

Appendix E: Water Quality Tables

Table E-1. Summary of water quality measurements during a *P. promelas* toxicity test initiated on 7/29/15, examining the toxicity of ambient surface water samples collected on 7/28/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|----------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 8.40 | 7.97 | 7.66 | 8.41 | 8.29 | 8.08 | 7.99 | 8.37 | 289 | 24.7 | 23.7 | 22.7 | 24.7 |
| Mokelumne | 8.35 | 7.86 | 7.60 | 8.57 | 8.30 | 8.00 | 8.00 | 8.30 | 120 | 24.8 | 23.9 | 22.7 | 24.8 |
| Hood | 8.56 | 7.99 | 7.61 | 8.59 | 8.15 | 8.10 | 7.78 | 8.16 | 131 | 24.8 | 23.6 | 22.8 | 24.8 |
| SJR @ Vernalis | 8.26 | 7.97 | 7.56 | 8.91 | 8.45 | 8.51 | 8.20 | 8.55 | 899 | 25.1 | 23.7 | 22.9 | 25.1 |
| SJR @ Buckley | 8.25 | 8.02 | 7.64 | 8.55 | 8.41 | 8.22 | 8.14 | 8.43 | 1304 | 24.8 | 23.7 | 22.4 | 24.8 |
| Ulatis Creek | 8.01 | 7.92 | 7.53 | 8.36 | 8.19 | 8.48 | 8.17 | 8.65 | 670 | 24.7 | 23.7 | 22.7 | 24.7 |
| Bottle Blank | 8.33 | 7.85 | 7.64 | 8.53 | 8.33 | 7.93 | 7.66 | 8.33 | 285 | 24.7 | 23.8 | 22.8 | 24.7 |

Table E-2. Summary of water quality measurements during a *C. dubia* toxicity retest initiated on 8/7/15, examining the toxicity of ambient surface water samples collected on 7/28/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|----------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| L1650 | 8.10 | 7.62 | 7.62 | 8.46 | 8.17 | 7.76 | 7.76 | 8.31 | 269 | 25.1 | 24.4 | 23.4 | 25.1 |
| Mokelumne | 8.12 | 7.62 | 7.62 | 8.48 | 8.14 | 7.74 | 7.74 | 8.29 | 137 | 25.3 | 24.4 | 23.5 | 25.3 |
| Hood | 8.08 | 7.69 | 7.69 | 8.49 | 8.17 | 7.80 | 7.80 | 8.29 | 144 | 25.4 | 24.4 | 23.5 | 25.4 |
| SJR @ Vernalis | 8.12 | 7.69 | 7.68 | 8.38 | 8.51 | 8.30 | 8.01 | 8.62 | 942 | 25.3 | 24.4 | 23.6 | 25.3 |
| SJR @ Buckley | 8.09 | 7.82 | 7.75 | 8.51 | 8.38 | 8.09 | 8.09 | 8.54 | 1356 | 25.3 | 24.4 | 23.7 | 25.3 |
| Ulatis Creek | 8.07 | 7.77 | 7.65 | 8.36 | 8.57 | 8.50 | 8.33 | 8.80 | 696 | 25.1 | 24.4 | 23.5 | 25.1 |
| Bottle Blank | 8.06 | 7.96 | 7.72 | 8.52 | 8.20 | 7.87 | 7.87 | 8.30 | 264 | 25.2 | 24.3 | 23.4 | 25.2 |

Table E-3. Summary of water quality measurements during a *S. capricornutum* toxicity test initiated on 7/29/15, examining the toxicity of ambient surface waters collected on 7/28/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC ($\mu\text{S/cm}$) | Temperature ($^{\circ}\text{C}$) | | | |
|-----------------|-----------|-------|------|-------|---------|-------|------|------|---------------------------------|------------------------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 8.17 | 9.75 | 8.17 | 9.75 | 7.75 | 9.32 | 7.67 | 9.32 | 98 | 24.3 | 24.6 | 24.3 | 24.6 |
| Mokelumne | 8.24 | 11.03 | 8.24 | 11.03 | 8.24 | 9.41 | 8.16 | 9.41 | 200 | 24.3 | 24.2 | 24.2 | 24.3 |
| Hood | 8.32 | 11.62 | 8.32 | 11.62 | 8.11 | 9.41 | 8.11 | 9.41 | 210 | 23.8 | 24.6 | 23.8 | 24.6 |
| SJR @ Vernalis | 8.36 | 10.64 | 8.36 | 10.64 | 8.34 | 9.21 | 8.34 | 9.21 | 955 | 23.9 | 24.1 | 23.9 | 24.1 |
| SJR @ Buckley | 8.39 | 8.45 | 8.39 | 8.45 | 8.36 | 8.64 | 8.36 | 8.64 | 1359 | 24.2 | 24.3 | 24.2 | 24.3 |
| Ulatis Creek | 8.40 | 13.70 | 8.40 | 13.70 | 8.41 | 9.46 | 8.41 | 9.46 | 756 | 24.0 | 24.6 | 24.0 | 24.6 |
| Bottle Blank | 8.12 | 9.53 | 8.12 | 9.53 | 7.76 | 9.21 | 7.72 | 9.21 | 90 | 23.7 | 24.5 | 23.7 | 24.5 |

Table E-4. Summary of water quality measurements during an *S. capricornutum* toxicity follow-up test initiated on 8/8/15, examining the toxicity of ambient surface water samples collected on 7/28/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC ($\mu\text{S/cm}$) | Temperature ($^{\circ}\text{C}$) | | | |
|-----------------|-----------|-------|------|------|---------|-------|------|------|---------------------------------|------------------------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 8.21 | 8.07 | 8.07 | 8.21 | 7.71 | 8.73 | 7.71 | 8.73 | 91 | 23.8 | 23.0 | 23.0 | 23.8 |
| Mokelumne | 8.33 | 8.20 | 8.20 | 8.33 | 8.08 | 9.11 | 8.08 | 9.11 | 203 | 24.2 | 22.9 | 22.9 | 24.2 |
| SJR @ Buckley | 8.34 | 8.24 | 8.24 | 8.34 | 8.24 | 8.96 | 8.24 | 8.96 | 1394 | 24.1 | 22.8 | 22.6 | 24.1 |

Table E-5. Summary of water quality measurements during a *P. promelas* toxicity test initiated on 8/19/15, examining the toxicity of ambient surface water samples collected on 8/18/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|--------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 8.35 | 7.42 | 7.42 | 8.35 | 8.39 | 7.85 | 7.76 | 8.39 | 299 | 24.4 | 25.7 | 23.6 | 25.7 |
| Hood | 8.23 | 7.51 | 7.40 | 8.29 | 8.27 | 7.93 | 7.46 | 8.41 | 171 | 24.3 | 25.3 | 23.3 | 25.4 |
| Mokelumne | 8.47 | 7.53 | 7.49 | 8.59 | 8.21 | 7.79 | 7.79 | 8.29 | 131 | 24.2 | 25.3 | 23.6 | 25.4 |
| SJR @ Buckley | 8.25 | 7.55 | 7.37 | 8.49 | 8.34 | 8.05 | 8.05 | 8.45 | 1277 | 24.2 | 25.4 | 23.3 | 25.5 |
| Dup: SJR @ Buckley | 8.29 | 7.79 | 7.49 | 8.86 | 8.24 | 8.07 | 7.97 | 8.46 | 1251 | 24.0 | 24.7 | 23.1 | 25.5 |
| SJR @ Vernalis | 8.34 | 7.53 | 7.33 | 8.56 | 8.38 | 8.21 | 8.16 | 8.55 | 615 | 24.0 | 25.6 | 23.1 | 25.6 |
| Ulatis Creek | 8.60 | 7.75 | 7.37 | 8.60 | 8.37 | 8.42 | 8.31 | 8.73 | 703 | 23.8 | 24.8 | 23.1 | 25.3 |
| Bottle Blank | 8.28 | 7.51 | 7.46 | 8.45 | 8.38 | 7.85 | 7.85 | 8.38 | 293 | 23.8 | 25.4 | 23.1 | 25.4 |

Table E-6. Summary of water quality measurements during an *S. capricornutum* toxicity test initiated on 8/19/15, examining the toxicity of ambient surface water samples collected on 8/18/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|--------------------|-----------|-------|------|-------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 8.60 | 8.89 | 8.60 | 8.89 | 7.83 | 8.90 | 7.81 | 8.90 | 94 | 21.9 | 24.3 | 21.9 | 24.3 |
| Hood | 8.62 | 11.16 | 8.62 | 11.16 | 8.10 | 9.65 | 8.10 | 9.65 | 239 | 21.8 | 24.2 | 21.8 | 24.2 |
| Mokelumne | 8.57 | 10.80 | 8.57 | 10.80 | 8.23 | 9.32 | 8.23 | 9.32 | 205 | 22.0 | 24.2 | 22.0 | 24.2 |
| SJR @ Buckley | 8.48 | 10.31 | 8.48 | 10.31 | 8.28 | 9.25 | 8.28 | 9.25 | 1321 | 22.0 | 24.0 | 22.0 | 24.0 |
| Dup: SJR @ Buckley | 8.55 | 10.95 | 8.55 | 10.95 | 8.24 | 9.18 | 8.24 | 9.18 | 1327 | 22.1 | 24.2 | 22.1 | 24.2 |
| SJR @ Vernalis | 8.66 | 11.96 | 8.66 | 11.96 | 8.30 | 9.56 | 8.30 | 9.56 | 653 | 22.0 | 24.5 | 22.0 | 24.5 |
| Ulatis Creek | 8.63 | 14.57 | 8.63 | 14.57 | 8.45 | 9.65 | 8.45 | 9.65 | 780 | 22.0 | 24.8 | 22.0 | 24.8 |
| Bottle Blank | 8.60 | 9.22 | 8.60 | 9.22 | 7.83 | 9.34 | 7.83 | 9.34 | 95 | 22.1 | 24.8 | 22.1 | 24.8 |

Table E-7. Summary of water quality measurements during a *P. promelas* toxicity test initiated on 9/25/15, examining the toxicity of ambient surface water samples collected on 9/23/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|----------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 8.06 | 8.29 | 7.76 | 8.29 | 8.19 | 8.16 | 7.89 | 8.37 | 278 | 24.5 | 23.5 | 23.1 | 24.5 |
| Hood | 8.01 | 8.17 | 7.76 | 8.51 | 8.21 | 8.20 | 7.83 | 8.27 | 187 | 25.2 | 23.5 | 23.2 | 25.2 |
| Mokelumne | 8.19 | 8.14 | 7.90 | 8.38 | 8.14 | 8.14 | 7.96 | 8.26 | 196 | 25.3 | 23.7 | 23.1 | 25.3 |
| SJR @ Buckley | 8.59 | 8.10 | 7.81 | 8.59 | 7.87 | 8.28 | 7.87 | 8.40 | 1347 | 25.1 | 23.6 | 23.0 | 25.1 |
| SJR @ Vernalis | 8.09 | 8.05 | 7.88 | 8.41 | 8.01 | 8.34 | 8.00 | 8.39 | 771 | 25.3 | 23.6 | 22.2 | 25.3 |
| Ulatis Creek | 8.02 | 7.86 | 7.78 | 8.40 | 8.25 | 8.49 | 8.18 | 8.58 | 1056 | 25.3 | 23.2 | 22.9 | 25.3 |

Table E-8. Summary of water quality measurements during a *P. promelas* Pathogen-Related Toxicity follow-up test initiated on 10/1/15, examining the toxicity of ambient surface water samples collected on 9/23/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|-----------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 8.22 | 8.05 | 7.88 | 8.30 | 8.26 | 7.44 | 7.44 | 8.95 | 290 | 25.1 | 24.3 | 23.2 | 25.1 |
| Mokelumne | 9.86 | 7.87 | 7.65 | 9.86 | 8.28 | 7.44 | 7.44 | 8.68 | 204 | 25.3 | 24.1 | 23.6 | 24.7 |

Table E-9. Summary of water quality measurements during a *C. dubia* toxicity test initiated on 9/24/15, examining the toxicity of ambient surface water samples collected on 9/23/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|----------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| L1650 | 7.80 | 6.20 | 5.30 | 8.00 | 8.35 | 8.02 | 7.84 | 8.38 | 290 | 24.0 | 24.0 | 24.0 | 24.0 |
| Hood | 8.20 | 5.30 | 5.30 | 8.20 | 8.27 | 7.97 | 7.81 | 8.38 | 179 | 24.0 | 24.0 | 24.0 | 24.0 |
| Mokelumne | 8.20 | 5.30 | 5.30 | 8.20 | 8.25 | 7.95 | 7.81 | 8.27 | 198 | 24.0 | 24.0 | 24.0 | 24.0 |
| SJR @ Buckley | 8.00 | 4.10 | 4.10 | 8.20 | 7.84 | 7.61 | 7.53 | 7.92 | 1392 | 24.0 | 24.0 | 24.0 | 24.0 |
| SJR @ Vernalis | 8.10 | 4.90 | 4.90 | 8.10 | 7.86 | 7.68 | 7.58 | 7.94 | 699 | 24.0 | 24.0 | 24.0 | 24.0 |
| Ulatis Creek | 7.40 | 5.00 | 5.00 | 8.20 | 7.66 | 7.59 | 7.43 | 8.02 | 1040 | 24.0 | 24.0 | 24.0 | 24.0 |

Table E-10. Summary of water quality measurements during an *S. capricornutum* toxicity test initiated on 9/24/15 examining the toxicity of ambient surface water samples collected on 9/23/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC ($\mu\text{S}/\text{cm}$) | Temperature ($^{\circ}\text{C}$) | | | |
|-----------------|-----------|-------|------|------|---------|-------|------|------|--|------------------------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 8.50 | 8.17 | 8.17 | 8.50 | 7.85 | 8.11 | 7.74 | 8.11 | 92 | 22.8 | 25.6 | 22.8 | 25.6 |
| Hood | 8.58 | 8.28 | 8.28 | 8.58 | 8.02 | 9.06 | 8.02 | 9.06 | 243 | 22.9 | 25.6 | 22.9 | 25.6 |
| Mokelumne | 8.60 | 8.12 | 8.12 | 8.60 | 8.14 | 8.89 | 8.14 | 8.89 | 255 | 22.8 | 25.9 | 22.8 | 25.9 |
| SJR @ Buckley | 8.57 | 8.13 | 8.13 | 8.57 | 8.13 | 8.65 | 8.13 | 8.65 | 1405 | 22.8 | 25.6 | 22.8 | 25.6 |
| SJR @ Vernalis | 8.47 | 8.15 | 8.15 | 8.47 | 8.19 | 8.75 | 8.19 | 8.75 | 709 | 22.7 | 25.6 | 22.7 | 25.6 |
| Ulatis Creek | 8.59 | 8.18 | 8.18 | 8.59 | 8.29 | 9.53 | 8.29 | 9.53 | 1023 | 22.8 | 25.6 | 22.8 | 25.6 |

Table E-11. Summary of water quality measurements during a *P. promelas* toxicity test initiated on 10/22/15, examining the toxicity of ambient surface waters collected on 10/21/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC ($\mu\text{S}/\text{cm}$) | Temperature ($^{\circ}\text{C}$) | | | |
|---------------------|-----------|-------|------|------|---------|-------|------|------|--|------------------------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 8.08 | 8.16 | 7.55 | 8.38 | 8.18 | 7.85 | 7.85 | 8.30 | 293 | 24.9 | 22.9 | 22.9 | 24.9 |
| Hood | 8.38 | 8.00 | 7.92 | 8.38 | 8.03 | 7.83 | 7.83 | 8.28 | 167 | 24.8 | 22.8 | 22.8 | 24.8 |
| Mokelumne | 8.34 | 8.20 | 7.95 | 8.35 | 7.79 | 7.50 | 7.50 | 8.09 | 62 | 24.6 | 22.9 | 22.7 | 24.7 |
| SJR @ Buckley | 8.32 | 7.99 | 7.65 | 8.32 | 8.26 | 8.15 | 7.76 | 8.32 | 870 | 25.2 | 23.0 | 22.7 | 25.2 |
| SJR @ Vernalis | 8.29 | 8.08 | 7.70 | 8.93 | 8.02 | 8.05 | 7.87 | 8.35 | 451 | 24.9 | 23.0 | 22.7 | 24.9 |
| Ulatis Creek | 8.22 | 7.92 | 7.45 | 8.96 | 8.11 | 8.40 | 8.11 | 8.59 | 927 | 25.0 | 23.1 | 22.7 | 25.0 |
| Dup: SJR @ Vernalis | 8.23 | 8.19 | 7.80 | 8.83 | 8.23 | 8.04 | 7.90 | 8.36 | 281 | 24.9 | 22.8 | 22.7 | 24.9 |
| Bottle Blank | 8.22 | 8.22 | 7.56 | 8.45 | 8.07 | 7.59 | 7.59 | 8.38 | 457 | 25.0 | 23.0 | 22.5 | 25.0 |
| Low EC Control | 8.33 | 8.15 | 7.89 | 8.36 | 7.86 | 7.81 | 7.52 | 8.35 | 79 | 24.8 | 23.2 | 22.0 | 24.8 |

Table E-12. Summary of water quality measurements during a *P. promelas* Pathogen-Related Toxicity follow-up test initiated 10/29/15, examining the toxicity of ambient surface water samples collected 10/21/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|-----------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | NR | 7.80 | 6.86 | 8.06 | NR | 8.04 | 7.56 | 8.15 | NR | NR | 25.1 | 23.7 | 25.2 |
| Mokelumne | NR | 7.75 | 6.82 | 8.36 | NR | 7.83 | 7.34 | 7.90 | NR | NR | 24.5 | 23.4 | 25.2 |
| SJR @ Vernalis | NR | 7.83 | 7.40 | 8.51 | NR | 8.11 | 7.92 | 8.21 | NR | NR | 24.3 | 23.2 | 25.4 |
| Bottle Blank | NR | 7.93 | 7.31 | 8.39 | NR | 7.99 | 7.68 | 8.00 | NR | NR | 24.1 | 23.2 | 25.3 |

NR: Not Reported. Sample was dumped prior to measuring initial water quality at test initiation, due to technician error.

Table E-13. Summary of water quality measurements during a *C. dubia* toxicity test initiated on 10/22/15, examining the toxicity of ambient surface water samples collected on 10/21/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|----------------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| L1650 | 8.16 | 7.74 | 7.36 | 8.25 | 8.20 | 7.82 | 7.81 | 8.20 | 312 | 24.9 | 24.5 | 24.4 | 25.5 |
| Hood | 8.22 | 7.97 | 7.42 | 8.24 | 8.24 | 7.86 | 7.86 | 8.24 | 183 | 24.9 | 23.8 | 23.8 | 25.3 |
| Mokelumne | 8.26 | 7.99 | 7.37 | 8.26 | 7.95 | 7.46 | 7.46 | 7.95 | 79 | 24.8 | 23.9 | 23.9 | 25.2 |
| SJR @ Buckley | 8.24 | 7.85 | 7.47 | 8.55 | 8.41 | 8.11 | 7.89 | 8.41 | 868 | 24.7 | 23.9 | 23.4 | 25.2 |
| SJR @ Vernalis | 8.38 | 7.98 | 7.72 | 8.38 | 8.39 | 8.02 | 7.99 | 8.39 | 519 | 24.7 | 23.9 | 23.9 | 25.5 |
| Ulatis Creek | 8.53 | 7.83 | 7.58 | 8.53 | 8.51 | 8.40 | 8.24 | 8.54 | 1057 | 24.7 | 23.6 | 23.4 | 25.6 |
| Dup: SJR @ Vernalis | 8.45 | 7.84 | 7.55 | 8.45 | 8.33 | 7.97 | 7.97 | 8.33 | 495 | 24.6 | 23.7 | 23.2 | 25.3 |
| Bottle Blank | 8.18 | 7.89 | 7.69 | 8.64 | 8.38 | 7.82 | 7.79 | 8.38 | 448 | 24.7 | 24.1 | 23.4 | 25.0 |
| Low EC Control | 8.48 | 7.90 | 7.55 | 8.48 | 7.90 | 7.43 | 7.43 | 7.90 | 64 | 24.6 | 23.7 | 23.7 | 25.1 |

Table E-14. Summary of water quality measurements during an *S. capricornutum* toxicity test initiated on 10/22/15, examining the toxicity of ambient surface water samples collected on 10/21/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|---------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 8.32 | 8.02 | 8.02 | 8.32 | 7.60 | 7.85 | 7.60 | 7.85 | 106 | 24.0 | 24.2 | 24.0 | 24.2 |
| Hood | 8.55 | 8.56 | 8.55 | 8.56 | 8.02 | 8.15 | 8.02 | 8.16 | 246 | 24.2 | 24.7 | 24.2 | 24.7 |
| Mokelumne | 8.42 | 8.11 | 8.11 | 8.42 | 7.81 | 7.97 | 7.81 | 7.97 | 144 | 24.3 | 24.5 | 24.3 | 24.5 |
| SJR @ Buckley | 8.47 | 8.23 | 8.23 | 8.47 | 8.10 | 8.42 | 8.10 | 8.43 | 923 | 24.2 | 24.7 | 24.2 | 24.7 |
| SJR @ Vernalis | 8.56 | 8.28 | 8.28 | 8.56 | 8.00 | 8.55 | 8.00 | 8.55 | 526 | 24.3 | 24.7 | 24.3 | 24.7 |
| Ulatis Creek | 8.40 | 8.91 | 8.40 | 8.91 | 8.26 | 9.25 | 8.26 | 9.25 | 983 | 24.4 | 24.8 | 24.4 | 24.8 |
| Dup: SJR @ Vernalis | 8.52 | 8.24 | 8.24 | 8.52 | 8.01 | 8.59 | 8.01 | 8.59 | 527 | 24.5 | 24.5 | 24.5 | 24.5 |
| Bottle Blank | 8.37 | 8.18 | 8.18 | 8.37 | 7.72 | 7.84 | 7.52 | 7.84 | 98 | 24.4 | 24.5 | 24.4 | 24.5 |

Table E-15. Summary of water quality measurements during a *P. promelas* toxicity test initiated on 11/11/15, examining the toxicity of ambient surface water samples collected on 11/10/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|----------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 8.26 | 7.75 | 7.75 | 8.37 | 8.17 | 7.84 | 7.84 | 8.20 | 280 | 23.7 | 23.2 | 22.1 | 23.9 |
| Hood | 8.41 | 7.67 | 7.67 | 8.63 | 8.10 | 7.83 | 7.83 | 8.17 | 193 | 24.0 | 23.3 | 22.2 | 24.0 |
| Mokelumne | 8.42 | 7.37 | 7.37 | 8.79 | 8.10 | 7.58 | 7.30 | 8.10 | 59 | 23.8 | 22.8 | 22.6 | 24.0 |
| SJR @ Buckley | 8.46 | 7.53 | 7.53 | 8.46 | 8.00 | 7.78 | 7.78 | 8.19 | 370 | 24.0 | 23.3 | 22.2 | 24.0 |
| SJR @ Vernalis | 8.46 | 7.59 | 7.59 | 8.46 | 8.00 | 7.74 | 7.74 | 8.21 | 250 | 24.0 | 23.0 | 22.1 | 24.0 |
| Ulatis Creek | 8.38 | 7.61 | 7.61 | 8.53 | 8.31 | 8.34 | 8.22 | 8.54 | 990 | 23.8 | 23.1 | 22.4 | 23.8 |
| Low EC Control | 8.40 | 7.28 | 7.28 | 8.40 | 7.81 | 7.64 | 7.20 | 8.18 | 81 | 23.7 | 23.0 | 22.3 | 23.9 |

Table E-16. Summary of water quality measurements during a *C. dubia* toxicity test initiated 11/11/15, examining the toxicity of ambient surface water samples collected on 11/10/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|-----------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| L1650 | 8.09 | 7.82 | 7.63 | 8.18 | 8.16 | 7.93 | 7.92 | 8.25 | 300 | 24.1 | 23.9 | 23.9 | 25.0 |
| Hood | 8.14 | 8.05 | 7.51 | 8.28 | 8.05 | 7.88 | 7.88 | 8.19 | 191 | 24.6 | 23.5 | 23.5 | 24.9 |
| Mokelumne | 8.15 | 7.99 | 7.44 | 8.47 | 7.86 | 7.64 | 7.36 | 8.04 | 64 | 24.8 | 23.2 | 23.2 | 24.8 |
| SJR @ Buckley | 8.16 | 8.06 | 7.71 | 8.21 | 8.16 | 7.72 | 7.72 | 8.21 | 371 | 24.7 | 23.4 | 23.4 | 24.8 |
| SJR @ Vernalis | 8.10 | 8.16 | 7.48 | 8.32 | 8.17 | 7.76 | 7.76 | 8.25 | 249 | 24.7 | 23.6 | 23.6 | 24.7 |
| Ulatis Creek | 8.12 | 8.05 | 7.60 | 8.31 | 8.49 | 8.42 | 8.22 | 8.62 | 1031 | 24.8 | 23.5 | 23.5 | 24.8 |
| Low EC Control | 8.17 | 8.24 | 7.68 | 8.30 | 7.81 | 7.52 | 7.46 | 8.14 | 63 | 24.4 | 23.5 | 23.5 | 24.8 |

Table E-17. Summary of water quality measurements during an *S. capricornutum* toxicity test initiated 11/11/15, examining the toxicity of ambient surface water samples collected 11/10/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|------------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 8.39 | 8.24 | 8.24 | 8.39 | 7.63 | 7.95 | 7.63 | 7.95 | 92 | 23.3 | 24.8 | 23.3 | 24.8 |
| Hood | 8.46 | 8.25 | 8.25 | 8.46 | 7.91 | 9.49 | 7.91 | 9.49 | 255 | 23.5 | 24.9 | 23.5 | 24.9 |
| Mokelumne | 8.50 | 8.40 | 8.40 | 8.50 | 7.79 | 9.37 | 7.79 | 9.37 | 141 | 23.4 | 24.8 | 23.4 | 24.8 |
| SJR @ Buckley | 8.48 | 8.48 | 8.48 | 8.48 | 7.98 | 9.04 | 7.98 | 9.04 | 433 | 23.5 | 24.9 | 23.5 | 24.9 |
| SJR @ Vernalis | 8.54 | 8.52 | 8.52 | 8.54 | 7.99 | 9.69 | 7.99 | 9.69 | 318 | 23.6 | 24.9 | 23.6 | 24.9 |
| Ulatis Creek | 8.60 | 8.55 | 8.55 | 8.60 | 8.29 | 9.46 | 8.29 | 9.46 | 1038 | 23.6 | 24.9 | 23.6 | 24.9 |

Table E-18. Summary of water quality measurements during a *P. promelas* toxicity test initiated on 12/16/15, examining the toxicity of ambient surface water samples collected on 12/15/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|---------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 8.44 | 8.11 | 8.01 | 8.55 | 8.10 | 8.02 | 7.92 | 8.31 | 292 | 24.9 | 23.7 | 22.0 | 24.9 |
| Hood | 8.36 | 8.25 | 8.10 | 8.52 | 8.15 | 8.06 | 7.99 | 8.31 | 189 | 24.4 | 23.4 | 22.0 | 24.4 |
| SJR @ Buckley | 8.40 | 8.28 | 8.09 | 8.60 | 8.11 | 8.08 | 7.98 | 8.28 | 592 | 24.6 | 23.5 | 22.0 | 24.6 |
| SJR @ Vernalis | 8.63 | 8.37 | 8.12 | 8.63 | 8.00 | 8.18 | 8.00 | 8.37 | 501 | 24.5 | 23.3 | 22.1 | 24.5 |
| Ulatis Creek | 8.56 | 8.24 | 7.95 | 8.61 | 8.20 | 8.43 | 8.20 | 8.45 | 799 | 24.4 | 23.5 | 22.1 | 24.4 |
| Dup: Hood | 8.41 | 8.14 | 8.12 | 8.63 | 8.09 | 8.11 | 8.02 | 8.48 | 191 | 24.4 | 23.5 | 22.1 | 24.4 |
| PRT: ROEPAMH | 8.40 | 7.77 | 7.52 | 8.40 | 8.13 | 8.11 | 7.67 | 8.32 | 267 | 24.2 | 24.4 | 23.3 | 27.0 |
| PRT: Mokelumne | 8.62 | 7.72 | 7.49 | 8.62 | 7.86 | 7.82 | 7.44 | 8.03 | 66 | 25.2 | 24.6 | 23.2 | 25.9 |
| PRT: Low EC Control | 8.37 | 7.62 | 7.44 | 8.43 | 7.87 | 7.91 | 7.22 | 8.06 | 68 | 24.3 | 24.5 | 23.1 | 25.1 |

Table E-19. Summary of water quality measurements during a *C. dubia* toxicity retest initiated on 12/16/15, examining the toxicity of ambient surface water samples collected on 12/15/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|----------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| L1650 | 8.30 | 7.40 | 7.40 | 8.30 | 8.13 | 7.79 | 7.79 | 8.26 | 260 | 23.9 | 23.8 | 23.8 | 25.1 |
| Hood | 8.50 | 7.46 | 7.46 | 8.50 | 8.18 | 7.81 | 7.81 | 8.33 | 186 | 23.9 | 23.6 | 23.4 | 24.7 |
| Mokelumne | 8.23 | 7.52 | 7.52 | 8.36 | 7.86 | 7.47 | 7.47 | 8.13 | 64 | 24.9 | 23.9 | 23.1 | 24.9 |
| SJR @ Buckley | 8.23 | 7.47 | 7.44 | 8.32 | 8.22 | 7.85 | 7.85 | 8.27 | 584 | 23.8 | 23.8 | 23.0 | 24.7 |
| SJR @ Vernalis | 8.33 | 7.50 | 7.25 | 8.41 | 8.19 | 7.86 | 7.86 | 8.35 | 499 | 23.8 | 23.7 | 23.3 | 24.8 |
| Ulatis Creek | 8.30 | 7.62 | 7.27 | 8.41 | 8.26 | 8.27 | 8.26 | 8.50 | 797 | 23.8 | 23.7 | 23.4 | 25.2 |
| Dup: Hood | 8.48 | 7.78 | 7.21 | 8.48 | 8.22 | 7.93 | 7.93 | 8.35 | 187 | 23.8 | 23.8 | 23.3 | 25.0 |
| Low EC Control | 8.36 | 7.76 | 7.44 | 8.36 | 7.81 | 7.39 | 7.39 | 8.06 | 66 | 23.7 | 23.6 | 22.8 | 25.0 |

Table E-20. Summary of water quality measurements during a *S. capricornutum* toxicity test initiated on 12/16/15, examining the toxicity of ambient surface waters collected on 12/15/15 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|-----------------|-----------|-------|------|-------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 8.66 | 8.66 | 8.66 | 8.66 | 7.02 | 8.76 | 7.02 | 8.76 | 90 | 23.5 | 25.3 | 23.2 | 25.3 |
| Hood | 8.72 | 10.67 | 8.72 | 10.67 | 7.91 | 9.66 | 7.91 | 9.66 | 268 | 23.4 | 25.3 | 23.4 | 25.3 |
| Mokelumne | 8.61 | 10.71 | 8.61 | 10.71 | 7.68 | 9.51 | 7.68 | 9.51 | 147 | 23.4 | 24.9 | 23.4 | 25.0 |
| SJR @ Buckley | 8.50 | 10.66 | 8.50 | 10.66 | 7.94 | 9.65 | 7.94 | 9.65 | 667 | 23.3 | 25.3 | 23.3 | 25.4 |
| SJR @ Vernalis | 8.69 | 10.59 | 8.69 | 10.59 | 8.00 | 9.48 | 8.00 | 9.48 | 573 | 23.4 | 25.2 | 23.4 | 25.2 |
| Ulatis Creek | 8.58 | 10.99 | 8.58 | 10.99 | 8.18 | 9.58 | 8.18 | 9.58 | 869 | 23.5 | 24.9 | 23.5 | 25.3 |
| Dup: Hood | 8.58 | 10.53 | 8.58 | 10.53 | 8.01 | 9.63 | 8.01 | 9.63 | 270 | 23.2 | 24.4 | 23.2 | 24.8 |

Table E-21. Summary of water quality measurements during a *P. promelas* toxicity test initiated on 1/20/16, examining the toxicity of ambient surface water samples collected on 1/19/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|---------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 7.86 | 7.75 | 7.75 | 8.33 | 8.29 | 8.05 | 7.87 | 8.29 | 274 | 24.7 | 23.7 | 22.9 | 24.8 |
| Hood | 7.88 | 7.76 | 7.68 | 8.48 | 8.30 | 7.93 | 7.88 | 8.30 | 152 | 24.9 | 23.7 | 22.8 | 24.9 |
| SJR @ Buckley | 7.91 | 7.55 | 7.55 | 8.55 | 8.22 | 7.91 | 7.62 | 8.22 | 419 | 25.1 | 23.8 | 22.8 | 25.1 |
| SJR @ Vernalis | 8.01 | 7.73 | 7.73 | 8.56 | 8.33 | 8.06 | 7.75 | 8.33 | 445 | 24.9 | 23.8 | 22.7 | 24.9 |
| Ulatis Creek | 7.83 | 7.40 | 7.31 | 8.40 | 8.11 | 7.80 | 7.57 | 8.11 | 153 | 25.0 | 23.8 | 22.7 | 25.0 |
| Dup: Ulatis Creek | 7.78 | 7.39 | 7.39 | 8.51 | 8.11 | 7.85 | 7.57 | 8.28 | 155 | 25.3 | 23.9 | 22.6 | 25.3 |
| PRT: ROEPAMH | 7.92 | 8.11 | 7.38 | 8.34 | 8.25 | 8.08 | 7.69 | 8.25 | 278 | 24.0 | 23.4 | 22.4 | 24.7 |
| PRT: Mokelumne | 7.86 | 7.97 | 7.51 | 8.45 | 8.02 | 7.66 | 7.32 | 8.02 | 64 | 23.9 | 23.9 | 23.1 | 24.8 |
| PRT: Low EC Control | 7.92 | 8.13 | 7.54 | 8.39 | 7.77 | 7.57 | 7.15 | 7.85 | 67 | 23.9 | 23.4 | 21.6 | 25.4 |

Table E-22. Summary of water quality measurements during a *C. dubia* toxicity test initiated on 1/20/16, examining the toxicity of ambient surface water samples collected on 1/19/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|-------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| L1650 | 7.98 | 7.62 | 7.29 | 8.24 | 8.31 | 7.57 | 7.57 | 8.31 | 286 | 24.8 | 25.0 | 23.1 | 25.1 |
| Hood | 8.04 | 7.70 | 7.42 | 8.26 | 8.22 | 7.73 | 7.69 | 8.22 | 142 | 24.7 | 25.0 | 22.6 | 25.0 |
| Mokelumne | 8.02 | 7.60 | 7.45 | 8.24 | 7.99 | 7.38 | 7.25 | 7.99 | 55 | 24.5 | 25.3 | 22.6 | 25.3 |
| SJR @ Buckley | 7.99 | 7.50 | 7.50 | 7.99 | 8.30 | 7.92 | 7.92 | 8.30 | 407 | 24.4 | 24.9 | 24.4 | 24.9 |
| SJR @ Vernalis | 7.99 | 7.66 | 7.50 | 8.44 | 8.33 | 7.81 | 7.77 | 8.33 | 437 | 24.4 | 25.1 | 22.6 | 25.1 |
| Ulatis Creek | 7.84 | 6.93 | 5.90 | 8.29 | 8.22 | 7.59 | 7.53 | 8.22 | 147 | 24.5 | 24.6 | 23.2 | 26.2 |
| Dup: Ulatis Creek | 7.81 | 6.34 | 5.95 | 8.26 | 8.11 | 7.52 | 7.49 | 8.11 | 143 | 24.4 | 24.5 | 22.8 | 26.1 |
| Low EC Control | 8.03 | 7.70 | 7.58 | 8.35 | 7.94 | 7.32 | 7.32 | 7.94 | 62 | 24.3 | 24.5 | 22.7 | 26.0 |

Table E-23. Summary of water quality measurements during an *S. capricornutum* toxicity test initiated on 1/20/16, examining the toxicity of ambient surface water samples collected on 1/19/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|-------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 7.86 | 8.43 | 7.86 | 8.43 | 7.91 | 7.9 | 7.53 | 7.94 | 92 | 25.7 | 25.3 | 25.2 | 25.7 |
| Hood | 8.13 | 8.93 | 8.13 | 8.93 | 8.17 | 9.1 | 8.06 | 9.10 | 232 | 25.8 | 25.2 | 24.5 | 25.8 |
| Mokelumne | 7.94 | 9.23 | 7.94 | 9.23 | 7.96 | 8.8 | 7.88 | 8.78 | 144 | 25.9 | 24.6 | 24.6 | 25.9 |
| SJR @ Buckley | 8.02 | 9.06 | 8.02 | 9.06 | 8.15 | 8.8 | 8.08 | 8.75 | 491 | 26.0 | 25.1 | 24.7 | 26.0 |
| SJR @ Vernalis | 8.00 | 9.11 | 8.00 | 9.11 | 8.22 | 9.1 | 8.21 | 9.07 | 532 | 25.7 | 25.2 | 24.8 | 25.7 |
| Ulatis Creek | 8.04 | 8.98 | 8.04 | 8.98 | 8.19 | 9.0 | 8.08 | 9.03 | 231 | 25.7 | 25.1 | 24.3 | 25.7 |
| Dup: Ulatis Creek | 8.01 | 8.95 | 8.01 | 8.95 | 8.12 | 9.0 | 8.10 | 9.03 | 228 | 25.9 | 24.8 | 24.8 | 25.9 |

Table E-24. Summary of water quality measurements during a *P. promelas* toxicity test initiated on 2/18/16, examining the toxicity of ambient surface water samples collected on 2/17/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|---------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 7.55 | 8.14 | 7.52 | 8.38 | 8.14 | 7.92 | 7.87 | 8.22 | 288 | 24.1 | 23.2 | 23.0 | 24.1 |
| Hood | 8.12 | 8.22 | 7.20 | 8.35 | 8.28 | 8.02 | 7.91 | 8.28 | 191 | 23.9 | 23.1 | 23.0 | 23.9 |
| SJR @ Buckley | 7.73 | 8.11 | 7.28 | 8.40 | 8.03 | 8.05 | 7.95 | 8.18 | 592 | 24.2 | 23.4 | 22.9 | 24.2 |
| SJR @ Vernalis | 7.35 | 8.18 | 7.18 | 8.42 | 8.26 | 8.22 | 8.14 | 8.26 | 952 | 24.2 | 23.3 | 23.0 | 24.2 |
| Ulatis Creek | 7.67 | 8.13 | 7.67 | 8.56 | 8.47 | 8.51 | 8.27 | 8.54 | 1095 | 24.0 | 23.3 | 22.7 | 24.0 |
| Field Blank | 7.65 | 8.17 | 7.65 | 8.48 | 8.21 | 7.91 | 7.86 | 8.22 | 290 | 24.3 | 23.2 | 22.9 | 24.3 |
| PRT: ROEPAMH | 8.19 | NR | 6.90 | 8.20 | 8.21 | NR | 7.70 | 8.21 | 282 | 23.9 | NR | 23.9 | 25.9 |
| PRT: Mokelumne | 7.97 | NR | 6.51 | 8.31 | 7.91 | NR | 7.30 | 7.91 | 75 | 24.0 | NR | 24.0 | 26.7 |
| PRT: Low EC Control | 8.10 | NR | 6.79 | 8.29 | 7.83 | NR | 7.20 | 7.96 | 70 | 24.0 | NR | 24.0 | 26.0 |

NR: Not reported. Sample was dumped prior to measuring final water quality at test termination, due to technician error.

Table E-25. Summary of water quality measurements during a *C. dubia* toxicity test initiated on 2/18/16, examining the toxicity of ambient surface water samples collected on 2/17/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|----------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| L1650 | 7.98 | 7.70 | 6.61 | 8.20 | 8.25 | 7.97 | 7.86 | 8.25 | 311 | 24.0 | 25.0 | 24.0 | 25.4 |
| Hood | 8.18 | 7.55 | 7.18 | 8.35 | 8.31 | 8.01 | 7.94 | 8.31 | 200 | 24.2 | 24.7 | 24.1 | 25.5 |
| Mokelumne | 8.22 | 7.58 | 7.37 | 8.48 | 8.10 | 7.58 | 7.58 | 8.10 | 70 | 24.1 | 24.8 | 24.1 | 25.6 |
| SJR @ Buckley | 8.14 | 7.59 | 7.34 | 8.52 | 8.31 | 8.05 | 7.94 | 8.31 | 587 | 24.0 | 24.1 | 24.0 | 25.5 |
| SJR @ Vernalis | 8.09 | 7.47 | 6.83 | 8.35 | 8.46 | 8.20 | 8.15 | 8.46 | 942 | 23.9 | 24.7 | 23.9 | 25.5 |
| Ulatis Creek | 8.11 | 7.64 | 6.65 | 8.40 | 8.68 | 8.54 | 8.33 | 8.68 | 1070 | 24.0 | 25.0 | 23.8 | 25.4 |
| Field Blank | 8.16 | 7.52 | 6.51 | 8.42 | 8.28 | 7.93 | 7.81 | 8.28 | 295 | 24.0 | 24.9 | 23.7 | 25.5 |
| Low EC Control | 8.09 | 7.71 | 6.67 | 8.50 | 8.02 | 7.55 | 7.42 | 8.56 | 75 | 23.9 | 24.8 | 23.9 | 25.3 |

Table E-26. Summary of water quality measurements during an *S. capricornutum* toxicity test initiated on 2/18/16 examining the toxicity of ambient surface water samples collected on 2/17/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|-----------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 6.31 | 8.20 | 6.31 | 8.20 | 9.10 | 7.74 | 7.73 | 9.10 | 134 | 19.8 | 24.8 | 19.8 | 25.3 |
| Hood | 7.87 | 8.80 | 7.87 | 8.80 | 7.94 | 9.06 | 7.94 | 9.06 | 270 | 19.7 | 24.9 | 19.7 | 25.3 |
| Mokelumne | 8.02 | 8.45 | 8.02 | 8.45 | 7.89 | 9.07 | 7.89 | 9.07 | 150 | 19.8 | 25.6 | 19.8 | 25.8 |
| SJR @ Buckley | 7.91 | 8.37 | 7.91 | 8.37 | 8.06 | 8.85 | 8.06 | 8.85 | 640 | 20.3 | 25.8 | 20.3 | 25.8 |
| SJR @ Vernalis | 7.97 | 8.41 | 7.97 | 8.41 | 8.17 | 9.10 | 8.17 | 9.10 | 1017 | 20.8 | 25.8 | 20.8 | 25.9 |
| Ulatis Creek | 8.01 | 8.75 | 8.01 | 8.75 | 8.38 | 8.95 | 8.38 | 8.95 | 1175 | 21.1 | 25.5 | 21.1 | 25.5 |
| Field Blank | 7.88 | 8.47 | 7.88 | 8.47 | 7.77 | 8.24 | 7.77 | 8.24 | 93 | 21.4 | 24.9 | 21.4 | 25.2 |

Table E-27. Summary of water quality measurements during a *P. promelas* toxicity test initiated on 3/8/16, examining the toxicity of ambient surface waters collected on 3/7/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|---------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 8.03 | 7.68 | 7.68 | 8.52 | 8.25 | 7.83 | 7.83 | 8.25 | 291 | 24.7 | 23.2 | 21.3 | 24.7 |
| Hood | 8.06 | 7.84 | 7.72 | 8.54 | 8.16 | 7.78 | 7.78 | 8.18 | 163 | 24.6 | 23.4 | 20.5 | 24.6 |
| SJR @ Buckley | 8.05 | 7.93 | 7.57 | 8.49 | 8.27 | 7.88 | 7.88 | 8.27 | 648 | 24.7 | 23.1 | 22.2 | 24.7 |
| SJR @ Vernalis | 8.11 | 7.90 | 7.63 | 8.45 | 8.39 | 7.90 | 7.90 | 8.39 | 728 | 24.6 | 23.2 | 21.7 | 24.6 |
| Ulatis Creek | 8.12 | 8.03 | 7.62 | 8.40 | 8.25 | 7.89 | 7.89 | 8.25 | 220 | 24.5 | 23.4 | 22.4 | 24.5 |
| PRT: ROEPAMH | 8.08 | 7.82 | 6.92 | 8.24 | 8.22 | 7.91 | 7.71 | 8.22 | 285 | 24.4 | 23.4 | 23.1 | 24.9 |
| PRT: Mokelumne | 8.10 | 7.90 | 7.20 | 8.33 | 7.87 | 7.52 | 7.42 | 7.99 | 73 | 24.3 | 23.1 | 23.1 | 24.7 |
| PRT: Low EC Control | 8.06 | 7.70 | 7.31 | 8.36 | 7.75 | 7.49 | 7.31 | 8.00 | 65 | 24.4 | 23.3 | 23.3 | 25.2 |

Table E-28. Summary of water quality measurements during a *P. promelas* Pathogen-Related Toxicity follow-up test initiated 3/15/16, examining the toxicity of 510SACC3A collected 3/7/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|----------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 8.04 | NR | 6.99 | 8.43 | 8.12 | NR | 7.84 | 8.31 | 280 | 24.7 | NR | 24.1 | 25.8 |
| Hood | 8.14 | NR | 7.01 | 8.34 | 8.02 | NR | 7.75 | 8.26 | 144 | 25.0 | NR | 24.2 | 25.3 |

NR: Not Reported. Sample dumped prior to final water quality measurements, due to technician error.

Table E-29. Summary of water quality measurements during a *C. dubia* toxicity test initiated on 3/8/16, examining the toxicity of ambient surface water samples collected on 3/7/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|-----------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| L1650 | 8.07 | 7.58 | 7.58 | 8.25 | 8.17 | 7.90 | 7.78 | 8.27 | 308 | 24.1 | 24.7 | 23.6 | 24.7 |
| Hood | 8.09 | 7.62 | 7.48 | 8.33 | 8.13 | 7.78 | 7.78 | 8.17 | 143 | 23.8 | 24.6 | 23.6 | 24.6 |
| Mokelumne | 8.10 | 7.51 | 7.42 | 8.21 | 7.76 | 7.36 | 7.36 | 7.89 | 59 | 23.9 | 24.4 | 23.0 | 24.4 |
| SJR @ Buckley | 8.08 | 7.48 | 7.48 | 8.35 | 8.16 | 7.87 | 7.87 | 8.32 | 643 | 23.9 | 24.4 | 23.5 | 24.4 |
| SJR @ Vernalis | 8.10 | 7.55 | 7.23 | 8.38 | 8.31 | 8.02 | 8.02 | 8.43 | 720 | 23.9 | 24.4 | 23.3 | 24.4 |
| Ulatis Creek | 8.06 | 7.33 | 7.33 | 8.58 | 8.23 | 7.89 | 7.89 | 8.29 | 211 | 24.0 | 24.4 | 23.4 | 24.4 |
| Low EC Control | 8.08 | 7.67 | 7.46 | 8.41 | 7.76 | 7.29 | 7.29 | 8.02 | 63 | 24.0 | 24.4 | 23.4 | 24.4 |

Table E-30. Summary of water quality measurements during an *S. capricornutum* toxicity test initiated on 3/8/16, examining the toxicity of ambient surface water samples collected on 3/7/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC ($\mu\text{S}/\text{cm}$) | Temperature ($^{\circ}\text{C}$) | | | |
|-----------------|-----------|-------|------|------|---------|-------|------|------|--|------------------------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 8.36 | 8.28 | 8.28 | 8.36 | 7.63 | 8.40 | 7.30 | 8.40 | 91 | 23.6 | 25.1 | 23.6 | 25.1 |
| Hood | 8.42 | 8.85 | 8.42 | 8.85 | 7.87 | 9.45 | 7.87 | 9.45 | 222 | 23.7 | 25.3 | 23.7 | 25.3 |
| Mokelumne | 8.53 | 8.40 | 8.40 | 8.53 | 7.69 | 8.90 | 7.69 | 8.90 | 142 | 23.5 | 24.5 | 23.5 | 24.5 |
| SJR @ Buckley | 8.49 | 8.47 | 8.47 | 8.49 | 7.94 | 9.15 | 7.94 | 9.15 | 693 | 23.6 | 25.4 | 23.6 | 25.4 |
| SJR @ Vernalis | 8.54 | 8.69 | 8.54 | 8.69 | 8.12 | 9.46 | 8.12 | 9.46 | 784 | 23.7 | 25.3 | 23.7 | 25.3 |
| Ulatis Creek | 8.50 | 8.95 | 8.50 | 8.95 | 8.07 | 9.46 | 8.05 | 9.46 | 287 | 23.4 | 24.6 | 23.4 | 24.6 |

Table E-31. Summary of water quality measurements during a *P. promelas* toxicity test initiated on 4/20/16, examining the toxicity of ambient surface water samples collected on 4/19/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC ($\mu\text{S}/\text{cm}$) | Temperature ($^{\circ}\text{C}$) | | | |
|---------------------|-----------|-------|------|------|---------|-------|------|------|--|------------------------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 8.45 | 8.28 | 7.50 | 8.45 | 8.11 | 8.05 | 7.76 | 8.27 | 296 | 24.9 | 23.0 | 23.0 | 24.9 |
| Hood | 8.41 | 8.27 | 7.42 | 8.41 | 8.08 | 8.03 | 7.61 | 8.14 | 130 | 24.7 | 23.1 | 23.0 | 24.7 |
| SJR @ Buckley | 8.36 | 8.20 | 7.45 | 8.44 | 8.13 | 8.20 | 7.97 | 8.24 | 844 | 24.7 | 23.1 | 23.1 | 24.7 |
| SJR @ Vernalis | 8.51 | 8.39 | 7.59 | 8.51 | 8.12 | 8.03 | 7.71 | 8.22 | 373 | 24.6 | 23.2 | 23.2 | 24.6 |
| Ulatis Creek | 8.40 | 8.17 | 7.21 | 8.40 | 8.61 | 8.53 | 7.94 | 8.78 | 800 | 24.6 | 23.2 | 23.2 | 24.6 |
| Dup: Hood | 8.40 | 8.35 | 7.39 | 8.50 | 8.26 | 8.26 | 7.94 | 8.34 | 839 | 24.6 | 22.8 | 22.8 | 24.6 |
| PRT: ROEPAMH | 8.33 | NR | 4.73 | 8.55 | 8.14 | NR | 7.43 | 8.26 | 290 | 24.2 | NR | 23.3 | 25.1 |
| PRT: Mokelumne | 8.39 | NR | 3.63 | 8.55 | 7.93 | NR | 6.97 | 7.98 | 62 | 23.9 | NR | 23.9 | 25.1 |
| PRT: Low EC Control | 8.42 | 8.34 | 6.75 | 8.60 | 7.69 | 7.75 | 7.10 | 7.94 | 80 | 24.1 | 24.2 | 24.1 | 26.0 |

NR: Not reported. Sample was dumped prior to final water quality measurements at test termination, due to technician error.

Table E-32. Summary of water quality measurements during a *C. dubia* toxicity test initiated 4/20/16, examining the toxicity of ambient surface water samples collected on 4/19/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|--------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| L1650 | 8.45 | 7.80 | 7.53 | 8.87 | 8.04 | 8.01 | 7.95 | 8.24 | 240 | 23.6 | 25.2 | 23.6 | 25.8 |
| Hood | 8.39 | 7.90 | 7.53 | 8.46 | 8.01 | 7.87 | 7.87 | 8.23 | 131 | 23.5 | 25.1 | 23.5 | 25.1 |
| Mokelumne | 8.40 | 7.96 | 7.64 | 8.44 | 7.79 | 7.58 | 7.58 | 8.26 | 61 | 23.8 | 25.0 | 23.8 | 25.1 |
| SJR @ Buckley | 8.51 | 8.01 | 7.63 | 8.51 | 8.21 | 8.08 | 8.08 | 8.36 | 840 | 23.7 | 25.2 | 23.7 | 25.2 |
| SJR @ Vernalis | 8.50 | 7.99 | 7.62 | 8.52 | 8.11 | 7.90 | 7.90 | 8.20 | 374 | 23.6 | 25.2 | 23.6 | 25.3 |
| Ulatis Creek | 8.46 | 7.96 | 7.50 | 8.46 | 8.60 | 8.42 | 5.56 | 8.78 | 793 | 23.5 | 25.0 | 23.5 | 25.0 |
| Dup: SJR @ Buckley | 8.51 | 8.03 | 7.50 | 8.53 | 8.24 | 8.17 | 8.16 | 8.45 | 844 | 23.7 | 25.1 | 23.7 | 25.1 |
| Low EC Control | 8.56 | 8.15 | 7.98 | 8.56 | 7.65 | 7.71 | 7.53 | 8.29 | 70 | 23.6 | 25.1 | 23.6 | 25.1 |

Table E-33. Summary of water quality measurements during an *S. capricornutum* toxicity test initiated 4/20/16, examining the toxicity of ambient surface water samples collected 4/19/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|--------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 8.33 | 8.16 | 8.16 | 8.33 | 7.53 | 8.1 | 7.53 | 8.13 | 92 | 23.2 | 26.0 | 23.2 | 26.0 |
| Hood | 8.38 | 8.73 | 8.38 | 8.73 | 7.82 | 8.7 | 7.82 | 8.73 | 209 | 23.2 | 26.0 | 23.2 | 26.0 |
| Mokelumne | 8.36 | 8.47 | 8.36 | 8.47 | 7.74 | 9.4 | 7.74 | 9.44 | 140 | 23.2 | 25.9 | 23.2 | 25.9 |
| SJR @ Buckley | 8.42 | 7.84 | 7.84 | 8.42 | 8.02 | 8.5 | 8.02 | 8.50 | 907 | 23.2 | 25.8 | 23.2 | 25.8 |
| SJR @ Vernalis | 8.38 | 7.94 | 7.94 | 8.38 | 7.96 | 8.4 | 7.96 | 8.35 | 444 | 23.2 | 25.9 | 23.2 | 25.9 |
| Ulatis Creek | 8.40 | 8.60 | 8.40 | 8.60 | 8.65 | 9.3 | 8.65 | 9.31 | 842 | 23.2 | 25.9 | 23.2 | 25.9 |
| Dup: SJR @ Buckley | 8.37 | 7.88 | 7.88 | 8.37 | 8.02 | 8.5 | 8.02 | 8.46 | 884 | 23.3 | 25.8 | 23.3 | 25.8 |

Table E-34. Summary of water quality measurements during a *P. promelas* toxicity test initiated on 5/19/16, examining the toxicity of ambient surface water samples collected on 5/18/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC ($\mu\text{S/cm}$) | Temperature ($^{\circ}\text{C}$) | | | |
|---------------------|-----------|-------|------|------|---------|-------|------|------|---------------------------------|------------------------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 8.16 | 8.09 | 7.90 | 8.56 | 8.13 | 8.00 | 7.98 | 8.32 | 269 | 24.4 | 23.9 | 25.0 | 24.4 |
| Hood | 8.10 | 8.03 | 7.87 | 8.45 | 8.12 | 7.90 | 7.89 | 8.13 | 119 | 23.9 | 23.9 | 24.9 | 23.9 |
| SJR @ Buckley | 8.14 | 8.05 | 7.88 | 8.50 | 8.02 | 7.79 | 7.47 | 8.12 | 263 | 24.1 | 23.7 | 24.8 | 24.1 |
| SJR @ Vernalis | 8.11 | 7.82 | 7.82 | 8.56 | 8.12 | 7.94 | 7.94 | 8.37 | 300 | 24.0 | 24.0 | 24.9 | 24.0 |
| Ulatis Creek | 8.15 | 7.96 | 7.89 | 8.55 | 8.56 | 8.45 | 7.88 | 8.64 | 750 | 23.8 | 23.8 | 25.0 | 23.8 |
| PRT: ROEPAMH | 8.13 | 8.07 | 7.22 | 8.42 | 8.12 | 7.90 | 7.80 | 8.22 | 272 | 23.1 | 23.1 | 25.3 | 23.1 |
| PRT: Mokelumne | 8.20 | 7.87 | 7.40 | 8.40 | 7.74 | 7.61 | 7.30 | 7.98 | 75 | 23.6 | 23.3 | 25.7 | 23.6 |
| PRT: Low EC Control | 7.88 | 8.11 | 7.25 | 8.57 | 7.77 | 7.55 | 7.44 | 7.98 | 72 | 22.8 | 22.8 | 25.3 | 22.8 |

Table E-35. Summary of water quality measurements during a *C. dubia* toxicity test initiated 5/19/16, examining the toxicity of ambient surface water samples collected on 5/18/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC ($\mu\text{S/cm}$) | Temperature ($^{\circ}\text{C}$) | | | |
|----------------|-----------|-------|------|------|---------|-------|------|------|---------------------------------|------------------------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| L1650 | 8.17 | 7.68 | 7.47 | 8.42 | 8.06 | 7.83 | 7.83 | 8.20 | 310 | 24.4 | 24.5 | 24.4 | 25.8 |
| Hood | 8.03 | 7.71 | 7.37 | 8.36 | 8.08 | 7.77 | 7.69 | 8.17 | 110 | 24.3 | 24.6 | 24.3 | 25.8 |
| Mokelumne | 8.09 | 7.65 | 7.30 | 8.31 | 7.79 | 7.58 | 7.52 | 7.97 | 58 | 24.3 | 24.5 | 24.3 | 25.7 |
| SJR @ Buckley | 8.12 | 7.62 | 7.44 | 8.42 | 7.93 | 7.57 | 7.57 | 8.11 | 274 | 24.4 | 24.5 | 24.4 | 25.8 |
| SJR @ Vernalis | 8.14 | 7.60 | 7.36 | 8.45 | 8.07 | 7.78 | 7.75 | 8.30 | 329 | 24.2 | 24.6 | 24.2 | 25.9 |
| Ulatis Creek | 8.10 | 7.72 | 7.37 | 8.38 | 8.60 | 8.41 | 8.20 | 8.65 | 757 | 24.3 | 24.5 | 24.3 | 27.1 |
| Low EC Control | 8.15 | 7.70 | 7.53 | 8.70 | 8.05 | 7.65 | 7.46 | 8.05 | 69 | 24.2 | 24.4 | 24.2 | 25.7 |

Table E-36. Summary of water quality measurements during an *S. capricornutum* toxicity test initiated 5/19/16, examining the toxicity of ambient surface water samples collected 5/18/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|-----------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 7.82 | 8.03 | 7.82 | 8.03 | 7.64 | 7.9 | 7.64 | 8.08 | 97 | 26.4 | 27.0 | 26.4 | 27.0 |
| Hood | 7.91 | 8.20 | 7.91 | 8.20 | 7.87 | 9.0 | 7.87 | 9.03 | 202 | 26.0 | 27.0 | 26.0 | 27.0 |
| Mokelumne | 7.89 | 8.39 | 7.89 | 8.39 | 7.71 | 9.0 | 7.71 | 8.96 | 142 | 26.1 | 26.6 | 26.1 | 26.6 |
| SJR @ Buckley | 7.92 | 7.86 | 7.86 | 7.92 | 7.83 | 8.1 | 7.83 | 8.34 | 367 | 26.1 | 26.5 | 26.1 | 26.5 |
| SJR @ Vernalis | 7.96 | 7.88 | 7.88 | 7.96 | 8.10 | 8.1 | 8.10 | 8.40 | 404 | 26.0 | 26.5 | 26.0 | 26.5 |
| Ulatis Creek | 7.93 | 8.63 | 7.93 | 8.63 | 8.25 | 9.3 | 8.25 | 9.25 | 868 | 25.7 | 26.6 | 25.7 | 26.6 |

Table E-37. Summary of water quality measurements during a *P. promelas* toxicity test initiated on 6/16/16, examining the toxicity of ambient surface water samples collected on 6/15/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|---------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 8.05 | 8.03 | 7.61 | 8.48 | 8.05 | 7.75 | 7.75 | 8.27 | 419 | 24.3 | 23.5 | 21.1 | 24.8 |
| Hood | 8.07 | 7.90 | 7.64 | 8.40 | 8.06 | 7.83 | 7.80 | 8.18 | 162 | 24.5 | 23.3 | 21.0 | 24.9 |
| SJR @ Buckley | 8.03 | 7.77 | 7.56 | 8.35 | 8.12 | 7.88 | 7.88 | 8.16 | 581 | 24.7 | 23.8 | 21.0 | 25.0 |
| SJR @ Vernalis | 8.31 | 7.94 | 7.76 | 8.42 | 8.43 | 8.03 | 8.03 | 8.79 | 427 | 24.7 | 23.5 | 21.3 | 24.9 |
| Ulatis Creek | 7.89 | 7.70 | 7.53 | 8.56 | 8.57 | 8.49 | 8.32 | 8.60 | 945 | 24.4 | 23.8 | 21.3 | 24.8 |
| Field Blank | 8.11 | 7.92 | 7.60 | 8.50 | 8.11 | 7.95 | 7.94 | 8.31 | 317 | 24.6 | 24.0 | 21.0 | 24.8 |
| PRT: ROEPAMH | 8.09 | 7.81 | 7.33 | 8.36 | 8.11 | 7.70 | 7.70 | 8.21 | 302 | 24.7 | 24.4 | 24.3 | 25.4 |
| PRT: Mokelumne | 8.09 | 7.84 | 7.49 | 8.32 | 7.75 | 7.60 | 7.60 | 7.98 | 93 | 24.5 | 24.3 | 24.2 | 25.7 |
| PRT: Low EC Control | NR | 7.90 | 7.50 | 8.39 | NR | 7.32 | 7.32 | 7.96 | NR | NR | 24.3 | 24.2 | 25.7 |

NR: Not reported. Sample was lost prior to initial water quality measurements at test initiation, due to technician error.

Table E-38. Summary of water quality measurements during a *C. dubia* toxicity test initiated 6/16/16, examining the toxicity of ambient surface water samples collected on 6/15/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|----------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| L1650 | 8.29 | 7.45 | 7.30 | 8.36 | 8.23 | 7.64 | 7.64 | 8.23 | 272 | 24.2 | 23.7 | 23.7 | 25.7 |
| Hood | 8.26 | 7.24 | 7.24 | 8.29 | 8.15 | 7.55 | 7.55 | 8.18 | 118 | 24.0 | 23.8 | 23.8 | 25.6 |
| Mokelumne | 8.35 | 7.13 | 7.13 | 8.35 | 7.92 | 7.30 | 7.30 | 8.01 | 74 | 24.1 | 23.9 | 23.9 | 25.5 |
| SJR @ Buckley | 8.24 | 7.28 | 7.23 | 8.36 | 8.15 | 7.62 | 7.62 | 8.23 | 538 | 24.1 | 23.8 | 23.8 | 25.6 |
| SJR @ Vernalis | 8.46 | 7.74 | 7.30 | 8.59 | 8.68 | 7.92 | 7.92 | 8.68 | 379 | 24.0 | 24.6 | 24.0 | 25.3 |
| Ulatis Creek | 8.18 | 7.05 | 7.05 | 8.44 | 8.63 | 8.46 | 8.16 | 8.63 | 887 | 23.9 | 24.7 | 23.9 | 25.2 |
| Low EC Control | 8.29 | 7.56 | 7.56 | 8.29 | 7.88 | 7.46 | 7.43 | 7.99 | 82 | 24.1 | 23.8 | 23.8 | 25.3 |
| Field Blank | 8.19 | 7.47 | 7.47 | 8.19 | 8.22 | 7.68 | 7.68 | 8.23 | 286 | 24.4 | 24.2 | 24.2 | 25.6 |

Table E-39. Summary of water quality measurements during an *S. capricornutum* toxicity test initiated 6/16/16, examining the toxicity of ambient surface water samples collected 6/15/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|-----------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 8.05 | 8.34 | 8.05 | 8.34 | 7.41 | 8.2 | 6.88 | 8.19 | 95 | 25.7 | 25.3 | 25.3 | 25.7 |
| Hood | 8.19 | 8.56 | 8.19 | 8.56 | 7.84 | 8.8 | 7.84 | 8.77 | 186 | 25.6 | 25.4 | 25.4 | 25.6 |
| Mokelumne | 8.25 | 9.03 | 8.25 | 9.03 | 7.83 | 9.2 | 7.77 | 9.20 | 136 | 25.8 | 25.3 | 25.3 | 25.8 |
| SJR @ Buckley | 8.09 | 8.05 | 8.05 | 8.09 | 8.01 | 8.3 | 8.01 | 8.32 | 619 | 25.7 | 25.2 | 25.2 | 25.7 |
| SJR @ Vernalis | 8.39 | 8.28 | 8.28 | 8.39 | 8.61 | 8.4 | 8.19 | 8.61 | 492 | 25.6 | 25.3 | 25.3 | 25.6 |
| Ulatis Creek | 8.05 | 8.63 | 8.05 | 8.63 | 8.34 | 9.1 | 8.34 | 9.08 | 1000 | 25.8 | 25.3 | 25.3 | 25.8 |
| Field Blank | 8.14 | 8.72 | 8.14 | 8.72 | 7.72 | 8.6 | 7.63 | 8.56 | 111 | 25.7 | 25.2 | 25.2 | 25.7 |

Table E-40. Summary of water quality measurements during a *P. promelas* toxicity test initiated on 7/14/16, examining the toxicity of ambient surface water samples collected on 7/13/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|---------------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| ROEPAMH | 8.01 | 8.13 | 7.70 | 8.50 | 8.24 | 8.16 | 7.97 | 8.33 | 262 | 24.6 | 23.3 | 22.6 | 24.6 |
| Hood | 8.06 | 8.02 | 7.73 | 8.31 | 8.23 | 8.05 | 7.77 | 8.35 | 110 | 24.7 | 23.2 | 23.2 | 24.7 |
| SJR @ Buckley | 8.07 | 8.10 | 7.64 | 8.22 | 8.18 | 8.12 | 7.91 | 8.24 | 451 | 24.6 | 23.2 | 23.0 | 24.6 |
| SJR @ Vernalis | 8.06 | 8.50 | 7.84 | 8.69 | 9.01 | 8.47 | 8.35 | 9.01 | 550 | 24.8 | 23.2 | 22.9 | 24.8 |
| Ulatis Creek | 8.11 | 7.89 | 7.64 | 8.29 | 8.45 | 8.56 | 8.29 | 8.64 | 895 | 24.8 | 23.1 | 23.1 | 24.8 |
| PRT: ROEPAMH | 8.14 | 8.00 | 7.07 | 8.44 | 8.28 | 8.09 | 7.93 | 8.28 | 260 | 24.6 | 24.6 | 23.8 | 24.6 |
| PRT: Mokelumne | 8.20 | 7.92 | 7.05 | 8.45 | 8.19 | 7.91 | 7.58 | 8.19 | 58 | 24.5 | 24.3 | 23.9 | 24.8 |
| PRT: Dup Mokelumne | 8.24 | 7.95 | 7.01 | 8.45 | 8.13 | 7.82 | 7.55 | 8.13 | 56 | 24.6 | 24.2 | 24.0 | 24.9 |
| PRT: Low EC Control | 8.18 | 8.08 | 7.10 | 8.61 | 8.04 | 7.69 | 7.22 | 8.04 | 58 | 24.7 | 24.3 | 24.0 | 24.8 |

Table E-41. Summary of water quality measurements during a *C. dubia* toxicity test initiated 7/14/16, examining the toxicity of ambient surface water samples collected on 7/13/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|----------------|-----------|-------|------|------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| L1650 | 8.25 | 7.51 | 7.24 | 8.42 | 8.12 | 7.91 | 7.83 | 8.28 | 252 | 24.5 | 25.3 | 23.7 | 25.3 |
| Hood | 8.10 | 7.48 | 6.84 | 8.51 | 8.24 | 7.84 | 7.69 | 8.24 | 106 | 24.9 | 24.7 | 23.6 | 24.9 |
| Mokelumne | 8.11 | 7.56 | 6.90 | 8.62 | 8.16 | 7.59 | 7.57 | 8.16 | 54 | 24.5 | 24.5 | 23.6 | 24.5 |
| SJR @ Buckley | 8.05 | 7.43 | 7.02 | 8.46 | 8.19 | 7.88 | 7.58 | 8.27 | 439 | 24.8 | 24.2 | 23.3 | 24.8 |
| SJR @ Vernalis | 8.30 | 7.87 | 7.31 | 8.50 | 8.58 | 8.23 | 8.13 | 8.94 | 517 | 24.6 | 24.5 | 23.3 | 24.6 |
| Ulatis Creek | 8.06 | 7.73 | 6.93 | 8.34 | 8.60 | 8.50 | 8.41 | 8.77 | 867 | 24.6 | 24.3 | 23.5 | 24.6 |
| Dup: Mokelumne | 8.11 | 7.53 | 7.16 | 8.54 | 8.18 | 7.60 | 7.55 | 8.18 | 112 | 24.6 | 24.0 | 23.3 | 24.6 |
| Low EC Control | 8.14 | 7.91 | 7.13 | 8.41 | 8.11 | 7.63 | 7.57 | 8.32 | 82 | 24.9 | 24.2 | 23.3 | 24.9 |

Table E-42. Summary of water quality measurements during an *S. capricornutum* toxicity test initiated 7/14/16, examining the toxicity of ambient surface water samples collected 7/13/16 by USGS.

| Sample | DO (mg/L) | | | | pH | | | | Initial EC (µS/cm) | Temperature (°C) | | | |
|-----------------|-----------|-------|------|-------|---------|-------|------|------|--------------------|------------------|-------|------|------|
| | Initial | Final | Min | Max | Initial | Final | Min | Max | | Initial | Final | Min | Max |
| Distilled Water | 8.24 | 9.63 | 8.24 | 9.63 | 8.10 | 9.17 | 7.71 | 9.17 | 106 | 24.6 | 24.5 | 24.5 | 24.6 |
| Hood | 8.25 | 10.61 | 8.25 | 10.61 | 8.12 | 9.50 | 8.02 | 9.50 | 192 | 24.5 | 24.6 | 24.5 | 24.6 |
| Mokelumne | 8.30 | 12.41 | 8.30 | 12.41 | 8.05 | 9.67 | 7.83 | 9.67 | 145 | 24.8 | 24.4 | 24.4 | 24.8 |
| SJR @ Buckley | 8.22 | 9.22 | 8.22 | 9.22 | 8.18 | 8.73 | 8.18 | 8.73 | 590 | 24.7 | 24.6 | 24.6 | 24.7 |
| SJR @ Vernalis | 8.47 | 11.50 | 8.47 | 11.50 | 8.92 | 9.43 | 8.39 | 9.43 | 646 | 24.6 | 24.5 | 24.5 | 24.6 |
| Ulatis Creek | 8.23 | 12.59 | 8.23 | 12.59 | 8.32 | 9.36 | 8.32 | 9.36 | 992 | 24.7 | 24.5 | 24.5 | 24.7 |
| Dup: Mokelumne | 8.27 | 11.73 | 8.27 | 11.73 | 8.12 | 9.63 | 8.12 | 9.63 | 163 | 24.9 | 24.3 | 24.3 | 24.9 |