GRASSLAND BYPASS PROJECT

QUARTERLY DATA REPORT

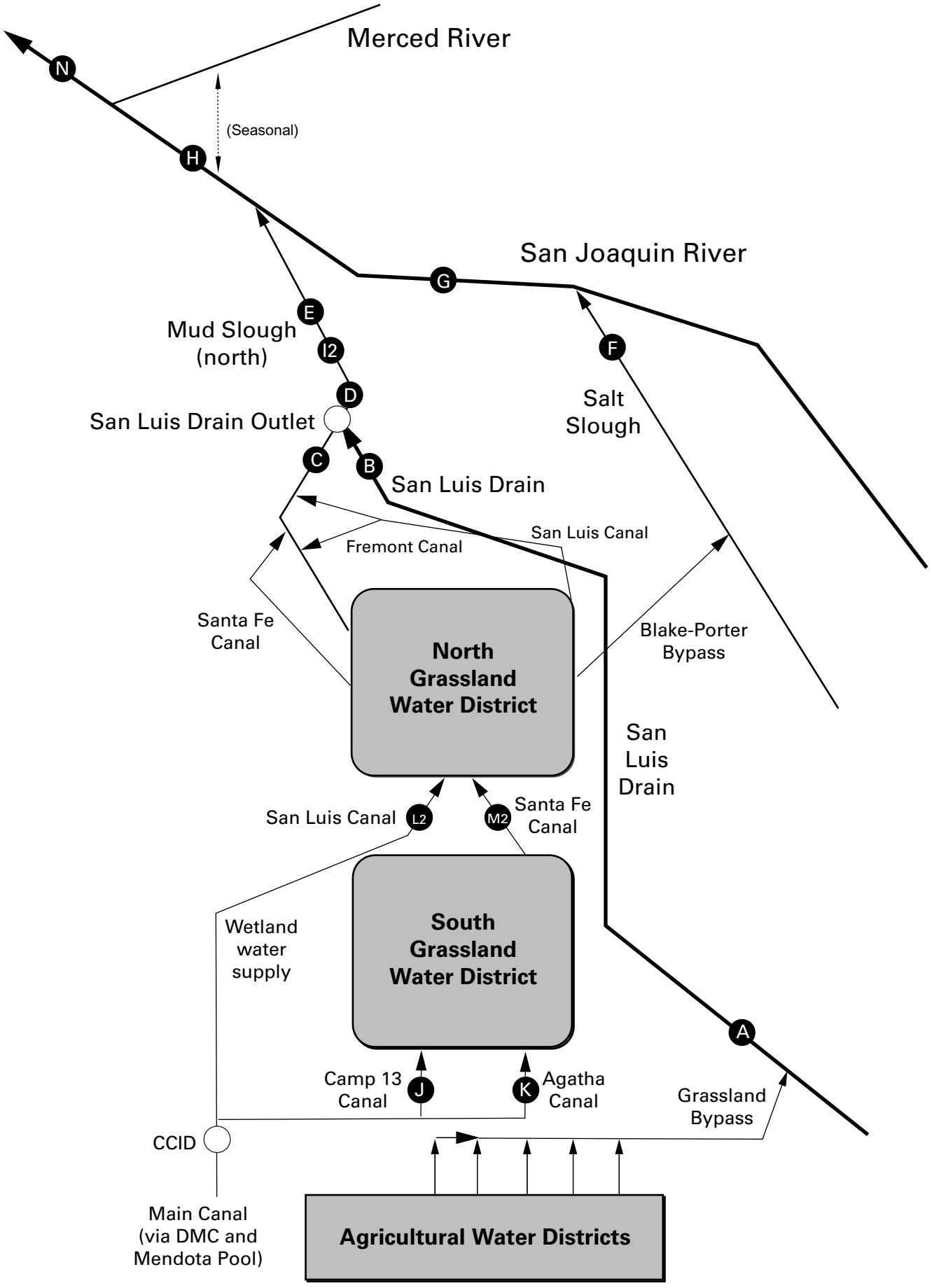
April, May and June 2009

July 2010

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


Merced River
N
(Seasonal)
H
San Joaquin River
G
E
Mud Slough
(north)
I2
F
D
San Luis Drain Outlet
Salt
Slough
C
B
San Luis Drain
San Luis Canal
Fremont Canal
Santa Fe
Canal
North
Grassland
Water District
Blake-Porter
Bypass
San
Luis
Drain
San Luis Canal
L2
M2
Santa Fe
Canal
Wetland
water
supply
South
Grassland
Water District
A
Camp 13
Canal
J
K
Agatha
Canal
Grassland
Bypass
CCID
Main Canal
(via DMC and
Mendota Pool)
Agricultural Water Districts

GRASSLAND BYPASS PROJECT

QUARTERLY DATA REPORT

LIST OF TABLES FOR QUARTERLY REPORT

PRELIMINARY RESULTS

Table 1. Continuous water monitoring at Station A (inflow to San Luis Drain), April, May, June 2009.

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	April	April	May	May	June	June
Day 1	20	4,220	17	3,820	28	3,400
Day 2	22	4,130	22	3,400	25	3,490
Day 3	29	4,320	23	3,380	18	3,540
Day 4	29	4,330	20	3,850	23	4,210
Day 5	26	4,440	17	3,950	24	4,120
Day 6	20	4,540	15	4,000	17	4,110
Day 7	13	4,740	14	4,030	17	4,680
Day 8	16	3,670	16	4,000	17	4,350
Day 9	16	3,650	14	4,220	17	4,380
Day 10	19	3,570	11	4,610	11	4,450
Day 11	18	3,700	11	4,690	11	4,240
Day 12	21	3,220	11	4,740	12	4,160
Day 13	19	3,150	9	4,790	16	4,040
Day 14	21	3,370	9	4,780	18	4,120
Day 15	27	4,120	10	4,800	15	4,260
Day 16	23	4,210	8	4,840	13	4,250
Day 17	20	4,090	9	4,710	12	4,240
Day 18	19	4,120	12	4,190	13	4,300
Day 19	20	4,300	12	4,400	14	3,910
Day 20	18	4,440	12	3,300	15	3,970
Day 21	18	4,460	10	3,410	15	3,500
Day 22	21	4,560	11	3,730	16	3,420
Day 23	17	4,560	11	3,710	16	3,370
Day 24	15	4,550	11	3,570	17	3,410
Day 25	14	4,880	12	3,790	17	3,650
Day 26	14	4,640	15	4,360	17	3,700
Day 27	18	4,450	25	4,240	19	3,590
Day 28	26	3,830	21	4,010	23	3,610
Day 29	25	3,700	29	3,960	19	3,210
Day 30	16	3,770	30	3,780	19	3,180
Day 31	.	.	28	3,650	.	.
Mean	20.1	4,120	15.3	4,090	17.1	3,900

PRELIMINARY RESULTS

Table 2a. Continuous water monitoring at Stations B and B2 (San Luis Drain Terminus), April 2009.

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
Apr-01-2009	20	16.7	7.0	4,330	37.4	4.0
Apr-02-2009	21	17.2	7.1	4,380	42.4	4.8
Apr-03-2009	19	16.6	7.6	4,360	42.3	4.4
Apr-04-2009	29	15.1	7.3	4,620	42.7	6.8
Apr-05-2009	30	16.3	7.9	4,840	45.0	7.3
Apr-06-2009	25	17.0	7.5	4,770	42.9	5.8
Apr-07-2009	20	17.6	7.9	4,850	50.4	5.4
Apr-08-2009	13	17.2	7.5	5,080	56.0	4.0
Apr-09-2009	15	16.9	7.6	4,870	49.2	3.9
Apr-10-2009	15	17.2	8.1	4,910	50.7	4.0
Apr-11-2009	17	17.4	8.0	4,950	45.5	4.2
Apr-12-2009	17	18.0	8.5	4,980	45.3	4.2
Apr-13-2009	19	19.2	9.4	5,160	33.4	3.5
Apr-14-2009	17	18.0	7.6	4,690	18.0	1.6
Apr-15-2009	17	15.0	6.8	4,200	26.3	2.5
Apr-16-2009	25	15.4	6.8	4,110	25.9	3.5
Apr-17-2009	21	16.5	6.1	4,070	24.4	2.8
Apr-18-2009	19	17.7	5.6	3,590	25.6	2.7
Apr-19-2009	17	19.3	5.9	3,730	29.1	2.7
Apr-20-2009	18	21.3	7.8	4,360	39.4	3.8
Apr-21-2009	17	22.7	7.8	4,710	48.0	4.3
Apr-22-2009	16	24.1	7.7	4,940	38.8	3.4
Apr-23-2009	18	23.4	7.9	4,670	34.5	3.4
Apr-24-2009	14	22.2	8.3	4,770	33.4	2.6
Apr-25-2009	13	20.1	8.6	4,760	42.7	3.0
Apr-26-2009	12	19.5	8.9	4,970	42.4	2.7
Apr-27-2009	12	19.2	9.5	5,060	44.7	2.8
Apr-28-2009	15	18.0	9.4	5,270	40.2	3.3
Apr-29-2009	23	17.9	9.2	5,400	47.6	6.0
Apr-30-2009	27	17.6	9.8	5,610	35.3	5.1
.	.	.	.	.	.	.
Mean	19	18.3	7.8	4,700	39.3	3.9
Total Acre-feet	**1,120**					
Total (lbs)						**118**

Load Limitation for April 2009 (lbs)	**336**

PRELIMINARY RESULTS

Table 2a. Continuous water monitoring at Stations B and B2 (San Luis Drain Terminus), May 2009.

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
May-01-2009	15	NA	11.7	5,600	43.2	3.4
May-02-2009	15	NA	10.4	5,370	41.7	3.4
May-03-2009	19	NA	8.5	4,660	35.3	3.7
May-04-2009	21	NA	7.1	4,450	42.3	4.8
May-05-2009	18	NA	6.6	3,950	33.2	3.2
May-06-2009	15	NA	7.6	4,250	26.4	2.1
May-07-2009	12	NA	6.7	3,860	24.6	1.6
May-08-2009	12	NA	6.8	3,870	25.9	1.6
May-09-2009	13	NA	5.8	3,510	22.6	1.6
May-10-2009	12	NA	6.1	3,720	25.8	1.6
May-11-2009	9	NA	6.7	4,040	27.2	1.3
May-12-2009	8	NA	6.9	4,340	30.9	1.3
May-13-2009	8	NA	7.3	4,560	32.2	1.3
May-14-2009	7	21.4	6.3	4,180	30.7	1.1
May-15-2009	5	22.6	7.4	4,550	35.2	1.0
May-16-2009	8	23.0	7.0	4,240	29.3	1.3
May-17-2009	7	24.2	7.4	4,590	35.1	1.3
May-18-2009	7	25.7	7.2	4,570	33.8	1.2
May-19-2009	8	26.2	7.1	4,410	33.2	1.5
May-20-2009	9	25.3	8.3	5,000	42.3	2.1
May-21-2009	10	24.7	8.6	5,240	44.5	2.4
May-22-2009	7	24.4	9.2	5,320	43.9	1.7
May-23-2009	8	24.2	9.5	5,350	39.6	1.8
May-24-2009	8	23.4	9.4	5,390	42.1	1.9
May-25-2009	8	23.1	9.5	5,440	38.8	1.7
May-26-2009	11	23.7	10.3	5,180	27.3	1.6
May-27-2009	13	25.7	9.5	4,880	20.5	1.4
May-28-2009	22	26.8	9.1	4,610	17.2	2.0
May-29-2009	19	26.7	8.0	3,950	18.0	1.9
May-30-2009	26	26.2	7.5	4,150	19.8	2.7
May-31-2009	28	25.8	8.7	4,770	33.1	5.1
Mean	12	24.6	8.0	4,580	33.0	2.1
Total Acre-feet	**770**					
Total (lbs)						**65**

Load Limitation for May 2009 (lbs)	**341**

PRELIMINARY RESULTS

Table 2a. Continuous water monitoring at Stations B and B2 (San Luis Drain Terminus), June 2009.

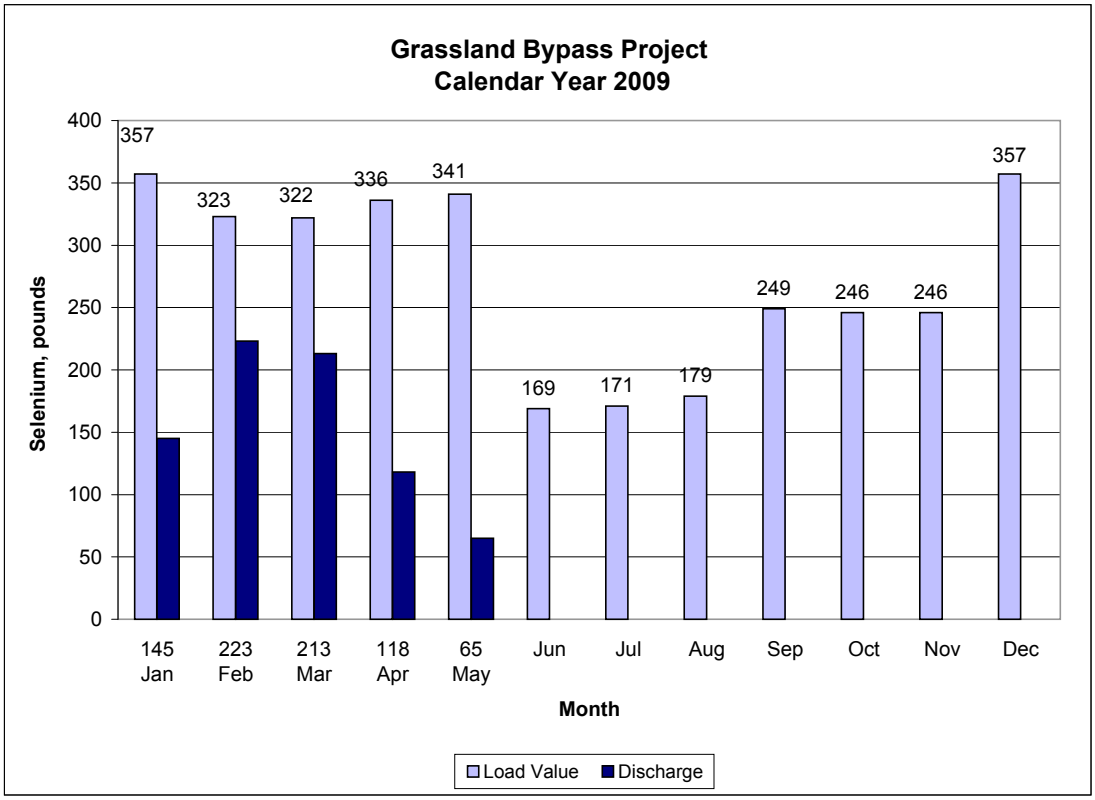
See Table 33 for explanation of footnotes and agency abbreviations.

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
Jun-01-2009	26	24.9	7.9	4,880	41.2	5.7
Jun-02-2009	26	24.2	7.5	4,620	46.4	6.6
Jun-03-2009	24	24.4	7.1	4,490	46.4	6.0
Jun-04-2009	16	23.1	6.6	4,310	44.8	4.0
Jun-05-2009	21	23.1	6.5	4,110	31.4	3.5
Jun-06-2009	22	22.2	5.7	3,930	28.0	3.3
Jun-07-2009	16	22.5	6.3	3,540	28.6	2.4
Jun-08-2009	14	23.4	5.8	3,920	26.4	2.1
Jun-09-2009	15	23.5	7.5	3,920	32.0	2.6
Jun-10-2009	15	23.8	8.8	4,810	39.0	3.2
Jun-11-2009	11	23.5	8.1	4,850	37.2	2.1
Jun-12-2009	9	23.9	7.3	4,590	42.7	2.0
Jun-13-2009	10	23.9	7.3	4,610	37.0	2.0
Jun-14-2009	13	23.6	8.8	4,930	43.0	3.0
Jun-15-2009	16	23.5	8.7	5,400	37.5	3.2
Jun-16-2009	13	23.1	8.1	5,040	36.5	2.5
Jun-17-2009	11	23.9	8.4	5,070	35.8	2.2
Jun-18-2009	10	24.8	7.9	5,250	33.6	1.7
Jun-19-2009	10	25.7	7.3	5,070	26.7	1.4
Jun-20-2009	11	24.4	7.4	4,830	25.9	1.5
Jun-21-2009	12	22.4	7.8	4,720	25.2	1.6
Jun-22-2009	13	23.5	7.9	4,750	32.5	2.2
Jun-23-2009	14	23.6	8.6	4,680	26.6	2.0
Jun-24-2009	13	25.3	8.3	4,970	26.2	1.9
Jun-25-2009	14	25.5	8.3	4,990	27.9	2.1
Jun-26-2009	14	25.7	9.0	4,800	24.4	1.9
Jun-27-2009	14	26.2	9.2	4,620	24.2	1.9
Jun-28-2009	17	27.5	7.2	4,340	19.3	1.7
Jun-29-2009	21	27.9	7.2	4,020	20.6	2.3
Jun-30-2009	17	27.1	7.5	3,950	20.2	1.8
.	.	.	.	.	.	.
Mean	15	24.3	7.7	4,600	32.2	2.7
Total Acre-feet	**910**					
Total (lbs)						**80**

Load Limitation for June 2009 (lbs)	**169**

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), April 2009.

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
Apr-01-2009	70	16.7	3,250
Apr-02-2009	67	17.5	3,190
Apr-03-2009	72	16.2	2,990
Apr-04-2009	87	15.0	3,110
Apr-05-2009	72	16.3	3,510
Apr-06-2009	92	17.8	3,270
Apr-07-2009	96	17.9	3,060
Apr-08-2009	65	16.9	3,150
Apr-09-2009	63	16.5	3,030
Apr-10-2009	61	17.0	3,220
Apr-11-2009	62	17.4	3,330
Apr-12-2009	59	18.6	3,370
Apr-13-2009	53	19.4	3,550
Apr-14-2009	57	17.4	3,130
Apr-15-2009	54	14.4	3,050
Apr-16-2009	54	15.4	3,340
Apr-17-2009	46	17.1	3,510
Apr-18-2009	38	19.1	3,600
Apr-19-2009	35	21.5	3,570
Apr-20-2009	33	22.8	3,820
Apr-21-2009	31	23.3	4,230
Apr-22-2009	28	23.9	4,150
Apr-23-2009	30	22.9	3,800
Apr-24-2009	26	21.1	4,060
Apr-25-2009	22	19.6	4,340
Apr-26-2009	22	19.4	4,460
Apr-27-2009	26	18.7	3,930
Apr-28-2009	28	17.9	4,080
Apr-29-2009	40	18.0	3,740
Apr-30-2009	39	18.6	4,000
.	.	.	.
Mean	51	18.5	3,560

PRELIMINARY RESULTS

Table 3. Continuous water monitoring at Station D (Mud Slough North downstream of drainage discharges), May 2009.

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
May-01-2009	33	19.0	3,930
May-02-2009	33	18.8	3,680
May-03-2009	36	19.1	3,560
May-04-2009	36	20.2	3,400
May-05-2009	31	21.4	3,560
May-06-2009	28	22.2	3,460
May-07-2009	25	21.7	3,910
May-08-2009	29	20.4	3,110
May-09-2009	29	21.1	3,430
May-10-2009	31	21.8	3,410
May-11-2009	27	22.1	3,440
May-12-2009	29	21.0	2,880
May-13-2009	28	20.1	2,920
May-14-2009	27	21.0	2,960
May-15-2009	24	22.5	2,950
May-16-2009	25	24.3	3,200
May-17-2009	20	25.7	3,620
May-18-2009	25	25.9	3,160
May-19-2009	33	25.6	2,510
May-20-2009	31	24.4	2,660
May-21-2009	28	24.1	3,100
May-22-2009	28	24.3	3,040
May-23-2009	34	23.8	2,760
May-24-2009	47	22.9	2,090
May-25-2009	40	23.1	2,360
May-26-2009	31	24.3	3,500
May-27-2009	39	25.8	3,090
May-28-2009	44	26.5	3,300
May-29-2009	33	26.2	3,230
May-30-2009	37	25.8	3,500
May-31-2009	40	25.5	3,860
Mean	32	22.9	3,210

PRELIMINARY RESULTS

Table 3. Continuous water monitoring at Station D (Mud Slough North downstream of drainage discharges), June 2009.

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
Jun-01-2009	43	24.5	3,390
Jun-02-2009	41	24.2	3,550
Jun-03-2009	45	24.2	3,150
Jun-04-2009	38	23.8	2,960
Jun-05-2009	40	23.0	3,080
Jun-06-2009	34	22.7	3,370
Jun-07-2009	26	23.1	3,300
Jun-08-2009	23	23.7	3,730
Jun-09-2009	24	23.7	3,750
Jun-10-2009	30	24.1	3,450
Jun-11-2009	25	24.1	3,510
Jun-12-2009	26	23.9	3,110
Jun-13-2009	23	24.1	3,400
Jun-14-2009	26	23.9	3,720
Jun-15-2009	27	23.1	4,320
Jun-16-2009	29	23.8	3,610
Jun-17-2009	24	24.5	3,690
Jun-18-2009	18	25.0	4,110
Jun-19-2009	26	25.8	3,290
Jun-20-2009	27	24.2	3,050
Jun-21-2009	27	22.7	3,210
Jun-22-2009	29	23.3	3,250
Jun-23-2009	28	24.5	3,430
Jun-24-2009	28	25.6	3,470
Jun-25-2009	27	25.8	3,500
Jun-26-2009	28	25.8	3,420
Jun-27-2009	30	26.4	3,120
Jun-28-2009	33	27.6	2,890
Jun-29-2009	34	28.0	3,070
Jun-30-2009	e25	27.1	3,340
.	.	.	.
Mean	30	24.5	3,410

PRELIMINARY RESULTS

Table 4. Continuous water monitoring at Station F (Salt Slough at Highway 165), April 2009.

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
Apr-01-2009	113	16.5	2,040
Apr-02-2009	113	17.4	1,920
Apr-03-2009	107	16.0	1,970
Apr-04-2009	111	15.0	1,980
Apr-05-2009	113	16.0	2,000
Apr-06-2009	108	17.3	2,010
Apr-07-2009	105	17.2	2,020
Apr-08-2009	98	16.4	1,990
Apr-09-2009	96	16.1	1,850
Apr-10-2009	110	16.4	1,800
Apr-11-2009	129	16.5	1,620
Apr-12-2009	141	17.4	1,400
Apr-13-2009	143	18.2	1,360
Apr-14-2009	144	16.9	1,380
Apr-15-2009	145	14.6	NA
Apr-16-2009	147	14.8	NA
Apr-17-2009	115	16.7	NA
Apr-18-2009	90	19.1	NA
Apr-19-2009	85	21.4	NA
Apr-20-2009	87	23.0	NA
Apr-21-2009	78	23.5	NA
Apr-22-2009	79	23.6	1,860
Apr-23-2009	84	22.2	1,710
Apr-24-2009	87	19.9	1,600
Apr-25-2009	93	17.7	1,490
Apr-26-2009	81	17.8	1,550
Apr-27-2009	78	17.6	1,650
Apr-28-2009	70	16.6	1,640
Apr-29-2009	78	17.3	1,670
Apr-30-2009	81	18.1	1,540
.	.	.	.
Mean	104	17.9	1,740

PRELIMINARY RESULTS

Table 4. Continuous water monitoring at Station F (Salt Slough at Highway 165), May 2009.

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
May-01-2009	91	18.8	1,520
May-02-2009	124	18.3	1,450
May-03-2009	146	18.7	1,360
May-04-2009	155	19.7	1,300
May-05-2009	135	21.1	1,380
May-06-2009	121	22.2	1,480
May-07-2009	105	21.9	1,550
May-08-2009	93	20.7	1,620
May-09-2009	85	21.1	1,700
May-10-2009	81	21.9	1,770
May-11-2009	82	22.1	1,810
May-12-2009	75	21.0	1,760
May-13-2009	64	19.9	1,880
May-14-2009	56	20.9	1,980
May-15-2009	53	22.8	1,960
May-16-2009	63	24.7	1,890
May-17-2009	84	26.4	1,780
May-18-2009	92	26.4	1,560
May-19-2009	96	25.4	1,490
May-20-2009	118	24.1	1,380
May-21-2009	120	23.4	1,270
May-22-2009	113	23.3	1,240
May-23-2009	110	22.6	1,250
May-24-2009	104	21.8	1,250
May-25-2009	106	21.8	1,230
May-26-2009	111	23.0	1,240
May-27-2009	88	25.2	1,340
May-28-2009	62	26.3	1,580
May-29-2009	73	25.7	1,540
May-30-2009	88	25.1	1,400
May-31-2009	92	24.7	1,350
Mean	96	22.6	1,530

PRELIMINARY RESULTS

Table 4. Continuous water monitoring at Station F (Salt Slough at Highway 165), June 2009.

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
Jun-01-2009	92	23.8	1,320
Jun-02-2009	85	23.3	1,300
Jun-03-2009	83	23.0	1,320
Jun-04-2009	80	22.8	1,350
Jun-05-2009	87	22.1	1,360
Jun-06-2009	86	21.8	1,380
Jun-07-2009	92	22.7	1,410
Jun-08-2009	106	23.2	1,400
Jun-09-2009	112	22.7	1,330
Jun-10-2009	102	22.5	1,350
Jun-11-2009	105	23.0	1,340
Jun-12-2009	92	23.0	1,400
Jun-13-2009	88	22.8	1,450
Jun-14-2009	101	22.6	1,400
Jun-15-2009	109	21.9	1,310
Jun-16-2009	108	22.5	1,280
Jun-17-2009	92	24.0	1,320
Jun-18-2009	107	24.5	1,210
Jun-19-2009	118	25.5	1,180
Jun-20-2009	114	23.6	1,190
Jun-21-2009	114	21.3	1,210
Jun-22-2009	115	22.2	1,210
Jun-23-2009	129	23.8	1,170
Jun-24-2009	131	25.2	1,170
Jun-25-2009	100	25.3	1,310
Jun-26-2009	91	25.0	1,380
Jun-27-2009	108	25.4	1,260
Jun-28-2009	87	27.1	1,320
Jun-29-2009	95	27.6	1,240
Jun-30-2009	102	26.6	1,200
.	.	.	.
Mean	101	23.7	1,300

PRELIMINARY RESULTS

Table 5. Continuous water monitoring at Station N (San Joaquin River at Crow's Landing), April 2009.

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
Apr-01-2009	570	17.1	1,890	2.9
Apr-02-2009	536	18.0	1,820	1.8
Apr-03-2009	513	17.2	1,820	1.7
Apr-04-2009	504	16.1	1,810	1.9
Apr-05-2009	494	16.9	1,880	2.0
Apr-06-2009	491	18.2	1,880	2.9
Apr-07-2009	500	18.1	1,880	2.6
Apr-08-2009	525	17.4	1,790	2.0
Apr-09-2009	525	16.8	1,690	1.8
Apr-10-2009	534	17.0	1,640	2.0
Apr-11-2009	545	17.5	1,530	1.8
Apr-12-2009	566	18.5	1,490	1.8
Apr-13-2009	570	19.1	1,450	1.8
Apr-14-2009	553	18.0	1,380	1.7
Apr-15-2009	561	15.5	1,390	1.7
Apr-16-2009	542	16.2	1,420	1.1
Apr-17-2009	550	17.7	1,400	1.9
Apr-18-2009	515	19.4	1,460	1.6
Apr-19-2009	495	21.4	1,560	1.6
Apr-20-2009	485	22.9	1,600	1.3
Apr-21-2009	446	23.7	1,630	1.6
Apr-22-2009	409	24.0	1,690	2.0
Apr-23-2009	392	23.2	1,780	2.0
Apr-24-2009	406	21.1	1,730	1.8
Apr-25-2009	407	19.1	1,650	1.6
Apr-26-2009	402	19.2	1,570	1.3
Apr-27-2009	431	19.7	1,480	1.3
Apr-28-2009	428	18.7	1,470	1.6
Apr-29-2009	387	18.8	1,560	1.6
Apr-30-2009	395	19.1	1,550	2.1
.	.	.	.	.
Mean	489	18.9	1,630	1.8

PRELIMINARY RESULTS

Table 5. Continuous water monitoring at Station N (San Joaquin River at Crow's Landing), May 2009.

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
May-01-2009	405	19.7	1,660	3.0
May-02-2009	428	18.9	1,560	2.2
May-03-2009	508	19.4	1,390	1.8
May-04-2009	586	20.3	1,090	1.5
May-05-2009	585	21.8	1,070	1.4
May-06-2009	567	22.4	1,150	1.7
May-07-2009	581	22.5	1,140	1.6
May-08-2009	669	21.5	955	0.7
May-09-2009	740	21.4	806	0.6
May-10-2009	839	20.9	641	0.4
May-11-2009	894	20.6	604	0.5
May-12-2009	916	19.9	604	0.4
May-13-2009	723	19.6	639	0.5
May-14-2009	505	20.7	924	0.5
May-15-2009	412	22.4	1,090	1.0
May-16-2009	374	24.2	1,250	1.0
May-17-2009	346	26.1	1,280	0.9
May-18-2009	356	26.2	1,400	0.9
May-19-2009	366	25.7	1,230	0.7
May-20-2009	377	24.4	1,180	0.8
May-21-2009	364	23.9	1,250	1.0
May-22-2009	361	24.1	NA	NA
May-23-2009	356	24.3	NA	NA
May-24-2009	354	24.0	NA	NA
May-25-2009	353	23.6	NA	NA
May-26-2009	345	24.3	NA	NA
May-27-2009	347	25.6	NA	NA
May-28-2009	349	26.2	NA	NA
May-29-2009	314	25.7	NA	NA
May-30-2009	315	25.2	NA	NA
May-31-2009	335	24.8	NA	NA
Mean	483	22.9	1,090	1.1

PRELIMINARY RESULTS

Table 5. Continuous water monitoring at Station N (San Joaquin River at Crow's Landing), June 2009.

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
Jun-01-2009	365	24.0	NA	NA
Jun-02-2009	380	23.7	NA	NA
Jun-03-2009	383	23.8	NA	NA
Jun-04-2009	371	24.2	NA	NA
Jun-05-2009	395	22.8	1,220	2.0
Jun-06-2009	398	22.3	1,230	2.1
Jun-07-2009	428	23.2	1,120	1.5
Jun-08-2009	424	23.8	1,140	1.3
Jun-09-2009	445	23.7	1,120	1.0
Jun-10-2009	427	23.7	1,040	1.0
Jun-11-2009	416	23.8	1,070	1.3
Jun-12-2009	399	23.7	1,120	1.3
Jun-13-2009	377	23.9	1,180	1.2
Jun-14-2009	370	23.6	1,170	1.1
Jun-15-2009	381	23.3	1,160	1.2
Jun-16-2009	400	23.5	1,150	1.5
Jun-17-2009	387	24.5	1,160	1.5
Jun-18-2009	339	25.4	1,240	1.3
Jun-19-2009	334	26.0	1,280	1.3
Jun-20-2009	336	25.0	1,310	1.1
Jun-21-2009	328	23.6	1,290	NA
Jun-22-2009	351	23.7	1,190	1.3
Jun-23-2009	335	24.8	1,250	1.2
Jun-24-2009	321	26.4	1,230	1.3
Jun-25-2009	337	26.4	1,390	1.3
Jun-26-2009	306	25.8	1,310	1.6
Jun-27-2009	303	26.4	1,450	1.5
Jun-28-2009	301	27.9	1,450	1.4
Jun-29-2009	303	28.4	1,310	1.3
Jun-30-2009	270	27.5	1,400	1.5
.	.	.	.	.
Mean	364	24.6	1,230	1.4

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	.	.	.
Apr-01-2009	20	.	.	4,670	109	.	.	.
Apr-08-2009	16	.	.	3,860	65	.	.	.
Apr-15-2009	27	.	.	4,580	218	.	.	.
Apr-22-2009	21	.	.	5,080	228	.	.	.
Apr-29-2009	25			4,380	131	.	.	.
May-06-2009	15	.	.	4,630	11	.	.	.
May-13-2009	9	.	.	5,220	21	.	.	.
May-20-2009	12	.	.	3,270	103	.	.	.
May-27-2009	25			4,960	136	.	.	.
Jun-03-2009	18	.	.	4,180	91	.	.	.
Jun-10-2009	11	.	.	4,610	47	.	.	.
Jun-17-2009	12	.	.	4,540	30	.	.	.
Jun-24-2009	17			4,070	51			
Jun-30-2009	19	.	.	3,870	103	.	.	.

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
Apr-07-2009	13	.	.	4,170	.	19.5	.	7.3
Apr-14-2009	21	.	.	3,830	.	26.7	.	6.1
Apr-21-2009	18	.	.	4,790	.	41.6	.	7.8
Apr-28-2009	26	.	.	4,390	.	41.3	.	8.8
May-05-2009	17	.	.	4,000	.	27.8	.	6.6
May-12-2009	11	.	.	4,800	.	37.6	.	7.8
May-19-2009	12	.	.	4,540	.	29.6	.	10.0
May-26-2009	15	.	.	3,960	.	21.2	.	7.1
Jun-02-2009	25	.	.	3,740	.	37.8	.	6.5
Jun-09-2009	17	.	.	4,690	.	40.6	.	8.8
Jun-16-2009	13	.	.	4,670	.	29.2	.	7.9
Jun-23-2009	16	.	.	4,080	.	24.9	.	6.4
Jun-30-2009	19	.	.	3,670	.	27.7	.	6.7

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
Apr-02-2009	21	16.0	7.2	4,250	46	41.6	7.0
Apr-09-2009	15	16.1	8.0	4,660	42	44.5	6.8
Apr-16-2009	25	13.7	7.4	4,120	66	28.2	6.8
Apr-23-2009	18	22.3	7.5	4,510	77	32.9	8.3
Apr-30-2009	27	17.0	8.2	5,220	84	34.4	9.3
May-07-2009	12	21.4	7.7	3,640	49	21.6	6.5
May-14-2009	7	19.8	8.4	4,250	43	30.4	7.1
May-21-2009	10	23.9	8.2	5,280	35	42.2	9.4
May-28-2009	22	25.4	7.8	4,600	18	15.3	8.4
Jun-04-2009	16	21.9	8.3	4,170	86	46.0	6.6
Jun-11-2009	11	22.6	7.7	4,580	52	38.2	8.2
Jun-18-2009	10	23.6	7.4	4,860	37	34.4	7.7
Jun-25-2009	14	26.7	8.8	4,810	35	28.2	8.4

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
Apr-02-2009	46	15.1	8.1	2,590	.	0.6	2.2
Apr-09-2009	48	15.5	8.1	2,370	.	0.8	2.3
Apr-16-2009	29	13.6	8.0	2,400	.	0.7	2.2
Apr-23-2009	12	18.4	7.8	3,580	.	0.5	3.1
Apr-30-2009	12	18.1	8.4	2,650	.	0.6	2.0
May-07-2009	13	18.7	8.1	3,200	.	NA	2.7
May-14-2009	20	19.0	8.1	2,310	.	0.5	1.9
May-21-2009	18	21.4	8.0	1,780	.	0.5	1.8
May-28-2009	22	24.5	8.1	1,470	.	NA	1.1
Jun-04-2009	22	21.2	8.1	1,910	.	0.8	1.5
Jun-11-2009	14	22.3	7.9	1,120	.	0.7	1.8
Jun-18-2009	8	22.2	8.0	2,550	.	0.5	1.8
Jun-25-2009	13	24.8	8.0	1,100	.	0.6	1.6

++ 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
Apr-02-2009	67	15.4	8.0	3,300	12.3	3.7
Apr-09-2009	63 e	15.5	8.1	3,180	11.4	3.5
Apr-16-2009	54	13.4	8.0	3,210	10.8	4.2
Apr-23-2009	30	20.8	7.9	4,400	22.6	6.6
Apr-30-2009	39	17.3	8.3	3,970	23.4	6.6
May-07-2009	25	19.8	8.0	4,100	14.0	5.4
May-14-2009	27	18.7	8.1	3,350	10.2	4.4
May-21-2009	28	21.8	7.9	3,440	15.4	4.2
May-28-2009	44	24.4	8.0	3,100	7.6	4.6
Jun-04-2009	38	21.4	8.1	2,890	19.7	3.8
Jun-11-2009	25	22.2	7.7	3,510	18.1	5.1
Jun-18-2009	18	22.4	7.9	4,140	18.2	5.4
Jun-25-2009	27	24.0	8.0	3,440	12.2	4.9

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
Apr-08-2009	.	8.3	3,630	58	9.4	4.0
Apr-14-2009	.	7.9	3,400	47	6.1	4.3
Apr-22-2009	.	8.1	4,790	26	24.2	6.4
Apr-28-2009	.	8.3	4,690	27	22.0	6.5
May-06-2009	.	8.4	3,860	34	11.9	4.7
May-12-2009	.	8.1	3,110	NA	6.8	3.3
May-19-2009	.	8.7	2,800	38	8.0	2.9
May-29-2009	.	8.4	3,380	37	6.8	4.7
Jun-03-2009	.	8.4	3,390	45	23.8	4.6
Jun-09-2009	.	8.8	4,200	35	18.8	5.5
Jun-15-2009	.	8.4	3,740	23	14.4	5.1
Jun-23-2009	.	8.4	3,580	29	12.7	5.0
Jun-29-2009	.	9.0	3,130	23	11.6	4.6

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
Apr-02-2009	113	15.5	8.1	2,000	0.6	1.1
Apr-09-2009	96	15.4	7.5	1,840	0.5	0.9
Apr-16-2009	147	12.9	7.8	1,460	0.5	0.8
Apr-23-2009	84	20.1	7.6	1,830	0.4	0.9
Apr-30-2009	81	15.3	7.1	1,490	0.6	0.6
May-07-2009	105	20.2	7.6	1,530	NA	0.7
May-14-2009	56	17.8	7.6	1,660	0.4	0.8
May-21-2009	120	21.2	7.8	1,330	0.6	0.5
May-28-2009	62	23.7	7.4	1,510	NA	0.6
Jun-04-2009	80	20.2	7.6	1,350	<0.4	0.5
Jun-11-2009	105	20.2	7.5	1,340	0.5	0.5
Jun-18-2009	107	21.8	7.9	1,250	0.6	0.5
Jun-25-2009	100	22.8	7.8	1,300	P	0.5

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
Apr-01-2009	0	.	.	1,830	1.4	2.2
Apr-08-2009	0	.	.	2,050	1.5	2.5
Apr-15-2009	15	.	.	788	1.2	0.5
Apr-22-2009	30	.	.	637	0.9	0.4
Apr-29-2009	30	.	.	644	1.3	0.3
May-06-2009	30	.	.	667	0.9	0.4
May-13-2009	55	.	.	677	0.9	0.4
May-20-2009	55	.	.	549	0.9	0.3
May-27-2009	45	.	.	642	0.6	0.3
Jun-03-2009	25	.	.	691	1.0	0.3
Jun-10-2009	55	.	.	656	1.2	0.4
Jun-17-2009	20	.	.	675	0.9	0.4
Jun-24-2009	20	.	.	656	1.0	0.4
Jun-30-2009	20	.	.	1,040	0.7	0.8

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
Apr-01-2009	0	.	.	1,910	1.2	2.4
Apr-08-2009	0	.	.	2,030	0.9	2.5
Apr-15-2009	10	.	.	2,040	1.3	2.7
Apr-22-2009	25	.	.	713	1.3	0.5
Apr-29-2009	40	.	.	816	2.8	0.6
May-06-2009	40	.	.	677	1.0	0.4
May-13-2009	60	.	.	652	1.2	0.4
May-20-2009	50	.	.	528	0.7	0.3
May-27-2009	30	.	.	1,150	1.4	1.5
Jun-03-2009	20	.	.	848	2.6	0.6
Jun-10-2009	20	.	.	780	1.8	0.6
Jun-17-2009	30	.	.	699	1.1	0.4
Jun-24-2009	25	.	.	787	1.4	0.5
Jun-30-2009	25	.	.	777	1.6	0.5

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
Apr-01-2009	NA	.	.	1,700	1.6	1.6
Apr-08-2009	NA	.	.	2,110	1.0	2.2
Apr-15-2009	NA	.	.	2,110	2.0	2.1
Apr-22-2009	NA	.	.	1,640	1.8	1.7
Apr-29-2009	NA	.	.	1,630	1.5	1.5
May-06-2009	NA	.	.	1,570	1.6	1.5
May-13-2009	NA	.	.	893	1.1	0.7
May-20-2009	NA	.	.	833	1.2	0.6
May-27-2009	NA	.	.	978	1.1	0.6
Jun-03-2009	NA	.	.	985	1.0	0.7
Jun-10-2009	NA	.	.	1,060	1.7	0.8
Jun-17-2009	NA	.	.	2,830	3.6	3.1
Jun-24-2009	NA	.	.	1,050	1.0	0.9
Jun-30-2009	NA	.	.	1,330	1.1	1.1

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
Apr-01-2009	NA	.	.	2,030	1.4	2.0
Apr-08-2009	NA	.	.	2,860	1.1	3.6
Apr-15-2009	NA	.	.	1,480	0.9	1.4
Apr-22-2009	NA	.	.	1,410	1.4	1.4
Apr-29-2009	NA	.	.	1,150	1.0	0.9
May-06-2009	NA	.	.	951	0.9	0.7
May-13-2009	NA	.	.	883	1.1	0.7
May-20-2009	NA	.	.	1,080	1.0	1.1
May-27-2009	NA	.	.	838	0.7	0.6
Jun-03-2009	NA	.	.	1,040	1.2	1.1
Jun-10-2009	NA	.	.	992	1.4	1.0
Jun-17-2009	NA	.	.	968	1.5	1.0
Jun-24-2009	NA	.	.	1,040	1.0	0.9
Jun-30-2009	NA	.	.	1,080	1.1	1.5

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
Apr-01-2009	.	.	.	651	0.8	0.3
Apr-08-2009	.	.	.	872	1.0	0.5
Apr-15-2009	.	.	.	891	1.2	0.5
Apr-22-2009	.	.	.	571	1.0	0.3
Apr-29-2009	.	.	.	655	1.1	0.3
May-06-2009	.	.	.	642	0.7	0.3
May-13-2009	.	.	.	656	0.9	0.4
May-20-2009	.	.	.	532	0.7	0.3
May-27-2009	.	.	.	693	0.6	0.3
Jun-03-2009	.	.	.	686	0.6	0.3
Jun-10-2009	.	.	.	672	0.8	0.3
Jun-17-2009	.	.	.	657	0.8	0.3
Jun-24-2009	.	.	.	682	0.5	0.4
Jun-30-2009	.	.	.	634	0.6	0.3

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
Apr-02-2009	168	15.6	7.3	2,330	<0.4	1.0
Apr-09-2009	156	16.1	7.1	2,240	<0.4	0.9
Apr-16-2009	200	14.2	7.3	1,640	0.5	0.7
Apr-23-2009	114	21.3	7.2	2,400	0.5	0.9
Apr-30-2009	117	17.3	7.0	1,980	0.5	0.7
May-07-2009	187	21.1	7.9	1,530	NA	0.5
May-14-2009	85	19.5	7.7	2,440	NA	0.8
May-21-2009	122	22.5	7.1	1,390	0.6	0.5
May-28-2009	92	24.5	7.6	1,840	NA	0.6
Jun-04-2009	92	21.8	7.7	1,740	<0.4	0.5
Jun-11-2009	158	22.5	7.0	1,050	0.4	0.4
Jun-18-2009	133	23.3	7.1	1,510	0.5	0.5
Jun-25-2009	136	24.4	7.1	1,440	<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
Apr-07-2009	.	.	.	2,790	3.4	1.9
Apr-14-2009	.	.	.	2,280	3.2	1.5
Apr-21-2009	.	.	.	2,780	3.2	1.6
May-05-2009	.	.	.	1,890	3	1.2
May-12-2009	.	.	.	2,550	1.6	1.3
May-19-2009	.	.	.	957	1.9	0.7
Jun-02-2009	.	.	.	1,120	1.1	1.1
Jun-09-2009	.	.	.	1,800	2.0	0.9
Jun-16-2009	.	.	.	2,020	3.7	1.4
Jun-23-2009	.	.	.	931	0.4	0.1
Jun-30-2009	.	.	.	1,200	0.7	1.7

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
Apr-02-2009	536	16.5	7.8	1,760	1.7	1.0
Apr-09-2009	525	16.5	7.5	1,640	1.7	1.0
Apr-16-2009	542	15.0	7.4	1,370	0.9	0.8
Apr-23-2009	392	21.6	7.4	1,840	1.9	1.0
Apr-30-2009	395	17.7	7.3	1,610	2.0	0.9
May-07-2009	581	21.3	8.0	1,230	1.2	0.7
May-14-2009	505	19.5	7.9	1,020	0.7	0.5
May-21-2009	364	22.4	7.7	1,340	1.2	0.7
May-28-2009	349	24.5	7.9	1,390	1.2	0.8
Jun-04-2009	371	22.7	8.2	1,400	3.0	1.0
Jun-11-2009	416	22.6	7.7	1,070	1.5	0.7
Jun-18-2009	339	23.5	7.6	1,250	1.4	0.7
Jun-25-2009	337	25.3	8.2	1,240	1.2	0.7

Table 20. Summary of fathead minnow (*Pimephales promelas*) larvae survival in 7-day tests using water samples collected from July 2008 to June 2009. 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	%	%	%	%	%	%
Jul-2008	90	98	100	90	100	95
Aug-2008	98	93	95	98	100	100
Sep-2008	90	95	93	98	95	98
Oct-2008	100	98	95	100	93	98
Nov-2008	93	95	98	100	95	98
Dec-2008	100	100	100	95	100	100
Jan-2009	95	95	93	93	93	95
Feb-2009	98	95	100	98	100	95
Mar-2009	98	100	100	100	98	95
Apr-2009	100	93	95	95	73	98
May-2009	98	98	98	100	93	95
Jun-2009	95	95	95	93	93	95

Table 21. Summary of fathead minnow (*Pimephales promelas*) larvae growth in 7-day tests using water samples collected from July 2008 to June 2009. 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
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-2008	0.30	0.36	0.30	0.33	0.33	0.28
Oct-2008	0.43	0.44	0.38	0.41	0.37	0.38
Nov-2008	0.32*	0.35	0.31	0.32*	0.38	0.35
Dec-2008	0.34	0.35	0.35	0.34	0.34	0.32
Jan-2009	0.35	0.37	0.36	0.33	0.30	0.36
Feb-2009	0.51	0.53	0.49	0.46	0.50	0.35
Mar-2009	0.50	0.50	0.45	0.50	0.44	0.44
Apr-2009	0.33	0.43	0.35	0.40	0.30	0.38
May-2009	0.48	0.41	0.41	0.42	0.42	0.42
Jun-2009	0.42	0.40	0.46	0.44	0.43	0.45

Table 22. Summary of *Daphnia magna* survival in 7-day tests using water samples collected from July 2008 to June 2009. 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	%	%	%	%	%	%
Jul-2008	100	80	100	100	90	100
Aug-2008	100	70	70	100	100	100
Sep-2008	90	90	100	90	100	100
Oct-2008	90	100	90	90	100	100
Nov-2008	100	100	100	100	90	90
Dec-2008	100	100	100	100	100	90
Dec-2009	90	100	100	100	100	100
Feb-2009	100	80	90	70	90	80
Mar-2009	100	100	100	100	90	90
Apr-2009	100	100	80	90	90	100
May-2009	80	100	90	100	100	100
Jun-2009	100	0*	30*	90	100	100

PRELIMINARY RESULTS

Table 23. Summary of *Daphnia magna* reproduction in 7-day tests using water samples collected from July 2008 to June 2009. 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
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-2008	27.3	24.9	36.6	22.3	27.3	23.8
Oct-2008	24.4	28.2	25.6	22.3	24.9	26.3
Nov-2008	57.7	43.0	50.1	41.2	46.6	30.1
Dec-2008	32.6	26.0	26.3	22.6	30.3	21.2
Jan-2009	19.7	22.4	21.0	24.1	19.0	19.3
Feb-2009	24.0	19.1	23.9	19.0	21.9	18.9
Mar-2009	43.9	34.5	41.2	35.6	37.5	27.2
Apr-2009	45.4	52.3	23.1	30.2	30.2	31.6
May-2009	22.1	31.8	36.3	29.3	29.9	23.6
Jun-2009	42.9	4.8*	13.6*	35.9	28.2	28.6

Table 24. Summary of *Selenastrum capricornutum* growth in 4-day tests using water samples collected from July 2008 to June 2009. 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
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-2008	24.7	18.2*	10.0*	17.5*	26.5	17.1
Oct-2008	25.8	33.9	30.6	30.7	24.3	22.5
Nov-2008	15.8*	23.7	25.3	24.0	20.5	21.6
Dec-2008	17.5	23.9	21.0	20.0	20.3	18.4
Jan-2009	2.5*	27.9	20.2	25.1	3.2††††	22.6
Feb-2009	14.4*	36.5	42.9	33.8	34.9	29.4
Mar-2009	12.9*	32.9	31.3	34.0	27.4	29.9
Apr-2009	20.9*	22.2	27.0	24.3	25.0	19.3
May-2009	21.6	33.2	25.2	11.4*	21.4	22.8
Jun-2009	19.8	20.2	24.4	21.7	20.1	17.0

PRELIMINARY RESULTS

Table 25. Summary of selenium concentrations in grab water samples collected at study stations for use in laboratory toxicity tests, April 2009 to June 2009.

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
Apr-06-2009	39	0.5	10	<0.4	<0.4
Apr-08-2009	56	0.5	10	<0.4	<0.4
Apr-10-2009	49	0.5	11	<0.4	<0.4
May-04-2009	43	0.5	24	0.5	<0.4
May-06-2009	26	<0.4	14	<0.4	<0.4
May-08-2009	29	0.5	7.1	<0.4	<0.4
Jun-15-2009	34	0.6	25	0.4	<0.4
Jun-17-2009	35	0.5	17	0.4	<0.4
Jun-19-2009	26	0.6	13	<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, April 2009 to June 2009.

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
Apr-06-2009	44	70	95	58	18
Apr-08-2009	34	132	92	47	11
Apr-10-2009	49	108	131	81	11
May-04-2009	60	108	79	31	11
May-06-2009	55	51	74	68	8
May-08-2009	105	149	89	109	13
Jun-15-2009	21	12	30	62	5
Jun-17-2009	28	10	21	67	4
Jun-19-2009	30	20	38	70	16

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
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
Oct-2008	17	1,020	3,488	2,581	3,580
Nov-2008	21	1,270	3,536	2,617	4,520
Dec-2008	22	1,320	4,045	2,993	5,370
Jan-2009	21	1,270	4,160	3,078	5,320
Feb-2009	32	1,800	4,200	3,108	7,610
Mar-2009	29	1,780	4,180	3,093	7,490
Apr-2009	19	1,110	4,690	3,471	5,240
May-2009	13	770	4,560	3,374	3,530
Jun-2009	15	910	4,650	3,441	4,260

Note: EC to TDS conversion = 0.74

Water Year Averages and Totals

PARAMETER	Mean daily flow	Total flow	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
WY 1997	52	37,560	4,257	3,150	160,910
WY 1998	64	45,950	4,438	3,280	204,970
WY 1999	45	32,310	4,650	3,440	151,160
WY 2000	43	31,260	4,301	3,180	135,190
WY 2001	39	28,250	4,191	3,100	119,100
WY 2002	39	28,400	4,069	3,010	116,260
WY 2003	38	27,270	4,319	3,200	118,680
WY 2004	38	27,700	4,173	3,090	116,410
WY 2005	42	30,160	4,315	3,190	130,850
WY 2006	36	25,970	4,605	3,410	120,440
WY 2007	26	18,540	4,235	3,130	78,920
WY 2008	22	15,670	4,161	3,080	65,640
WY 2009 to date	18	13,150	4,245	3,070	54,900

Calendar Year Totals

PARAMETER	Mean daily flow	Total flow	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	15,860	4,096	3,030	65,360
CY 2009 to date	18	11,630	4,329	3,120	49,350

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
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
Oct-2008	106	6,540	1,040	718	6,380
Nov-2008	86	5,100	1,520	1,049	7,270
Dec-2008	106	6,520	1,640	1,132	10,030
Jan-2009	90	5,530	2,590	1,787	13,440
Feb-2009	133	7,380	2,620	1,808	18,140
Mar-2009	157	9,630	2,620	1,808	23,680
Apr-2009	51	3,030	3,410	2,353	9,700
May-2009	32	1,950	3,120	2,153	5,710
Jun-2009	29	1,750	3,380	2,332	5,550

Note: EC to TDS conversion = 0.69

Water Year Averages and Totals

PARAMETER	Mean daily flow	Total flow	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
WY 1997	181	130,930	2,390	1,650	293,810
WY 1998	257	182,580	2,600	1,790	444,470
WY 1999	141	101,360	2,582	1,780	245,370
WY 2000	131	94,440	2,496	1,720	220,910
WY 2001	129	92,870	2,737	1,890	238,710
WY 2002	104	75,280	2,809	1,940	198,620
WY 2003	122	88,200	2,688	1,860	223,110
WY 2004	120	87,190	2,704	1,870	221,740
WY 2005	154	110,600	2,535	1,750	263,230
WY 2006	160	116,100	2,273	1,570	247,900
WY 2007	100	72,200	2,541	1,750	171,840
WY 2008	85	61,680	2,044	1,410	118,280
WY 2009 to date	71	51,240	2,640	1,780	124,040

Calendar Year Totals

PARAMETER	Mean daily flow	Total flow	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	80	58,150	1,999	1,380	109,140
CY 2009 to date	75	54,260	2,760	1,775	130,990

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
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
Oct-2008	48	2,980	1,160	789	3,200
Nov-2008	103	6,100	1,070	728	6,040
Dec-2008	51	3,110	1,340	911	3,850
Jan-2009	41	2,530	2,190	1,489	5,120
Feb-2009	131	7,290	1,770	1,204	11,930
Mar-2009	163	10,020	1,890	1,285	17,510
Apr-2009	104	6,170	1,730	1,176	9,870
May-2009	96	5,920	1,480	1,006	8,100
Jun-2009	101	6,010	1,300	884	7,230

Note: EC to TDS conversion = 0.68

Water Year Averages and Totals

PARAMETER	Mean daily flow	Total flow	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
WY 1997	216	156,080	1,294	880	186,800
WY 1998	273	196,090	1,387	940	250,680
WY 1999	210	151,770	1,192	810	167,190
WY 2000	195	141,050	1,314	890	170,730
WY 2001	185	133,880	1,340	910	165,690
WY 2002	145	104,880	1,445	980	139,780
WY 2003	177	127,940	1,334	910	158,340
WY 2004	170	123,330	1,296	880	147,600
WY 2005	215	155,280	1,267	860	181,620
WY 2006	234	168,800	1,189	810	185,950
WY 2007	154	111,370	1,272	870	131,770
WY 2008	125	90,930	1,099	750	92,750
WY 2009 to date	94	67,440	1,441	910	83,460

Calendar Year Totals

PARAMETER	Mean daily flow	Total flow	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	120	86,890	1,046	710	83,900
CY 2009 to date	100	72,060	1,468	893	87,510

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
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
Oct-2008	43	2,660	2,030	1,380	4,990
Nov-2008	106	6,300	1,730	1,176	10,080
Dec-2008	73	4,460	2,570	1,748	10,600
Jan-2009	84	5,180	2,150	1,462	10,300
Feb-2009	261	14,490	1,320	898	17,690
Mar-2009	283	17,390	1,590	1,081	25,570
Apr-2009	153	9,130	2,080	1,414	17,560
May-2009	123	7,580	1,690	1,149	11,850
Jun-2009	127	7,540	1,420	966	9,900

Note: EC to TDS conversion = 0.62

Water Year Averages and Totals

PARAMETER	Mean daily flow	Total flow	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	1,546	970	na
WY 2003	215	156,100	1,542	1,010	214,420
WY 2004	223	161,760	1,554	1,020	224,390
WY 2005	889	642,060	1,034	610	532,650
WY 2006	2,670	1,931,210	863	530	1,392,020
WY 2007	217	156,740	1,382	890	189,720
WY 2008	206	148,330	1,611	1,100	221,900
WY 2009 to date	129	92,850	1,727	970	122,490

Calendar Year Totals

PARAMETER	Mean daily flow	Total flow	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	1,857	1,230	na
CY 2002	225	163,110	1,531	980	217,390
CY 2003	194	140,470	1,572	1,040	198,680
CY 2004	238	172,020	1,513	980	229,270
CY 2005	897	647,690	992	590	519,710
CY 2006	2,671	1,931,950	838	518	1,361,900
CY 2007	193	139,080	1,523	993	187,760
CY 2008	197	141,790	1,649	1,120	215,970
CY 2009 to date	140	101,080	1,651	986	135,610

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
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
Oct-2008	430	26,480	896	556	20,010
Nov-2008	520	30,940	1,055	654	27,530
Dec-2008	500	30,570	1,235	766	31,830
Jan-2009	500	30,610	1,380	856	35,620
Feb-2009	780	43,120	1,300	806	47,270
Mar-2009	840	51,450	1,410	874	61,170
Apr-2009	490	29,110	1,600	992	39,270
May-2009	480	29,690	1,110	688	27,790
Jun-2009	360	21,640	1,250	775	22,810

Note: EC to TDS conversion = 0.62

Water Year Averages and Totals

PARAMETER	Mean daily flow	Total flow	FW EC	TDS	Salt load
UNITS	cfs	acre-feet	µS/cm	mg/L	tons
WY 1997	5,407	3,844,610	820	510	2,666,620
WY 1998	6,869	4,904,910	601	370	2,468,150
WY 1999	1,412	1,015,480	902	560	773,390
WY 2000	1,423	1,027,440	976	610	852,360
WY 2001	903	653,430	1,162	720	639,840
WY 2002	738	533,960	1,202	750	544,640
WY 2003	753	546,130	1,244	770	571,910
WY 2004	764	554,550	1,226	760	573,180
WY 2005	2,381	1,721,000	722	450	1,053,250
WY 2006	4,748	3,437,650	569	350	1,636,320
WY 2007	838	607,180	1,103	680	561,520
WY 2008	802	580,500	1,059	660	521,060
WY 2009 to date	468	336,670	1,273	690	315,930

Calendar Year Totals

PARAMETER	Mean daily flow	Total flow	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	4,798	3,473,920	567	352	1,661,630
CY 2007	740	535,270	1,099	682	496,160
CY 2008	753	545,170	1,088	670	496,760
CY 2009 to date	490	353,040	1,270	660	316,760

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

PRELIMINARY RESULTS

Table 32. Summary of sediment monitoring results from November 2005 to June 2009. Concentrations in µg/g dry weight.

See Table 33 for explanation of footnotes and agency abbreviations.

Station Code	PARAMETER	Selenium			Organic Carbon			Percent Moisture		
Station Name	DEPTH	0-3 cm	3-8 cm	Whole Core	0-3 cm	3-8 cm	Whole Core	0-3 cm	3-8 cm	Whole Core
	SOURCE	USBR	USBR	USBR	USBR	USBR	USBR	USBR	USBR	USBR
	UNITS	µg/g (dry)	µg/g (dry)	µg/g (dry)	%	%	%	%	%	%
Station C:	Nov-01-2005	<0.10	<0.10	<0.10	0.24	0.17	0.11	31.10	28.00	20.30
Mud Slough North	Apr-21-2006	**0.54	**0.54	**0.47	**1.41	**1.58	0.95	45.20	41.80	33.80
upstream of	Jun-21-2006	0.12	<0.10	<0.10	0.42	0.07	0.25	29.90	24.10	24.90
drainage discharges	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
	Nov-04-2008	0.10	0.20	0.10	0.41	0.30	0.35	28.30	27.20	26.50
	Mar-10-2009	0.10	0.10	0.10	0.66	0.71	0.53	38.90	36.30	35.90
	Jun-03-2009	P	P	P	P	P	P	P	P	P
Station D:	Nov-01-2005	0.19	0.19	0.23	0.09	0.11	0.20	26.10	24.50	22.90
Mud Slough North	Apr-21-2006	NA	NA	NA	NA	NA	NA	NA	NA	NA
downstream of	Jun-21-2006	**1.8	0.24	0.30	**1.23	0.22	0.30	44.30	25.90	30.70
drainage discharges	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
	Nov-04-2008	0.30	0.20	0.10	0.28	0.24	0.17	31.10	26.10	19.60
	Mar-10-2009	0.20	0.20	0.10	0.15	0.20	0.14	25.80	25.90	23.90
	Jun-03-2009	P	P	P	P	P	P	P	P	P
Station E:	Nov-01-2005	0.43	0.55	0.47	0.16	0.26	0.16	28.80	27.40	26.10
Mud Slough at Highway 140	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
	Nov-04-2008	0.70	0.70	1.20	0.43	0.47	0.63	30.50	37.80	40.30
	Mar-10-2009	0.60	0.70	0.70	0.22	0.39	0.45	29.10	30.70	31.00
	Jun-03-2009	P	P	P	P	P	P	P	P	P
Station F:	Nov-01-2005	0.29	0.44	0.48	0.25	0.41	0.26	27.40	26.90	27.00
Salt Slough at Highway 165	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
	Nov-04-2008	0.20	0.20	0.50	0.28	0.22	0.26	27.10	27.00	22.40
	Mar-10-2009	0.40	0.50	0.40	0.27	0.22	0.21	29.60	29.10	25.90
	Jun-03-2009	P	P	P	P	P	P	P	P	P
Station I2:	Nov-01-2005	6.30	5.80	2.60	2.45	2.62	1.78	55.10	54.20	52.10
Mud Slough:	Apr-21-2006	2.20	1.80	1.20	1.93	1.55	1.00	43.60	36.60	34.40
Seasonal backwater tributary	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
	Nov-04-2008	4.80	3.70	3.00	2.59	2.23	2.33	51.10	50.90	49.40
	Mar-10-2009	5.50	6.20	2.60	2.71	3.05	2.11	50.40	52.80	49.60
	Jun-03-2009	P	P	P	P	P	P	P	P	P

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 (10^6cell/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