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NOAA Technical Memorandum ERL GLERL-83



GREAT LAKES MONTHLY HYDROLOGIC DATA

Thomas E. Croley II
Timothy S. Hunter

Great Lakes Environmental Research Laboratory
Ann Arbor, Michigan
June 1994

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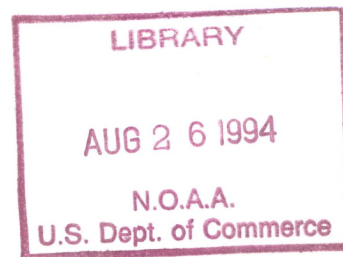
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DEPARTMENT OF COMMERCE

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GREAT LAKES MONTHLY HYDROLOGIC DATA¹

Thomas E. Croley II and Timothy S. Hunter

ABSTRACT. Accurate hydrologic data (over-land precipitation, over-lake precipitation, runoff, lake evaporation, net basin supplies, connecting channel flows, diversion flows, beginning-of-month lake levels, and changes in storage) are required for simulation, forecasting, and water resource studies on the Laurentian Great Lakes and their basins. This report is an update of an earlier report presenting Great Lakes monthly hydrologic data (Quinn and Kelley, 1983). It has been expanded and revised to include all available data through 1990 and to reflect improved computational techniques. The data and a program for combining the data are available on a companion diskette.

1. INTRODUCTION

Accurate hydrologic data (over-land precipitation, over-lake precipitation, runoff, lake evaporation, net basin supplies, connecting channel flows, diversion flows, beginning-of-month lake levels, and changes in storage) are required for simulation, forecasting, and water resource studies on the Laurentian Great Lakes and their basins. In 1983, the Great Lakes Environmental Research Laboratory (GLERL) published a report (Quinn and Kelley, 1983) compiling monthly values of these data through 1980 in a single source. This report serves as an update to the 1983 report by providing additional data through 1990 and revising some data to reflect improved computational techniques. We also provide a companion computer diskette which contains all of the tables in the report as well as some derived quantities and FORTRAN software for computing additional derived quantities. As in the previous report, numerous sources are involved so the period of record for the data will vary.

As in the preceding report, all hydrometeorological data are uncorrected for gage errors or systematic measurement biases (such as precipitation gage undercatch). Data are averaged spatially and temporally without regard to their relative quality, except that obvious errors of two types are trapped: 1) all daily minimum and maximum air temperatures that improperly match are regarded as missing data (i.e., minimum exceeds maximum), and 2) all air temperature or precipitation data that exceed range limits are regarded as missing. These range limits are, for the U.S. side, -60°F - 115°F for air temperature and 0-10 in. for precipitation; for Canada, they are -53°C - 43°C for air temperature and 0-25.4 cm for precipitation.

2. THE PHYSICAL SYSTEM

The Laurentian Great Lakes contain 23,000 km³ of water (about 20% of the world's fresh surface water) and, with their surrounding basins, cover 770,000 km² in the United States and Canada; see Figure 1. Their surface areas comprise about one-third of the total basin area. The basin extends over 3,200 km from the western edge of Lake Superior to the Moses-Saunders Power Dam on the St. Lawrence River.

¹GLERL Contribution No. 902

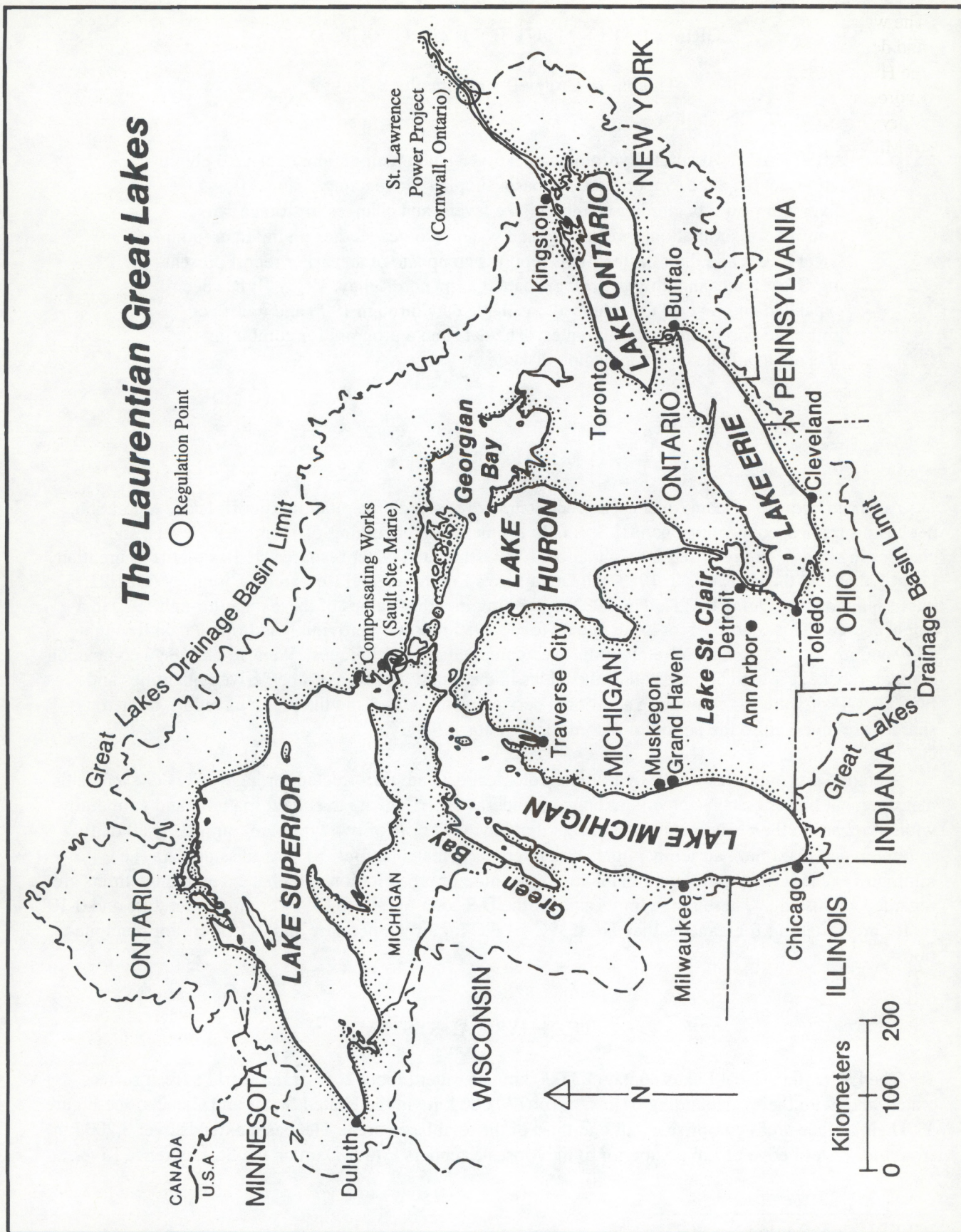


Figure 1.--Location map for the Laurentian Great Lakes.

The water surface cascades over this distance more than 182 m to sea level. The most upstream, largest, and deepest lake is Lake Superior. The lake has two interbasin diversions of water into the system from the Hudson Bay basin: the Ogoki and Long Lac diversions. Lake Superior water flows through the lock, hydroelectric power facilities, and compensating works at Sault Ste. Marie, Michigan and down the St. Marys River into Lake Huron where it is joined by water flowing from Lake Michigan through the Straits of Mackinac.

Another interbasin diversion takes place from Lake Michigan at Chicago. Here, water is diverted from the Great Lakes to the Mississippi River basin. The water from Lake Huron flows through the St. Clair River, Lake St. Clair, and Detroit River system into Lake Erie. From Lake Erie the flow continues through the Niagara River and Welland Canal diversion into Lake Ontario. The Welland Canal diversion is an intrabasin diversion bypassing Niagara Falls and is used for navigation and hydropower production. There is also a small diversion into the New York State Barge Canal system which is ultimately discharged into Lake Ontario. From Lake Ontario, the water flows through the St. Lawrence River to the Gulf of St. Lawrence and the Atlantic Ocean.

Lake Superior and Lake Ontario are the only regulated lakes in the system. Their regulation is conducted under the auspices of the International Joint Commission (IJC) and its Boards of Control. The criteria, or guidelines, for the regulation of these two lakes are set forth in Orders and Supplementary Orders of Approval issued by the IJC. Regulation plans which strive to satisfy these criteria have been developed and are incorporated in hydrologic routing models maintained by the U.S. Army Corps of Engineers and Environment Canada.

The hydrologic cycle of the Great Lakes basin and meteorology determine water supplies to the lakes. Runoff comprises a significant part of the Great Lakes water supply, particularly during the snowmelt season, late March through early June. Because the lakes are so large, lake precipitation and evaporation are of the same order of magnitude as runoff. On a monthly scale, precipitation is fairly uniformly distributed throughout the year. Lake evaporation typically has the greatest effect on water supplies during the winter months as dry air and warm water result in massive evaporation. Condensation on the cool lake surface from the wet overlying air occurs in the summer. Net groundwater flows to each of the Great Lakes are generally ignored. Net supplies (runoff and precipitation less evaporation) typically reach a maximum in late spring and a minimum in late fall.

3. PRECIPITATION DATA

We present monthly estimates for over-land and over-lake precipitation for each of the Great Lakes in Appendices A and B, respectively. Due to the quality of the available station data, estimates were derived in three ways, corresponding to the available periods of record for different segments of the historical time series. Data prior to 1930 were computed by the Lake Survey District of the U.S. Army Corps of Engineers and by the National Ocean Survey. Data for 1930-1947 were computed at the Great Lakes Environmental Research Laboratory (GLERL) from monthly station values. Data for 1948-1990 were computed at GLERL using daily station data. The methodology for each period is briefly described below.

The Lake Survey District of the U.S. Army Corps of Engineers, and later the National Ocean Survey, computed monthly precipitation estimates for data earlier than 1929 with an areally weighted "district" approach (Quinn and Norton, 1982). Monthly over-land precipitation data begin in 1882 (Superior), 1883 (Michigan), 1883 (Huron), 1900 (St. Clair), 1882 (Erie), and 1883 (Ontario). Districts (large areas) were

designated and divided into sub-districts (smaller areas). Arithmetic means for each sub-district were computed from all stations chosen for that subdistrict. The sub-district values were areally weighted to compute district precipitation. Over-land values were computed by areally averaging district values. Over-lake values came from the use of nearshore stations. Monthly over-lake precipitation data begins in 1900 for all lakes.

Quinn and Norton (1982) computed 1930-1947 monthly precipitation using a modified Thiessen weighting approach. They areally weighted monthly station data on a 5-km grid to calculate each monthly value. Each grid square, belonging to the basin or lake, was evaluated to find its nearest station; the relative counts for each station within the basin or lake were used as Thiessen weights to areally combine station values for the basin or lake. All available stations within 25 km of the basin were used, and the weights were recomputed for each month as necessary.

We computed 1948-1990 monthly precipitation from all available daily data from stations within 0-30 km of the basin, depending upon station density near the edge of the basin. Station data for the U.S. were obtained from the National Climatic Data Center (1987), and station data for Canada were obtained from the Atmospheric Environment Service (1981). We then used Thiessen weighting (Croley and Hartmann, 1985) similar to the above, but defined for a 1-km grid and recomputed every day for all watersheds within the basin and the lake. The basin watersheds were defined by the U.S. Geological Survey and the Water Survey of Canada. We constructed daily over-land basin precipitation by areally weighting the areally-averaged daily precipitation for each watershed and summing over the days in each month. We also constructed total monthly over-lake precipitation by summing the areally-averaged daily values for the lake surface.

4. RUNOFF DATA

We computed watershed runoff estimates, in Appendix C, using streamflow records from major rivers, available from the U.S. Geological Survey (Showen, 1980) for U.S. streams and the Inland Waters Directorate of Environment Canada for Canadian streams (Inland Waters Directorate, 1980). Complete years of historical daily runoff data begin in 1908 (Superior), 1910 (Michigan), 1915 (Huron), 1935 (St. Clair), 1914 (Erie), and 1916 (Ontario). Daily runoff values provided by these agencies were summed for each watershed within a lake basin. The runoff was extrapolated over ungaged areas; between 22% and 43% of the Great Lakes basin remains ungaged (Lee, 1992) and runoff error potential exists. Weights were assigned to each non-overlapping streamflow gage by dividing its drainage area by the watershed area. Daily watershed runoff estimates were computed by summing all daily station values in the watershed and then dividing by the sum of their weights, to extrapolate for ungaged areas.

Daily lake basin runoff estimates were computed in a similar manner by summing the watershed estimates, for which there were data available, and then dividing by the ratio of the area of those watersheds to the total basin area. Monthly basin runoff was computed by simply summing the daily basin runoff estimates for all days in each month.

The earlier methodology for computing the runoff values (Quinn and Kelley, 1983) differs from our methodology concerning the handling of missing data. Quinn and Kelley (1983) used data from upstream gages to fill in missing data. We did not fill in missing data, but rather removed any stations with missing data from the computations. This effectively makes a station's drainage area part of the ungaged area of the subbasin, and the normal area extrapolation is used with no further adjustments required.

While diversions should not be included in the runoff, the Ogoki diversion is indirectly included as part of the Lake Superior runoff data. The Ogoki diversion is routed through Lake Nipigon and the Nipigon River flow records reflect it. It is not directly estimable at the mouth of the Nipigon River where it flows into Lake Superior, however, since Lake Nipigon is regulated and river routing alters the time distribution. Therefore, we cannot remove this diversion from the flow records. Based on long-term average annual flows, the Ogoki diversion contributes approximately 0.8% of the estimated Lake Superior runoff.

5. LAKE EVAPORATION

Monthly evaporation estimates (Appendix D) were derived from daily evaporation estimates generated by the Great Lakes Evaporation Model (Croley, 1989a,b, 1992; Croley and Assel, 1994). This is a lumped-parameter surface flux and heat-storage model. It uses areal-average daily air temperature, windspeed, humidity, precipitation, and cloudcover. These data are sufficiently available since 1948 (1953 for Georgian Bay), and 2 years are used for model initialization. Over-land data are adjusted for over-water or over-ice conditions. Surface flux processes are represented for short-wave radiation and reflection, net long-wave radiation exchange, and advection. Atmospheric stability effects on the bulk transfer coefficients are formulated and used with the aerodynamic equation for sensible and latent heat surface fluxes.

Energy conservation and superposition mixing are used to account for heat storage in the lake. The effects of past heat additions or losses are superimposed to determine temperatures at all depths. Each past addition or loss is parameterized by its age and allowed to mix throughout the volume accordingly. Mass and energy conservation are used to account for ice formation and icepack decay in the lake.

These relations are solved simultaneously through iterative determination and use of water surface temperature and ice cover. The model was calibrated to give the smallest sum-of-squared-errors between model and actual daily water surface temperatures observed by satellite during the calibration period of generally 1979-88 and smallest sum-of-squared errors between model and actual daily ice cover during the calibration period of 1958-88. Statistics compiled over independent verification periods agree well with the calibrations. The models were also assessed partially by comparing model evaporation with water balance derivations for 1951-88. Low annual residuals resulted.

Turnovers (convective mixing of deep lower-density waters with surface waters as surface temperature passes through that at maximum density) occur as a fundamental behavior of GLERL's thermodynamic and heat storage model. Hysteresis between heat in storage and surface temperature, observed during the heating and cooling cycles on the lakes, is preserved. The model also correctly depicts lake-wide seasonal heating and cooling cycles, vertical temperature distributions, and other mixed-layer developments.

Comparisons between model results and actual data include 23 years of daily aerial and satellite observations of water surface temperature on all lakes, 8 years of bathythermograph observations of depth-temperature profiles on Lake Superior, and 1 year of independently-derived weekly or monthly surface flux estimates on Lakes Superior, Erie, and Ontario (2 estimates). The daily lake evaporation estimates were summed over all days in each month to calculate monthly lake evaporation.

6. NET BASIN SUPPLY

The water supplies to a lake, referred to as the net basin supplies (NBS), are defined in terms of their components as:

$$\text{NBS} = \text{P} + \text{R} - \text{E} \quad (1)$$

where P is over-lake precipitation, R is basin runoff to the lake, and E is lake evaporation. NBS have also been computed indirectly by both the U.S. Army Corps of Engineers and Environment Canada as a residual in a water balance:

$$\Delta S = \text{NBS} + \text{I} - \text{O} + \text{D} \quad (2)$$

where ΔS is change in lake storage computed from lake-level changes, I and O are inter-basin inflow and outflow through a natural channel, respectively, and D is inter-basin diversions into the lake. Equation (2) ignores thermal expansion, consumptive use, and groundwater.

Lake evaporation is estimable from 1950 (1955 on Lake Huron), since wind speed and humidity data exist only since 1948 (1953 on Georgian Bay) and 2 years are used for model initialization. Thus, NBS from equation (1) from 1950 (1955 for Lake Huron) are reported in Appendix E. (Note: since Lake Superior runoff indirectly includes the Ogoki diversion, there is a slight error in component NBS on Lake Superior.) Residual NBS, from equation (2), depend on connecting channel flows and water level data, which exist preceding January 1900. Residual NBS are not presented here, but a computer program is included on a data diskette for computing them in a variety of manners.

Water balance errors can result in significant differences between NBS estimates computed from equations (1) and (2). Table 1 summarizes a comparison of the two monthly NBS series over an evalua-

Table 1.--Comparison of residual with component monthly NBS over the evaluation period (August 1982-December 1988).

	Superior	Mich-Huron	Erie	Ontario
Mean Component NBS (mm)	75	87	63	162
Mean Residual NBS (mm)	68	78	70	156
Standard Deviation Component NBS (mm)	64	60	98	108
Standard Deviation Residual NBS (mm)	63	66	102	118
RMSE (mm)	23	20	27	33
Correlation	0.94	0.96	0.97	0.96
Bias (mm)	7	9	-7	7

tion period of August 1982 through December 1988. While correlation is good, there are large differences between the component and residual methods for all lakes, as reflected by the bias and root mean square error (RMSE) statistics. On all lakes, the RMSE is about one third of the standard deviation of component NBS. On Lakes Superior, Michigan, Huron, and Erie, the bias is about one tenth of the mean component NBS, and on Lake Ontario it is about 4%. Comparison plots of average seasonal characteristics of NBS from both methods (Lee, 1992) reveal little difference in the timing of the seasonal maximum and minimum, but reveal significant differences in the monthly means during the late summer and fall months. Annual comparison plots (Lee, 1992) show the residual NBS are consistently lower than the component NBS throughout the evaluation period used here for Lakes Superior, Michigan, Huron, and Ontario. This agrees well with the bias in Table 1.

6.1 Residual Method Errors

The differences between residual and component NBS largely result from residual errors in the water balance of equation (2). These include errors in estimating change of storage, inter-basin inflows, outflows, and diversions, and errors in ignoring thermal volumetric changes, consumptive use, and groundwater. The change in storage on a lake is computed from the difference between the beginning-of-period and the end-of-period water levels (Lee, 1992). Both are estimated with 2-day averages of spatial means. Average estimates of instantaneous values and remnant short-term fluctuations cause errors in estimates of storage change and, ultimately, NBS. Croley (1987) evaluated errors in storage change for Lakes Superior and Erie and found the largest error in fall and winter months, when storm activity is most frequent.

Lake outflows are determined by direct measurement (Lakes Superior and Ontario), stage-discharge relationships (Lakes Michigan, Huron, and St. Clair), or a combination (Lake Erie) and are generally considered accurate within 5%. However, small outflow errors can result in large errors in residual NBS. Quinn and Guerra (1986) have shown that a 5% error in the Detroit or Niagara River flows can result in a 34% error in the residual NBS of Lake Erie. Errors in outflows estimated for Lakes Michigan, Huron, and St. Clair may exceed 5% during ice jams, since ice retardation must often be estimated. Other sources of large errors in flow estimation include flow reversals on the Detroit River during seiche activity on Lake Erie, past dredging activities in the St. Clair River, and negotiated changes in flow rating equations.

As previously discussed, the Ogoki diversion is reported at a point before it enters the basin even though it passes through regulated Lake Nipigon and is part of the measured runoff into Lake Superior through the Nipigon River. Unfortunately, the timing and amount of diverted water from Lake Nipigon cannot be separated from its natural flow. Because of this, and for purposes of comparison with component NBS, it is not recommended to include the Ogoki diversion as an inflow to Lake Superior when computing the residual NBS. It is recommended, however, to include the Long-Lac diversion, as it is not included in our runoff estimates. Since some include the Ogoki diversion as an inflow (primarily as a pragmatic solution to an accounting problem), the program for computing NBS (supplied on the companion diskette) allows its use as an option. Likewise, diversions from Lake Michigan, in equation (2), include actual withdrawal from the lake and redirected lake drainage (International Joint Commission, 1985), even though only lake withdrawal should be used. Both of these diversion inconsistencies cause errors in residual NBS estimates.

Omissions in equation (2) further contribute to error in residual NBS estimation. Ignoring thermal expansion or contraction of the lake water body can result in a 100% error in monthly residual NBS (Meredith, 1975) on each lake. This difference is largest for June through November, when the lakes heat storage increases and then declines. Quinn and Guerra (1986) verified this in a Lake Erie water balance. Ignoring the total consumptive use [about 2,850 cfs in 1989, (Great Lakes Commission, 1991)] will affect residual NBS (computed for the entire Great Lakes basin) as much as omitting the Lake Michigan diversion; they are about the same magnitude. Groundwater contributions to the Great Lakes are generally taken as small (Great Lakes Basin Commission, 1975) and conveniently ignored since they are unknown. However, any groundwater errors are directly reflected in the residual NBS estimation. While no residual net basin supplies are presented here, they may be computed from equation (2) from changes in storage (computed from lake levels), interconnecting channel flow rates, and basin diversions; these data are presented here in following sections. They may be used with a program provided on the companion data diskette to compute residual net basin supplies in a variety of manners.

6.2 Component Method Errors

There are, of course, errors associated with the component method of estimating NBS. These include errors in estimating precipitation, runoff, and evaporation. Over-lake precipitation estimates can be different, depending on which land-based meteorologic stations are used and how lake/land precipitation ratios are determined from short-term studies. For the Great Lakes, where lake effects on nearshore meteorology are significant and the drainage basins have relatively low relief, the use of all available meteorologic stations throughout the basin may be less biased than the use of only nearshore stations. GLERL often estimates over-lake precipitation from over-land precipitation which is, in turn, measured throughout the basin and Thiessen weighted (Croley and Lee, 1993). Direct measurement of over-lake precipitation may be possible in the future with the implementation of the Next Generation Radar (NEXRAD) as part of the National Weather Service modernization program.

Likewise, there are errors in evaporation modeling. While the model agrees well with monitored water surface temperatures, ice cover, temperatures measured at depth, and estimated thermodynamic surface fluxes, there are no evaporation measurements to compare. However, even though there are significant differences in monthly component and residual estimates of NBS, they agree well over the long term; this indicates the long-term evaporation estimates, at least, are reasonable. The Lake Superior component NBS estimate includes the Ogoki diversion; it should not. See Section 4, Runoff Data, for more information. This introduces a small error into component NBS. Based on our review of the sources and magnitudes of errors in the computation of NBS, we believe that actual NBS are determined more accurately now by estimating all components directly, instead of as a water balance residual.

7. CONNECTING CHANNEL FLOWS

The connecting channels of the Great Lakes system consist of the St. Marys, St. Clair, Detroit, Niagara, and St. Lawrence Rivers. Historical flows in these channels are presented in Appendix F. The basic reference for the St. Marys, Detroit, and St. Clair River flows was the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data (1988). The reference for the Niagara River flows was the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data (1976). The flow data for the St. Lawrence River were obtained from the Levels and Flows Work Group (1969). Updated values for the St. Marys, Niagara, and St. Lawrence Rivers were obtained from the Detroit District of the Army Corps of Engineers.

8. DIVERSIONS

Data for the Long Lac-Ogoki, Chicago, and Welland diversions were obtained from the Levels and Flows Work Group (1969) and updated by the various responsible U.S. and Canadian agencies and international boards and committees. They are presented in Appendix G. Note that the Chicago diversion includes water that would have gone into Lake Michigan as streamflow runoff, but is now discharged into the Mississippi River basin. The diverted area of the basin has already been removed from consideration in our runoff estimates for Lake Michigan. Using this diversion data in a water balance with the runoff data presented here would double count (negatively) Chicago runoff. That is, runoff to Lake Michigan does not include Chicago runoff to the lake, but Chicago runoff is included as a diversion from the lake. The user of this data will need to account for this if performing water balance calculations. The diversion values do not accurately reflect the amount of water removed from the lake, but are significantly higher. Through discussions with the U.S. Army Corps of Engineers in Chicago (Kiel, personal communication, 1993), we determined that it is not possible for us to separate the components for most of the period of record. The numbers are, therefore, presented as supplied to us.

Additionally, in late 1992, the U.S. Geological Survey performed a verification of the rating curve used to compute flows through the Chicago diversion. The USGS found that the flows were actually much higher than indicated by the equations which were used during the period October, 1985 - December, 1990. Accordingly, data for this period is presented from the revised values supplied by the U.S. Army Corps of Engineers, derived from the USGS acoustic current meter at Romeoville, Illinois.

9. BEGINNING-OF-MONTH LAKE LEVELS

We computed the beginning-of-month lake levels, in Appendix H, using the same methodology used to compute the values published in the 1983 report (Quinn and Kelley, 1983). See Quinn (1975a,b), Quinn and Derecki (1976a,b), Kelley (1976), and Quinn et al. (1979). A minimal set of Thiessen polygons were constructed and used without further modification. Missing station data were filled in by various techniques using nearby gages so that Thiessen weights never required recomputation due to missing data. Networks changed only when new stations became available or old stations were discontinued.

The values in this publication are reported in IGLD 1985 datum. The 1983 report (Quinn and Kelley, 1983) used the IGLD 1955 datum. We do not have access to the station data prior to 1973 in a computer-readable form, so we did not recompute the values prior to 1973. We simply computed lake-wide conversion factors (from IGLD 1955 to IGLD 1985) based on the networks employed and the conversion factors for the individual gages in each of the networks. The conversion factors were then applied to the IGLD 1955 values. The IGLD 1955 to IGLD 1985 conversion was unavailable for Pte. Petre, Ontario, so it was estimated by the average of those at Cobourg, Ontario and Kingston, Ontario. We recomputed the values from 1973 to 1990 by using the actual IGLD 1985 gage data. Our network was the largest network used by Quinn et al. (1979). In those instances where a station from that network had been discontinued, we recomputed the network weights.

The beginning-of-month level for a gage is defined as the level at 12:00:00 a.m. (midnight) on the first day of that month. Since this value is generally unknown for practical reasons, it is standard practice to compute the value by averaging the daily mean level for the last day of the previous month with the daily mean level for the first day of the current month, when both are available. When one or both of the

daily mean values are unavailable, several alternative methods for filling in the missing data are available. We used the following methods, listed in order of preference, to estimate the beginning-of-month lake level (BOM) from daily lake level i days after the beginning of the month, L_i :

$$\begin{array}{ll}
 \text{BOM} & = 0.50 L_{+0} + 0.50 L_{-1} \\
 & = 0.67 L_{+0} + 0.33 L_{-2} \\
 & = 0.33 L_{+1} + 0.67 L_{-1} \\
 & = 0.75 L_{+0} + 0.25 L_{-3} \\
 & = 0.25 L_{+2} + 0.75 L_{-1} \\
 & = 0.50 L_{+1} + 0.50 L_{-2} \\
 & = 0.60 L_{+1} + 0.40 L_{-3} \\
 & = 0.40 L_{+2} + 0.60 L_{-2}
 \end{array}
 \qquad
 \begin{array}{ll}
 \text{BOM} & = 0.50 L_{+2} + 0.50 L_{-3} \\
 & = L_{+0} \\
 & = L_{+1} \\
 & = L_{+2} \\
 & = L_{-1} \\
 & = L_{-2} \\
 & = L_{-3}
 \end{array}
 \qquad (3)$$

These alternatives were sufficient to compute the beginning-of-month level at each gage for each month.

10. CHANGES IN STORAGE

Monthly changes in storage for each lake, presented in Appendix I, were computed by multiplying the difference between two consecutive beginning-of-month levels (as determined by Thiessen weighting) by the area of the lake in Table 2. Changes in storage were then converted from volumes into average rates by dividing by the number of seconds in the month. Leap years were taken into account.

11. DATA AVAILABILITY

All data in Appendices A-I and a FORTRAN program for computing net basin supplies are available on a companion diskette. Inquiries should refer to this report and be addressed to:

Publications
 NOAA, Great Lakes Environmental Research Laboratory
 2205 Commonwealth Blvd.
 Ann Arbor, Michigan 48105-1593
 U.S.A.

Table 2. Coordinated Great Lakes Drainage Areas (Coordinating Committee, 1977)

	Superior	Michigan	Huron	St.Clair	Erie	Ontario
Lake Area (sq km)	82,100	57,800	59,800	1,170	25,800	19,000
Land Area (sq km)	128,000	118,000	134,000	15,700	61,000	64,000
Basin Area (sq km)	210,000	176,000	194,000	16,900	86,800	83,000

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APPENDIX A - Overland Precipitation

LAKE SUPERIOR OVERLAND PRECIPITATION (CENTIMETERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1881														
1882	2.51	6.78	5.72	4.88	8.33	9.47	8.33	8.03	9.14	10.44	3.61	3.73	7.31	87.67
1883	3.78	2.51	1.73	3.18	6.30	10.97	10.03	4.50	5.66	6.91	7.44	5.38	6.59	78.66
1884	2.11	4.45	2.90	6.53	8.18	3.07	6.96	13.26	13.34	11.48	3.61	9.19	6.40	76.70
1885	3.35	1.55	3.45	3.76	5.03	8.94	7.72	5.49	5.18	4.14	6.73	4.80	7.20	86.26
1886	4.34	4.45	3.23	4.47	3.63	6.88	3.81	5.28	9.30	7.21	5.18	2.67	6.73	80.74
1887	2.26	3.15	1.27	3.68	5.03	4.90	13.21	2.59	3.00	6.55	3.78	3.58	6.18	74.32
1888	4.78	2.84	4.70	5.11	6.78	9.63	4.70	7.21	6.91	5.16	5.08	2.18	5.86	70.25
1889	4.75	3.53	3.96	8.51	5.64	5.33	11.05	9.50	9.10	2.77	3.10	6.27	6.84	81.87
1890	5.84	5.94	2.59	4.24	5.99	7.85	10.64	7.67	6.22	5.16	1.75	2.13	7.43	88.86
1891	2.62	4.11	4.32	2.21	1.47	3.71	8.05	7.92	6.86	6.68	4.14	5.16	7.28	87.42
1892	3.38	2.62	2.82	4.17	6.32	4.62	6.99	8.97	4.55	5.54	5.11	3.53	6.29	75.27
1893	4.01	5.08	3.94	5.76	5.41	8.18	6.65	6.96	6.55	7.70	5.16	6.96	7.06	84.53
1894	4.32	1.63	5.79	5.28	9.60	4.78	5.13	5.21	6.99	11.46	6.07	4.14	6.45	77.27
1895	5.77	2.62	1.70	4.62	7.29	8.15	5.64	5.79	11.89	4.60	4.14	4.78	7.05	84.36
1896	4.47	2.44	3.12	8.59	11.68	4.52	4.11	6.65	4.04	7.82	10.74	1.68	5.87	70.38
1897	6.55	3.43	4.80	4.06	6.35	8.03	14.43	6.48	5.16	6.38	4.42	4.01	6.24	75.05
1898	2.87	4.50	3.94	1.96	8.56	10.87	6.15	6.30	6.17	7.01	4.57	2.79	6.33	75.82
1899	3.81	3.30	4.32	5.59	8.13	9.40	5.59	8.64	8.89	6.10	1.27	5.08	6.82	81.49
1900	3.33	2.51	2.16	2.29	2.29	5.08	9.65	13.36	13.16	8.00	3.30	2.79	6.37	76.47
1901	3.66	1.17	5.05	2.92	3.81	10.74	11.73	5.69	7.04	7.39	4.50	3.76	6.27	75.12
1902	3.84	2.39	1.96	3.35	5.64	7.11	7.06	7.09	6.60	6.60	6.73	4.93	6.19	74.17
1903	2.92	3.23	4.37	4.65	9.50	4.04	11.30	8.00	10.80	7.98	5.08	3.51	5.70	68.31
1904	3.02	2.29	4.17	2.51	8.36	7.59	7.90	6.28	10.13	8.48	1.96	4.24	7.72	82.89
1905	2.46	2.11	5.33	4.01	6.22	8.43	11.96	5.33	10.82	6.83	7.09	2.16	7.36	88.42
1906	3.78	2.69	3.51	2.59	7.75	13.21	4.39	6.81	4.93	6.88	8.76	3.48	5.65	78.94
1907	4.70	2.82	3.49	4.60	5.64	3.51	9.45	11.10	9.75	4.75	4.29	1.65	6.22	74.41
1908	2.84	5.44	4.01	6.96	10.80	9.53	6.86	6.15	5.84	3.05	4.85	5.56	8.12	97.31
1909	4.11	4.85	2.95	5.08	4.19	3.18	11.40	8.15	6.93	5.11	8.33	5.94	6.17	73.63
1910	2.57	4.67	1.04	5.05	4.95	2.44	8.36	7.54	8.03	5.11	4.57	3.58	7.61	91.00
1911	3.94	4.93	3.94	2.90	8.20	10.19	12.22	10.13	7.80	6.68	8.10	5.38	7.36	88.27
1912	3.15	1.30	2.39	6.81	8.36	4.04	7.82	8.59	11.13	4.65	2.31	7.21	7.00	83.66
1913	3.99	4.04	8.13	2.82	8.28	6.76	11.10	6.78	8.46	9.40	5.23	0.89	6.87	82.16
1914	3.91	2.72	2.92	5.89	4.95	6.25	6.58	6.43	6.83	4.29	5.61	2.77	7.04	84.18
1915	4.75	3.12	1.27	3.18	6.15	12.60	6.71	7.29	10.52	6.88	8.23	4.60	6.59	79.00
1916	8.84	1.70	4.98	6.76	7.59	11.43	5.16	8.23	11.33	6.99	2.13	4.22	5.63	67.57
1917	3.40	3.20	6.45	3.40	3.35	6.81	5.56	8.03	5.18	7.70	1.50	5.46	5.69	82.5
1918	3.43	3.56	2.18	3.81	10.41	6.76	5.94	6.71	8.13	8.69	6.50	5.21	8.25	98.81
1919	3.45	4.55	4.47	4.85	4.34	5.16	6.60	7.24	8.69	7.59	8.69	3.40	6.36	75.92
1920	3.86	1.80	6.32	4.88	5.66	9.98	8.66	4.50	6.91	5.00	3.23	6.25	7.33	87.69
1921	2.57	3.51	5.72	5.89	7.37	4.24	11.81	5.13	10.13	3.45	4.60	4.98	6.03	72.56
1922	4.24	6.78	4.27	5.87	5.25	7.77	9.53	4.80	5.21	3.48	6.02	6.10	7.30	83.81
1923	3.78	3.25	5.59	2.95	3.33	8.56	9.37	6.91	6.48	6.10	3.02	3.58	7.86	93.81
1924	5.94	2.84	2.01	6.02	4.06	6.07	7.77	11.07	8.69	3.53	4.75	4.88	7.13	85.25
1925	3.99	3.63	3.91	3.18	3.51	9.37	7.72	6.32	8.64	5.03	3.66	3.43	6.94	83.11
1926	4.50	3.10	5.00	3.23	2.95	12.17	10.52	8.03	14.71	8.08	11.10	5.33	8.14	97.58
1927	3.02	4.09	3.73	4.04	10.49	7.72	9.58	4.98	7.16	6.63	6.68	6.53	6.77	81.13
1928	3.58	1.75	3.56	6.58	3.76	12.78	9.93	12.04	9.50	10.34	2.49	2.95	5.84	69.57
1929	6.81	2.46	5.96	4.29	8.00	5.66	7.42	4.55	11.83	6.38	4.52	5.08	7.98	95.46
1930	2.92	3.12	2.46	2.45	7.07	10.56	6.71	2.71	10.82	5.95	6.78	3.26	6.35	76.02
1931	3.76	2.20	2.74	3.39	7.27	7.80	7.22	7.03	10.52	9.29	9.60	2.27	6.30	82.99
1932	6.60	5.17	2.79	6.25	5.59	10.05	11.08	4.81	7.74	6.28	4.81	6.44	6.30	75.47
1933	4.03	4.68	3.72	6.00	5.57	6.13	7.47	5.07	10.54	10.13	7.26	5.28	0.79	9.51
1934	5.49	2.62	4.31	4.87	4.26	7.16	6.21	7.17	12.64	7.78	6.68	5.42	2.30	1.56
1935	8.86	2.16	4.73	3.84	3.61	9.34	12.42	9.59	8.77	8.94	5.03	4.75	1.56	9.51
1936	3.93	4.07	6.59	4.33	7.11	5.09	3.06	8.18	7.93	5.40	6.09	5.34	8.25	98.81
1937	8.25	6.84	1.46	5.46	8.98	3.52	12.49	8.66	9.12	7.56	6.54	6.39	19.77	1977
1938	5.86	3.60	4.51	10.49	6.93	10.32	7.46	9.07	5.79	4.12	10.32	5.69	4.43	53.00
1939	5.84	8.23	4.67	3.74	6.44	12.16	6.63	8.44	6.70	6.42	0.98	3.24	0.89	1.887
1940	3.83	3.41	3.37	6.00	9.06	9.04	6.18	5.88	4.40	4.88	7.88	3.85	4.43	1887

LAKE MICHIGAN OVERLAND PRECIPITATION (CENTIMETERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1981	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	5.56	8.61	1.83	4.67	15.93	16.48	18.29	4.65	6.17	8.46	9.50	4.06	8.68	104.21
1983	5.77	8.23	6.45	6.65	8.03	7.95	8.51	7.26	9.50	11.73	5.28	11.94	8.12	97.30
1984	6.91	3.99	3.23	6.35	5.61	9.45	8.31	14.20	7.11	7.92	6.65	8.03	7.34	87.76
1985	5.99	4.85	2.98	5.08	5.00	5.74	3.18	11.33	13.87	7.01	6.64	4.62	7.04	84.28
1986	6.83	9.65	2.62	5.03	4.06	5.64	6.88	6.10	8.89	7.82	4.42	9.37	6.30	75.81
1987	5.99	4.72	7.87	5.77	9.68	4.57	6.43	5.38	8.74	5.13	5.44	5.44	6.27	75.16
1988	5.21	5.33	2.06	4.34	10.03	11.71	7.98	3.56	7.52	1.88	6.43	7.42	6.11	73.47
1989	7.49	5.23	5.46	7.19	9.98	10.36	6.48	8.38	5.49	10.41	4.42	2.41	6.96	83.30
1990	5.31	6.48	6.73	5.03	2.77	7.24	5.21	9.07	3.63	3.25	10.19	6.76	5.96	71.67
1991	5.87	4.95	3.25	5.89	14.58	15.65	7.52	7.06	5.64	5.18	6.22	4.24	7.16	85.95
1992	6.43	5.44	5.89	10.41	7.01	5.94	9.32	3.76	6.80	6.93	5.77	9.19	6.90	82.69
1993	5.64	3.38	6.53	6.17	12.19	7.34	3.45	1.70	9.32	7.54	7.42	6.30	6.29	75.30
1994	6.35	2.44	2.06	3.58	8.36	4.67	4.57	8.33	6.38	2.31	7.42	10.62	5.62	67.09
1995	3.18	3.20	3.89	9.14	10.34	7.16	10.29	8.69	13.84	3.89	5.31	5.54	7.04	84.47
1996	10.21	3.48	7.70	7.54	6.15	8.64	7.06	4.93	3.78	4.70	7.24	5.61	6.44	77.04
1997	6.86	5.59	8.92	4.67	7.62	9.32	5.33	8.46	7.21	10.77	5.84	3.96	7.05	84.45
1998	4.09	3.58	7.14	3.94	9.65	8.10	9.68	3.94	7.47	6.81	2.90	5.72	6.11	73.02
1999	3.12	6.73	3.91	5.36	6.05	6.35	14.27	10.03	10.74	9.65	7.75	2.03	7.16	85.99
2000	4.04	3.51	7.82	2.54	6.27	7.52	11.84	5.74	6.76	8.53	3.61	4.90	6.12	73.08
2001	1.88	3.40	5.72	4.83	10.57	12.27	12.83	3.51	8.71	5.38	6.91	5.54	6.81	81.55
2002	3.84	4.75	5.11	8.43	8.59	5.77	11.53	12.90	10.31	5.28	4.22	4.88	7.15	85.61
2003	3.76	4.93	8.10	5.36	11.68	5.66	8.26	7.57	10.44	8.41	0.94	4.72	6.67	79.83
2004	4.34	3.66	5.74	5.11	11.63	13.54	11.66	8.71	8.28	7.06	5.34	4.78	7.43	88.89
2005	7.37	3.66	5.89	4.60	7.29	10.34	7.04	8.81	6.96	8.31	8.94	5.82	7.11	85.03
2006	7.77	1.57	7.06	6.71	7.21	8.71	7.24	12.12	12.12	3.43	4.75	5.89	6.58	78.63
2007	3.58	7.99	6.60	7.31	11.99	6.02	7.92	6.53	4.42	2.08	5.82	4.30	6.22	74.64
2008	3.96	5.59	4.27	13.11	6.25	9.57	7.57	6.12	5.99	3.48	8.59	7.82	6.80	81.82
2009	4.27	3.48	0.76	8.43	7.11	2.77	5.21	9.32	8.48	6.25	5.21	3.53	5.41	64.82
2010	3.53	5.13	3.18	5.41	11.28	8.36	7.98	7.75	10.97	12.47	9.07	5.69	7.58	90.82
2011	3.15	2.82	2.41	5.41	13.84	3.61	13.18	12.37	9.07	6.48	5.77	4.78	6.91	82.58
2012	4.57	3.99	8.64	5.77	9.86	5.94	10.19	5.46	7.59	8.31	4.71	1.37	6.30	76.47
2013	3.33	2.54	4.50	7.52	8.76	13.34	8.03	10.36	6.63	5.54	4.34	4.04	6.77	80.93
2014	4.29	5.59	1.68	2.54	9.04	8.99	9.25	8.64	13.69	4.47	7.90	3.33	6.61	79.41
2015	7.32	2.36	6.48	6.25	10.39	14.15	3.78	6.50	10.77	9.70	5.72	4.82	7.34	88.04
2016	3.58	1.96	5.18	6.99	6.35	12.98	5.87	6.63	5.77	10.06	1.93	2.74	5.86	70.04
2017	4.72	4.80	3.89	5.33	13.54	5.11	4.55	6.83	5.97	8.13	7.42	6.15	6.39	76.44
2018	1.90	4.42	5.92	8.46	8.59	7.54	6.50	6.05	8.79	10.49	7.19	2.11	6.50	77.96
2019	3.35	1.68	7.75	7.24	4.27	10.69	7.90	6.86	6.17	4.39	5.92	7.62	6.16	73.84
2020	1.90	2.21	8.79	10.72	4.93	5.08	5.89	10.92	10.16	7.16	5.77	6.86	6.73	80.49
2021	2.84	7.09	6.81	9.42	8.18	9.55	10.36	5.41	9.80	4.80	6.45	2.90	6.95	83.61
2022	3.89	2.92	7.29	5.11	6.83	7.77	7.98	7.16	8.79	7.14	2.77	5.11	6.09	72.76
2023	4.55	3.99	5.18	7.95	9.73	8.53	9.07	13.21	6.93	1.47	5.33	4.88	6.75	80.82
2024	1.83	3.73	3.25	5.18	3.07	8.56	9.45	6.10	10.29	7.16	4.01	4.04	5.55	66.67
2025	3.10	5.31	5.41	4.85	7.85	10.36	7.16	8.76	12.47	8.03	9.02	4.11	7.20	86.43
2026	2.74	2.26	5.36	6.81	11.89	5.41	8.74	2.36	12.70	6.99	10.21	6.71	6.66	82.18
2027	3.25	4.52	4.83	6.99	5.56	10.92	6.86	11.07	9.09	10.13	7.26	3.63	7.01	84.11
2028	7.37	2.51	5.03	13.59	9.12	8.76	6.96	4.17	5.49	7.75	3.38	4.45	6.57	78.58
2029	4.80	4.42	4.27	4.55	7.52	8.74	4.57	2.34	5.26	5.16	3.84	1.96	4.78	57.43
2030	2.72	1.93	5.03	3.30	7.29	9.32	5.06	5.49	14.73	8.43	10.58	4.40	6.53	78.28
2031	6.85	4.15	3.90	3.82	8.61	6.18	8.95	9.22	5.06	9.55	4.82	6.13	6.47	77.24
2032	3.57	4.22	5.09	8.30	10.88	7.64	5.81	4.51	8.87	9.75	4.32	4.35	6.45	77.31
2033	2.96	1.54	4.72	5.38	3.93	7.41	4.53	6.66	13.15	4.96	12.44	3.77	5.95	71.41
2034	4.96	3.34	4.50	4.73	7.30	10.80	7.29	9.77	6.90	4.46	8.05	3.32	6.29	75.42
2035	4.32	4.38	2.88	4.42	5.74	5.33	2.65	11.19	11.93	7.64	3.47	5.89	5.81	69.72
2036	6.17	5.32	1.65	9.46	6.25	8.72	7.49	6.51	8.20	7.61	5.79	3.55	6.38	76.72
2037	6.63	8.02	7.01	4.84	10.53	9.55	8.66	11.17	11.44	2.95	4.13	5.28	7.51	90.21
2038	5.83	6.00	4.30	7.22	6.01	13.14	4.60	11.01	7.03	5.98	1.93	3.14	6.34	76.19
2039	4.82	2.65	3.36	5.91	10.02	14.17	5.02	14.90	4.17	6.58	8.16	4.59	7.04	84.35
2040														

LAKE HURON OVERLAND PRECIPITATION (CENTIMETERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1881	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1882	6.12	7.67	5.21	3.73	11.35	13.41	12.98	3.66	7.29	7.80	8.94	5.38	7.69	92.42
1883	7.72	6.05	5.21	3.73	5.13	5.99	7.29	5.38	8.31	10.90	5.69	10.95	7.01	83.97
1884	8.36	4.83	3.35	5.13	7.39	8.89	6.35	9.83	8.28	7.85	8.79	8.41	7.30	87.41
1885	10.34	6.25	8.33	6.22	4.45	7.72	4.04	8.81	9.83	6.55	7.75	5.87	7.18	86.11
1886	9.60	9.93	2.97	4.11	4.22	5.08	8.79	2.82	4.09	8.53	4.62	9.83	6.20	74.59
1887	5.21	4.50	6.60	5.41	6.30	3.73	2.72	7.67	7.14	7.11	7.82	4.75	5.75	68.96
1888	7.04	5.11	1.27	3.31	8.31	10.97	5.97	4.11	8.56	4.19	7.95	6.06	6.34	76.13
1889	11.18	6.40	4.72	6.71	8.48	9.68	8.99	7.77	4.55	8.36	5.72	5.46	7.35	88.02
1890	6.99	8.28	7.62	5.31	1.37	2.95	6.60	10.74	5.44	5.49	15.47	5.92	6.83	82.18
1891	8.08	5.05	2.62	3.78	6.96	10.06	7.98	8.89	8.48	5.64	7.14	7.72	6.87	82.40
1892	7.65	5.82	5.13	3.35	7.85	6.40	7.62	6.32	7.75	11.43	9.86	12.22	8.13	97.40
1893	7.32	4.27	6.65	3.20	12.27	6.40	3.89	4.09	9.55	8.92	7.19	6.50	6.71	80.25
1894	9.53	3.43	3.00	4.04	6.12	3.81	3.91	7.14	7.39	4.72	8.08	9.75	5.93	70.92
1895	6.02	4.93	3.48	5.28	6.76	6.58	10.59	9.75	11.96	5.08	8.03	4.57	6.47	77.69
1896	8.81	4.62	7.52	6.73	6.07	5.79	6.07	5.79	6.45	8.31	8.15	8.64	7.48	89.31
1897	7.49	6.48	7.26	3.33	3.83	8.66	3.25	8.03	6.78	10.67	5.28	6.96	6.76	81.02
1898	7.24	3.35	8.86	3.73	8.26	8.74	8.84	2.64	8.59	7.06	3.05	8.61	6.61	78.97
1899	4.39	9.14	4.11	3.10	5.28	6.93	11.81	6.99	9.63	5.77	8.56	4.24	6.64	79.95
1900	5.13	3.12	6.88	3.96	6.96	5.89	10.21	6.91	5.79	9.02	5.84	6.71	6.41	76.42
1901	4.17	3.00	6.96	4.85	8.46	10.11	10.59	5.77	8.89	7.47	6.25	7.04	6.41	84.16
1902	5.64	6.91	5.59	4.47	6.32	7.04	8.81	10.31	9.22	8.08	5.21	6.98	7.14	85.58
1903	4.83	5.56	7.01	6.50	10.31	6.43	7.19	7.77	10.95	6.43	2.84	5.97	6.82	81.79
1904	6.05	6.05	4.11	9.78	8.66	9.40	6.27	7.07	9.38	6.53	4.67	6.88	82.44	98.54
1905	7.49	4.24	6.27	3.81	5.54	9.60	5.59	6.45	6.27	9.55	7.70	6.43	6.59	78.94
1906	7.04	6.32	5.94	5.87	6.27	5.59	4.98	9.14	4.88	6.53	7.14	6.04	6.04	72.28
1907	5.46	9.32	5.94	5.28	10.34	4.04	8.43	5.59	4.24	2.18	6.68	6.88	6.19	74.38
1908	4.55	6.78	4.98	10.16	5.18	3.30	8.46	6.02	6.76	5.05	6.76	7.67	6.30	75.67
1909	5.33	4.98	2.29	7.42	7.90	6.73	6.17	8.53	6.60	8.99	6.68	5.51	6.43	77.13
1910	3.71	4.50	4.47	3.96	7.98	5.05	5.61	5.56	6.43	11.18	10.26	5.64	6.21	74.35
1911	6.68	4.24	2.49	5.28	10.26	3.66	6.53	10.08	9.04	6.12	7.98	5.87	6.53	78.23
1912	5.94	5.28	7.85	6.83	4.47	5.44	6.96	8.08	5.13	9.07	5.79	1.35	6.02	72.19
1913	6.07	4.19	4.04	4.46	4.65	5.46	4.27	8.05	5.03	5.54	7.32	5.23	5.45	65.31
1914	3.96	4.47	1.42	3.18	5.18	8.79	6.83	9.32	11.07	4.85	6.99	4.70	5.89	70.76
1915	8.08	3.51	6.02	6.50	8.94	8.51	3.02	5.87	8.33	10.36	7.16	6.32	6.90	82.62
1916	5.13	3.30	6.60	5.66	4.67	10.80	8.64	6.99	3.86	9.32	3.02	5.03	6.11	73.02
1917	6.91	6.58	3.35	3.78	10.08	6.50	5.05	7.06	8.89	8.84	8.36	6.91	6.86	82.31
1918	4.39	4.45	6.65	7.49	8.13	4.57	5.18	6.32	8.33	10.74	7.49	4.19	6.51	77.93
1919	4.34	3.02	5.36	7.09	2.34	6.40	7.82	5.69	5.66	5.03	5.89	9.93	5.72	68.57
1920	3.20	3.68	9.65	7.80	4.09	5.61	7.67	7.62	9.30	6.73	6.43	9.07	6.76	80.85
1921	4.65	6.81	4.52	9.73	4.88	6.50	11.13	4.80	5.49	6.43	6.17	5.00	6.35	76.31
1922	4.26	6.00	5.06	7.11	9.40	4.64	5.97	4.07	6.98	10.32	8.07	6.84	6.56	78.72
1923	4.39	2.22	5.18	5.80	3.09	6.64	4.97	4.51	12.00	5.44	10.18	4.38	5.73	68.80
1924	6.40	3.34	4.95	2.75	3.76	10.77	6.33	5.28	6.95	5.79	8.95	3.55	5.73	68.72
1925	5.74	5.26	5.93	5.79	6.41	5.66	3.62	7.59	10.41	9.97	5.08	6.92	6.54	78.38
1926	6.28	5.68	7.42	8.11	4.14	5.16	9.50	7.49	11.97	7.76	6.84	5.86	6.79	81.48
1927	7.03	7.88	8.63	5.77	6.39	7.04	5.67	9.76	8.03	3.40	5.61	7.46	6.88	82.67
1928	6.12	7.48	4.78	6.73	6.71	9.73	4.25	10.48	6.38	8.35	2.45	4.10	6.46	77.56
1929	5.97	2.89	4.42	4.38	10.09	9.60	6.32	11.54	7.69	5.78	9.11	6.23	7.02	84.02
1930	4.15	2.41	4.72	4.82	7.22	6.29	7.34	4.82	13.69	8.26	9.90	4.87	6.55	78.49
1931	8.02	6.48	5.00	5.20	7.12	5.43	8.45	10.02	8.75	13.64	5.39	7.27	7.59	90.77
1932	4.26	6.00	5.06	7.11	9.40	4.64	5.97	4.07	6.98	10.32	8.07	6.84	6.56	78.72
1933	4.39	2.22	5.18	5.80	3.09	6.64	4.97	4.51	12.00	5.44	10.18	4.38	5.73	68.80
1934	6.40	3.34	4.95	2.75	3.76	10.77	6.33	5.28	6.95	5.79	8.95	3.55	5.73	68.72
1935	5.74	5.26	5.93	5.79	6.41	5.66	3.62	7.59	10.41	9.97	5.08	6.92	6.54	78.38
1936	6.28	5.68	7.42	8.11	4.14	5.16	9.50	7.49	11.97	7.76	6.84	5.86	6.79	81.48
1937	7.03	7.88	8.63	5.77	6.39	7.04	5.67	9.76	8.03	3.40	5.61	7.46	6.88	82.67
1938	6.12	7.48	4.78	6.73	6.71	9.73	4.25	10.48	6.38	8.35	2.45	4.10	6.46	77.56
1939	5.97	2.89	4.42	4.38	10.09	9.60	6.32	11.54	7.69	5.78	9.11	6.23	7.02	84.02
1940	4.15	2.41	4.72	4.82	7.22	6.29	7.34	4.82	13.69	8.26	9.90	4.87	6.55	78.49
1941	8.02	6.48	5.00	5.20	7.12	5.43	8.45	10.02	8.75	13.64	5.39	7.27	7.59	90.77
1942	4.26	6.00	5.06	7.11	9.40	4.64	5.97	4.07	6.98	10.32	8.07	6.84	6.56	78.72
1943	4.39	2.22	5.18	5.80	3.09	6.64	4.97	4.51	12.00	5.44	10.18	4.38	5.73	68.80
1944	6.40	3.34	4.95	2.75	3.76	10.77	6.33	5.28	6.95	5.79	8.95	3.55	5.73	68.72
1945	5.74	5.26	5.93	5.79	6.41	5.66	3.62	7.59	10.41	9.97	5.08	6.92	6.54	78.38
1946	6.28	5.68	7.42	8.11	4.14	5.16	9.50	7.49	11.97	7.76	6.84	5.86	6.79	81.48
1947	7.03	7.88	8.63	5.77	6.39	7.04	5.67	9.76	8.03	3.40	5.61	7.46	6.88	82.67
1948	6.12	7.48	4.78	6.73	6.71	9.73	4.25	10.48	6.38	8.35	2.45	4.10	6.46	77.56
1949	5.97	2.89	4.42	4.38	10.09	9.60	6.32	11.54	7.69	5.78	9.11	6.23	7.02	84.02
1950	4.15	2.41	4.72	4.82	7.22	6.29	7.34	4.82	13.69	8.26	9.90	4.87	6.55	78.49
1951	8.02	6.48	5.00	5.20	7.12	5.43	8.45	10.02	8.75	13.64	5.39	7.27	7.59	90.77
1952	4.26	6.00	5.06	7.11	9.40	4.64	5.97	4.07	6.98	10.32	8.07	6.84	6.56	78.72
1953	4.39	2.22	5.18	5.80	3.09	6.64	4.97	4.51	12.00	5.44	10.18	4.38	5.73	68.80
1954	6.40	3.34	4.95	2.75	3.76	10.77	6.33	5.28	6.95	5.79	8.95	3.55	5.73	68.72
1955	5.74	5.26	5.93	5.79	6.41	5.66	3.62	7.59	10.41	9.97	5.08	6.92	6.54	78.38
1956	6.28	5.68	7.42	8.11	4.14	5.16	9.50	7.49	11.97	7.76	6.84	5.86	6.79	81.48
1957	7.03	7.88	8.63	5.77	6.39	7.04	5.67	9.76	8.03	3.40	5.61	7.46	6.88	82.67
1958	6.12	7.48	4.78	6.73	6.71	9.73	4.25	10.48	6.38	8.35	2.45	4.10	6.46	77.56
1959	5.97	2.89	4.42	4.38	10.09	9.60	6.32	11.54	7.69	5.78	9.11	6.23	7.02	84.02
1960	4.15	2.41	4.72	4.82	7.22	6.29	7.34	4.82	13.69	8.26	9.90	4.87	6.55	78.49
1961	8.02	6.48	5.00	5.20	7.12	5.43	8.45	10.02	8.75	13.64	5.39	7.27	7.59	90.77
1962	4.26	6.00	5.06	7.11	9.40	4.64	5.97	4.07	6.98	10.32	8.07	6.84	6.56	78.72
1963	4.39	2.22	5.18	5.80	3.09	6.64	4.97	4.51	12.00	5.44	10.18	4.38	5.73	68.80
1964	6.40	3.34	4.95	2.75	3.76	10.77	6.33	5.28	6.95	5.79	8.95	3.55	5.73	68.72
1965	5.74	5.26	5.93	5.79	6.41	5.66	3.62	7.59	10.41	9.97	5.08	6.92	6.54	78.38
1966	6.28	5.68	7.42	8.11	4.14	5.16	9.50	7.49	11.97	7.76	6.84	5.86	6.79	81.48
1967	7.03	7.88	8.63											

LAKE ST. CLAIR OVERLAND PRECIPITATION (CENTIMETERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1891	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1892	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1893	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1900	4.75	10.46	5.87	4.95	6.40	8.10	12.17	7.77	4.60	6.17	9.60	2.21	6.90	83.05
1901	4.78	4.11	6.17	6.38	9.12	7.09	8.00	7.59	5.82	4.09	4.85	9.22	6.46	77.22
1902	3.25	2.62	6.81	4.47	8.86	16.54	15.39	3.81	13.67	6.40	4.90	6.96	7.83	93.68
1903	4.78	3.06	6.48	10.31	5.99	9.68	11.84	11.40	5.64	6.48	4.95	5.74	7.63	91.67
1904	10.39	7.08	11.07	7.57	8.64	5.18	10.31	8.69	7.09	7.04	7.16	4.78	7.38	88.28
1905	5.16	4.93	3.76	6.45	11.25	11.51	10.06	8.53	7.09	7.04	6.60	8.94	7.32	87.72
1906	4.52	2.51	6.45	4.95	6.30	9.14	10.24	9.73	5.84	11.71	6.60	8.94	7.29	86.93
1907	11.89	1.65	8.56	5.54	8.10	10.01	8.64	3.78	11.25	7.44	5.87	9.73	7.75	92.46
1908	5.72	10.85	8.18	6.88	11.13	5.72	8.79	8.86	2.11	3.07	3.38	5.36	6.67	80.05
1909	7.04	10.72	6.30	10.74	10.80	10.21	7.29	7.26	5.18	5.13	9.80	6.96	8.09	97.43
1910	8.76	7.37	1.07	9.80	8.56	4.19	8.61	5.54	9.25	8.71	6.27	5.82	6.99	83.95
1911	6.40	5.38	4.78	8.13	4.42	8.92	5.54	9.78	9.42	10.95	9.02	6.86	7.47	89.60
1912	5.64	4.57	6.17	7.95	8.94	5.72	10.54	11.10	9.12	7.21	5.33	4.70	7.27	86.99
1913	13.67	3.58	17.07	8.10	8.74	4.78	8.61	8.08	4.32	9.37	7.14	2.24	8.03	95.70
1914	6.40	3.51	5.56	9.22	11.61	7.29	4.72	12.19	5.74	5.84	4.32	6.83	6.98	83.33
1915	6.65	5.72	2.77	2.67	7.77	7.80	15.88	12.40	10.90	5.11	5.92	6.48	7.53	90.07
1916	10.67	3.81	8.26	6.91	12.34	11.13	3.10	5.77	6.25	6.15	5.05	6.30	7.16	85.74
1917	5.99	3.40	7.11	9.09	10.39	13.06	8.31	7.19	4.98	13.61	2.03	3.33	7.41	88.49
1918	6.05	6.43	6.10	5.97	8.15	5.84	4.39	5.94	11.53	5.84	5.33	7.90	6.62	79.47
1919	3.07	3.58	8.08	9.73	11.28	6.17	4.65	9.70	6.35	12.04	5.77	2.79	6.96	83.21
1920	4.55	2.29	4.57	10.64	3.51	10.59	9.68	8.76	5.11	6.73	7.39	7.80	6.81	81.62
1921	3.51	4.45	11.23	10.06	6.55	6.22	7.92	8.51	9.14	7.75	9.25	5.38	7.51	89.97
1922	4.17	4.19	9.22	9.17	9.32	8.03	8.76	6.48	8.26	4.62	4.01	6.50	6.91	82.73
1923	6.86	3.63	6.78	5.11	9.22	6.50	7.80	7.16	9.04	4.52	5.64	11.15	6.98	83.41
1924	8.13	4.78	5.49	6.02	9.42	12.70	7.21	5.72	12.34	1.14	2.54	8.97	7.03	84.40
1925	3.28	5.61	7.57	3.71	9.84	5.94	9.40	5.97	11.99	8.64	8.89	3.43	6.52	78.27
1926	5.11	6.53	5.89	8.46	4.34	7.87	5.54	14.40	17.50	11.30	6.99	4.55	8.20	98.48
1927	4.57	5.08	6.58	6.78	10.82	6.68	11.51	3.89	6.68	4.57	15.14	8.79	7.60	91.09
1928	4.75	4.95	5.66	5.51	5.44	13.31	10.06	6.53	4.24	6.93	8.15	4.39	6.66	79.92
1929	10.39	3.66	7.52	14.66	9.83	7.82	9.27	3.81	5.46	9.88	8.46	8.94	8.33	99.60
1930	11.89	5.16	6.50	5.87	6.05	8.08	3.00	3.81	6.58	4.50	4.57	3.02	5.75	69.03
1931	5.52	3.21	5.57	7.00	5.84	6.42	9.10	3.99	8.35	6.14	7.51	6.34	6.26	74.99
1932	10.56	4.49	4.27	4.40	14.13	4.58	13.90	7.41	10.37	9.07	6.31	7.65	8.13	97.14
1933	3.01	4.18	6.44	7.64	7.57	3.60	5.30	6.43	6.22	6.03	8.58	5.46	5.88	70.46
1934	4.06	1.98	6.56	7.04	1.62	3.48	5.73	7.12	9.36	4.06	6.83	5.14	5.26	62.98
1935	6.20	5.68	5.96	4.64	7.07	9.63	5.33	7.25	5.38	3.93	9.66	5.27	6.33	76.81
1936	4.54	5.14	3.36	7.12	2.98	7.82	4.94	5.05	11.90	8.56	4.46	5.40	5.71	68.00
1937	10.62	4.66	2.55	14.58	5.92	10.15	7.44	9.51	6.42	8.81	3.89	4.72	7.28	87.27
1938	3.83	12.16	8.60	4.64	8.46	5.44	9.31	7.09	5.05	2.81	3.05	6.06	6.39	77.01
1939	6.70	11.23	4.79	9.06	3.88	9.22	5.77	4.81	5.31	7.05	2.05	3.16	6.04	73.05
1940	5.60	4.65	5.50	5.88	10.49	13.90	5.06	16.10	5.44	7.02	8.67	7.94	8.03	96.25
1941	4.76	2.58	3.79	4.99	5.09	6.24	6.35	7.40	3.04	11.30	5.31	4.87	5.51	65.72
1942	5.46	6.08	9.08	3.55	12.13	6.54	10.54	7.14	11.07	8.48	8.16	2.56	7.92	94.78
1943	6.64	3.46	7.36	8.38	16.01	9.83	10.50	7.43	5.21	4.81	5.66	7.46	7.50	89.75
1944	3.14	5.75	6.81	6.04	8.28	7.71	4.43	5.75	8.38	1.38	5.91	6.14	5.80	69.72
1945	3.02	4.25	8.49	9.83	15.68	11.90	8.64	7.40	13.88	9.46	4.89	5.19	8.57	102.63
1946	5.31	6.54	5.31	2.12	10.77	10.65	4.12	5.89	4.12	7.60	4.25	8.02	6.24	74.77
1947	8.42	2.90	7.76	14.38	13.20	8.48	10.68	8.37	11.56	3.74	5.16	5.61	8.38	100.26
1948	4.21	5.98	9.78	6.02	11.50	9.88	6.82	3.08	4.05	5.20	9.63	5.40	6.79	81.55
1949	7.62	7.52	6.71	5.23	6.29	9.88	6.09	9.41	8.80	7.46	8.77	5.19	7.54	90.27
1950	11.26	8.85	6.29	9.88	3.15	6.42	11.28	6.43	7.96	7.45	11.37	7.13	8.09	97.29

LAKE ERIE OVERLAND PRECIPITATION (CENTIMETERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1881	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1882	2.51	6.78	5.72	4.88	8.33	9.47	8.33	8.03	9.14	10.44	3.61	3.73	6.75	80.97
1883	3.78	2.51	1.73	3.18	6.30	10.97	10.03	4.50	5.66	6.91	7.44	5.38	5.71	68.39
1884	2.11	4.45	2.90	6.53	8.18	3.07	6.96	13.26	13.34	11.48	3.63	9.19	7.11	85.08
1885	3.35	1.55	3.45	3.76	5.03	8.94	7.72	5.49	5.18	4.14	6.73	4.80	5.03	60.14
1886	4.34	4.45	3.23	4.47	3.63	6.88	3.81	5.28	9.30	7.21	5.18	2.67	5.03	69.45
1887	2.26	3.15	1.27	3.68	5.03	4.90	13.21	2.59	3.00	6.55	3.78	3.58	4.43	53.00
1888	4.78	2.84	4.70	7.21	6.78	9.63	4.70	7.21	6.91	5.16	5.08	2.18	5.42	65.08
1889	4.75	3.53	3.96	8.51	5.64	5.33	11.05	9.50	9.17	2.77	3.10	6.27	6.15	73.58
1890	5.84	5.94	2.59	4.24	5.97	7.85	10.64	7.67	6.22	5.16	1.75	2.13	5.50	66.02
1891	2.62	4.11	4.32	2.21	1.47	3.71	8.05	7.92	6.86	6.68	4.14	5.16	4.78	57.25
1892	3.38	2.62	2.82	4.17	6.32	4.62	6.99	8.97	4.55	5.54	5.11	3.53	4.90	58.62
1893	4.01	5.08	3.94	6.76	5.41	8.18	6.65	6.96	6.55	7.70	5.16	6.96	6.12	73.36
1894	4.32	1.63	5.79	5.28	6.60	4.78	5.13	5.21	6.99	11.46	6.07	4.14	5.90	70.40
1895	5.77	2.62	1.70	4.62	7.29	8.15	5.64	5.79	11.89	4.60	4.14	4.78	5.59	66.99
1896	4.47	2.44	3.12	8.59	11.68	4.52	4.11	6.65	4.04	7.82	10.74	1.68	5.83	69.86
1897	6.55	3.43	4.80	4.06	6.35	8.03	14.43	6.48	5.16	6.38	4.42	4.01	6.21	74.10
1898	2.87	4.50	3.94	1.96	8.56	10.87	6.15	6.30	6.17	4.57	2.79	5.48	65.69	1958
1899	3.81	3.30	4.32	5.59	8.13	9.40	5.59	8.64	8.89	6.10	1.27	5.08	5.86	70.12
1900	4.75	10.46	5.87	4.95	6.40	8.10	12.17	7.77	4.60	6.17	9.60	2.21	6.90	83.05
1901	4.78	4.11	6.17	6.38	9.12	7.09	8.00	7.59	5.82	4.09	4.85	9.22	6.46	77.22
1902	3.25	2.62	6.81	4.47	8.86	16.54	15.39	3.81	13.67	4.40	4.90	6.96	7.83	93.68
1903	4.78	8.38	6.48	10.31	5.99	9.68	11.84	11.40	5.64	6.48	4.95	5.74	7.63	91.67
1904	10.39	7.06	11.07	7.57	8.64	5.18	10.31	8.69	7.59	4.90	1.09	5.79	7.38	88.28
1905	5.16	4.93	3.76	6.45	11.25	11.51	10.06	8.53	7.09	7.04	7.16	4.78	7.32	87.72
1906	4.52	2.51	6.45	4.95	6.30	9.14	10.24	9.73	5.84	11.71	6.60	8.94	7.29	86.93
1907	11.89	1.65	8.56	5.54	8.10	10.01	8.64	3.78	11.25	7.44	5.87	9.73	7.75	92.46
1908	5.72	10.85	8.18	6.88	11.13	5.72	8.79	8.86	2.11	3.07	3.38	5.36	6.67	80.95
1909	7.04	10.72	6.30	10.74	10.80	10.21	7.29	7.26	5.18	5.13	9.80	6.96	8.09	97.43
1910	8.76	7.37	1.07	9.80	8.56	4.19	8.61	5.54	9.25	8.71	6.27	5.82	6.99	83.95
1911	6.40	5.38	4.78	8.13	4.42	8.92	5.54	9.78	9.42	10.95	9.02	6.86	7.47	89.60
1912	5.64	4.57	6.17	7.95	8.94	5.72	10.54	11.10	9.12	7.21	5.33	4.70	7.27	86.99
1913	13.67	3.58	17.07	8.10	8.74	4.78	8.61	8.08	4.32	9.93	7.14	2.24	8.03	95.70
1914	6.65	5.56	9.22	11.61	7.29	4.72	12.19	5.74	5.84	4.12	5.92	6.48	6.98	83.33
1915	19.16	6.65	5.72	2.77	7.77	7.80	15.88	12.40	10.90	5.11	5.92	6.48	7.53	90.07
1916	10.67	3.81	8.26	6.91	12.34	11.13	3.10	5.77	6.25	6.15	5.05	6.30	7.16	85.74
1917	5.99	3.40	7.11	9.09	10.39	13.06	8.31	7.19	4.98	13.61	2.03	3.33	7.41	88.49
1918	6.05	6.43	6.10	5.97	8.15	5.84	4.39	5.94	11.53	5.84	5.33	7.90	6.62	79.92
1919	3.07	3.58	8.08	9.73	11.28	6.17	4.65	9.70	6.35	12.04	5.77	2.79	6.96	83.21
1920	4.55	2.29	4.57	10.64	3.51	10.59	9.68	8.76	5.11	6.73	7.39	7.80	6.81	81.82
1921	3.51	4.45	11.23	10.06	6.55	6.22	7.92	8.51	9.14	7.75	9.25	5.38	7.51	89.97
1922	4.17	4.19	9.22	9.17	9.32	8.03	8.76	6.48	8.26	4.62	4.01	6.50	6.91	82.73
1923	6.86	3.63	6.78	5.11	9.22	6.50	7.80	7.16	9.04	4.52	5.64	11.15	6.98	83.41
1924	8.13	4.72	5.49	6.02	9.42	12.70	7.21	5.72	12.34	1.14	2.54	8.97	7.03	84.40
1925	3.28	5.61	7.57	3.71	3.84	5.94	9.40	5.97	11.99	8.64	8.89	3.43	6.52	78.27
1926	5.11	6.53	5.89	8.46	4.34	7.87	5.54	14.40	17.50	11.30	6.99	4.55	8.20	98.48
1927	4.57	5.08	6.58	6.78	10.82	6.68	11.51	3.89	6.68	4.57	15.14	8.79	7.60	91.09
1928	4.75	4.95	5.66	5.51	5.44	13.31	10.06	6.53	4.24	6.93	5.15	4.39	6.66	79.92
1929	10.39	3.66	7.52	14.66	9.83	7.82	9.27	3.81	5.46	8.88	8.46	8.84	8.33	99.60
1930	11.89	5.16	6.50	5.87	6.05	8.08	3.00	3.81	6.58	4.50	4.57	3.02	5.75	69.03
1931	3.81	3.68	5.63	7.60	7.07	9.32	7.27	7.86	9.79	5.84	7.20	6.98	6.85	82.05
1932	11.96	3.37	5.96	5.38	7.97	5.75	9.39	5.66	8.85	9.17	7.18	9.01	7.50	89.65
1933	3.69	4.35	8.57	7.77	11.83	4.46	5.23	6.18	9.90	4.42	5.69	5.27	6.46	77.36
1934	4.42	2.10	6.82	7.27	1.79	6.37	4.57	7.54	10.21	3.10	6.05	4.54	5.40	64.78
1935	6.17	5.01	6.09	4.12	9.10	8.50	8.56	9.61	5.74	4.03	7.01	4.83	6.58	78.77
1936	3.80	6.30	8.15	6.29	4.17	6.15	4.90	5.88	10.09	8.35	5.80	6.01	6.32	75.92
1937	14.98	4.56	4.13	13.38	8.59	16.99	11.44	8.67	5.69	7.88	3.73	5.39	8.81	105.43
1938	3.33	9.23	10.55	6.37	9.00	9.39	9.70	7.24	8.61	2.29	6.08	4.68	7.18	86.47
1939	6.15	9.55	7.59	9.40	3.11	12.38	8.57	5.52	6.32	7.16	2.20	3.47	6.75	81.42
1940	4.29	5.31	5.91	9.67	10.80	12.87	5.00	11.49	4.91	5.65	7.55	8.41	7.66	91.86
1941	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074
2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089
2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104
2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119
2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134
2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149
2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164
2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179
2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194
2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209
2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224
2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239
2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254
2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269
2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284
2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299
2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314
2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	

LAKE ONTARIO OVERLAND PRECIPITATION (CENTIMETERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1881	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1882	5.08	7.47	4.67	5.11	14.22	12.45	11.66	6.02	6.71	5.84	5.54	4.65	7.45	89.42
1883	9.32	7.77	7.90	2.87	9.25	8.79	8.76	6.58	5.64	6.17	5.79	7.82	7.20	86.66
1884	9.32	7.77	7.90	2.87	9.25	8.79	8.76	6.58	5.64	6.17	5.79	7.82	7.20	86.66
1885	7.16	4.55	2.26	5.94	6.96	10.31	8.08	14.02	7.92	10.39	6.07	7.26	7.60	90.92
1886	9.63	5.13	5.87	5.92	8.51	7.04	9.60	7.04	9.56	4.90	12.04	5.00	7.46	89.50
1887	6.99	10.67	4.65	4.62	4.17	7.04	9.60	7.04	9.56	4.90	12.04	5.00	7.46	89.50
1888	6.99	10.67	4.65	4.62	4.17	7.04	9.60	7.04	9.56	4.90	12.04	5.00	7.46	89.50
1889	9.93	5.61	4.11	8.03	8.61	17.25	13.13	5.13	7.87	8.81	13.21	8.66	9.20	110.35
1890	10.11	8.36	7.85	7.11	15.90	10.77	7.01	12.22	16.97	12.45	7.44	7.57	10.33	123.76
1891	7.77	9.27	8.26	4.70	3.02	7.06	10.97	10.77	4.11	7.52	7.26	10.71	7.58	90.95
1892	9.45	5.79	7.44	2.77	14.25	14.02	10.87	14.48	5.49	4.80	9.27	3.71	8.55	102.34
1893	5.16	9.04	5.41	8.97	14.76	6.35	8.46	14.35	8.23	5.87	5.21	9.19	8.42	101.00
1894	7.47	6.63	4.19	9.02	17.20	8.20	6.65	3.63	12.62	10.72	5.26	6.22	8.16	97.81
1895	8.31	4.04	3.81	4.50	6.40	5.41	6.38	8.71	6.40	4.14	9.42	10.16	6.49	77.68
1896	6.17	10.39	8.15	3.15	6.12	6.60	9.80	6.25	11.48	5.92	7.59	3.48	7.07	85.10
1897	6.40	4.60	8.18	6.76	8.66	7.49	13.34	5.99	3.96	3.28	11.20	8.61	7.40	88.47
1898	8.92	5.79	5.87	5.23	7.87	7.29	4.37	11.02	8.23	12.24	6.93	6.68	7.56	90.44
1899	5.64	4.09	8.84	3.71	8.28	5.11	7.29	3.40	9.30	7.34	4.42	9.93	6.47	77.35
1900	7.65	10.11	8.89	3.63	4.88	6.63	10.57	5.64	6.71	7.67	13.06	5.38	7.56	90.82
1901	6.22	4.75	7.67	9.96	11.30	7.90	9.96	10.13	7.52	4.29	7.14	10.67	8.15	97.51
1902	6.45	6.48	7.37	6.81	6.71	11.13	15.93	6.10	6.68	8.41	4.50	9.67	7.91	94.65
1903	7.57	6.88	7.95	6.48	2.36	13.18	10.29	11.68	3.63	9.60	4.62	7.67	7.67	91.91
1904	8.76	6.88	8.33	9.55	9.12	8.69	11.28	8.99	10.16	6.22	1.70	6.12	7.99	95.80
1905	7.67	4.98	4.14	5.21	7.19	13.16	10.95	9.98	7.16	6.66	5.64	7.77	7.73	92.51
1906	5.51	2.77	6.93	4.37	7.09	13.28	7.57	7.80	7.82	12.22	6.27	7.44	7.46	89.07
1907	7.16	3.28	4.32	6.71	6.38	6.40	6.71	3.25	10.72	7.95	7.67	10.11	6.74	80.66
1908	6.53	8.74	6.53	7.65	10.72	6.99	9.60	5.46	3.58	3.84	4.37	5.44	6.62	79.45
1909	6.73	8.28	6.38	8.94	9.14	4.67	9.83	5.64	5.97	5.46	6.60	6.45	7.00	84.09
1910	8.51	9.30	3.07	8.20	8.48	3.40	7.57	8.97	7.75	8.36	6.81	6.96	7.26	87.28
1911	5.59	6.40	6.35	3.61	5.56	7.95	7.06	7.24	7.32	8.94	8.20	6.32	6.71	80.54
1912	6.99	5.49	5.94	7.49	14.05	3.02	6.99	9.80	11.23	7.59	8.48	6.02	7.77	93.09
1913	11.23	4.17	12.06	7.37	7.59	4.86	5.23	7.09	4.95	9.83	8.18	3.96	7.25	86.54
1914	6.32	6.05	6.88	8.64	6.05	7.67	4.42	11.05	5.18	4.57	6.12	6.81	6.65	79.76
1915	8.51	7.11	1.93	2.95	5.87	7.95	11.33	13.13	6.43	6.83	5.46	7.82	7.13	85.32
1916	7.82	7.80	6.22	6.45	7.95	11.91	7.95	7.47	4.55	14.81	3.02	5.74	7.35	87.83
1917	6.83	4.74	6.22	6.45	7.95	11.91	7.95	7.47	4.55	14.81	3.02	5.74	7.35	87.83
1918	6.58	7.44	4.72	5.18	8.41	8.00	6.65	7.14	12.42	9.47	5.18	6.50	7.30	87.69
1919	3.86	3.30	7.92	8.10	13.36	6.96	7.32	8.74	5.54	9.80	5.61	3.91	7.07	84.42
1920	5.28	5.13	5.59	7.49	1.68	5.99	11.02	6.12	8.94	5.59	9.53	8.48	6.73	80.84
1921	3.12	4.60	9.19	7.59	4.75	5.64	8.61	6.32	5.66	8.69	9.25	5.33	6.57	78.75
1922	5.16	6.38	6.96	9.35	5.79	14.53	7.04	8.84	5.69	5.44	3.43	5.21	6.98	83.82
1923	7.75	3.76	6.68	5.54	7.98	8.71	4.42	4.95	6.99	6.68	7.59	7.65	6.57	78.70
1924	9.60	6.98	2.59	8.08	10.59	7.04	9.42	7.70	15.19	1.40	4.17	5.82	7.32	87.98
1925	7.37	7.47	7.57	5.49	5.16	9.40	10.21	5.38	13.21	9.58	8.66	6.15	7.96	95.65
1926	6.15	6.25	6.25	8.05	3.56	8.71	6.88	11.38	10.34	13.41	10.41	5.44	7.89	94.75
1927	4.32	6.86	4.57	3.91	10.06	5.59	11.91	6.60	3.91	9.45	16.99	9.02	7.78	93.19
1928	6.25	5.84	7.59	7.44	4.45	10.97	9.88	9.88	6.50	9.47	8.59	4.04	7.58	90.90
1929	10.29	4.01	8.05	12.75	10.29	6.02	8.98	5.84	5.82	8.74	7.87	8.81	8.15	97.35
1930	9.53	4.67	8.81	4.85	8.33	9.45	7.14	4.27	5.44	3.63	3.45	3.91	6.14	73.48
1931	6.05	3.56	5.71	6.58	10.98	5.54	10.26	5.12	10.45	6.11	6.65	7.68	7.08	84.69
1932	11.39	6.27	8.07	6.57	7.46	5.04	10.41	9.74	6.20	11.10	9.64	6.41	8.20	98.08
1933	3.74	5.44	8.07	8.37	7.49	5.25	3.44	10.84	5.33	5.45	8.58	7.95	6.66	79.85
1934	5.80	3.34	6.94	7.31	2.70	8.34	5.15	4.66	10.45	5.31	7.84	6.43	6.19	74.27
1935	8.50	5.03	4.62	5.80	6.41	11.15	12.79	4.72	8.40	6.13	7.18	5.40	7.18	86.13
1936	6.71	5.57	14.09	7.60	4.95	5.55	3.35	6.81	9.48	9.87	6.81	7.16	7.34	87.95
1937	11.75	6.14	5.19	8.62	8.54	10.07	5.48	9.52	5.22	11.87	7.93	5.97	8.04	96.30
1938	5.83	8.94	6.78	6.20	6.63	5.89	10.93	9.11	13.39	2.07	5.40	5.56	7.21	86.73
1939	7.08	8.55	7.00	7.15	4.44	6.63	7.83	6.05	7.41	6.96	2.68	6.88	6.55	78.66
1940	5.65	6.92	8.29	7.57	10.15	9.43	7.61	5.18	7.38	4.90	10.26	10.11	7.78	93.45
1941	7.77	9.27	8.26	4.70	3.02	7.06	10.97	10.77	4.11	7.52	7.26	10.71	7.58	90.95
1942	9.45	5.79	7.44	2.77	14.25	14.02	10.87	14.48	5.49	4.80	9.27	3.71	8.55	102.34
1943	5.16	9.04	5.41	8.97	14.76	6.35	8.46	14.35	8.23	5.87	5.21	9.19	8.42	101.00
1944	7.47	6.63	4.19	9.02	17.20	8.20	6.65	3.63	12.62	10.72	5.26	6.22	8.16	97.81
1945	8.31	4.04	3.81	4.50	6.40	5.41	6.38	8.71	6.40	4.14	9.42	10.16	6.49	77.68
1946	6.17	10.39	8.15	3.15	6.12	6.60	9.80	6.25	11.48	5.92	7.59	3.48	7.07	85.10
1947	6.40	4.60	8.18	6.76	8.66	7.49	13.34	5.99	3.96	3.28	11.20	8.61	7.40	88.47
1948	8.92	5.79	5.87	5.23	7.87	7.29	4.37	11.02	8.23	12.24	6.93	6.68	7.56	90.44
1949	5.64	4.09	8.84	3.71	8.28	5.11	7.29	3.40	9.30	7.34	4.42	9.93	6.47	77.35
1950	7.65	10.11	8.89	3.63	4.88	6.63	10.57	5.64	6.71	7.67	13.06	5.38	7.56	90.82
1951	7.44	8.10	10.38	11.08	4.58	9.99	11.40	6.62	8.15	5.04	9.45	10.71	8.57	102.94
1952	7.00	5.60	6.72	6.93	10.71	4.08	8.18	7.59	7.58	5.33	7.76	8.25	7.16	85.73
1953	6.84	4.79	9.59	6.52	12.17	5.84	9.31	7.77	9.68	2.91	5.85	7.27	7.23	86.47
1954	6.51	8.59	9.34	11.11	5.84	8.95	4.10	10.05	9.28	9.56	8.46	9.57	8.43	101.36
1955	4.10	5.52	10.88	6.06	6.08	3.73	5.37	12.71	5.95	21.06	5.64	4.57	7.68	91.67
1956	4.69	6.62	8.50	9.83	11.03	5.02	8.67	11.75	8.26	3.53	6.05	6.53	7.55	90.48
1957	7.00	4.40	4.04	7.83	8.69	11.36	7.82	3.39	9.50	4.52	6.84	8.98	7.03	84.39
1958	6.81	7.26	2.71	6.14	6.18	9.40	8.75	8.55	11.50	7.67	8.14	4.47	7.28	87.58
1959	9.49	7.61	6.27	7.31	6.63	5.39	8.77	9.16	6.48	13.80	9.64	10.25	8.42	100.80
1960	7.59	10.47	4.10	8.11	11.23	9.08	5.35	6.58	3.54	6.73	5.31	3.89	6.82	81.98
1961	3.16	7.59	6.05	10.94	8.42	10.78	8.79	8.29	4.02	5.31	7.24	6.59	7.25	87.18
1962	7.68	6.84	2.65	7.52	6.39	6.42	7.89	7.61	9.79	5.55	5.44	6.75	6.96	83.53
1963	4.75	3.68	6.67	7.05	8.39	3.47	6.48	10.99	5.07	1.36	12.20	5.78	6.34	75.89
1964	7.03	3.08	8.29	8.23	7.63	4.16	7.93	9.88	2.53	3.87	9.93	6.11	7.24	87.59
1965	7.86	8.87	4.49	6.47	3.41	5.08	6.05	9.92	8.66	10.33	9.88	6.11	7.24	87.59
1966	8.08	6.05												

APPENDIX B - Overlake Precipitation

LAKE SUPERIOR OVERLAKE PRECIPITATION (CENTIMETERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1891	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1892	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1893	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1900	3.99	3.66	2.79	3.99	2.82	5.99	9.68	13.31	18.75	7.01	4.88	2.79	6.64	79.66
1901	3.48	1.68	5.77	3.00	3.99	10.77	12.45	6.43	6.93	8.79	4.62	4.55	6.07	72.46
1902	3.25	3.15	1.96	4.47	6.43	9.35	7.26	6.02	6.71	6.71	7.19	5.44	5.67	67.94
1903	3.07	3.15	5.64	2.28	9.78	3.94	10.87	7.82	10.13	7.82	5.08	4.34	6.44	76.92
1904	3.05	3.00	4.70	2.95	9.47	7.14	6.86	6.50	10.19	10.54	2.54	5.11	6.02	72.05
1905	3.48	2.16	4.65	3.89	7.98	8.59	10.03	5.33	12.42	7.70	6.20	2.84	6.29	75.27
1906	4.62	2.54	4.27	2.90	7.42	10.44	4.14	7.44	6.05	6.88	9.02	4.22	5.84	69.94
1907	5.61	2.26	4.50	4.27	6.10	3.40	7.52	9.40	9.83	4.75	4.75	2.03	5.43	64.87
1908	2.34	5.36	3.76	6.32	9.80	7.87	7.70	5.23	6.30	3.18	5.44	4.98	5.68	68.28
1909	3.38	4.17	3.25	5.08	4.62	2.84	13.03	7.21	6.40	5.36	7.49	6.55	5.80	69.38
1910	3.33	4.72	0.84	5.16	5.51	2.01	6.40	7.29	7.42	5.21	5.69	4.37	4.83	57.95
1911	4.39	4.95	3.66	2.18	8.59	9.02	10.67	9.58	7.26	6.12	7.52	5.54	6.50	77.82
1912	3.99	1.12	1.55	5.87	8.48	4.01	5.82	9.92	4.92	4.95	2.72	5.92	5.30	63.33
1913	3.73	3.86	7.11	3.15	7.85	6.65	11.66	6.86	8.36	9.40	4.93	0.91	6.23	74.47
1914	4.95	3.07	3.05	8.86	5.26	8.46	6.05	6.66	6.65	3.61	6.17	3.15	5.66	67.94
1915	4.60	3.35	1.55	3.18	5.99	12.29	6.45	7.14	9.93	9.93	4.67	6.81	7.25	86.92
1916	7.98	2.21	5.31	7.21	8.48	12.50	4.01	7.72	14.96	7.85	2.82	5.87	6.81	76.57
1917	3.45	2.44	7.49	3.23	3.84	7.06	5.21	7.80	5.21	8.05	1.73	6.81	5.23	62.32
1918	4.50	3.10	1.73	3.84	10.82	5.49	5.38	7.19	6.50	8.64	6.86	5.51	5.82	69.56
1919	3.00	4.60	3.61	5.46	4.47	5.77	4.98	6.02	8.03	8.13	11.28	4.85	5.84	70.20
1920	4.80	1.80	7.39	5.94	4.34	9.42	9.19	4.80	6.22	5.38	4.34	7.52	5.94	71.14
1921	3.43	3.48	6.78	6.45	6.93	4.37	10.34	5.03	10.06	4.19	4.72	5.44	5.95	71.22
1922	5.03	8.03	4.95	6.93	6.71	8.71	10.16	4.34	6.07	3.32	7.09	5.31	6.35	76.45
1923	5.54	3.68	5.84	3.10	2.74	5.94	9.09	5.69	6.93	7.98	2.84	4.57	5.35	63.94
1924	6.86	2.74	2.18	5.74	4.80	5.59	7.04	12.19	7.39	3.86	5.51	6.60	5.89	70.50
1925	3.84	3.61	3.63	2.54	4.14	8.89	6.32	5.46	9.47	6.85	4.27	4.72	5.30	63.54
1926	3.89	3.00	5.54	2.67	3.33	10.24	10.13	6.50	15.11	9.14	11.30	6.35	7.27	87.20
1927	3.25	3.89	4.29	4.06	11.63	6.68	10.41	3.33	8.48	6.68	7.90	7.65	6.54	78.25
1928	5.16	3.05	3.45	7.70	3.91	11.20	9.68	9.73	10.34	11.33	2.46	3.53	6.80	81.54
1929	8.64	2.62	4.57	4.45	6.45	6.25	7.04	4.37	10.69	8.00	5.77	5.31	7.32	74.16
1930	4.29	3.94	3.40	2.84	7.31	10.33	5.77	2.50	10.52	7.35	6.80	4.17	5.76	69.22
1931	3.85	2.81	3.25	3.07	7.50	7.72	6.56	6.32	11.69	10.81	8.92	3.03	6.31	75.53
1932	7.97	6.72	5.69	3.24	6.99	5.17	12.12	11.73	4.84	8.59	8.46	7.16	7.42	88.68
1933	4.24	6.42	4.04	6.61	4.69	6.50	7.19	4.40	12.17	9.67	7.94	5.57	6.60	79.44
1934	6.09	2.60	4.48	4.79	3.43	5.81	5.04	7.72	14.54	7.05	7.59	7.45	6.39	76.59
1935	9.58	2.46	4.89	4.08	3.26	9.10	9.57	8.01	7.22	7.89	5.84	6.23	6.54	78.13
1936	5.70	4.76	5.82	4.52	7.50	3.93	2.31	8.74	7.31	4.57	5.97	6.10	5.61	67.23
1937	8.53	7.63	1.59	5.90	7.66	2.97	11.44	7.87	7.87	8.07	8.07	7.04	7.05	84.59
1938	8.92	3.42	5.03	9.62	5.84	10.54	5.39	8.72	6.56	5.08	11.17	6.92	7.27	87.21
1939	7.73	8.76	5.34	3.62	6.86	13.41	5.24	8.83	6.58	6.01	1.30	2.98	6.40	76.96
1940	5.19	2.66	4.06	5.03	10.46	11.79	4.98	6.41	4.84	4.99	10.92	4.26	6.30	75.59
1941	5.09	4.81	2.07	8.26	7.02	7.98	5.74	11.39	13.32	10.10	5.01	4.87	7.14	85.66
1942	4.55	2.62	7.17	4.26	9.86	4.68	8.40	7.98	12.36	10.11	8.28	5.89	7.22	86.16
1943	5.28	4.24	4.68	4.69	9.19	15.92	4.30	7.98	4.43	6.21	6.94	3.94	6.49	77.80
1944	2.93	4.11	6.81	3.46	8.65	15.22	10.44	9.48	7.54	3.16	8.64	5.85	7.19	86.29
1945	5.39	6.38	4.44	8.69	5.44	7.69	6.60	9.99	8.42	3.98	8.92	5.87	6.80	81.81
1946	6.95	5.70	2.96	3.80	6.85	7.63	3.96	7.41	10.98	9.11	7.44	6.09	6.57	78.88
1947	4.09	5.39	2.32	8.78	7.36	11.46	3.90	5.99	7.87	1.79	8.64	4.70	5.99	72.29
1948	5.01	2.87	5.23	2.02	5.11	7.45	6.58	2.54	3.63	10.67	7.01	5.57	5.57	66.86
1949	7.56	5.31	5.99	1.52	7.79	10.26	12.01	4.88	8.03	9.41	7.69	4.84	7.12	85.29
1950	9.71	4.23	5.07	7.49	8.72	9.66	8.03	8.15	5.62	6.19	10.53	6.03	7.47	89.43

LAKE MICHIGAN OVERLAKE PRECIPITATION (CENTIMETERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1891	-	-	-	-	-	4.21	4.56	7.44	9.68	5.78	6.71	11.17	8.34	8.61
1892	-	-	-	-	-	6.22	1.55	7.15	6.02	8.11	7.27	16.55	8.12	3.23
1893	-	-	-	-	-	4.25	6.69	4.52	8.56	6.51	9.28	7.82	6.12	3.37
1894	-	-	-	-	-	3.72	4.68	5.88	11.83	6.36	15.30	8.89	6.43	10.41
1895	-	-	-	-	-	3.27	3.25	4.37	7.32	6.89	7.23	5.15	5.70	3.66
1896	-	-	-	-	-	1.46	2.81	5.02	7.66	9.59	5.82	10.36	8.60	3.28
1897	-	-	-	-	-	3.23	2.39	3.76	7.97	11.11	8.37	7.06	7.95	4.66
1898	-	-	-	-	-	3.07	2.32	1.43	5.56	4.34	7.46	7.42	8.58	8.66
1899	-	-	-	-	-	4.92	4.95	6.93	8.38	7.63	3.27	13.29	10.15	13.08
1900	3.51	6.93	3.33	5.21	7.44	5.59	13.28	7.59	9.91	7.62	8.05	2.41	6.73	80.87
1901	3.91	3.30	6.32	1.75	5.05	6.30	9.91	4.93	7.04	6.99	3.10	5.13	5.34	63.73
1902	1.55	3.71	6.32	4.37	11.02	11.63	13.69	3.15	8.33	4.83	6.27	5.23	6.69	80.10
1903	3.68	4.29	7.16	7.29	6.12	4.70	10.11	11.35	7.95	4.67	3.86	4.96	6.37	76.16
1904	3.30	4.98	9.17	5.28	12.06	4.32	6.96	7.59	9.63	7.52	6.66	5.26	6.42	76.73
1905	4.27	4.34	6.32	4.55	11.68	11.15	12.09	8.61	7.34	8.36	4.93	4.14	7.34	87.78
1906	7.11	4.70	6.27	5.61	5.92	6.96	5.92	5.82	7.44	8.53	12.73	5.94	6.92	82.95
1907	8.13	1.90	6.22	7.14	7.21	8.53	9.02	8.71	11.56	2.79	5.59	6.53	6.97	83.33
1908	4.29	7.59	6.32	7.75	11.18	5.21	7.44	5.77	4.39	2.34	6.22	5.66	6.17	74.06
1909	4.85	5.79	4.27	13.61	8.74	8.92	6.27	5.99	6.63	3.43	6.93	9.68	7.08	85.11
1910	4.67	3.45	1.90	8.53	7.39	2.79	4.85	10.46	8.69	7.87	5.99	3.20	5.83	69.79
1911	4.06	5.31	2.44	6.45	10.44	7.39	5.31	7.54	10.87	12.83	8.61	5.56	7.24	86.81
1912	4.39	3.66	2.57	4.50	13.89	3.48	14.35	10.52	10.41	7.24	6.12	4.29	7.15	85.42
1913	4.14	4.11	7.44	5.82	10.39	6.30	9.65	4.67	6.81	7.95	4.57	1.19	6.11	73.04
1914	5.44	2.95	4.85	5.99	8.99	12.98	7.04	7.95	6.96	7.11	3.76	4.65	6.58	78.67
1915	4.37	5.87	6.65	2.34	9.17	7.77	7.04	8.28	13.41	4.01	7.01	3.20	6.20	79.12
1916	7.44	2.77	6.22	5.72	10.19	12.52	3.48	7.01	8.76	10.54	6.50	5.89	7.27	87.04
1917	3.89	2.31	4.39	6.27	7.14	13.08	5.33	4.14	5.69	8.92	2.46	3.20	5.58	66.82
1918	7.14	4.17	4.29	6.25	14.35	4.42	3.71	4.52	4.99	7.62	7.54	6.68	6.33	75.64
1919	2.21	4.50	6.50	8.26	9.30	4.32	6.45	5.21	9.88	10.64	6.81	2.69	6.40	76.77
1920	3.76	2.51	10.03	7.29	4.29	9.27	6.63	5.69	5.69	5.18	5.54	7.57	6.13	73.45
1921	1.52	1.90	8.10	9.40	5.03	3.73	4.27	11.15	11.76	8.71	5.61	8.28	6.65	79.46
1922	3.28	7.92	6.99	8.59	7.06	7.57	9.80	4.85	10.21	6.86	6.65	3.02	6.88	82.80
1923	4.34	3.35	8.61	5.23	5.99	8.89	6.40	9.19	7.70	10.24	2.57	5.03	6.24	74.54
1924	4.78	5.11	5.64	7.24	9.32	8.33	9.27	16.18	6.22	10.53	5.87	4.78	6.95	83.27
1925	1.98	3.94	2.92	5.84	3.18	8.84	7.90	4.11	8.00	7.04	3.15	4.24	5.11	61.42
1926	2.69	5.69	5.84	4.52	8.41	11.00	6.10	6.88	12.32	7.57	10.87	4.27	7.16	86.16
1927	3.10	2.11	6.40	7.82	10.90	4.65	7.87	2.74	12.83	7.52	10.29	5.92	6.86	82.15
1928	2.92	4.98	5.03	6.60	4.78	10.95	5.94	10.13	8.05	9.60	8.79	4.22	6.82	81.99
1929	8.38	2.82	5.61	13.36	6.45	9.02	6.07	4.22	5.79	7.16	2.92	3.73	6.31	75.53
1930	4.47	4.39	4.62	5.31	6.32	6.76	4.62	2.08	5.00	5.44	3.18	2.16	4.52	54.35
1931	3.17	1.54	6.50	2.85	8.99	6.50	6.00	5.10	14.87	9.72	10.57	4.58	6.72	80.39
1932	7.10	3.73	4.34	3.20	7.77	5.04	8.43	8.10	3.20	11.18	4.49	5.89	6.07	72.47
1933	3.88	4.54	6.14	8.31	12.68	8.72	5.95	4.72	7.51	9.78	4.32	4.75	6.79	81.30
1934	2.65	1.88	4.79	4.76	4.29	7.63	3.19	7.16	12.02	5.62	15.10	3.98	6.09	73.17
1935	4.99	3.93	4.08	4.34	6.88	10.57	5.89	9.07	7.78	4.15	9.23	4.05	6.24	74.86
1936	5.11	4.69	2.40	4.03	5.69	4.65	2.57	11.62	13.16	8.18	3.12	6.50	5.98	71.72
1937	5.95	5.63	2.18	9.37	5.99	7.40	7.08	5.31	9.59	6.90	6.11	3.96	6.28	75.59
1938	8.31	7.81	6.80	3.71	8.31	10.43	7.68	11.13	11.98	3.04	5.25	4.66	7.42	89.11
1939	5.61	5.63	3.41	6.16	5.61	10.73	3.70	8.84	6.27	6.78	2.08	3.18	5.66	68.00
1940	5.97	2.62	3.24	5.82	9.95	11.80	5.13	15.11	5.02	6.44	8.15	3.24	6.97	83.49
1941	4.91	3.45	3.03	5.48	8.03	5.64	6.21	8.92	15.16	15.60	7.18	4.36	7.35	87.97
1942	4.20	2.61	6.79	3.34	12.25	9.31	8.22	5.65	13.19	5.83	6.24	8.28	7.19	85.91
1943	5.57	3.97	7.08	5.29	11.28	11.19	7.16	9.05	4.01	4.98	7.50	1.70	6.58	78.78
1944	2.71	4.27	6.62	6.65	6.67	10.36	6.37	6.02	10.42	2.92	6.64	3.77	6.10	73.42
1945	2.50	4.47	3.44	8.68	12.86	9.62	5.91	9.92	13.04	5.20	8.99	4.42	7.42	89.05
1946	5.75	3.01	5.19	2.11	7.87	8.90	3.89	5.12	6.71	4.51	6.81	5.89	5.45	65.22
1947	5.11	3.24	3.63	12.53	12.43	7.98	6.70	5.38	11.09	2.52	6.52	3.45	6.71	80.58
1948	2.82	4.15	8.65	6.79	7.18	7.45	5.71	4.15	5.06	3.03	9.77	4.83	5.79	69.59
1949	6.73	4.88	5.44	4.24	5.58	9.23	10.40	4.85	5.74	4.83	5.77	6.54	6.20	74.23
1950	7.83	4.85	6.03	10.28	3.85	9.45	11.29	6.01	6.55	3.52	5.67	6.23	6.80	81.56
1951	1.52	1.90	8.10	9.40	5.03	3.73	4.27	11.15	11.76	8.71	5.61	8.28	6.65	79.46
1952	3.28	7.92	6.99	8.59	7.06	7.57	9.80	4.85	10.21	6.86	6.65	3.02	6.88	82.80
1953	4.34	3.35	8.61	5.23	5.99	8.89	6.40	9.19	7.70	10.24	2.57	5.03	6.24	74.54
1954	4.78	5.11	5.64	7.24	9.32	8.33	9.27	16.18	6.22	10.53	5.87	4.78	6.95	83.27
1955	1.98	3.94	2.92	5.84	3.18	8.84	7.90	4.11	8.00	7.04	3.15	4.24	5.11	61.42
1956	2.69	5.69	5.84	4.52	8.41	11.00	6.10	6.88	12.32	7.57	10.87	4.27	7.16	86.16
1957	3.10	2.11	6.40	7.82	10.90	4.65	7.87	2.74	12.83	7.52	10.29	5.92	6.86	82.15
1958	2.92	4.98	5.03	6.60	4.78	10.95	5.94	10.13	8.05	9.60	8.79	4.22	6.82	81.99
1959	8.38	2.82	5.61	13.36	6.45	9.02	6.07	4.22	5.79	7.16	2.92	3.73	6.31	75.53
1960	3.76	2.51	10.03	7.29	4.29	9.27	6.63	5.69	5.69	5.18	5.54	7.57	6.13	73.45
1961	1.52	1.90	8.10	9.40	5.03	3.73	4.27	11.15	11.76	8.71	5.61	8.28	6.65	79.46
1962	3.28	7.92	6.99	8.59	7.06	7.57	9.80	4.85	10.21	6.86	6.65	3.02	6.88	82.80
1963	4.34	3.35	8.61	5.23	5.99	8.89	6.40	9.19	7.70	10.24	2.57	5.03	6.24	74.54
1964	4.78	5.11	5.64	7.24	9.32	8.33	9.27	16.18	6.22	10.53	5.87	4.78	6.95	83.27
1965	1.98	3.94	2.92	5.84	3.18	8.84	7.90	4.11	8.00	7.04	3.15	4.24	5.11	61.42
1966	2.69	5.69	5.84	4.52	8.41	11.00	6.10	6.88	12.32	7.57	10.87	4.27	7.16	86.16
1967	3.10	2.11	6.40	7.82	10.90	4.65	7.87	2.74	12.83	7.52	10.29	5.92	6.86	82.15
1968	2.92	4.98	5.03	6.60	4.78	10.95	5.94	10.13	8.05	9.60	8.79	4.22	6.82	81.99
1969	8.38	2.82	5.61	13.36	6.45	9.02	6.07	4.22	5.79	7.16	2.92	3.73	6.31	75.53
1970	3.76	2.51	10.03	7.29	4.29	9.27	6.63	5.69	5.69	5.18	5.54	7.57	6.13	73.45
1971	1.52	1.90	8.10	9.40	5.03	3.73	4.27	11.15	11.76	8.71	5.61	8.28	6.65	79.46
1972	3.28	7.92	6.99	8.59	7.06	7.57	9.80	4.85	10.21	6.86	6.65	3.02	6.88	82.80
1973	4.34	3.35	8.61	5.23	5.99	8.89	6.40	9.19	7.70	10.24	2.57	5.03	6.24	74.54
1974	4.78	5.11	5.64	7.24	9.32	8.33	9.27	16.18	6.22	10.53	5.87	4.78	6.95	83.27
1975	1.98	3.94	2.92	5.84	3.18	8.84	7.90	4.11	8.00	7.04	3.15	4.24	5.11	61.42
1976	2.69	5.69	5.84	4.52	8.41	11.00	6.10	6.88	12.32	7.57	10.87	4.27	7.16	86.16
1977	3.10	2.11	6.40	7.82	10.90	4.65	7.87	2.74	12.83	7.52	10.29	5.92	6.86	

	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1	1951	7.56	6.72	8.11	10.00	3.35	6.45	10.92	8.55	8.74	12.50	8.91	10.40	8.53	102.21
2	1952	7.26	3.99	5.86	7.44	6.73	5.80	10.58	9.57	6.99	1.84	9.58	5.91	6.80	81.55
3	1953	6.91	6.97	8.21	6.63	9.65	5.87	8.04	6.23	9.48	3.39	5.83	7.52	7.08	84.93
4	1954	5.20	5.93	7.27	10.37	5.54	11.10	4.62	6.21	12.94	15.39	6.04	5.90	8.03	96.42
5	1955	7.55	5.07	5.56	6.81	6.62	3.43	6.10	7.97	2.61	10.54	8.63	6.70	6.46	77.29
6	1956	2.83	4.93	4.71	6.89	8.51	7.36	8.69	11.08	7.14	2.25	6.79	6.66	6.51	78.14
7	1957	7.26	3.86	3.56	7.89	7.14	11.24	6.89	3.14	11.90	9.31	8.55	8.99	7.48	89.73
8	1958	4.86	3.62	1.39	3.21	2.73	6.44	7.15	5.55	8.83	6.04	8.96	8.01	5.57	66.79
9	1959	6.54	6.79	4.08	9.23	8.23	3.97	6.95	11.89	9.83	11.16	10.31	7.23	8.02	96.21
10	1960	6.91	4.92	4.27	7.96	11.85	9.16	7.23	4.34	6.05	6.08	7.25	5.55	6.80	81.57
11	1961	3.48	3.91	5.55	4.83	3.99	8.48	7.04	7.77	12.00	4.35	6.33	6.96	6.22	74.69
12	1962	8.43	6.26	1.65	4.69	7.11	6.03	5.16	6.26	9.38	8.19	3.28	9.34	6.32	75.78
13	1963	5.89	3.35	5.61	5.21	8.56	4.82	7.47	8.50	6.32	3.01	6.90	7.42	6.14	73.35
14	1964	5.39	2.39	5.01	6.54	6.67	3.37	7.32	11.69	9.01	4.12	7.72	8.46	6.49	77.69
15	1965	9.74	9.01	4.35	6.09	5.73	4.54	5.74	10.31	13.68	6.68	8.78	7.94	7.70	92.59
16	1966	4.95	4.32	6.63	4.90	3.63	3.83	2.57	8.59	6.22	6.03	13.97	9.96	6.31	75.60
17	1967	8.54	5.71	3.32	9.25	3.91	13.24	4.89	9.66	6.61	9.94	10.71	9.30	7.92	95.08
18	1968	5.52	7.25	3.51	5.94	6.86	8.66	5.90	11.63	8.75	6.30	7.04	9.86	7.30	87.62
19	1969	8.54	2.07	3.85	7.49	8.65	11.91	6.54	3.36	5.35	13.36	9.08	5.05	7.13	85.25
20	1970	6.64	3.06	5.45	6.79	6.95	5.60	14.58	4.50	14.27	7.74	5.56	8.33	7.49	89.47
21	1971	9.41	8.36	6.06	4.13	6.43	6.83	8.37	8.41	5.68	3.37	6.69	11.68	7.12	85.42
22	1972	6.89	6.43	7.14	4.79	5.00	7.35	9.37	10.78	6.87	6.75	5.59	12.40	7.47	89.36
23	1973	4.99	3.87	7.51	4.08	11.42	8.26	7.85	8.06	5.01	8.05	7.62	6.67	6.98	83.39
24	1974	9.23	5.39	4.50	8.43	7.93	7.95	6.76	5.66	9.31	6.43	6.56	4.55	6.88	82.60
25	1975	9.82	6.90	5.32	5.51	5.38	7.23	7.34	10.14	7.79	3.00	8.13	6.72	6.94	83.28
26	1976	8.59	6.69	10.95	2.97	7.61	8.74	7.05	4.26	7.07	6.22	5.94	7.42	6.97	83.51
27	1977	8.12	6.34	7.19	5.17	3.86	4.18	8.05	13.56	11.55	6.24	11.25	9.22	7.91	94.7

LAKE ST. CLAIR OVERLAKE PRECIPITATION (CENTIMETERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1891	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1892	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1893	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1900	5.51	10.85	6.58	4.32	4.78	6.96	12.57	7.37	4.93	5.54	10.03	2.29	6.79	81.73
1901	4.93	4.37	6.60	6.91	7.59	6.15	7.77	7.95	6.58	3.18	5.82	10.01	6.51	77.86
1902	3.99	2.82	5.77	4.11	9.40	15.19	15.60	3.40	12.40	5.99	4.39	6.96	7.52	90.02
1903	5.11	8.36	6.27	10.08	4.93	10.49	13.89	11.79	4.78	6.15	4.14	5.87	7.85	91.86
1904	10.59	7.16	10.11	6.78	8.08	3.78	9.17	7.80	7.16	5.54	7.01	5.51	6.89	82.39
1905	6.38	4.62	3.40	6.05	10.06	9.17	6.81	8.03	5.23	6.96	7.01	4.62	6.54	78.34
1906	4.06	2.62	7.11	4.57	5.11	6.50	8.89	8.89	6.15	13.21	5.72	8.20	6.80	81.08
1907	11.61	1.93	7.59	5.54	8.05	9.25	7.75	3.40	11.91	9.50	4.72	9.40	7.60	90.65
1908	6.22	10.29	7.14	7.47	8.46	5.33	7.06	8.99	1.52	3.20	3.40	5.18	6.19	74.26
1909	6.88	10.31	6.81	8.10	10.67	7.87	8.38	7.34	5.69	5.16	9.27	7.44	7.81	93.92
1910	10.57	8.94	1.17	9.40	8.71	4.22	8.89	4.52	6.78	10.62	8.94	7.26	6.48	87.43
1911	7.87	6.43	4.85	6.93	4.72	7.16	5.79	11.79	9.50	10.67	8.94	7.26	7.66	91.86
1912	6.99	5.23	6.40	8.84	7.37	6.05	9.25	11.46	9.91	8.59	5.33	5.66	7.60	91.08
1913	13.54	4.67	17.04	7.26	8.61	6.10	8.33	9.04	4.45	9.80	8.15	2.57	8.35	99.56
1914	8.20	4.47	6.83	9.40	11.86	5.79	3.96	13.89	5.11	5.69	5.03	7.42	7.34	87.65
1915	7.67	6.15	2.95	2.24	8.23	7.47	15.60	13.82	8.64	5.16	6.15	7.72	7.68	91.80
1916	9.96	5.49	7.87	6.73	12.24	9.53	2.79	5.82	6.45	7.26	5.16	7.14	7.22	86.44
1917	6.73	3.89	7.85	5.79	10.97	13.36	7.32	7.21	5.51	16.23	2.36	4.17	7.66	91.39
1918	6.32	5.61	7.52	5.74	7.62	6.93	4.57	5.54	11.68	6.12	5.28	7.44	6.70	80.37
1919	2.84	3.66	8.03	13.77	11.46	5.72	4.17	9.37	5.36	10.08	4.88	3.15	6.89	82.49
1920	4.67	3.02	4.34	10.52	3.00	11.81	8.08	7.72	4.42	7.26	7.92	6.99	6.64	79.75
1921	3.30	4.75	11.07	9.65	5.82	6.35	6.99	8.97	8.46	6.65	9.40	5.03	7.21	86.44
1922	3.86	3.71	10.13	6.65	6.38	6.60	7.42	7.85	6.30	4.19	4.09	6.27	6.14	73.45
1923	3.60	3.61	6.76	5.94	7.37	6.50	6.50	6.40	6.82	3.96	4.15	5.72	6.49	77.63
1924	8.41	4.83	5.13	7.11	6.86	11.58	6.76	5.61	13.54	1.07	2.36	8.74	6.82	82.00
1925	3.48	6.20	7.24	3.43	3.73	3.38	10.24	5.31	10.59	8.31	8.71	3.78	6.36	76.40
1926	5.46	7.19	5.56	9.65	3.07	8.05	4.29	14.68	17.83	12.65	7.44	4.98	8.39	100.85
1927	4.42	5.49	6.05	5.51	9.55	5.49	10.31	4.11	5.46	5.16	16.61	9.04	7.27	87.20
1928	4.42	4.98	5.23	5.33	4.52	13.18	9.91	6.38	4.42	7.52	7.01	4.42	6.44	77.32
1929	10.72	3.68	7.16	14.83	9.60	6.50	7.47	2.54	5.69	8.79	8.74	9.98	8.00	95.70
1930	11.96	5.41	6.81	5.66	4.67	6.99	2.77	2.39	6.65	5.00	4.06	2.97	5.44	65.34
1931	4.12	2.62	5.50	6.60	5.26	6.11	4.76	2.63	7.22	4.95	7.41	5.25	5.21	62.43
1932	9.86	4.13	2.71	4.67	15.73	4.86	10.03	4.29	9.29	8.50	5.68	7.61	7.31	87.36
1933	3.05	3.45	6.50	7.07	7.95	3.26	4.46	6.82	3.96	4.15	5.72	4.72	5.02	60.11
1934	3.07	1.78	6.28	6.32	0.98	2.65	2.80	6.74	6.78	2.76	4.78	4.18	4.10	49.12
1935	5.09	4.10	6.04	5.01	7.63	7.65	5.07	5.98	3.31	2.63	6.41	3.19	5.18	62.11
1936	4.25	4.43	2.20	6.84	3.29	8.40	5.41	5.51	12.03	7.18	2.40	3.25	5.16	62.19
1937	7.76	3.26	1.27	10.63	4.90	9.93	6.96	6.24	4.17	5.02	2.51	3.43	5.51	66.08
1938	2.62	12.50	8.51	4.07	6.93	4.51	6.91	7.89	4.42	2.58	1.76	3.65	5.51	66.35
1939	5.24	11.36	4.83	10.05	2.49	8.98	4.66	4.21	3.66	5.96	1.35	2.45	5.38	65.24
1940	2.80	4.73	5.54	5.31	8.95	15.95	6.21	16.44	4.05	6.93	7.36	6.61	7.58	90.88
1941	4.01	1.58	3.93	3.84	6.24	6.83	5.93	7.37	2.78	8.95	4.91	4.67	5.12	61.04
1942	4.83	6.83	7.76	3.95	11.40	5.07	9.90	10.78	8.30	7.57	6.87	6.47	7.50	89.73
1943	4.85	4.40	6.74	8.89	17.84	5.64	11.75	4.13	4.55	2.68	5.17	1.29	6.52	77.93
1944	2.19	4.94	6.62	7.56	9.07	7.88	3.06	6.16	3.78	1.47	4.38	4.57	5.13	61.68
1945	2.40	4.00	8.74	8.33	16.98	9.78	7.29	6.13	13.62	8.00	3.55	4.71	7.81	93.53
1946	3.61	5.61	5.85	1.41	10.67	12.97	2.57	7.84	3.47	6.00	3.29	7.52	5.91	70.81
1947	7.16	0.74	5.85	15.31	12.94	6.28	10.58	12.95	10.83	2.18	3.73	4.72	7.82	93.27
1948	3.20	5.57	8.61	6.61	12.32	6.94	3.86	3.29	3.81	3.88	9.15	4.52	5.98	71.76
1949	6.47	6.41	6.49	5.12	7.43	6.97	7.59	7.66	6.67	10.70	3.58	9.24	5.98	84.33
1950	11.14	8.91	5.96	10.50	5.23	5.01	8.04	6.07	9.29	8.74	9.61	6.50	7.90	95.00
1951	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1953	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1954	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1955	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1956	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1957	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1958	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1959	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1960	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1961	0.80	6.20	5.99	12.86	5.96	7.35	6.14	11.00	9.80	3.46	6.75	3.68	6.64	79.99
1962	5.06	5.68	2.52	3.84	2.90	12.74	5.28	8.10	6.80	4.27	4.88	3.55	5.45	65.62
1963	2.28	1.70	6.53	7.64	5.97	6.65	4.25	5.23	3.65	1.09	3.03	3.18	4.24	50.80
1964	5.13	1.93	8.00	10.22	4.91	7.00	5.35	11.59	5.02	1.30	2.26	6.07	5.75	68.78
1965	8.83	6.69	6.89	6.13	4.36	5.44	7.03	8.80	6.88	8.30	3.56	9.54	6.89	92.47
1966	1.84	2.89	5.82	8.24	4.84	7.79	7.61	10.02	3.24	3.43	9.76	10.78	6.37	76.26
1967	5.63	3.22	2.14	7.46	3.58	18.32	8.51	8.21	5.72	10.19	6.34	13.33	7.74	92.65
1968	6.19	3.78	5.67	4.57	11.85	15.49	11.02	10.56	4.75	3.57	7.43	8.44	7.80	93.32
1969	7.06	0.68	4.11	9.79	11.21	9.41	16.87	4.94	2.34	4.94	7.42	4.12	6.94	82.69
1970	2.73	1.89	5.10	7.66	7.46	9.11	10.24	3.44	6.10	4.29	7.19	5.07	5.87	70.28
1971	1.65	1.81	4.56	2.25	3.04	5.10	3.78	8.35	5.68	2.81	3.61	9.42	4.85	58.43
1972	4.03	3.48	6.60	8.47	5.22	6.41	5.71	10.35	8.04	8.39	10.52	8.60	7.16	85.82
1973	3.38	3.67	11.80	4.74	7.22	13.49	7.34	4.30	4.06	5.23	9.40	8.20	6.92	82.90
1974	7.14	5.99	9.20	6.76	10.64	3.85	4.82	6.94	6.04	2.06	8.06	7.90	6.63	79.40
1975	6.51	6.75	5.53	7.40	6.46	12.17	3.91	18.93	7.97	2.17	6.12	9.38	7.78	93.30
1976	6.10	6.55	10.39	7.96	10.65	9.69	17.63	5.32	8.55	6.74	2.64	3.80	8.02	96.02
1977	3.69	3.55	9.30	11.52	4.55	6.56	6.91	7.37	12.61	5.11	6.48	8.21	7.16	85.86
1978	9.24	1.02	4.57	6.00	7.34	7.43	3.99	3.90	8.60	4.75	5.10	4.73	5.56	66.47
1979	4.21	1.43	5.41	11.40	10.93	5.68	9.44	3.90	4.21	3.54	10.38	7.18	6.50	77.71
1980	2.19	2.18	8.15	8.48	6.20	10.48	15.09	12.37	8.96	4.85	2.39	5.56	7.27	86.90
1981	1.51	7.66	2.27	10.98	6.96	7.43	9.57	10.70	15.77	12.55	3.51	5.23	7.83	94.14
1982	7.27	4.00	6.55	4.31	4.12	9.33	8.90	5.50	7.68	2.39	14.53	9.04	6.97	83.62
1983	2.15	3.10	4.59	10.98	12.22	10.29	16.15	5.31	6.77	8.10				

LAKE ERIE OVERLAKE PRECIPITATION (CENTIMETERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1891	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1892	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1893	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1900	5.51	10.85	6.58	4.32	4.78	6.96	12.57	7.37	4.93	5.54	10.03	2.29	6.79	81.73
1901	4.93	4.37	6.60	6.91	7.59	6.15	7.77	7.95	6.58	3.18	5.82	10.01	6.51	77.86
1902	3.99	2.82	5.77	4.11	9.40	15.19	15.60	3.40	12.40	5.99	4.39	6.96	7.52	90.02
1903	5.11	8.36	6.27	10.08	4.93	10.49	13.89	11.79	7.16	6.15	4.14	5.87	7.65	91.86
1904	10.59	7.16	10.11	6.78	8.08	3.78	9.17	7.80	7.16	5.54	0.71	5.51	6.89	82.39
1905	6.38	4.62	3.40	6.05	10.06	9.17	6.81	8.03	5.23	6.96	7.01	4.62	6.54	78.34
1906	4.06	2.62	7.11	4.57	5.11	6.50	8.89	8.89	6.15	13.21	5.77	8.20	6.80	81.08
1907	11.61	1.93	7.59	5.54	8.05	9.25	7.75	3.40	11.91	9.50	4.72	9.40	7.60	90.65
1908	6.22	10.29	7.14	7.47	8.46	5.33	7.06	8.99	1.52	3.20	3.40	5.18	6.19	74.26
1909	6.88	10.31	6.81	8.10	10.67	7.87	8.38	7.34	5.69	5.16	9.27	7.44	7.81	93.92
1910	10.57	8.94	1.17	9.40	8.71	4.22	8.89	4.52	6.78	10.97	6.78	6.48	7.28	87.43
1911	7.87	6.43	4.85	6.93	4.72	7.16	5.79	11.79	9.50	10.62	8.94	7.26	7.66	91.86
1912	6.99	5.23	6.40	8.84	7.37	6.05	9.25	11.46	9.91	8.59	5.33	5.66	7.60	91.08
1913	13.54	4.67	7.04	7.26	8.61	6.10	8.33	9.04	4.45	9.80	8.15	2.57	8.35	99.56
1914	8.20	4.47	6.93	9.40	11.86	5.79	3.96	13.89	5.11	5.69	5.03	7.42	7.34	87.65
1915	7.67	6.15	2.95	2.24	8.23	7.47	15.60	13.82	8.64	5.16	7.14	7.72	7.68	91.80
1916	9.96	5.49	7.87	6.73	12.24	9.53	2.79	5.82	6.45	7.26	5.16	7.14	7.22	86.44
1917	6.73	3.89	7.85	5.79	10.97	13.36	7.32	7.21	5.51	16.23	2.36	4.17	7.66	91.39
1918	6.32	5.61	7.52	5.74	7.62	6.93	4.57	5.54	11.68	6.12	5.28	7.44	6.70	80.37
1919	2.84	3.66	8.03	13.77	11.46	5.72	4.17	9.37	5.36	10.08	4.88	3.15	6.89	82.49
1920	4.67	3.02	4.34	10.52	3.00	11.81	8.08	7.72	4.42	7.26	7.92	6.99	6.64	79.75
1921	3.30	4.75	11.07	9.65	5.82	6.35	6.99	8.97	8.46	6.65	9.40	5.03	7.21	86.44
1922	3.86	3.71	10.13	6.65	6.38	6.60	7.42	7.85	6.30	4.19	4.09	6.27	6.14	73.45
1923	3.60	3.61	6.76	5.94	7.37	6.35	6.50	4.57	7.72	4.78	5.97	11.46	6.49	77.63
1924	8.41	4.83	5.13	7.11	6.86	11.58	6.76	5.61	13.54	1.07	2.36	8.74	6.82	82.00
1925	3.48	6.20	7.24	3.43	3.73	5.38	10.24	5.31	10.59	8.31	8.71	3.78	6.36	76.40
1926	5.46	7.19	5.56	9.65	3.07	8.05	4.29	14.68	17.83	12.65	7.44	4.98	8.39	100.85
1927	4.42	5.49	6.05	5.51	9.55	5.49	10.31	4.11	5.46	5.16	16.61	9.04	7.27	87.20
1928	4.42	4.98	5.23	5.33	4.52	13.18	9.91	6.38	4.42	7.52	7.01	4.42	6.44	77.32
1929	10.72	3.68	7.16	14.83	9.60	6.50	7.47	2.54	5.69	8.79	8.74	9.98	8.00	95.70
1930	11.96	5.41	6.81	5.66	4.67	6.99	2.77	2.39	6.65	5.00	4.06	2.97	5.44	65.34
1931	5.22	4.21	5.21	7.95	5.84	8.58	8.99	6.22	8.89	6.00	7.03	5.88	6.66	79.82
1932	11.39	3.42	4.50	4.88	11.17	3.51	9.80	5.47	7.95	8.47	7.19	8.64	7.23	86.39
1933	4.05	4.47	7.79	6.87	7.44	3.53	3.59	6.53	6.55	4.37	6.64	5.06	5.63	67.49
1934	4.81	1.97	7.38	7.36	1.41	4.80	4.59	7.88	10.46	3.86	6.13	5.57	5.53	66.22
1935	6.17	6.64	5.35	4.19	6.99	7.17	6.77	8.99	5.82	4.52	6.44	5.18	6.19	74.23
1936	4.37	6.19	7.14	6.05	3.38	5.86	5.04	5.06	8.95	7.49	5.48	5.12	5.83	70.13
1937	17.46	4.67	5.97	15.18	6.09	16.31	9.00	7.08	4.30	9.35	4.25	7.63	8.96	107.29
1938	3.28	11.33	9.10	5.36	8.56	8.15	9.01	5.91	12.11	3.38	7.35	4.71	7.31	88.25
1939	6.14	10.02	7.35	9.92	3.56	8.94	7.53	4.26	6.37	6.80	2.57	3.65	6.33	76.40
1940	3.56	5.52	6.51	7.81	11.38	10.22	4.73	13.14	6.77	5.16	8.45	9.85	7.76	93.10
1941	4.60	2.54	3.21	3.92	5.46	6.64	6.65	8.09	3.57	9.85	5.60	4.77	5.44	64.90
1942	4.78	7.60	8.00	6.34	13.17	7.48	10.02	7.81	10.35	9.35	9.02	8.38	8.50	101.90
1943	4.78	4.45	6.49	10.03	14.49	6.80	11.03	6.49	6.17	7.62	4.74	2.75	7.18	85.84
1944	3.04	6.02	7.79	10.55	8.20	7.80	3.81	7.48	7.91	4.43	6.05	6.46	6.62	79.54
1945	4.90	5.69	10.56	8.17	10.51	12.26	6.94	7.36	16.37	12.63	6.23	5.20	8.91	106.82
1946	2.90	5.48	6.56	2.37	13.79	10.96	6.20	5.39	3.56	8.66	6.12	6.88	6.60	78.94
1947	9.98	2.46	6.17	14.02	13.41	10.55	8.74	8.77	8.13	2.92	7.26	5.50	8.19	97.91
1948	4.53	6.40	10.85	8.42	10.77	11.73	6.37	6.87	4.68	8.27	9.57	5.86	7.86	94.32
1949	7.97	6.21	6.59	6.07	7.91	4.65	9.42	7.97	8.65	4.00	7.85	8.36	7.15	85.65
1950	14.90	10.59	9.12	9.93	4.33	7.11	9.90	7.28	8.62	6.83	14.22	6.56	9.09	109.39
1951	7.38	8.29	10.64	7.90	6.71	9.15	5.98	4.35	6.83	8.17	11.04	9.86	7.86	94.43
1952	9.33	5.07	6.75	7.17	8.98	3.79	5.22	8.71	8.17	2.32	6.24	6.90	6.56	78.65
1953	7.62	2.81	7.51	6.55	10.93	5.89	5.91	6.49	6.17	1.70	6.38	6.55	6.24	74.51
1954	6.87	8.09	12.46	12.94	2.98	6.18	4.79	6.79	5.18	21.62	5.83	6.24	8.34	99.97
1955	5.43	6.31	8.63	8.55	5.11	4.89	4.83	10.66	5.40	13.94	8.06	3.84	7.15	85.65
1956	4.45	7.35	9.48	9.73	12.77	6.46	9.06	16.58	5.63	2.45	6.13	6.58	8.07	96.67
1957	7.40	5.22	3.62	12.68	8.27	13.37	9.68	5.94	11.30	6.48	6.93	8.56	8.28	99.45
1958	4.84	2.96	1.94	7.49	5.28	11.08	10.90	9.84	10.46	5.22	9.84	2.92	6.90	82.77
1959	11.44	7.49	7.31	9.95	8.05	4.27	7.85	5.27	7.70	13.21	8.20	8.00	8.24	98.74
1960	7.63	6.20	3.80	7.05	9.20	9.61	6.34	6.75	4.35	4.01	4.96	2.63	6.04	72.53
1961	1.77	7.93	7.01	16.31	5.55	9.10	8.95	10.83	7.01	4.18	6.85	5.41	7.55	90.90
1962	6.97	5.62	3.22	3.78	4.10	8.09	7.23	8.33	9.84	7.05	6.83	6.96	6.50	78.02
1963	2.83	2.24	7.25	7.37	5.51	4.36	6.43	6.74	3.69	1.87	7.87	4.85	5.10	61.01
1964	5.10	2.95	10.55	11.28	6.71	5.37	6.83	14.92	3.72	3.51	3.51	8.02	6.90	82.47
1965	10.81	7.52	7.55	5.02	6.02	6.37	6.25	9.51	6.77	8.96	7.06	7.06	7.42	88.95
1966	4.07	4.84	6.62	8.69	4.86	7.79	7.24	8.42	7.15	3.60	13.16	11.11	7.30	87.55
1967	3.59	4.05	4.06	8.67	8.16	9.54	6.73	7.23	7.40	8.05	9.02	9.10	7.14	85.60
1968	8.75	2.50	4.92	5.85	10.42	9.38	7.71	8.50	7.04	6.61	10.67	9.85	7.71	92.20
1969	7.81	1.39	3.97	11.95	13.95	10.72	13.84	2.95	6.75	6.05	9.66	6.48	7.99	95.52
1970	4.23	3.69	5.29	7.43	7.44	8.26	10.86	3.81	11.58	9.03	9.63	6.27	7.30	87.52
1971	3.66	7.99	4.18	3.51	5.94	6.75	6.45	6.39	6.76	5.09	6.70	10.26	6.13	73.68
1972	4.69	5.12	9.10	8.75	8.60	11.71	7.11	8.74	12.49	6.31	11.01	8.95	8.54	102.58
1973	4.15	4.40	11.91	7.00	9.50	12.22	7.31	5.58	4.50	9.41	8.52	8.92	7.81	93.42
1974	7.06	5.95	10.15	8.61	10.93	10.35	4.98	5.75	6.85	3.71	12.22	7.93	7.87	94.49
1975	7.94	7.33	7.47	3.91	5.71	10.50	5.89	19.70	8.91	4.33	6.53	10.81	8.27	99.03
1976	7.95	8.83	11.88	5.99	7.84	8.80	10.46	16.18	11.31	7.28	3.41	4.16	7.84	94.09
1977	4.69	4.21	8.81	11.72	4.34	8.74	11.85	15.18	18.73	5.28	10.01	11.36	9.68	115.92
1978	10.06	1.33	6.12	7.64	8.25	7.19	3.85	7.25	9.57	9.89	5.02	7.66	7.03	83.83
1979	8.30	3.77	6.74	11.03	9.54	6.93	6.							

LAKE ONTARIO OVERLAKE PRECIPITATION (CENTIMETERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1891	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1892	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1893	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1900	7.85	11.76	8.33	3.96	3.45	5.89	9.22	4.47	7.14	7.04	11.94	5.54	7.19	86.59
1901	6.27	4.67	8.28	10.59	9.50	6.91	9.17	7.87	8.08	3.76	5.69	11.18	7.69	91.97
1902	6.45	6.25	6.45	7.59	5.59	10.01	14.60	5.18	7.39	7.29	4.32	7.21	7.37	88.33
1903	7.14	7.21	7.06	7.98	2.97	12.60	8.56	11.46	2.31	7.16	4.70	7.82	7.25	86.97
1904	9.17	8.13	8.64	8.51	9.02	8.69	9.91	8.94	9.25	6.30	0.99	5.05	7.72	92.60
1905	6.30	5.51	2.84	4.17	7.77	11.84	10.34	11.33	5.23	9.53	5.84	7.34	7.36	88.04
1906	4.98	2.01	6.45	4.83	5.69	11.63	9.53	5.11	6.45	14.40	5.54	7.01	7.01	83.63
1907	7.54	2.64	4.34	4.78	6.38	5.18	6.20	3.07	9.60	8.31	8.13	12.29	6.57	78.46
1908	5.23	7.62	5.44	5.94	10.52	4.62	8.74	6.15	3.25	4.17	4.11	4.06	5.83	69.90
1909	7.11	7.82	6.35	9.96	10.57	3.28	9.45	5.64	5.26	6.15	8.59	8.13	7.36	88.31
1910	7.67	8.41	2.72	8.36	7.11	3.35	8.59	8.38	6.38	9.75	6.76	7.04	7.04	84.52
1911	4.67	5.64	6.10	3.56	4.32	6.83	6.71	5.94	7.82	8.03	7.80	6.81	6.19	74.23
1912	7.39	4.50	4.37	6.76	14.38	3.05	5.69	10.39	10.59	7.24	8.46	5.35	7.36	88.15
1913	11.43	3.86	10.82	9.80	6.32	4.75	4.67	7.62	4.01	9.17	6.86	3.23	6.91	82.56
1914	6.60	3.71	6.40	7.82	5.23	7.32	2.64	8.51	4.37	4.01	5.44	6.58	5.74	68.73
1915	7.42	6.45	1.45	2.54	4.27	6.40	8.66	14.33	5.28	5.13	4.57	8.46	6.26	74.96
1916	8.10	6.32	5.49	7.72	13.41	12.32	3.10	4.22	4.72	7.29	4.83	6.25	6.98	83.77
1917	7.42	4.57	5.87	12.75	12.42	13.06	6.71	6.30	3.53	14.91	3.25	5.84	8.08	96.63
1918	7.01	8.43	4.17	5.03	7.06	7.57	5.92	6.30	11.58	8.48	4.37	6.96	6.89	82.88
1919	4.11	3.56	8.13	8.28	15.21	7.11	5.74	7.39	5.18	9.93	4.83	4.06	7.00	83.53
1920	4.80	4.72	5.16	7.24	1.27	6.35	6.60	4.95	6.76	6.40	9.37	8.51	6.00	72.13
1921	2.06	4.42	9.07	8.08	4.88	4.24	6.71	5.38	4.37	9.09	7.62	5.69	5.98	71.61
1922	3.99	6.32	7.01	8.84	5.08	12.57	6.83	6.30	5.59	5.94	3.96	4.09	6.36	76.52
1923	7.77	3.28	5.56	4.39	7.90	6.83	2.90	5.44	6.27	6.12	8.81	7.49	6.82	72.76
1924	8.64	6.88	2.16	7.59	9.98	6.15	8.94	7.80	13.36	1.02	3.35	6.07	6.08	81.94
1925	5.74	7.92	6.81	4.11	4.01	7.01	8.97	6.17	13.21	8.51	7.72	5.13	7.09	85.31
1926	4.98	6.43	5.31	7.44	3.07	6.83	6.93	12.09	12.01	10.92	9.65	5.18	7.56	90.84
1927	3.45	6.35	4.14	3.33	8.94	4.83	10.92	5.11	3.61	9.09	16.15	8.32	7.08	84.84
1928	6.10	5.84	6.40	7.11	3.78	10.80	9.91	7.80	5.59	8.05	8.89	3.86	7.01	84.13
1929	10.44	3.86	8.03	12.37	8.10	4.83	7.52	4.42	5.03	7.06	7.98	8.08	7.34	87.72
1930	9.70	4.83	9.22	4.11	6.73	7.62	6.35	3.10	4.85	4.17	3.35	3.40	5.63	67.43
1931	6.33	3.63	6.95	5.85	10.37	6.27	6.99	4.17	9.10	5.73	5.61	6.69	6.49	77.69
1932	12.14	6.49	8.15	7.30	6.58	4.88	8.72	8.96	6.31	7.44	9.89	6.72	7.78	93.18
1933	3.48	5.62	7.40	8.00	5.38	3.89	2.27	10.73	4.95	5.25	9.03	8.19	6.18	74.19
1934	5.25	4.43	6.62	6.00	2.65	7.15	3.24	4.11	9.66	3.95	8.16	6.80	5.66	68.02
1935	7.96	5.07	3.48	4.44	6.68	10.10	6.47	4.13	6.96	5.33	5.69	6.15	6.04	72.46
1936	6.31	6.82	15.19	6.27	3.19	4.23	3.25	5.39	9.29	8.01	6.43	7.30	6.79	81.48
1937	11.38	5.84	5.69	8.90	6.86	8.47	3.84	6.68	3.92	11.45	7.56	5.84	7.21	86.43
1938	5.53	8.57	5.71	5.01	5.38	4.74	8.40	8.33	12.95	1.57	4.98	4.88	6.31	76.05
1939	7.07	9.01	6.58	7.17	3.36	4.94	6.16	7.12	7.29	5.24	2.00	6.23	6.00	72.17
1940	6.04	6.58	6.05	7.06	10.10	8.25	7.17	3.84	6.88	4.09	10.31	8.98	6.10	85.35
1941	5.80	5.20	4.59	2.40	3.50	3.90	9.36	7.84	3.57	9.94	6.71	7.01	5.84	69.82
1942	5.89	7.62	9.21	5.48	11.84	4.55	7.90	3.81	9.07	7.08	8.05	11.79	7.70	92.29
1943	5.46	5.66	7.34	8.39	13.88	7.05	7.51	9.16	5.07	11.11	5.59	2.34	7.40	88.56
1944	2.90	6.04	6.64	9.42	6.53	9.39	6.76	5.85	6.85	2.95	5.63	9.73	6.54	78.59
1945	5.46	5.99	7.61	9.57	12.21	7.40	12.17	5.58	15.14	10.42	9.62	7.85	8.85	106.14
1946	4.43	6.09	2.85	3.11	8.69	5.64	5.68	5.63	7.49	10.12	6.99	7.87	6.22	74.57
1947	11.19	3.85	8.51	7.86	11.32	11.78	14.86	4.91	6.81	2.02	6.79	6.03	8.02	95.93
1948	6.12	6.59	9.48	6.82	8.13	7.09	4.78	4.38	3.60	7.96	8.84	5.86	6.64	79.65
1949	7.13	6.67	4.35	7.24	3.83	2.26	5.12	5.78	8.53	3.69	8.31	8.90	5.97	71.81
1950	10.43	8.72	7.33	5.51	4.88	6.17	7.40	9.42	4.20	8.76	11.44	6.11	7.53	90.37
1951	6.33	6.95	5.85	10.37	6.27	6.35	6.99	4.17	9.10	5.73	5.61	6.69	6.49	77.69
1952	12.14	6.49	8.15	7.30	6.58	4.88	8.72	8.96	6.31	7.44	9.89	6.72	7.78	93.18
1953	3.48	5.62	7.40	8.00	5.38	3.89	2.27	10.73	4.95	5.25	9.03	8.19	6.18	74.19
1954	5.25	4.43	6.62	6.00	2.65	7.15	3.24	4.11	9.66	3.95	8.16	6.80	5.66	68.02
1955	7.96	5.07	3.48	4.44	6.68	10.10	6.47	4.13	6.96	5.33	5.69	6.15	6.04	72.46
1956	6.31	6.82	15.19	6.27	3.19	4.23	3.25	5.39	9.29	8.01	6.43	7.30	6.79	81.48
1957	11.38	5.84	5.69	8.90	6.86	8.47	3.84	6.68	3.92	11.45	7.56	5.84	7.21	86.43
1958	5.53	8.57	5.71	5.01	5.38	4.74	8.40	8.33	12.95	1.57	4.98	4.88	6.31	76.05
1959	7.07	9.01	6.58	7.17	3.36	4.94	6.16	7.12	7.29	5.24	2.00	6.23	6.00	72.17
1960	6.04	6.58	6.05	7.06	10.10	8.25	7.17	3.84	6.88	4.09	10.31	8.98	6.10	85.35
1961	6.27	4.67	8.28	10.59	9.50	6.91	9.17	7.87	8.08	3.76	5.69	11.18	7.69	91.97
1962	6.45	6.25	6.45	7.59	5.59	10.01	14.60	5.18	7.39	7.29	4.32	7.21	7.37	88.33
1963	7.14	7.21	7.06	7.98	2.97	12.60	8.56	11.46	2.31	7.16	4.70	7.82	7.25	86.97
1964	9.17	8.13	8.64	8.51	9.02	8.69	9.91	8.94	9.25	6.30	0.99	5.05	7.72	92.60
1965	6.30	5.51	2.84	4.17	7.77	11.84	10.34	11.33	5.23	9.53	5.84	7.34	7.36	88.04
1966	4.98	2.01	6.45	4.83	5.69	11.63	9.53	5.11	6.45	14.40	5.54	7.01	7.01	83.63
1967	7.54	2.64	4.34	4.78	6.38	5.18	6.20	3.07	9.60	8.31	8.13	12.29	6.57	78.46
1968	5.23	7.62	5.44	5.94	10.52	4.62	8.74	6.15	3.25	4.17	4.11	4.06	5.83	69.90
1969	7.11	7.82	6.35	9.96	10.57	3.28	9.45	5.64	5.26	6.15	8.59	8.13	7.36	88.31
1970	7.67	8.41	2.72	8.36	7.11	3.35	8.59	8.38	6.38	9.75	6.76	7.04	7.04	84.52
1971	4.67	5.64	6.10	3.56	4.32	6.83	6.71	5.94	7.82	8.03	7.80	6.81	6.19	74.23
1972	7.39	4.50	4.37	6.76	14.38	3.05	5.69	10.39	10.59	7.24	8.46	5.35	7.36	88.15
1973	11.43	3.86	10.82	9.80	6.32	4.75	4.67	7.62	4.01	9.17	6.86	3.23	6.91	82.56
1974	6.60	3.71	6.40	7.82	5.23	7.32	2.64	8.51	4.37	4.01	5.44	6.58	5.74	68.73
1975	7.42	6.45	1.45	2.54	4.27	6.40	8.66	14.33	5.28	5.13	4.57	8.46	6.26	74.96
1976	8.10	6.32	5.49	7.72	13.41	12.32	3.10	4.22	4.72	7.29	4.83	6.25	6.98	83.77
1977	7.42	4.57	5.87	12.75	12.42	13.06	6.71	6.30	3.53	14.91	3.25	5.84	8.08	96.63
1978	7.01	8.43	4.17	5.03	7.06	7.57	5.92	6.30	11.58	8.48	4.37	6.96	6.89	82.88
1979	4.11	3.56	8.13	8.28	15.21	7.11	5.74	7.39	5.18	9.93	4.83			

APPENDIX C - Basin Runoff

LAKE SUPERIOR RUNOFF (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1901	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1902	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1903	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1904	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1905	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1906	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1907	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1908	0.42	0.47	0.50	5.13	15.79	21.23	4.52	2.31	0.84	1.08	0.78	0.67	4.47	53.74
1909	0.72	0.70	0.87	1.73	9.03	4.13	4.30	9.56	3.13	3.99	3.54	3.51	3.80	45.21
1910	1.14	0.83	2.09	3.76	2.56	1.26	0.73	1.45	1.18	1.81	0.64	0.37	1.49	17.82
1911	0.36	0.37	1.14	4.85	5.41	3.55	1.42	4.66	5.29	2.54	1.08	0.75	2.63	31.42
1912	0.56	0.42	0.58	3.31	10.98	5.32	1.86	0.92	1.59	1.70	0.83	0.55	2.39	28.62
1913	0.44	0.45	0.78	3.03	7.98	6.30	7.09	2.25	5.24	2.25	1.39	0.92	3.49	41.68
1914	0.65	0.62	0.75	2.85	10.06	9.73	7.25	2.57	3.62	1.92	1.34	0.92	3.54	42.31
1915	0.73	0.72	1.06	4.10	6.39	7.53	3.94	1.73	1.11	3.88	3.55	1.51	3.03	36.25
1916	1.31	1.11	1.25	20.16	14.58	6.45	4.08	1.62	2.62	1.93	1.61	1.12	4.81	57.84
1917	0.84	0.67	0.76	4.49	3.85	3.24	2.09	1.96	1.23	2.23	1.68	1.03	2.01	24.07
1918	0.86	0.83	2.25	2.70	5.63	5.35	1.22	1.11	1.01	1.04	1.89	0.97	2.07	24.86
1919	0.75	0.61	3.45	10.01	4.05	4.99	2.15	1.56	1.17	1.56	3.43	1.45	2.93	35.18
1920	1.26	1.20	7.98	8.65	5.14	10.94	5.21	2.39	1.33	1.61	1.53	1.43	4.05	48.67
1921	1.42	1.09	2.59	8.81	6.19	5.94	2.67	1.56	1.26	1.18	1.25	1.25	2.93	35.21
1922	0.90	0.76	1.42	7.97	13.02	4.04	2.23	1.70	1.93	0.95	1.23	0.87	2.33	37.02
1923	0.64	0.47	0.65	4.27	8.56	2.71	1.71	1.45	0.86	2.28	2.95	1.73	2.37	28.28
1924	1.23	1.00	1.06	3.31	6.16	4.10	2.78	2.12	2.28	3.02	1.89	1.68	2.56	30.63
1925	1.11	1.20	1.90	4.76	6.74	5.78	3.48	2.85	1.67	1.93	1.57	2.92	3.49	34.94
1926	1.37	1.03	1.74	3.48	4.33	4.93	5.78	3.18	4.74	5.11	3.73	2.95	3.51	42.03
1927	2.15	1.73	2.74	12.21	13.56	7.28	6.16	2.88	1.81	2.65	2.95	2.43	4.89	58.55
1928	2.00	1.65	1.86	7.30	9.60	8.36	7.80	5.14	7.37	8.81	5.61	3.24	5.73	68.74
1929	2.10	1.53	2.18	5.71	5.82	4.85	3.16	1.82	1.57	1.89	2.32	1.53	2.88	34.48
1930	1.48	1.31	1.37	3.71	9.51	6.81	6.25	1.98	1.65	2.03	3.90	2.25	3.53	42.25
1931	1.31	1.03	1.03	3.54	6.66	5.96	2.00	1.31	1.34	2.26	3.20	1.65	2.61	31.29
1932	1.12	1.17	1.31	8.17	9.87	4.19	3.13	2.98	1.73	1.75	4.21	2.23	3.49	41.86
1933	1.87	1.67	1.90	7.19	9.46	5.29	1.90	1.53	1.45	2.03	2.31	1.71	3.20	38.31
1934	1.54	1.22	1.50	5.25	14.53	4.76	2.81	1.98	2.59	2.88	3.45	3.41	3.85	45.92
1935	2.57	2.39	3.34	8.87	10.01	6.31	4.79	3.63	2.31	3.04	3.35	2.56	4.44	53.17
1936	2.20	1.82	2.21	6.72	18.38	5.41	3.02	2.21	1.73	1.54	1.76	1.50	4.06	48.50
1937	1.57	1.28	1.56	8.53	10.91	5.86	3.18	2.87	2.60	3.27	3.31	2.68	3.98	47.62
1938	1.93	1.65	3.43	11.58	15.56	8.82	3.43	2.46	1.71	1.68	2.23	1.86	4.70	56.34
1939	2.10	1.68	2.32	7.55	15.56	7.55	4.76	2.85	2.45	2.88	2.07	1.78	4.48	53.55
1940	1.82	1.51	1.43	3.40	10.71	7.62	3.60	1.96	1.61	1.51	2.42	2.42	3.34	40.01
1941	1.92	1.76	1.79	12.16	7.44	5.05	3.09	2.03	5.64	8.87	5.10	4.04	4.91	58.89
1942	3.02	2.03	2.34	8.31	12.78	4.93	2.87	2.88	3.02	4.61	5.82	3.52	4.69	56.13
1943	2.78	2.42	2.81	7.50	11.32	13.08	4.85	3.77	2.74	2.65	2.92	2.28	4.93	59.12
1944	2.20	2.10	2.25	6.75	13.64	11.86	5.10	4.80	3.82	3.54	3.45	2.81	5.20	62.32
1945	2.42	2.15	8.14	12.41	6.56	6.21	4.15	3.06	3.04	2.65	4.90	3.04	4.90	58.73
1946	3.04	2.56	5.97	7.81	6.94	6.92	4.01	2.76	2.95	5.30	5.63	4.01	4.83	57.90
1947	3.24	2.62	2.73	7.42	15.56	14.87	4.74	2.88	2.70	2.40	2.23	1.92	5.28	63.31
1948	2.03	1.95	2.03	13.11	7.75	2.84	2.46	2.45	2.09	1.89	2.32	2.49	3.64	43.79
1949	2.25	2.09	2.43	7.55	9.74	3.73	5.21	2.48	2.12	3.60	3.26	2.53	3.93	46.99
1950	2.46	2.31	2.57	6.81	24.60	8.81	7.39	5.32	3.94	4.24	3.98	4.46	6.45	76.89
1951	1.31	1.03	1.03	3.54	6.66	5.96	2.00	1.31	1.34	2.26	3.20	1.65	2.61	31.29
1952	0.90	0.76	1.42	7.97	13.02	4.04	2.23	1.70	1.93	0.95	1.23	0.87	2.33	37.02
1953	0.64	0.47	0.65	4.27	8.56	2.71	1.71	1.45	0.86	2.28	2.95	1.73	2.37	28.28
1954	1.23	1.00	1.06	3.31	6.16	4.10	2.78	2.12	2.28	3.02	1.89	1.68	2.56	30.63
1955	1.11	1.20	1.90	4.76	6.74	5.78	3.48	2.85	1.67	1.93	1.57	2.92	3.49	34.94
1956	1.37	1.03	1.74	3.48	4.33	4.93	5.78	3.18	4.74	5.11	3.73	2.95	3.51	42.03
1957	2.15	1.73	2.74	12.21	13.56	7.28	6.16	2.88	1.81	2.65	2.95	2.43	4.89	58.55
1958	2.00	1.65	1.86	7.30	9.60	8.36	7.80	5.14	7.37	8.81	5.61	3.24	5.73	68.74
1959	2.10	1.53	2.18	5.71	5.82	4.85	3.16	1.82	1.57	1.89	2.32	1.53	2.88	34.48
1960	1.48	1.31	1.37	3.71	9.51	6.81	6.25	1.98	1.65	2.03	3.90	2.25	3.53	42.25
1961	1.42	1.09	2.59	8.81	6.19	5.94	2.67	1.56	1.26	1.18	1.25	1.25	2.93	35.21
1962	0.90	0.76	1.42	7.97	13.02	4.04	2.23	1.70	1.93	0.95	1.23	0.87	2.33	37.02
1963	0.64	0.47	0.65	4.27	8.56	2.71	1.71	1.45	0.86	2.28	2.95	1.73	2.37	28.28
1964	1.23	1.00	1.06	3.31	6.16	4.10	2.78	2.12	2.28	3.02	1.89	1.68	2.56	30.63
1965	1.11	1.20	1.90	4.76	6.74	5.78	3.48	2.85	1.67	1.93	1.57	2.92	3.49	34.94
1966	1.37	1.03	1.74	3.48	4.33	4.93	5.78	3.18	4.74	5.11	3.73	2.95	3.51	42.03
1967	2.15	1.73	2.74	12.21	13.56	7.28	6.16	2.88	1.81	2.65	2.95	2.43	4.89	58.55
1968	2.00	1.65	1.86	7.30	9.60	8.36	7.80	5.14	7.37	8.81	5.61	3.24	5.73	68.74
1969	2.10	1.53	2.18	5.71	5.82	4.85	3.16	1.82	1.57	1.89	2.32	1.53	2.88	34.48
1970	1.48	1.31	1.37	3.71	9.51	6.81	6.25	1.98	1.65	2.03	3.90	2.25	3.53	42.25
1971	1.42	1.09	2.59	8.81	6.19	5.94	2.67	1.56	1.26	1.18	1.25	1.25	2.93	35.21
1972	0.90	0.76	1.42	7.97	13.02	4.04	2.23	1.70	1.93	0.95	1.23	0.87	2.33	37.02
1973	0.64	0.47	0.65	4.27	8.56	2.71	1.71	1.45	0.86	2.28	2.95	1.73	2.37	28.28
1974	1.23	1.00	1.06	3.31	6.16	4.10	2.78	2.12	2.28	3.02	1.89	1.68	2.56	30.63
1975	1.11	1.20	1.90	4.76	6.74	5.78	3.48	2.85	1.67	1.93	1.57	2.92	3.49	34.94
1976	1.37	1.03	1.74	3.48	4.33	4.93	5.78	3.18	4.74	5.11	3.73	2.95	3.51	42.03
1977	2.15	1.73	2.74	12.21	13.56	7.28	6.16	2.88	1.81	2.65	2.95	2.43	4.89	58.55
1978	2.00	1.65	1.86	7.30	9.60	8.36	7.80	5.14	7.37	8.81	5.61	3.24	5.73	68.74
1979	2.10	1.53	2.18	5.71	5.82	4.85	3.16	1.82	1.57	1.89	2.32	1.53	2.88	34.48
1980	1.48	1.31	1.37	3.71	9.51	6.81	6.25	1.98	1.65	2.03	3.90	2.25	3.53	42.25
1981	1.42	1.09	2.59	8.81	6.19	5.94	2.67	1.56	1.26	1.18	1.25	1.25	2.93	35.21
1982	0.90	0.76	1.42	7.97	13.02	4.04	2.23	1.70	1.93	0.95	1.23	0.87	2.33	37.02
1983	0.64	0.47	0.65	4.27	8.56	2.71	1.71	1.45	0.86	2.28	2.95	1.73	2.37	28.28
1984	1.23	1.00	1.06	3.31	6.16	4.10	2.78	2.12	2.28	3.02	1.89	1.68	2.56	30.63
1985	1.11	1.20	1.90	4.76	6.74	5.78	3.48	2.85	1.67	1.93	1.57	2.92	3.49	34.94
1986	1.37	1.03	1.74	3.48	4.33	4.93	5.78	3.18	4.74	5.11	3.73	2.95	3.51	42.03
1987	2.15	1.73	2.74	12.21	13.56	7.28	6.16	2.88	1.81	2.65	2.95	2.43	4.89	58.55
1988	2.00	1.65	1.86	7.30	9.60	8.36	7.80	5.14	7.37	8.81	5.61	3.24	5.73	68.74
1989	2.10	1.53	2.18	5.71	5.82	4.85	3.16	1.82	1.57	1.89	2.32	1.53	2.88	34.48
1990														

LAKE MICHIGAN RUNOFF (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1901	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1902	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1903	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1904	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1905	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1906	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1907	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1908	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1909	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1910	2.86	2.41	7.31	7.21	5.29	3.02	1.88	2.04	2.35	2.80	3.14	2.55	3.58	42.86
1911	2.59	3.43	4.96	11.09	7.96	5.35	3.10	5.17	3.06	7.76	8.35	8.43	5.95	71.25
1912	4.61	3.98	4.84	15.66	13.86	7.31	5.41	5.78	7.76	6.53	7.51	7.86	7.59	91.11
1913	6.57	4.29	15.15	13.41	4.49	3.78	4.53	3.37	3.08	5.02	4.45	4.41	6.45	77.24
1914	3.94	3.47	5.51	7.94	6.53	5.45	4.65	3.78	3.86	4.74	3.47	3.43	4.76	57.02
1915	3.12	5.98	7.76	8.10	6.35	5.31	3.90	3.74	5.47	3.35	5.47	4.10	5.21	62.65
1916	6.12	4.06	7.21	13.45	8.90	8.55	2.96	2.49	2.31	3.47	5.23	3.72	5.70	68.47
1917	2.43	1.90	9.43	9.23	7.35	9.06	5.06	2.84	2.45	3.06	3.47	3.16	4.97	59.44
1918	3.29	3.53	11.90	7.66	9.33	7.37	3.39	2.43	2.06	2.18	3.53	4.16	5.08	60.83
1919	3.96	3.49	7.31	9.29	7.33	4.33	3.37	2.98	2.57	3.23	5.02	4.04	4.75	56.92
1920	3.86	3.49	10.15	10.68	5.37	4.23	3.43	2.20	1.98	2.10	3.10	3.53	4.51	54.12
1921	3.78	3.29	5.57	8.74	6.66	3.39	1.98	1.51	1.67	1.76	2.63	3.27	3.69	44.25
1922	2.84	3.18	9.25	15.78	9.23	5.51	3.96	2.94	2.63	2.55	2.72	2.78	5.28	63.37
1923	3.35	3.23	6.23	12.09	6.59	3.92	2.59	1.63	1.74	2.10	2.12	2.72	4.02	48.31
1924	2.82	2.98	4.92	10.31	11.74	4.76	3.65	12.23	4.47	4.10	3.86	3.82	5.82	69.66
1925	3.84	4.02	4.49	3.18	2.57	3.67	4.16	2.72	1.96	2.72	3.10	3.57	3.33	40.00
1926	3.35	3.18	3.92	5.84	6.31	6.14	3.78	2.84	3.80	5.55	4.88	4.47	4.51	54.06
1927	4.84	4.77	7.45	7.02	6.61	5.27	3.45	2.76	1.98	4.29	4.68	4.35	4.77	57.17
1928	3.94	4.47	8.39	12.35	5.66	4.08	3.29	3.00	4.92	6.47	6.21	5.63	5.69	68.41
1929	5.02	5.19	13.00	17.11	10.45	4.57	4.53	3.47	2.76	2.67	3.27	3.59	6.30	75.63
1930	5.00	5.00	5.55	4.76	4.51	3.45	2.43	1.35	1.18	1.74	1.71	2.35	3.24	39.03
1931	2.12	2.08	2.53	2.45	2.18	2.06	1.49	1.18	1.49	1.94	3.08	3.55	2.18	26.15
1932	5.51	5.37	4.74	4.84	4.57	3.10	2.10	1.59	1.67	2.04	2.88	3.96	3.53	42.37
1933	4.29	3.63	5.31	8.37	8.15	3.25	2.41	1.69	1.55	2.55	2.65	3.10	3.91	46.95
1934	3.27	2.47	3.29	6.00	2.94	1.59	1.43	1.22	1.51	1.78	2.67	3.35	2.82	31.42
1935	3.37	3.29	8.88	5.21	4.74	4.02	3.00	2.82	2.25	2.25	3.08	2.94	3.63	45.85
1936	3.00	3.02	7.66	4.84	4.21	2.33	1.37	1.22	2.04	2.67	2.88	2.76	3.17	38.00
1937	4.98	4.72	5.17	7.57	6.92	4.72	3.86	2.08	1.76	2.16	2.53	2.76	4.10	49.23
1938	3.12	9.47	8.23	8.43	5.47	4.84	3.84	3.45	5.43	4.29	3.10	3.31	5.21	62.98
1939	4.23	5.92	7.29	9.57	5.12	4.53	3.02	3.08	2.51	2.65	2.84	3.00	4.46	53.76
1940	2.90	2.72	4.00	5.74	5.04	5.63	3.84	3.51	3.88	2.98	3.67	5.08	4.08	48.99
1941	5.88	4.02	5.29	7.23	4.25	3.27	2.23	1.76	2.51	4.92	6.84	4.76	4.41	52.96
1942	4.57	4.31	9.98	7.25	6.00	7.00	3.37	3.78	3.39	4.10	5.45	5.14	5.37	64.34
1943	6.43	7.12	10.17	8.62	10.41	10.78	5.53	3.57	3.51	3.16	4.14	3.39	6.39	76.83
1944	3.06	3.66	7.04	7.49	6.43	4.78	2.88	2.14	2.18	2.51	2.74	2.90	4.01	48.11
1945	2.69	3.02	5.92	6.55	7.23	7.78	3.39	2.72	3.14	4.68	5.00	4.16	4.69	56.28
1946	6.74	4.27	11.60	5.31	3.84	4.55	3.27	2.33	2.14	2.23	3.18	3.47	4.40	52.73
1947	3.61	3.39	5.25	13.76	9.78	7.64	3.70	2.59	3.25	2.72	3.37	4.12	5.26	63.18
1948	3.41	3.99	10.66	8.02	8.15	3.23	2.72	2.20	1.88	1.98	2.98	3.16	4.37	52.31
1949	4.37	5.70	5.39	6.08	4.14	3.45	3.51	2.47	2.37	2.74	2.76	4.61	3.95	47.59
1950	7.06	5.08	9.08	14.05	8.94	5.35	4.16	3.14	3.25	2.86	3.14	4.57	5.89	70.68
1951	1931	1917	1931	1931	1931	1931	1931	1931	1931	1931	1931	1931	1931	1931
1952	1932	1918	1932	1918	1932	1918	1932	1918	1932	1918	1932	1918	1932	1918
1953	1933	1919	1933	1919	1933	1919	1933	1919	1933	1919	1933	1919	1933	1919
1954	1934	1920	1934	1920	1934	1920	1934	1920	1934	1920	1934	1920	1934	1920
1955	1935	1921	1935	1921	1935	1921	1935	1921	1935	1921	1935	1921	1935	1921
1956	1936	1922	1936	1922	1936	1922	1936	1922	1936	1922	1936	1922	1936	1922
1957	1937	1923	1937	1923	1937	1923	1937	1923	1937	1923	1937	1923	1937	1923
1958	1938	1924	1938	1924	1938	1924	1938	1924	1938	1924	1938	1924	1938	1924
1959	1939	1925	1939	1925	1939	1925	1939	1925	1939	1925	1939	1925	1939	1925
1960	1940	1926	1940	1926	1940	1926	1940	1926	1940	1926	1940	1926	1940	1926
1961	1941	1927	1941	1927	1941	1927	1941	1927	1941	1927	1941	1927	1941	1927
1962	1942	1928	1942	1928	1942	1928	1942	1928	1942	1928	1942	1928	1942	1928
1963	1943	1929	1943	1929	1943	1929	1943	1929	1943	1929	1943	1929	1943	1929
1964	1944	1930	1944	1930	1944	1930	1944	1930	1944	1930	1944	1930	1944	1930
1965	1945	1931	1945	1931	1945	1931	1945	1931	1945	1931	1945	1931	1945	1931
1966	1946	1932	1946	1932	1946	1932	1946	1932	1946	1932	1946	1932	1946	1932
1967	1947	1933	1947	1933	1947	1933	1947	1933	1947	1933	1947	1933	1947	1933
1968	1948	1934	1948	1934	1948	1934	1948	1934	1948	1934	1948	1934	1948	1934
1969	1949	1935	1949	1935	1949	1935	1949	1935	1949	1935	1949	1935	1949	1935
1970	1950	1936	1950	1936	1950	1936	1950	1936	1950	1936	1950	1936	1950	1936
1971	1951	1937	1951	1937	1951	1937	1951	1937	1951	1937	1951	1937	1951	1937
1972	1952	1938	1952	1938	1952	1938	1952	1938	1952	1938	1952	1938	1952	1938
1973	1953	1939	1953	1939	1953	1939	1953	1939	1953	1939	1953	1939	1953	1939
1974	1954	1940	1954	1940	1954	1940	1954	1940	1954	1940	1954	1940	1954	1940
1975	1955	1941	1955	1941	1955	1941	1955	1941	1955	1941	1955	1941	1955	1941
1976	1956	1942	1956	1942	1956	1942	1956	1942	1956	1942	1956	1942	1956	1942
1977	1957	1943	1957	1943	1957	1943	1957	1943	1957	1943	1957	1943	1957	1943
1978	1958	1944	1958	1944	1958	1944	1958	1944	1958	1944	1958	1944	1958	1944
1979	1959	1945	1959	1945	1959	1945	1959	1945	1959	1945	1959	1945	1959	1945
1980	1960	1946	1960	1946	1960	1946	1960	1946	1960	1946	1960	1946	1960	1946
1981	1961	1947	1961	1947	1961	1947	1961	1947	1961	1947	1961	1947	1961	1947
1982	1962	1948	1962	1948	1962	1948	1962	1948	1962	1948	1962	1948	1962	1948
1983	1963	1949	1963	1949	1963	1949	1963	1949	1963	1949	1963	1949	1963	1949
1984	1964	1950	1964	1950	1964	1950	1964	1950	1964	1950	1964	1950	1964	1950
1985	1965	1951	1965	1951	1965	1951	1965	1951	1965	1951	1965	1951	1965	1951
1986	1966	1952	1966	1952	1966	1952	1966	1952	1966	1952	1966	1952	1966	1952
1987	1967	1953	1967	1953	1967	1953	1967	1953	1967	1953	1967	1953	1967	1953
1988	1968	1954	1968	1954	1968	1954	1968	1954	1968	1954	1968	1954	1968	1954
1989	1969	1955	1969	1955	1969	1955	1969	1955	1969	1955	1969	1955	1969	1955
1990	1970	1956	1970	1956	1970	1956	1970	1956	1970	1956	1970	1956	1970	1956
1991	1971	1957	1971											

LAKE HURON RUNOFF (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1911	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1912	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1913	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1914	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1915	5.06	11.20	11.47	10.76	8.63	8.49	4.28	3.11	3.63	8.49	6.79	8.56	7.51	90.47
1916	9.30	6.61	7.48	29.67	20.35	13.31	6.52	3.50	3.07	4.46	12.77	15.91	11.06	132.95
1917	5.22	2.06	7.04	18.15	21.87	24.60	25.21	4.62	2.58	3.29	3.38	3.20	10.15	121.22
1918	5.27	5.18	29.98	18.20	17.37	15.37	12.77	3.11	2.94	3.64	12.26	10.98	11.69	139.77
1919	7.73	4.15	12.08	18.49	16.65	12.28	3.94	2.55	5.45	11.54	13.06	10.85	9.92	118.77
1920	5.15	3.76	21.13	17.99	11.92	9.05	11.65	2.94	2.29	2.44	4.28	7.87	8.40	100.47
1921	7.55	3.34	15.01	20.03	10.44	10.82	4.01	2.73	2.33	6.45	5.18	11.00	8.27	98.89
1922	5.60	4.01	11.29	29.40	16.29	8.67	9.90	3.50	2.44	3.43	4.19	3.61	8.94	102.33
1923	2.84	2.06	5.40	18.17	24.76	9.16	8.38	2.33	2.46	1.90	2.11	3.32	6.92	82.69
1924	3.27	2.22	5.22	19.23	12.59	5.49	11.07	4.77	2.58	2.24	4.59	4.80	6.51	78.07
1925	2.46	4.28	9.52	18.69	8.40	5.80	3.61	2.24	2.20	3.34	9.39	8.40	6.52	78.33
1926	5.31	3.45	4.24	15.17	15.91	11.00	5.87	3.90	2.94	4.35	16.69	9.84	8.23	98.67
1927	5.83	4.41	17.39	19.32	14.99	9.19	5.27	2.91	1.99	4.80	5.71	7.89	8.33	99.70
1928	5.85	4.03	7.26	33.19	30.09	9.66	7.75	6.27	7.26	22.63	16.07	9.28	13.29	159.34
1929	8.20	4.30	12.37	30.68	21.58	9.55	8.87	4.24	2.71	4.15	6.83	4.03	9.81	117.51
1930	5.09	5.40	6.61	18.20	15.69	19.83	18.85	4.82	3.23	2.87	3.00	3.25	8.91	106.84
1931	1.86	1.70	2.46	15.08	12.64	6.83	3.59	2.24	2.85	5.94	13.44	12.82	6.80	81.45
1932	11.36	8.43	6.70	19.36	12.91	5.29	3.05	2.20	2.60	5.31	10.87	10.37	8.19	98.45
1933	7.26	4.48	4.26	27.85	19.34	8.18	3.63	1.88	1.50	2.53	3.83	4.26	7.41	89.00
1934	5.11	3.88	4.21	22.79	21.18	7.17	2.91	1.70	2.08	3.56	15.84	16.20	8.88	106.43
1935	5.96	3.38	7.69	14.59	8.94	6.07	2.67	1.03	0.87	1.05	2.78	2.87	4.82	57.90
1936	1.77	1.75	7.46	13.18	15.04	4.37	1.84	1.12	1.43	2.46	3.14	3.72	4.78	57.28
1937	7.33	5.38	4.91	17.75	11.32	3.83	2.44	3.00	2.87	6.48	7.87	5.38	6.54	78.56
1938	3.88	9.73	14.14	22.70	10.73	5.13	2.40	1.88	2.13	2.02	3.38	5.11	6.90	83.23
1939	4.39	3.50	6.41	16.16	15.64	8.43	3.74	2.44	2.11	2.44	3.90	2.89	6.01	72.05
1940	2.44	1.99	2.76	9.77	11.20	9.16	4.03	3.23	3.47	3.07	6.54	7.28	5.41	64.94
1941	5.89	3.52	4.88	16.13	9.05	3.32	2.22	1.93	2.17	8.69	11.45	8.47	6.48	77.72
1942	5.74	3.54	13.29	15.98	10.11	6.61	2.62	1.93	2.24	4.37	9.59	13.87	7.51	89.89
1943	14.14	19.56	22.43	52.30	36.28	25.72	11.47	8.54	7.91	8.04	12.86	13.47	19.33	232.72
1944	8.85	11.72	14.39	20.79	22.63	9.88	6.92	6.77	6.39	10.22	9.32	10.53	11.53	138.41
1945	10.76	10.13	23.95	27.45	21.31	21.71	8.72	7.31	6.57	14.77	24.47	15.84	16.09	192.99
1946	17.32	14.79	38.47	19.00	12.23	13.42	11.43	9.01	5.76	5.78	8.78	10.62	13.90	166.61
1947	12.71	13.40	16.25	47.03	42.15	26.15	11.27	7.66	5.78	6.39	7.28	10.17	17.17	206.24
1948	9.32	9.46	30.14	33.25	17.79	7.04	7.57	6.57	4.32	4.35	7.57	8.94	12.20	146.32
1949	11.92	13.74	18.02	20.71	13.02	9.39	8.65	4.91	5.47	5.92	6.79	13.92	11.02	132.46
1950	16.69	12.48	20.46	36.17	20.19	8.94	7.62	8.11	9.90	9.55	10.89	16.27	14.77	177.27
1951	15.39	13.51	23.15	51.65	20.14	10.15	11.72	9.48	6.83	18.11	25.46	17.64	18.59	223.23
1952	22.41	16.78	21.18	47.91	19.92	9.75	12.01	7.26	6.36	6.36	6.81	13.04	15.79	189.79
1953	11.94	12.86	27.36	25.05	19.45	13.24	7.46	4.93	5.45	5.36	4.30	6.86	12.01	144.26
1954	8.54	13.38	18.04	25.99	17.34	17.84	5.49	6.23	9.50	25.19	13.49	10.89	14.31	171.92
1955	12.41	9.95	20.14	23.06	9.30	8.99	3.99	4.73	4.64	6.43	9.19	9.10	10.64	127.93
1956	8.36	7.26	14.12	24.85	21.09	9.90	9.50	4.82	7.22	4.68	6.97	10.31	10.76	129.08
1957	10.13	8.31	13.53	17.84	24.85	14.50	20.48	3.67	7.26	7.75	16.65	17.57	13.58	162.54
1958	7.10	8.65	12.97	12.37	6.77	4.19	5.13	2.96	5.98	11.88	8.40	6.95	7.77	93.33
1959	7.10	7.60	14.03	38.65	25.32	6.66	4.06	7.15	9.21	11.88	17.05	14.57	13.61	163.28
1960	13.89	11.02	11.52	46.21	43.65	12.73	8.34	5.62	5.94	5.22	9.30	9.32	15.22	182.76
1961	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1962	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1963	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1964	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1965	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1966	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1967	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1968	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1969	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1970	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1971	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MEAN	8.28	7.52	13.33	22.18	16.16	9.28	6.52	4.38	4.68	6.86	9.27	9.83	9.86	118.30
S.D.	4.09	4.08	6.90	9.98	7.80	5.13	4.42	2.39	2.62	4.45	4.86	4.28	3.47	41.64
MAX.	22.41	19.56	38.47	52.30	43.65	26.15	25.21	12.41	12.82	25.19	25.46	21.29	19.33	232.72
YEAR	1952	1943	1946	1943	1960	1947	1917	1973	1961	1954	1951	1966	1943	1943
MIN.	1.77	1.70	2.46	7.08	3.41	1.99	1.68	1.03	0.87	1.05	2.11	2.73	4.52	54.33
YEAR	1936	1931	1931	1990	1987	1977	1988	1935	1935	1935	1923	1989	1989	1989

LAKE ST. CLAIR RUNOFF (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1931	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1932	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1933	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1934	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1935	24.15	21.20	67.76	14.36	21.20	14.36	7.11	6.44	4.16	3.89	9.26	11.67	17.17	205.56
1936	8.86	11.94	49.78	37.98	15.03	5.37	3.22	2.95	5.50	9.80	10.20	11.41	14.35	172.04
1937	52.74	53.27	20.53	87.49	33.82	14.76	12.35	9.53	4.83	5.50	7.92	8.19	25.65	310.93
1938	18.25	14.03	89.50	37.84	20.13	11.27	7.11	12.61	6.44	5.77	5.10	7.51	29.47	362.56
1939	13.69	52.60	89.77	11.64	13.02	12.61	5.77	3.88	4.43	4.83	4.83	5.50	26.60	322.58
1940	5.77	5.77	35.16	125.06	13.96	40.39	10.74	12.08	8.86	10.33	12.61	52.33	27.67	333.06
1941	33.28	13.82	34.08	42.40	8.45	5.90	4.56	5.23	2.68	4.96	7.25	8.86	14.29	171.47
1942	16.51	90.17	39.72	13.02	15.97	7.51	11.94	8.45	15.70	24.15	45.49	45.88	24.88	297.35
1943	81.32	116.21	44.82	146.80	48.58	22.14	12.08	10.33	9.12	15.03	7.51	45.31	45.31	545.21
1944	8.45	30.33	67.36	52.20	24.69	9.66	3.89	2.01	1.34	2.28	2.01	2.01	17.12	206.23
1945	2.28	4.70	86.15	46.70	96.35	53.68	11.00	11.41	9.93	35.16	10.33	9.12	31.63	376.81
1946	47.77	16.51	123.05	10.87	16.64	20.13	4.96	2.95	1.74	2.28	3.09	4.83	21.41	254.82
1947	16.24	6.17	86.82	195.65	82.39	47.23	15.30	7.11	12.88	6.84	7.11	17.31	41.78	501.05
1948	7.11	50.19	174.04	51.66	62.13	11.54	7.25	2.68	2.82	3.49	7.25	8.19	32.42	388.35
1949	24.96	93.80	56.63	36.23	14.22	3.76	5.23	3.62	4.03	5.90	3.49	31.94	23.20	283.81
1950	69.91	42.27	130.83	114.46	15.03	12.88	9.39	4.83	7.78	11.41	31.80	70.85	43.48	521.44
1951	57.84	82.12	106.68	106.14	15.97	10.60	4.96	3.49	4.16	8.05	21.60	22.54	36.66	444.15
1952	91.11	63.61	103.73	80.24	23.35	5.90	6.17	3.49	3.49	3.22	5.90	10.74	33.35	400.95
1953	13.28	11.14	51.13	26.70	28.72	10.80	17.98	26.97	3.35	2.95	3.35	4.96	16.87	201.13
1954	5.50	91.78	74.74	38.24	13.96	8.19	3.49	2.55	2.42	33.28	14.36	26.30	25.81	314.81
1955	46.43	36.10	117.68	48.44	11.41	5.10	3.49	2.55	2.42	5.90	16.10	19.86	26.30	315.48
1956	7.78	12.88	129.22	73.80	147.47	15.37	12.61	18.52	23.21	8.45	8.45	31.27	41.07	489.63
1957	30.59	36.36	58.51	70.45	39.99	12.35	25.76	4.56	10.20	11.41	33.41	74.47	34.01	408.06
1958	18.79	12.61	52.06	23.48	7.11	6.84	6.58	3.49	6.58	4.29	9.66	8.72	13.38	160.21
1959	13.69	23.75	128.42	93.53	30.59	13.96	5.50	7.25	6.44	21.47	38.65	61.73	37.18	444.98
1960	39.32	33.28	43.34	170.82	50.72	32.88	7.25	5.23	3.76	4.83	6.17	4.83	33.32	402.43
1961	3.49	21.20	37.17	48.17	30.86	11.67	8.05	10.06	7.78	4.96	14.63	19.59	18.08	217.63
1962	10.06	9.26	121.04	35.96	15.30	14.36	3.62	4.83	4.03	6.44	14.36	14.89	21.32	254.15
1963	6.84	4.16	89.24	36.63	24.42	8.19	3.62	2.95	2.82	2.68	3.49	2.95	15.79	187.99
1964	10.06	11.54	38.78	36.50	18.52	4.83	4.56	14.22	7.11	2.95	2.82	17.58	14.15	169.47
1965	27.37	77.29	90.44	95.94	14.22	4.43	2.68	2.68	2.68	6.44	12.88	54.35	32.29	391.40
1966	21.47	38.11	68.03	38.65	23.08	17.71	3.49	4.29	3.76	4.56	19.46	86.55	27.42	329.16
1967	37.17	22.28	93.66	108.02	26.03	37.84	21.47	11.94	6.84	36.77	61.46	85.88	45.89	549.36
1968	33.28	123.05	88.56	34.22	23.75	34.75	17.31	9.39	9.53	13.28	20.40	45.62	37.44	453.14
1969	54.08	59.45	50.99	81.32	58.24	22.81	13.42	6.17	4.16	5.77	16.10	21.47	32.63	393.98
1970	9.39	18.38	51.39	76.76	24.02	10.60	9.80	4.96	5.50	8.19	22.14	40.66	23.47	281.79
1971	17.58	53.68	107.75	55.02	11.00	5.90	3.89	4.29	4.16	4.56	5.77	20.53	24.35	294.13
1972	23.35	10.87	90.44	86.42	23.48	9.12	12.08	11.14	6.17	13.69	42.00	59.58	32.44	388.34
1973	87.49	29.25	161.96	46.03	30.59	24.15	10.06	10.47	4.43	6.17	27.84	50.99	41.03	489.23
1974	98.63	56.49	112.85	72.73	75.41	14.09	8.86	6.44	5.10	6.44	11.67	17.58	40.55	486.29
1975	61.73	57.97	95.01	96.08	20.53	22.95	7.78	16.51	32.47	11.41	14.63	44.55	39.37	481.62
1976	24.02	136.74	164.92	53.94	54.35	11.94	32.47	18.92	9.53	12.35	17.18	11.94	45.44	548.30
1977	6.58	13.42	159.01	61.86	13.69	6.58	8.19	5.90	27.37	34.89	35.16	100.91	39.75	473.56
1978	16.64	13.42	108.41	132.58	28.98	10.33	5.23	4.56	9.26	10.74	10.60	17.98	30.59	366.73
1979	25.36	10.06	108.69	131.91	29.25	11.54	10.47	7.25	5.10	8.86	34.08	67.76	37.86	450.33
1980	33.28	10.87	86.28	81.72	25.36	17.85	16.64	16.51	13.96	13.96	9.53	24.69	29.30	350.65
1981	7.51	117.82	39.72	50.86	36.10	13.42	8.19	9.12	48.58	87.22	36.23	28.72	39.69	483.49
1982	33.55	9.93	168.81	114.86	15.57	25.23	10.47	8.45	12.21	13.02	56.76	97.29	47.43	566.15
1983	28.31	42.14	34.08	61.73	76.22	26.57	14.89	29.52	10.33	14.22	38.24	75.41	37.64	451.66
1984	10.74	116.88	98.90	49.78	31.27	45.36	17.18	10.47	26.03	12.75	34.75	55.96	42.14	510.07
1985	58.91	100.10	102.11	21.05	20.13	13.96	12.21	9.12	11.94	26.70	33.14	98.09	47.23	60.33
1986	42.00	33.28	144.39	41.73	22.41	30.46	13.96	11.00	72.46	94.07	26.70	59.45	49.53	591.91
1987	31.94	14.22	74.21	63.87	12.35	11.94	10.06	9.12	6.64	11.41	30.73	81.99	30.27	361.50
1988	19.59	27.51	67.09	36.50	14.89	5.37	6.17	7.11	6.84	17.98	44.42	25.76	23.25	279.23
1989	18.92	8.45	26.97	26.30	10.33	55.29	13.69	8.72	19.86	9.12	24.15	10.33	19.30	232.13
1990	40.26	42.27	77.69	41.33	31.94	14.09	6.44	8.66	11.54	35.16	42.94	38.38	32.55	390.90
MEAN	28.52	41.70	90.16	67.56	32.18	17.72	9.74	8.52	10.32	14.01	20.50	33.83	31.18	374.77
S.D.	22.66	36.88	42.05	38.29	29.63	13.31	6.09	5.74	12.17	17.52	17.81	27.45	10.53	126.55
MAX. YEAR	98.63	141.03	211.21	195.65	147.47	55.29	32.47	29.52	72.46	94.07	98.09	100.91	60.33	727.81
MIN. YEAR	2.28	4.16	20.53	10.87	7.11	3.76	2.68	2.01	1.34	2.28	2.01	2.01	13.38	160.21
1944	1944	1944	1944	1944	1944	1944	1944	1944	1944	1944	1944	1944	1944	1958

LAKE ERIE RUNOFF (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1911	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1912	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1913	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1914	3.17	4.92	13.10	9.58	5.72	2.01	1.51	1.04	1.77	2.22	2.84	4.13	49.58	63.89
1915	2.55	6.22	11.70	9.41	3.14	2.79	2.60	7.12	7.21	5.13	5.01	3.85	4.13	49.58
1916	18.37	6.45	10.78	19.55	10.78	9.95	2.44	1.51	1.04	1.77	1.99	2.44	5.55	66.73
1917	2.77	2.10	18.39	13.12	6.15	6.01	13.24	1.58	1.21	1.99	2.32	1.99	7.25	87.07
1918	1.06	15.75	41.16	8.75	3.17	1.61	0.83	0.69	2.79	2.53	3.69	9.27	7.58	90.87
1919	3.33	2.10	19.77	12.46	12.39	2.79	1.42	1.28	1.35	1.70	3.05	3.38	5.45	65.02
1920	1.54	1.39	21.61	9.93	3.12	2.06	1.96	1.35	1.09	1.54	4.16	8.13	4.85	57.88
1921	6.36	2.67	19.17	10.69	5.53	3.00	3.29	1.82	1.87	1.32	7.12	6.71	5.82	69.55
1922	3.59	5.53	14.85	23.90	9.65	2.10	1.28	0.64	1.18	0.61	0.76	1.87	5.48	65.96
1923	10.76	6.10	18.50	8.98	8.94	1.30	0.90	0.54	0.78	0.33	1.04	15.53	6.14	73.22
1924	11.92	6.57	17.26	8.94	6.03	10.36	0.40	0.28	3.26	1.32	0.31	3.22	6.42	77.01
1925	1.06	12.27	13.81	1.49	0.99	0.33	0.92	0.43	1.80	3.85	10.21	3.66	4.14	50.38
1926	6.10	12.55	13.41	16.74	1.44	1.32	0.61	2.44	14.54	14.14	7.76	4.37	7.89	95.42
1927	9.79	14.85	17.43	8.32	8.11	3.43	0.64	0.73	0.35	0.54	4.71	22.25	7.57	91.15
1928	9.24	12.84	7.38	8.28	2.27	7.21	3.38	0.71	0.28	0.45	1.82	3.33	4.73	57.19
1929	13.55	6.83	16.24	17.47	11.35	1.66	4.99	1.04	0.47	3.26	7.83	11.66	8.05	96.35
1930	31.49	10.90	10.43	8.68	1.58	1.04	0.35	0.21	0.28	0.35	0.40	1.32	5.57	67.03
1931	2.01	2.32	4.02	6.71	2.60	1.92	0.83	0.38	0.69	0.66	1.25	5.98	2.45	29.37
1932	18.09	6.24	5.39	5.60	4.42	0.97	1.09	0.31	0.59	0.71	3.59	10.05	4.77	57.05
1933	9.17	4.73	16.50	12.48	14.68	0.73	0.50	0.35	0.83	1.04	1.21	2.08	5.38	64.30
1934	3.24	0.64	7.45	9.58	0.73	0.43	0.33	0.59	0.47	0.31	1.09	1.35	2.19	26.21
1935	4.68	4.37	8.04	1.92	8.02	1.02	1.75	2.91	0.38	0.61	1.37	4.71	3.33	39.78
1936	1.54	2.22	8.84	4.85	2.27	0.95	0.47	0.24	0.66	1.54	1.84	1.66	2.26	27.08
1937	5.23	4.66	2.70	9.69	7.38	5.84	3.69	3.03	1.04	1.28	1.37	1.77	3.96	47.68
1938	3.38	12.06	11.66	9.58	3.88	2.72	1.09	1.63	1.32	0.59	1.63	2.29	4.26	51.83
1939	3.24	14.90	19.06	12.06	1.56	2.53	1.09	0.59	0.21	0.52	0.54	0.83	4.69	57.13
1940	1.25	4.35	12.01	16.50	3.48	5.53	1.49	0.69	0.76	0.69	1.68	7.52	4.65	55.95
1941	5.93	3.26	5.01	5.60	1.25	2.39	0.76	0.45	0.35	0.95	1.39	2.22	2.46	29.56
1942	2.44	11.02	18.11	13.50	3.52	3.14	1.61	2.55	1.25	1.63	6.67	10.07	6.26	75.51
1943	9.10	9.91	13.52	6.22	25.94	8.68	7.90	1.92	1.63	1.06	2.22	1.23	7.45	89.33
1944	1.51	4.78	13.78	18.75	6.93	3.38	0.61	0.45	0.45	0.50	0.80	0.99	4.39	52.93
1945	1.04	7.52	16.98	9.86	12.65	6.76	2.03	0.95	1.39	7.73	3.50	4.82	6.27	75.23
1946	7.78	5.25	11.96	1.42	5.23	9.74	1.35	0.45	0.31	0.64	1.39	2.84	4.03	48.36
1947	10.45	4.75	9.22	23.29	16.27	15.44	2.13	1.23	2.15	1.09	2.20	4.68	7.73	92.90
1948	5.63	10.12	23.88	10.12	9.86	2.08	1.80	1.44	0.80	1.09	3.33	5.77	6.33	75.92
1949	15.49	12.89	8.84	7.42	5.66	2.65	1.56	0.97	1.02	1.49	1.04	6.27	5.40	65.20
1950	28.30	17.05	20.78	18.13	5.65	4.00	2.08	1.13	3.50	4.04	8.49	15.75	10.71	128.90
1951	14.92	17.47	17.69	14.07	7.71	4.00	3.33	1.02	0.90	1.35	5.60	9.62	8.09	97.68
1952	25.70	10.78	16.72	13.10	6.62	1.66	1.66	0.80	0.71	1.28	2.93	6.86	6.86	82.19
1953	5.56	4.00	10.19	5.39	8.98	2.62	1.39	1.11	0.64	0.57	0.76	1.70	3.59	42.91
1954	3.38	6.55	13.59	15.68	4.09	2.46	1.02	1.54	0.76	10.83	3.85	7.45	5.93	71.20
1955	8.75	8.75	20.26	8.68	2.32	1.39	1.23	1.06	0.52	2.10	6.79	4.35	5.50	66.20
1956	1.89	12.93	19.48	12.32	17.57	4.99	2.53	4.49	3.14	1.42	1.66	5.18	7.29	87.60
1957	7.02	7.40	6.71	23.43	6.55	5.44	5.56	1.40	1.66	2.08	4.11	13.31	7.00	84.31
1958	4.18	4.11	8.32	6.67	3.76	5.25	6.31	6.15	3.74	1.51	5.63	3.10	4.90	58.73
1959	13.50	18.63	15.98	14.61	8.11	2.51	1.49	1.11	1.11	4.30	6.67	10.85	8.18	98.87
1960	12.25	10.90	8.18	13.78	6.83	5.79	1.99	1.35	0.90	0.90	1.13	0.85	5.37	64.85
1961	1.02	0.64	2.70	1.42	0.73	0.33	0.33	0.21	0.21	0.31	0.31	0.83	2.19	26.21
1962	7.23	6.27	16.17	5.63	2.36	1.61	0.92	0.92	1.49	1.13	2.84	3.19	5.29	63.89
1963	2.06	1.32	20.64	6.50	2.67	1.96	1.09	1.02	0.61	1.44	3.26	2.48	4.10	49.19
1964	3.36	1.58	14.90	15.51	4.18	1.80	0.92	1.49	0.78	0.76	0.97	3.24	4.13	40.94
1965	7.66	10.17	15.16	13.00	3.71	1.75	0.85	0.83	0.95	2.53	3.48	7.31	5.59	67.40
1966	5.41	7.49	9.15	6.76	7.57	1.92	3.17	1.18	0.80	0.80	5.79	17.84	5.64	67.68
1967	4.56	7.78	15.94	11.11	10.17	2.88	2.60	1.75	1.68	3.43	6.86	14.54	6.95	83.30
1968	8.94	12.60	11.82	6.67	8.49	5.79	3.36	2.65	1.70	1.96	5.89	11.35	6.76	81.22
1969	16.15	9.03	6.48	17.61	13.03	4.26	8.11	1.42	1.23	1.56	6.08	4.56	7.45	89.52
1970	4.23	8.39	11.16	13.78	7.21	3.29	2.70	1.49	2.10	3.38	6.50	7.73	5.97	71.96
1971	3.36	15.13	12.29	6.67	5.34	3.24	1.32	0.90	1.18	1.23	1.68	7.28	4.90	59.62
1972	5.91	3.29	16.31	16.93	6.31	6.03	4.26	2.06	5.70	5.15	15.68	14.09	8.48	101.72
1973	8.72	6.03	24.05	10.92	8.25	9.17	4.09	2.29	1.02	1.58	4.85	9.10	7.53	90.07
1974	17.45	9.22	18.82	13.24	10.31	3.14	2.08	1.35	1.25	1.30	5.25	8.70	7.68	92.11
1975	12.20	14.00	12.98	8.28	6.17	6.64	1.87	3.50	5.39	2.67	3.00	9.93	7.18	86.63
1976	8.87	26.15	19.13	6.69	5.77	2.58	3.71	1.94	2.06	2.81	2.67	2.44	7.00	84.82
1977	1.28	5.96	19.81	13.24	4.33	1.54	3.69	4.00	7.59	4.66	6.17	21.52	7.84	93.79
1978	5.91	2.86	28.99	18.42	6.71	2.79	2.13	1.18	1.25	1.75	1.63	4.11	6.51	77.73
1979	6.62	4.89	21.14	17.69	6.93	2.74	2.96	4.09	4.40	3.36	7.14	13.55	7.98	95.51
1980	6.22	3.88	18.13	13.86	4.78	7.68	3.64	5.23	2.65	2.70	2.51	4.63	6.34	75.91
1981	2.58	18.13	5.49	10.07	7.57	15.18	3.43	2.46	8.61	8.39	5.65	7.28	7.80	94.84
1982	8.89	10.71	31.52	13.78	5.11	5.77	3.62	1.37	1.61	1.51	9.39	16.48	9.15	109.76
1983	4.71	5.84	7.23	13.33	13.69	3.74	3.69	2.51	1.61	2.79	11.35	14.42	7.08	84.91
1984	3.33	17.17	18.39	15.32	11.23	4.68	2.15	1.75	1.99	1.92	5.23	9.13	7.65	92.29
1985	7.92	16.53	19.62	13.41	2.88	3.20	2.06	2.03	3.19	18.09	10.64	8.38	101.41	
1986	7.45	12.60	17.19	6.57	5.08	8.20	6.03	2.48	5.46	10.95	6.27	11.07	8.26	99.35
1987	4.78	3.95	8.96	11.02	3.22	3.88	5.44	2.27	2.58	2.88	3.36	10.78	5.27	63.12
1988	4.92	9.06	9.29	7.35	2.72	0.85	1.04	1.28	1.35	2.67	7.26	4.78	4.36	52.57
1989	9.36	4.35	6.19	11.14	12.44	14.30	2.81	1.25	2.20	2.15	6.36	2.96	6.28	75.51
1990	12.18	17.78	13.52	13.50	11.42	4.04	2.20	2.32	4.23	9.46	5.37	18.56	9.51	114.58
MEAN	7.49	8.49	14.58	11.51	6.76	4.08	2.49	1.64	1.97	2.43	4.16	6.96	6.04	72.56
S.D.	6.14	5.20	6.47	4.97	4.36	3.25	2.08	1.30	2.25	2.63	3.34	5.20	1.77	21.28
MAX.	31.49	26.15	41.16	23.90	25.94	15.44	13.24	7.12	14.54	14.14	18.09	22.25	10.71	128.90
YEAR	1930	1976	1918	1922	1943	1947	1917	1915	1926	1926	1985	1927	1950	1950
MIN.	1.02	0.64	2.70	1.42	0.73	0.33	0.33	0.21	0.21	0.31	0.31	0.83	2.19	26.21
YEAR	1961	1934	1937	1946	1934	1925	1934	1930	1939	1934	1924	1939	1934</	

LAKE ONTARIO RUNOFF (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1911	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1912	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1913	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1914	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1915	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1916	11.22	18.16	9.97	54.37	23.88	35.77	11.18	2.56	1.28	4.31	5.56	9.67	15.55	187.93
1917	8.19	5.56	30.35	39.68	16.30	15.93	6.13	4.01	4.31	10.54	12.16	6.50	13.32	159.66
1918	3.97	12.19	33.85	43.45	21.96	12.53	5.73	3.87	6.43	17.82	22.43	25.03	17.44	209.26
1919	16.54	8.02	31.90	40.45	30.82	13.24	6.80	4.14	5.22	8.99	12.33	11.72	15.89	190.17
1920	3.67	3.50	34.39	22.06	12.16	4.58	7.88	4.28	3.81	6.20	11.52	26.41	11.76	140.46
1921	12.83	9.60	47.59	27.33	9.80	5.39	6.16	3.97	3.44	6.16	16.67	13.64	13.17	157.55
1922	7.41	11.45	31.49	47.33	13.10	16.77	12.06	6.74	4.48	4.51	5.19	5.09	13.77	165.62
1923	8.05	5.46	24.12	37.15	20.28	10.04	4.51	3.33	3.74	4.88	6.67	17.04	12.14	145.27
1924	21.63	8.05	18.39	44.53	33.04	9.26	5.83	6.27	6.64	14.85	8.15	12.09	15.75	188.73
1925	5.52	30.01	34.90	27.22	14.69	7.58	7.31	6.47	8.19	15.97	24.02	17.72	16.52	199.60
1926	11.65	8.19	18.49	52.04	28.23	11.65	6.47	6.57	7.31	15.53	29.20	14.59	17.49	209.92
1927	12.36	13.31	38.00	19.03	21.89	8.99	6.77	5.02	4.95	10.51	31.66	42.24	17.95	214.73
1928	25.30	16.00	28.87	45.47	20.18	14.62	9.23	9.33	6.97	12.23	15.33	19.60	18.59	223.13
1929	23.48	9.36	40.59	41.33	33.35	9.30	8.08	7.01	5.73	10.14	12.09	13.68	17.92	214.14
1930	38.00	18.49	32.40	35.30	16.81	10.75	7.24	4.85	4.55	4.82	4.38	5.52	15.25	183.11
1931	4.28	4.68	14.18	29.00	20.88	8.79	6.87	4.75	6.16	6.91	11.82	16.40	11.25	134.72
1932	28.70	20.31	14.48	49.92	20.95	6.70	8.93	6.03	4.88	15.16	19.77	14.42	17.48	210.25
1933	17.21	9.77	19.44	44.53	18.46	7.85	4.31	4.11	3.77	4.48	5.39	10.42	12.47	149.76
1934	13.64	5.73	17.65	31.97	9.33	5.02	3.73	2.63	2.93	4.01	6.47	8.79	9.25	110.94
1935	16.01	10.00	22.40	21.56	20.14	11.28	15.83	7.48	5.46	5.52	9.60	11.99	13.19	157.87
1936	10.17	8.79	50.56	39.48	16.57	6.06	3.64	3.00	4.35	8.83	12.53	11.59	14.65	175.57
1937	29.64	17.25	12.80	34.43	24.89	11.59	6.64	5.93	4.45	6.97	14.75	13.78	15.23	183.12
1938	12.16	25.60	33.41	23.11	11.22	6.23	5.56	5.46	9.70	7.28	8.15	11.72	13.22	159.60
1939	10.51	12.60	27.15	36.21	14.38	6.27	4.21	3.44	3.13	3.97	5.22	7.98	11.23	135.07
1940	6.37	6.20	8.79	55.34	22.97	12.33	8.52	4.31	3.77	4.04	7.58	15.29	12.92	155.51
1941	17.35	10.58	12.29	31.39	6.70	3.87	3.67	3.50	5.69	5.42	8.45	10.98	9.96	119.89
1942	10.21	7.51	36.35	32.13	12.60	8.12	5.19	4.92	6.50	8.32	15.43	14.72	13.53	162.00
1943	24.79	19.71	33.28	29.81	48.44	18.19	6.91	6.33	5.32	6.40	13.88	9.40	18.55	222.46
1944	8.76	9.43	18.36	32.47	23.07	9.60	6.20	4.31	4.04	4.55	4.82	8.32	11.15	133.93
1945	10.27	12.43	47.33	25.20	28.63	14.75	10.24	5.49	9.40	26.64	21.15	20.85	19.44	232.38
1946	21.42	12.73	30.32	10.91	12.63	11.82	6.40	4.75	3.81	9.50	13.57	14.82	12.75	152.68
1947	23.01	19.67	24.29	50.96	36.21	32.81	13.74	8.35	5.19	3.87	6.74	10.11	19.53	234.95
1948	6.97	11.76	38.13	26.48	20.82	9.77	6.27	5.39	3.71	4.58	8.99	8.99	12.66	151.86
1949	20.41	18.46	22.10	22.77	10.98	4.28	3.30	3.40	5.05	5.39	6.53	16.57	11.57	139.24
1950	22.57	12.83	23.48	39.38	12.56	8.35	4.99	3.84	6.06	7.17	15.46	22.94	14.96	179.63
1951	22.70	21.39	32.27	41.87	13.88	7.55	10.21	4.95	5.12	5.42	12.26	15.26	16.02	192.88
1952	22.23	18.36	26.48	31.53	14.69	7.95	5.83	3.74	3.87	5.86	6.43	15.49	13.52	162.46
1953	13.44	13.84	24.69	18.22	22.77	7.04	4.68	5.73	4.75	4.28	4.95	11.79	11.36	136.18
1954	7.85	22.67	26.27	35.94	22.67	8.59	4.41	3.57	5.73	8.86	11.62	16.88	14.51	175.06
1955	16.20	9.20	38.37	34.19	8.72	6.53	3.50	3.07	2.80	13.17	16.00	12.77	13.73	164.52
1956	7.85	11.08	31.16	43.76	29.95	11.62	5.56	4.88	8.32	5.32	6.37	16.03	15.15	181.90
1957	16.61	12.73	21.29	21.32	14.62	7.38	7.07	4.45	4.14	3.47	6.23	16.54	11.33	135.85
1958	9.26	7.11	22.27	31.02	14.79	11.65	6.74	5.09	9.16	9.16	11.52	11.22	12.42	148.99
1959	15.70	15.56	25.03	44.29	12.46	4.75	4.65	3.60	3.50	8.86	14.48	24.72	15.03	180.60
1960	16.67	19.30	18.33	54.47	19.60	12.16	4.65	3.23	2.69	3.44	5.22	4.45	13.35	161.21
1961	17.35	10.58	12.29	31.39	6.70	3.87	3.67	3.50	5.69	5.42	8.45	10.98	9.96	119.89
1962	10.21	7.51	36.35	32.13	12.60	8.12	5.19	4.92	6.50	8.32	15.43	14.72	13.53	162.00
1963	24.79	19.71	33.28	29.81	48.44	18.19	6.91	6.33	5.32	6.40	13.88	9.40	18.55	222.46
1964	8.76	9.43	18.36	32.47	23.07	9.60	6.20	4.31	4.04	4.55	4.82	8.32	11.15	133.93
1965	10.27	12.43	47.33	25.20	28.63	14.75	10.24	5.49	9.40	26.64	21.15	20.85	19.44	232.38
1966	21.42	12.73	30.32	10.91	12.63	11.82	6.40	4.75	3.81	9.50	13.57	14.82	12.75	152.68
1967	23.01	19.67	24.29	50.96	36.21	32.81	13.74	8.35	5.19	3.87	6.74	10.11	19.53	234.95
1968	6.97	11.76	38.13	26.48	20.82	9.77	6.27	5.39	3.71	4.58	8.99	8.99	12.66	151.86
1969	20.41	18.46	22.10	22.77	10.98	4.28	3.30	3.40	5.05	5.39	6.53	16.57	11.57	139.24
1970	22.57	12.83	23.48	39.38	12.56	8.35	4.99	3.84	6.06	7.17	15.46	22.94	14.96	179.63
1971	22.70	21.39	32.27	41.87	13.88	7.55	10.21	4.95	5.12	5.42	12.26	15.26	16.02	192.88
1972	22.23	18.36	26.48	31.53	14.69	7.95	5.83	3.74	3.87	5.86	6.43	15.49	13.52	162.46
1973	13.44	13.84	24.69	18.22	22.77	7.04	4.68	5.73	4.75	4.28	4.95	11.79	11.36	136.18
1974	7.85	22.67	26.27	35.94	22.67	8.59	4.41	3.57	5.73	8.86	11.62	16.88	14.51	175.06
1975	16.20	9.20	38.37	34.19	8.72	6.53	3.50	3.07	2.80	13.17	16.00	12.77	13.73	164.52
1976	7.85	11.08	31.16	43.76	29.95	11.62	5.56	4.88	8.32	5.32	6.37	16.03	15.15	181.90
1977	16.61	12.73	21.29	21.32	14.62	7.38	7.07	4.45	4.14	3.47	6.23	16.54	11.33	135.85
1978	9.26	7.11	22.27	31.02	14.79	11.65	6.74	5.09	9.16	9.16	11.52	11.22	12.42	148.99
1979	15.70	15.56	25.03	44.29	12.46	4.75	4.65	3.60	3.50	8.86	14.48	24.72	15.03	180.60
1980	16.67	19.30	18.33	54.47	19.60	12.16	4.65	3.23	2.69	3.44	5.22	4.45	13.35	161.21
1981	17.35	10.58	12.29	31.39	6.70	3.87	3.67	3.50	5.69	5.42	8.45	10.98	9.96	119.89
1982	10.21	7.51	36.35	32.13	12.60	8.12	5.19	4.92	6.50	8.32	15.43	14.72	13.53	162.00
1983	24.79	19.71	33.28	29.81	48.44	18.19	6.91	6.33	5.32	6.40	13.88	9.40	18.55	222.46
1984	8.76	9.43	18.36	32.47	23.07	9.60	6.20	4.31	4.04	4.55	4.82	8.32	11.15	133.93
1985	10.27	12.43	47.33	25.20	28.63	14.75	10.24	5.49	9.40	26.64	21.15	20.85	19.44	232.38
1986	21.42	12.73	30.32	10.91	12.63	11.82	6.40	4.75	3.81	9.50	13.57	14.82	12.75	152.68
1987	23.01	19.67	24.29	50.96	36.21	32.81	13.74	8.35	5.19	3.87	6.74	10.11	19.53	234.95
1988	6.97	11.76	38.13	26.48	20.82	9.77	6.27	5.39	3.71	4.58	8.99	8.99	12.66	151.86
1989	20.41	18.46	22.10	22.77	10.98	4.28	3.30	3.40	5.05	5.39	6.53	16.57	11.57	139.24
1990	22.57	12.83	23.48	39.38	12.56	8.35	4.99	3.84	6.06	7.17	15.46	22.94	14.96	179.63
1991	22.70	21.39	32.27	41.87	13.88	7.55	10.21	4.95	5.12	5.42	12.26	15.26	16.02	192.88
1992	22.23	18.36	26.48	31.53	14.69	7.95	5.83	3.74	3.87	5.86	6.43	15.49	13.52	162.46
1993	13.44	13.84	24.69	18.22	22.77	7.04	4.68	5.73	4.75	4.28	4.95	11.79	11.36	136.18
1994	7.85	22.67	26.27	35.94										

APPENDIX D - Lake Evaporation

LAKE SUPERIOR EVAPORATION (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1941	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1942	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1943	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1944	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1946	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1949	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1950	13.72	8.64	6.29	4.51	0.25	-0.57	-0.60	1.72	3.14	4.82	11.66	11.85	5.43	65.43
1951	9.47	5.69	6.92	1.51	-0.14	-0.47	-0.55	1.37	5.60	6.07	11.46	11.07	4.82	57.90
1952	9.54	6.17	5.72	1.52	-0.06	-0.58	-0.13	1.60	4.95	11.83	8.38	9.31	4.86	58.25
1953	10.35	7.22	4.93	2.84	0.39	-0.41	0.64	1.51	7.59	5.11	8.26	12.34	5.05	60.77
1954	12.78	5.31	8.52	2.86	1.12	-0.43	-0.11	2.24	4.83	7.18	7.13	9.34	5.08	60.77
1955	10.70	7.80	8.79	0.48	0.13	-0.43	-0.16	2.20	7.16	5.71	12.95	13.04	5.69	68.37
1956	7.79	7.83	6.78	3.03	0.96	-0.43	-0.14	1.41	5.73	5.03	10.69	11.58	5.01	60.26
1957	11.78	4.95	3.29	2.69	0.62	-0.40	-0.37	2.21	5.39	6.04	9.84	10.51	4.71	56.55
1958	7.70	8.50	3.11	2.28	1.03	0.06	0.39	3.77	4.51	5.94	10.45	12.95	5.04	60.69
1959	11.29	7.06	4.83	1.94	0.09	-0.39	-0.22	0.74	5.29	8.91	12.89	9.53	5.15	61.96
1960	9.12	7.48	6.97	1.88	0.48	-0.31	-0.20	0.93	5.16	6.58	9.46	12.65	5.01	60.20
1961	9.51	5.40	4.90	2.32	0.75	-0.26	-0.12	1.80	6.35	6.71	8.78	11.82	4.83	57.96
1962	12.88	7.15	2.67	2.48	0.04	-0.24	0.20	1.69	6.01	6.13	7.62	12.21	4.90	58.84
1963	11.37	5.88	2.35	1.34	0.49	-0.40	-0.22	2.58	4.81	3.34	8.97	13.42	4.49	53.93
1964	9.41	7.20	7.84	2.18	-0.07	-0.21	0.26	3.88	5.65	6.91	8.77	11.80	5.30	63.62
1965	11.35	5.77	3.17	1.04	0.00	-0.20	-0.10	1.98	5.26	6.38	9.98	9.06	4.51	54.13
1966	11.35	2.74	2.96	1.74	1.53	-0.35	-0.29	1.11	6.32	8.28	11.29	11.35	4.85	58.03
1967	9.82	3.14	1.15	1.38	1.00	-0.44	-0.44	0.87	4.67	7.50	9.57	10.80	4.10	49.02
1968	8.64	4.82	1.71	1.05	0.22	-0.37	-0.47	0.85	2.11	6.15	10.62	12.11	3.96	47.44
1969	9.14	3.88	4.25	0.89	0.44	-0.15	-0.32	0.31	5.38	7.78	8.72	9.18	4.13	49.50
1970	9.29	5.30	3.13	1.70	0.48	-0.27	-0.36	1.70	5.06	4.97	9.69	10.65	4.27	51.34
1971	11.61	3.43	2.91	1.69	0.40	-0.23	-0.28	2.26	3.90	4.98	9.71	10.73	4.32	51.87
1972	11.97	4.92	2.75	1.61	0.14	-0.07	-0.20	1.06	6.70	8.79	7.16	10.88	4.65	55.71
1973	7.55	5.78	2.41	2.70	0.73	-0.29	-0.16	0.68	6.72	5.57	10.53	10.47	4.37	52.69
1974	9.08	5.98	6.19	1.93	0.73	-0.28	-0.32	1.68	5.80	6.15	8.03	8.86	4.48	53.83
1975	9.63	6.22	6.98	3.50	-0.09	-0.38	-0.28	2.18	5.83	6.31	8.11	11.01	4.91	59.02
1976	10.75	5.46	5.34	1.30	0.95	-0.26	-0.16	3.40	7.74	8.75	12.51	12.85	5.75	68.95
1977	7.05	1.69	1.40	1.12	0.15	-0.15	-0.13	2.68	3.11	6.72	7.60	11.37	3.57	42.61
1978	10.50	5.41	3.77	2.43	0.17	-0.07	-0.10	1.68	4.77	7.19	10.22	11.97	4.85	58.14
1979	9.07	3.45	1.80	1.29	0.23	-0.14	-0.27	1.14	3.92	6.59	8.84	9.02	3.75	44.94
1980	8.71	6.37	5.45	1.38	0.32	-0.02	0.02	1.40	7.08	9.36	7.39	11.96	4.95	59.42
1981	7.80	4.58	4.21	2.06	0.66	-0.27	0.28	1.75	8.06	7.73	7.76	9.54	4.51	54.16
1982	12.67	3.73	2.86	2.65	-0.05	0.00	-0.30	2.37	3.96	5.04	9.10	9.60	4.31	51.63
1983	8.47	5.18	5.49	2.87	1.19	-0.15	-0.10	1.25	6.54	7.66	10.53	14.65	5.30	63.58
1984	9.34	4.04	5.92	1.11	0.54	-0.33	-0.19	1.34	6.54	5.95	9.47	12.03	4.65	55.76
1985	10.55	4.22	3.68	2.22	0.01	-0.05	0.01	2.16	5.71	6.47	10.40	13.06	4.88	58.44
1986	8.73	3.92	2.84	1.11	0.21	-0.08	-0.21	2.94	4.52	6.35	10.67	8.68	4.14	49.88
1987	7.71	5.07	4.54	1.36	0.44	0.15	1.02	5.25	4.71	10.27	8.61	9.01	4.86	58.14
1988	11.29	8.74	6.07	1.95	0.30	0.11	0.32	3.11	5.91	9.35	8.17	12.11	5.62	67.43
1989	9.01	8.97	4.89	2.22	0.25	-0.20	-0.17	1.66	5.93	6.93	11.09	11.02	5.11	61.60
1990	6.94	6.66	4.61	2.57	0.44	-0.27	-0.16	1.32	5.73	7.13	8.91	11.07	4.57	54.95
MEAN	9.90	5.65	4.49	1.97	0.43	-0.25	-0.09	1.90	5.47	6.85	9.56	11.13	4.75	57.01
S.D.	1.71	1.73	1.96	0.80	0.40	0.17	0.32	0.98	1.27	1.64	1.53	1.46	0.50	6.00
MAX. YEAR	13.72	8.97	8.79	4.51	1.53	0.15	1.02	5.25	8.06	11.83	12.95	14.65	5.75	68.95
MIN. YEAR	6.94	1.69	1.15	0.48	-0.14	-0.58	-0.60	0.31	2.11	3.34	7.13	8.68	3.57	42.61
1991	9.29	5.30	3.13	1.70	0.48	-0.27	-0.36	1.70	5.06	4.97	9.69	10.65	4.27	51.34

LAKE MICHIGAN EVAPORATION (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1941	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1942	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1943	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1944	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1946	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1949	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1950	9.45	5.68	4.66	2.39	-0.15	0.11	1.87	7.46	6.11	6.32	14.43	11.67	5.84	70.00
1951	6.98	3.51	3.62	0.27	-0.34	-0.36	0.72	5.67	10.15	7.08	11.92	9.41	4.89	58.63
1952	6.12	3.56	3.50	0.81	-0.01	0.25	3.98	6.23	9.84	14.57	8.54	7.68	5.44	65.07
1953	7.55	5.20	3.00	1.47	0.24	0.69	4.79	6.18	12.39	7.46	9.90	12.48	5.95	71.35
1954	10.07	3.34	5.80	1.17	1.10	0.32	3.65	7.82	7.71	9.19	8.75	10.52	5.82	69.44
1955	10.41	5.39	4.96	-0.06	0.07	1.29	2.54	8.76	11.21	8.93	14.57	12.40	6.72	80.47
1956	6.50	4.96	4.10	1.48	-0.02	0.41	3.00	5.08	10.10	6.11	12.97	9.61	5.35	64.30
1957	10.87	3.54	2.96	1.32	-0.09	-0.19	2.09	7.90	9.43	9.55	11.70	10.18	5.79	69.26
1958	7.50	6.58	1.45	0.93	0.40	1.43	2.61	7.76	7.35	7.78	11.68	13.13	5.71	68.60
1959	9.24	4.09	2.43	0.23	-0.54	-0.38	0.97	2.57	10.41	10.01	12.60	6.52	4.84	58.15
1960	7.27	5.90	5.31	0.33	-0.27	-0.11	2.66	5.16	8.94	9.26	10.38	13.78	5.73	68.61
1961	8.65	2.69	2.06	1.29	0.67	1.20	2.25	6.16	9.23	8.46	9.97	12.07	5.41	64.70
1962	10.84	4.53	1.64	0.79	-0.54	-0.30	2.85	4.92	10.28	7.92	7.53	11.93	5.21	62.39
1963	9.53	4.49	1.51	0.23	-0.17	-0.40	0.96	7.13	7.42	5.07	9.84	13.43	4.93	59.04
1964	7.25	5.40	4.50	0.98	-0.44	0.23	3.32	8.84	8.52	9.06	8.05	11.10	5.58	66.81
1965	9.49	5.55	3.68	0.40	-0.46	-0.13	2.66	6.33	6.65	8.57	8.98	7.45	4.94	59.17
1966	10.71	3.78	2.41	0.86	0.92	0.18	4.20	8.22	10.35	10.09	10.34	10.02	6.03	72.08
1967	7.67	6.67	2.66	0.68	0.37	-0.28	2.48	8.50	8.78	8.80	10.13	8.79	5.43	65.25
1968	7.70	7.09	2.02	0.35	-0.03	0.23	3.08	6.93	6.52	9.55	9.14	12.22	5.41	64.80
1969	8.28	4.33	4.53	0.31	-0.12	0.67	1.68	5.70	10.48	10.58	9.53	10.62	5.56	66.59
1970	8.74	4.96	2.89	0.58	-0.35	-0.19	1.51	6.28	8.79	7.05	10.86	10.98	5.18	62.10
1971	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MEAN	8.53	4.64	3.03	0.84	0.00	0.28	2.41	6.22	8.71	8.76	9.96	10.57	5.34	63.96
S.D.	1.72	1.25	1.17	0.53	0.41	0.67	1.24	1.69	1.74	1.91	1.88	1.84	0.56	6.75
MAX. YEAR	11.71	7.22	5.80	2.39	1.10	1.98	5.02	8.98	12.39	14.57	14.57	13.98	6.72	80.47
MIN. YEAR	4.00	2.36	0.90	-0.06	-0.54	-0.53	-0.14	2.57	5.10	5.07	6.79	6.52	4.11	49.30
1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LAKE HURON EVAPORATION (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1951	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1953	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1954	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1955	9.96	4.87	5.13	0.23	0.04	0.24	1.54	4.95	8.89	6.98	13.14	13.32	5.78	69.29
1956	8.22	4.64	4.23	1.35	0.60	0.11	1.33	3.36	8.27	6.04	10.74	10.36	4.94	59.25
1957	9.54	3.53	2.98	1.44	0.69	0.17	1.67	6.11	6.84	7.83	11.33	10.62	5.25	62.75
1958	9.09	5.94	1.60	1.54	1.48	2.03	1.29	5.84	5.50	8.47	12.80	15.46	5.92	71.04
1959	8.96	1.72	3.48	0.53	-0.11	-0.10	0.61	1.34	7.51	10.47	13.28	9.94	4.65	55.64
1960	8.05	5.29	3.99	0.59	-0.25	-0.28	0.70	2.80	6.31	8.45	9.68	14.54	4.99	59.76
1961	8.38	1.99	2.47	0.91	0.42	0.12	0.54	3.23	5.97	7.69	9.89	11.96	4.49	53.57
1962	11.57	3.99	1.32	1.27	-0.10	0.17	2.86	3.79	8.87	7.16	9.81	13.11	5.33	63.52
1963	9.88	1.61	0.87	0.73	0.35	0.17	1.59	5.54	7.41	4.47	9.47	14.56	4.75	56.65
1964	8.79	6.22	5.02	1.46	0.19	0.97	2.01	6.59	6.93	9.05	8.91	12.20	5.70	68.34
1965	10.35	5.11	3.80	1.19	-0.04	0.28	2.65	4.85	5.39	9.45	10.12	8.85	5.18	62.00
1966	10.65	3.63	3.09	1.49	1.56	0.25	2.67	4.67	9.60	9.51	9.77	11.58	5.73	68.47
1967	8.88	6.07	2.53	1.28	0.87	-0.21	1.25	4.81	8.40	8.12	10.96	10.25	5.26	63.21
1968	7.86	4.83	1.71	0.64	0.21	0.18	1.92	4.08	4.76	8.72	11.70	14.44	5.10	61.05
1969	7.58	3.97	3.86	0.80	0.21	0.34	0.78	3.38	8.08	8.80	9.21	12.62	4.98	59.63
1970	8.38	4.70	3.49	1.39	-0.03	0.22	0.38	4.08	6.26	6.09	11.66	13.84	5.04	60.46
1971	10.37	3.11	3.38	1.34	0.15	-0.18	2.25	4.50	4.40	4.83	12.04	11.36	4.81	57.55
1972	11.70	5.47	3.72	1.81	0.01	0.57	0.88	2.75	7.10	10.59	8.52	10.08	5.27	63.20
1973	7.68	5.01	1.36	1.68	0.24	-0.17	1.31	2.87	9.54	6.60	11.41	12.35	4.98	59.88
1974	8.28	5.61	4.58	1.15	0.48	0.18	1.73	4.11	9.23	8.77	8.10	9.69	5.16	61.91
1975	9.70	4.56	4.79	2.87	-0.21	-0.19	2.32	5.38	7.67	7.18	7.42	13.06	5.40	64.55
1976	11.90	3.90	3.44	1.44	0.36	0.01	1.95	5.59	8.17	10.88	12.57	13.14	6.13	73.35
1977	5.23	0.90	1.01	0.93	0.18	0.48	1.82	5.23	3.59	7.97	8.98	12.35	4.09	48.67
1978	9.87	2.86	1.58	1.33	-0.04	0.16	1.76	3.06	6.72	8.54	10.21	11.93	4.85	57.98
1979	9.05	3.18	0.95	0.84	0.02	0.08	0.54	3.84	6.30	8.68	8.64	10.37	4.39	52.49
1980	9.33	5.36	2.84	0.70	0.05	0.73	0.38	2.06	8.77	10.69	10.11	12.85	5.32	63.87
1981	6.47	1.65	2.09	0.99	0.33	-0.05	1.57	2.97	8.49	8.73	8.40	10.98	4.41	52.62
1982	10.97	1.80	1.40	1.59	-0.16	-0.06	0.26	4.78	4.13	6.50	8.61	9.31	4.12	49.13
1983	8.92	4.31	4.13	1.97	0.99	0.67	1.66	4.01	8.31	10.27	11.68	14.21	5.94	71.13
1984	8.13	2.94	4.10	0.56	0.32	-0.09	1.03	2.98	7.43	5.80	10.25	10.74	4.52	54.19
1985	10.33	4.38	3.55	1.36	0.02	1.06	2.23	4.06	5.72	7.91	10.28	13.31	5.37	64.21
1986	8.97	4.50	2.81	0.83	0.17	0.78	1.02	6.85	5.20	7.61	11.83	9.31	5.00	59.88
1987	8.97	4.72	3.31	1.07	0.68	1.17	2.79	6.53	5.57	11.09	10.28	10.91	5.54	66.31
1988	11.49	6.98	3.60	1.13	0.11	1.65	1.09	5.74	7.44	10.96	8.64	12.94	5.99	71.77
1989	8.69	6.62	3.84	1.25	0.13	0.00	1.24	5.01	7.94	8.51	12.61	12.60	5.70	68.44
1990	5.19	5.34	2.90	1.29	0.25	0.23	1.16	3.31	8.41	8.40	9.18	11.09	4.72	56.75
1991	9.07	4.20	2.97	1.19	0.28	0.32	1.47	4.31	7.09	8.27	10.34	11.95	5.13	61.47
1992	1.59	1.53	1.23	0.49	0.42	0.52	0.72	1.33	1.59	1.69	1.55	1.71	0.53	6.35
1993	11.90	6.98	5.13	2.87	1.56	2.03	2.86	6.85	9.60	11.09	13.28	15.46	6.13	73.35
1994	1976	1988	1955	1975	1966	1958	1962	1986	1966	1987	1959	1958	1976	1976
1995	5.19	0.90	0.87	0.23	-0.25	-0.28	0.26	1.34	3.59	4.47	7.42	8.85	4.09	48.67
1996	1990	1977	1963	1955	1960	1960	1982	1959	1977	1963	1975	1965	1977	1977

LAKE ST. CLAIR EVAPORATION (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1941	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1942	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1943	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1944	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1946	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1949	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1950	0.97	0.95	1.33	0.45	4.34	18.98	16.36	16.83	12.53	7.49	5.44	1.11	7.26	86.78
1951	0.95	0.54	1.04	-0.05	5.85	16.10	18.30	16.88	15.67	7.92	3.63	0.82	7.34	87.65
1952	0.95	1.23	0.92	-0.04	9.28	16.77	22.24	16.23	15.46	9.77	3.92	1.00	8.17	97.73
1953	1.05	1.51	0.65	1.20	9.83	15.13	19.64	16.47	15.40	8.67	4.45	1.98	8.04	95.98
1954	1.23	0.80	1.54	-0.01	8.50	14.79	18.63	18.27	11.89	9.13	2.89	1.68	7.50	89.34
1955	1.24	0.81	1.38	-0.11	11.87	15.87	19.37	20.96	13.41	9.06	4.20	1.31	8.34	99.37
1956	1.13	1.05	1.13	0.13	3.22	16.61	16.19	16.01	14.14	7.43	6.14	0.69	7.00	83.87
1957	1.12	0.97	1.10	0.23	6.14	16.10	18.02	17.76	13.22	8.06	3.92	1.23	7.36	87.87
1958	1.94	1.44	1.18	0.17	9.79	15.47	17.78	17.99	13.11	9.02	5.71	1.23	7.95	94.83
1959	1.44	1.48	1.73	-0.10	0.36	17.58	19.44	17.62	15.23	9.52	3.84	0.84	7.44	88.98
1960	1.52	1.65	1.24	0.00	3.18	15.92	19.31	15.96	14.37	9.12	4.04	2.08	7.38	88.39
1961	1.25	0.72	1.04	0.35	8.27	15.10	18.40	16.61	16.15	8.17	4.74	2.00	7.78	92.80
1962	1.62	1.20	0.74	0.34	5.25	16.32	19.20	15.64	14.89	8.48	2.23	1.81	7.35	87.72
1963	0.95	1.15	0.82	-0.03	3.97	15.53	21.57	18.06	12.89	8.49	4.96	1.70	7.55	90.06
1964	1.20	1.44	1.28	0.00	10.38	14.41	21.28	16.08	13.85	7.30	4.87	1.05	7.79	93.14
1965	1.18	1.17	1.40	0.10	4.30	15.84	18.92	15.92	11.36	9.06	3.98	1.24	7.08	84.47
1966	1.56	0.84	1.12	0.15	9.36	14.23	22.09	16.59	15.37	7.87	2.85	1.58	7.85	93.61
1967	1.43	1.36	0.77	-0.05	6.50	14.95	16.38	17.93	13.23	6.45	3.73	1.00	7.01	83.68
1968	0.82	1.73	1.04	-0.08	7.73	14.61	19.76	17.49	12.60	9.89	3.03	2.22	7.60	90.84
1969	1.14	1.72	1.96	-0.17	3.81	13.10	16.98	17.42	14.25	8.76	3.05	1.63	7.01	83.65
1970	0.86	1.41	1.22	0.19	1.56	16.27	16.30	19.22	13.37	6.29	5.20	1.37	6.96	83.26
1971	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1972	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1973	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1974	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1975	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1976	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1977	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1978	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1979	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1980	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1981	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1982	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1983	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1984	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1985	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1986	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1987	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1988	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1989	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1990	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1991	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1992	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1993	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1994	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1995	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1996	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1997	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1998	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
1999	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95
2000	1.26	0.75	0.54	0.37	-0.17	0.14	13.10	16.19	15.09	9.12	6.29	1.92	6.69	79.95

LAKE ERIE EVAPORATION (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1941	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1942	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1943	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1944	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1946	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1949	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1950	4.44	3.77	2.59	1.06	0.51	3.44	6.63	10.48	15.95	14.27	18.47	10.22	7.65	91.73
1951	3.32	1.16	1.52	0.59	1.66	2.66	7.41	12.75	18.35	16.43	17.15	8.67	7.67	91.67
1952	3.46	2.61	2.24	0.57	2.00	2.60	8.76	11.82	17.32	22.98	12.49	8.24	7.95	95.09
1953	3.47	3.12	1.91	1.97	1.31	2.56	8.51	11.58	19.55	15.55	15.47	12.02	8.11	97.02
1954	5.01	1.46	3.09	0.58	2.60	2.72	7.81	12.89	14.90	17.77	14.15	9.69	7.77	92.67
1955	5.69	1.22	2.41	0.14	2.28	4.35	7.14	13.93	16.31	20.03	17.99	8.70	8.56	102.19
1956	3.01	1.78	2.16	1.02	1.87	2.42	6.45	10.23	17.56	14.36	17.49	7.20	7.13	85.55
1957	5.40	1.14	1.37	1.03	2.79	2.64	7.81	13.96	16.19	19.52	14.60	7.91	7.91	94.36
1958	5.24	2.44	0.86	0.58	2.62	4.29	4.94	12.18	14.63	18.83	15.58	10.32	7.74	92.49
1959	2.47	1.04	1.34	0.03	0.29	3.36	6.23	8.79	17.39	20.58	16.24	6.94	7.10	84.90
1960	4.75	4.19	2.80	0.07	0.46	2.96	7.79	9.86	14.51	21.51	13.76	12.56	7.96	95.22
1961	2.03	0.47	1.02	0.62	2.47	3.24	4.42	10.49	16.53	19.93	15.86	11.78	7.44	88.86
1962	3.47	1.11	0.85	0.36	0.28	2.68	9.23	10.13	17.96	16.72	12.08	11.65	7.25	86.52
1963	1.84	1.04	0.69	0.14	1.11	2.78	7.06	13.32	15.70	13.25	15.49	12.33	7.10	84.75
1964	2.75	1.79	1.58	0.35	2.01	3.08	7.79	13.58	16.65	17.67	12.30	8.75	7.38	88.30
1965	5.01	1.43	1.67	0.30	0.75	3.66	8.13	11.31	11.80	20.42	13.37	7.28	7.14	85.13
1966	6.06	0.77	1.29	0.45	2.75	1.78	9.32	11.13	18.55	18.45	10.81	9.67	7.64	91.03
1967	4.24	3.19	0.98	0.44	2.11	1.97	6.36	12.44	16.44	15.89	15.03	7.28	7.22	86.37
1968	3.04	1.53	1.00	0.24	1.09	2.50	4.60	10.84	12.45	19.67	14.28	11.64	7.09	84.74
1969	2.90	1.53	1.83	-0.02	0.92	2.48	4.60	10.55	16.33	19.40	12.85	9.65	6.95	83.02
1970	2.08	1.33	1.21	0.13	0.01	2.91	4.35	11.52	13.80	15.87	16.54	10.16	6.68	79.91
1971	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MEAN	3.90	1.78	1.57	0.72	1.47	3.21	7.05	11.57	15.94	18.16	14.37	9.68	7.48	89.40
S.D.	1.54	1.01	0.88	0.62	1.05	1.20	1.43	2.00	2.24	2.70	2.12	1.70	0.64	7.68
MAX.	7.02	4.19	3.09	2.62	4.07	6.97	9.32	17.92	19.55	23.50	19.21	13.56	9.04	107.95
YEAR	1972	1960	1954	1983	1983	1988	1966	1987	1953	1988	1971	1985	1983	1983
MIN.	1.02	0.47	0.55	-0.02	-0.21	1.08	4.35	8.16	11.20	12.11	10.81	6.94	6.43	76.75
YEAR	1977	1961	1973	1969	1978	1971	1970	1980	1971	1984	1966	1959	1982	1982

LAKE ONTARIO EVAPORATION (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1941	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1942	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1943	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1944	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1946	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1949	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1950	9.17	9.14	6.42	2.09	-0.14	0.28	1.57	4.08	8.43	6.40	10.49	10.93	5.71	68.86
1951	8.61	4.87	3.74	0.69	-0.02	0.24	1.99	5.79	9.42	7.34	12.24	11.04	5.50	65.95
1952	8.25	5.25	3.75	0.40	0.18	0.72	2.43	6.18	8.57	13.63	7.33	9.65	5.54	66.34
1953	8.45	6.56	3.43	1.59	0.77	1.16	4.07	6.05	10.13	7.04	7.91	10.81	5.66	67.97
1954	11.23	4.63	5.64	1.35	1.04	0.96	3.83	6.93	7.20	6.36	8.14	10.86	5.70	68.17
1955	11.13	5.04	5.43	0.18	0.16	0.90	3.20	6.85	10.16	7.18	12.47	12.63	6.29	75.33
1956	9.00	5.00	4.72	1.17	0.51	0.38	2.13	4.45	8.79	6.35	9.05	9.13	5.06	60.68
1957	10.84	4.23	3.01	1.73	0.89	0.66	3.50	7.73	7.80	8.73	9.91	9.37	5.72	68.40
1958	10.93	8.73	1.91	1.07	0.69	1.92	1.32	5.73	6.91	9.22	10.58	13.88	6.06	72.89
1959	10.30	6.35	4.08	0.68	-0.12	-0.24	0.37	2.22	8.70	11.00	10.95	9.07	5.27	63.36
1960	9.57	5.75	6.34	0.61	-0.37	-0.36	1.06	3.61	6.99	10.09	7.97	14.44	5.49	65.70
1961	10.29	2.98	3.53	1.06	0.08	-0.13	0.36	3.82	7.20	8.91	9.88	11.31	4.96	59.29
1962	12.30	5.55	2.37	1.20	-0.18	-0.06	3.70	4.14	9.43	7.25	8.50	12.06	5.53	66.26
1963	10.34	6.28	2.15	0.87	0.14	0.12	1.60	5.90	9.09	5.81	7.78	14.44	5.38	64.52
1964	8.57	7.05	4.22	1.41	-0.18	0.57	1.78	6.89	7.95	9.08	8.25	9.58	5.43	65.17
1965	12.22	6.90	4.49	1.17	-0.09	0.18	2.34	5.50	5.36	9.98	8.39	7.33	5.32	63.77
1966	11.75	4.54	3.23	1.24	1.00	0.01	2.76	5.26	10.07	8.83	6.23	11.08	5.52	66.00
1967	8.42	8.57	3.57	1.40	0.53	-0.13	1.26	5.63	8.63	8.22	11.15	9.01	5.50	66.26
1968	9.03	8.98	2.69	0.69	-0.04	-0.30	1.20	4.48	5.20	8.45	9.73	13.98	5.34	64.09
1969	8.96	4.97	5.17	0.71	-0.04	-0.31	0.40	3.90	8.43	10.12	8.22	12.77	5.29	63.32
1970	8.69	5.37	3.30	1.23	-0.04	-0.08	0.32	4.50	6.68	6.22	8.76	12.03	4.75	56.96
1971	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	7.91	3.14	3.17	1.03	0.05	-0.31	0.84	3.17	9.00	8.70	7.46	9.56	4.49	53.72
1982	12.13	4.92	3.05	2.95	-0.26	-0.39	0.02	5.08	4.48	7.53	8.20	7.82	4.63	55.53
1983	8.51	4.42	3.83	1.46	0.89	1.10	3.45	5.62	9.00	10.86	9.32	14.67	6.19	74.03
1984	8.87	3.28	5.47	0.47	0.21	0.11	2.03	4.80	9.22	5.99	10.65	9.09	5.02	60.19
1985	11.33	5.32	3.61	1.60	0.12	1.39	3.16	5.87	6.64	8.96	8.96	13.80	5.92	70.76
1986	9.64	5.60	3.04	0.65	0.21	0.98	1.45	8.14	6.01	8.48	10.56	8.94	5.31	63.70
1987	8.93	5.69	2.93	0.71	0.62	1.41	3.58	9.53	6.56	10.84	9.12	8.97	5.76	68.89
1988	10.75	7.38	4.10	1.08	0.18	2.74	1.28	8.18	8.75	11.75	7.36	11.66	6.28	75.21
1989	8.93	7.11	4.37	1.60	-0.05	-0.01	2.45	6.91	8.91	8.66	11.89	13.02	6.15	73.79
1990	4.45	5.23	3.72	1.36	0.18	0.32	1.63	5.31	10.09	8.40	8.92	9.52	4.92	59.13
MEAN	9.74	5.73	3.82	1.21	0.16	0.29	1.70	5.11	8.00	8.63	9.14	10.99	5.38	64.51
S.D.	1.55	1.50	1.23	0.60	0.37	0.71	1.17	1.72	1.67	1.90	1.58	1.99	0.50	5.95
MAX.	12.30	9.14	6.42	3.18	1.04	2.74	4.07	9.53	10.68	13.63	12.47	14.67	6.29	75.33
YEAR	1962	1950	1950	1975	1954	1988	1953	1967	1973	1952	1955	1983	1955	1955
MIN.	4.45	2.98	1.38	0.18	-0.37	-0.39	0.02	1.95	4.48	4.98	6.23	7.33	4.26	50.98
YEAR	1990	1961	1973	1955	1960	1982	1982	1978	1971	1971	1966	1965	1977	1977

APPENDIX E - Component Net Basin Supply

LAKE SUPERIOR NET BASIN SUPPLY (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1941	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1942	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1943	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1944	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1946	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1949	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1950	-1.55	-2.10	1.35	9.79	33.07	19.04	16.02	11.75	6.42	5.61	2.85	-1.36	8.48	100.89
1951	-1.65	4.96	6.87	16.59	16.64	18.84	10.90	13.87	12.73	8.46	0.76	-0.77	9.01	108.20
1952	0.67	0.31	4.33	13.08	11.31	17.06	19.39	12.05	2.21	-5.72	0.74	-2.48	6.09	72.95
1953	-1.98	0.98	4.92	9.91	20.75	19.31	16.54	12.81	4.03	1.03	0.87	-1.72	7.33	87.45
1954	-2.22	2.48	0.93	17.25	22.34	16.85	8.42	7.53	7.83	3.61	0.64	-3.21	6.87	82.45
1955	-1.98	-0.15	4.56	13.29	13.36	9.99	12.54	11.04	5.78	8.59	-0.42	-3.24	6.15	73.36
1956	-0.21	-2.21	-1.24	8.99	15.88	12.19	13.24	9.68	4.19	0.66	-0.14	-1.07	5.02	59.96
1957	-3.81	1.92	4.07	11.55	10.90	14.37	11.43	5.76	8.09	0.78	3.43	-2.30	5.50	66.19
1958	0.15	-2.59	2.19	6.47	7.81	12.57	14.01	11.17	7.70	2.77	4.31	-2.14	5.41	64.42
1959	-3.34	-0.99	2.74	6.77	18.55	11.55	9.88	18.32	12.71	7.96	-2.30	-1.90	6.72	79.95
1960	-0.11	-0.86	-0.63	18.90	22.52	12.07	11.36	8.92	5.16	2.93	1.92	-5.13	6.43	77.05
1961	-3.38	1.18	3.93	8.82	15.23	11.11	9.09	5.46	10.31	4.45	2.57	-2.65	5.52	66.12
1962	-3.84	1.50	2.68	7.48	17.59	9.45	8.05	11.06	6.40	0.25	-1.46	-3.44	4.66	55.72
1963	-3.74	0.46	6.11	11.02	10.52	16.86	8.31	8.60	3.50	2.40	0.05	-4.02	5.01	60.07
1964	-1.03	-0.73	0.47	13.95	22.83	15.61	10.75	10.97	9.65	4.03	2.61	0.60	7.49	89.71
1965	-1.96	5.26	5.56	11.84	20.42	12.29	12.13	10.00	12.61	5.58	4.98	1.33	8.34	100.04
1966	-0.15	4.86	9.82	10.94	13.76	12.20	10.21	14.72	2.20	5.57	-1.38	-1.28	6.81	81.47
1967	1.19	5.55	7.36	15.47	10.48	17.41	9.63	12.53	1.53	6.49	0.18	-2.72	7.09	85.10
1968	-2.23	1.87	8.05	17.60	14.01	22.40	21.22	13.59	15.07	10.70	-1.94	1.83	10.19	122.17
1969	5.33	3.05	2.42	17.71	14.91	12.88	10.35	10.41	3.76	4.93	-0.84	-0.27	7.07	84.64
1970	0.40	0.82	3.00	10.95	23.81	12.53	15.10	5.17	9.59	11.51	4.82	0.70	8.25	98.40
MEAN	-0.34	1.56	4.48	12.08	16.28	14.44	12.10	10.42	7.06	4.84	1.74	-1.19	6.98	83.47
S.D.	2.14	2.56	3.40	3.41	5.25	3.79	3.57	3.75	4.33	4.28	3.60	1.91	1.59	19.10
MAX.	5.65	6.95	13.19	18.90	33.07	22.40	21.22	19.62	20.06	15.24	11.57	3.48	10.19	122.17
MIN.	-3.84	-2.59	-1.24	5.38	7.81	5.73	4.91	1.78	-2.23	-5.72	-6.32	-5.13	4.03	48.52
YEAR	1962	1958	1956	1987	1958	1987	1989	1976	1976	1952	1976	1960	1976	1976

LAKE MICHIGAN NET BASIN SUPPLY (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1941	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1942	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1943	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1944	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1946	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1949	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1950	5.44	4.25	10.45	21.94	12.94	14.69	13.58	1.69	3.69	0.06	-5.62	-0.87	6.85	82.24
1951	2.50	6.24	11.29	22.88	14.02	12.03	15.70	6.32	2.11	11.24	2.46	2.53	9.13	109.32
1952	8.20	4.11	11.53	18.48	13.73	11.43	18.02	5.83	-3.87	-10.59	2.19	1.65	6.74	80.71
1953	0.76	5.72	9.20	15.11	13.03	13.24	7.24	3.54	-4.63	-2.18	-3.90	-3.50	4.45	53.63
1954	-3.45	5.28	5.35	18.67	11.69	21.08	9.24	1.43	5.76	12.95	-0.21	-1.18	7.20	86.81
1955	-1.95	1.86	6.15	16.59	11.74	10.21	5.39	-0.53	-5.47	3.43	-5.93	-5.86	2.97	35.63
1956	-2.18	0.95	6.76	14.35	19.61	9.55	11.65	7.36	-3.84	-2.13	-4.65	-3.13	4.55	54.30
1957	-4.46	2.06	5.15	13.47	17.47	12.66	9.16	2.38	-2.20	-0.92	1.97	-0.36	4.70	56.38
1958	-0.63	-1.18	4.82	9.86	7.33	8.85	8.42	3.29	4.07	0.29	-1.79	-7.75	2.97	35.58
1959	-1.73	4.41	11.38	18.99	14.52	6.90	10.34	13.74	3.41	8.66	-0.39	5.39	8.01	95.62
1960	6.11	4.95	3.54	21.72	28.38	16.67	11.35	9.04	3.81	0.33	1.23	-7.73	8.27	99.40
1961	-3.92	3.14	11.56	13.75	9.50	10.45	8.46	2.52	12.97	3.53	2.97	-3.18	5.96	71.75
1962	-0.05	4.16	10.20	13.48	13.40	9.98	7.46	5.91	-0.79	1.41	-1.97	-4.40	4.90	58.79
1963	-3.56	-0.05	10.49	11.05	12.78	8.27	9.79	1.51	1.54	-0.53	-0.76	-5.97	3.73	44.56
1964	-0.67	-1.53	4.54	13.65	13.94	6.44	9.15	2.24	4.92	-4.16	1.39	-4.01	3.82	45.90
1965	0.65	2.95	9.46	20.26	15.10	9.65	5.69	7.56	17.44	2.94	2.83	7.52	8.51	102.05
1966	-0.17	6.41	13.86	14.20	11.32	8.98	4.78	2.15	-4.04	-2.25	4.03	2.21	5.11	61.48
1967	3.53	2.56	8.00	23.19	11.45	20.36	5.94	1.25	-1.26	5.43	1.42	2.52	7.03	84.39
1968	0.38	2.93	5.30	14.74	13.69	18.95	10.03	3.73	7.60	-0.47	1.85	1.85	6.69	80.58
1969	4.88	2.14	4.97	19.09	14.87	23.99	14.77	-0.31	-1.65	6.28	-0.52	-3.24	7.11	85.27
1970	-0.75	0.24	6.62	14.18	17.19	12.60	9.69	0.13	11.54	4.45	2.52	0.31	6.57	78.72
MEAN	0.84	3.47	10.17	16.71	14.45	12.80	9.45	5.73	3.81	2.53	1.66	0.02	6.81	81.63
S.D.	3.35	2.72	4.78	3.56	4.43	4.59	3.39	4.34	6.53	4.71	4.89	4.31	1.96	23.48
MAX.	9.29	8.83	23.60	23.19	28.38	23.99	18.02	15.21	26.72	12.95	16.10	11.84	10.89	130.29
YEAR	1990	1985	1976	1967	1960	1969	1952	1972	1986	1954	1985	1982	1990	1990
MIN.	-4.46	-1.53	3.54	9.86	6.29	2.83	3.90	-1.38	-5.47	-10.59	-6.73	-7.75	2.97	35.58
YEAR	1957	1964	1960	1958	1988	1988	1976	1976	1955	1952	1976	1958	1955	1958

LAKE HURON NET BASIN SUPPLY (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1951	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1953	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1954	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1955	10.00	10.15	20.57	35.64	15.88	12.18	8.55	7.75	-1.64	9.69	4.68	2.48	11.32	135.93
1956	2.97	7.55	14.60	30.39	29.00	17.15	16.86	12.54	6.09	1.19	3.02	6.61	12.34	147.97
1957	7.85	8.64	14.11	24.29	31.30	25.57	25.70	0.70	12.32	9.23	13.87	15.94	15.82	189.82
1958	7.60	6.33	12.76	14.04	8.02	8.60	10.99	2.67	9.31	4.70	4.56	-0.50	7.41	89.08
1959	4.68	12.67	16.62	47.35	33.66	10.73	10.40	17.70	11.53	12.57	14.08	11.86	16.98	203.85
1960	12.75	10.65	11.91	53.58	55.75	22.17	14.87	7.16	5.68	2.85	6.87	0.33	17.03	204.57
1961	2.18	8.35	16.93	18.40	14.53	16.40	16.67	10.19	18.85	6.47	8.50	7.23	12.05	144.70
1962	6.05	9.24	15.05	26.48	29.35	12.65	5.39	6.19	3.78	5.62	-0.97	3.96	10.24	122.79
1963	4.26	8.13	17.40	25.16	24.07	10.34	9.67	7.31	4.04	2.80	3.05	1.08	9.78	117.31
1964	3.84	1.93	9.11	19.89	18.89	6.61	9.21	8.60	8.40	1.88	5.08	7.84	8.46	101.28
1965	8.96	14.10	11.98	31.01	28.09	9.73	7.26	11.67	16.58	10.50	13.20	18.02	15.07	181.10
1966	8.51	13.57	22.00	21.20	14.62	11.18	3.82	7.28	0.07	3.13	16.21	19.67	11.75	141.26
1967	11.69	12.10	15.94	45.03	21.32	27.39	12.40	11.55	2.96	10.49	16.71	15.83	16.92	203.41
1968	9.24	16.27	18.14	24.12	17.63	16.84	10.46	16.18	14.43	8.47	5.78	9.07	13.86	166.63
1969	14.07	9.66	12.92	32.28	30.51	23.02	15.40	8.32	1.19	15.38	16.50	4.71	15.34	183.96
1970	7.16	6.20	12.81	27.76	23.41	22.07	25.61	7.23	18.38	15.32	7.14	9.28	15.23	182.37
1971	8.81	15.09	19.78	38.40	31.18	18.46	12.86	10.86	7.96	4.79	5.20	14.64	15.65	188.03
1972	6.75	9.74	15.79	31.73	35.40	15.94	16.09	17.37	8.62	11.38	13.45	15.00	16.46	197.26
1973	15.08	11.88	31.67	22.90	28.21	19.81	14.27	17.60	1.05	9.09	9.07	7.68	15.75	186.31
1974	14.46	10.83	19.50	35.81	28.48	19.58	16.32	6.46	4.90	3.49	5.94	1.40	13.93	167.17
1975	7.99	8.75	10.41	17.47	18.16	13.54	8.31	7.81	4.22	-1.40	4.92	3.09	8.59	103.27
1976	2.63	12.09	25.57	19.50	19.66	13.48	8.77	0.80	0.94	-2.08	-2.91	-1.69	8.04	96.76
1977	6.34	8.89	20.54	17.26	8.88	5.69	8.20	10.66	11.99	7.37	12.47	7.04	10.44	125.33
1978	4.36	4.71	9.03	16.44	17.80	9.77	6.64	6.61	14.01	5.01	1.86	3.27	8.30	99.51
1979	5.97	5.99	22.16	28.53	23.26	15.74	8.09	9.18	0.13	6.92	9.55	7.14	11.92	142.86
1980	4.06	2.74	10.86	24.60	15.00	13.13	11.78	7.67	5.03	2.52	0.35	2.66	8.35	100.20
1981	1.73	15.95	10.28	22.02	14.17	13.42	5.89	9.20	8.55	7.45	2.71	0.19	9.22	111.56
1982	2.84	5.56	15.41	19.79	14.40	13.39	7.29	5.89	9.47	5.70	10.71	14.00	10.38	124.45
1983	7.27	7.01	11.54	17.32	29.70	14.54	5.16	6.08	5.49	5.54	0.79	4.66	9.61	115.10
1984	2.85	12.26	11.81	18.22	15.51	15.84	11.15	10.49	8.00	6.98	7.82	10.17	10.90	131.10
1985	8.66	13.86	22.14	27.22	20.15	7.59	8.73	9.44	9.39	7.11	11.69	6.21	12.66	152.19
1986	2.61	4.31	17.47	17.21	14.74	12.14	11.17	3.76	26.57	11.47	-2.87	3.02	10.15	121.60
1987	2.71	1.77	9.62	11.94	7.71	9.20	4.54	7.18	6.20	0.88	2.84	6.38	5.93	70.97
1988	1.43	6.82	11.42	22.84	12.71	4.55	7.25	6.82	3.87	9.93	17.45	4.37	9.10	109.46
1989	1.23	1.47	12.24	13.04	10.46	16.05	2.71	2.91	-0.48	0.67	2.67	-1.82	5.10	61.15
1990	7.11	3.81	14.31	11.00	14.79	13.33	9.15	5.76	3.79	10.88	10.86	2.72	8.99	107.51
MEAN	6.58	8.86	15.67	25.27	21.57	14.38	10.77	8.49	7.55	6.50	7.30	6.76	11.64	139.70
S.D.	3.82	4.08	5.06	9.94	9.71	5.42	5.24	4.19	6.20	4.34	5.67	5.73	3.35	40.14
MAX.	15.08	16.27	31.67	53.58	55.75	27.39	25.70	17.70	26.57	15.38	17.45	19.67	17.03	204.57
YEAR	1973	1968	1973	1960	1960	1967	1957	1959	1986	1969	1988	1966	1960	1960
MIN.	1.23	1.47	9.03	11.00	7.71	4.55	2.71	0.70	-1.64	-2.08	-2.91	-1.82	5.10	61.15
YEAR	1989	1989	1978	1990	1987	1988	1989	1957	1955	1976	1976	1989	1989	1989

LAKE ST. CLAIR NET BASIN SUPPLY (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1941	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1942	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1943	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1944	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1946	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1949	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1950	80.08	50.23	135.46	124.51	15.92	-1.09	1.07	-5.93	4.54	12.66	35.97	76.24	44.12	529.66
1951	63.09	88.50	112.73	112.51	16.96	2.48	-5.82	-7.92	-6.53	9.99	26.02	32.17	36.63	444.18
1952	97.58	65.68	110.36	87.89	20.12	-8.03	-10.12	-7.67	-7.87	-3.19	8.03	14.62	30.54	367.40
1953	17.76	11.24	57.28	32.95	24.41	3.13	3.81	14.61	-7.38	-3.59	1.29	7.56	13.68	163.09
1954	9.21	100.83	84.21	45.59	8.31	-0.70	-11.45	-11.18	-4.36	41.52	15.36	29.01	25.04	306.35
1955	49.21	41.78	122.73	54.15	3.31	-5.39	-10.03	-9.95	-5.69	6.19	19.89	21.82	23.95	288.02
1956	9.84	17.37	136.53	84.04	158.16	7.25	0.05	15.31	10.91	2.79	7.66	35.75	40.74	485.66
1957	34.20	40.90	60.96	82.21	41.49	4.70	20.49	-7.81	7.87	11.39	35.51	82.31	34.49	414.22
1958	18.77	12.97	52.12	27.34	-0.03	-1.24	-4.86	-9.16	1.52	-0.90	10.60	8.68	9.62	115.81
1959	19.74	27.17	132.20	103.25	38.47	-1.70	-8.06	2.16	-1.01	22.18	42.30	69.75	37.30	446.45
1960	44.72	36.82	45.32	176.87	53.69	30.27	-7.77	-5.31	-7.95	0.35	4.46	4.41	31.08	375.88
1961	3.04	26.68	42.12	60.68	28.55	3.92	-4.21	4.45	1.43	0.25	16.64	21.27	16.95	204.82
1962	13.50	13.74	122.82	39.46	12.95	10.78	-10.30	-2.71	-4.06	2.23	17.01	16.63	19.42	232.05
1963	8.17	4.71	94.95	44.30	26.02	-0.69	-13.70	-9.88	-6.42	-4.72	1.56	4.43	12.49	148.73
1964	13.99	12.03	45.50	46.72	13.05	-2.58	-11.37	9.73	-1.72	-3.05	0.21	22.60	12.11	145.11
1965	35.02	82.81	95.93	101.97	14.28	-5.95	-9.21	-4.44	-1.80	5.68	12.46	62.65	32.10	389.40
1966	21.75	40.16	72.73	46.74	18.56	11.27	-10.99	-2.28	-8.37	0.12	26.37	92.71	25.94	311.81
1967	41.37	24.14	95.03	115.53	23.11	41.21	13.60	2.22	-0.67	40.51	64.07	98.21	46.62	558.33
1968	38.65	125.10	93.19	38.87	27.87	35.63	8.57	2.46	1.68	6.96	24.80	51.84	37.63	455.62
1969	60.00	58.41	53.14	91.28	65.64	19.12	13.11	-6.31	-7.75	1.95	20.47	23.96	32.56	393.02
1970	11.26	18.86	55.27	84.23	29.92	3.44	3.74	-10.82	-1.77	6.19	24.13	44.36	22.37	268.81
1971	17.63	60.95	110.99	56.85	9.23	-3.10	-13.44	-3.89	-2.64	-0.53	2.82	28.57	21.73	263.44
1972	25.79	12.71	95.46	94.32	24.35	1.94	0.63	5.36	0.65	-13.62	49.75	66.80	32.68	391.38
1973	69.17	31.65	173.39	50.49	30.73	22.10	-1.42	-1.02	-6.85	3.21	32.74	57.05	40.36	481.44
1974	104.82	61.24	120.71	79.48	78.78	2.51	-6.48	-2.78	-2.19	1.82	15.09	24.01	39.75	477.01
1975	66.59	62.98	98.72	102.46	23.49	18.79	-8.68	-18.39	27.67	4.77	16.62	51.95	40.11	483.75
1976	28.39	142.29	174.11	60.58	55.41	4.47	31.08	6.63	4.56	9.93	16.27	13.95	45.38	547.67
1977	8.92	15.55	167.51	73.29	12.72	-3.89	-4.84	-2.35	26.92	31.86	36.63	107.69	39.43	470.01
1978	24.32	13.61	109.99	138.40	36.18	1.06	-9.77	-7.39	3.20	7.59	11.33	20.82	29.14	349.34
1979	28.10	10.34	113.14	142.82	38.96	2.23	3.03	-4.28	-4.17	3.87	40.82	73.23	37.47	448.09
1980	34.11	11.91	93.45	90.27	26.34	11.67	14.17	12.03	8.24	10.12	9.18	28.85	29.28	350.34
1981	8.27	124.80	40.70	61.85	37.54	4.75	-0.81	4.33	50.84	93.17	35.85	32.13	40.46	493.42
1982	39.41	13.20	174.56	118.34	17.49	18.73	0.80	-3.43	9.25	6.70	67.11	104.75	47.46	566.91
1983	29.35	44.52	37.76	71.50	76.64	21.42	12.01	17.84	2.31	13.52	46.44	83.86	38.07	457.17
1984	11.55	120.56	107.10	55.49	38.30	34.90	4.23	0.77	22.82	11.71	37.09	63.06	41.92	507.58
1985	65.23	109.71	220.00	109.88	10.98	2.74	1.13	16.41	23.43	34.20	109.84	49.42	62.38	752.97
1986	43.29	39.45	149.45	48.30	22.50	27.66	3.85	0.37	80.10	91.86	25.45	63.89	49.81	596.17
1987	36.20	14.25	78.47	68.24	9.70	4.31	2.44	3.38	7.52	9.57	34.91	91.10	30.15	360.09
1988	20.86	31.38	69.55	42.36	9.70	-12.89	-3.36	-6.13	2.79	18.17	53.60	28.63	21.16	254.66
1989	21.66	9.39	30.58	32.91	15.89	51.92	6.15	0.80	15.71	8.67	26.32	12.60	19.41	233.60
1990	43.80	52.44	81.69	48.73	36.96	7.93	-5.54	3.44	11.26	37.26	46.99	43.64	33.96	408.60
MEAN	35.08	45.93	99.22	76.77	30.55	8.90	-0.69	0.20	5.79	13.82	27.55	45.61	32.33	388.73
S.D.	25.51	37.88	44.12	34.52	27.37	14.41	9.85	8.30	17.03	21.62	21.50	30.14	11.53	138.58
MAX.	104.82	142.29	220.00	176.87	158.16	51.92	31.08	18.39	80.10	93.17	109.84	107.69	62.38	752.97
YEAR	1974	1976	1985	1960	1956	1989	1976	1975	1986	1981	1985	1977	1985	1985
MIN.	3.04	4.71	30.58	27.34	-0.03	-12.89	-13.70	-11.18	-8.37	-4.72	0.21	4.41	9.62	115.81
YEAR	1961	1963	1989	1958	1958	1988	1963	1954	1966	1963	1964	1960	1958	1958

LAKE ERIE NET BASIN SUPPLY (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1941	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1942	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1943	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1944	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1946	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1949	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1950	38.76	23.87	27.31	27.00	9.47	7.67	5.35	-2.07	-3.73	-3.40	4.24	12.09	12.15	146.56
1951	18.98	24.60	26.81	21.38	12.76	10.49	1.90	-7.38	-10.62	-8.78	-0.51	10.81	8.27	100.44
1952	31.57	13.24	21.23	19.70	13.60	2.85	-2.45	-2.31	-8.35	-19.95	-4.97	1.59	5.47	65.75
1953	9.71	3.69	15.79	9.97	18.60	5.95	-1.21	-3.98	-12.74	-13.28	-8.33	-3.77	1.72	20.40
1954	5.24	13.18	22.96	28.04	4.47	5.92	-2.00	-4.56	-8.96	14.68	-4.47	4.00	6.50	78.50
1955	8.49	13.84	26.48	17.09	5.15	1.93	-1.08	-2.21	-12.39	-3.99	-3.14	-0.51	4.09	49.66
1956	3.33	18.50	26.80	21.03	28.47	9.03	5.14	10.84	-8.79	-10.49	-9.70	4.56	8.23	98.72
1957	9.02	11.48	8.96	35.08	12.03	16.17	7.43	-6.98	-3.23	-10.96	-3.56	13.96	7.38	89.40
1958	3.78	4.63	9.40	13.58	6.42	12.04	12.27	3.83	-0.43	-12.10	-0.11	-4.30	4.06	49.01
1959	22.47	25.08	21.95	24.53	15.87	3.42	3.11	-2.41	-8.78	-3.07	-1.37	11.91	9.32	112.71
1960	15.13	12.91	9.18	20.76	15.57	12.44	0.54	-1.76	-9.26	-16.60	-7.67	-9.08	3.46	42.16
1961	0.76	14.20	18.95	36.87	9.46	9.15	6.21	2.33	-8.03	-14.62	-6.17	-3.18	5.40	65.93
1962	10.73	10.78	18.54	9.05	6.18	7.02	-1.08	-0.88	-7.22	-8.23	-1.99	-2.21	3.35	40.89
1963	3.05	2.52	27.20	13.73	7.07	3.54	0.46	-5.56	-11.40	-10.84	-6.51	-6.06	1.44	17.20
1964	5.71	2.74	23.87	26.44	8.88	4.09	-0.04	2.83	-12.15	-13.40	-7.82	2.51	3.65	43.66
1965	13.46	16.26	21.04	17.77	8.98	4.46	-1.03	-0.97	-4.08	-8.93	-2.83	7.09	5.87	71.22
1966	3.42	11.56	14.48	15.00	9.68	7.93	1.09	-1.53	-10.60	-14.05	8.14	19.08	5.30	64.20
1967	3.91	8.64	19.02	19.34	16.22	10.45	2.97	-3.46	-7.36	-4.41	0.85	16.36	6.87	82.53
1968	14.65	13.57	15.74	12.28	17.82	12.67	4.61	0.31	-3.71	-11.10	2.28	9.56	7.37	88.68
1969	21.06	8.89	8.62	29.58	26.06	12.50	17.35	-6.18	-8.35	-11.79	2.89	1.39	8.49	102.02
1970	6.38	10.75	15.24	21.08	14.64	8.64	9.21	-6.22	-0.12	-3.46	-0.41	3.84	6.59	79.57
1971	3.07	22.12	14.53	9.41	10.51	8.91	-0.68	-3.04	-3.26	-6.66	-10.83	8.48	4.27	52.56
1972	3.58	6.72	23.99	24.89	14.53	14.01	6.60	1.43	4.21	-7.58	14.60	15.65	10.19	122.63
1973	7.90	7.75	35.41	16.68	16.05	19.25	4.16	-2.08	-12.42	-5.45	-2.11	6.80	7.69	91.94
1974	21.01	11.76	26.66	21.16	19.36	10.21	-0.52	-2.96	-9.39	-11.43	5.12	8.48	8.28	99.46
1975	15.56	18.42	17.79	10.17	11.89	15.24	-0.94	12.16	-4.00	-8.82	-2.92	9.70	7.80	94.25
1976	12.08	34.29	29.83	10.93	11.03	8.89	6.43	-4.47	-3.77	-10.48	-7.60	-0.61	7.12	86.55
1977	4.95	9.26	28.88	24.77	8.33	6.74	8.77	8.66	13.25	-9.82	2.09	22.51	10.70	128.39
1978	13.12	3.64	34.29	25.87	15.17	8.04	-0.21	0.07	-3.93	-7.41	-6.61	1.27	6.98	83.31
1979	11.37	7.89	27.11	28.32	15.62	6.24	4.21	4.10	-0.31	-5.94	6.39	14.04	9.93	119.04
1980	3.75	5.08	26.83	22.23	10.22	14.61	12.73	9.83	-3.83	-10.48	-6.35	1.61	7.20	86.23
1981	3.24	26.33	6.98	21.90	12.49	25.58	6.79	2.37	6.97	-0.13	-1.56	4.69	9.46	115.66
1982	13.28	13.81	39.12	17.35	12.81	14.70	4.22	-4.60	0.37	-9.95	12.55	17.69	10.92	131.35
1983	1.46	5.81	10.78	20.65	20.67	8.43	7.19	-0.09	-9.62	-7.24	9.96	12.79	6.73	80.79
1984	5.85	23.65	23.61	22.55	22.90	10.88	0.65	-0.06	-2.83	-6.19	-4.63	10.00	8.81	106.38
1985	7.18	24.13	31.12	16.77	7.82	4.38	2.68	-0.14	-7.16	-4.73	26.82	3.47	9.23	112.34
1986	8.63	18.14	20.96	12.77	15.95	19.08	6.88	-5.94	7.80	3.84	-2.17	10.53	9.64	116.47
1987	4.72	2.76	13.99	15.05	5.60	9.44	5.46	1.79	-3.60	-10.54	-2.57	9.65	4.32	51.75
1988	3.11	12.64	12.37	12.26	4.80	-3.89	3.83	-5.65	-8.43	-8.42	5.77	0.95	2.40	29.34
1989	11.06	3.86	11.74	16.36	26.36	22.65	4.09	-6.30	-6.85	-7.44	-1.95	-1.09	6.04	72.49
1990	16.18	27.01	15.27	19.99	20.49	6.71	1.66	4.24	1.13	-0.06	-1.05	18.79	10.78	130.36
MEAN	10.26	13.41	20.75	19.74	13.41	9.72	3.73	-0.71	-5.02	-7.90	-0.44	6.46	6.91	83.42
S.D.	8.16	8.00	8.02	6.74	6.06	5.72	4.39	4.87	5.85	5.83	7.32	7.58	2.66	32.03
MAX.	38.76	34.29	39.12	36.87	28.47	25.58	17.35	12.16	13.25	14.68	26.82	22.51	12.15	146.56
MIN.	0.76	2.52	6.99	9.05	4.47	-3.89	-2.45	-7.38	-12.74	-19.95	-10.83	-9.08	1.44	17.20
YEAR	1961	1963	1981	1962	1954	1988	1952	1951	1953	1952	1971	1960	1963	1963

LAKE ONTARIO NET BASIN SUPPLY (CENTIMETERS OVER THE LAKE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	SUM
1941	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1942	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1943	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1944	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1946	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1947	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1949	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1950	23.83	12.41	24.39	42.80	17.58	14.24	10.82	9.18	1.83	9.53	16.41	18.12	16.77	201.14
1951	21.12	24.24	38.97	52.25	18.11	16.48	18.66	4.98	2.66	2.57	8.95	13.41	18.47	222.40
1952	20.35	18.75	29.91	37.72	24.99	9.97	9.70	4.93	2.68	-3.05	5.98	12.46	14.51	174.39
1953	11.29	10.60	30.15	22.09	34.45	10.30	6.04	6.86	3.70	-0.21	2.22	7.08	12.09	144.57
1954	2.63	26.17	29.67	44.74	25.74	14.54	3.04	5.91	6.68	12.88	12.17	15.55	16.53	199.72
1955	9.16	9.35	42.67	40.45	15.23	7.98	5.28	8.21	-2.03	27.43	7.65	4.83	14.74	176.21
1956	3.02	11.59	34.18	52.02	40.48	14.70	10.20	12.06	7.06	2.02	2.61	12.66	16.89	202.60
1957	12.84	13.09	21.89	26.98	21.37	16.62	9.32	-0.52	5.51	-1.31	2.17	15.29	11.92	143.25
1958	4.49	6.18	22.38	36.22	18.86	17.09	13.31	8.97	13.00	6.42	8.66	2.52	13.17	158.10
1959	14.56	16.25	29.38	51.24	18.62	8.82	12.79	6.25	0.79	9.52	10.97	26.27	17.12	205.46
1960	14.06	23.88	13.14	61.40	30.43	20.25	8.02	6.25	-2.71	0.08	2.19	-6.23	14.11	170.76
1961	-3.57	15.61	27.75	37.96	26.61	22.83	13.85	7.67	-0.84	-1.48	5.21	5.53	13.04	157.13
1962	5.83	7.30	21.76	33.82	16.26	9.88	6.39	8.06	5.58	8.16	6.94	4.46	11.20	134.44
1963	0.41	1.88	28.82	41.44	22.63	7.27	6.52	7.01	-2.95	-1.99	9.83	1.98	10.27	122.85
1964	9.03	3.73	29.14	30.45	18.83	7.89	9.12	6.63	-3.54	-2.97	0.53	5.09	9.53	113.93
1965	3.49	19.18	13.13	32.21	14.68	8.45	7.16	7.12	6.56	7.29	15.84	15.79	12.49	150.90
1966	8.99	15.34	32.27	19.52	13.93	11.61	3.68	5.19	2.35	-2.76	12.13	15.42	11.44	137.67
1967	8.54	4.62	12.17	28.12	21.96	15.54	12.01	7.55	7.19	13.51	20.35	15.45	14.03	168.01
1968	9.16	10.73	25.83	20.32	20.80	18.10	8.58	8.05	8.95	5.11	19.88	13.78	14.10	169.29
1969	16.11	10.89	15.91	44.33	33.19	21.67	12.98	5.22	-2.56	-0.61	10.66	6.90	14.54	174.69
1970	4.41	11.96	18.60	37.96	21.06	14.18	15.17	5.54	5.73	12.94	14.25	13.52	14.59	175.32
1971	4.63	17.33	27.03	40.84	27.81	14.58	11.64	8.28	5.75	4.02	-0.06	13.31	14.57	175.16
1972	8.48	10.45	26.30	45.08	36.73	31.06	27.28	14.57	4.28	5.30	23.28	27.30	21.69	260.11
1973	20.55	17.11	44.82	38.80	26.09	16.52	7.59	3.50	-1.17	7.14	11.40	22.36	17.92	214.71
1974	19.30	12.99	24.61	39.71	36.22	17.45	12.46	7.07	2.58	0.34	14.28	17.48	17.06	204.49
1975	14.00	17.59	30.42	29.23	22.05	18.00	8.09	5.11	13.20	10.78	11.50	12.78	16.03	192.75
1976	7.49	28.63	49.59	40.03	36.42	22.80	17.41	8.90	5.94	13.85	4.10	3.85	19.89	239.01
1977	5.96	6.35	44.94	33.88	11.25	9.92	10.73	17.79	24.35	22.85	26.97	31.44	20.62	246.43
1978	25.12	10.90	26.87	48.37	22.86	11.05	7.12	10.56	8.13	5.06	3.60	7.78	15.55	186.42
1979	23.51	10.22	46.66	44.41	21.70	12.00	7.86	9.04	12.37	10.72	16.78	20.15	19.68	235.42
1980	7.69	1.27	31.50	41.68	14.47	17.45	15.06	8.88	3.07	6.88	11.04	12.70	14.33	171.69
1981	2.52	36.87	18.63	21.20	18.18	15.77	13.67	14.17	18.82	19.35	20.45	9.55	17.25	209.18
1982	8.77	7.78	28.92	37.76	18.81	25.71	10.56	6.76	9.71	4.50	20.50	21.89	16.81	201.67
1983	10.61	13.51	18.04	34.07	37.23	10.03	4.35	7.71	-1.27	3.99	13.61	23.04	14.59	174.92
1984	5.63	31.02	21.23	44.55	33.96	16.74	8.20	10.84	6.49	2.00	5.07	17.03	16.81	202.82
1985	15.26	20.04	36.47	27.90	14.88	10.68	6.53	4.57	8.07	8.55	32.00	11.02	16.26	195.97
1986	12.21	13.00	32.83	30.72	17.87	21.69	13.54	12.27	24.09	20.05	10.68	22.83	19.34	231.78
1987	9.89	2.99	26.04	36.66	8.93	13.62	9.37	1.69	11.13	3.18	14.07	16.97	12.89	154.54
1988	2.94	12.65	17.20	25.84	16.47	4.53	10.27	2.27	1.04	7.02	16.52	1.89	9.85	118.64
1989	3.24	5.07	20.56	32.93	39.18	33.36	6.87	5.60	7.46	10.47	20.69	4.03	15.79	189.46
1990	24.22	32.93	34.26	42.79	40.64	17.96	11.07	6.45	-0.52	21.57	17.22	26.22	22.86	274.81
MEAN	10.53	14.21	28.03	37.35	23.84	15.33	10.30	7.49	5.59	7.09	11.93	13.26	15.40	184.95
S.D.	7.23	8.48	9.25	9.31	8.70	6.21	4.49	3.44	6.59	7.51	7.44	8.19	3.14	37.74
MAX.	25.12	36.87	49.59	61.40	40.64	33.36	27.28	17.79	24.35	27.43	32.00	31.44	22.86	274.81
YEAR	1978	1981	1976	1960	1990	1989	1972	1977	1977	1955	1985	1977	1990	1990
MIN.	-3.57	1.27	12.17	19.52	8.93	4.53	3.04	-0.52	-3.54	-3.05	-0.06	-6.23	9.53	113.93
YEAR	1961	1980	1967	1966	1987	1988	1954	1957	1964	1952	1971	1960	1964	1964

APPENDIX F - Connecting Channel Flows

ST. MARYS RIVER FLOW (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1851	-	-	-	-	-	-	-	-	-	-	-	-	-
1852	-	-	-	-	-	-	-	-	-	-	-	-	-
1853	-	-	-	-	-	-	-	-	-	-	-	-	-
1854	-	-	-	-	-	-	-	-	-	-	-	-	-
1855	-	-	-	-	-	-	-	-	-	-	-	-	-
1856	-	-	-	-	-	-	-	-	-	-	-	-	-
1857	-	-	-	-	-	-	-	-	-	-	-	-	-
1858	-	-	-	-	-	-	-	-	-	-	-	-	-
1859	-	-	-	-	-	-	-	-	-	-	-	-	-
1860	1870	1870	2010	2070	2320	2440	2490	2460	2440	2460	2350	2210	2250
1861	1900	1870	1870	1870	2380	2520	2630	2550	2580	2520	2440	2240	2283
1862	2070	1840	1780	1760	2160	2150	2180	2290	2320	2320	2210	2100	2095
1863	1870	1780	1780	1640	1780	1810	1900	2010	2100	2100	2150	1980	1902
1864	1730	1670	1590	1560	1840	1870	1930	1980	2010	1930	1780	1810	1809
1865	1590	1420	1420	1610	2010	2180	2320	2320	2320	2270	2010	1900	1948
1866	1530	1360	1440	1670	1900	2040	2120	2180	2180	2210	2150	1870	1890
1867	1610	1730	1780	1810	2100	2040	2270	2350	2320	2180	2070	1930	2018
1868	1730	1440	1700	1900	1900	1980	2120	2150	2180	2040	2100	2100	1947
1869	1730	1610	1420	1670	1980	2010	2290	2550	2800	2780	2550	2070	2124
1870	1840	1730	1730	1780	1980	2410	2490	2490	2580	2490	2440	2290	2190
1871	2070	1980	1840	1900	2240	2460	2580	2520	2550	2440	2290	2070	2247
1872	1950	1900	1760	1760	2240	2350	2580	2780	2800	2720	2630	2350	2320
1873	2120	2040	2070	2070	2380	2460	2720	2890	2920	2830	2690	2580	2484
1874	2240	2150	2100	2270	2490	2720	2780	2780	2750	2830	2690	2630	2477
1875	2380	2240	2210	2350	2520	2720	2780	2780	2780	2860	2690	2630	2570
1876	1876	2320	2290	2150	2180	2610	2970	3260	3280	3310	2920	2630	2754
1877	2440	2460	2410	2320	2320	2460	2660	2720	2580	2610	2460	2300	2486
1878	2240	2100	2040	2040	2180	2320	2410	2380	2210	2270	2210	2100	2209
1879	1900	1670	1560	1610	1810	1870	2040	2070	2010	2040	1930	1730	1855
1880	1610	1610	1560	1560	1950	2380	2520	2440	2550	2410	2440	2270	2110
1881	2100	2040	2040	1980	2210	2350	2460	2440	2520	2800	2750	2550	2355
1882	2240	2120	2070	2070	2270	2320	2520	2580	2550	2490	2460	2290	2333
1883	2070	2010	2010	2040	2040	2240	2350	2610	2100	2320	2240	2100	2205
1884	2040	1950	1900	1810	2010	2070	2180	2210	2240	2290	2320	2100	2103
1885	2120	2040	1980	1870	2210	2360	2490	2610	2460	2380	2320	2180	2255
1886	1980	1900	1900	1900	2100	2210	2290	2380	2290	2320	2210	2070	2131
1887	1950	1870	1870	1780	1980	2180	2380	2320	2240	2320	2180	1980	2089
1888	1870	1700	1700	1780	1980	2410	2460	2460	2440	2410	2290	2120	2127
1889	1980	1840	1840	1840	2120	2210	2350	2380	2350	2270	2120	1930	2104
1890	1950	1670	1670	1640	1840	2150	2350	2290	2240	2210	2120	1980	2012
1891	1640	1700	1610	1730	1900	1870	1930	1930	1900	1930	1870	1780	1816
1892	1730	1560	1470	1530	1760	1900	1950	1950	1950	1900	1760	1610	1757
1893	1560	1470	1470	1590	1780	2010	2100	2150	2100	2070	2040	1810	1848
1894	1760	1700	1670	1810	2210	2320	2380	2380	2320	2350	2290	2180	2117
1895	2070	2010	1930	1930	2040	2210	2320	2320	2410	2460	2240	2180	2178
1896	1980	1960	1870	1930	2210	2410	2460	2460	2440	2270	2290	2180	2207
1897	1900	1950	1950	1980	2180	2350	2490	2520	2460	2380	2350	2120	2238
1898	2100	1780	1730	1780	1950	2180	2270	2270	2320	2290	2240	2210	2080
1899	1950	1900	1900	1840	2290	2460	2580	2630	2750	2610	2520	2440	2325
1900	2240	2192	2073	2067	2172	2220	2328	2424	2616	2659	2662	2393	2337
1901	2248	2135	1945	1984	2141	2229	2435	2435	2288	2282	2200	2036	2198
1902	1880	1750	1625	1727	1849	1962	2090	2124	2192	2107	2124	1960	1950
1903	1826	1739	1691	1741	1979	2183	2243	2280	2254	2288	2268	2076	2049
1904	2027	1917	1914	1994	2146	2314	2393	2447	2472	2546	2464	2297	2245
1905	2197	1999	1909	2095	2243	2316	2466	2455	2526	2631	2500	2367	2311
1906	2316	2163	2104	2138	2291	2438	2495	2523	2478	2430	2376	2234	2333
1907	2104	2010	1889	1974	2044	2212	2356	2481	2574	2475	2401	2328	2239
1908	2121	1971	1841	1753	1903	2209	2430	2483	2398	2311	2248	2101	1984
1909	1906	2002	1523	1498	1911	1773	1962	2144	2152	2135	1949	2101	1894
1910	1900	1792	1623	1566	1620	1801	1869	1977	1943	1923	1863	1651	1794

ST. MARYS RIVER FLOW (CUBIC METERS / SECOND) - continued

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1971	2622	2347	2376	2699	3058	3208	3228	2996	3047	3200	3172	2806	2900
1972	2294	2067	2124	2124	3143	3285	3228	3200	3256	3143	3285	2435	2801
1973	2124	1614	1501	1557	1557	1586	2265	2747	3341	2639	2381	2413	2147
1974	2152	2124	2124	2124	2067	2407	2152	2124	2095	2067	1937	1977	2214
1975	2455	2421	2435	2619	2772	2515	2376	2282	2093	1883	1937	1977	2313
1976	1971	1943	1951	2025	2381	2314	2260	2042	1917	1807	1608	1685	1993
1977	1736	1713	1727	1747	1716	1742	1523	1693	1869	2769	3135	2549	1994
1978	2197	2189	2155	2163	2319	2401	2447	2633	2758	2803	2741	2107	2410
1979	1911	1897	1909	1894	2316	2750	3157	3228	3200	2747	2602	2302	2496
1980	2115	2135	2110	2144	2401	2274	2186	2110	2039	2330	2347	1909	2175
1981	1897	1897	1897	2124	2492	2718	2917	2747	2294	1359	1246	1303	2075
1982	1274	1274	1274	1303	1727	2095	2209	2379	2407	2520	2832	2803	2012
1983	2294	2322	2464	2435	2917	2945	2917	3002	2379	1699	2407	2379	2515
1984	2294	2152	2294	2294	2803	2832	3030	3115	2917	2095	1614	1926	2449
1985	1982	1982	2011	1982	1982	1926	1897	2350	2888	3455	3738	2917	2427
1986	2435	2435	2407	2294	3002	3228	3143	3228	3058	2435	1642	1982	2609
1987	2011	1982	2011	2011	2407	2180	1586	1557	1557	1671	1557	1557	1840
1988	1784	1784	1784	1784	1982	1926	1586	1586	1586	1982	1897	1586	1829
1989	2237	2265	2180	2209	2633	2662	2662	2605	2407	2039	1897	1897	2308
1990	1897	1897	1897	1897	2039	1614	1869	1812	1841	1671	1869	1727	1836
MEAN	1942	1890	1860	1914	2109	2211	2316	2386	2385	2331	2276	2086	2143
S.D.	270	267	270	322	414	457	511	536	528	521	500	382	331
MAX.	2622	2605	2687	2959	3443	3486	3565	3599	3554	3523	3738	3186	3089
YEAR	1971	1969	1969	1951	1951	1951	1938	1943	1950	1950	1985	1950	1951
MIN.	1246	1274	1274	1297	1260	1212	1280	1271	1158	1257	1246	1303	1320
YEAR	1922	1962	1982	1922	1931	1922	1922	1926	1955	1926	1981	1981	1922

ST. CLAIR RIVER FLOW (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1851	-	-	-	-	-	-	-	-	-	-	-	-	-
1852	-	-	-	-	-	-	-	-	-	-	-	-	-
1853	-	-	-	-	-	-	-	-	-	-	-	-	-
1854	-	-	-	-	-	-	-	-	-	-	-	-	-
1855	-	-	-	-	-	-	-	-	-	-	-	-	-
1856	-	-	-	-	-	-	-	-	-	-	-	-	-
1857	-	-	-	-	-	-	-	-	-	-	-	-	-
1858	-	-	-	-	-	-	-	-	-	-	-	-	-
1859	-	-	-	-	-	-	-	-	-	-	-	-	-
1860	5589	5022	5242	5684	6519	7177	7325	7282	7198	6942	6861	6522	6452
1861	5136	4617	4838	5403	6546	7275	7435	7520	7493	7358	7098	6360	6434
1862	5378	4833	4929	5500	6508	7002	7052	7122	7006	7332	7137	6042	6329
1863	5335	4714	4832	5376	6309	6826	6776	6803	6773	6653	6713	5583	6061
1864	5028	4466	4611	5172	6217	6533	6653	6602	6398	6017	5910	5481	5764
1865	4450	3958	4195	4917	5812	6152	6528	6564	6471	6334	5944	5578	5585
1866	4402	3732	3904	4604	5510	5878	6074	6183	6069	5977	5955	5416	5318
1867	4628	4115	4357	4971	5988	6395	6566	6578	6437	6234	5956	5275	5626
1868	4391	329	4313	4744	5704	6064	6096	5926	5783	5690	5667	5659	5328
1869	4283	3780	3785	4442	5429	5901	6162	6407	6375	6171	6175	5853	5407
1870	4752	4261	4568	5252	6244	6761	6847	6781	6958	6704	6431	5626	5941
1871	5152	4568	5037	5603	6600	7078	7108	6991	6657	6384	6246	5416	6070
1872	4596	3948	4033	4535	5531	6192	6359	6257	6220	6103	6035	5918	5483
1873	4385	3829	4012	4690	5769	6367	6508	6527	6463	6560	6572	5740	5627
1874	4990	4525	4746	5122	5958	6642	6726	6654	6572	6403	5982	5875	5858
1875	4688	4115	4282	4842	5839	6519	6605	6605	6725	6610	6587	6484	5835
1876	5001	4449	4665	5273	6406	7026	7410	7434	7556	7300	7195	6166	6329
1877	5389	4843	4951	5452	6352	6970	7049	6992	6832	6623	6605	5988	6104
1878	5173	4541	4778	5198	6222	6754	7033	6671	6539	6647	6613	5540	5959
1879	4887	4217	4341	4815	5693	5547	6083	6023	6030	5878	5884	5696	5433
1880	4628	4055	4195	4658	5682	6582	6522	6484	6457	6201	6152	6134	5626
1881	4688	4358	4508	4977	5958	6380	6502	6365	6353	6718	6803	6042	5813
1882	5114	4451	4670	5246	6147	6320	6443	6510	6468	6676	6502	6484	5929
1883	4995	4428	4595	5058	6174	6724	6888	7145	7038	6878	7220	6188	6120
1884	5443	4822	4989	5613	6541	6930	6991	7010	6821	6703	6933	6441	6308
1885	5395	4806	4951	5468	6492	7195	7306	7409	7379	7297	7115	6312	6436
1886	5503	5000	5248	5862	6848	7715	7541	7441	7327	7272	7158	5783	6566
1887	5281	4843	5102	5511	6427	7010	7095	6966	6735	6671	6407	5750	6158
1888	4785	4196	4433	4966	6012	6800	6687	6778	6582	6416	6295	5383	5782
1889	4736	4153	4287	4707	5591	6071	6274	6286	6212	6018	5798	5394	5469
1890	4482	3877	4012	4545	5521	5820	6058	6178	6016	5903	5706	4952	5264
1891	4348	3748	3877	4512	5450	5708	5702	5652	5518	5290	5083	5049	5003
1892	4024	3451	3629	4129	5008	5250	5454	5634	5509	5516	5364	5151	4848
1893	3975	3408	3596	4259	5407	6203	5884	5829	5654	5562	5461	5151	5042
1894	4186	3651	3877	4458	5483	5940	6076	5894	5766	5646	5565	4509	5096
1895	4078	3473	3623	4135	5035	5354	5293	5218	5139	5036	4767	4698	4662
1896	3608	3133	3224	3697	4722	5019	5000	4968	4929	4772	4854	4935	4409
1897	3802	3213	3434	4075	5191	5509	5628	5649	5508	5320	5281	5545	4857
1898	3916	3408	3677	4399	5272	5479	5557	5515	5451	5254	5194	5065	4858
1899	3927	3311	3537	4086	5186	5629	5850	5785	5731	5448	5366	5286	4939
1900	4190	3960	3960	5130	5240	5540	5440	5470	5550	5480	5440	5440	5077
1901	4700	3570	4360	3600	5490	5720	5780	5780	5660	5610	5550	5300	5105
1902	4130	4300	5180	5270	5320	5440	5410	5490	5380	5270	5300	5150	5141
1903	3990	3880	4900	5240	5240	5320	5440	5440	5490	5610	5440	5150	5102
1904	4330	4190	4360	5300	5520	5720	5780	5800	5780	5800	5690	5350	5304
1905	3570	3940	4560	5550	5660	5780	5830	5860	5860	5830	5720	5610	5321
1906	5470	4250	4810	5660	5780	5830	5800	5800	5720	5610	5550	5150	5458
1907	4420	4110	4900	5580	5640	5720	5830	5830	5830	5720	5610	5490	5395
1908	3960	3740	4730	5440	5610	5780	5890	5830	5690	5550	5440	5380	5258
1909	4810	3450	4360	5210	5380	5520	5580	5520	5490	5380	5210	5040	5090
1910	3910	3960	5040	5150	5270	5350	5300	5270	5240	5240	5150	4790	4978

ST. CLAIR RIVER FLOW (CUBIC METERS / SECOND) - continued

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1971	5210	4980	5550	5800	5970	6060	6170	6170	6090	6000	5950	5750	5813
1972	5610	5320	5440	5490	5890	6060	6060	6170	6290	6260	6120	5950	5890
1973	5860	5490	5690	6060	6260	6370	6460	6510	6460	6370	6290	6060	6161
1974	5660	5720	5830	5950	6200	6430	6570	6480	6400	6230	6170	5950	6135
1975	5690	5550	5440	5830	6120	6230	6310	6230	6170	6000	5860	5800	5938
1976	4729	4984	5494	6003	6230	6286	6315	6230	6060	5890	5692	5154	5757
1977	4191	4672	5154	5323	5351	5409	5409	5437	5324	5324	5437	5154	5184
1978	4814	4701	4899	5069	5267	5437	5607	5635	5663	5777	5663	5437	5335
1979	4502	4729	5324	5550	5947	6003	6116	6201	6116	5975	5862	5805	5683
1980	5692	5578	5493	5607	5777	5890	5947	5918	5918	5918	5833	5663	5770
1981	4672	5210	5578	5607	5777	5777	5833	5805	5862	5663	5663	5550	5585
1982	4616	4587	4955	5182	5493	5522	5578	5720	5720	5635	5607	5493	5347
1983	5465	5465	5635	5607	5777	6060	6116	6003	6003	5947	5805	5380	5773
1984	4389	5409	5210	3681	6003	6116	6173	6173	6116	6088	6060	6032	5623
1985	5578	5409	5748	6003	6371	6428	6371	6371	6371	6371	6258	6116	6120
1986	5522	5607	5833	6258	6371	6400	6541	6626	6598	6739	6654	6230	6285
1987	6060	5607	5682	6060	6088	6145	6088	6032	5890	5833	5720	5493	5894
1988	5182	5069	5380	5635	5663	5720	5607	5550	5437	5437	5324	5437	5455
1989	5154	4927	4984	5239	5380	5380	5437	5437	5380	5239	5210	4474	5188
1990	4729	4701	4701	4899	5012	5125	5295	5239	5182	5125	5154	5097	5023

MEAN	4554	4296	4674	5066	5519	5734	5813	5811	5748	5690	5615	5327	5326
S.D.	648	649	610	531	549	679	693	696	679	677	661	548	548
MAX.	6060	5720	5833	6258	6848	7715	7541	7520	7556	7358	7220	6522	6565
YEAR	1987	1952	1986	1986	1886	1886	1886	1861	1876	1861	1883	1860	1886
MIN.	3060	3000	3224	3600	4390	4420	4500	4530	4470	4420	4390	3990	4199
YEAR	1934	1942	1896	1901	1933	1964	1934	1934	1933	1933	1933	1935	1934

DETROIT RIVER FLOW (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1891	-	-	-	-	-	-	-	-	-	-	-	-	5742
1892	-	-	-	-	-	-	-	-	-	-	-	-	6327
1893	-	-	-	-	-	-	-	-	-	-	-	-	6093
1894	-	-	-	-	-	-	-	-	-	-	-	-	5840
1895	-	-	-	-	-	-	-	-	-	-	-	-	5743
1896	-	-	-	-	-	-	-	-	-	-	-	-	5240
1897	-	-	-	-	-	-	-	-	-	-	-	-	5017
1898	-	-	-	-	-	-	-	-	-	-	-	-	4665
1899	-	-	-	-	-	-	-	-	-	-	-	-	4702
1900	4300	4160	4190	5270	5300	5380	5490	5550	5580	5640	5380	5411	5411
1901	4960	4020	4500	3620	5010	5640	5780	5800	5690	5610	5580	5410	5316
1902	4250	4390	5100	5100	5300	5490	5720	5610	5470	5320	5320	5300	5040
1903	4280	4080	5130	5440	5580	5690	5520	5580	5550	5550	5550	5470	4650
1904	4530	4670	4590	5660	5690	5780	5830	5890	5800	5750	5550	4930	4385
1905	3820	4420	4870	5520	5720	5890	6000	5920	5920	5800	5690	4620	4420
1906	5490	4320	4790	5410	5830	5920	5950	5890	5750	5660	5240	5150	4757
1907	4790	4330	4980	5680	5800	5750	5920	5920	5890	5830	5690	5210	5106
1908	4330	4130	5010	5660	5800	5920	6000	5920	5720	5520	5380	5440	5286
1909	4980	3740	4250	5440	5580	5580	5610	5550	5520	5470	5380	5660	5399
1910	4700	3910	4960	5270	5490	5410	5320	5300	5300	5270	4930	5103	5706
1911	3820	3910	4640	4900	5130	5210	5210	5240	5130	5180	5150	5040	5575
1912	3960	3940	4590	4980	5270	5440	5490	5490	5550	5580	5580	5410	5881
1913	5300	4190	4560	5690	5720	5690	5750	5690	5580	5580	5660	5310	6009
1914	4700	4420	4560	5150	5440	5440	5440	5550	5520	5490	5300	6400	6320
1915	3770	4500	4530	5100	5240	5210	5270	5320	5240	5210	5040	6200	6298
1916	5040	4330	3940	5180	5550	5490	5640	5780	5660	5640	5580	6310	6094
1917	4500	4530	5350	5720	5830	5830	5970	6090	5800	5890	5830	6173	5934
1918	4330	4790	4870	5150	6200	6230	6170	6090	6080	5890	5950	5720	5356
1919	5780	5320	5550	5780	5830	5690	5690	5780	5690	5610	5660	6003	5828
1920	3480	3960	4790	5470	5440	5660	5750	5720	5720	5690	5470	5150	5931
1921	5320	3710	5240	5300	5380	5410	5410	5350	5240	5320	5070	5180	5762
1922	4500	3960	4700	5100	5150	5520	5490	5470	5380	5320	5300	5070	5565
1923	4160	3850	4450	4870	4930	5270	5210	5210	5180	5180	5100	4620	5974
1924	4530	3450	4330	4500	4810	5070	5070	5130	5130	5040	4900	4420	5849
1925	4050	3470	4330	4390	4530	4730	4730	4670	4560	4620	4530	4300	6374
1926	3230	3170	3740	4330	4640	4590	4620	4640	4620	4700	4700	4640	6493
1927	3370	3570	4050	4790	4870	5040	5100	5040	4960	5010	4980	4900	6036
1928	4530	3910	3790	4980	5320	5320	5410	5520	5580	5690	5690	5690	5549
1929	5100	4640	5720	6170	6460	6400	6430	6310	6120	5920	5970	5350	5283
1930	4700	4760	5660	5720	5780	5720	5860	5780	5660	5640	5270	5100	5487
1931	4360	3280	3450	4960	4930	4930	4980	4840	4790	4810	4840	4730	5306
1932	4560	4640	3790	4470	4700	4700	4730	4700	4590	4500	4450	4530	517
1933	4360	3770	4220	4530	4590	4810	4700	4590	4470	4420	4420	4160	6493
1934	3340	3430	4050	4450	4450	4470	4500	4530	4500	4500	4390	4450	1986
1935	3960	4450	4110	4550	4700	4530	4730	4730	4670	4820	4590	4020	6493
1936	3960	3770	4250	4590	4760	4900	4870	4790	4670	4870	4760	4560	6493
1937	4670	3680	4500	4730	4810	4670	4640	4640	4620	4730	4670	4300	5356
1938	3710	4330	4050	4870	4960	5040	5150	5210	5150	5150	4930	4812	4259
1939	4590	4190	4190	5100	5100	5210	5300	5320	5380	5320	5270	5070	1934
1940	3880	4050	4220	4810	4810	5070	5010	4980	5100	5070	5130	4980	4990
1941	4300	3680	4190	4670	5010	5010	5010	4900	4960	5040	5130	5040	5048
1942	4330	3230	4390	5210	5270	5440	5440	5380	5410	5210	5300	5040	4752
1943	4470	4190	5040	5320	5720	5720	5950	5970	5950	5890	5830	5610	4984
1944	4300	4670	4790	5550	5610	5720	5750	5640	5610	5520	5520	5361	5480
1945	4470	4450	5150	5320	5640	5720	5830	5720	5660	5780	5550	5440	5361
1946	5100	4760	5520	5720	5690	5780	5720	5640	5640	5780	5320	5270	5453
1947	4590	4300	5040	5660	5550	5690	5830	5780	5660	5660	5690	5490	5432
1948	5210	4960	5440	5580	5890	5660	5720	5660	5490	5240	5130	5040	5420
1949	5210	5100	4390	5150	5100	5070	5150	5150	5040	5040	4810	4790	4990
1950	4810	4300	4330	5100	4980	5100	5270	5300	5380	5380	5300	5270	5048

NIAGARA RIVER FLOW (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1851													
1852													
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1910													

NIAGARA RIVER FLOW (CUBIC METERS / SECOND) - continued

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1971	6000	5800	6030	6000	6116	6400	6090	6000	5950	5920	5860	5950	6011
1972	6090	5800	6173	6286	6630	6683	6710	6570	6430	6510	6683	6994	6486
1973	6940	6680	7110	7450	7420	7420	7330	7050	6770	6570	6630	6570	6997
1974	6600	6710	7051	7447	7500	7306	7051	6768	6600	6340	6400	6510	6857
1975	6740	6650	6650	6940	6940	6790	6800	6650	6800	6570	6570	6430	6711
1976	6315	6485	7051	7249	7278	6966	6938	6683	6626	6456	6343	5862	6688
1977	5494	5380	5720	6060	6456	6315	6202	6230	6286	6173	6088	6371	6069
1978	5890	5862	6032	6541	6654	6711	6315	6230	5975	5975	5748	5918	6156
1979	5635	5578	5833	6286	6570	6598	6428	6513	6428	6456	6343	6428	6282
1980	6513	6145	6315	6796	6881	6881	6711	6796	6711	6513	6145	6032	6538
1981	5692	5777	5918	5947	6371	6570	6400	6456	6485	6400	6371	6230	6220
1982	6201	5862	6343	6456	6541	6739	6315	6258	6003	5890	6145	6315	6258
1983	6315	6088	6116	6400	6796	6485	6626	6711	6513	6315	6371	6626	6450
1984	5975	6173	6428	6626	6683	6711	6598	6456	6400	6230	6315	6315	6409
1985	6201	5663	6739	7334	7334	7277	6909	6768	6683	6485	6824	7391	6808
1986	6343	6654	7249	7193	7476	7589	7504	7193	6909	7193	7023	7306	7139
1987	7193	6853	6796	7051	6966	6824	6881	6654	6541	6371	6145	6315	6716
1988	6088	6032	6003	6088	6230	6003	5748	5862	5607	5635	5635	5880	5880
1989	5663	5465	5267	5862	6060	6343	6116	6088	5833	5663	5862	5352	5799
1990	5465	5748	5918	6173	6258	6173	5918	5947	6088	6032	5890	6088	5976
MEAN	5564	5416	5565	5826	6139	6187	6084	5982	5861	5757	5755	5754	5826
S.D.	624	645	651	659	628	605	595	574	567	556	564	589	568
MAX. YEAR	7193	6853	7249	7450	7500	7589	7504	7193	6909	7193	7023	7391	7139
MIN. YEAR	3940	3280	4050	4300	4500	4470	4360	4390	4360	4330	4190	4250	4310
1964	1964	1936	1934	1935	1934	1934	1934	1934	1934	1934	1934	1964	1934

ST. LAWRENCE RIVER FLOW (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1851	-	-	-	-	-	-	-	-	-	-	-	-	-
1852	-	-	-	-	-	-	-	-	-	-	-	-	-
1853	-	-	-	-	-	-	-	-	-	-	-	-	-
1854	-	-	-	-	-	-	-	-	-	-	-	-	-
1855	-	-	-	-	-	-	-	-	-	-	-	-	-
1856	-	-	-	-	-	-	-	-	-	-	-	-	-
1857	-	-	-	-	-	-	-	-	-	-	-	-	-
1858	-	-	-	-	-	-	-	-	-	-	-	-	-
1859	-	-	-	-	-	-	-	-	-	-	-	-	-
1860	-	-	-	-	-	-	-	-	-	-	-	-	-
1861	6626	6824	7419	7900	8495	8580	8608	8382	8042	8099	8070	8014	7928
1862	7334	7023	7419	8184	8807	8637	8552	8325	7985	7702	7419	7362	7901
1863	7391	7277	7249	7872	8325	8382	8127	7929	7674	7362	7362	7306	7697
1864	6739	6966	7164	7074	8127	8410	8127	7872	7617	7419	7476	7589	7586
1865	7334	6739	7221	7929	8070	8070	7900	7589	7221	6966	6881	6796	7397
1866	6201	6032	6428	6909	7249	7561	7617	7532	7362	7306	7362	7646	7107
1867	6739	7193	7306	7872	8354	8580	8354	8014	7589	7164	7023	6513	7559
1868	6258	5918	6286	6909	6994	7419	7362	7136	7136	6768	6626	6824	6805
1869	6173	5975	5805	7221	7674	7787	8014	7985	7419	7759	7504	7136	7251
1870	7306	7334	7306	8212	8892	8722	8665	8212	7872	7617	7362	7249	7899
1871	6824	6683	7164	7504	7759	7759	7646	7362	7164	6909	6541	6343	7141
1872	5947	5493	5550	6230	6541	6739	6768	6654	6513	6343	6400	5918	6260
1873	5578	5578	5947	7108	7646	7747	7900	8155	8070	7702	7476	7391	6905
1874	7193	6513	7759	7815	7787	7957	7900	7731	7334	7108	6924	6598	7383
1875	5493	4899	5833	6854	6994	7079	7108	6994	6739	6654	6513	6371	6454
1876	6485	6739	7193	7985	8354	8495	8552	8240	7815	7731	7419	7334	7698
1877	5947	6654	6881	7277	7419	7419	7447	7221	6938	6796	6826	6683	6943
1878	6456	6598	7108	7391	7646	7646	7532	7516	7476	7277	7193	7702	7299
1879	6966	7277	7193	7476	7590	7561	7476	7193	7051	6711	6428	6428	7111
1880	6570	6683	6881	7164	7249	7391	7362	7051	6909	6654	6739	6428	6923
1881	5154	5522	6456	6881	6994	7136	7193	6994	6711	6485	6541	6626	6563
1882	6881	6909	7391	7561	7617	7985	7985	7759	7391	7023	6824	6881	7353
1883	5777	5833	6343	7136	7447	7900	8155	8070	7702	7476	7391	7391	7226
1884	6570	6909	7362	8099	8382	8184	8240	8014	7646	7306	7136	7051	7076
1885	6485	6173	6370	6570	7532	7815	7872	7674	7646	5419	7504	7674	7099
1886	5761	7646	7702	8240	8552	8410	8127	7929	7731	7447	7249	7249	7684
1887	6938	7136	7476	7985	8269	8269	8099	7702	7391	7221	6881	6711	7508
1888	6343	5808	6173	7023	7164	7249	7221	7193	6966	6711	6681	6681	6771
1889	6739	6230	6541	7136	7221	7504	7617	7476	7108	6683	6570	6824	6976
1890	7079	7193	7476	7362	7929	8155	8269	7844	7646	7419	7447	7249	7592
1891	6796	7023	7419	7872	7815	7532	7447	7164	6853	6485	6230	6145	7065
1892	6003	5663	5692	6456	6570	6909	7306	7164	7108	6768	6570	6513	6563
1893	6003	5465	5947	6966	7702	7900	7759	7334	7249	6994	6854	6541	6884
1894	6485	5862	6853	7051	7221	7532	7791	6909	6739	6598	6456	6173	6778
1895	5862	5380	5522	6315	6456	6400	6201	6088	5862	5663	5465	5493	5895
1896	5578	5607	5550	6541	6739	6683	6598	6400	6060	5862	5662	5720	6101
1897	5578	5409	5748	6428	6711	6881	6796	6796	6371	6032	5918	6032	6230
1898	5975	6088	6456	6853	6994	7023	6881	6654	6400	6201	6230	6258	6503
1899	6088	5947	6258	6739	6938	7051	6909	6598	6286	6032	5947	6003	6402
1900	5890	5918	6088	6768	6938	6966	6909	6711	6513	6258	6116	6286	6448
1901	6060	5918	5833	6626	6909	7023	7023	6981	6654	6485	6315	6088	6397
1902	5947	5352	6286	6739	6796	6881	7023	7079	6881	6654	5975	6343	6549
1903	6230	6230	6796	7306	7362	7306	7362	7221	7079	6768	6428	6230	6863
1904	5748	5833	6230	7249	7646	7844	7872	7731	7476	7221	6881	6258	7001
1905	5918	6173	6003	6739	6853	7051	7334	7277	7193	6994	6824	6654	6754
1906	6853	6626	6570	6824	6909	6966	7079	6881	6626	6541	6485	6428	6733
1907	6315	6513	6654	7221	7391	7419	7447	7306	7051	6994	6938	6909	7016
1908	6570	6541	7023	7872	8269	8325	8155	7900	7419	6994	6739	6428	7355
1909	6088	5890	5890	6343	6824	7391	7532	7476	7249	6909	6683	6371	6769
1910	5918	5663	6456	6711	7023	7023	7051	6966	6824	6541	6400	6230	6492

ST. LAWRENCE RIVER FLOW (CUBIC METERS / SECOND) - continued

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1971	6683	7023	7447	7674	8070	7702	7391	7334	7447	7334	6994	6654	7314
1972	6286	6541	7193	7731	8240	8495	8778	8778	8552	8297	7646	7946	7946
1973	7136	7900	8467	9203	9543	9911	9911	9146	8976	8976	8325	7532	8755
1974	6796	7504	8552	8778	8722	9260	9515	9345	8892	8580	7844	7957	8484
1975	7249	7079	8184	8523	8665	8722	8212	8014	7957	8184	8127	7447	8035
1976	6994	7391	8212	8637	9288	9854	9911	9231	8750	8524	8410	6768	8499
1977	6286	6088	6994	7816	7929	7447	7447	7363	7844	8495	8382	7277	7454
1978	7065	8064	8466	8304	8907	8726	8224	7882	7759	7457	7043	6369	7853
1979	6270	7032	7640	8045	817	8384	7908	7775	8005	8270	8152	8169	7825
1980	7178	7172	7156	7865	8382	8242	8141	8315	8532	8114	7921	7122	7845
1981	6683	6796	7504	7334	7023	7164	7447	7900	8382	8467	8410	8495	7639
1982	6796	7108	7221	7759	8155	8212	8240	7872	7702	7504	7532	7646	7648
1983	6570	6938	7589	7787	7959	8438	7985	7815	7844	7702	7646	7504	7651
1984	6739	7476	7929	7985	8693	8750	8665	8637	8438	7674	7504	7362	7988
1985	6485	7277	7844	8354	8438	8637	8580	8382	8382	8184	8099	7759	8038
1986	7023	8155	8523	8976	9373	9203	9486	9231	9231	9175	9571	9260	8937
1987	8467	8099	8892	8863	9316	8892	8665	8099	7787	7731	7023	7561	8286
1988	6739	7136	7362	7164	6739	7108	6881	6966	6881	6768	6994	6966	6974
1989	6060	6400	6201	5805	6456	7362	7957	7646	7419	7221	7419	6711	6891
1990	6881	7193	7476	7844	8155	8325	7872	7561	7391	7306	7306	7108	7536
1991													
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APPENDIX G - Diversions

OGOKI DIVERSION (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1931	-	-	-	-	-	-	-	-	-	-	-	-	-
1932	-	-	-	-	-	-	-	-	-	-	-	-	-
1933	-	-	-	-	-	-	-	-	-	-	-	-	-
1934	-	-	-	-	-	-	-	-	-	-	-	-	-
1935	-	-	-	-	-	-	-	-	-	-	-	-	-
1936	-	-	-	-	-	-	-	-	-	-	-	-	-
1937	-	-	-	-	-	-	-	-	-	-	-	-	-
1938	-	-	-	-	-	-	-	-	-	-	-	-	-
1939	-	-	-	-	-	-	-	-	-	-	-	-	-
1940	0	0	0	0	3	0	0	1	1	1	0	0	0
1941	0	0	0	1	0	0	0	0	1	0	0	1	0
1942	0	0	0	0	1	0	0	0	1	0	0	1	0
1943	0	0	0	0	0	0	22	60	91	116	113	95	42
1944	87	75	59	52	75	150	148	14	0	61	34	35	66
1945	51	35	34	37	71	139	188	134	90	74	76	73	84
1946	67	62	62	81	212	278	226	109	69	102	162	156	133
1947	107	82	65	51	173	179	215	90	97	81	73	73	107
1948	78	60	54	68	201	217	218	190	110	85	91	105	123
1949	81	61	53	97	259	234	122	111	73	72	92	99	113
1950	97	80	70	69	199	0	0	20	160	61	124	128	84
1951	92	71	62	49	75	40	65	105	86	182	170	219	102
1952	132	98	79	34	1	0	0	0	1	0	0	72	35
1953	147	81	65	65	100	200	199	3	6	55	192	119	103
1954	180	122	91	82	136	1	5	137	133	141	148	185	114
1955	112	85	73	92	219	260	241	127	86	80	96	103	132
1956	94	85	73	70	119	351	275	162	106	87	91	103	135
1957	87	69	62	68	195	234	19	151	91	83	121	93	106
1958	68	66	65	74	183	241	170	130	114	171	206	166	138
1959	121	93	72	74	111	292	328	228	167	150	124	112	156
1960	88	74	62	65	116	209	178	112	74	57	64	69	97
1961	66	59	57	65	192	310	184	115	85	70	77	83	114
1962	73	59	55	56	95	211	213	188	175	128	94	76	119
1963	70	63	58	65	89	157	168	252	226	132	86	71	120
1964	67	63	58	61	230	264	129	284	249	286	218	144	171
1965	111	90	78	75	117	178	179	148	116	136	176	165	131
1966	135	110	96	92	158	425	94	226	133	87	67	56	140
1967	48	44	47	55	93	299	222	133	90	64	59	54	101
1968	50	49	52	69	204	367	196	38	62	43	313	200	137
1969	134	111	90	86	210	377	101	1	312	216	162	130	160
1970	101	82	69	63	121	234	194	209	213	281	20	130	144
1971	162	246	129	84	102	106	102	103	103	103	103	103	103
1972	131	104	82	76	40	101	101	101	101	101	101	101	101
1973	104	104	88	88	30	108	108	108	108	108	108	108	108
1974	120	76	30	30	78	108	108	108	108	108	108	108	108
1975	136	136	88	88	136	136	136	136	136	136	136	136	136
1976	110	110	110	110	110	110	110	110	110	110	110	110	110
1977	77	77	77	77	77	77	77	77	77	77	77	77	77
1978	64	64	64	64	64	64	64	64	64	64	64	64	64
1979	23	23	23	23	23	23	23	23	23	23	23	23	23
1980	84	84	84	84	84	84	84	84	84	84	84	84	84
1981	110	110	110	110	110	110	110	110	110	110	110	110	110
1982	109	109	109	109	109	109	109	109	109	109	109	109	109
1983	52	52	52	52	52	52	52	52	52	52	52	52	52
1984	63	63	63	63	63	63	63	63	63	63	63	63	63
1985	69	69	69	69	69	69	69	69	69	69	69	69	69
1986	101	101	101	101	101	101	101	101	101	101	101	101	101
1987	139	139	139	139	139	139	139	139	139	139	139	139	139
1988	164	164	164	164	164	164	164	164	164	164	164	164	164
1989	193	193	193	193	193	193	193	193	193	193	193	193	193
1990	246	246	246	246	246	246	246	246	246	246	246	246	246
1991	284	284	284	284	284	284	284	284	284	284	284	284	284
1992	313	313	313	313	313	313	313	313	313	313	313	313	313
1993	346	346	346	346	346	346	346	346	346	346	346	346	346
1994	384	384	384	384	384	384	384	384	384	384	384	384	384
1995	425	425	425	425	425	425	425	425	425	425	425	425	425
1996	469	469	469	469	469	469	469	469	469	469	469	469	469
1997	510	510	510	510	510	510	510	510	510	510	510	510	510
1998	559	559	559	559	559	559	559	559	559	559	559	559	559
1999	609	609	609	609	609	609	609	609	609	609	609	609	609
2000	659	659	659	659	659	659	659	659	659	659	659	659	659
2001	709	709	709	709	709	709	709	709	709	709	709	709	709
2002	759	759	759	759	759	759	759	759	759	759	759	759	759
2003	809	809	809	809	809	809	809	809	809	809	809	809	809
2004	859	859	859	859	859	859	859	859	859	859	859	859	859
2005	909	909	909	909	909	909	909	909	909	909	909	909	909
2006	959	959	959	959	959	959	959	959	959	959	959	959	959
2007	1009	1009	1009	1009	1009	1009	1009	1009	1009	1009	1009	1009	1009
2008	1059	1059	1059	1059	1059	1059	1059	1059	1059	1059	1059	1059	1059
2009	1109	1109	1109	1109	1109	1109	1109	1109	1109	1109	1109	1109	1109
2010	1159	1159	1159	1159	1159	1159	1159	1159	1159	1159	1159	1159	1159
2011	1209	1209	1209	1209	1209	1209	1209	1209	1209	1209	1209	1209	1209
2012	1259	1259	1259	1259	1259	1259	1259	1259	1259	1259	1259	1259	1259
2013	1309	1309	1309	1309	1309	1309	1309	1309	1309	1309	1309	1309	1309
2014	1359	1359	1359	1359	1359	1359	1359	1359	1359	1359	1359	1359	1359
2015	1409	1409	1409	1409	1409	1409	1409	1409	1409	1409	1409	1409	1409
2016	1459	1459	1459	1459	1459	1459	1459	1459	1459	1459	1459	1459	1459
2017	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509
2018	1559	1559	1559	1559	1559	1559	1559	1559	1559	1559	1559	1559	1559
2019	1609	1609	1609	1609	1609	1609	1609	1609	1609	1609	1609	1609	1609
2020	1659	1659	1659	1659	1659	1659	1659	1659	1659	1659	1659	1659	1659

LONG-LAC DIVERSION (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1931	-	-	-	-	-	-	-	-	-	-	-	-	-
1932	-	-	-	-	-	-	-	-	-	-	-	-	-
1933	-	-	-	-	-	-	-	-	-	-	-	-	-
1934	-	-	-	-	-	-	-	-	-	-	-	-	-
1935	-	-	-	-	-	-	-	-	-	-	-	-	-
1936	-	-	-	-	-	-	-	-	-	-	-	-	-
1937	-	-	-	-	-	-	-	-	-	-	-	-	-
1938	-	-	-	-	-	-	-	-	-	-	-	-	-
1939	-	-	-	-	-	-	-	-	-	-	-	-	-
1940	0	0	0	0	14	24	32	36	25	0	0	0	5
1941	6	20	17	19	42	46	40	34	36	34	49	44	32
1942	35	27	21	21	50	65	55	46	36	16	59	53	40
1943	46	32	25	20	46	65	69	59	53	40	37	32	43
1944	26	21	17	16	58	77	62	71	66	47	45	39	45
1945	31	24	20	37	31	62	58	47	18	31	37	32	36
1946	26	20	17	27	74	76	74	52	39	31	48	51	45
1947	37	31	20	17	42	62	63	57	45	32	23	32	38
1948	24	19	8	6	31	46	40	25	20	8	2	28	21
1949	24	35	46	42	33	60	31	22	29	30	38	40	36
1950	45	45	40	30	53	65	66	39	38	41	69	62	49
1951	44	34	26	25	55	45	37	28	27	33	42	47	37
1952	46	41	29	20	27	59	58	44	36	35	25	24	37
1953	26	29	26	26	53	63	64	31	34	36	32	28	37
1954	32	37	34	28	76	73	32	33	34	26	33	30	39
1955	32	42	40	24	56	49	37	32	36	28	29	30	36
1956	28	25	26	23	17	62	45	33	30	38	34	27	32
1957	21	19	20	23	71	75	55	36	34	36	35	34	38
1958	42	42	34	34	69	82	62	37	39	33	40	29	45
1959	38	49	36	28	33	53	34	30	23	23	23	24	33
1960	28	39	31	26	51	71	40	27	25	19	35	41	36
1961	42	46	39	34	74	64	37	24	14	43	56	33	42
1962	40	54	41	35	41	78	31	33	52	39	36	37	43
1963	40	39	30	26	33	78	30	28	32	35	33	34	36
1964	35	33	30	35	87	98	78	59	51	74	48	43	56
1965	42	40	58	61	70	60	31	28	20	62	39	42	46
1966	52	49	37	38	80	76	48	63	51	46	46	43	52
1967	57	49	35	41	88	83	50	43	20	21	40	48	48
1968	55	44	33	41	76	80	82	72	34	39	44	52	54
1969	50	48	40	39	84	85	49	39	36	33	25	23	46
1970	35	45	39	30	57	86	72	40	36	67	65	46	52
1971	68	70	38	34	40	34	40	28	11	3	14	11	28
1972	58	70	34	24	79	59	68	28	34	65	48	54	46
1973	35	35	52	22	40	68	45	28	20	23	51	48	42
1974	44	22	35	24	91	69	72	52	53	42	27	39	52
1975	45	25	50	26	41	66	42	75	62	92	83	57	53
1976	48	38	48	19	72	49	52	42	24	23	24	36	41
1977	54	71	54	19	0	10	13	5	36	20	21	36	21
1978	59	17	99	25	57	57	50	54	60	95	73	59	51
1979	59	23	59	23	69	48	38	24	21	13	9	22	34
1980	42	51	42	28	48	65	57	32	20	19	46	50	35
1981	37	36	30	26	52	61	48	38	32	33	36	37	39
1982	12	12	10	10	21	17	16	14	13	19	18	13	9
1983	57	57	58	61	91	99	82	75	66	95	83	62	56
1984	1967	1984	1965	1965	1984	1978	1968	1985	1944	1988	1985	1950	1964
1985	0	0	0	0	0	10	3	5	6	0	0	0	4
1986	1940	1940	1940	1940	1987	1987	1939	1987	1971	1940	1939	1939	1939
1987	42	46	39	34	74	64	37	24	14	43	56	33	42
1988	40	54	41	35	41	78	31	33	52	39	36	37	43
1989	35	33	30	26	33	78	30	28	32	35	33	34	36
1990	42	40	58	61	70	60	31	28	20	62	39	42	46
1991	52	49	37	38	80	76	48	63	51	46	46	43	52
1992	57	49	35	41	88	83	50	43	20	21	40	48	48
1993	55	44	33	41	76	80	82	72	34	39	44	52	54
1994	50	48	40	39	84	85	49	39	36	33	25	23	46
1995	35	45	39	30	57	86	72	40	36	67	65	46	52

CHICAGO DIVERSION (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1891	-	-	-	-	-	-	-	-	-	-	-	-	-
1892	-	-	-	-	-	-	-	-	-	-	-	-	-
1893	-	-	-	-	-	-	-	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-	-	-	-
1900	40	65	59	76	91	91	96	102	65	96	93	122	83
1901	139	144	150	125	88	82	88	110	110	108	105	105	114
1902	173	161	150	130	136	119	116	122	122	119	119	116	122
1903	156	156	156	150	144	116	130	122	122	119	113	144	136
1904	147	156	156	133	116	119	116	122	122	127	127	144	127
1905	127	130	125	130	133	125	113	96	105	147	147	139	126
1906	140	156	142	142	142	156	159	176	133	119	125	142	145
1907	150	156	142	142	142	156	159	176	133	119	125	142	145
1908	116	127	193	218	212	212	195	190	184	184	181	181	183
1909	176	173	173	190	193	195	201	198	187	176	173	176	184
1910	193	184	201	198	198	204	195	190	187	201	193	184	194
1911	173	173	167	173	178	204	215	210	215	224	215	198	195
1912	176	170	173	193	178	195	212	221	221	215	210	193	196
1913	193	187	184	193	224	238	244	261	258	246	227	218	223
1914	207	207	195	204	227	232	224	235	258	238	215	215	222
1915	212	218	207	193	215	224	221	241	229	218	227	229	220
1916	224	215	215	212	221	241	272	258	232	227	238	235	220
1917	229	221	218	224	229	261	283	280	275	258	249	238	247
1918	218	241	238	244	255	269	280	263	246	246	246	252	250
1919	241	227	249	249	278	255	244	241	242	244	244	244	244
1920	232	229	241	232	221	227	232	241	258	249	241	235	237
1921	221	221	221	229	221	239	252	244	244	252	258	249	237
1922	229	227	244	227	246	252	252	244	244	244	244	244	244
1923	221	212	218	218	227	232	229	238	238	235	232	229	227
1924	210	229	266	275	269	292	275	283	266	258	238	224	257
1925	212	218	229	235	235	238	241	232	235	227	204	207	226
1926	204	218	227	249	244	261	252	255	221	190	249	246	235
1927	241	224	258	224	193	187	221	258	283	278	289	218	240
1928	241	278	283	289	286	292	289	292	286	283	283	292	284
1929	286	289	235	193	164	263	258	269	311	323	314	286	267
1930	218	224	252	275	232	241	232	294	255	255	210	204	237
1931	229	218	215	215	227	238	224	255	249	249	241	224	232
1932	227	210	204	221	232	239	218	244	252	249	235	229	229
1933	201	193	218	232	221	241	252	249	241	218	229	227	227
1934	207	193	218	227	238	249	246	246	246	232	235	238	230
1935	235	235	235	238	235	232	227	218	204	221	249	218	229
1936	178	187	187	193	215	181	198	201	204	167	184	139	186
1937	177	158	154	178	165	190	207	217	196	203	209	205	188
1938	181	208	215	217	74	74	81	82	80	85	80	98	187
1939	82	112	90	76	74	74	119	81	82	80	85	80	98
1940	82	79	88	85	91	79	102	110	88	91	79	139	93
1941	74	71	79	76	102	113	105	102	96	79	65	93	88
1942	76	96	82	82	88	88	93	99	105	79	79	82	87
1943	71	74	76	76	127	105	116	102	88	85	65	65	88
1944	82	82	91	88	85	93	93	93	93	91	71	65	87
1945	82	82	76	96	110	105	93	93	91	79	71	65	88
1946	79	82	85	74	116	102	108	99	91	76	76	65	88
1947	82	79	82	113	88	99	82	113	85	74	68	96	88
1948	74	71	88	68	82	99	110	125	113	88	71	79	89
1949	71	68	71	88	71	96	116	119	105	85	68	68	89
1950	71	74	74	85	71	110	116	113	108	85	68	68	89
1951	88	88	88	88	88	88	88	88	88	88	88	88	88
1952	88	88	88	88	88	88	88	88	88	88	88	88	88
1953	88	88	88	88	88	88	88	88	88	88	88	88	88
1954	88	88	88	88	88	88	88	88	88	88	88	88	88
1955	88	88	88	88	88	88	88	88	88	88	88	88	88
1956	88	88	88	88	88	88	88	88	88	88	88	88	88
1957	88	88	88	88	88	88	88	88	88	88	88	88	88
1958	88	88	88	88	88	88	88	88	88	88	88	88	88
1959	88	88	88	88	88	88	88	88	88	88	88	88	88
1960	88	88	88	88	88	88	88	88	88	88	88	88	88
1961	88	88	88	88	88	88	88	88	88	88	88	88	88
1962	88	88	88	88	88	88	88	88	88	88	88	88	88
1963	88	88	88	88	88	88	88	88	88	88	88	88	88
1964	88	88	88	88	88	88	88	88	88	88	88	88	88
1965	88	88	88	88	88	88	88	88	88	88	88	88	88
1966	88	88	88	88	88	88	88	88	88	88	88	88	88
1967	88	88	88	88	88	88	88	88	88	88	88	88	88
1968	88	88	88	88	88	88	88	88	88	88	88	88	88
1969	88	88	88	88	88	88	88	88	88	88	88	88	88
1970	88	88	88	88	88	88	88	88	88	88	88	88	88
1971	88	88	88	88	88	88	88	88	88	88	88	88	88
1972	88	88	88	88	88	88	88	88	88	88	88	88	88
1973	88	88	88	88	88	88	88	88	88	88	88	88	88
1974	88	88	88	88	88	88	88	88	88	88	88	88	88
1975	88	88	88	88	88	88	88	88	88	88	88	88	88
1976	88	88	88	88	88	88	88	88	88	88	88	88	88
1977	88	88	88	88	88	88	88	88	88	88	88	88	88
1978	88	88	88	88	88	88	88	88	88	88	88	88	88
1979	88	88	88	88	88	88	88	88	88	88	88	88	88
1980	88	88	88	88	88	88	88	88	88	88	88	88	88
1981	88	88	88	88	88	88	88	88	88	88	88	88	88
1982	88	88	88	88	88	88	88	88	88	88	88	88	88
1983	88	88	88	88	88	88	88	88	88	88	88	88	88
1984	88	88	88	88	88	88	88	88	88	88	88	88	88
1985	88	88	88	88	88	88	88	88	88	88	88	88	88
1986	88	88	88	88	88	88	88	88	88	88	88	88	88
1987	88	88	88	88	88	88	88	88	88	88	88	88	88
1988	88	88	88	88	88	88	88	88	88	88	88	88	88
1989	88	88	88	88	88	88	88	88	88	88	88	88	88
1990	88	88	88	88	88	88	88	88	88	88	88	88	88
1991	88	88	88	88	88	88	88	88	88	88	88	88	88
1992	88	88	88	88	88	88	88	88	88	88	88	88	88
1993	88	88	88	88	88	88	88	88	88	88	88	88	88
1994	88	88	88	88	88	88	88	88	88	88	88	88	88
1995	88	88	88	88	88	88	88	88	88	88	88	88	88
1996	88	88	88	88	88	88	88	88	88	88	88	88	88
1997	88	88	88	88	88	88	88	88	88	88	88	88	88
1998	88	88	88	88	88	88	88	88	88	88	88	88	88
1999	88	88	88	88	88	88	88	88	88	88	88	88	88
2000	88	88	88	88	88	88	88	88	88	88	88	88	88

WELLAND CANAL DIVERSION (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1861	8	8	8	8	9	9	9	9	9	9	8	9	9
1862	8	8	8	8	9	9	9	9	9	9	8	9	9
1863	8	8	8	8	9	9	9	9	9	9	8	9	9
1864	8	8	8	8	9	9	9	9	9	9	8	9	9
1865	8	8	8	8	9	9	9	9	9	9	8	9	9
1866	8	8	8	8	9	9	9	9	9	9	8	9	9
1867	8	8	8	8	9	9	9	9	9	9	8	9	9
1868	8	8	8	8	9	9	9	9	9	9	8	9	9
1869	8	8	8	8	9	9	9	9	9	9	8	9	9
1870	8	8	8	8	9	9	9	9	9	9	8	9	9
1871	8	8	8	8	9	9	9	9	9	9	8	9	9
1872	8	8	8	8	9	9	9	9	9	9	8	9	9
1873	8	8	8	8	9	9	9	9	9	9	8	9	9
1874	8	8	8	8	9	9	9	9	9	9	8	9	9
1875	8	8	8	8	9	9	9	9	9	9	8	9	9
1876	8	8	8	8	9	9	9	9	9	9	8	9	9
1877	8	8	8	8	9	9	9	9	9	9	8	9	9
1878	7	7	7	7	7	7	7	7	7	7	7	7	7
1879	7	7	7	7	7	7	7	7	7	7	7	7	7
1880	7	7	7	7	7	7	7	7	7	7	7	7	7
1881	6	6	6	6	6	6	6	6	6	6	6	6	6
1882	10	10	10	10	11	11	11	11	11	11	10	11	10
1883	12	12	12	12	12	12	12	12	12	12	12	12	12
1884	13	13	13	13	14	14	14	14	14	14	13	14	13
1885	15	15	15	15	15	15	15	15	15	15	15	15	15
1886	15	15	15	15	16	16	16	16	16	16	16	16	16
1887	17	17	17	17	18	18	18	18	18	18	17	18	17
1888	17	17	17	17	18	18	18	18	18	18	17	18	17
1889	18	18	18	18	19	19	19	19	19	19	18	19	18
1890	19	19	19	19	20	20	20	20	20	20	19	20	19
1891	21	21	21	21	22	22	22	22	22	22	21	22	21
1892	22	22	22	22	23	23	23	23	23	23	22	23	22
1893	23	23	23	23	24	24	24	24	24	24	23	24	23
1894	24	24	24	24	25	25	25	25	25	25	24	25	24
1895	25	25	25	25	26	26	26	26	26	26	25	26	25
1896	25	25	25	25	26	26	26	26	26	26	25	26	25
1897	26	26	26	26	27	27	27	27	27	27	26	27	26
1898	27	27	27	27	28	28	28	28	28	28	27	28	27
1899	28	28	28	28	29	29	29	29	29	29	28	29	28
1900	29	29	29	29	30	30	30	30	30	30	29	30	29
1901	30	30	30	30	31	31	31	31	31	31	30	31	30
1902	31	31	31	31	32	32	32	32	32	32	31	32	31
1903	32	32	32	32	33	33	33	33	33	33	32	33	32
1904	33	33	33	33	34	34	34	34	34	34	33	34	33
1905	35	35	35	35	36	36	36	36	36	36	35	36	35
1906	41	41	41	41	42	42	42	42	42	42	41	42	41
1907	43	43	43	43	44	44	44	44	44	44	43	44	43
1908	40	40	40	40	41	41	41	41	41	41	40	41	40
1909	48	48	48	48	49	49	49	49	49	49	48	49	48
1910	51	51	51	51	52	52	52	52	52	52	51	52	51
1911	53	53	53	53	54	54	54	54	54	54	53	54	53
1912	58	58	58	58	59	59	59	59	59	59	58	59	58
1913	64	64	64	64	65	65	65	65	65	65	64	65	64
1914	62	62	62	62	63	63	63	63	63	63	62	63	62
1915	68	68	68	68	69	69	69	69	69	69	68	69	68
1916	75	75	75	75	76	76	76	76	76	76	75	76	75
1917	79	79	79	79	80	80	80	80	80	80	79	80	79
1918	72	72	72	72	73	73	73	73	73	73	72	73	72
1919	76	76	76	76	77	77	77	77	77	77	76	77	76
1920	81	81	81	81	82	82	82	82	82	82	81	82	81

WELLAND CANAL DIVERSION (CUBIC METERS / SECOND) - continued

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1981	198	201	215	275	261	272	272	263	263	269	278	263	253
1982	204	187	181	227	261	269	269	252	269	261	263	258	242
1983	241	235	184	210	252	263	269	246	246	249	246	249	241
1984	190	184	198	261	272	261	272	255	255	261	261	249	243
1985	201	184	176	249	263	249	232	215	229	218	232	224	223
1986	241	227	227	241	181	204	173	227	238	249	246	238	224
1987	232	198	215	246	246	235	241	227	249	246	252	241	236
1988	246	244	238	235	261	258	246	232	232	224	227	232	240
1989	235	193	235	258	261	252	258	238	255	246	244	235	243
1990													
	MEAN	92	92	94	102	106	105	103	106	106	108	101	102
	S.D.	80	79	80	89	90	88	88	89	90	91	88	86
	MAX.	246	244	238	275	272	272	272	263	269	278	263	252
	YEAR	1988	1988	1988	1981	1984	1981	1981	1973	1982	1981	1981	1981
	MIN.	6	6	6	6	6	6	6	6	6	7	6	6
	YEAR	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881

APPENDIX H - Lake Levels

LAKE SUPERIOR BEGINNING-OF-MONTH LAKE LEVEL (METERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1851	-	-	-	-	-	-	-	-	-	-	-	-	-
1852	-	-	-	-	-	-	-	-	-	-	-	-	-
1853	-	-	-	-	-	-	-	-	-	-	-	-	-
1854	-	-	-	-	-	-	-	-	-	-	-	-	-
1855	-	-	-	-	-	-	-	-	-	-	-	-	-
1856	-	-	-	-	-	-	-	-	-	-	-	-	-
1857	-	-	-	-	-	-	-	-	-	-	-	-	-
1858	-	-	-	-	-	-	-	-	-	-	-	-	-
1859	-	-	-	-	-	-	-	-	-	-	-	-	-
1860	183.15	183.14	183.23	183.26	183.31	183.39	183.39	183.38	183.42	183.39	183.36	183.25	183.31
1861	183.16	183.15	183.15	183.15	183.36	183.48	183.46	183.45	183.43	183.42	183.32	183.30	183.32
1862	183.27	183.14	183.10	183.08	183.21	183.25	183.26	183.32	183.34	183.35	183.28	183.22	183.14
1863	183.14	183.09	183.04	183.03	183.03	183.05	183.09	183.17	183.22	183.22	183.25	183.14	183.12
1864	183.06	183.02	182.98	182.95	183.06	183.08	183.11	183.15	183.16	183.11	183.02	183.05	183.06
1865	182.98	182.86	182.86	182.99	183.16	183.26	183.34	183.34	183.38	183.32	183.17	183.09	183.14
1866	182.94	182.82	182.88	183.03	183.09	183.18	183.25	183.32	183.30	183.31	183.28	183.25	183.13
1867	182.99	183.07	183.04	183.11	183.21	183.18	183.25	183.32	183.30	183.31	183.29	183.11	183.19
1868	183.06	182.89	183.04	183.17	183.14	183.18	183.17	183.18	183.23	183.23	183.22	183.18	183.14
1869	183.06	182.99	182.86	183.03	183.15	183.15	183.27	183.40	183.44	183.44	183.40	183.21	183.20
1870	183.14	183.07	183.07	183.10	183.14	183.39	183.45	183.45	183.45	183.45	183.39	183.11	183.27
1871	183.08	182.90	183.03	183.18	183.34	183.38	183.40	183.42	183.45	183.43	183.41	183.24	183.27
1872	183.15	183.11	183.05	183.25	183.36	183.44	183.50	183.54	183.54	183.51	183.47	183.38	183.32
1873	183.35	183.29	183.30	183.31	183.40	183.50	183.58	183.67	183.69	183.67	183.61	183.53	183.49
1874	183.45	183.35	183.34	183.37	183.39	183.45	183.57	183.59	183.62	183.64	183.59	183.49	183.49
1875	183.39	183.38	183.39	183.39	183.46	183.57	183.60	183.67	183.67	183.62	183.58	183.52	183.51
1876	183.46	183.45	183.36	183.37	183.54	183.55	183.86	183.90	183.86	183.76	183.72	183.63	183.63
1877	183.52	183.45	183.37	183.34	183.42	183.52	183.54	183.49	183.49	183.43	183.40	183.44	183.44
1878	183.31	183.40	183.17	183.16	183.24	183.34	183.36	183.32	183.27	183.29	183.23	183.13	183.27
1879	183.11	183.15	183.24	183.12	183.01	183.08	183.16	183.19	183.18	183.19	183.18	183.03	183.13
1880	182.97	182.96	182.93	182.93	183.16	183.41	183.45	183.45	183.45	183.43	183.42	183.34	183.24
1881	183.26	183.23	183.20	183.17	183.27	183.40	183.42	183.43	183.50	183.61	183.59	183.50	183.38
1882	183.39	183.32	183.29	183.26	183.31	183.32	183.40	183.46	183.46	183.41	183.40	183.34	183.36
1883	183.27	183.18	183.18	183.26	183.31	183.36	183.36	183.36	183.36	183.32	183.27	183.23	183.28
1884	183.21	183.16	183.13	183.07	183.15	183.18	183.24	183.25	183.35	183.45	183.40	183.34	183.24
1885	183.27	183.22	183.19	183.18	183.31	183.38	183.46	183.48	183.48	183.40	183.36	183.28	183.33
1886	183.16	183.12	183.11	183.13	183.21	183.25	183.27	183.27	183.26	183.30	183.27	183.22	183.21
1887	183.11	183.11	183.21	183.26	183.18	183.25	183.34	183.35	183.30	183.31	183.22	183.17	183.23
1888	183.13	183.13	183.11	183.25	183.28	183.48	183.54	183.60	183.58	183.54	183.49	183.38	183.36
1889	183.32	183.23	183.16	183.28	183.33	183.39	183.44	183.48	183.48	183.43	183.34	183.23	183.32
1890	183.20	183.17	183.09	183.08	183.18	183.29	183.38	183.42	183.46	183.45	183.39	183.28	183.28
1891	183.16	183.11	183.11	183.09	183.16	183.16	183.17	183.20	183.17	183.22	183.16	183.14	183.15
1892	183.14	183.05	183.01	183.01	183.11	183.23	183.24	183.28	183.29	183.26	183.21	183.12	183.16
1893	183.04	183.01	183.03	183.06	183.21	183.37	183.46	183.48	183.45	183.44	183.39	183.32	183.27
1894	183.27	183.21	183.24	183.29	183.52	183.58	183.60	183.64	183.61	183.62	183.61	183.55	183.48
1895	183.46	183.39	183.34	183.31	183.42	183.52	183.58	183.60	183.64	183.65	183.56	183.47	183.49
1896	183.41	183.35	183.29	183.31	183.51	183.61	183.64	183.65	183.60	183.50	183.52	183.48	183.49
1897	183.43	183.36	183.34	183.34	183.44	183.54	183.63	183.67	183.65	183.59	183.50	183.37	183.39
1898	183.25	183.20	183.14	183.14	183.21	183.36	183.48	183.52	183.54	183.54	183.47	183.40	183.36
1899	183.29	183.23	183.16	183.23	183.45	183.60	183.67	183.73	183.78	183.72	183.69	183.62	183.52
1900	183.58	183.49	183.41	183.34	183.38	183.42	183.40	183.52	183.64	183.81	183.79	183.71	183.54
1901	183.59	183.48	183.43	183.37	183.43	183.54	183.57	183.67	183.67	183.63	183.64	183.57	183.54
1902	183.48	183.39	183.36	183.30	183.42	183.57	183.60	183.70	183.70	183.77	183.72	183.65	183.55
1903	183.45	183.39	183.36	183.30	183.42	183.57	183.60	183.70	183.70	183.77	183.72	183.65	183.55
1904	183.54	183.44	183.42	183.38	183.36	183.50	183.57	183.58	183.60	183.68	183.68	183.60	183.53
1905	183.48	183.38	183.31	183.34	183.39	183.49	183.56	183.61	183.65	183.72	183.67	183.65	183.52
1906	183.57	183.52	183.34	183.41	183.49	183.61	183.59	183.63	183.65	183.66	183.59	183.55	183.51
1907	183.42	183.34	183.29	183.26	183.43	183.51	183.56	183.65	183.65	183.66	183.59	183.55	183.46
1908	183.40	183.30	183.21	183.20	183.25	183.44	183.53	183.59	183.54	183.54	183.44	183.37	183.40
1909	183.26	183.15	183.11	183.09	183.13	183.28	183.32	183.43	183.46	183.43	183.37	183.37	183.28
1910	183.33	183.25	183.19	183.15	183.22	183.28	183.29	183.29	183.29	183.29	183.24	183.16	183.25
1911	183.08	182.95	182.92	182.89	182.82	183.04	183.13	183.30	183.35	183.36	183.36	183.29	183.13
1912	183.28	183.18	183.17	183.11	183.19	183.31	183.40	183.46	183.47	183.51	183.51	183.40	183.33
1913	183.30	183.28	183.15	183.19	183.26	183.39	183.45	183.53	183.54	183.57	183.57	183.40	183.40
1914	183.42	183.40	183.39	183.28	183.34	183.42	183.49	183.52	183.53	183.54	183.49	183.39	183.43
1915	183.30	183.27	183.22	183.12	183.17	183.25	183.40	183.44	183.45	183.53	183.55	183.57	183.36
1916	183.52	183.49	183.42	183.38	183.56	183.72	183.85	183.86	183.85	183.88	183.82	183.71	183.67
1917	183.66	183.50	183.45	183.44	183.42	183.54	183.56	183.57	183.57	183.55	183.50	183.42	183.51
1918	183.33	183.26	183.23	183.16	183.20	183.34	183.42	183.46	183.48	183.47	183.49	183.49	183.36
1919	183.45	183.38	183.34	183.31	183.38	183.46	183.50	183.52	183.51	183.50	183.44	183.47	183.44
1920	183.37	183.32	183.30	183.38	183.45	183.51	183.60	183.65	183.61	183.54	183.51	183.42	183.47
1921	183.40	183.29	183.23	183.23	183.35	183.46	183.51	183.55	183.54	183.54	183.46	183.36	183.41
1922	183.25	183.17	183.14	183.12	183.24	183.38	183.45	183.53	183.54	183.53	183.44	183.38	183.35
1923	183.31	183.25	183.13	183.18	183.22	183.38	183.45	183.53	183.54	183.53	183.44	183.38	183.27
1924	183.22	183.15	183.07	183.02	183.09	183.11	183.15	183.21	183.30	183.31	183.29	183.20	183.18
1925	183.09	183.03	182.97	182.94	183.00	183.04	183.13	183.18	183.19	183.19	183.11	183.00	183.00
1926	182.91	182.82	182.76	182.75	182.75	182.83	182.93	183.04	183.07	183.20	183.21	183.24	182.96
1927	183.20	183.13	183.09	183.13	183.20	183.39	183.48	183.58	183.54	183.54	183.52	183.44	183.35
1928	183.39	183.31	183.26	183.23	183.32	183.39	183.55	183.64	183.70	183.73	183.77	183.66	183.50
1929	183.54	183.48	183.46	183.48	183.50	183.54	183.57	183.62	183.58	183.60	183.58	183.53	183.48
1930	183.46	183.39	183.36	183.31	183.35	183.46	183.59	183.65	183.59	183.57	183.53	183.48	183.48
1931	183.39	183.32	183.25	183.18	183.21	183.29	183.38	183.43	183.42	183.45	183.47	183.48	183.36
1932	183.40	183.38	183.34	183.29	183.33	183.47	183.47	183.60	183.65	183.57	183.50	183.44	183.45
1933	183.38	183.32											

LAKE SUPERIOR BEGINNING-OF-MONTH LAKE LEVEL (METERS) - continued

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1971	183.56	183.47	183.47	183.47	183.53	183.66	183.72	183.72	183.70	183.67	183.66	183.61	183.60
1972	183.51	183.45	183.42	183.43	183.49	183.60	183.60	183.66	183.75	183.74	183.63	183.56	183.57
1973	183.65	183.58	183.53	183.60	183.65	183.80	183.90	183.90	184.01	183.95	183.90	183.82	183.78
1974	183.73	183.67	183.60	183.54	183.64	183.75	183.86	183.93	183.99	183.97	183.94	183.92	183.80
1975	183.83	183.78	183.73	183.67	183.68	183.76	183.86	183.88	183.84	183.82	183.76	183.79	183.78
1976	183.71	183.64	183.60	183.62	183.75	183.75	183.82	183.83	183.77	183.69	183.59	183.48	183.69
1977	183.38	183.31	183.29	183.36	183.43	183.47	183.53	183.61	183.69	183.85	183.82	183.77	183.54
1978	183.70	183.60	183.53	183.48	183.49	183.58	183.65	183.73	183.79	183.78	183.67	183.57	183.63
1979	183.49	183.41	183.39	183.46	183.58	183.77	183.88	183.89	183.86	183.82	183.82	183.77	183.68
1980	183.67	183.62	183.56	183.50	183.56	183.59	183.63	183.66	183.71	183.75	183.69	183.61	183.63
1981	183.50	183.42	183.43	183.44	183.54	183.59	183.71	183.68	183.64	183.54	183.56	183.51	183.55
1982	183.44	183.38	183.32	183.32	183.43	183.58	183.60	183.73	183.75	183.77	183.85	183.83	183.58
1983	183.79	183.71	183.65	183.63	183.68	183.76	183.79	183.82	183.80	183.78	183.83	183.82	183.76
1984	183.71	183.63	183.60	183.57	183.65	183.69	183.82	183.84	183.85	183.81	183.81	183.76	183.73
1985	183.71	183.63	183.61	183.60	183.71	183.82	183.89	183.95	184.01	184.07	184.07	184.05	183.84
1986	183.95	183.85	183.80	183.82	183.92	183.92	183.97	184.03	184.00	183.99	183.96	183.90	183.93
1987	183.81	183.72	183.65	183.61	183.60	183.64	183.71	183.73	183.69	183.61	183.58	183.67	183.67
1988	183.53	183.44	183.36	183.35	183.39	183.44	183.45	183.46	183.63	183.62	183.58	183.69	183.50
1989	183.62	183.56	183.48	183.47	183.52	183.63	183.73	183.70	183.70	183.63	183.59	183.51	183.60
1990	183.41	183.35	183.28	183.27	183.32	183.37	183.50	183.55	183.54	183.56	183.59	183.55	183.44

MEAN 183.38 183.31 183.27 183.27 183.34 183.44 183.51 183.56 183.57 183.56 183.52 183.46 183.43
S.D. 0.20 0.20 0.18 0.18 0.18 0.19 0.19 0.19 0.19 0.18 0.19 0.20 0.18
MAX. 183.95 183.85 183.80 183.82 183.92 183.92 183.97 184.03 184.01 184.07 184.07 184.05 183.93
YEAR 1986 1986 1986 1986 1986 1986 1986 1986 1973 1985 1985 1985 1986
MIN. 182.91 182.82 182.76 182.75 182.75 182.83 182.93 183.04 183.07 183.11 183.02 183.00 182.96
YEAR 1926 1866 1926 1926 1926 1926 1926 1926 1926 1864 1864 1925 1926

LAKE MICHIGAN BEGINNING-OF-MONTH LAKE LEVEL (METERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1891	-	-	-	-	-	-	-	-	-	-	-	-	-
1892	-	-	-	-	-	-	-	-	-	-	-	-	-
1893	-	-	-	-	-	-	-	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-	-	-	-
1900	176.52	176.40	176.51	176.47	176.56	176.63	176.63	176.73	176.77	176.73	176.77	176.67	176.62
1901	176.56	176.49	176.52	176.59	176.72	176.80	176.82	176.85	176.85	176.75	176.68	176.55	176.68
1902	176.46	176.44	176.45	176.46	176.44	176.50	176.61	176.70	176.79	176.71	176.67	176.58	176.46
1903	176.39	176.38	176.45	176.55	176.60	176.71	176.71	176.71	176.73	176.74	176.67	176.57	176.60
1904	176.47	176.48	176.47	176.64	176.74	176.81	176.96	176.94	176.96	176.83	176.82	176.69	176.74
1905	176.61	176.59	176.61	176.71	176.72	176.86	176.95	177.00	176.96	176.80	176.68	176.75	176.78
1906	176.64	176.68	176.74	176.77	176.84	176.76	176.94	176.94	176.84	176.83	176.73	176.65	176.78
1907	176.72	176.73	176.74	176.73	176.81	176.90	176.94	176.92	176.90	176.85	176.80	176.72	176.81
1908	176.63	176.65	176.73	176.74	176.79	176.97	177.00	177.05	176.94	176.82	176.71	176.58	176.80
1909	176.46	176.44	176.51	176.49	176.75	176.80	176.83	176.83	176.74	176.68	176.56	176.52	176.64
1910	176.51	176.49	176.47	176.50	176.63	176.62	176.65	176.60	176.58	176.48	176.49	176.40	176.54
1911	176.24	176.29	176.23	176.26	176.39	176.46	176.51	176.46	176.41	176.40	176.36	176.31	176.36
1912	176.33	176.29	176.29	176.27	176.40	176.61	176.62	176.67	176.71	176.63	176.62	176.60	176.50
1913	176.52	176.50	176.49	176.59	176.76	176.86	176.88	176.88	176.83	176.75	176.63	176.69	176.70
1914	176.52	176.48	176.48	176.55	176.58	176.63	176.73	176.72	176.69	176.61	176.54	176.45	176.58
1915	176.30	176.44	176.36	176.32	176.35	176.42	176.47	176.50	176.45	176.50	176.37	176.32	176.40
1916	176.29	176.29	176.30	176.38	176.59	176.74	176.87	176.87	176.73	176.70	176.67	176.61	176.59
1917	176.58	176.65	176.61	176.68	176.81	176.92	177.05	177.05	176.94	176.86	176.79	176.73	176.84
1918	176.74	176.73	176.79	176.87	176.94	177.09	177.07	177.07	176.99	176.88	176.83	176.76	176.90
1919	176.84	176.70	176.67	176.75	176.88	176.97	176.95	176.91	176.78	176.72	176.67	176.55	176.78
1920	176.41	176.53	176.47	176.65	176.69	176.75	176.79	176.79	176.77	176.73	176.64	176.58	176.65
1921	176.51	176.50	176.44	176.45	176.63	176.69	176.66	176.67	176.57	176.44	176.46	176.32	176.52
1922	176.28	176.28	176.29	176.36	176.58	176.65	176.69	176.67	176.65	176.55	176.44	176.26	176.48
1923	176.23	176.20	176.15	176.18	176.29	176.43	176.39	176.46	176.40	176.38	176.23	176.18	176.29
1924	176.15	176.06	176.06	176.13	176.18	176.30	176.33	176.40	176.37	176.30	176.19	176.10	176.21
1925	176.05	176.06	175.93	175.97	176.03	176.00	176.05	176.06	175.96	175.95	175.79	175.77	175.96
1926	175.67	175.72	175.70	175.80	175.89	175.92	176.05	176.09	176.06	176.05	175.95	175.98	175.91
1927	175.97	175.94	176.01	176.11	176.15	176.30	176.36	176.38	176.31	176.23	176.22	176.14	176.18
1928	176.12	176.09	176.12	176.19	176.40	176.50	176.60	176.64	176.64	176.61	176.64	176.71	176.44
1929	176.70	176.68	176.66	176.79	177.01	177.18	177.21	177.20	177.12	177.03	176.94	176.63	176.93
1930	176.68	176.66	176.72	176.69	176.76	176.79	176.85	176.84	176.80	176.62	176.51	176.38	176.69
1931	176.30	176.22	176.23	176.23	176.21	176.23	176.25	176.22	176.09	176.07	176.03	175.95	176.17
1932	176.09	175.87	175.93	175.91	176.00	176.08	176.06	176.07	176.01	175.89	175.91	175.83	175.97
1933	175.77	175.78	175.76	175.81	175.97	176.08	176.12	176.07	176.02	175.88	175.86	175.70	175.90
1934	175.74	175.67	175.65	175.74	175.81	175.89	175.90	175.90	175.84	175.84	175.73	175.75	175.79
1935	175.78	175.77	175.78	175.88	175.91	175.97	176.09	176.06	176.03	175.93	175.94	175.89	175.92
1936	175.84	175.83	175.88	175.91	176.01	176.07	176.12	176.06	176.06	176.05	175.96	175.90	175.97
1937	175.79	175.80	175.84	175.85	176.05	176.05	176.09	176.11	176.07	176.02	175.92	175.79	175.95
1938	175.82	175.81	175.87	176.00	176.15	176.30	176.37	176.38	176.39	176.37	176.29	176.19	176.18
1939	176.08	176.13	176.15	176.15	176.27	176.40	176.47	176.50	176.51	176.43	176.36	176.26	176.31
1940	176.12	176.13	176.11	176.03	176.13	176.22	176.29	176.31	176.34	176.28	176.22	176.15	176.19
1941	176.15	176.12	176.10	176.10	176.20	176.26	176.23	176.20	176.10	176.10	176.23	176.23	176.17
1942	176.22	176.21	176.17	176.27	176.39	176.55	176.56	176.58	176.50	176.45	176.36	176.34	176.38
1943	176.31	176.27	176.30	176.43	176.52	176.74	176.89	176.95	176.96	176.90	176.84	176.74	176.66
1944	176.62	176.59	176.60	176.58	176.68	176.72	176.77	176.76	176.69	176.72	176.61	176.56	176.66
1945	176.40	176.34	176.37	176.46	176.51	176.72	176.79	176.85	176.76	176.76	176.62	176.69	176.61
1946	176.66	176.61	176.63	176.83	176.76	176.83	176.84	176.80	176.65	176.59	176.45	176.42	176.67
1947	176.34	176.42	176.29	176.33	176.57	176.70	176.82	176.86	176.86	176.79	176.82	176.52	176.61
1948	176.68	176.49	176.55	176.65	176.71	176.77	176.69	176.69	176.69	176.57	176.41	176.32	176.61
1949	176.22	176.13	176.23	176.34	176.36	176.39	176.44	176.40	176.31	176.19	176.06	175.96	176.25
1950	176.03	176.02	176.01	176.15	176.31	176.36	176.41	176.55	176.53	176.49	176.45	176.29	176.30
1951	176.36	176.40	176.47	176.53	176.82	176.87	176.90	176.99	177.09	176.97	176.96	176.99	176.78
1952	176.98	177.00	177.01	177.06	177.22	177.28	177.33	177.29	177.35	177.20	177.01	176.97	177.14
1953	176.93	176.82	176.88	176.97	177.12	177.15	177.16	177.17	177.14	177.04	176.94	176.83	177.01
1954	176.66	176.63	176.69	176.89	176.94	177.02	177.04	176.98	176.98	177.05	176.97	176.88	176.98
1955	176.93	176.87	176.85	176.83	176.93	176.96	176.95	176.90	176.74	176.61	176.56	176.42	176.80
1956	176.37	176.35	176.36	176.40	176.50	176.60	176.65	176.68	176.67	176.55	176.49	176.35	176.50
1957	176.26	176.23	176.24	176.25	176.32	176.40	176.42	176.48	176.43	176.31	176.29	176.20	176.32
1958	176.27	176.21	176.25	176.19	176.15	176.21	176.19	176.22	176.09	175.98	175.97	175.81	176.13
1959	175.84	175.77	175.81	175.90	176.07	176.22	176.21	176.16	176.24	176.17	176.14	176.15	176.06
1960	176.22	176.21	176.22	176.25	176.43	176.65	176.76	176.79	176.81	176.75	176.71	176.56	176.53
1961	176.50	176.40	176.37	176.41	176.47	176.49	176.55	176.58	176.47	176.48	176.32	176.35	176.45
1962	176.21	176.22	176.24	176.30	176.40	176.42	176.46	176.40	176.36	176.27	176.19	176.08	176.30
1963	175.98	175.91	175.91	176.01	176.07	176.12	176.13	176.11	176.06	176.01	175.91	175.80	176.00
1964	175.68	175.69	175.59	175.65	175.81	175.84	175.86	175.86	175.82	175.82	175.74	175.71	175.75
1965	175.66	175.65	175.75	175.78	175.94	176.08	176.09	176.11	176.10	176.19	176.09	176.08	175.96
1966	176.13	176.08	176.15	176.27	176.33	176.35	176.38	176.31	176.29	176.14	176.05	176.07	176.21
1967	176.13	176.14	176.11	176.19	176.42	176.46	176.57	176.57	176.53	176.45	176.40	176.39	176.36
1968	176.32	176.36	176.35	176.34	176.44	176.52	176.62	176.60	176.68	176.61	176.63	176.53	176.50
1969	176.48	176.55	176.56	176.50	176.72	176.86	176.98	177.04	176.97	176.85	176.84	176.70	176.76
1970	176.74	176.62	176.61	176.60	176.72	176.82	176.84	176.89	176.79	176.83	176.80	176.75	176.75
1971	176.73	176.65	176.65	176.82	176.91	177.01	177.04	177.02	177.04	176.97	176.86	176.84	176.88
1972	176.82	176.74	176.76	176.74	176.92	176.99	177.04	177.07	177.17</				

LAKE HURON BEGINNING-OF-MONTH LAKE LEVEL (METERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1891	-	-	-	-	-	-	-	-	-	-	-	-	-
1892	-	-	-	-	-	-	-	-	-	-	-	-	-
1893	-	-	-	-	-	-	-	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-	-	-	-
1900	176.49	176.45	176.45	176.47	176.56	176.57	176.63	176.73	176.75	176.75	176.68	176.68	176.60
1901	176.61	176.53	176.49	176.59	176.72	176.79	176.82	176.89	176.83	176.72	176.70	176.56	176.69
1902	176.56	176.44	176.39	176.49	176.50	176.58	176.68	176.78	176.72	176.65	176.56	176.54	176.58
1903	176.48	176.44	176.45	176.56	176.62	176.65	176.69	176.73	176.74	176.76	176.68	176.55	176.61
1904	176.51	176.47	176.45	176.61	176.75	176.83	176.97	176.99	176.92	176.85	176.84	176.75	176.76
1905	176.63	176.59	176.59	176.66	176.73	176.86	176.95	177.00	176.97	176.91	176.84	176.75	176.79
1906	176.71	176.73	176.73	176.76	176.84	176.90	176.97	176.95	176.89	176.83	176.76	176.78	176.82
1907	176.64	176.70	176.69	176.75	176.80	176.87	176.95	176.99	176.93	176.91	176.76	176.71	176.81
1908	176.70	176.59	176.64	176.72	176.83	176.97	177.01	177.05	176.95	176.86	176.72	176.61	176.80
1909	176.55	176.46	176.49	176.51	176.59	176.77	176.84	176.82	176.77	176.70	176.54	176.52	176.63
1910	176.50	176.52	176.49	176.51	176.58	176.65	176.65	176.62	176.59	176.53	176.45	176.40	176.54
1911	176.36	176.31	176.34	176.30	176.34	176.48	176.50	176.47	176.41	176.35	176.34	176.34	176.38
1912	176.24	176.28	176.28	176.26	176.37	176.61	176.55	176.66	176.66	176.70	176.62	176.61	176.49
1913	176.57	176.52	176.53	176.64	176.74	176.86	176.90	176.90	176.83	176.73	176.70	176.60	176.71
1914	176.54	176.55	176.53	176.49	176.56	176.64	176.70	176.71	176.68	176.62	176.57	176.42	176.58
1915	176.32	176.31	176.36	176.33	176.35	176.38	176.45	176.47	176.49	176.47	176.40	176.37	176.39
1916	176.27	176.36	176.34	176.36	176.34	176.69	176.63	176.85	176.79	176.74	176.71	176.70	176.60
1917	176.68	176.63	176.63	176.66	176.75	176.85	177.03	177.13	177.04	177.01	176.90	176.79	176.84
1918	176.69	176.73	176.78	176.86	176.96	177.08	177.09	177.05	177.00	176.90	176.85	176.86	176.91
1919	176.72	176.77	176.63	176.76	176.79	176.91	176.88	176.87	176.81	176.69	176.68	176.68	176.77
1920	176.54	176.44	176.48	176.55	176.71	176.72	176.79	176.84	176.80	176.76	176.64	176.53	176.65
1921	176.46	176.42	176.42	176.52	176.69	176.85	176.85	176.83	176.54	176.57	176.41	176.33	176.52
1922	176.40	176.22	176.32	176.34	176.54	176.62	176.65	176.70	176.59	176.54	176.36	176.35	176.47
1923	176.21	176.11	176.19	176.31	176.39	176.46	176.43	176.39	176.34	176.32	176.15	176.08	176.28
1924	176.08	176.03	176.06	176.09	176.21	176.30	176.35	176.36	176.43	176.35	176.19	176.10	176.21
1925	175.97	175.95	175.95	176.00	176.01	175.99	176.04	176.03	175.96	175.83	175.83	175.75	175.94
1926	175.76	175.70	175.69	175.70	175.86	175.92	176.04	176.04	176.03	175.97	175.97	176.03	175.89
1927	175.96	175.99	175.98	176.06	176.16	176.31	176.35	176.37	176.27	176.25	176.15	176.23	176.17
1928	176.18	176.13	176.18	176.23	176.42	176.51	176.60	176.64	176.67	176.59	176.68	176.67	176.46
1929	176.66	176.69	176.64	176.70	176.96	177.17	177.22	177.22	177.12	177.00	176.87	176.89	176.93
1930	176.68	176.68	176.69	176.71	176.72	176.81	176.86	176.87	176.76	176.69	176.54	176.45	176.71
1931	176.37	176.22	176.14	176.19	176.19	176.23	176.23	176.19	176.05	176.12	176.02	176.08	176.17
1932	175.79	176.09	175.99	175.98	175.99	176.06	176.06	176.07	176.05	175.95	175.86	175.80	175.97
1933	175.84	175.74	175.78	175.72	175.86	176.08	176.11	176.11	175.96	175.93	175.86	175.83	175.90
1934	175.72	175.76	175.66	175.67	175.82	175.81	175.89	175.88	175.79	175.87	175.78	175.76	175.78
1935	175.79	175.74	175.78	175.83	175.93	175.94	176.03	176.03	176.04	176.01	175.89	175.94	175.92
1936	175.84	175.87	175.86	175.94	175.94	176.07	176.08	176.05	176.03	176.02	175.97	175.84	175.96
1937	175.92	175.85	175.88	175.81	175.93	176.04	176.10	176.08	176.03	175.97	175.91	175.95	175.96
1938	175.64	175.84	175.83	176.10	176.16	176.20	176.31	176.36	176.37	176.34	176.25	176.21	176.14
1939	176.15	176.04	176.09	176.13	176.27	176.34	176.48	176.47	176.48	176.44	176.35	176.24	176.29
1940	176.20	176.09	176.06	176.05	176.06	176.18	176.29	176.29	176.27	176.25	176.11	176.12	176.16
1941	176.10	176.10	176.09	176.03	176.16	176.18	176.19	176.19	176.12	176.10	176.08	176.16	176.13
1942	176.11	176.14	176.15	176.26	176.30	176.42	176.56	176.54	176.45	176.43	176.40	176.31	176.34
1943	176.27	176.29	176.34	176.40	176.53	176.65	176.88	176.93	176.92	176.84	176.72	176.75	176.63
1944	176.63	176.63	176.57	176.61	176.59	176.66	176.76	176.73	176.65	176.63	176.53	176.53	176.63
1945	176.42	176.42	176.36	176.41	176.53	176.62	176.79	176.76	176.72	176.67	176.65	176.63	176.58
1946	176.59	176.57	176.57	176.63	176.68	176.70	176.79	176.75	176.69	176.62	176.53	176.40	176.63
1947	176.33	176.25	176.30	176.27	176.48	176.68	176.79	176.86	176.80	176.78	176.69	176.68	176.58
1948	176.46	176.44	176.42	176.53	176.69	176.74	176.78	176.79	176.74	176.64	176.50	176.32	176.36
1949	176.34	176.29	176.26	176.19	176.28	176.32	176.39	176.42	176.32	176.29	176.13	176.05	176.27
1950	175.94	176.00	176.03	176.04	176.23	176.31	176.43	176.45	176.46	176.44	176.37	176.44	176.26
1951	176.34	176.36	176.37	176.47	176.69	176.80	176.88	176.98	176.90	176.90	177.00	176.97	176.72
1952	176.92	177.01	176.97	176.98	177.15	177.21	177.22	177.33	177.26	177.19	177.00	176.99	177.10
1953	176.91	176.92	176.85	176.88	176.90	177.01	177.12	177.13	177.11	176.97	176.89	176.78	176.96
1954	176.75	176.65	176.66	176.69	176.79	176.83	176.99	176.99	176.93	176.93	177.02	177.00	176.86
1955	176.86	176.81	176.77	176.79	176.91	176.86	176.93	176.86	176.83	176.81	176.49	176.48	176.77
1956	176.38	176.33	176.32	176.34	176.44	176.60	176.59	176.63	176.62	176.54	176.40	176.35	176.46
1957	176.34	176.24	176.18	176.16	176.27	176.33	176.45	176.46	176.34	176.33	176.22	176.24	176.30
1958	176.18	176.19	176.11	176.14	176.21	176.12	176.15	176.16	176.15	176.12	175.99	175.94	176.12
1959	175.74	175.79	175.77	175.82	176.02	176.10	176.11	176.16	176.16	176.12	176.15	176.16	176.01
1960	176.14	176.16	176.18	176.16	176.33	176.60	176.72	176.79	176.77	176.70	176.50	176.63	176.47
1961	176.43	176.36	176.33	176.35	176.42	176.42	176.47	176.47	176.45	176.43	176.45	176.29	176.41
1962	176.26	176.21	176.22	176.23	176.28	176.39	176.39	176.38	176.31	176.22	176.14	176.01	176.25
1963	175.94	175.85	175.83	175.89	175.99	176.04	176.04	176.06	176.03	175.94	175.87	175.83	175.94
1964	175.68	175.61	175.60	175.58	175.63	175.75	175.78	175.79	175.74	175.65	175.65	175.64	175.69
1965	175.61	175.63	175.59	175.66	175.77	175.96	176.02	175.99	176.01	176.08	176.14	176.13	175.89
1966	176.17	176.16	176.11	176.18	176.27	176.28	176.29	176.25	176.21	176.17	176.05	176.10	176.19
1967	176.08	176.07	176.11	176.09	176.26	176.35	176.50	176.51	176.46	176.37	176.32	176.28	176.28
1968	176.35	176.24	176.31	176.32	176.43	176.45	176.53	176.58	176.56	176.65	176.49	176.51	176.45
1969	176.54	176.51	176.45	176.51	176.60	176.70	176.90	176.97	176.92	176.79	176.69	176.75	176.70
1970	176.56	176.59	176.55	176.53	176.61	176.70	176.77	176.83	176.79	176.79	176.71	176.63	176.67
1971	176.63	176.64	176.72	176.65	176.83	176.89	176.96	176.97	176.91	176.84	176.82	176.72	176.80
1972	176.78	176.69	176.63	176.69	176.79	176.91	176.96	177.02	177.08	177.09	176.97	177.01	176.89
1973	176.91	176.85											

LAKE ST. CLAIR BEGINNING-OF-MONTH LAKE LEVEL (METERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1901	174.90	174.81	175.07	175.21	175.38	175.38	175.42	175.43	175.40	175.31	175.29	175.27	175.24
1902	175.49	175.27	175.46	175.49	175.62	175.65	175.73	175.68	175.65	175.53	175.31	175.25	175.51
1903	175.25	175.26	175.22	175.34	175.43	175.49	175.53	175.49	175.35	175.27	175.14	175.36	175.36
1904	175.03	174.62	175.07	175.26	175.41	175.36	175.43	175.41	175.37	175.31	175.39	175.30	175.25
1905	175.38	175.19	175.35	175.39	175.45	175.44	175.43	175.38	175.29	175.14	175.04	174.91	175.28
1906	174.93	174.14	174.44	174.89	175.21	175.24	175.24	175.27	175.27	175.13	175.00	174.83	174.97
1907	174.83	174.53	174.84	174.86	175.05	175.06	175.08	175.13	175.03	174.96	174.85	174.73	174.92
1908	174.85	174.20	174.47	174.53	174.71	174.79	174.74	174.82	174.82	174.74	174.63	174.47	174.65
1909	174.40	174.26	174.35	174.74	174.83	174.90	174.87	174.84	174.82	174.74	174.63	174.64	174.67
1910	174.79	174.44	174.71	174.96	174.99	175.15	175.26	175.27	175.25	175.19	175.01	174.85	174.99
1911	174.87	174.67	174.94	174.97	175.21	175.14	175.16	175.17	175.09	175.00	174.86	174.82	174.99
1912	174.88	174.39	174.57	174.91	174.90	174.91	174.96	174.91	174.87	174.82	174.71	174.67	174.79
1913	174.78	174.42	174.40	174.76	174.77	174.73	174.73	174.74	174.70	174.64	174.55	174.48	174.62
1914	174.88	174.59	174.70	174.95	174.95	175.09	175.08	175.07	175.03	174.92	174.81	174.73	174.90
1915	174.96	174.48	174.57	174.63	174.70	174.79	174.84	174.89	174.93	174.94	174.76	174.62	174.76
1916	174.77	174.89	174.63	174.92	174.98	175.21	175.26	175.22	175.05	174.97	174.87	174.83	174.97
1917	175.32	174.85	174.85	174.94	174.88	175.25	175.51	175.58	175.36	175.16	175.07	175.09	175.16
1918	175.01	174.63	174.86	174.68	174.93	175.15	175.13	175.22	175.13	175.25	175.01	175.02	175.00
1919	175.03	175.01	174.87	175.12	175.22	175.41	175.43	175.25	175.15	175.08	175.02	174.85	175.12
1920	174.35	174.38	174.49	174.80	174.97	174.99	175.08	175.07	175.07	175.00	174.92	174.89	174.84
1921	175.12	174.84	174.51	174.97	175.12	175.12	175.14	175.03	174.96	174.74	174.86	174.78	174.93
1922	174.69	174.57	174.43	174.90	174.99	175.03	175.09	175.05	174.99	174.92	174.80	174.59	174.93
1923	174.68	174.35	174.35	174.55	174.68	174.84	174.86	174.78	174.71	174.77	174.62	174.56	174.66
1924	174.63	174.49	174.37	174.61	174.72	174.82	174.90	174.91	174.84	174.74	174.58	174.47	174.67
1925	174.40	174.26	174.32	174.56	174.52	174.57	174.58	174.50	174.50	174.50	174.37	174.35	174.46
1926	174.10	173.91	173.97	174.42	174.46	174.49	174.61	174.64	174.60	174.72	174.63	174.61	174.43
1927	174.62	174.19	174.00	174.74	174.71	174.86	174.86	174.91	174.79	174.66	174.59	174.68	174.64
1928	174.65	174.59	174.30	174.76	174.76	174.88	175.07	175.07	175.03	174.94	174.94	174.92	174.83
1929	174.97	175.02	175.24	175.03	175.46	175.54	175.53	175.54	175.41	175.36	175.20	174.95	175.27
1930	174.74	175.06	175.36	175.22	175.32	175.29	175.33	175.29	175.15	175.06	174.92	174.76	175.13
1931	174.73	174.29	174.04	174.38	174.70	174.70	174.75	174.76	174.60	174.57	174.47	174.38	174.53
1932	174.63	174.54	174.62	174.42	174.62	174.76	174.64	174.68	174.62	174.51	174.50	174.46	174.58
1933	174.56	174.47	174.39	174.57	174.71	174.81	174.82	174.74	174.71	174.56	174.49	174.39	174.60
1934	174.39	174.03	174.06	174.08	174.43	174.45	174.50	174.48	174.37	174.37	174.21	174.12	174.29
1935	174.44	174.01	174.02	174.38	174.40	174.49	174.59	174.57	174.53	174.46	174.38	174.28	174.38
1936	174.06	174.01	174.36	174.32	174.56	174.60	174.60	174.53	174.45	174.54	174.42	174.38	174.40
1937	174.38	174.55	174.78	174.47	174.87	174.75	174.86	174.82	174.74	174.64	174.56	174.39	174.62
1938	174.48	174.24	174.70	174.68	174.76	174.86	174.90	174.92	174.87	174.85	174.76	174.64	174.72
1939	174.82	174.37	174.31	174.71	174.89	174.91	174.96	174.96	174.95	174.88	174.75	174.67	174.77
1940	174.63	174.21	174.26	174.45	174.69	174.84	174.87	174.87	174.86	174.82	174.70	174.63	174.65
1941	174.83	174.26	174.31	174.56	174.69	174.75	174.75	174.74	174.64	174.58	174.58	174.56	174.61
1942	174.60	174.42	173.97	174.73	174.55	175.02	175.04	175.07	175.00	174.95	174.85	174.88	174.76
1943	175.11	174.53	174.80	174.96	175.10	175.33	175.40	175.46	175.38	175.31	175.24	175.12	175.15
1944	174.87	174.80	174.69	174.96	175.15	175.22	175.27	175.20	175.09	175.12	174.98	174.83	175.02
1945	174.95	174.48	174.75	174.98	175.07	175.27	175.34	175.34	175.23	175.18	175.12	175.09	175.05
1946	175.20	174.56	174.62	175.19	175.13	175.24	175.32	175.29	175.15	175.05	175.00	174.84	175.05
1947	174.87	174.81	174.63	174.95	175.18	175.34	175.41	175.42	175.40	175.30	175.23	175.02	175.13
1948	175.13	174.92	175.25	175.25	175.34	175.34	175.34	175.28	174.85	174.81	175.07	174.92	174.85
1949	175.34	175.24	175.18	175.20	174.96	174.99	175.02	174.98	174.85	174.78	174.66	174.54	174.98
1950	174.65	174.84	174.60	174.95	175.13	175.05	175.06	175.07	175.05	174.99	174.92	174.91	174.94
1951	174.90	174.81	175.07	175.21	175.38	175.38	175.42	175.43	175.40	175.31	175.29	175.27	175.24
1952	175.49	175.27	175.46	175.49	175.62	175.65	175.73	175.68	175.65	175.53	175.31	175.25	175.51
1953	175.25	175.26	175.22	175.34	175.43	175.49	175.53	175.49	175.35	175.27	175.14	175.36	175.36
1954	175.03	174.62	175.07	175.26	175.41	175.36	175.43	175.41	175.37	175.31	175.39	175.30	175.25
1955	175.38	175.19	175.35	175.39	175.45	175.44	175.43	175.38	175.29	175.14	175.04	174.91	175.28
1956	174.93	174.14	174.44	174.89	175.21	175.24	175.24	175.27	175.27	175.13	175.00	174.83	174.97
1957	174.83	174.53	174.84	174.86	175.05	175.06	175.08	175.13	175.03	174.96	174.85	174.73	174.92
1958	174.85	174.20	174.47	174.53	174.71	174.79	174.74	174.82	174.82	174.74	174.63	174.47	174.65
1959	174.40	174.26	174.35	174.74	174.83	174.90	174.87	174.84	174.82	174.74	174.63	174.64	174.67
1960	174.79	174.44	174.71	174.96	174.99	175.15	175.26	175.27	175.25	175.19	175.01	174.85	174.99
1961	174.87	174.67	174.94	174.97	175.21	175.14	175.16	175.17	175.09	175.00	174.86	174.82	174.99
1962	174.88	174.39	174.57	174.91	174.90	174.91	174.96	174.91	174.87	174.82	174.71	174.67	174.79
1963	174.78	174.42	174.40	174.76	174.77	174.73	174.73	174.74	174.70	174.64	174.55	174.48	174.62
1964	174.42	174.08	174.05	174.42	174.56	174.58	174.53	174.52	174.43	174.31	174.25	174.39	174.51
1965	174.28	174.01	174.16	174.53	174.63	174.68	174.71	174.65	174.66	174.63	174.59	174.51	174.76
1966	174.70	174.57	174.56	174.93	174.93	174.92	174.95	174.89	174.85	174.71	174.59	174.64	174.76
1967	174.79	174.81	174.71	174.88	174.96	175.05	175.17	175.10	175.06	174.95	174.92	174.95	174.95
1968	175.03	174.98	174.95	174.97	175.04	175.20	175.28	175.21	175.14	175.10	174.99	175.06	175.09
1969	175.06	175.20	175.11	175.14	175.31	175.42	175.48	175.56	175.46	175.34	175.21	175.09	175.28
1970	174.83	174.98	174.96	175.15	175.20	175.29	175.34	175.36	175.30	175.28	175.19	175.16	175.17
1971	175.22	174.89	175.19	175.28	175.33	175.41	175.44	175.41	175.45	175.34	175.25	175.19	175.29
1972	175.23	175.26	175.14	175.28	175.37	175.49	175.54	175.56	175.55	175.53	175.51	175.48	175.41
1973	175.56	175.61	175.52	175.65	175.71	175.77	175.78	175.72	175.66	175.53	175.40	175.48	175.66
1974	175.39	175.50	175.52	175.53	175.57	175.68	175.68	175.60	175.67	175.54	175.38	175.23	175.52
1975	175.39	175.50	175.52	175.53	175.57	175.68	175.68	175.67	175.72	175.55	175.44	175.30	175.49
1976	175.44	175.20	175.54	175.59	175.68	175.68	175.68	175.67	175.72	175.55	175.44	175.30	175.49
1977	174.99	175.14	175.06	175.24	175.34	175.27	175.18	175.20	175.20	175.29	175.11	175.08	175.17
1978	175.43	175.32	175										

LAKE ERIE BEGINNING-OF-MONTH LAKE LEVEL (METERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1891	-	-	-	-	-	-	-	-	-	-	-	-	-
1892	-	-	-	-	-	-	-	-	-	-	-	-	-
1893	-	-	-	-	-	-	-	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-	-	-	-
1900	173.78	173.82	173.85	173.98	174.05	174.08	174.07	174.06	174.02	173.89	173.82	173.83	173.94
1901	173.77	173.68	173.56	173.69	173.70	173.80	173.90	173.93	173.93	173.81	173.72	173.65	173.76
1902	173.72	173.61	173.50	173.75	173.83	173.92	174.04	174.24	174.09	174.10	173.98	173.91	173.89
1903	173.86	173.81	173.87	174.08	174.32	174.26	174.24	174.23	174.20	174.04	173.93	173.86	174.06
1904	173.77	173.77	173.80	174.15	174.34	174.41	174.38	174.34	174.23	174.16	174.03	173.91	174.11
1905	173.84	173.75	173.67	173.82	173.99	174.14	174.28	174.25	174.20	174.10	173.98	173.97	174.00
1906	173.96	174.01	173.89	174.00	174.14	174.28	174.34	174.27	174.10	173.98	173.85	173.74	174.03
1907	174.05	174.19	174.03	174.16	174.20	174.27	174.35	174.33	174.19	174.18	174.10	174.06	174.18
1908	174.13	174.06	174.04	174.27	174.37	174.46	174.38	174.33	174.23	174.09	174.00	173.86	174.19
1909	173.82	173.83	173.86	173.90	174.09	174.28	174.31	174.24	174.16	174.00	173.82	173.85	174.01
1910	173.75	173.72	173.71	173.90	174.07	174.15	174.09	174.07	173.98	173.91	173.82	173.85	173.92
1911	173.66	173.66	173.64	173.73	173.89	173.93	173.92	173.81	173.80	173.79	173.76	173.69	173.77
1912	173.78	173.70	173.67	173.89	174.11	174.14	174.14	174.11	174.08	174.02	173.99	173.87	173.96
1913	173.80	174.13	174.02	174.57	174.52	174.45	174.47	174.31	174.24	174.14	174.02	174.04	174.23
1914	173.69	173.89	173.80	173.90	174.08	174.28	174.21	174.14	174.09	173.97	173.86	173.76	174.00
1915	173.99	173.68	173.78	173.74	173.78	173.85	173.90	173.98	174.01	173.97	173.85	173.74	173.83
1916	173.77	173.95	173.89	174.00	174.14	174.28	174.34	174.27	174.10	173.98	173.86	173.81	174.03
1917	173.81	173.79	173.72	173.91	174.12	174.32	174.45	174.48	174.36	174.28	174.25	174.19	174.14
1918	174.02	173.81	173.91	174.03	173.93	174.05	174.11	174.12	174.08	174.04	174.04	173.96	174.01
1919	174.07	174.03	173.94	174.23	174.33	174.51	174.43	174.33	174.25	174.13	174.09	173.92	174.19
1920	173.82	173.65	173.51	173.68	174.00	174.04	174.04	174.13	174.13	174.11	174.05	173.93	173.92
1921	173.91	173.93	173.84	174.09	174.28	174.28	174.25	174.14	174.03	173.92	173.89	173.87	174.04
1922	173.89	173.71	173.68	173.91	174.11	174.20	174.17	174.12	174.03	173.96	173.80	173.68	173.94
1923	173.66	173.63	173.53	173.71	173.81	173.92	173.93	173.90	173.79	173.70	173.65	173.61	173.74
1924	173.79	173.73	173.65	173.78	173.93	174.00	174.11	174.04	173.92	173.90	173.73	173.67	173.85
1925	173.59	173.45	173.54	173.72	173.73	173.69	173.68	173.66	173.64	173.57	173.46	173.50	173.60
1926	173.38	173.35	173.29	173.35	173.65	173.68	173.72	173.68	173.68	173.63	173.52	173.50	173.61
1927	173.76	173.63	173.61	173.75	173.86	174.00	173.99	173.99	173.87	173.78	173.69	173.82	173.81
1928	173.97	173.88	173.86	173.82	173.95	173.98	174.14	174.14	174.06	173.90	173.87	173.92	173.96
1929	173.93	173.98	173.99	174.30	174.57	174.66	174.62	174.55	174.42	174.28	174.20	174.25	174.31
1930	174.19	174.37	174.37	174.48	174.56	174.50	174.45	174.32	174.20	174.09	173.97	173.87	174.28
1931	173.85	173.74	173.61	173.58	173.73	173.80	173.84	173.81	173.74	173.68	173.61	173.61	173.72
1932	173.57	173.84	173.84	173.79	173.83	173.91	173.88	173.83	173.75	173.64	173.52	173.49	173.74
1933	173.55	173.60	173.54	173.71	173.88	173.99	173.92	173.82	173.69	173.61	173.45	173.38	173.68
1934	173.37	173.28	173.17	173.24	173.43	173.44	173.46	173.40	173.37	173.37	173.24	173.24	173.33
1935	173.22	173.19	173.19	173.34	173.43	173.54	173.57	173.60	173.52	173.43	173.36	173.33	173.39
1936	173.30	173.18	173.23	173.55	173.65	173.69	173.68	173.61	173.54	173.52	173.45	173.37	173.48
1937	173.43	173.73	173.74	173.71	174.00	174.01	174.16	174.11	174.00	173.78	173.69	173.57	173.83
1938	173.56	173.77	173.77	173.93	174.01	174.04	174.06	173.96	173.88	173.78	173.68	173.68	173.84
1939	173.63	173.65	173.72	173.83	174.06	174.04	174.08	174.06	173.95	173.84	173.76	173.68	173.86
1940	173.63	173.50	173.52	173.61	173.87	173.98	174.05	174.00	173.97	173.88	173.80	173.73	173.80
1941	173.85	173.80	173.67	173.75	173.80	173.84	173.81	173.72	173.59	173.57	173.57	173.53	173.72
1942	173.55	173.50	173.51	173.77	173.95	174.06	174.10	174.13	174.04	173.95	173.92	173.94	173.87
1943	173.99	173.94	173.93	174.05	174.22	174.54	174.56	174.42	174.28	174.21	174.14	174.14	174.24
1944	174.03	173.88	173.89	174.00	174.28	174.38	174.38	174.24	174.16	174.09	173.96	173.93	174.10
1945	174.10	174.10	173.99	174.10	174.21	174.36	174.49	174.44	174.32	174.33	174.29	174.21	174.19
1946	173.93	174.10	173.99	174.16	174.16	174.28	174.42	174.34	174.19	174.08	174.00	173.92	174.15
1947	173.86	173.90	173.93	174.37	174.56	174.63	174.63	174.54	174.49	174.31	174.23	174.10	174.23
1948	174.08	174.00	174.05	174.32	174.42	174.53	174.53	174.43	174.31	174.16	174.02	173.98	174.24
1949	173.93	174.03	174.10	174.08	174.14	174.18	174.16	174.10	173.98	173.85	173.76	173.68	174.00
1950	173.72	174.02	174.06	174.21	174.37	174.31	174.26	174.22	174.12	174.04	173.99	174.03	174.11
MEAN	173.98	173.96	173.97	174.11	174.24	174.30	174.32	174.28	174.20	174.11	174.02	173.98	174.13
S.D.	0.38	0.38	0.41	0.42	0.39	0.38	0.38	0.37	0.36	0.35	0.35	0.36	0.37
MAX.	175.06	174.99	174.98	175.10	175.14	175.16	175.22	175.17	175.03	175.07	175.08	175.02	175.06
YEAR	1987	1987	1986	1986	1985	1986	1986	1986	1986	1986	1986	1986	1986
MIN.	173.22	173.18	173.17	173.24	173.43	173.44	173.46	173.40	173.37	173.37	173.24	173.24	173.33
YEAR	1935	1936	1934	1934	1934	1934	1934	1934	1934	1934	1934	1934	1934

LAKE ONTARIO BEGINNING-OF-MONTH LAKE LEVEL (METERS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1891	-	-	-	-	-	-	-	-	-	-	-	-	-
1892	-	-	-	-	-	-	-	-	-	-	-	-	-
1893	-	-	-	-	-	-	-	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-	-	-	-
1900	74.29	74.39	74.42	74.55	74.79	74.73	74.74	74.67	74.55	74.42	74.29	74.38	74.52
1901	74.34	74.34	74.23	74.49	74.77	74.71	74.76	74.66	74.54	74.44	74.25	74.19	74.48
1902	74.37	74.28	74.23	74.62	74.64	74.60	74.66	74.81	74.73	74.62	74.50	74.45	74.54
1903	74.41	74.41	74.51	74.85	75.01	74.88	74.93	74.93	74.81	74.66	74.63	74.51	74.71
1904	74.44	74.41	74.55	74.85	75.16	75.29	75.33	75.30	75.20	75.08	74.94	74.78	74.95
1905	74.69	74.65	74.77	74.67	74.81	74.88	75.00	75.04	75.01	74.94	74.84	74.75	74.92
1906	74.76	74.80	74.77	74.77	74.86	74.85	74.90	74.88	74.77	74.63	74.62	74.68	74.77
1907	74.67	74.87	74.84	75.03	75.05	75.08	75.08	75.06	74.92	74.87	74.78	74.82	74.92
1908	75.02	74.99	75.09	75.28	75.42	75.56	75.49	75.39	75.20	74.99	74.79	74.83	75.17
1909	74.56	74.52	74.62	74.76	74.92	75.16	75.10	75.07	74.91	74.75	74.59	74.52	74.79
1910	74.44	74.46	74.48	74.73	74.82	74.91	74.87	74.69	74.73	74.62	74.50	74.45	74.64
1911	74.28	74.31	74.41	74.47	74.56	74.59	74.61	74.49	74.38	74.31	74.25	74.23	74.41
1912	74.34	74.39	74.37	74.50	74.89	75.09	75.09	74.96	74.83	74.80	74.69	74.67	74.72
1913	74.73	75.03	74.90	75.19	75.35	75.38	75.33	75.23	75.08	74.89	74.80	74.75	75.05
1914	74.67	74.64	74.57	74.75	74.97	75.02	74.98	74.86	74.79	74.66	74.52	74.43	74.74
1915	74.31	74.35	74.49	74.45	74.45	74.45	74.45	74.45	74.45	74.45	74.45	74.45	74.45
1916	74.39	74.52	74.54	74.66	74.97	75.19	75.38	75.23	75.03	74.85	74.69	74.57	74.84
1917	74.50	74.48	74.43	74.65	74.89	74.94	75.14	75.21	75.10	74.96	74.97	74.91	74.85
1918	74.83	74.78	74.82	75.05	75.12	75.08	75.03	74.95	74.80	74.77	74.77	74.74	74.89
1919	74.77	74.76	74.71	74.83	75.03	75.35	75.34	75.25	75.10	74.94	74.84	74.73	74.97
1920	74.63	74.48	74.41	74.60	74.63	74.63	74.64	74.68	74.63	74.56	74.53	74.51	74.58
1921	74.62	74.60	74.59	74.82	74.95	74.96	74.90	74.82	74.65	74.51	74.41	74.39	74.69
1922	74.37	74.32	74.41	74.58	74.90	74.92	75.04	74.97	74.81	74.68	74.53	74.40	74.66
1923	74.29	74.29	74.27	74.40	74.59	74.67	74.73	74.67	74.50	74.40	74.27	74.25	74.44
1924	74.31	74.38	74.38	74.45	74.66	74.84	74.83	74.79	74.71	74.63	74.49	74.34	74.57
1925	74.24	74.19	74.41	74.61	74.64	74.60	74.54	74.45	74.31	74.27	74.19	74.27	74.39
1926	74.26	74.18	74.16	74.25	74.53	74.54	74.56	74.45	74.43	74.43	74.45	74.59	74.40
1927	74.54	74.52	74.58	74.74	74.72	74.78	74.77	74.76	74.61	74.46	74.38	74.52	74.62
1928	74.72	74.74	74.72	74.81	74.93	74.92	74.98	74.97	74.89	74.70	74.65	74.66	74.81
1929	74.66	74.77	74.66	74.96	75.31	75.52	75.48	75.44	75.26	75.10	74.97	74.88	75.09
1930	74.87	75.06	75.14	75.33	75.37	75.41	75.41	75.31	75.10	74.92	74.72	74.59	75.10
1931	74.46	74.40	74.34	74.39	74.46	74.56	74.54	74.49	74.34	74.28	74.18	74.12	74.38
1932	74.15	74.38	74.51	74.55	74.77	74.80	74.72	74.66	74.54	74.36	74.27	74.26	74.50
1933	74.24	74.25	74.20	74.25	74.49	74.58	74.55	74.44	74.35	74.20	74.04	73.98	74.30
1934	73.98	74.08	74.01	74.11	74.31	74.25	74.21	74.09	73.91	73.77	73.77	74.03	74.03
1935	73.73	73.85	73.87	74.01	74.08	74.15	74.25	74.23	74.09	74.00	73.91	73.87	74.00
1936	73.84	73.83	73.78	74.32	74.53	74.51	74.44	74.32	74.19	74.13	74.05	74.03	74.16
1937	74.03	74.30	74.39	74.37	74.62	74.77	74.78	74.73	74.66	74.46	74.40	74.40	74.49
1938	74.31	74.28	74.45	74.65	74.74	74.74	74.69	74.67	74.57	74.54	74.40	74.31	74.53
1939	74.25	74.24	74.34	74.55	74.80	74.80	74.78	74.70	74.60	74.44	74.33	74.19	74.50
1940	74.16	74.09	74.07	74.11	74.55	74.70	74.76	74.75	74.58	74.49	74.36	74.37	74.42
1941	74.48	74.50	74.51	74.55	74.65	74.58	74.50	74.46	74.33	74.20	74.16	74.15	74.42
1942	74.16	74.13	74.13	74.47	74.66	74.78	74.77	74.74	74.63	74.57	74.50	74.53	74.51
1943	74.59	74.68	74.79	75.03	75.14	75.54	75.58	75.49	75.37	75.18	75.08	75.01	75.13
1944	74.86	74.76	74.72	74.77	74.99	75.10	75.16	75.09	74.92	74.81	74.64	74.56	74.87
1945	74.53	74.54	74.59	74.96	75.11	75.33	75.35	75.32	75.16	75.15	75.20	75.23	75.04
1946	75.17	75.12	75.11	75.21	75.12	75.14	75.13	75.04	74.91	74.81	74.76	74.69	75.02
1947	74.67	74.80	74.76	74.88	75.17	75.42	75.66	75.67	75.50	75.28	75.09	74.95	75.16
1948	74.88	74.84	74.92	75.22	75.37	75.48	75.45	75.33	75.16	74.95	74.81	74.78	75.10
1949	74.69	74.78	74.93	74.92	75.08	75.03	74.92	74.80	74.74	74.54	74.42	74.34	74.76
1950	74.41	74.64	74.75	74.94	75.16	75.17	75.14	75.06	74.96	74.79	74.73	74.77	74.88
1951	74.48	74.50	74.51	74.55	74.65	74.58	74.50	74.46	74.33	74.20	74.16	74.15	74.42
1952	74.16	74.13	74.13	74.47	74.66	74.78	74.77	74.74	74.63	74.57	74.50	74.53	74.51
1953	74.24	74.25	74.20	74.25	74.49	74.58	74.55	74.44	74.35	74.20	74.04	73.98	74.30
1954	73.98	74.08	74.01	74.11	74.31	74.25	74.21	74.09	73.91	73.77	73.77	74.03	74.03
1955	73.73	73.85	73.87	74.01	74.08	74.15	74.25	74.23	74.09	74.00	73.91	73.87	74.00
1956	73.84	73.83	73.78	74.32	74.53	74.51	74.44	74.32	74.19	74.13	74.05	74.03	74.16
1957	74.03	74.30	74.39	74.37	74.62	74.77	74.78	74.73	74.66	74.46	74.40	74.40	74.49
1958	74.31	74.28	74.45	74.65	74.74	74.74	74.69	74.67	74.57	74.54	74.40	74.31	74.53
1959	74.25	74.24	74.34	74.55	74.80	74.80	74.78	74.70	74.60	74.44	74.33	74.19	74.50
1960	74.16	74.09	74.07	74.11	74.55	74.70	74.76	74.75	74.58	74.49	74.36	74.37	74.42
1961	74.48	74.50	74.51	74.55	74.65	74.58	74.50	74.46	74.33	74.20	74.16	74.15	74.42
1962	74.16	74.13	74.13	74.47	74.66	74.78	74.77	74.74	74.63	74.57	74.50	74.53	74.51
1963	74.59	74.68	74.79	75.03	75.14	75.54	75.58	75.49	75.37	75.18	75.08	75.01	75.13
1964	74.86	74.76	74.72	74.96	75.11	75.33	75.35	75.32	75.16	75.15	75.20	75.23	75.04
1965	75.17	75.12	75.11	75.21	75.12	75.14	75.13	75.04	74.91	74.81	74.76	74.69	75.02
1966	74.67	74.80	74.76	74.88	75.17	75.42	75.66	75.67	75.50	75.28	75.09	74.95	75.16
1967	74.88	74.84	74.92	75.22	75.37	75.48	75.45	75.33	75.16	74.95	74.81	74.78	75.10
1968	74.69	74.78	74.93	74.92	75.08	75.03	74.92	74.80	74.74	74.54	74.42	74.34	74.76
1969	74.41	74.64	74.75	74.94	75.16	75.17	75.14	75.06	74.96	74.79	74.73	74.77	74.88
1970	74.41	74.64	74.75	74.94	75.16	75.17	75.14	75.06	74.96	74.79	74.73	74.77	74.88
1971	74.48	74.50	74.51	74.55	74.65	74.58	74.50	74.46	74.33	74.20	74.16	74.15	74.42
1972	74.16	74.13	74.13	74.47	74.66	74.78	74.77	74.74	74.63	74.57	74.50	74.53	74.51
1973	74.24	74.25	74.20	74.25	74.49	74.58	74.55	74.44	74.35	74.20	74.04	73.98	74.30
1974	73.98	74.08	74.01	74.11	74.31	74.25	74.21	74.09	73.91	73.77	73.77	74.03	74.03
1975	73.73	73.85	73.87	74.01	74.08	74.15	74.25	74.23	74.09	74.00	73.91	73.87	74.00
1976	73.84	73.83	73.78	74.32	74.53	74.51	74.44	74.32	74.19	74.13	74.05	74.03	74.16
1977	74.03	74.30	74.39	74.37	74.62	74.77	74.78	74.73	74.66	74.46	74.40	74.40	74.49
1978	74.31	74.28	74.45	74.65	74.74	74.74	74.69	74.67	74.57	74.54	74.40	74.31	74.53
1979	74.25	74.24	74.34	74.55	74.80	74.80	74.78	74.70	74.60	74.44	74.33</		

APPENDIX I - Change in Storage

LAKE SUPERIOR CHANGE IN STORAGE (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1851	-2759	-340	0	0	6437	3801	-613	-307	-634	-306	-3167	-613	130
1852	-2759	-4412	-1226	-634	3985	1267	306	1840	633	307	-2217	-1839	-208
1853	-2452	-1697	-1533	-1267	3372	634	1226	2452	1584	0	950	-3372	-233
1854	-2452	-1310	-1226	-950	3372	634	920	1226	317	-1533	-2851	920	-233
1855	-2146	-4072	0	4118	5211	3167	2452	0	317	-306	-4751	-2452	104
1856	-2146	-4072	1839	4751	1839	2851	1533	1226	317	613	-950	0	417
1857	-7970	2715	920	317	3065	951	2146	1533	1226	317	613	-634	-365
1858	-1533	-5570	4598	4118	920	0	920	306	1584	0	-317	0	286
1859	-4905	-2375	-3985	5385	3678	0	3679	3985	1267	0	-1267	-5824	-26
1860	-2146	-2375	0	950	1226	7919	1839	0	1584	-1533	-1900	-8583	-260
1861	-920	-6109	3985	4751	4905	1267	613	613	950	-613	-633	-5211	338
1862	-2759	-1310	-920	-950	6130	3484	2452	1839	1267	-920	-1267	-2759	363
1863	-2452	-2037	307	317	2759	3168	2452	2759	634	-613	-1900	-2452	391
1864	-2452	-3393	-307	950	0	1900	3679	613	950	613	-1584	-3065	-104
1865	-3065	-3393	306	0	2146	3484	0	920	2217	-1533	-1267	-1839	78
1866	-1839	-2294	-920	317	5211	6652	3372	1226	-1267	-3065	-1267	-2759	286
1867	-3372	-2376	-2452	-950	0	2534	3065	613	-1584	613	-1900	-920	-599
1868	-920	1018	-7050	-317	2452	3167	613	-1226	-1584	613	-1900	-3065	-703
1869	-613	1357	2759	-3801	-3372	2217	2452	920	-950	920	-950	-3985	-260
1870	-1839	-327	-920	0	7050	7919	1226	0	0	-613	-317	-2452	805
1871	-2452	-1018	-920	-950	3065	4117	613	306	2217	3372	-634	-2759	416
1872	-3372	-2375	-920	-950	1533	317	2452	1840	0	-1533	-1226	-1839	-416
1873	-2145	-3055	0	2534	0	1584	1533	613	-634	-1226	-1584	-2145	-286
1874	-613	-1697	-920	-1900	2452	950	1840	306	3168	3065	-1584	-1839	286
1875	-2145	-1697	-920	-317	3985	2217	2452	920	-950	1840	-1267	-2452	-156
1876	-3678	-1358	-306	634	2452	1267	613	0	-317	1226	-950	-1533	-156
1877	-3372	0	0	3065	1583	2217	2759	307	-1584	306	-2851	-1533	-130
1878	-1226	0	-613	0	4291	7285	1839	1840	-634	-1226	-1583	-3372	545
1879	-1839	-3055	-2145	-317	3678	1584	1839	1533	1267	-1533	-2851	-3372	-391
1880	-920	-1018	-2452	-317	3065	3484	2759	1226	1267	-307	-1900	-3372	130
1881	-3678	-1697	0	-634	2146	0	306	920	-950	1533	-1900	-613	-364
1882	-2452	-1018	-1226	0	3065	3801	307	1226	317	-920	-1583	-2759	-52
1883	-2452	-1018	613	950	4598	5068	2759	613	-950	306	-1584	-2145	521
1884	-1533	-2036	-920	1583	7050	1900	613	1226	-950	306	-317	-1839	599
1885	-2759	-2376	-1533	-950	3372	3168	1839	306	1584	306	-2851	-2759	-208
1886	-1839	-1966	-1840	634	6130	3168	920	306	-1583	-3065	634	-1226	26
1887	-1533	-2375	-613	0	3065	3167	2759	1226	-634	-1839	-2851	-3985	-286
1888	-3678	-2036	-307	-317	6744	4751	3678	1226	633	-1839	-950	-2146	78
1889	-3372	-2036	307	-2217	1226	1267	-613	3679	3801	5211	-634	-2452	225
1890	-1226	-3054	-2452	-2217	1226	1267	-613	3679	3801	5211	-634	-2452	225
1891	-3678	-3733	-1533	-1900	1839	1584	1839	4598	-634	-1226	317	-2145	-364
1892	-2759	-3054	-920	-950	920	2217	3065	1226	0	613	-950	-920	-104
1893	-2452	-2036	-920	-1900	3678	4751	920	3065	634	2452	0	-2146	312
1894	-3372	-3276	-613	-1267	-613	4434	2146	306	634	2452	0	-2452	-130
1895	-3679	-3393	-2146	-950	1533	3168	2145	1533	1267	2146	-1584	-613	130
1896	-2452	-1697	-4598	-950	2146	2534	3678	-613	0	-613	-2217	306	-364
1897	-2452	-1697	-4598	-950	2146	5385	2452	1533	2851	307	-2217	-1226	104
1898	-4598	-2715	-1533	0	-920	5385	2452	1533	2851	307	-2217	-1226	104
1899	-3678	-3276	-2759	-317	1533	6018	2759	1839	-1584	951	-3167	-2759	-519
1900	-2759	-3733	-1226	-634	1226	4751	1226	3371	951	-920	-1900	0	52
1901	-1226	-2715	-1839	-1267	2146	1900	306	0	0	613	-2217	-2452	-547

LAKE SUPERIOR CHANGE IN STORAGE (CUBIC METERS / SECOND) - continued

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1971	-2759	-3054	0	0	1839	4118	1839	0	-634	-920	-317	-1533	-104	MEAN	-2447	-2194	-1207	-285	2417	3116	2208	1303	403	-201	-1254	-1916	8
1972	-3065	-1966	-920	317	1840	3484	0	1839	2851	-306	-3484	-2146	-130	S.D.	1120	1223	1446	1573	1767	1899	1373	1270	1301	1557	1343	1482	367
1973	2759	-2375	-1533	2217	1332	4751	3065	1533	1900	-1839	-1584	-2452	677	MAX.	2759	2715	4598	5385	7050	8869	6130	5211	5385	5211	2534	3372	833
1974	-2759	-2036	-2145	-1901	3065	3484	3372	2145	1901	-613	-950	-613	260	YEAR	1973	1867	1868	1869	1880	1950	1944	1911	1988	1900	1982	1988	1982
1975	-2759	-1697	-1533	-1900	3065	2534	3065	613	-1267	-613	-1901	920	-339	MIN.	-7970	-6109	-7050	-4118	-3372	-951	-613	-1226	-1900	-3372	-5385	-8583	-833
1976	-2452	-2294	-1226	633	3985	0	2146	306	-1900	-2452	-3168	-3372	-805	YEAR	1973	1867	1868	1869	1880	1950	1944	1911	1988	1900	1982	1988	1982
1977	-3065	-2376	-613	2217	2145	1267	1839	2452	2534	4905	-950	-1533	755	MIN.	-7970	-6109	-7050	-4118	-3372	-951	-613	-1226	-1900	-3372	-5385	-8583	-833
1978	-2146	-3393	-2146	-1584	307	2851	2145	2452	1900	-306	-3484	-3065	-521	YEAR	1973	1867	1868	1869	1880	1950	1944	1911	1988	1900	1982	1988	1982
1979	-2452	-2715	-613	2217	3678	6018	3372	306	-950	-1226	0	-1533	521	MIN.	-7970	-6109	-7050	-4118	-3372	-951	-613	-1226	-1900	-3372	-5385	-8583	-833
1980	-3065	-1638	-1839	-1900	1839	950	1226	920	1584	1226	-1900	-2452	-415	YEAR	1867	1871	1878	1914	1879	1867	1861	1878	1930	1952	1952	1870	1987
1981	-3372	-2715	306	317	3065	1584	3679	-920	-1267	-3065	634	-1533	-260	MEAN	-2447	-2194	-1207	-285	2417	3116	2208	1303	403	-201	-1254	-1916	8
1982	-2145	-2036	-1839	0	3371	4751	613	3985	634	613	2534	-613	833	S.D.	1120	1223	1446	1573	1767	1899	1373	1270	1301	1557	1343	1482	367
1983	-1226	-2714	-1840	-633	1532	2534	920	920	-634	-613	1584	-306	-26	MAX.	2759	2715	4598	5385	7050	8869	6130	5211	5385	5211	2534	3372	833
1984	-3372	-2621	-920	-950	2452	1267	3985	613	317	-1226	0	-1533	-156	YEAR	1973	1867	1868	1869	1880	1950	1944	1911	1988	1900	1982	1988	1982
1985	-1532	-2715	-613	-317	3372	3484	2145	1839	1900	1840	0	-613	755	MIN.	-7970	-6109	-7050	-4118	-3372	-951	-613	-1226	-1900	-3372	-5385	-8583	-833
1986	-3065	-3393	-1533	634	3065	0	1533	1839	-950	-306	-950	-1840	-390	YEAR	1973	1867	1868	1869	1880	1950	1944	1911	1988	1900	1982	1988	1982
1987	-2759	-3054	-2146	-1267	-306	1267	0	2146	633	-1226	-2534	-920	-833	MIN.	-7970	-6109	-7050	-4118	-3372	-951	-613	-1226	-1900	-3372	-5385	-8583	-833
1988	-1533	-2949	-2452	-317	1226	1584	306	307	5385	-307	-1267	3372	286	YEAR	1867	1871	1878	1914	1879	1867	1861	1878	1930	1952	1952	1870	1987
1989	-2146	-2036	-2452	-317	1533	3484	3065	-920	0	-2145	-1267	-2452	-469	MEAN	-2447	-2194	-1207	-285	2417	3116	2208	1303	403	-201	-1254	-1916	8
1990	-3065	-2036	-2146	-317	1533	1583	3985	1533	-317	613	950	-1226	104	S.D.	1120	1223	1446	1573	1767	1899	1373	1270	1301	1557	1343	1482	367

LAKE MICHIGAN-HURON CHANGE IN STORAGE (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1891	-	-	-	-	-	-	-	-	-	-	-	-	-
1892	-	-	-	-	-	-	-	-	-	-	-	-	-
1893	-	-	-	-	-	-	-	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-	-	-	-
1900	-	-	-	-	-	-	-	-	-	-	-	-	-
1901	-3931	-3643	-243	3860	5699	3393	1100	2204	-1380	-4606	-2021	-5920	-447
1902	-1942	-3434	-681	1854	1517	4293	4167	4167	-3164	-2421	-4076	-3035	-203
1903	-2846	-1224	1732	4759	2414	3143	890	890	676	661	-3401	-5051	220
1904	-3048	-720	452	6320	5273	7010	2859	13	-1610	-1706	-2752	-4809	596
1905	-4396	-1464	432	3840	1773	6111	3945	2192	-1582	-2630	-7895	843	110
1906	-3264	1448	1295	1359	3290	-404	5443	445	-3387	-1767	-3840	-1281	-127
1907	-1604	1717	-6	1157	2839	3616	2643	458	-1826	-1524	-4564	-2838	-4
1908	-2165	-2156	2839	2063	3527	7233	1537	1969	-4753	-4593	-5672	-5254	-445
1909	-3925	-2695	2178	14	7391	5254	2204	445	-3157	-2863	-6355	-1308	-280
1910	-661	-	-	1129	4364	1386	647	-1747	-1136	-3493	-1617	-3055	-447
1911	-4343	-38	-627	-251	3696	4780	1524	-1747	-2495	-1551	-1122	-1079	-278
1912	-1793	28	0	-906	5253	10202	-1119	3527	892	-836	-2063	-653	1039
1913	-2616	-1710	6	4759	5894	4989	1322	0	-2724	-3951	-3366	-930	146
1914	-5004	-709	-13	195	2204	2955	3493	7	-1359	-3081	-2710	-5280	-780
1915	-5462	3098	-613	-1582	1092	2251	2636	1092	-655	634	-4509	-1747	-333
1916	-2873	2141	-229	2251	8537	6794	5920	445	-4502	-1759	-1359	-1518	1152
1917	-1092	440	-863	2251	4809	4753	6811	3304	-3185	-3042	-4313	-3959	500
1918	-3304	746	2408	3624	3736	6104	222	-1321	-2934	-4599	-2264	-1289	77
1919	-1389	-2113	-3762	4773	3474	4766	-1100	-1086	-4279	-3965	-1345	-2590	-725
1920	-6136	390	-405	5624	4423	1568	2420	1113	-1366	-1753	-4766	-3743	-228
1921	-3068	-1225	-1295	2523	7668	418	-647	-2387	-2070	-2138	-3233	-4801	-854
1922	-694	-4434	-2491	2509	9198	3401	1531	681	-2975	-3271	-6592	-4107	-72
1923	-3762	-3181	-1079	2509	5044	4962	695	843	-2487	-1321	-3805	-4862	-524
1924	-2204	-3265	668	2251	3749	4745	1760	1732	940	-3290	-6132	-3945	-240
1925	-3972	-2643	-648	2042	1517	-1129	2191	-6	-3839	-3109	-3568	-2211	-1266
1926	-1936	-654	-654	2460	5502	2049	5476	863	-899	-1551	-2230	1982	914
1927	-1773	22	1287	4070	3088	6794	2185	877	-3860	-2171	-2523	54	671
1928	-1545	-1881	1759	2711	8760	4299	4161	1753	244	-1996	2738	1289	1871
1929	-438	261	-1544	4279	10534	8620	1761	-216	-4084	-4612	-4996	-6245	269
1930	-3594	-478	1518	-209	1732	2738	2408	6	-3421	-5442	-5902	-4808	-1290
1931	-3506	-5606	-1564	1150	-431	1366	432	-1537	-6118	1126	-3191	-391	-1487
1932	-3432	2061	-930	-676	2165	3393	-432	439	-1798	-4815	-1623	-3061	-747
1933	-405	-2224	458	-265	6568	7512	1531	-1079	-4564	-3689	-2055	-4121	-182
1934	-1585	-688	-2657	2237	4848	1554	1996	-222	-3408	1780	-4522	-13	-41
1935	1315	-1471	1106	3380	2872	1568	4593	688	-1819	-2826	-2536	34	597
1936	-3304	483	857	2509	2158	4327	1301	-1963	-460	-438	-3157	-4188	-170
1937	-594	-1485	1531	-1387	6986	2529	2198	-13	-2042	-2414	-3610	-1916	6
1938	-6250	4688	3298	6808	4572	4265	3958	1329	453	-1100	-3853	-3048	1225
1939	-3709	-1515	1544	920	5705	4508	4626	425	453	-2616	-3630	-4606	185
1940	-3911	-2386	-1100	-2014	2380	4766	3958	432	209	-1740	-4557	-1289	-427
1941	-445	-717	-654	-1380	5051	1798	-424	-647	-3840	-445	2439	1780	222
1942	-1329	500	-641	4759	3480	6327	3331	-13	-3853	-1524	-2697	-2435	485
1943	-1537	-464	1760	4279	4835	7665	8355	2407	-7	-3075	-4097	-1490	1565
1944	-5260	-692	-1119	474	1713	2502	3304	-884	-3401	202	-4753	-1079	-744
1945	-5901	-1433	-688	3157	3749	6752	5293	627	-2927	-1113	-3582	1066	427
1946	-1537	-1687	432	5840	-399	2021	2219	-1753	-4725	-2853	-5191	-3540	-929
1947	-3283	-60	-1693	202	9852	7498	5038	2421	-1380	-1956	-1400	-6050	767
1948	-2090	-4859	850	4759	4855	2488	890	-1504	-3449	-5705	-7707	-1052	-1024
1949	-2603	-3382	1490	844	2435	1589	2636	-195	-4306	-5260	-4508	-3938	-1246
1950	-938	1239	452	3352	7681	2955	3749	3466	-216	-1308	-2502	-1895	1342
1951	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	-	-	-	-	-	-	-	-	-	-	-	-	-
1953	-	-	-	-	-	-	-	-	-	-	-	-	-
1954	-	-	-	-	-	-	-	-	-	-	-	-	-
1955	-	-	-	-	-	-	-	-	-	-	-	-	-
1956	-	-	-	-	-	-	-	-	-	-	-	-	-
1957	-	-	-	-	-	-	-	-	-	-	-	-	-
1958	-	-	-	-	-	-	-	-	-	-	-	-	-
1959	-	-	-	-	-	-	-	-	-	-	-	-	-
1960	-	-	-	-	-	-	-	-	-	-	-	-	-
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1962	-	-	-	-	-	-	-	-	-	-	-	-	-
1963	-	-	-	-	-	-	-	-	-	-	-	-	-
1964	-	-	-	-	-	-	-	-	-	-	-	-	-
1965	-	-	-	-	-	-	-	-	-	-	-	-	-
1966	-	-	-	-	-	-	-	-	-	-	-	-	-
1967	-	-	-	-	-	-	-	-	-	-	-	-	-
1968	-	-	-	-	-	-	-	-	-	-	-	-	-
1969	-	-	-	-	-	-	-	-	-	-	-	-	-
1970	-	-	-	-	-	-	-	-	-	-	-	-	-
1971	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-	-	-	-

LAKE ST. CLAIR CHANGE IN STORAGE (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1901	-	-	-	-	-	-	-	-	-	-	-	-	-
1902	-	-	-	-	-	-	-	-	-	-	-	-	-
1903	-	-	-	-	-	-	-	-	-	-	-	-	-
1904	-	-	-	-	-	-	-	-	-	-	-	-	-
1905	-	-	-	-	-	-	-	-	-	-	-	-	-
1906	-	-	-	-	-	-	-	-	-	-	-	-	-
1907	-	-	-	-	-	-	-	-	-	-	-	-	-
1908	-	-	-	-	-	-	-	-	-	-	-	-	-
1909	-	-	-	-	-	-	-	-	-	-	-	-	-
1910	-	-	-	-	-	-	-	-	-	-	-	-	-
1911	-208	46	21	181	25	30	25	-33	-9	-12	-30	-33	-4
1912	-8	31	71	30	25	34	8	-25	0	-17	-17	-46	7
1913	-37	-134	0	-108	146	13	-12	-17	-43	-67	-34	21	5
1914	96	-221	37	26	29	60	4	-4	-17	-46	-47	-33	-8
1915	62	53	-108	125	25	39	21	4	17	4	-77	-58	-4
1916	204	-216	0	39	-25	99	21	-17	-73	-33	-43	-17	7
1917	-33	-175	96	104	104	95	108	29	-95	-83	-39	8	9
1918	4	-9	-58	107	42	82	8	37	-39	50	-103	4	-2
1919	-208	13	46	133	71	9	37	-75	-43	-29	-34	-12	1
1920	96	-129	-137	198	62	0	8	-46	-30	-92	52	-33	-4
1921	-37	-55	-58	202	33	21	25	-17	-26	-29	-64	-87	-7
1922	37	-152	0	86	54	69	8	0	-34	-4	-52	-25	-1
1923	-29	-62	-50	103	46	43	33	4	-30	-42	-69	-46	-3
1924	-104	-87	25	193	17	13	50	12	-17	50	-36	-8	-4
1925	4	-198	-79	318	-12	64	0	21	-52	-54	-30	37	9
1926	-12	-27	-121	198	0	52	79	0	-17	-37	0	-8	9
1927	21	23	92	-90	179	34	-4	4	-56	-21	-69	-104	1
1928	-87	147	125	-60	42	-13	17	-17	-60	-37	-60	-67	-7
1929	-12	-203	-104	146	133	0	21	4	-69	-12	-43	-37	-13
1930	104	-40	33	-86	83	60	-50	17	-26	-46	-4	-37	3
1931	42	-41	-33	77	58	43	4	-33	-13	-62	-30	-42	-1
1932	0	-166	12	9	146	9	21	-8	-47	0	-69	-37	-2
1933	133	-198	4	155	8	39	42	-8	-17	-29	-34	-42	6
1934	-92	-22	146	-17	100	17	0	-29	-34	37	-52	-17	3
1935	0	78	-71	39	166	-52	46	-17	-34	-42	-34	-71	0
1936	37	-111	191	-9	33	43	17	8	-21	-8	-39	-50	9
1937	75	-207	-25	172	75	9	21	0	-4	-29	-56	-33	1
1938	-17	-187	21	82	100	64	12	0	-4	-17	-52	-29	-2
1939	83	-262	21	107	54	26	0	-4	-43	-25	0	-8	-2
1940	96	-267	-187	327	-75	202	8	12	-30	-43	-43	12	11
1941	-104	-31	-46	116	58	99	25	-34	-29	-30	-50	-50	9
1942	50	-216	112	99	37	86	29	-47	12	-60	-62	-25	-10
1943	36	-295	-25	245	-25	47	33	0	-60	-42	-21	-67	-10
1944	12	-28	-75	138	96	69	29	-12	-60	-42	-21	-67	-10
1945	46	-33	62	77	0	39	4	-9	-202	108	-84	-29	6
1946	204	-46	-25	9	-100	13	12	-17	-56	-29	-52	-50	-11
1947	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1948	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1949	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1950	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1951	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1952	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1953	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1954	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1955	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1956	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1957	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1958	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1959	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1960	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1961	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1962	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1963	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1964	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1965	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1966	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1967	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1968	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1969	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1970	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1971	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1972	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1973	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1974	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1975	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1976	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1977	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1978	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1979	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1980	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1981	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1982	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1983	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1984	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1985	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1986	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1987	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1988	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1989	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1990	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1991	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1992	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1993	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1994	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1995	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1996	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1997	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1998	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
1999	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13
2000	46	-87	-100	150	75	-34	4	-4	-9	-25	-30	-4	13

LAKE ERIE CHANGE IN STORAGE (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1891	-	-	-	-	-	-	-	-	-	-	-	-	-
1892	-	-	-	-	-	-	-	-	-	-	-	-	-
1893	-	-	-	-	-	-	-	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-	-	-	-
1900	-	-	-	-	-	-	-	-	-	-	-	-	-
1901	-576	-956	-1151	1289	672	297	-96	-397	-1247	-694	96	46	46
1902	672	-1169	-1055	2479	768	992	959	297	1727	992	864	-192	163
1903	480	-531	576	2082	2303	496	1151	1919	1785	2975	-198	-576	-41
1904	864	0	288	3470	1823	595	-192	-96	-1062	480	0	-576	-73
1905	-672	-956	-768	1487	1631	1487	1343	-288	-1091	1823	99	-576	-220
1906	-96	531	-1439	694	1055	397	672	0	-397	1823	99	-576	-138
1907	288	1487	-1535	1289	384	694	768	-192	-1388	1343	96	-576	-228
1908	672	-718	-192	2281	959	892	-768	-480	-992	1343	96	-576	-98
1909	-384	106	288	397	1823	1884	288	-672	-793	1343	96	-576	187
1910	-960	-319	-96	1884	1631	793	-576	-192	-892	1343	96	-576	65
1911	-1823	0	-192	892	1535	397	-96	-1055	99	1343	96	-576	122
1912	864	-821	-288	2181	2111	297	0	-288	-287	1343	96	-576	-33
1913	-672	3506	-1055	4363	1055	297	0	-288	-287	1343	96	-576	-24
1914	-480	-1062	-864	991	1727	1884	-672	-672	-1289	1343	96	-576	350
1915	-672	-106	960	397	384	694	480	-672	-1289	1343	96	-576	57
1916	288	1846	-576	1081	1343	1388	576	-672	-1686	1343	96	-576	-16
1917	0	-213	-672	1884	2015	1983	1247	288	-1151	1343	96	-576	-41
1918	-1631	-2231	960	1190	-960	1190	576	96	-397	1343	96	-576	-162
1919	1055	-424	-864	2875	960	1785	-768	-959	-793	1343	96	-576	16
1920	-959	-1744	-1343	1686	3071	397	864	0	-198	1343	96	-576	-98
1921	-192	212	-864	2479	1823	0	-288	-1055	-1091	1343	96	-576	73
1922	192	-1912	-288	2281	1919	892	-288	-480	-892	1343	96	-576	-49
1923	-192	-319	-960	1785	959	1091	96	-288	-1091	1343	96	-576	98
1924	1727	-615	-768	1289	1439	694	1055	-672	-1190	1343	96	-576	-41
1925	-768	-1487	864	1785	96	397	-96	-192	-1686	1343	96	-576	367
1926	-1151	-319	-576	992	2495	297	384	-384	0	1343	96	-576	33
1927	-576	-1381	-192	1388	1055	1388	-96	0	-1190	1343	96	-576	-408
1928	1439	-923	-192	397	1247	297	1535	0	-793	1343	96	-576	-252
1929	96	531	96	3074	2591	892	-384	-672	-1289	1343	96	-576	0
1930	-576	1912	0	1091	768	-595	-480	-1247	-1190	1343	96	-576	106
1931	-192	-1169	-1247	-297	1439	694	384	-288	-694	1343	96	-576	5
1932	-384	2769	0	-496	384	793	-288	-480	-793	1343	96	-576	156
1933	576	531	-576	1686	1631	1091	-672	-959	-1289	1343	96	-576	366
1934	-96	-956	-1055	694	1823	99	192	-576	-297	1343	96	-576	1985
1935	-192	-319	0	1487	864	1091	288	-288	-793	1343	96	-576	366
1936	-288	-1231	480	3173	959	397	-96	-672	-694	1343	96	-576	-41
1937	576	3187	96	-297	2783	99	1439	-480	-1091	1343	96	-576	367
1938	-96	-637	2591	1289	864	198	288	192	-991	1343	96	-576	33
1939	-480	212	672	1091	2207	-198	384	-192	-1091	1343	96	-576	-408
1940	-480	-1333	192	892	2495	1091	672	-480	-297	1343	96	-576	-252
1941	1152	-531	-1247	0	768	496	384	-288	-892	1343	96	-576	0
1942	192	-531	96	2578	1727	1091	384	288	-892	1343	96	-576	-768
1943	480	-531	-96	1190	1631	3173	0	192	-1388	1343	96	-576	73
1944	-1055	-1538	96	1091	2687	992	0	-1343	-793	1343	96	-576	163
1945	-288	-1169	192	1055	1055	1487	1247	-480	-1190	1343	96	-576	228
1946	-768	-319	-1055	1686	0	1190	1343	-768	-1487	1343	96	-576	147
1947	-576	425	-959	1289	4222	1884	672	-864	-496	1343	96	-576	192
1948	-192	-821	-960	2677	959	1091	0	-960	-1190	1343	96	-576	-244
1949	-480	1062	672	-198	576	397	-192	-576	-1190	1343	96	-576	285
1950	384	3187	384	1487	1535	-595	-480	-384	-992	1343	96	-576	384

LAKE ONTARIO CHANGE IN STORAGE (CUBIC METERS / SECOND)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1891	-	-	-	-	-	-	-	-	-	-	-	-	-
1892	-	-	-	-	-	-	-	-	-	-	-	-	-
1893	-	-	-	-	-	-	-	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-	-	-	-
1900	-	-	-	-	-	-	-	-	-	-	-	-	-
1901	-283	0	-779	1902	1982	-439	354	-708	-878	-708	-1390	-425	-114
1902	1274	-705	-354	2853	142	-293	425	1062	-585	-779	-878	-354	156
1903	283	0	708	2187	1133	-951	354	0	-878	-1062	-219	-849	36
1904	-496	-227	991	2194	991	512	283	-212	-732	-849	-1024	-1133	162
1905	-637	-313	-566	731	0	637	849	283	-219	-496	-732	-425	-18
1906	71	1567	-212	1390	142	219	354	0	-142	-805	-991	-73	-42
1907	-71	1567	-212	1390	142	219	0	-142	-1024	-354	-658	283	84
1908	1416	-227	708	1390	991	1024	-496	-708	-1390	-1487	-1463	283	6
1909	-1911	-313	708	1024	1133	1756	-425	-212	-1170	-1133	-1170	-496	-186
1910	-566	157	142	1829	637	658	-283	-1274	293	-779	-878	-354	-42
1911	-1203	235	708	439	637	219	142	-849	-805	-496	-439	-142	-132
1912	779	-157	-71	1682	920	73	-425	-566	-1244	-991	-731	-142	-72
1913	-179	-392	637	1244	2265	146	849	-496	-1170	-920	-1097	-920	6
1914	-566	-235	-496	1317	1557	366	-283	-849	-805	-708	-951	-142	-90
1915	-849	313	991	-293	0	0	71	142	-658	-354	-585	-496	-36
1916	142	984	142	878	2194	1609	1345	-1062	-1463	-1274	-1170	-849	120
1917	-496	157	-354	1609	1699	366	1416	-496	-805	-991	73	-425	204
1918	-566	-1019	849	1682	496	-293	-354	-566	-1097	-212	0	-212	-102
1919	-212	-78	-354	1416	1416	2341	-71	-837	-1097	-1133	-732	-779	-6
1920	-708	-1135	-496	1390	212	0	71	283	-366	-496	-219	-142	-132
1921	779	-157	-71	1682	920	73	-425	-566	-1244	-991	-731	-142	-72
1922	-179	-392	637	1244	2265	146	849	-496	-1170	-920	-1097	-920	6
1923	-779	-142	78	-354	366	1699	354	-849	-805	-708	-951	-142	-90
1924	425	530	0	512	1487	731	-283	-849	-805	-708	-951	-142	-90
1925	-708	-392	1557	1463	212	-293	-425	-637	-1024	-283	-585	566	-42
1926	-71	-627	-142	658	1982	73	142	-779	-146	0	146	991	192
1927	-354	-157	425	1170	-142	439	-71	-71	-1097	-1062	-585	991	142
1928	1416	151	-142	658	849	-73	425	-71	-585	-1345	-366	71	84
1929	0	862	-779	2194	2478	1536	-283	-283	-1317	-1133	-951	-637	132
1930	-71	1489	566	1390	283	293	0	-708	-1536	-1274	-1463	-920	-174
1931	-920	-470	-425	366	496	731	-142	-354	-1097	-425	-731	-425	-283
1932	212	1740	920	293	1557	219	-566	-425	-878	-1274	-658	-71	84
1933	-142	78	-354	366	1699	658	-212	-779	-858	-1062	-1170	-425	-126
1934	0	784	-496	731	1416	-439	-283	-849	-1317	0	1024	0	60
1935	-283	940	142	1024	496	512	708	-142	-1024	-637	-658	-283	60
1936	-212	-76	-354	3950	1487	-146	-496	-849	-951	-425	-585	-142	96
1937	-637	2116	637	-146	1770	1097	71	-354	-512	-1416	-439	0	222
1938	-637	-235	1203	1463	637	0	-354	-142	-731	-212	-1024	-637	-54
1939	-425	-770	708	1536	1770	0	-142	-566	-731	-1062	-878	-991	-72
1940	-212	-530	-142	293	3115	1097	425	-71	-1244	-637	-951	71	108
1941	779	157	71	293	708	-512	-566	-283	-951	-920	-293	-71	-132
1942	71	-235	0	2487	1345	878	-71	-212	-805	-425	-512	212	228
1943	425	705	-779	1756	779	2926	283	-637	-878	-1345	-731	-496	289
1944	-1062	-757	-283	366	1557	805	425	-496	-1244	-779	-1244	-566	-270
1945	-212	78	354	2707	1062	1609	142	-212	-1170	-71	366	212	403
1946	-425	-392	-71	731	-637	146	-71	-637	-951	-708	-366	-496	-325
1947	-142	1019	-283	878	2053	1829	1699	71	-1244	-1557	-1390	-991	156
1948	-496	-303	566	2194	1062	805	-212	-849	-1244	-1487	-1024	-212	-102
1949	-637	-705	1062	293	-779	-366	-779	-849	-1170	-708	-878	-566	-264
1950	496	1803	779	1390	1557	73	-212	-566	-731	-1203	-439	283	259
1951	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	-	-	-	-	-	-	-	-	-	-	-	-	-
1953	-	-	-	-	-	-	-	-	-	-	-	-	-
1954	-	-	-	-	-	-	-	-	-	-	-	-	-
1955	-	-	-	-	-	-	-	-	-	-	-	-	-
1956	-	-	-	-	-	-	-	-	-	-	-	-	-
1957	-	-	-	-	-	-	-	-	-	-	-	-	-
1958	-	-	-	-	-	-	-	-	-	-	-	-	-
1959	-	-	-	-	-	-	-	-	-	-	-	-	-
1960	-	-	-	-	-	-	-	-	-	-	-	-	-
1961	-	-	-	-	-	-	-	-	-	-	-	-	-
1962	-	-	-	-	-	-	-	-	-	-	-	-	-
1963	-	-	-	-	-	-	-	-	-	-	-	-	-
1964	-	-	-	-	-	-	-	-	-	-	-	-	-
1965	-	-	-	-	-	-	-	-	-	-	-	-	-
1966	-	-	-	-	-	-	-	-	-	-	-	-	-
1967	-	-	-	-	-	-	-	-	-	-	-	-	-
1968	-	-	-	-	-	-	-	-	-	-	-	-	-
1969	-	-	-	-	-	-	-	-	-	-	-	-	-
1970	-	-	-	-	-	-	-	-	-	-	-	-	-
1971	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-	-	-	-