## SOUTH-CENTRAL ALASKA

## 15297585 CHIGNIK RIVER AT BLACK LAKE OUTLET NEAR CHIGNIK

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 2004 to September 2005 (discontinued).
PERIOD OF DAILY RECORD.--May 2004 to September 2005 (discontinued).
INSTRUMENTATION.--Electronic water-temperature recorder set for 1 -hour recording interval.

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REMARKS.--Probe installed on May 20, 2004. Records represent water-temperature at the sensor within 0. 50}\textrm{C}
    Temperature at the sensor was compared with the stream average by cross section on May 4, 2005 and July 7, 2005.
    Variations of 0.3'C or less were found within the cross sections on both dates. The variation found between mean
    stream temperature and sensor temperature was less than 0.5 ' C
EXTREMES FOR PERIOD OF DAILY RECORD.--
    WATER TEMPERATURE: Maximum, 23.5呂, July 11, 2004; minimum, 0.00}\textrm{C}\mathrm{ on many days during winter periods.
EXTREMES FOR 2004 WATER YEAR.--
    WATER TEMPERATURE: Maximum, 23.50}\textrm{C}, July 11; minimum recorded 5.0呂, September 27
EXTREMES FOR 2005 WATER YEAR.--
    WATER TEMPERATURE: Maximum, 21.0}\mp@subsup{0}{}{\circ}\textrm{C}, August 8 and 12; minimum 0.00'C on many days during the winter
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WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

|  |  |  | $\begin{aligned} & \text { Loca- } \\ & \text { tion in } \end{aligned}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Time | $\begin{gathered} \text { Stream } \\ \text { width, } \\ \text { feet } \\ (00004) \end{gathered}$ | X-sect. looking dwnstrm ft from 1 bank (00009) | Gage height, feet (00065) | Instantaneous discharge, cfs (00061) | ```Sampler type, code (84164)``` | $\begin{gathered} \text { Sam- } \\ \text { pling } \\ \text { method, } \\ \text { code } \\ (82398) \end{gathered}$ | ```Temper- ature, water, deg C (00010)``` | ```Temper- ature, air, deg C (00020)``` |
| MAY |  |  |  |  |  |  |  |  |  |
| 04 | 1328 | 180 | 162 | 6.41 | 678 | 8010 | 10 | 9.3 | 10.5 |
| 04 | 1329 | 180 | 126 | 6.41 | 678 | 8010 | 10 | 9.2 | 10.5 |
| 04 | 1330 | 180 | 90.0 | 6.41 | 678 | 8010 | 10 | 9.1 | 10.5 |
| 04 | 1331 | 180 | 54.0 | 6.41 | 678 | 8010 | 10 | 9.1 | 10.5 |
| 04 | 1332 | 180 | 18.0 | 6.41 | 678 | 8010 | 10 | 9.2 | 10.5 |
| JUL |  |  |  |  |  |  |  |  |  |
| 07. | 1625 | 176 | 18.0 | 6.79 | 943 | 8010 | 10 | 15.6 | 13.7 |
| 07. | 1626 | 176 | 53.0 | 6.79 | 943 | 8010 | 10 | 15.5 | 13.7 |
| 07. | 1627 | 176 | 88.0 | 6.79 | 943 | 8010 | 10 | 15.4 | 13.7 |
| 07. | 1628 | 176 | 123 | 6.79 | 943 | 8010 | 10 | 15.3 | 13.7 |
| 07. | 1629 | 176 | 158 | 6.79 | 943 | 8010 | 10 | 15.4 | 13.7 |

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FEBRUARY |  |  | MARCH |  |  | APRIL |  |  | MAY |  |  |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | -- | --- |
| 2 | -- | -- | --- | --- | --- | --- | --- | - | - | --- | --- | --- |
| 3 | --- | -- | - | -- | --- | --- | -- | --- | --- | --- | --- | --- |
| 4 | - | - | - | - | -- | --- | -- | --- | --- | - | -- | --- |
| 5 | -- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | --- | - | - | --- | --- | --- | --- | --- | --- | --- | -- | --- |
| 7 | - | --- | --- | --- | --- | --- | --- | --- | --- | --- | - | --- |
| 8 | - | --- | --- | --- | --- | --- | --- | --- | --- | --- | - | --- |
| 9 | - | --- | --- | --- | --- | --- | - | - | -- - | -- - | - | --- |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | -- - | --- | --- | --- |
| 11 | - | --- | --- | --- | --- | --- | -- | -- | - | --- | -- | --- |
| 12 | --- | --- | --- | --- | --- | --- | - | --- | --- | --- | --- | --- |
| 13 | - | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | - | --- |
| 16 | -- | - | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | - | --- | --- | --- | --- | --- | - | -- | --- | - | -- | --- |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | -- | --- | --- |
| 20 | --- | --- | --- | --- | -- | --- | -- | -- | --- | 12.5 | -- | --- |
| 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 13.5 | 8.5 | 11.0 |
| 22 | --- | - | - | --- | --- | --- | -- | --- | --- | 12.0 | 9.5 | 11.0 |
| 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.5 | 10.0 | 10.5 |
| 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12.5 | 9.0 | 10.5 |
| 25 | --- | - | --- | --- | --- | --- | --- | --- | --- | 12.0 | 10.0 | 11.0 |
| 26 | --- | --- | --- | -- | --- | --- | -- | --- | --- | 13.0 | 9.5 | 11.0 |
| 27 | - | --- | --- | --- | --- | --- | --- | --- | --- | 12.0 | 10.5 | 11.5 |
| 28 | - | --- | --- | --- | --- | --- | --- | --- | --- | 11.5 | 10.0 | 11.0 |
| 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 8.5 | 9.0 |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 8.0 | 9.0 |
| 31 | --- | --- | -- - | --- | --- | --- | --- | --- | --- | 12.0 | 8.5 | 10.0 |
| MONTH | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|  | JUNE |  |  | JULY |  |  | AUGUST |  |  | SEPTEMBER |  |  |
| 1 | 12.0 | 9.5 | 10.5 | 14.0 | 11.5 | 12.5 | 17.0 | 15.5 | 16.0 | 14.5 | 13.0 | 13.5 |
| 2 | 11.0 | 10.0 | 10.0 | 13.0 | 11.5 | 12.0 | 19.0 | 14.0 | 16.5 | 15.0 | 13.0 | 14.0 |
| 3 | 10.0 | 8.5 | 9.5 | 14.0 | 11.0 | 13.0 | 18.5 | 16.0 | 17.0 | 13.5 | 12.5 | 13.0 |
| 4 | 10.0 | 8.5 | 9.0 | 14.0 | 12.0 | 13.0 | 16.0 | 14.0 | 15.0 | 13.5 | 12.0 | 12.5 |
| 5 | 13.0 | 9.5 | 11.0 | 15.0 | 13.0 | 14.0 | 16.0 | 14.5 | 15.0 | 14.5 | 12.0 | 13.0 |
| 6 | 12.5 | 12.0 | 12.0 | 15.5 | 13.0 | 14.0 | 17.5 | 14.5 | 16.0 | 14.0 | 12.5 | 13.0 |
| 7 | 12.0 | 11.0 | 11.5 | 17.5 | 13.0 | 15.0 | 19.0 | 14.0 | 16.5 | 13.5 | 12.0 | 12.5 |
| 8 | 11.5 | 9.0 | 10.5 | 19.0 | 15.0 | 17.0 | 20.0 | 16.5 | 18.5 | 14.0 | 11.0 | 12.5 |
| 9 | 11.5 | 8.5 | 10.0 | 21.0 | 16.5 | 18.5 | 20.0 | 16.0 | 17.5 | 13.5 | 12.0 | 12.5 |
| 10 | 12.5 | 9.0 | 10.5 | 22.5 | 18.0 | 20.0 | 20.5 | 17.5 | 18.5 | 14.0 | 11.5 | 12.5 |
| 11 | 12.0 | 10.5 | 11.0 | 23.5 | 18.5 | 21.0 | 21.0 | 17.5 | 19.0 | 14.0 | 11.5 | 12.5 |
| 12 | 11.5 | 9.5 | 11.0 | 22.0 | 16.5 | 19.0 | 19.5 | 17.0 | 18.5 | 13.5 | 11.5 | 12.5 |
| 13 | 11.5 | 9.5 | 10.5 | 16.5 | 14.0 | 15.5 | 17.0 | 15.0 | 15.5 | 14.0 | 10.0 | 12.0 |
| 14 | 12.5 | 10.5 | 11.5 | 15.5 | 14.0 | 14.5 | 17.5 | 14.0 | 15.5 | 12.0 | 10.0 | 11.0 |
| 15 | 12.5 | 11.0 | 12.0 | 17.0 | 14.5 | 15.5 | 19.5 | 14.0 | 16.5 | 11.5 | 10.0 | 10.5 |
| 16 | 13.5 | 11.5 | 12.5 | 17.0 | 14.0 | 15.5 | 19.5 | 16.0 | 17.5 | 10.5 | 8.5 | 9.5 |
| 17 | 13.0 | 11.0 | 12.0 | 15.5 | 14.0 | 14.5 | 19.5 | 16.5 | 18.0 | 10.0 | 8.5 | 9.0 |
| 18 | 12.0 | 10.5 | 11.0 | 15.0 | 14.0 | 14.0 | 17.5 | 16.5 | 16.5 | 11.0 | 9.5 | 10.5 |
| 19 | 14.0 | 10.5 | 12.0 | 16.5 | 13.0 | 14.0 | 17.0 | 15.5 | 16.0 | 13.0 | 10.0 | 11.5 |
| 20 | 14.0 | 11.5 | 12.5 | 16.0 | 14.0 | 15.0 | 18.5 | 15.0 | 16.5 | 12.0 | 9.5 | 11.0 |
| 21 | 14.0 | 12.0 | 13.0 | 15.0 | 13.0 | 14.0 | 17.0 | 14.5 | 15.0 | 11.0 | 8.5 | 9.5 |
| 22 | 14.0 | 12.5 | 13.0 | 17.5 | 14.0 | 15.5 | 16.0 | 13.5 | 14.5 | 10.0 | 9.0 | 9.5 |
| 23 | 15.0 | 12.5 | 13.5 | 18.5 | 15.5 | 16.5 | 16.5 | 13.5 | 15.0 | 9.0 | 7.5 | 8.0 |
| 24 | 14.0 | 13.0 | 13.5 | 17.0 | 14.5 | 15.5 | 16.0 | 14.0 | 15.0 | 8.5 | 6.5 | 7.5 |
| 25 | 13.0 | 10.5 | 11.5 | 15.5 | 14.0 | 14.5 | 15.5 | 14.5 | 15.0 | 8.5 | 7.5 | 8.0 |
| 26 | 14.0 | 10.5 | 12.0 | 16.0 | 14.5 | 15.0 | 15.0 | 13.0 | 14.0 | 7.5 | 6.0 | 6.5 |
| 27 | 14.0 | 12.5 | 13.5 | 15.0 | 13.5 | 14.0 | 14.5 | 12.5 | 13.5 | 7.5 | 5.0 | 6.0 |
| 28 | 14.5 | 12.0 | 13.0 | 15.0 | 13.5 | 14.0 | 13.5 | 12.0 | 12.5 | 8.0 | 6.5 | 7.0 |
| 29 | 13.5 | 13.0 | 13.0 | 15.5 | 14.0 | 14.5 | 13.0 | 11.0 | 12.0 | 9.5 | 7.5 | 8.5 |
| 30 | 13.5 | 12.5 | 13.0 | 16.0 | 13.5 | 15.0 | 14.0 | 11.5 | 12.5 | 9.5 | 7.5 | 8.5 |
| 31 | --- | --- | --- | 17.0 | 14.5 | 15.5 | 14.0 | 12.0 | 13.0 | --- | --- | --- |
| MONTH | 15.0 | 8.5 | 11.7 | 23.5 | 11.0 | 15.2 | 21.0 | 11.0 | 15.7 | 15.0 | 5.0 | 10.6 |

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005


## SOUTH-CENTRAL ALASKA

## 15297585 CHIGNIK RIVER AT BLACK LAKE OUTLET NEAR CHIGNIK—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | JUNE |  |  | JULY |  |  | UGUST |  |  | SEPTEMBER |  |
| 1 | 10.5 | 8.0 | 9.5 | 16.0 | 13.0 | 14.5 | 16.0 | 14.0 | 15.0 | 12.5 | 9.5 | 11.0 |
| 2 | 11.5 | 8.5 | 10.0 | 18.0 | 13.5 | 15.5 | 16.0 | 14.0 | 15.0 | 12.5 | 10.5 | 11.5 |
| 3 | 14.5 | 10.0 | 12.0 | 17.0 | 14.5 | 15.5 | 16.0 | 14.0 | 15.0 | 13.0 | 11.5 | 12.5 |
| 4 | 16.5 | 11.0 | 13.5 | 16.5 | 14.5 | 15.5 | 16.0 | 14.0 | 15.0 | 13.0 | 11.0 | 12.0 |
| 5 | 15.5 | 12.5 | 14.0 | 17.0 | 14.5 | 15.5 | 17.5 | 14.0 | 15.5 | 13.0 | 11.0 | 12.0 |
| 6 | 13.5 | 11.5 | 12.5 | 16.5 | 14.0 | 15.0 | 19.0 | 15.0 | 16.5 | 12.5 | 11.5 | 11.5 |
| 7 | 12.5 | 10.5 | 11.5 | 17.0 | 13.0 | 14.5 | 20.5 | 16.0 | 18.0 | 13.0 | 11.0 | 11.5 |
| 8 | 13.0 | 10.0 | 11.5 | 19.0 | 13.5 | 16.0 | 21.0 | 16.5 | 18.5 | 12.0 | 11.0 | 11.5 |
| 9 | 13.5 | 11.0 | 12.0 | 17.5 | 15.5 | 16.0 | 19.0 | 16.0 | 17.5 | 13.5 | 11.5 | 12.0 |
| 10 | 13.0 | 10.5 | 12.0 | 17.0 | 13.0 | 15.0 | 18.0 | 14.5 | 16.0 | 13.5 | 11.0 | 12.5 |
| 11 | 14.5 | 11.5 | 13.0 | 15.5 | 13.5 | 14.0 | 20.0 | 14.0 | 17.0 | 14.0 | 11.5 | 12.5 |
| 12 | 13.5 | 11.0 | 12.0 | 16.0 | 13.0 | 14.5 | 21.0 | 17.0 | 18.5 | 13.0 | 11.5 | 12.0 |
| 13 | 15.0 | 10.5 | 13.0 | 17.0 | 13.5 | 15.0 | 19.0 | 16.0 | 17.5 | 12.0 | 10.0 | 11.0 |
| 14 | 16.5 | 12.0 | 14.5 | 18.0 | 14.5 | 16.0 | 19.0 | 15.5 | 17.0 | 13.0 | 11.0 | 11.5 |
| 15 | 17.5 | 13.5 | 15.5 | 17.0 | 14.0 | 15.5 | 18.0 | 15.5 | 17.0 | 12.5 | 11.5 | 12.0 |
| 16 | 16.5 | 13.0 | 15.0 | 16.0 | 14.5 | 15.5 | 19.5 | 16.0 | 17.5 | 11.5 | 10.0 | 11.0 |
| 17 | 14.0 | 11.5 | 12.5 | 15.5 | 13.0 | 14.0 | 18.0 | 16.0 | 17.0 | 11.0 | 10.0 | 10.5 |
| 18 | 14.0 | 11.5 | 13.0 | 15.5 | 12.5 | 13.5 | 19.0 | 14.5 | 16.5 | 10.5 | 9.5 | 10.0 |
| 19 | 14.0 | 11.0 | 12.5 | 17.5 | 13.0 | 15.0 | 17.5 | 15.0 | 16.0 | 10.5 | 9.0 | 9.5 |
| 20 | 14.5 | 11.0 | 12.5 | 16.0 | 13.0 | 14.5 | 16.0 | 13.0 | 14.5 | 10.5 | 8.5 | 9.5 |
| 21 | 13.5 | 12.0 | 12.5 | 16.0 | 13.0 | 14.5 | 16.5 | 14.0 | 15.0 | 10.0 | 9.0 | 9.5 |
| 22 | 14.5 | 12.0 | 13.0 | 16.5 | 14.5 | 15.5 | 17.0 | 14.5 | 15.5 | 11.0 | 10.0 | 10.5 |
| 23 | 16.0 | 12.5 | 14.0 | 17.5 | 14.5 | 15.5 | 16.0 | 13.5 | 14.5 | 11.0 | 9.5 | 10.5 |
| 24 | 15.0 | 13.0 | 14.0 | 16.5 | 14.0 | 15.0 | 14.0 | 12.0 | 13.0 | 11.5 | 9.0 | 10.0 |
| 25 | 15.0 | 13.0 | 14.0 | 17.5 | 14.0 | 15.5 | 13.5 | 11.5 | 12.5 | 11.0 | 8.0 | 9.5 |
| 26 | 17.0 | 14.0 | 15.0 | 17.0 | 14.5 | 15.5 | 14.0 | 11.5 | 12.5 | 9.5 | 8.5 | 9.0 |
| 27 | 20.0 | 14.0 | 16.5 | 17.0 | 14.5 | 15.5 | 13.5 | 11.5 | 12.5 | 10.0 | 8.5 | 9.0 |
| 28 | 20.0 | 16.0 | 18.0 | 15.5 | 13.0 | 14.0 | 14.0 | 12.5 | 13.5 | 9.5 | 8.5 | 9.0 |
| 29 | 20.0 | 15.0 | 17.5 | 13.5 | 12.0 | 13.0 | 13.5 | 11.5 | 12.5 | 8.5 | 7.5 | 8.0 |
| 30 | 18.0 | 15.5 | 16.0 | 15.0 | 13.0 | 13.5 | 12.5 | 11.0 | 11.5 | 8.0 | 7.0 | 7.5 |
| 31 | --- | - | - | 16.0 | 13.5 | 14.5 | 11.0 | 10.5 | 11.0 | - | --- | --- |
| MONTH | 20.0 | 8.0 | 13.4 | 19.0 | 12.0 | 14.9 | 21.0 | 10.5 | 15.3 | 14.0 | 7.0 | 10.7 |

