

GRASSLAND BYPASS PROJECT

MONTHLY DATA REPORT

March 2000

June 09, 2000

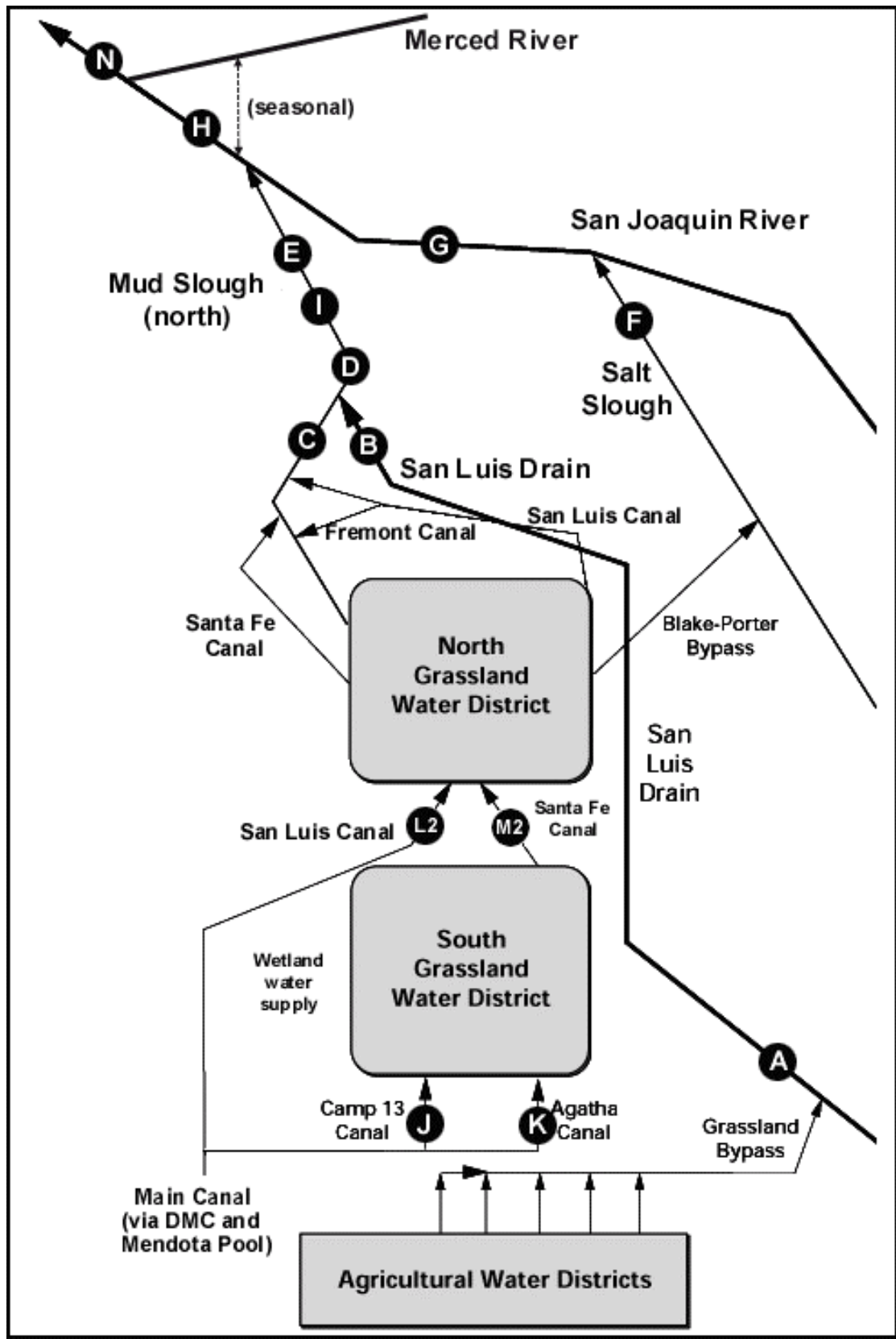
Preliminary Results

A cooperative effort of:

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

compiled by San Francisco Estuary Institute





GRASSLAND BYPASS PROJECT

MONTHLY DATA REPORT

LIST OF TABLES FOR MONTHLY REPORT

Continuous Monitoring

1. Continuous water monitoring at Station A (inflow to San Luis Drain), March 2000.
2. Continuous water monitoring at Station B (discharge from San Luis Drain), March 2000.
3. Continuous water monitoring at Station D (Mud Slough North downstream of drainage discharges), March 2000.
4. Continuous water monitoring at Station F (Salt Slough at Highway 165), March 2000.
5. Continuous water monitoring at Station N (San Joaquin River at Crow's Landing), March 2000.

Weekly Monitoring

- 6a. Weekly water quality monitoring at Station A (inflow to San Luis Drain), taken from grab samples.
- 6b. Weekly water quality monitoring at Station A (inflow to San Luis Drain), taken from composite samples.
7. Weekly water quality monitoring at Station B (discharge from San Luis Drain).
8. Weekly water quality monitoring at Station C (Mud Slough North upstream of drainage discharge).
9. Weekly water quality monitoring at Station D (Mud Slough North downstream of drainage discharge).
10. Weekly water quality monitoring at Station F (Salt Slough at Lander Avenue).
11. Weekly water quality monitoring at Station G (San Joaquin River at Fremont Ford).
12. Weekly water quality monitoring at Station H (San Joaquin River at Hills Ferry).
13. Weekly water quality monitoring at Station J (Camp 13 Ditch).
14. Weekly water quality monitoring at Station K (Agatha Canal).
15. Weekly water quality monitoring at Station L2 (San Luis Canal at splits).
16. Weekly water quality monitoring at Station M2 (Santa Fe Canal at weir).
17. Weekly water quality monitoring at Station N (San Joaquin River at Crow's Landing).

Monthly Monitoring

18. Summary of fathead minnow (*Pimephales promelas*) larvae survival in 7-day tests using water samples collected from April 1999 to March 2000.
19. Summary of fathead minnow (*Pimephales promelas*) larvae growth in 7-day tests using water samples collected from April 1999 to March 2000.
20. Summary of *Daphnia magna* survival in 7-day tests using water samples collected from April 1999 to March 2000.
21. Summary of *Daphnia magna* reproduction in 7-day tests using water samples collected from April 1999 to March 2000.
22. Summary of *Selenastrum capricornutum* growth in 4-day tests using water samples collected from April 1999 to March 2000.
23. Summary of selenium concentrations in grab water samples collected at study stations for use in laboratory toxicity tests, January 2000 to March 2000.
24. Summary of sulfate concentrations in grab water samples collected at study stations for use in laboratory toxicity tests, January 2000 to March 2000.
25. Summary of total suspended solids concentrations in grab water samples collected from January 2000 to March 2000.
26. Explanations of footnotes and agency abbreviations.

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

See Table 26 for explanation of footnotes and agency abbreviations.

| PARAMETER | Flow | Specific Conductance |
|-------------|--------|----------------------|
| DATA SOURCE | SLDMWA | SLDMWA |
| UNITS | cfs | µS/cm |
| Mar-01-2000 | 74 | 4,410 |
| Mar-02-2000 | 72 | 4,280 |
| Mar-03-2000 | 72 | 4,330 |
| Mar-04-2000 | 66 | 4,070 |
| Mar-05-2000 | 69 | 4,400 |
| Mar-06-2000 | 74 | 4,730 |
| Mar-07-2000 | 66 | 4,910 |
| Mar-08-2000 | 60 | 5,000 |
| Mar-09-2000 | 57 | 5,250 |
| Mar-10-2000 | 52 | 5,350 |
| Mar-11-2000 | 49 | 5,400 |
| Mar-12-2000 | 49 | 5,430 |
| Mar-13-2000 | 48 | 5,450 |
| Mar-14-2000 | 49 | 5,420 |
| Mar-15-2000 | 48 | 5,530 |
| Mar-16-2000 | 48 | 5,580 |
| Mar-17-2000 | 48 | 5,500 |
| Mar-18-2000 | 46 | 5,470 |
| Mar-19-2000 | 46 | 5,420 |
| Mar-20-2000 | 43 | 5,430 |
| Mar-21-2000 | 49 | 5,330 |
| Mar-22-2000 | 45 | 5,280 |
| Mar-23-2000 | 45 | 5,250 |
| Mar-24-2000 | 46 | 5,050 |
| Mar-25-2000 | 44 | 5,240 |
| Mar-26-2000 | 43 | 5,280 |
| Mar-27-2000 | 44 | 5,130 |
| Mar-28-2000 | 46 | 4,880 |
| Mar-29-2000 | 42 | 4,970 |
| Mar-30-2000 | 40 | 5,020 |
| Mar-31-2000 | 42 | 4,910 |
| Mean | 52 | 5,090 |

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

| | | |
|---------------------------------------|--------------|------------|
| Load Limitation for March 2000 | (lbs) | 959 |
|---------------------------------------|--------------|------------|

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

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

See Table 26 for explanation of footnotes and agency abbreviations.

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

Table 26. 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 |
| (4) | In situ cages could not be deployed due to wet weather conditions. |
| (5) | Baseline results for 3/96 are for 14-day old larvae. There was no survival for the 24-hour old larvae. |
| (6) | Windmill station was dry due to water drainage. Use of plastic screened beakers for Station F during 8/96 with use of 4-day old larvae resulted in 0/39. Apparent cause of mortality was elevated temperature and sediment which was found in all cages and beakers. |
| (7) | Heavy silt accumulation was noted in Stations D and F cages and light silt accumulation was observed in both the Windmill Station and Station B. |
| (8) | Moderate silt accumulation was noted in Stations B and F cages and light silt accumulation was observed in Station D. |
| (9) | No test deployment was done at the Windmill Station due to extreme conditions (stagnant & pH>9.0). At Station B, replicate A was retrieved with no cork and replicate C lost its cork during retrieval. There were no surviving fish for a growth determination for Station F cages. |
| * | Significantly reduced from Delta Mendota Canal ($p < 0.05$) |
| † | DMC water failed to meet the survival (>80%) acceptability criteria. |
| †† | Data from records of the Grassland Water District. Data is not subjected to the criteria documented in the Compliance Monitoring Program for the Use and Operation of the Grassland Bypass Project (1996) nor the Quality Assurance Project Plan for the GBP (1997 draft). |
| ††† | DMC water failed to meet the reproduction (>10 neonates/adult) acceptability criteria. |
| †††† | DMC water failed to meet minimum growth (10^6 cell/mL) acceptability criteria. |
| ‡ | Control value exceeds suggested maximum variance (20%) acceptability criteria. |
| # | New testing laboratory with reporting limit of 0.4 µg/L as of June 1998. |