

GRASSLAND BYPASS PROJECT

QUARTERLY DATA REPORT

July, August and September 2008

April 2009

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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PRELIMINARY RESULTS

Table 1. Continuous water monitoring at Station A (inflow to San Luis Drain), July, August, September 2008.

See Table 33 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	July	July	August	August	September	September
Day 1	19	3,620	20	3,740	19	2,520
Day 2	23	3,830	17	3,780	22	2,630
Day 3	21	3,800	13	4,210	17	2,850
Day 4	23	3,640	12	4,080	14	3,100
Day 5	23	NA	14	3,840	12	3,050
Day 6	14	NA	16	3,510	11	3,490
Day 7	14	4,200	16	3,320	12	3,630
Day 8	18	NA	15	3,360	11	3,370
Day 9	18	3,430	13	3,040	10	3,730
Day 10	19	4,420	12	2,960	10	4,080
Day 11	22	3,200	11	3,150	7	4,150
Day 12	22	NA	10	3,260	9	4,170
Day 13	19	NA	12	2,740	7	4,430
Day 14	19	4,190	12	2,770	4	4,970
Day 15	13	4,200	14	2,840	4	5,350
Day 16	15	4,140	14	3,270	5	5,160
Day 17	16	4,140	10	3,460	4	5,330
Day 18	13	3,840	11	3,960	15	4,670
Day 19	13	NA	8	3,640	11	4,160
Day 20	14	NA	10	3,610	10	3,840
Day 21	14	4,200	11	3,560	11	3,580
Day 22	21	NA	11	3,660	11	3,650
Day 23	21	3,790	12	4,190	9	3,590
Day 24	19	3,720	12	4,030	8	3,650
Day 25	19	NA	11	3,970	9	3,880
Day 26	14	NA	11	4,060	9	3,920
Day 27	14	NA	11	3,800	9	3,980
Day 28	14	4,700	12	3,340	9	4,140
Day 29	13	NA	14	3,260	10	4,130
Day 30	13	4,800	13	3,100	10	3,950
Day 31	17	4,880	20	2,760	.	.
Mean	17.2	4,040	12.9	3,490	10.4	3,910

Data logger stopped collecting data July 4th. Data Estimated.

PRELIMINARY RESULTS

Table 2a. Continuous water monitoring at Stations B and B2 (San Luis Drain Terminus), July 2008.

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	San Luis Drain Outlet Flow	Temperature	Boron	Specific Conductance	Selenium (total)	Selenium (total) Load
DATA SOURCE	SLDMWA*	SLDMWA	CVRWQCB	SLDMWA	CVRWQCB	Computed
UNITS	cfs	°C	mg/L	µS/cm	µg/L	lbs
Jul-01-2008	19	26.7	N/A	3,650	26.6	2.7
Jul-02-2008	19	26.6	N/A	4,000	26.5	2.8
Jul-03-2008	22	26.6	N/A	3,990	26.9	3.2
Jul-04-2008	21	26.9	N/A	4,030	29.5	3.4
Jul-05-2008	22	26.8	N/A	4,200	33.6	4.0
Jul-06-2008	21	27.0	N/A	4,230	31.5	3.5
Jul-07-2008	18	27.5	N/A	4,240	32.3	3.1
Jul-08-2008	19	29.0	N/A	4,300	32.6	3.3
Jul-09-2008	20	30.0	N/A	4,330	30.6	3.4
Jul-10-2008	19	30.5	N/A	4,450	20.9	2.2
Jul-11-2008	20	29.5	N/A	4,040	30.6	3.2
Jul-12-2008	20	29.2	N/A	4,570	38.2	4.0
Jul-13-2008	21	28.8	N/A	4,340	30.8	3.4
Jul-14-2008	22	29.0	N/A	3,910	22.6	2.6
Jul-15-2008	19	28.7	N/A	4,070	23.9	2.5
Jul-16-2008	18	28.2	N/A	3,860	19.2	1.9
Jul-17-2008	18	28.0	N/A	3,630	16.1	1.5
Jul-18-2008	16	27.5	N/A	3,740	15.1	1.3
Jul-19-2008	16	27.4	N/A	3,410	16.6	1.4
Jul-20-2008	16	27.2	N/A	3,640	21.0	1.8
Jul-21-2008	16	26.8	N/A	4,120	17.5	1.5
Jul-22-2008	16	26.1	N/A	4,070	15.1	1.3
Jul-23-2008	16	26.0	N/A	3,900	14.7	1.3
Jul-24-2008	18	26.8	N/A	3,860	17.1	1.6
Jul-25-2008	18	27.3	7.6	4,520	23.0	2.3
Jul-26-2008	18	27.2	7.9	4,460	22.1	2.1
Jul-27-2008	17	27.0	7.8	4,310	25.4	2.3
Jul-28-2008	16	27.1	7.6	4,440	25.0	2.2
Jul-29-2008	18	27.2	7.3	4,460	25.9	2.5
Jul-30-2008	16	26.6	7.1	4,220	27.8	2.4
Jul-31-2008	16	27.1	7.4	4,240	27.5	2.4
Mean	18	27.6	7.5	4,100	24.7	2.5
Total Acre-feet	1,130					
Total (lbs)						77

Load Limitation for July 2008 (lbs)

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PRELIMINARY RESULTS

Table 2a. Continuous water monitoring at Stations B and B2 (San Luis Drain Terminus), August 2008.

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	San Luis Drain Outlet Flow	Temperature	Boron	Specific Conductance	Selenium (total)	Selenium (total) Load
DATA SOURCE	SLDMWA*	SLDMWA	CVRWQCB	SLDMWA	CVRWQCB	Computed
UNITS	cfs	°C	mg/L	µS/cm	µg/L	lbs
Aug-01-2008	16	27.1	7.3	4,100	28.1	2.4
Aug-02-2008	19	27.1	7.7	4,650	32.3	3.2
Aug-03-2008	17	26.9	7.3	4,710	35.4	3.2
Aug-04-2008	12	26.7	7.6	5,060	34.3	2.2
Aug-05-2008	11	26.5	7.7	5,180	36.8	2.2
Aug-06-2008	12	27.1	6.8	5,120	28.1	1.8
Aug-07-2008	14	27.3	6.9	4,340	29.0	2.2
Aug-08-2008	14	27.2	7.2	4,110	25.6	1.9
Aug-09-2008	14	26.9	6.4	3,970	21.0	1.6
Aug-10-2008	12	26.6	8.0	3,930	31.0	2.0
Aug-11-2008	11	26.5	7.8	4,780	27.6	1.6
Aug-12-2008	10	27.1	7.6	4,610	26.3	1.4
Aug-13-2008	9	27.8	7.7	4,570	23.0	1.2
Aug-14-2008	10	28.8	6.9	4,390	20.5	1.1
Aug-15-2008	11	28.7	7.1	4,090	20.5	1.2
Aug-16-2008	11	28.7	6.3	3,970	17.6	1.1
Aug-17-2008	12	28.3	6.3	3,800	18.8	1.2
Aug-18-2008	9	27.7	5.4	3,790	17.4	0.9
Aug-19-2008	9	26.9	4.8	3,440	17.1	0.8
Aug-20-2008	8	26.3	5.2	3,300	17.5	0.7
Aug-21-2008	8	27.2	5.4	3,400	17.9	0.7
Aug-22-2008	9	27.3	5.0	3,570	16.6	0.8
Aug-23-2008	9	27.4	4.4	3,310	15.1	0.7
Aug-24-2008	10	27.7	4.5	3,020	14.6	0.8
Aug-25-2008	11	27.9	5.4	3,120	13.6	0.8
Aug-26-2008	10	27.0	5.8	3,480	17.0	0.9
Aug-27-2008	10	26.8	6.0	3,800	21.8	1.1
Aug-28-2008	10	27.4	6.1	4,180	23.7	1.3
Aug-29-2008	10	27.0	6.2	3,480	18.3	1.0
Aug-30-2008	11	27.6	5.9	4,200	22.0	1.4
Aug-31-2008	11	26.7	6.1	4,100	24.9	1.5
Mean	11	27.3	6.4	4,050	23.0	1.4
Total Acre-feet	690					
Total (lbs)						45

Load Limitation for August 2008 (lbs)	180
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PRELIMINARY RESULTS

Table 2a. Continuous water monitoring at Stations B and B2 (San Luis Drain Terminus), September 2008.

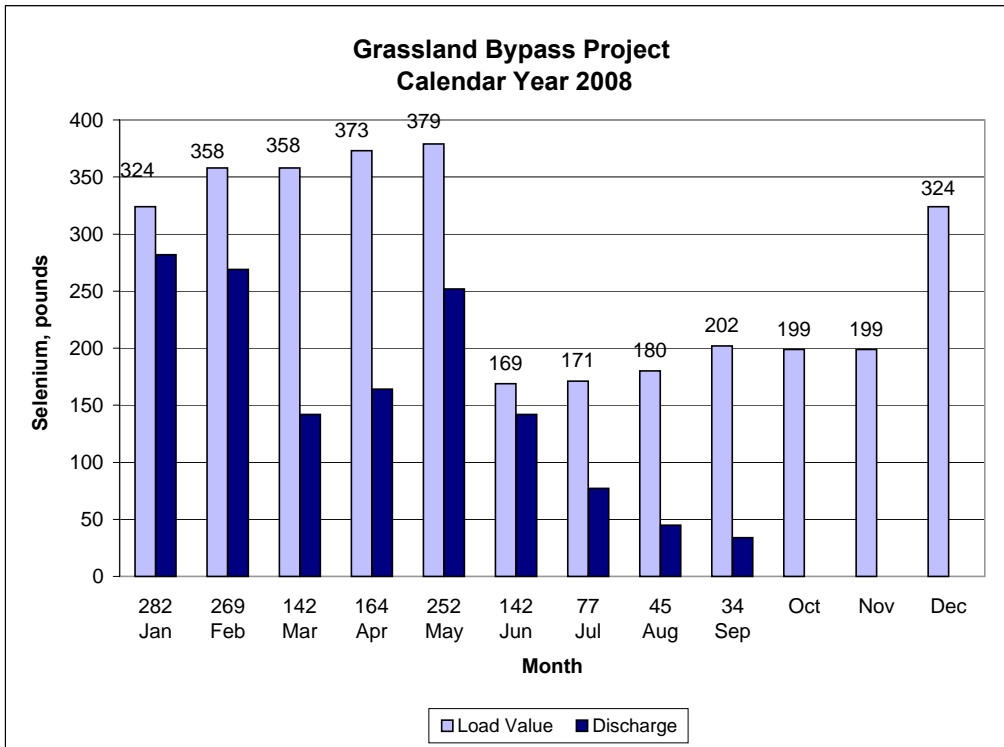
See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	San Luis Drain Outlet Flow	Temperature	Boron	Specific Conductance	Selenium (total)	Selenium (total) Load
DATA SOURCE	SLDMWA*	SLDMWA	CVRWQCB	SLDMWA	CVRWQCB	Computed
UNITS	cfs	°C	mg/L	µS/cm	µg/L	lbs
Sep-01-2008	16	23.9	6.6	4,530	26.2	2.3
Sep-02-2008	18	22.8	6.3	4,580	25.5	2.5
Sep-03-2008	20	24.1	5.5	4,430	26.4	2.9
Sep-04-2008	17	24.9	4.7	3,770	20.6	1.9
Sep-05-2008	12	25.1	4.8	3,480	13.4	0.9
Sep-06-2008	11	25.6	4.9	3,030	16.3	1.0
Sep-07-2008	10	26.5	4.3	3,090	14.5	0.8
Sep-08-2008	10	26.3	4.2	2,880	11.8	0.6
Sep-09-2008	9	25.6	4.5	2,720	13.9	0.7
Sep-10-2008	10	25.0	4.2	2,940	12.3	0.7
Sep-11-2008	9	25.1	4.5	2,810	12.7	0.6
Sep-12-2008	9	25.2	4.8	3,040	13.8	0.6
Sep-13-2008	8	24.7	5.0	3,250	14.3	0.6
Sep-14-2008	9	24.5	4.8	3,380	14.2	0.7
Sep-15-2008	7	24.7	4.8	3,350	16.2	0.6
Sep-16-2008	6	24.5	5.6	3,330	18.4	0.6
Sep-17-2008	6	24.3	6.0	3,630	18.2	0.6
Sep-18-2008	7	23.4	5.5	3,900	18.5	0.7
Sep-19-2008	13	23.4	5.9	3,750	16.5	1.2
Sep-20-2008	13	23.2	7.7	3,520	19.0	1.4
Sep-21-2008	12	23.2	8.3	4,020	19.3	1.2
Sep-22-2008	13	23.2	8.6	4,230	16.0	1.1
Sep-23-2008	14	22.7	9.9	4,410	19.3	1.5
Sep-24-2008	13	22.8	10.0	4,670	23.0	1.6
Sep-25-2008	12	23.5	9.4	4,980	24.1	1.5
Sep-26-2008	12	23.9	7.5	4,710	21.2	1.4
Sep-27-2008	12	24.6	7.1	4,070	15.6	1.0
Sep-28-2008	12	24.9	6.2	3,700	13.1	0.8
Sep-29-2008	13	24.7	6.1	3,450	12.5	0.9
Sep-30-2008	13	24.9	5.9	3,480	11.4	0.8
.
Mean	12	24.4	6.1	3,700	17.3	1.1
Total Acre-feet	690					
Total (lbs)						34

Load Limitation for September 2008 (lbs)	202
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PRELIMINARY RESULTS

Figure 2b. Monthly selenium discharges from the terminus of the San Luis Drain into Mud Slough compared to load values.



PRELIMINARY RESULTS

Table 3. Continuous water monitoring at Station D

(Mud Slough North downstream of drainage discharges), July 2008.

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	USGS	USGS	USGS
UNITS	cfs	°C	µS/cm
Jul-01-2008	18	26.0	3,520
Jul-02-2008	18	25.8	3,860
Jul-03-2008	20	26.1	3,750
Jul-04-2008	19	25.9	3,870
Jul-05-2008	20	26.0	4,230
Jul-06-2008	19	26.9	4,390
Jul-07-2008	16	27.8	4,440
Jul-08-2008	17	28.7	4,380
Jul-09-2008	19	29.1	4,080
Jul-10-2008	19	29.4	4,110
Jul-11-2008	22	28.8	3,380
Jul-12-2008	19	28.2	4,320
Jul-13-2008	19	28.2	4,290
Jul-14-2008	20	28.4	3,980
Jul-15-2008	20	27.7	3,690
Jul-16-2008	19	27.2	3,370
Jul-17-2008	16	27.3	3,490
Jul-18-2008	12	26.7	3,780
Jul-19-2008	12	27.0	3,600
Jul-20-2008	12	26.5	3,810
Jul-21-2008	16	26.0	4,030
Jul-22-2008	16	25.4	3,550
Jul-23-2008	16	25.6	3,660
Jul-24-2008	18	26.3	3,740
Jul-25-2008	18	26.4	4,290
Jul-26-2008	18	26.7	4,150
Jul-27-2008	20	26.6	3,410
Jul-28-2008	19	26.2	3,330
Jul-29-2008	16	25.9	3,390
Jul-30-2008	20	25.9	2,970
Jul-31-2008	17	26.3	3,190
Mean	18	26.9	3,810

PRELIMINARY RESULTS

**Table 3. Continuous water monitoring at Station D
(Mud Slough North downstream of drainage discharges), August 2008.**

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	USGS	USGS	USGS
UNITS	cfs	°C	µS/cm
Aug-01-2008	19	25.9	3,620
Aug-02-2008	21	26.3	3,990
Aug-03-2008	21	26.3	3,930
Aug-04-2008	14	25.9	4,690
Aug-05-2008	14	25.7	4,860
Aug-06-2008	15	26.3	4,950
Aug-07-2008	18	26.6	4,170
Aug-08-2008	17	26.4	3,900
Aug-09-2008	17	26.1	3,770
Aug-10-2008	15	25.9	3,720
Aug-11-2008	13	26.3	4,580
Aug-12-2008	12	26.7	4,450
Aug-13-2008	11	27.4	4,430
Aug-14-2008	13	28.1	4,300
Aug-15-2008	14	28.0	4,030
Aug-16-2008	14	28.1	3,840
Aug-17-2008	21	27.6	2,700
Aug-18-2008	15	26.6	2,860
Aug-19-2008	11	25.8	3,230
Aug-20-2008	10	25.6	3,140
Aug-21-2008	10	26.6	3,240
Aug-22-2008	11	26.6	3,380
Aug-23-2008	11	26.8	3,200
Aug-24-2008	12	26.9	2,930
Aug-25-2008	12	27.0	2,980
Aug-26-2008	11	26.0	3,290
Aug-27-2008	11	26.1	3,490
Aug-28-2008	18	26.3	2,720
Aug-29-2008	15	27.1	3,220
Aug-30-2008	16	27.1	3,160
Aug-31-2008	17	25.3	2,790
Mean	14	26.6	3,660

PRELIMINARY RESULTS

Table 3. Continuous water monitoring at Station D

(Mud Slough North downstream of drainage discharges), September 2008.

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	USGS	USGS	USGS
UNITS	cfs	°C	µS/cm
Sep-01-2008	17	22.7	4,020
Sep-02-2008	18	22.6	4,190
Sep-03-2008	20	23.4	4,030
Sep-04-2008	17	24.2	3,370
Sep-05-2008	13	24.8	3,050
Sep-06-2008	14	25.3	2,330
Sep-07-2008	13	26.1	2,260
Sep-08-2008	17	25.2	1,790
Sep-09-2008	18	24.5	1,590
Sep-10-2008	15	23.8	2,010
Sep-11-2008	13	23.9	2,080
Sep-12-2008	16	24.1	1,860
Sep-13-2008	16	23.2	1,850
Sep-14-2008	16	23.3	2,120
Sep-15-2008	17	23.5	1,700
Sep-16-2008	9	23.4	2,210
Sep-17-2008	9	23.0	2,520
Sep-18-2008	11	22.1	2,560
Sep-19-2008	20	22.2	2,690
Sep-20-2008	21	22.4	2,360
Sep-21-2008	19	22.2	2,630
Sep-22-2008	22	21.8	2,800
Sep-23-2008	27	21.6	2,500
Sep-24-2008	20	22.3	2,800
Sep-25-2008	23	22.9	2,690
Sep-26-2008	27	23.4	2,450
Sep-27-2008	25	23.9	2,260
Sep-28-2008	31	23.9	1,990
Sep-29-2008	38	24.0	1,760
Sep-30-2008	44	23.9	1,700
.	.	.	.
Mean	20	23.5	2,470

PRELIMINARY RESULTS

Table 4. Continuous water monitoring at Station F (Salt Slough at Highway 165), July 2008.

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	usgs	usgs	usgs
UNITS	cfs	°C	µS/cm
Jul-01-2008	108	25.4	1,220
Jul-02-2008	106	25.2	1,310
Jul-03-2008	121	25.6	1,300
Jul-04-2008	125	25.3	1,270
Jul-05-2008	107	25.2	1,300
Jul-06-2008	121	26.3	1,240
Jul-07-2008	130	27.7	1,190
Jul-08-2008	148	28.8	1,100
Jul-09-2008	136	28.8	1,090
Jul-10-2008	110	28.8	1,240
Jul-11-2008	108	27.9	1,250
Jul-12-2008	101	27.3	1,300
Jul-13-2008	106	27.3	1,300
Jul-14-2008	111	27.9	1,220
Jul-15-2008	104	27.2	1,180
Jul-16-2008	112	26.2	1,160
Jul-17-2008	108	26.7	1,180
Jul-18-2008	109	25.9	1,140
Jul-19-2008	106	26.2	1,070
Jul-20-2008	103	25.6	1,080
Jul-21-2008	91	24.1	1,130
Jul-22-2008	69	24.3	1,200
Jul-23-2008	77	25.2	1,290
Jul-24-2008	94	25.8	1,270
Jul-25-2008	88	25.7	1,270
Jul-26-2008	87	26.1	1,270
Jul-27-2008	77	26.4	1,280
Jul-28-2008	87	25.6	1,210
Jul-29-2008	81	25.3	1,270
Jul-30-2008	73	25.3	1,290
Jul-31-2008	79	26.0	1,290
Mean	103	26.3	1,220

PRELIMINARY RESULTS

Table 4. Continuous water monitoring at Station F (Salt Slough at Highway 165), August 2008.

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	usgs	usgs	usgs
UNITS	cfs	°C	µS/cm
Aug-01-2008	91	25.3	1,200
Aug-02-2008	103	25.6	1,180
Aug-03-2008	118	25.9	1,040
Aug-04-2008	91	25.6	1,090
Aug-05-2008	90	25.7	1,150
Aug-06-2008	82	25.8	1,080
Aug-07-2008	85	26.2	1,100
Aug-08-2008	88	26.0	1,050
Aug-09-2008	81	25.2	1,040
Aug-10-2008	71	25.1	1,150
Aug-11-2008	82	25.9	1,130
Aug-12-2008	92	26.7	1,090
Aug-13-2008	80	27.4	1,110
Aug-14-2008	61	28.0	1,180
Aug-15-2008	63	27.6	1,230
Aug-16-2008	80	27.4	1,170
Aug-17-2008	87	26.2	1,130
Aug-18-2008	78	25.4	1,160
Aug-19-2008	57	24.5	1,210
Aug-20-2008	56	24.8	1,290
Aug-21-2008	49	26.5	1,330
Aug-22-2008	51	26.3	1,390
Aug-23-2008	65	26.3	1,360
Aug-24-2008	63	26.3	1,340
Aug-25-2008	64	26.4	1,290
Aug-26-2008	55	25.5	1,300
Aug-27-2008	41	25.9	1,400
Aug-28-2008	42	26.5	1,490
Aug-29-2008	62	27.1	1,350
Aug-30-2008	60	27.4	1,340
Aug-31-2008	47	24.5	1,370
Mean	72	26.1	1,220

PRELIMINARY RESULTS

Table 4. Continuous water monitoring at Station F (Salt Slough at Highway 165), September 2008.

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	Specific Conductance
DATA SOURCE	USGS	USGS	USGS
UNITS	cfs	°C	µS/cm
Sep-01-2008	50	21.4	1,380
Sep-02-2008	44	22.4	1,360
Sep-03-2008	34	24.1	1,380
Sep-04-2008	32	24.9	1,470
Sep-05-2008	28	24.9	NA
Sep-06-2008	31	25.7	NA
Sep-07-2008	37	26.5	NA
Sep-08-2008	35	25.2	1,510
Sep-09-2008	39	24.0	1,500
Sep-10-2008	45	22.8	1,320
Sep-11-2008	41	23.7	1,300
Sep-12-2008	38	24.4	1,370
Sep-13-2008	41	23.2	1,440
Sep-14-2008	42	23.0	1,420
Sep-15-2008	48	23.5	1,340
Sep-16-2008	46	23.5	1,290
Sep-17-2008	35	22.8	1,290
Sep-18-2008	33	21.6	1,360
Sep-19-2008	39	21.7	1,430
Sep-20-2008	56	21.8	1,380
Sep-21-2008	56	21.8	1,330
Sep-22-2008	62	21.4	1,310
Sep-23-2008	58	21.4	1,280
Sep-24-2008	56	22.3	1,350
Sep-25-2008	57	23.0	1,350
Sep-26-2008	55	23.4	1,340
Sep-27-2008	49	23.9	1,400
Sep-28-2008	51	23.9	1,500
Sep-29-2008	59	23.8	1,480
Sep-30-2008	54	23.7	1,400
.	.	.	.
Mean	45	23.3	1,380

PRELIMINARY RESULTS

Table 5. Continuous water monitoring at Station N (San Joaquin River at Crow's Landing), July 2008.

See Table 33 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
Jul-01-2008	304	25.0	1,410	1.5
Jul-02-2008	286	25.0	1,370	1.5
Jul-03-2008	297	25.1	1,400	1.7
Jul-04-2008	286	24.8	1,580	2.0
Jul-05-2008	307	25.0	1,610	2.1
Jul-06-2008	311	26.3	1,440	1.9
Jul-07-2008	321	27.6	1,370	2.2
Jul-08-2008	293	29.0	1,380	2.0
Jul-09-2008	275	28.8	1,390	1.8
Jul-10-2008	264	28.5	1,390	2.1
Jul-11-2008	259	27.6	1,400	2.2
Jul-12-2008	270	27.0	1,480	2.0
Jul-13-2008	312	26.7	1,350	1.7
Jul-14-2008	300	27.3	1,320	1.7
Jul-15-2008	306	26.5	1,280	2.1
Jul-16-2008	307	26.0	1,150	1.6
Jul-17-2008	309	26.4	1,160	1.5
Jul-18-2008	289	25.8	1,290	1.5
Jul-19-2008	297	26.4	1,330	1.3
Jul-20-2008	321	25.5	1,180	1.0
Jul-21-2008	312	24.7	1,170	0.9
Jul-22-2008	299	24.6	1,080	1.0
Jul-23-2008	257	25.5	1,210	1.2
Jul-24-2008	253	25.9	1,320	1.1
Jul-25-2008	265	26.0	1,310	1.1
Jul-26-2008	272	26.3	1,310	1.2
Jul-27-2008	300	26.2	1,300	1.3
Jul-28-2008	289	25.5	1,300	1.3
Jul-29-2008	276	25.5	1,290	1.3
Jul-30-2008	362	25.0	1,250	1.4
Jul-31-2008	426	25.7	890	0.9
Mean	298	26.2	1,310	1.6

PRELIMINARY RESULTS

Table 5. Continuous water monitoring at Station N (San Joaquin River at Crow's Landing), August 2008.

See Table 33 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
Aug-01-2008	358	25.1	1,030	0.9
Aug-02-2008	354	25.5	1,140	0.9
Aug-03-2008	366	25.6	1,140	1.4
Aug-04-2008	384	25.2	1,120	1.5
Aug-05-2008	363	25.0	1,010	1.1
Aug-06-2008	330	25.0	1,040	1.0
Aug-07-2008	310	25.2	1,100	1.1
Aug-08-2008	355	24.7	1,190	1.2
Aug-09-2008	419	24.5	940	0.9
Aug-10-2008	421	24.5	900	0.8
Aug-11-2008	429	24.9	890	0.8
Aug-12-2008	412	25.6	900	0.6
Aug-13-2008	445	26.1	880	0.7
Aug-14-2008	403	27.0	880	0.9
Aug-15-2008	392	26.9	930	0.7
Aug-16-2008	396	27.1	920	0.7
Aug-17-2008	426	26.4	910	0.7
Aug-18-2008	468	25.6	890	0.7
Aug-19-2008	448	24.6	840	0.8
Aug-20-2008	425	24.4	840	0.5
Aug-21-2008	407	25.6	860	0.6
Aug-22-2008	395	25.4	880	0.5
Aug-23-2008	410	25.5	870	0.5
Aug-24-2008	440	25.6	880	0.5
Aug-25-2008	430	25.9	860	0.7
Aug-26-2008	435	25.0	880	0.5
Aug-27-2008	421	25.1	860	0.6
Aug-28-2008	394	25.6	870	0.5
Aug-29-2008	382	26.4	990	0.6
Aug-30-2008	390	26.5	1,040	0.7
Aug-31-2008	443	24.7	970	0.9
Mean	402	25.5	950	0.8

PRELIMINARY RESULTS

Table 5. Continuous water monitoring at Station N (San Joaquin River at Crow's Landing), September 2008.

See Table 33 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-01-2008	438	22.3	930	0.7
Sep-02-2008	423	22.4	890	0.8
Sep-03-2008	416	23.6	930	0.9
Sep-04-2008	419	24.2	970	1.1
Sep-05-2008	409	24.5	970	1.3
Sep-06-2008	415	25.0	930	0.9
Sep-07-2008	401	25.4	900	1.2
Sep-08-2008	412	24.8	960	0.8
Sep-09-2008	419	24.1	910	0.7
Sep-10-2008	425	23.5	880	0.7
Sep-11-2008	415	23.7	880	0.7
Sep-12-2008	415	23.9	890	0.7
Sep-13-2008	404	23.3	890	0.6
Sep-14-2008	419	23.1	910	<0.4
Sep-15-2008	454	23.4	840	<0.4
Sep-16-2008	319	23.4	960	0.6
Sep-17-2008	256	22.6	1,200	<0.4
Sep-18-2008	238	21.6	1,270	0.4
Sep-19-2008	227	21.7	1,250	0.7
Sep-20-2008	225	21.8	1,240	0.8
Sep-21-2008	272	21.8	1,270	1.0
Sep-22-2008	298	21.6	1,080	0.9
Sep-23-2008	306	21.5	1,020	0.9
Sep-24-2008	296	22.2	1,050	1.9
Sep-25-2008	280	22.6	1,060	0.9
Sep-26-2008	266	23.0	1,130	0.9
Sep-27-2008	267	23.6	1,170	1.1
Sep-28-2008	252	23.6	1,220	1.1
Sep-29-2008	263	23.5	1,240	1.0
Sep-30-2008	278	23.4	1,160	0.9
.
Mean	344	23.2	1,030	0.9

PRELIMINARY RESULTS

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

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	.	.	Specific Conductance	Total Suspended Solids	.	.	.
DATA SOURCE	SLDMWA	.	.	CVRWQCB	CVRWQCB	.	.	.
UNITS	cfs	.	.	µS/cm	mg/L	.	.	.
Jul-02-2008	23	.	.	3,920	190	.	.	.
Jul-09-2008	18	.	.	3,850	218	.	.	.
Jul-16-2008	15	.	.	4,120	180	.	.	.
Jul-23-2008	21	.	.	3,510	175	.	.	.
Jul-30-2008	13	.	.	4,760	154	.	.	.
Aug-06-2008	16	.	.	3,690	171	.	.	.
Aug-13-2008	12	.	.	3,100	183	.	.	.
Aug-20-2008	10	.	.	3,800	166	.	.	.
Aug-27-2008	11	.	.	4,210	197	.	.	.
Sep-03-2008	17	.	.	3,660	105	.	.	.
Sep-10-2008	10	.	.	4,390	80	.	.	.
Sep-17-2008	4	.	.	5,920	32	.	.	.
Sep-24-2008	8	.	.	3,980	127	.	.	.

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

See Table 33 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-01-2008	19	.	.	3,990	.	31.7	.	6.4
Jul-08-2008	18	.	.	4,080	.	34.0	.	6.9
Jul-15-2008	13	.	.	3,770	.	25.6	.	6.6
Jul-22-2008	21	.	.	4,030	.	28.9	.	7.1
Jul-29-2008	13	.	.	4,360	.	37.8	.	8.0
Aug-05-2008	14	.	.	4,150	.	26.8	.	6.6
Aug-12-2008	10	.	.	3,300	.	19.4	.	4.9
Aug-19-2008	8	.	.	3,530	.	21.8	.	6.2
Aug-26-2008	11	.	.	4,110	.	30.9	.	6.3
Sep-02-2008	22	.	.	3,040	.	19.6	.	4.9
Sep-09-2008	10	.	.	3,650	.	22.2	.	5.1
Sep-16-2008	5	.	.	5,200	.	33.3	.	11.0
Sep-23-2008	9	.	.	4,340	.	26.2	.	8.2
Sep-30-2008	10	.	.	4,260	.	20.1	.	8.4

PRELIMINARY RESULTS

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

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow	Temperature	pH	Specific Conductance	Total Suspended Solids	Selenium (total)	Boron
DATA SOURCE	USGS	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	cfs	°C	.	µS/cm	mg/L	µg/L	mg/L
Jul-02-2008	19	25.1	8.5	3,820	81	24.6	6.4
Jul-10-2008	19	28.4	7.5	3,890	21	20.3	6.9
Jul-17-2008	18	25.7	7.1	3,570	34	16.5	6.0
Jul-24-2008	18	24.5	8.0	4,040	20	19.0	6.7
Jul-31-2008	16	25.3	7.6	4,080	18	27.9	6.5
Aug-07-2008	14	25.6	8.2	4,940	24	32.3	7.3
Aug-14-2008	10	26.9	7.9	3,920	25	19.7	6.3
Aug-21-2008	8	25.5	8.2	3,500	14	18.0	5.5
Aug-28-2008	10	25.2	7.3	4,300	28	25.8	6.4
Sep-04-2008	17	23.0	8.8	3,430	42	20.1	4.9
Sep-11-2008	9	22.8	8.4	2,930	25	12.2	4.8
Sep-18-2008	7	21.7	8.0	3,690	28	17.5	5.4
Sep-25-2008	12	22.1	8.1	4,710	33	22.5	9.4

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

See Table 33 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-02-2008	-1	24.9	8.2	3,430	.	<0.4	2.6
Jul-10-2008	0	26.0	8.0	3,440	.	<0.4	2.5
Jul-17-2008	-2	23.1	7.8	2,490	.	0.5	2.0
Jul-24-2008	0	21.7	8.4	2,670	.	0.6	1.8
Jul-31-2008	1	23.0	8.2	1,060	.	1.3	1.4
Aug-07-2008	4	22.9	8.2	4,010	.	0.7	3.5
Aug-14-2008	3	25.1	8.4	3,970	.	<0.4	3.0
Aug-21-2008	2	26.3	7.5	1,910	.	0.7	1.7
Aug-28-2008	8	24.0	8.5	1,050	.	1.0	0.8
Sep-04-2008	0	22.8	8.5	1,110	.	<0.4	0.7
Sep-11-2008	4	19.9	8.2	970	.	<0.4	0.5
Sep-18-2008	4	18.6	8.1	1,280	.	0.6	0.8
Sep-25-2008	11	20.6	7.1	1,170	.	2.5	0.8

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

PRELIMINARY RESULTS

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

See Table 33 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-02-2008	18	25.2	8.7	4,050	23.2	5.9
Jul-10-2008	19	28.3	7.8	3,500	27.4	6.9
Jul-17-2008	16	25.3	8.2	3,420	15.2	5.5
Jul-24-2008	18	24.3	8.3	3,390	12.6	5.9
Jul-31-2008	17	23.7	8.1	2,940	19.3	5.5
Aug-07-2008	18	24.6	8.1	3,900	21.2	6.3
Aug-14-2008	13	16.5	8.4	4,390	20.2	6.7
Aug-21-2008	10	26.7	8.3	3,230	14.0	4.8
Aug-28-2008	18	24.1	6.2	2,460	11.6	3.8
Sep-04-2008	17	22.8	8.6	3,400	21.1	5.4
Sep-11-2008	13	21.5	8.1	2,170	7.6	2.9
Sep-18-2008	11	19.8	8.1	2,630	9.1	3.2
Sep-25-2008	23	21.1	7.7	2,750	9.5	4.6

Table 10. Weekly water quality monitoring at Station I2 (Mud Slough backwater downstream of Station D).

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER		pH	Specific Conductance	Turbidity	Selenium	Boron
DATA SOURCE		USBR	USBR	USBR	USBR	USBR
UNITS		.	µS/cm	NTU	µg/L	mg/L
Jul-01-2008	.	8.8	4,020	33	19.2	5.7
Jul-09-2008	.	8.8	4,340	33	27.7	7.1
Jul-18-2008	.	8.3	3,920	27	12.8	6.3
Jul-23-2008	.	8.8	3,650	32	10.5	6.7
Jul-29-2008	.	8.5	3,710	16	16.2	6.4
Aug-06-2008	.	8.5	5,110	16	32.2	8.8
Aug-11-2008	.	8.8	4,760	14	28.2	7.6
Aug-19-2008	.	8.4	3,350	13	14.6	5.2
Aug-25-2008	.	8.3	3,140	12	13.2	4.6
Sep-03-2008	.	8.3	4,180	13	24.8	6.8
Sep-08-2008	.	7.9	1,760	17	6.7	2.4
Sep-18-2008	.	8.8	2,580	11	8.7	3.6
Sep-22-2008	.	8.3	2,969	13	10.6	5.6

PRELIMINARY RESULTS

Table 11. Weekly water quality monitoring at Station F (Salt Slough at Lander Avenue).

See Table 33 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-02-2008	106	23.0	8.0	1,420	<0.4	0.6
Jul-10-2008	110	26.6	7.4	1,030	0.5	0.5
Jul-17-2008	108	23.4	7.7	1,127	0.4	0.5
Jul-24-2008	94	23.0	7.6	1,230	0.5	0.5
Jul-31-2008	79	23.1	7.6	1,280	0.5	0.5
Aug-07-2008	85	23.7	7.6	1,100	0.4	0.4
Aug-14-2008	61	24.9	7.6	1,190	<0.4	0.5
Aug-21-2008	49	26.3	7.9	1,320	<0.4	0.5
Aug-28-2008	42	23.0	7.7	1,360	<0.4	0.5
Sep-04-2008	32	21.0	7.9	1,590	<0.4	0.6
Sep-11-2008	41	20.1	7.9	1,230	<0.4	0.5
Sep-18-2008	33	18.1	8.1	1,480	0.6	0.6
Sep-25-2008	57	21.0	7.3	1,290	<0.4	0.6

Table 12. Weekly water quality monitoring at Station J (Camp 13 Ditch).

See Table 33 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-02-2008	11	.	.	640	0.9	0.4
Jul-09-2008	11	.	.	480	0.8	0.3
Jul-16-2008	11	.	.	420	0.7	0.3
Jul-23-2008	11	.	.	540	1.2	0.4
Jul-30-2008	11	.	.	460	0.8	0.2
Aug-06-2008	11	.	.	500	0.6	0.2
Aug-13-2008	21	.	.	580	0.8	0.3
Aug-20-2008	21	.	.	610	0.4	0.3
Aug-27-2008	50	.	.	630	0.7	0.3
Sep-03-2008	70	.	.	710	0.7	0.4
Sep-10-2008	70	.	.	660	0.5	0.2
Sep-17-2008	130	.	.	630	0.8	0.3
Sep-24-2008	180	.	.	700	0.5	0.2

PRELIMINARY RESULTS

Table 13. Weekly water quality monitoring at Station K (Agatha Canal).

See Table 33 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-02-2008	13	.	.	840	1.6	0.7
Jul-09-2008	13	.	.	660	1.3	0.6
Jul-16-2008	13	.	.	500	1.1	0.5
Jul-23-2008	13	.	.	430	1.0	0.3
Jul-30-2008	13	.	.	500	0.9	0.3
Aug-06-2008	0	.	.	540	1.3	0.3
Aug-13-2008	0	.	.	1,090	1.7	1.6
Aug-20-2008	0	.	.	680	1.6	0.5
Aug-27-2008	0	.	.	1,960	5.5	2.7
Sep-03-2008	80	.	.	760	1.0	0.5
Sep-10-2008	90	.	.	700	0.7	0.3
Sep-17-2008	150	.	.	620	0.7	0.2
Sep-24-2008	150	.	.	690	0.6	0.2

Table 14. Weekly water quality monitoring at Station L2 (San Luis Canal at splits).

See Table 33 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-02-2008	NA	.	.	1,370	1.3	1.2
Jul-09-2008	NA	.	.	1,100	0.6	1.5
Jul-16-2008	NA	.	.	980	1.4	1.5
Jul-23-2008	NA	.	.	1,000	1.4	1.6
Jul-30-2008	NA	.	.	960	1.2	1.4
Aug-06-2008	NA	.	.	1,130	1.2	1.8
Aug-13-2008	NA	.	.	2,920	3.6	3.3
Aug-20-2008	NA	.	.	1,210	0.8	1.0
Aug-27-2008	NA	.	.	1,100	1.1	0.7
Sep-03-2008	NA	.	.	880	0.7	0.5
Sep-10-2008	NA	.	.	890	0.6	0.3
Sep-17-2008	NA	.	.	800	0.7	0.3
Sep-24-2008	NA	.	.	760	1.0	0.2

PRELIMINARY RESULTS

Table 15. Weekly water quality monitoring at Station M2 (Santa Fe Canal at weir).

See Table 33 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-02-2008	NA	.	.	1,330	1.4	2.0
Jul-09-2008	NA	.	.	1,140	1.1	1.6
Jul-16-2008	NA	.	.	990	1.2	1.6
Jul-23-2008	NA	.	.	1,010	1.4	1.6
Jul-30-2008	NA	.	.	960	1.3	1.5
Aug-06-2008	NA	.	.	1,200	1.2	1.9
Aug-13-2008	NA	.	.	1,020	0.9	1.3
Aug-20-2008	NA	.	.	1,040	1.2	1.2
Aug-27-2008	NA	.	.	760	0.8	0.5
Sep-03-2008	NA	.	.	760	0.6	0.4
Sep-10-2008	NA	.	.	820	0.8	0.4
Sep-17-2008	NA	.	.	800	0.9	0.4
Sep-24-2008	NA	.	.	830	0.5	0.4

Table 16. Weekly water quality monitoring at Central California Irrigation District Main Canal at Russell Avenue (MER510).

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	.	.	.	Specific Conductance	Selenium (total)	Boron
DATA SOURCE	.	.	.	CVRWQCB	CVRWQCB	CVRWQCB
UNITS	.	.	.	µS/cm	µg/L	mg/L
Jul-02-2008	.	.	.	620	0.7	0.3
Jul-09-2008	.	.	.	460	NA	0.3
Jul-16-2008	.	.	.	430	0.5	0.2
Jul-23-2008	.	.	.	430	1.0	0.2
Jul-30-2008	.	.	.	460	0.7	0.2
Aug-06-2008	.	.	.	470	0.6	0.2
Aug-13-2008	.	.	.	520	0.4	0.3
Aug-20-2008	.	.	.	590	0.5	0.2
Aug-27-2008	.	.	.	610	0.5	0.3
Sep-03-2008	.	.	.	690	0.7	0.3
Sep-10-2008	.	.	.	630	0.6	0.2
Sep-17-2008	.	.	.	620	0.6	0.2
Sep-24-2008	.	.	.	700	<0.4	0.2

PRELIMINARY RESULTS

Table 17. Weekly water quality monitoring at Station G (San Joaquin River at Fremont Ford).

See Table 33 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-02-2008	108	23.2	7.9	1,310	<0.4	0.5
Jul-10-2008	135	27.9	7.5	1,310	<0.4	0.4
Jul-17-2008	118	24.6	7.1	1,250	<0.4	0.5
Jul-24-2008	94	24.0	7.8	1,390	<0.4	0.5
Jul-31-2008	86	23.9	7.5	1,440	0.5	0.5
Aug-07-2008	96	24.2	7.9	1,190	<0.4	0.4
Aug-14-2008	83	26.2	7.9	1,110	<0.4	0.4
Aug-21-2008	59	24.4	8.0	1,440	<0.4	0.6
Aug-28-2008	47	24.3	7.5	1,540	<0.4	0.6
Sep-04-2008	38	23.2	8.0	2,400	<0.4	0.7
Sep-11-2008	45	21.4	7.8	1,590	<0.4	0.5
Sep-18-2008	33	20.4	7.1	2,120	<0.4	0.7
Sep-25-2008	58	20.5	7.8	1,270	<0.4	0.6

Table 18. Weekly water quality monitoring at Station H (San Joaquin River at Hills Ferry).

(Collected data intended for use with biological monitoring.)

See Table 33 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
Jul-01-2008	.	.	.	1,940	2.4	1.3
Jul-08-2008	.	.	.	1,820	2.8	1.2
Jul-15-2008	.	.	.	1,940	3.9	1.6
Jul-22-2008	.	.	.	1,920	2.1	1.3
Jul-29-2008	.	.	.	1,750	2.2	1.2
Aug-06-2008	.	.	.	745	1.7	0.6
Aug-12-2008	.	.	.	1,740	2.1	1.0
Aug-19-2008	.	.	.	1,580	1.5	0.9
Aug-26-2008	.	.	.	1,750	1.6	0.9
Sep-09-2008	.	.	.	2,280	3.3	1.5
Sep-16-2008	.	.	.	2,050	0.9	1.2
Sep-24-2008	.	.	.	729	0.5	0.2
Sep-30-2008	.	.	.	1,910	1.3	1.5

PRELIMINARY RESULTS

Table 19. Weekly water quality monitoring at Station N (San Joaquin River at Crow's Landing).

See Table 33 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-02-2008	286	22.5	8.2	1,460	1.4	0.8
Jul-10-2008	264	26.7	8.2	1,420	1.9	0.8
Jul-17-2008	309	24.3	7.9	1,210	1.4	0.7
Jul-24-2008	261	23.3	8.1	1,330	1.0	0.6
Jul-31-2008	427	23.8	7.9	870	1.0	0.5
Aug-07-2008	310	23.9	7.9	1,110	1.1	0.5
Aug-14-2008	403	25.7	7.8	900	0.7	0.4
Aug-21-2008	407	24.1	7.9	900	0.5	0.4
Aug-28-2008	394	24.0	8.0	950	0.6	0.4
Sep-04-2008	419	23.0	8.1	990	1.2	0.5
Sep-11-2008	415	22.1	7.8	890	<0.4	0.3
Sep-18-2008	238	19.8	7.2	1,300	0.8	0.5
Sep-25-2008	280	20.7	7.8	1,100	0.7	0.7

Table 20. Summary of fathead minnow (*Pimephales promelas*) larvae survival in 7-day tests using water samples collected from October 2007 to September 2008. Each value is the mean of 4 replicates with 10 fish in each replicate.

See Table 33 for explanation of footnotes and agency abbreviations.

LOCATION	Station B	Station C	Station D	Station F	Canal	Control
DATA SOURCE	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA
UNITS	%	%	%	%	%	%
Oct-2008	88	98	93	95	98	100
Nov-2008	95	95	100	100	100	98
Dec-2008	93	93	98	98	95	95
Jan-2008	100	100	95	98	100	100
Feb-2008	100	95	100	95	98	100
Mar-2008	93	95	100	100	73	100
Apr-2008	98	100	100	100	95	98
May-2008	98	95	98	95	98	100
Jun-2008	98	95	100	93	100	98
Jul-2008	90	98	100	90	100	95
Aug-2008	98	93	95	98	100	100
Sep-2009	90	95	93	98	95	98

Table 21. Summary of fathead minnow (*Pimephales promelas*) larvae growth in 7-day tests using water samples collected from October 2007 to September 2008. Each value is the mean of 4 replicates with 10 fish in each replicate.

See Table 33 for explanation of footnotes and agency abbreviations.

LOCATION	Station B	Station C	Station D	Station F	Canal	Control
DATA SOURCE	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA
UNITS	mg	mg	mg	mg	mg	mg
Oct-2008	0.32	0.36	0.34	0.41	0.36	0.34
Nov-2008	0.32*	0.32*	0.35	0.33	0.36	0.33
Dec-2008	0.31	0.33	0.32	0.32	0.32	0.32
Jan-2008	0.40	0.40	0.41	0.41	0.37	0.35
Feb-2008	0.46	0.43	0.41	0.41	0.38	0.33
Mar-2008	0.33	0.33	0.37	0.38	0.22	0.29
Apr-2008	0.31	0.39	0.31	0.24*	0.30	0.27
May-2008	0.31	0.31	0.29*	0.31	0.34	0.32
Jun-2008	0.31	0.33	0.36	0.31	0.31	0.31
Jul-2008	0.32	0.34	0.30	0.26	0.29	0.25
Aug-2008	0.36	0.33	0.37	0.33	0.34	0.32
Sep-2009	0.30	0.36	0.30	0.33	0.33	0.28

Table 22. Summary of *Daphnia magna* survival in 7-day tests using water samples collected from October 2007 to September 2008. Each value is the mean of 10 replicates with 1 animal in each replicate.

See Table 33 for explanation of footnotes and agency abbreviations.

LOCATION	Station B	Station C	Station D	Station F	Canal	Control
DATA SOURCE	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA	SLDMWA
UNITS	%	%	%	%	%	%
Oct-2008	90	80	100	90	90	80
Nov-2008	100	100	100	100	100	100
Dec-2008	90	100	100	100	100	80
Jan-2008	70	100	90	100	100	90
Feb-2008	100	90	80	90	100	100
Mar-2008	100	100	90	100	100	90
Apr-2008	100	100	80	100	90	90
May-2008	80	70	80	100	90	90
Jun-2008	100	100	100	90	90	90
Jul-2008	100	80	100	100	90	100
Aug-2008	100	70	70	100	100	100
Sep-2009	90	90	100	90	100	100

PRELIMINARY RESULTS

Table 23. Summary of *Daphnia magna* reproduction in 7-day tests using water samples collected from October 2007 to September 2008. Each value is the mean of 10 replicates with 1 animal in each replicate.

See Table 33 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-2008	35.8	31.1	34.4	27.5	24.3	26.2
Nov-2008	49.9	44.0	46.9	41.6	42.5	40.3
Dec-2008	32.2	24.4	32.2	28.7	30.7	23.0
Jan-2008	36.4	47.8	41.5	40.3	48.8	45.2
Feb-2008	35.6	33.6	33.4	35.8	27.7	28.3
Mar-2008	27.4	29.0	29.5	26.2	30.1	19.6
Apr-2008	31.4	31.1	27.5	24.8	33.6	25.8
May-2008	22.2	19.6	23.5	33.1	25.7	28.8
Jun-2008	23.4	21.0	29.3	23.6	26.6	26.0
Jul-2008	19.1	22.4	23.8	18.4	21.4	24.3
Aug-2008	26.5	15.3*	23.3	30.2	24.1	29.5
Sep-2009	27.3	24.9	36.6	22.3	27.3	23.8

Table 24. Summary of *Selenastrum capricornutum* growth in 4-day tests using water samples collected from October 2007 to September 2008. Each value is the mean of 4 replicates.

See Table 33 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-2008	12.0	13.9	14.1	14.8	10.8	13.8 †
Nov-2008	9.7*	17.3	21.4	19.1	13.2	15.1
Dec-2008	11.7	19.3	17.7	18.3	13.2	14.1
Jan-2008	15.8	16.3	22.6	19.9	16.3	16.1
Feb-2008	6.2	13.9	12.1	12.8	7.7††††	12.3
Mar-2008	18.1	14.2*	22.2	11.2*	20.5	24.9
Apr-2008	13.3*	16.7	22.4	11.9*	17.2	18.3
May-2008	17.1	30.5	22.3	14.2*	21.6	19.8
Jun-2008	15.9*	20.9	8.6*	22.7	20.5	20.1
Jul-2008	22.1	27.7	22.7	26.1	21.5	12.6
Aug-2008	16.8*	23.3	18.2*	19.5	20.9	20.8
Sep-2009	24.7	18.2*	10.0*	17.5*	26.5	17.1

PRELIMINARY RESULTS

Table 25. Summary of selenium concentrations in grab water samples collected at study stations for use in laboratory toxicity tests, July 2008 to September 2008.

See Table 33 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-14-2008	20	<0.4	21	<0.4	<0.4
Jul-16-2008	19	0.7	15	0.4	<0.4
Jul-18-2008	14	0.4	13	<0.4	<0.4
Aug-11-2008	25	0.5	28	<0.4	<0.4
Aug-13-2008	22	<0.4	23	<0.4	<0.4
Aug-15-2008	20	0.4	18	<0.4	<0.4
Sep-08-2008	11	<0.4	6.8	<0.4	<0.4
Sep-10-2008	11	<0.4	7.0	<0.4	<0.4
Sep-12-2008	13	<0.4	5.2	<0.4	<0.4

Table 26. Summary of total suspended solids concentrations in grab water samples collected at study stations for use in laboratory toxicity tests, July 2008 to September 2008.

See Table 33 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-14-2008	40	6	26	114	43
Jul-16-2008	28	36	21	143	52
Jul-18-2008	80	10	34	126	45
Aug-11-2008	20	7	25	94	12
Aug-13-2008	21	8	18	88	19
Aug-15-2008	34	3	24	149	16
Sep-08-2008	18	17	16	38	11
Sep-10-2008	11	8	16	59	10
Sep-12-2008	17	59	64	53	9

PRELIMINARY RESULTS

Table 27. Monthly Flow and Salinity of Water at San Luis Drain, Station B.

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow at Station B		Salinity at Station B		
	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
Jan-2007	32	1,980	3,970	2,940	7,920
Feb-2007	43	2,380	3,980	2,940	9,520
Mar-2007	31	1,920	4,480	3,320	8,670
Apr-2007	32	1,900	4,713	3,490	9,020
May-2007	32	1,990	4,858	3,590	9,720
Jun-2007	23	1,370	4,139	3,063	5,710
Jul-2007	20	1,230	3,700	2,738	4,580
Aug-2007	16	1,000	3,898	2,885	3,920
Sep-2007	13	800	4,075	3,016	3,280
Oct-2007	7	430	4,340	3,212	1,880
Nov-2007	10	610	4,823	3,569	2,960
Dec-2007	17	1,020	4,294	3,178	4,410
Jan-2008	27	1,660	4,443	3,288	7,420
Feb-2008	32	1,850	4,462	3,302	8,310
Mar-2008	29	1,780	3,882	2,873	6,950
Apr-2008	26	1,540	4,276	3,164	6,630
May-2008	29	1,760	4,461	3,301	7,900
Jun-2008	21	1,260	4,361	3,227	5,530
Jul-2008	16	980	4,120	3,049	4,060
Aug-2008	11	690	4,110	3,041	2,850
Sep-2008	12	690	3,809	2,819	2,650

Note: EC to TDS conversion = 0.74

Water Year Averages and Totals

PARAMETER	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
WY 1997	52	37,560	4,257	3,150	167,830
WY 1998	64	45,950	4,438	3,280	205,110
WY 1999	45	32,310	4,650	3,440	149,140
WY 2000	43	31,260	4,301	3,180	135,010
WY 2001	39	28,250	4,191	3,100	120,030
WY 2002	39	28,400	4,069	3,010	116,190
WY 2003	38	27,270	4,319	3,200	118,760
WY 2004	38	27,700	4,173	3,090	116,350
WY 2005	42	30,160	4,315	3,190	130,850
WY 2006	36	25,970	4,605	3,410	121,050
WY 2007	26	18,540	4,235	3,130	78,920
WY 2008	20	14,380	4,304	3,180	62,190

Calendar Year Totals

PARAMETER	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
CY 1997	52	37,490	4,354	3,220	164,180
CY 1998	64	46,240	4,563	3,380	212,560
CY 1999	45	32,250	4,532	3,360	147,370
CY 2000	42	30,210	4,189	3,100	127,370
CY 2001	39	28,010	4,200	3,110	118,470
CY 2002	39	28,460	4,155	3,070	118,830
CY 2003	38	27,550	4,282	3,170	118,770
CY 2004	39	28,290	4,129	3,060	117,730
CY 2005	41	29,610	4,420	3,270	131,680
CY 2006	36	25,890	4,589	3,395	119,540
CY 2007	25	17,990	4,137	3,061	74,890
CY 2008	22	13,230	4,222	3,120	56,140

Note: All totals and averages calculated from USGS preliminary data.

PRELIMINARY RESULTS

Table 28. Monthly Flow and Salinity of Water at Mud Slough, Station D.

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow at Station D		Salinity at Station D		
	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
Jan-2007	159	9,780	2,050	1,410	18,750
Feb-2007	149	8,270	2,570	1,780	20,020
Mar-2007	136	8,340	2,760	1,900	21,550
Apr-2007	50	2,990	3,876	2,670	10,860
May-2007	49	3,030	3,466	2,390	9,850
Jun-2007	29	1,730	3,490	2,408	5,670
Jul-2007	27	1,680	2,755	1,901	4,340
Aug-2007	21	1,270	3,116	2,150	3,710
Sep-2007	35	2,060	1,952	1,347	3,770
Oct-2007	123	7,570	1,301	898	9,240
Nov-2007	128	7,600	1,798	1,241	12,820
Dec-2007	127	7,790	2,188	1,510	15,990
Jan-2008	169	10,410	1,590	1,097	15,530
Feb-2008	148	8,500	1,790	1,235	14,280
Mar-2008	125	7,690	1,830	1,263	13,210
Apr-2008	71	4,200	2,420	1,670	9,540
May-2008	50	3,060	2,640	1,822	7,580
Jun-2008	29	1,720	2,400	1,656	3,870
Jul-2008	18	1,090	2,630	1,815	2,690
Aug-2008	14	890	2,530	1,746	2,110
Sep-2008	20	1,160	1,670	1,152	1,820

Note: EC to TDS conversion = 0.69

Water Year Averages and Totals

PARAMETER	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
WY 1997	181	130,930	2,390	1,650	254,020
WY 1998	257	182,580	2,600	1,790	369,220
WY 1999	141	101,360	2,582	1,780	229,760
WY 2000	131	94,440	2,496	1,720	201,560
WY 2001	129	92,870	2,737	1,890	214,330
WY 2002	104	75,280	2,809	1,940	184,890
WY 2003	122	88,200	2,688	1,860	208,450
WY 2004	120	87,190	2,704	1,870	197,370
WY 2005	154	110,600	2,535	1,750	263,230
WY 2006	160	116,100	2,273	1,570	242,890
WY 2007	100	72,200	2,541	1,750	171,840
WY 2008	88	63,550	2,148	1,480	127,910

Calendar Year Totals

PARAMETER	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
CY 1997	174	125,450	2,471	1,700	290,040
CY 1998	258	183,320	2,559	1,770	441,290
CY 1999	137	98,740	2,588	1,790	240,370
CY 2000	133	96,070	2,467	1,700	222,110
CY 2001	123	88,890	2,768	1,910	230,900
CY 2002	111	80,260	2,827	1,950	212,850
CY 2003	119	85,750	2,621	1,810	211,080
CY 2004	121	87,960	2,738	1,890	226,090
CY 2005	160	115,030	2,513	1,730	270,640
CY 2006	160	115,820	2,241	1,546	243,490
CY 2007	86	61,940	2,611	1,801	151,730
CY 2008	85	61,680	2,066	1,430	119,960

Note: All totals and averages calculated from USGS preliminary data.

PRELIMINARY RESULTS

Table 29. Monthly Flow and Salinity of Water at Salt Slough, Station F.

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow at Station F		Salinity at Station F		
	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
Jan-2007	198	12,150	1,370	930	15,370
Feb-2007	228	12,690	1,380	940	16,220
Mar-2007	235	14,460	1,500	1,020	20,060
Apr-2007	139	8,260	1,441	980	11,010
May-2007	145	8,910	1,172	800	9,700
Jun-2007	136	8,090	1,118	760	8,370
Jul-2007	133	8,200	1,028	699	7,800
Aug-2007	88	5,410	1,196	813	5,980
Sep-2007	67	3,990	1,400	952	5,170
Oct-2007	106	6,520	1,348	917	8,130
Nov-2007	111	6,600	1,511	1,027	9,220
Dec-2007	122	7,480	1,577	1,072	10,910
Jan-2008	170	10,460	1,080	734	10,450
Feb-2008	188	10,800	1,090	741	10,890
Mar-2008	228	14,030	660	449	8,560
Apr-2008	135	8,050	1,040	707	7,740
May-2008	117	7,200	990	673	6,590
Jun-2008	107	6,370	880	598	5,180
Jul-2008	103	6,310	840	571	4,900
Aug-2008	72	4,430	820	558	3,360
Sep-2008	45	2,680	950	646	2,350

Note: EC to TDS conversion = 0.68

Water Year Averages and Totals

PARAMETER	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
WY 1997	216	156,080	1,294	880	192,670
WY 1998	273	196,090	1,387	940	258,200
WY 1999	210	151,770	1,192	810	171,580
WY 2000	195	141,050	1,314	890	170,780
WY 2001	185	133,880	1,340	910	168,570
WY 2002	145	104,880	1,445	980	142,570
WY 2003	177	127,940	1,334	910	165,550
WY 2004	170	123,330	1,296	880	153,230
WY 2005	215	155,280	1,267	860	181,620
WY 2006	234	168,800	1,189	810	192,440
WY 2007	154	111,370	1,272	870	131,770
WY 2008	131	95,110	1,150	780	100,890

Calendar Year Totals

PARAMETER	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
CY 1997	205	147,940	1,355	920	185,100
CY 1998	281	201,370	1,292	880	241,000
CY 1999	204	147,380	1,255	850	170,370
CY 2000	194	140,370	1,284	870	166,090
CY 2001	181	131,100	1,399	950	169,380
CY 2002	161	116,600	1,403	950	150,650
CY 2003	163	117,730	1,342	910	145,700
CY 2004	170	123,500	1,285	870	146,130
CY 2005	224	161,730	1,261	860	189,160
CY 2006	232	167,460	1,163	793	180,680
CY 2007	142	102,810	1,336	909	127,130
CY 2008	125	90,930	1,066	720	89,040

Note: All totals and averages calculated from USGS preliminary data.

PRELIMINARY RESULTS

Table 30. Monthly Flow and Salinity of Water at San Joaquin River at Fremont Ford, Station G.

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow at Station N		Salinity at Station N		
	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
Jan-2007	238	14,620	1,530	1,040	20,680
Feb-2007	336	18,650	1,370	930	23,590
Mar-2007	412	25,320	1,490	1,010	34,780
Apr-2007	223	13,300	1,706	1,160	20,070
May-2007	196	12,050	1,457	600	9,070
Jun-2007	172	10,210	1,307	889	12,340
Jul-2007	164	10,100	1,077	732	10,060
Aug-2007	113	6,950	1,265	860	8,130
Sep-2007	80	4,760	1,589	1,080	6,990
Oct-2007	124	7,640	1,474	1,002	10,410
Nov-2007	132	7,860	1,757	1,195	12,770
Dec-2007	147	9,040	1,905	1,295	15,930
Jan-2008	489	30,070	580	394	16,130
Feb-2008	640	36,840	570	388	19,420
Mar-2008	337	20,740	1,100	748	21,100
Apr-2008	167	9,910	1,370	932	12,560
May-2008	139	8,560	1,220	830	9,660
Jun-2008	119	7,080	1,090	741	7,140
Jul-2008	92	5,630	940	639	4,890
Aug-2008	83	5,090	940	639	4,420
Sep-2008	48	2,830	1,220	830	3,190

Note: EC to TDS conversion = 0.62

Water Year Averages and Totals

PARAMETER	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
WY 1997	na	na	1,387	940	na
WY 1998	na	na	1,281	870	na
WY 1999	na	na	1,433	980	na
WY 2000	na	na	1,525	1,040	na
WY 2001	na	na	1,761	1,200	na
WY 2002	na	na	1,433	970	na
WY 2003	215	156,100	1,486	1,010	217,950
WY 2004	223	161,760	1,493	1,020	219,220
WY 2005	889	642,060	1,034	610	532,650
WY 2006	2,670	1,931,210	787	530	344,360
WY 2007	217	156,740	1,355	890	189,720
WY 2008	221	159,550	1,250	850	184,440

Calendar Year Totals

PARAMETER	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
CY 1997	na	na	1,466	1,000	na
CY 1998	na	na	1,221	830	na
CY 1999	na	na	1,463	1,000	na
CY 2000	na	na	1,517	1,030	na
CY 2001	na	na	1,811	1,230	na
CY 2002	225	163,110	1,439	980	217,390
CY 2003	194	140,470	1,534	1,040	198,680
CY 2004	238	172,020	1,435	980	229,270
CY 2005	897	647,690	992	590	519,710
CY 2006	2,671	1,931,950	765	518	1,361,900
CY 2007	193	138,380	1,495	983	184,930
CY 2008	210	151,290	1,181	800	164,600

Note: All totals and averages calculated from USGS preliminary data.

PRELIMINARY RESULTS

Table 31. Monthly Flow and Salinity of Water at San Joaquin River at Crow's Landing, Station N.

See Table 33 for explanation of footnotes and agency abbreviations.

PARAMETER	Flow at Station N		Salinity at Station N		
	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
Jan-2007	850	52,460	1,290	799	57,000
Feb-2007	920	51,280	1,400	871	60,720
Mar-2007	1,020	62,530	1,460	905	76,990
Apr-2007	770	45,550	1,294	820	50,800
May-2007	1,000	61,340	805	513	42,860
Jun-2007	680	40,300	834	517	28,340
Jul-2007	340	20,840	1,177	730	20,680
Aug-2007	290	17,950	1,118	693	16,920
Sep-2007	280	16,770	1,172	727	16,580
Oct-2007	620	37,880	855	530	27,320
Nov-2007	1,020	60,400	686	425	34,930
Dec-2007	850	52,270	1,027	637	45,270
Jan-2008	1,410	86,440	537	333	39,140
Feb-2008	1,490	85,840	565	350	40,890
Mar-2008	1,040	64,130	889	551	48,070
Apr-2008	780	46,630	933	578	36,680
May-2008	1,100	67,510	452	280	25,730
Jun-2008	380	22,670	870	539	16,630
Jul-2008	300	18,300	804	498	12,410
Aug-2008	400	24,700	604	374	12,580
Sep-2008	340	20,480	635	394	10,970

Note: EC to TDS conversion = 0.62

Water Year Averages and Totals

PARAMETER	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
WY 1997	5,407	3,844,610	820	510	1,080,680
WY 1998	6,869	4,904,910	601	370	1,511,480
WY 1999	1,412	1,015,480	902	560	680,120
WY 2000	1,423	1,027,440	976	610	703,910
WY 2001	903	653,430	1,162	720	623,560
WY 2002	738	533,960	1,202	750	517,360
WY 2003	753	546,130	1,244	770	576,340
WY 2004	764	554,550	1,226	760	564,500
WY 2005	2,381	1,721,000	722	450	1,053,250
WY 2006	4,748	3,437,650	569	350	947,330
WY 2007	826	598,540	1,103	690	561,670
WY 2008	800	579,330	857	530	417,580

Calendar Year Totals

PARAMETER	Mean daily	Total	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
CY 1997	5,063	3,590,680	975	600	2,929,990
CY 1998	7,086	5,064,330	453	280	1,928,500
CY 1999	1,207	864,600	1,017	630	740,790
CY 2000	1,466	1,059,180	905	560	806,670
CY 2001	882	638,210	1,174	730	633,610
CY 2002	723	523,240	1,235	770	547,940
CY 2003	718	521,480	1,258	780	553,190
CY 2004	790	573,270	1,213	750	584,740
CY 2005	2,428	1,755,440	697	430	1,026,580
CY 2006	4,786	3,465,280	567	352	1,657,190
CY 2007	740	535,170	1,099	684	497,750
CY 2008	811	587,250	738	460	367,380

Note: All totals and averages calculated from USGS preliminary data.

PRELIMINARY RESULTS

Table 32. Summary of sediment monitoring results from June 2005 to September 2008. Concentrations in µg/g dry weight.

See Table 33 for explanation of footnotes and agency abbreviations.

Station Code Station Name	PARAMETER DEPTH SOURCE UNITS	Selenium			Organic Carbon			Percent Moisture		
		0-3 cm	3-8 cm	Whole Core	0-3 cm	3-8 cm	Whole Core	0-3 cm	3-8 cm	Whole Core
		USBR	USBR	USBR	USBR	USBR	USBR	USBR	USBR	USBR
		µg/g (dry)	µg/g (dry)	µg/g (dry)	%	%	%	%	%	%
Station C:	Jun-15-2005	<0.10	<0.10	<0.10	0.23	0.10	0.32	25.70	61.90	30.80
Mud Slough North	Sep-12-2005	0.13	<0.10	<0.10	0.38	0.44	0.26	26.10	29.90	31.10
upstream of	Nov-01-2005	<0.10	<0.10	<0.10	0.24	0.17	0.11	31.10	28.00	20.30
drainage discharges	Apr-21-2006	**0.54	**0.54	**0.47	**1.41	**1.58	0.95	45.20	41.80	33.80
	Jun-21-2006	0.12	<0.10	<0.10	0.42	0.07	0.25	29.90	24.10	24.90
	Sep-13-2006	**0.58	**0.59	**0.69	**1.66	**1.69	**1.78	41.90	42.80	43.18
	Dec-07-2006	0.16	0.13	0.12	0.39	0.11	0.25	34.50	24.30	26.70
	Mar-13-2007	<0.10	<0.10	0.16	0.37	0.30	0.27	33.30	27.00	26.50
	Jun-27-2007	<0.10	<0.10	<0.10	0.33	0.29	0.67	28.99	20.69	28.49
	Sep-04-2007	0.10	0.10	0.10	0.14	0.14	0.23	18.60	19.50	19.30
	Nov-05-2007	0.20	0.10	0.10	0.62	0.46	0.53	38.40	28.80	22.50
	Mar-03-2008	<0.10	0.10	<0.10	0.13	0.16	0.08	27.30	26.50	23.80
	Jun-03-2008	<0.1	<0.1	0.10	0.25	0.13	0.19	21.00	19.90	26.00
	Sep-09-2008	0.10	0.10	0.10	0.24	0.33	0.55	16.20	45.40	34.40
Station D:	Jun-15-2005	0.16	<0.10	0.30	0.15	0.14	0.20	24.30	24.50	27.80
Mud Slough North	Sep-12-2005	0.26	0.17	0.35	0.23	0.13	0.19	31.10	23.00	27.50
downstream of	Nov-01-2005	0.19	0.19	0.23	0.09	0.11	0.20	26.10	24.50	22.90
drainage discharges	Apr-21-2006	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jun-21-2006	**1.8	0.24	0.30	**1.23	0.22	0.30	44.30	25.90	30.70
	Sep-21-2006	0.27	0.28	0.33	0.16	0.16	0.17	27.64	27.26	24.53
	Dec-07-2006	0.12	0.18	0.35	0.10	0.13	0.25	25.60	22.10	25.80
	Mar-13-2007	0.17	0.13	0.30	0.11	0.08	0.19	23.20	16.60	19.40
	Jun-27-2007	0.18	0.14	0.18	0.14	0.09	0.13	18.63	25.53	19.55
	Sep-05-2007	0.30	0.20	0.20	0.28	0.20	0.23	n/a	n/a	n/a
	Nov-05-2007	0.30	0.20	0.20	0.05	0.23	0.23	26.80	26.10	26.20
	Mar-03-2008	0.10	0.20	0.10	0.26	0.16	0.09	23.30	22.50	20.80
	Jun-01-2008	0.10	0.10	0.10	0.15	0.16	0.25	76.50	19.90	21.60
	Sep-09-2008	0.20	0.20	0.20	0.14	0.17	0.16	27.20	22.10	23.30
Station E:	Jun-15-2005	0.42	0.42	0.53	0.17	0.31	0.26	28.60	29.90	29.80
Mud Slough at Highway 140	Sep-12-2005	0.90	0.60	0.80	0.34	0.25	0.27	33.50	31.30	29.30
	Nov-01-2005	0.43	0.55	0.47	0.16	0.26	0.16	28.80	27.40	26.10
	Apr-21-2006	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jun-21-2006	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sep-21-2006	0.34	0.50	0.54	0.26	0.25	0.30	27.48	26.87	31.26
	Dec-07-2006	0.75	0.23	0.15	0.59	0.33	0.24	37.40	33.20	28.40
	Mar-13-2007	0.60	0.99	0.79	0.35	0.34	0.17	32.20	27.60	25.30
	Jun-27-2007	0.77	0.92	0.47	0.57	0.47	0.31	39.82	35.66	30.88
	Sep-04-2007	0.40	0.50	0.40	0.20	0.22	0.38	n/a	n/a	n/a
	Nov-05-2007	0.40	0.40	0.30	0.25	0.39	0.31	16.80	29.10	28.50
	Mar-03-2008	0.70	1.30	1.00	0.22	0.21	0.22	27.80	27.60	30.40
	Jun-01-2008	0.30	0.50	1.30	0.38	0.34	0.63	32.80	22.60	38.30
	Sep-09-2008	0.60	1.50	1.30	0.52	0.66	0.56	37.10	47.20	36.60
Station F:	Jun-14-2005	1.50	0.62	0.26	1.18	0.61	0.45	44.00	37.10	32.40
Salt Slough at Highway 165	Sep-12-2005	0.28	0.21	0.36	0.37	0.23	0.16	29.10	28.90	21.70
	Nov-01-2005	0.29	0.44	0.48	0.25	0.41	0.26	27.40	26.90	27.00
	Apr-21-2006	0.74	0.19	0.32	**1.24	0.27	0.53	33.80	25.40	29.30
	Jun-20-2006	0.25	0.30	0.40	0.43	0.30	0.27	27.90	26.30	25.50
	Sep-22-2006	0.46	0.38	0.36	0.27	0.22	0.21	32.28	28.82	25.75
	Dec-07-2006	0.20	0.31	0.46	0.25	0.24	0.19	27.90	27.30	25.60
	Mar-14-2007	0.30	0.45	0.42	0.24	0.15	0.16	27.70	28.10	17.90
	Jun-27-2007	0.18	0.44	0.30	0.19	0.24	0.17	26.38	30.21	24.69
	Sep-05-2007	0.20	0.20	0.30	0.29	0.31	0.17	28.80	21.20	25.80
	Nov-05-2007	0.40	0.50	0.50	0.27	0.26	0.32	30.00	30.50	27.90
	Mar-04-2008	0.20	0.50	0.30	0.22	0.24	0.23	28.00	27.20	20.60
	Jun-01-2008	0.10	0.20	0.20	0.23	0.26	0.34	21.00	23.00	23.00
	Sep-09-2008	0.20	0.40	0.70	0.27	0.18	0.38	23.80	25.40	26.90
Station I2:	Jun-15-2005	4.70	4.50	6.40	2.08	1.67	1.92	67.20	55.80	54.60
Mud Slough:	Sep-12-2005	4.40	5.30	5.40	1.88	1.88	1.93	31.90	32.40	39.10
Seasonal backwater tributary	Nov-01-2005	6.30	5.80	2.60	2.45	2.62	1.78	55.10	54.20	52.10
	Apr-21-2006	2.20	1.80	1.20	1.93	1.55	1.00	43.60	36.60	34.40
	Jun-21-2006	4.80	2.80	3.40	3.28	2.25	2.31	52.90	47.80	52.30
	Sep-13-2006	3.20	3.10	3.00	1.99	2.07	1.71	51.59	51.03	42.34
	Dec-07-2006	4.30	4.90	3.30	2.37	3.38	2.24	59.80	62.30	53.80
	Mar-13-2007	5.30	4.50	2.50	2.27	2.08	1.55	59.70	55.90	46.30
	Jun-27-2007	4.40	5.20	6.40	2.10	2.04	2.39	45.43	48.41	52.32
	Sep-05-2007	7.00	7.90	5.30	2.14	2.55	2.92	n/a	n/a	n/a
	Nov-05-2007	4.30	3.00	3.70	2.77	2.50	2.40	51.60	48.90	49.10
	Mar-04-2008	6.30	6.70	3.00	1.98	2.20	1.59	67.10	56.60	55.20
	Jun-01-2008	4.10	5.00	3.50	2.67	2.73	1.98	40.03	43.30	42.00
	Sep-08-2008	**15	**11	5.60	1.75	1.82	2.19	4.18	13.10	26.80

Table 33. 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 ($p < 0.05$)
**	Sample re-analyzed and result confirmed.
†	DMC/Lab CI 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.
‡‡	Fungal growth observed on test organisms.
#	New testing laboratory with reporting limit of 0.4 µg/L as of June 1998.
❖	Based on definitive bioassay, NOEC is 50 percent
S	Source
EC	Electrical conductivity
FW	Flow-weighted average concentration
G	US Geological Survey published data
L	Lawrence Berkeley Laboratory 15 minute flow and EC data
TDS	Total dissolved solids