,120	1,100	1,110	1,020	610	808	644	544	594								
5	1,680	1,580	1,640	1,130	1,100	1,120	792	613	675	723	623	669								
6	1,680	1,590	1,630	1,120	1,080	1,110	807	626	699	752	723	735								
7	1,690	1,600	1,650	1,420	1,090	1,130	901	818	840	752	631	719								
8	1,700	1,610	1,660	1,310	600	745	953	822	905	651	621	632								
9	1,700	1,610	1,670	690	600	625	1,020	638	910	730	640	708								
10	1,690	1,590	1,640	880	600	734	940	429	582	740	499	632								
11	1,700	1,590	1,660	1,030	890	955	632	433	493	499	418	451								
12	1,680	1,590	1,630	1,120	1,000	1,070	716	445	637	538	498	521								
13	1,620	1,510	1,570	1,600	1,240	1,610	869	760	707	737	537	605								
14	1,610	1,510	1,570	1,630	1,600	1,610	869	760	826	718	627	682								
15	1,610	1,510	1,580	1,630	1,600	1,610	918	839	864	--	--	--								
16	1,610	1,570	1,600	1,630	1,500	1,590	958	858	917	--	--	--								
17	1,620	1,510	1,590	1,680	1,420	1,580	967	847	922	540	499	517								
18	1,620	1,510	1,590	1,810	1,420	1,570	936	646	766	510	440	474								
19	1,610	1,590	1,610	1,810	1,600	1,660	716	535	605	641	421	551								
20	1,620	804	1,390	1,580	910	1,360	654	535	607	642	501	585								
21	824	694	753	1,180	680	776	734	634	684	742	622	684								
22	814	595	675	1,200	600	730	763	713	734	753	523	695								
23	1,310	615	985	880	700	776	862	733	795	804	644	719								
24	876	696	748	900	500	649	852	752	800	734	504	561								
25	816	516	638	580	420	500	821	731	751	725	604	655								
26	877	597	741	720	600	677	840	730	746	755	626	721								
27	1,020	897	950	920	720	789	750	509	578	746	326	598								
28	1,120	1,010	1,070	710	420	567	559	448	517	--	--	--								
29	1,180	1,100	1,120	630	420	509	548	428	462	--	--	--								
30	1,220	1,180	1,200	800	620	715	707	527	599	--	--	--								
31	--	--	--	900	800	840	--	--	--	--	--	--								
MONTH	1,710	516	1,370	1,810	420	1,040	--	--	--	--	--	--								

TABLE 13.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in "A" Drain (site 46), Fernley Wildlife Management Area, 1988-89--Continued

DAY	SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{cm}$)											
	AUGUST 1989			SEPTEMBER 1989			OCTOBER 1989			NOVEMBER 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	705	605	644	790	650	727	1,450	1,410	1,440
2	740	510	675	735	695	718	840	620	746	1,470	1,420	1,450
3	751	610	674	745	615	690	780	600	660	1,630	1,430	1,500
4	762	751	753	715	669	669	840	770	802	1,570	1,040	1,260
5	752	732	738	605	555	575	860	850	854	1,160	1,040	1,090
6	753	732	740	635	555	591	870	850	863	1,020	890	950
7	753	553	693	545	495	516	890	870	876	1,230	950	1,090
8	714	534	603	564	514	529	980	710	855	1,350	1,240	1,290
9	812	633	723	594	504	525	700	600	646	1,410	1,360	1,380
10	661	610	630	704	604	654	910	680	777	1,500	900	1,260
11	758	629	701	814	704	753	900	730	854	1,160	880	992
12	808	758	782	823	792	806	880	680	756	1,410	1,170	1,280
13	808	588	766	802	761	783	1,050	900	944	1,410	1,310	1,340
14	678	538	592	791	760	781	1,060	970	1,010	1,460	1,000	1,280
15	777	678	739	760	629	672	1,160	1,010	1,070	1,240	980	1,070
16	797	777	784	787	708	753	1,030	780	841	1,330	1,250	1,290
17	797	787	790	826	787	801	1,030	880	938	1,380	1,330	1,350
18	797	787	793	916	735	785	1,120	1,040	1,090	1,380	1,360	1,370
19	797	627	706	775	754	765	1,110	1,050	1,080	1,390	1,360	1,380
20	757	677	726	792	753	779	1,130	1,080	1,110	1,410	1,380	1,390
21	777	757	766	792	781	785	1,380	660	972	1,430	1,410	1,410
22	777	767	771	791	750	776	800	640	706	1,440	1,410	1,420
23	786	766	774	780	749	774	790	690	737	1,450	1,420	1,430
24	796	756	769	868	768	795	1,000	780	874	1,470	1,430	1,450
25	786	566	627	807	677	713	1,040	900	958	1,490	1,470	1,480
26	566	516	535	706	596	640	1,340	1,030	1,210	1,520	1,480	1,500
27	646	546	597	725	614	668	1,360	1,310	1,330	1,530	1,460	1,500
28	626	546	587	734	643	685	1,400	1,300	1,350	1,540	1,440	1,490
29	696	626	660	771	722	739	1,410	1,330	1,380	1,520	1,420	1,470
30	716	615	685	840	640	779	1,390	1,350	1,360	1,490	1,380	1,440
31	625	555	590	--	--	--	1,420	1,370	1,400	--	--	--
MONTH	--	--	--	916	495	705	1,420	600	961	1,630	880	1,330

TABLE 13.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in "A" Drain (site 46), Fernley Wildlife Management Area, 1988-89--Continued

DAY	SEPTEMBER 1988			JANUARY 1989			FEBRUARY 1989			MARCH 1989			APRIL 1989			MAY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	--	--	--	7.9	7.8	7.9	--	--	--	8.3	7.9	8.1	8.8	7.4	8.0
2	--	--	--	--	--	--	7.8	7.8	7.8	--	--	--	8.3	7.8	8.1	8.5	7.9	8.2
3	--	--	--	--	--	--	7.8	7.8	7.8	--	--	--	8.2	7.7	7.9	8.5	7.7	8.0
4	--	--	--	--	--	--	7.8	7.8	7.8	--	--	--	7.9	7.6	7.8	8.4	7.7	8.0
5	--	--	--	--	--	--	7.8	7.7	7.7	--	--	--	7.9	7.6	7.7	8.5	7.6	7.9
6	--	--	--	--	--	--	--	--	--	--	--	8.1	7.6	7.8	8.3	7.5	7.8	
7	--	--	--	--	--	--	--	--	--	--	--	7.8	7.5	7.7	8.3	7.5	7.9	
8	--	--	--	--	--	--	--	--	--	--	--	7.8	7.5	7.6	7.9	7.4	7.7	
9	--	--	--	--	--	--	--	--	--	--	--	7.7	7.5	7.6	7.6	7.3	7.5	
10	8.4	7.6	8.0	--	--	--	--	--	--	--	--	7.7	7.5	7.6	8.1	7.4	7.7	
11	--	--	--	--	--	--	--	--	--	--	--	7.6	7.4	7.5	8.0	7.5	7.7	
12	--	--	--	--	--	--	--	--	--	--	--	7.7	7.4	7.5	8.0	7.5	7.7	
13	--	--	--	--	--	--	--	--	--	--	--	7.8	7.4	7.5	7.8	7.4	7.6	
14	--	--	--	--	--	--	--	--	--	--	--	7.7	7.2	7.5	8.0	7.6	7.8	
15	--	--	--	--	--	--	--	--	--	--	--	7.6	7.2	7.3	7.9	7.5	7.7	
16	--	--	--	--	--	--	--	--	--	--	--	7.5	7.2	7.3	7.7	7.5	7.6	
17	--	--	--	--	--	--	--	--	--	--	--	7.5	7.2	7.3	8.0	7.4	7.7	
18	--	--	--	--	--	--	--	--	--	--	--	7.7	7.2	7.4	8.1	7.4	7.8	
19	--	--	--	--	--	--	--	--	--	--	--	7.7	7.3	7.5	8.0	7.6	7.8	
20	--	--	--	--	--	--	--	--	--	--	--	8.1	7.5	7.8	--	--	--	
21	--	--	--	8.3	8.3	8.3	--	--	--	--	--	7.7	7.2	7.5	--	--	--	
22	--	--	--	8.4	8.3	8.3	--	--	--	--	--	7.7	7.2	7.5	--	--	--	
23	--	--	--	8.4	8.3	8.3	--	--	--	--	--	7.6	7.2	7.5	--	--	--	
24	--	--	--	8.4	8.3	8.3	--	--	--	--	--	7.7	7.2	7.4	--	--	--	
25	--	--	--	8.3	8.3	8.3	--	--	--	--	--	7.6	7.2	7.4	--	--	--	
26	--	--	--	8.3	8.2	8.2	--	--	--	--	--	8.0	7.2	7.6	--	--	--	
27	--	--	--	8.2	8.2	8.2	--	--	--	--	--	8.1	7.3	7.7	--	--	--	
28	--	--	--	8.2	8.1	8.2	--	--	--	--	--	8.0	7.3	7.6	--	--	--	
29	--	--	--	8.1	8.1	8.1	--	--	--	--	--	8.0	7.4	7.7	--	--	--	
30	--	--	--	8.1	8.0	8.1	--	--	--	8.5	8.0	8.2	8.0	7.3	7.6	--	--	--
31	--	--	--	8.0	7.9	7.9	--	--	--	8.4	7.9	8.1	--	--	--	--	--	--
MONTH	--	--	--	--	--	--	--	--	--	--	--	8.3	7.2	7.6	--	--	--	--

TABLE 13.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in "A" Drain (site 46), Fernley Wildlife Management Area, 1988-89--Continued

DAY	PH (STANDARD UNITS)																	
	JUNE 1989			JULY 1989			AUGUST 1989			SEPTEMBER 1989			OCTOBER 1989			NOVEMBER 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	--	--	--	8.4	7.9	8.1	8.3	8.0	8.1	8.5	8.1	8.3	8.9	8.7	8.8	8.6	8.5	8.6
2	8.7	7.8	8.1	8.4	7.8	8.0	8.5	8.0	8.2	8.5	8.2	8.4	8.9	8.6	8.8	8.6	8.5	8.6
3	8.6	7.8	8.0	8.3	7.8	8.0	8.2	7.7	7.9	8.3	8.2	8.3	8.8	8.5	8.7	8.6	8.5	8.6
4	8.4	7.8	8.1	8.6	7.9	8.2	8.1	7.8	7.9	8.4	8.1	8.3	8.9	8.7	8.8	8.6	8.4	8.5
5	8.3	8.0	8.1	8.8	7.8	8.2	8.1	7.8	7.9	8.2	8.0	8.3	9.0	8.8	8.9	8.5	8.3	8.4
6	8.1	7.4	7.9	8.8	7.9	8.3	7.7	7.4	7.5	8.3	7.9	8.1	9.0	8.8	8.9	8.4	8.3	8.3
7	7.7	7.2	7.3	8.9	7.9	8.3	7.5	7.2	7.4	7.9	7.8	7.8	9.0	8.7	8.8	8.6	8.4	8.5
8	7.6	7.2	7.4	8.9	7.8	8.2	7.6	7.2	7.3	7.9	7.7	7.8	8.9	8.7	8.7	8.6	8.4	8.5
9	7.6	7.2	7.5	--	--	--	7.7	7.4	7.6	7.8	7.6	7.7	8.8	8.6	8.7	8.6	8.5	8.6
10	7.5	7.1	7.2	--	--	--	7.4	7.2	7.3	8.0	7.8	7.9	8.9	8.4	8.6	8.6	8.2	8.5
11	7.6	7.1	7.3	--	--	--	7.9	7.1	7.6	8.4	7.9	8.1	8.6	8.3	8.4	8.5	8.2	8.4
12	8.0	7.6	7.8	--	--	--	8.0	7.7	7.9	8.5	8.4	8.4	8.6	8.2	8.4	8.6	8.4	8.5
13	8.5	7.6	7.9	--	--	--	8.1	7.6	7.8	8.6	8.4	8.5	8.6	8.4	8.5	8.6	8.5	8.5
14	8.5	7.8	8.1	8.6	7.9	8.1	8.2	7.8	8.0	8.7	8.5	8.6	8.7	8.4	8.5	8.5	8.2	8.4
15	8.8	7.8	8.2	8.5	7.8	8.1	8.1	7.9	8.0	--	--	--	8.7	8.4	8.5	8.4	8.2	8.3
16	8.8	7.8	8.3	8.4	7.8	8.0	8.1	7.7	7.9	8.5	8.3	8.4	8.5	8.3	8.4	8.6	8.4	8.5
17	8.8	7.9	8.3	--	--	--	8.1	7.9	8.0	8.5	8.3	8.5	8.6	8.3	8.4	8.6	8.5	8.5
18	8.7	7.8	8.1	--	--	--	8.0	7.8	7.9	8.5	8.4	8.5	8.6	8.3	8.4	8.6	8.5	8.5
19	8.4	7.8	8.0	--	--	--	8.1	7.9	8.0	9.0	8.4	8.5	8.7	8.4	8.5	8.5	8.4	8.5
20	8.4	7.7	8.0	--	--	--	8.2	7.9	8.0	8.4	8.3	8.4	8.6	8.3	8.4	8.6	8.5	8.5
21	8.5	7.4	7.9	--	--	--	8.2	8.0	8.1	8.3	8.2	8.3	8.5	8.1	8.4	8.6	8.5	8.5
22	8.3	7.4	7.9	8.1	7.8	7.9	8.1	8.0	8.1	8.6	8.4	8.5	8.4	8.1	8.2	8.6	8.5	8.5
23	8.2	7.4	7.8	8.1	7.8	7.9	8.3	8.0	8.1	8.8	8.6	8.7	8.3	8.2	8.2	8.6	8.5	8.5
24	8.1	7.7	7.9	--	--	--	8.4	8.2	8.3	8.9	8.7	8.8	8.5	8.2	8.4	8.6	8.4	8.5
25	8.4	7.6	8.0	--	--	--	8.3	8.1	8.2	--	--	--	8.4	8.2	8.3	8.6	8.4	8.5
26	8.6	7.7	8.0	8.4	8.0	8.1	8.2	8.0	8.1	8.8	8.6	8.7	8.5	8.3	8.4	8.5	8.4	8.5
27	8.1	7.9	8.0	8.6	8.0	8.2	8.5	8.1	8.3	8.8	8.6	8.7	8.6	8.4	8.5	8.5	8.4	8.5
28	8.4	7.9	8.1	8.5	8.0	8.2	8.4	8.0	8.2	9.0	8.7	8.8	8.6	8.5	8.5	8.4	8.3	8.4
29	8.5	7.9	8.1	8.6	8.0	8.2	--	--	--	8.9	8.7	8.8	8.6	8.5	8.5	8.4	8.3	8.4
30	8.8	8.0	8.3	8.3	7.9	8.1	8.6	8.0	8.3	9.0	8.7	8.8	8.6	8.5	8.5	8.4	8.3	8.4
31	--	--	--	8.4	7.9	8.1	8.3	8.0	8.1	--	--	--	8.6	8.5	8.5	--	--	--
MONTH	--	--	--	--	--	--	--	--	--	--	--	--	9.0	8.1	8.5	8.6	8.2	8.5

TABLE 13.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in "A" Drain (site 46), Fernley Wildlife Management Area, 1988-89--Continued

DAY	SEPTEMBER 1988			JANUARY 1989			FEBRUARY 1989			MARCH 1989			APRIL 1989			MAY 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	DISSOLVED OXYGEN (mg/L)																	
1	--	--	--	--	--	--	11.4	7.5	9.6	--	--	--	12.2	5.6	8.3	13.7	5.5	9.0
2	--	--	--	--	--	--	12.4	6.4	9.2	--	--	--	11.9	6.3	8.6	12.9	5.3	8.4
3	--	--	--	--	--	--	9.2	6.4	7.0	--	--	--	12.7	5.5	8.3	12.3	4.7	7.7
4	--	--	--	--	--	--	6.4	5.9	6.1	--	--	--	10.9	4.7	7.4	11.9	3.6	7.0
5	--	--	--	--	--	--	6.8	5.7	6.2	--	--	--	11.6	4.5	7.3	12.0	3.2	6.4
6	--	--	--	--	--	--	--	--	--	--	--	12.7	3.9	7.4	11.8	3.2	5.6	
7	--	--	--	--	--	--	--	--	--	--	--	12.9	3.7	7.1	11.2	3.2	5.8	
8	--	--	--	--	--	--	--	--	--	--	--	12.8	3.6	7.0	7.4	3.8	5.5	
9	--	--	--	--	--	--	--	--	--	--	--	13.2	3.6	6.8	7.2	4.2	5.4	
10	11.1	4.8	7.0	--	--	--	--	--	--	--	--	12.8	3.8	7.5	9.9	5.1	6.9	
11	--	--	--	--	--	--	--	--	--	--	--	16.0	3.6	8.0	10.1	5.1	7.1	
12	--	--	--	--	--	--	--	--	--	--	--	16.0	3.8	8.5	10.6	4.7	6.9	
13	--	--	--	--	--	--	--	--	--	--	--	14.4	3.4	7.7	8.1	4.7	6.0	
14	--	--	--	--	--	--	--	--	--	--	--	13.0	3.2	7.3	9.7	4.5	6.5	
15	--	--	--	--	--	--	--	--	--	--	--	14.7	3.0	6.9	9.8	3.8	6.2	
16	--	--	--	--	--	--	--	--	--	--	--	14.5	2.3	7.3	10.0	3.4	5.9	
17	--	--	--	--	--	--	--	--	--	--	--	14.7	1.9	6.9	10.0	3.8	5.9	
18	--	--	--	--	--	--	--	--	--	--	--	13.9	1.9	6.4	9.8	4.0	6.3	
19	--	--	--	--	--	--	--	--	--	--	--	13.3	1.9	5.5	10.2	4.4	7.1	
20	--	--	--	--	--	--	--	--	--	--	--	11.1	1.7	5.9	10.2	4.6	6.7	
21	--	--	--	11.7	5.6	8.4	--	--	--	--	--	--	9.7	5.3	7.1	9.3	4.5	6.4
22	--	--	--	11.2	5.5	8.1	--	--	--	--	--	--	10.0	6.1	7.9	7.7	4.7	6.2
23	--	--	--	9.8	5.8	7.4	--	--	--	--	--	--	8.8	6.8	7.7	9.7	5.1	6.9
24	--	--	--	12.0	5.6	8.0	--	--	--	--	--	--	11.0	7.4	8.8	9.1	5.7	7.2
25	--	--	--	13.8	5.5	8.8	--	--	--	--	--	--	10.6	7.4	8.9	8.1	5.5	6.8
26	--	--	--	14.3	5.8	9.4	--	--	--	--	--	--	14.2	7.2	10.0	9.1	4.4	6.8
27	--	--	--	14.2	5.6	9.2	--	--	--	--	--	--	15.8	6.4	10.0	9.4	4.3	6.4
28	--	--	--	13.8	5.4	9.0	--	--	--	--	--	--	15.9	6.3	10.0	8.5	5.6	6.9
29	--	--	--	12.9	5.5	9.0	--	--	--	--	--	--	16.3	5.7	10.3	8.2	6.4	7.2
30	--	--	--	13.3	5.7	9.2	--	--	--	--	--	--	16.3	5.7	9.6	9.4	5.2	7.3
31	--	--	--	12.7	5.5	9.1	--	--	--	12.4	5.2	7.7	16.3	5.7	9.6	9.4	5.2	7.3
							12.2	5.0	7.7	--	--	--	--	--	--	9.6	4.2	6.9
TOTAL	--	--	--	--	--	--	--	--	--	--	--	16.3	1.7	7.9	13.7	3.2	6.7	

TABLE 13. --Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in "A" Drain (site 46), Fernely Wildlife Management Area, 1988-89--Continued

DAY	DISSOLVED OXYGEN (mg/L)																	
	JUNE 1989			JULY 1989			AUGUST 1989			SEPTEMBER 1989			OCTOBER 1989			NOVEMBER 1989		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.9	3.7	6.6	7.2	4.0	5.5	4.5	0.7	2.8	7.6	5.0	6.0	9.8	7.0	8.2	11.8	9.7	10.5
2	11.4	3.0	6.5	7.8	3.8	5.5	4.8	1.0	3.3	8.2	5.0	6.3	8.7	7.2	7.8	11.9	9.9	10.6
3	11.8	3.0	5.7	8.0	3.5	5.4	4.8	.8	3.3	7.4	4.5	5.8	8.9	7.3	7.9	12.0	10.0	10.7
4	7.7	3.8	5.5	9.9	3.1	6.0	4.6	1.0	3.2	7.7	5.2	6.3	9.9	7.6	8.5	11.1	9.5	10.2
5	8.5	4.9	6.4	12.5	2.5	6.7	9.1	1.4	3.7	7.4	5.2	6.1	10.4	7.7	8.9	10.9	8.9	9.7
6	9.6	3.9	6.4	12.8	2.0	6.5	9.2	1.3	3.7	7.8	5.4	6.3	10.4	7.5	8.8	10.7	9.1	9.8
7	10.9	4.0	6.0	10.4	2.3	5.5	4.8	1.4	3.1	6.6	5.3	5.9	10.5	7.5	8.8	11.5	9.2	10.0
8	11.6	3.0	6.5	11.6	1.2	5.0	3.8	2.0	2.9	7.2	5.3	6.2	10.6	7.7	8.8	12.0	9.6	10.4
9	12.5	2.9	6.4	11.6	.9	4.6	4.3	3.0	3.6	6.8	5.2	5.9	9.3	7.5	8.4	12.1	9.7	10.5
10	12.1	3.3	6.0	3.9	.3	2.7	4.1	3.2	3.6	7.9	5.1	6.2	10.6	7.8	8.8	11.4	8.9	10.1
11	7.4	4.4	5.6	4.1	.1	1.9	7.1	3.6	5.2	9.1	5.4	6.8	10.2	7.7	8.7	11.2	9.1	9.9
12	7.7	4.0	5.5	4.0	.0	2.1	7.7	4.7	5.8	9.3	6.5	7.6	10.6	7.6	8.7	11.5	9.1	10.0
13	9.5	3.6	5.9	10.6	.0	3.4	7.9	4.3	5.8	9.7	6.6	8.0	11.2	7.6	8.8	11.6	8.9	9.5
14	11.0	2.8	6.3	10.6	.2	3.9	6.5	4.7	5.3	9.8	6.4	7.9	11.0	7.5	8.7	10.9	8.7	9.5
15	11.8	2.4	6.1	9.3	.5	3.2	8.5	4.7	6.3	7.5	5.6	6.5	10.5	7.6	8.6	10.9	9.0	9.9
16	12.1	2.1	5.9	8.1	.7	3.3	9.0	4.6	6.4	8.5	5.9	6.7	10.0	7.9	8.7	11.6	9.5	10.3
17	8.9	1.9	4.7	4.0	.3	2.4	9.2	4.7	6.2	7.1	5.3	6.1	11.2	8.1	9.3	11.6	9.4	10.1
18	8.7	2.3	4.7	4.2	.2	2.1	9.1	4.7	6.4	8.4	6.4	7.3	11.3	8.0	9.3	11.8	9.6	10.3
19	8.4	4.8	6.3	4.0	.8	2.1	7.4	4.4	5.7	8.3	6.4	7.1	11.6	7.9	9.3	12.0	9.7	10.5
20	11.6	3.6	7.3	4.1	.9	1.9	8.1	4.8	5.9	8.6	6.3	7.3	11.2	8.0	9.1	12.1	9.9	10.6
21	12.3	2.0	6.7	9.1	.9	2.9	8.3	4.8	6.2	9.1	6.4	7.5	9.2	7.5	8.2	12.2	9.7	10.5
22	9.0	1.5	4.4	9.7	.9	3.5	8.2	5.1	6.3	9.3	6.4	7.6	9.0	7.4	8.0	12.3	9.8	10.6
23	7.6	1.9	3.7	10.4	.8	3.6	8.3	5.4	6.5	9.6	6.5	7.8	8.7	7.2	7.9	12.0	9.3	10.4
24	11.9	1.9	6.3	4.2	.6	2.4	8.8	5.7	7.0	9.4	6.5	7.7	10.3	7.5	8.5	11.7	8.9	9.7
25	11.8	1.4	5.8	8.9	.5	3.2	7.7	5.5	6.5	8.7	6.7	7.5	9.8	7.5	8.5	12.3	8.8	10.0
26	10.6	1.4	4.5	9.9	.9	3.9	7.1	5.1	6.1	9.0	6.8	7.7	11.1	8.6	9.6	11.8	8.7	9.9
27	6.2	4.2	5.2	8.9	.9	4.0	7.9	5.2	6.3	9.1	6.5	7.6	11.1	8.9	9.7	12.6	9.6	10.8
28	7.5	4.5	5.8	9.7	.6	3.1	7.4	5.0	6.1	9.2	6.6	7.6	11.5	9.2	10.1	12.3	8.9	10.4
29	7.9	4.5	5.9	8.8	1.4	3.6	8.0	5.2	6.4	8.9	6.7	7.4	11.9	9.9	10.6	12.2	8.4	10.2
30	9.9	4.4	6.5	9.0	2.2	3.6	8.7	4.3	6.1	9.6	6.9	7.8	11.9	10.1	10.7	12.2	8.1	10.1
31	--	--	--	4.6	2.3	3.4	6.4	4.5	5.4	--	--	--	11.9	9.9	10.6	--	--	--
MONTH	12.5	1.4	5.8	12.8	.0	3.8	9.2	.7	5.2	9.8	4.5	6.9	11.9	7.0	8.9	12.6	8.1	10.2

TABLE 13.--Daily maximum, minimum, and mean water temperature, specific conductance, pH, and dissolved oxygen, and daily mean discharge in "A" Drain (site 46), Fernley Wildlife Management Area, 1988-89--Continued

DAY	MEAN DISCHARGE (CUBIC FEET PER SECOND)											
	FEBRUARY 1989	MARCH 1989	APRIL 1989	MAY 1989	JUNE 1989	JULY 1989	AUGUST 1989	SEPTEMBER 1989	OCTOBER 1989	NOVEMBER 1989		
1	e1.0	0.31	0.11	0.15	0.07	1.9	0.55	1.6	1.2	1.8		
2	e.60	e.28	.10	.26	.04	1.5	1.1	.98	2.4	1.7		
3	e.45	.26	.09	.09	.03	1.0	.65	1.6	3.2	1.9		
4	e.32	.23	.07	.07	1.0	.37	.48	1.8	1.4	3.6		
5	e.25	.25	.07	.05	1.1	.13	.34	2.6	1.1	3.6		
6	e.20	.32	.07	.05	.43	.09	.29	1.9	1.0	4.3		
7	e.14	.36	.07	.13	.14	.15	.92	3.7	.94	2.6		
8	e.10	.32	.07	2.5	.10	.15	2.2	3.0	1.8	2.0		
9	e.06	.28	.07	2.8	.07	.13	3.5	3.6	3.1	1.8		
10	e.04	.26	.07	.91	.66	1.2	3.0	1.3	1.8	3.3		
11	e.02	.21	.06	.18	2.1	2.4	1.2	1.1	2.2	3.7		
12	e.01	.19	.06	.09	2.2	.99	.71	1.1	2.0	2.4		
13	e.01	.18	.06	.66	.36	.47	.92	.94	1.3	2.3		
14	e.01	.15	.06	.20	.11	.34	2.3	.94	1.3	3.3		
15	e.01	.15	.05	.09	.04	.20	.66	2.3	1.6	5.4		
16	e.02	.16	.04	.06	.01	.76	.49	1.4	2.7	3.2		
17	e.03	.15	.03	.05	.01	3.0	.44	1.7	1.5	2.9		
18	e.05	.14	.03	.10	.36	2.2	.41	2.2	1.4	2.6		
19	e.09	.14	.02	.14	.63	.88	.84	1.9	1.2	2.4		
20	e.16	.13	.28	.21	.15	.60	.72	1.3	1.2	2.3		
21	e.25	.12	.54	.39	.03	.37	.67	1.1	3.3	2.3		
22	.91	.13	.92	1.3	.01	.25	.66	.97	4.6	2.2		
23	1.7	.14	2.2	.22	.01	.28	.73	.94	4.3	2.1		
24	1.9	.14	1.5	.67	.03	1.6	.78	1.3	2.3	2.2		
25	1.0	.13	2.2	1.9	.02	.51	2.4	1.8	3.0	2.0		
26	.75	.12	.44	.42	.05	.33	3.3	2.2	2.7	2.1		
27	.55	.11	.16	.20	1.5	.22	1.7	1.8	2.0	1.8		
28	.37	.12	.13	1.5	1.7	.20	2.2	1.7	1.8	e.80		
29	--	.12	.10	2.1	1.3	.19	1.2	1.2	1.8	e.25		
30	--	.11	.09	.47	.44	.20	1.4	1.5	1.8	e.12		
31	--	.11	--	.16	--	.19	2.9	--	1.9	--		
TOTAL	11.00	5.82	9.76	18.12	14.70	22.80	39.66	51.47	63.84	72.97		
MEAN	.39	.19	.33	.58	.49	.74	1.28	1.72	2.06	2.43		
MAX	1.9	.36	2.2	2.8	2.2	3.0	3.5	3.7	4.6	5.4		
MIN	.01	.11	.02	.05	.01	.09	.29	.94	.94	.12		
ACRE-FT	22	12	19	36	29	45	79	102	127	145		

TABLE 14.--Field measurements of selected properties and constituents in surface-water samples from the study area, 1987-89

[Abbreviations and symbols: e, estimated; ft³/s; cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter at 25 °C; --, not determined; <, less than]

Site number (figs. 1-6)	Date sampled	Time	Dis-charge, instan-taneous (ft ³ /s)	Spe-cific conduct-ance (µS/cm)	pH (stand-ard units)	Air tempera-ture (°C)	Water tempera-ture (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (percent satura-tion)
<u>Background Sites</u>									
1	09-28-87	0900	--	569	8.6	12.5	15.5	8.2	98
	03-11-88	1230	--	535	8.8	5.0	7.0	10.3	102
	08-19-88	1500	--	826	8.7	32.0	29.2	7.3	117
	03-23-89	1330	--	571	8.5	16.5	10.1	9.2	99
2	09-25-87	1300	590	332	8.5	28.5	19.0	10.5	132
	03-11-88	1015	2.5	406	8.9	5.0	5.5	11.5	106
	08-19-88	1030	760	373	7.7	28.5	21.0	7.3	96
	10-28-88	1200	273	780	8.4	18.0	14.1	9.3	106
	03-17-89	0800	1.3	517	8.6	3.5	5.5	9.9	91
3	09-24-87	1400	--	345	8.8	31.5	21.5	9.2	121
	03-11-88	0830	--	395	8.5	.5	5.6	10.1	93
	08-19-88	0830	--	398	8.6	24.0	21.3	7.8	102
4	10-23-87	1230	--	236	7.7	17.0	13.0	8.1	90
	03-18-88	1200	--	298 ^a	8.6 ^a	--	--	--	--
	08-22-88	1830	--	198	7.3	32.0	22.5	6.9	94
	03-23-89	1115	--	176	7.6	16.5	8.8	9.1	92
	06-16-89	1100	--	157	7.5	22.5	18.5	6.9	86
	09-12-89	1500	--	244	8.7	26.0	18.5	6.6	83
5	10-07-87	1500	e158	1,010	8.5	27.0	18.0	8.7	107
	03-18-88	0900	--	916 ^a	8.3 ^a	--	--	--	--
	08-24-88	0730	e247	1,060	8.1	19.0	18.7	8.0	100
	03-29-89	0750	.50	895	8.6	5.5	7.0	9.7	93
<u>Carson Lake/Diagonal Drain Area</u>									
6	10-08-87	0830	4.4	486	7.6	15.0	14.0	7.6	85
	03-10-88	1715	--	660	8.0	--	10.5	--	--
7	10-08-87	1045	3.8	663	8.0	20.0	15.5	11.2	130
	03-10-88	1700	1.0	726	8.6	--	9.5	--	--
8	10-09-87	1300	27	634	8.0	25.0	16.0	9.6	113
	03-10-88	1645	--	960	8.7	--	12.0	--	--
9	09-24-87	0830	17	1,550	7.9	16.0	14.5	8.1	92
	03-14-88	1200	--	2,710 ^a	8.2 ^a	--	--	--	--
	08-18-88	0830	24	1,340	7.6	24.0	17.1	7.2	87
	03-20-89	1600	1.5	3,780	9.1	12.0	17.3	17	206
10	09-24-87	1230	12	1,500	8.2	29.0	18.5	8.6	107
	03-14-88	1330	--	6,980 ^a	8.4 ^a	--	--	--	--
	08-18-88	0945	.77	3,700	8.5	25.0	21.0	7.7	101
	03-23-89	0800	.46	5,840	9.1	11.5	10.1	9.6	101
11	09-23-87	1430	38	388	8.6	35.0	21.5	8.7	114
	03-15-88	1200	--	3,200 ^a	7.9 ^a	--	--	--	--
	08-18-88	1400	4.7	744	8.2	31.0	23.5	4.7	64
	03-21-89	0800	e.5	2,510	9.0	13.0	7.7	12.4	120
12	09-23-87	1300	39	393	8.2	33.0	19.5	7.7	97
	03-15-88	1030	--	5,540 ^a	8.2 ^a	--	--	--	--
	03-21-89	1230	11	1,900	9.0	23.0	12.5	16.2	176

TABLE 14.--Field measurements of selected properties and constituents in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date sampled	Time	Dis-charge, instan-taneous (ft ³ /s)	Spe-cific conduct-ance (µS/cm)	pH (stand-ard units)	Air tempera-ture (°C)	Water tempera-ture (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (percent satura-tion)
13	09-24-87	1030	20	572	8.5	27.5	18.5	8.8	108
	03-15-88	1330	--	949 ^a	8.4 ^a	--	--	--	--
	08-18-88	1600	.45	506	9.4	33.0	30.8	17.8	279
	03-21-89	1500	1.8	861	8.4	16.0	16.9	7.5	90
14	09-23-87	0830	--	1,490	8.0	19.0	14.0	4.6	51
	03-14-88	1500	--	2,820 ^a	8.0 ^a	--	--	--	--
	08-18-88	1100	--	1,450	8.8	26.0	27.6	13.7	202
	03-21-89	1000	--	4,410	8.6	--	16.3	11.6	138
15	09-23-87	1100	--	870	8.6	34.5	21.0	8.1	105
	03-15-88	0930	--	5,200 ^a	7.7 ^a	--	--	--	--
16	10-08-87	1300	52	621	8.1	26.0	18.0	11.1	136
	03-10-88	1625	6.0	1,440	8.9	--	10.0	--	--
17	10-08-87	1800	--	668	8.0	23.0	18.5	8.5	106
	03-10-88	1550	--	3,190	8.9	--	12.0	--	--
18	10-09-87	0900	--	747	8.1	20.0	15.0	6.8	78
<u>Stillwater Wildlife Management Area</u>									
19	12-13-88	1500	<0.01	49,100	8.2	9.5	7.3	14	161
20	12-13-88	1345	<.20	30,500	8.4	11.0	4.9	12.6	126
21	09-21-87	1530	--	9,170	8.4	27.5	21.5	13.1	175
	03-07-88	1530	e.2	32,400	8.4	17.5	16.5	9.5	124
	08-04-88	1400	--	5,170	8.7	--	26.2	14.2	205
	08-15-88	1200	1.0	21,800	8.4	26.0	24.1	11.3	167
	08-15-88	1715	--	19,000	8.6	--	23.5	12.7	183
	08-29-88	0950	--	17,500	8.5	--	21.9	6.9	--
	09-22-88	1430	--	8,500	8.7	23.0	18.0	13.9	174
	10-14-88	0815	--	31,700	8.4	--	7.8	6.3	68
	11-15-88	1100	--	30,600	8.5	--	4.1	10.6	104
	12-13-88	1030	e.1	32,900	8.4	5.5	.5	10.4	94
	12-13-88	1100	--	32,900	8.4	--	.5	10.4	94
	01-12-89	1100	--	33,500	--	--	0.0	12.9	113
	02-15-89	1200	0	--	--	--	0.0	--	--
	03-14-89	1215	<.10	32,000	8.4	10.5	14.7	11.5	145
	04-28-89	1130	.70	8,610	8.5	--	20.4	11.4	150
	05-15-89	1400	e3.0	11,200	--	--	27.0	--	--
05-19-89	1500	e1.0	15,500	--	20.0	22.0	--	--	
05-31-89	1555	1.0	6,220	8.8	--	29.1	14.1	216	
06-12-89	1100	.60	11,400	8.8	27.0	23.5	15.4	216	
07-13-89	1735	e.10	6,290	9.2	--	28.9	15.1	232	
08-10-89	0800	9.1	4,650	8.7	19.0	21.9	5.8	78	
08-22-89	1515	3.3	5,010	8.8	--	24.4	14.1	200	
09-13-89	1400	.59	13,600	8.7	30.0	18.0	13	165	
09-27-89	1040	.61	9,910	8.6	23.5	16.6	7.0	86	
10-10-89	1515	.44	16,200	8.6	28.0	15.4	13.3	162	
10-23-89	1340	7.5	2,910	8.7	20.0	12.8	12.4	138	
11-06-89	1510	e.25	16,500	8.6	9.0	8.0	11.9	123	
12-01-89	1121	e.10	19,600	8.4	--	4.0	--	--	
22	09-22-87	1330	15	608	9.0	30.5	21.5	10	131
	03-08-88	1415	21	1,150	9.0	17.5	13.5	10.3	114
	03-13-89	1530	3.4	1,610	9.4	14.0	16.6	12.5	149
	03-15-89	1000	--	1,600	9.4	10.0	8.6	10.4	104

TABLE 14.--Field measurements of selected properties and constituents in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date sampled	Time	Dis-charge, instantaneous (ft ³ /s)	Spe-cific conduct-ance (µS/cm)	pH (stand-ard units)	Air tempera-ture (°C)	Water tempera-ture (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (percent saturation)
	04-28-89	1345	1.7	1,010	9.6	--	21.0	18.3	238
	09-27-89	1255	2.2	3,160	9.4	26.0	21.4	13.1	173
	10-10-89	1745	.60	3,180	9.3	26.0	20.2	10.9	141
	11-06-89	1415	2.9	2,760	9.3	10.0	10.6	13.7	144
22	09-22-87	1330	15	608	9.0	30.5	21.5	10	131
	03-08-88	1415	21	1,150	9.0	17.5	13.5	10.3	114
	03-13-89	1530	3.4	1,610	9.4	14.0	16.6	12.5	149
	03-15-89	1000	--	1,600	9.4	10.0	8.6	10.4	104
	04-28-89	1345	1.7	1,010	9.6	--	21.0	18.3	238
	09-27-89	1255	2.2	3,160	9.4	26.0	21.4	13.1	173
	10-10-89	1745	.60	3,180	9.3	26.0	20.2	10.9	141
	11-06-89	1415	2.9	2,760	9.3	10.0	10.6	13.7	144
23	08-04-88	1140	--	580	7.9	--	21.1	8.4	107
	08-15-88	1755	--	634	9.0	--	26.5	12.3	178
	08-25-88	1205	--	598	8.6	--	25.6	11.9	169
	08-29-88	1035	--	612	8.1	--	22.1	8.1	108
	09-22-88	1505	--	1,640	8.0	24.0	27.1	2.8	41
	10-14-88	0855	--	3,480	8.7	--	8.2	9.0	89
	11-16-88	1215	--	2,830	8.7	--	5.8	13.9	130
	12-13-88	1210	--	4,250	--	--	.6	13.7	111
	01-12-89	1150	--	--	--	--	.1	--	--
	02-15-89	1155	e.1	10,100	7.8	-1.0	.7	16.3	135
	03-15-89	1100	--	18,900	8.2	12.0	11.8	20	228
	04-28-89	1610	3.2	1,030	9.2	--	23.3	18.9	258
	05-19-89	1020	13	--	--	--	16.0	--	--
	05-31-89	1755	6.4	--	--	--	21.1	17.5	--
	06-01-89	0915	e5.0	598	9.3	--	16.6	10.1	119
	06-12-89	1430	.76	473	10	31.0	25.5	11.1	157
	07-14-89	1120	5.4	408	8.6	34.0	23.8	8.1	111
	08-10-89	1330	7.4	583	8.5	--	25.0	11.1	156
	08-22-89	1250	8.7	461	8.5	--	21.9	10.2	136
	09-13-89	1600	.33	495	9.3	28.5	23.6	13.7	187
	09-27-89	1430	1.3	1,840	8.7	26.0	20.2	15.1	194
	10-11-89	1430	3.0	613	9.0	28.0	19.4	16.1	203
	10-23-89	1045	4.9	708	8.5	13.5	11.5	9.7	104
	11-06-89	1245	11	527	8.4	10.0	8.8	11.8	118
	11-30-89	1510	1.8	2,980	8.5	--	.5	--	--
24	09-21-87	1400	--	607	9.1	28.5	21.5	10.3	134
	03-08-88	1100	12	1,180	9.0	13.5	8.0	10.7	104
	08-15-88	1315	1.5	670	8.8	29.0	23.5	9.5	130
	03-14-89	1330	2.3	1,650	9.4	11.0	11.2	10.7	113
	04-28-89	1700	4.7	1,020	--	--	24.0	--	--
25	09-21-87	1100	--	3,380	8.9	22.0	17.0	6.5	78
	03-07-88	1200	--	4,080	9.1	17.0	12.0	10.4	111
	08-15-88	1530	--	5,340	8.9	28.0	25.2	10.5	153
	12-13-88	0830	--	10,200	9.0	-2.5	1.8	11.3	97
	03-14-89	0800	--	7,680	9.5	3.5	7.4	9.8	96
	04-28-89	0945	--	6,070	9.5	--	14.5	15	173
	06-12-89	1630	--	6,260	9.3	34.0	31.9	18.7	302
	09-13-89	0845	--	5,800	9.0	14.0	14.5	5.6	64
	10-11-89	1305	--	2,930	9.0	27.0	18.3	9.5	118
	11-30-89	1123	--	3,030	8.9	--	2.5	--	--

TABLE 14.--Field measurements of selected properties and constituents in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date sampled	Time	Dis-charge, instantaneous (ft ³ /s)	Spe-cific conduct-ance (μS/cm)	pH (stand-ard units)	Air tempera-ture (°C)	Water tempera-ture (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (percent satura-tion)	
26	07-14-88	1345	--	3,790	8.6	--	29.0	6.1	--	
	08-04-88	1325	--	3,970	8.9	--	29.5	10.3	158	
	08-25-88	0830	--	3,540	8.7	25.0	23.1	13.1	178	
	08-29-88	0810	--	2,080	8.2	22.0	18.4	4.5	56	
	09-22-88	1230	--	7,230	9.2	22.0	21.0	10.8	143	
	10-13-88	1630	--	8,930	9.1	19.0	19.5	14.8	193	
	11-15-88	1540	--	10,200	9.0	--	7.0	12.4	122	
	02-15-89	1110	--	9,840	8.9	-3.0	.1	20	162	
	06-01-89	1300	--	4,010	9.2	--	23.3	8.8	120	
	07-14-89	0755	--	4,430	8.7	24.0	21.1	2.8	37	
	07-26-89	1525	--	5,740	8.5	--	25.0	2.6	37	
	08-09-89	1720	--	3,890	8.7	--	23.0	11.1	152	
	27	09-22-87	0930	45	871	8.2	19.5	16.0	7.9	92
		10-09-87	0730	53	758	8.3	10.0	14.0	7.4	83
03-09-88		1530	e5	2,800	9.0	7.5	9.0	13.6	137	
08-16-88		1330	35	848	8.4	32.0	25.0	9.1	129	
08-25-88		1520	--	896	8.4	--	28.6	11.5	172	
08-29-88		1140	--	843	8.4	--	24.4	8.8	123	
09-22-88		1700	--	1,140	8.9	24.0	21.6	13.8	182	
10-13-88		1000	9.3	1,520	8.5	17.0	10.9	5.4	57	
11-16-88		1325	--	2,090	8.3	--	4.3	7.8	70	
12-13-88		1600	--	2,210	8.8	10.5	1.8	15.7	131	
01-12-89		1315	--	2,500	--	--	.5	20	159	
02-15-89		1335	--	2,590	8.7	-1.0	.2	20	159	
03-15-89		1330	<3.0	4,160	9.0	19.5	11.6	12.6	137	
04-28-89		1830	--	1,030	8.6	--	19.6	11.1	141	
06-01-89		1505	20	1,080	8.8	--	25.8	14.7	209	
07-14-89		1340	39	878	8.2	--	28.0	8.5	127	
07-26-89		1745	--	892	8.2	--	28.1	7.0	105	
09-14-89		0810	48	693	8.0	20.0	15.6	6.7	78	
10-11-89		0850	28	1,190	8.5	20.0	12.9	8.5	93	
12-01-89	0839	--	1,610	8.4	-1.0	1.0	--	--		
28	10-13-88	1215	--	2,030	8.9	19.5	18.0	9.9	122	
29	10-13-88	1415	7.7	2,020	8.9	24.5	14.3	6.9	79	
30	09-22-87	1200	16	1,170	8.2	29.0	16.5	8.4	99	
	03-08-88	0800	2.5	6,080	8.5	8.0	7.0	9.7	93	
	08-16-88	0800	13	1,160	8.0	21.0	17.7	6.5	79	
	03-15-89	1615	1.8	6,740	8.8	19.0	14.9	11.5	135	
	10-11-89	1055	10	1,250	8.0	25.0	15.2	6.5	75	
31	09-22-87	1630	--	16,100	9.6	31.0	24.0	20	287	
	03-10-88	1000	--	7,110	9.3	0.0	4.0	--	--	
32	03-30-89	1400	<.1	120,000	8.2	--	26.0	--	--	
33	03-30-89	1215	--	76,000	8.3	18.5	15.0	6.9	105	
34	03-30-89	1030	.01	51,100	8.2	16.0	17.0	--	--	
35	09-30-87	1530	e.20	20,600	9.1	29.5	22.0	12.8	179	
	03-09-88	1315	e.20	66,500	8.5	6.5	10.0	12.1	159	
	08-17-88	1515	.70	8,720	8.9	32.5	28.1	9.7	148	
	03-20-89	1330	<.04	63,800	9.0	14.0	16.0	13.3	195	
	03-30-89	0745	.04	68,400	--	8.5	9.5	--	--	
	06-15-89	0830	1.3	59,100	8.3	25.0	18.5	.1	2.0	
36	09-30-87	1330	9.5	2,820	9.4	27.0	20.5	18.8	242	
	03-09-88	1100	--	3,640	8.6	10.0	10.0	11.1	114	
	03-20-89	1100	3.8	4,420	8.6	9.0	14.1	13.2	148	

TABLE 14.--Field measurements of selected properties and constituents in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date sampled	Time	Dis-charge, instantaneous (ft ³ /s)	Spe-cific conduct-ance (µS/cm)	pH (stand-ard units)	Air tempera-ture (°C)	Water tempera-ture (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (percent satura-tion)
37	03-16-89	1615	--	7,810	8.8	11.0	6.6	9.7	94
38	03-16-89	1345	--	7,040	9.0	9.5	8.9	9.2	95
39	03-10-88	1130	--	4,740 ^a	8.5 ^a	--	--	--	--
	08-17-88	1715	--	7,920	10.40	32.5	24.7	13.8	198
	03-16-89	1145	--	11,600	9.4	7.0	8.4	9.0	93
40	10-01-87	0800	--	6,590	8.9	11.5	11.0	7.4	79
	03-16-89	1030	--	16,100	8.9	11.5	8.6	9.3	98
41	09-30-87	1230	--	8,810	9.3	28.0	20.5	14.3	187
	03-09-88	0900	--	4,370	8.7	8.0	8.0	10	99
	03-16-89	0900	--	5,150	9.2	10.5	10.0	13.8	146
42	09-30-87	1000	--	23,200	9.4	19.0	15.5	2.4	30
	03-16-88	1000	--	18,800 ^a	9.2 ^a	--	--	--	--
<u>Fernley Wildlife Management Area</u>									
43	10-23-87	0800	2.5	800	7.7	11.5	11.0	6.1	65
	03-24-88	0930	e.2	1,530	8.4	13.0	4.5	12.9	116
	08-23-88	0945	5.1	253	7.0	27.0	19.2	6.2	78
	06-16-89	1000	<.43	606	8.0	21.0	15.8	11.3	133
	09-12-89	1300	.46	674	8.0	23.0	15.6	8.6	101
44	10-23-87	1100	.13	950	7.7	13.0	13.0	7.0	78
	03-22-89	1430	--	865 ^a	8.4 ^a	--	--	--	--
	09-11-89	1430	<.50	891	7.5	28.5	14.0	5.2	59
45	10-23-87	0930	1.5	754	8.1	14.0	12.0	8.7	94
	03-21-88	1530	.27	845	9.0	19.0	11.0	10.5	112
	08-23-88	0730	1.7	771	7.7	22.0	15.3	8.3	96
	03-22-89	1430	.19	852	8.8	19.5	16.9	8.2	99
	06-16-89	0830	.16	783	8.1	21.5	15.4	8.3	97
	09-12-89	1030	1.7	778	8.1	18.5	13.5	7.7	86
46	10-22-87	1830	3.2	1,240	8.5	--	11.0	--	--
	03-22-88	0900	.24	1,520	8.4	12.0	5.5	11.8	109
	08-22-88	1530	1.4	856	8.1	34.0	22.1	8.1	109
	09-07-88	1255	--	726	8.0	--	17.1	9.2	111
	09-09-88	0846	--	--	--	--	14.0	--	--
	10-14-88	1215	1.1	824	8.5	18.5	10.8	11.1	116
	11-14-88	1415	--	1,600	8.4	9.5	5.7	12.2	114
	12-12-88	1100	.40	1,930	8.5	5.0	.4	12.2	97
	01-12-89	1500	--	2,160	--	--	0.0	--	--
	01-20-89	1030	--	1,450	8.4	-4.0	.2	6.3	50
	02-15-89	0920	--	1,820	8.0	-1.0	0.0	6.8	54
	03-22-89	1300	.13	1,670	8.6	21.0	13.5	14.5	163
	03-29-89	1200	--	1,750	8.4	--	14.5	12.6	144
	05-01-89	1200	.20	1,320	8.6	--	17.8	13.7	168
	06-01-89	1810	<.05	969	8.1	27.0	21.5	7.0	92
	06-13-89	1430	.27	760	8.3	32.5	26.6	9.0	131
	07-13-89	1330	.56	737	8.2	34.0	23.2	10.8	147
	08-08-89	1710	2.4	694	7.7	19.0	18.6	4.1	51
	08-10-89	1300	7.4	538	--	--	--	--	--
	08-11-89	0800	1.3	698	7.8	--	16.4	5.6	67
	09-11-89	1200	1.2	784	8.2	24.0	13.5	9.0	101
	10-10-89	1200	1.5	806	8.2	24.0	9.9	10.7	110
	12-01-89	1459	<.10	1,520	8.5	--	.5	--	--

TABLE 14.--Field measurements of selected properties and constituents in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date sampled	Time	Dis-charge, instan-taneous (ft ³ /s)	Spe-cific conduct-ance (µS/cm)	pH (stand-ard units)	Air tempera-ture (°C)	Water tempera-ture (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (percent satura-tion)
47	10-22-87	1415	--	2,880	9.3	22.0	12.0	17.6	193
	03-23-88	0800	--	5,030	8.9	15.0	10.5	9.1	97
	08-23-88	1215	--	25,000	9.3	30.5	31.8	14.4	246
	12-12-88	1400	--	7,330	9.0	9.5	5.2	20	185
	03-22-89	0830	--	6,170	9.1	9.0	8.3	8.5	86
	06-13-89	0900	--	12,300	8.9	25.0	21.4	10	136
48	03-22-89	1100	--	7,190	9.1	15.0	11.8	9.6	105
49	10-22-87	1600	--	17,200	9.8	--	15.0	20	245
	03-23-88	1100	--	9,620	8.9	18.0	12.0	9.1	101
	08-23-88	1430	--	49,000	9.6	33.0	30.0	20	359
	03-22-89	0930	--	16,650	9.4	18.5	9.6	9.7	104
	06-13-89	1200	--	52,100	9.3	31.0	26.8	11	189
	50	10-22-87	1230	--	38,800	8.8	20.5	14.5	9.1
03-22-88		1400	--	20,900	8.8	21.0	16.5	10.2	130
03-29-89		1030	--	19,300	8.8	12.0	11.0	9.6	107
51	10-22-87	1030	.09	4,900	8.3	--	10.0	9.3	97
<u>Massie Slough</u>									
52	08-22-88	1100	4.8	2,780	8.2	30.5	17.4	5.7	70
	03-29-89	1400	5.0	3,000	8.5	--	12.0	9.8	106
53	08-22-88	1330	--	2,810	8.3	33.0	25.0	7.5	106
	03-29-89	1600	--	3,120	8.3	--	16.0	8.7	103
<u>Humboldt Wildlife Management Area</u>									
54	10-07-87	0730	2.9	2,720	8.4	9.0	14.0	7.9	89
	03-17-88	1530	--	3,620 ^a	8.1 ^a	--	--	--	--
	08-24-88	0930	14	1,520	8.4	27.5	23.0	7.9	107
	03-28-89	1400	3.2	4,270	8.8	--	16.0	9.8	116
55	10-06-87	1500	19	7,900	8.3	28.0	18.5	11.3	142
	03-16-88	1530	--	13,700 ^a	7.9 ^a	--	--	--	--
	08-24-88	1230	19	4,370	8.2	33.0	24.0	5.7	79
	03-28-89	0800	1.7	5,900	8.4	15.0	10.0	6.0	63
56	10-07-87	1030	--	5,960	8.2	23.5	15.0	6.1	71
	03-17-88	1030	--	5,320 ^a	8.1 ^a	--	--	--	--
	08-24-88	1130	--	5,490	8.6	32.5	29.5	12.3	189
	03-28-89	1045	--	7,140	8.8	15.0	18.0	8.6	107
57	10-06-87	1300	11	2,420	8.5	26.0	18.0	13	159
	03-17-88	0830	--	3,630 ^a	7.9 ^a	--	--	--	--
	08-23-88	1730	5.7	1,950	8.4	34.0	26.0	10.6	153
	03-27-89	1500	1.2	2,840	9.1	12.5	17.0	20	242
58	10-07-87	1200	--	2,600	8.8	23.5	18.0	8.2	101
	03-17-88	1330	--	3,820 ^a	8.2 ^a	--	--	--	--
	03-28-89	1230	--	5,930	9.4	--	15.5	9.6	113

^a Laboratory measurement.

TABLE 15.--Concentrations of hardness and major dissolved constituents in surface-water samples from the study area, 1987-89

(Abbreviations and symbol: mg/L, milligrams per liter; --, not determined)

Site number (figs. 1-6)	Date	Hardness (mg/L as CaCO ₃)	Calcium (mg/L as Ca)	Magnesium (mg/L as Mg)	Sodium (mg/L as Na)	Potassium (mg/L as K)	Alkalinity (mg/L as CaCO ₃)	Bicarbonate (mg/L as HCO ₃)	Carbonate (mg/L as CO ₃)	Sulfate (mg/L as SO ₄)	Chloride (mg/L as Cl)	Fluoride (mg/L as F)	Silica (mg/L as SiO ₂)	Solids dissolved residue at 180 °C (mg/L)	Solids dissolved, sum of constituents (mg/L)
Background Sites															
1	09-28-87	200	54	15	59	11	304	293	38	17	14	1.1	51	393	404
	03-11-88	180	48	15	56	9.3	293	298	29	15	13	.9	42	367	375
	08-19-88	210	48	23	110	11	403	422	34	31	23	--	--	561	487
	03-23-89	130	30	14	79	11	306	373	0	21	19	--	--	384	357
2	09-25-87	110	29	8.3	42	5.5	104	127	0	56	23	.3	12	242	239
	03-11-88	92	25	7.1	55	4.3	120	122	12	50	21	.3	21	260	256
	08-19-88	98	26	8.1	37	4.8	96	117	0	52	18	--	--	228	203
	10-28-88	180	48	14	92	6.5	149	161	10	160	59	--	--	503	469
	03-17-89	110	30	7.9	74	5.1	169	178	14	58	29	--	--	335	306
3	09-24-87	100	29	7.6	33	5.0	114	110	14	46	13	.3	12	205	214
	03-11-88	110	30	8.1	44	4.3	120	146	0	54	19	.8	13	253	245
	08-19-88	110	29	8.5	42	4.8	102	110	7	60	20	--	--	252	225
4	10-23-87	69	18	5.8	20	3.6	67	82	0	18	14	.2	17	145	137
	03-18-88	81	21	6.9	27	--	66 ^a	80 ^a	0 ^a	31	19	.3	23	180	--
	08-22-88	62	16	5.4	15	3.0	72	88	0	15	8.7	--	--	132	106
	03-23-89	50	13	4.3	15	2.3	52	63	0	12	15	--	--	113	93
	06-16-89	46	12	3.9	12	2.5	51	62	0	10	8.8	.1	19	132	99
	09-12-89	70	18	6.1	21	4.3	80	89	4	18	14	.1	16	134	145
5	10-07-87	190	44	20	140	16	249	259	22	96	130	.8	41	624	637
	03-18-88	220	57	18	110	10	194 ^a	237 ^a	0 ^a	97	110	.5	39	552	558
	08-24-88	180	39	21	140	13	230	281	0	100	130	--	--	641	581
	03-29-89	210	51	20	120	11	176 ^a	215 ^a	0 ^a	93	130	--	--	544	531
Carson Lake/Diagonal Drain Area															
6	10-08-87	160	45	11	48	6.9	172	210	0	57	16	.4	27	318	315
7	10-08-87	210	60	14	70	8.4	264	322	0	67	24	.5	33	445	435
8	10-09-87	150	40	11	85	7.7	436	532	0	85	23	.5	28	424	542
9	09-24-87	240	58	23	260	13	284	346	0	240	190	.6	32	1,020	987
	03-14-88	270	56	32	460	16	379 ^a	462 ^a	0 ^a	440	340	.7	22	1,680	1,590
	08-18-88	220	55	19	200	7.0	260	317	0	180	160	--	--	823	777
	03-20-89	310	58	40	630	15	476	458	60	590	500	--	--	2,170	2,120
10	09-24-87	190	50	16	260	11	308	376	0	210	190	.6	22	946	944
	03-14-88	330	57	45	1,500	32	750 ^a	914 ^a	0 ^a	610	140	1.1	19	4,260	2,850
	08-18-88	770	30	170	690	12	780	415	264	260	850	--	--	2,180	2,480
	03-23-89	210	34	30	1,200	21	708	742	60	370	1,400	--	--	3,580	3,480

TABLE 15. ---Concentrations of hardness and major dissolved constituents in surface-water samples from the study area, 1987-89---Continued

Site number (figs. 1-6)	Date	Hardness (mg/L as CaCO ₃)	Calcium (mg/L as Ca)	Magnesium (mg/L as Mg)	Sodium (mg/L as Na)	Potassium (mg/L as K)	Alkalinity (mg/L as CaCO ₃)	Bicarbonate (mg/L as HCO ₃)	Carbonate (mg/L as CO ₃)	Sulfate (mg/L as SO ₄)	Chloride (mg/L as Cl)	Fluoride (mg/L as F)	Silica (mg/L as SiO ₂)	Solids, dissolved, residue at 180 °C (mg/L)	Solids, dissolved, sum of constituents (mg/L)
11	09-23-87	96	25	8.2	41	5.0	110	124	5	55	9.0	.3	12	235	221
	03-15-88	390	78	47	580	18	437 ^a	533 ^a	0 ^a	490	410	.9	16	1,980	1,900
	08-18-88	130	34	12	97	11	152	185	0	97	77	--	--	447	419
	03-21-89	280	62	30	410	13	420	405	53	350	320	--	--	1,430	1,440
12	09-23-87	98	27	7.3	30	4.3	114	139	0	45	14	.3	12	195	208
	03-15-88	500	84	70	1,000	27	420 ^a	512 ^a	0 ^a	740	990	.9	5.0	3,400	3,170
	03-21-89	230	56	21	320	14	317	317	34	240	270	--	--	1,190	1,110
13	09-24-87	150	43	11	69	8.1	204	234	7	69	17	.5	22	368	362
	03-15-88	160	41	15	140	13	288 ^a	351 ^a	0 ^a	130	46	.6	19	590	577
	08-18-88	120	31	10	60	7.3	140	83	43	69	24	--	--	297	285
	03-21-89	150	38	13	130	11	272	332	0	110	38	--	--	540	503
14	09-23-87	190	40	22	260	15	268	327	0	200	200	.7	6.9	971	905
	03-14-88	300	62	36	540	13	382 ^a	466 ^a	0 ^a	460	330	.7	18	1,730	1,690
	08-18-88	200	44	21	230	10	280	283	29	190	180	--	--	893	843
	03-21-89	370	64	52	800	22	501	566	22	680	770	--	--	2,800	2,690
15	09-23-87	140	32	15	130	9.3	145	156	10	120	120	.4	13	527	526
	03-15-88	470	71	72	900	37	377 ^a	460 ^a	0 ^a	880	910	1.0	15	3,330	3,110
16	10-08-87	150	41	11	81	8.0	208	254	0	89	26	.5	25	396	406
17	10-08-87	140	39	11	90	8.0	188	229	0	100	37	.5	23	419	421
18	10-09-87	150	41	11	110	8.4	260	317	0	100	55	.5	23	467	505
Stillwater Wildlife Management Area															
19	12-13-88	8,300	1,000	1,400	10,000	170	258	315	0	4,800	18,000	.6	13	35,500	35,500
20	12-13-88	3,300	390	560	6,100	71	497	586	10	4,100	9,200	.8	24	21,900	20,700
21	09-21-87	1,300	190	190	1,700	36	246	271	14	1,200	2,100	.7	15	6,010	5,580
	03-07-88	--	--	--	--	--	401	444	22	--	--	--	--	--	--
	08-15-88	2,800	350	460	5,100	45	277	244	46	3,200	7,000	--	--	15,900	16,300
	12-13-88	3,700	430	650	7,400	80	481	586	0	4,400	10,000	.8	20	23,700	23,300
	03-14-89	3,600	380	640	6,900	75	340	386	14	4,300	10,000	--	--	23,200	22,500
	06-12-89	1,000	140	170	2,000	34	268	288	29	1,500	2,900	.8	18	7,190	6,920
	09-13-89	1,100	130	200	2,500	39	348	307	58	1,800	3,600	.8	9.0	8,710	8,490
22	09-22-87	110	27	11	92	8.2	164	166	17	98	31	.5	14	388	380
	03-08-88	170	37	19	190	9.3	218	207	29	230	110	.5	12	724	739
	03-13-89	140	27	17	310	11	225	173	50	370	160	--	--	1,050	1,030
23	03-15-89	2,600	390	400	3,300	54	296	361	0	2,300	5,900	--	--	13,300	12,500
	06-12-89	110	31	8.0	58	5.2	230 ^a	144 ^a	67 ^a	54	43	.3	16	303	353
	09-13-89	120	32	10	59	7.8	124	98	26	58	48	.3	4.9	299	294

TABLE 15. --Concentrations of hardness and major dissolved constituents in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date	Hardness (mg/L as CaCO ₃)	Calcium (mg/L as Ca)	Magnesium (mg/L as Mg)	Sodium (mg/L as Na)	Potassium (mg/L as K)	Alkalinity (mg/L as CaCO ₃)	Bicarbonate (mg/L as HCO ₃)	Carbonate (mg/L as CO ₃)	Sulfate (mg/L as SO ₄)	Chloride (mg/L as Cl)	Fluoride (mg/L as F)	Silica (mg/L as SiO ₂)	Solids, dissolved, residue at 180 °C (mg/L)	Solids, dissolved, sum of constituents (mg/L)
24	09-21-87	110	27	11	88	8.1	170	163	22	89	39	.5	13	382	378
	03-08-88	170	37	20	190	9.2	215	234	14	230	120	.5	11	751	747
	08-15-88	140	37	12	80	8.0	155	161	14	88	68	--	--	398	386
	03-14-89	160	33	20	330	11	223	185	43	370	180	--	--	1,080	1,080
25	09-21-87	360	50	57	600	22	172	132	38	410	750	.6	22	2,070	2,010
	03-07-88	440	74	63	490	18	239	229	31	420	630	.6	9.5	1,880	1,850
	08-15-88	650	77	110	970	23	260	215	50	700	1,200	--	--	3,270	3,240
	12-13-88	1,100	100	210	1,800	42	351	310	58	1,500	2,500	1.0	11	6,700	6,370
	03-14-89	750	69	140	1,500	33	286	149	98	1,100	1,900	--	--	4,890	4,910
	06-12-89	590	73	100	1,000	36	236	78	103	880	1,500	.8	16	3,770	3,750
	09-13-89	660	83	110	1,000	34	265	254	34	830	1,400	.9	26	15,500	3,640
27	09-22-87	170	47	13	130	9.7	254	310	0	130	54	.6	27	571	564
	10-09-87	--	--	--	--	--	212	259	0	--	--	--	--	--	--
	03-09-88	270	64	27	530	18	354	320	55	390	410	.7	19	1,740	1,670
	08-16-88	160	42	13	120	9.4	247	273	14	120	50	--	--	543	503
	10-13-88	220	55	20	260	14	334	383	12	230	170	--	--	949	949
	03-15-89	350	76	39	760	17	365	376	34	580	830	--	--	2,600	2,520
28	10-13-88	180	40	20	370	13	288	312	19	260	310	--	--	1,230	1,190
29	10-13-88	170	37	20	370	12	289	308	22	250	300	--	--	1,140	1,160
30	09-22-87	250	68	19	160	13	226	276	0	160	110	.5	25	751	691
	03-08-88	600	110	78	1,100	26	304	371	0	690	1,400	.6	23	3,900	3,610
	08-16-88	220	60	18	150	11	220	268	0	160	140	--	--	714	671
	03-15-89	720	160	77	1,100	2.2	307	322	26	750	1,700	--	--	4,210	3,970
31	09-22-87	200	25	34	3,800	90	392	102	185	1,600	4,600	1.3	13	10,300	10,400
	03-10-88	--	--	--	--	--	317	254	65	--	--	--	--	--	--
32	03-30-89	4,600	520	790	41,000	63	488	595	0	16,000	55,000	--	--	120,000	113,700
33	03-30-89	4,800	800	690	20,000	400	376	410	24	9,800	30,000	--	--	62,500	61,900
34	03-30-89	3,800	620	540	11,000	230	388	473	0	5,500	18,000	--	--	36,800	36,100
35	09-30-87	1,000	150	160	4,000	100	201	95	74	1,500	6,600	.6	7.3	13,300	12,600
	03-09-88	--	--	--	--	--	324	224	84	--	--	--	--	--	--
	08-17-88	580	88	88	1,800	34	192	78	77	640	2,500	--	--	5,140	5,270
	03-20-89	5,600	730	920	14,000	240	283	81	130	6,300	26,000	--	--	49,600	48,400
	06-15-89	3,800	980	340	14,000	320	330	403	0	5,800	22,000	1.1	20	44,100	43,700
36	09-30-87	350	61	47	510	22	227	120	77	400	540	.7	24	1,750	1,740
	03-09-88	--	--	--	--	--	295	307	26	--	--	--	--	--	--
	03-20-89	620	120	79	750	25	365	417	14	670	880	--	--	2,840	2,740
37	03-16-89	440	71	65	1,500	28	420	454	24	910	1,900	--	--	4,870	4,730
38	03-16-89	400	61	59	1,400	30	396	395	43	780	1,600	--	--	4,280	4,170

TABLE 15.---Concentrations of hardness and major dissolved constituents in surface-water samples from the study area, 1987-89---Continued

Site number (figs. 1-6)	Date	Hardness (mg/L as CaCO ₃)	Calcium (mg/L as Ca)	Magnesium (mg/L as Mg)	Sodium (mg/L as Na)	Potassium (mg/L as K)	Alkalinity (mg/L as CaCO ₃)	Bicarbonate (mg/L as HCO ₃)	Carbonate (mg/L as CO ₃)	Sulfate (mg/L as SO ₄)	Chloride (mg/L as Cl)	Fluoride (mg/L as F)	Silica (mg/L as SiO ₂)	Solids dissolved residue at 180 °C (mg/L)	Solids dissolved, sum of constituents (mg/L)
39	03-10-88	210	34	31	880	22	357 ^a	435 ^a	0 ^a	230	1,000	.7	11	2,680	2,420
	08-17-88	78	13	11	1,800	25	431	17	250	650	1,900	--	--	4,690	4,660
	03-16-89	310	29	57	2,400	31	440	303	115	540	3,500	--	--	6,900	6,820
40	10-01-87	160	26	23	1,500	30	496	434	84	430	1,700	1.2	19	4,000	4,030
	03-16-89	1,100	200	140	3,300	67	273	256	38	2,100	4,500	--	--	10,800	10,500
	09-30-87	330	50	51	1,800	47	248	122	89	960	2,200	.8	18	5,570	5,280
41	03-09-88	390	54	62	750	33	219	239	14	490	850	.7	18	2,610	2,390
	03-16-89	530	71	85	890	31	300	244	60	730	1,100	--	--	3,170	3,090
	09-30-87	450	14	100	5,300	190	827	468	266 ^a	2,400	1,000	.9	8.2	16,800	9,510
42	03-16-88	500	34	100	4,500	110	688 ^a	839 ^a	0	1,600	5,000	.1	.3	12,200	11,800
	10-23-87	150	33	17	110	18	190	232	0	160	40	.3	30	517	522
	03-24-88	230	40	32	260	14	304	371	0	430	64	.3	30	1,040	1,050
43	08-23-88	81	20	7.5	20	15	88	107	0	20	11	--	--	168	137
	06-16-89	150	30	18	71	15	224	273	0	54	23	.3	42	387	388
	09-12-89	150	32	18	83	17	242	295	0	73	25	.3	41	400	434
44	10-23-87	180	34	22	130	14	218	266	0	170	66	.2	40	605	607
	03-22-89	79	15	10	160	16	364 ^a	444 ^a	0 ^a	73	19	--	--	544	511
	09-11-89	210	40	27	110	16	210	256	0	160	57	.3	42	584	578
45	10-23-87	110	22	14	130	24	336	410	0	58	27	.4	40	502	517
	03-21-88	92	17	12	170	3.0	348	351	36	74	17	.4	31	537	533
	08-23-88	160	33	18	120	15	336	410	0	110	26	--	--	563	524
46	03-22-89	--	--	--	--	--	333	368	19	--	--	--	--	--	--
	06-16-89	120	23	14	130	20	336	410	0	50	16	.4	28	483	483
	09-12-89	140	27	17	120	25	412	503	0	54	20	.4	42	473	553
47	10-22-87	210	35	30	560	40	398	492	6	530	66	.5	31	1,320	1,330
	03-22-88	310	41	50	1,100	35	588	620	48	1,400	460	1.1	21	3,490	3,460
	08-23-88	430	25	89	6,500	220	1,450	896	427	8,600	3,500	--	--	20,600	19,800
48	12-12-88	260	54	30	340	28	413	492	6	530	66	.5	31	1,320	1,330
	03-22-88	160	32	20	320	20	450	549	0	370	57	--	--	1,120	1,090
	06-13-89	130	27	14	110	22	214	261	0	120	28	.4	30	507	480
49	09-11-89	140	28	16	120	23	312	381	0	70	23	.4	34	513	502
	10-22-87	210	35	30	560	40	398	492	89	700	330	.5	32	1,860	1,970
	03-23-88	310	41	50	1,100	35	588	620	48	1,400	460	1.1	21	3,490	3,460
50	08-23-88	430	25	89	6,500	220	1,450	896	427	8,600	3,500	--	--	20,600	19,800
	12-12-88	570	92	82	1,600	78	505	522	46	2,300	720	.9	11	5,440	5,380
	03-22-89	330	35	59	1,400	65	622	608	74	1,800	720	--	--	4,400	4,450
51	06-13-89	730	62	140	2,800	150	985	967	115	3,800	1,800	1.8	29	9,480	9,370

Fernley Wildlife Management Area

TABLE 15.--Concentrations of hardness and major dissolved constituents in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date	Hardness (mg/L as CaCO ₃)	Calcium (mg/L as Ca)	Magnesium (mg/L as Mg)	Sodium (mg/L as Na)	Potassium (mg/L as K)	Alkalinity (mg/L as CaCO ₃)	Bicarbonate (mg/L as HCO ₃)	Carbonate (mg/L as CO ₃)	Sulfate (mg/L as SO ₄)	Chloride (mg/L as Cl)	Fluoride (mg/L as F)	Silica (mg/L as SiO ₂)	Solids dissolved residue at 180 °C (mg/L)	Solids dissolved, sum of constituents (mg/L)
48	03-22-89	330	30	61	1,500	68	550	539	65	1,900	960	--	--	5,940	4,850
49	10-22-87	120	4.0	26	4,600	200	1,440	580	580	4,900	2,400	1.4	12	13,200	13,000
	03-23-88	380	22	80	2,200	3.5	765	776	77	2,200	1,400	1.1	18	6,690	6,380
	08-23-88	1,200	7.5	280	16,000	470	3,470	1,200	1,490	16,000	9,100	--	--	44,200	43,900
	03-22-89	650	48	130	4,000	130	735	534	178	4,000	3,500	--	--	12,400	12,200
	06-13-89	2,200	20	520	15,000	570	2,570	1,280	912	14,000	13,000	2.5	1.0	45,100	44,700
50	10-22-87	1,300	190	200	9,700	500	464	381	91	1,500	14,000	2.0	17	25,600	26,400
	03-22-88	710	120	100	4,700	1,500	390	403	36	810	6,400	6.4	22	13,000	13,900
	03-29-89	630	110	87	4,000	180	414	403	50	720	6,000	--	--	11,600	11,300
51	10-22-87	120	46	1.2	1,000	60	216	264	0	290	1,200	7.2	150	2,920	2,880
Massie Slough															
52	08-22-88	100	24	10	580	28	422	515	0	420	370	--	--	1,690	1,690
	03-29-89	89	21	9.0	670	30	438	495	19	450	440	--	--	1,890	1,880
53	08-22-88	110	27	11	600	23	444	542	0	430	380	--	--	1,760	1,740
	03-29-89	96	23	9.3	640	31	450	539	5	470	470	--	--	1,970	1,910
Humboldt Wildlife Management Area															
54	10-07-87	240	36	36	530	25	324	395	0	290	430	1.2	27	1,590	1,570
	03-17-88	250	61	23	670	35	310 ^a	378 ^a	0 ^a	210	710	1.7	44	2,050	1,940
	08-24-88	190	44	20	240	27	287	315	17	120	230	--	--	907	853
	03-28-89	230	50	26	830	43	371	400	26	210	1,000	--	--	2,420	2,380
55	10-06-87	900	210	91	1,300	49	462	564	0	700	2,100	1.5	37	5,040	4,770
	03-16-88	1,200	250	130	2,900	63	454 ^a	554 ^a	0	1,200	3,600	1.7	28	8,580	8,450
	08-24-88	490	120	47	800	24	564	688	0	360	1,200	--	--	2,560	2,660
	03-28-89	570	130	59	1,100	34	550	622	24	450	1,500	--	--	3,530	3,600
56	10-07-87	540	100	71	1,200	42	346	422	0	560	1,500	1.4	29	3,540	3,710
	03-17-88	450	75	64	980	28	230 ^a	280 ^a	0 ^a	460	1,100	1.3	11	3,070	2,860
	08-24-88	390	57	61	1,000	44	344	381	19	560	1,200	--	--	3,140	3,130
	03-28-89	530	83	78	1,300	47	356	381	26	630	1,900	--	--	4,300	4,250
57	10-06-87	310	75	30	420	24	486	534	29	280	360	1.3	44	1,500	1,530
	03-17-88	430	100	43	680	23	498 ^a	607 ^a	0 ^a	430	450	1.4	41	2,210	2,070
	08-23-88	280	69	25	320	25	424	454	31	190	280	--	--	1,210	1,160
	03-27-89	320	82	29	510	23	438	408	62	250	560	--	--	1,710	1,720
58	10-07-87	210	45	23	540	27	444	488	26	170	560	1.2	42	1,560	1,670
	03-17-88	380	78	44	760	26	507 ^a	618 ^a	0 ^a	440	550	1.4	26	2,310	2,230
	03-28-89	260	36	41	1,200	50	492	381	108	690	1,300	--	--	3,690	3,610

^a Laboratory measurement; all other alkalinity, bicarbonate, and carbonate measurements were made in the field.

TABLE 16.--Concentrations of dissolved nitrogen, phosphorus, and organic carbon in surface-water samples from the study area, 1987-89

[Concentrations are expressed in milligrams per liter as the element;
Symbols: <, less than; --, not determined]

Site number (figs. 1-6)	Date	Nitrogen, nitrate	Nitrogen, nitrite	Nitrogen, ammonia	Nitrogen, ammonia, un-ionized	Ortho-phosphorus	Phosphorus	Carbon, organic
<u>Background Sites</u>								
1	09-28-87	--	--	0.03	<0.01	--	--	--
	03-11-88	--	--	.03	<.01	--	--	--
	08-19-88	--	--	<.01	<.01	--	--	--
	03-23-89	--	--	.03	<.01	--	--	--
2	09-25-87	--	--	.05	<.01	--	--	3.9
	03-11-88	--	--	.10	<.01	--	--	2.7
	08-19-88	--	--	.07	<.01	--	--	3.6
	10-28-88	--	--	.07	<.01	--	--	3.6
	03-17-89	--	--	<.01	<.01	--	--	2.6
3	09-24-87	--	--	.02	<.01	--	--	--
	03-11-88	--	--	.03	<.01	--	--	--
	08-19-88	--	--	<.01	<.01	--	--	--
4	10-23-87	1.63	0.17	.17	<.01	0.01	0.03	2.8
	03-18-88	--	--	.59	--	--	--	1.5
	08-22-88	--	--	.16	<.01	--	--	3.2
	03-23-89	--	--	.02	<.01	--	--	2.8
	06-16-89	--	--	.02	<.01	--	--	2.9
	09-12-89	--	--	.02	<.01	--	--	3.1
	03-11-88	--	--	.02	<.01	--	--	2.6
5	10-07-87	.10	<.01	.02	<.01	.02	.04	--
	03-18-88	--	--	.02	--	--	--	2.6
	08-24-88	--	--	<.01	<.01	--	--	4.6
	03-29-89	--	--	<.01	<.01	--	--	3.1
<u>Carson Lake/Diagonal Drain Area</u>								
6	10-08-87	1.07	0.03	0.04	<0.01	0.10	0.11	--
7	10-08-87	1.14	.06	.11	<.01	.20	.20	--
8	10-09-87	.91	.06	.07	<.01	.26	.28	--
9	09-24-87	--	--	.08	<.01	--	--	0.6
	03-14-88	--	--	.10	--	--	--	7.2
	08-18-88	--	--	.05	<.01	--	--	6.6
	03-20-89	--	--	.13	.04	--	--	10
10	09-24-87	--	--	.39	.02	--	--	12
	03-14-88	--	--	.30	--	--	--	17
	08-18-88	--	--	<.01	<.01	--	--	12
	03-23-89	--	--	.58	.11	--	--	13
11	09-23-87	--	--	.04	<.01	--	--	5.3
	03-15-88	--	--	.17	--	--	--	15
	08-18-88	--	--	.03	<.01	--	--	8.3
	03-21-89	--	--	.04	<.01	--	--	10
12	09-23-87	--	--	.06	<.01	--	--	5.4
	03-15-88	--	--	.07	--	--	--	18
	03-21-89	--	--	.58	.11	--	--	9.8
13	09-24-87	--	--	.04	<.01	--	--	5.1
	03-15-88	--	--	.02	--	--	--	6.3
	08-18-88	--	--	<.01	<.01	--	--	5.5
	03-21-89	--	--	.47	.03	--	--	6.3
14	09-23-87	--	--	.09	<.01	--	--	--
	03-14-88	--	--	.23	--	--	--	--
	08-18-88	--	--	.04	.01	--	--	--
	03-21-89	--	--	.19	.02	--	--	--
15	09-23-87	--	--	.08	.01	--	--	--
	03-15-88	--	--	.09	--	--	--	--
16	10-08-87	.70	.05	.06	<.01	.25	.26	--
17	10-08-87	.63	.08	.16	<.01	.25	.24	--
18	10-09-87	.59	.07	.18	<.01	.25	.26	--

TABLE 16.--Concentrations of dissolved nitrogen, phosphorus, and organic carbon in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date	Nitrogen, nitrate	Nitrogen, nitrite	Nitrogen, ammonia	Nitrogen, ammonia, un-ionized	Ortho-phosphorus	Phosphorus	Carbon, organic
<u>Stillwater Wildlife Management Area</u>								
19	12-13-88	--	--	1.3	0.03	--	--	20
20	12-13-88	--	--	.17	<.01	--	--	22
21	09-21-87	--	--	.06	<.01	--	--	12
	03-07-88	--	--	.13	<.01	--	--	18
	08-15-88	--	--	.08	<.01	--	--	10
	12-13-88	--	--	.22	<.01	--	--	12
	03-14-89	--	--	.08	<.01	--	--	12
	06-12-89	--	--	.05	.01	--	--	11
	09-13-89	--	--	.02	<.01	--	--	12
22	09-22-87	--	--	.03	<.01	--	--	6.5
	03-08-88	--	--	.03	<.01	--	--	6.7
	03-13-89	--	--	.03	.01	--	--	14
23	03-15-89	--	--	.19	<.01	--	--	13
	06-12-89	--	--	.02	.02	--	--	--
	09-13-89	--	--	<.01	<.01	--	--	5.8
24	09-21-87	--	--	.02	<.01	--	--	6.5
	03-08-88	--	--	.03	<.01	--	--	6.0
	08-15-88	--	--	<.01	<.01	--	--	6.4
	03-14-89	--	--	.04	.01	--	--	9.4
25	09-21-87	--	--	.16	.03	--	--	--
	08-15-88	--	--	.01	<.01	--	--	--
	12-13-88	--	--	2.3	.20	--	--	--
26	03-14-89	--	--	.06	.02	--	--	34
	06-12-89	--	--	.04	.03	--	--	--
	09-13-89	--	--	.02	<.01	--	--	6.5
27	09-22-87	--	--	.09	<.01	--	--	7.3
	03-09-88	--	--	.83	.12	--	--	10
	08-16-88	--	--	.04	<.01	--	--	6.7
	10-13-88	--	--	.29	.02	--	--	6.5
	03-15-89	--	--	.02	<.01	--	--	14
28	10-13-88	--	--	.06	.01	--	--	--
29	10-13-88	--	--	.04	<.01	--	--	8.6
30	09-22-87	--	--	.06	<.01	--	--	6.6
	03-08-88	--	--	.30	.01	--	--	7.8
	08-16-88	--	--	.05	<.01	--	--	6.1
	03-15-89	--	--	.14	.02	--	--	9.2
31	09-22-87	--	--	.09	.06	--	--	--
	03-10-88	--	--	.04	<.01	--	--	--
35	09-30-87	--	--	.03	.01	--	--	14
	03-09-88	--	--	.16	<.01	--	--	20
	08-17-88	--	--	<.01	<.01	--	--	11
	03-20-89	--	--	.25	.06	--	--	13
	06-15-89	--	--	.30	.02	--	--	--
36	09-30-87	--	--	.04	.02	--	--	22
	03-09-88	--	--	.04	<.01	--	--	14
	03-20-89	--	--	.23	.02	--	--	20
37	03-16-89	--	--	.07	<.01	--	--	--
38	03-16-89	--	--	.02	<.01	--	--	--
39	03-10-88	--	--	.03	--	--	--	--
	08-17-88	--	--	.01	<.01	--	--	--
	03-16-89	--	--	.03	<.01	--	--	--
40	10-01-87	--	--	.07	<.01	--	--	--
	03-16-89	--	--	.81	.09	--	--	--
41	09-30-87	--	--	.04	.02	--	--	--
	03-09-88	--	--	.05	<.01	--	--	--
	03-16-89	--	--	.11	.03	--	--	--
42	09-30-87	--	--	.12	.05	--	--	--
	03-16-88	--	--	<.01	--	--	--	--

TABLE 16.--Concentrations of dissolved nitrogen, phosphorus, and organic carbon in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date	Nitrogen, nitrate	Nitrogen, nitrite	Nitrogen, ammonia	Nitrogen, ammonia, un-ionized	Ortho-phosphorus	Phosphorus	Carbon, organic
<u>Fernley Wildlife Management Area</u>								
43	10-23-87	1.42	0.08	0.07	<0.01	0.25	0.27	8.0
	03-24-88	--	--	.04	<.01	--	--	4.9
	08-23-88	--	--	.03	<.01	--	--	6.2
	06-16-89	--	--	.02	<.01	--	--	4.8
	09-12-89	--	--	.05	<.01	--	--	4.2
44	10-23-87	1.92	.08	.12	<.01	.40	.42	3.3
	09-11-89	--	--	.03	<.01	--	--	4.7
45	10-23-87	1.48	.02	.02	<.01	.36	.35	2.9
	03-21-88	--	--	.02	<.01	--	--	3.1
	08-23-88	--	--	.01	<.01	--	--	2.5
	03-22-89	--	--	.08	.01	--	--	4.4
	06-16-89	--	--	.02	<.01	--	--	3.5
	09-12-89	--	--	<.01	<.01	--	--	2.5
46	10-22-87	.64	<.01	.02	<.01	.22	.22	5.1
	03-22-88	--	--	.07	<.01	--	--	6.3
	08-22-88	--	--	.01	<.01	--	--	5.0
	10-14-88	--	--	.06	<.01	--	--	3.3
	12-12-88	--	--	.05	<.01	--	--	6.0
	03-22-89	--	--	.02	<.01	--	--	8.5
	06-13-89	--	--	.04	<.01	--	--	--
	09-11-89	--	--	.02	<.01	--	--	5.8
47	10-22-87	.09	.01	.03	<.01	.02	.05	--
	03-23-88	--	--	.01	<.01	--	--	--
	08-23-88	--	--	.20	.13	--	--	--
	12-12-88	--	--	.05	<.01	--	--	--
	03-22-89	--	--	.05	<.01	--	--	20
	06-13-89	--	--	.06	.02	--	--	--
48	03-22-89	--	--	.04	<.01	--	--	18
49	10-22-87	--	--	--	--	--	.18	--
	03-22-89	--	--	.09	.03	--	--	36
50	10-22-87	--	--	--	--	--	.04	--
	03-29-89	--	--	.02	<.01	--	--	--
51	10-22-87	.10	<.01	.03	<.01	.06	.06	3.2
<u>Massie Slough</u>								
52	08-22-88	--	--	<0.01	<0.01	--	--	2.8
	03-29-89	--	--	.03	<.01	--	--	3.3
53	08-22-88	--	--	.01	<.01	--	--	--
	03-29-89	--	--	.04	<.01	--	--	--
<u>Humboldt Wildlife Management Area</u>								
54	10-07-87	0.10	<0.01	0.01	<0.01	0.04	0.03	--
	03-17-88	--	--	.01	--	--	--	3.8
	08-24-88	--	--	.03	<.01	--	--	4.2
	03-28-89	--	--	<.01	<.01	--	--	4.9
55	10-06-87	--	--	--	--	--	.06	--
	03-16-88	--	--	.10	--	--	--	12
	08-24-88	--	--	.20	.02	--	--	7.0
	03-28-89	--	--	.05	<.01	--	--	8.9
56	10-07-87	.10	<.01	.04	<.01	<.01	.01	--
	03-17-88	--	--	.03	--	--	--	--
	08-24-88	--	--	.02	<.01	--	--	--
	03-28-89	--	--	.01	<.01	--	--	--
57	10-06-87	.33	.03	.03	<.01	.26	.24	--
	03-17-88	--	--	1.2	--	--	--	4.0
	08-23-88	--	--	<.01	<.01	--	--	5.9
	03-27-89	--	--	.90	.26	--	--	6.8
58	10-07-87	.10	<.01	.02	<.01	.02	.05	--
	03-17-88	--	--	.03	--	--	--	--
	03-28-89	--	--	.03	.01	--	--	--

TABLE 17.--Concentrations of dissolved trace elements in surface-water samples from the study area, 1987-89

[Concentrations are expressed in micrograms per liter as the element. Symbols: <, less than; --, not determined]

Site number (figs. 1-6)	Date	Aluminum	Antimony	Arsenic	Barium	Boron	Cadmium	Chromium	Copper	Iron	Lead
Background Sites											
1	09-28-87	<10	2	8	99	90	<1	<10	<10	--	<5
	03-11-88	20	1	7	140	80	<1	<1	<10	--	<5
	08-19-88	--	--	15	--	130	--	<1	--	--	--
	03-23-89	--	--	12	--	100	--	<1	--	--	--
2	09-25-87	30	2	15	64	360	<1	<10	<10	--	<5
	03-11-88	<10	5	31	40	400	<1	<1	<10	--	<5
	08-19-88	--	--	16	--	300	--	<1	--	--	--
	10-28-88	--	--	28	--	730	--	<1	--	--	--
	03-17-89	--	--	40	--	440	--	<1	--	--	--
3	09-24-87	20	2	18	58	290	<1	<10	<10	--	<5
	03-11-88	20	<1	9	58	350	<1	1	<10	--	<5
	08-19-88	--	--	18	--	370	--	<1	--	--	--
4	10-23-87	<10	<1	7	28	220	<1	20	<10	--	<5
	03-18-88	10	--	--	--	430	1	<1	--	42	--
	08-22-88	--	--	5	--	110	--	<1	--	--	--
	03-23-89	--	--	6	--	170	--	<1	--	--	--
	06-16-89	10	--	8	--	170	--	<1	--	33	--
	09-12-89	<10	--	8	--	180	<1	<1	--	24	<1
5	10-07-87	<10	7	39	59	550	<1	<10	<10	--	<5
	03-18-88	<10	1	33	--	350	1	<1	<1	<10	<5
	08-24-88	--	--	51	--	620	--	<1	--	--	--
	03-29-89	--	--	29	--	400	--	<1	--	--	--
Carson Lake/Diagonal Drain Area											
6	10-08-87	<10	15	20	65	370	<1	20	<10	--	<5
7	10-08-87	<10	2	18	90	500	<1	10	<10	--	<5
8	10-09-87	20	<7	60	58	620	<1	<10	<10	--	<5
9	09-24-87	<10	9	67	60	1,900	<1	<10	<10	--	<5
	03-14-88	<10	14	110	--	3,600	<1	<10	3	20	<5
	08-18-88	--	--	70	--	1,400	--	<1	--	--	--
	03-20-89	--	--	93	--	5,400	--	<1	--	--	--

TABLE 17.--Concentrations of dissolved trace elements in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date	Aluminum	Antimony	Arsenic	Barium	Boron	Cadmium	Chromium	Copper	Iron	Lead
10	09-24-87	<10	6	85	65	2,000	<1	<10	<10	--	<5
	03-14-88	<10	20	180	--	11,000	<1	<10	4	30	<5
	08-18-88	--	--	86	--	5,000	--	<1	--	--	--
	03-23-89	--	--	110	--	10,000	--	<1	--	--	--
11	09-23-87	10	2	16	59	360	<1	<10	<10	--	<5
	03-15-88	<10	18	95	--	3,400	1	<1	1	30	<5
	08-18-88	--	--	50	--	770	--	<1	--	--	--
	03-21-89	--	--	96	--	2,600	--	<1	--	--	--
12	09-23-87	10	1	15	42	280	<1	<10	<10	--	<5
	03-15-88	<10	11	43	--	5,800	<1	<10	5	30	<5
	03-21-89	--	--	88	--	2,000	--	<1	--	--	--
13	09-24-87	<10	3	29	60	480	<1	<10	<10	--	5
	03-15-88	90	6	54	--	840	<1	<10	2	78	<5
	08-18-88	--	--	45	--	470	--	<1	--	--	--
	03-21-89	--	--	48	--	750	--	<1	--	--	--
14	09-23-87	50	7	44	89	2,000	<1	<10	<10	--	<5
	03-14-88	<10	16	100	--	3,600	<1	<1	<1	10	<5
	08-18-88	--	--	88	--	1,700	--	<1	--	--	--
	03-21-89	--	--	100	--	5,900	--	<1	--	--	--
15	09-23-87	10	2	48	48	1,000	<1	<10	<10	--	<5
	03-15-88	30	5	40	--	6,400	<1	<10	4	40	<5
16	10-08-87	10	5	36	61	610	<1	<1	<10	--	<5
17	10-08-87	10	6	38	60	650	<1	<10	<10	--	<5
18	10-09-87	20	10	48	61	720	<1	<1	<10	--	<5
Stillwater Wildlife Management Area											
19	12-13-88	<10	--	84	--	31,000	--	<1	--	230	<5
20	12-13-88	<10	--	250	--	23,000	--	<1	--	110	<5
21	09-21-87	<10	7	76	100	6,900	<1	10	20	--	<5
	08-15-88	--	--	200	--	17,000	--	<1	--	--	--
	12-13-88	<10	--	230	--	25,000	--	<1	--	120	<5
	03-14-89	--	--	200	--	25,000	--	<5	--	--	--
	06-12-89	80	--	180	--	9,100	--	<2	--	40	<1
	09-13-89	30	--	48	--	10,000	2	<2	--	30	2
22	09-22-87	20	5	--	--	--	--	--	--	--	--
	03-08-88	10	4	21	76	1,200	<1	<1	<10	--	<5
	03-13-89	--	--	220	--	2,500	--	<1	--	--	--

TABLE 17.--Concentrations of dissolved trace elements in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date	Aluminum	Antimony	Arsenic	Barium	Boron	Cadmium	Chromium	Copper	Iron	Lead
23	03-15-89	--	--	31	--	14,000	--	<3	--	--	--
	06-12-89	40	--	11	--	480	--	<1	--	40	--
	09-13-89	50	--	17	--	430	--	<1	--	22	<1
24	09-21-87	<10	4	32	57	660	<1	<10	<10	--	<5
	03-08-88	20	5	20	99	1,200	<1	<1	<10	--	<5
	08-15-88	--	--	26	--	530	--	<1	--	--	--
	03-14-89	--	--	80	--	2,500	--	<1	--	--	--
25	09-21-87	<10	5	59	200	2,900	<1	<10	10	--	<5
	03-07-88	<10	4	32	200	2,600	1	<1	30	--	<5
	08-15-88	--	--	150	--	4,900	--	<1	--	--	--
	12-13-88	<10	--	130	--	9,600	--	<1	--	30	<5
	03-14-89	--	--	110	--	7,800	--	<1	--	--	--
27	06-12-89	<10	--	44	--	6,200	--	<1	--	20	<1
	09-13-89	20	--	140	--	6,400	--	<1	--	70	<1
	09-22-87	<10	4	59	58	930	<1	<10	<10	--	<5
	03-09-88	<10	7	100	100	2,900	1	<1	40	--	<5
	08-16-88	--	--	68	--	840	--	<1	--	--	--
	10-13-88	--	--	74	--	1,700	--	<1	--	--	--
28	03-15-89	--	--	120	--	4,000	--	1	--	--	--
	10-13-88	--	--	74	--	2,300	--	<1	--	--	--
29	10-13-88	--	--	63	--	2,300	--	<1	--	--	--
	09-22-87	<10	3	33	61	1,300	<1	<10	<10	--	<5
	03-08-88	<10	10	60	200	6,100	1	<1	10	--	<5
30	08-16-88	--	--	47	--	1,100	--	<1	--	--	--
	03-15-89	--	--	60	--	7,100	--	2	--	--	--
	09-22-87	<10	29	150	300	19,000	<1	20	20	--	<5
	03-30-89	--	--	230	--	260,000	--	15,000	--	--	--
31	03-30-89	--	--	150	--	130,000	--	3,100	--	--	--
	03-30-89	--	--	220	--	60,000	--	19	--	--	--
	09-30-87	<10	12	130	94	16,000	<1	20	20	--	<5
32	08-17-88	--	--	98	--	5,500	--	<1	--	--	--
	03-20-89	--	--	220	--	47,000	--	<10	--	--	--
	06-15-89	400	--	230	--	77,000	--	<10	--	400	<8
	09-30-87	<10	6	84	100	2,800	<1	<10	20	--	<5
33	03-20-89	--	--	39	--	4,300	--	<1	--	--	--
	03-16-89	--	--	55	--	7,800	--	<1	--	--	--
34	03-16-89	--	--	92	--	6,600	--	<1	--	--	--
	03-16-89	--	--		--		--		--	--	--

TABLE 17.---Concentrations of dissolved trace elements in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date	Aluminum	Antimony	Arsenic	Barium	Boron	Cadmium	Chromium	Copper	Iron	Lead
39	03-10-88	<10	7	47	100	3,500	1	<1	40	--	<5
	08-17-88	--	--	210	--	7,800	--	<1	--	--	--
	03-16-89	--	--	83	--	8,700	--	<3	--	--	--
40	10-01-87	40	29	320	200	5,800	<1	20	20	--	<5
	03-16-89	--	--	98	--	10,000	--	<3	--	--	--
41	09-30-87	10	14	190	200	9,300	<1	<10	20	--	<5
	03-09-88	<10	8	68	100	3,900	<1	<1	30	--	<5
	03-16-89	--	--	46	--	5,800	--	<1	--	--	--
42	09-30-87	30	120	1,300	300	30,000	<1	30	60	--	<5
	03-16-88	10	32	370	--	23,000	1	<1	<1	40	<5
Fernley Wildlife Management Area											
43	10-23-87	10	4	32	70	670	<1	<10	<10	--	12
	03-24-88	<10	5	87	--	1,000	<1	<1	<1	71	<5
	08-23-88	--	--	180	--	--	--	<1	--	--	--
	06-16-89	<10	--	35	--	590	--	<1	--	74	<1
	09-12-89	10	--	28	--	590	<1	<1	--	36	<1
44	10-23-87	10	7	50	70	700	<1	<10	<10	--	48
	03-22-89	--	--	34	--	840	--	<1	--	--	--
	09-11-89	<10	--	22	--	650	<1	<1	--	22	<1
45	10-23-87	20	16	140	75	790	<1	<10	<10	--	<5
	03-21-88	20	10	210	--	830	10	<1	<1	480	<5
	08-23-88	--	--	120	--	730	--	<1	--	--	--
	06-16-89	10	--	100	--	700	--	<1	--	26	<1
	09-12-89	<10	--	110	--	720	--	1	--	10	<1
46	10-22-87	20	12	60	65	960	<1	30	<10	--	<5
	03-22-88	50	5	140	--	1,200	<1	<1	<1	89	<5
	08-22-88	--	--	110	--	680	1	1	--	--	--
	10-14-88	--	--	48	--	840	--	<1	--	--	--
47	12-12-88	10	--	95	--	1,400	--	<1	--	47	<5
	03-22-89	--	--	130	--	1,300	--	<1	--	--	--
	06-13-89	30	--	59	--	780	--	<1	--	130	--
	09-11-89	<10	--	55	--	680	<1	<1	--	75	<1
47	10-22-87	20	22	210	100	2,500	<1	<10	<10	--	<5
	03-23-88	30	12	310	--	4,200	<1	<1	<1	60	<5
	08-23-88	--	--	1,300	--	24,000	--	<1	<1	--	--
	12-12-88	10	--	150	--	5,400	--	<1	--	110	<5
	03-22-89	--	--	170	--	5,600	--	<1	--	--	--
06-13-89	50	--	450	--	13,000	--	<2	--	60	--	

TABLE 17.--Concentrations of dissolved trace elements in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date	Aluminum	Antimony	Arsenic	Barium	Boron	Cadmium	Chromium	Copper	Iron	Lead
48	03-22-89	--	--	420	--	6,900	--	<1	--	--	--
49	10-22-87	20	210	1,900	200	19,000	<1	<10	20	--	<5
	03-23-88	<10	14	460	--	9,200	1	<1	<1	30	<5
	08-23-88	--	--	7,500	--	56,000	--	<1	--	--	--
	03-22-89	--	--	310	--	16,000	--	<3	--	--	--
	06-13-89	<100	--	2,500	--	61,000	--	<10	--	320	--
50	10-22-87	10	15	370	400	44,000	<1	20	50	--	<5
	03-22-88	<10	11	260	--	22,000	<1	<1	<1	40	<5
	03-29-89	--	--	290	--	22,000	--	<3	--	--	--
51	10-22-87	<10	21	460	200	6,000	<1	<10	<10	--	<5
Massie Slough											
52	08-22-88	--	--	540	--	2,900	--	<1	--	--	--
	03-29-89	--	--	470	--	3,400	--	<1	--	--	--
53	08-22-88	--	--	690	--	3,000	--	<1	--	--	--
	03-29-89	--	--	520	--	3,700	--	<1	--	--	--
Humboldt Wildlife Management Area											
54	10-07-87	10	<1	85	100	2,200	<1	<40	<10	--	<5
	03-17-88	<10	3	52	--	3,500	1	<1	<1	<10	<5
	08-24-88	--	--	57	--	1,100	--	<1	--	--	--
	03-28-89	--	--	40	--	4,500	--	<1	--	--	--
55	10-06-87	<10	10	100	100	5,000	<1	<10	<10	--	<5
	03-16-88	<10	28	200	--	10,000	1	<1	<1	30	<5
	08-24-88	--	--	83	--	3,000	--	<1	--	--	--
	03-28-89	--	--	73	--	3,700	--	<1	--	--	--
56	10-07-87	<10	7	210	100	3,900	<1	<10	<10	--	<5
	03-17-88	<10	2	56	--	3,500	1	<1	<1	10	<5
	08-24-88	--	--	90	--	4,300	--	<1	--	--	--
	03-28-89	--	--	98	--	5,400	--	<1	--	--	--
57	10-06-87	<10	11	230	100	1,900	<1	<10	<10	--	<5
	03-17-88	<10	12	110	--	3,200	1	<1	<1	10	<5
	08-23-88	--	--	33	--	1,400	--	<1	--	--	--
	03-27-89	--	--	55	--	2,600	--	<1	--	--	--
58	10-07-87	<10	13	<60	100	2,300	<1	2	<10	--	<5
	03-17-88	<10	16	150	--	3,400	1	<1	<1	10	<5
	03-28-89	--	--	220	--	5,700	--	<1	--	--	--

TABLE 17.---Concentrations of dissolved trace elements in surface-water samples from the study area, 1987-89---Continued

Site number (figs. 1-6)	Date	Lithium	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Vanadium	Zinc
Background_Sites										
1	09-28-87	35	1	<0.1	7	<1	<1	<1	43	<3
	03-11-88	38	2	<.1	9	3	<1	<1	34	4
	08-19-88	54	--	<.1	13	--	<1	--	72	<3
	03-23-89	36	--	1.6	12	--	<1	--	2	3
2	09-25-87	35	15	<.1	7	<1	<1	<1	9	7
	03-11-88	43	110	<.1	14	2	<1	<1	8	<3
	08-19-88	34	--	<.1	6	--	<1	--	5	24
	10-28-88	63	--	.1	13	--	--	--	9	26
	03-17-89	38	--	<.1	15	--	<1	--	5	<3
3	09-24-87	32	2	<.1	7	4	2	1	8	4
	03-11-88	44	2	<.1	9	3	<1	<1	3	5
	08-19-88	45	--	<.1	7	--	<1	--	7	<3
4	10-23-87	29	10	<.1	1	2	<1	<1	3	15
	03-18-88	63	42	<.1	--	--	--	--	2	10
	08-22-88	9	--	<.1	1	--	<1	--	3	6
	03-23-89	23	--	<.1	1	--	<1	--	<1	18
	06-16-89	29	5	<.1	2	<1	<1	2	2	<3
	09-12-89	21	9	.1	2	--	<1	--	4	4
5	10-07-87	140	2	<.1	11	3	1	<1	15	16
	03-18-88	90	20	<.1	7	--	1	--	8	<10
	08-24-88	170	--	<.1	11	--	1	--	16	<3
	03-29-89	110	--	<.1	9	--	1	--	6	7
Carson_Lake/Diagonal_Drain_Area										
6	10-08-87	44	43	<0.1	6	2	<1	<1	13	18
7	10-08-87	55	<430	.2	7	<1	<1	<1	10	<10
8	10-09-87	47	<100	.1	13	<1	1	<1	20	<9
9	09-24-87	65	57	<.1	72	5	<1	<1	19	7
	03-14-88	80	550	.2	110	--	<1	--	34	<10
	08-18-88	62	--	<.1	38	--	<1	--	20	6
	03-20-89	90	--	<.1	160	--	<1	--	46	<10

TABLE 17.--Concentrations of dissolved trace elements in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date	Lithium	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Vanadium	Zinc
10	09-24-87	57	62	<0.1	38	<1	<1	<1	13	6
	03-14-88	110	1,500	.3	90	--	<1	--	56	10
	08-18-88	80	--	.1	32	--	<1	--	17	<10
	03-23-89	90	--	<.1	58	--	<1	--	43	10
11	09-23-87	34	14	<.1	7	3	<1	<1	10	11
	03-15-88	100	1,200	<.1	66	--	<1	--	26	<10
	08-18-88	51	--	<.1	17	--	<1	--	16	9
	03-21-89	80	--	<.1	65	--	<1	--	14	<10
12	09-23-87	32	8	<.1	7	4	<1	<1	6	<3
	03-15-88	120	310	.2	100	--	<1	--	39	<10
	03-21-89	60	--	<.1	44	--	<1	--	21	11
13	09-24-87	50	6	<.1	10	3	<1	<1	17	<3
	03-15-88	64	27	<.1	17	--	<1	--	20	<3
	08-18-88	52	--	<.1	7	--	<1	--	20	<3
	03-21-89	59	--	<.1	16	--	<1	--	16	11
14	09-23-87	67	110	.1	50	3	<1	<1	10	18
	03-14-88	100	350	<.1	110	--	<1	--	38	<10
	08-18-88	69	--	.1	44	--	<1	--	26	<3
	03-21-89	130	--	<.1	110	--	<1	--	33	10
15	09-23-87	50	6	.3	17	<1	<1	<1	8	11
	03-15-88	250	<10	.2	52	--	<1	--	28	10
16	10-08-87	43	89	<.1	14	1	<1	<1	14	7
17	10-08-87	42	95	<.1	14	2	<1	<1	14	9
18	10-09-87	45	46	<.1	15	<1	<1	<1	11	10
Stillwater Wildlife Management Area										
19	12-13-88	2,900	100	<0.1	1,000	--	<1	--	320	40
20	12-13-88	700	30	<.1	900	--	<1	--	210	30
21	09-21-87	320	40	.6	270	4	<1	1	68	10
	08-15-88	650	--	.5	500	--	<1	--	25	20
	12-13-88	810	30	<.1	950	--	<1	--	220	30
	03-14-89	760	--	.6	900	--	<1	--	200	30
	06-12-89	360	70	<.1	280	--	<1	--	37	10
	09-13-89	320	10	.2	370	--	<1	--	<15	10
22	09-22-87	44	6	--	--	--	--	--	--	--
	03-08-88	59	8	<.1	27	4	<1	<1	10	<3
	03-13-89	59	--	<.1	55	--	<1	--	19	7

TABLE 17.--Concentrations of dissolved trace elements in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date	Lithium	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Vanadium	Zinc
23	03-15-89	730	--	--	340	--	<1	--	150	20
	06-12-89	45	2	<0.1	8	2	<1	--	5	<3
	09-13-89	41	8	.1	8	--	<1	--	6	<3
24	09-21-87	44	2	<.1	20	3	<1	<1	16	4
	03-08-88	61	7	<.1	28	2	<1	<1	9	<3
	08-15-88	58	--	<.1	12	--	<1	--	7	5
	03-14-89	70	--	<.1	55	--	<1	--	19	8
	09-21-87	170	<10	.1	88	3	<1	<1	22	10
25	03-07-88	170	<10	<.1	65	3	<1	1	19	<10
	08-15-88	30	--	.1	86	--	<1	--	36	<10
	12-13-88	600	50	<.1	95	--	<1	--	24	20
	03-14-89	490	--	<.1	80	--	<1	--	40	10
	06-12-89	410	<10	<.1	120	--	<1	--	23	10
27	09-13-89	390	20	.4	68	--	<1	--	<5	120
	09-22-87	51	7	<.1	27	<1	<1	<1	15	4
	03-09-88	70	620	<.1	66	4	<1	5	33	<10
	08-16-88	54	--	<.1	23	--	<1	--	17	<3
	10-13-88	66	--	<.1	40	--	<1	--	20	6
	03-15-89	90	--	<.1	83	--	<1	--	32	<10
	10-13-88	100	--	<.1	48	--	<1	--	21	<10
30	10-13-88	100	--	<.1	46	--	<1	--	20	<10
	09-22-87	84	40	<.1	21	5	<1	1	9	4
	03-08-88	260	10	.1	68	5	<1	1	39	<10
	08-16-88	87	--	.1	19	--	<1	--	12	6
	03-15-89	310	--	<.1	61	--	<1	--	40	<10
31	09-22-87	430	10	.3	360	5	<1	<1	53	20
	03-30-89	8,500	--	.2	5,000	--	15	--	1,000	70
	03-30-89	4,400	--	--	56,000	--	21	--	550	40
	03-30-89	2,700	--	.1	2,500	--	<1	--	370	30
35	09-30-87	800	61	.6	230	3	<1	<1	100	40
	08-17-88	290	--	.4	120	--	1	--	29	<10
	03-20-89	2,100	--	<.1	850	--	<1	--	380	<30
	06-15-89	3,400	450	<.1	1,500	--	<1	--	420	50
36	09-30-87	190	10	.2	64	4	<1	<1	16	<10
	03-20-89	350	--	<.1	62	--	<1	--	2	<10
37	03-16-89	290	--	<.1	150	--	<1	--	49	20
	03-16-89	260	--	<.1	160	--	<1	--	51	20

TABLE 17. ---Concentrations of dissolved trace elements in surface-water samples from the study area, 1987-89---Continued

Site number (figs. 1-6)	Date	Lithium	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Vanadium	Zinc
39	03-10-88	140	<10	<0.1	77	7	<1	<1	19	<10
	08-17-88	240	--	.1	86	--	<1	--	27	<10
	03-16-89	230	--	<.1	140	--	<1	--	87	10
40	10-01-87	190	10	.2	110	5	<1	<1	55	<10
	03-16-89	360	--	<.1	600	--	7	--	150	20
41	09-30-87	320	10	.2	180	2	2	<1	50	<10
	03-09-88	210	<10	<.1	80	1	<1	<1	27	20
	03-16-89	390	--	<.1	92	--	<1	--	43	<10
42	09-30-87	730	20	.2	220	4	<1	<1	100	20
	03-16-88	590	<10	<.1	110	--	<1	--	69	20
Fernley Wildlife Management Area										
43	10-23-87	20	71	<0.1	17	2	2	<1	10	8
	03-24-88	6	210	<.1	51	--	3	--	24	3
	08-23-88	9	--	<.1	3	--	<1	--	5	<3
	06-16-89	12	7	<.1	9	--	<1	--	3	4
	09-12-89	13	21	.1	13	--	<1	--	8	<3
44	10-23-87	12	210	<.1	7	1	<1	<1	15	6
	03-22-89	<4	--	<.1	21	--	1	--	90	7
	09-11-89	13	7	.2	5	--	<1	--	1	6
45	10-23-87	8	14	<.1	11	2	1	<1	57	4
	03-21-88	52	48	<.1	20	--	<1	--	83	<30
	08-23-88	15	--	<.1	16	--	<1	--	31	8
	06-16-89	9	5	<.1	9	--	<1	--	42	<3
	09-12-89	10	4	.1	11	--	<1	--	24	<3
46	10-22-87	25	9	<.1	19	1	1	<1	24	11
	03-22-88	13	65	<.1	40	--	<1	--	41	<3
	08-22-88	<7	--	<.1	11	--	1	--	42	<3
	10-14-88	39	--	<.1	13	--	<1	--	27	6
47	12-12-88	22	33	<.1	64	--	1	--	44	7
	03-22-89	12	--	<.1	53	--	1	--	18	10
	06-13-89	40	40	<.1	18	2	<1	--	27	10
	09-11-89	15	17	.2	12	--	<1	--	19	3
47	10-22-87	70	10	<.1	80	2	1	<1	11	<10
	03-23-88	110	20	<.1	280	--	<1	--	49	<10
	08-23-88	340	--	<.1	900	--	<1	--	76	20
	12-12-88	160	60	<.1	750	--	12	--	43	10
	03-22-89	120	--	<.1	420	--	7	--	85	<10
06-13-89	250	20	<.1	570	5	2	--	80	20	

TABLE 17. --Concentrations of dissolved trace elements in surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date	Lithium	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Vanadium	Zinc
48	03-22-89	110	--	<0.1	550	--	7	--	80	<10
49	10-22-87	230	20	.2	440	2	<1	<1	56	20
	03-23-88	160	10	<.1	370	--	<1	--	57	<10
	08-23-88	550	--	--	1,100	--	<1	--	92	40
	03-22-89	230	--	.4	750	--	3	--	130	10
	06-13-89	540	70	<.1	1,400	3	<1	--	240	50
50	10-22-87	6,500	70	.6	46	1	<1	<1	220	30
	03-22-88	3,100	30	<.1	47	--	<1	--	140	<10
	03-29-89	2,700	--	<.1	51	--	<1	--	130	<10
51	10-22-87	40	<10	.2	9	<1	<1	<1	32	10
<u>Massie Slough</u>										
52	08-22-88	110	--	<0.1	100	--	1	--	57	<10
	03-29-89	100	--	<.1	120	--	1	--	100	<10
53	08-22-88	120	--	<.1	110	--	<1	--	97	<10
	03-29-89	110	--	<.1	110	--	1	--	120	10
<u>Humboldt Wildlife Management Area</u>										
54	10-07-87	390	<10	<0.1	17	<1	1	<1	22	<10
	03-17-88	740	40	<.1	12	--	1	--	21	<10
	08-24-88	270	--	<.1	10	--	<1	--	18	15
	03-28-89	730	--	<.1	13	--	<1	--	15	<10
55	10-06-87	760	160	<.2	58	1	2	<1	62	20
	03-16-88	920	440	<.1	100	--	<1	--	69	10
	08-24-88	520	--	<.1	20	--	2	--	45	<10
	03-28-89	540	--	.5	22	--	<1	--	38	10
56	10-07-87	660	<10	.2	31	1	2	<1	43	10
	03-17-88	560	<10	<.1	27	--	<1	--	33	20
	08-24-88	700	--	<.1	38	--	<1	--	41	10
	03-28-89	710	--	<.1	44	--	<1	--	45	10
57	10-06-87	340	<10	.1	23	1	<1	<1	27	<10
	03-17-88	400	110	<.1	32	--	2	--	34	10
	08-23-88	270	--	<.1	10	--	<1	--	19	<3
	03-27-89	300	--	<.1	21	--	1	--	30	<10
58	10-07-87	350	<10	.1	12	<1	<1	<1	21	<10
	03-17-88	420	<10	<.1	35	--	1	--	41	10
	03-28-89	490	--	<.1	140	--	2	--	91	10

TABLE 18.--Radiochemical data for surface-water samples from the study area, 1987-89

[Abbreviations and symbols: µg/L, micrograms per liter; pCi/L, picocuries per liter; Cs-137, cesium-137; Sr/Y-90, strontium/yttrium-90; --, not determined; <, less than]

Site number (figs. 1-6)	Date	Radium-226, dissolved, radon method (pCi/L)	Uranium, natural, dissolved (µg/L as U)	Uranium, ¹ natural, dissolved (pCi/L)	Gross alpha, dissolved (µg/L as U, natural)	Gross beta, dissolved (pCi/L as Cs-137)	Gross beta, dissolved (pCi/L as Sr/Y-90)
<u>Background Sites</u>							
1	08-19-88	--	180	120	--	--	--
	03-23-89	--	140	95	--	--	--
2	08-19-88	--	4.5	3.1	--	--	--
	10-28-88	--	9.1	6.2	--	--	--
	03-17-89	--	6.8	4.6	--	--	--
3	08-19-88	--	5.5	3.7	--	--	--
4	10-23-87	0.07	1.2	.81	1.4	4.3	3.3
	08-22-88	--	.80	.54	--	--	--
	03-23-89	--	1.1	.75	--	--	--
	06-16-89	--	<1.0	<.68	--	--	--
5	10-07-87	.03	7.6	5.2	11	15	11
	08-24-88	--	8.3	5.6	--	--	--
	03-29-89	--	12	8.1	--	--	--
<u>Carson Lake/Diagonal Drain Area</u>							
9	08-18-88	--	32	22	--	--	--
	03-20-89	--	120	81	--	--	--
10	08-18-88	--	19	13	--	--	--
	03-23-89	--	61	41	--	--	--
11	08-18-88	--	11	7.5	--	--	--
	03-21-89	--	46	31	--	--	--
12	03-21-89	--	45	31	--	--	--
13	08-18-88	--	10	6.8	--	--	--
	03-21-89	--	33	22	--	--	--
14	08-18-88	--	46	31	--	--	--
	03-21-89	--	98	66	--	--	--
<u>Stillwater Wildlife Management Area</u>							
19	12-13-88	--	450	300	--	--	--
20	12-13-88	--	470	320	--	--	--
21	08-15-88	--	230	160	--	--	--
	12-13-88	--	470	320	--	--	--
	03-14-89	--	370	250	--	--	--
	06-12-89	--	110	75	--	--	--
22	03-13-89	--	35	24	--	--	--
23	03-15-89	--	83	56	--	--	--
	06-12-89	--	2.2	1.5	--	--	--
24	08-15-88	--	9.2	6.2	--	--	--
	03-14-89	--	29	20	--	--	--
25	08-15-88	--	40	27	--	--	--
	12-13-88	--	61	41	--	--	--
	03-14-89	--	41	28	--	--	--
	06-12-89	--	54	37	--	--	--

TABLE 18.--Radiochemical data for surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date	Radium-226, dissolved, radon method (pCi/L)	Uranium, natural, dissolved (µg/L as U)	Uranium, ¹ natural, dissolved (pCi/L)	Gross alpha, dissolved (µg/L as U, natural)	Gross beta, dissolved (pCi/L as Cs-137)	Gross beta, dissolved (pCi/L as Sr/Y-90)
27	08-16-88	--	22	15	--	--	--
	10-13-88	--	35	24	--	--	--
	03-15-89	--	58	39	--	--	--
28	10-13-88	--	30	20	--	--	--
29	10-13-88	--	30	20	--	--	--
30	08-16-88	--	17	12	--	--	--
	03-15-89	--	32	22	--	--	--
32	03-30-89	--	350	240	--	--	--
33	03-30-89	--	340	230	--	--	--
34	03-30-89	--	400	270	--	--	--
35	08-17-88	--	22	15	--	--	--
	03-20-89	--	130	88	--	--	--
36	03-20-89	--	36	24	--	--	--
37	03-16-89	--	42	28	--	--	--
38	03-16-89	--	49	33	--	--	--
39	08-17-88	--	33	22	--	--	--
	03-16-89	--	60	41	--	--	--
40	03-16-89	--	68	46	--	--	--
41	03-16-89	--	60	41	--	--	--
<u>Fernley Wildlife Management Area</u>							
43	10-23-87	0.06	4.8	3.3	5.2	23	16
	08-23-88	--	.50	.34	--	--	--
	06-16-89	--	2.6	1.8	--	--	--
44	10-23-87	.05	3.2	2.2	3.8	22	15
	03-22-89	--	6.0	4.1	--	--	--
45	10-23-87	.07	4.4	3.0	5.5	28	20
	08-23-88	--	5.0	3.4	--	--	--
	06-16-89	--	4.9	3.3	--	--	--
46	10-22-87	.03	6.6	4.5	6.7	19	14
	08-22-88	--	5.6	3.8	--	--	--
	10-14-88	--	6.0	4.1	--	--	--
	12-12-88	--	14	9.5	--	--	--
	03-22-89	--	12	8.1	--	--	--
	06-13-89	--	5.3	3.6	--	--	--
47	10-22-87	.08	20	14	11	57	39
	08-23-88	--	140	95	--	--	--
	03-22-89	--	82	56	--	--	--
	06-13-89	--	110	75	--	--	--
48	03-22-89	--	110	75	--	--	--
49	10-22-87	.12	73	49	78	310	210
	08-23-88	--	200	140	--	--	--
	03-22-89	--	140	95	--	--	--
	06-13-89	--	380	260	--	--	--
50	10-22-87	.37	43	29	36	730	510
	03-29-89	--	38	26	--	--	--
51	10-22-87	.55	1.1	.75	4.2	69	46

TABLE 18.--Radiochemical data for surface-water samples from the study area, 1987-89--Continued

Site number (figs. 1-6)	Date	Radium-226, dissolved, radon method (pCi/L)	Uranium, natural, dissolved (µg/L as U)	Uranium, ¹ natural, dissolved (pCi/L)	Gross alpha, dissolved (µg/L as U, natural)	Gross beta, dissolved (pCi/L as Cs-137)	Gross beta, dissolved (pCi/L as Sr/Y-90)
<u>Massie Slough</u>							
52	08-22-88	--	24	16	--	--	--
	03-29-89	--	27	18	--	--	--
53	08-22-88	--	23	16	--	--	--
	03-29-89	--	38	26	--	--	--
<u>Humboldt Wildlife Management Area</u>							
54	10-07-87	0.05	6.5	4.4	10	43	28
	08-24-88	--	8.4	5.7	--	--	--
	03-28-89	--	7.5	5.1	--	--	--
55	10-06-87	.12	42	28	54	66	50
	08-24-88	--	22	15	--	--	--
	03-28-89	--	34	23	--	--	--
56	10-07-87	.07	38	26	46	64	43
	08-24-88	--	30	20	--	--	--
	03-28-89	--	44	30	--	--	--
57	10-06-87	.06	24	16	29	48	32
	08-23-88	--	13	8.8	--	--	--
	03-27-89	--	18	12	--	--	--
58	10-07-87	.03	20	14	14	170	110
	03-28-89	--	140	95	--	--	--

¹ Natural-uranium values in pCi/L are calculated from corresponding µg/L values by assuming that the activity ratio of uranium-234 to uranium-238 is 1.

TABLE 19.--Stable-isotope data¹ for in surface-water samples from in and near Stillwater and Fernley Wildlife Management Areas, 1989

[Symbol: --, not determined]

Site number (figs. 4, 5)	Date	Delta carbon-13 of carbonate species (permil)	Delta deuterium of water (permil)	Delta oxygen-18 of water (permil)	Delta sulfur-34 of sulfate (permil)
<u>Background Site</u>					
4	03-23-89	--	-96	-12.9	--
4	06-16-89	-9.60	-98	-12.4	3.90
<u>Stillwater Wildlife Management Area</u>					
21	06-12-89	-8.00	--	--	8.00
23	06-12-89	-13.3	--	--	4.80
25	06-12-89	-1.60	--	--	7.70
<u>Fernley Wildlife Management Area</u>					
46	06-13-89	-10.6	--	--	-2.00
47	06-13-89	-5.40	--	--	-1.60

¹ The stable isotopes evaluated herein are carbon-13 relative to carbon-12 (¹³C/¹²C), deuterium (hydrogen-2) relative to hydrogen-1 (D/¹H), oxygen-18 relative to oxygen-16 (¹⁸O/¹⁶O), and sulfur-34 relative to sulfur-32 (³⁴S/³²S). Each ratio is determined for a water sample, and then related mathematically to the comparable ratio for the following international reference standards: Peedee belemnite for carbon, Vienna Standard Mean Ocean Water for hydrogen and oxygen, and Canyon Diablo Troilite for sulfur isotopes. By convention, the computed results are expressed as "delta carbon-13," "delta deuterium," "delta oxygen-18," and "delta sulfur-34;" the units of measure are parts per thousand (abbreviated "permil"). A negative delta value indicates that the water sample is isotopically lighter than the standard (that is, for example, the water sample has a smaller proportion of deuterium, relative to hydrogen-1, compared to the standard).

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89

[Data from U.S. Fish and Wildlife Service. Abbreviations and symbols: Blw, below; BN, black-necked; Br., Branch; Canback, Canvasback duck; C Teal, Cinnamon teal; Ext., extension; Gw Teal, Green-winged teal; HWWA, Humboldt Wildlife Management Area; Pt., Point; R., River; SWMA, Stillwater Wildlife Management Area; USFWS, U.S. Fish and Wildlife Service; WMA, Wildlife Management Area; <, less than; --, not determined. All values in micrograms per gram, dry weight.]

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
67	88385	07-25-88	Carson Lake, Sprig Pond	Bird	BN Stilt	71.73	<6.3	<0.30	0.37	<0.03	1.7	2.41
	88435	08-10-88	Fernley WMA	Bird	BN Stilt	72.10	5	.20	.10	<0.10	<2	<.40
	88436	08-10-88	Fernley WMA	Bird	BN Stilt	71.70	<3	.10	.30	<0.10	<2	.80
71	88405	07-22-88	Fernley WMA, East Pond	Bird	BN Stilt	69.46	9.3	<.30	.22	<.03	3.5	1.22
75	88383	07-25-88	Mahala Slough	Bird	BN Stilt	77.41	21.10	.94	.47	<.03	3.4	1.82
75	88404	07-21-88	Mahala Slough	Bird	BN Stilt	71.32	<6.3	.71	<.18	<.03	3.8	3.2
67	88395	07-24-88	Carson Lake, Sprig Pond	Bird	C Teal	73.14	<6.3	.45	.50	<.03	7.9	.64
71	88372	07-24-88	Fernley WMA, East Pond	Bird	C Teal	73.12	17.50	2.34	.95	.26	8.5	<.40
71	88379	07-24-88	Fernley WMA, East Pond	Bird	C Teal	70.88	<6.3	3.03	.48	<.03	2.4	<.40
71	88391	07-24-88	Fernley WMA, East Pond	Bird	C Teal	72.44	11	2.2	.23	<.03	9.2	<.40
71	88392	07-24-88	Fernley WMA, East Pond	Bird	C Teal	73.34	<6.3	2.22	.21	<.03	12.10	<.40
	88341	07-19-88	HWWA, Army Drain	Bird	C Teal	74.13	<6.3	<.30	.23	<.03	5.1	.41
	88342	07-19-88	HWWA, Army Drain	Bird	C Teal	73.88	<6.3	.46	.22	<.03	1.8	<.40
	88343	07-19-88	HWWA, Army Drain	Bird	C Teal	72.51	<6.3	<.30	.26	<.03	2	<.40
	88360	07-23-88	HWWA, Humboldt Lake	Bird	C Teal	76.91	<6.3	<.30	<.18	<.03	3.6	.53
88	88361	07-23-88	HWWA, Humboldt Lake	Bird	C Teal	74.90	<6.3	<.30	.46	.24	3.2	.92
22	88366	07-23-88	HWWA, Humboldt Lake	Bird	C Teal	75.18	<6.3	<.30	<.18	<.03	3.4	<.40
88	88336	07-14-88	S-line Reservoir	Bird	C Teal	75.45	<6.3	<.30	.26	<.03	1.5	.40
88	88307	07-06-88	SWMA, South Lead Lake	Bird	C Teal	70.77	8.8	.56	<.18	<.03	3.1	<.40
88	88309	07-06-88	SWMA, South Lead Lake	Bird	C Teal	69.38	<6.3	<.30	<.18	<.03	4.4	<.40
88	88313	07-06-88	SWMA, South Lead Lake	Bird	C Teal	72.90	<6.3	<.30	<.18	<.03	4	<.40
88	88314	07-06-88	SWMA, South Lead Lake	Bird	C Teal	69.21	<6.3	<.30	<.18	<.03	3.4	<.40
88	88316	07-06-88	SWMA, South Lead Lake	Bird	C Teal	71.30	<3	.09	.10	<.10	<2	<.40
	87890	10-17-87	SWMA	Bird	Canback	70.20	3.1	<.20	.20	<.01	3	.09
	87892	10-25-87	SWMA	Bird	Canback	74.50	.90	<.20	.10	<.01	<2	.09
	87894	10-25-87	SWMA	Bird	Canback	69.10	1.7	.30	.20	<.01	<2	.46
	87896	10-25-87	SWMA	Bird	Canback	70.70	4	.20	.20	<.05	<2	.75
	87898	10-25-87	SWMA	Bird	Canback	70	1.3	.50	<.10	.01	<2	.21
	87900	10-25-87	SWMA	Bird	Canback	69.80	1.2	.30	<.10	.02	<2	.28
	87891	10-17-87	SWMA	Bird	Canback, muscle	74	1.6	<.20	<.10	<.01	<2	.04
	87893	10-25-87	SWMA	Bird	Canback, muscle	66.10	1.8	.20	<.10	<.01	<2	.06
	87895	10-25-87	SWMA	Bird	Canback, muscle	71.70	1.8	.20	<.10	<.01	<2	.07
	87897	10-25-87	SWMA	Bird	Canback, muscle	70.30	.80	.40	<.10	<.01	<2	.09
	87899	10-25-87	SWMA	Bird	Canback, muscle	70.70	2.8	.40	<.10	<.01	<2	.06
	87901	10-25-87	SWMA	Bird	Canback, muscle	72	.70	.30	<.10	.01	<2	.04

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS		Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
67		88323	07-07-88	Carson Lake, Sprig Pond	Bird	Coot	78.20	<6.3	0.92	<0.18	<0.03	3.3	<0.40	
67		88324	07-07-88	Carson Lake, Sprig Pond	Bird	Coot	75.94	<6.3	.52	<.18	<.03	4.6	.54	
67		88356	07-22-88	Carson Lake, Sprig Pond	Bird	Coot	76.37	<6.3	<.30	<.18	<.03	5.4	<.40	
67		88357	07-22-88	Carson Lake, Sprig Pond	Bird	Coot	76	<6.3	<.30	<.18	<.03	6.1	<.40	
67		88384	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	73.13	<6.3	.70	.26	<.03	5.5	<.40	
67		88386	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	74.26	10.5	.64	.58	<.03	1.6	.60	
67		88387	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	76.68	<6.3	.63	.72	<.03	6.8	<.40	
67		88390	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	74.49	<6.3	.46	.20	<.03	4.9	<.40	
67		88393	07-24-88	Carson Lake, Sprig Pond	Bird	Coot	74.04	<6.3	.71	.34	<.03	5.2	<.40	
67		88394	07-24-88	Carson Lake, Sprig Pond	Bird	Coot	73.88	<6.3	.81	.53	<.03	5.6	<.40	
71		88373	07-24-88	Fernley WMA, East Pond	Bird	Coot	67.24	11.1	3.9	.21	<.03	17.5	.71	
71		88374	07-24-88	Fernley WMA, East Pond	Bird	Coot	70.01	18.6	6.3	.18	<.03	17	.70	
71		88375	07-24-88	Fernley WMA, East Pond	Bird	Coot	69.33	57.8	5.59	<.18	<.03	17.6	.43	
71		88376	07-24-88	Fernley WMA, East Pond	Bird	Coot	71.77	<6.3	4.87	<.18	<.03	7.5	<.40	
71		88377	07-24-88	Fernley WMA, East Pond	Bird	Coot	75.24	<6.3	1.71	<.18	<.03	8.7	<.40	
71		88378	07-24-88	Fernley WMA, East Pond	Bird	Coot	71.93	7.1	4.75	.26	<.03	14.7	.74	
71		88380	07-24-88	Fernley WMA, East Pond	Bird	Coot	68.69	8.7	5.49	<.18	<.03	34.5	1.2	
		88425	08-09-88	HWMA, Humboldt Lake	Bird	Coot	68.10	4	.30	<.10	<.10	5	.80	
		88414	08-09-88	HWMA, Humboldt Lake	Bird	Coot	68.60	<3	.52	<.10	<.10	8	.70	
		88415	08-09-88	HWMA, Humboldt Lake	Bird	Coot	69	3	.20	<.10	<.10	5	<.40	
		88416	08-09-88	HWMA, Humboldt Lake	Bird	Coot	70.90	<3	.20	<.10	<.10	5	<.40	
		88417	08-09-88	HWMA, Humboldt Lake	Bird	Coot	69.60	4	.41	.10	<.10	4	1	
		88418	08-09-88	HWMA, Humboldt Lake	Bird	Coot	70.30	<3	.20	.10	<.10	3	<.40	
		88419	08-09-88	HWMA, Humboldt Lake	Bird	Coot	66.80	3	.20	<.10	<.10	4	1	
		88420	08-09-88	HWMA, Humboldt Lake	Bird	Coot	68.80	<3	.38	.10	<.10	6	.50	
		88421	08-09-88	HWMA, Humboldt Lake	Bird	Coot	69.60	4	.50	<.10	<.10	3	.90	
		88422	08-09-88	HWMA, Humboldt Lake	Bird	Coot	71.20	4	.30	<.10	<.10	<2	1	
		88423	08-09-88	HWMA, Humboldt Lake	Bird	Coot	69	4	.38	<.10	<.10	5	.70	
		88424	08-09-88	HWMA, Humboldt Lake	Bird	Coot	69.40	<3	.36	<.10	<.10	5	<.40	
75		88359	07-21-88	Mahala Slough	Bird	Coot	77.39	18.5	1.14	.65	<.03	5.6	<.40	
75		88370	07-23-88	Mahala Slough	Bird	Coot	76.12	15.6	2.14	.52	<.03	5.4	<.40	
75		88400	07-28-88	Mahala Slough	Bird	Coot	73.93	<6.3	1.19	.19	<.03	3.7	.43	
75		88403	08-01-88	Mahala Slough	Bird	Coot	72.47	<6.3	.69	<.18	<.03	5.7	.42	
75		88426	08-03-88	Mahala Slough	Bird	Coot	76.30	<3	.94	.30	<.10	5	<.40	
75		88427	08-04-88	Mahala Slough	Bird	Coot	72.70	<3	.86	.32	<.10	7	<.50	
22		88344	07-14-88	S-line Reservoir	Bird	Coot	74.40	<6.3	2.46	.36	<.03	7.3	<.40	
22		88345	07-14-88	S-line Reservoir	Bird	Coot	73.99	<6.3	<.30	<.18	<.03	1.6	<.40	
22		88346	07-14-88	S-line Reservoir	Bird	Coot	74.88	<6.3	.97	<.18	<.03	4.4	<.40	
22		88347	07-14-88	S-line Reservoir	Bird	Coot	73.20	<6.3	<.30	.23	<.03	2.2	<.40	
22		88348	07-14-88	S-line Reservoir	Bird	Coot	75.26	<6.3	.69	.43	<.03	5.4	<.40	

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS													
Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium	
22	88358	07-21-88	S-line Reservoir	Bird	Coot	74.72	<6.3	0.43	<0.18	<0.03	2.5	0.44	
22	88402	08-01-88	S-line Reservoir	Bird	Coot	73.31	<6.3	.80	<.18	<.03	3.6	.64	
88	88349	07-20-88	SWMA, South Lead Lake	Bird	Coot	75.11	<6.3	<.30	<.18	<.03	9.3	<.40	
88	88350	07-20-88	SWMA, South Lead Lake	Bird	Coot	74.55	<6.3	.38	<.18	<.03	5.9	.46	
88	88351	07-20-88	SWMA, South Lead Lake	Bird	Coot	75.17	<6.3	.43	.37	<.03	11.9	.43	
88	88301	07-06-88	SWMA, South Lead Lake	Bird	Coot	74.20	8.1	1.17	<.18	<.03	12.3	<.40	
88	88302	07-06-88	SWMA, South Lead Lake	Bird	Coot	78.39	7.1	2.45	<.18	<.03	15.1	<.40	
88	88303	07-06-88	SWMA, South Lead Lake	Bird	Coot	75.20	7.8	.56	<.18	<.03	7.7	<.40	
88	88304	07-06-88	SWMA, South Lead Lake	Bird	Coot	76.60	8.3	.52	<.18	<.03	10.3	<.40	
88	88308	07-06-88	SWMA, South Lead Lake	Bird	Coot	79.17	<6.3	1.08	<.18	<.03	10.6	.62	
88	88311	07-06-88	SWMA, South Lead Lake	Bird	Coot	75.94	<6.3	.56	<.18	<.03	22.1	<.40	
88	88312	07-06-88	SWMA, South Lead Lake	Bird	Coot	80.12	<6.3	.43	<.18	<.03	5.8	<.40	
67	88412	08-09-88	HWMA, Humboldt Lake	Bird	Gadwall	74.20	<3	.20	.30	<.10	4	<.50	
67	89121	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	74.50	--	--	--	--	--	--	
67	89123	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	72.68	--	--	--	--	--	--	
67	89125	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	74.04	--	--	--	--	--	--	
67	89127	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	73.43	--	--	--	--	--	--	
67	89129	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	73.13	--	--	--	--	--	--	
67	89131	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	74.88	--	--	--	--	--	--	
67	89133	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	74	--	--	--	--	--	--	
67	89135	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	73.21	--	--	--	--	--	--	
67	89139	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	73.53	--	--	--	--	--	--	
67	87839	10-17-87	Carson Lake	Bird	Mallard	72.77	--	--	--	--	--	--	
	87842	10-17-87	Carson Lake	Bird	Mallard	70.40	1.9	<.10	.10	<.01	8.8	1.1	
	87844	10-17-87	Carson Lake	Bird	Mallard	71.90	.90	<.10	<.10	<.01	<2	.30	
	87846	10-17-87	Carson Lake	Bird	Mallard	71.90	2.1	<.10	.10	<.01	<2	.51	
	87848	10-17-87	Carson Lake	Bird	Mallard	71.70	2.6	<.10	<.10	<.01	<2	1.6	
	87850	10-17-87	Carson Lake	Bird	Mallard	67.40	2	<.10	<.10	<.01	<2	1.4	
	87852	10-17-87	Carson Lake	Bird	Mallard	67.90	1	<.10	<.10	<.01	<2	.20	
	87854	10-17-87	Carson Lake	Bird	Mallard	67.60	1.8	<.10	<.10	<.01	<2	.40	
	87856	10-17-87	Carson Lake	Bird	Mallard	72	1.8	<.10	.20	<.01	6	.33	
	87858	10-17-87	Carson Lake	Bird	Mallard	71.40	.80	<.10	<.10	<.01	<2	.77	
67	88320	07-07-88	Carson Lake, Sprig Pond	Bird	Mallard	69.60	1	<.10	.10	<.01	<2	2.3	
67	88396	07-24-88	Carson Lake, Sprig Pond	Bird	Mallard	71.64	<6.3	1.05	<.18	<.03	5.3	<.40	
	88397	07-24-88	Carson Lake, Sprig Pond	Bird	Mallard	70.31	<6.3	<.30	.34	<.03	4.1	<.40	
67	88408	08-10-88	Carson Lake, Sprig Pond	Bird	Mallard	73.92	<6.3	.58	.36	<.03	5	.65	
67	88332	07-16-88	Carson Valley	Bird	Mallard	70.70	<3	.09	.10	<.10	<2	<.50	
	88333	07-16-88	Carson Valley	Bird	Mallard	74.69	<6.3	<.30	<.18	<.03	2.3	.70	
	88334	07-16-88	Carson Valley	Bird	Mallard	75.57	<6.3	<.30	<.18	<.03	2.8	<.40	
			Carson Valley	Bird	Mallard	74.86	<6.3	<.30	.35	<.03	2.6	<.40	

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
	88335	07-16-88	Carson Valley	Bird	Mallard	75.89	<6.3	<0.30	0.23	<0.03	1.2	0.46
	88363	07-23-88	HWMA, Humboldt Lake	Bird	Mallard	72.03	<6.3	.38	<.18	<.03	3.4	<.40
	88364	07-23-88	HWMA, Humboldt Lake	Bird	Mallard	72.86	<6.3	.40	<.18	<.03	2.7	<.40
	88365	07-23-88	HWMA, Humboldt Lake	Bird	Mallard	71.86	<6.3	.47	<.18	.03	3.9	<.40
	88367	07-23-88	HWMA, Humboldt Lake	Bird	Mallard	74.13	6.7	<.30	<.18	<.03	3.1	<.40
	88409	08-09-88	HWMA, Humboldt Lake	Bird	Mallard	73.90	5	.36	.30	<.10	9	<.40
	88410	08-09-88	HWMA, Humboldt Lake	Bird	Mallard	73	<3	.10	<.10	<.10	10	<.40
	88413	08-09-88	HWMA, Humboldt Lake	Bird	Mallard	74.70	<3	.20	.30	<.10	9	<.40
	87771	10-18-87	SWMA	Bird	Mallard	72.50	1.1	.20	<.10	.02	<2	.20
	87774	10-18-87	SWMA	Bird	Mallard	73.80	.90	<.10	.20	.02	3	.21
	87776	10-18-87	SWMA	Bird	Mallard	71.40	.80	<.10	<.10	.02	3	.47
	87778	10-18-87	SWMA	Bird	Mallard	71.90	.40	.20	<.10	.02	4	.17
	87780	10-18-87	SWMA	Bird	Mallard	70.50	.90	.20	.10	.01	4	.22
	87782	10-17-87	SWMA	Bird	Mallard	73.70	.80	<.10	<.10	<.01	<2	.15
	87784	10-18-87	SWMA	Bird	Mallard	71	1.2	<.10	<.10	<.01	<2	.49
	87786	10-18-87	SWMA	Bird	Mallard	73.40	1.2	<.10	.34	<.01	3	3.3
	87788	10-18-87	SWMA	Bird	Mallard	69.60	1.8	<.10	.60	<.01	3	1.8
	87790	10-18-87	SWMA	Bird	Mallard	72.20	1.7	<.10	.20	<.01	<2	1.7
88	88310	07-06-88	SWMA, South Lead Lake	Bird	Mallard	73.93	<6.3	.34	.18	<.03	5.1	<.40
88	88315	07-06-88	SWMA, South Lead Lake	Bird	Mallard	71.94	<6.3	<.30	.25	<.03	9.8	1.13
	87838	10-17-87	Carson Lake	Bird	Mallard, Skin	30.20	1.9	<.10	<.10	<.01	<2	.04
	87841	10-17-87	Carson Lake	Bird	Mallard, Skin	26.30	45	<.10	.46	<.01	<2	<.04
	87770	10-18-87	SWMA	Bird	Mallard, Skin	32.60	<.40	<.10	<.10	.02	<2	.05
	87773	10-18-87	SWMA	Bird	Mallard, Skin	24.60	.40	<.10	<.10	.02	<2	.05
	87840	10-17-87	Carson Lake	Bird	Mallard, muscle	73.40	.70	<.10	<.10	<.01	8.5	<.04
	87843	10-17-87	Carson Lake	Bird	Mallard, muscle	72.70	1	<.10	<.10	<.01	<2	<.04
	87845	10-17-87	Carson Lake	Bird	Mallard, muscle	73.20	1.7	<.10	<.10	<.01	<2	<.04
	87847	10-17-87	Carson Lake	Bird	Mallard, muscle	72.90	1.2	<.10	<.10	<.01	<2	.10
	87849	10-17-87	Carson Lake	Bird	Mallard, muscle	73.30	1.9	<.10	<.10	<.01	<2	<.04
	87851	10-17-87	Carson Lake	Bird	Mallard, muscle	74.60	1.8	<.10	<.10	<.01	<2	<.04
	87853	10-17-87	Carson Lake	Bird	Mallard, muscle	74.20	2.9	<.10	<.10	<.01	<2	.04
	87855	10-17-87	Carson Lake	Bird	Mallard, muscle	74.70	.80	<.10	<.10	<.01	8	<.04
	87857	10-17-87	Carson Lake	Bird	Mallard, muscle	74.60	<.30	<.10	<.10	<.01	<2	<.04
	87859	10-17-87	Carson Lake	Bird	Mallard, muscle	74.30	.80	<.20	<.10	<.01	<2	<.04
	87772	10-18-87	SWMA	Bird	Mallard, muscle	66.60	.80	<.10	<.10	.02	<2	.05
	87775	10-18-87	SWMA	Bird	Mallard, muscle	74.80	.80	<.10	<.10	.02	<2	.06
	87777	10-18-87	SWMA	Bird	Mallard, muscle	73	<.40	<.10	<.10	.01	3	<.06
	87779	10-18-87	SWMA	Bird	Mallard, muscle	72.60	.70	<.10	<.10	<.01	<3	<.04
	87781	10-18-87	SWMA	Bird	Mallard, muscle	72.30	<.40	<.10	<.10	<.01	4	.04
	87783	10-17-87	SWMA	Bird	Mallard, muscle	74.20	1.1	<.10	<.10	<.01	<2	<.03

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS

Site number (fig. 7)	Sample number	Date	Location	Cate-gory	Species ¹	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
	87785	10-18-87	SWMA	Bird	Mallard, muscle	72.50	<0.40	<0.20	<0.10	<0.01	<2	<0.03
	87787	10-18-87	SWMA	Bird	Mallard, muscle	72.50	.80	<10	<10	<0.01	3	<0.03
	87789	10-18-87	SWMA	Bird	Mallard, muscle	71.10	.50	<10	<10	<0.01	<2	.06
	87791	10-18-87	SWMA	Bird	Mallard, muscle	69.80	1.4	<10	<10	<0.01	3	.12
88	88305	07-06-88	SWMA, South Lead Lake	Bird	Pintail	72.20	9.1	<30	<18	<0.03	5.9	.60
67	88321	07-07-88	Carson Lake, Sprig Pond	Bird	Redhead	71.78	<6.3	.37	<18	<0.03	<.80	<.40
67	88322	07-07-88	Carson Lake, Sprig Pond	Bird	Redhead	72.66	<6.3	.54	.21	<0.03	2.2	<.40
67	88388	07-25-88	Carson Lake, Sprig Pond	Bird	Redhead	74.37	13	1.02	.56	<0.03	5.9	<.40
67	88389	07-25-88	Carson Lake, Sprig Pond	Bird	Redhead	71.95	<6.3	.93	.23	<0.03	15.1	<.40
	88362	07-23-88	HWMA, Humboldt Lake	Bird	Redhead	75.63	<6.3	.56	.30	<0.03	5.2	<.40
	88368	07-23-88	HWMA, Humboldt Lake	Bird	Redhead	75.96	7.2	.73	.51	.07	6.1	.58
	88411	08-09-88	HWMA, Humboldt Lake	Bird	Redhead	72.40	4	.10	<1	<1	3	<.50
75	88353	07-21-88	Mahala Slough	Bird	Redhead	75.85	<6.3	3.52	.40	<0.03	9.3	<.40
75	88371	07-23-88	Mahala Slough	Bird	Redhead	74.46	<6.3	2.04	.53	.07	3.7	<.40
75	88381	07-25-88	Mahala Slough	Bird	Redhead	74.78	11	3	.31	<0.03	6.5	<.40
B	88325	07-13-88	Massie Gun Club	Bird	Redhead	73.04	16	1.03	.29	<0.03	5.8	<.40
B	88326	07-13-88	Massie Gun Club	Bird	Redhead	71.86	6.7	1.13	.27	<0.03	6.3	<.40
B	88327	07-13-88	Massie Gun Club	Bird	Redhead	70.64	<6.3	1.1	.21	<0.03	6	<.40
B	88328	07-13-88	Massie Gun Club	Bird	Redhead	70.77	<6.3	.66	.41	<0.03	5.5	<.40
B	88354	07-21-88	Massie Gun Club	Bird	Redhead	70.61	<6.3	1	<18	<0.03	5.7	<.40
B	88401	07-29-88	Massie Gun Club	Bird	Redhead	73.70	<6.3	9.8	<18	<0.03	13.6	<.40
B	88355	07-21-88	Massie Slough	Bird	Redhead	76.40	<6.3	<30	<18	<0.03	4.4	<.40
88	88306	07-06-88	SWMA, South Lead Lake	Bird	Redhead	72.20	<6.3	<30	<18	<0.03	6	<.40
88	88331	07-13-88	SWMA, South Lead Lake	Bird	Redhead	73.77	<6.3	<30	<18	<0.03	5	.58
	87861	10-17-87	Carson Lake	Bird	Redhead	69.30	.90	<20	.10	.01	<2	1
	87864	10-17-87	Carson Lake	Bird	Redhead	71.40	1.3	<20	<10	.02	<2	.20
	87866	10-17-87	Carson Lake	Bird	Redhead	76.70	10	.63	.20	<0.01	7.6	.01
	87793	10-17-87	SWMA	Bird	Redhead	73.40	3	<10	.20	<0.01	3	3.9
	87796	10-17-87	SWMA	Bird	Redhead	70.80	1.7	<10	.20	<0.01	<2	3.6
	87798	10-18-87	SWMA	Bird	Redhead	71.70	4.4	<10	.33	<0.01	4	1.2
	87800	10-18-87	SWMA	Bird	Redhead	71.50	1.1	<10	<10	<0.01	<2	.85
	87802	10-17-87	SWMA	Bird	Redhead	74.50	1.5	<10	.10	<0.01	<2	.20
	87804	10-17-87	SWMA	Bird	Redhead	70.30	2.1	<10	.10	<0.01	<2	.04
	87806	10-17-87	SWMA	Bird	Redhead	69.40	2.8	<10	.31	<0.01	<2	.29
	87808	10-17-87	SWMA	Bird	Redhead	69.40	1.1	<10	<10	<0.01	<2	.06
	87810	10-17-87	SWMA	Bird	Redhead	73.10	1.4	<10	.10	<0.01	<2	1.8
	87812	10-17-87	SWMA	Bird	Redhead	73.60	1.2	<10	.10	<0.01	<2	.19
	87862	10-17-87	Carson Lake	Bird	Redhead, muscle	73.90	.60	<20	<10	<0.01	<2	.07
	87865	10-17-87	Carson Lake	Bird	Redhead, muscle	72.90	.60	<20	<10	<0.01	<2	.04
	87867	10-17-86	Carson Lake	Bird	Redhead, muscle	76.70	.90	<20	<10	<0.01	6.8	.05

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS												
Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
	87794	10-17-87	SWMA	Bird	Redhead, muscle	73	1.1	<0.10	<0.10	<0.01	<2	0.16
	87797	10-17-87	SWMA	Bird	Redhead, muscle	73.10	1.3	<0.10	<0.10	<0.01	<2	.09
	87799	10-18-87	SWMA	Bird	Redhead, muscle	76.70	.50	<0.10	<0.10	<0.01	4	.04
	87801	10-18-87	SWMA	Bird	Redhead, muscle	74.90	1.8	<0.10	<0.10	<0.01	2	.06
	87803	10-17-87	SWMA	Bird	Redhead, muscle	76.20	.80	<0.10	<0.10	<0.01	<2	<.04
	87805	10-17-87	SWMA	Bird	Redhead, muscle	74.60	.70	<0.10	.10	<0.01	3	<.04
	87807	10-17-87	SWMA	Bird	Redhead, muscle	72.40	.90	<0.10	<0.10	<0.01	<2	<.04
	87809	10-17-87	SWMA	Bird	Redhead, muscle	71.70	.90	<0.10	<0.10	<0.01	<2	<.04
	87811	10-17-87	SWMA	Bird	Redhead, muscle	74.70	4.8	<0.10	<0.10	<0.01	<2	.08
	87813	10-17-87	SWMA	Bird	Redhead, muscle	72.30	1.4	<0.10	<0.10	<0.01	<2	<.04
	87860	10-17-87	Carson Lake	Bird	Redhead, skin	37	36.5	<.20	.33	<.01	<2	.05
	87863	10-17-87	Carson Lake	Bird	Redhead, skin	25.60	3.8	<.20	.10	<.01	<2	<.04
	87792	10-17-87	SWMA	Bird	Redhead, skin	48.10	11	<.10	.20	<.01	<2	.08
67	87795	10-17-87	SWMA	Bird	Redhead, skin	42.10	51	.30	.42	<.01	<2	.07
	88317	07-07-88	Carson Lake, Sprig Pond	Bird	Ruddy	73.10	<6.3	<.30	.19	<.03	3.6	<.40
67	88318	07-07-88	Carson Lake, Sprig Pond	Bird	Ruddy	73.14	<6.3	<.30	<.18	<.03	3.7	.42
67	88319	07-07-88	Carson Lake, Sprig Pond	Bird	Ruddy	74.45	<6.3	.40	<.18	<.03	3.9	.58
67	88398	07-24-88	Carson Lake, Sprig Pond	Bird	Ruddy	70.94	10	.48	.35	<.03	2.1	<.40
75	88329	07-13-88	Mahala Slough	Bird	Ruddy	72.74	7.7	.44	.54	<.03	1.6	<.40
75	88330	07-13-88	Mahala Slough	Bird	Ruddy	74.29	9.2	.72	.53	<.03	1.1	<.40
75	88352	07-21-88	Mahala Slough	Bird	Ruddy	72.66	<6.3	<.30	.20	<.03	1.5	<.40
75	88369	07-23-88	Mahala Slough	Bird	Ruddy	74.10	<6.3	1.49	.43	<.03	2.4	<.40
75	88382	07-25-88	Mahala Slough	Bird	Ruddy	75.25	<6.3	.82	.20	<.03	1.3	<.40
75	88399	07-28-88	Mahala Slough	Bird	Ruddy	73.39	<6.3	.39	.52	<.03	1.6	<.40
88	88300	06-22-88	SWMA, South Lead Lake	Bird	Ruddy	71.81	<6.3	<.30	.46	<.03	1.8	<.40
	87869	10-17-87	Carson Lake	Bird	Shoveler	69.70	5.3	<.20	<.10	<.01	2	.68
	87872	10-17-87	Carson Lake	Bird	Shoveler	68.90	5.5	<.20	<.10	<.01	<2	1.2
	87874	10-17-87	Carson Lake	Bird	Shoveler	70.20	1.2	<.20	<.10	.01	2	.21
	87876	10-17-87	Carson Lake	Bird	Shoveler	70.50	<.30	<.20	<.10	.01	<2	.48
	87878	10-17-87	Carson Lake	Bird	Shoveler	68.20	<.30	<.20	<.10	<.01	<2	.22
	87880	10-17-87	Carson Lake	Bird	Shoveler	68	10	<.20	.20	.01	<2	2.1
	87882	10-17-87	Carson Lake	Bird	Shoveler	69.90	2.5	<.20	.10	.01	<2	.96
	87884	10-17-87	Carson Lake	Bird	Shoveler	68.90	7.4	<.20	<.10	<.01	<2	1.1
	87886	10-17-87	Carson Lake	Bird	Shoveler	70.20	3.1	<.20	<.10	<.01	<2	.63
	87888	10-17-87	Carson Lake	Bird	Shoveler	68.80	1	<.20	<.10	<.01	<2	.15
	87815	10-17-87	SWMA	Bird	Shoveler	68	.60	<.10	<.10	<.01	9.4	.25
	87818	10-17-87	SWMA	Bird	Shoveler	71.90	6.4	.10	.20	.02	<2	2.1
	87822	10-17-87	SWMA	Bird	Shoveler	69.90	.80	<.10	<.10	<.01	10	1.0
	87824	10-17-87	SWMA	Bird	Shoveler	70.10	6.3	<.10	<.10	<.01	<2	1.3
	87826	10-17-87	SWMA	Bird	Shoveler	70.50	1.3	<.10	<.10	<.01	<2	2.3

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USEFWS

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
	87828	10-17-87	SWMA	Bird	Shoveler	71.50	1.9	<0.10	0.20	<0.01	6	0.56
	87830	10-17-87	SWMA	Bird	Shoveler	68.90	1.4	<0.10	<0.10	<0.01	12	.32
	87832	10-17-87	SWMA	Bird	Shoveler	68.90	1	<0.10	<0.10	<0.01	<2	.15
	87834	10-17-87	SWMA	Bird	Shoveler	71.80	1.6	<0.10	.20	<0.01	<2	.82
	87870	10-17-87	Carson Lake	Bird	Shoveler, muscle	72	1.3	<0.20	<0.10	<0.01	2	.04
	87873	10-17-87	Carson Lake	Bird	Shoveler, muscle	72.20	.60	<0.20	<0.10	<0.01	2	.07
	87875	10-17-87	Carson Lake	Bird	Shoveler, muscle	72.90	1.6	<0.20	<0.10	<0.01	<2	<.04
	87877	10-17-87	Carson Lake	Bird	Shoveler, muscle	73.60	<.30	<0.20	<0.10	<0.01	<2	.05
	87879	10-17-87	Carson Lake	Bird	Shoveler, muscle	72.90	.60	<0.20	<0.10	<0.01	<2	<.04
	87881	10-17-87	Carson Lake	Bird	Shoveler, muscle	72.30	<.30	<0.20	<0.10	<0.01	<2	.05
	87883	10-17-87	Carson Lake	Bird	Shoveler, muscle	72.20	153	<.20	1.1	.02	3	.04
	87885	10-17-87	Carson Lake	Bird	Shoveler, muscle	72.30	1.4	<.20	<.10	<.01	2	.04
	87887	10-17-87	Carson Lake	Bird	Shoveler, muscle	72.90	3.6	<.20	.27	<.01	<2	.05
	87889	10-17-87	Carson Lake	Bird	Shoveler, muscle	72.50	2.1	<.20	<.10	<.01	<2	.07
67	89071	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	73.04	--	--	--	--	--	--
67	89073	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	73.68	--	--	--	--	--	--
67	89075	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	73.91	--	--	--	--	--	--
67	89077	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	72.77	--	--	--	--	--	--
67	89079	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	72.82	--	--	--	--	--	--
67	89089	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	72.91	--	--	--	--	--	--
67	89091	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	74.02	--	--	--	--	--	--
67	89093	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	74.38	--	--	--	--	--	--
67	89095	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	74.38	--	--	--	--	--	--
67	89097	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	75.12	--	--	--	--	--	--
67	89101	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	72.91	--	--	--	--	--	--
67	89103	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	72.12	--	--	--	--	--	--
67	89105	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	74.29	--	--	--	--	--	--
67	89107	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	72.77	--	--	--	--	--	--
67	89109	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	73.91	--	--	--	--	--	--
67	89111	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	71.92	--	--	--	--	--	--
67	89113	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	73.30	--	--	--	--	--	--
67	89115	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	73.81	--	--	--	--	--	--
67	89117	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	72.60	--	--	--	--	--	--
67	89119	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	73.50	--	--	--	--	--	--
67	87816	10-17-87	SWMA	Bird	Shoveler, muscle	72.10	.70	<.10	<.10	<.01	12	<.04
67	87819	10-17-87	SWMA	Bird	Shoveler, muscle	73.70	.70	<.10	<.10	<.01	<2	.10
67	87821	10-17-87	SWMA	Bird	Shoveler, muscle	72.80	.50	<.10	<.10	<.01	16	<.04
67	87823	10-17-87	SWMA	Bird	Shoveler, muscle	73.50	.80	<.10	<.10	<.01	12	<.04
67	87825	10-17-87	SWMA	Bird	Shoveler, muscle	72.60	.80	<.10	<.10	<.01	<2	.08
67	87827	10-17-87	SWMA	Bird	Shoveler, muscle	72.70	.80	<.10	<.10	<.01	<2	<.03

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
	87829	10-17-87	SWMA	Bird	Shoveler, muscle	75.10	1.2	<0.10	<0.10	<0.01	8.3	<0.04
	87831	10-17-87	SWMA	Bird	Shoveler, muscle	74.40	2.4	<0.10	<0.10	<0.01	15	<0.04
	87833	10-17-87	SWMA	Bird	Shoveler, muscle	73	1.5	<0.10	<0.10	<0.01	<2	<0.04
	87835	10-17-87	SWMA	Bird	Shoveler, muscle	73.50	1.6	<0.10	<0.10	<0.01	<2	<0.04
	87836	10-16-86	SWMA	Bird	Shoveler, muscle	71.40	1.8	<0.10	<0.10	<0.01	7.2	<0.04
	87837	10-16-86	SWMA	Bird	Shoveler, muscle	71.60	1	<0.10	<0.10	<0.01	7.2	.04
	87868	10-17-87	Carson Lake	Bird	Shoveler, skin	13.80	20	<0.20	.20	<0.01	<2	.05
	87871	10-17-87	Carson Lake	Bird	Shoveler, skin	15.20	3.8	<0.20	<0.10	<0.01	<2	<.03
	87814	10-17-87	SWMA	Bird	Shoveler, skin	17.70	8.3	<0.10	.20	<0.01	<2	.04
	87817	10-17-87	SWMA	Bird	Shoveler, skin	14.40	1.7	<0.10	.10	.01	<2	.06
71	88454	06-11-88	Fernley WMA, East Pond	Egg	C Teal	68.40	<6.3	<.30	17.7	.05	4.8	<.40
71	88455	06-03-88	Fernley WMA, East Pond	Egg	C Teal	68.30	<6.3	<.30	9.85	.07	1.7	<.40
	88470	06-28-88	HWMA, Toulon Lake	Egg	C Teal	65.80	<6.3	<.30	10.2	.05	2.8	<.40
	88471	06-01-88	HWMA, Toulon Lake	Egg	C Teal	67.90	<6.3	<.30	8.34	.06	5.2	<.40
75	88498	06-02-88	Mahala Slough	Egg	C Teal	65.70	<6.3	.39	16.4	<.03	7.6	<.40
75	88499	06-12-88	Mahala Slough	Egg	C Teal	65	<6.3	.56	16.2	<.03	4.4	<.40
75	88500	06-02-88	Mahala Slough	Egg	C Teal	69.60	<6.3	<.30	8.36	<.03	1.5	.43
75	88501	06-02-88	Mahala Slough	Egg	C Teal	64.90	<6.3	.83	11.5	<.03	7.3	.41
75	88502	06-02-88	Mahala Slough	Egg	C Teal	65.80	<6.3	.64	15.7	<.03	2.1	<.40
75	88503	06-04-88	Mahala Slough	Egg	C Teal	68	<6.3	<.30	9.12	<.03	4.8	<.40
75	88511	06-19-88	Mahala Slough	Egg	C Teal	67	<6.3	.63	24.4	.16	1.8	<.40
75	88512	06-02-88	Mahala Slough	Egg	C Teal	69.40	<6.3	.47	6.33	<.03	5.1	<.40
75	88517	06-02-88	Mahala Slough	Egg	C Teal	68.40	<6.3	<.30	10.1	<.03	2.3	<.40
B	88478	05-24-88	Massie Slough	Egg	C Teal	69.80	<6.3	.45	17.4	<.03	1.7	<.40
83	88464	06-09-88	SWMA, Lead Lake	Egg	C Teal	68.10	<6.3	<.30	9.64	<.03	4.8	<.40
83	88465	06-09-88	SWMA, Lead Lake	Egg	C Teal	66.60	<6.3	<.30	9.51	<.03	3.2	<.40
83	88522	06-09-88	SWMA, Lead Lake	Egg	C Teal	68.60	<6.3	<.30	5.21	<.03	4.4	<.40
71	88525	05-11-88	Fernley WMA, East Pond	Egg	Coot	74.80	<6.3	.46	2.67	.36	14.5	1.13
71	88526	05-19-88	Fernley WMA, East Pond	Egg	Coot	75.60	<6.3	<.30	6.3	.27	15.7	<.40
71	88527	06-03-88	Fernley WMA, East Pond	Egg	Coot	73.30	<6.3	<.30	.60	<.03	7.5	<.40
71	88528	05-19-88	Fernley WMA, East Pond	Egg	Coot	74	<6.3	<.30	4.3	<.03	6.5	<.40
71	88529	05-19-88	Fernley WMA, East Pond	Egg	Coot	76.60	<6.3	<.30	.56	<.03	5.7	<.40
71	88530	05-19-88	Fernley WMA, East Pond	Egg	Coot	72.60	<6.3	<.30	3.38	<.03	8.5	<.40
71	88531	05-19-88	Fernley WMA, East Pond	Egg	Coot	72.70	<6.3	<.30	6.56	<.03	10.6	<.40
71	88532	06-16-88	Fernley WMA, East Pond	Egg	Coot	74.60	<6.3	<.30	4.25	<.03	7.6	<.40
71	88533	06-16-88	Fernley WMA, East Pond	Egg	Coot	72.80	<6.3	<.30	5.55	<.03	5.9	<.40
71	88534	06-03-88	Fernley WMA, East Pond	Egg	Coot	75.10	<6.3	<.30	5.62	<.03	14.5	<.40
71	88535	06-03-88	Fernley WMA, East Pond	Egg	Coot	70.20	<6.3	<.30	4.02	<.03	15.2	<.40
71	88536	06-16-88	Fernley WMA, East Pond	Egg	Coot	75	<6.3	<.30	8.45	<.03	6.3	<.40
71	88537	05-19-88	Fernley WMA, East Pond	Egg	Coot	74.20	<6.3	<.30	1.01	<.03	9	<.40

USEFWS

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USEWS

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
71	88538	05-19-88	Fernley WMA, East Pond	Egg	Coot	73.60	<6.3	0.39	1.88	0.13	11.3	0.49
71	88539	06-03-88	Fernley WMA, East Pond	Egg	Coot	74.90	<6.3	<0.30	4.9	.12	8.7	<4.0
71	88540	05-19-88	Fernley WMA, East Pond	Egg	Coot	73.90	<6.3	<0.30	3.37	.12	11.5	<4.0
71	88541	05-19-88	Fernley WMA, East Pond	Egg	Coot	73.40	<6.3	<0.30	1.81	.10	11.5	<4.0
71	88542	05-19-88	Fernley WMA, East Pond	Egg	Coot	71.80	<6.3	<0.30	2.85	.10	8.8	<4.0
71	88543	05-19-88	Fernley WMA, East Pond	Egg	Coot	73.80	<6.3	<0.30	2.25	.18	7.9	<4.0
71	88544	05-19-88	Fernley WMA, East Pond	Egg	Coot	72	<6.3	<0.30	2.43	.21	9.1	<4.0
71	88545	06-03-88	Fernley WMA, East Pond	Egg	Coot	73	<6.3	.45	1.31	.14	9.5	<4.0
71	88546	06-16-88	Fernley WMA, East Pond	Egg	Coot	73.70	<6.3	<0.30	8.77	.11	5.5	<4.0
71	88547	06-16-88	Fernley WMA, East Pond	Egg	Coot	77.80	<6.3	<0.30	4.34	.19	7.4	<4.0
71	88548	06-16-88	Fernley WMA, East Pond	Egg	Coot	77.40	<6.3	.42	1.01	.16	7.2	<4.0
71	88549	06-16-88	Fernley WMA, East Pond	Egg	Coot	73.50	<6.3	<0.30	3.9	.23	6	<4.0
	88556	05-17-88	HWMA, Toulon Lake	Egg	Coot	72.20	<6.3	.50	11.8	.08	9	<4.0
	88557	05-17-88	HWMA, Toulon Lake	Egg	Coot	74.50	<6.3	.55	1.62	.14	4.5	<4.0
	88558	05-17-88	HWMA, Toulon Lake	Egg	Coot	75.40	<6.3	.42	3.88	.07	6.4	<4.0
	88559	05-17-88	HWMA, Toulon Lake	Egg	Coot	73.10	<6.3	.49	3.58	<.03	6.9	<4.0
	88560	05-17-88	HWMA, Toulon Lake	Egg	Coot	74	<6.3	.76	4.92	.21	6.7	1.22
	88561	06-08-88	HWMA, Toulon Lake	Egg	Coot	73.40	<6.3	.76	3.67	.15	7.1	.93
	88562	06-08-88	HWMA, Toulon Lake	Egg	Coot	74	<6.3	<0.30	11.2	.17	9.5	.91
	88563	06-08-88	HWMA, Toulon Lake	Egg	Coot	77.20	<6.3	<0.30	6	.19	13.8	.81
	88564	05-25-88	HWMA, Toulon Lake	Egg	Coot	72.20	<6.3	<0.30	1.27	.13	5.1	1
	88565	05-17-88	HWMA, Toulon Lake	Egg	Coot	73.50	<6.3	<0.30	7.45	.11	8.7	.55
	88566	05-17-88	HWMA, Toulon Lake	Egg	Coot	73.50	<6.3	<0.30	3.37	<.03	7.8	.69
	88567	05-17-88	HWMA, Toulon Lake	Egg	Coot	72.70	<6.3	.64	3.12	<.03	7.2	<4.0
	88568	05-25-88	HWMA, Toulon Lake	Egg	Coot	66.50	<6.3	.49	3.22	<.03	4.4	<4.0
	88569	05-25-88	HWMA, Toulon Lake	Egg	Coot	63.60	<6.3	.51	9.12	<.03	9.8	<4.0
	88570	05-25-88	HWMA, Toulon Lake	Egg	Coot	63.70	<6.3	.63	3.95	<.03	14.3	<4.0
	88571	05-17-88	HWMA, Toulon Lake	Egg	Coot	65.40	<6.3	.46	4.02	.12	9.1	.44
	88572	05-17-88	HWMA, Toulon Lake	Egg	Coot	63.30	<6.3	.50	2.88	.32	5.2	<4.0
	88573	05-17-88	HWMA, Toulon Lake	Egg	Coot	59.80	<6.3	<0.30	1.03	<.03	5.4	<4.0
	88574	05-17-88	HWMA, Toulon Lake	Egg	Coot	65.50	<6.3	<0.30	4.24	.03	7.7	<4.0
	88575	05-17-88	HWMA, Toulon Lake	Egg	Coot	62.40	<6.3	.47	5.37	<.03	8.6	<4.0
	88576	05-17-88	HWMA, Toulon Lake	Egg	Coot	54	<6.3	.43	8.85	<.03	8.5	<4.0
	88577	05-25-88	HWMA, Toulon Lake	Egg	Coot	55.80	<6.3	<0.30	6	<.03	4.5	<4.0
	88578	05-26-88	HWMA, Toulon Lake	Egg	Coot	59.70	<6.3	<0.30	6.16	.04	5.5	<4.0
	88579	05-25-88	HWMA, Toulon Lake	Egg	Coot	77.80	<6.3	.51	3.82	<.03	10.3	<4.0
	88580	05-25-88	HWMA, Toulon Lake	Egg	Coot	75.30	<6.3	<0.30	7.3	<.03	8.6	<4.0
	88581	05-26-88	HWMA, Toulon Lake	Egg	Coot	75.60	<6.3	<0.30	6.34	<.03	6.8	<4.0
	88582	06-01-88	HWMA, Toulon Lake	Egg	Coot	74.90	<6.3	.43	2.23	<.03	5.7	<4.0
	88484	06-13-88	Incline Wetlands	Egg	Coot	69	<6.3	.71	.89	.16	3.9	.60

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
75	88518	06-20-88	Mahala Slough	Egg	Coot	67	<6.3	0.48	4.11	<0.03	11.5	<0.40
75	88519	06-20-88	Mahala Slough	Egg	Coot	71.60	<6.3	.55	.21	<0.03	21.4	<0.40
75	88520	06-02-88	Mahala Slough	Egg	Coot	74.50	<6.3	.60	4.64	<0.03	11.4	<0.40
75	88521	06-12-88	Mahala Slough	Egg	Coot	75.70	<6.3	.42	.72	<0.03	9.3	<0.40
B	88479	06-17-88	Massie Gun Club	Egg	Coot	74.60	<6.3	1.89	5.93	.07	4	<0.40
B	88480	06-17-88	Massie Gun Club	Egg	Coot	76.30	<6.3	1.14	2.35	.13	6.1	<0.40
B	88481	06-10-88	Massie Gun Club	Egg	Coot	75.40	<6.3	1.11	11.5	.11	5.9	<0.40
B	88482	05-24-88	Massie Slough	Egg	Coot	74.80	<6.3	.75	10.9	.29	12	<0.40
B	88483	05-31-88	Massie Slough	Egg	Coot	73.50	<6.3	.56	4.44	.18	7.3	.51
83	88550	06-18-88	SWMA, Lead Lake	Egg	Coot	76.60	<6.3	.47	2.57	.10	6.5	<0.40
83	88551	06-09-88	SWMA, Lead Lake	Egg	Coot	74.70	<6.3	<0.30	3.8	.09	5	<0.40
83	88552	06-09-88	SWMA, Lead Lake	Egg	Coot	75.20	<6.3	<0.30	3.44	.06	5.2	<0.40
83	88553	06-09-88	SWMA, Lead Lake	Egg	Coot	65	8.3	<0.30	5.63	.12	5.3	<0.40
83	88554	06-09-88	SWMA, Lead Lake	Egg	Coot	73.30	9.7	<0.30	6.49	.05	4.3	<0.40
83	88555	06-09-88	SWMA, Lead Lake	Egg	Coot	70.20	<6.3	<0.30	10.4	.21	1.8	.64
75	88466	06-08-88	HWMA, Toulon Lake	Egg	Gadwall	65.90	<6.3	<0.30	9.27	.04	3.9	<0.40
83	88462	06-09-88	SWMA, Lead Lake	Egg	Gadwall	64.50	<6.3	.75	6.68	.41	7.6	.53
83	88467	05-06-88	Carson Valley	Egg	Mallard	66.90	<6.3	<0.30	8.15	.14	<0.80	.54
83	88488	05-23-88	Carson Valley	Egg	Mallard	67.80	<6.3	<0.30	14	.12	<0.80	.44
83	88489	05-06-88	Carson Valley	Egg	Mallard	69	<6.3	<0.30	10.5	6.8	<0.80	<0.40
83	88490	05-06-88	Carson Valley	Egg	Mallard	66	<6.3	<0.30	8.54	.19	1.9	.41
83	88491	05-06-88	Carson Valley	Egg	Mallard	64.30	10.1	<0.30	7.46	.10	<0.80	<0.40
71	88453	06-03-88	Fernley WMA, East Pond	Egg	Mallard	71.30	<6.3	<0.30	8.26	.06	3.1	<0.40
71	88469	05-25-88	HWMA, Toulon Lake	Egg	Mallard	65.70	<6.3	<0.30	4.66	.04	10.2	<0.40
75	88495	06-02-88	Mahala Slough	Egg	Mallard	61.90	<6.3	.34	23.1	.36	<0.80	<0.40
75	88516	06-20-88	Mahala Slough	Egg	Mallard	69	<6.3	<0.30	5.94	<0.03	<0.80	<0.40
75	88516	06-20-88	Mahala Slough	Egg	Mallard	67.70	<6.3	.53	7.89	.03	.90	<0.40
83	88459	06-09-88	SWMA, Lead Lake	Egg	Mallard	68.20	<6.3	<0.30	11.1	.13	2.2	<0.40
83	88460	06-09-88	SWMA, Lead Lake	Egg	Mallard	67.10	<6.3	<0.30	11.6	.09	1.7	<0.40
83	88461	06-09-88	SWMA, Lead Lake	Egg	Pintail	65.50	<6.3	<0.30	13.5	.04	2.3	<0.40
71	88450	06-03-88	Fernley WMA, East Pond	Egg	Redhead	66.60	<6.3	<0.30	10.8	<0.03	5.4	.52
71	88451	05-19-88	Fernley WMA, East Pond	Egg	Redhead	68.70	<6.3	<0.30	4.59	<0.03	3.9	<0.40
71	88452	06-11-88	Fernley WMA, East Pond	Egg	Redhead	66.80	<6.3	<0.30	8.7	.05	3.2	<0.40
71	88467	05-25-88	HWMA, Toulon Lake	Egg	Redhead	51.50	<6.3	<0.30	9.26	.11	3.1	<0.40
83	88468	05-25-88	HWMA, Toulon Lake	Egg	Redhead	65.10	<6.3	<0.30	18.5	.19	7.2	.56
83	88472	06-08-88	HWMA, Toulon Lake	Egg	Redhead	68.20	<6.3	<0.30	8.95	<0.03	4.7	<0.40
83	88473	06-01-88	HWMA, Toulon Lake	Egg	Redhead	66.90	<6.3	<0.30	12.6	.04	6.3	<0.40
83	88474	06-01-88	HWMA, Toulon Lake	Egg	Redhead	68.30	<6.3	<0.30	10.7	.24	9.6	.73
83	88475	06-08-88	HWMA, Toulon Lake	Egg	Redhead	66.20	<6.3	<0.30	11.9	.14	4.8	<0.40

USFWS

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
75	88492	06-12-88	Mahala Slough	Egg	Redhead	69.80	<6.3	<0.30	16.1	0.08	4.2	<0.40
75	88493	06-02-88	Mahala Slough	Egg	Redhead	68.30	<6.3	1	16.1	.06	11.6	<.40
75	88497	06-23-88	Mahala Slough	Egg	Redhead	66.80	<6.3	.67	7.31	<.06	17.5	<.40
75	88508	06-04-88	Mahala Slough	Egg	Redhead	68.90	<6.3	<.30	10.2	.24	11.5	.42
75	88509	06-02-88	Mahala Slough	Egg	Redhead	68.40	<6.3	.65	12.8	<.03	13.3	<.40
75	88513	06-20-88	Mahala Slough	Egg	Redhead	69.20	<6.3	1.15	41.9	<.03	19.4	<.40
75	88514	06-20-88	Mahala Slough	Egg	Redhead	66.40	<6.3	<.30	11.3	<.03	4.4	<.40
B	88476	05-24-88	Massie Slough	Egg	Redhead	66.90	<6.3	<.30	10.1	.07	1.8	.46
83	88458	06-18-88	SWMA, Lead Lake	Egg	Redhead	71.30	14.4	<.30	3.88	<.07	5.7	<.40
75	88494	06-12-88	Mahala Slough	Egg	Ruddy	63.90	<6.3	<.30	11.5	.25	<.80	<.40
75	88504	06-19-88	Mahala Slough	Egg	Ruddy	66.30	<6.3	.32	17	<.03	2.9	<.40
75	88505	06-20-88	Mahala Slough	Egg	Ruddy	61.20	<6.3	<.30	2.88	<.03	1.8	<.40
75	88506	06-19-88	Mahala Slough	Egg	Ruddy	61.80	<6.3	<.30	8.81	.16	2.2	<.40
75	88507	06-02-88	Mahala Slough	Egg	Ruddy	63.80	<6.3	<.30	17.4	.25	2.5	<.40
75	88510	06-29-88	Mahala Slough	Egg	Ruddy	66.10	<6.3	.58	39.9	.13	3.1	.45
75	88524	06-19-88	Mahala Slough	Egg	Ruddy	65.20	<6.3	.48	27	<.03	2	<.40
B	88477	06-15-88	Massie Gun Club	Egg	Ruddy	66.30	<6.3	<.30	5.77	.04	2.1	<.40
83	88456	06-09-88	SWMA, Lead Lake	Egg	Ruddy	64.70	<6.3	<.30	14.7	.04	1.2	<.40
83	88457	06-18-88	SWMA, Lead Lake	Egg	Ruddy	55.30	<6.3	<.30	8.84	.06	1.1	<.40
83	88463	06-21-88	SWMA, Lead Lake	Egg	Shoveler	68.20	<6.3	<.30	4.06	<.03	3.7	<.40
81	88110	02-11-88	SWMA, Hunter Drain	Insect	Corixidae	83.20	310	5.48	12.8	<.12	255	1.15
71	88151	06-27-88	Fernley WMA, East Pond	Insect	Ephydra	72.10	290	2.94	7.82	<.12	61.5	<.50
72	88150	06-27-88	Fernley WMA, N. Pond	Insect	Ephydra	72.70	120	3.25	12.6	<.12	79.2	<.50
73	88152	06-27-88	Fernley WMA, Pond #1	Insect	Ephydra	53.70	1,760	25.10	66.3	<.12	99.5	1.08
D	88138	06-16-88	SWMA, Goose Lake	Insect	Ephydra	73.60	1,470	7.18	17	<.12	135	.60
81	88132	06-03-88	SWMA, Hunter Drain	Insect	Ephydra	75.90	820	14.20	10.3	<.12	105	.77
81	88136	06-16-88	SWMA, Hunter Drain	Insect	Ephydra	74.90	1,280	4.73	10	<.12	87.6	5.21
81	88137	06-16-88	SWMA, Hunter Drain	Insect	Ephydra	76.50	770	8.14	8.06	<.12	75.1	<.50
81	88182	08-02-88	SWMA, Hunter Drain	Insect	Ephydra	75.80	830	2.81	5.98	<.12	86	5.05
87	88133	06-14-88	SWMA, Pintail Bay	Insect	Ephydra	73.40	370	11	8	<.12	73.1	<.50
88	88141	06-16-88	SWMA, South Lead Lake	Insect	Ephydra	61.70	1,290	2.27	12.6	.13	77.6	.72
92	88139	06-16-88	SWMA, TJ Drain	Insect	Ephydra	70.40	800	7.96	10	<.12	100	.70
92	88140	06-16-88	SWMA, TJ Drain	Insect	Ephydra	74	2,170	23.30	17	<.12	89.2	1.1
1	88800	08-29-88	Sheckler Reservoir	Plant	Algae	87.90	10,300	14	167	.38	75	<.50
26	88839	09-12-88	New River Drain	Plant	Algae	83.10	18,200	11	240	.50	31	<.50
50	88842	09-12-88	Kent Lake Ext. Drain	Plant	Algae	82.10	13,400	11	137	.30	89	<.50
2	88832	09-06-88	Old Reservoir	Plant	Algae	83.70	23,700	23	414	.85	35	<.50
27	88840	09-12-88	Upper New River Drain	Plant	Algae	89.30	9,390	83	189	.70	46	.70
95	88159	07-07-88	Carson R. Blw Lahontan	Plant	Algae	77.60	5,670	21.50	472	.23	34.1	3.79
52	88835	09-08-88	Paute Br. 3 Drain	Plant	Algae	84.80	6,910	14	167	.30	57	<.50

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USEWS		Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
4	88801	08-29-88	Upper L Drain	Plant	Algae	83.30	6,190	14	178	0.20	66	<0.50		
29	88803	08-29-88	Mid L Drain	Plant	Algae	84.10	12,000	20	295	.38	51	<.50		
30	88804	08-29-88	L3 Drain	Plant	Algae	86.50	10,400	23	126	.38	65	<.50		
6	88805	08-29-88	Sheckler Deep Drain	Plant	Algae	89.30	12,200	14	228	.35	87	<.50		
68	89061	09-22-89	Fernley Drain	Plant	Algae	89.76	2,500	25	150	<4.8	<120	<4.8		
68	89201	11-30-89	Fernley Drain	Plant	Algae	75.70	4,100	22	190	<2	<50	<2		
70	89009	05-16-89	Fernley West Drain	Plant	Algae	75.70	5,130	32	288	.26	51	.98		
70	89031	07-07-89	Fernley West Drain	Plant	Algae	85.60	1,330	7.95	68.7	<.20	167	<.70		
31	88806	08-30-88	L2 Drain	Plant	Algae	92.50	4,770	46	126	.10	264	<.40		
54	88831	09-06-88	R2 Drain	Plant	Algae	86.20	12,800	16	191	.44	120	.50		
63	88807	08-30-88	Lower Diagonal Drain	Plant	Algae	83.70	9,810	28.6	270	.30	120	<.50		
55	88843	09-06-88	Upper Paiute Drain	Plant	Algae	81.70	15,900	18	264	.37	88	<.50		
8	88802	08-29-88	Upper Diagonal 2 Drain	Plant	Algae	77.70	9,480	22	224	.30	59	.50		
33	88808	08-30-88	Middle L Drain	Plant	Algae	85.10	5,940	20	134	.20	99	<.50		
56	88833	09-08-88	S2C Drain	Plant	Algae	88.40	13,400	15	180	.46	79	<.50		
34	88809	08-30-88	LB Drain	Plant	Algae	85.70	4,640	12	101	.10	99	<.40		
57	88841	09-12-88	Upper Stillwater Slough	Plant	Algae	82.70	16,600	17	203	.45	25	<.50		
58	88836	09-07-88	Harmon Deep Drain	Plant	Algae	80.90	11,100	14	195	.38	57	<.50		
11	88812	08-30-88	Carson Lake I Ext. Drain	Plant	Algae	82.50	9,080	16	169	.30	82	<.50		
35	88902	08-25-88	L Branch I Deep Drain	Plant	Algae	86.50	12,200	12	149	.30	68	.60		
59	88829	09-07-88	S2G Drain	Plant	Algae	84.10	6,330	33	164	.20	276	<.50		
36	88906	08-25-88	Lower L Drain	Plant	Algae	74.20	12,100	13	172	.30	46	1		
60	88838	09-07-88	Harmon Reservoir	Plant	Algae	97.10	5,080	6.5	423	<.20	93	<.80		
13	88813	08-30-88	Carson Lake 1A Drain	Plant	Algae	92.60	2,280	38	306	<.10	100	.70		
37	88810	08-30-88	Mid Carson Lake Drain	Plant	Algae	82.90	8,210	14	150	.30	52	<.50		
61	88837	09-06-88	S1B Drain	Plant	Algae	89.90	15,400	9.9	169	.39	27	<.50		
14	88814	08-30-88	A1 Drain	Plant	Algae	81	7,960	85	232	.20	100	.90		
38	88900	08-25-88	A-Line	Plant	Algae	82.40	4,020	28.6	281	<.10	150	.60		
62	88912	08-29-88	Lower Diagonal 1 Drain	Plant	Algae	77.10	4,220	18	206	<.10	242	.50		
15	88825	08-31-88	Mussi Drain	Plant	Algae	77.50	14,000	17	194	.52	55	<.50		
39	88904	08-25-88	Pierson Drain	Plant	Algae	80	4,040	12	81.1	<.10	237	.50		
63	88908	08-25-88	Lower Diagonal Drain	Plant	Algae	76.20	16,100	18	226	.47	54	.50		
40	88820	08-31-88	J1 Deep Drain	Plant	Algae	86.20	13,200	13	145	.48	84	<.50		
64	88828	09-06-88	Paiute Branch 1 Drain	Plant	Algae	87	13,500	9.8	170	.55	21	<.50		
16	88826	08-31-88	F2 Drain	Plant	Algae	87	2,570	28	406	<.10	277	<.50		
41	88817	08-31-88	Yarbrough Drain	Plant	Algae	88.50	10,100	14	119	<.10	160	<.50		
90	88845	09-08-88	Stillwater Pt. Reservoir	Plant	Algae	78.50	15,700	14	177	.39	23	<.50		
17	88822	08-31-88	Shaffner Drain	Plant	Algae	82.20	12,000	45	235	.30	49	<.50		
42	88811	08-30-88	Carson Lake Br. 3 Drain	Plant	Algae	80.70	11,900	51	734	.46	100	<.50		
66	88830	09-06-88	Upper TJ Drain	Plant	Algae	89.60	3,690	41	52	<.10	303	1		

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS												
Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
18	88824	08-31-88	ERB Drain	Plant	Algae	71.70	12,100	23	282	0.43	35	<0.50
43	88815	08-30-88	Carson Lake Br. 1 Drain	Plant	Algae	90.80	725	12	91.8	<0.10	558	<0.40
78	88160	07-07-88	SWMA, D-Line Canal	Plant	Algae	86.60	10,800	112	235	.50	336	.89
78	89028	07-07-89	SWMA, D-Line Canal	Plant	Algae	86	3,230	25.8	127	<0.20	230	<0.70
78	89063	09-22-89	SWMA, D-Line Canal	Plant	Algae	81.77	7,900	48	140	<2.6	<64	<2.6
78	89210	11-30-89	SWMA, D-Line Canal	Plant	Algae	82.26	8,100	15	170	<2.8	<70	<2.8
81	88100	02-11-88	SWMA, Hunter Drain	Plant	Algae	79.10	2,870	48.4	28.4	<.12	356	1
81	88111	02-11-88	SWMA, Hunter Drain	Plant	Algae	78	3,480	50.8	32	.14	323	<.50
81	88114	02-11-88	SWMA, Hunter Drain	Plant	Algae	74.40	4,690	61.8	70.3	.20	348	.54
81	88117	02-11-88	SWMA, Hunter Drain	Plant	Algae	76	2,000	51.7	38.9	<.12	543	2.04
81	88120	02-11-88	SWMA, Hunter Drain	Plant	Algae	75	7,310	31.8	45.5	.18	748	2.04
81	88134	05-19-88	SWMA, Hunter Drain	Plant	Algae	62	4,760	14.1	130	.19	388	.62
81	88135	05-19-88	SWMA, Hunter Drain	Plant	Algae	61.10	6,130	15.7	131	.22	451	<.50
81	88156	07-05-88	SWMA, Hunter Drain	Plant	Algae	61.10	3,120	48.4	33.4	.18	296	<.50
81	88157	07-05-88	SWMA, Hunter Drain	Plant	Algae	79.40	8,750	29.6	31.4	.17	469	2.23
81	89007	03-16-89	SWMA, Hunter Drain	Plant	Algae	78.70	3,940	42.4	35.7	<.20	820	2.36
81	89014	05-16-89	SWMA, Hunter Drain	Plant	Algae	81.10	8,940	20.9	43.7	.36	1,020	2.1
81	89029	07-07-89	SWMA, Hunter Drain	Plant	Algae	62.10	7,490	12.8	81.8	.36	654	.81
86	89006	03-16-89	SWMA, Paiute Drain	Plant	Algae	68	5,070	20.6	144	.21	117	<0.70
86	89011	05-16-89	SWMA, Paiute Drain	Plant	Algae	83.60	5,140	6.18	90.7	.34	102	<0.70
86	89030	07-07-89	SWMA, Paiute Drain	Plant	Algae	84.70	11,200	10.9	205	.59	147	.93
86	89062	09-22-89	SWMA, Paiute Drain	Plant	Algae	76.69	9,100	12	140	<2.1	51	<2.1
86	89207	11-30-89	SWMA, Paiute Drain	Plant	Algae	52.17	5,200	5.1	80	<.94	<24	<.94
92	88158	07-06-88	SWMA, TJ Drain	Plant	Algae	76.60	1,000	31.6	52.9	<.12	202	<.50
92	88189	08-24-88	SWMA, TJ Drain	Plant	Algae	72.80	3,310	78	99.8	.10	229	<.50
92	88191	09-13-88	SWMA, TJ Drain	Plant	Algae	71	2,730	93	74.4	<.10	390	<.50
92	89005	03-16-89	SWMA, TJ Drain	Plant	Algae	62.10	2,410	71.8	112	<.20	262	<.70
92	89016	05-16-89	SWMA, TJ Drain	Plant	Algae	76	4,470	48.8	112	.22	111	<.70
92	89027	07-07-89	SWMA, TJ Drain	Plant	Algae	82.10	5,930	50.1	75	.27	200	<.70
92	89060	09-22-89	SWMA, TJ Drain	Plant	Algae	80.29	3,000	21	58	<2.4	350	22.0
92	89204	11-30-89	SWMA, TJ Drain	Plant	Algae	88.94	4,100	41	63	<4.1	140	<4.1
44	88819	08-31-88	Downs Drain	Plant	Algae	82.30	4,050	29.4	191	.10	382	<.40
20	88827	09-06-88	Paiute Ext. Br. 1 Drain	Plant	Algae	86.60	7,790	11	163	.57	84	<.50
22	88821	08-31-88	S-Line Reservoir	Plant	Algae	84.80	19,900	16	291	.57	13	<.50
46	88816	08-31-88	Holmes Branch 2 Drain	Plant	Algae	82.60	12,300	14	203	.36	100	<.50
23	88844	09-08-88	New River Ext. Drain	Plant	Algae	83.30	16,700	17	253	.47	15	<.50
47	88818	08-31-88	Holmes Drain	Plant	Algae	84.80	9,070	15	339	.32	120	<.50
24	88823	08-31-88	Upper Harmon Deep Drain	Plant	Algae	95.30	9,090	19	242	.20	49	<.50
48	88834	09-07-88	NE Carson Lake	Plant	Algae	90.80	15,800	110	194	.58	210	.80
49	88846	09-08-88	Patrick Drain	Plant	Algae	87.50	10,700	26.9	148	.20	227	<.50

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
67	88385	07-25-88	Carson Lake, Sprig Pond	Bird	BN Stilt	<0.50	18.5	880	<9	721	13	7.87
	88435	08-10-88	Fernley WMA	Bird	BN Stilt	<2	17	838	<4	741	13	.99
	88436	08-10-88	Fernley WMA	Bird	BN Stilt	<2	29.9	973	6	800	15	.72
	88405	07-22-88	Fernley WMA, East Pond	Bird	BN Stilt	<.50	20.2	1,780	<9	745	12.9	.39
75	88383	07-25-88	Mahala Slough	Bird	BN Stilt	<.50	15.6	1,550	<9	708	13.9	1.97
	88404	07-21-88	Mahala Slough	Bird	BN Stilt	<.50	24.8	1,730	<9	783	15.9	13.9
67	88395	07-24-88	Carson Lake, Sprig Pond	Bird	C Teal	<.50	31.8	6,280	<9	627	11.4	5.64
	88372	07-24-88	Fernley WMA, East Pond	Bird	C Teal	1.01	38.9	1,510	<9	768	15.9	.13
71	88379	07-24-88	Fernley WMA, East Pond	Bird	C Teal	1.19	23.4	6,510	<9	792	14.8	.12
	88391	07-24-88	Fernley WMA, East Pond	Bird	C Teal	<.50	21.3	2,160	<9	792	14.7	.04
71	88392	07-24-88	Fernley WMA, East Pond	Bird	C Teal	.56	41.6	2,480	9.34	825	16.7	.04
	88341	07-19-88	HWMA, Army Drain	Bird	C Teal	<.50	42.3	79.7	<9	994	15.4	1.64
	88342	07-19-88	HWMA, Army Drain	Bird	C Teal	<.50	73.7	310	<9	1,040	15	.61
	88343	07-19-88	HWMA, Army Drain	Bird	C Teal	.63	68.5	786	<9	929	14.8	1.13
	88360	07-23-88	HWMA, Humboldt Lake	Bird	C Teal	<.50	115	431	11.1	809	16.3	1.16
	88361	07-23-88	HWMA, Humboldt Lake	Bird	C Teal	.91	216	369	<9	802	15.9	.79
22	88366	07-23-88	HWMA, Humboldt Lake	Bird	C Teal	.54	167	1,140	<9	616	10.9	.43
	88336	07-14-88	S-line Reservoir	Bird	C Teal	<.50	109	1,160	<9	795	13.3	9.36
	88307	07-06-88	SWMA, South Lead Lake	Bird	C Teal	<.50	105	446	9	827	13.2	3.45
	88309	07-06-88	SWMA, South Lead Lake	Bird	C Teal	<.50	71.8	2,070	<9	626	15.3	1.59
	88313	07-06-88	SWMA, South Lead Lake	Bird	C Teal	<.50	40.8	2,510	<9	977	15.6	1.35
	88314	07-06-88	SWMA, South Lead Lake	Bird	C Teal	.59	77.8	2,560	<9	911	14.4	1.5
88	88316	07-06-88	SWMA, South Lead Lake	Bird	C Teal	<2	62.8	584	<4	870	15	2.9
	87890	10-17-87	SWMA	Bird	Canback	<.10	8.28	1,420	<.40	622	10.3	.10
	87892	10-25-87	SWMA	Bird	Canback	<.10	12	2,640	<.50	656	8.6	.11
	87894	10-25-87	SWMA	Bird	Canback	.10	121	1,900	<.40	832	18.3	.07
88	87896	10-25-87	SWMA	Bird	Canback	.30	84	1,620	<.70	677	12.9	.05
	87898	10-25-87	SWMA	Bird	Canback	.41	27.6	1,800	<.40	723	13	.06
	87900	10-25-87	SWMA	Bird	Canback	.30	876	2,740	<.50	780	17.9	.35
	87891	10-17-87	SWMA	Bird	Canback, muscle	<.10	12.5	200	<.40	1,100	1.2	.03
	87893	10-25-87	SWMA	Bird	Canback, muscle	.20	11.1	287	<.40	869	1.7	.04
	87895	10-25-87	SWMA	Bird	Canback, muscle	.20	14.4	187	<.40	1,020	1.2	.28
88	87897	10-25-87	SWMA	Bird	Canback, muscle	.20	26.5	263	<.40	990	1.5	.03
	87899	10-25-87	SWMA	Bird	Canback, muscle	.35	13.9	173	<.40	1,010	1.5	.02
	87901	10-25-87	SWMA	Bird	Canback, muscle	.20	20.2	163	<.40	1,050	1.2	.05

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USEWS		Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
67	88323	07-07-88	Carson Lake, Sprig Pond	Bird	Coot	0.73	78.8	358	<9	954	24	4.09		
67	88324	07-07-88	Carson Lake, Sprig Pond	Bird	Coot	.69	159	3,500	<9	690	14.6	8.84		
67	88356	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	.57	113	1,160	<9	861	15.8	4.78		
67	88357	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	.56	217	1,570	<9	783	13.2	4.92		
67	88384	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	<.50	117	1,160	<9	724	10.3	1.98		
67	88386	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	<.50	42	465	<9	714	9.2	3.97		
67	88387	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	<.50	45.3	487	<9	1,040	9.7	5.14		
67	88390	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	<.50	75.2	2,650	<9	897	8.8	8.3		
67	88393	07-24-88	Carson Lake, Sprig Pond	Bird	Coot	.50	35.8	1,410	<9	836	9.2	5.46		
67	88394	07-24-88	Carson Lake, Sprig Pond	Bird	Coot	<.50	29.9	1,020	<9	841	11.1	5.54		
71	88373	07-24-88	Fernley WMA, East Pond	Bird	Coot	<.50	150	6,210	<9	738	8.6	.31		
71	88374	07-24-88	Fernley WMA, East Pond	Bird	Coot	<.50	62	4,780	<9	714	8.4	.53		
71	88375	07-24-88	Fernley WMA, East Pond	Bird	Coot	<.50	103	6,660	<9	706	9.8	.36		
71	88376	07-24-88	Fernley WMA, East Pond	Bird	Coot	<.50	64.9	1,360	<9	697	10.9	.40		
71	88377	07-24-88	Fernley WMA, East Pond	Bird	Coot	1.47	50.8	2,390	<9	625	9.5	.26		
71	88378	07-24-88	Fernley WMA, East Pond	Bird	Coot	1.03	64	8,050	<9	696	10.3	.37		
71	88390	07-24-88	Fernley WMA, East Pond	Bird	Coot	1.25	56.3	6,560	<9	724	13.2	.36		
	88425	08-09-88	HWMA, Humboldt Lake	Bird	Coot	<2	13	3,460	<4	585	13	1.5		
	88414	08-09-88	HWMA, Humboldt Lake	Bird	Coot	<2	25.8	5,370	<4	595	8.1	.44		
	88415	08-09-88	HWMA, Humboldt Lake	Bird	Coot	<2	27.8	4,340	<4	685	13	.42		
	88416	08-09-88	HWMA, Humboldt Lake	Bird	Coot	<2	26.8	3,470	<4	716	12	3.2		
	88417	08-09-88	HWMA, Humboldt Lake	Bird	Coot	<2	35.1	5,480	<4	678	9.7	.42		
	88418	08-09-88	HWMA, Humboldt Lake	Bird	Coot	<2	33.3	4,370	<4	628	7.7	.27		
	88419	08-09-88	HWMA, Humboldt Lake	Bird	Coot	<2	31.7	2,330	<4	586	9.9	.27		
	88420	08-09-88	HWMA, Humboldt Lake	Bird	Coot	<2	18	4,460	<4	557	9.9	.31		
	88421	08-09-88	HWMA, Humboldt Lake	Bird	Coot	<2	13	5,320	<4	625	11	.42		
	88422	08-09-88	HWMA, Humboldt Lake	Bird	Coot	<2	26.1	4,770	<4	706	15	.41		
	88423	08-09-88	HWMA, Humboldt Lake	Bird	Coot	<2	17	6,490	<4	700	12	.62		
	88424	08-09-88	HWMA, Humboldt Lake	Bird	Coot	<2	15	3,840	<4	564	8.4	.21		
75	88359	07-21-88	Mahala Slough	Bird	Coot	1.03	70.7	1,180	<9	689	10.2	.72		
75	88370	07-23-88	Mahala Slough	Bird	Coot	.56	46.9	775	<9	702	8.6	.16		
75	88400	07-28-88	Mahala Slough	Bird	Coot	<.50	72.8	1,450	<9	712	9.1	.33		
75	88403	08-01-88	Mahala Slough	Bird	Coot	<.50	77	1,550	<9	767	8.1	1.19		
75	88426	08-03-88	Mahala Slough	Bird	Coot	<2	59.1	1,090	<4	745	9.7	1.04		
75	88427	08-04-88	Mahala Slough	Bird	Coot	<2	97.2	975	<4	769	9.5	1.07		
22	88344	07-14-88	S-line Reservoir	Bird	Coot	.82	64.5	4,590	<9	945	28	.84		
22	88345	07-14-88	S-line Reservoir	Bird	Coot	<.50	93.9	771	<9	676	9	2.82		
22	88346	07-14-88	S-line Reservoir	Bird	Coot	<.50	102	758	<9	681	12.5	2.59		
22	88347	07-14-88	S-line Reservoir	Bird	Coot	<.50	106	1,770	<9	678	8.4	4.25		
22	88348	07-14-88	S-line Reservoir	Bird	Coot	<.50	106	2,380	<9	660	31.2	3.75		

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89---Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
22	88358	07-21-88	S-line Reservoir	Bird	Coot	<0.50	96.3	1,070	<9	649	10.3	2.76
22	88402	08-01-88	S-line Reservoir	Bird	Coot	<.50	177	2,020	<9	610	11.8	2.97
88	88349	07-20-88	SWMA, South Lead Lake	Bird	Coot	<.50	116	2,140	<9	687	8.2	4.79
88	88350	07-20-88	SWMA, South Lead Lake	Bird	Coot	<.50	105	839	<9	720	6.9	5.68
88	88351	07-20-88	SWMA, South Lead Lake	Bird	Coot	<.50	99.7	3,910	<9	753	8.5	3.87
88	88301	07-06-88	SWMA, South Lead Lake	Bird	Coot	<.50	36.3	1,980	<9	719	12.9	2.03
88	88302	07-06-88	SWMA, South Lead Lake	Bird	Coot	<.50	41.9	1,180	<9	682	9.8	2.61
88	88303	07-06-88	SWMA, South Lead Lake	Bird	Coot	<.50	89.1	1,430	<9	805	12.7	2.95
88	88304	07-06-88	SWMA, South Lead Lake	Bird	Coot	<.50	133	1,060	<9	755	9.6	5.5
88	88308	07-06-88	SWMA, South Lead Lake	Bird	Coot	<.50	90.7	369	<9	639	10.2	4.24
88	88311	07-06-88	SWMA, South Lead Lake	Bird	Coot	1.16	80.8	3,120	<9	789	9.3	4.19
88	88312	07-06-88	SWMA, South Lead Lake	Bird	Coot	.61	62.6	1,170	<9	870	7.1	4.08
88	88412	08-09-88	HWMA, Humboldt Lake	Bird	Gadwall	<2	117	735	<4	822	11	.84
67	89137	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	--	--	--	--	.27
67	89121	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	--	--	--	--	2.4
67	89123	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	--	--	--	--	1.2
67	89125	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	--	--	--	--	.32
67	89127	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	--	--	--	--	1.1
67	89129	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	--	--	--	--	13
67	89131	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	--	--	--	--	3.5
67	89133	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	--	--	--	--	.59
67	89135	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	--	--	--	--	.18
67	89139	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	--	--	--	--	4.4
67	87839	10-17-87	Carson Lake	Bird	Mallard	<.10	135	2,490	<.50	669	15.3	17
67	87842	10-17-87	Carson Lake	Bird	Mallard	<.10	349	1,350	<.50	603	9.9	2.9
67	87844	10-17-87	Carson Lake	Bird	Mallard	<.10	116	2,120	<.50	688	12.3	6.91
67	87846	10-17-87	Carson Lake	Bird	Mallard	<.10	181	3,300	<.50	647	10.7	4.4
67	87848	10-17-87	Carson Lake	Bird	Mallard	<.10	123	1,410	.80	675	12.8	2.9
67	87850	10-17-87	Carson Lake	Bird	Mallard	<.10	73	1,290	<.50	467	10.1	.42
67	87852	10-17-87	Carson Lake	Bird	Mallard	<.10	58.6	1,300	.50	437	7.3	4.4
67	87854	10-17-87	Carson Lake	Bird	Mallard	<.10	179	2,870	<.50	740	14.4	5.2
67	87856	10-17-87	Carson Lake	Bird	Mallard	.20	78.7	1,630	<.50	619	9.8	10
67	87858	10-17-87	Carson Lake	Bird	Mallard	<.10	325	2,260	.90	665	18.4	3.8
67	88320	07-07-88	Carson Lake, Sprig Pond	Bird	Mallard	<.50	66.4	2,480	<9	723	15.2	5.08
67	88396	07-24-88	Carson Lake, Sprig Pond	Bird	Mallard	<.50	9.32	1,590	<9	422	8.1	1.39
67	88397	07-24-88	Carson Lake, Sprig Pond	Bird	Mallard	<.50	145	2,340	<9	685	10.3	6.01
67	88408	08-10-88	Carson Lake, Sprig Pond	Bird	Mallard	<2	385	1,180	<9	758	19	1.3
67	88332	07-16-88	Carson Valley	Bird	Mallard	<.50	119	839	9.41	861	17.4	1.38
67	88333	07-16-88	Carson Valley	Bird	Mallard	<.50	141	799	<9	906	16.2	1.4
67	88334	07-16-88	Carson Valley	Bird	Mallard	<.50	170	1,560	<9	737	11.3	1.34

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TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USEWS

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
	88335	07-16-88	Carson Valley	Bird	Mallard	0.71	119	532	<9	721	12	2.37
	88363	07-23-88	HWMA, Humboldt Lake	Bird	Mallard	.62	93	542	<9	723	10	.34
	88364	07-23-88	HWMA, Humboldt Lake	Bird	Mallard	.60	175	513	<9	750	9.4	.49
	88365	07-23-88	HWMA, Humboldt Lake	Bird	Mallard	.63	189	594	<9	651	10.6	.35
	88367	07-23-88	HWMA, Humboldt Lake	Bird	Mallard	<.50	117	627	<9	634	9.6	.27
	88409	08-09-88	HWMA, Humboldt Lake	Bird	Mallard	<2	16	1,090	<4	925	10	.70
	88410	08-09-88	HWMA, Humboldt Lake	Bird	Mallard	<2	46.4	685	<4	744	11	.71
	88413	08-09-88	HWMA, Humboldt Lake	Bird	Mallard	<2	12	1,860	<4	808	9.5	.59
	87771	10-18-87	HWMA	Bird	Mallard	.73	147	1,570	<.50	770	16	3.4
	87774	10-18-87	SWMA	Bird	Mallard	.79	194	2,160	3.2	674	13.8	4.9
	87776	10-18-87	SWMA	Bird	Mallard	<.10	121	2,020	<.50	659	12.9	11.8
	87778	10-18-87	SWMA	Bird	Mallard	<.10	188	3,330	3.1	716	14.4	14.9
	87780	10-18-87	SWMA	Bird	Mallard	.81	75	3,310	<.50	723	15.6	1.5
	87782	10-17-87	SWMA	Bird	Mallard	.71	49.6	2,650	<.50	670	13.1	2.5
	87784	10-18-87	SWMA	Bird	Mallard	<.10	56.6	4,480	.80	550	8.8	.56
	87786	10-18-87	SWMA	Bird	Mallard	.30	81.7	4,020	13	816	21.3	5.28
	87788	10-18-87	SWMA	Bird	Mallard	.40	84.2	3,350	<.50	608	11.6	.35
	87790	10-18-87	SWMA	Bird	Mallard	.30	11.3	7,740	<.50	782	19	.50
88	88310	07-06-88	SWMA, South Lead Lake	Bird	Mallard	<.50	137	2,930	<9	850	14.3	2.98
88	88315	07-06-88	SWMA, South Lead Lake	Bird	Mallard	.69	151	9,630	<9	834	18.8	2.66
	87838	10-17-87	Carson Lake	Bird	Mallard, Skin	.10	2	46	<.40	168	.10	.80
	87841	10-17-87	Carson Lake	Bird	Mallard, Skin	.58	.90	81	.70	153	2	.18
	87770	10-18-87	SWMA	Bird	Mallard, Skin	.39	.60	23	<.40	134	.10	.23
	87773	10-18-87	SWMA	Bird	Mallard, Skin	.39	.63	14	<.40	109	.20	.17
	87840	10-17-87	Carson Lake	Bird	Mallard, muscle	<.10	17.7	211	<.40	1,040	1.6	4.1
	87843	10-17-87	Carson Lake	Bird	Mallard, muscle	<.10	20.6	217	<.40	1,070	2	.76
	87845	10-17-87	Carson Lake	Bird	Mallard, muscle	<.10	26.5	215	<.40	1,130	1.8	1.8
	87847	10-17-87	Carson Lake	Bird	Mallard, muscle	<.10	17.6	237	<.40	1,090	2.1	.95
	87849	10-17-87	Carson Lake	Bird	Mallard, muscle	<.10	22.2	176	<.40	1,160	2	.96
	87851	10-17-87	Carson Lake	Bird	Mallard, muscle	<.10	13	90	<.40	1,090	.80	.13
	87853	10-17-87	Carson Lake	Bird	Mallard, muscle	.10	11.3	110	<.40	1,120	.90	3
	87855	10-17-87	Carson Lake	Bird	Mallard, muscle	.10	9.23	111	<.50	1,170	.90	1.7
	87857	10-17-87	Carson Lake	Bird	Mallard, muscle	<.10	10.2	96	<.50	1,110	.80	4.2
	87859	10-17-87	Carson Lake	Bird	Mallard, muscle	.89	17.8	89	<.50	1,120	1	1.02
	87772	10-18-87	SWMA	Bird	Mallard, muscle	.78	20.3	198	<.40	1,180	2.7	.92
	87775	10-18-87	SWMA	Bird	Mallard, muscle	.58	21.2	180	<.40	1,140	2	.99
	87777	10-18-87	SWMA	Bird	Mallard, muscle	<.10	15	181	<.40	1,110	1.8	2.3
	87779	10-18-87	SWMA	Bird	Mallard, muscle	.52	15	181	<.40	1,100	1.6	4.4
	87781	10-18-87	SWMA	Bird	Mallard, muscle	.55	14.1	178	<.40	1,100	1.7	.35
	87783	10-17-87	SWMA	Bird	Mallard, muscle	<.10	16.6	197	<.40	1,160	1.9	.67

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
	87785	10-18-87	SWMA	Bird	Mallard, muscle	0.10	19	214	<0.40	1,080	1.8	0.21
	87787	10-18-87	SWMA	Bird	Mallard, muscle	.20	25.6	181	<.40	1,200	1.7	1.5
	87789	10-18-87	SWMA	Bird	Mallard, muscle	.20	16.6	193	<.50	1,020	1.3	.05
	87791	10-18-87	SWMA	Bird	Mallard, muscle	.30	14.7	200	<.50	1,000	1.4	.06
88	88305	07-06-88	SWMA, South Lead Lake	Bird	Pintail	<.50	74	2,450	<.9	804	12.9	1.81
67	88321	07-07-88	Carson Lake, Sprig Pond	Bird	Redhead	<.50	124	561	<.9	701	15.8	1.72
67	88322	07-07-88	Carson Lake, Sprig Pond	Bird	Redhead	<.50	234	1,230	<.9	727	19.6	1.65
67	88388	07-25-88	Carson Lake, Sprig Pond	Bird	Redhead	<.50	151	4,810	26.9	828	28.9	.89
	88389	07-25-88	Carson Lake, Sprig Pond	Bird	Redhead	<.50	347	995	<.9	870	12.6	5.13
	88362	07-23-88	HWMA, Humboldt Lake	Bird	Redhead	.55	724	1,390	<.9	798	14	.83
	88368	07-23-88	HWMA, Humboldt Lake	Bird	Redhead	.85	833	1,270	<.9	714	14.9	.84
	88411	08-09-88	HWMA, Humboldt Lake	Bird	Redhead	<.2	65.2	522	<.4	655	12	.58
75	88353	07-21-88	Mahala Slough	Bird	Redhead	.91	323	1,820	<.9	903	10.1	.72
75	88371	07-23-88	Mahala Slough	Bird	Redhead	.96	149	1,020	<.9	811	16.3	.20
75	88381	07-25-88	Mahala Slough	Bird	Redhead	.72	123	1,640	<.9	765	13.5	.13
B	88325	07-13-88	Massie Gun Club	Bird	Redhead	.68	203	1,090	<.9	743	11.7	.40
B	88326	07-13-88	Massie Gun Club	Bird	Redhead	<.50	225	617	<.9	683	11.4	.41
B	88327	07-13-88	Massie Gun Club	Bird	Redhead	<.50	131	2,410	<.9	712	13.8	.19
B	88328	07-13-88	Massie Gun Club	Bird	Redhead	<.50	138	1,520	<.9	661	11.5	.47
B	88354	07-21-88	Massie Gun Club	Bird	Redhead	.98	32.3	1,630	<.9	723	10.1	.17
B	88401	07-29-88	Massie Gun Club	Bird	Redhead	<.50	157	5,010	<.9	781	8.5	.04
B	88355	07-21-88	Massie Slough	Bird	Redhead	.80	112	455	<.9	824	22.9	.36
88	88306	07-06-88	SWMA, South Lead Lake	Bird	Redhead	<.50	305	802	<.9	776	17.5	2.37
88	88331	07-13-88	SWMA, South Lead Lake	Bird	Redhead	<.50	437	1,930	9.24	780	19.6	6.38
	87861	10-17-87	Carson Lake	Bird	Redhead	<.10	216	1,490	<.50	487	6.8	.64
	87864	10-17-87	Carson Lake	Bird	Redhead	.10	607	1,170	<.50	689	13.7	.72
	87866	10-17-87	Carson Lake	Bird	Redhead	<.10	269	3,130	<.50	915	12.2	.4
	87793	10-17-87	SWMA	Bird	Redhead	.37	338	2,590	<.50	766	13.7	.32
	87796	10-17-87	SWMA	Bird	Redhead	.20	1,180	2,640	<.50	644	11.2	.33
	87798	10-18-87	SWMA	Bird	Redhead	.30	1,480	2,530	<.50	739	6.6	2.7
	87800	10-18-87	SWMA	Bird	Redhead	.20	96.1	941	.70	641	9.9	.83
	87802	10-17-87	SWMA	Bird	Redhead	.30	32.8	1,390	<.50	725	9.5	1.9
	87804	10-17-87	SWMA	Bird	Redhead	.20	44.9	2,190	.70	573	9	.13
	87806	10-17-87	SWMA	Bird	Redhead	.42	456	2,710	1	559	8.5	1.4
	87808	10-17-87	SWMA	Bird	Redhead	.30	128	1,370	<.50	587	9.2	.3
	87810	10-17-87	SWMA	Bird	Redhead	.30	336	3,730	<.50	692	11.9	1.1
	87812	10-17-87	SWMA	Bird	Redhead	.50	239	3,910	.80	613	7.8	.98
	87862	10-17-87	Carson Lake	Bird	Redhead, muscle	.10	23.2	305	<.50	1,080	1.6	.25
	87865	10-17-87	Carson Lake	Bird	Redhead, muscle	<.10	23.6	235	<.50	1,120	1.8	1.7
	87867	10-17-86	Carson Lake	Bird	Redhead, muscle	<.10	40.2	369	<.50	1,110	1.6	.97

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Site number (fig. 7)

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS

Site number (fig. 7)	Sample number	Date	Location	Cate-gory	Species ¹	Chro-mium	Copper	Iron	Lead	Magne-sium	Manganese	Mercury
	87794	10-17-87	SWMA	Bird	Redhead, muscle	0.30	24.2	268	<0.40	1,060	1.8	0.06
	87797	10-17-87	SWMA	Bird	Redhead, muscle	.30	20.3	262	<.40	1,100	1.8	.08
	87799	10-18-87	SWMA	Bird	Redhead, muscle	.20	35.3	356	<.40	1,140	1.4	1.3
	87801	10-18-87	SWMA	Bird	Redhead, muscle	.37	21.8	314	<.50	1,140	1.6	.27
	87803	10-17-87	SWMA	Bird	Redhead, muscle	.30	32.8	258	<.40	1,140	1.5	.73
	87805	10-17-87	SWMA	Bird	Redhead, muscle	.30	20.9	298	1.7	1,030	1.6	.05
	87807	10-17-87	SWMA	Bird	Redhead, muscle	.30	21.4	284	<.50	1,050	1.7	.84
	87809	10-17-87	SWMA	Bird	Redhead, muscle	.20	21	288	<.50	1,030	1.7	1.04
	87811	10-17-87	SWMA	Bird	Redhead, muscle	.55	27.9	314	<.40	1,150	1.8	.57
	87813	10-17-87	SWMA	Bird	Redhead, muscle	.30	27.5	254	<.40	1,110	2.2	.24
	87860	10-17-87	Carson Lake	Bird	Redhead, skin	.20	1.1	60	<.50	188	1.4	.09
	87863	10-17-87	Carson Lake	Bird	Redhead, skin	.30	.59	28	<.50	78	.20	.30
	87792	10-17-87	SWMA	Bird	Redhead, skin	.60	2.42	65	<.40	274	.40	.03
	87795	10-17-87	SWMA	Bird	Redhead, skin	.35	1.3	78	<.40	219	1.1	.03
67	88317	07-07-88	Carson Lake, Sprig Pond	Bird	Ruddy	<.50	51.4	660	<.9	849	24.1	1.69
67	88318	07-07-88	Carson Lake, Sprig Pond	Bird	Ruddy	<.50	83.2	609	<.9	824	26.4	2.36
67	88319	07-07-88	Carson Lake, Sprig Pond	Bird	Ruddy	<.50	84.3	617	<.9	841	26.1	1.82
67	88398	07-24-88	Carson Lake, Sprig Pond	Bird	Ruddy	<.50	78.5	671	<.9	787	20.6	<.02
75	88329	07-13-88	Mahala Slough	Bird	Ruddy	.54	87.6	441	<.9	831	20.9	.31
75	88330	07-13-88	Mahala Slough	Bird	Ruddy	.54	13	389	<.9	662	14.8	.12
75	88352	07-21-88	Mahala Slough	Bird	Ruddy	<.50	141	667	<.9	753	22.4	.09
75	88369	07-23-88	Mahala Slough	Bird	Ruddy	.72	25.7	854	<.9	722	15.7	.18
75	88382	07-25-88	Mahala Slough	Bird	Ruddy	.56	79.7	647	<.9	788	16.8	.08
75	88399	07-28-88	Mahala Slough	Bird	Ruddy	.53	171	879	<.9	661	22.3	.45
88	88300	06-22-88	SWMA, South Lead Lake	Bird	Ruddy	<.50	96.8	1,230	<.9	823	23.9	2.09
	87869	10-17-87	Carson Lake	Bird	Shoveler	<.10	60	3,020	<.50	775	15.9	36
	87872	10-17-87	Carson Lake	Bird	Shoveler	<.10	124	936	<.40	604	11.2	19
	87874	10-17-87	Carson Lake	Bird	Shoveler	<.10	52.3	2,500	<.50	813	13.6	140
	87876	10-17-87	Carson Lake	Bird	Shoveler	<.10	31.4	1,180	<.40	839	13.5	66.2
	87878	10-17-87	Carson Lake	Bird	Shoveler	<.10	39.1	495	<.40	625	14.5	5.09
	87880	10-17-87	Carson Lake	Bird	Shoveler	<.10	159	2,630	<.50	746	19	83.6
	87882	10-17-87	Carson Lake	Bird	Shoveler	<.10	47.9	1,370	<.40	779	16.4	94.4
	87884	10-17-87	Carson Lake	Bird	Shoveler	<.10	41.9	2,850	<.50	799	15.4	74
	87886	10-17-87	Carson Lake	Bird	Shoveler	.10	81.2	2,040	<.50	730	17.9	67.7
	87888	10-17-87	Carson Lake	Bird	Shoveler	<.10	50	2,010	<.40	777	21.3	54.5
	87815	10-17-87	SWMA	Bird	Shoveler	.35	29.3	657	<.40	654	7.6	1.5
	87818	10-17-87	SWMA	Bird	Shoveler	.20	54.8	3,430	<.50	716	18.4	5.19
	87822	10-17-87	SWMA	Bird	Shoveler	.20	27.8	1,210	<.50	690	7.7	1.6
	87824	10-17-87	SWMA	Bird	Shoveler	.20	43.9	2,770	<.50	780	16	52.7
	87826	10-17-87	SWMA	Bird	Shoveler	.20	49.8	1,640	<.40	751	14.3	10.5

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS

Site number (fig. 7)	Sample number	Date	Location	Cate- gory	Species ¹	Chro- mium	Copper	Iron	Lead	Magne- sium	Manganese	Mercury
	87828	10-17-87	SWMA	Bird	Shoveler	0.20	41.9	4,480	<0.50	778	13.5	7.48
	87830	10-17-87	SWMA	Bird	Shoveler	.30	17.4	3,180	<.50	582	5.1	1.9
	87832	10-17-87	SWMA	Bird	Shoveler	.20	71.9	2,990	<.50	803	18.90	14
	87834	10-17-87	SWMA	Bird	Shoveler	.20	28.6	4,730	<.50	760	18.30	3.2
	87870	10-17-87	Carson Lake	Bird	Shoveler, muscle	<.10	33.5	210	<.40	1,060	1.5	8.27
	87873	10-17-87	Carson Lake	Bird	Shoveler, muscle	.10	26.2	225	<.40	1,100	2.1	4.9
	87875	10-17-87	Carson Lake	Bird	Shoveler, muscle	<.10	40.3	229	<.40	1,090	2	55.70
	87877	10-17-87	Carson Lake	Bird	Shoveler, muscle	.20	36.2	243	<.40	1,170	2.1	25.50
	87879	10-17-87	Carson Lake	Bird	Shoveler, muscle	<.10	31.8	227	<.40	1,110	1.7	2.1
	87881	10-17-87	Carson Lake	Bird	Shoveler, muscle	.20	29.9	275	<.40	1,110	2	21
	87883	10-17-87	Carson Lake	Bird	Shoveler, muscle	.20	44.1	397	<.40	1,230	5.7	30.4
	87885	10-17-87	Carson Lake	Bird	Shoveler, muscle	<.10	27.6	264	<.40	1,150	2	22
	87887	10-17-87	Carson Lake	Bird	Shoveler, muscle	.20	24	251	<.40	1,140	2	25
	87889	10-17-87	Carson Lake	Bird	Shoveler, muscle	.36	36.1	240	<.40	1,130	2.3	18
67	89071	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	1.1
67	89073	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	1.8
67	89075	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	3.1
67	89077	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	12
67	89079	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	6.4
67	89089	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	2.9
67	89091	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	1.7
67	89093	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	4
67	89095	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	2.5
67	89097	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	4.9
67	89101	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	1.2
67	89103	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	16
67	89105	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	6
67	89107	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	.86
67	89109	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	36
67	89111	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	1.1
67	89113	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	.97
67	89115	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	6.1
67	89117	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	22
67	89119	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	--	--	--	--	12
	87816	10-17-87	SWMA	Bird	Shoveler, muscle	.20	31.4	216	<.40	1,100	2.1	.58
	87819	10-17-87	SWMA	Bird	Shoveler, muscle	.30	21.7	306	<.40	1,060	1.9	1.6
	87821	10-17-87	SWMA	Bird	Shoveler, muscle	.10	31.9	212	<.40	1,060	2	1.3
	87823	10-17-87	SWMA	Bird	Shoveler, muscle	.20	31.8	229	<.40	1,070	1.9	.74
	87825	10-17-87	SWMA	Bird	Shoveler, muscle	.20	36.5	295	<.40	1,090	1.9	19
	87827	10-17-87	SWMA	Bird	Shoveler, muscle	.20	28	228	<.40	1,100	2.2	2.7

TABLE 20.---Moisture content and trace-element concentrations in biological samples from the study area, 1987-89---Continued

USFWS

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
	87829	10-17-87	SWMA	Bird	Shoveler, muscle	0.20	34.9	224	<0.40	1,120	1.7	2.4
	87831	10-17-87	SWMA	Bird	Shoveler, muscle	.20	42.2	237	<.50	1,130	2	.89
	87833	10-17-87	SWMA	Bird	Shoveler, muscle	.20	32.2	243	<.40	1,110	2.2	3.4
	87835	10-17-87	SWMA	Bird	Shoveler, muscle	<.10	43	241	<.40	1,100	1.9	.74
	87836	10-16-86	SWMA	Bird	Shoveler, muscle	<.10	26.2	203	<.40	1,020	1.8	3.2
	87837	10-16-86	SWMA	Bird	Shoveler, skin	.20	30.3	198	<.40	1,050	2.2	.45
	87868	10-17-87	Carson Lake	Bird	Shoveler, skin	.10	.42	28	<.40	61	.60	.64
	87871	10-17-87	Carson Lake	Bird	Shoveler, skin	<.10	.33	15	<.40	45	.30	.39
	87814	10-17-87	SWMA	Bird	Shoveler, skin	.30	1	33	<.40	113	.50	.08
	87817	10-17-87	SWMA	Bird	Shoveler, skin	<.10	.30	17	<.50	57	.30	.14
71	88454	06-11-88	Fernley WMA, East Pond	Egg	C Teal	<.50	4.06	150	<9	452	3	.23
71	88455	06-03-88	Fernley WMA, East Pond	Egg	C Teal	<.50	2.64	149	<9	320	1.2	.72
	88470	06-28-88	HWMA, Toulon Lake	Egg	C Teal	<.50	4	119	<9	485	2	.39
	88471	06-01-88	HWMA, Toulon Lake	Egg	C Teal	<.50	4.87	119	<9	402	1.4	.52
75	88498	06-02-88	Mahala Slough	Egg	C Teal	<.50	4.65	125	<9	396	2.1	.43
75	88499	06-12-88	Mahala Slough	Egg	C Teal	<.50	3.42	130	<9	364	3.4	.45
75	88500	06-02-88	Mahala Slough	Egg	C Teal	<.50	4.35	132	<9	524	1.5	.84
75	88501	06-02-88	Mahala Slough	Egg	C Teal	<.50	3.77	109	<9	447	1	.46
75	88502	06-02-88	Mahala Slough	Egg	C Teal	<.50	3.75	107	<9	423	2.9	1.11
75	88503	06-04-88	Mahala Slough	Egg	C Teal	<.50	<2.2	117	<9	413	2	.24
75	88511	06-19-88	Mahala Slough	Egg	C Teal	1.05	4.07	132	<9	288	2.2	.18
75	88512	06-02-88	Mahala Slough	Egg	C Teal	<.50	3.49	123	<9	414	1.2	.80
75	88517	06-02-88	Mahala Slough	Egg	C Teal	<.50	4.09	108	<9	366	<.40	.61
B	88478	05-24-88	Massie Slough	Egg	C Teal	<.50	4.53	128	<9	464	3.1	.09
83	88464	06-09-88	SWMA, Lead Lake	Egg	C Teal	<.50	3.84	139	<9	420	2.5	1.61
83	88465	06-09-88	SWMA, Lead Lake	Egg	C Teal	<.50	5.06	105	<9	454	1.9	5.81
83	88522	06-09-88	SWMA, Lead Lake	Egg	C Teal	<.50	4.67	106	<9	394	1.3	6.16
71	88525	05-11-88	Fernley WMA, East Pond	Egg	Coot	.68	4.89	110	<9	582	1.6	.12
71	88526	05-19-88	Fernley WMA, East Pond	Egg	Coot	1.11	8.93	113	<9	533	1.7	.05
71	88527	06-03-88	Fernley WMA, East Pond	Egg	Coot	<.50	6.38	124	<9	529	.60	.16
71	88528	05-19-88	Fernley WMA, East Pond	Egg	Coot	<.50	5.53	109	<9	580	1.4	.14
71	88529	05-19-88	Fernley WMA, East Pond	Egg	Coot	<.50	10.4	78	<9	667	.90	.18
71	88530	05-19-88	Fernley WMA, East Pond	Egg	Coot	<.50	5.07	105	<9	467	.50	.11
71	88531	05-19-88	Fernley WMA, East Pond	Egg	Coot	<.50	8.33	133	<9	567	1.3	.09
71	88532	06-16-88	Fernley WMA, East Pond	Egg	Coot	<.50	7.48	124	<9	934	1.7	.18
71	88533	06-16-88	Fernley WMA, East Pond	Egg	Coot	<.50	4.22	89	<9	709	.60	.16
71	88534	06-03-88	Fernley WMA, East Pond	Egg	Coot	.61	6.45	98	<9	426	1.2	.10
71	88535	06-03-88	Fernley WMA, East Pond	Egg	Coot	<.50	8.68	129	<9	566	1	.15
71	88536	06-16-88	Fernley WMA, East Pond	Egg	Coot	.80	5.82	112	<9	729	2.3	.42
71	88537	05-19-88	Fernley WMA, East Pond	Egg	Coot	.67	6.69	81	<9	504	3.4	.13

TABLE 20.---Moisture content and trace-element concentrations in biological samples from the study area, 1987-89---Continued

USFWS

Site number (fig. 7)	Sample number	Date	Location	Cate- gory	Species ¹	Chro- mium	Copper	Iron	Lead	Magne- sium	Manganese	Mercury
71	88538	05-19-88	Fernley WMA, East Pond	Egg	Coot	<0.50	7.72	134	<9	521	1.7	0.15
71	88539	06-03-88	Fernley WMA, East Pond	Egg	Coot	<0.50	7.43	131	<9	629	2.8	.11
71	88540	05-19-88	Fernley WMA, East Pond	Egg	Coot	<0.50	4.57	105	<9	788	2.6	.10
71	88541	05-19-88	Fernley WMA, East Pond	Egg	Coot	<0.50	8.34	100	<9	569	2.5	.10
71	88542	05-19-88	Fernley WMA, East Pond	Egg	Coot	<0.50	9.57	125	<9	674	1	.08
71	88543	05-19-88	Fernley WMA, East Pond	Egg	Coot	<0.50	6.42	100	<9	499	1.9	.15
71	88544	05-19-88	Fernley WMA, East Pond	Egg	Coot	.53	4.88	109	<9	443	1.1	.10
71	88545	06-03-88	Fernley WMA, East Pond	Egg	Coot	<0.50	4.95	114	<9	399	1.5	.09
71	88546	06-16-88	Fernley WMA, East Pond	Egg	Coot	<0.50	4.5	134	<9	533	1.2	.20
71	88547	06-16-88	Fernley WMA, East Pond	Egg	Coot	<0.50	5.35	88	<9	613	1.1	.14
71	88548	06-16-88	Fernley WMA, East Pond	Egg	Coot	<0.50	6.04	107	<9	504	4.9	.18
71	88549	06-16-88	Fernley WMA, East Pond	Egg	Coot	.75	6.5	156	9.32	567	1.7	.15
71	88556	05-17-88	HWMA, Toulon Lake	Egg	Coot	<0.50	6.42	109	<9	481	1.1	.13
71	88557	05-17-88	HWMA, Toulon Lake	Egg	Coot	<0.50	5.46	84	<9	604	1.3	.14
71	88558	05-17-88	HWMA, Toulon Lake	Egg	Coot	<0.50	3.56	87	<9	681	1.4	.10
71	88559	05-17-88	HWMA, Toulon Lake	Egg	Coot	<0.50	4.53	116	<9	519	1.4	.23
71	88560	05-17-88	HWMA, Toulon Lake	Egg	Coot	.86	5.2	118	<9	607	1.7	.15
71	88561	06-08-88	HWMA, Toulon Lake	Egg	Coot	<0.50	4.63	114	<9	518	.70	.11
71	88562	06-08-88	HWMA, Toulon Lake	Egg	Coot	<0.50	4	153	<9	483	1.1	.18
71	88563	06-08-88	HWMA, Toulon Lake	Egg	Coot	.54	5.64	121	<9	569	1.5	.13
71	88564	05-25-88	HWMA, Toulon Lake	Egg	Coot	<0.50	4.3	96	<9	598	1.1	.16
71	88565	05-17-88	HWMA, Toulon Lake	Egg	Coot	<0.50	3.75	108	<9	603	1.1	.08
71	88566	05-17-88	HWMA, Toulon Lake	Egg	Coot	.89	5.82	80	9.97	659	1.6	.10
71	88567	05-17-88	HWMA, Toulon Lake	Egg	Coot	<0.50	4.91	98	<9	728	.80	.14
71	88568	05-25-88	HWMA, Toulon Lake	Egg	Coot	<0.50	3.94	127	<9	703	1.2	.17
71	88569	05-25-88	HWMA, Toulon Lake	Egg	Coot	<0.50	4.16	102	<9	598	1	.14
71	88570	05-25-88	HWMA, Toulon Lake	Egg	Coot	<0.50	6.6	103	<9	684	.60	.09
71	88571	05-17-88	HWMA, Toulon Lake	Egg	Coot	5.73	3.45	130	13.2	627	1.6	.20
71	88572	05-17-88	HWMA, Toulon Lake	Egg	Coot	<0.50	3.45	90	<9	479	<.40	.20
71	88573	05-17-88	HWMA, Toulon Lake	Egg	Coot	.91	3.98	77	<9	502	2.2	.15
71	88574	05-17-88	HWMA, Toulon Lake	Egg	Coot	.58	3.39	74	<9	480	<.40	.12
71	88575	05-17-88	HWMA, Toulon Lake	Egg	Coot	<0.50	3.97	80	<9	495	.50	.11
71	88576	05-17-88	HWMA, Toulon Lake	Egg	Coot	<0.50	3.3	100	<9	424	.70	1.36
71	88577	05-25-88	HWMA, Toulon Lake	Egg	Coot	.62	3.69	89	<9	300	.70	.48
71	88578	05-26-88	HWMA, Toulon Lake	Egg	Coot	.59	4.48	89	<9	496	1.8	.29
71	88579	05-25-88	HWMA, Toulon Lake	Egg	Coot	<.50	5.03	105	<9	455	.80	.10
71	88580	05-25-88	HWMA, Toulon Lake	Egg	Coot	<.50	4.74	112	<9	566	.50	.10
71	88581	05-26-88	HWMA, Toulon Lake	Egg	Coot	<.50	5.15	118	<9	493	1.5	.22
71	88582	06-01-88	HWMA, Toulon Lake	Egg	Coot	<.50	3.21	77	<9	526	1.1	.13
71	88484	06-13-88	Incline Wetlands	Egg	Coot	<.50	3.69	172	<9	485	.90	.13

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
75	88518	06-20-88	Mahala Slough	Egg	Coot	<.50	4.27	101	<9	355	<0.40	0.29
75	88519	06-20-88	Mahala Slough	Egg	Coot	<.50	4.91	106	<9	471	1.2	.77
75	88520	06-02-88	Mahala Slough	Egg	Coot	<.50	3.38	101	<9	633	<.40	.46
75	88521	06-12-88	Mahala Slough	Egg	Coot	<.50	4.09	101	<9	667	1.1	.36
B	88479	06-17-88	Massie Gun Club	Egg	Coot	<.50	3.82	111	<9	624	1.3	.09
B	88480	06-17-88	Massie Gun Club	Egg	Coot	<.50	2.97	100	<9	556	1.4	.06
B	88481	06-10-88	Massie Gun Club	Egg	Coot	<.50	6.59	115	<9	584	1.9	.12
B	88482	05-24-88	Massie Slough	Egg	Coot	<.50	4.8	117	<9	627	1.7	.21
B	88483	05-31-88	Massie Slough	Egg	Coot	<.50	4.76	122	<9	620	2.8	.09
83	88350	06-18-88	SWMA, Lead Lake	Egg	Coot	<.50	4.62	159	<9	748	1.8	2.13
83	88551	06-09-88	SWMA, Lead Lake	Egg	Coot	<.50	7.09	149	<9	643	2.6	1.42
83	88552	06-09-88	SWMA, Lead Lake	Egg	Coot	1.14	6.05	161	<9	795	3	1.49
83	88553	06-09-88	SWMA, Lead Lake	Egg	Coot	.85	6.55	175	<9	735	3.2	2.14
83	88554	06-09-88	SWMA, Lead Lake	Egg	Coot	.80	5.95	167	<9	787	1	.75
83	88555	06-09-88	SWMA, Lead Lake	Egg	Coot	<.50	6.37	140	9.13	400	3.7	.12
75	88466	06-08-88	HWMA, Toulon Lake	Egg	Gadwall	<.50	4.48	139	<9	491	1.2	.22
83	88496	06-02-88	Mahala Slough	Egg	Gadwall	<.50	6.89	126	12.6	312	2.4	.27
83	88462	06-09-88	SWMA, Lead Lake	Egg	Gadwall	<.50	3.99	141	<9	455	1.2	.50
83	88487	05-06-88	Carson Valley	Egg	Mallard	<.50	3.55	113	9.24	443	1.5	.22
83	88488	05-23-88	Carson Valley	Egg	Mallard	<.50	4.86	155	<9	427	3.2	.59
83	88489	05-06-88	Carson Valley	Egg	Mallard	<.50	4.32	127	<9	571	2.1	.19
83	88490	05-06-88	Carson Valley	Egg	Mallard	<.50	3.45	111	<9	398	2.7	.34
83	88491	05-06-88	Carson Valley	Egg	Mallard	<.50	7.15	201	<9	671	7.2	.35
71	88453	06-03-88	Fernley WMA, East Pond	Egg	Mallard	<.50	3.06	128	<9	407	1.6	.20
83	88469	05-25-88	HWMA, Toulon Lake	Egg	Mallard	<.50	5.12	78	<9	299	.60	.51
75	88495	06-02-88	Mahala Slough	Egg	Mallard	<.50	3.98	116	<9	495	5.3	.93
75	88515	06-20-88	Mahala Slough	Egg	Mallard	<.50	<2.2	96	<9	309	6.3	2.07
75	88516	06-20-88	Mahala Slough	Egg	Mallard	<.50	<2.2	129	<9	350	<.40	.31
83	88459	06-09-88	SWMA, Lead Lake	Egg	Mallard	<.50	2.97	130	<9	554	2	1.73
83	88460	06-09-88	SWMA, Lead Lake	Egg	Mallard	<.50	4.91	90	<9	505	2.4	3.67
83	88461	06-09-88	SWMA, Lead Lake	Egg	Pintail	<.50	3.93	152	<9	477	2.4	.42
71	88450	06-03-88	Fernley WMA, East Pond	Egg	Redhead	<.50	6.5	109	<9	424	1.8	<.02
71	88451	05-19-88	Fernley WMA, East Pond	Egg	Redhead	<.50	7.02	135	<9	378	1.5	.05
71	88452	06-11-88	Fernley WMA, East Pond	Egg	Redhead	<.50	3.28	148	<9	466	3.1	.30
83	88467	05-25-88	HWMA, Toulon Lake	Egg	Redhead	<.50	6.76	124	<9	789	1.4	.60
83	88468	05-25-88	HWMA, Toulon Lake	Egg	Redhead	<.50	4.77	157	13.7	395	1.5	.08
83	88472	06-08-88	HWMA, Toulon Lake	Egg	Redhead	<.50	4.41	152	<9	482	.70	.08
83	88473	06-01-88	HWMA, Toulon Lake	Egg	Redhead	.53	5.34	181	<9	392	3.1	1.74
83	88474	06-01-88	HWMA, Toulon Lake	Egg	Redhead	.56	6.49	106	<9	547	1.1	.07
83	88475	06-08-88	HWMA, Toulon Lake	Egg	Redhead	<.50	4.56	132	<9	381	.90	.27

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
75	88492	06-12-88	Mahala Slough	Egg	Redhead	<0.50	5.58	144	<9	440	1.3	0.67
75	88493	06-02-88	Mahala Slough	Egg	Redhead	<.50	9.79	131	<9	363	1.5	.30
75	88497	06-23-88	Mahala Slough	Egg	Redhead	<.50	5.78	143	15.1	395	2.2	.75
75	88508	06-04-88	Mahala Slough	Egg	Redhead	.55	6.23	180	<9	304	2.4	.42
75	88509	06-02-88	Mahala Slough	Egg	Redhead	1.56	4.4	133	<9	267	3.6	.58
75	88513	06-20-88	Mahala Slough	Egg	Redhead	<.50	5.51	142	<9	459	1.7	.09
75	88514	06-20-88	Mahala Slough	Egg	Redhead	<.50	3.4	116	<9	483	2.4	1.16
B	88476	05-24-88	Massie Slough	Egg	Redhead	<.50	6.93	111	<9	457	1.5	.43
83	88458	06-18-88	SWMA, Lead Lake	Egg	Redhead	<.50	4.87	114	<9	595	2.5	1.74
75	88494	06-12-88	Mahala Slough	Egg	Ruddy	<.50	4.75	125	<9	518	1.1	2.72
75	88504	06-19-88	Mahala Slough	Egg	Ruddy	<.50	3.55	111	<9	454	1	.30
75	88505	06-20-88	Mahala Slough	Egg	Ruddy	<.50	3.47	92	<9	400	1.8	.43
75	88506	06-19-88	Mahala Slough	Egg	Ruddy	.62	4.52	129	11.6	308	1.9	.24
75	88507	06-02-88	Mahala Slough	Egg	Ruddy	.10	6.31	173	<9	325	2.2	.16
75	88510	06-29-88	Mahala Slough	Egg	Ruddy	1.07	4.73	172	<9	366	2.9	.11
75	88524	06-19-88	Mahala Slough	Egg	Ruddy	<.50	4.01	142	<9	420	1.4	.41
B	88477	06-15-88	Massie Gun Club	Egg	Ruddy	<.50	4.37	171	<9	415	1.8	.10
83	88456	06-09-88	SWMA, Lead Lake	Egg	Ruddy	<.50	2.72	149	<9	460	2.1	.24
83	88457	06-18-88	SWMA, Lead Lake	Egg	Ruddy	<.50	3.84	145	<9	631	2.3	.53
83	88463	06-21-88	SWMA, Lead Lake	Egg	Shoveler	<.50	4.5	135	<9	455	1.7	8.52
81	88110	02-11-88	SWMA, Hunter Drain	Insect	Corixidae	<1.9	13.8	500	<15	4,300	87.1	.34
71	88151	06-27-88	Fernley WMA, East Pond	Insect	Ephydra	<1.9	16.8	690	<15	1,400	15.7	.78
72	88150	06-27-88	Fernley WMA, N. Pond	Insect	Ephydra	<1.9	14.8	540	<15	1,440	15.3	.52
73	88152	06-27-88	Fernley WMA, Pond #1	Insect	Ephydra	2.01	24.8	2,040	<15	5,850	299	.14
D	88138	06-16-88	SWMA, Goose Lake	Insect	Ephydra	2.52	17.9	2,120	<15	3,980	55.4	.30
81	88132	06-03-88	SWMA, Hunter Drain	Insect	Ephydra	1.91	6.51	1,230	<15	3,440	262	.14
81	88136	06-16-88	SWMA, Hunter Drain	Insect	Ephydra	2.82	27.7	1,930	<15	2,500	69.1	.62
81	88137	06-16-88	SWMA, Hunter Drain	Insect	Ephydra	<1.9	18.1	1,200	<15	3,010	124	.59
81	88182	08-02-88	SWMA, Hunter Drain	Insect	Ephydra	<1.9	28.2	1,410	<15	1,910	50.3	.41
87	88133	06-14-88	SWMA, Pintail Bay	Insect	Ephydra	<1.9	15.1	800	<15	3,010	29.2	1.04
83	88141	06-16-88	SWMA, South Lead Lake	Insect	Ephydra	3.01	22.2	2,130	<15	2,680	85.7	1.19
92	88139	06-16-88	SWMA, TJ Drain	Insect	Ephydra	2.99	15.3	1,560	<15	3,560	295	.72
92	88140	06-16-88	SWMA, TJ Drain	Insect	Ephydra	<1.9	24.8	3,790	<15	3,010	349	1.04
1	88800	08-29-88	Sheckler Reservoir	Plant	Algae	10	23	11,500	8	5,930	1,530	1.3
26	88839	09-12-88	New River Drain	Plant	Algae	15	30	22,200	15	9,320	1,660	4.1
50	88842	09-12-88	Kent Lake Ext. Drain	Plant	Algae	16	22	16,000	6	6,970	1,160	.45
2	88832	09-06-88	Old Reservoir	Plant	Algae	17	32.5	29,400	10	14,800	1,190	.36
27	88840	09-12-88	Upper New River Drain	Plant	Algae	8.5	17	17,000	8	6,040	1,890	3.7
95	88159	07-07-88	Carson R. Blw Lahontan	Plant	Algae	5.78	13.3	7,950	27.9	6,350	<1.9	2.74
52	88835	09-08-88	Paiute Branch 3 Drain	Plant	Algae	5	12	7,630	7	6,680	749	.66

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
4	88801	08-29-88	Upper L Drain	Plant	Algae	8.1	12	8,230	4	3,040	4,410	0.22
29	88803	08-29-88	Mid L Drain	Plant	Algae	16	20	15,500	9	5,880	7,010	.47
30	88804	08-29-88	L3 Drain	Plant	Algae	11	19	13,200	6	5,550	4,580	.35
6	88805	08-29-88	Sheckler Deep Drain	Plant	Algae	10	19	13,100	8	5,540	4,580	.36
68	89061	09-22-89	Fernley Drain	Plant	Algae	<12	<82	5,500	34	4,900	400	<.47
68	89201	11-30-89	Fernley Drain	Plant	Algae	70	<34	10,000	6.2	3,700	1,500	<.20
70	89009	05-16-89	Fernley West Drain	Plant	Algae	14	97.8	32,600	<10	3,640	5,050	<.02
70	89031	07-07-89	Fernley West Drain	Plant	Algae	<4	8.87	2,280	<10	3,210	956	<.02
31	88806	08-30-88	L2 Drain	Plant	Algae	4	12	5,450	<4	4,820	1,930	.30
54	88831	09-06-88	R2 Drain	Plant	Algae	16	24	15,200	8	7,190	2,260	1.2
63	88807	08-30-88	Lower Diagonal Drain	Plant	Algae	12	28.7	13,200	16	6,020	5,950	6.86
55	88843	09-06-88	Upper Palute Drain	Plant	Algae	12	23	19,200	6	8,340	4,960	.20
8	88802	08-29-88	Upper Diagonal 2 Drain	Plant	Algae	8.8	31.4	12,800	16	5,100	10,400	10.4
33	88808	08-30-88	Middle L Drain	Plant	Algae	8.9	12	8,050	<4	3,450	2,820	.26
56	88833	09-08-88	S2C Drain	Plant	Algae	11	21	15,400	9	12,500	1,360	1.3
34	88809	08-30-88	LB Drain	Plant	Algae	16	9.4	6,100	4	2,960	2,210	1.07
57	88841	09-12-88	Upper Stillwater Slough	Plant	Algae	14	23	19,500	9	9,750	1,110	1.3
58	88836	09-07-88	Harmon Deep Drain	Plant	Algae	17	16	14,500	4	5,610	2,330	.25
11	88812	08-30-88	Carson Lake I Ext. Drain	Plant	Algae	13	19	11,800	8	5,480	3,750	2.1
35	88902	08-25-88	L Branch 1 Deep Drain	Plant	Algae	7.9	17	12,200	7	12,400	3,230	1.3
59	88829	09-07-88	S2G Drain	Plant	Algae	34	30.5	7,790	5	17,200	4,530	.17
36	88906	08-25-88	Lower L Drain	Plant	Algae	11	27.7	15,100	10	5,920	2,620	6.35
60	88838	09-07-88	Harmon Reservoir	Plant	Algae	5	13	5,220	<7	4,370	823	--
13	88813	08-30-88	Carson Lake IA Drain	Plant	Algae	3	6.7	2,820	<4	6,110	8,980	.60
37	88810	08-30-88	Mid Carson Lake Drain	Plant	Algae	12	15	9,350	6	3,860	1,670	2.1
61	88837	09-06-88	S1B Drain	Plant	Algae	19	28.8	16,900	10	8,370	846	2.2
14	88814	08-30-88	A1 Drain	Plant	Algae	6	18	10,900	8	7,200	4,040	1.5
38	88900	08-25-88	A-Line	Plant	Algae	5	9.5	5,170	4	10,500	8,740	1.05
62	88912	08-29-88	Lower Diagonal 1 Drain	Plant	Algae	<2	13	5,570	6	5,320	3,090	1.08
15	88825	08-31-88	Mussi Drain	Plant	Algae	15	21	16,100	7	8,850	2,510	.82
39	88904	08-25-88	Pierson Drain	Plant	Algae	3	12	5,190	9	7,640	569	5.86
63	88908	08-25-88	Lower Diagonal Drain	Plant	Algae	14	35.8	21,400	19	8,850	4,510	10.3
40	88820	08-31-88	J1 Deep Drain	Plant	Algae	13	24.6	15,600	8	7,980	2,160	1.8
64	88828	09-06-88	Palute Branch 1 Drain	Plant	Algae	9.2	26	16,000	9	7,720	1,130	1.3
16	88826	08-31-88	F2 Drain	Plant	Algae	5	16	3,070	<4	6,550	10,400	.17
41	88817	08-31-88	Yarbrough Drain	Plant	Algae	7.8	17	13,100	13	12,300	989	4.9
90	88845	09-08-88	Stillwater Pt. Reservoir	Plant	Algae	12	27	18,900	10	9,270	794	4.6
17	88822	08-31-88	Shaffner Drain	Plant	Algae	35	32.6	16,300	8	6,370	6,560	.14
42	88811	08-30-88	Carson Lake Br. 3 Drain	Plant	Algae	10	21	15,400	10	8,090	14,300	2.1
66	88830	09-06-88	Upper TJ Drain	Plant	Algae	3	11	4,860	<4	10,200	1,500	.06

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
18	88824	08-31-88	ERB Drain	Plant	Algae	12	18	14,000	6	7,340	5,100	0.32
43	88815	08-30-88	Carson Lake Br. 1 Drain	Plant	Algae	<2	1.7	1,270	<4	7,580	1,140	.12
78	88160	07-07-88	SWMA, D-Line Canal	Plant	Algae	9.76	17.3	15,700	18.3	35,600	577	.27
78	89028	07-07-89	SWMA, D-Line Canal	Plant	Algae	<4	17.2	4,310	<10	10,200	175	.14
78	89063	09-22-89	SWMA, D-Line Canal	Plant	Algae	34	<44	13,000	8.7	12,000	740	.51
78	89210	11-30-89	SWMA, D-Line Canal	Plant	Algae	43	<47	13,000	<5.6	10,000	500	.30
81	88100	02-11-88	SWMA, Hunter Drain	Plant	Algae	2.61	18.4	3,160	<15	6,980	1,070	.28
81	88111	02-11-88	SWMA, Hunter Drain	Plant	Algae	3.05	12.8	4,870	18.7	8,010	895	.17
81	88114	02-11-88	SWMA, Hunter Drain	Plant	Algae	4.69	12.7	6,940	<15	10,700	1,020	.16
81	88117	02-11-88	SWMA, Hunter Drain	Plant	Algae	<1.9	12.3	3,010	<15	6,350	648	.12
81	88120	02-11-88	SWMA, Hunter Drain	Plant	Algae	5.3	21	12,300	<15	11,500	1,430	.67
81	88134	05-19-88	SWMA, Hunter Drain	Plant	Algae	4.65	10.3	7,250	<15	7,310	392	.11
81	88135	05-19-88	SWMA, Hunter Drain	Plant	Algae	5.73	13.3	8,540	<15	8,660	459	.07
81	88156	07-05-88	SWMA, Hunter Drain	Plant	Algae	<1.9	12.3	4,120	15.5	11,700	1,030	.31
81	88157	07-05-88	SWMA, Hunter Drain	Plant	Algae	<1.9	19.2	13,100	<15	16,700	820	.74
81	89007	03-16-89	SWMA, Hunter Drain	Plant	Algae	5.48	15.5	5,610	<10	8,160	3,900	.57
81	89014	05-16-89	SWMA, Hunter Drain	Plant	Algae	8.09	28.9	11,300	<10	11,500	826	.37
81	89029	07-07-89	SWMA, Hunter Drain	Plant	Algae	6.28	18.3	9,920	<10	8,340	384	.06
86	89006	03-16-89	SWMA, Paiute Drain	Plant	Algae	6.49	10.4	6,850	<10	7,490	3,720	.41
86	89011	05-16-89	SWMA, Paiute Drain	Plant	Algae	7.11	17.6	8,340	<10	4,970	1,310	.47
86	89030	07-07-89	SWMA, Paiute Drain	Plant	Algae	12.40	30.6	15,100	26.9	7,780	4,470	.91
86	89062	09-22-89	SWMA, Paiute Drain	Plant	Algae	46	<36	17,000	18	7,200	1,800	.89
86	89207	11-30-89	SWMA, Paiute Drain	Plant	Algae	35	<16	10,000	3.3	4,700	830	.50
92	88158	07-06-88	SWMA, TJ Drain	Plant	Algae	<1.9	9.97	1,780	<15	7,650	1,510	.09
92	88189	08-24-88	SWMA, TJ Drain	Plant	Algae	3	9.2	3,770	<4	9,020	3,730	.15
92	88191	09-13-88	SWMA, TJ Drain	Plant	Algae	4	8.3	3,250	5	8,910	3,930	.21
92	89005	03-16-89	SWMA, TJ Drain	Plant	Algae	<4	<3.3	3,540	<10	8,930	2,060	.06
92	89016	05-16-89	SWMA, TJ Drain	Plant	Algae	4.95	21.8	6,520	<10	9,300	3,110	.14
92	89027	07-07-89	SWMA, TJ Drain	Plant	Algae	6.84	19.8	8,470	<10	11,700	1,320	.19
92	89060	09-22-89	SWMA, TJ Drain	Plant	Algae	<5.7	<41	5,200	<4.8	7,300	3,200	.27
92	89204	11-30-89	SWMA, TJ Drain	Plant	Algae	15	<70	8,433	<8.2	8,600	2,800	<.43
44	88819	08-31-88	Downs Drain	Plant	Algae	4	6.6	4,620	4	11,000	4,850	.93
20	88827	09-06-88	Paiute Ext Br. 1 Drain	Plant	Algae	21	15	9,670	4	7,610	934	.21
22	88821	08-31-88	S-Line Reservoir	Plant	Algae	18	29.2	24,500	14	8,900	1,400	4.1
46	88816	08-31-88	Holmes Branch 2 Drain	Plant	Algae	11	24	14,900	9	9,950	1,780	1.11
23	88844	09-08-88	New River Ext. Drain	Plant	Algae	13	32	21,100	10	9,500	2,840	5.58
47	88818	08-31-88	Holmes Drain	Plant	Algae	7.3	17	9,790	7	8,670	3,190	1.12
24	88823	08-31-88	Upper Harmon Deep Drain	Plant	Algae	10	44.6	10,600	7	4,970	12,700	1.44
48	88834	09-07-88	NE Carson Lake	Plant	Algae	11	19	17,400	9	16,000	1,310	1.9
49	88846	09-08-88	Patrick Drain	Plant	Algae	7	17	11,900	7	6,610	2,700	.92

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TABLE 20. --Molsture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS												
Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
67	88385	07-25-88	Carson Lake, Sprig Pond	Bird	BN Stilt	<7	<4.5	13.2	1.02	<21	<0.57	90.2
	88435	08-10-88	Fernley WMA	Bird	BN Stilt	2	<3	17	.80	--	<.50	79.2
	88436	08-10-88	Fernley WMA	Bird	BN Stilt	3	<3	33	.56	--	<.50	104
71	88405	07-22-88	Fernley WMA, East Pond	Bird	BN Stilt	<7	<4.5	35.3	.57	<21	.59	99.7
	88383	07-25-88	Mahala Slough	Bird	BN Stilt	<7	<4.5	102	1.37	<21	<.57	101
75	88404	07-21-88	Mahala Slough	Bird	BN Stilt	<7	<4.5	52	.76	<21	<.57	112
	88395	07-24-88	Carson Lake, Sprig Pond	Bird	C Teal	<7	<4.5	8.63	1.03	<21	<.57	117
	88372	07-24-88	Fernley WMA, East Pond	Bird	C Teal	<7	<4.5	26.4	2.01	<21	<.57	143
71	88379	07-24-88	Fernley WMA, East Pond	Bird	C Teal	<7	<4.5	28	2.68	<21	<.57	166
	88391	07-24-88	Fernley WMA, East Pond	Bird	C Teal	<7	<4.5	31.5	1.33	<21	<.57	137
71	88392	07-24-88	Fernley WMA, East Pond	Bird	C Teal	<7	<4.5	35.3	1.31	<21	<.57	145
	88341	07-19-88	HWMA, Army Drain	Bird	C Teal	<7	<4.5	16	1.11	<21	<.57	153
	88342	07-19-88	HWMA, Army Drain	Bird	C Teal	<7	<4.5	12.6	1.14	<21	<.57	128
88	88343	07-19-88	HWMA, Army Drain	Bird	C Teal	<7	<4.5	16	1.45	<21	<.57	174
	88360	07-23-88	HWMA, Humboldt Lake	Bird	C Teal	<7	<4.5	16.7	1.54	<21	<.57	184
	88361	07-23-88	HWMA, Humboldt Lake	Bird	C Teal	<7	<4.5	17.5	2.35	<21	<.57	154
22	88366	07-23-88	HWMA, Humboldt Lake	Bird	C Teal	<7	<4.5	11.9	1.37	<21	<.57	155
	88336	07-14-88	S-line Reservoir	Bird	C Teal	<7	<4.5	5.54	1.67	<21	<.57	166
88	88307	07-06-88	SWMA, South Lead Lake	Bird	C Teal	<7	<4.5	5.36	1.29	<21	<.57	159
	88309	07-06-88	SWMA, South Lead Lake	Bird	C Teal	<7	<4.5	5.66	1.45	<21	<.57	181
88	88313	07-06-88	SWMA, South Lead Lake	Bird	C Teal	<7	<4.5	6.34	1.29	<21	<.57	155
	88314	07-06-88	SWMA, South Lead Lake	Bird	C Teal	<7	<4.5	6.83	1.13	<21	<.57	155
88	88316	07-06-88	SWMA, South Lead Lake	Bird	C Teal	4	<4	4	.92	--	<.50	153
	87890	10-17-87	SWMA	Bird	Canback	1	<1.0	1.8	.52	--	<.30	105
	87892	10-25-87	SWMA	Bird	Canback	2	<1.0	2.3	.39	--	<.30	118
88	87894	10-25-87	SWMA	Bird	Canback	3	<1.0	3.9	.10	--	<.30	211
	87896	10-25-87	SWMA	Bird	Canback	2	<1.0	2.3	.30	--	<.30	138
	87898	10-25-87	SWMA	Bird	Canback	2	<1.0	2.7	.20	--	<.30	189
88	87900	10-25-87	SWMA	Bird	Canback	3	<1.0	4.2	.20	--	<.30	211
	87891	10-17-87	SWMA	Bird	Canback, muscle	<1	<1.0	.63	.33	--	<.30	33.6
88	87893	10-25-87	SWMA	Bird	Canback, muscle	<1	<1.0	.65	<.10	--	<.30	31.4
	87895	10-25-87	SWMA	Bird	Canback, muscle	<1	<1.0	.99	.20	--	<.30	44.4
88	87897	10-25-87	SWMA	Bird	Canback, muscle	<1	<1.0	.85	.10	--	<.30	56.4
	87899	10-25-87	SWMA	Bird	Canback, muscle	<1	<1.0	.67	.20	--	<.30	46.3
88	87901	10-25-87	SWMA	Bird	Canback, muscle	<1	<1.0	1.4	.30	--	<.30	45.2

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
67	88323	07-07-88	Carson Lake, Sprig Pond	Bird	Coot	<7	<4.5	2.55	1.48	<21	<0.57	190
67	88324	07-07-88	Carson Lake, Sprig Pond	Bird	Coot	<7	<4.5	6.15	1.36	769	<0.57	227
67	88356	07-22-88	Carson Lake, Sprig Pond	Bird	Coot	7.42	<4.5	2.77	1	<21	<0.57	187
67	88357	07-22-88	Carson Lake, Sprig Pond	Bird	Coot	<7	<4.5	4.56	1.26	<21	<0.57	289
67	88384	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	<7	<4.5	4.1	1.78	<21	<0.57	255
67	88386	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	<7	<4.5	5.01	2.82	<21	<0.57	180
67	88387	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	<7	<4.5	4.89	4.16	<21	<0.57	162
67	88390	07-25-88	Carson Lake, Sprig Pond	Bird	Coot	<7	<4.5	6.3	2.08	<21	<0.57	178
67	88393	07-24-88	Carson Lake, Sprig Pond	Bird	Coot	<7	<4.5	3.45	1.88	<21	<0.57	223
67	88394	07-24-88	Carson Lake, Sprig Pond	Bird	Coot	<7	<4.5	3.99	2.03	<21	.79	169
71	88373	07-24-88	Fernley WMA, East Pond	Bird	Coot	<7	<4.5	26.4	.89	<21	.87	110
71	88374	07-24-88	Fernley WMA, East Pond	Bird	Coot	36.5	<4.5	36	.53	<21	1.91	134
71	88375	07-24-88	Fernley WMA, East Pond	Bird	Coot	56.8	<4.5	29.2	.60	<21	2.67	136
71	88376	07-24-88	Fernley WMA, East Pond	Bird	Coot	20.6	<4.5	33	1.23	<21	<0.57	152
71	88377	07-24-88	Fernley WMA, East Pond	Bird	Coot	19.7	6.2	28.5	1.22	<21	<0.57	154
71	88378	07-24-88	Fernley WMA, East Pond	Bird	Coot	26.1	<4.5	35.8	.78	<21	1.83	144
71	88380	07-24-88	Fernley WMA, East Pond	Bird	Coot	32.5	<4.5	27.5	.55	<21	1.58	151
88425	08-09-88	HWMA, Humboldt Lake	Bird	Coot	4	<3	8.7	30	.30	--	<0.50	93.2
88414	08-09-88	HWMA, Humboldt Lake	Bird	Coot	4.7	<3	9.1	.68	--	--	2.1	95.5
88415	08-09-88	HWMA, Humboldt Lake	Bird	Coot	4	<3	11	.48	--	--	1	121
88416	08-09-88	HWMA, Humboldt Lake	Bird	Coot	4.3	<3	13	.38	--	--	<0.50	137
88417	08-09-88	HWMA, Humboldt Lake	Bird	Coot	6	<3	11	.68	--	--	2.1	118
88418	08-09-88	HWMA, Humboldt Lake	Bird	Coot	4.3	<3	11	.38	--	--	<0.50	111
88419	08-09-88	HWMA, Humboldt Lake	Bird	Coot	3	<3	8.5	.47	--	--	1	111
88420	08-09-88	HWMA, Humboldt Lake	Bird	Coot	4.6	<3	8.8	.70	--	--	<0.50	98.4
88421	08-09-88	HWMA, Humboldt Lake	Bird	Coot	4	<3	9.8	.64	--	--	2.4	88.2
88422	08-09-88	HWMA, Humboldt Lake	Bird	Coot	4	<3	12	.65	--	--	1	132
88423	08-09-88	HWMA, Humboldt Lake	Bird	Coot	5.6	<3	7.8	.45	--	--	<0.50	144
88424	08-09-88	HWMA, Humboldt Lake	Bird	Coot	3	<3	10	.33	--	--	1.6	80.6
88359	07-21-88	Mahala Slough	Bird	Coot	<7	<4.5	7.63	3.13	<21	<21	<0.57	183
88370	07-23-88	Mahala Slough	Bird	Coot	<7	<4.5	8.82	1.11	<21	<21	<0.57	161
88400	07-28-88	Mahala Slough	Bird	Coot	<7	<4.5	9.53	1.01	<21	<21	<0.57	216
88403	08-01-88	Mahala Slough	Bird	Coot	<7	<4.5	8.52	.91	<21	<21	.75	243
88426	08-03-88	Mahala Slough	Bird	Coot	5.5	<3	15	1	--	--	.50	145
88427	08-04-88	Mahala Slough	Bird	Coot	4.4	<3	7.8	1.3	--	--	<0.50	204
88344	07-14-88	S-line Reservoir	Bird	Coot	<7	<4.5	2.9	1.54	<21	<21	<0.57	141
88345	07-14-88	S-line Reservoir	Bird	Coot	<7	<4.5	3.23	1.1	<21	<21	<0.57	172
88346	07-14-88	S-line Reservoir	Bird	Coot	<7	<4.5	4.38	1	<21	<21	<0.57	133
88347	07-14-88	S-line Reservoir	Bird	Coot	<7	<4.5	5.25	1.53	<21	<21	<0.57	217
88348	07-14-88	S-line Reservoir	Bird	Coot	<7	<4.5	5.33	2.09	<21	<21	<0.57	173

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TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS												
Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
22	88358	07-21-88	S-line Reservoir	Bird	Coot	<7	<4.5	5.19	1.1	<21	<0.57	155
22	88402	08-01-88	S-line Reservoir	Bird	Coot	<7	<4.5	4.09	.70	<21	<.57	204
88	88349	07-20-88	SWMA, South Lead Lake	Bird	Coot	<7	<4.5	3.95	1.29	<21	<.57	195
88	88350	07-20-88	SWMA, South Lead Lake	Bird	Coot	<7	<4.5	3.65	1.31	<21	<.57	238
88	88351	07-20-88	SWMA, South Lead Lake	Bird	Coot	<7	<4.5	4.69	2.03	<21	<.57	209
88	88301	07-06-88	SWMA, South Lead Lake	Bird	Coot	<7	<4.5	5.37	1.4	<21	<.57	199
88	88302	07-06-88	SWMA, South Lead Lake	Bird	Coot	<7	<4.5	4.56	1.84	<21	<.57	189
88	88303	07-06-88	SWMA, South Lead Lake	Bird	Coot	<7	<4.5	5.87	1.08	<21	<.57	259
88	88304	07-06-88	SWMA, South Lead Lake	Bird	Coot	<7	<4.5	3.37	1.44	<21	<.57	177
88	88308	07-06-88	SWMA, South Lead Lake	Bird	Coot	7.3	<4.5	4.09	1.83	<21	<.57	199
88	88311	07-06-88	SWMA, South Lead Lake	Bird	Coot	7.1	<4.5	3.48	1.65	<21	<.57	191
88	88312	07-06-88	SWMA, South Lead Lake	Bird	Coot	<7	<4.5	4.77	1.84	<21	1.01	132
67	88412	08-09-88	HWA, Humboldt Lake	Bird	Gadwall	4.2	<3	16	1.7	--	<.50	164
67	89137	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	.79	--	--	--	--
67	89121	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	.69	--	--	--	--
67	89123	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	.74	--	--	--	--
67	89125	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	1.2	--	--	--	--
67	89127	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	3.6	--	--	--	--
67	89129	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	.87	--	--	--	--
67	89131	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	.73	--	--	--	--
67	89133	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	.42	--	--	--	--
67	89135	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	.53	--	--	--	--
67	89139	10-14-89	Carson Lake, Sprig Pond	Bird	Gw Teal, muscle	--	--	.51	--	--	--	--
67	87839	10-17-87	Carson Lake	Bird	Mallard	3.9	<.10	5.1	1.5	--	<.30	149
67	87842	10-17-87	Carson Lake	Bird	Mallard	3.5	<.10	3	.34	--	<.30	111
67	87844	10-17-87	Carson Lake	Bird	Mallard	3.8	<.10	2.5	.66	--	<.30	145
67	87846	10-17-87	Carson Lake	Bird	Mallard	3.7	<.10	2.9	.33	--	<.30	139
67	87848	10-17-87	Carson Lake	Bird	Mallard	3.0	<.10	4.6	.44	--	<.30	129
67	87850	10-17-87	Carson Lake	Bird	Mallard	2.0	<.10	1.6	.20	--	<.30	69
67	87852	10-17-87	Carson Lake	Bird	Mallard	2.0	<.10	1.6	.34	--	<.30	60.7
67	87854	10-17-87	Carson Lake	Bird	Mallard	5.4	<.10	2.9	.84	--	<.30	189
67	87856	10-17-87	Carson Lake	Bird	Mallard	3.0	<.10	4	.50	--	<.30	102
67	87858	10-17-87	Carson Lake	Bird	Mallard	3.0	<.10	6.2	.43	--	<.30	140
67	88320	07-07-88	Carson Lake, Sprig Pond	Bird	Mallard	<7.0	<4.5	6.62	1.44	<21	<.57	116
67	88396	07-24-88	Carson Lake, Sprig Pond	Bird	Mallard	<7.0	<4.5	4.49	1.1	<21	<.57	103
67	88397	07-24-88	Carson Lake, Sprig Pond	Bird	Mallard	<7.0	<4.5	4.35	1.98	<21	<.57	205
67	88408	08-10-88	Carson Lake, Sprig Pond	Bird	Mallard	3.7	<3	4.8	.36	--	<.50	138
67	88332	07-16-88	Carson Valley	Bird	Mallard	7.8	<4.5	3.45	.96	<21	<.57	177
67	88333	07-16-88	Carson Valley	Bird	Mallard	<7.0	<4.5	2.25	1.14	<21	<.57	160
67	88334	07-16-88	Carson Valley	Bird	Mallard	<7.0	<4.5	2.88	1.03	<21	<.57	195

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
	88335	07-16-88	Carson Valley	Bird	Mallard	<7.0	<4.5	3.52	1.08	<21	<0.57	206
	88363	07-23-88	HWMA, Humboldt Lake	Bird	Mallard	<7.0	<4.5	7.24	1.79	<21	<.57	171
	88364	07-23-88	HWMA, Humboldt Lake	Bird	Mallard	<7.0	<4.5	7.42	1.55	<21	<.57	205
	88365	07-23-88	HWMA, Humboldt Lake	Bird	Mallard	9.0	<4.5	9.84	1.11	<21	<.57	198
	88367	07-23-88	HWMA, Humboldt Lake	Bird	Mallard	<7.0	<4.5	8.75	1.79	<21	<.57	188
	88409	08-09-88	HWMA, Humboldt Lake	Bird	Mallard	3.8	<3	23	2.2	--	<.50	164
	88410	08-09-88	HWMA, Humboldt Lake	Bird	Mallard	2.0	<3	13	1	--	<.50	167
	88413	08-09-88	HWMA, Humboldt Lake	Bird	Mallard	3.0	<3	20	2.1	--	<.50	135
	87771	10-18-87	SWMA	Bird	Mallard	4.2	.20	4.9	.54	--	<.30	191
	87774	10-18-87	SWMA	Bird	Mallard	3.0	<.20	4.4	.66	--	<.30	159
	87776	10-18-87	SWMA	Bird	Mallard	3.0	<.20	3.6	.52	--	<.30	103
	87778	10-18-87	SWMA	Bird	Mallard	6.4	<.20	4.4	.96	--	<.30	138
	87780	10-18-87	SWMA	Bird	Mallard	4.0	<.20	3.1	.67	--	<.30	124
	87782	10-17-87	SWMA	Bird	Mallard	3.5	<.20	3.2	.64	--	<.30	106
	87784	10-18-87	SWMA	Bird	Mallard	3.0	<.20	7.1	.42	--	.50	84.7
	87786	10-18-87	SWMA	Bird	Mallard	4.9	<.20	10	1.1	--	<.30	126
	87788	10-18-87	SWMA	Bird	Mallard	8.5	<.20	3.3	.32	--	<.30	117
	87790	10-18-87	SWMA	Bird	Mallard	5.6	.38	3.4	.38	--	.40	130
88	88310	07-06-88	SWMA, South Lead Lake	Bird	Mallard	<7.0	<4.5	7.42	1.63	<21	<.57	192
88	88315	07-06-88	SWMA, South Lead Lake	Bird	Mallard	8.4	<4.5	9.04	1.16	<21	1.02	191
	87838	10-17-87	Carson Lake	Bird	Mallard, Skin	<1	<.10	.40	.10	--	<.30	11.5
	87841	10-17-87	Carson Lake	Bird	Mallard, Skin	<1	.20	<.20	.55	--	<.30	11.2
	87770	10-18-87	SWMA	Bird	Mallard, Skin	<1	<.20	.10	.48	--	<.30	15.3
	87773	10-18-87	SWMA	Bird	Mallard, Skin	<1	<.20	.20	.10	--	<.30	11.3
	87840	10-17-87	Carson Lake	Bird	Mallard, muscle	<1	<.10	1.5	.20	--	<.30	33.2
	87843	10-17-87	Carson Lake	Bird	Mallard, muscle	<1	<.10	1.1	.20	--	<.30	38.2
	87845	10-17-87	Carson Lake	Bird	Mallard, muscle	<1	<.10	.97	.10	--	<.30	41.7
	87847	10-17-87	Carson Lake	Bird	Mallard, muscle	<1	.40	.91	<.10	--	<.30	42.3
	87849	10-17-87	Carson Lake	Bird	Mallard, muscle	<1	.10	1.4	<.10	--	<.30	38.4
	87851	10-17-87	Carson Lake	Bird	Mallard, muscle	<1	.20	.50	.34	--	<.30	32.7
	87853	10-17-87	Carson Lake	Bird	Mallard, muscle	<1	<.10	1	.33	--	<.30	41.3
	87855	10-17-87	Carson Lake	Bird	Mallard, muscle	<1	<.10	.94	.20	--	<.30	40.5
	87857	10-17-87	Carson Lake	Bird	Mallard, muscle	<1	<.10	.77	.33	--	<.30	35.5
	87859	10-17-87	Carson Lake	Bird	Mallard, muscle	<1	<.10	1.3	.20	--	<.30	35.8
	87772	10-18-87	SWMA	Bird	Mallard, muscle	<1	.40	1.5	.10	--	<.30	41.3
	87775	10-18-87	SWMA	Bird	Mallard, muscle	<1	<.20	1.7	.10	--	<.30	40.5
	87777	10-18-87	SWMA	Bird	Mallard, muscle	<1	<.20	1.2	.10	--	<.30	34.1
	87779	10-18-87	SWMA	Bird	Mallard, muscle	<1	<.20	1.3	.20	--	<.30	33.7
	87781	10-18-87	SWMA	Bird	Mallard, muscle	<1	.20	1.2	.10	--	<.30	31.4
	87783	10-17-87	SWMA	Bird	Mallard, muscle	<1	<.20	1.2	.10	--	<.30	36.5

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TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
	87785	10-18-87	SWMA	Bird	Mallard, muscle	<1	<0.20	1.8	<0.10	--	<0.30	36.8
	87787	10-18-87	SWMA	Bird	Mallard, muscle	<1	<.20	2.3	.10	--	<.30	43.4
	87789	10-18-87	SWMA	Bird	Mallard, muscle	<1	<.20	.98	.20	--	<.30	36.9
	87791	10-18-87	SWMA	Bird	Mallard, muscle	<1	<.20	.80	.10	--	<.30	31
88	88305	07-06-88	SWMA, South Lead Lake	Bird	Pintail	<7	<4.5	6.64	1.22	<21	<.57	196
67	88321	07-07-88	Carson Lake, Sprig Pond	Bird	Redhead	<7	<4.5	5.66	1.19	<21	<.57	170
67	88322	07-07-88	Carson Lake, Sprig Pond	Bird	Redhead	<7	<4.5	5.37	1.3	<21	<.57	141
67	88388	07-25-88	Carson Lake, Sprig Pond	Bird	Redhead	<7	<4.5	4.38	4.34	<21	<.57	280
67	88389	07-25-88	Carson Lake, Sprig Pond	Bird	Redhead	<7	<4.5	7	3.37	<21	<.57	212
	88362	07-23-88	HWMA, Humboldt Lake	Bird	Redhead	<7	<4.5	12.4	2.35	<21	<.57	266
	88368	07-23-88	HWMA, Humboldt Lake	Bird	Redhead	<7	<4.5	13.3	2.17	<21	<.57	232
	88411	08-09-88	HWMA, Humboldt Lake	Bird	Redhead	2	<3	9.1	.64	--	<.50	225
75	88353	07-21-88	Mahala Slough	Bird	Redhead	<7	<4.5	20.4	1.43	<21	<.57	184
75	88371	07-23-88	Mahala Slough	Bird	Redhead	<7	<4.5	8.21	.94	<21	<.57	204
75	88381	07-25-88	Mahala Slough	Bird	Redhead	<7	<4.5	11.8	1.86	<21	<.57	227
B	88325	07-13-88	Massie Gun Club	Bird	Redhead	<7	<4.5	32.4	.99	<21	<.57	189
B	88326	07-13-88	Massie Gun Club	Bird	Redhead	<7	<4.5	42.6	.87	<21	<.57	159
B	88327	07-13-88	Massie Gun Club	Bird	Redhead	<7	<4.5	22.2	.62	<21	<.57	296
B	88328	07-13-88	Massie Gun Club	Bird	Redhead	<7	<4.5	21.1	.54	<21	.68	273
B	88354	07-21-88	Massie Gun Club	Bird	Redhead	<7	<4.5	43.5	.64	<21	<.57	231
B	88401	07-29-88	Massie Gun Club	Bird	Redhead	<7	<4.5	35.5	1.12	<21	<.57	284
B	88355	07-21-88	Massie Slough	Bird	Redhead	<7	<4.5	17.5	1.23	<21	<.57	127
88	88306	07-06-88	SWMA, South Lead Lake	Bird	Redhead	<7	<4.5	6.72	1.14	<21	<.57	309
88	88331	07-13-88	SWMA, South Lead Lake	Bird	Redhead	<7	<4.5	13.9	.99	<21	<.57	228
	87861	10-17-87	Carson Lake	Bird	Redhead	3	<.10	2.8	.33	--	<.30	112
	87864	10-17-87	Carson Lake	Bird	Redhead	3	<.10	3.7	.55	--	<.30	192
	87866	10-17-87	Carson Lake	Bird	Redhead	5.1	<.10	11	6.5	--	.30	209
	87793	10-17-87	SWMA	Bird	Redhead	5.5	<.20	3.6	.50	--	<.50	242
	87796	10-17-87	SWMA	Bird	Redhead	3	<.20	2.7	.43	--	<.30	176
	87798	10-18-87	SWMA	Bird	Redhead	4.4	<.20	6.6	2.5	--	.50	154
	87800	10-18-87	SWMA	Bird	Redhead	3.7	<.20	3.9	.33	--	<.30	127
	87802	10-17-87	SWMA	Bird	Redhead	4.6	<.10	3	.55	--	<.30	191
	87804	10-17-87	SWMA	Bird	Redhead	3	<.10	2.1	.49	--	<.30	154
	87806	10-17-87	SWMA	Bird	Redhead	3	<.20	2.4	1.1	--	<.30	90.2
	87808	10-17-87	SWMA	Bird	Redhead	4.2	<.10	3.4	.52	--	<.30	112
	87810	10-17-87	SWMA	Bird	Redhead	<1	<.10	2.7	.53	--	<.30	140
	87812	10-17-87	SWMA	Bird	Redhead	3	<.10	2.2	.51	--	<.30	131
	87862	10-17-87	Carson Lake	Bird	Redhead, muscle	<1	<.10	1.5	.20	--	<.30	39.4
	87865	10-17-87	Carson Lake	Bird	Redhead, muscle	<1	<.10	1.5	.20	--	<.30	44
	87867	10-17-86	Carson Lake	Bird	Redhead, muscle	<1	<.10	2.8	.30	--	<.30	48.3

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TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS												
Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
	87794	10-17-87	SWMA	Bird	Redhead, muscle	<1	<0.20	1.6	0.10	--	<0.30	44.1
	87797	10-17-87	SWMA	Bird	Redhead, muscle	<1	<.20	.84	.10	--	<.30	38.1
	87799	10-18-87	SWMA	Bird	Redhead, muscle	<1	.30	2.5	.48	--	<.30	53.9
	87801	10-18-87	SWMA	Bird	Redhead, muscle	<1	.30	1.5	.10	--	<.30	41.3
	87803	10-17-87	SWMA	Bird	Redhead, muscle	<1	<.10	1.4	.30	--	<.30	48.3
	87805	10-17-87	SWMA	Bird	Redhead, muscle	<1	<.10	.83	.32	--	<.30	43.4
	87807	10-17-87	SWMA	Bird	Redhead, muscle	<1	<.10	1.2	.30	--	<.30	36.3
	87809	10-17-87	SWMA	Bird	Redhead, muscle	<1	<.10	1.6	.33	--	<.30	37.4
	87811	10-17-87	SWMA	Bird	Redhead, muscle	<1	.20	1	.20	--	<.30	35.1
	87813	10-17-87	SWMA	Bird	Redhead, muscle	<1	<.10	.58	.10	--	<.30	48
	87860	10-17-87	Carson Lake	Bird	Redhead, skin	<1	<.10	.30	.81	--	<.30	14.9
	87863	10-17-87	Carson Lake	Bird	Redhead, skin	<1	<.10	<.20	.20	--	<.30	8.3
	87792	10-17-87	SWMA	Bird	Redhead, skin	<1	.30	.60	.32	--	<.30	28.9
	87795	10-17-87	SWMA	Bird	Redhead, skin	<1	<.20	.30	.66	--	<.30	20.3
67	88317	07-07-88	Carson Lake, Sprig Pond	Bird	Ruddy	<7	<4.5	8.21	1.66	<21	<.57	122
67	88318	07-07-88	Carson Lake, Sprig Pond	Bird	Ruddy	<7	<4.5	7.64	1.26	<21	<.57	130
67	88319	07-07-88	Carson Lake, Sprig Pond	Bird	Ruddy	<7	<4.5	6.89	1.58	<21	<.57	131
67	88398	07-24-88	Carson Lake, Sprig Pond	Bird	Ruddy	<7	<4.5	7.51	1.29	<21	<.57	151
75	88329	07-13-88	Mahala Slough	Bird	Ruddy	<7	<4.5	5.54	1.21	<21	<.57	141
75	88330	07-13-88	Mahala Slough	Bird	Ruddy	<7	<4.5	9.38	1.13	<21	<.57	93.2
75	88352	07-21-88	Mahala Slough	Bird	Ruddy	<7	<4.5	5.4	1.02	<21	<.57	149
75	88369	07-23-88	Mahala Slough	Bird	Ruddy	<7	<4.5	10.4	.88	<21	.62	115
75	88382	07-25-88	Mahala Slough	Bird	Ruddy	<7	<4.5	9.27	2.02	<21	<.57	144
75	88399	07-28-88	Mahala Slough	Bird	Ruddy	<7	<4.5	7.21	1.08	<21	<.57	162
88	88300	06-22-88	SWMA, South Lead Lake	Bird	Ruddy	<7	<4.5	6.37	1.13	<21	<.57	124
	87869	10-17-87	Carson Lake	Bird	Shoveler	<1	<.10	7.8	.46	--	<.30	111
	87872	10-17-87	Carson Lake	Bird	Shoveler	2	<.10	5.8	.34	--	<.30	96.6
	87874	10-17-87	Carson Lake	Bird	Shoveler	3,7	<.10	8.4	.42	--	<.30	110
	87876	10-17-87	Carson Lake	Bird	Shoveler	3	<.10	5.2	.33	--	<.30	101
	87878	10-17-87	Carson Lake	Bird	Shoveler	2	<.10	2.8	.20	--	<.30	74.5
	87880	10-17-87	Carson Lake	Bird	Shoveler	3	<.10	14	.71	--	.30	162
	87882	10-17-87	Carson Lake	Bird	Shoveler	4,6	.30	14	.60	--	.40	108
	87884	10-17-87	Carson Lake	Bird	Shoveler	3,8	<.10	7.3	.30	--	<.30	112
	87886	10-17-87	Carson Lake	Bird	Shoveler	3,8	<.10	6.6	.58	--	<.30	105
	87888	10-17-87	Carson Lake	Bird	Shoveler	3	<.10	7.7	.63	--	<.30	104
	87815	10-17-87	SWMA	Bird	Shoveler	2	<.10	3.8	.30	--	.40	96.5
	87818	10-17-87	SWMA	Bird	Shoveler	<1	<.10	5.6	.42	--	<.30	105
	87822	10-17-87	SWMA	Bird	Shoveler	2	<.10	3.6	.61	--	<.30	89.3
	87824	10-17-87	SWMA	Bird	Shoveler	3	<.10	5.7	.55	--	<.30	142
	87826	10-17-87	SWMA	Bird	Shoveler	3,9	<.10	4.8	.34	--	<.30	110

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS												
Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
	87828	10-17-87	SWMA	Bird	Shoveler	4.2	<0.10	4.8	1.2	--	<0.30	113
	87830	10-17-87	SWMA	Bird	Shoveler	3.9	<0.10	3.4	.51	--	<0.30	80.1
	87832	10-17-87	SWMA	Bird	Shoveler	5	<0.10	4.1	.30	--	<0.30	128
	87834	10-17-87	SWMA	Bird	Shoveler	4	<0.10	5	1	--	<0.30	133
	87870	10-17-87	Carson Lake	Bird	Shoveler, muscle	<1	<0.10	1.3	.20	--	<0.30	39.7
	87873	10-17-87	Carson Lake	Bird	Shoveler, muscle	<1	<0.10	1.3	.20	--	<0.30	36.5
	87875	10-17-87	Carson Lake	Bird	Shoveler, muscle	<1	<0.10	1.2	.20	--	<0.30	38.9
	87877	10-17-87	Carson Lake	Bird	Shoveler, muscle	<1	<0.10	.86	.20	--	<0.30	45
	87879	10-17-87	Carson Lake	Bird	Shoveler, muscle	<1	<0.10	.93	.20	--	<0.30	37.7
	87881	10-17-87	Carson Lake	Bird	Shoveler, muscle	<1	.30	1.5	.20	--	<0.30	35.8
	87883	10-17-87	Carson Lake	Bird	Shoveler, muscle	<1	<0.10	1.7	2.6	--	.50	44.6
	87885	10-17-87	Carson Lake	Bird	Shoveler, muscle	<1	<0.10	1.7	.10	--	<0.30	40.1
	87887	10-17-87	Carson Lake	Bird	Shoveler, muscle	<1	<0.20	1.3	.20	--	<0.30	36.3
	87889	10-17-87	Carson Lake	Bird	Shoveler, muscle	<1	.20	1	.20	--	<0.30	36
67	89071	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	.53	--	--	--	--
67	89073	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	.61	--	--	--	--
67	89075	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1.6	--	--	--	--
67	89077	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1.1	--	--	--	--
67	89079	08-17-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	.37	--	--	--	--
67	89089	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1	--	--	--	--
67	89091	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	.86	--	--	--	--
67	89093	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1.1	--	--	--	--
67	89095	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1	--	--	--	--
67	89097	08-21-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	2.7	--	--	--	--
67	89101	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1.1	--	--	--	--
67	89103	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	2.7	--	--	--	--
67	89105	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1.1	--	--	--	--
67	89107	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1	--	--	--	--
67	89109	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1.2	--	--	--	--
67	89111	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1	--	--	--	--
67	89113	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1	--	--	--	--
67	89115	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1	--	--	--	--
67	89117	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1.6	--	--	--	--
67	89119	10-14-89	Carson Lake, Sprig Pond	Bird	Shoveler, muscle	--	--	1.5	--	--	--	--
67	87816	10-17-87	SWMA	Bird	Shoveler, muscle	<1	<0.10	1.2	.20	--	<0.30	46.3
67	87819	10-17-87	SWMA	Bird	Shoveler, muscle	<1	<0.10	1.3	.10	--	<0.30	39.2
67	87821	10-17-87	SWMA	Bird	Shoveler, muscle	<1	<0.10	1.9	.20	--	<0.30	46.1
67	87823	10-17-87	SWMA	Bird	Shoveler, muscle	<1	<0.10	1.4	.30	--	<0.30	50.5
67	87825	10-17-87	SWMA	Bird	Shoveler, muscle	<1	<0.10	1.4	.20	--	<0.30	48.1
67	87827	10-17-87	SWMA	Bird	Shoveler, muscle	<1	<0.10	.96	.10	--	<0.30	40.6

TABLE 20. --Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USEFS	Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
		87829	10-17-87	SWMA	Bird	Shoveler, muscle	<1	<0.10	1.2	0.45	---	<0.30	40.8
		87831	10-17-87	SWMA	Bird	Shoveler, muscle	<1	<0.10	1.5	.20	---	<0.30	52
		87833	10-17-87	SWMA	Bird	Shoveler, muscle	<1	<0.10	.92	.10	---	<0.30	42.5
		87835	10-17-87	SWMA	Bird	Shoveler, muscle	<1	<0.10	1.3	.20	---	<0.30	45.8
		87836	10-16-86	SWMA	Bird	Shoveler, muscle	<1	<0.10	1.7	.39	---	<0.30	38.6
		87837	10-16-86	SWMA	Bird	Shoveler, muscle	<1	<0.10	1.5	<.10	---	<0.30	46.4
		87868	10-17-87	Carson Lake	Bird	Shoveler, skin	<1	<0.10	<.20	.51	---	<0.30	5.3
		87871	10-17-87	Carson Lake	Bird	Shoveler, skin	<1	<0.10	<.20	.20	---	<0.30	4.6
		87814	10-17-87	SWMA	Bird	Shoveler, skin	<1	<0.10	<.10	.35	---	<0.30	8.8
		87817	10-17-87	SWMA	Bird	Shoveler, skin	<1	<0.10	.10	.20	---	<0.30	5.8
71		88454	06-11-88	Fernley WMA, East Pond	Egg	C Teal	<7	<4.5	10.1	39.3	<21	<.57	68.3
71		88455	06-03-88	Fernley WMA, East Pond	Egg	C Teal	<7	<4.5	7.58	23.2	<21	<.57	58.8
		88470	06-28-88	HWMA, Toulon Lake	Egg	C Teal	<7	<4.5	2.79	27.1	<21	<.57	77.8
		88471	06-01-88	HWMA, Toulon Lake	Egg	C Teal	<7	<4.5	3.66	22.2	<21	<.57	77.8
75		88498	06-02-88	Mahala Slough	Egg	C Teal	<7	<4.5	1.97	26.8	<21	<.57	71.8
75		88499	06-12-88	Mahala Slough	Egg	C Teal	<7	<4.5	2.91	22	<21	<.57	68.2
75		88500	06-02-88	Mahala Slough	Egg	C Teal	<7	<4.5	5.51	43.7	<21	<.57	70.9
75		88501	06-02-88	Mahala Slough	Egg	C Teal	<7	<4.5	4.28	34.6	<21	<.57	59.3
75		88502	06-02-88	Mahala Slough	Egg	C Teal	<7	<4.5	3.28	29.6	<21	<.57	57.4
75		88503	06-04-88	Mahala Slough	Egg	C Teal	<7	<4.5	6.85	35.9	<21	<.57	62.6
75		88511	06-19-88	Mahala Slough	Egg	C Teal	<7	5.54	2.26	22.7	<21	<.57	85.7
75		88512	06-02-88	Mahala Slough	Egg	C Teal	<7	<4.5	7.41	21.3	31	<.57	60.4
75		88517	06-02-88	Mahala Slough	Egg	C Teal	<7	<4.5	5.02	24.2	<21	.94	55.4
B		88478	05-24-88	Massie Slough	Egg	C Teal	<7	<4.5	7.95	28.6	<21	<.57	80.2
83		88464	06-09-88	SWMA, Lead Lake	Egg	C Teal	<7	<4.5	2.31	23.8	<21	<.57	77.9
83		88465	06-09-88	SWMA, Lead Lake	Egg	C Teal	<7	<4.5	2.04	23	<21	<.57	66.7
83		88522	06-09-88	SWMA, Lead Lake	Egg	C Teal	<7	<4.5	2.27	20.3	<21	<.57	50.3
71		88525	05-11-88	Fernley WMA, East Pond	Egg	Coot	<7	9.42	4.42	25	<21	.79	58.6
71		88526	03-19-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	12.2	50.5	<21	<.57	59.9
71		88527	06-03-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	6.49	28.2	<21	<.57	46.2
71		88528	05-19-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	8.45	26.8	<21	<.57	58.7
71		88529	03-19-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	9.46	16	<21	<.57	53.4
71		88530	05-19-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	7.24	24.8	<21	<.57	59.7
71		88531	05-19-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	8.31	43.3	<21	<.57	50.5
71		88532	06-16-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	10.1	71.8	<21	<.57	70
71		88533	06-16-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	10.1	42.4	<21	.63	57.9
71		88534	06-03-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	8.09	30.7	22.8	<.57	59.6
71		88535	06-03-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	5.84	34.3	<21	.82	67.6
71		88536	06-16-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	11.6	41.1	<21	<.57	52.3
71		88537	05-19-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	8.56	36.1	<21	.58	54.1

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
71	88538	05-19-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	9.82	28.3	<21	<0.57	68.8
71	88539	06-03-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	6.29	37.5	<21	<0.57	70.2
71	88540	05-19-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	9.21	31.5	<21	<0.57	52.7
71	88541	05-19-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	7.06	26.5	<21	<0.57	56.5
71	88542	05-19-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	9.89	31.7	<21	<0.57	62.9
71	88543	05-19-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	6.44	25	<21	<0.57	60.8
71	88544	05-19-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	7.56	25.2	22.8	1.01	67.5
71	88545	06-03-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	5.05	19.9	<21	1.16	55.2
71	88546	06-16-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	11.4	34.9	<21	.92	64.2
71	88547	06-16-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	11.8	29.5	<21	.98	64.7
71	88548	06-16-88	Fernley WMA, East Pond	Egg	Coot	<7	<4.5	10.8	17.2	<21	.99	59.6
71	88549	06-16-88	Fernley WMA, East Pond	Egg	Coot	<7	6.89	11.2	27.2	<21	1.6	63.5
	88556	05-17-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	3.3	43.2	<21	<0.57	71.9
	88557	05-17-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	2.06	25.1	<21	<0.57	57.8
	88558	05-17-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	2.9	27.2	<21	<0.57	64.9
	88559	05-17-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	2.11	25.8	<21	<0.57	58.8
	88560	05-17-88	HMMA, Toulon Lake	Egg	Coot	<7	7.41	2.8	28.9	<21	<0.57	63.7
	88561	06-08-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	2.44	41.3	<21	<0.57	65.3
	88562	06-08-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	2.21	44.6	39.2	<0.57	80.1
	88563	06-08-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	3.97	36.4	<21	<0.57	73.7
	88564	05-25-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	2.1	32.2	<21	<0.57	56.5
	88565	05-17-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	3.8	32.9	<21	<0.57	67.1
	88566	05-17-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	3.38	32.6	51.5	<0.57	59.5
	88567	05-17-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	2.44	46.5	<21	<0.57	60.9
	88568	05-25-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	2.55	41.7	25.7	<0.57	66.2
	88569	05-25-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	2.86	39	<21	.90	67.1
	88570	05-25-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	4.48	33.6	35.4	.59	56.5
	88571	05-17-88	HMMA, Toulon Lake	Egg	Coot	7.3	5.48	2.33	22.8	<21	.91	67.8
	88572	05-17-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	1.85	22.3	<21	<0.57	56.5
	88573	05-17-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	2.36	9.78	<21	.59	69.2
	88574	05-17-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	2.79	23	<21	<0.57	63.7
	88575	05-17-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	3.34	14.4	<21	<0.57	55.8
	88576	05-17-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	2.64	22.9	<21	.58	67.6
	88577	05-25-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	1.99	23.2	<21	<0.57	74.3
	88578	05-26-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	4.09	13.2	<21	.64	61.9
	88579	05-25-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	3.1	17.4	<21	<0.57	52.2
	88580	05-25-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	3.1	28.5	31.3	<0.57	62.3
	88581	05-26-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	3.89	14.9	24.5	<0.57	57.9
	88582	06-01-88	HMMA, Toulon Lake	Egg	Coot	<7	<4.5	3.25	17.8	<21	<0.57	53.6
	88484	06-13-88	Incline Wetlands	Egg	Coot	<7	5	.59	24.7	<21	<0.57	89.1

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USFWS												
Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
75	88518	06-20-88	Mahala Slough	Egg	Coot	<7	<4.5	4.35	25.6	<21	0.69	50.9
75	88519	06-20-88	Mahala Slough	Egg	Coot	<7	<4.5	5.94	24.4	24	<5.7	53.6
75	88520	06-02-88	Mahala Slough	Egg	Coot	<7	<4.5	4.91	26.5	<21	<5.7	58.8
75	88521	06-12-88	Mahala Slough	Egg	Coot	<7	<4.5	3.74	22.9	<21	<5.7	46.2
B	88479	06-17-88	Massie Gun club	Egg	Coot	<7	<4.5	4.3	38.2	<21	<5.7	60.4
B	88480	06-17-88	Massie Gun club	Egg	Coot	<7	<4.5	4.53	24.1	<21	<5.7	66.1
B	88481	06-10-88	Massie Gun club	Egg	Coot	<7	<4.5	9.13	23.6	<21	<5.7	66
B	88482	05-24-88	Massie Slough	Egg	Coot	<7	5.7	9	43	<21	<5.7	90
B	88483	05-31-88	Massie Slough	Egg	Coot	<7	5.69	7.93	21.1	<21	<5.7	73.2
83	88550	06-18-88	SWMA, Lead Lake	Egg	Coot	<7	<4.5	3.07	26.9	<21	1.38	63.4
83	88551	06-09-88	SWMA, Lead Lake	Egg	Coot	<7	<4.5	2.06	46.7	<21	1.13	62
83	88552	06-09-88	SWMA, Lead Lake	Egg	Coot	<7	<4.5	2.01	97.9	<21	2.05	82.9
83	88553	06-09-88	SWMA, Lead Lake	Egg	Coot	<7	<4.5	5.15	63.8	<21	1.68	73.5
83	88554	06-09-88	SWMA, Lead Lake	Egg	Coot	<7	<4.5	2.53	50.4	<21	.97	63.6
83	88555	06-09-88	SWMA, Lead Lake	Egg	Coot	<7	5.94	1.56	37.5	<21	<5.7	68.9
75	88466	06-08-88	HWMA, Toulon Lake	Egg	Gadwall	<7	<4.5	3.14	23.6	<21	<5.7	87.9
83	88462	06-09-88	SWMA, Lead Lake	Egg	Gadwall	<7	10.6	4.6	22.6	<21	.83	56.7
83	88487	05-06-88	Carson Valley	Egg	Gadwall	<7	<4.5	1.77	23	<21	<5.7	77.6
83	88488	05-23-88	Carson Valley	Egg	Mallard	<7	<4.5	1.4	16.9	<21	.74	50.6
83	88489	05-06-88	Carson Valley	Egg	Mallard	<7	<4.5	1.2	16.3	<21	<5.7	66.7
83	88490	05-06-88	Carson Valley	Egg	Mallard	<7	5.19	.72	14.1	<21	<5.7	57.2
71	88453	06-03-88	Carson Valley	Egg	Mallard	<7	<4.5	1.61	33.7	<21	<5.7	80.9
71	88469	05-25-88	Fernley WMA, East Pond	Egg	Mallard	7.5	<4.5	8.91	31.2	<21	<5.7	58.4
75	88495	06-02-88	Mahala Slough	Egg	Mallard	<7	<4.5	3.04	16.3	<21	<5.7	55.9
75	88515	06-20-88	Mahala Slough	Egg	Mallard	<7	<4.5	1.27	22.3	<21	<5.7	73.7
75	88516	06-20-88	Mahala Slough	Egg	Mallard	<7	<4.5	2.38	19.2	<21	<5.7	51.6
83	88459	06-09-88	Mahala Slough	Egg	Mallard	<7	<4.5	8.36	27	<21	<5.7	69
83	88460	06-09-88	SWMA, Lead Lake	Egg	Mallard	<7	<4.5	2.11	20.4	<21	<5.7	64.8
83	88461	06-09-88	SWMA, Lead Lake	Egg	Mallard	<7	<4.5	2.11	36.5	<21	<5.7	70.3
83	88462	06-09-88	SWMA, Lead Lake	Egg	Mallard	<7	<4.5	2.54	23.2	<21	<5.7	77.9
71	88450	06-03-88	Fernley WMA, East Pond	Egg	Pintail	<7	<4.5	10.1	25.9	<21	<5.7	63.1
71	88451	05-19-88	Fernley WMA, East Pond	Egg	Redhead	<7	<4.5	10.9	22.3	<21	.83	59.4
71	88452	06-11-88	Fernley WMA, East Pond	Egg	Redhead	<7	<4.5	8.81	31.2	<21	<5.7	63.7
71	88467	05-25-88	HWMA, Toulon Lake	Egg	Redhead	<7	<4.5	3.02	86.1	<21	<5.7	65.5
83	88468	05-25-88	HWMA, Toulon Lake	Egg	Redhead	<7	<4.5	3.11	24.7	<21	<5.7	85.7
83	88472	06-08-88	HWMA, Toulon Lake	Egg	Redhead	<7	<4.5	3.7	20.7	<21	<5.7	77.7
83	88473	06-01-88	HWMA, Toulon Lake	Egg	Redhead	<7	<4.5	3	26.7	<21	<5.7	88.9
83	88474	06-01-88	HWMA, Toulon Lake	Egg	Redhead	<7	7.92	3	23.7	<21	.84	64.3
83	88475	06-08-88	HWMA, Toulon Lake	Egg	Redhead	<7	<4.5	3.6	26.5	<21	<5.7	75.4

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USEWS		Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
75		88492	06-12-88	Mahala Slough	Egg	Redhead	<7	<4.5	3.85	31.1	<21	<0.57	75.3	
75		88493	06-02-88	Mahala Slough	Egg	Redhead	12.8	<4.5	2.3	30.7	28.9	<0.57	63.1	
75		88497	06-23-88	Mahala Slough	Egg	Redhead	<7	<4.5	2.95	26	<21	<0.57	68.2	
75		88508	06-04-88	Mahala Slough	Egg	Redhead	<7	4.68	1.18	32.5	<21	<0.57	79.3	
75		88509	06-02-88	Mahala Slough	Egg	Redhead	<7	<4.5	2.49	33	21.8	<0.57	64.6	
75		88513	06-20-88	Mahala Slough	Egg	Redhead	9.5	<4.5	4.85	52.7	20.8	<0.57	56.5	
75		88514	06-20-88	Mahala Slough	Egg	Redhead	<7	<4.5	8.48	22.7	<21	<0.57	54.1	
B		88476	05-24-88	Massie Slough	Egg	Redhead	<7	<4.5	3.54	25.5	<21	.78	71	
83		88458	06-18-88	SWMA, Lead Lake	Egg	Redhead	<7	<4.5	1.78	20.3	<21	<0.57	58.6	
75		88494	06-12-88	Mahala Slough	Egg	Ruddy	<7	<4.5	3.7	25.5	<21	<0.57	55.1	
75		88504	06-19-88	Mahala Slough	Egg	Ruddy	<7	<4.5	2.53	22.2	<21	<0.57	42.6	
75		88505	06-20-88	Mahala Slough	Egg	Ruddy	<7	<4.5	3.54	18.6	<21	<0.57	46.8	
75		88506	06-19-88	Mahala Slough	Egg	Ruddy	<7	<4.5	1.16	21.4	24.5	.69	52.9	
75		88507	06-02-88	Mahala Slough	Egg	Ruddy	<7	5.05	3.33	26.6	<21	<0.57	67.7	
75		88510	06-29-88	Mahala Slough	Egg	Ruddy	<7	<4.5	3.46	28.5	<21	.91	54.3	
75		88524	06-19-88	Mahala Slough	Egg	Ruddy	<7	<4.5	5.69	21.2	<21	<0.57	52.7	
B		88477	06-15-88	Massie Gun Club	Egg	Ruddy	<7	<4.5	7.39	25.3	<21	<0.57	70.7	
83		88456	06-09-88	SWMA, Lead Lake	Egg	Ruddy	<7	<4.5	2.1	23.1	<21	<0.57	54.5	
83		88457	06-18-88	SWMA, Lead Lake	Egg	Ruddy	<7	<4.5	2.85	51.7	<21	.71	43.6	
83		88463	06-21-88	SWMA, Lead Lake	Egg	Shoveler	<7	<4.5	1.24	20.9	<21	<0.57	65.5	
81		88110	02-11-88	SWMA, Hunter Drain	Insect	Corixidae	13.8	<10	1.84	190	<20	1.4	108	
71		88151	06-27-88	Fernley WMA, East Pond	Insect	Ephydra	<12	<10	5.69	22.9	<20	<1.2	97.9	
72		88150	06-27-88	Fernley WMA, N. Pond	Insect	Ephydra	<12	<10	5.8	25.5	<20	<1.2	87.7	
73		88152	06-27-88	Fernley WMA, Pond #1	Insect	Ephydra	<12	<10	8.25	52	<20	6.25	118	
D		88138	06-16-88	SWMA, Goose Lake	Insect	Ephydra	<12	<10	2.14	76.3	<20	5.78	124	
81		88132	06-03-88	SWMA, Hunter Drain	Insect	Ephydra	<12	<10	5.31	162	<20	4.41	28.8	
81		88136	06-16-88	SWMA, Hunter Drain	Insect	Ephydra	<12	<10	11.4	53.3	<20	4.76	78	
81		88137	06-16-88	SWMA, Hunter Drain	Insect	Ephydra	<12	<10	17.9	78.4	<20	3.32	97.3	
81		88182	08-02-88	SWMA, Hunter Drain	Insect	Ephydra	<12	<10	10.8	39.1	20.9	3.95	64.4	
87		88133	06-14-88	SWMA, Pintail Bay	Insect	Ephydra	<12	<10	1.53	33.8	<20	2.5	75.3	
83		88141	06-16-88	SWMA, South Lead Lake	Insect	Ephydra	<12	<10	4.67	45.2	<20	4.49	153	
92		88139	06-16-88	SWMA, TJ Drain	Insect	Ephydra	<12	<10	18.4	116	<20	4.79	98.1	
92		88140	06-16-88	SWMA, TJ Drain	Insect	Ephydra	<12	<10	11.4	108	<20	12.3	179	
1		88800	08-29-88	Sheckler Reservoir	Plant	Algae	<2	9	.61	167	--	26	39.2	
26		88839	09-12-88	New River Drain	Plant	Algae	<3	13	.50	168	--	41	78.9	
50		88842	09-12-88	Kent Lake Ext. Drain	Plant	Algae	<2	13	.79	127	--	32	73.1	
2		88832	09-06-88	Old Reservoir	Plant	Algae	<3	18	<20	238	--	52.6	80.3	
27		88840	09-12-88	Upper New River Drain	Plant	Algae	<2	8	.63	221	--	31	53.5	
95		88159	07-07-88	Carson R. Blw Lahontan	Plant	Algae	<12	<10	1.29	172	20	21.2	40	
52		88835	09-08-88	Paiute Branch 3 Drain	Plant	Algae	<2	7	.40	466	--	16	26	

TABLE 20. ---Moisture content and trace-element concentrations in biological samples from the study area, 1987-89---Continued

USFWS												
Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
4	88801	08-29-88	Upper L Drain	Plant	Algae	2	6	0.79	98.2	--	24	30
29	88803	08-29-88	Mid L Drain	Plant	Algae	<2	11	1.4	132	--	37	47
30	88804	08-29-88	L3 Drain	Plant	Algae	<2	9	.83	106	--	32	42.5
6	88805	08-29-88	Sheckler Deep Drain	Plant	Algae	<2	10	1.2	167	--	40	44.4
68	89061	09-22-89	Fernley Drain	Plant	Algae	<28	<.58	<.87	120	<48	24	81
68	89201	11-30-89	Fernley Drain	Plant	Algae	<12	39	<.41	48	<20	38	49
70	89009	05-16-89	Fernley West Drain	Plant	Algae	<10	20.5	1.41	81.1	<30	32.2	56.5
70	89031	07-07-89	Fernley West Drain	Plant	Algae	<10	<6	.83	69.2	<30	8.53	21.2
31	88806	08-30-88	L2 Drain	Plant	Algae	<1	4	1.5	222	--	22	43.2
54	88831	09-06-88	R2 Drain	Plant	Algae	<2	14	.40	141	--	33	59.3
63	88807	08-30-88	Lower Diagonal Drain	Plant	Algae	4	10	1.5	253	--	38	65.3
55	88843	09-06-88	Upper Paiute Drain	Plant	Algae	<2	13	1.3	209	--	43	51.7
8	88802	08-29-88	Upper Diagonal 2 Drain	Plant	Algae	4	9	1.2	126	--	35	67.3
33	88808	08-30-88	Middle L Drain	Plant	Algae	4	7	1.2	95.5	--	23	27
56	88833	09-08-88	S2C Drain	Plant	Algae	<2	12	.40	267	--	31	50.5
34	88809	08-30-88	LB Drain	Plant	Algae	4	7	.91	81.7	--	15	23
57	88841	09-12-88	Upper Stillwater Slough	Plant	Algae	<3	13	.60	324	--	38	57.1
58	88836	09-07-88	Harmon Deep Drain	Plant	Algae	<2	13	1.7	125	--	32	40.2
11	88812	08-30-88	Carson Lake I Ext. Drain	Plant	Algae	<2	9	.63	195	--	25	40.2
35	88902	08-25-88	L Branch 1 Deep Drain	Plant	Algae	<2	9	.40	162	--	28	48.6
59	88829	09-07-88	S2G Drain	Plant	Algae	<2	15	.50	516	--	20	20
36	88906	08-25-88	Lower L Drain	Plant	Algae	<2	11	.73	98.8	--	34	57.4
60	88838	09-07-88	Harmon Reservoir	Plant	Algae	<2	10	.30	225	--	15	24
13	88813	08-30-88	Carson Lake 1A Drain	Plant	Algae	2	<3	.90	286	--	14	28
37	88810	08-30-88	Mid Carson Lake Drain	Plant	Algae	4	8	.63	149	--	25	31
61	88837	09-06-88	S1B Drain	Plant	Algae	<2	15	.66	131	--	32	57.1
14	88814	08-30-88	A1 Drain	Plant	Algae	<2	8	.70	488	--	32	44.4
38	88900	08-25-88	A-Line	Plant	Algae	2	6	.20	470	--	15	23
62	88912	08-29-88	Lower Diagonal 1 Drain	Plant	Algae	3	5	.40	213	--	11	25
15	88825	08-31-88	Mussi Drain	Plant	Algae	<2	16	.62	151	--	32	48.6
39	88904	08-25-88	Piercion Drain	Plant	Algae	<1	5	.40	209	--	13	35.9
63	88908	08-25-88	Lower Diagonal Drain	Plant	Algae	<3	13	1	131	--	46	77.9
40	88820	08-31-88	J1 Deep Drain	Plant	Algae	<2	12	.75	114	--	33	55.5
64	88828	09-06-88	Paiute Branch 1 Drain	Plant	Algae	<2	12	.75	195	--	32	52.4
16	88826	08-31-88	F2 Drain	Plant	Algae	2	9	1.9	809	--	19	22
41	88817	08-31-88	Yarbrough Drain	Plant	Algae	<2	9	.30	196	--	24	46.1
90	88845	09-08-88	Stillwater Pt. Reservoir	Plant	Algae	<2	13	.30	181	--	38	58.3
17	88822	08-31-88	Shaffner Drain	Plant	Algae	<2	20	4.4	232	--	61.3	53
42	88811	08-30-88	Carson Lake Br. 3 Drain	Plant	Algae	4	12	1	386	--	36	48.2
66	88830	09-06-88	Upper TJ Drain	Plant	Algae	23	17	5.6	2,270	--	25	11

TABLE 20.--Moisture content and trace-element concentrations in biological samples from the study area, 1987-89--Continued

USEWS

Site number (fig. 7)	Sample number	Date	Location	Category	Species ¹	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
18	88824	08-31-88	ERB Drain	Plant	Algae	<2	13	<0.20	153	--	31	40.6
43	88815	08-30-88	Carson Lake Br. 1 Drain	Plant	Algae	1	<3	.40	437	--	2.7	4.2
78	88160	07-07-88	SWMA, D-Line Canal	Plant	Algae	<12	10.9	<30	759	<20	51.9	42.7
78	89028	07-07-89	SWMA, D-Line Canal	Plant	Algae	<10	6.31	<0.6	421	<30	13.4	33.6
78	89063	09-22-89	SWMA, D-Line Canal	Plant	Algae	<15	27	<4.8	290	<26	30	52
78	89210	11-30-89	SWMA, D-Line Canal	Plant	Algae	<16	24	<5.3	330	<28	34	47
81	88100	02-11-88	SWMA, Hunter Drain	Plant	Algae	16.1	<10	3.81	372	<20	8.47	52.9
81	88111	02-11-88	SWMA, Hunter Drain	Plant	Algae	<12	<10	4.03	400	<20	13.2	29.8
81	88114	02-11-88	SWMA, Hunter Drain	Plant	Algae	<12	<10	2.83	871	<20	20.1	34.5
81	88117	02-11-88	SWMA, Hunter Drain	Plant	Algae	<12	<10	1.77	930	<20	11.8	73.6
81	88120	02-11-88	SWMA, Hunter Drain	Plant	Algae	23.8	<10	3.11	232	<20	34.6	42.8
81	88134	05-19-88	SWMA, Hunter Drain	Plant	Algae	<12	<10	.89	708	<20	18.4	21
81	88135	05-19-88	SWMA, Hunter Drain	Plant	Algae	<12	<10	.95	871	<20	23.7	26.4
81	88156	07-05-88	SWMA, Hunter Drain	Plant	Algae	<12	<10	5.53	527	<20	13.9	26.5
81	88157	07-05-88	SWMA, Hunter Drain	Plant	Algae	<12	<10	4.35	124	<20	32	57.6
81	89007	03-16-89	SWMA, Hunter Drain	Plant	Algae	39.8	10.1	4.97	224	<30	27.1	29.6
81	89014	05-16-89	SWMA, Hunter Drain	Plant	Algae	27.4	10.8	3.62	246	<30	35.4	46.9
81	89029	07-07-89	SWMA, Hunter Drain	Plant	Algae	20.2	6.22	.87	899	<30	30.1	38.4
86	89006	03-16-89	SWMA, Paiute Drain	Plant	Algae	<10	<6	<.60	323	<30	18.5	44.9
86	89011	05-16-89	SWMA, Paiute Drain	Plant	Algae	<10	7.81	<.60	94.1	<30	19.8	46.3
86	89030	07-07-89	SWMA, Paiute Drain	Plant	Algae	<10	11.7	<.60	130	<30	36.5	75.9
86	89062	09-22-89	SWMA, Paiute Drain	Plant	Algae	<12	30	.50	86	<21	33	75
86	89207	11-30-89	SWMA, Paiute Drain	Plant	Algae	<5.5	19	.22	57	<9.4	20	41
92	88158	07-06-88	SWMA, TJ Drain	Plant	Algae	<12	<10	.96	683	26.5	8.59	17.1
92	88189	08-24-88	SWMA, TJ Drain	Plant	Algae	5.9	4	1.1	848	--	17	17
92	88191	09-13-88	SWMA, TJ Drain	Plant	Algae	12	5	.71	1,040	--	17	15
92	89005	03-16-89	SWMA, TJ Drain	Plant	Algae	<10	<6	.95	1,410	<30	16.5	17.6
92	89016	05-16-89	SWMA, TJ Drain	Plant	Algae	<10	10.9	2.06	1,350	<30	52.6	33.5
92	89027	07-07-89	SWMA, TJ Drain	Plant	Algae	<10	8.91	.81	691	<30	35.7	42.8
92	89060	09-22-89	SWMA, TJ Drain	Plant	Algae	<14	6.3	.61	370	<24	23	26
92	89204	11-30-89	SWMA, TJ Drain	Plant	Algae	<24	12	.84	460	<41	30	<41
44	88819	08-31-88	Downs Drain	Plant	Algae	2	4	.87	303	--	12	21
20	88827	09-06-88	Paiute Ext. Br. 1 Drain	Plant	Algae	<2	12	.50	326	--	26	34.1
22	88821	08-31-88	S-Line Reservoir	Plant	Algae	<3	17	.40	112	--	47	75.3
46	88816	08-31-88	Holmes Branch 2 Drain	Plant	Algae	<2	11	.64	258	--	37	54.3
23	88844	09-08-88	New River Ext. Drain	Plant	Algae	<3	14	.66	270	--	44	74.8
47	88818	08-31-88	Holmes Drain	Plant	Algae	<2	8	1.60	324	--	29	40.9
24	88823	08-31-88	Upper Harmon Deep Drain	Plant	Algae	12	23	1.9	223	--	40	59.4
48	88834	09-07-88	NE Carson Lake	Plant	Algae	<2	12	<.20	739	--	33	51.1
49	88846	09-08-88	Patrick Drain	Plant	Algae	<2	10	.88	116	--	26	41.6

¹ Except as noted, bird tissue is liver.

TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89

[Data from U.S. Fish and Wildlife Service. Abbreviations and symbol: Comp, Composite; Ext., Extension; HMMA, Humboldt Wildlife Management Area; Pt., Point; Res, Reservoir; R., River; SWMA, Stillwater Wildlife Management Area; USEFWS, U.S. Fish and Wildlife Service; WMA, Wildlife Management Area; --, not determined. All values in micrograms per gram, dry weight.]

Site number (fig. 7)	Sample number	Date	Location	Category	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
95	88161	07-07-88	Carson R. Below Lahontan	Drift	95.90	3,970	9.26	168	0.15	48.7	1.54
68	89056	09-22-89	Fernley Drain	Drift	92.71	580	6.9	180	--	<480	<6.8
68	89200	11-30-89	Fernley Drain	Drift	65.36	1,900	4.3	130	--	<96	<1.4
70	88145	06-22-88	Fernley West Drain	Drift	80.90	6,080	16.8	198	.23	43.3	.94
70	88179	07-20-88	Fernley West Drain	Drift	86	4,660	20	194	.16	72	.59
70	88188	08-10-88	Fernley West Drain	Drift	94	6,950	26	351	.10	261	.70
70	88192	09-13-88	Fernley West Drain	Drift	87.40	10,000	20	247	.20	210	<.50
70	89008	05-16-89	Fernley West Drain	Drift	91.80	5,480	79.8	1,460	.18	40	4.17
70	89024	07-07-89	Fernley West Drain	Drift	96.50	737	12.3	40.7	<.10	29	2.35
73	88153	06-28-88	Fernley WMA, Pond #1	Drift	94	170	20.4	38.3	<.12	54.8	<.50
73	88154	06-28-88	Fernley WMA, Pond #1	Drift	79	20	2.33	2.08	<.12	9	<.50
73	88155	06-28-88	Fernley WMA, Pond #1	Drift	72	1,390	43.5	129	<.12	82.4	<.50
73	88178	07-20-88	Fernley WMA, Pond #1	Drift	78.40	50	5.11	1.06	<.12	22	<.50
73	88186	08-10-88	Fernley WMA, Pond #1	Drift	80	2,060	16	18.7	<.10	67	<.40
73	88187	08-10-88	Fernley WMA, Pond #1	Drift	75.70	518	4.7	5.8	<.10	18	<.40
78	88147	06-21-88	SWMA, Canvasback	Drift	78.70	9,790	28.1	143	.48	135	<.50
78	88146	06-23-88	SWMA, D-Line Canal	Drift	90.60	3,530	27.8	135	.18	131	.63
78	88149	06-21-88	SWMA, D-Line Canal	Drift	91.60	2,240	7.05	55.7	.13	40.4	1.31
78	88185	08-03-88	SWMA, D-Line Canal	Drift	93.90	2,380	21.1	84.6	<.12	222	2.53
78	89003	03-10-89	SWMA, D-Line Canal	Drift	78.80	6,440	12.1	196	.48	153	.56
78	89012	05-16-89	SWMA, D-Line Canal	Drift	88.80	3,920	8	129	.23	28	.62
78	89023	07-07-89	SWMA, D-Line Canal	Drift	82.40	1,450	5.56	33.8	<.10	54	2.52
78	89055	09-22-89	SWMA, D-Line Canal	Drift	90.24	170	<.99	15	--	<340	<4.8
78	89209	11-30-89	SWMA, D-Line Canal	Drift	90.59	690	5.4	35	--	<370	<5.3
81	88130	06-01-88	SWMA, Hunter Drain	Drift	66.80	11,500	35	103	.46	579	1.34
81	88131	06-01-88	SWMA, Hunter Drain	Drift	83.20	2,720	14.5	53.7	.12	93.4	2.37
81	88163	07-13-88	SWMA, Hunter Drain	Drift	80.10	2,320	10.1	53	<.12	310	1.27
81	88183	08-03-88	SWMA, Hunter Drain	Drift	70.80	2,420	4.61	24	<.12	816	1.24
81	89004	03-10-89	SWMA, Hunter Drain	Drift	68.30	8,280	18.6	135	.33	514	2.06
81	89013	05-16-89	SWMA, Hunter Drain	Drift	66.40	443	3.65	45.4	<.10	109	1.05
81	89022	07-07-89	SWMA, Hunter Drain	Drift	82.10	3,230	9.79	70.2	.40	286	3.21
81	89058	09-22-89	SWMA, Hunter Drain	Drift	51.74	5,900	8.6	500	--	120	1.1
81	89212	11-30-89	SWMA, Hunter Drain	Drift	59.20	4,000	8.1	57	--	360	<1.2
81	88148	06-21-88	SWMA, Lead Lake Outflow	Drift	90.70	1,600	12	46.9	<.12	79	1.04
81	88166	07-14-88	SWMA, Lead Lake Outflow	Drift	86.10	810	5.2	24.5	<.12	46.1	.58

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TABLE 21. --Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89--Continued

USFWS		Site number (fig. 7)	Sample number	Date	Location	Category	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
		88162	07-13-88	SWMA, Navy Cabin Drain	Drift	78.50	120	1.52	4.6	<0.12		11.8	<0.50
86		88143	06-14-88	SWMA, Paiute Drain	Drift	91.20	6,930	8.36	100	.35		29.1	1.35
86		88165	07-13-88	SWMA, Paiute Drain	Drift	90.20	5,420	8.51	85.8	.24		61.4	1.37
86		88193	09-14-88	SWMA, Paiute Drain	Drift	89.80	15,200	16	168	.46		110	2.7
86		89002	03-10-89	SWMA, Paiute Drain	Drift	76.60	10,300	17	161	.50		114	.55
86		89010	05-16-89	SWMA, Paiute Drain	Drift	90.90	7,030	13.7	93.8	.34		90	1.74
86		89026	07-07-89	SWMA, Paiute Drain	Drift	94.20	8,250	18.6	128	.48		76	2.25
86		89059	09-22-89	SWMA, Paiute Drain	Drift	81.06	11,000	4.2	170	--		<180	<2.6
86		89206	11-30-89	SWMA, Paiute Drain	Drift	84.57	1,200	2	60	--		<210	3.6
88		88190	08-24-88	SWMA, South Lead Lake	Drift	84.80	95	1.2	27.5	<.10		14	<.40
91		88144	06-14-88	SWMA, Swan Lake Check	Drift	94.90	1,420	11.4	37.2	<.12		154	.75
92		88142	06-14-88	SWMA, TJ Drain	Drift	91	2,580	46.4	35	.15		94.5	1.86
92		88164	07-13-88	SWMA, TJ Drain	Drift	83.50	1,680	23.7	28	<.12		95.3	1.78
92		88184	08-03-88	SWMA, TJ Drain	Drift	90	1,210	15.2	26.9	<.12		103	1.03
92		88194	09-14-88	SWMA, TJ Drain	Drift	86.70	1,760	16	42.2	<.10		120	2.9
92		89001	03-10-89	SWMA, TJ Drain	Drift	87.70	3,150	79.8	81.8	.13		245	6.67
92		89015	05-16-89	SWMA, TJ Drain	Drift	90.70	4,430	56.3	77.4	.20		139	2.68
92		89025	07-07-89	SWMA, TJ Drain	Drift	90.30	6,260	25.3	68	.33		46	.68
92		89057	09-22-89	SWMA, TJ Drain	Drift	98.01	1,600	<4.6	48	--		<1,700	24
92		89203	11-30-89	SWMA, TJ Drain	Drift	98.04	870	52	<43	--		<1,700	24
1		88922	08-29-88	Sheckler Reservoir	Detritus	80.30	22,900	15	246	.60		14	<.50
26		88974	09-12-88	New River Drain	Detritus	81.70	21,600	12	249	.64		22	<.50
50		88975	09-12-88	Kent Lake Ext. Drain	Detritus	81.80	28,100	15	228	.88		28	<.50
2		88967	09-07-88	Old Reservoir	Detritus	87.70	36,300	18	253	1.1		41	<.50
27		88972	09-12-88	Upper New River Drain	Detritus	93.50	24,600	54	260	.85		44	.50
51		88966	09-09-88	Lower Stillwater Slough	Detritus	82.40	27,500	17	238	.89		34	<.50
3		88942	09-02-88	Soda Lake Drain	Detritus	87.70	22,300	44	287	.74		30	<.30
67		89054	08-22-89	Carson Lake, Sprig Pond	Detritus	89.85	16,000	13	150	<4.6		81	<4.6
28		88919	08-29-88	LD Drain	Detritus	87.20	20,800	24	269	.52		25	<.50
52		88964	09-09-88	Paiute Branch 3 Drain	Detritus	91.80	19,700	13	190	.69		25	<.40
4		88921	08-29-88	Upper L Drain	Detritus	81.50	17,100	23	239	.45		20	<.60
29		88916	08-29-88	Mid L Drain	Detritus	83	17,200	21	203	.47		20	<.50
53		88947	09-02-88	S1 Deep Drain	Detritus	81.20	23,200	13	178	.85		32	<.30
5		88924	08-29-88	South Carson River Drain	Detritus	90.60	16,300	18	174	.35		19	.50
30		88918	08-29-88	L3 Drain	Detritus	84.80	20,700	34	215	.59		22	<.50

TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
6	88925	08-29-88	Sheckler Deep Drain	Detritus	89.50	18,600	32	223	0.45	27	<0.50
68	89067	09-22-89	Fernley Drain	Detritus	85.22	9,000	15	110	<3	<30	<3
68	89202	11-30-89	Fernley Drain	Detritus	91	4,500	4.9	36	<5.1	<51	<5.1
69	88171	06-28-88	Fernley South Drain	Detritus	85.70	23,800	23.4	458	.83	51.5	<.70
70	88169	06-28-88	Fernley West Drain	Detritus	82.30	6,620	25.2	485	.80	45.4	<.70
70	89035	07-07-89	Fernley West Drain	Detritus	95.90	30,700	36.6	556	.71	80	<1
71	88170	06-27-88	Fernley WMA, E. Pond	Detritus	90	15,600	53.6	403	.75	353	<.70
72	88180	07-19-88	Fernley WMA, N. Pond	Detritus	88.20	7,340	35.6	249	<.50	511	<.70
73	88172	06-27-88	Fernley WMA, Pond #1	Detritus	88.50	19,300	37.1	517	.81	172	<.70
31	88935	09-02-88	L2 Drain	Detritus	87.20	16,800	38	175	.30	16	<.50
54	88944	09-02-88	R2 Drain	Detritus	90.10	22,800	24	235	.89	20	<.30
7	88917	08-29-88	Upper West Side Drain	Detritus	87.70	17,300	23	195	.52	16	<.50
63	88926	08-30-88	Lower Diagonal Drain	Detritus	87.80	19,800	44	181	.46	18	.70
55	88943	09-02-88	Upper Paiute Drain	Detritus	87.60	16,500	18	222	.59	20	.40
8	88923	08-29-88	Upper Diagonal 2 Drain	Detritus	90.50	18,100	30	177	.42	24	.90
33	88934	09-02-88	Middle L Drain	Detritus	85.10	17,300	27	207	.41	16	<.50
56	88962	09-08-88	S2C Drain	Detritus	89.60	25,700	13	262	1.1	14	<.50
9	89053	08-16-89	HWMA, Humboldt Lake	Detritus	77.41	3,600	27	130	<1.9	180	<1.9
9	88920	08-29-88	Upper Diagonal Drain	Detritus	83.50	15,400	23	199	.42	15	<.50
34	88936	09-02-88	L8 Drain	Detritus	81.30	15,100	18	185	.34	12	<.50
57	88973	09-12-88	Upper Stillwater Slough	Detritus	84	24,000	20	277	.74	31	<.50
10	88929	08-30-88	Gumow Drain	Detritus	85.60	20,500	26	217	.48	20	<.50
58	88959	09-07-88	Harmon Deep Drain	Detritus	87.30	20,000	21	30	.72	30	<.50
11	88931	08-30-88	Carson Lake I Ext. Drain	Detritus	84.70	21,000	21	263	.53	25	<.50
35	88903	08-25-88	L Branch 1 Deep Drain	Detritus	81.70	27,900	13	186	.89	24	1.8
59	88946	09-02-88	S2G Drain	Detritus	83.20	19,600	13	141	.67	53	<.30
12	88927	08-30-88	Carson Lake Drain	Detritus	90.60	25,000	22	272	.68	41	<.50
36	88907	08-25-88	Lower L Drain	Detritus	75.60	19,900	12	169	.58	15	<.50
60	88952	09-02-88	Harmon Reservoir	Detritus	78.20	13,200	8.6	168	.52	12	<.50
13	88930	08-30-88	Carson Lake 1A Drain	Detritus	88.30	22,500	26	296	.55	35	<.50
37	88932	09-02-88	Mid Carson Lake Drain	Detritus	88.80	18,300	44	243	.53	20	<.50
61	88948	09-02-88	S1B Drain	Detritus	72.80	11,900	6.2	135	.30	7	<.30
14	88937	09-02-88	A1 Drain	Detritus	90.40	26,900	37	262	.82	30	<.50
38	88901	08-25-88	A-Line Canal	Detritus	84.80	20,300	23	155	.60	37	<.50
62	88914	08-25-88	Lower Diagonal 1 Drain	Detritus	88.50	23,800	19	204	.63	47	<.50

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TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
74	89048	08-01-89	North Mahala Slough	Detritus	91.80	41,400	49.4	520	1.13	155	<1
15	88969	09-09-88	Mussi Drain	Detritus	85.60	21,500	13	228	.59	31	<.40
39	88905	08-25-88	Pierson Drain	Detritus	90.80	22,800	23	189	.63	42	.60
63	88910	08-25-88	Lower Diagonal Drain	Detritus	79.40	22,400	20	235	.62	27	<.50
40	88956	09-09-88	J1 Deep Drain	Detritus	75.70	18,200	14	152	.63	14	<.50
64	88951	09-02-88	Paiute Branch 1 Drain	Detritus	84.50	23,400	14	211	.86	9	.40
16	88971	09-09-88	F2 Drain	Detritus	86.40	15,300	24	216	.45	38	<.40
41	88953	09-08-88	Yarbrough Drain	Detritus	83.50	25,900	9.9	171	.93	19	<.60
65	88961	09-08-88	Stillwater Pt. Reservoir	Detritus	82.70	24,700	13	244	.85	46	<.50
17	88970	09-09-88	Shaifner Drain	Detritus	91.70	22,200	36	208	.62	74	.70
42	88928	08-30-88	Carson Lake Branch 3 Drain	Detritus	87.30	23,200	33	258	.74	28	<.50
66	88950	09-06-88	Upper TJ Drain	Detritus	83.20	12,100	38	102	.36	76	<.50
18	88968	09-07-88	ERB Drain	Detritus	88.90	24,600	46	427	.85	28	<.50
75	89049	08-01-89	South Mahala Slough	Detritus	89.30	22,200	356	345	.68	460	<1
43	88933	09-02-88	Carson Lake Branch 1 Drain	Detritus	89.50	21,600	20	222	.49	100	<.50
76	89052	08-01-89	SWMA, Big Indian Lake	Detritus	88.70	53,300	18.5	636	1.22	83	1.08
77	89047	07-26-89	SWMA, Cattail Lake	Detritus	89.50	41,600	13	549	1.51	250	1.58
78	88174	07-07-88	SWMA, D-Line Canal	Detritus	83	18,800	14.6	571	1.46	115	<.70
78	89036	07-07-89	SWMA, D-Line Canal	Detritus	90.20	35,800	6.68	489	1.49	133	1.65
78	89069	09-22-89	SWMA, D-Line Canal	Detritus	85.14	14,000	9.2	160	<3.1	<31	<3.1
78	89211	11-30-89	SWMA, D-Line Canal	Detritus	96.63	5,000	51	75	15	<150	15
79	89039	07-26-89	SWMA, Dry Lake East	Detritus	88.30	44,700	11.9	550	1.38	225	<1
80	89043	07-26-89	SWMA, Dry Lake West	Detritus	90.60	39,300	11.4	589	1.32	187	<1
81	88173	07-05-88	SWMA, Hunter Drain	Detritus	81.60	18,100	46	329	.77	207	<.70
81	88175	07-05-88	SWMA, Hunter Drain	Detritus	72.60	14,200	18.6	371	1.4	500	<.70
81	89032	07-07-89	SWMA, Hunter Drain	Detritus	81	26,000	12.8	404	.82	849	<1
81	89066	09-22-89	SWMA, Hunter Drain	Detritus	80.82	11,000	14	84	<2.4	830	<2.4
81	89213	11-30-89	SWMA, Hunter Drain	Detritus	84.80	20,000	17	150	<3.2	880	<3.2
83	89038	07-25-89	SWMA, Lead Lake Comp1	Detritus	57.60	39,100	8.28	588	1.33	69	<1
83	89046	07-25-89	SWMA, Lead Lake Comp2	Detritus	98.80	33,800	--	358	.81	436	<1
83	89044	07-25-89	SWMA, Lead Lake Comp3	Detritus	90.50	39,300	23.9	441	.91	206	<1
83	89037	07-20-89	SWMA, Lead Lake Comp4	Detritus	87.80	41,200	19.3	451	1.02	208	<1
84	89050	08-01-89	SWMA, Likes Lake	Detritus	81.70	32,400	26.3	522	1.15	62	<1
85	89051	08-01-89	SWMA, Papoose Lake	Detritus	78.60	53,200	17.6	676	1.27	68	<1
86	89033	07-07-89	SWMA, Paiute Drain	Detritus	85.50	21,100	12.7	466	1.2	82	1

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TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89--Continued

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Site number (fig. 7)	Sample number	Date	Location	Category	Percent moisture	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium
86	89068	09-22-89	SWMA, Paiute Drain	Detritus	86.95	2,600	20	310	<3.8	<38	<3.8
86	89208	11-30-89	SWMA, Paiute Drain	Detritus	80.09	9,600	10	110	<2.5	<25	<2.5
87	88168	07-06-88	SWMA, Pintail Bay	Detritus	94.30	8,510	25.8	299	.61	471	<.70
88	88167	07-06-88	SWMA, South Lead Lake	Detritus	83.50	14,500	23.5	472	1.07	183	<.70
89	89041	07-25-89	SWMA, South Nutgrass	Detritus	95.90	19,000	37.5	276	.59	922	<1
65	89040	07-26-89	SWMA, Stillwater Pt Res	Detritus	91	46,100	10	696	1.46	136	1.08
91	89042	07-25-89	SWMA, Swan Lake Check	Detritus	99.30	21,800	--	274	.55	684	<1
91	88176	07-12-88	SWMA, Swan Lake Check	Detritus	82.90	14,800	25.7	392	.79	356	<.70
92	88177	07-13-88	SWMA, TJ Drain	Detritus	73.70	19,000	29.2	445	1.04	97.9	<.70
92	89034	07-07-89	SWMA, TJ Drain	Detritus	90	46,200	27.9	410	1	150	<1
92	89065	09-22-89	SWMA, TJ Drain	Detritus	85.09	8,200	21	72	<3.3	55	<3.3
92	89205	11-30-89	SWMA, TJ Drain	Detritus	86.69	10,000	40	64	<3.4	140	<3.4
93	88181	07-15-88	SWMA, Tule Lake	Detritus	91	11,000	25.6	350	.61	515	<.70
94	89045	07-25-89	SWMA, West Nutgrass	Detritus	84.70	29,300	30.1	341	.75	607	<1
19	88963	09-09-88	Lower Soda Lake Drain	Detritus	89.10	14,300	56	194	.46	28	.50
44	88955	09-09-88	Downs Drain	Detritus	91.40	21,400	23	144	.75	54	<.60
20	88938	09-02-88	Paiute Ext. Branch 1 Drain	Detritus	90.30	19,000	30	209	.38	34	<.50
45	88957	09-09-88	Lower Carson Lake Drain	Detritus	82.20	20,600	11	226	.79	28	<.50
21	88941	09-02-88	Harmon 1 Deep Drain	Detritus	89.90	16,700	74	186	.10	22	1
22	88940	09-02-88	S-Line Reservoir	Detritus	82.30	17,000	11	431	.35	10	<.50
46	88958	09-09-88	Holmes Branch 2 Drain	Detritus	88.90	17,400	13	175	.65	31	.40
23	88965	09-08-88	New River Ext. Drain	Detritus	91.40	22,700	31	294	.72	25	<.50
47	88954	09-09-88	Holmes Drain	Detritus	87.10	20,600	14	238	.84	26	<.60
24	88945	09-02-88	Upper Harmon Deep Drain	Detritus	94.20	12,600	41	311	.39	42	.60
48	88949	09-02-88	NE Carson Lake	Detritus	84.30	20,100	69	160	.67	100	<.30
25	88939	09-02-88	Harmon 2 Drain	Detritus	88.70	18,500	28	223	.42	38	<.50
49	88960	09-08-88	Patrick Drain	Detritus	85.90	27,900	11	251	1	27	<.50

TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89--Continued

USFWS											
Site number (fig. 7)	Sample number	Date	Location	Category	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
95	88161	07-07-88	Carson R. Below Lahontan	Drift	5.61	24.2	6,790	<15	4,410	2,880	3.46
68	89056	09-22-89	Fernley Drain	Drift	<13	<140	1,800	19	1,900	2,800	<.67
68	89200	11-30-89	Fernley Drain	Drift	<2.6	<27	5,100	12	1,600	390	<.14
70	88145	06-22-88	Fernley West Drain	Drift	5.51	14	9,980	<15	4,840	2,120	.09
70	88179	07-20-88	Fernley West Drain	Drift	6.08	18.3	7,130	<15	4,500	4,520	.74
70	88188	08-10-88	Fernley West Drain	Drift	6	59.1	7,820	6	3,360	7,030	.08
70	88192	09-13-88	Fernley West Drain	Drift	7.2	22	10,900	4	3,910	2,530	.05
70	89008	05-16-89	Fernley West Drain	Drift	5.56	57.6	11,900	14.6	4,240	3,090	.05
70	89024	07-07-89	Fernley West Drain	Drift	<2	27.9	1,390	<6	2,200	250	.13
73	88153	06-28-88	Fernley WMA, Pond #1	Drift	<1.9	27.8	380	<15	2,340	37.7	.14
73	88154	06-28-88	Fernley WMA, Pond #1	Drift	<1.9	33.9	120	<15	1,220	12.2	.05
73	88155	06-28-88	Fernley WMA, Pond #1	Drift	<1.9	9.64	3,640	<15	2,390	1,040	.04
73	88178	07-20-88	Fernley WMA, Pond #1	Drift	11.4	31.4	1,190	<15	1,190	10.5	.75
73	88186	08-10-88	Fernley WMA, Pond #1	Drift	<2	20.3	1,910	<4	1,880	70	.06
73	88187	08-10-88	Fernley WMA, Pond #1	Drift	<2	21.7	565	<4	1,220	26	.07
78	88147	06-21-88	SWMA, Canvasback	Drift	8.53	27.1	13,500	<15	11,600	547	1.72
78	88146	06-23-88	SWMA, D-Line Canal	Drift	2.89	23.9	5,600	<15	4,750	2,510	1.52
78	88149	06-21-88	SWMA, D-Line Canal	Drift	2.65	30.7	3,190	<15	3,620	122	.36
78	88185	08-03-88	SWMA, D-Line Canal	Drift	2.87	37.3	4,080	<15	4,730	147	.35
78	89003	03-10-89	SWMA, D-Line Canal	Drift	6.31	23.8	8,710	9.18	8,860	471	.20
78	89012	05-16-89	SWMA, D-Line Canal	Drift	4.41	40.4	5,780	9.74	5,480	261	.35
78	89023	07-07-89	SWMA, D-Line Canal	Drift	<2	75.6	1,920	<6	2,860	114	.75
78	89055	09-22-89	SWMA, D-Line Canal	Drift	<9.1	<96	470	<9.6	2,200	<140	1.5
78	89209	11-30-89	SWMA, D-Line Canal	Drift	<10	<110	1,200	<11	2,900	<160	.61
81	88130	06-01-88	SWMA, Hunter Drain	Drift	9.6	24.2	17,300	23.5	15,100	672	.61
81	88131	06-01-88	SWMA, Hunter Drain	Drift	2.74	18.5	3,240	<15	19,000	945	.56
81	88163	07-13-88	SWMA, Hunter Drain	Drift	3.24	19.5	3,240	<15	17,700	1,200	.67
81	88183	08-03-88	SWMA, Hunter Drain	Drift	2.77	15.5	2,930	<15	8,300	243	.32
81	89004	03-10-89	SWMA, Hunter Drain	Drift	6.54	95.2	10,600	6.5	9,650	878	1.01
81	89013	05-16-89	SWMA, Hunter Drain	Drift	<2	6.4	648	<6	7,370	864	.32
81	89022	07-07-89	SWMA, Hunter Drain	Drift	3.34	33.4	4,570	<6	8,740	1,710	.49
81	89058	09-22-89	SWMA, Hunter Drain	Drift	2.2	26	11,000	7.3	8,800	480	.28
81	89212	11-30-89	SWMA, Hunter Drain	Drift	5.2	<25	6,500	6.8	5,100	210	.79
81	88148	06-21-88	SWMA, Lead Lake Outflow	Drift	2.05	18.2	2,630	<15	5,220	100	.60
81	88166	07-14-88	SWMA, Lead Lake Outflow	Drift	2.4	15.8	1,230	<15	3,870	60.7	.37

TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
86	88162	07-13-88	SNWA, Navy Cabin Drain	Drift	<1.9	35.6	280	<15	1,600	32.4	0.51
86	88143	06-14-88	SNWA, Paiute Drain	Drift	6.71	59.8	10,300	<15	5,110	712	.63
86	88165	07-13-88	SNWA, Paiute Drain	Drift	6.5	31.3	8,400	20.6	4,700	1,240	.89
86	88193	09-14-88	SNWA, Paiute Drain	Drift	11	49	16,400	10	6,650	2,310	.94
86	89002	03-10-89	SNWA, Paiute Drain	Drift	10.8	25	12,500	9.05	9,080	2,140	.68
86	89010	05-16-89	SNWA, Paiute Drain	Drift	7.17	49.4	10,500	15.6	5,020	1,030	.86
86	89026	07-07-89	SNWA, Paiute Drain	Drift	8.92	61.5	13,200	10.9	5,690	1,320	1.04
86	89059	09-22-89	SNWA, Paiute Drain	Drift	7.6	<52	18,000	15	7,300	660	.92
86	89206	11-30-89	SNWA, Paiute Drain	Drift	<5.7	<60	2,000	22	3,600	280	<.31
88	88190	08-24-88	SNWA, South Lead Lake	Drift	<2	18	396	<4	2,120	84.7	.39
91	88144	06-14-88	SNWA, Swan Lake Check	Drift	<1.9	14.1	2,080	<15	6,680	66.6	.33
92	88142	06-14-88	SNWA, TJ Drain	Drift	1.9	15.7	3,870	<15	5,330	1,640	.09
92	88164	07-13-88	SNWA, TJ Drain	Drift	2.93	31.4	2,670	<15	5,330	595	.14
92	88184	08-03-88	SNWA, TJ Drain	Drift	2.36	22.6	1,880	<15	3,670	1,270	.18
92	88194	09-14-88	SNWA, TJ Drain	Drift	<3	380	2,040	<5	2,890	1,200	--
92	89001	03-10-89	SNWA, TJ Drain	Drift	3.79	38	4,980	<6	8,930	2,090	.12
92	89015	05-16-89	SNWA, TJ Drain	Drift	4.52	64.9	6,240	10.3	6,550	2,530	.35
92	89025	07-07-89	SNWA, TJ Drain	Drift	6.34	91.8	9,160	<6	6,450	698	.24
92	89057	09-22-89	SNWA, TJ Drain	Drift	<45	<480	2,200	<48	13,000	970	<2.5
92	89203	11-30-89	SNWA, TJ Drain	Drift	<46	<480	1,500	170	18,000	920	<2.5
1	88922	08-29-88	Sheckler Reservoir	Detritus	18	39.6	30,600	14	11,600	719	2.37
26	88974	09-12-88	New River Drain	Detritus	15	35	25,000	14	9,440	877	5
50	88975	09-12-88	Kent Lake Ext. Drain	Detritus	21	42	34,300	9	11,500	866	.56
2	88967	09-07-88	Old Reservoir	Detritus	20	52	40,900	20	16,900	688	.47
27	88972	09-12-88	Upper New River Drain	Detritus	18	54.7	45,800	21	12,800	781	12.3
51	88966	09-09-88	Lower Stillwater Slough	Detritus	16	46	31,900	18	11,600	1,150	10.4
3	88942	09-02-88	Soda Lake Drain	Detritus	16	36.4	27,900	10	11,900	30	.21
67	89054	08-22-88	Carson Lake, Sprig Pond	Detritus	<14	<16	23,000	<9.1	1,400	770	.58
28	88919	08-29-88	LD Drain	Detritus	16	36.7	27,000	10	11,500	877	.34
52	88964	09-09-88	Paiute Branch 3 Drain	Detritus	11	29	22,700	10	9,690	461	.99
4	88921	08-29-88	Upper L Drain	Detritus	16	35.7	24,200	10	7,980	2,740	.60
29	88916	08-29-88	Mid L Drain	Detritus	15	30.9	23,900	9	7,370	2,410	.60
53	88947	09-02-88	S1 Deep Drain	Detritus	17	37.4	30,300	10	11,900	430	.28
05	88924	08-29-88	South Carson River Drain	Detritus	15	72.5	21,900	44	7,200	693	38.6
30	88918	08-29-88	L3 Drain	Detritus	18	45.2	29,700	10	10,400	1,370	.72

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TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury	
	USFWS											
6	88925	08-29-88	Sheckler Deep Drain	Detritus	17	46.6	25,000	10	9,130	1,510	0.82	
68	89067	09-22-89	Fernley Drain	Detritus	<9.1	<11	16,000	12	4,500	760	<.04	
68	89202	11-30-88	Fernley Drain	Detritus	590	<18	9,800	<10	2,600	340	<.04	
69	88171	06-28-88	Fernley South Drain	Detritus	28.7	18.5	32,400	26.5	10,000	646	.07	
70	88169	06-28-88	Fernley West Drain	Detritus	31.4	18.7	31,600	15.7	4,060	796	.10	
70	89035	07-07-89	Fernley West Drain	Detritus	27	38.1	30,700	24.9	7,250	4,160	.23	
71	88170	06-27-88	Fernley WMA, E. Pond	Detritus	24.4	26.1	26,900	19.5	13,600	748	.06	
72	88180	07-19-88	Fernley WMA, N. Pond	Detritus	17.3	13.7	14,100	<12	3,200	518	.04	
73	88172	06-27-88	Fernley WMA, Pond #1	Detritus	29.4	9.35	31,000	27.7	6,600	1,090	.06	
31	88935	09-02-88	L2 Drain	Detritus	14	33	21,300	10	7,240	578	.83	
54	88944	09-02-88	R2 Drain	Detritus	18	41.6	30,800	17	11,900	716	2.16	
7	88917	08-29-88	Upper West Side Drain	Detritus	15	34	23,300	10	9,030	721	.56	
63	88926	08-30-88	Lower Diagonal Drain	Detritus	18	68.7	28,200	31	8,770	789	20.30	
55	88943	09-02-88	Upper Paiute Drain	Detritus	12	26.7	22,700	9	8,350	988	.29	
8	88923	08-29-88	Upper Diagonal 2 Drain	Detritus	18	83.3	26,300	41	8,910	815	35.30	
33	88934	09-02-88	Middle L Drain	Detritus	15	30.8	24,400	10	7,620	1,540	1.4	
56	88982	09-08-88	S2C Drain	Detritus	15	43	32,600	17	13,900	1,020	1.94	
9	89053	08-16-89	HWMA, Humboldt Lake	Detritus	<5.7	<6.8	4,400	<3.8	15,000	390	<.04	
34	88920	08-29-88	Upper Diagonal Drain	Detritus	14	40.4	21,100	19	7,590	1,040	13.60	
57	88936	09-02-88	LB Drain	Detritus	13	27.8	20,300	10	6,620	1,030	4	
10	88973	09-12-88	Upper Stillwater Slough	Detritus	17	40	28,000	10	9,950	817	2.43	
58	88929	08-30-88	Gumow Drain	Detritus	15	37.2	25,600	10	10,400	1,240	2.15	
11	88931	08-30-88	Harmon Deep Drain	Detritus	14	33	26,600	10	9,500	1,710	.33	
35	88903	08-25-88	Carson Lake I Ext. Drain	Detritus	17	50.2	29,400	16	10,100	1,770	5.2	
59	88946	09-02-88	L Branch I Deep Drain	Detritus	22	47.1	37,700	16	12,200	764	2.55	
12	88927	08-30-88	S2G Drain	Detritus	14	33.6	27,400	10	11,100	1,030	.27	
36	88907	08-25-88	Carson Lake Drain	Detritus	19	51.3	32,200	14	11,100	1,840	4.7	
60	88952	09-02-88	Lower L Drain	Detritus	17	39.9	25,800	16	8,290	708	9.4	
13	88930	08-30-88	Harmon Reservoir	Detritus	9.5	23	16,500	10	6,980	440	.59	
37	88932	08-30-88	Carson Lake 1A Drain	Detritus	17	35.4	29,300	10	10,700	2,980	2.27	
61	88948	09-02-88	Mid Carson Lake Drain	Detritus	16	35	25,000	15	8,620	1,600	7.4	
14	88937	09-02-88	S1B Drain	Detritus	9.4	11	13,600	7	4,760	273	.56	
38	88901	08-25-88	A1 Drain	Detritus	20	49.6	34,500	16	12,600	1,240	2.57	
62	88914	08-25-88	A-Line	Detritus	17	39	28,500	10	10,000	743	1.85	
			Lower Diagonal 1 Drain	Detritus	18	39.8	29,500	10	12,300	680	4	

TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
74	89048	08-01-89	North Mahala Slough	Detritus	21.3	32.2	24,600	48.5	10,900	872	2.51
15	88969	09-09-88	Mussi Drain	Detritus	14	28	23,500	10	10,500	713	.68
39	88905	08-25-88	Pierson Drain	Detritus	17	67	28,700	33	11,100	555	18
63	88910	08-25-88	Lower Diagonal Drain	Detritus	18	52.6	30,300	24	10,400	1,620	16.5
40	88956	09-09-88	J1 Deep Drain	Detritus	14	32.8	23,900	10	8,070	472	2.65
64	88951	09-02-88	Paiute Branch 1 Drain	Detritus	17	37	30,600	16	11,800	912	2.3
16	88971	09-09-88	F2 Drain	Detritus	11	34	17,200	7	7,560	3,120	.84
41	88953	09-08-88	Yarbrough Drain	Detritus	18	54.4	33,600	23	11,700	459	14.5
65	88961	09-08-88	Stillwater Pt. Reservoir	Detritus	16	36	30,100	10	13,400	1,040	2.22
17	88970	09-09-88	Shaffner Drain	Detritus	17	44	26,400	8	9,670	1,400	.19
42	88928	08-30-88	Carson Lake Branch 3 Drain	Detritus	18	44.1	31,200	14	10,900	1,350	7.8
66	88950	09-06-88	Upper TJ Drain	Detritus	7.5	20	12,900	9	11,900	2,470	.08
18	88968	09-07-88	ERB Drain	Detritus	13	39	30,600	10	14,000	7,100	.55
75	89049	08-01-89	South Mahala Slough	Detritus	15	24.1	16,500	27.8	5,490	540	.15
43	88933	09-02-88	Carson Lake Branch 1 Drain	Detritus	15	34.6	26,100	10	10,700	775	1.65
76	89052	08-01-89	SWMA, Big Indian Lake	Detritus	24.2	69.8	29,400	74.7	13,400	634	52.6
77	89047	07-26-89	SWMA, Cattail Lake	Detritus	24.9	41.5	34,900	85.6	21,300	809	.33
78	88174	07-07-88	SWMA, D-Line Canal	Detritus	33.5	18.4	35,500	22.2	7,110	719	.20
78	89036	07-07-89	SWMA, D-Line Canal	Detritus	32.9	56.7	42,100	28.7	14,900	714	.45
78	89069	09-22-89	SWMA, D-Line Canal	Detritus	<9.4	<11	19,000	13	12,000	530	.06
78	89211	11-30-89	SWMA, D-Line Canal	Detritus	<44	<52	8,100	<29	5,600	250	.05
79	89039	07-26-89	SWMA, Dry Lake East	Detritus	25.2	41.3	34,900	27.7	19,700	880	.40
80	89043	07-26-89	SWMA, Dry Lake West	Detritus	25.2	38.3	34,800	28.3	15,900	852	.75
81	88173	07-05-88	SWMA, Hunter Drain	Detritus	20.3	18.9	19,300	18.8	9,180	674	.14
81	88175	07-05-88	SWMA, Hunter Drain	Detritus	31.5	33.1	35,700	28.2	5,540	660	.27
81	89032	07-07-89	SWMA, Hunter Drain	Detritus	14.1	27.1	16,300	22.5	7,190	428	.17
81	89066	09-22-89	SWMA, Hunter Drain	Detritus	<7.1	24	16,000	7	14,000	450	.05
81	89213	11-30-89	SWMA, Hunter Drain	Detritus	<9.7	<12	28,000	<6.5	19,000	720	.08
83	89038	07-25-89	SWMA, Lead Lake Compl	Detritus	20	22.8	19,900	24.1	5,860	402	.59
83	89046	07-25-89	SWMA, Lead Lake Comp2	Detritus	16	29	22,200	33.1	15,800	483	--
83	89044	07-25-89	SWMA, Lead Lake Comp3	Detritus	16.2	26.1	21,200	35	14,500	444	3.08
83	89037	07-20-89	SWMA, Lead Lake Comp4	Detritus	19.8	27.2	23,100	24.1	18,100	476	1.25
84	89050	08-01-89	SWMA, Likes Lake	Detritus	21.7	86.8	24,600	87.8	5,650	430	97.8
85	89051	08-01-89	SWMA, Papoose Lake	Detritus	22.7	47.3	26,500	118	10,800	511	25.7
86	89033	07-07-89	SWMA, Paiute Drain	Detritus	26.2	54.2	35,400	36.8	5,400	1,080	.12

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TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89--Continued

Site number (fig. 7)	Sample number	Date	Location	Category	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury
86	89068	09-22-89	SWMA, Paiute Drain	Detritus	14	57	43,000	25	17,000	2,000	0.12
86	89208	11-30-89	SWMA, Paiute Drain	Detritus	<7.5	10	17,000	<5	6,700	690	.17
87	88168	07-06-88	SWMA, Pintail Bay	Detritus	17.5	15.7	16,400	24.6	10,700	365	.74
88	88167	07-06-88	SWMA, South Lead Lake	Detritus	<22.4	19.8	26,300	18.7	12,800	459	.75
89	89041	07-25-89	SWMA, South Nutgrass	Detritus	13	19.8	14,700	16.8	15,600	344	.40
65	89040	07-26-89	SWMA, Stillwater Pt Res	Detritus	24.9	39.2	33,500	33.6	12,100	1,130	1.93
91	89042	07-25-89	SWMA, Swan Lake Check	Detritus	12.8	14.2	15,000	32.4	20,300	412	--
91	88176	07-12-88	SWMA, Swan Lake Check	Detritus	22.4	23.5	21,700	12.5	13,500	493	.75
92	88177	07-13-88	SWMA, TJ Drain	Detritus	23.8	18.5	21,900	21.5	4,470	915	.08
92	89034	07-07-89	SWMA, TJ Drain	Detritus	20.5	46.9	29,300	75.3	12,300	1,030	.25
92	89065	09-22-89	SWMA, TJ Drain	Detritus	<10	<12	13,000	<6.6	8,600	790	<.04
92	89205	11-30-89	SWMA, TJ Drain	Detritus	<10	<12	17,000	13	12,000	830	<.04
93	88181	07-15-88	SWMA, Tule Lake	Detritus	19.4	12.7	15,800	14.1	8,400	409	.50
94	89045	07-25-89	SWMA, West Nutgrass	Detritus	15.2	23.7	18,700	26.7	22,200	393	.56
19	88963	09-09-88	Lower Soda Lake Drain	Detritus	9.5	29	18,800	10	7,360	1,800	2.43
44	88955	09-09-88	Downs Drain	Detritus	15	50.2	28,600	16	11,900	975	3.7
20	88938	09-02-88	Paiute Ext. Branch 1 Drain	Detritus	14	36.3	25,000	9	9,810	548	.45
45	88957	09-09-88	Lower Carson Lake Drain	Detritus	15	42.7	28,600	16	12,300	842	4.5
21	88941	09-02-88	Harmon 1 Deep Drain	Detritus	12	36.4	18,800	9	7,150	423	.27
22	88940	09-02-88	S Line Reservoir	Detritus	12	28.3	21,600	10	7,740	741	4.1
46	88958	09-09-88	Holmes Branch 2 Drain	Detritus	17	38	23,700	10	12,100	787	1.4
23	88965	09-08-88	New River Ext. Drain	Detritus	14	41	27,500	22	10,600	2,520	12
47	88954	09-09-88	Holmes Drain	Detritus	15	38	27,600	10	10,700	1,290	2.14
24	88945	09-02-88	Upper Harmon Deep Drain	Detritus	10	49.3	17,000	10	6,810	6,640	.66
48	88949	09-02-88	NE Carson Lake	Detritus	14	34.8	25,800	10	11,800	768	4.9
25	88939	09-02-88	Harmon 2 Drain	Detritus	15	31.1	24,300	9	8,830	1,240	.48
49	88960	09-08-88	Patrick Drain	Detritus	18	42	35,000	17	13,300	1,130	1.69

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TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89--Continued

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Site number (fig. 7)	Sample number	Date	Location	Category	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
95	88161	07-07-88	Carson R. Below Lahontan	Drift	<12	<10	1.22	247	28.2	20.1	75.8
68	89056	09-22-89	Fernley Drain	Drift	<20	<8.8	1.6	<340	<68	<12	--
68	89200	11-30-89	Fernley Drain	Drift	<4	3.5	.27	<69	<14	12	--
70	88145	06-22-88	Fernley West Drain	Drift	<12	20.1	.68	130	<20	28.8	42.5
70	88179	07-20-88	Fernley West Drain	Drift	<12	11.3	2.61	125	<20	25.5	64.5
70	88188	08-10-88	Fernley West Drain	Drift	5.3	9	3.6	218	--	36	93.2
70	88192	09-13-88	Fernley West Drain	Drift	3	8	2.2	133	--	41	59.9
70	89008	05-16-89	Fernley West Drain	Drift	<5	44.2	1.96	110	<30	28.1	90.5
70	89024	07-07-89	Fernley West Drain	Drift	<5	17.7	3.79	132	<30	4.32	155
73	88153	06-28-88	Fernley WMA, Pond #1	Drift	<12	<10	9.97	769	<20	1.23	85
73	88154	06-28-88	Fernley WMA, Pond #1	Drift	<12	<10	7.71	33.2	<20	<1.2	143
73	88155	06-28-88	Fernley WMA, Pond #1	Drift	<12	<10	4.13	392	<20	21.2	36.9
73	88178	07-20-88	Fernley WMA, Pond #1	Drift	<12	<10	5.11	16.5	<20	<1.2	90.9
73	88186	08-10-88	Fernley WMA, Pond #1	Drift	12	<3	7.9	43.7	--	6.2	115
73	88187	08-10-88	Fernley WMA, Pond #1	Drift	3.8	<3	9.3	22.9	--	1	124
81	88147	06-21-88	SWMA, Canvasback	Drift	<12	16.1	.84	513	<20	46.1	48.3
78	88146	06-23-88	SWMA, D-Line Canal	Drift	<12	14.7	1.75	340	<20	14.6	58.1
78	88149	06-21-88	SWMA, D-Line Canal	Drift	<12	23.9	.98	162	<20	9.41	145
78	88185	08-03-88	SWMA, D-Line Canal	Drift	<12	37.2	<.30	259	<20	13.5	75.5
78	89003	03-10-89	SWMA, D-Line Canal	Drift	<5	--	<.30	383	<30	22.5	50.2
78	89012	05-16-89	SWMA, D-Line Canal	Drift	<5	6.46	.58	461	<30	14.2	68.7
78	89023	07-07-89	SWMA, D-Line Canal	Drift	<5	50.9	<.30	108	<30	4.72	122
78	89055	09-22-89	SWMA, D-Line Canal	Drift	<14	<6.2	<.99	<240	<48	<8.6	--
78	89209	11-30-89	SWMA, D-Line Canal	Drift	<15	<6.8	<1	<260	<53	<9.5	--
81	88130	06-01-88	SWMA, Hunter Drain	Drift	27.6	12.1	3.64	272	<20	41.7	52.9
81	88131	06-01-88	SWMA, Hunter Drain	Drift	14.4	<10	7.36	1,100	<20	11.1	66
81	88163	07-13-88	SWMA, Hunter Drain	Drift	28	<10	5.66	1,180	20.2	10.2	26.1
81	88183	08-03-88	SWMA, Hunter Drain	Drift	64.5	<10	3.12	816	<20	11.4	24.6
81	89004	03-10-89	SWMA, Hunter Drain	Drift	25.4	8.63	2.08	508	40.9	31.8	62.1
81	89013	05-16-89	SWMA, Hunter Drain	Drift	<5	<4.5	1.92	639	<30	1.73	18.6
81	89022	07-07-89	SWMA, Hunter Drain	Drift	30.1	6.63	4.65	754	<30	15.2	42
81	89058	09-22-89	SWMA, Hunter Drain	Drift	15	63	1.3	610	15	23	--
81	89212	11-30-89	SWMA, Hunter Drain	Drift	13	6.2	.81	280	<12	9.3	--
81	88148	06-21-88	SWMA, Lead Lake Outflow	Drift	<12	12.6	.93	283	<20	10.1	83.3
81	88166	07-14-88	SWMA, Lead Lake Outflow	Drift	<12	12.9	<.30	122	<20	4.81	122

TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89---Continued

USFWS											
Site number (fig. 7)	Sample number	Date	Location	Category	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
86	88162	07-13-88	SWMA, Navy Cabin Drain	Drift	<12	<10	1.7	30.3	<20	2.02	131
86	88143	06-14-88	SWMA, Paiute Drain	Drift	<12	14.6	1.09	273	<20	19.3	121
86	88165	07-13-88	SWMA, Paiute Drain	Drift	<12	65.3	1.64	140	<20	20.8	201
86	88193	09-14-88	SWMA, Paiute Drain	Drift	<2	61	2.1	126	--	41	131
86	89002	03-10-89	SWMA, Paiute Drain	Drift	<5	10.2	.47	217	<30	30.6	63.7
86	89010	05-16-89	SWMA, Paiute Drain	Drift	<5	27	1.45	135	<30	28.5	98.1
86	89026	07-07-89	SWMA, Paiute Drain	Drift	<5	112	1.45	137	<30	31.8	129
86	89039	09-22-89	SWMA, Paiute Drain	Drift	<7.5	14	.49	<130	<26	28	--
86	89206	11-30-89	SWMA, Paiute Drain	Drift	<8.7	11	<.55	170	<30	<5.4	--
88	88190	08-24-88	SWMA, South Lead Lake	Drift	1	<3	.60	86.8	--	.60	138
91	88144	06-14-88	SWMA, Swan Lake Check	Drift	<12	<10	2.01	441	<20	7.35	76.3
92	88142	06-14-88	SWMA, TJ Drain	Drift	<12	11.4	3.22	583	<20	17.5	79.4
92	88164	07-13-88	SWMA, TJ Drain	Drift	<12	<10	2.24	935	<20	9.39	53.4
92	88184	08-03-88	SWMA, TJ Drain	Drift	<12	<10	4.31	487	<20	8.45	61.4
92	88194	09-14-88	SWMA, TJ Drain	Drift	13	200	3.4	781	--	11	200
92	89001	03-10-89	SWMA, TJ Drain	Drift	10.7	21.5	1.65	894	<30	24.9	50.4
92	89015	05-16-89	SWMA, TJ Drain	Drift	10.9	73.6	3.64	550	<30	22.7	59.4
92	89025	07-07-89	SWMA, TJ Drain	Drift	30.4	7.51	1.71	545	<30	32.6	100
92	89057	09-22-89	SWMA, TJ Drain	Drift	<69	<31	<4.6	1,500	<240	<43	--
92	89203	11-30-89	SWMA, TJ Drain	Drift	<69	31	5.2	<1,200	<240	<43	--
1	88922	08-29-88	Sheckler Reservoir	Detritus	<3	1	.40	124	--	60.8	86.7
26	88974	09-12-88	New River Drain	Detritus	<3	13	.40	200	--	47.7	85
50	88975	09-12-88	Kent Lake Ext. Drain	Detritus	<3	17	.76	136	--	65.9	110
2	88967	09-07-88	Old Reservoir	Detritus	<4	22	.20	137	--	78.9	110
27	88972	09-12-88	Upper New River Drain	Detritus	<4	17	.95	172	--	75.8	130
51	88956	09-09-88	Lower Stillwater Slough	Detritus	<3	17	.40	199	--	58.6	94
3	88942	09-02-88	Soda Lake Drain	Detritus	<3	16	3	161	--	111	75.1
67	89054	08-22-89	Carson Lake, Sprig Pond	Detritus	7.7	6.1	.10	200	<46	45	<46
28	88919	08-29-88	LD Drain	Detritus	<3	17	.93	204	--	63	82.2
52	88964	09-09-88	Paiute Branch 3 Drain	Detritus	<3	13	.20	249	--	46	65
4	88921	08-29-88	Upper L Drain	Detritus	<3	14	1.4	164	--	64.8	77.9
29	88916	08-29-88	Mid L Drain	Detritus	<3	14	1.2	140	--	59.5	67.1
53	88947	09-02-88	S1 Deep Drain	Detritus	9.9	16	.40	137	--	59.7	103
05	88924	08-29-88	South Carson River Drain	Detritus	<3	13	1.1	56	--	56	150
30	88918	08-29-88	L3 Drain	Detritus	<3	17	1.2	154	--	80.8	97.1

TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89--Continued

USFWS											
Site number (fig. 7)	Sample number	Date	Location	Category	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
6	88925	08-29-88	Sheckler Deep Drain	Detritus	<3	17	2	223	--	--	91.6
68	89067	09-22-89	Fernley Drain	Detritus	<3	8.2	.12	62	<30	42	<30
68	89202	11-30-89	Fernley Drain	Detritus	<5.1	<5.1	<.09	23	<51	19	<51
69	88171	06-28-88	Fernley South Drain	Detritus	<10	<10	8.04	377	<25	103	114
70	88169	06-28-88	Fernley West Drain	Detritus	<10	<10	1.95	371	<25	102	97.9
70	89035	07-07-89	Fernley West Drain	Detritus	<12	13.9	2.1	310	<40	98.1	109
71	88170	06-27-88	Fernley WMA, E. Pond	Detritus	20.1	20.1	4.01	661	<25	101	73.2
72	88180	07-19-88	Fernley WMA, N. Pond	Detritus	74.1	14	2.76	414	<25	54.9	45.3
73	88172	06-27-88	Fernley WMA, Pond #1	Detritus	<10	19.4	4.59	620	<25	112	79.3
31	88935	09-02-88	L2 Drain	Detritus	<3	12	2.6	181	--	92	74.8
54	88944	09-02-88	R2 Drain	Detritus	<3	18	.20	129	--	59.3	99.1
7	88917	08-29-88	Upper West Side Drain	Detritus	<3	14	1.5	262	--	52	69.9
63	88926	08-30-88	Lower Diagonal Drain	Detritus	<3	16	1.9	142	--	76.9	138
55	88943	09-02-88	Upper Paiute Drain	Detritus	<3	13	1	240	--	50.7	57
8	88923	08-29-88	Upper Diagonal 2 Drain	Detritus	10	17	1.6	162	--	77.5	151
33	88934	09-02-88	Middle L Drain	Detritus	<3	16	1.2	136	--	61.8	68.2
56	88962	09-08-88	S2C Drain	Detritus	<3	18	.30	188	--	48.8	97
9	89053	08-16-89	HWMA, Humboldt Lake	Detritus	<1.9	3.5	.09	610	<19	9.3	<19
34	88920	08-29-88	Upper Diagonal Drain	Detritus	<3	13	1.3	235	235	50	71.1
34	88936	09-02-88	LB Drain	Detritus	<3	12	.70	125	--	45	71.4
57	88973	09-12-88	Upper Stillwater Slough	Detritus	<3	16	.76	210	--	56.9	81
10	88929	08-30-88	Gumow Drain	Detritus	<3	14	1.2	254	--	58	79.6
58	88959	09-07-88	Harmon Deep Drain	Detritus	<3	15	1.6	192	--	55.3	73
11	88931	08-30-88	Carson Lake I Ext. Drain	Detritus	<3	17	.83	216	--	65.8	88.7
35	88903	08-25-88	L Branch 1 Deep Drain	Detritus	<4	20	.20	139	--	77.2	99.5
59	88946	09-02-88	S2G Drain	Detritus	4	15	.68	364	--	55.4	65.2
12	88927	08-30-88	Carson Lake Drain	Detritus	<3	18	.69	154	--	72.1	105
36	88907	08-25-88	Lower L Drain	Detritus	<3	14	.50	108	--	51.8	83.4
60	88952	09-02-88	Harmon Reservoir	Detritus	<2	9.4	.20	149	--	32.9	44.3
13	88930	08-30-88	Carson Lake IA Drain	Detritus	<3	15	.92	173	--	65.9	77.8
37	88932	09-02-88	Mid Carson Lake Drain	Detritus	<3	15	.82	169	--	55.8	70.7
61	88948	09-02-88	S1B Drain	Detritus	<2	9	<.20	96.6	--	28	34
14	88937	09-02-88	A1 Drain	Detritus	<4	19	.50	237	--	72.6	94
38	88901	08-25-88	A-Line	Detritus	10	16	.30	202	--	71.4	77.7
62	88914	08-25-88	Lower Diagonal 1 Drain	Detritus	<3	14	.72	198	--	65	87.5

TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89--Continued

USFWS											
Site number (fig. 7)	Sample number	Date	Location	Category	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
74	89048	08-01-89	North Mahala Slough	Detritus	<12	13.2	0.98	399	<40	156	71.5
15	89569	09-09-88	Mussi Drain	Detritus	<3	14	.20	185	--	46.2	62
39	88905	08-25-88	Pierson Drain	Detritus	3	15	.60	263	--	76.2	101
63	88910	08-25-88	Lower Diagonal Drain	Detritus	<3	17	.89	145	--	66.8	102
40	88956	09-09-88	J1 Deep Drain	Detritus	<3	13	.20	107	--	50.3	66.1
64	88951	09-02-88	Paiute Branch 1 Drain	Detritus	<3	16	.30	121	--	41.9	84
16	88971	09-09-88	F2 Drain	Detritus	<2	14	3.2	477	--	58.7	57
41	88953	09-08-88	Yarbrough Drain	Detritus	<3	17	.30	125	--	64.9	98.2
65	88961	09-08-88	Stillwater Pt. Reservoir	Detritus	<3	16	.30	192	--	59.5	83
17	88970	09-09-88	Shaffner Drain	Detritus	<3	16	6.5	357	--	109	73
42	88928	08-30-88	Carson Lake Branch 3 Drain	Detritus	<3	18	.65	192	--	60	86.2
66	88950	09-06-88	Upper TJ Drain	Detritus	110	47.3	3.1	1,320	--	47.6	34
18	88968	09-07-88	ERB Drain	Detritus	<3	20	.20	168	--	57.5	89
75	89049	08-01-89	South Mahala Slough	Detritus	<12	10.3	1.13	257	<40	240	51.9
43	88933	09-02-88	Carson Lake Branch 1 Drain	Detritus	4	16	1.3	359	--	72.1	63.9
76	89052	08-01-89	SWMA, Big Indian Lake	Detritus	<12	14.7	.62	502	<40	83.9	106
77	89047	07-26-89	SWMA, Cattail Lake	Detritus	<12	20.4	<.30	460	<40	104	94.1
78	88174	07-07-88	SWMA, D-Line Canal	Detritus	<10	23	<.30	469	<25	110	84.1
78	89036	07-07-89	SWMA, D-Line Canal	Detritus	<12	27.8	<.30	367	<40	118	99.1
78	89069	09-22-89	SWMA, D-Line Canal	Detritus	<3.1	14	<.09	230	<31	38	<31
78	89211	11-30-89	SWMA, D-Line Canal	Detritus	<15	<15	<.10	130	<150	22	150
79	89039	07-26-89	SWMA, Dry Lake East	Detritus	<12	21	.45	455	<40	105	96.4
80	89043	07-26-89	SWMA, Dry Lake West	Detritus	<12	20.4	.34	392	<40	101	101
81	88173	07-05-88	SWMA, Hunter Drain	Detritus	175	15.5	2.48	1,270	<25	92.5	58.2
81	88175	07-05-88	SWMA, Hunter Drain	Detritus	198	26.1	3.31	258	<25	121	109
81	89032	07-07-89	SWMA, Hunter Drain	Detritus	46.3	7.84	1.75	335	<40	57.4	49.7
81	89066	09-22-89	SWMA, Hunter Drain	Detritus	110	37	.16	170	<24	37	23
81	89213	11-30-89	SWMA, Hunter Drain	Detritus	16	23	<.10	290	<32	57	36
83	89038	07-25-89	SWMA, Lead Lake Comp1	Detritus	<12	12.9	<.30	397	<40	64.6	50.7
83	89046	07-25-89	SWMA, Lead Lake Comp2	Detritus	21.8	11.4	--	495	<40	71.3	58.2
83	89044	07-25-89	SWMA, Lead Lake Comp3	Detritus	23.5	12.7	.74	607	<40	76.3	58.7
83	89037	07-20-89	SWMA, Lead Lake Comp4	Detritus	15.2	14.5	.52	620	<40	86.2	58.2
84	89050	08-01-89	SWMA, Likes Lake	Detritus	<12	14.8	.73	321	<40	86.4	115
85	89051	08-01-89	SWMA, Papoose Lake	Detritus	<12	13.6	.51	509	<40	79.1	104
86	89033	07-07-89	SWMA, Paiute Drain	Detritus	<12	18.1	.67	239	<40	107	114

TABLE 21.--Moisture content and trace-element concentrations in drift and detrital samples from the study area, 1988-89--Continued

USFWS											
Site number (fig. 7)	Sample number	Date	Location	Category	Molybdenum	Nickel	Selenium	Strontium	Tin	Vanadium	Zinc
86	89068	09-22-89	SWMA, Paiute Drain	Detritus	11	24	0.18	150	<38	76	130
86	89208	11-30-89	SWMA, Paiute Drain	Detritus	<2.5	18	<.10	80	<25	28	29
87	88168	07-06-88	SWMA, Pintail Bay	Detritus	12.8	12.8	<.30	610	<25	64.7	82.7
88	88167	07-06-88	SWMA, South Lead Lake	Detritus	<10	<10	<.30	822	<25	84.5	71.2
89	89041	07-25-89	SWMA, South Nutgrass	Detritus	<12	11.6	.80	445	<40	65.9	50
65	89040	07-26-89	SWMA, Stillwater Pt. Res	Detritus	<12	17.9	.34	381	<40	98.2	94.5
91	89042	07-25-89	SWMA, Swan Lake Check	Detritus	14.6	12.7	--	566	47.7	57.1	45.5
91	88176	07-12-88	SWMA, Swan Lake Check	Detritus	<10	17.9	.62	671	<25	93.8	64.7
92	88177	07-13-88	SWMA, TJ Drain	Detritus	46.8	16.8	.93	932	<25	87	59.1
92	89034	07-07-89	SWMA, TJ Drain	Detritus	58	15.2	1.3	611	<40	115	81.2
92	89065	09-22-89	SWMA, TJ Drain	Detritus	35	7	.09	400	<33	47	<33
92	89205	11-30-89	SWMA, TJ Drain	Detritus	41	15	<.10	420	<34	56	<34
93	88181	07-15-88	SWMA, Tule Lake	Detritus	16.3	13.9	<.30	682	26.5	62.9	54.4
94	89045	07-25-89	SWMA, West Nutgrass	Detritus	<12	13.9	.52	597	<40	81.1	57.8
19	88963	09-09-88	Lower Soda Lake Drain	Detritus	<2	12	1.3	168	--	69.3	67
44	88955	09-09-88	Downs Drain	Detritus	6	14	3.5	354	--	60.8	97
20	88938	09-02-88	Paiute Ext. Branch 1 Drain	Detritus	9.6	14	1.6	237	--	75.4	65.3
45	88957	09-09-88	Lower Carson Lake Drain	Detritus	<3	15	.30	212	--	59.9	82.8
21	88941	09-02-88	Harmon 1 Deep Drain	Detritus	12	13	.50	335	--	90.3	77
22	88940	09-02-88	S Line Reservoir	Detritus	<3	14	.20	128	--	42	65.1
46	88958	09-09-88	Holmes Branch 2 Drain	Detritus	<3	13	.30	292	--	45.5	74
23	88965	09-08-88	New River Ext. Drain	Detritus	<3	15	1.2	297	--	75.9	92
47	88954	09-09-88	Holmes Drain	Detritus	<3	15	.40	144	--	61.2	83.3
24	88945	09-02-88	Upper Harmon Deep Drain	Detritus	12	27	2.4	271	--	67.4	70.1
48	88949	09-02-88	NE Carson Lake	Detritus	<3	13	.40	267	--	48.9	69.8
25	88939	09-02-88	Harmon 2 Drain	Detritus	<3	16	1.1	207	--	49	70.7
49	88960	09-08-88	Patrick Drain	Detritus	<3	18	.40	149	--	62.1	97

TABLE 22.--Principal ground-water sampling sites in and near Stillwater and Fernley Wildlife Management Areas, 1987-89

[Abbreviations and symbols: Dr, Drain; nr, near; Res, Reservation; USFWS, U.S. Fish and Wildlife Service; --, unknown]

Site number (figs 3-5)	Station name	U.S. Geological Survey site designations		Land-surface altitude (feet above sea level)	Well depth (feet)
		Local identification ¹	Standard identification ²		
<u>Stillwater Wildlife Management Area</u>					
59	Lead Lake Well 1	101 N20 E31 07BDCA1	393651118325701	3,882.67	20
60	Lead Lake Well 2	101 N20 E31 07CAAB1	393648118325101	3,880.19	18
61	Lead Lake Well 3	101 N20 E31 07DBBC1	393645118324201	3,878.62	15
62	Lead Lake Well 4	101 N20 E31 07DBDD1	393641118323401	3,875.29	13
63	Lead Lake Well 5	101 N20 E31 07DACC1	393637118322501	3,874.15	14
64	Lead Lake Well 6	101 N20 E31 10ABCB1	393705118292401	3,879.35	16
65	Lead Lake Well 7	101 N20 E31 15BABB1	393624118294101	3,873.95	11.5
66	Lead Lake Well 8	101 N20 E31 04CADD1	393719118303301	3,873.86	14
67	Artesian Well nr Paiute Dr	101 N19 E31 07CBDB1	393640118330401	3,881	--
68	Fallon Indian Res Well 13	101 N20 E30 35DCCB1	393300118345801	3,894	20
69	USFWS Well 2	101 N20 E31 33DCDB1	393258118302001	3,891	680
70	USFWS Well 3	101 N20 E32 20CAC 1	393457118250601	3,890	700
71	De Braga 14-6 Well	101 N19 E31 06BCBB1	393236118331601	3,891	--
<u>Fernley Wildlife Management Area</u>					
72	FWA-1 Well	76 N20 E25 22CBDA1	393459119095601	4,170	119
73	FWA-2 Well	76 N20 E25 22BDB1	393526119100401	4,121	228
74	FWA-2A Well	76 N20 E25 22BCC 1	393507119100301	4,152.52	60
75	FWA-2B Well	76 N20 E25 22BCC 2	393507119100302	4,152.76	45
76	FWA-3A Well	76 N20 E25 22BBA 1	393526119100301	4,120.68	51
77	FWA-3B Well	76 N20 E25 22BBA 2	393526119100302	4,120.68	35
78	FWA-3 Well	76 N20 E25 15CBDD1	393547119095801	4,081.56	31
79	FWA-4 Well	76 N20 E25 15CBAA1	393558119095801	4,065.11	14
80	FWA-5 Well	76 N20 E25 15CBAA1	393610119100401	4,065.96	15
81	FWA-6 Well	76 N20 E25 14DDCD1	393533119080701	4,089.05	16
82	FWA-7 Well	76 N21 E25 26BDDA1	393949119084601	4,011	14
83	FWA-8 Well	76 N21 E25 34BBCC1	393851119100801	4,034	13
84	Fernley Hot Springs	76 N20 E25 18CABA	393555119064101	4,065	--

¹ A local site designation is used in Nevada to identify a site by hydrographic area (Rush, 1968) and by the official rectangular subdivision of the public lands referenced to the Mt. Diablo base line and meridian. Each site designation consists of four units: The first unit is the hydrographic area number. The second unit is the township, preceded by an N or S to indicate location north or south of the base line. The third unit is the range, preceded by an E to indicate location east of the meridian. The fourth unit consists of the section number and letters designating the quarter section, quarter-quarter section, and so on (A, B, C, and D indicate the northeast, northwest, southwest, and southeast quarters, respectively), followed by a number indicating the sequence in which the site was recorded. For example, site 101 N20 E31 07BDCA1 is in the Carson Desert (hydrographic area 101). It is the first site recorded in the northeast quarter of the southwest quarter of the southeast quarter of the northwest quarter of section 7, Township 20 North, Range 31 East, Mount Diablo base line and meridian.

² The standard site identification is based on the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude; the next seven digits denote the degrees, minutes, and seconds of longitude; and the last two digits (assigned sequentially) identify the sites within a 1-second grid. For example, site 393651118325701 refers to 39° 36' 51" latitude and 118° 32' 57" longitude, and it is the first site recorded in that 1-second grid. The assigned number is retained as a permanent identifier even if a more precise latitude and longitude are determined later.

TABLE 23.--Lithologic logs of wells in and near Stillwater and Fernley Wildlife Management Areas, 1987-88

Material ¹	Thickness (feet)	Depth (feet)
<u>Stillwater Wildlife Management Area</u>		
<u>Lead Lake Well 1 (site 59):</u>		
Sand, fine to very fine grained, pale brown (5YR5/2), well sorted, rounded, quartz, feldspar, dark grains -----	5.0	5.0
Sand, fine to very fine grained, clayey, light olive gray (5Y5/2), poorly sorted, increasing clay content with depth -----	10.0	15.0
Sand, very fine grained, very light gray (N8), well sorted, angular -----	.2	15.2
Sand, fine to very fine grained, clayey, light olive gray (5Y5/2), poorly sorted -----	4.8	20.0
<u>Lead Lake Well 2 (site 60):</u>		
Sand, very fine grained, moderate brown (5YR3/4), poorly sorted, rounded -----	4.0	4.0
Sand, fine to very fine grained, clayey, light olive gray (5Y5/2), poorly sorted, rounded -----	6.0	10.0
Sand, very fine to medium grained, clayey, grayish brown (5YR3/2), poorly sorted, well rounded, lithic fragments to 1 inch diameter -----	.5	10.5
Sand, fine to very fine grained, clayey, light olive gray (5YR3/2), poorly sorted, rounded -----	5.5	16.0
Sand, very fine grained, very light gray (N8), well sorted, angular -----	.3	16.3
Sand, fine to very fine grained, clayey, greenish gray (5G6/1), poorly sorted, some oblong rounded grains -----	1.7	18.0
<u>Lead lake Well 3 (site 61):</u>		
Sand, very fine grained, silty, dusky brown (5YR2/2), poorly sorted, dark rock fragments -----	2.5	2.5
Sand, very fine grained, to silt, clayey, light olive gray (5Y5/2), poorly sorted, angular to subangular, dark rock fragments -----	5.5	8.0
Sand, very fine grained, very light gray (N8), well sorted, angular -----	.3	8.3
Sand, very fine grained, silty to clayey, light olive gray (5Y5/2) -----	4.7	13.0
Sand, fine to very fine grained, clayey to silty, dusky yellow green (5GY5/2) -----	2.0	15.0

TABLE 23.--Lithologic logs of wells in and near Stillwater and Fernley Wildlife Management Areas, 1987-88--Continued

Material ¹	Thickness (feet)	Depth (feet)
<u>Lead Lake Well 4 (site 62):</u>		
Sand, very fine grained, silty, dark yellowish brown (10YR4/2), organic matter (roots) -----	2.0	2.0
Sand, fine grained, clayey, light olive gray (5Y5/2) -----	4.0	6.0
Clay, silty, light olive gray (5Y5/2), many thin lenses of fine-grained sand -----	1.5	7.5
Sand, fine to very fine grained, silty, dark yellowish brown (10YR4/2), poorly sorted, subangular to subrounded -----	.5	8.0
Clay, silty, light olive gray (5Y5/2), many thin lenses of fine-grained sand -----	3.5	11.5
Sand, very fine grained, very light gray (N8), well sorted, angular -----	.4	11.9
Clay, silty, light olive gray (5Y5/2) -----	1.1	13.0
<u>Lead Lake Well 5 (site 63):</u>		
Sand, very fine grained, brownish black (5YR2/1), well sorted, subangular to subrounded -----	3.0	3.0
Clay, silty, light olive gray (5Y5/2), lithic fragments to 0.75 inch diameter -----	1.5	4.5
Sand, very fine grained, very light gray (N8), well sorted, angular -----	.1	4.6
Clay, silty, light olive gray (5Y5/2), lithic fragments to 0.75 inch diameter -----	8.4	13.0
Sand, very fine grained, very light gray (N8), well sorted, angular -----	.5	13.5
Clay, silty, light olive gray (5Y5/2), lithic fragments to 0.75 inch diameter -----	.5	14.0
<u>Lead Lake Well 6 (site 64):</u>		
Sand, very fine grained, grayish brown (5YR3/2), well sorted, subrounded to rounded -----	3.0	3.0
Clay, silty, grayish olive (10Y4/2) mottled with grayish brown (5YR3/2) -----	3.5	6.5
Clay, silty to sandy, yellowish gray (5Y7/2) mottled, friable -----	2.5	9.0
Clay, silty, light olive gray (5Y5/2) -----	7.0	16.0
<u>Lead Lake Well 7 (site 65):</u>		
Sand, very fine grained, clayey, grayish brown (5YR3/2), subrounded to rounded, white crystalline needles near surface -----	2.5	2.5
Clay, silty, light olive gray (5Y5/2) mottled with layers of brownish black (5YR2/1) -----	3.0	5.5
Clay, silty, light olive gray (5Y6/1) -----	6.0	11.0

TABLE 23.--Lithologic logs of wells in and near Stillwater and Fernley Wildlife Management Areas, 1987-88--Continued

Material ¹	Thickness (feet)	Depth (feet)
<u>Lead Lake Well # (site 66):</u>		
Sand, very fine grained, clayey, brownish black (5YR2/1) -----	2.5	2.5
Sand, very fine grained, clayey, light olive gray (5Y5/2), gastropods, 6-inch thick layer of very fine grained sand (dark yellowish brown, 10YR4/2) with subangular to subrounded grains at 13 feet -----	11.5	14.0
<u>Fernley Wildlife Management Area</u>		
<u>FWA-2A Well (site 74):</u>		
Sand, very fine grained, silty, pebbly, very pale orange (10YR8/2), poorly sorted, volcanic-rock fragments abundant -----	9.0	9.0
Sand, very fine grained, clayey, pebbly, grayish orange (10YR7/4), poorly sorted -----	4.0	15.0
Sand, very fine grained, clayey, pale yellowish brown (10YR6/2), poorly sorted -----	3.0	18.0
Sand, very fine grained, clayey, dark yellowish brown (10YR4/2), poorly sorted -----	4.0	22.0
Clay, silty, dark yellowish brown (10YR4/2) -----	17.0	39.0
Sand, gravel, and clay interbedded, dark yellowish brown (10YR4/2), gravel mostly volcanic-rock fragments to 1 inch diameter -----	21.0	60.0
<u>FWA-3A Well (site 76):</u>		
Sand, fine grained, silty, pebbly, pale yellowish brown (10YR6/2) -----	14.0	14.0
Sand, very fine grained, clayey, dark yellowish brown (10YR4/2) -----	5.0	19.0
Sand, fine grained, dark yellowish brown (10YR4/2), well sorted, rounded, mica flakes, dark minerals -----	31.0	50.0
<u>FWA-3 Well (site 78):</u>		
Sand, very fine grained, silty, clayey, dark yellowish brown (10YR4/2), poorly sorted, rounded, quartz, mica, some dark minerals -----	3.0	3.0
Clay, silty, dark yellowish brown (10YR4/2), poorly sorted, some mica flakes -----	16.0	19.0
Sand, very fine grained, clayey, dark yellowish brown (10YR4/2), poorly sorted, subrounded, quartz, feldspar, mica, red-stained grains, dark minerals -----	10.0	29.0
Clay, sandy (very fine grained), dark yellowish brown (10YR4/2), quartz, feldspar, mica, dark minerals -----	2.0	31.0

TABLE 23.--Lithologic logs of wells in and near Stillwater and Fernley Wildlife Management Areas, 1987-88--Continued

Material ¹	Thickness (feet)	Depth (feet)
<u>FWA-4 Well (site 79):</u>		
Silt, clayey to silty clay, dark yellowish brown (10YR4/2), minor mica -----	10.0	10.0
Sand, very fine grained, silty to clayey, dark yellowish brown (10YR4/2), mica, dark mineral grains -----	4.0	14.0
Sand, very fine grained, dark yellowish brown (10YR4/2), well sorted, quartz, feldspar, mica, some mafic minerals -----	2.0	16.0
<u>FWA-5 Well (site 80):</u>		
Sand, very fine grained to silt, clayey, dark yellowish brown (10YR4/2), poorly sorted, quartz, dark minerals, red-stained lithic fragments, mica -----	4.0	4.0
Clay, silty, dark yellowish brown (10YR4/2), brittle -----	6.0	10.0
Silt, clayey, dark yellowish brown (10YR4/2), mica, dark mineral grains, quartz -----	4.0	14.0
Clay, silty, dark yellowish brown (10YR4/2), brittle -----	1.0	15.0
<u>FWA-6 Well (site 81):</u>		
Sand, fine grained, dark yellowish brown (10YR4/2), well sorted, subangular to rounded, quartz, mica, dark minerals -----	6.0	6.0
Silt, clayey, dark yellowish brown (10YR4/2) -----	6.0	12.0
Silt, clayey, to very fine grained sand, pale yellowish brown (10YR6/2), quartz, dark minerals -----	4.0	16.0
<u>FWA-7 Well (site 82):</u>		
Clay, silty (some very fine grained sand), pale yellowish brown (10YR6/2), some dark mineral grains -----	6.0	6.0
Clay, silty, dark yellowish brown (10YR4/2), plastic -----	3.0	9.0
Clay, silty, medium light gray (N6), some dark grains, biotite (?), oxidizes to light olive gray (5Y5/2) -----	2.0	11.0
Sand, very fine grained, clayey, grayish black (N2), quartz, mica, feldspar, red-stained volcanic lithic fragments -----	3.0	14.0
<u>FWA-8 Well (site 83):</u>		
Clay, sandy (very fine grained), light olive gray (5Y5/2) -----	7.0	7.0
Clay, silty, dark yellowish brown (10YR4/2), mica, quartz -----	5.0	12.0
Sand, very fine grained, clayey, grayish black (N2), poorly sorted, subangular to rounded, quartz, mica, feldspar, dark minerals, biotite -----	1.0	13.0

¹ Color codes (for example, "10YR5/2") are for undried cuttings or cores, on basis of Rock-Color Chart distributed by Geological Society of America.

TABLE 24.--Mineralogy of core-material samples from wells in and near Stillwater and Fernley Wildlife Management Areas, 1987-88

Site name and number (figs. 4,5)	Depth (feet below land surface)	Minerals present ¹	Minerals possibly present
<u>Stillwater Wildlife Management Area</u>			
Lead Lake Well 1 (site 59)	15	Calcite, plagioclase (andesine, labradorite), quartz; chlorite, illite, kaolinite, smectite; biotite, gypsum	
Lead Lake Well 3 (site 61)	13.5	Calcite, plagioclase (oligoclase), quartz; chlorite, illite, kaolinite smectite; biotite	Muscovite
Lead Lake Well 5 (site 63)	12	Plagioclase, quartz; illite, kaolinite, smectite	Calcite, chlorite, muscovite
<u>Fernley Wildlife Management Area</u>			
FWA-2A Well (site 74)	60	Calcite, plagioclase (andesine, bytownite, labradorite), quartz; chlorite, illite, kaolinite, smectite; hornblende, magnetite, potassium feldspar, pyroxene	
FWA-3A Well (site 76)	45	Plagioclase, potassium feldspar, quartz; chlorite, illite, kaolinite, smectite; hematite, pyroxene	
FWA-4 Well (site 79)	14	Plagioclase (andesine, labradorite), quartz; chlorite, illite, kaolinite, smectite; biotite, hornblende, pyroxene	
FWA-8 Well (site 83)	13	Plagioclase, quartz; illite, kaolinite, mixed-layer clay	Augite

¹ Minerals preceding first semicolon are major components (make up most of the sediment); minerals following first semicolon are clays; minerals following second semicolon are minor components (make up a few percent of sediment).

TABLE 25.--Water-level altitudes in wells and piezometers
in Stillwater Wildlife Management Area, 1988-89

[Abbreviations and symbols: LLP, Lead Lake piezometer; --, not measured]

Site number (fig. 4)	Land-surface altitude (feet above sea level)	Water-level altitude (feet above 3,800 feet)						
		November 22, 1988	November 29, 1988	November 30, 1988	December 1, 1988	December 2, 1988	December 5, 1988	December 6, 1988
59	3,882.67	--	69.96	--	--	--	70.18	70.23
60	3,880.19	--	69.71	--	--	--	70.14	70.21
61	3,878.62	--	--	68.88	--	--	70.31	--
62	3,875.29	--	--	69.82	--	--	69.21	69.22
63	3,874.15	--	--	68.47	--	--	67.94	68.27
64	3,879.35	--	--	--	68.57	--	--	68.64
65	3,873.95	--	--	--	--	--	--	69.89
66	3,873.86	--	--	--	--	66.58	67.42	67.47
LLP-1	3,876.46	71.10	--	--	--	--	--	71.11
LLP-2	3,876.46	70.95	--	--	--	--	--	71.01
LLP-3	3,878.26	70.96	--	--	--	--	--	70.96
LLP-4	3,874.40	69.63	--	--	--	--	--	69.68
LLP-5	3,873.14	67.36	--	--	--	--	--	67.50
LLP-6	3,873.22	68.97	--	--	--	--	--	69.05
LLP-7	3,880.80	70.96	--	--	--	--	--	70.91

Site number (fig. 4)	Water-level altitude (feet above 3,800 feet)									
	December 14, 1988	December 15, 1988	April 3, 1989	April 4, 1989	April 5, 1989	April 26, 1989	June 14, 1989	June 15, 1989	September 14, 1989	December 1, 1989
59	--	70.28	--	70.52	--	--	70.43	--	69.81	70.83
60	70.29	--	--	70.56	--	--	70.49	--	69.94	71.12
61	70.47	--	--	70.87	--	--	70.87	--	70.46	71.79
62	69.29	--	--	70.30	--	--	70.01	--	69.41	71.25
63	68.38	--	--	--	68.93	--	--	69.37	68.49	72.37
64	--	68.60	69.08	--	--	68.73	--	68.78	68.59	69.35
65	--	70.15	70.26	--	--	--	--	70.00	69.63	71.43
66	--	67.52	--	68.25	--	--	--	67.74	68.73	70.60
LLP-1	--	--	--	--	71.53	--	--	71.89	71.30	73.17
LLP-2	--	--	--	--	71.81	--	--	71.89	71.44	72.63
LLP-3	--	--	--	--	71.68	--	--	71.76	71.22	72.51
LLP-4	--	--	--	--	70.29	--	--	70.63	70.12	72.04
LLP-5	--	--	--	--	68.69	--	--	69.14	69.05	71.56
LLP-6	--	--	--	--	69.84	--	--	69.38	68.69	70.78
LLP-7	--	--	--	--	71.49	--	--	71.29	70.81	72.07

TABLE 26.--Water-level altitudes in wells and piezometers
in and near Fernley Wildlife Management Area, 1987-89

[Abbreviations and symbol: FP, Fernley piezometer; --, not measured]

Site number (fig. 5)	Land-surface altitude (feet above sea level)	Water-level altitude (feet above 4,000 feet)								
		October 26, 1987	October 27, 1987	November 9, 1987	March 21, 1988	March 22, 1988	August 31, 1988	September 1, 1988	September 9, 1988	September 12, 1988
74	4,152.52	--	--	--	--	--	113.61	113.34	113.22	112.92
75	4,152.76	--	--	--	--	--	113.81	113.54	113.35	113.48
76	4,120.68	--	--	--	--	--	--	103.35	103.94	104.61
77	4,120.68	--	--	--	--	--	--	103.60	103.91	104.61
78	4,081.56	73.03	--	72.38	70.10	--	--	--	--	--
79	4,065.11	--	62.10	62.61	--	61.99	--	--	--	--
80	4,065.96	--	--	62.76	--	61.64	--	--	--	--
81	4,089.05	--	--	87.26	--	--	--	--	--	--
82	^a 4,011	--	--	flowing	--	--	--	--	--	--
83	^a 4,034	--	--	flowing	--	--	--	--	--	--
FP-1	4,076.12	--	--	--	--	--	--	--	--	--
FP-2	4,072.70	--	--	--	--	--	--	--	--	--

Site number (fig. 5)	Water-level altitude (feet above 4,000 feet)								
	September 13, 1988	September 14, 1988	December 12, 1988	June 20, 1989	June 21, 1989	September 11, 1989	September 12, 1989	December 1, 1989	December 1, 1989
74	--	--	101.94	99.52	--	--	115.68	108.29	
75	--	--	dry	dry	--	--	116.19	dry	
76	--	--	95.16	95.03	--	--	109.01	101.73	
77	--	--	95.07	94.95	--	--	107.04	101.73	
78	68.48	--	68.69	67.31	--	68.73	--	70.02	
79	59.34	--	60.49	--	59.57	59.84	--	61.34	
80	59.19	--	60.18	--	59.37	59.49	--	60.68	
81	83.00	--	84.12	81.51	--	82.65	--	84.21	
82	--	10.15	--	--	10.69	--	--	flowing	
83	--	flowing	--	--	flowing	--	--	flowing	
FP-1	--	--	67.11	65.88	--	67.08	--	68.53	
FP-2	--	--	64.35	62.91	--	63.65	--	65.15	

^a Altitudes estimated from U.S. Geological Survey Two Tips (1:24,000) topographic map.

TABLE 27.--Concentrations of major elements in core-material samples from wells in and near Stillwater and Fernley Wildlife Management Areas, 1987-88

[Concentrations are dry-weight, whole-rock percentages. Symbol: <, less than]

Site number (figs. 4, 5)	Date	Sample depth (feet below land surface)	Aluminum	Calcium	Iron	Magnesium	Phosphorus	Potassium	Sodium	Titanium	Total carbon	Organic carbon	Inorganic carbon
<u>Stillwater Wildlife Management Area</u>													
59	11-29-88	20	7.9	3.7	4.0	1.8	0.09	2.3	2.5	0.38	1.20	0.47	0.73
60	11-29-88	18	7.3	3.5	3.8	1.7	.10	1.8	2.3	.37	3.78	3.20	.58
61	11-30-88	8	7.1	2.1	2.1	.58	.05	2.5	3.0	.24	.37	.12	.25
61	11-30-88	13.5	7.8	4.4	3.8	1.6	.10	2.2	2.0	.37	1.39	.39	1.00
62	11-30-88	13	7.6	2.7	4.0	1.8	.09	2.0	2.6	.37	.96	.59	.37
63	11-30-88	14	6.9	1.7	2.0	.56	.05	2.6	3.4	.22	.20	.04	.16
64	11-30-88	16	7.6	3.5	3.6	1.8	.09	2.4	4.7	.36	.79	.17	.62
65	12-01-88	11.5	7.8	5.9	3.6	2.0	.10	2.2	2.8	.37	1.57	.19	1.38
66	12-02-88	14	8.2	4.1	4.8	2.0	.12	1.9	4.0	.59	.33	.07	.26
<u>Fernley Wildlife Management Area</u>													
74	08-30-88	60	8.2	7.7	4.4	1.8	0.10	1.1	2.0	0.42	1.26	0.12	1.14
75	08-30-88	45	7.3	9.6	5.7	1.7	.12	1.2	2.1	.51	2.00	.19	1.81
76	08-31-88	50	9.7	2.6	4.5	1.4	.11	1.7	2.1	.40	.08	.06	.02
77	08-31-88	35	9.3	2.8	4.6	1.6	.09	1.6	2.2	.41	.06	.06	<.01
78	11-17-87	26	9.1	3.6	3.6	1.4	.08	1.6	2.5	.53	.05	.04	.01
79	11-17-87	16	9.3	3.8	3.8	1.5	.09	1.5	2.5	.36	<.05	<.05	<.01
80	11-17-87	15	9.3	2.8	4.6	1.6	.10	1.8	2.3	.41	.06	.06	<.01
81	11-17-88	16	9.0	3.5	3.7	1.4	.08	1.6	2.5	.34	.10	.08	.02
82	11-18-87	14	8.6	3.3	3.2	1.2	.05	1.6	2.5	.29	.09	.09	<.01
83	11-18-87	13	9.0	2.8	4.2	1.3	.09	1.7	2.3	.38	.14	.08	.06

TABLE 28. --Total trace-element concentrations¹ in core-material samples from wells in and near Stillwater and Fernley Wildlife Management Areas, 1987-89

[Concentrations are expressed in milligrams per kilogram, dry weight. Abbreviation and symbols: particle-size code 1, <2 millimeter; particle-size code 2, <0.062 millimeter; <, less than; --, not determined]

Site number ² (figs. 3-5)	Date	Particle size	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Cerium	Chromium	Cobalt	Copper	Europium
<u>Stillwater Wildlife Management Area</u>													
59	11-29-88	1	25	847	2	<10	49	<2	55	32	17	41	<2
		2	24	833	2	<10	--	<2	55	31	16	42	<2
60	11-29-88	1	17	779	2	<10	45	<2	48	33	15	64	<2
		2	16	799	2	<10	66	<2	51	34	15	57	<2
61 (8)	11-30-88	1	4.8	796	2	<10	15	<2	41	13	6	20	<2
		2	1.8	779	2	<10	8	<2	40	2	3	11	<2
61 (13.5)	11-30-88	1	16	803	2	<10	16	<2	54	30	15	39	<2
		2	16	789	2	<10	--	<2	55	27	15	38	<2
62	11-30-88	1	28	745	2	<10	40	<2	49	32	16	42	<2
		2	24	786	2	<10	--	<2	50	30	14	37	<2
63	11-30-88	1	6.6	767	2	<10	31	<2	42	8	6	16	<2
		2	4.7	767	2	<10	--	<2	39	4	4	12	<2
64	11-30-88	1	43	624	2	<10	76	<2	48	35	17	41	<2
		2	47	951	2	<10	99	<2	55	44	18	42	<2
65	12-01-88	1	17	1,010	2	<10	39	<2	53	30	16	48	<2
		2	16	1,100	2	<10	46	<2	56	29	15	48	<2
66	12-02-88	1	140	735	2	<10	48	<2	42	132	22	52	<2
		2	240	729	2	<10	77	<2	45	129	23	62	<2
71	01-24-89	1	15	775	2	<10	--	<2	47	35	15	44	<2
<u>Fernley Wildlife Management Area</u>													
74	08-30-88	1	12	750	1	<10	1	<2	36	41	20	23	<2
75	08-30-88	1	22	790	1	<10	.80	<2	36	58	24	19	<2
76	08-31-88	1	16	890	2	<10	2.9	<2	57	32	19	46	<2
77	08-31-88	1	25	830	1	<10	3	<2	50	32	21	45	<2
78	11-17-87	1	18	790	1	<10	2.3	<2	39	31	17	26	<2
79	11-17-87	1	16	840	1	<10	1.9	<2	39	43	18	25	<2
80	11-17-87	1	28	850	2	<10	5.6	<2	52	30	21	47	<2
81	11-17-87	1	21	820	1	<10	2.7	<2	42	29	17	29	<2
82	11-18-87	1	6.9	740	1	<10	4.6	<2	34	24	15	19	<2
83	11-18-87	1	13	880	1	<10	4.8	<2	49	33	18	34	<2

TABLE 28.---Total trace-element concentrations¹ in core-material samples from wells in and near Stillwater and Fernley Wildlife Management Areas, 1987-89--Continued

Site number ² (figs. 3-5)	Par-ticle size code	Gallium	Gold	Holmium	Lanthanum	Lead	Lithium	Manganese	Mercury	Molybdenum	Neodymium	Nickel	Niobium
<u>Stillwater Wildlife Management Area</u>													
59	1	20	<8	<4	33	22	129	760	0.04	3	27	22	8
	2	20	<8	<4	33	22	125	790	.02	4	29	20	9
60	1	18	<8	<4	28	19	116	620	.06	4	25	24	8
	2	19	<8	<4	29	19	108	630	.04	4	25	23	8
61 (8)	1	16	<8	<4	24	16	49	470	<.02	<2	20	8	8
	2	16	<8	<4	22	13	32	400	<.02	<2	18	3	10
61 (13.5)	1	22	<8	<4	33	22	111	910	.08	<2	27	20	10
	2	21	<8	<4	32	20	108	910	.10	<2	24	20	10
62	1	20	<8	<4	29	20	149	670	.02	<2	24	20	8
	2	18	<8	<4	30	19	122	710	.04	<2	26	19	8
63	1	16	<8	<4	23	13	46	470	<.02	7	19	4	9
	2	16	<8	<4	22	13	39	430	<.02	<2	19	4	11
64	1	20	<8	<4	29	19	111	1,300	.02	33	24	28	8
	2	21	<8	<4	32	20	111	1,500	.06	33	25	27	9
65	1	20	<8	<4	32	19	114	860	.04	5	27	28	8
	2	21	<8	<4	33	23	106	890	.04	5	29	23	8
66	1	19	<8	<4	24	15	61	720	<.02	13	24	59	11
	2	20	<8	<4	26	14	71	750	<.02	18	26	47	14
71	1	19	<8	<4	28	18	110	630	.28	<2	23	25	9
<u>Fernley Wildlife Management Area</u>													
74	1	19	<8	<4	23	9	46	850	<.02	<2	23	21	9
75	1	18	<8	<4	23	8	30	1,200	.04	<2	22	24	<4
76	1	22	<8	<4	32	11	47	800	.10	<2	30	25	5
77	1	22	<8	<4	29	13	42	930	.04	<2	24	22	5
78	1	21	<8	<4	24	13	30	750	.04	<2	21	21	5
79	1	21	<8	<4	24	11	26	730	.06	<2	20	27	<4
80	1	22	<8	<4	29	13	47	850	.06	<2	27	21	5
81	1	19	<8	<4	25	12	31	770	.04	<2	20	19	4
82	1	19	<8	<4	21	11	22	600	<.02	<2	18	14	<4
83	1	22	<8	<4	28	13	36	830	.08	<2	24	22	5

TABLE 28. --Total trace-element concentrations¹ in core-material samples from wells in and near Stillwater and Fernley Wildlife Management Areas, 1987-89--Continued

Site number (figs. 3-5)	Par-ticle size code	Scandium	Selenium	Silver	Strontium	Tantalum	Thorium	Tin	Uranium	Vanadium	Ytterbium	Yttrium	Zinc
<u>Stillwater Wildlife Management Area</u>													
59	1	12	0.20	<2	570	<40	16	<10	0.47	120	2	15	100
	2	12	.20	<2	560	<40	12.20	<10	4.8	--	--	--	--
60	1	11	.70	<2	600	<40	11.20	<10	5.67	130	2	14	89
	2	11	.60	<2	590	<40	12.30	<10	5.56	110	2	15	100
61 (8)	1	6	<.10	<2	270	<40	9.45	<10	3.2	43	2	18	54
	5		<.10	<2	170	<40	6.5	<10	2.78	140	3	14	89
61 (13.5)	1	12	.10	<2	680	<40	15.90	<10	5.02	120	2	15	100
	2	12	.10	<2	620	<40	13.60	<10	5.3	17	2	20	42
62	1	12	.60	<2	550	<40	14.50	<10	3.67	120	2	14	87
	2	11	.40	<2	650	<40	11.50	<10	4.12	110	2	15	99
63	1	6	<.10	<2	240	<40	7.65	<10	2.65	30	2	18	50
	2	5	<.10	<2	190	<40	6.1	<10	2.83	19	2	19	45
64	1	11	.60	<2	570	<40	11.20	<10	6.07	120	2	14	86
	2	12	.30	<2	660	<40	14	<10	6.54	120	2	16	88
65	1	12	<.10	<2	750	<40	13.30	<10	.26	130	2	14	98
	2	11	.10	<2	900	<40	14.80	<10	6.91	120	2	15	93
66	1	17	.40	<2	520	<40	8.56	<10	3.72	160	2	15	69
	2	19	.50	<2	510	<40	8.7	<10	5.05	190	2	16	80
71	1	11	.20	<2	540	<40	--	<10	--	100	2	14	85
<u>Fernley Wildlife Management Area</u>													
74	1	16	<0.10	<2	760	<40	8	<10	0.85	150	2	16	77
	1	14	.10	<2	770	<40	6	<10	1.5	210	2	15	94
76	1	15	<.10	<2	460	<40	12	<10	2.3	110	2	18	89
	1	15	<.10	<2	480	<40	10	<10	1.7	120	2	16	92
78	1	13	<.10	<2	590	<40	8	<10	1.1	100	2	13	71
79	1	13	.10	<2	630	<40	8	<10	.85	110	2	14	70
80	1	15	<.10	<2	470	<40	11	<10	1.7	120	2	17	97
81	1	13	.10	<2	570	<40	8	<10	.90	100	2	14	72
82	1	11	.10	<2	520	<40	7	<10	.85	95	2	12	61
83	1	13	.20	<2	510	<40	8	<10	2.3	110	2	15	80

¹ The total amount of a given constituent in a core-material sample, regardless of its physical or chemical form. This term is used only when the analytical procedure assures the measurement of at least 95 percent of the constituent present in the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total."

² Numbers in parentheses indicate sample depth, in feet below land surface, at sites where more than one sample was taken. For the other sites, the sample depth is the well depth, listed in table 22.

TABLE 29. -- Total-recoverable¹ trace-element concentrations in core-material samples from wells in and near Stillwater and Fernley Wildlife Management Areas, 1987-88

[Concentrations are expressed in milligrams per kilogram; samples at all sites were taken from the total depth level listed in table 22; symbol: <, less than]

Site number (figs 4,5)	Date	Arsenic	Boron	Chromium	Iron	Lead	Lithium	Manganese	Mercury	Molybdenum	Selenium
Stillwater Wildlife Management Area											
59	11-29-88	17	120	20	15,000	<100	80	680	0.03	<5.0	<1.0
60	11-29-88	13	150	20	15,000	<100	74	530	.04	2.9	<1.0
61	11-30-88	12	60	20	8,500	<100	62	730	.04	<5.0	<1.0
62	11-30-88	22	160	20	14,000	<100	110	500	.06	<6.0	<1.0
63	11-30-88	7	60	10	10,000	<100	34	260	.02	<1.0	<1.0
Fernley Wildlife Management Area											
74	08-30-88	11	10	10	7,900	<100	12	270	0.02	<1.0	<1.0
76	08-31-88	24	30	20	18,000	<100	20	960	.06	<5.0	<1.0
78	11-17-87	15	20	10	7,100	<100	13	380	.04	<4.0	<1.0
79	11-17-87	13	20	10	13,000	<100	11	420	.05	<4.0	<1.0
80	11-17-87	21	40	20	17,000	<100	25	870	.06	<5.0	<1.0

¹ The amount of a given constituent that is in solution after a core-material sample has been extracted with hot hydrochloric acid solution. Complete dissolution of all particulate matter is not achieved by the extraction treatment and there is reason to suspect that the determination actually represents something less than the "total" amount (95 percent) of the constituent sought in both phases of the sample.

TABLE 30.--Field measurements of selected properties and constituents in ground-water samples from in and near Stillwater and Fernley Wildlife Management Areas, 1987-89

[Abbreviations and symbols: mg/L, milligrams per liter; mv, millivolts; °C, degrees Celsius; µS/cm, microsiemens per centimeter at 25 °C; --, not determined; <, less than]

Site number (figs. 3-5)	Date sampled	Time	Specific conductance (µS/cm)	pH (standard units)	Eh (mv)	Water temperature (°C)	Oxygen, dissolved (mg/L)
<u>Stillwater Wildlife Management Area</u>							
59	12-15-88	1600	35,400	7.1	290	13.5	0.5
	04-04-89	1030	36,300	7.1	260	15.5	.8
	06-14-89	1000	36,300	7.0	270	17.2	.8
60	12-14-88	1600	32,100	6.9	350	13.5	.4
	04-04-89	1230	31,300	6.9	260	15.0	.5
	06-14-89	1200	31,000	6.9	270	16.0	.6
61	12-14-88	1400	13,200	7.3	300	14.5	.3
	04-04-89	1430	13,300	7.2	260	15.5	.5
	06-14-89	1400	13,100	7.2	260	18.0	.6
62	12-14-88	1200	37,600	7.0	300	12.0	.2
	04-04-89	1600	39,000	7.1	260	13.0	.5
	06-14-89	1600	38,200	7.0	260	14.8	.7
63	12-14-88	1000	40,100	7.0	340	14.0	.7
	04-05-89	0930	39,500	7.0	240	13.5	.6
	06-15-89	1700	42,400	6.8	250	15.6	.8
64	12-15-88	1200	88,700	7.7	280	15.0	.2
	04-03-89	1500	96,500	7.6	260	15.5	.7
	06-15-89	1300	98,400	7.5	270	16.4	.4
65	12-15-88	1000	38,100	7.5	310	12.0	.8
	04-03-89	1330	41,900	7.5	250	11.0	.7
	06-15-89	1030	43,700	7.4	260	14.1	.4
66	12-15-88	1400	83,600	7.3	250	15.0	.3
	04-04-89	0900	84,000	7.4	260	13.5	.5
	06-15-89	1500	92,000	7.2	260	16.4	.4
67	03-07-88	1445	10,600	8.4	--	19.5	--
68	04-05-89	1430	55,000	7.1	--	14.7	<.2
69	04-03-89	1130	7,120	8.3	--	24.0	.6
70	04-03-89	1700	14,200	7.9	--	25.0	.4
71	01-13-89	1313	9,540	7.9	--	80.0	--
<u>Fernley Wildlife Management Area</u>							
72	11-18-87	1230	518	8.6	--	14.0	--
	03-24-88	1230	536	8.3	--	15.0	--
	09-13-88	1630	533	8.4	--	17.0	--
73	03-24-88	1100	^a 947	^a 8.6	--	--	--
	09-13-88	1830	963	8.5	--	15.5	5.0
74	09-12-88	1200	547	7.8	--	16.0	6.2
	06-20-89	1100	625	7.7	340	16.0	6.0
75	09-12-88	1000	536	7.6	--	16.0	5.9
76	09-12-88	1600	936	8.7	--	15.5	4.1
	06-20-89	1300	1,040	8.7	300	16.0	2.5
77	09-12-88	1400	986	8.4	--	16.0	7.0
78	11-17-87	1430	1,020	8.4	470	14.0	2.0
	03-21-88	1330	1,050	8.2	360	14.5	2.4
	09-13-88	1230	1,060	8.5	--	15.5	1.9
	06-20-89	1730	1,020	8.4	290	15.0	2.3

TABLE 30.--Field measurements of selected properties and constituents in ground-water samples from in and near Stillwater and Fernley Wildlife Management Areas, 1987-89--Continued

Site number (figs. 3-5)	Date sampled	Time	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Eh (mv)	Water temperature ($^{\circ}\text{C}$)	Oxygen, dissolved (mg/L)
79	11-17-87	0830	1,030	8.3	500	14.5	1.9
	03-22-88	0800	1,000	8.6	350	12.0	2.3
	09-13-88	0830	1,080	8.5	--	13.0	1.6
	06-21-89	1230	1,020	8.5	270	13.7	2.1
80	11-17-87	1000	3,350	8.1	420	13.5	.7
	03-22-88	1030	3,210	8.2	350	13.0	1.0
	09-13-88	1030	3,280	8.2	--	13.0	.5
	06-21-89	1430	3,250	8.1	260	13.0	.7
81	11-17-87	1300	1,330	8.2	500	16.0	2.7
	03-21-88	0945	1,290	8.8	360	13.5	3.5
	09-13-88	1500	1,220	8.2	--	17.5	2.9
	06-20-89	1530	1,230	8.2	310	15.5	3.5
82	11-18-87	0800	24,300	7.5	210	14.0	0.7
	03-22-88	1200	20,200	7.8	135	13.5	.9
	09-14-88	0800	15,000	7.5	195	14.0	.4
	06-21-89	0830	12,800	7.6	195	14.5	.6
83	11-18-87	1000	5,390	7.7	85	12.5	.4
	03-22-88	1530	4,920	7.9	55	12.5	1.0
	09-14-88	1000	4,600	7.8	202	12.5	.4
	06-21-89	1030	4,430	7.8	140	12.0	.6
84	03-21-88	1200	3,800	6.9	--	88.0	--

^a Laboratory measurement.

TABLE 31.--Concentrations of hardness and major dissolved constituents in ground-water samples from
in and near Stillwater and Fernley Wildlife Management Areas, 1987-89

[Abbreviations and symbol: mg/L, milligram per liter; °C, degrees Celsius; --, not determined]

Site number (figs. 3-5)	Date	Hard- ness (mg/L as CaCO ₃)	Calcium (mg/L as Ca)	Magne- sium (mg/L as Mg)	Sodium (mg/L as Na)	Potas- sium (mg/L as K)	Alka- linity (mg/L as CaCO ₃)	Bicar- bonate (mg/L as HCO ₃)	Car- bonate (mg/L as CO ₃)	Sulfate (mg/L as SO ₄)	Chlo- ride (mg/L as Cl)	Fluo- ride (mg/L as F)	Silica (mg/L as SiO ₂)	Solids, dis- solved, residue at 180 °C (mg/L)	Solids, dis- solved, sum of consti- tuents (mg/L)
<u>Stillwater Wildlife Management Area</u>															
59	12-15-88	4,500	380	870	8,900	280	976	1,190	0	8,900	9,300	1.5	51	32,400	29,300
	04-04-89	4,900	420	930	8,300	230	1,020	1,240	0	11,000	9,100	1.8	55	30,600	30,600
	06-14-89	4,400	330	860	7,900	370	1,000	1,220	0	9,800	9,300	1.9	54	30,000	29,200
60	12-14-88	4,600	520	800	7,600	180	845	1,030	0	9,100	9,000	2.1	65	27,600	27,800
	04-04-89	4,700	540	810	6,800	110	845	1,030	0	8,200	8,100	2.4	32	25,000	25,100
	06-14-89	4,000	460	700	6,400	180	877	1,070	0	7,100	7,500	2.9	52	23,700	22,900
61	12-14-88	2,400	460	310	3,000	81	302	368	0	4,700	2,900	1.9	54	11,400	11,700
	04-04-89	2,400	430	320	2,500	79	292	356	0	4,400	2,500	2.2	57	10,900	10,500
	06-14-89	2,500	520	290	2,300	81	300	366	0	4,100	2,400	2.3	58	10,400	9,930
62	12-14-88	4,700	450	880	8,100	210	951	1,160	0	11,000	8,500	2.7	45	32,800	29,800
	04-04-89	5,900	550	1,100	8,500	180	976	1,190	0	12,000	8,700	2.9	42	32,200	31,700
	06-14-89	5,200	490	960	8,400	250	984	1,200	0	11,000	8,900	4.0	42	32,300	30,600
63	12-14-88	5,500	550	1,000	9,300	170	1,190	1,450	0	12,000	9,400	2.5	54	34,800	33,200
	04-05-89	7,100	700	1,300	8,700	150	1,210	1,470	0	13,000	9,500	2.7	54	34,100	34,100
	06-15-89	6,500	620	1,200	8,500	200	1,160	1,420	0	12,000	10,000	.9	42	34,800	33,300
64	12-15-88	7,400	490	1,500	30,000	1,100	340	415	0	26,000	34,000	.5	14	94,600	93,300
	04-03-89	7,400	510	1,500	28,000	860	317	386	0	25,000	35,000	.5	15	94,500	91,100
	06-15-89	8,500	600	1,700	29,000	1,300	326	398	0	26,000	35,000	.1	24	94,700	93,800
65	12-15-88	3,100	190	640	11,000	300	1,200	1,460	0	15,000	8,300	.7	40	36,100	36,200
	04-03-89	3,400	190	720	11,000	250	1,140	1,390	0	16,000	8,400	.7	39	37,000	37,300
	06-15-89	3,400	250	670	11,000	330	1,340	1,630	0	16,000	8,500	.1	3.3	37,500	37,600
66	12-15-88	6,500	460	1,300	26,000	630	599	730	0	21,000	32,000	.7	33	82,800	81,800
	04-04-89	7,000	510	1,400	24,000	580	564	688	0	21,000	32,000	.7	33	83,400	79,900
	06-15-89	7,300	610	1,400	24,000	770	544	664	0	21,000	31,000	.7	62	83,000	79,200
67	03-07-88	39	5.9	5.8	1,700	30	749	861	26	13	2,200	1.3	43	4,720	4,450
68	04-05-89	12,551	1,400	2,200	9,400	84	454	554	0	4,900	20,000	.7	48	41,200	38,300
69	04-03-89	78	22	5.7	1,500	34	216	264	0	110	2,300	1.6	49	4,080	4,150
70	04-03-89	200	27	32	3,100	45	688	839	0	6.8	4,700	.7	63	8,490	8,390
71	01-13-89	260	97	3.2	1,600	120	56	68	0	270	2,700	4.6	210	5,080	5,040

TABLE 31.--Concentrations of hardness and major dissolved constituents in ground-water samples from in and near Stillwater and Fernley Wildlife Management Areas, 1987-89--Continued

Site number (figs. 3-5)	Date	Hardness (mg/L as CaCO ₃)	Calcium (mg/L as Ca)	Magnesium (mg/L as Mg)	Sodium (mg/L as Na)	Potassium (mg/L as K)	Alkalinity (mg/L as CaCO ₃)	Bicarbonate (mg/L as HCO ₃)	Carbonate (mg/L as CO ₃)	Sulfate (mg/L as SO ₄)	Chloride (mg/L as Cl)	Fluoride (mg/L as F)	Silica (mg/L as SiO ₂)	Solids, dissolved, residue at 180 °C (mg/L)	Solids, dissolved, sum of constituents (mg/L)
Fernley Wildlife Management Area															
72	11-18-87	56	16	4.0	110	4.1	248	288	7	22	14	0.1	57	374	376
	03-24-88	52	15	3.6	110	4.0	250	305	0	23	12	.2	56	376	374
	09-13-88	53	15	3.8	100	4.1	231	268	7	21	12	.1	57	359	352
73	03-24-88	21	4.3	2.4	220	9.7	473 ^a	577 ^a	0 ^a	21	11	.6	40	612	593
	09-13-88	21	4.1	2.5	220	9.4	461	534	14	22	11	.7	20	612	566
74	09-12-88	150	27	20	53	26	257	314	0	19	13	.3	50	366	363
	06-20-89	120	23	16	75	30	289	352	0	20	13	.4	48	419	398
75	09-12-88	190	37	24	20	24	224	273	0	20	13	.3	49	335	322
76	09-12-88	12	2.3	1.4	210	11	454	521	16	19	13	.7	35	591	565
	06-20-89	12	2.4	1.5	220	13	466	520	24	19	13	.6	34	608	583
77	09-12-88	13	2.2	1.8	220	11	433	520	4	24	19	.6	38	638	576
	11-17-87	23	3.5	3.4	230	16	437	505	14	93	19	.5	34	673	662
78	03-21-88	24	3.5	3.7	240	12	438	534	0	90	17	.5	35	678	666
	09-13-88	24	3.2	3.9	230	13	440	488	24	80	17	.5	35	663	647
	06-20-89	24	3.5	3.6	220	5.0	430	471	26	78	17	.6	33	648	618
79	11-17-87	17	2.6	2.5	240	14	436	532	0	93	19	.5	36	678	669
	03-22-88	17	2.6	2.5	240	16	436	532	0	92	17	.6	34	674	666
	09-13-88	17	2.6	2.6	240	13	447	517	14	80	18	.6	35	684	660
	06-21-89	16	2.5	2.3	230	14	428	522	0	72	17	.6	35	657	630
80	11-17-87	89	11	15	750	28	620	756	0	860	190	.4	35	2,010	2,260
	03-22-88	90	9.6	16	740	28	628	766	0	850	150	.4	33	2,230	2,200
	09-13-88	93	11	16	730	30	632	771	0	860	200	.4	35	2,210	2,260
	06-21-89	87	10	15	760	34	642	783	0	830	180	.4	34	2,190	2,250
81	11-17-87	35	5.9	4.9	280	27	384	468	0	220	58	.2	42	832	868
	03-21-88	35	5.9	4.9	280	21	393	479	0	190	48	.2	40	853	826
	09-13-88	33	5.5	4.6	270	27	392	478	0	180	45	.2	41	837	808
	06-20-89	37	7.1	4.6	250	27	402	490	0	180	33	.2	40	804	783
82	11-18-87	1,400	260	190	5,100	230	186	227	0	2,000	8,500	.3	35	16,500	16,400
	03-22-88	1,300	240	160	4,000	1,400	172	210	0	1,500	6,700	.3	28	13,200	14,100
	09-14-88	920	170	120	2,800	150	176	215	0	1,000	4,600	.4	39	9,400	8,990
	06-21-89	840	170	100	2,500	17	192	234	0	930	4,100	.4	39	8,280	7,970
83	11-18-87	280	47	39	1,100	65	220	268	0	260	1,800	.8	36	3,170	3,480
	03-22-88	250	43	34	900	58	164	200	0	190	1,200	.8	33	2,720	2,560
	09-14-88	240	42	34	840	52	160	200	0	170	1,400	.8	36	2,580	2,670
	06-21-89	240	42	32	840	60	148	181	0	160	1,300	.8	36	2,520	2,560
84	03-21-88	180	69	1.3	640	31	96	117	0	400	720	3.6	150	2,170	2,070

^a Measured in laboratory (all other alkalinity, bicarbonate, and carbonate concentrations measured in field).

TABLE 32.--Concentrations of dissolved nitrogen, phosphorus, and organic carbon in ground-water samples from in and near Stillwater and Fernley Wildlife Management Areas, 1987-89

[Concentrations are expressed in milligrams per liter as the element;
Symbols: <, less than; --, not determined]

Site number (figs. 3-5)	Date	Nitro- gen, nitrate	Nitro- gen, nitrite	Nitro- gen, ammonia	Nitro- gen, ammonia, un-ionized	Nitro- gen, organic	Ortho- phosphorus	Carbon, organic
<u>Stillwater Wildlife Management Area</u>								
59	06-14-89	--	--	3.1	<0.01	--	--	--
60	06-14-89	--	--	1.9	<.01	--	--	--
61	06-14-89	--	--	.71	<.01	--	--	--
62	06-14-89	--	--	4.2	.01	--	--	--
63	06-15-89	--	--	4.7	<.01	--	--	--
64	06-15-89	--	--	.48	<.01	--	--	--
65	06-15-89	--	--	.11	<.01	--	--	--
66	06-15-89	--	--	.84	<.01	--	--	--
67	03-07-88	--	--	--	--	--	--	9.0
71	01-13-89	0.08	0.02	2.6	1.4	0.30	0.04	7.9
<u>Fernley Wildlife Management Area</u>								
72	11-18-87	2.1	<0.01	<0.01	<0.01	<0.20	0.04	0.7
	03-24-88	2.0	<.01	<.01	<.01	.20	.04	.7
73	03-24-88	2.6	<.01	<.01	--	.20	.40	.7
74	06-20-89	--	--	.01	<.01	--	--	.6
76	06-20-89	--	--	<.01	<.01	--	--	.7
78	11-17-87	1.8	<.01	<.01	<.01	<.20	.53	.9
	03-21-88	1.9	<.01	<.01	<.01	.40	.55	1.0
	06-20-89	--	--	<.01	<.01	--	--	.7
79	11-17-87	1.8	<.01	<.01	<.01	<.20	.74	1.2
	03-22-88	1.9	<.01	.02	<.01	.28	.75	.9
	06-21-89	--	--	<.01	<.01	--	--	.9
80	11-17-87	.92	<.01	<.01	<.01	<.20	.55	2.3
	03-22-88	.97	<.01	<.01	<.01	.40	.54	2.1
	06-21-89	--	--	<.01	<.01	--	--	2.1
81	11-17-87	1.8	<.01	<.01	<.01	<.20	.19	.8
	03-21-88	1.9	<.01	<.01	<.01	.30	.20	.7
	06-20-89	--	--	<.01	<.01	--	--	.6
82	11-18-87	.10	<.01	.42	<.01	<.20	.14	2.2
	03-22-88	.10	<.01	.34	<.01	.46	.15	.6
	06-21-89	--	--	.21	<.01	--	--	1.6
83	11-18-87	.10	<.01	.24	<.01	<.20	.35	.5
	03-22-88	.10	<.01	.27	<.01	.23	.26	1.1
	06-21-89	--	--	.25	<.01	--	--	.5
84	03-21-88	.01	.09	.35	.05	<.20	.02	.2

TABLE 33.--Concentrations of dissolved trace elements in ground-water samples from in and near Stillwater and Farnley Wildlife Management Areas, 1987-89

[Concentrations are expressed in micrograms per liter as the element.
Symbols: <, less than; --, not determined]

Site number (figs. 3-5)	Date	Aluminum	Antimony	Arsenic	Barium	Boron	Cadmium	Chromium	Copper	Iron	Lead
<u>Stillwater Wildlife Management Area</u>											
59	12-15-88	20	--	450	--	72,000	--	<1	--	190	<5
	04-04-89	140	--	550	--	68,000	--	<5	--	160	<5
	06-14-89	40	--	140	--	74,000	--	<5	--	180	<2
60	12-14-88	20	--	420	--	60,000	--	<1	--	170	<5
	04-04-89	100	--	320	--	58,000	--	<5	--	190	<5
	06-14-89	40	--	120	--	60,000	--	<5	--	180	<2
61	12-14-88	<10	--	290	--	16,000	--	<1	--	40	<5
	04-04-89	70	--	300	--	15,000	--	2	--	50	<5
	06-14-89	10	--	250	--	14,000	--	4	--	50	<2
62	12-14-88	10	--	950	--	48,000	--	<1	--	150	<5
	04-04-89	50	--	1,000	--	48,000	--	<5	--	160	<5
	06-14-89	30	--	980	--	45,500	--	<5	--	180	<2
63	12-14-88	20	--	420	--	34,000	--	<1	--	770	<5
	04-05-89	70	--	1,400	--	35,000	--	<5	--	700	<5
	06-15-89	20	--	790	--	35,000	--	<5	--	730	<2
64	12-15-88	40	--	420	--	77,000	--	<1	--	750	<5
	04-03-89	120	--	690	--	79,000	--	<10	--	860	<5
	06-15-89	80	--	330	--	79,000	--	<10	--	860	<8
65	12-15-88	<10	--	750	--	57,000	--	<1	--	150	<5
	04-03-89	110	--	740	--	57,000	--	<5	--	180	<5
	06-15-89	50	--	410	--	62,000	--	<5	--	180	<2
66	12-15-88	20	--	700	--	89,000	--	<1	--	650	<5
	04-04-89	80	--	750	--	90,000	--	<10	--	740	<5
	06-15-89	50	--	540	--	92,000	--	<10	--	760	<8
67	03-07-88	<10	6	21	300	23,000	1	<1	<10	--	<5
68	04-05-89	130	--	78	--	32,000	--	<10	--	280	<5
69	04-03-89	10	--	2	--	20,000	--	<1	--	170	<5
70	04-03-89	<20	--	120	--	13,000	--	<1	--	180	<5
71	01-13-89	--	--	130	250	18,000	<5	<25	<50	<15	<50

TABLE 33.--Concentrations of dissolved trace elements in ground-water samples from
in and near Stillwater and Fernley Wildlife Management Areas, 1987-89--Continued

Site number (figs. 3-5)	Date	Aluminum	Antimony	Arsenic	Barium	Boron	Cadmium	Chromium	Copper	Iron	Lead
Fernley Wildlife Management Area											
72	11-18-87	<10	4	18	42	390	<1	1	<10	--	<5
	03-24-88	<10	1	31	--	420	<1	<10	2	150	<5
	09-13-88	<10	--	15	--	380	--	<1	--	7	<5
73	03-24-88	<10	16	300	--	640	<1	2	5	<10	<5
	09-13-88	<10	--	340	--	650	--	1	--	8	<5
74	09-12-88	<10	--	100	--	390	--	1	--	--	<5
	06-20-89	<10	--	100	--	440	--	1	--	3	<1
75	09-12-88	<10	--	44	--	370	--	1	--	--	6
76	09-12-88	370	--	320	--	1,000	--	2	--	230	<5
	06-20-89	<10	--	170	--	940	--	2	--	11	<1
77	09-12-88	40	--	<1	--	1,400	--	2	--	--	<5
78	11-17-87	<10	31	930	29	1,300	<1	2	<10	--	<5
	03-21-88	150	8	480	--	1,200	<1	2	2	150	<5
	09-13-88	<10	--	330	--	1,200	--	2	--	<3	<5
	06-20-89	10	--	63	--	1,100	--	2	--	14	14
79	11-17-87	<10	32	1,200	37	1,300	<1	2	<10	--	<5
	03-22-88	<10	25	600	--	1,200	<1	2	2	<10	<5
	09-13-88	<10	--	650	--	1,300	--	2	--	--	<5
	06-21-89	20	--	540	--	1,200	--	3	--	18	<1
80	11-17-87	<10	60	990	<100	3,400	<1	<1	20	--	<5
	03-22-88	<10	20	550	--	3,300	<1	<10	5	10	<5
	09-13-88	<10	--	120	--	3,300	--	<1	--	<10	<5
	06-21-89	10	--	510	--	3,200	--	<1	--	20	<1
81	11-17-87	<10	6	120	23	1,300	<1	2	<10	--	<5
	03-21-88	20	6	110	--	1,200	<1	1	1	16	<5
	09-13-88	<10	--	130	--	1,300	--	2	--	6	<5
	06-20-89	<10	--	140	--	1,300	--	1	--	6	<1
82	11-18-87	<10	3	65	100	1,600	<1	<1	30	--	<5
	03-22-88	<10	3	52	--	13,000	<1	<10	2	180	<5
	09-14-88	<10	--	59	--	11,000	--	<1	--	330	<5
	06-21-89	<20	--	43	--	11,000	--	<2	--	380	4
83	11-18-87	<10	2	46	100	3,600	<1	<1	<10	--	<5
	03-22-88	<10	3	48	--	3,000	<1	<10	1	10	<5
	09-14-88	<10	--	46	--	2,800	--	<1	--	250	<5
	06-21-89	50	--	25	--	2,700	--	<1	--	330	<1
84	03-21-88	<10	11	30	--	5,700	<1	2	1	<10	<5

TABLE 33.--Concentrations of dissolved trace elements in ground-water samples from
in and near Stillwater and Fernley Wildlife Management Areas, 1987-89--Continued

Site number (figs. 3-5)	Date	Lithium	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Vanadium	Zinc
<u>Stillwater Wildlife Management Area</u>										
59	12-15-88	3,200	2,800	<0.1	4,500	--	<1	--	250	40
	04-04-89	3,200	3,300	<1	3,600	--	<1	--	130	40
	06-14-89	3,500	2,400	<1	3,400	--	<1	--	1,500	40
60	12-14-88	2,900	2,400	<1	4,500	--	<1	--	200	40
	04-04-89	2,900	4,600	<1	3,400	--	<1	--	180	20
	06-14-89	3,100	3,500	<1	3,000	--	<1	--	140	40
61	12-14-88	980	140	<1	1,500	--	<1	--	43	30
	04-04-89	940	2,000	<1	1,200	--	<1	--	60	20
	06-14-89	890	1,800	<1	1,400	--	<1	--	61	20
62	12-14-88	2,700	250	<1	1,000	--	<1	--	190	40
	04-04-89	2,900	4,300	<1	1,000	--	<1	--	100	30
	06-14-89	3,200	3,300	.1	1,300	--	<1	--	150	40
63	12-14-88	2,400	1,700	<1	220	--	<1	--	200	50
	04-05-89	2,600	5,000	<1	200	--	<1	--	94	30
	06-15-89	3,100	4,100	<1	220	--	<1	--	130	40
64	12-15-88	3,800	150	<1	28,000	--	110	--	750	90
	04-03-89	4,000	190	<1	26,000	--	110	--	1,100	60
	06-15-89	4,300	190	.6	25,000	--	110	--	<500	80
65	12-15-88	3,000	190	<1	9,000	--	<1	--	420	40
	04-03-89	3,200	220	<1	8,800	--	<1	--	400	40
	06-15-89	3,600	210	<1	8,600	--	2	--	380	40
66	12-15-88	3,200	380	<1	8,000	--	11	--	480	80
	04-04-89	3,300	2,100	<1	10,000	--	<20	--	890	60
	06-15-89	3,600	1,700	<1	10,000	--	13	--	<500	80
67	03-07-88	140	970	<1	2	2	<1	1	54	<10
68	04-05-89	3,300	8,700	<1	1,000	--	40	--	350	40
69	04-03-89	1,000	30	<1	16	--	<1	--	24	<10
70	04-03-89	320	110	<1	7	--	<1	--	100	<10
71	01-13-89	2,000	29	<1	50	<50	<1	<5	34	<15

TABLE 33.--Concentrations of dissolved trace elements in ground-water samples from
in and near Stillwater and Fernley Wildlife Management Areas, 1987-89.--Continued

Site number (figs. 3-5)	Date	Lithium	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Vanadium	Zinc
Fernley Wildlife Management Area										
72	11-18-87	45	<1	<0.1	4	<1	<1	<1	45	25
	03-24-88	45	3	<.1	4	--	<1	--	46	130
	09-13-88	48	<1	<.1	4	--	<1	--	43	34
73	03-24-88	<10	<10	<.1	7	--	<1	--	230	20
	09-13-88	14	2	<.1	8	--	<1	--	240	4
74	09-12-88	23	1	<.1	10	--	<1	--	69	13
	06-20-89	26	<1	<.1	7	--	<1	--	56	3
75	09-12-88	20	<10	<.1	8	--	<1	--	33	10
76	09-12-88	<4	5	<.1	20	--	<1	--	180	8
	06-20-89	<4	<1	<.1	18	--	<1	--	190	<3
77	09-12-88	5	<1	<.1	29	--	2	--	81	12
78	11-17-87	<4	<1	<0.1	67	<1	<1	<1	120	<3
	03-21-88	<10	<10	<.1	74	--	<1	--	130	<10
	09-13-88	<4	<1	<.1	80	--	1	--	130	<3
	06-20-89	4	2	<.1	73	--	2	--	140	<3
79	11-17-87	6	1	<.1	57	<1	<1	<1	140	6
	03-22-88	<10	<10	<.1	54	--	<1	--	150	<10
	09-13-88	6	<1	<.1	48	--	<1	--	160	5
	06-21-89	6	<1	<.1	58	--	1	--	140	<3
80	11-17-87	30	20	<.1	440	<1	3	<1	120	<10
	03-22-88	30	14	<.1	54	--	2	--	85	10
	09-13-88	30	10	<.1	470	--	2	--	110	<10
	06-21-89	30	10	<.1	440	--	10	--	120	<10
81	11-17-87	8	2	<.1	10	<1	3	<1	63	7
	03-21-88	7	<1	<.1	12	--	2	--	53	4
	09-13-88	10	<1	<.1	15	--	3	--	89	19
	06-20-89	11	1	<.1	15	--	2	--	63	<3
82	11-18-87	130	1,000	.2	76	<1	<1	<1	85	20
	03-22-88	100	870	2.6	62	--	<1	--	74	20
	09-14-88	60	690	.5	59	--	<1	--	62	10
	06-21-89	50	620	.3	59	--	<1	--	76	10
83	11-18-87	20	260	.1	43	<1	<1	<1	31	<10
	03-22-88	20	230	<.1	34	--	<1	--	32	10
	09-14-88	20	260	2	28	--	<1	--	30	<10
	06-21-89	10	280	<.1	16	--	<1	--	45	<10
84	03-21-88	1,800	60	.2	23	--	<1	--	21	10

TABLE 34.--Radiochemical data for ground-water samples from in and near Stillwater and Fernley Wildlife Management Areas, 1987-89

[Abbreviations and symbols: Cs-137, cesium-137; pCi/L, picocuries per liter; Sr/Y-90, strontium/yttrium-90, µg/L, micrograms per liter; --, not determined; <, less than]

Site number (figs. 3-5)	Date	Radon-222, total (pCi/L)	Radium-226, dissolved, radon method (pCi/L)	Uranium, natural, dissolved (µg/L as U)	Uranium, natural, dissolved (pCi/L)	Gross alpha, dissolved (µg/L as U, natural)	Gross beta, dissolved (pCi/L as Cs-137)	Gross beta, dissolved (pCi/L as Sr/Y-90)
<u>Stillwater Wildlife Management Area</u>								
59	12-15-88	--	--	190	130	--	--	--
	04-04-89	--	--	170	120	--	--	--
	06-14-89	--	--	180	120	--	--	--
60	12-14-88	--	--	210	140	--	--	--
	04-04-89	--	--	160	110	--	--	--
	06-14-89	--	--	240	160	--	--	--
61	12-14-88	--	--	77	52	--	--	--
	04-04-89	--	--	64	43	--	--	--
	06-14-89	--	--	58	39	--	--	--
62	12-14-88	--	--	110	75	--	--	--
	04-04-89	--	--	100	68	--	--	--
	06-14-89	--	--	200	140	--	--	--
63	12-14-88	--	--	140	95	--	--	--
	04-05-89	--	--	130	88	--	--	--
	06-15-89	--	--	190	130	--	--	--
64	12-15-88	--	--	800	540	--	--	--
	04-03-89	--	--	1,000	680	--	--	--
	06-15-89	--	--	1,300	880	--	--	--
65	12-15-88	--	--	1,500	1,000	--	--	--
	04-03-89	--	--	870	590	--	--	--
	06-15-89	550	--	8.3	5.6	--	--	--
66	12-15-88	--	--	810	550	--	--	--
	04-04-89	--	--	880	600	--	--	--
	06-15-89	490	--	1,000	680	--	--	--
68	04-05-89	--	--	560	380	--	--	--
69	04-03-89	--	--	5.6	3.8	--	--	--
70	04-03-89	--	--	3.8	2.6	--	--	--
71	01-13-89	--	--	<.40	<.27	<0.40	180	120
<u>Fernley Wildlife Management Area</u>								
72	11-18-87	--	0.05	4.1	2.8	5.1	6.0	4.5
	09-13-88	--	--	4.8	3.3	--	--	--
73	09-13-88	--	--	7.9	5.4	--	--	--
74	09-12-88	--	--	7.2	4.9	--	--	--
	06-20-89	720	--	6.9	4.7	--	--	--
75	09-12-88	--	--	7.1	4.8	--	--	--
76	09-12-88	--	--	3.3	2.2	--	--	--
	06-20-89	--	--	3.1	2.1	--	--	--
77	09-12-88	--	--	3.5	2.4	--	--	--

TABLE 34.--Radiochemical data for ground-water samples from in and near Stillwater and Fernley Wildlife Management Areas, 1987-89--Continued

Site number (figs. 3-5)	Date	Radon-222, total (pCi/L)	Radium-226, dissolved, radon method (pCi/L)	Uranium, natural, dissolved (µg/L as U)	Uranium, natural, ¹ dissolved (pCi/L)	Gross alpha, dissolved (µg/L as U, natural)	Gross beta, dissolved (pCi/L as Cs-137)	Gross beta, dissolved (pCi/L as Sr/Y-90)
78	11-17-87	--	0.04	4.3	2.9	5.6	22	15
	09-13-88	--	--	4.8	3.3	--	--	--
	06-20-89	--	--	4.0	2.7	--	--	--
79	09-13-88	--	--	4.6	3.1	--	--	--
	06-21-89	--	--	3.2	2.2	--	--	--
80	11-17-87	--	<.02	41	28	43	73	48
	09-13-88	--	--	32	22	--	--	--
	06-21-89	<80	--	18	12	--	--	--
81	11-17-87	--	.06	8.3	5.6	8.1	39	26
	09-13-88	--	--	8.1	5.5	--	--	--
	06-20-89	--	--	5.7	3.9	--	--	--
82	11-17-87	--	.05	4.3	2.9	4.1	14	10
	11-18-87	--	.32	12	8.1	20	150	110
	09-14-88	--	--	4.1	2.8	--	--	--
	06-21-89	--	--	40	27	--	--	--
83	11-18-87	--	.09	2.1	1.4	3.8	65	48
	09-14-88	--	--	.50	.34	--	--	--
	06-21-89	<80	--	1.2	.81	--	--	--

¹ Natural-uranium values in pCi/L are calculated from corresponding µg/L values by assuming the activity ratio of uranium-234 to uranium-238 is 1.

TABLE 35.--Concentrations of dissolved ferrous iron, ferric iron, arsenite, and arsenate in ground-water samples from in and near Stillwater and Fernley Wildlife Management Areas, 1988-89

[Concentrations expressed in micrograms per liter.
Symbols: <, less than; --, not determined]

Site number (figs. 4,5)	Date	Ferrous iron (as Fe)	Ferric iron (as Fe)	Arsenite (as As)	Arsenate (as As)
<u>Stillwater Wildlife Management Area</u>					
59	06-14-89	18	4.7	480	200
60	06-14-89	46	13	390	90
61	06-14-89	1.5	2.7	100	250
62	06-14-89	42	2.3	91	1,000
63	06-15-89	1,400	110	1,000	400
64	06-15-89	3.8	2.2	50	480
65	06-15-89	6.8	0.2	52	850
66	06-15-89	4.9	2.3	50	720
<u>Fernley Wildlife Management Area</u>					
74	06-20-89	2.5	<0.2	1.9	120
76	06-20-89	4.1	<.2	6.1	390
78	06-20-89	2.5	.2	8.3	510
79	06-21-89	4.3	3.4	9.6	610
80	06-21-89	3.7	<.2	15	520
81	06-20-89	<.2	1.9	2.1	140
82	09-14-88	450	10	--	--
82	06-21-89	370	52	9.9	55
83	09-14-88	350	20	--	--
83	06-21-89	300	40	30	2.4

TABLE 36.--Stable-isotope data¹ for ground-water samples from
in and near Stillwater and Fernley Wildlife Management Areas,
1987-89

[Symbol: --, not determined]

Site number (figs. 3-5)	Date	Delta carbon-13 of carbonate species (permil)	Delta deuterium of water (permil)	Delta oxygen-18 of water (permil)	Delta sulfur-34 of sulfate (permil)
<u>Stillwater Wildlife Management Area</u>					
59	12-15-88	--	-99	-8.7	--
	04-04-89	--	-94	-9.0	--
	06-14-89	-6.1	-98	-9.1	3.5
60	12-14-88	--	-94	-8.4	--
	04-04-89	--	-90	-8.4	--
	06-14-89	--	-90	-8.3	--
61	12-14-88	--	-86	-8.6	--
	04-04-89	--	-84	-8.6	--
	06-14-89	-10.6	-84	-8.7	3.7
62	12-14-88	--	-82	-6.9	--
	04-04-89	--	-83	-6.9	--
	06-14-89	--	-80	-7.0	--
63	12-14-88	--	-73	-5.0	--
	04-05-89	--	-69	-4.9	--
	06-15-89	-7.9	-68	-4.9	5.6
64	12-15-88	--	-81	-4.4	--
	04-03-89	--	-74	-4.0	--
	06-15-89	--	-74	-4.1	--
65	12-15-88	--	-68	-5.0	--
	04-03-89	--	-66	-4.6	--
	06-15-89	-6.3	-64	-4.5	4.8
66	12-15-88	--	-67	-2.6	--
	04-04-89	--	-60	-2.3	--
	06-15-89	--	-61	-2.3	--
67	03-07-88	--	-106	-12.1	--
68	04-05-89	--	-94	-8.6	--
69	04-03-89	--	-97	-10.5	--
70	04-03-89	--	-109	-12.1	--
<u>Fernley Wildlife Management Area</u>					
72	11-18-87	--	-87	-10.4	--
	03-24-88	--	-91	-10.9	--
	09-13-88	--	-88	-10.6	--
73	03-24-89	--	-82	-10.5	--
	09-13-89	--	-88	-10.7	--
74	09-12-88	--	-80	-8.9	--
	06-20-89	-14.5	-79	-8.7	1.1
75	09-12-88	--	-109	-8.7	--
76	09-12-88	--	-88	-10.3	--
	06-20-89	-15.8	-82	-10.1	.2
77	09-12-88	--	-86	-10.1	--
78	11-17-87	--	-86	-10.0	--
	03-21-88	--	-82	-10.5	--
	09-13-88	--	-90	-10.7	--
	06-20-89	-14.0	-86	-10.3	.3

TABLE 36.--Stable-isotope data¹ for ground-water samples from in and near Stillwater and Fernley Wildlife Management Areas, 1987-89--Continued

Site number (figs. 3-5)	Date	Delta carbon-13 of carbonate species (permil)	Delta deuterium of water (permil)	Delta oxygen-18 of water (permil)	Delta sulfur-34 of sulfate (permil)
79	11-17-87	--	-88	-10.3	--
	03-22-88	--	-83	-10.7	--
	09-13-88	--	-90	-10.5	--
	06-21-89	-14.0	-82	-10.4	3.1
80	11-17-87	--	-88	-10.5	--
	03-22-88	--	-85	-11.1	--
	09-13-88	--	-92	-10.8	--
	06-21-89	-12.1	-88	-10.6	-1.9
81	11-17-87	--	-88	-10.5	--
	03-21-88	--	-84	-10.3	--
	09-13-88	--	-89	-10.4	--
	06-20-89	--	-84	-10.3	--
82	11-18-87	--	-106	-11.2	--
	03-22-88	--	-104	-11.9	--
	09-14-88	--	-112	-12.2	--
	06-21-89	--	-108	-12.0	--
83	03-22-88	--	-109	-13.4	--
	09-14-88	--	-116	-13.4	--
	06-21-89	-10.3	-114	-13.4	15.7
84	03-21-88	--	-119	-13.5	--

¹ The stable isotopes evaluated herein are carbon-13 relative to carbon-12 (¹³C/¹²C), deuterium (hydrogen-2) relative to hydrogen-1 (D/¹H), oxygen-18 relative to oxygen-16 (¹⁸O/¹⁶O), and sulfur-34 relative to sulfur-32 (³⁴S/³²S). Each ratio is determined for a water sample, and then related mathematically to the comparable ratio for the following international reference standards: Peedee belemnite for carbon, Vienna Standard Mean Ocean Water for hydrogen and oxygen, and Canyon Diablo Troilite for sulfur isotopes. By convention, the computed results are expressed as "delta carbon-13," "delta deuterium," "delta oxygen-18," and "delta sulfur-34;" the units of measure are parts per thousand (abbreviated "permil"). A negative delta value indicates that the water sample is isotopically lighter than the standard (that is, for example, the water sample has a smaller proportion of deuterium, relative to hydrogen-1, compared to the standard).

TABLE 37.--Concentrations of dissolved trace elements in quality-assurance field blanks, 1987-89

[Concentrations are expressed in micrograms per liter as the element.
Symbols: --, not determined; <, less than]

Date	Arsenic	Barium	Boron	Cadmium	Chromium	Copper	Lead	Lithium
09-25-87	<1	<2	30	<1.0	<10	<10	<5	<4
03-28-88	<1	--	<10	<1.0	<1	<1	<5	<4
08-24-88	<1	--	10	--	<1	--	--	<4
04-05-89	2	--	<10	--	<1	--	<5	<4

Date	Mercury	Molybdenum	Nickel	Seelenium	Silver	Uranium, natural	Vanadium	Zinc
09-25-87	<0.1	<1	<1	<1	<1.0	--	<1	<3
03-24-88	<0.1	<1	--	<1	--	--	<1	15
08-24-88	<0.1	1	--	<1	--	<0.40	<1	7
04-05-89	<0.1	<1	--	<1	--	--	<1	20