LOCATION.--Lat $47^{\circ} 14^{\prime} 58^{\prime \prime}$, long $122^{\circ} 14^{\prime} 36^{\prime \prime}$, in $\mathrm{NE}^{1 /{ }^{1} 4} \mathrm{SW}^{1 / /_{4}} \mathrm{sec} .1, \mathrm{~T} .20 \mathrm{~N} .$, R. 4 E., Pierce County, Hydrologic Unit 17110014 , on right bank, 300 feet downstream from 8th Street E. bridge, 3.3 miles north of Sumner, WA, and at mile 4.9 .

DRAINAGE AREA. $--470 \mathrm{mi}^{2}$.
PERIOD OF RECORD.--Water years 1961-75, August to September 2002.
PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August to September 2002.
pH: August to September 2002.
WATER TEMPERATURE: August to September 2002
DISSOLVED OXYGEN: August to September 2002.
INSTRUMENTATION.--Water-quality monitor since August 2002. Electronic data logger with 30-minute logging interval.
REMARKS.--Interruption in record due to malfunction of the recording instrument and removal for servicing. Specific conductance records good. pH records good, except for Aug. 8-9, which are fair. Water temperature records excellent. Dissolved-oxygen records good, except for Sept. 23-30, which are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--No previous record.
EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, $88 \mathrm{uS} / \mathrm{cm}$ on Sept. 29; minimum recorded, $50 \mathrm{uS} / \mathrm{cm}$ on Aug. 3, but may have been lower during periods of missing record.
$\mathrm{pH}:$ Maximum recorded, 9.0 units on Sept. $13-14$ and Sept. 28-30, but may have been higher during periods of missing record; minimum recorded, 7.2 units on Aug. 3 and 9, but may have been lower during periods of missing record.
WATER TEMPERATURE: Maximum recorded, $21.1^{\circ} \mathrm{C}$ on Aug. 28, but may have been higher during periods of missing record; minimum recorded, $9.6^{\circ} \mathrm{C}$ on Sept. 22.
DISSOLVED OXYGEN: Maximum recorded, $11.6 \mathrm{mg} / \mathrm{L}$ Sept. 28 ; minimum recorded, $8.0 \mathrm{mg} / \mathrm{L}$ Sept. 9.
SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), AUGUST TO SEPTEMBER 2002

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AUGUST |  |  | SEPTEMBER |  |  |
| 1 | --- | --- | -- | 69 | 66 | 68 |
| 2 | -- | -- | -- | 68 | 61 | 65 |
| 3 | 66 | 50 | 56 | 67 | 63 | 65 |
| 4 | 59 | 56 | 58 | 71 | 61 | 66 |
| 5 | 61 | 58 | 59 | 75 | 70 | 71 |
| 6 | 64 | 60 | 62 | 78 | 72 | 75 |
| 7 | --- | --- | --- | 78 | 75 | 77 |
| 8 | - | --- | --- | 80 | 76 | 77 |
| 9 | 69 | 66 | 68 | 83 | 79 | 80 |
| 10 | 67 | 62 | 65 | 83 | 80 | 82 |
| 11 | 64 | 60 | 62 | 81 | 77 | 79 |
| 12 | 65 | 60 | 62 | 77 | 74 | 75 |
| 13 | --- | --- | --- | 76 | 72 | 74 |
| 14 | --- | --- | -- | 76 | 71 | 73 |
| 15 | --- | --- | --- | 73 | 70 | 72 |
| 16 | -- | -- | -- | 73 | 69 | 71 |
| 17 | 60 | 57 | 59 | 77 | 70 | 74 |
| 18 | 62 | 59 | 61 | --- | --- | --- |
| 19 | 64 | 61 | 63 | --- | - | -- |
| 20 | 65 | 61 | 63 | 78 | 74 | 76 |
| 21 | 65 | 62 | 64 | 79 | 72 | 74 |
| 22 | 66 | 60 | 63 | 82 | 76 | 78 |
| 23 | 64 | 59 | 62 | 84 | 76 | 80 |
| 24 | 61 | 57 | 59 | 84 | 78 | 80 |
| 25 | 63 | 57 | 60 | 86 | 78 | 81 |
| 26 | 68 | 63 | 66 | 87 | 79 | 83 |
| 27 | 70 | 65 | 68 | 87 | 79 | 83 |
| 28 | 68 | 62 | 66 | 87 | 82 | 84 |
| 29 | 66 | 61 | 64 | 88 | 81 | 84 |
| 30 | 66 | 62 | 64 | 87 | 82 | 84 |
| 31 | 69 | 62 | 66 | --- | --- | --- |
| MONTH | 70 | 50 | 63 | 88 | 61 | 76 |
| YEAR | 88 | 50 | 70 |  |  |  |

12100500 WHITE RIVER NEAR SUMNER, WA--Continued
PH, WATER, WHOLE, FIELD, STANDARD UNITS, AUGUST TO SEPTEMBER 2002

| DAY | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AUGUST |  |  |  | SEPTEMBER |  |
| 1 | --- | --- | --- | 7.7 | 7.5 | 7.5 |
| 2 | --- | --- | --- | 7.6 | 7.4 | 7.5 |
| 3 | 7.4 | 7.2 | 7.3 | 7.6 | 7.4 | 7.5 |
| 4 | 7.4 | 7.4 | 7.4 | 7.7 | 7.4 | 7.5 |
| 5 | 7.5 | 7.4 | 7.4 | 7.8 | 7.4 | 7.5 |
| 6 | 7.6 | 7.4 | 7.4 | 7.9 | 7.5 | 7.5 |
| 7 | --- | --- | --- | 8.1 | 7.5 | 7.6 |
| 8 | --- | --- | --- | 8.1 | 7.5 | 7.6 |
| 9 | 7.7 | 7.2 | 7.4 | 8.5 | 7.5 | 7.6 |
| 10 | 7.6 | 7.4 | 7.5 | 8.8 | 7.5 | 7.6 |
| 11 | 7.8 | 7.5 | 7.7 | 8.9 | 7.5 | 7.6 |
| 12 | 7.8 | 7.4 | 7.6 | 8.9 | 7.4 | 7.5 |
| 13 | --- | --- | --- | 9.0 | 7.4 | 7.5 |
| 14 | --- | --- | --- | 9.0 | 7.4 | 7.5 |
| 15 | --- | --- | --- | 8.4 | 7.5 | 7.5 |
| 16 | - | --- | -- | 8.4 | 7.4 | 7.5 |
| 17 | 7.8 | 7.5 | 7.6 | 8.8 | 7.5 | 7.5 |
| 18 | 7.6 | 7.5 | 7.6 | --- | --- |  |
| 19 | 7.6 | 7.5 | 7.6 | --- | --- | --- |
| 20 | 7.7 | 7.5 | 7.6 | 8.9 | 7.5 | 7.5 |
| 21 | 7.6 | 7.5 | 7.6 | 8.7 | 7.4 | 7.5 |
| 22 | 7.6 | 7.5 | 7.5 | 8.8 | 7.4 | 7.5 |
| 23 | 7.6 | 7.5 | 7.5 | 8.8 | 7.3 | 7.5 |
| 24 | 7.6 | 7.4 | 7.5 | 8.9 | 7.3 | 7.4 |
| 25 | 7.5 | 7.4 | 7.5 | 8.9 | 7.3 | 7.4 |
| 26 | 7.6 | 7.4 | 7.5 | 8.9 | 7.3 | 7.5 |
| 27 | 7.6 | 7.4 | 7.4 | 8.9 | 7.3 | 7.4 |
| 28 | 7.6 | 7.4 | 7.4 | 9.0 | 7.3 | 7.5 |
| 29 | 7.6 | 7.4 | 7.5 | 9.0 | 7.3 | 7.6 |
| 30 | 7.6 | 7.5 | 7.5 | 9.0 | 7.4 | 7.5 |
| 31 | 7.7 | 7.4 | 7.5 |  | --- | --- |
| MAX | 7.8 | 7.5 | 7.7 | 9.0 | 7.5 | 7.6 |
| MIN | 7.4 | 7.2 | 7.3 | 7.6 | 7.3 | 7.4 |
| YEAR | MAX |  |  | MAXIMUM 9.0 | MINIMUM | 7.4 |
|  | MIN |  |  | MAXIMUM 7.5 | MINIMUM | 7.2 |
|  | MEDIAN |  |  | MAXIMUM 7.7 | MINIMUM | 7.3 |

TEMPERATURE, WATER (DEG. C), AUGUST TO SEPTEMBER 2002

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AUGUST |  |  | SEPTEMBER |  |  |
| 1 | --- | --- | --- | 16.6 | 14.1 | 15.3 |
| 2 | --- | --- | --- | 16.0 | 12.7 | 14.5 |
| 3 | 16.0 | 12.0 | 13.7 | 17.6 | 13.3 | 15.1 |
| 4 | 15.2 | 13.0 | 13.9 | 16.6 | 11.4 | 13.9 |
| 5 | 15.8 | 11.7 | 13.4 | 16.3 | 10.7 | 13.4 |
| 6 | 15.5 | 12.6 | 13.7 | 16.4 | 11.3 | 13.7 |
| 7 | --- | --- | --- | 15.8 | 12.2 | 13.7 |
| 8 | --- | --- | --- | 13.7 | 10.9 | 12.5 |
| 9 | 19.2 | 14.0 | 16.3 | 17.7 | 12.0 | 14.5 |
| 10 | 16.8 | 14.1 | 16.0 | 18.5 | 13.3 | 15.8 |
| 11 | 18.3 | 13.9 | 15.9 | 18.6 | 13.5 | 16.0 |
| 12 | 18.8 | 14.4 | 16.3 | 18.9 | 13.6 | 16.1 |
| 13 | --- | --- | - | 19.0 | 13.5 | 16.2 |
| 14 | --- | --- | --- | 18.7 | 13.7 | 16.1 |
| 15 | --- | --- | --- | 16.4 | 14.3 | 15.1 |
| 16 | --- | --- | --- | 15.3 | 13.2 | 14.3 |
| 17 | 18.1 | 14.2 | 15.8 | 16.2 | 12.4 | 14.0 |
| 18 | 17.0 | 13.6 | 15.1 | --- | --- |  |
| 19 | 16.0 | 13.4 | 14.5 | --- | --- | --- |
| 20 | 15.3 | 13.4 | 14.6 | 16.2 | 12.4 | 14.1 |
| 21 | 15.3 | 12.5 | 13.5 | 14.4 | 9.9 | 12.3 |
| 22 | 17.6 | 12.6 | 14.8 | 14.7 | 9.6 | 12.1 |
| 23 | 18.6 | 14.1 | 16.1 | 15.6 | 10.5 | 12.9 |
| 24 | 18.2 | 14.8 | 16.3 | 16.0 | 11.2 | 13.5 |
| 25 | 15.9 | 14.8 | 15.4 | 15.9 | 11.3 | 13.5 |
| 26 | 17.3 | 13.6 | 15.4 | 14.8 | 11.2 | 12.9 |
| 27 | 19.7 | 13.3 | 16.3 | 14.7 | 10.8 | 12.6 |
| 28 | 21.1 | 14.5 | 17.6 | 15.0 | 10.6 | 12.7 |
| 29 | 20.4 | 15.4 | 17.6 | 13.6 | 11.5 | 12.5 |
| 30 | 19.1 | 14.4 | 16.4 | 12.3 | 9.8 | 11.0 |
| 31 | 18.3 | 12.5 | 15.4 |  |  |  |
| MONTH | 21.1 | 11.7 | 15.4 | 19.0 | 9.6 | 13.9 |
| YEAR | 21.1 | 9.6 | 14.6 |  |  |  |

PUYALLUP RIVER BASIN
12100500 WHITE RIVER NEAR SUMNER, WA--Continued

| OXYGEN DISSOLVED (MG/L), AUGUST TO SEPTEMBER 2002 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN |
| AUGUST |  |  |  | SEPTEMBER |  |  |
| 1 | --- | --- | --- | 9.5 | 8.9 | 9.3 |
| 2 | --- | --- | --- | 10.0 | 9.2 | 9.6 |
| 3 | 10.7 | 9.6 | 10.2 | 9.8 | 8.9 | 9.4 |
| 4 | 10.4 | 10.0 | 10.2 | 10.2 | 9.4 | 9.8 |
| 5 | 10.7 | 9.9 | 10.4 | 10.7 | 9.4 | 10.0 |
| 6 | 10.6 | 9.9 | 10.3 | 10.7 | 9.4 | 10.0 |
| 7 | --- | --- | --- | 10.5 | 9.6 | 10.0 |
| 8 | --- | --- | --- | 10.9 | 9.8 | 10.3 |
| 9 | 9.8 | 8.9 | 9.4 | 10.3 | 8.0 | 9.4 |
| 10 | 9.7 | 9.1 | 9.3 | 10.7 | 8.9 | 9.7 |
| 11 | 9.7 | 8.9 | 9.4 | 10.6 | 8.9 | 9.7 |
| 12 | 9.8 | 8.9 | 9.3 | 10.5 | 9.0 | 9.7 |
| 13 | --- | --- | --- | 10.6 | 8.6 | 9.8 |
| 14 | --- | --- | --- | 9.6 | 8.3 | 8.9 |
| 15 | --- | --- | -- | 10.4 | 8.8 | 9.7 |
| 16 | --- | - | -- | 10.5 | 9.5 | 9.9 |
| 17 | 9.7 | 9.0 | 9.4 | 10.4 | 9.4 | 9.9 |
| 18 | 9.9 | 9.2 | 9.6 | --- | --- | --- |
| 19 | 10.0 | 9.5 | 9.8 | --- | --- | --- |
| 20 | 10.2 | 9.6 | 9.9 | 10.6 | 9.0 | 9.7 |
| 21 | 10.4 | 9.4 | 9.9 | 11.0 | 9.3 | 10.0 |
| 22 | 10.0 | 9.1 | 9.6 | 11.0 | 9.2 | 10.1 |
| 23 | 9.7 | 8.9 | 9.4 | 11.5 | 9.2 | 10.0 |
| 24 | 9.6 | 9.0 | 9.3 | 11.0 | 9.4 | 10.1 |
| 25 | 9.7 | 9.3 | 9.5 | 11.2 | 9.4 | 10.2 |
| 26 | 9.8 | 9.2 | 9.6 | 11.2 | 9.6 | 10.3 |
| 27 | 10.2 | 8.8 | 9.6 | 11.1 | 9.3 | 10.2 |
| 28 | 9.7 | 8.4 | 9.1 | 11.6 | 9.0 | 10.2 |
| 29 | 9.4 | 8.4 | 8.9 | 10.9 | 9.2 | 10.0 |
| 30 | 9.6 | 8.8 | 9.2 | 11.4 | 9.7 | 10.4 |
| 31 | 10.0 | 8.7 | 9.4 | --- | --- | --- |
| MONTH | 10.7 | 8.4 | 9.6 | 11.6 | 8.0 | 9.9 |
| YEAR | 11.6 | 8.0 | 9.7 |  |  |  |

