

# GRASSLAND BYPASS PROJECT

## QUARTERLY DATA REPORT

January, February, and March 2000

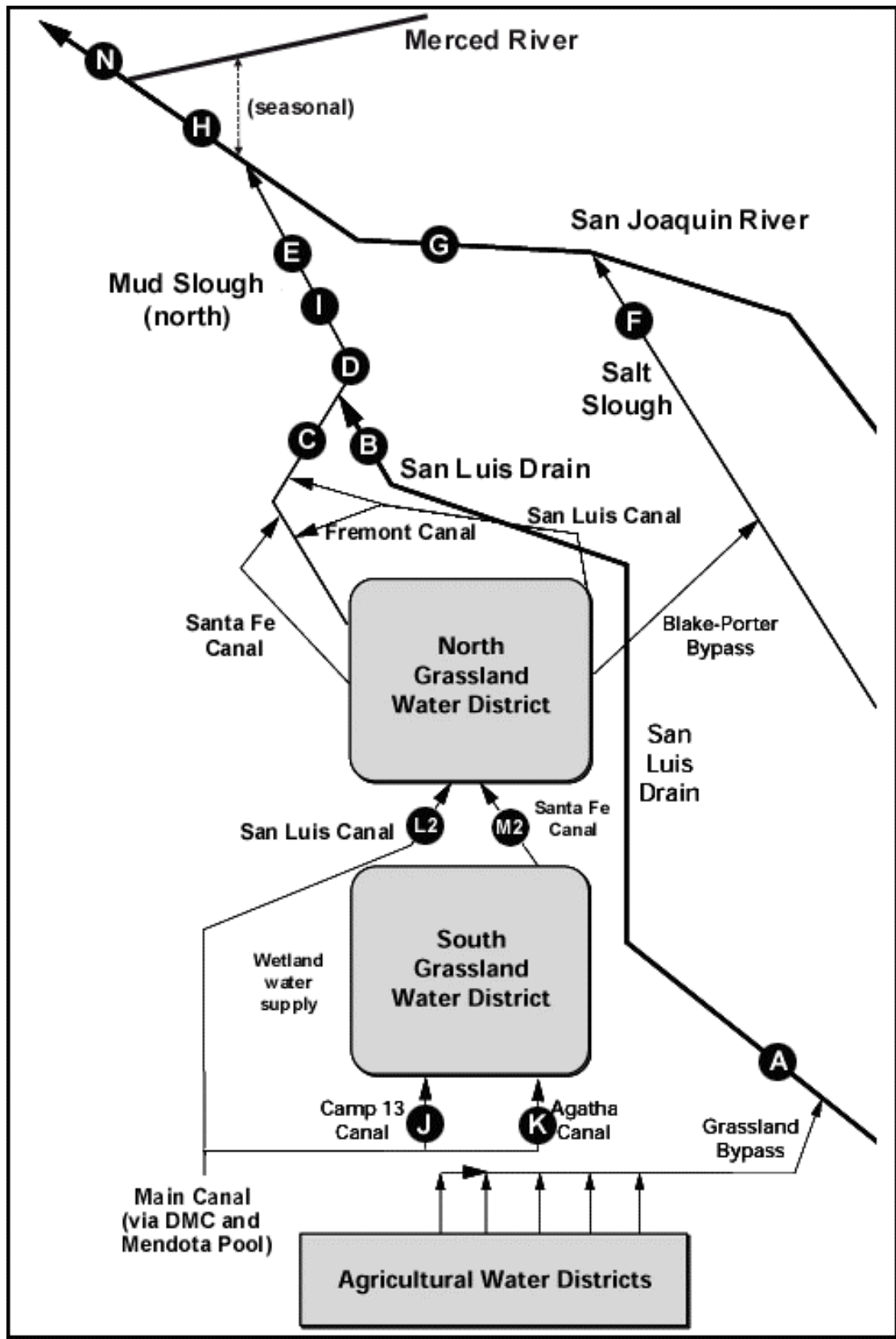
July 2000

A cooperative effort of:

U.S. Bureau of Reclamation  
Central Valley Regional Water Quality Control Board  
U.S. Fish and Wildlife Service  
California Department of Fish and Game  
San Luis & Delta-Mendota Water Authority  
U.S. Environmental Protection Agency  
U.S. Geological Survey

compiled by San Francisco Estuary Institute





## GRASSLAND BYPASS PROJECT

### QUARTERLY DATA REPORT

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**Table 1. Continuous water monitoring at Station A (inflow to San Luis Drain), January, February, March 2000.  
Flow data reported by SLDMWA since October 1, 1999.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Specific Conductance	Flow	Specific Conductance	Flow	Specific Conductance
DATA SOURCE	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA
UNITS	cfs	µS/cm	cfs	µS/cm	cfs	µS/cm
Month	January	January	February	February	March	March
Day 1	15	5,040	31	4,880	74	4,410
Day 2	15	5,090	31	4,900	72	4,280
Day 3	14	4,920	33	4,870	72	4,330
Day 4	13	4,850	35	4,930	66	4,070
Day 5	13	4,860	39	4,870	69	4,400
Day 6	13	4,920	40	4,530	74	4,730
Day 7	13	4,860	41	4,310	66	4,910
Day 8	13	5,080	47	4,140	60	5,000
Day 9	13	5,070	47	4,280	57	5,250
Day 10	13	5,050	45	4,340	52	5,350
Day 11	16	4,730	43	4,470	49	5,400
Day 12	15	5,140	47	4,250	49	5,430
Day 13	14	5,080	49	4,290	48	5,450
Day 14	15	5,140	60	4,110	49	5,420
Day 15	15	5,150	57	4,500	48	5,530
Day 16	16	5,140	59	4,430	48	5,580
Day 17	17	5,120	71	4,080	48	5,500
Day 18	26	4,350	67	4,330	46	5,470
Day 19	32	3,190	63	4,600	46	5,420
Day 20	22	4,450	70	4,640	43	5,430
Day 21	21	4,680	68	4,520	49	5,330
Day 22	20	4,750	59	4,610	45	5,280
Day 23	25	4,620	67	4,740	45	5,250
Day 24	37	4,060	60	5,000	46	5,050
Day 25	41	4,100	51	4,880	44	5,240
Day 26	34	4,130	64	4,850	43	5,280
Day 27	28	4,680	69	4,790	44	5,130
Day 28	28	4,850	69	4,770	46	4,880
Day 29	28	4,850	68	4,610	42	4,970
Day 30	31	4,820	.	.	40	5,020
Day 31	31	4,820	.	.	42	4,910
Mean	21	4,760	53	4,570	52	5,090

**Table 2. Continuous water monitoring at Station B (discharge from San Luis Drain), January 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Boron	Specific Conductance	Selenium (total)	Selenium (total) Load
DATA SOURCE	USGS	USGS	CVRWQCB	CVRWQCB	CVRWQCB	Computed
UNITS	cfs	°C	mg/L	µS/cm	µg/L	lbs
Jan-01-2000	23	8.9	7.4	4,930	74.1	9.2
Jan-02-2000	21	8.7	7.4	4,770	65.1	7.4
Jan-03-2000	21	8.5	7.4	4,800	68.5	7.8
Jan-04-2000	21	8.5	7.2	4,700	64.9	7.4
Jan-05-2000	20	8.8	6.9	4,490	48.5	5.2
Jan-06-2000	21	8.3	7.0	4,600	58.4	6.6
Jan-07-2000	20	8.4	7.2	4,660	68.1	7.3
Jan-08-2000	20	8.5	7.0	4,670	69.1	7.5
Jan-09-2000	20	8.8	6.8	4,660	68.7	7.4
Jan-10-2000	20	9.1	6.8	4,580	63.2	6.8
Jan-11-2000	20	9.6	6.9	4,590	64.7	7.0
Jan-12-2000	23	10.3	6.6	4,400	57.3	7.1
Jan-13-2000	22	10.5	6.6	4,360	49.7	5.9
Jan-14-2000	21	10.6	7.0	4,460	61.2	6.9
Jan-15-2000	22	11.1	6.9	4,430	61.5	7.3
Jan-16-2000	23	11.3	7.0	4,560	67.5	8.4
Jan-17-2000	24	11.4	7.2	4,640	71.3	9.2
Jan-18-2000	27	12.3	6.7	4,420	60.5	8.8
Jan-19-2000	35	13.3	7.3	4,640	66.9	12.6
Jan-20-2000	39	13.8	7.4	4,710	69.8	14.7
Jan-21-2000	31	13.6	7.8	4,840	69.7	11.7
Jan-22-2000	29	13.8	7.9	4,860	73.3	11.5
Jan-23-2000	31	13.4	7.0	4,460	71.8	12.0
Jan-24-2000	37	13.2	4.6	3,260	47.5	9.5
Jan-25-2000	47	13.8	5.4	3,760	48.8	12.4
Jan-26-2000	49	13.5	6.4	4,380	55.3	14.6
Jan-27-2000	40	13.3	6.7	4,550	61.6	13.3
Jan-28-2000	34	12.8	6.1	4,190	58.2	10.7
Jan-29-2000	34	12.6	6.0	4,100	54.8	10.0
Jan-30-2000	34	12.4	6.2	4,170	56.1	10.3
Jan-31-2000	36	12.1	5.9	4,140	43.2	8.4
Mean	28	11.1	6.8	4,480	61.9	
<b>Total</b>						<b>285</b>

<b>Load Limitation for January 2000</b>	<b>(lbs)</b>	<b>479</b>
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**Table 2. Continuous water monitoring at Station B (discharge from San Luis Drain), February 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Boron	Specific Conductance	Selenium (total)	Selenium (total) Load
DATA SOURCE	USGS	USGS	CVRWQCB	CVRWQCB	CVRWQCB	Computed
UNITS	cfs	°C	mg/L	µS/cm	µg/L	lbs
Feb-01-2000	36	12.7	7.2	4,660	51.4	10.0
Feb-02-2000	36	12.9	7.6	4,850	60.6	11.8
Feb-03-2000	35	13.0	7.7	4,870	63.6	12.0
Feb-04-2000	38	13.2	7.7	4,880	59.2	12.1
Feb-05-2000	39	13.5	7.7	4,930	59.9	12.6
Feb-06-2000	43	14.1	7.8	4,960	60.3	14.0
Feb-07-2000	44	14.3	7.9	4,950	63.5	15.1
Feb-08-2000	46	14.8	8.0	5,030	66.6	16.5
Feb-09-2000	51	15.3	7.5	4,950	76.9	21.2
Feb-10-2000	52	15.1	6.7	4,700	70.6	19.8
Feb-11-2000	48	14.1	6.8	4,350	54.4	14.1
Feb-12-2000	48	13.1	6.4	4,140	53.2	13.8
Feb-13-2000	50	12.7	6.7	4,410	62.2	16.8
Feb-14-2000	56	13.4	6.9	4,480	59.2	17.9
Feb-15-2000	66	13.5	6.8	4,400	56.9	20.3
Feb-16-2000	63	13.8	6.7	4,430	56.4	19.2
Feb-17-2000	66	13.9	6.0	4,190	50.6	18.0
Feb-18-2000	73	14.3	6.7	4,530	61.2	24.1
Feb-19-2000	68	14.3	6.7	4,340	62.3	22.8
Feb-20-2000	63	14.5	6.4	4,100	52.6	17.9
Feb-21-2000	69	14.3	6.9	4,350	54.4	20.2
Feb-22-2000	65	13.8	7.2	4,610	62.6	21.9
Feb-23-2000	60	13.1	6.9	4,680	73.2	23.7
Feb-24-2000	67	12.6	6.6	4,440	72.5	26.2
Feb-25-2000	61	13.0	7.4	4,770	59.8	19.7
Feb-26-2000	54	13.9	7.2	4,870	68.2	19.9
Feb-27-2000	67	14.4	7.1	5,200	70.8	25.6
Feb-28-2000	73	14.5	7.8	5,070	61.4	24.2
Feb-29-2000	72	14.7	7.9	5,090	76.2	29.6
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	.	.	.	.	.	.
Mean	55	13.8	7.1	4,660	62.1	
<b>Total</b>						<b>541</b>

<b>Load Limitation for February 2000</b>	<b>(lbs)</b>	<b>779</b>
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**Table 2. Continuous water monitoring at Station B (discharge from San Luis Drain), March 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Boron	Specific Conductance	Selenium (total)	Selenium (total) Load
DATA SOURCE	USGS	USGS	CVRWQCB	CVRWQCB	CVRWQCB	Computed
UNITS	cfs	°C	mg/L	µS/cm	µg/L	lbs
Mar-01-2000	71	14.4	7.7	5,010	70.1	26.8
Mar-02-2000	75	14.3	7.8	4,990	67.1	27.1
Mar-03-2000	75	14.2	7.3	4,750	66.3	26.8
Mar-04-2000	73	15.0	6.8	4,590	69.4	27.3
Mar-05-2000	68	14.7	6.9	4,580	66.3	24.3
Mar-06-2000	70	14.6	6.9	4,740	69.8	26.4
Mar-07-2000	75	14.6	7.0	4,870	66.6	26.9
Mar-08-2000	68	13.8	7.3	4,980	75.6	27.7
Mar-09-2000	62	13.7	7.2	4,950	76.3	25.5
Mar-10-2000	59	14.2	6.9	4,960	84.0	26.7
Mar-11-2000	54	15.3	7.0	5,030	79.4	23.1
Mar-12-2000	49	16.0	7.4	5,150	81.6	21.6
Mar-13-2000	51	17.0	8.0	5,480	94.7	26.0
Mar-14-2000	49	18.0	7.9	5,410	91.0	24.0
Mar-15-2000	49	18.3	8.3	5,490	92.7	24.5
Mar-16-2000	49	18.1	8.4	5,530	95.9	25.3
Mar-17-2000	48	16.6	8.3	5,530	98.8	25.6
Mar-18-2000	50	16.9	8.4	5,590	92.4	24.9
Mar-19-2000	47	17.8	8.7	5,640	97.4	24.7
Mar-20-2000	45	14.9	8.7	5,750	104	25.2
Mar-21-2000	46	14.1	8.4	5,640	102	25.3
Mar-22-2000	50	15.4	8.4	5,640	98.2	26.5
Mar-23-2000	46	16.4	8.6	5,620	99.3	24.6
Mar-24-2000	46	16.7	8.8	5,700	92.7	23.0
Mar-25-2000	46	17.3	8.3	5,660	93.4	23.2
Mar-26-2000	44	17.7	8.4	5,620	90.0	21.4
Mar-27-2000	42	18.0	8.3	5,580	90.5	20.5
Mar-28-2000	46	NA	7.8	5,380	91.0	22.6
Mar-29-2000	45	NA	8.2	5,620	92.5	22.5
Mar-30-2000	41	NA	8.3	5,690	96.1	21.3
Mar-31-2000	40 e	NA	8.2	5,530	90.4	19.5
Mean	55	15.9	7.9	5,310	86.3	
<b>Total</b>						<b>761</b>

<b>Load Limitation for March 2000</b>	<b>(lbs)</b>	<b>959</b>
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**Table 3. Continuous water monitoring at Station D  
(Mud Slough North downstream of drainage discharges), January 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	usgs	usgs	usgs
UNITS	cfs	°C	µS/cm
Jan-01-2000	171	8.7	1,940
Jan-02-2000	176	8.4	1,880
Jan-03-2000	181	8.2	1,850
Jan-04-2000	185	8.1	1,840
Jan-05-2000	170	8.7	1,950
Jan-06-2000	165	7.8	1,970
Jan-07-2000	163	8.2	1,950
Jan-08-2000	155	8.2	2,010
Jan-09-2000	150	8.7	2,020
Jan-10-2000	147	9.2	1,980
Jan-11-2000	147	10.1	2,010
Jan-12-2000	150	11.1	1,980
Jan-13-2000	148	10.8	1,990
Jan-14-2000	142	10.9	2,000
Jan-15-2000	141	11.4	2,020
Jan-16-2000	140	11.5	1,980
Jan-17-2000	140	11.5	1,970
Jan-18-2000	154	12.7	1,860
Jan-19-2000	166	13.6	1,870
Jan-20-2000	181	14.0	1,880
Jan-21-2000	175	13.4	1,830
Jan-22-2000	177	13.4	1,900
Jan-23-2000	197	12.9	NP
Jan-24-2000	241	12.9	NP
Jan-25-2000	304	13.9	1,760
Jan-26-2000	338	13.6	1,860
Jan-27-2000	324	13.2	1,820
Jan-28-2000	308	12.4	1,730
Jan-29-2000	296	12.0	1,760
Jan-30-2000	287	12.0	1,810
Jan-31-2000	294	11.9	1,800



**Table 3. Continuous water monitoring at Station D  
(Mud Slough North downstream of drainage discharges), February 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	usgs	usgs	usgs
UNITS	cfs	°C	µS/cm
Feb-01-2000	270	12.9	1,910
Feb-02-2000	249	13.3	2,140
Feb-03-2000	228	13.1	2,210
Feb-04-2000	202	13.0	2,310
Feb-05-2000	189	13.2	2,380
Feb-06-2000	180	13.9	2,510
Feb-07-2000	175	14.2	2,560
Feb-08-2000	174	15.0	NA
Feb-09-2000	177	15.4	NA
Feb-10-2000	175	14.9	2,510
Feb-11-2000	169	13.1	2,420
Feb-12-2000	174	12.1	2,330
Feb-13-2000	191	12.0	2,330
Feb-14-2000	236	13.4	2,140
Feb-15-2000	300	13.4	NA
Feb-16-2000	315	13.6	NA
Feb-17-2000	359	13.3	1,710
Feb-18-2000	362	13.7	1,790
Feb-19-2000	348	13.7	1,750
Feb-20-2000	340	14.0	1,640
Feb-21-2000	342	13.7	1,750
Feb-22-2000	334	13.0	1,780
Feb-23-2000	345	12.3	1,730
Feb-24-2000	356	11.5	1,650
Feb-25-2000	352	12.4	1,550
Feb-26-2000	347	13.9	1,520
Feb-27-2000	346	14.3	1,680
Feb-28-2000	354	13.9	1,810
Feb-29-2000	338	13.6	1,990
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**Table 3. Continuous water monitoring at Station D  
(Mud Slough North downstream of drainage discharges), March 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	usgs	usgs	usgs
UNITS	cfs	°C	µS/cm
Mar-01-2000	357	13.8	1,970
Mar-02-2000	356	13.6	2,120
Mar-03-2000	331	13.8	2,270
Mar-04-2000	302	15.2	2,350
Mar-05-2000	265	14.8	2,460
Mar-06-2000	242	13.8	2,680
Mar-07-2000	233	13.6	2,800
Mar-08-2000	233	12.9	2,820
Mar-09-2000	222	13.0	2,780
Mar-10-2000	220	14.1	2,710
Mar-11-2000	216	15.8	NA
Mar-12-2000	207	16.0	NA
Mar-13-2000	202	16.6	NA
Mar-14-2000	238	18.0	NA
Mar-15-2000	248	17.7	2,260
Mar-16-2000	228	17.5	2,530
Mar-17-2000	205	15.5	2,690
Mar-18-2000	190	16.5	2,750
Mar-19-2000	184	17.7	2,810
Mar-20-2000	175	13.9	2,900
Mar-21-2000	160	13.3	NA
Mar-22-2000	147	15.5	NA
Mar-23-2000	133	17.0	3,250
Mar-24-2000	133	17.1	3,280
Mar-25-2000	132	17.4	3,290
Mar-26-2000	138	17.8	3,180
Mar-27-2000	133	18.1	3,180
Mar-28-2000	129	17.3	3,130
Mar-29-2000	114	17.6	3,530
Mar-30-2000	106	17.2	3,590
Mar-31-2000	96	16.2	3,650

**Table 4. Continuous water monitoring at Station F (Salt Slough at Highway 165), January 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	usgs	usgs	usgs
UNITS	cfs	°C	µS/cm
Jan-01-2000	172	9.7	1,990
Jan-02-2000	98	9.0	2,140
Jan-03-2000	91	8.9	2,150
Jan-04-2000	75	8.8	2,140
Jan-05-2000	72	9.5	2,130
Jan-06-2000	69	8.6	2,090
Jan-07-2000	76	8.9	2,040
Jan-08-2000	78	8.8	2,070
Jan-09-2000	81	9.3	2,100
Jan-10-2000	81	9.7	2,150
Jan-11-2000	81	10.4	2,170
Jan-12-2000	82	11.6	2,150
Jan-13-2000	84	11.3	2,150
Jan-14-2000	84	11.3	2,170
Jan-15-2000	88	11.7	2,150
Jan-16-2000	91	11.9	2,160
Jan-17-2000	91	12.1	2,200
Jan-18-2000	97	13.3	2,190
Jan-19-2000	103	14.2	2,150
Jan-20-2000	114	14.2	2,080
Jan-21-2000	121	13.6	2,050
Jan-22-2000	120	13.6	2,070
Jan-23-2000	121	12.9	2,110
Jan-24-2000	152	13.0	2,020
Jan-25-2000	205	13.8	1,830
Jan-26-2000	247	13.3	1,820
Jan-27-2000	237	12.9	1,910
Jan-28-2000	198	12.1	2,010
Jan-29-2000	182	11.8	2,050
Jan-30-2000	177	11.9	2,020
Jan-31-2000	169	12.0	2,060

**Table 4. Continuous water monitoring at Station F (Salt Slough at Highway 165), February 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	usgs	usgs	usgs
UNITS	cfs	°C	µS/cm
Feb-01-2000	164	13.0	2,100
Feb-02-2000	161	13.0	2,240
Feb-03-2000	153	13.0	2,250
Feb-04-2000	176	13.3	2,070
Feb-05-2000	180	13.3	2,040
Feb-06-2000	167	13.8	2,010
Feb-07-2000	171	14.0	2,000
Feb-08-2000	163	14.8	1,890
Feb-09-2000	153	15.3	1,890
Feb-10-2000	143	15.1	1,900
Feb-11-2000	140	13.4	1,730
Feb-12-2000	154	12.4	1,650
Feb-13-2000	176	12.3	1,610
Feb-14-2000	232	13.4	1,510
Feb-15-2000	335	13.8	1,520
Feb-16-2000	426	13.8	1,560
Feb-17-2000	398	13.4	1,640
Feb-18-2000	371	13.8	1,720
Feb-19-2000	284	14.0	1,860
Feb-20-2000	224	14.4	1,850
Feb-21-2000	223	14.3	1,740
Feb-22-2000	225	13.7	1,720
Feb-23-2000	235	12.9	1,690
Feb-24-2000	271	12.0	1,570
Feb-25-2000	352	12.4	1,560
Feb-26-2000	331	13.9	1,600
Feb-27-2000	288	14.8	1,570
Feb-28-2000	278	14.4	1,530
Feb-29-2000	373	14.0	1,500
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**Table 4. Continuous water monitoring at Station F (Salt Slough at Highway 165), March 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	usgs	usgs	usgs
UNITS	cfs	°C	µS/cm
Mar-01-2000	415	13.9	1,560
Mar-02-2000	392	13.9	1,550
Mar-03-2000	360	13.8	1,570
Mar-04-2000	344	14.9	1,580
Mar-05-2000	342	15.2	1,570
Mar-06-2000	352	14.5	1,560
Mar-07-2000	438	14.0	1,500
Mar-08-2000	448	13.6	1,510
Mar-09-2000	429	13.5	1,510
Mar-10-2000	468	14.1	1,510
Mar-11-2000	452	15.6	1,540
Mar-12-2000	416	16.5	1,530
Mar-13-2000	384	17.1	1,540
Mar-14-2000	369	17.7	1,490
Mar-15-2000	353	17.9	1,510
Mar-16-2000	361	17.7	1,500
Mar-17-2000	390	16.3	1,440
Mar-18-2000	391	16.4	1,450
Mar-19-2000	388	17.6	1,400
Mar-20-2000	383	15.4	1,350
Mar-21-2000	382	14.0	1,340
Mar-22-2000	369	15.2	1,390
Mar-23-2000	357	16.6	1,400
Mar-24-2000	355	17.1	1,390
Mar-25-2000	357	17.0	1,360
Mar-26-2000	349	17.1	1,350
Mar-27-2000	349	17.5	1,320
Mar-28-2000	346	16.7	1,310
Mar-29-2000	332	16.7	1,320
Mar-30-2000	324	17.1	1,250
Mar-31-2000	288	16.9	1,330

**Table 5. Continuous water monitoring at Station N (San Joaquin River at Crow's Landing), January 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance	Selenium (total)
DATA SOURCE	usgs	usgs	CVRWQCB	CVRWQCB
UNITS	cfs	°C	µS/cm	µg/L
Jan-01-2000	674	8.7	1,460	2.4
Jan-02-2000	701	8.2	1,380	2.2
Jan-03-2000	694	8.0	1,390	2.4
Jan-04-2000	674	8.0	1,410	2.2
Jan-05-2000	663	8.6	1,440	2.3
Jan-06-2000	639	8.4	1,430	2.3
Jan-07-2000	616	8.2	1,500	2.2
Jan-08-2000	630	8.2	1,470	2.3
Jan-09-2000	676	8.4	1,440	2.5
Jan-10-2000	674	8.8	1,440	2.5
Jan-11-2000	656	9.3	1,460	2.6
Jan-12-2000	641	10.4	1,500	2.2
Jan-13-2000	629	10.6	1,520	2.4
Jan-14-2000	642	10.6	1,490	2.1
Jan-15-2000	659	11.0	1,460	2.0
Jan-16-2000	698	11.3	1,430	2.0
Jan-17-2000	734	11.5	1,390	1.9
Jan-18-2000	800	12.0	1,360	2.1
Jan-19-2000	797	13.3	1,360	2.3
Jan-20-2000	852	13.7	1,350	2.2
Jan-21-2000	862	13.3	1,390	3.1
Jan-22-2000	862	13.2	1,370	2.9
Jan-23-2000	904	13.0	1,360	2.7
Jan-24-2000	1,040	12.8	1,280	2.5
Jan-25-2000	1,190	13.5	1,240	2.3
Jan-26-2000	1,340	13.4	1,220	1.8
Jan-27-2000	1,720	13.0	1,080	1.7
Jan-28-2000	1,830	12.2	920	1.9
Jan-29-2000	1,720	11.7	989	1.7
Jan-30-2000	1,530	11.9	1,110	1.7
Jan-31-2000	1,390	11.6	1,200	1.7

**Table 5. Continuous water monitoring at Station N (San Joaquin River at Crow's Landing), February 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance	Selenium (total)
DATA SOURCE	usgs	usgs	CVRWQCB	CVRWQCB
UNITS	cfs	°C	µS/cm	µg/L
Feb-01-2000	1,320	12.4	1,280	1.8
Feb-02-2000	1,260	12.9	1,360	1.8
Feb-03-2000	1,210	12.9	1,450	2.0
Feb-04-2000	1,130	13.0	1,530	2.3
Feb-05-2000	1,080	13.0	1,610	2.6
Feb-06-2000	1,070	13.4	1,590	2.7
Feb-07-2000	1,010	13.8	1,610	2.8
Feb-08-2000	965	14.4	1,670	3.1
Feb-09-2000	940	14.9	1,690	3.3
Feb-10-2000	936	15.0	1,680	4.1
Feb-11-2000	931	13.8	1,650	4.7
Feb-12-2000	1,030	12.9	1,610	3.9
Feb-13-2000	1,570	12.5	1,310	2.4
Feb-14-2000	3,010	12.8	654	1.7
Feb-15-2000	3,740	12.9	466	1.3
Feb-16-2000	4,930	13.1	336	1.0
Feb-17-2000	5,790	12.7	324	0.8
Feb-18-2000	6,280	12.2	372	0.9
Feb-19-2000	6,160	12.4	397	1.0
Feb-20-2000	5,750	12.6	449	1.4
Feb-21-2000	5,280	12.8	482	0.9
Feb-22-2000	5,010	12.4	493	1.2
Feb-23-2000	5,310	11.7	492	1.3
Feb-24-2000	5,590	10.9	496	0.9
Feb-25-2000	5,830	11.0	452	0.9
Feb-26-2000	6,010	11.9	413	0.9
Feb-27-2000	5,870	12.8	502	0.8
Feb-28-2000	5,680	13.0	566	1.1
Feb-29-2000	6,070	12.4	455	1.0
	.	.	.	.
	.	.	.	.

**Table 5. Continuous water monitoring at Station N (San Joaquin River at Crow's Landing), March 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance	Selenium (total)
DATA SOURCE	usgs	usgs	CVRWQCB	CVRWQCB
UNITS	cfs	°C	µS/cm	µg/L
Mar-01-2000	6,280	12.2	374	1.2
Mar-02-2000	6,570	12.2	405	0.9
Mar-03-2000	6,610	12.2	461	0.9
Mar-04-2000	6,310	12.5	517	1.2
Mar-05-2000	5,930	13.1	587	1.3
Mar-06-2000	5,830	12.6	547	1.3
Mar-07-2000	6,170	12.0	438	1.0
Mar-08-2000	6,220	11.8	391	1.1
Mar-09-2000	6,200	11.6	441	1.1
Mar-10-2000	6,250	11.8	444	1.2
Mar-11-2000	6,320	12.9	401	1.0
Mar-12-2000	6,110	13.6	441	1.0
Mar-13-2000	5,750	14.1	485	1.2
Mar-14-2000	5,390	14.5	497	1.0
Mar-15-2000	5,040	14.8	527	1.1
Mar-16-2000	4,840	14.9	521	1.0
Mar-17-2000	4,350	14.6	605	1.2
Mar-18-2000	4,010	14.5	654	1.3
Mar-19-2000	3,890	14.8	644	1.3
Mar-20-2000	3,840	14.1	623	1.3
Mar-21-2000	3,690	13.2	606	1.2
Mar-22-2000	3,550	13.5	624	1.4
Mar-23-2000	3,250	14.6	678	1.6
Mar-24-2000	2,890	15.2	762	1.8
Mar-25-2000	2,670	15.4	831	1.8
Mar-26-2000	2,390	15.5	845	2.3
Mar-27-2000	1,920	16.0	1,030	2.4
Mar-28-2000	1,710	16.0	1,170	2.5
Mar-29-2000	1,580	16.2	1,240	2.8
Mar-30-2000	1,500	16.3	1,250	3.0
Mar-31-2000	1,380	15.7	1,260	3.0



**Table 6a. Weekly water quality monitoring at Station A (inflow to San Luis Drain), 2000, taken from grab samples. Flow data reported by SLDMWA since October 1, 1999.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	.	.	Specific Conductance	Total Suspended Solids	Selenium (total)	Selenium (dissolved)	Boron
DATA SOURCE	SLDMWA	.	.	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	cfs	.	.	µS/cm	mg/L	µg/L	µg/L	mg/L
Jan-05-2000	13	.	.	4,940	11	82.3	78.2	8.1
Jan-12-2000	15	.	.	5,270	54	96.7	94.0	8.6
Jan-19-2000	32	.	.	3,330	130	67.3	72.7	4.5
Jan-26-2000	34	.	.	4,140	72	49.3	NA	6.0
Feb-02-2000	31	.	.	5,170	80	Selenium and boron analyses		
Feb-09-2000	47	.	.	4,250	290	from weekly grab		
Feb-16-2000	59	.	.	4,870	320	discontinued 2/1/00.		
Feb-23-2000	67	.	.	4,730	310	.	.	.
Mar-01-2000	74	.	.	4,750	290	.	.	.
Mar-08-2000	60	.	.	5,160	160	.	.	.
Mar-15-2000	48	.	.	5,670	90	.	.	.
Mar-22-2000	45	.	.	5,530	50	.	.	.
Mar-29-2000	42	.	.	5,290	P	.	.	.

**Table 6b. Weekly water quality monitoring at Station A (inflow to San Luis Drain), 2000, taken from composite samples. Flow data reported by SLDMWA since October 1, 1999.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	.	.	Specific Conductance	.	Selenium (total)	.	Boron
DATA SOURCE	SLDMWA	.	.	CVRWQCB	.	CVRWQCB	.	CVRWQCB
UNITS	cfs	.	.	µS/cm	.	µg/L	.	mg/L
Jan-04-2000	13	.	.	5,020	.	91.5	.	8.1
Jan-11-2000	16	.	.	5,090	.	93.3	.	8.1
Jan-18-2000	26	.	.	5,020	.	92.1	.	8.1
Jan-25-2000	41	.	.	4,520	.	74.3	.	6.9
Feb-01-2000	31	.	.	5,100	.	67.7	.	8.1
Feb-08-2000	47	.	.	4,860	.	74.8	.	7.7
Feb-15-2000	57	.	.	4,570	.	66.2	.	7.0
Feb-22-2000	59	.	.	NA	.	70.9	.	7.3
Feb-29-2000	68	.	.	5,180	.	73.5	.	7.8
Mar-07-2000	66	.	.	4,910	.	79.6	.	6.9
Mar-14-2000	49	.	.	5,520	.	94.9	.	8.4
Mar-21-2000	49	.	.	5,750	.	99.0	.	8.5
Mar-28-2000	46	.	.	5,410	.	91.4	.	8.1

Table 7. Weekly water quality monitoring at Station B (discharge from San Luis Drain), taken from grab samples.

See Table 26 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	pH	Specific Conductance	Total Suspended Solids	Selenium (total)	Selenium (dissolved)	Boron
DATA SOURCE	USGS	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	cfs	°C		µS/cm	mg/L	µg/L	µg/L	mg/L
Jan-06-2000	21	7.5	7.3	4,560	48	58.9	59.3	7.1
Jan-13-2000	22	10.0	7.9	4,480	72	52.5	50.4	6.9
Jan-20-2000	39	13.5	7.5	4,750	89	74.3	.	7.4
Jan-27-2000	40	13.3	7.7	4,610	48	70.3	Selenium	6.6
Feb-03-2000	35	13.4	7.6	4,860	72	59.4	(dissolved)	7.8
Feb-10-2000	52	14.7	7.8	4,690	81	64.6	analyses	7.2
Feb-17-2000	66	13.4	7.9	4,250	72	55.3	discontinued	6.2
Feb-24-2000	67	11.7	7.6	4,660	57	69.6	1/15/2000.	7.2
Mar-02-2000	75	13.0	7.7	4,980	74	80.8	.	7.6
Mar-09-2000	62	12.7	7.8	4,990	50	78.9	.	7.0
Mar-15-2000	49	18.9	NA	5,450	66	96.0	.	8.2
Mar-23-2000	46	15.1	8.0	5,600	37	94.6	.	8.3
Mar-30-2000	41	16.9	8.1	5,540	P	99.3	.	8.2

**Table 8. Weekly water quality monitoring at Station C (Mud Slough North upstream of drainage discharges), 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	pH	Specific Conductance	Selenium (total)	Boron
DATA SOURCE	calculated ++	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	cfs	°C		µS/cm	µg/L	mg/L
Jan-06-2000	144	7.5	8.1	1,610	<0.4	1.2
Jan-13-2000	126	11.3	8.0	1,680	<0.4	1.3
Jan-20-2000	142	13.8	7.9	1,680	0.4	1.3
Jan-27-2000	248	12.8	6.7	1,530	<0.4	1.2
Feb-03-2000	193	13.8	7.9	1,720	1.1	1.5
Feb-10-2000	123	15.0	6.7	1,800	0.6	1.5
Feb-17-2000	293	12.5	7.5	1,380	0.7	1.3
Feb-24-2000	289	10.9	7.9	1,280	0.9	1.2
Mar-02-2000	281	12.3	8.0	1,620	0.8	1.4
Mar-09-2000	160	12.8	8.1	1,990	0.7	1.8
Mar-15-2000	199	19.0	NA	1,760	0.8	1.6
Mar-23-2000	87	15.0	7.7	2,120	1.0	1.9
Mar-30-2000	65	16.6	8.2	2,400	<0.4	2.1

++ Calculated flow value. Flow at Station C = flow at Station D - flow at Station B.

**Table 9. Weekly water quality monitoring at Station D (Mud Slough North downstream of drainage discharges), 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	pH	Specific Conductance	Selenium (total)	Boron
DATA SOURCE	usgs	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	cfs	°C		µS/cm	µg/L	mg/L
Jan-06-2000	165	7.5	8.0	2,070	6.7	2.0
Jan-13-2000	148	10.8	8.0	2,180	6.5	2.2
Jan-20-2000	181	13.8	7.9	2,420	14.3	2.6
Jan-27-2000	324	12.8	7.5	1,990	9.2	2.0
Feb-03-2000	228	13.8	8.1	2,330	10.1	2.6
Feb-10-2000	175	14.9	7.0	2,710	19.6	3.2
Feb-17-2000	359	13.1	7.9	1,930	10.1	2.2
Feb-24-2000	356	11.0	7.9	1,910	12.4	2.2
Mar-02-2000	356	12.7	7.9	2,520	14.6	3.0
Mar-09-2000	222	12.7	8.0	3,000	23.2	3.4
Mar-15-2000	248	19.1	NA	2,600	18.9	3.1
Mar-23-2000	133	14.9	7.4	3,380	30.9	4.2
Mar-30-2000	106	15.9	8.3	3,880	46.6	4.7

**Table 10. Weekly water quality monitoring at Station F (Salt Slough at Lander Avenue), 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	pH	Specific Conductance	Selenium (total)	Boron
DATA SOURCE	USGS	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	cfs	°C		µS/cm	µg/L	mg/L
Jan-06-2000	69	7.2	7.7	2,170	0.5	1.2
Jan-13-2000	84	10.3	7.9	2,270	<0.4	1.3
Jan-20-2000	114	13.9	7.7	2,140	0.5	1.3
Jan-27-2000	237	12.5	7.4	1,950	1.0	1.4
Feb-03-2000	153	12.1	7.6	2,370	0.7	1.7
Feb-10-2000	143	14.7	7.4	2,000	1.1	1.4
Feb-17-2000	398	12.5	7.4	1,750	1.1	1.3
Feb-24-2000	271	11.5	7.4	1,690	1.6	1.2
Mar-02-2000	392	13.0	7.4	1,670	1.6	1.1
Mar-09-2000	429	13.9	7.6	1,600	1.1	1.1
Mar-15-2000	353	18.8	NA	1,690	1.7	1.1
Mar-23-2000	357	15.5	7.4	1,510	1.1	1.2
Mar-30-2000	324	15.4	7.9	1,310	0.5	0.9

**Table 11. Weekly water quality monitoring at Station G (San Joaquin River at Fremont Ford), 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	.	Temperature	pH	Specific Conductance	Selenium (total)	Boron
DATA SOURCE	.	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	.	°C		µS/cm	µg/L	mg/L
Jan-06-2000	.	6.1	7.8	2,360	<0.4	1.0
Jan-13-2000	.	9.3	7.2	2,460	<0.4	1.2
Jan-20-2000	.	13.7	7.1	2,300	0.6	1.1
Jan-27-2000	.	12.3	6.9	764	0.5	0.4
Feb-03-2000	.	11.6	7.6	1,770	0.6	1.1
Feb-10-2000	.	13.9	7.9	1,950	1.0	1.2
Feb-17-2000	.	12.7	7.6	295	0.4	0.1
Feb-24-2000	.	11.2	7.2	627	0.9	0.3
Mar-02-2000	.	12.6	7.4	432	0.7	0.2
Mar-09-2000	.	13.5	7.6	518	0.5	0.2
Mar-15-2000	.	18.8	NA	665	0.5	0.3
Mar-23-2000	.	15.8	7.8	1,030	0.9	0.6
Mar-30-2000	.	15.1	7.4	1,500	0.9	0.9

**Table 12. Weekly water quality monitoring at Station H (San Joaquin River at Hills Ferry), 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	.	Temperature	pH	Specific Conductance	Selenium (total)	Boron
DATA SOURCE	.	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	.	°C	.	µS/cm	µg/L	mg/L
.	.	.	.	.	.	.
.	Data no longer collected regularly for this station. Contact CVRWQCB for details.					

**Table 13. Weekly water quality monitoring at Station J (Camp 13 Ditch), 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	.	.	Specific Conductance	Selenium (total)	Boron
DATA SOURCE	SLDMWA <sup>††</sup>	.	.	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	cfs	.	.	µS/cm	µg/L	mg/L
Jan-05-2000	15	.	.	544	<0.4	0.2
Jan-12-2000	10	.	.	938	1.2	0.6
Jan-19-2000	10	.	.	608	0.5	0.3
Jan-26-2000	2	.	.	883	1.6	0.7
Feb-02-2000	2	.	.	879	1.6	0.8
Feb-09-2000	2	.	.	839	1.7	0.7
Feb-16-2000	2	.	.	1,030	2.1	1.1
Feb-23-2000	2	.	.	1,220	2.8	1.3
Mar-01-2000	3	.	.	1,030	2.6	1.1
Mar-08-2000	5	.	.	585	1.4	0.7
Mar-15-2000	5	.	.	731	1.9	1.0
Mar-22-2000	5	.	.	344	0.6	0.4
Mar-29-2000	5	.	.	336	0.5	0.4

**Table 14. Weekly water quality monitoring at Station K (Agatha Canal), 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	.	.	Specific Conductance	Selenium (total)	Boron
DATA SOURCE	SLDMWA <sup>††</sup>	.	.	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	cfs	.	.	µS/cm	µg/L	mg/L
Jan-05-2000	55	.	.	572	<0.4	0.2
Jan-12-2000	25	.	.	628	0.5	0.3
Jan-19-2000	25	.	.	811	0.7	0.4
Jan-26-2000	10	.	.	729	1.2	0.5
Feb-02-2000	10	.	.	943	1.0	1.0
Feb-09-2000	10	.	.	1,250	0.9	1.9
Feb-16-2000	10	.	.	1,220	1.5	1.6
Feb-23-2000	15	.	.	1,030	2.0	1.1
Mar-01-2000	15	.	.	491	1.9	0.5
Mar-08-2000	5	.	.	302	0.9	0.3
Mar-15-2000	5	.	.	781	1.8	1.0
Mar-22-2000	5	.	.	569	0.5	0.8
Mar-29-2000	7	.	.	187	0.5	0.2

**Table 15. Weekly water quality monitoring at Station L2 (San Luis Canal at splits), 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	.	.	Specific Conductance	Selenium (total)	Boron
DATA SOURCE	SLDMWA <sup>††</sup>	.	.	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	cfs	.	.	µS/cm	µg/L	mg/L
Jan-05-2000	80	.	.	511	<0.4	0.2
Jan-12-2000	50	.	.	935	1.0	0.6
Jan-19-2000	40	.	.	824	0.8	0.6
Jan-26-2000	25	.	.	1,200	1.3	0.8
Feb-02-2000	0	.	.	2,170	3.3	2.9
Feb-09-2000	2	.	.	2,430	3.6	3.2
Feb-16-2000	12	.	.	1,300	2.1	1.5
Feb-23-2000	30	.	.	983	2.4	0.9
Mar-01-2000	30	.	.	1,010	3.5	0.9
Mar-08-2000	30	.	.	814	1.6	0.9
Mar-15-2000	30	.	.	606	2.1	0.6
Mar-22-2000	30	.	.	647	1.1	0.7
Mar-29-2000	30	.	.	394	0.6	0.4

**Table 16. Weekly water quality monitoring at Station M2 (Santa Fe Canal at weir), 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	.	.	Specific Conductance	Selenium (total)	Boron
DATA SOURCE	SLDMWA <sup>††</sup>	.	.	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	cfs	.	.	µS/cm	µg/L	mg/L
Jan-05-2000	52	.	.	1,450	0.5	1.4
Jan-12-2000	55	.	.	1,900	0.5	2.1
Jan-19-2000	67	.	.	1,640	0.6	2.0
Jan-26-2000	122	.	.	1,930	0.8	2.5
Feb-02-2000	76	.	.	1,930	0.9	2.4
Feb-09-2000	43	.	.	2,670	1.8	3.5
Feb-16-2000	99	.	.	2,610	1.9	3.3
Feb-23-2000	120	.	.	2,220	1.8	2.9
Mar-01-2000	109	.	.	2,410	2.4	3.0
Mar-08-2000	109	.	.	2,320	1.3	2.7
Mar-15-2000	108	.	.	2,230	1.2	2.7
Mar-22-2000	94	.	.	2,470	1.1	3.9
Mar-29-2000	106	.	.	1,860	0.5	2.8

**Table 17. Weekly water quality monitoring at Station N (San Joaquin River at Crow's Landing), 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	pH	Specific Conductance	Selenium (total)	Boron
DATA SOURCE	USGS	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	cfs	°C		µS/cm	µg/L	mg/L
Jan-06-2000	639	7.0	7.7	1,480	2.1	0.9
Jan-13-2000	629	11.5	8.0	1,540	2.1	1.0
Jan-20-2000	852	13.6	7.1	1,320	2.2	0.8
Jan-27-2000	1,720	13.2	7.4	1,060	1.8	0.7
Feb-03-2000	1,210	14.0	7.0	1,490	2.0	0.7
Feb-10-2000	936	14.1	7.7	1,690	4.6	1.4
Feb-17-2000	5,790	13.7	7.0	320	0.8	0.2
Feb-23-2000	5,310	NA	NA	492	1.4	0.4
Mar-02-2000	6,570	12.5	7.6	421	1.3	0.3
Mar-09-2000	6,200	11.2	7.6	446	1.5	0.3
Mar-16-2000	4,840	15.2	NA	498	1.2	0.3
Mar-23-2000	3,250	15.7	8.0	695	2.2	0.5
Mar-30-2000	1,500	17.3	7.5	1,260	3.6	0.9

Table 18. Summary of fathead minnow (*Pimephales promelas*) larvae survival in 7-day tests using water samples collected from April 1999 to March 2000. Each value is the mean of 4 replicates with 10 fish in each replicate.

See Table 28 for explanation of footnotes and agency abbreviations.

LOCATION	Station B	Station C	Station D	Station F	Delta Mendota Canal	Laboratory Control
DATA SOURCE	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA
UNITS	%	%	%	%	%	%
Apr-1999	93	88	100	83	73 †	100
May-1999	98	90	93	88	50 †	98
Jun-1999	98	93	100	98	70 †	100
Jul-1999	93	100	90	93	98	100
Aug-1999	93	100	89	68	98	100
Sep-1999	95	85	93	53	93	98
Oct-1999	100	98	90	70*	98	100
Nov-1999	98	38*	60*	50*	87	95
Dec-1999	100	73*	73*	70*	100	100
Jan-2000	98	33*	48*	85	83	100
Feb-2000	95	85	65*	75*	95	98
Mar-2000	100	100	100	85	93	100

Table 19. Summary of fathead minnow (*Pimephales promelas*) larvae growth in 7-day tests using water samples collected from April 1999 to March 2000. Each value is the mean of 4 replicates with 10 fish in each replicate.

See Table 28 for explanation of footnotes and agency abbreviations.

LOCATION	Station B	Station C	Station D	Station F	Delta Mendota Canal	Laboratory Control
DATA SOURCE	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA
UNITS	mg	mg	mg	mg	mg	mg
Apr-1999	0.66	0.61	0.78	0.57	0.48	0.72
May-1999	0.78	0.76	0.74	0.61	0.39	0.71
Jun-1999	0.67	0.68	0.72	0.67	0.43	0.72
Jul-1999	0.72	0.77	0.69	0.67	0.68	0.63
Aug-1999	0.60	0.70	0.54	0.44*	0.65	0.63
Sep-1999	0.65	0.49	0.54	0.35	0.59	0.58
Oct-1999	0.70	0.62	0.58	0.51	0.63	0.65
Nov-1999	0.58	0.20*	0.35*	0.29*	0.51	0.52
Dec-1999	0.67	0.47*	0.49	0.50*	0.68	0.61
Jan-2000	0.68	0.23*	0.37	0.59	0.53	0.64
Feb-2000	0.71	0.60	0.54	0.51*	0.68	0.65
Mar-2000	0.66	0.64	0.62	0.62	0.53	0.60

Table 20. Summary of *Daphnia magna* survival in 7-day tests using water samples collected from April 1999 to March 2000. Each value is the mean of 10 replicates with 1 animal in each replicate.

See Table 28 for explanation of footnotes and agency abbreviations.

LOCATION	Station B	Station C	Station D	Station F	Delta Mendota Canal	Laboratory Control
DATA SOURCE	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA
UNITS	%	%	%	%	%	%
Apr-1999	90	100	100	100	100	100
May-1999	100	90	90	100	100	100
Jun-1999	100	80	90	100	90	90
Jul-1999	90	100	80	90	50 †	90
Aug-1999	100	100	100	100	90	80
Sep-1999	100	100	100	80	100	80
Oct-1999	100	100	100	100	100	80
Nov-1999	100	100	100	100	90	100
Dec-1999	90	100	100	100	90	90
Jan-2000	100	100	100	100	100	100
Feb-2000	90	90	70	70	80	100
Mar-2000	90	90	90	90	90	100



Table 21. Summary of *Daphnia magna* reproduction in 7-day tests using water samples collected from April 1999 to March 2000. Each value is the mean of 10 replicates with 1 animal in each replicate.

See Table 28 for explanation of footnotes and agency abbreviations.

LOCATION	Station B	Station C	Station D	Station F	Delta Mendota Canal	Laboratory Control
DATA SOURCE	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA
UNITS	neonates per female	neonates per female	neonates per female	neonates per female	neonates per female	neonates per female
Apr-1999	17.1	24.4	20.6	21.6	19.9	13.8
May-1999	31.6	36.0	33.8	37.4	30.8	39.2
Jun-1999	23.8	24.0	21.2	18.5	8.6 †††	10.3
Jul-1999	31.1	35.9	32.6	27.2	12.8	15.7
Aug-1999	19.9	23.2	24.3	19.9	11.4	12.3
Sep-1999	29.2	37.7	36.1	28.4	17.9	14.6
Oct-1999	31.7	25.7	28.4	22.2	22.8	16.8
Nov-1999	16.2	11.7	10.1	14.8	5.3	7.3
Dec-1999	34.9	32.0	43.0	37.7	31.2	40.9
Jan-2000	18.9	22.3	23.0	24.9	15.0	14.0
Feb-2000	37.1	29.0	24.5	22.7	22.5	32.1
Mar-2000	10.6	10.6	13.0	10.6	6.2	12.7

Table 22. Summary of *Selenastrum capricornutum* growth in 4-day tests using water samples collected from April 1999 to March 2000. Each value is the mean of 4 replicates.

See Table 28 for explanation of footnotes and agency abbreviations.

LOCATION	Station B	Station C	Station D	Station F	Delta Mendota Canal	Laboratory Control
DATA SOURCE	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA
UNITS	10 <sup>5</sup> cells/mL	10 <sup>5</sup> cells/mL	10 <sup>5</sup> cells/mL	10 <sup>5</sup> cells/mL	10 <sup>5</sup> cells/mL	10 <sup>5</sup> cells/mL
Apr-1999	17.6	14.4*	15.8	23.0	19.6	22.6 ‡
May-1999	12.0	13.3	11.8	8.5	11.5 ‡	14.7 ‡
Jun-1999	9.3	10.1	9.4	11.1	7.4 ††††	11.6
Jul-1999	9.1	10.5	9.9	11.2	7.5 ††††	11.9
Aug-1999	9.2*	10.0	10.2	11.9	13.3 ‡	14.9 ‡
Sep-1999	9.8	11.1	10.8	10.2	14.1	23.5
Oct-1999	9.8	10.7	9.0*	11.4	11.8	12.7
Nov-1999	9.9*	12.8	11.4*	12.9	14.3	15.3
Dec-1999	12.0*	22.7	20.9	20.4	18.8	23.4
Jan-2000	2.3*	6.5	7.5	7.3	6.9 ††††	8.2 ††††
Feb-2000	5.8*	9.4	9.8	6.7*	10.0	10.2 ‡
Mar-2000	7.1	9.7	8.0	8.1	8.3 ††††, ‡	11.4 ††††

**Table 23. Summary of selenium concentrations in grab water samples collected at study stations for use in laboratory toxicity tests, January to March 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

LOCATION	Station B	Station C	Station D	Station F	Delta Mendota Canal
DATA SOURCE #	SLDMWA/USBR	SLDMWA/USBR	SLDMWA/USBR	SLDMWA/USBR	SLDMWA/USBR
UNITS	µg/L	µg/L	µg/L	µg/L	µg/L
Jan-03-2000	77	0.8	7.8	0.6	<0.4
Jan-05-2000	55	0.4	6.7	0.9	<0.4
Jan-07-2000	76	0.5	8.4	0.8	<0.4
Feb-07-2000	66	0.8	16	0.7	0.6
Feb-09-2000	72	<0.4	22	0.9	0.6
Feb-11-2000	63	<0.4	17	0.9	0.5
Mar-06-2000	81	1.2	24	1.1	0.6
Mar-08-2000	90	0.6	27	1.1	0.6
Mar-10-2000	79	0.8	23	1.2	0.8

**Table 24. Summary of sulfate concentrations in grab water samples collected at study stations for use in laboratory toxicity tests, January to March 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

LOCATION	Station B	Station C	Station D	Station F	Delta Mendota Canal
DATA SOURCE	SLDMWA/USBR	SLDMWA/USBR	SLDMWA/USBR	SLDMWA/USBR	SLDMWA/USBR
UNITS	mg/L	mg/L	mg/L	mg/L	mg/L
Jan-03-2000	1,520	182	326	324	51
Jan-05-2000	1,400	206	336	312	25
Jan-07-2000	1,430	205	381	322	25
Feb-07-2000	1,600	233	572	343	107
Feb-09-2000	1,540	222	637	337	99
Feb-11-2000	1,390	260	573	272	64
Mar-06-2000	1,600	296	711	277	47
Mar-08-2000	1,710	311	771	262	37
Mar-10-2000	1,600	312	702	266	51

**Table 25. Summary of total suspended solids concentrations in grab water samples collected from January to March 2000.**

See Table 28 for explanation of footnotes and agency abbreviations.

LOCATION	Station B	Station C	Station D	Station F	Delta Mendota Canal
DATA SOURCE	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA
UNITS	mg/L	mg/L	mg/L	mg/L	mg/L
Jan-03-2000	36	19	41	24	12
Jan-05-2000	25	13	17	31	4
Jan-07-2000	34	17	21	34	7
Feb-07-2000	23	42	45	72	4
Feb-09-2000	48	40	52	66	21
Feb-11-2000	48	78	53	82	15
Mar-06-2000	NT	NT	27	58	NT
Mar-08-2000	NT	NT	41	29	5
Mar-10-2000	NT	47	43	50	16

Table 26. Summary of sediment monitoring results from March 1996 to November 1999. Concentrations in µg/g dry weight.

See Table 28 for explanation of footnotes and agency abbreviations.

Station Code Station Name	PARAMETER DEPTH SOURCE UNITS	Selenium			Organic Carbon		
		0-3 cm	3-8 cm	Whole Core	0-3 cm	3-8 cm	Whole Core
		USBR	USBR	USBR	USBR	USBR	USBR
		µg/g (dry)	µg/g (dry)	µg/g (dry)	%	%	%
Station A: Inflow to San Luis Drain	Mar-13-1996	2.0	16	10	3.9	3.6	3.4
	Jun-27-1996	8.0	20	29	4.33	5.01	2.96
	Sep-04-1996	3.4	24	7.7	4.35	2.72	4.10
	Nov-12-1996	22	62	55	2.92	3.10	3.72
	Mar-12-1997	NT	NT	NT	NT	NT	NT
	Jun-10-1997	2.9	4.2	5.4	0.89	1.55	2.10
	Sep-11-1997	38	56	50	1.52	2.18	1.95
	Nov-18-1997	NT	NT	NT	NT	NT	NT
	Mar-03-1998	18	150	98	1.21	2.89	2.28
	Jun-04-1998	2.8	12	7.0	0.58	1.58	1.03
	Sep-28-1998	8.5	23	52	1.06	1.17	2.25
	Nov-10-1998	27	140	31	1.55	2.61	1.43
	Feb-10-1999	3.0	15	11	1.32	1.45	1.10
	Jun-17-1999	2.5	2.7	23	1.03	1.01	1.34
Sep-17-1999	43	16	30	1.11	1.23	2.05	
Nov-18-1999	2.9	14	4.3	0.80	1.36	0.93	
Station B: Discharge from San Luis Drain	Mar-12-1996	NT	NT	NT	NT	NT	NT
	Jun-27-1996	19	12	30	2.70	2.81	2.15
	Sep-04-1996	11	18	20	3.85	3.75	2.08
	Nov-12-1996	24	41	40	1.97	1.89	3.45
	Mar-13-1997	26	48	42	2.49	2.36	2.66
	Jun-10-1997	14	27	0.11	2.14	2.95	0.07
	Sep-11-1997	21	61	48	2.39	2.82	1.84
	Nov-18-1997	15	28	41	1.62	1.86	1.73
	Mar-03-1998	18	41	45	1.46	1.70	1.73
	Jun-03-1998	11	21	26	0.85	1.51	1.09
	Sep-29-1998	13	15	NT	1.51	1.64	NT
	Nov-09-1998	17	17	17	1.68	1.74	1.76
	Feb-09-1999	15	31	23	0.94	1.93	1.87
	Jun-18-1999	17	27	31	1.45	1.84	1.28
Sep-16-1999	20	29	26	1.65	2.03	1.57	
Nov-17-1999	38	21	39	2.23	1.96	1.92	
Station C: Mud Slough North upstream of drainage discharges	Mar-12-1996	NT	NT	NT	NT	NT	NT
	May-20-1996	0.2	0.2	0.1	0.8	0.6	0.6
	Jun-27-1996	0.1	<0.1	0.1	0.49	0.40	0.14
	Sep-04-1996	0.3	0.1	<0.1	0.38	0.53	0.53
	Nov-12-1996	0.16	0.17	0.31	0.26	0.28	0.95
	Mar-12-1997	0.15	<0.10	0.11	0.35	0.28	0.68
	Jun-09-1997	0.11	0.20	<0.10	0.31	0.27	0.16
	Sep-11-1997	0.23	0.12	0.44	0.41	0.19	0.92
	Nov-17-1997	0.10	0.10	0.10	0.27	0.18	0.32
	Mar-03-1998	NT	NT	NT	NT	NT	NT
	Jun-04-1998	0.26	0.31	0.10	0.58	0.62	0.33
	Sep-28-1998	0.40	0.35	0.31	0.77	0.70	0.53
	Nov-09-1998	0.34	0.23	0.14	0.55	0.66	0.33
	Feb-09-1999	0.20	0.13	0.51	0.28	0.21	0.85
Jun-18-1999	0.29	0.19	0.25	0.40	0.22	0.20	
Sep-16-1999	0.27	0.32	0.25	0.60	0.67	0.54	
Nov-17-1999	0.10	0.10	0.15	0.15	0.25	1.12	

Table 26. Summary of sediment monitoring results from March 1996 to November 1999. Concentrations in  $\mu\text{g/g}$  dry weight (continued).

See Table 28 for explanation of footnotes and agency abbreviations.

Station Code Station Name	PARAMETER DEPTH SOURCE UNITS	Selenium			Organic Carbon		
		0-3 cm	3-8 cm	Whole Core	0-3 cm	3-8 cm	Whole Core
		USBR	USBR	USBR	USBR	USBR	USBR
		$\mu\text{g/g}$ (dry)	$\mu\text{g/g}$ (dry)	$\mu\text{g/g}$ (dry)	%	%	%
<b>Station D:</b>	Mar-12-1996	NT	NT	NT	NT	NT	NT
Mud Slough North	Apr-03-1996	<0.1	0.1	<0.1	0.5	0.5	0.5
downstream of	Jun-27-1996	0.4	0.4	0.2	0.26	0.35	0.19
drainage discharges	Sep-04-1996	0.2	0.2	0.2	0.22	0.20	0.20
	Nov-13-1996	0.14	0.25	0.17	0.14	0.12	0.12
	Mar-12-1997	0.46	0.27	0.76	0.28	0.17	0.28
	Jun-09-1997	0.12	<0.10	0.16	0.07	0.06	0.11
	Sep-11-1997	0.53	0.29	0.33	0.24	0.22	0.16
	Nov-17-1997	0.72	0.24	0.24	0.54	0.09	0.14
	Mar-03-1998	NT	NT	NT	NT	NT	NT
	Jun-03-1998	0.63	1.2	1.3	0.26	1.10	0.68
	Sep-28-1998	0.64	0.47	0.50	0.29	0.27	0.21
	Nov-10-1998	0.34	0.23	0.45	0.15	0.13	0.18
	Feb-09-1999	0.29	0.40	0.38	0.18	0.27	0.51
	Jun-18-1999	0.60	0.60	0.83	0.79	0.54	0.72
	Sep-16-1999	0.68	0.53	0.81	0.44	0.51	0.85
	Nov-17-1999	0.81	0.54	0.67	0.60	0.55	0.42
<b>Station E:</b>	Mar-12-1996	NT	NT	NT	NT	NT	NT
Mud Slough at Highway 140	May-20-1996	0.1	0.1	0.1	0.70	1.00	0.70
	Jun-27-1996	0.1	0.1	<0.1	1.08	0.45	0.40
	Sep-04-1996	NT	NT	NT	NT	NT	NT
	Nov-13-1996	0.72	0.71	0.70	0.38	0.30	0.31
	Mar-13-1997	0.82	1.00	1.00	0.12	0.16	0.06
	Jun-09-1997	1.50	1.60	1.50	0.65	0.72	0.74
	Sep-11-1997	1.6	1.3	1.9	0.69	0.52	0.78
	Nov-17-1997	0.8	2.0	1.2	0.29	0.31	0.39
	Mar-03-1998	NT	NT	NT	NT	NT	NT
	Jun-03-1998	NT	NT	NT	NT	NT	NT
	Sep-29-1998	0.24	0.18	0.25	0.16	0.18	0.21
	Nov-10-1998	0.25	0.18	0.30	0.13	0.15	0.39
	Feb-10-1999	0.32	0.48	0.78	0.32	0.54	0.45
	Jun-18-1999	0.48	0.30	0.47	0.24	0.16	0.32
	Sep-17-1999	0.96	0.54	0.20	0.44	0.24	0.08
	Nov-18-1999	0.38	0.17	0.39	0.17	0.13	0.26
<b>Station F:</b>	Mar-12-1996	NT	NT	NT	NT	NT	NT
Salt Slough at Highway 165	Jun-27-1996	0.6	0.5	0.2	0.69	0.58	0.18
	Sep-05-1996	0.4	0.8	0.4	0.44	0.75	0.25
	Nov-13-1996	0.24	0.40	0.25	0.05	0.16	0.05
	Mar-13-1997	0.94	0.36	0.57	0.56	0.36	0.32
	Jun-09-1997	0.12	0.14	0.35	0.08	0.12	0.26
	Sep-12-1997	0.59	0.73	0.74	0.23	0.22	0.23
	Nov-18-1997	1.3	1.9	1.4	1.16	1.43	1.12
	Mar-04-1998	2.1	1.8	1.6	2.32	1.97	2.11
	Jun-04-1998	0.66	1.0	1.3	0.49	0.59	1.48
	Sep-29-1998	0.33	0.48	0.59	0.26	0.31	0.23
	Nov-10-1998	0.28	0.55	0.70	0.21	0.26	0.33
	Feb-10-1999	0.59	0.56	0.93	0.40	0.32	0.19
	Jun-18-1999	0.37	0.52	0.70	0.22	0.27	0.37
	Sep-17-1999	0.53	0.65	0.62	0.49	0.53	0.22
	Nov-18-1999	0.27	0.25	0.42	0.33	0.24	0.26
<b>Station I:</b>	Jun-13-1996	0.4	0.4	0.3	1.60	1.30	1.20
Mud Slough:	Mar-13-1997	1.5	0.8	0.4	1.76	0.79	0.56
Seasonal backwater tributary	Jun-03-1998	0.3	0.2	0.2	0.47	0.69	0.55
Reported annually	Jun-18-1999	4.8	4.5	4.4	1.90	1.89	1.96

Table 27. Summary of quarterly in situ bioassay results from December 1995 to May 1998.

Results are the number of live fathead minnows (*Pimephales promelas*) per number of fish recovered at the end of the 7 day deployment at each station (initial count of 80 used at each station).

See Table 28 for explanation of footnotes and agency abbreviations.

LOCATION	Windmill (4 day old larvae)	Station B (4 day old larvae)	Station D (4 day old larvae)	Station D (14 day old larvae)	Station F (4 day old larvae)	Station F (14 day old larvae)
DATA SOURCE	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA
UNITS	# alive/total count	# alive/total count	# alive/total count	# alive/total count	# alive/total count	# alive/total count
December-1995 <sup>(4)</sup>	NT	NT	NT	NT	NT	NT
March-1996 <sup>(5)</sup>	80/80	NT	NT	44/44	NT	70/70
August-1996 <sup>(6)</sup>	NT	NT	13/19	22/29	28/40	20/49
November-1996 <sup>(7)</sup>	46/62	63/68	0/2	.	16/36	.
February-1997 <sup>(8)</sup>	NT	3/13	0/0	.	0/11	.
May-1997	64/66	0/0	0/24	.	5/9	.
August-1997 <sup>(9)</sup>	NT	38/38	27/31	.	0/8	.
May-1998	5/24	3/23	2/21	.	1/21	.

Table 28. Explanations of footnotes and agency abbreviations.

Footnote	Explanation
CVRWQCB	California Regional Water Quality Control Board, Central Valley Region
SLDMWA	San Luis & Delta-Mendota Water Authority
USBR	U.S. Bureau of Reclamation
USGS	U.S. Geological Survey
.	Not applicable
<	Less than MDL. For use in calculations, use 1/2 of MDL.
e	Estimated value
P	Pending, data not available at this time but will be available in the future
NA	Not analyzed - operator error, data will not be available in the future
NS	Not sampled or unable to sample
NT	Not tested
(4)	In situ cages could not be deployed due to wet weather conditions.
(5)	Baseline results for 3/96 are for 14-day old larvae. There was no survival for the 24-hour old larvae.
(6)	Windmill station was dry due to water drainage. Use of plastic screened beakers for Station F during 8/96 with use of 4-day old larvae resulted in 0/39. Apparent cause of mortality was elevated temperature and sediment which was found in all cages and beakers.
(7)	Heavy silt accumulation was noted in Stations D and F cages and light silt accumulation was observed in both the Windmill station and Station B.
(8)	Moderate silt accumulation was noted in Stations B and F cages and light silt accumulation was observed in Station D.
(9)	No test deployment was done at the Windmill Station due to extreme conditions (stagnant & pH>9.0). Station B replicate A was retrieved with no cork and replicate C lost its cork during retrieval. There were no surviving fish for a growth determination for Station F cages.
*	Significantly reduced from Delta Mendota Canal (p<0.05)
†	DMC water failed to meet the survival (>80%) and the acceptability criteria.
††	Data from records of the Grassland Water District. Data is not subjected to the criteria documented in the Compliance Monitoring Program for the Use and Operation of the Grassland Bypass Project (1996) nor the Quality Assurance Project Plan for the GBP (1997 draft).
†††	DMC water failed to meet the reproduction (>10 neonates/adult) acceptability criteria.
††††	DMC water failed to meet minimum growth (1 X 10 <sup>6</sup> cell/mL) acceptability criteria.
‡	Control value exceeds suggested maximum variance (20%) acceptability criteria.
#	New testing laboratory with reporting limit of 0.4 µg/L as of June 1998.