

Appendix B

Selenium Uptake, Flow, and X2 (Isohaline) Data

Table B-1
Concentrations of Selenium (Se) in *Corbula amurensis*
at USGS Benthic Station 4.1 near Chipps Island, Suisun Bay

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/ gram) | Weighted Monthly Average of Se in Clams (micrograms/ gram) |
|-----------|--------------------------|------------------------------|-------------------------|---------------------------|--|--|
| 01-Nov-01 | | | | | | 16.0 |
| 27-Nov-01 | 71 | 9.970 | 0.318 | 0.004 | 16.0 | |
| 27-Nov-01 | 58 | 11.600 | 0.388 | 0.007 | 16.0 | |
| 01-Dec-01 | | | | | | 13.1 |
| 18-Dec-01 | 85 | 10.000 | 0.322 | 0.004 | 14.0 | |
| 18-Dec-01 | 73 | 11.820 | 0.435 | 0.006 | 12.0 | |
| 01-Jan-02 | | | | | | |
| 01-Feb-02 | | | | | | |
| 01-Mar-02 | | | | | | 7.9 |
| 23-Mar-02 | 56 | 9.970 | 0.358 | 0.006 | 8.0 | |
| 23-Mar-02 | 6 | 19.980 | 0.268 | 0.045 | 6.6 | |
| 01-Apr-02 | | | | | | |
| 01-May-02 | | | | | | 5.0 |
| 08-May-02 | 74 | 8.550 | 0.408 | 0.006 | 5.0 | |
| 08-May-02 | 45 | 9.490 | 0.332 | 0.007 | 5.0 | |
| 01-Jun-02 | | | | | | 5.8 |
| 05-Jun-02 | 50 | 9.510 | 0.218 | 0.004 | 6.0 | |
| 05-Jun-02 | 38 | 10.460 | 0.221 | 0.006 | 5.9 | |
| 05-Jun-02 | 34 | 11.440 | 0.256 | 0.008 | 5.3 | |
| 01-Jul-02 | | | | | | 13.0 |
| 17-Jul-02 | 35 | 10.580 | 0.177 | 0.005 | 13.0 | |
| 17-Jul-02 | 28 | 11.410 | 0.177 | 0.006 | 13.0 | |
| 17-Jul-02 | 21 | 12.450 | 0.172 | 0.008 | 13.0 | |

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Table B-1
Concentrations of Selenium (Se) in *Corbula amurensis*
at USGS Benthic Station 4.1 near Chipp's Island, Suisun Bay

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/ gram) | Weighted Monthly Average of Se in Clams (micrograms/ gram) |
|-----------|--------------------------|------------------------------|-------------------------|---------------------------|--|--|
| 01-Aug-02 | | | | | | 11.3 |
| 22-Aug-02 | 32 | 11.400 | 0.257 | 0.008 | 11.0 | |
| 22-Aug-02 | 19 | 13.530 | 0.211 | 0.011 | 12.0 | |
| 22-Aug-02 | 17 | 14.450 | 0.228 | 0.013 | 11.0 | |
| 01-Sep-02 | | | | | | 10.4 |
| 11-Sep-02 | 21 | 13.490 | 0.269 | 0.013 | 10.2 | |
| 11-Sep-02 | 14 | 15.580 | 0.250 | 0.018 | 10.8 | |
| 11-Sep-02 | 10 | 17.350 | 0.245 | 0.024 | 10.4 | |
| 01-Oct-02 | | | | | | 9.7 |
| 09-Oct-02 | 21 | 12.450 | 0.253 | 0.011 | 10.1 | |
| 09-Oct-02 | 18 | 13.570 | 0.209 | 0.012 | 10.1 | |
| 09-Oct-02 | 17 | 14.440 | 0.220 | 0.013 | 8.9 | |
| 01-Nov-02 | | | | | | 10.6 |
| 14-Nov-02 | 28 | 14.990 | 0.459 | 0.016 | 11.0 | |
| 14-Nov-02 | 20 | 16.970 | 0.377 | 0.019 | 10.0 | |
| 01-Dec-02 | | | | | | 10.5 |
| 11-Dec-02 | 12 | 17.550 | 0.315 | 0.026 | 11.0 | |
| 11-Dec-02 | 7 | 19.180 | 0.221 | 0.032 | 10.0 | |
| 11-Dec-02 | 6 | 20.470 | 0.227 | 0.038 | 10.0 | |
| 01-Jan-03 | | | | | | 8.4 |
| 08-Jan-03 | 18 | 13.800 | 0.223 | 0.012 | 8.9 | |
| 08-Jan-03 | 10 | 17.600 | 0.228 | 0.023 | 7.9 | |
| 08-Jan-03 | 6 | 20.290 | 0.190 | 0.032 | 7.8 | |
| 01-Feb-03 | | | | | | 7.9 |
| 20-Feb-03 | 6 | 16.500 | 0.098 | 0.016 | 7.8 | |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

Table B-1
Concentrations of Selenium (Se) in *Corbula amurensis*
at USGS Benthic Station 4.1 near Chipp's Island, Suisun Bay

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/ gram) | Weighted Monthly Average of Se in Clams (micrograms/ gram) |
|-----------|--------------------------|------------------------------|-------------------------|---------------------------|--|--|
| 20-Feb-03 | 6 | 17.440 | 0.107 | 0.018 | 8.0 | |
| 20-Feb-03 | 6 | 19.270 | 0.145 | 0.024 | 7.9 | |
| 01-Mar-03 | | | | | | 7.2 |
| 19-Mar-03 | 33 | 10.980 | 0.225 | 0.007 | 7.6 | |
| 19-Mar-03 | 10 | 16.400 | 0.207 | 0.021 | 6.0 | |
| 19-Mar-03 | 4 | 19.390 | 0.111 | 0.028 | 7.0 | |
| 01-Apr-03 | | | | | | |
| 01-May-03 | | | | | | |
| 01-Jun-03 | | | | | | |
| 01-Jul-03 | | | | | | 6.5 |
| 16-Jul-03 | 35 | 11.490 | 0.234 | 0.007 | 6.2 | |
| 16-Jul-03 | 20 | 12.530 | 0.180 | 0.009 | 6.7 | |
| 16-Jul-03 | 15 | 13.550 | 0.179 | 0.012 | 6.7 | |
| 01-Aug-03 | | | | | | 6.3 |
| 13-Aug-03 | 22 | 11.520 | 0.179 | 0.008 | 6.2 | |
| 13-Aug-03 | 26 | 12.560 | 0.268 | 0.010 | 6.4 | |
| 13-Aug-03 | 22 | 13.520 | 0.247 | 0.011 | 6.2 | |
| 01-Sep-03 | | | | | | 7.5 |
| 10-Sep-03 | 21 | 12.550 | 0.219 | 0.010 | 7.5 | |
| 10-Sep-03 | 17 | 13.560 | 0.222 | 0.013 | 7.7 | |
| 10-Sep-03 | 10 | 17.510 | 0.243 | 0.024 | 7.3 | |
| 01-Oct-03 | | | | | | 8.0 |
| 16-Oct-03 | 14 | 16.520 | 0.300 | 0.021 | 8.0 | |
| 16-Oct-03 | 10 | 17.370 | 0.242 | 0.024 | 8.4 | |
| 16-Oct-03 | 5 | 20.380 | 0.216 | 0.043 | 7.1 | |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

Table B-1
Concentrations of Selenium (Se) in *Corbula amurensis*
at USGS Benthic Station 4.1 near Chipp's Island, Suisun Bay

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/ gram) | Weighted Monthly Average of Se in Clams (micrograms/ gram) |
|-----------|--------------------------|------------------------------|-------------------------|---------------------------|--|--|
| 01-Nov-03 | | | | | | 10.1 |
| 19-Nov-03 | 47 | 10.500 | 0.244 | 0.005 | 10.7 | |
| 19-Nov-03 | 37 | 11.380 | 0.245 | 0.007 | 9.7 | |
| 19-Nov-03 | 7 | 16.590 | 0.178 | 0.025 | 7.7 | |
| 01-Dec-03 | | | | | | 7.9 |
| 17-Dec-03 | 8 | 15.450 | 0.161 | 0.020 | 7.9 | |
| 17-Dec-03 | 10 | 17.680 | 0.270 | 0.027 | 7.9 | |
| 17-Dec-03 | 10 | 18.510 | 0.289 | 0.029 | 7.8 | |
| 01-Jan-04 | | | | | | 6.9 |
| 13-Jan-04 | 22 | 17.350 | 0.151 | 0.007 | 7.1 | |
| 13-Jan-04 | 13 | 12.450 | 0.205 | 0.016 | 6.2 | |
| 13-Jan-04 | 15 | 13.570 | 0.318 | 0.021 | 7.1 | |
| 01-Feb-04 | | | | | | 6.7 |
| 11-Feb-04 | 35 | 14.440 | 0.234 | 0.007 | 6.8 | |
| 11-Feb-04 | 19 | 14.990 | 0.223 | 0.012 | 6.4 | |
| 11-Feb-04 | 10 | 16.970 | 0.203 | 0.020 | 6.7 | |
| 01-Mar-04 | | | | | | 5.5 |
| 10-Mar-04 | 47 | 17.550 | 0.299 | 0.006 | 5.5 | |
| 10-Mar-04 | 33 | 19.180 | 0.262 | 0.008 | 5.5 | |
| 01-Apr-04 | | | | | | 4.2 |
| 21-Apr-04 | 49 | 20.470 | 0.377 | 0.008 | 4.4 | |
| 21-Apr-04 | 44 | 13.800 | 0.539 | 0.012 | 3.9 | |
| 21-Apr-04 | 14 | 17.600 | 0.404 | 0.029 | 4.8 | |
| 01-May-04 | | | | | | 4.9 |
| 19-May-04 | 83 | 20.290 | 0.423 | 0.005 | 4.8 | |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

Table B-1
Concentrations of Selenium (Se) in *Corbula amurensis*
at USGS Benthic Station 4.1 near Chipp's Island, Suisun Bay

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/ gram) | Weighted Monthly Average of Se in Clams (micrograms/ gram) |
|-----------|--------------------------|------------------------------|-------------------------|---------------------------|--|--|
| 19-May-04 | 45 | 16.500 | 0.345 | 0.008 | 4.9 | |
| 19-May-04 | 23 | 17.440 | 0.321 | 0.014 | 5.1 | |
| 01-Jun-04 | | | | | | 8.5 |
| 23-Jun-04 | 63 | 19.270 | 0.337 | 0.005 | 9.1 | |
| 23-Jun-04 | 34 | 10.980 | 0.251 | 0.007 | 8.2 | |
| 23-Jun-04 | 27 | 16.400 | 0.248 | 0.009 | 8.7 | |
| 23-Jun-04 | 21 | 19.390 | 0.230 | 0.011 | 7.8 | |
| 23-Jun-04 | 17 | 11.490 | 0.252 | 0.015 | 7.8 | |
| 01-Jul-04 | | | | | | 8.6 |
| 27-Jul-04 | 28 | 12.530 | 0.207 | 0.007 | 8.3 | |
| 27-Jul-04 | 27 | 13.550 | 0.243 | 0.009 | 9.3 | |
| 27-Jul-04 | 17 | 11.520 | 0.222 | 0.013 | 7.9 | |
| 01-Aug-04 | | | | | | 8.8 |
| 25-Aug-04 | 29 | 12.560 | 0.211 | 0.007 | 8.2 | |
| 25-Aug-04 | 27 | 13.520 | 0.237 | 0.009 | 9.5 | |
| 25-Aug-04 | 31 | 12.550 | 0.339 | 0.011 | 8.7 | |
| 01-Sep-04 | | | | | | 7.2 |
| 15-Sep-04 | 19 | 13.560 | 0.248 | 0.013 | 7.3 | |
| 15-Sep-04 | 11 | 17.510 | 0.207 | 0.019 | 7.3 | |
| 15-Sep-04 | 7 | 16.520 | 0.162 | 0.023 | 6.8 | |
| 01-Oct-04 | | | | | | |
| 01-Nov-04 | | | | | | 6.5 |
| 04-Nov-04 | 17 | 17.370 | 0.249 | 0.015 | 6.8 | |
| 04-Nov-04 | 11 | 20.380 | 0.248 | 0.023 | 6.7 | |
| 04-Nov-04 | 8 | 10.500 | 0.239 | 0.030 | 5.6 | |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

Table B-1
Concentrations of Selenium (Se) in *Corbula amurensis*
at USGS Benthic Station 4.1 near Chipp's Island, Suisun Bay

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/ gram) | Weighted Monthly Average of Se in Clams (micrograms/ gram) |
|-----------|--------------------------|------------------------------|-------------------------|---------------------------|--|--|
| 01-Dec-04 | | | | | | 8.1 |
| 14-Dec-04 | 13 | 11.380 | 0.195 | 0.015 | 8.0 | |
| 14-Dec-04 | 11 | 16.590 | 0.179 | 0.016 | 8.3 | |
| 14-Dec-04 | 9 | 15.450 | 0.175 | 0.019 | 7.9 | |
| 01-Jan-05 | | | | | | 6.2 |
| 12-Jan-05 | 14 | 17.680 | 0.221 | 0.016 | 6.4 | |
| 12-Jan-05 | 11 | 18.510 | 0.208 | 0.019 | 6.3 | |
| 12-Jan-05 | 8 | 17.410 | 0.187 | 0.023 | 5.6 | |
| 01-Feb-05 | | | | | | 6.4 |
| 24-Feb-05 | 24 | 13.250 | 0.221 | 0.009 | 6.3 | |
| 24-Feb-05 | 14 | 15.570 | 0.200 | 0.014 | 7.0 | |
| 24-Feb-05 | 15 | 16.790 | 0.266 | 0.018 | 6.1 | |
| 01-Mar-05 | | | | | | 5.2 |
| 23-Mar-05 | 25 | 12.370 | 0.220 | 0.009 | 5.0 | |
| 23-Mar-05 | 10 | 15.910 | 0.156 | 0.016 | 5.6 | |
| 23-Mar-05 | 6 | 17.880 | 0.133 | 0.022 | 5.7 | |
| 01-Apr-05 | | | | | | 5.1 |
| 13-Apr-05 | 28 | 11.940 | 0.272 | 0.010 | 5.1 | |
| 13-Apr-05 | 18 | 15.390 | 0.307 | 0.017 | 5.2 | |
| 13-Apr-05 | 11 | 16.270 | 0.281 | 0.026 | 4.7 | |
| 01-May-05 | | | | | | 3.3 |
| 11-May-05 | 70 | 5.500 | 0.388 | 0.006 | 3.3 | |
| 11-May-05 | 50 | 9.510 | 0.379 | 0.008 | 3.1 | |
| 11-May-05 | 37 | 10.450 | 0.359 | 0.010 | 3.4 | |
| 01-Jun-05 | | | | | | 3.9 |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

Table B-1
Concentrations of Selenium (Se) in *Corbula amurensis*
at USGS Benthic Station 4.1 near Chipp's Island, Suisun Bay

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/ gram) | Weighted Monthly Average of Se in Clams (micrograms/ gram) |
|-----------|--------------------------|------------------------------|-------------------------|---------------------------|--|--|
| 22-Jun-05 | 75 | 9.190 | 0.382 | 0.005 | 3.8 | |
| 22-Jun-05 | 40 | 10.960 | 0.348 | 0.009 | 4.0 | |
| 22-Jun-05 | 20 | 13.020 | 0.268 | 0.013 | 4.1 | |
| 01-Jul-05 | | | | | | |
| 01-Aug-05 | | | | | | 7.4 |
| 10-Aug-05 | 34 | 12.100 | 0.326 | 0.010 | 7.8 | |
| 10-Aug-05 | 21 | 14.150 | 0.301 | 0.014 | 7.2 | |
| 10-Aug-05 | 9 | 17.770 | 0.246 | 0.027 | 6.7 | |
| 01-Sep-05 | | | | | | 7.8 |
| 08-Sep-05 | 21 | 14.020 | 0.355 | 0.017 | 7.7 | |
| 08-Sep-05 | 14 | 15.490 | 0.287 | 0.021 | 8.2 | |
| 08-Sep-05 | 9 | 17.710 | 0.266 | 0.030 | 7.2 | |
| 01-Oct-05 | | | | | | 7.3 |
| 13-Oct-05 | 15 | 14.090 | 0.258 | 0.017 | 7.7 | |
| 13-Oct-05 | 10 | 16.390 | 0.226 | 0.023 | 7.2 | |
| 13-Oct-05 | 8 | 17.570 | 0.210 | 0.026 | 6.8 | |
| 01-Nov-05 | | | | | | 7.6 |
| 09-Nov-05 | 19 | 14.380 | 0.351 | 0.018 | 7.8 | |
| 09-Nov-05 | 10 | 17.510 | 0.266 | 0.027 | 7.5 | |
| 09-Nov-05 | 7 | 18.960 | 0.244 | 0.035 | 7.0 | |
| 01-Dec-05 | | | | | | 7.9 |
| 08-Dec-05 | 16 | 16.190 | 0.360 | 0.022 | 8.3 | |
| 08-Dec-05 | 10 | 17.430 | 0.264 | 0.026 | 7.6 | |
| 08-Dec-05 | 8 | 18.470 | 0.242 | 0.030 | 7.6 | |
| 01-Jan-06 | | | | | | 6.3 |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

Table B-1
Concentrations of Selenium (Se) in *Corbula amurensis*
at USGS Benthic Station 4.1 near Chipp's Island, Suisun Bay

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/ gram) | Weighted Monthly Average of Se in Clams (micrograms/ gram) |
|-----------|--------------------------|------------------------------|-------------------------|---------------------------|--|--|
| 11-Jan-06 | 22 | 11.220 | 0.146 | 0.007 | 6.5 | |
| 11-Jan-06 | 11 | 16.480 | 0.235 | 0.021 | 6.1 | |
| 11-Jan-06 | 6 | 18.480 | 0.159 | 0.026 | 6.1 | |
| 01-Feb-06 | | | | | | 5.0 |
| 15-Feb-06 | 46 | 10.180 | 0.258 | 0.006 | 4.9 | |
| 15-Feb-06 | 24 | 13.190 | 0.291 | 0.012 | 5.3 | |
| 15-Feb-06 | 8 | 17.460 | 0.201 | 0.025 | 4.2 | |
| 01-Mar-06 | | | | | | 3.9 |
| 16-Mar-06 | 32 | 10.930 | 0.302 | 0.009 | 3.9 | |
| 16-Mar-06 | 8 | 16.940 | 0.223 | 0.028 | 3.7 | |
| 16-Mar-06 | 5 | 19.560 | 0.218 | 0.044 | 3.9 | |
| 01-Apr-06 | | | | | | |
| 01-May-06 | | | | | | 2.8 |
| 10-May-06 | 45 | 9.080 | 0.273 | 0.006 | 2.9 | |
| 10-May-06 | 21 | 11.590 | 0.287 | 0.014 | 2.9 | |
| 10-May-06 | 8 | 13.680 | 0.185 | 0.023 | 2.0 | |
| 01-Jun-06 | | | | | | |
| 01-Jul-06 | | | | | | |
| 01-Aug-06 | | | | | | 4.7 |
| 16-Aug-06 | 14 | 13.570 | 0.285 | 0.020 | 4.4 | |
| 16-Aug-06 | 9 | 16.570 | 0.243 | 0.027 | 4.9 | |
| 16-Aug-06 | 7 | 17.470 | 0.215 | 0.031 | 5.0 | |
| 01-Sep-06 | | | | | | 6.2 |
| 13-Sep-06 | 43 | 9.940 | 0.258 | 0.006 | 6.2 | |
| 13-Sep-06 | 14 | 15.500 | 0.233 | 0.017 | 6.0 | |

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Selenium Uptake, Flow, and X2 (Isohaline) Data

Table B-1
Concentrations of Selenium (Se) in *Corbula amurensis*
at USGS Benthic Station 4.1 near Chipp's Island, Suisun Bay

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/gram) | Weighted Monthly Average of Se in Clams (micrograms/gram) |
|-----------|-----------------------|---------------------------|----------------------|------------------------|------------------------------------|---|
| 13-Sep-06 | 10 | 17.340 | 0.221 | 0.220 | 6.3 | |
| 01-Oct-06 | | | | | | 5.7 |
| 18-Oct-06 | 10 | 14.560 | 0.146 | 0.015 | 5.9 | |
| 18-Oct-06 | 7 | 17.320 | 0.159 | 0.023 | 5.8 | |
| 18-Oct-06 | 6 | 18.250 | 0.171 | 0.029 | 5.4 | |
| 01-Nov-06 | | | | | | 6.9 |
| 15-Nov-06 | 21 | 12.800 | 0.202 | 0.010 | 7.4 | |
| 15-Nov-06 | 10 | 17.580 | 0.222 | 0.022 | 6.3 | |
| 15-Nov-06 | 8 | 18.620 | 0.218 | 0.027 | 6.2 | |
| 01-Dec-06 | | | | | | 6.3 |
| 13-Dec-06 | 44 | 10.660 | 0.269 | 0.006 | 6.3 | |
| 13-Dec-06 | 13 | 15.230 | 0.236 | 0.018 | 6.5 | |
| 13-Dec-06 | 10 | 17.420 | 0.243 | 0.024 | 6.1 | |
| 01-Jan-07 | | | | | | 7.7 |
| 10-Jan-07 | 58 | 9.010 | 0.225 | 0.004 | 8.2 | |
| 10-Jan-07 | 17 | 12.830 | 0.190 | 0.011 | 6.7 | |
| 10-Jan-07 | 9 | 16.710 | 0.199 | 0.022 | 6.3 | |
| 01-Feb-07 | | | | | | 7.9 |
| 07-Feb-07 | 46 | 9.040 | 0.168 | 0.004 | 8.0 | |
| 07-Feb-07 | 22 | 11.360 | 0.151 | 0.007 | 8.2 | |
| 07-Feb-07 | 6 | 17.180 | 0.138 | 0.023 | 6.4 | |
| 01-Mar-07 | | | | | | |
| 01-Apr-07 | | | | | | 5.6 |
| 04-Apr-07 | 80 | 8.830 | 0.258 | 0.003 | 5.6 | |
| 04-Apr-07 | 30 | 10.970 | 0.167 | 0.006 | 5.9 | |

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Selenium Uptake, Flow, and X2 (Isohaline) Data

Table B-1
Concentrations of Selenium (Se) in *Corbula amurensis*
at USGS Benthic Station 4.1 near Chipp's Island, Suisun Bay

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/ gram) | Weighted Monthly Average of Se in Clams (micrograms/ gram) |
|-----------|--------------------------|------------------------------|-------------------------|---------------------------|--|--|
| 04-Apr-07 | 12 | 15.620 | 0.189 | 0.016 | 5.3 | |
| 01-May-07 | | | | | | |
| 01-Jun-07 | | | | | | |
| 01-Jul-07 | | | | | | 8.0 |
| 17-Jul-07 | 79 | 8.530 | 0.216 | 0.003 | 7.2 | |
| 17-Jul-07 | 60 | 9.530 | 0.224 | 0.004 | 8.3 | |
| 17-Jul-07 | 40 | 10.420 | 0.181 | 0.005 | 9.2 | |
| 01-Aug-07 | | | | | | 9.3 |
| 21-Aug-07 | 81 | 9.280 | 0.300 | 0.004 | 9.8 | |
| 21-Aug-07 | 40 | 11.420 | 0.258 | 0.006 | 9.6 | |
| 21-Aug-07 | 28 | 12.400 | 0.218 | 0.008 | 7.4 | |
| 01-Sep-07 | | | | | | 9.2 |
| 12-Sep-07 | 27 | 10.480 | 0.166 | 0.006 | 9.1 | |
| 12-Sep-07 | 28 | 11.460 | 0.204 | 0.007 | 9.4 | |
| 12-Sep-07 | 21 | 12.380 | 0.188 | 0.009 | 9.0 | |
| 01-Oct-07 | | | | | | 10.0 |
| 24-Oct-07 | 42 | 10.180 | 0.212 | 0.005 | 10.0 | |
| 24-Oct-07 | 27 | 12.430 | 0.227 | 0.008 | 10.0 | |
| 24-Oct-07 | 13 | 14.510 | 0.167 | 0.013 | 9.9 | |
| 01-Nov-07 | | | | | | 9.6 |
| 15-Nov-07 | 35 | 11.480 | 0.232 | 0.007 | 10.0 | |
| 15-Nov-07 | 30 | 12.470 | 0.240 | 0.008 | 10.0 | |
| 15-Nov-07 | 25 | 13.410 | 0.231 | 0.009 | 8.5 | |
| 01-Dec-07 | | | | | | 11.3 |
| 12-Dec-07 | 48 | 9.860 | 0.223 | 0.005 | 12.0 | |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/ gram) | Weighted Monthly Average of Se in Clams (micrograms/ gram) |
|-----------|--------------------------|------------------------------|-------------------------|---------------------------|--|--|
| | | | | | | |
| 12-Dec-07 | 25 | 12.510 | 0.215 | 0.009 | 11.0 | |
| 12-Dec-07 | 22 | 13.320 | 0.220 | 0.010 | 10.0 | |
| 01-Jan-08 | | | | | | |
| 01-Feb-08 | | | | | | 8.3 |
| 13-Feb-08 | 35 | 10.460 | 0.152 | 0.004 | 8.6 | |
| 13-Feb-08 | 30 | 11.500 | 0.171 | 0.006 | 8.4 | |
| 13-Feb-08 | 21 | 13.370 | 0.180 | 0.009 | 7.5 | |
| 01-Mar-08 | | | | | | |
| 01-Apr-08 | | | | | | |
| 01-May-08 | | | | | | 7.9 |
| 07-May-08 | 58 | 9.470 | 0.390 | 0.007 | 7.4 | |
| 07-May-08 | 40 | 10.640 | 0.360 | 0.009 | 8.2 | |
| 07-May-08 | 10 | 14.300 | 0.180 | 0.018 | 9.2 | |
| 01-Jun-08 | | | | | | 12.6 |
| 18-Jun-08 | 52 | 9.620 | 0.254 | 0.005 | 13.0 | |
| 18-Jun-08 | 31 | 11.820 | 0.261 | 0.008 | 12.0 | |
| 18-Jun-08 | 8 | 15.630 | 0.145 | 0.018 | 12.0 | |
| 01-Jul-08 | | | | | | 12.0 |
| 16-Jul-08 | 42 | 10.640 | 0.280 | 0.007 | 12.0 | |
| 16-Jul-08 | 30 | 12.880 | 0.329 | 0.011 | 12.0 | |
| 16-Jul-08 | 18 | 14.180 | 0.267 | 0.015 | 12.0 | |
| 01-Aug-08 | | | | | | |
| 01-Sep-08 | | | | | | 10.6 |
| 17-Sep-08 | 75 | 9.930 | 0.452 | 0.006 | 11.0 | |
| 17-Sep-08 | 22 | 12.480 | 0.254 | 0.012 | 9.6 | |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

Table B-1
Concentrations of Selenium (Se) in *Corbula amurensis*
at USGS Benthic Station 4.1 near Chipp's Island, Suisun Bay

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/ gram) | Weighted Monthly Average of Se in Clams (micrograms/ gram) |
|-----------|--------------------------|------------------------------|-------------------------|---------------------------|--|--|
| 17-Sep-08 | 13 | 15.350 | 0.284 | 0.022 | 10.0 | |
| 01-Oct-08 | | | | | | 8.3 |
| 16-Oct-08 | 28 | 12.440 | 0.286 | 0.010 | 8.6 | |
| 16-Oct-08 | 17 | 14.730 | 0.306 | 0.018 | 7.9 | |
| 16-Oct-08 | 9 | 16.300 | 0.216 | 0.024 | 8.0 | |
| 01-Nov-08 | | | | | | 8.8 |
| 19-Nov-08 | 30 | 12.900 | 0.331 | 0.011 | 8.7 | |
| 19-Nov-08 | 17 | 14.430 | 0.261 | 0.015 | 9.0 | |
| 19-Nov-08 | 11 | 16.400 | 0.257 | 0.023 | 8.5 | |
| 01-Dec-08 | | | | | | 11.4 |
| 17-Dec-08 | 60 | 9.890 | 0.304 | 0.005 | 12.0 | |
| 17-Dec-08 | 23 | 13.150 | 0.260 | 0.011 | 10.0 | |
| 17-Dec-08 | 12 | 15.400 | 0.219 | 0.018 | 11.0 | |
| 01-Jan-09 | | | | | | 11.0 |
| 14-Jan-09 | 62 | 9.430 | 0.204 | 0.003 | 10.0 | |
| 14-Jan-09 | 42 | 11.100 | 0.225 | 0.005 | 13.0 | |
| 14-Jan-09 | 19 | 14.500 | 0.220 | 0.012 | 10.0 | |
| 01-Feb-09 | | | | | | 12.3 |
| 11-Feb-09 | 53 | 8.470 | 0.157 | 0.003 | 13.0 | |
| 11-Feb-09 | 37 | 10.380 | 0.179 | 0.005 | 12.0 | |
| 11-Feb-09 | 18 | 12.500 | 0.148 | 0.008 | 11.0 | |
| 01-Mar-09 | | | | | | 7.2 |
| 11-Mar-09 | 56 | 9.130 | 0.185 | 0.003 | 7.2 | |
| 11-Mar-09 | 35 | 11.280 | 0.198 | 0.006 | 7.6 | |
| 11-Mar-09 | 14 | 15.080 | 0.191 | 0.014 | 6.5 | |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

Table B-1
Concentrations of Selenium (Se) in *Corbula amurensis*
at USGS Benthic Station 4.1 near Chipp's Island, Suisun Bay

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/ gram) | Weighted Monthly Average of Se in Clams (micrograms/ gram) |
|-----------|--------------------------|------------------------------|-------------------------|---------------------------|--|--|
| 01-Apr-09 | | | | | | 10.2 |
| 15-Apr-09 | 56 | 9.000 | 0.174 | 0.003 | 11.0 | |
| 15-Apr-09 | 37 | 10.460 | 0.176 | 0.005 | 9.3 | |
| 15-Apr-09 | 16 | 12.330 | 0.115 | 0.007 | 9.6 | |
| 01-May-09 | | | | | | 6.6 |
| 20-May-09 | 53 | 8.590 | 0.199 | 0.004 | 6.4 | |
| 20-May-09 | 27 | 10.390 | 0.161 | 0.006 | 6.8 | |
| 20-May-09 | 16 | 12.820 | 0.156 | 0.010 | 6.9 | |
| 01-Jun-09 | | | | | | 8.8 |
| 24-Jun-09 | 56 | 9.150 | 0.225 | 0.004 | 8.9 | |
| 24-Jun-09 | 40 | 10.530 | 0.232 | 0.006 | 8.7 | |
| 24-Jun-09 | 24 | 12.050 | 0.187 | 0.008 | 8.9 | |
| 01-Jul-09 | | | | | | 11.1 |
| 22-Jul-09 | 63 | 9.090 | 0.245 | 0.004 | 11.0 | |
| 22-Jul-09 | 46 | 10.560 | 0.283 | 0.006 | 12.0 | |
| 22-Jul-09 | 27 | 12.220 | 0.234 | 0.009 | 10.0 | |
| 01-Aug-09 | | | | | | 8.8 |
| 26-Aug-09 | 62 | 9.710 | 0.291 | 0.005 | 9.1 | |
| 26-Aug-09 | 40 | 11.930 | 0.314 | 0.008 | 8.9 | |
| 26-Aug-09 | 21 | 13.490 | 0.228 | 0.011 | 7.9 | |
| 01-Sep-09 | | | | | | 8.9 |
| 23-Sep-09 | 32 | 12.030 | 0.253 | 0.008 | 10.0 | |
| 23-Sep-09 | 21 | 13.440 | 0.225 | 0.011 | 9.7 | |
| 23-Sep-09 | 158 | 14.910 | 0.217 | 0.014 | 8.6 | |
| 01-Oct-09 | | | | | | 9.7 |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

| Date | Individuals in Sample | Average shell length (mm) | Total dry weight (g) | Average dry weight (g) | Se concentration (micrograms/ gram) | Weighted Monthly Average of Se in Clams (micrograms/ gram) |
|-----------|--------------------------|------------------------------|-------------------------|---------------------------|--|--|
| | | | | | | |
| 28-Oct-09 | 27 | 11.540 | 0.184 | 0.007 | 10.0 | |
| 28-Oct-09 | 26 | 13.210 | 0.263 | 0.010 | 9.9 | |
| 28-Oct-09 | 13 | 15.050 | 0.187 | 0.014 | 8.8 | |
| 01-Nov-09 | | | | | | 9.6 |
| 17-Nov-09 | 52 | 10.770 | 0.288 | 0.006 | 9.9 | |
| 17-Nov-09 | 27 | 12.620 | 0.214 | 0.008 | 9.7 | |
| 17-Nov-09 | 20 | 13.890 | 0.211 | 0.011 | 8.9 | |
| 01-Dec-09 | | | | | | 9.9 |
| 02-Dec-09 | 28 | 12.530 | 0.254 | 0.009 | 9.8 | |
| 02-Dec-09 | 21 | 13.500 | 0.229 | 0.011 | 10.0 | |
| 02-Dec-09 | 16 | 14.850 | 0.209 | 0.013 | 9.8 | |
| 01-Jan-10 | | | | | | 10.6 |
| 06-Jan-10 | 27 | 12.480 | 0.226 | 0.008 | 11.0 | |
| 06-Jan-10 | 22 | 13.960 | 0.254 | 0.012 | 10.0 | |
| 06-Jan-10 | 10 | 15.470 | 0.147 | 0.015 | 11.0 | |
| 01-Feb-10 | | | | | | 6.7 |
| 24-Feb-10 | 25 | 12.000 | 0.159 | 0.006 | 7.4 | |
| 24-Feb-10 | 17 | 13.600 | 0.152 | 0.009 | 6.2 | |
| 24-Feb-10 | 11 | 15.270 | 0.131 | 0.012 | 5.9 | |

Sources: Kleckner, *et al* 2010; California Water Impact Network. Months that are blank means no data were available from Kleckner's dataset, as shown in Table B-1, above.

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

| Month/ Year | Net Delta Outflow (cfs) | San Joaquin River at Jersey Point (cfs) | Sacramento River at Rio Vista (cfs) | Ratio SJR/ (SJR+SAC) | X2 (miles from Golden Gate) | Sample Weighted Average Selenium in Clam |
|----------------|-------------------------------|--|---|-------------------------|--------------------------------------|--|
| | | | | | | |
| Jan-02 | 38,734 | 38,277 | 2,661 | 0.06501 | 64.19 | |
| Feb-02 | 12,029 | 18,175 | 1,897 | 0.09452 | 72.35 | |
| Mar-02 | 16,964 | 21,316 | 2,134 | 0.09099 | 71.67 | 7.9 |
| Apr-02 | 11,892 | 14,477 | 2,599 | 0.15217 | 73.47 | |
| May-02 | 13,483 | 12,963 | 2,739 | 0.17443 | 73.87 | 5.0 |
| Jun-02 | 7,374 | 13,889 | 1,407 | 0.09200 | 77.24 | 5.8 |
| Jul-02 | 5,662 | 18,901 | 1,227 | 0.06096 | 81.35 | 13.0 |
| Aug-02 | 3,768 | 17,020 | 1,116 | 0.06151 | 85.07 | 11.3 |
| Sep-02 | 4,108 | 13,563 | 1,175 | 0.07973 | 88.06 | 10.4 |
| Oct-02 | 4,184 | 9,891 | 1,705 | 0.14702 | 86.68 | 9.7 |
| Nov-02 | 7,331 | 11,746 | 1,715 | 0.12738 | 84.46 | 10.6 |
| Dec-02 | 28,885 | 29,130 | 1,988 | 0.06390 | 79.60 | 10.5 |
| Jan-03 | 51,440 | 51,935 | 1,913 | 0.03552 | 62.53 | 8.4 |
| Feb-03 | 29,622 | 36,086 | 1,879 | 0.04949 | 62.29 | 7.9 |
| Mar-03 | 15,761 | 22,923 | 2,193 | 0.08732 | 68.52 | 7.2 |
| Apr-03 | 22,029 | 21,587 | 2,668 | 0.10999 | 71.01 | |
| May-03 | 41,877 | 40,539 | 2,625 | 0.06082 | 62.67 | |
| Jun-03 | 11,719 | 22,277 | 2,034 | 0.08365 | 69.11 | |
| Jul-03 | 9,631 | 22,429 | 1,321 | 0.05561 | 76.67 | 6.5 |
| Aug-03 | 6,874 | 19,584 | 1,281 | 0.06138 | 78.67 | 6.3 |
| Sep-03 | 3,447 | 15,347 | 1,308 | 0.07855 | 85.72 | 7.5 |
| Oct-03 | 4,288 | 11,005 | 1,999 | 0.15373 | 88.29 | 8.0 |
| Nov-03 | 6,626 | 12,450 | 1,647 | 0.11683 | 84.34 | 10.1 |
| Dec-03 | 23,820 | 27,787 | 1,503 | 0.05130 | 76.36 | 7.9 |
| Jan-04 | 32,104 | 36,768 | 1,792 | 0.04647 | 65.16 | 6.9 |
| Feb-04 | 68,091 | 44,421 | 2,201 | 0.04722 | 65.61 | 6.7 |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

| Month/ Year | Net Delta Outflow (cfs) | San Joaquin River at Jersey Point (cfs) | Sacramento River at Rio Vista (cfs) | Ratio SJR/ (SJR+SAC) | X2 (miles from Golden Gate) | Sample Weighted Average Selenium in Clam |
|----------------|-------------------------------|--|---|-------------------------|--------------------------------------|--|
| | | | | | | |
| Mar-04 | 56,256 | 46,706 | 3,361 | 0.06712 | 56.70 | 5.5 |
| Apr-04 | 21,948 | 23,793 | 2,751 | 0.10363 | 64.67 | 4.2 |
| May-04 | 12,354 | 12,532 | 2,647 | 0.17437 | 70.90 | 4.9 |
| Jun-04 | 5,651 | 15,130 | 1,404 | 0.08490 | 81.18 | 8.5 |
| Jul-04 | 7,317 | 20,442 | 1,147 | 0.05311 | 80.25 | 8.6 |
| Aug-04 | 5,204 | 17,913 | 1,125 | 0.05911 | 82.22 | 8.8 |
| Sep-04 | 4,676 | 14,627 | 1,121 | 0.07117 | 84.74 | 7.2 |
| Oct-04 | 8,508 | 12,606 | 1,753 | 0.12207 | 84.09 | |
| Nov-04 | 6,708 | 12,250 | 1,632 | 0.11754 | 80.64 | 6.5 |
| Dec-04 | 12,449 | 17,745 | 1,578 | 0.08167 | 81.05 | 8.1 |
| Jan-05 | 33,589 | 33,681 | 4,918 | 0.12742 | 69.54 | 6.2 |
| Feb-05 | 24,922 | 24,875 | 5,303 | 0.17573 | 67.52 | 6.4 |
| Mar-05 | 38,546 | 30,368 | 8,065 | 0.20984 | 64.40 | 5.2 |
| Apr-05 | 29,876 | 22,133 | 10,061 | 0.31250 | 62.26 | 5.1 |
| May-05 | 50,929 | 40,219 | 10,408 | 0.20558 | 62.02 | 3.3 |
| Jun-05 | 27,838 | 28,653 | 9,922 | 0.25722 | 60.99 | 3.9 |
| Jul-05 | 9,378 | 19,668 | 4,160 | 0.17460 | 71.92 | |
| Aug-05 | 5,586 | 17,245 | 2,622 | 0.13196 | 79.93 | 7.4 |
| Sep-05 | 6,897 | 17,933 | 2,298 | 0.11357 | 81.69 | 7.8 |
| Oct-05 | 4,451 | 14,074 | 2,619 | 0.15688 | 83.71 | 7.3 |
| Nov-05 | 5,006 | 13,387 | 2,038 | 0.13214 | 86.44 | 7.6 |
| Dec-05 | 42,828 | 35,458 | 3,521 | 0.09034 | 78.80 | 7.9 |
| Jan-06 | 145,920 | 66,152 | 13,171 | 0.16605 | 54.66 | 6.3 |
| Feb-06 | 51,805 | 48,921 | 6,458 | 0.11661 | 55.12 | 5.0 |
| Mar-06 | 115,393 | 67,413 | 11,705 | 0.14794 | 52.77 | 3.9 |
| Apr-06 | 179,387 | 77,647 | 27,887 | 0.26425 | 45.97 | |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

| Month/ Year | Table B-2 Flow, X2 and Selenium Sample Data in <i>Corbula</i> Clams, 2002-2010 | | | | | |
|----------------|---|--|---|-------------------------|--------------------------------------|--|
| | Net Delta Outflow (cfs) | San Joaquin River at Jersey Point (cfs) | Sacramento River at Rio Vista (cfs) | Ratio SJR/ (SJR+SAC) | X2 (miles from Golden Gate) | Sample Weighted Average Selenium in Clam |
| May-06 | 80,754 | 52,145 | 25,971 | 0.33247 | 48.40 | 2.8 |
| Jun-06 | 34,332 | 27,210 | 15,670 | 0.36544 | 57.13 | |
| Jul-06 | 9,300 | 18,587 | 5,547 | 0.22983 | 70.04 | |
| Aug-06 | 7,227 | 18,865 | 3,697 | 0.16387 | 77.94 | 4.7 |
| Sep-06 | 6,982 | 18,010 | 3,316 | 0.15549 | 80.33 | 6.2 |
| Oct-06 | 3,970 | 11,722 | 3,851 | 0.24728 | 83.18 | 5.7 |
| Nov-06 | 5,230 | 12,147 | 2,538 | 0.17283 | 86.03 | 6.9 |
| Dec-06 | 9,019 | 16,952 | 2,354 | 0.12194 | 83.07 | 6.3 |
| Jan-07 | 8,229 | 13,823 | 2,587 | 0.15766 | 79.01 | 7.7 |
| Feb-07 | 21,230 | 22,700 | 2,534 | 0.10040 | 75.19 | 7.9 |
| Mar-07 | 13,968 | 18,323 | 2,555 | 0.12237 | 71.42 | |
| Apr-07 | 11,239 | 13,631 | 2,225 | 0.14034 | 75.24 | 5.6 |
| May-07 | 9,311 | 9,363 | 2,898 | 0.23637 | 76.06 | |
| Jun-07 | 7,777 | 12,290 | 1,745 | 0.12433 | 78.64 | |
| Jul-07 | 5,292 | 19,065 | 1,138 | 0.05632 | 81.74 | 8.0 |
| Aug-07 | 3,689 | 17,123 | 1,008 | 0.05557 | 86.66 | 9.3 |
| Sep-07 | 4,486 | 15,197 | 1,014 | 0.06256 | 86.27 | 9.2 |
| Oct-07 | 3,649 | 10,517 | 1,570 | 0.12986 | 88.61 | 10.0 |
| Nov-07 | 4,290 | 10,007 | 1,711 | 0.14599 | 87.93 | 9.6 |
| Dec-07 | 6,579 | 11,519 | 1,503 | 0.11539 | 86.63 | 11.3 |
| Jan-08 | 24,549 | 22,471 | 2,319 | 0.09356 | 75.37 | |
| Feb-08 | 24,104 | 26,286 | 2,369 | 0.08268 | 68.39 | 8.3 |
| Mar-08 | 12,183 | 13,692 | 2,115 | 0.13383 | 71.30 | |
| Apr-08 | 9,482 | 10,194 | 2,409 | 0.19113 | 76.57 | |
| May-08 | 8,154 | 8,798 | 2,755 | 0.23850 | 77.92 | 7.9 |
| Jun-08 | 7,254 | 11,304 | 1,033 | 0.08372 | 79.58 | 12.6 |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

Table B-2
Flow, X2 and Selenium Sample Data in *Corbula* Clams, 2002-2010

| Month/ Year | Net Delta Outflow (cfs) | San Joaquin River at Jersey Point (cfs) | Sacramento River at Rio Vista (cfs) | Ratio SJR/ (SJR+SAC) | X2 (miles from Golden Gate) | Sample Weighted Average Selenium in Clam |
|----------------|-------------------------------|--|---|-------------------------|--------------------------------------|--|
| Jul-08 | 3,614 | 12,526 | 864 | 0.06452 | 84.56 | 12.0 |
| Aug-08 | 3,031 | 10,823 | 869 | 0.07430 | 89.32 | |
| Sep-08 | 4,029 | 10,336 | 902 | 0.08023 | 88.60 | 10.6 |
| Oct-08 | 3,032 | 7,631 | 1,235 | 0.13927 | 90.00 | 8.3 |
| Nov-08 | 5,534 | 9,458 | 1,140 | 0.10756 | 87.99 | 8.8 |
| Dec-08 | 6,919 | 8,679 | 1,128 | 0.11503 | 85.88 | 11.4 |
| Jan-09 | 6,034 | 8,870 | 1,105 | 0.11077 | 84.11 | 11.0 |
| Feb-09 | 22,387 | 20,104 | 1,428 | 0.06630 | 77.36 | 12.3 |
| Mar-09 | 19,414 | 22,116 | 1,422 | 0.06042 | 69.39 | 7.2 |
| Apr-09 | 11,944 | 13,563 | 1,516 | 0.10053 | 74.66 | 10.2 |
| May-09 | 15,797 | 16,358 | 2,130 | 0.11519 | 72.27 | 6.6 |
| Jun-09 | 8,006 | 11,966 | 1,099 | 0.08409 | 76.53 | 8.8 |
| Jul-09 | 5,151 | 18,616 | 606 | 0.03153 | 81.98 | 11.1 |
| Aug-09 | 4,213 | 15,113 | 609 | 0.03872 | 85.38 | 8.8 |
| Sep-09 | 3,066 | 11,448 | 948 | 0.07645 | 87.64 | 8.9 |
| Oct-09 | 6,636 | 9,781 | 1,904 | 0.16296 | 85.54 | 9.7 |
| Nov-09 | 5,201 | 9,008 | 1,404 | 0.13488 | 84.92 | 9.6 |
| Dec-09 | 6,874 | 10,612 | 1,319 | 0.11053 | 83.16 | 9.9 |
| Jan-10 | 27,303 | 26,809 | 1,955 | 0.06797 | 77.86 | 10.6 |
| Feb-10 | 30,183 | 28,993 | 2,426 | 0.07721 | 65.58 | 6.7 |

Appendix B
Selenium Uptake, Flow, and X2 (Isohaline) Data

Table B-3
Average Subsurface Selenium Concentrations in San Joaquin River Basin, 1986-2005
and Selenium Regulation Criteria

| Year | Arithmetic Average | Geometric Mean | USEPA Se Criterion for Rivers & Streams (5 micrograms/Liter) | State and Federal Se Criterion for Wetlands' Aquatic Life (2 micrograms/Liter) | Recommended USGS Safe Tissue Levels for Estuary (0.5 micrograms/Liter) |
|------|--------------------|----------------|--|--|--|
| 1986 | 0.099 | 0.061 | | | |
| 1987 | 0.110 | 0.053 | | | |
| 1988 | 0.095 | 0.057 | | | |
| 1989 | 0.090 | 0.053 | | | |
| 1990 | 0.085 | 0.053 | 0.005 | 0.002 | 0.0005 |
| 1991 | 0.091 | 0.053 | 0.005 | 0.002 | 0.0005 |
| 1992 | 0.066 | 0.050 | 0.005 | 0.002 | 0.0005 |
| 1993 | 0.071 | 0.042 | 0.005 | 0.002 | 0.0005 |
| 1994 | 0.077 | 0.054 | 0.005 | 0.002 | 0.0005 |
| 1995 | | | 0.005 | 0.002 | 0.0005 |
| 1996 | 0.077 | 0.050 | 0.005 | 0.002 | 0.0005 |
| 1997 | 0.089 | 0.049 | 0.005 | 0.002 | 0.0005 |
| 1998 | 0.080 | 0.061 | 0.005 | 0.002 | 0.0005 |
| 1999 | 0.086 | 0.059 | 0.005 | 0.002 | 0.0005 |
| 2000 | 0.114 | 0.057 | 0.005 | 0.002 | 0.0005 |
| 2001 | 0.117 | 0.080 | 0.005 | 0.002 | 0.0005 |
| 2002 | 0.133 | 0.083 | 0.005 | 0.002 | 0.0005 |
| 2003 | 0.139 | 0.099 | 0.005 | 0.002 | 0.0005 |
| 2004 | 0.146 | 0.104 | 0.005 | 0.002 | 0.0005 |
| 2005 | 0.134 | 0.093 | 0.005 | 0.002 | 0.0005 |

Sources: California Department of Water Resources 2010: Table 15, 29.