

GRASSLAND BYPASS PROJECT

MONTHLY DATA REPORT

February 2001

April 23, 2001

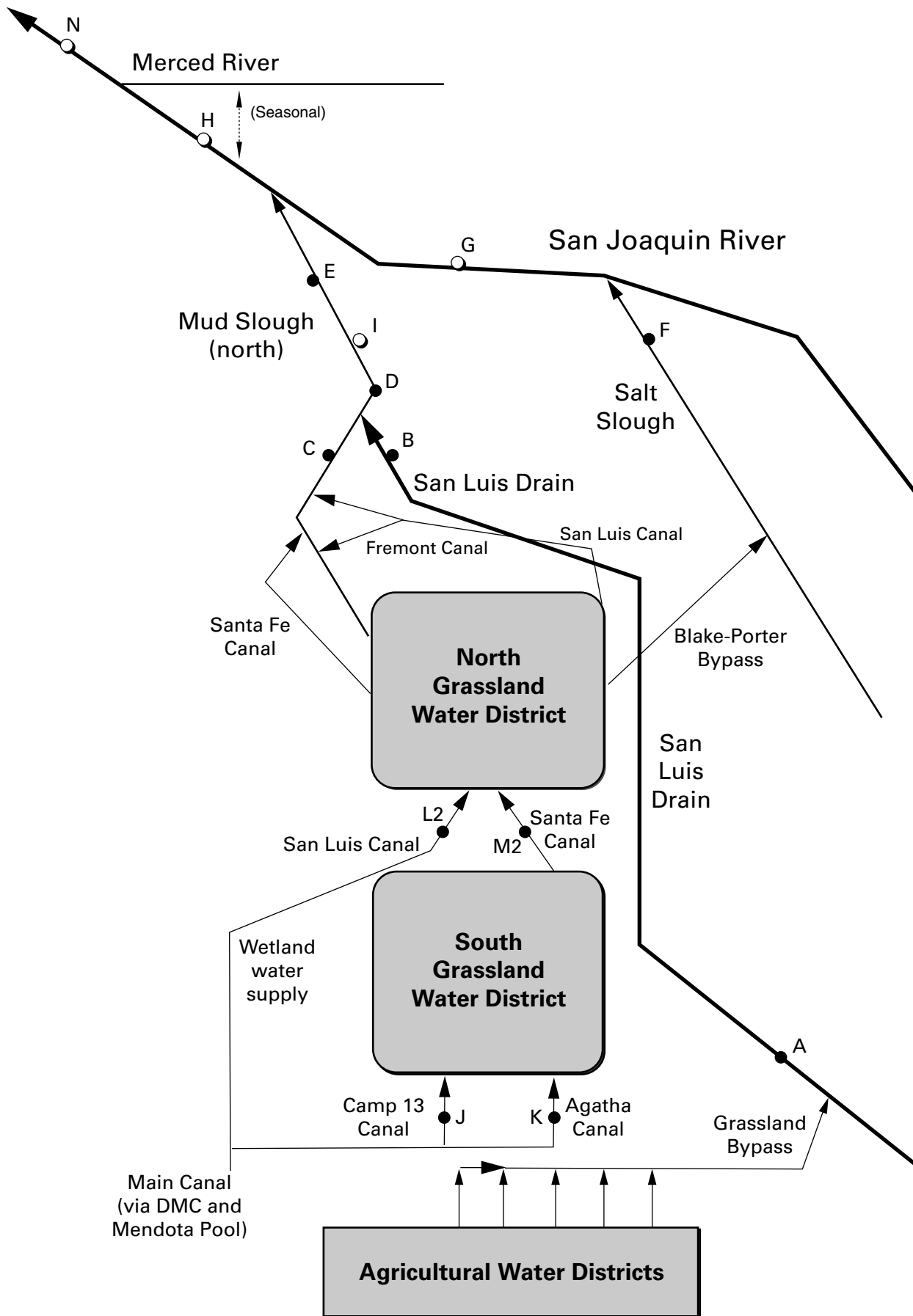
Preliminary Results

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





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Table 1. Continuous water monitoring at Station A (inflow to San Luis Drain), February 2001.

See Table 26 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Specific Conductance
DATA SOURCE	SLDMWA	SLDMWA
UNITS	cfs	µS/cm
Feb-01-2001	39	4,270
Feb-02-2001	42	4,430
Feb-03-2001	46	4,310
Feb-04-2001	49	4,020
Feb-05-2001	52	4,270
Feb-06-2001	58	4,190
Feb-07-2001	58	4,370
Feb-08-2001	53	4,550
Feb-09-2001	51	4,580
Feb-10-2001	53	4,730
Feb-11-2001	60	4,500
Feb-12-2001	65	4,510
Feb-13-2001	61	4,640
Feb-14-2001	61	4,650
Feb-15-2001	57	4,730
Feb-16-2001	56	4,800
Feb-17-2001	56	4,830
Feb-18-2001	57	4,770
Feb-19-2001	57	4,870
Feb-20-2001	60	4,870
Feb-21-2001	57	4,770
Feb-22-2001	57	4,850
Feb-23-2001	59	5,090
Feb-24-2001	62	5,010
Feb-25-2001	67	4,730
Feb-26-2001	64	4,760
Feb-27-2001	64	4,620
Feb-28-2001	63	5,050
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Mean	57	4,630

Table 2. Continuous water monitoring at Station B (discharge from San Luis Drain), February 2001.

See Table 26 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-01-2001	37	9.8	6.6	4,180	58.0	11.6
Feb-02-2001	41	10.3	6.7	4,430	60.5	13.4
Feb-03-2001	43	11.0	6.8	4,430	58.9	13.7
Feb-04-2001	49	11.6	6.8	4,360	56.2	14.9
Feb-05-2001	51	12.4	6.4	4,110	47.9	13.2
Feb-06-2001	53	12.9	6.4	4,230	54.3	15.5
Feb-07-2001	58	11.1	5.7	3,960	51.1	16.0
Feb-08-2001	58	9.5	6.1	4,090	55.8	17.5
Feb-09-2001	52	9.2	6.0	4,100	57.7	16.2
Feb-10-2001	52	8.8	5.8	4,000	57.6	16.2
Feb-11-2001	55	9.0	6.4	4,250	58.5	17.4
Feb-12-2001	59	9.3	6.4	4,300	61.1	19.4
Feb-13-2001	64	8.9	6.7	4,460	66.9	23.1
Feb-14-2001	62	9.6	6.5	4,290	66.5	22.2
Feb-15-2001	61	10.7	6.5	4,360	69.6	22.9
Feb-16-2001	58	11.6	6.5	4,480	73.2	22.9
Feb-17-2001	55	11.9	6.8	4,510	75.2	22.3
Feb-18-2001	55	12.2	7.0	4,490	74.4	22.1
Feb-19-2001	58	12.6	7.4	4,460	72.7	22.7
Feb-20-2001	58	12.5	7.2	4,650	74.1	23.2
Feb-21-2001	58	12.7	7.1	4,570	72.7	22.7
Feb-22-2001	57	12.7	7.1	4,680	77.8	23.9
Feb-23-2001	57	12.1	7.1	4,740	84.5	26.0
Feb-24-2001	60	11.2	6.9	4,500	72.9	23.6
Feb-25-2001	63	11.2	7.1	4,570	77.5	26.3
Feb-26-2001	67	12.0	7.6	4,820	87.3	31.5
Feb-27-2001	63	12.7	7.6	4,840	80.4	27.3
Feb-28-2001	63	13.2	6.9	4,590	78.6	26.7
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Mean	56	11.2	6.7	4,410	67.2	
Total						574

Load Limitation for February 2001	(lbs)	736
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**Table 3. Continuous water monitoring at Station D
(Mud Slough North downstream of drainage discharges), February 2001.**

See Table 26 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	usgs	usgs	usgs
UNITS	cfs	°C	µS/cm
Feb-01-2001	207	9.5	2,190
Feb-02-2001	202	10.1	2,300
Feb-03-2001	200	11.2	2,350
Feb-04-2001	200	12.1	2,430
Feb-05-2001	196	13.1	2,400
Feb-06-2001	197	13.2	2,470
Feb-07-2001	200	10.5	2,450
Feb-08-2001	198	8.7	NA
Feb-09-2001	195	9.0	NA
Feb-10-2001	203	8.8	2,450
Feb-11-2001	225	9.3	2,460
Feb-12-2001	249	9.6	2,410
Feb-13-2001	264	8.9	2,500
Feb-14-2001	247	9.9	2,520
Feb-15-2001	235	11.1	2,540
Feb-16-2001	219	12.1	2,600
Feb-17-2001	210	11.9	2,670
Feb-18-2001	210	12.2	2,680
Feb-19-2001	220	12.9	2,700
Feb-20-2001	214	12.2	2,650
Feb-21-2001	215	12.1	NA
Feb-22-2001	209	11.4	NA
Feb-23-2001	216	10.3	NA
Feb-24-2001	239	10.7	2,660
Feb-25-2001	260	11.1	2,610
Feb-26-2001	251	12.3	2,760
Feb-27-2001	246	13.5	2,810
Feb-28-2001	239	13.2	2,790
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Table 4. Continuous water monitoring at Station F (Salt Slough at Highway 165), February 2001.

See Table 26 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	usgs	usgs	usgs
UNITS	cfs	°C	µS/cm
Feb-01-2001	173	9.6	1,810
Feb-02-2001	174	10.0	1,830
Feb-03-2001	199	10.8	1,680
Feb-04-2001	208	11.7	1,650
Feb-05-2001	214	12.5	1,690
Feb-06-2001	216	12.6	1,670
Feb-07-2001	209	10.5	1,640
Feb-08-2001	199	8.6	1,660
Feb-09-2001	213	8.9	1,580
Feb-10-2001	230	9.0	1,510
Feb-11-2001	252	9.4	1,440
Feb-12-2001	290	9.3	1,390
Feb-13-2001	311	8.7	1,380
Feb-14-2001	314	9.3	1,420
Feb-15-2001	252	10.6	1,530
Feb-16-2001	196	11.8	1,600
Feb-17-2001	205	11.6	1,570
Feb-18-2001	207	11.7	1,550
Feb-19-2001	222	12.5	1,500
Feb-20-2001	239	12.3	1,460
Feb-21-2001	244	12.3	1,480
Feb-22-2001	236	12.3	1,560
Feb-23-2001	251	11.7	1,510
Feb-24-2001	304	10.7	1,420
Feb-25-2001	385	10.3	1,390
Feb-26-2001	449	11.6	1,420
Feb-27-2001	459	13.0	1,430
Feb-28-2001	419	13.1	1,490
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Table 5. Continuous water monitoring at Station N (San Joaquin River at Crow's Landing), February 2001.

See Table 26 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-01-2001	1,030	9.3	1,340	2.5
Feb-02-2001	958	9.6	1,410	2.5
Feb-03-2001	915	10.5	1,480	5.6
Feb-04-2001	914	11.4	1,510	3.5
Feb-05-2001	913	12.1	1,500	3.5
Feb-06-2001	909	12.5	1,520	3.4
Feb-07-2001	896	10.8	1,570	3.7
Feb-08-2001	875	8.9	1,580	4.4
Feb-09-2001	862	9.1	1,570	4.3
Feb-10-2001	867	9.0	1,600	4.8
Feb-11-2001	951	9.3	1,500	4.1
Feb-12-2001	1,080	9.4	1,410	3.9
Feb-13-2001	1,240	8.7	1,290	4.0
Feb-14-2001	1,290	8.9	1,260	3.8
Feb-15-2001	1,260	9.8	1,310	4.2
Feb-16-2001	1,180	10.7	1,320	4.1
Feb-17-2001	1,080	11.2	1,380	4.1
Feb-18-2001	1,010	11.5	1,480	4.6
Feb-19-2001	989	12.5	1,500	4.4
Feb-20-2001	976	12.5	1,530	4.8
Feb-21-2001	977	12.5	1,510	4.6
Feb-22-2001	983	12.4	1,510	4.3
Feb-23-2001	1,010	12.1	1,490	4.9
Feb-24-2001	1,110	11.3	1,500	5.1
Feb-25-2001	1,470	10.9	1,300	4.1
Feb-26-2001	1,560	12.1	1,170	3.4
Feb-27-2001	1,670	12.6	1,090	3.6
Feb-28-2001	1,650	12.8	1,120	3.8
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Table 6a. Weekly water quality monitoring at Station A (inflow to San Luis Drain), taken from grab samples.

See Table 26 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
Dec-06-2000	18	.	.	4,650	47	Selenium and boron analyses		
Dec-13-2000	24	.	.	4,810	59	from weekly grab		
Dec-20-2000	19	.	.	4,650	54	discontinued 2/1/00.		
Dec-27-2000	19	.	.	4,640	32	.	.	.
Jan-03-2001	15	.	.	4,800	24	.	.	.
Jan-10-2001	19	.	.	4,650	43	.	.	.
Jan-17-2001	21	.	.	4,620	38	.	.	.
Jan-24-2001	30	.	.	4,740	58	.	.	.
Jan-31-2001	36	.	.	4,600	80	.	.	.
Feb-07-2001	58	.	.	4,240	100	.	.	.
Feb-14-2001	61	.	.	4,620	NA	.	.	.
Feb-21-2001	57	.	.	4,760	130	.	.	.
Feb-28-2001	63	.	.	4,930	93	.	.	.

Table 6b. Weekly water quality monitoring at Station A (inflow to San Luis Drain), taken from composite samples.

See Table 26 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
Dec-05-2000	17	.	.	4,540	.	69.3	.	7.3
Dec-12-2000	19	.	.	4,840	.	70.0	.	8.0
Dec-19-2000	18	.	.	4,500	.	61.5	.	7.5
Dec-26-2000	17	.	.	4,780	.	68.6	.	8.0
Jan-02-2001	14	.	.	4,730	.	65.0	.	8.1
Jan-09-2001	20	.	.	4,670	.	65.9	.	7.6
Jan-16-2001	23	.	.	4,530	.	73.4	.	7.0
Jan-23-2001	28	.	.	4,750	.	73.4	.	7.4
Jan-30-2001	33	.	.	NA	.	67.9	.	7.0
Feb-06-2001	58	.	.	4,220	.	60.2	.	6.3
Feb-13-2001	61	.	.	4,490	.	NA	.	6.7
Feb-20-2001	60	.	.	4,710	.	74.9	.	7.2
Feb-27-2001	64	.	.	4,820	.	76.6	.	7.4

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
Dec-07-2000	24	9.7	7.4	3,840	51	43.1	Selenium	6.2
Dec-12-2000	25	12.1	7.2	4,280	55	52.7	(dissolved)	6.8
Dec-21-2000	24	11.2	7.9	3,850	38	40.2	analyses	6.1
Dec-28-2000	24	9.7	7.8	4,320	38	51.9	discontinued	6.5
Jan-04-2001	21	7.8	7.1	4,490	22	66.4	1/15/2000.	6.9
Jan-11-2001	25	8.9	5.5	4,040	53	45.0	.	6.5
Jan-18-2001	27	7.7	5.9	4,380	32	68.7	.	6.4
Jan-25-2001	33	9.9	7.8	4,380	52	54.6	.	6.5
Feb-01-2001	37	8.4	7.3	4,340	43	70.4	.	6.6
Feb-08-2001	58	12.2	8.1	4,180	26	57.2	.	6.3
Feb-15-2001	61	10.8	8.1	4,370	32	65.6	.	6.2
Feb-22-2001	57	12.9	7.8	4,750	31	71.1	.	6.5

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

See Table 26 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
Dec-07-2000	118	9.6	7.9	1,430	0.6	1.1
Dec-12-2000	129	11.6	7.6	1,450	1.1	1.2
Dec-21-2000	138	10.3	7.8	1,490	0.7	1.2
Dec-28-2000	111	7.8	7.7	1,620	0.6	1.2
Jan-04-2001	92	8.0	7.9	1,760	<0.4	1.4
Jan-11-2001	180	8.9	6.9	1,620	0.5	1.4
Jan-18-2001	179	7.6	7.6	1,630	0.5	1.4
Jan-25-2001	177	9.7	7.9	1,710	0.4	1.4
Feb-01-2001	170	8.6	7.3	1,730	0.5	1.5
Feb-08-2001	140	8.4	8.0	1,900	0.6	1.7
Feb-15-2001	174	11.6	8.2	1,850	0.6	1.6
Feb-22-2001	152	12.7	7.9	1,980	0.7	1.6

++ 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).

See Table 26 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
Dec-07-2000	142	9.6	7.9	2,010	9.5	2.3
Dec-12-2000	154	11.8	7.5	2,040	9.0	2.2
Dec-21-2000	162	10.5	7.9	1,920	6.9	2.0
Dec-28-2000	135	7.6	6.9	2,230	10.0	2.3
Jan-04-2001	113	8.2	7.7	2,390	11.9	2.6
Jan-11-2001	205	8.7	6.6	2,080	6.9	2.2
Jan-18-2001	206 e	8.2	7.5	2,120	9.9	2.2
Jan-25-2001	210	9.6	7.9	2,230	10.3	2.4
Feb-01-2001	207	8.5	7.8	2,300	12.1	2.6
Feb-08-2001	198	9.1	8.1	2,660	17.0	3.1
Feb-15-2001	235	11.8	8.2	2,700	19.0	3.1
Feb-22-2001	209	12.3	8.0	2,920	21.4	3.2

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

See Table 26 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
Dec-07-2000	168	9.8	7.6	1,480	0.8	0.8
Dec-12-2000	169	11.2	7.4	1,470	1.3	0.8
Dec-21-2000	127	9.4	7.7	1,670	0.7	0.9
Dec-28-2000	119	7.9	7.2	1,790	0.7	0.9
Jan-04-2001	100	7.6	7.8	1,900	<0.4	1.0
Jan-11-2001	322	9.2	7.7	1,310	1.1	0.8
Jan-18-2001	201	6.7	7.3	1,800	1.0	1.2
Jan-25-2001	187	10.5	6.6	1,790	0.8	1.1
Feb-01-2001	173	8.5	6.8	1,900	0.9	1.2
Feb-08-2001	199	8.6	7.8	1,680	0.8	0.9
Feb-15-2001	252	10.5	7.5	1,560	1.3	0.8
Feb-22-2001	236	17.0	7.6	1,600	0.9	0.7

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

See Table 26 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
Dec-07-2000	.	9.3	7.1	1,560	0.7	0.8
Dec-12-2000	.	10.6	7.4	1,540	1.2	0.7
Dec-21-2000	.	8.9	7.7	1,840	0.5	0.9
Dec-28-2000	.	7.6	7.2	1,890	0.5	0.8
Jan-04-2001	.	7.5	6.9	2,020	<0.4	0.9
Jan-11-2001	.	8.7	7.6	1,290	0.7	0.7
Jan-18-2001	.	6.2	8.0	1,650	0.6	0.9
Jan-25-2001	.	9.9	7.3	1,850	0.5	1.0
Feb-01-2001	.	8.1	7.6	1,570	0.5	0.9
Feb-08-2001	.	8.9	7.6	1,720	0.7	0.9
Feb-15-2001	.	9.7	7.3	1,200	1.1	0.6
Feb-22-2001	.	14.6	7.8	1,620	0.7	0.6

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

(Collected data intended for use with biological monitoring.)

See Table 26 for explanation of footnotes and agency abbreviations.

PARAMETER	.	.	.	Specific Conductance	Selenium (total)	Boron
DATA SOURCE	.	.	.	SLDMWA	SLDMWA	SLDMWA
UNITS	.	.	.	µS/cm	µg/L	mg/L
Dec-08-2001	.	.	.	1,720	3.3	1.7
Dec-14-2000	.	.	.	1,780	3.3	1.3
Dec-21-2000	.	.	.	1,840	4.3	1.3
Dec-28-2000	.	.	.	2,000	4.0	1.5
Jan-04-2001	.	.	.	2,120	3.7	1.5
Jan-09-2001	.	.	.	1,830	3.4	1.3
Jan-16-2001	.	.	.	1,630	2.7	1.2
Jan-24-2001	.	.	.	2,020	3.6	1.5
Jan-30-2001	.	.	.	1,700	4.1	1.3
Feb-06-2001	.	.	.	2,150	6.3	1.6
Feb-13-2001	.	.	.	1,790	6.6	1.4
Feb-20-2001	.	.	.	2,020	7.6	1.6
Feb-27-2001	.	.	.	1,350	4.9	1.0

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

See Table 26 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
Dec-06-2000	25	.	.	668	1.3	0.4
Dec-13-2000	25	.	.	717	1.8	0.4
Dec-20-2000	25	.	.	650	1.2	0.3
Dec-27-2000	15	.	.	779	1.6	0.4
Jan-03-2001	15	.	.	671	1.2	0.3
Jan-10-2001	15	.	.	721	1.0	0.2
Jan-17-2001	5	.	.	740	1.5	0.3
Jan-24-2001	5	.	.	780	1.7	0.3
Jan-31-2001	5	.	.	785	1.4	0.4
Feb-07-2001	6	.	.	764	1.4	0.4
Feb-14-2001	5	.	.	715	1.8	0.4
Feb-21-2001	5	.	.	670	2.2	0.4
Feb-28-2001	5	.	.	588	2.3	0.4

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

See Table 26 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
Dec-06-2000	50	.	.	659	1.2	0.3
Dec-13-2000	50	.	.	677	1.1	0.3
Dec-20-2000	40	.	.	666	1.1	0.3
Dec-27-2000	40	.	.	645	1.0	0.3
Jan-03-2001	40	.	.	687	1.0	0.4
Jan-10-2001	40	.	.	708	0.9	0.3
Jan-17-2001	40	.	.	774	1.1	0.4
Jan-24-2001	40	.	.	755	1.3	0.3
Jan-31-2001	40	.	.	842	1.4	0.5
Feb-07-2001	40	.	.	912	1.6	0.6
Feb-14-2001	40	.	.	964	2.9	0.7
Feb-21-2001	40	.	.	920	2.4	0.6
Feb-28-2001	40	.	.	815	3.3	0.6

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

See Table 26 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
Dec-06-2000	0	.	.	2,290	3.0	2.8
Dec-13-2000	0	.	.	1,810	2.7	2.3
Dec-20-2000	0	.	.	2,370	3.2	3.2
Dec-27-2000	0	.	.	1,510	2.4	1.5
Jan-03-2001	0	.	.	1,780	2.8	1.8
Jan-10-2001	45	.	.	1,240	1.9	1.0
Jan-17-2001	0	.	.	2,160	3.3	2.4
Jan-24-2001	10	.	.	396	0.4	0.3
Jan-31-2001	0	.	.	2,020	3.1	2.2
Feb-07-2001	0	.	.	1,880	2.9	2.0
Feb-14-2001	0	.	.	2,270	3.9	2.8
Feb-21-2001	10	.	.	1,270	2.8	1.3
Feb-28-2001	10	.	.	1,360	2.8	1.2

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

See Table 26 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
Dec-06-2000	116	.	.	1,010	1.0	0.9
Dec-13-2000	132	.	.	1,120	1.0	1.0
Dec-20-2000	129	.	.	1,080	1.1	1.0
Dec-27-2000	105	.	.	1,260	1.2	1.2
Jan-03-2001	111	.	.	1,300	1.0	1.2
Jan-10-2001	92	.	.	1,200	1.1	1.0
Jan-17-2001	160	.	.	1,500	1.5	1.4
Jan-24-2001	144	.	.	1,710	2.2	1.9
Jan-31-2001	138	.	.	1,750	2.2	2.0
Feb-07-2001	129	.	.	1,720	2.3	1.8
Feb-14-2001	125	.	.	1,590	2.0	1.5
Feb-21-2001	111	.	.	1,800	1.9	2.1
Feb-28-2001	134	.	.	1,590	2.2	1.7

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

See Table 26 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
Dec-07-2000	846	10.3	7.8	1,050	1.8	0.7
Dec-12-2000	823	12.8	8.2	1,110	2.4	0.7
Dec-21-2000	817	9.4	7.8	1,140	1.8	0.7
Dec-28-2000	773	6.6	7.9	1,200	2.0	0.7
Jan-04-2001	681	8.9	7.6	1,290	1.7	0.8
Jan-11-2001	948	8.7	7.5	1,120	2.1	0.7
Jan-18-2001	960	8.2	8.1	1,270	1.8	0.9
Jan-25-2001	893	8.8	7.8	1,390	2.1	0.9
Feb-01-2001	1,030	8.2	7.4	1,350	2.3	1.0
Feb-08-2001	875	10.6	7.6	1,560	3.8	1.2
Feb-15-2001	1,260	10.0	7.4	1,290	4.7	1.0
Feb-22-2001	983	11.9	7.8	1,550	4.8	1.1

Table 18. Summary of fathead minnow (*Pimephales promelas*) larvae survival in 7-day tests using water samples collected from March 2000 to February 2001. Each value is the mean of 4 replicates with 10 fish in each replicate.

See Table 26 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	%	%	%	%	%	%
Mar-2000	100	100	100	85	93	100
Apr-2000	95	93	95	98	83	100
May-2000	93	93	98	100	93	100
Jun-2000	90	85	95	95	88	100
Jul-2000	98	100	90	98	100	100
Aug-2000	100	97	88	80	100	100
Sep-2000	100	100	93	98	98	98
Oct-2000	100	75*	93	100	100	98
Nov-2000	88	15*	23*	63*	95	100
Dec-2000	100	63*	73	88	88	93
Jan-2001	95	85	93	90	100	100
Feb-2001	100	90	93	78	78	100

Table 19. Summary of fathead minnow (*Pimephales promelas*) larvae growth in 7-day tests using water samples collected from March 2000 to February 2001. Each value is the mean of 4 replicates with 10 fish in each replicate.

See Table 26 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
Mar-2000	0.66	0.64	0.62	0.62	0.53	0.60
Apr-2000	0.66	0.65	0.69	0.53	0.51	0.82
May-2000	0.27	0.28	0.36	0.35	0.27	0.33
Jun-2000	0.48	0.42	0.56	0.48	0.46	0.54
Jul-2000	0.68	0.60	0.58	0.62	0.62	0.69
Aug-2000	0.50	0.40	0.49	0.44	0.56	0.64
Sep-2000	0.42	0.34	0.34	0.41	0.37	0.34
Oct-2000	0.66	0.46*	0.58*	0.67	0.68	0.58
Nov-2000	0.29	0.05*	0.07*	0.21*	0.28	0.31
Dec-2000	0.72	0.40*	0.49*	0.67	0.74	0.60
Jan-2001	0.63	0.50	0.59	0.55	0.62	0.57
Feb-2001	0.54*	0.53*	0.64	0.61	0.68	0.65

Table 20. Summary of *Daphnia magna* survival in 7-day tests using water samples collected from March 2000 to February 2001. Each value is the mean of 10 replicates with 1 animal in each replicate.

See Table 26 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	%	%	%	%	%	%
Mar-2000	90	90	90	90	90	100
Apr-2000	80	100	90	90	80	100
May-2000	100	100	100	100	100	90
Jun-2000	80	100	100	90	100	90
Jul-2000	100	100	100	100	90	90
Aug-2000	90	100	90	100	90	90
Sep-2000	90	90	90	100	100	100
Oct-2000	80	80	60*	80	80	70
Nov-2000	100	100	100	100	90	100
Dec-2000	100	80	80	100	100	60*
Jan-2001	90	70*	100	100	90	80
Feb-2001	100	100	90	100	90	100

Table 21. Summary of *Daphnia magna* reproduction in 7-day tests using water samples collected from March 2000 to February 2001. Each value is the mean of 10 replicates with 1 animal in each replicate.

See Table 26 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
Mar-2000	10.6	10.6	13.0	10.6	6.2	12.7
Apr-2000	14.5	17.3	11.2	10.5	9.7 †††	11.6
May-2000	13.4	18.5	12.5	9.7	11.4	17.7
Jun-2000	21.5	29.1	35.0	22.1	15.5	16.6
Jul-2000	27.3	36.8	31.4	17.0	8.8	28.6
Aug-2000	20.9	18.2	21.5	26.8	16.3	14.5
Sep-2000	42.4	38.9	39.9	41.6	48.7	31.8
Oct-2000	29.8	41.5	23.9	25.7	31.8	17.7
Nov-2000	45.7	40.4	43.9	35.1	22.8	26.3
Dec-2000	13.7	15.7	13.3	11.2	13.4	4.4*
Jan-2001	30.8	31.3	46.2	36.9	30.8	27.1
Feb-2001	31.2	25.7	25.1	29.9	27.2	27.5

Table 22. Summary of *Selenastrum capricornutum* growth in 4-day tests using water samples collected from March 2000 to February 2001. Each value is the mean of 4 replicates.

See Table 26 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 ⁵ cells/mL	10 ⁵ cells/mL	10 ⁵ cells/mL	10 ⁵ cells/mL	10 ⁵ cells/mL	10 ⁵ cells/mL
Mar-2000	7.1	9.7	8.0	8.1	8.3 ††††, ‡	11.4 ††††
Apr-2000	18.7	19.9	21.5	22.4	10.0 ‡	12.2
May-2000	16.2	16.3	17.3	16.5	15.2	17.2
Jun-2000	19.7	24.3	21.7	21.4	19.9	11.9
Jul-2000	13.7	16.3	13.5	11.3	12.1	13.3
Aug-2000	19.8	25.1	24.8	33.3	13.4	23.0
Sep-2000	9.4	11.5	10.8	13.7	10.8	9.6
Oct-2000	15.0	15.7	14.3	16.1	14.4	16.2
Nov-2000	8.3	7.5	8.1	7.6	7.7	7.9
Dec-2000	7.8*	13.6	15.4	14.9	13.1	13.3
Jan-2001	2.0	2.0	2.1	2.3 ‡	2.1 ‡	2.2
Feb-2001	11.3 ‡	23.8	21.5	16.7 ‡	22.5	17.6

Table 23. Summary of selenium concentrations in grab water samples collected at study stations for use in laboratory toxicity tests, December 2000 to February 2001.

See Table 26 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
Dec-11-2000	51	0.5	9.8	0.5	0.5
Dec-13-2000	51	0.6	8.1	0.7	<0.4
Dec-15-2000	56	0.6	12	0.6	<0.4
Jan-08-2001	42	<0.4	11	0.4	<0.4
Jan-10-2001	46	0.5	9.3	0.5	<0.4
Jan-12-2001	47	<0.4	7.7	1.0	0.8
Feb-12-2001	65	0.8	17	0.6	<0.4
Feb-14-2001	70	<0.4	20	0.8	<0.4
Feb-16-2001	68	<0.4	19	0.4	<0.4

Table 24. Summary of sulfate concentrations in grab water samples collected at study stations for use in laboratory toxicity tests, December 2000 to March 2001.

See Table 26 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
Dec-11-2000	1,350	207	432	201	39
Dec-13-2000	1,450	209	426	209	29
Dec-15-2000	1,470	219	481	213	29
Jan-08-2001	1,180	297	532	193	34
Jan-10-2001	1,350	267	521	205	36
Jan-12-2001	1,280	239	423	205	105
Feb-12-2001	1,340	276	553	199	60
Feb-14-2001	1,350	290	588	202	31
Feb-16-2001	1,360	299	595	220	33

Table 25. Summary of total suspended solids concentrations in grab water samples collected from December 2000 to March 2001.

See Table 26 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
Dec-11-2000	64	8	30	62	22
Dec-13-2000	68	22	27	81	25
Dec-15-2000	85	18	39	61	11
Jan-08-2001	60	28	31	42	7
Jan-10-2001	53	20	33	34	8
Jan-12-2001	59	32	33	53	10
Feb-12-2001	64	40	54	44	14
Feb-14-2001	71	47	36	52	20
Feb-16-2001	66	56	39	52	15

Table 26. 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
e	Estimated value
.	Not applicable
<	Less than MDL. If needed in calculation, use 1/2 MDL
NA	Not analyzed - operator error, data will not be available in the future
NP	Not Provided. Data may be available in the future.
NT	Not tested
P	Pending, data not available at this time but will be available in the future
*	Significantly reduced from Delta Mendota Canal (p<0.05)
†	DMC water failed to meet the survival (>80%) 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 (10 ⁶ 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.