

GRASSLAND BYPASS PROJECT

MONTHLY DATA REPORT

September 2000

December 05, 2000

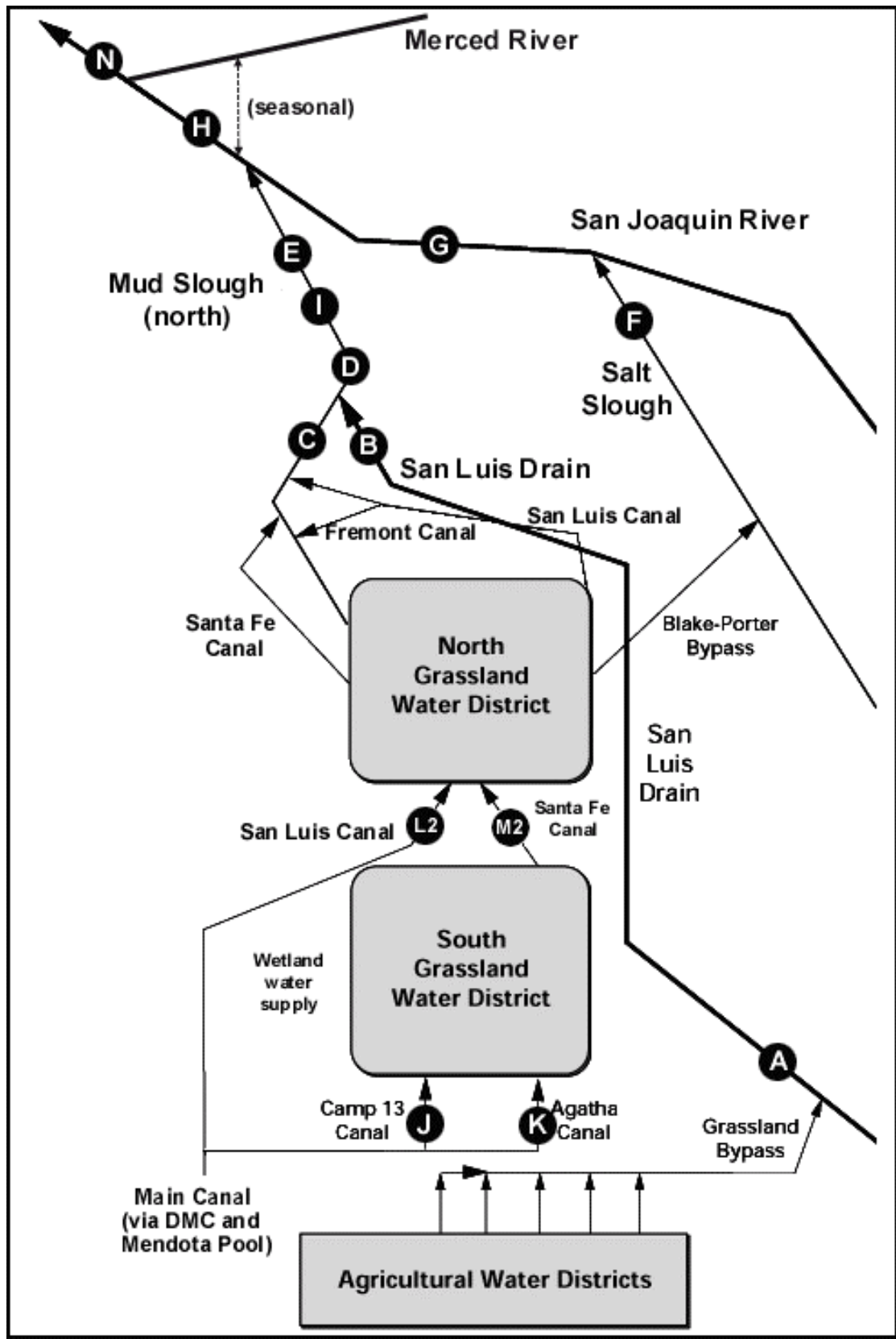
Preliminary Results

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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See Table 26 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Specific Conductance
DATA SOURCE	SLDMWA	SLDMWA
UNITS	cfs	µS/cm
Sep-01-2000	49	4,250
Sep-02-2000	48	4,070
Sep-03-2000	50	3,930
Sep-04-2000	54	3,920
Sep-05-2000	48	4,050
Sep-06-2000	46	4,040
Sep-07-2000	45	3,860
Sep-08-2000	43	3,640
Sep-09-2000	40	3,570
Sep-10-2000	34	3,660
Sep-11-2000	26	4,870
Sep-12-2000	23	5,020
Sep-13-2000	20	5,010
Sep-14-2000	19	4,970
Sep-15-2000	21	4,940
Sep-16-2000	20	4,520
Sep-17-2000	21	4,410
Sep-18-2000	19	4,320
Sep-19-2000	18 e	4,690 e
Sep-20-2000	20 e	4,430 e
Sep-21-2000	22	4,160
Sep-22-2000	25	4,130
Sep-23-2000	22	3,990
Sep-24-2000	18	4,140
Sep-25-2000	14	4,920
Sep-26-2000	11	5,110
Sep-27-2000	12	5,110
Sep-28-2000	12	4,990
Sep-29-2000	13	4,840
Sep-30-2000	14	4,620
	.	.
Mean	28	4,410

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

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
Sep-01-2000	51	23.0	6.0	3,630	42.2	11.6
Sep-02-2000	48	22.0	6.2	3,800	47.3	12.2
Sep-03-2000	48	22.5	6.6	3,970	46.6	12.1
Sep-04-2000	50	22.5	7.0	4,260	62.3	16.8
Sep-05-2000	50	22.0	6.8	4,160	54.0	14.6
Sep-06-2000	47	22.0	6.4	4,020	49.0	12.4
Sep-07-2000	46	22.5	6.2	3,830	45.8	11.4
Sep-08-2000	43	23.5	6.2	3,910	56.1	13.0
Sep-09-2000	41	24.0	6.0	3,920	54.0	11.9
Sep-10-2000	37	24.0	5.8	3,790	55.0	11.0
Sep-11-2000	31	24.5	5.7	3,760	56.4	9.4
Sep-12-2000	25	24.5	5.8	3,720	55.8	7.5
Sep-13-2000	22	25.0	5.6	3,620	48.0	5.7
Sep-14-2000	18	25.5	5.5	3,500	40.7	4.0
Sep-15-2000	19	25.5	5.8	3,520	45.4	4.7
Sep-16-2000	21	25.5	5.5	3,390	39.7	4.5
Sep-17-2000	22	25.5	6.4	3,740	46.4	5.5
Sep-18-2000	22	26.0	8.1	4,700	70.9	8.4
Sep-19-2000	21	26.5	8.5	4,880	69.8	7.9
Sep-20-2000	21	27.0	8.6	4,860	61.8	7.0
Sep-21-2000	23	26.5	9.1	4,860	52.6	6.5
Sep-22-2000	26	25.5	8.8	4,790	47.3	6.6
Sep-23-2000	28	24.5	7.6	4,310	41.1	6.2
Sep-24-2000	27	24.5	7.6	4,220	36.3	5.3
Sep-25-2000	23	24.5	7.9	4,440	38.6	4.8
Sep-26-2000	19	25.5	7.4	4,280	39.5	4.0
Sep-27-2000	18	25.5	6.9	4,080	37.7	3.7
Sep-28-2000	18	25.0	7.2	4,030	33.7	3.3
Sep-29-2000	19	24.5	7.4	4,120	42.8	4.4
Sep-30-2000	20	25.0	6.8	4,040	53.7	5.8
Mean	30	24.5	6.8	4,070	49.0	
Total						242

Load Limitation for September 2000	(lbs)	350
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**Table 3. Continuous water monitoring at Station D
(Mud Slough North downstream of drainage discharges), September 2000.**

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
Sep-01-2000	53	22.5	2,880
Sep-02-2000	52	21.5	2,910
Sep-03-2000	61	22.0	2,650
Sep-04-2000	61	21.5	2,800
Sep-05-2000	62	21.5	2,830
Sep-06-2000	56	21.0	2,740
Sep-07-2000	60	22.0	2,520
Sep-08-2000	56	23.0	2,610
Sep-09-2000	57	23.0	2,550
Sep-10-2000	55	23.0	2,490
Sep-11-2000	55	23.0	2,270
Sep-12-2000	51	23.0	2,130
Sep-13-2000	52	23.5	1,940
Sep-14-2000	43	24.0	2,020
Sep-15-2000	43	24.0	1,890
Sep-16-2000	48	23.5	2,040
Sep-17-2000	54	24.0	1,720
Sep-18-2000	59	24.5	1,900
Sep-19-2000	54	25.0	2,170
Sep-20-2000	52	25.5	2,220
Sep-21-2000	50	24.0	2,490
Sep-22-2000	49	23.5	2,850
Sep-23-2000	51	22.5	2,850
Sep-24-2000	51	22.5	2,660
Sep-25-2000	49	22.5	2,540
Sep-26-2000	43	23.0	2,620
Sep-27-2000	42	23.0	2,450
Sep-28-2000	43	22.5	2,160
Sep-29-2000	46	22.0	2,060
Sep-30-2000	56	22.5	1,840
.	.	.	.

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

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
Sep-01-2000	160	21.9	1,190
Sep-02-2000	166	21.3	1,120
Sep-03-2000	160	21.9	1,120
Sep-04-2000	158	21.6	NA
Sep-05-2000	127	20.1	NA
Sep-06-2000	104	19.8	NA
Sep-07-2000	102	22.0	NA
Sep-08-2000	109	23.3	NA
Sep-09-2000	102	23.5	1,340
Sep-10-2000	128	23.2	1,170
Sep-11-2000	148	23.3	994
Sep-12-2000	130	23.2	1,010
Sep-13-2000	108	23.5	1,010
Sep-14-2000	106	23.6	822
Sep-15-2000	103	23.5	909
Sep-16-2000	122	23.1	764
Sep-17-2000	113	23.5	663
Sep-18-2000	110	24.1	678
Sep-19-2000	106	24.9	654
Sep-20-2000	94	25.5	709
Sep-21-2000	85	23.6	752
Sep-22-2000	81	22.4	724
Sep-23-2000	80	21.6	903
Sep-24-2000	83	21.7	936
Sep-25-2000	108	22.2	848
Sep-26-2000	118	22.8	686
Sep-27-2000	77	22.8	732
Sep-28-2000	67	21.5	786
Sep-29-2000	70	20.9	818
Sep-30-2000	81	21.8	793
	.	.	.

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

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
Sep-01-2000	641	22.4	1,170	3.9
Sep-02-2000	661	21.6	1,120	3.3
Sep-03-2000	715	22.2	1,000	2.0
Sep-04-2000	756	21.8	892	2.5
Sep-05-2000	724	21.5	884	2.3
Sep-06-2000	671	21.4	962	3.3
Sep-07-2000	630	22.1	1,020	3.3
Sep-08-2000	624	23.0	1,040	3.7
Sep-09-2000	602	23.1	1,090	3.7
Sep-10-2000	625	23.0	1,040	3.7
Sep-11-2000	663	23.1	1,010	3.6
Sep-12-2000	654	23.0	906	3.1
Sep-13-2000	662	23.0	858	2.6
Sep-14-2000	643	23.8	836	2.2
Sep-15-2000	594	23.7	843	1.9
Sep-16-2000	568	23.0	880	1.5
Sep-17-2000	568	23.2	940	1.6
Sep-18-2000	564	23.7	915	1.8
Sep-19-2000	550	24.4	892	1.7
Sep-20-2000	541	25.1	937	2.5
Sep-21-2000	504	24.9	984	2.7
Sep-22-2000	550	23.3	NA	NA
Sep-23-2000	560	21.9	NA	NA
Sep-24-2000	545	21.7	NA	NA
Sep-25-2000	571	22.0	NA	NA
Sep-26-2000	541	22.3	NA	NA
Sep-27-2000	557	22.3	NA	NA
Sep-28-2000	527	21.8	NA	NA
Sep-29-2000	509	21.4	NA	NA
Sep-30-2000	490	22.0	NA	NA

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

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
Jul-05-2000	63	.	.	4,260	NA	Selenium and boron analyses		
Jul-12-2000	64	.	.	4,020	120	from weekly grab		
Jul-19-2000	58	.	.	4,180	84	discontinued 2/1/00.		
Jul-26-2000	57	.	.	3,960	92	.	.	.
Aug-02-2000	63	.	.	3,740	190	.	.	.
Aug-09-2000	60	.	.	3,740	90	.	.	.
Aug-16-2000	51	.	.	3,650	NA	.	.	.
Aug-23-2000	61	.	.	3,690	100	.	.	.
Aug-30-2000	57	.	.	4,080	100	.	.	.
Sep-06-2000	46	.	.	3,700	76	.	.	.
Sep-13-2000	20	.	.	5,020	40	.	.	.
Sep-20-2000	20 e	.	.	4,350	42	.	.	.
Sep-27-2000	12	.	.	4,890	78	.	.	.

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

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
Jul-04-2000	61	.	.	4,360	.	42.6	.	7.4
Jul-11-2000	71	.	.	3,920	.	39.9	.	6.7
Jul-18-2000	59	.	.	3,900	.	40.2	.	6.7
Jul-25-2000	62	.	.	4,110	.	46.0	.	6.8
Aug-01-2000	57	.	.	3,940	.	40.3	.	6.8
Aug-08-2000	58	.	.	3,810	.	34.7	.	6.5
Aug-15-2000	52	.	.	3,620	.	26.1	.	6.6
Aug-22-2000	57	.	.	3,480	.	28.6	.	5.9
Aug-29-2000	62	.	.	3,740	.	41.6	.	6.1
Sep-05-2000	48	.	.	3,940	.	50.7	.	6.4
Sep-12-2000	23	.	.	4,140	.	52.0	.	6.6
Sep-19-2000	18 e	.	.	4,680	.	48.0	.	7.9
Sep-26-2000	11	.	.	4,440	.	55.0	.	7.7

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
Jul-06-2000	62	23.3	8.2	4,220	80	36.2	Selenium	7.2
Jul-13-2000	62	23.7	8.0	3,910	30	40.6	(dissolved)	6.5
Jul-20-2000	57	34.3	7.3	3,810	64	34.9	analyses	6.7
Jul-27-2000	55	26.7	8.3	4,110	37	48.4	discontinued	6.5
Aug-03-2000	60	27.4	7.6	3,760	52	39.4	1/15/2000.	6.5
Aug-10-2000	57	23.2	8.1	3,760	80	35.4	.	6.5
Aug-17-2000	49	26.6	8.1	3,700	36	27.4	.	6.7
Aug-24-2000	58	23.1	8.0	3,480	52	30.1	.	6.0
Aug-31-2000	55	23.4	7.7	4,010	71	45.5	.	6.5
Sep-07-2000	46	21.4	7.3	3,690	78	46.4	.	6.0
Sep-14-2000	18	23.7	8.0	3,140	53	33.3	.	5.0
Sep-21-2000	23	23.3	5.5	4,790	64	53.2	.	8.3
Sep-28-2000	18	24.9	6.2	4,130	33	35.2	.	7.4

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
Jul-06-2000	10	27.0	8.8	1,440	1.6	1.4
Jul-13-2000	6	22.6	8.4	1,680	1.0	1.7
Jul-20-2000	6	25.5	8.6	1,670	0.8	1.6
Jul-27-2000	6	28.4	8.7	1,530	1.0	1.5
Aug-03-2000	-5	26.8	8.3	2,580	0.7	2.2
Aug-10-2000	4	19.5	7.0	1,410	1.7	1.7
Aug-17-2000	7	27.4	8.2	1,080	1.0	1.0
Aug-24-2000	5	21.4	8.2	1,450	2.0	1.3
Aug-31-2000	2	23.8	8.4	1,300	<0.4	1.2
Sep-07-2000	14	22.7	8.5	689	<0.4	0.5
Sep-14-2000	25	25.8	8.1	654	<0.4	0.5
Sep-21-2000	27	23.1	6.7	620	<0.4	0.4
Sep-28-2000	25	25.7	8.0	816	0.7	0.6

++ 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
Jul-06-2000	72	24.5	7.1	3,790	29.9	6.2
Jul-13-2000	68	24.6	8.3	3,680	34.7	5.8
Jul-20-2000	63	25.9	8.4	3,520	31.7	6.0
Jul-27-2000	61	26.4	8.4	3,690	40.2	5.9
Aug-03-2000	55	28.5	8.1	3,760	42.6	6.3
Aug-10-2000	61	22.9	7.6	3,390	29.8	5.8
Aug-17-2000	56	26.7	8.2	3,180	20.3	5.6
Aug-24-2000	63	23.3	8.3	3,110	25.1	5.2
Aug-31-2000	57	24.1	8.3	3,870	45.1	6.2
Sep-07-2000	60	21.2	7.9	3,180	34.7	5.2
Sep-14-2000	43	24.3	7.6	2,120	20.7	3.1
Sep-21-2000	50	22.9	7.1	2,560	23.0	3.9
Sep-28-2000	43	25.3	7.8	2,240	14.7	3.3

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
Jul-06-2000	252	21.8	7.5	874	1.1	0.4
Jul-13-2000	215	22.9	7.9	976	0.9	0.5
Jul-20-2000	237	22.7	8.0	918	0.9	0.6
Jul-27-2000	179	24.9	8.7	931	1.2	0.5
Aug-03-2000	184	26.2	7.8	916	0.8	0.6
Aug-10-2000	169	22.4	8.1	927	1.1	0.5
Aug-17-2000	155	23.8	7.9	955	0.5	0.4
Aug-24-2000	169	21.9	8.1	1,020	0.7	0.6
Aug-31-2000	128	21.7	8.1	1,060	<0.4	0.5
Sep-07-2000	102	20.2	7.8	1,280	<0.4	0.6
Sep-14-2000	106	22.9	7.9	1,140	<0.4	0.5
Sep-21-2000	85	21.5	7.7	1,320	<0.4	0.6
Sep-28-2000	67	21.4	8.0	1,300	0.9	0.6

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
Jul-06-2000	.	21.5	8.0	824	0.7	0.4
Jul-13-2000	.	23.1	8.1	911	0.7	0.4
Jul-20-2000	.	22.0	6.3	990	0.8	0.6
Jul-27-2000	.	25.4	7.8	1,070	1.0	0.5
Aug-03-2000	.	26.5	7.7	971	0.7	0.6
Aug-10-2000	.	23.3	8.2	910	0.8	0.4
Aug-17-2000	.	23.7	7.9	1,070	0.5	0.4
Aug-24-2000	.	21.8	8.1	978	0.5	0.4
Aug-31-2000	.	21.1	7.7	1,060	<0.4	0.5
Sep-07-2000	.	19.6	7.5	1,030	<0.4	0.4
Sep-14-2000	.	22.6	7.0	1,030	<0.4	0.4
Sep-21-2000	.	22.2	6.9	1,320	0.6	0.6
Sep-28-2000	.	21.3	7.1	1,190	0.8	0.5

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

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
.
.	Data no longer collected regularly for this station. Contact CVRWQCB for details.					

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
Jul-05-2000	10	.	.	427	1.3	0.3
Jul-12-2000	15	.	.	655	1.0	0.6
Jul-19-2000	5	.	.	466	1.3	0.4
Jul-26-2000	5	.	.	453	1.3	0.3
Aug-02-2000	20	.	.	402	0.8	0.3
Aug-09-2000	10	.	.	385	0.9	0.2
Aug-16-2000	0	.	.	529	1.4	0.7
Aug-23-2000	0	.	.	1,570	0.9	2.8
Aug-30-2000	35	.	.	488	0.5	0.3
Sep-06-2000	35	.	.	396	<0.4	0.3
Sep-13-2000	140	.	.	457	0.6	0.3
Sep-20-2000	215	.	.	453	1.2	0.2
Sep-27-2000	245	.	.	368	0.8	0.2

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
Jul-05-2000	25	.	.	424	1.0	0.3
Jul-12-2000	25	.	.	406	0.7	0.2
Jul-19-2000	15	.	.	404	1.1	0.2
Jul-26-2000	15	.	.	408	1.2	0.2
Aug-02-2000	15	.	.	413	0.8	0.3
Aug-09-2000	15	.	.	373	0.9	0.2
Aug-16-2000	15	.	.	392	0.8	0.2
Aug-23-2000	25	.	.	368	0.8	0.2
Aug-30-2000	70	.	.	439	<0.4	0.3
Sep-06-2000	90	.	.	355	<0.4	0.2
Sep-13-2000	140	.	.	366	0.7	0.2
Sep-20-2000	150	.	.	362	0.9	0.2
Sep-27-2000	190	.	.	490	1.0	0.2

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
Jul-05-2000	10	.	.	1,260	2.2	1.3
Jul-12-2000	10	.	.	1,310	2.2	1.5
Jul-19-2000	10	.	.	1,170	2.3	1.3
Jul-26-2000	10	.	.	1,320	2.6	1.5
Aug-02-2000	10	.	.	1,190	1.8	1.3
Aug-09-2000	10	.	.	1,020	1.8	1.0
Aug-16-2000	10	.	.	1,220	1.8	1.1
Aug-23-2000	10	.	.	1,250	1.7	1.4
Aug-30-2000	10	.	.	1,060	0.8	1.0
Sep-06-2000	130	.	.	452	0.4	0.3
Sep-13-2000	150	.	.	462	0.6	0.3
Sep-20-2000	150	.	.	388	0.8	0.2
Sep-27-2000	150	.	.	467	1.8	0.3

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
Jul-05-2000	22	.	.	1,290	2.5	2.1
Jul-12-2000	1	.	.	1,070	1.7	1.4
Jul-19-2000	9	.	.	924	1.8	1.2
Jul-26-2000	5	.	.	1,050	2.0	1.2
Aug-02-2000	46	.	.	1,050	1.8	1.7
Aug-09-2000	34	.	.	1,110	1.9	1.6
Aug-16-2000	20	.	.	903	1.4	1.0
Aug-23-2000	38	.	.	1,200	1.8	1.9
Aug-30-2000	8	.	.	953	0.7	1.0
Sep-06-2000	6	.	.	583	0.5	0.5
Sep-13-2000	41	.	.	481	0.5	0.3
Sep-20-2000	69	.	.	466	1.0	0.3
Sep-27-2000	83	.	.	443	2.0	0.3

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
Jul-06-2000	754	21.3	8.0	1,040	3.4	0.9
Jul-13-2000	691	24.0	9.5	1,120	3.6	0.9
Jul-20-2000	651	25.6	6.9	1,160	3.6	1.0
Jul-27-2000	633	24.4	6.6	1,220	4.9	1.0
Aug-03-2000	636	28.3	8.0	1,140	3.3	1.0
Aug-10-2000	633	22.9	8.0	1,070	3.1	0.9
Aug-17-2000	611	26.8	8.2	1,160	2.2	0.9
Aug-24-2000	620	23.7	8.1	1,050	2.7	0.8
Aug-31-2000	623	20.1	6.8	1,080	3.4	0.9
Sep-07-2000	630	19.0	7.1	1,070	3.3	0.8
Sep-14-2000	643	24.2	7.8	844	1.6	0.5
Sep-21-2000	504	22.6	7.1	1,040	2.8	0.7
Sep-28-2000	527	21.1	5.8	916	2.1	0.6

Table 18. Summary of fathead minnow (*Pimephales promelas*) larvae survival in 7-day tests using water samples collected from October 1999 to September 2000. 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	%	%	%	%	%	%
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
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

Table 19. Summary of fathead minnow (*Pimephales promelas*) larvae growth in 7-day tests using water samples collected from October 1999 to September 2000. 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
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
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

Table 20. Summary of *Daphnia magna* survival in 7-day tests using water samples collected from October 1999 to September 2000. 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	%	%	%	%	%	%
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
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

Table 21. Summary of *Daphnia magna* reproduction in 7-day tests using water samples collected from October 1999 to September 2000. 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
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
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

Table 22. Summary of *Selenastrum capricornutum* growth in 4-day tests using water samples collected from October 1999 to September 2000. 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
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 ††††
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

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

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
Jul-10-2000	42	1.7	31	1.0	0.4
Jul-12-2000	35	1.3	33	1.0	0.4
Jul-14-2000	32	0.9	30	0.9	<0.4
Aug-14-2000	24	1.2	26	0.6	<0.4
Aug-16-2000	23	1.0	20	0.6	<0.4
Aug-18-2000	28	0.8	24	1.6	<0.4
Sep-11-2000	52	0.6	32	0.7	<0.4
Sep-13-2000	45	0.5	21	0.6	<0.4
Sep-15-2000	40	0.8	17	0.7	<0.4

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

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
Jul-10-2000	1,350	250	1,100	133	18
Jul-12-2000	1,200	271	1,130	137	34
Jul-14-2000	1,200	325	1,090	142	18
Aug-14-2000	1,130	289	1,110	110	23
Aug-16-2000	1,050	208	923	118	17
Aug-18-2000	1,210	175	1,120	115	15
Sep-11-2000	1,110	58	675	101	23
Sep-13-2000	1,090	55	505	135	22
Sep-15-2000	1,050	71	508	136	36

Table 25. Summary of total suspended solids concentrations in grab water samples collected from July 2000 to September 2000.

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
Jul-10-2000	17	27	23	31	3
Jul-12-2000	9	43	29	42	5
Jul-14-2000	38	26	41	58	3
Aug-14-2000	17	39	19	33	5
Aug-16-2000	17	22	24	43	5
Aug-18-2000	44	16	61	86	18
Sep-11-2000	59	80	85	32	12
Sep-13-2000	39	35	58	80	16
Sep-15-2000	49	10	67	67	19

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
USBRR	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
(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). At 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%) 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.