## 04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY

LOCATION.--Lat 44°59'46", long 73°21'37", Clinton County, Hydrologic Unit 02010006, on left bank at outlet of Lake Champlain in Rouses Point, and 1.0 mi south of Fort Montgomery ruins.

DRAINAGE AREA.--8,277 $mi^2$.

PERIOD OF RECORD.--October 1863 to December 1870 (maximum and minimum monthly gage heights at St. Johns, Quebec, published in WSP 97) and March 1871 to current year (daily gage heights prior to October 1970, elevations thereafter: those for 1871-1907 published in WSP 894). Gage heights prior to October 1, 1925, published as "Richelieu River at Fort Montgomery, Rouses Point". Discharge records for January 1875 to September 1916 at "Chambly, Quebec," published in WSP 65, 82, 97, 129, 170, 206, 424, and 1307 have been found to be unreliable and should not be used. Daily discharge record for "Richelieu River at Fryers Rapids, Quebec," published in Water Survey of Canada annual reports.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. March 1871 to May 1923, nonrecording gage located in Fort Montgomery and May 1923 to October 1938, nonrecording gage at present site. Prior to October 1970, at datum 93.00 ft higher.

REMARKS.--Area of lake surface about 490 $mi^2$. Total volume below 92.5 ft elevation, reported by Lake Champlain Studies Center, 902.2 bil $ft^3$. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 101.88 ft, Apr. 25, 1993; minimum observed, 92.17 ft, Oct. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since at least 1827, 102.1 ft, May 4, 1869, from marks at railroad bridge near present gage, according to data published on p. 428 of the Report of the Board of Engineers on Deep Waterways, 1900: U.S. 56th Cong., 2d sess. H. Doc. 149.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 99.82 ft, Jan. 3, affected by seiche; minimum, 94.75 ft, Oct. 21, affected by seiche.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 95.26 | 97.19 | 98.53 | 99.41 | 97.43 | 95.90 | 97.52 | 98.05 | 97.89 | 96.47 | 96.33 | 97.60 |
| 2 | 95.24 | 97.25 | 98.44 | 99.44 | 97.35 | 95.89 | 97.74 | 98.03 | 97.78 | 96.36 | 96.33 | 97.71 |
| 3 | 95.34 | 97.29 | 98.48 | 99.55 | 97.31 | 95.88 | 98.06 | 97.86 | 97.85 | 96.32 | 96.36 | 97.81 |
| 4 | 95.43 | 97.39 | 98.43 | 99.40 | 97.27 | 95.91 | 98.17 | 97.84 | 97.88 | 96.33 | 96.37 | 97.68 |
| 5 | 95.20 | 97.73 | 98.34 | 99.40 | 97.18 | 96.00 | 98.26 | 97.87 | 97.90 | 96.38 | 96.29 | 97.78 |
| 6 | 95.12 | 97.38 | 98.14 | 99.42 | 97.14 | 96.09 | 98.35 | 97.84 | 97.90 | 96.14 | 96.28 | 97.80 |
| 7 | 95.18 | 97.45 | 98.08 | 99.37 | 97.07 | 96.28 | 98.43 | 97.66 | 97.82 | 96.14 | 96.28 | 97.70 |
| 8 | 95.17 | 97.34 | 98.24 | --- | 97.03 | 96.45 | 98.44 | 97.70 | 97.76 | 96.19 | 96.31 | 97.49 |
| 9 | 95.07 | 97.40 | 98.20 | --- | 97.00 | 96.55 | 98.39 | 97.63 | 97.68 | 96.18 | 96.30 | 97.60 |
| 10 | 95.06 | 97.42 | 98.27 | 99.15 | 96.93 | 96.61 | 98.35 | 97.59 | 97.57 | 96.15 | 96.35 | 97.84 |
| 11 | 95.05 | 97.55 | 98.13 | 99.14 | 96.85 | 96.64 | 98.33 | --- | 97.52 | 96.14 | 96.30 | 98.05 |
| 12 | 95.04 | 97.29 | 98.19 | 98.95 | 96.80 | 96.67 | 98.29 | 97.40 | 97.48 | 96.18 | 96.27 | 98.12 |
| 13 | 94.97 | 97.34 | 98.27 | 98.86 | 96.77 | 96.65 | 98.28 | 97.36 | 97.53 | 96.23 | 96.37 | 98.02 |
| 14 | 95.12 | 97.10 | 98.35 | 98.80 | 96.69 | 96.68 | 98.33 | 97.35 | 97.50 | 96.14 | 96.57 | 98.11 |
| 15 | 95.06 | 97.24 | 98.35 | 98.71 | 96.64 | 96.65 | 98.41 | 97.27 | 97.32 | 96.09 | 96.69 | 98.11 |
| 16 | 94.99 | 97.27 | 98.54 | 98.66 | 96.60 | 96.56 | 98.50 | 97.19 | 97.27 | 96.11 | 96.76 | 98.03 |
| 17 | 95.00 | 97.24 | 98.51 | 98.57 | 96.55 | 96.54 | 98.54 | 97.20 | 97.21 | 96.11 | 96.84 | 97.82 |
| 18 | 94.99 | 97.40 | 98.54 | 98.50 | 96.48 | 96.52 | 98.52 | 97.18 | 97.13 | 96.10 | 96.96 | 97.68 |
| 19 | 94.98 | 97.50 | 98.53 | 98.42 | 96.44 | 96.48 | 98.64 | 97.06 | 97.01 | 96.12 | 96.96 | 97.65 |
| 20 | 95.02 | 97.42 | 98.52 | 98.32 | 96.39 | 96.49 | 98.46 | 97.19 | 96.98 | 96.20 | 96.91 | 97.68 |
| 21 | 94.98 | 97.94 | 98.71 | 98.24 | 96.36 | 96.40 | 98.80 | 96.93 | 96.92 | 96.22 | 96.91 | 97.67 |
| 22 | 95.09 | 98.17 | 98.66 | 98.18 | 96.30 | 96.34 | 98.54 | 96.96 | 96.90 | 96.31 | 96.98 | 97.61 |
| 23 | 95.24 | 98.35 | 98.58 | 98.06 | 96.24 | 96.37 | 98.43 | 96.95 | 96.80 | 96.24 | 97.05 | 97.52 |
| 24 | 95.30 | 98.54 | 98.57 | 97.99 | 96.20 | 96.29 | 98.34 | 97.09 | 96.83 | 96.20 | 96.96 | 97.50 |
| 25 | 95.47 | 98.32 | 98.77 | 97.92 | 96.15 | 96.30 | 98.42 | 97.39 | 96.70 | 96.24 | 97.04 | 97.49 |
| 26 | 95.37 | 98.38 | 99.11 | 97.84 | 96.09 | 96.33 | 98.51 | 97.69 | 96.67 | 96.27 | 97.12 | 97.35 |
| 27 | 95.41 | 98.29 | 99.30 | 97.77 | 96.05 | 96.47 | 98.27 | 97.70 | 96.61 | 96.33 | 97.03 | 97.32 |
| 28 | 95.84 | 98.29 | 99.47 | 97.71 | 96.00 | 96.83 | 98.20 | 97.73 | 96.55 | 96.31 | 96.89 | 97.17 |
| 29 | 96.23 | 98.40 | 99.51 | 97.64 | 95.96 | 97.15 | 98.29 | 97.70 | 96.53 | 96.29 | 96.97 | 97.06 |
| 30 | 96.73 | 98.55 | 99.44 | 97.55 | --- | 97.33 | 98.11 | 97.72 | 96.46 | 96.33 | 97.11 | 97.05 |
| 31 | 97.17 | --- | 99.44 | 97.49 | --- | 97.43 | --- | 97.74 | --- | 96.43 | 97.39 | --- |
| MEAN | 95.33 | 97.68 | 98.60 | --- | 96.66 | 96.47 | 98.33 | --- | 97.27 | 96.23 | 96.69 | 97.67 |
| MAX | 97.17 | 98.55 | 99.51 | --- | 97.43 | 97.43 | 98.80 | --- | 97.90 | 96.47 | 97.39 | 98.12 |
| MIN | 94.97 | 97.10 | 98.08 | --- | 95.96 | 95.88 | 97.52 | --- | 96.46 | 96.09 | 96.27 | 97.05 |

CAL YR 2003 MEAN 96.50 MAX 99.51 MIN 94.42