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**BASIS OF COMPARISON
GREAT LAKES-ST. LAWRENCE RIVER SYSTEM**

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Ann Arbor, Michigan
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BASIS OF COMPARISON GREAT LAKES-ST. LAWRENCE RIVER SYSTEM

Abstract. A 90-year set of lake levels and flows has been developed that reflects a consistent hydraulic regime in the Great Lakes-St. Lawrence River system. This hydraulic regime is defined by the diversion rates into and out of the system, consumptive use withdrawals from the system, the time series of water supplies to the system, outlet conditions of each lake, flow retardation due to ice or weeds in the connecting channels, initial starting elevations for the simulation, the hydraulic condition of the St. Lawrence River, and tidal levels at its outlet. These levels and flows can be used as a reference for assessing the effects of modified lake regulation and climate change.

1. Introduction

The recorded Great Lakes and St. Lawrence River water levels and flows reflect the effects of changes in the regime over the study period (1900-1989). The principal changes to the Great Lakes-St. Lawrence River system during this period have primarily been anthropogenic and include changes in the amount of diversions into, within, and out of the system, modifications to the connecting channels and the St. Lawrence River, and the construction of control structures at the outlets of Lake Superior and Lake Ontario. In addition to these changes, which can be related to a specific point in time, there have been changes in the runoff from the land surface area due to deforestation and urbanization, increases in consumptive uses of water within the basin, and the movement of the earth's crust within the basin. These last items have been progressive over time within the basin and have resulted in a gradual change in the water surface elevations of the individual lakes.

To have a common basis by which to compare the effects of various regulation plans, a set of lake levels and flows has been developed that reflects a consistent hydraulic regime in the Great Lakes-St. Lawrence River system over the study period. This hydraulic regime is defined by the diversion rates into and out of the system, consumptive use withdrawals from the system, the time series of water supplies to the system, outlet conditions of each lake, flow retardation due to ice or weeds in the connecting channels, initial starting elevations for the simulation, the hydraulic condition of the St. Lawrence River, and tidal levels at its outlet. These conditions have been specified and approved by the Study Board as follows.

2. Conditions

2.1 Diversions

Four diversions are considered in the development of the Basis of Comparison: the Chicago Diversion from Lake Michigan; the Long Lac and Ogoki Diversions into Lake Superior; and the Welland Canal, which flows from Lake Erie to Lake Ontario.

For the Chicago Diversion, a constant diversion of 3,200 cfs out of Lake Michigan is assumed. This is the maximum allowable diversion at Chicago as specified by a decree of the U.S. Supreme Court dated June 12, 1967. This decree was modified in November 1980 to provide for a change in computational procedure, with the maximum allowable diversion remaining at 3,200 cfs. This diversion consists of actual water withdrawals from Lake Michigan, and of runoff that is now diverted to the Illinois River (IJC, 1985).

The Long Lac and Ogoki Diversions redirect to Lake Superior water that originally drained north into James Bay. The Long Lac Diversion, the smaller of the two, discharges directly into Lake Superior through the Aguasabon River. The Ogoki Diversion flows first into Lake Nipigon, and then to Lake Superior (IJC, 1985). Although the Ogoki Diversion into Lake Nipigon exhibits a strong seasonal cycle, regulated releases from the lake do not reflect this same trend. Thus the actual timing and amount of the diversion entering Lake Superior monthly cannot be distinguished. An annual average of 5,400 cfs for the combined diversions is assumed, based on the recorded monthly flows of the diversions from 1944 to 1989.

For the **Welland** Canal, monthly mean values of the diversion from Lake Erie into Lake Ontario shown in Table 1 are used. These values are based on the time period from March 1973, when increased flows for power production were instituted, to December 1989, the end of the study period.

Table 1. Monthly Mean Welland Canal Flows

Month	Amount (cfs)
January	7,900
February	7,600
March	7,800
April	8,900
May	9,000
June	8,900
July	8,800
August	8,800
September	9,000
October	9,100
November	9,100
December	8,800

2.2 Consumptive Use

Consumptive use of water is that portion of water withdrawn or withheld from the Great Lakes-St. Lawrence River system and assumed to be lost due to evaporation during use, transpiration from irrigated crops, leakage, incorporation into manufactured products, or similar occurrences during use (IJC, 1985). Estimates of consumptive use by basin, based on data published in the 1989 Annual Report of the Great Lakes Regional Water Use Data Base Repository (GLC, 1991), indicate that this is a small but significant component of the water balance for the Great Lakes. The total estimated consumptive use by basin is shown in Table 2.

Table 2.-- Estimated Consumptive Use

Basin	1989 Consumptive Use* (cfs)	Rounded Value (cfs)
Lake Superior	128	100
Lake Michigan	893	900
Lake Huron	256	300
Lake St. Clair	184	200
Lake Erie	714	700
Lake Ontario	342	300
St. Lawrence River	325	300

***The consumptive use values published by basin for 1989 were prorated to include the 742 cfs State of Michigan consumptive use, which was not reported by basin but was included in the state total. Consumptive use for Lake St. Clair was estimated as a portion of Lake Erie's consumptive use, based on a ratio of drainage areas.**

2.3 Net Basin Supplies

Net basin supplies for 1900 through 1989 computed as a residual of change in storage, inflows, outflows and diversions, and coordinated between the U.S. Army Corps of Engineers and Environment Canada are used for the Great Lakes.

For the St. Lawrence River between Cornwall, Ontario, and Beauharnois, Quebec (ie. Lake St. Francis), net basin supplies computed by Hydro Quebec were used. Downstream of Beauharnois, net basin supplies are not defined for the St. Lawrence River. For this downstream portion of the St. Lawrence River, recorded outflows from the Ottawa River and five other major tributaries of the St. Lawrence are used to represent local inflows to the river for 1950 to 1989. These data were supplied by the Water Survey of Canada and Hydro Quebec.

2.4 Outlet Conditions

Lake Superior and Lake Ontario are the only lakes of the five Great Lakes whose outflows are regulated. For the Basis of Comparison, Lake Superior outflows are those determined in accordance with Plan 1977-A, the current regulation plan implemented by the International Lake Superior Board of Control (ILSBC, 1989) with Criterion C of the Orders of Approval (IJC, 1979) incorporated. Criterion C requires that whenever the monthly mean level of Lake Superior is less than 600.5 feet on the International Great Lakes Datum of 1955, the total discharge permitted is to be no greater than that which would have occurred under conditions prior to 1887. Appendix D contains graphs of the differences in levels and flows between the Basis of Comparison

made with and without Criterion C. These graphs are for the Great Lakes only. The outflow conditions prior to 1887 are represented by the following equation:

$$Q_s = 490.1(Z_{PI} - 593.99)^{1.5} \quad (1)$$

where Q_s is the monthly outflow from Lake Superior, and Z_{PI} is the monthly mean level at Pt. Iroquois, Michigan. This equation was derived from the equation based on levels at Marquette, Michigan, developed by the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data (CCGLBHHD, 1970) by adjusting to Pt. Iroquois for the effects of **crustal** movement.

Lake Ontario outflows are determined in accordance with Plan 1958-D, without discretionary actions (ISRBC, 1963).

The outflows from Lakes Michigan-Huron, Lake St. Clair, and Lake Erie are naturally regulated, and their outflows are computed from stage-discharge equations. Lake Huron and Lake St. Clair outflows are representative of channel conditions that have existed since the completion of the 27-ft navigation channel dredging in 1962 in the St. Clair - Lake St. Clair - Detroit River system. The equations representative of the present channel conditions are

$$Q_{MH} = 84.1168[(Z_{MH} + Z_{SC}) / 2 - 543.4]^2 (Z_{MH} - Z_{SC})^{0.5} \quad (2)$$

$$Q_{SC} = 128.0849(Z_{SC} - 543.81)^2 (Z_{SC} - Z_E)^{0.5} \quad (3)$$

where Q_{MH} and Q_{SC} are the outflows from Lakes Michigan-Huron and Lake St. Clair through the St. Clair River and the Detroit River, respectively. Z_{MH} , Z_{SC} , and Z_E are the monthly mean levels of Lakes Michigan-Huron, Lake St. Clair, and Lake Erie.

Niagara River outflows from Lake Erie are represented by a discharge relationship derived using data for 1974 to 1986 (Quinn, 1989). The relationship is a single gauge, stage-discharge relationship:

$$Q_E = 260.5(Z_E - 550.11)^{2.2} \quad (4)$$

where Q_E is the outflow from Lake Erie through the Niagara River. All stage-discharge equations are based on the International Great Lakes Datum, 1955, and flows are given in cubic feet per second. The flows are adjusted for ice and weed retardation as described in the following section.

The flow in the St. Lawrence River upstream of Cornwall is regulated by the flow from the power plant and spillway at Cornwall-Massena. Outflows from Lake St. Francis are completely controlled by the flows from the power plants and spillways at Beauharnois and Les Cedres, Quebec. Due to the relatively small size of Lake St. Francis, it is assumed that the quarter monthly outflow from Lake Ontario is discharged from Lake St. Francis in the same quarter month period.

The distribution of outflows from the St. Lawrence River and the Ottawa River around the Island of Montreal is determined with the ARCHIPEL model adapted from Hydro Quebec. This hydrologic routing model reflects current channel conditions in the St. Lawrence and Ottawa River systems around the Montreal archipelago and downstream to Lake St. Pierre.

2.5 Channel Flow Retardation

Channel retardation due to weed growth or ice reduces flows within the connecting channels. However, since Lake Superior and Lake Ontario are regulated, any retardation due to weeds or ice does not affect their regulated outflows. Ice does have a significant effect on the outflow from Lakes Michigan-Huron and Lake St. Clair. Monthly median retardation values are computed from 1962 to 1989 using flows published by the Coordinating Committee (CCGLBHHD, 1988) for the St. Clair and Detroit Rivers, and Eqs. (2) and (3). These values are given in Table 3.

Table 3.-- Median Ice Retardation Values

Month	St. Clair River (cfs)	Detroit River (cfs)
January	19,000	16,000
February	16,000	12,000
March	4,000	3,000
April	0	0
December	3,000	3,000

For flow through the Niagara River from Lake Erie, monthly average values of weed retardation computed for 1974 through 1989 using flows published by the Coordinating Committee (CCGLBHHD, 1976) and Eq. (4) are used. These values are shown in Table 4.

Table 4.-- Niagara River Average Weed Retardation

Month	Weed Retardation (cfs)
June	2,000
July	8,000
August	5,000
September	3,000
October	2,000

Although the installation of the Lake Erie ice boom in 1964 has reduced the severity and duration of ice runs in the Niagara River, an analysis of ice retardation using Eq. (4) indicates that some ice retardation still exists. Median ice retardation values as computed with the above equation from 1974 through 1989 are used. These values are given in Table 5.

Table 5.-- Niagara River Ice Retardation

Month	Ice Retardation (cfs)
January	8,000
February	6,000
March	4,000
April	5,000
December	5,000

Ice and weed retardation are not incorporated into the ARCHIPEL model for the St. Lawrence River downstream of Beauharnois.

2.6 Starting Elevations

The starting elevations for year 1 of the Great Lakes are the recorded January monthly means for the period of record 1900- 1989 (NOS, 1989) as shown in Table 6.

Table 6.-- Initial Starting Elevations

Lake	Elevation (IGLD 55) (ft)
Lake Superior	600.39
Lakes Michigan-Huron	577.92
Lake St. Clair	572.84
Lake Erie	569.99
Lake Ontario	244.07

For the St. Lawrence River below Beauharnois, starting elevations for year 1 of the 1950-1989 period are computed in the initialization portion of the ARCHIPEL model from initial flows that are entered into the model for the first quarter of January 1950.

2.7 Tidal Levels at the Outlet of the St. Lawrence River

The water level in the St. Lawrence River below the **LaPrarie** Basin is affected by the tides. The ARCHIPEL model uses the water level recorded at Lauzon, Quebec (Quebec City), in computing the level and discharge in the river. Recorded daily high water levels at Lauzon, which include the effects of tides and surge, were available for 1969 to 1988. These were supplemented by published tidal levels for 1960 to 1968 and 1989. Tidal levels for 1950 to 1959 were approximated using data for 1960 to 1969.

3. Basis of Comparison Levels and Flows

3.1 Levels

The Basis of Comparison levels for Lake Superior to Lake Erie were simulated under the conditions described above with a hydrologic response model of the Great Lakes developed and maintained by the U.S. Army Corps of Engineers, Detroit District (**USACE**, 1991). Levels for Lake Ontario and sites on the St. Lawrence River above Cornwall, Ontario, were simulated using a similar hydrologic response model maintained by the Great Lakes-St. Lawrence River Office of Environment Canada. These models were verified by comparing the levels generated by each model. The results of the two models differed within the ranges shown in Table 7.

Table 7.-- Differences in Basis of Comparison Levels Between Two Independent Models

Lake	Differences (ft)
Lake Superior	-0.02 to +0.03
Lakes Michigan-Huron	-0.03 to +0.04
Lake St. Clair	-0.02 to +0.03
Lake Erie	-0.02 to +0.02
Lake Ontario	-0.06 to +0.05

These differences are due to rounding within the models, computational differences between machines, and differences in software coding. The differences can be considered the degree of significance of the Great Lakes Basis of Comparison levels; e.g., the levels are significant to roughly within ± 0.05 ft.

The ARCHIPEL model described in sections 2.3 and 2.4 was used to generate levels for sites on the St. Lawrence River below Beauharnois, Quebec. Appendix A contains graphs of the Basis of Comparison monthly mean levels for each lake and eight locations along the St. Lawrence River. These eight locations are Ogdensburg, New York; Cardinal, Ontario; Iroquois, Ontario; Morrisburg, Ontario; Long Sault Dam, New York; Pointe Claire, Quebec; Montreal Harbour, Quebec; and Lake St. Pierre, Quebec. Appendix B lists the monthly mean levels, along with the average, standard deviation, maximum and minimum level for each month of the series.

3.2 Flows

The Basis of Comparison flows were also simulated and verified as described above. The results of the two models differed within the ranges shown in Table 8.

**Table 8.-- Differences in Basis of Comparison Flows
Between Two Independent Models**

Lake	Differences (cfs)
Lake Superior	-15,800 to + 17,400
Lakes Michigan-Huron	-600 to + 600
Lake St. Clair	-600 to + 600
Lake Erie	-500 to + 500
Lake Ontario	-2,700 to + 3,300

The larger flow differences for Lake Superior and Lake Ontario are primarily due to a few specific cases where the routed levels differed by a very small amount, causing the models to take different actions, resulting in different outflows. These differences were balanced in the following month's outflow. The outflows for the Basis of Comparison should be considered significant to within about $\pm 1,000$ cfs. Appendix A contains graphs of the monthly mean outflows from each lake. Appendix B lists the monthly mean flows, along with the average, standard deviation, maximum and minimum flow for each month of the series. It should be noted that the outflows for Lake Erie include those of the Niagara River and **Welland Canal**.

3.3 Lake Ontario Levels and Flows with Past Discretionary Actions

Appendix C contains the levels and flows for Lake Ontario and levels for the eight sites on the St. Lawrence River under the Basis of Comparison conditions with past discretionary actions. It is included here for comparative purposes only.

4. Acknowledgements

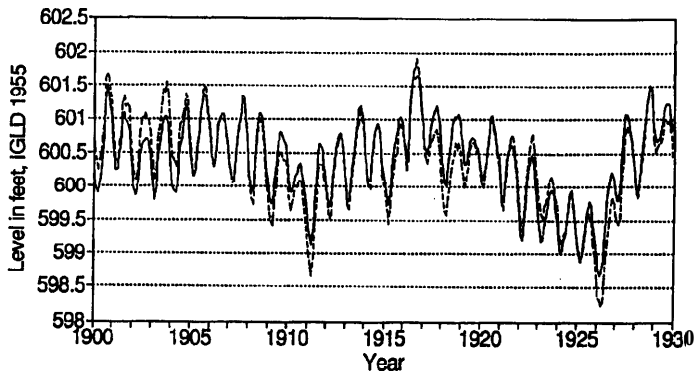
This work was performed in support of Phase II of the International Joint Commission Levels Reference Study, by Task Group 2 of Working Committee 3, and was identified as Task 19.3.3 of the Plan of Study. Members of the Task Group contributing to this report include Gordon Larsen of the Detroit District Corps of Engineers and David Fay and Charles **Southam** of the Inland Waters Directorate, Environment Canada.

5. References

- Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data. Lake Superior outflow, 1860-1968. U.S. Army Corps of Engineers, Detroit, MI (1970).
- Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data. Lake Erie outflow 1860-1964 with Addendum 1965-1975. U.S. Army Corps of Engineers, Detroit, MI (1976).
- Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data. Lakes Michigan-Huron outflows - St. Clair and Detroit rivers 1900-1986. U.S. Army Corps of Engineers, Detroit, MI (1988).
- Great Lakes Commission. 1989 Annual Report of the Great Lakes Regional Water Use Data Base Repository. Great Lakes Commission, Ann Arbor, MI (1991).
- International Joint Commission. Supplementary Order of Approval, October 3, 1979. International Joint Commission, Windsor, Ontario (1979).
- International Joint Commission. Great Lakes diversions and consumptive uses. International Joint Commission, Windsor, Ontario, (1985).
- International Lake Superior Board of Control. Regulation of Lake Superior, Plan 1977-A Development, Description and Testing. International Joint Commission, Windsor, Ontario (1989).
- International St. Lawrence River Board of Control. Regulation of Lake Ontario Plan 1958-D. International Joint Commission, Windsor, Ontario (1963).
- QUINN, F.H. Niagara river discharge equation developed for Phase I of the IJC Levels Reference Study. Open file report, Great Lakes Environmental Research Laboratory, Ann Arbor, MI (1989).
- National Ocean Service. Great Lakes water levels, 1989. National Oceanic and Atmospheric Administration, Department of Commerce, Rockville, MD (1989).
- U.S. Army Corps of Engineers. Great Lakes routing computer model. In Pre-Phase II IJC Levels Reference Study - Feasibility of System Wide Regulation (unpublished report), U.S. Army Corps of Engineers, Detroit District, International Lake Hydrology Section, 199 1.

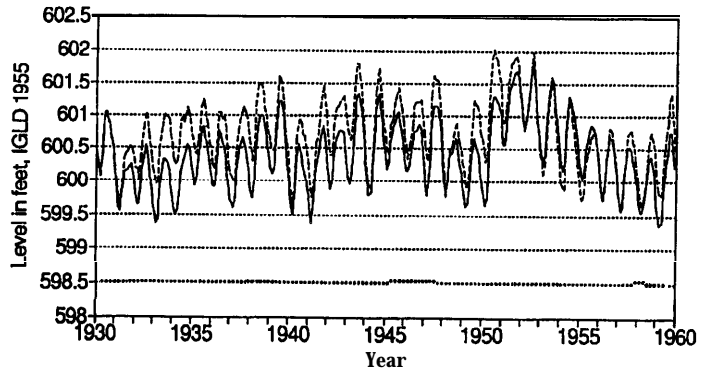
APPENDIX A - Basis of Comparison Levels and Flows - CHARTS

Lake Superior
Basis of Comparison, 1900-1930



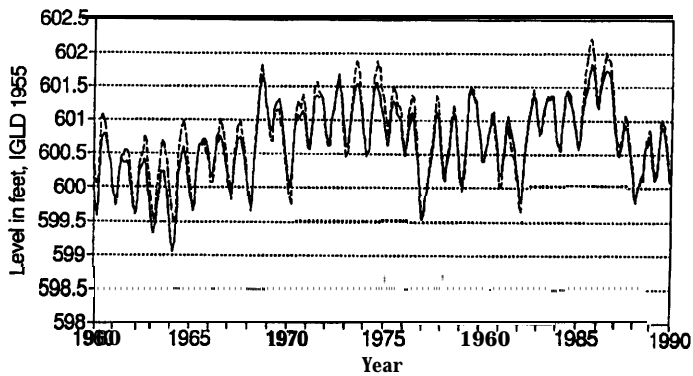
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Lake Superior
Basis of Comparison, 1930-1960



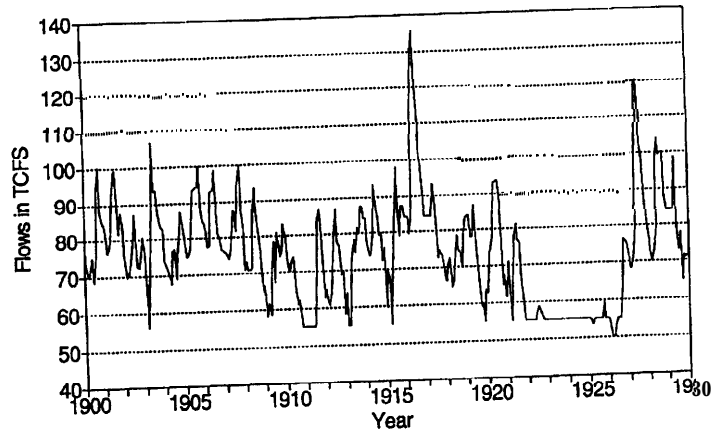
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Lake Superior
Basis of Comparison, 1960-1990

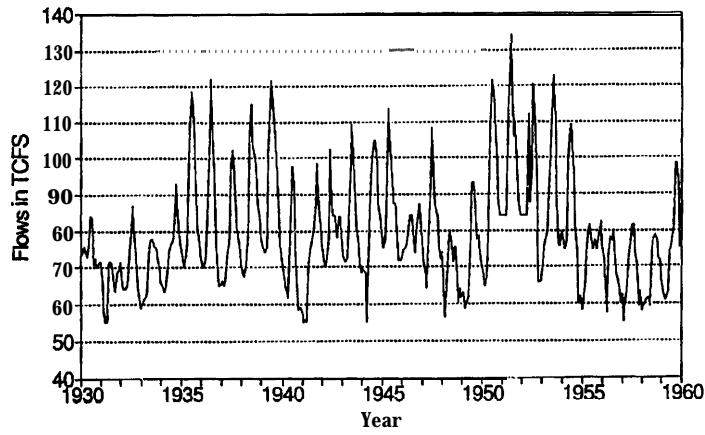


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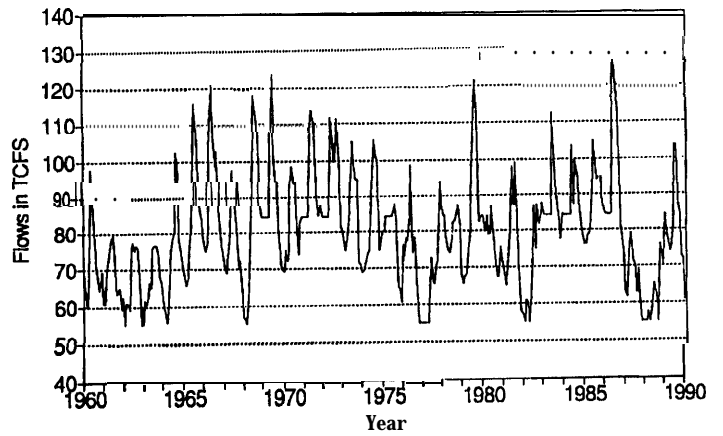
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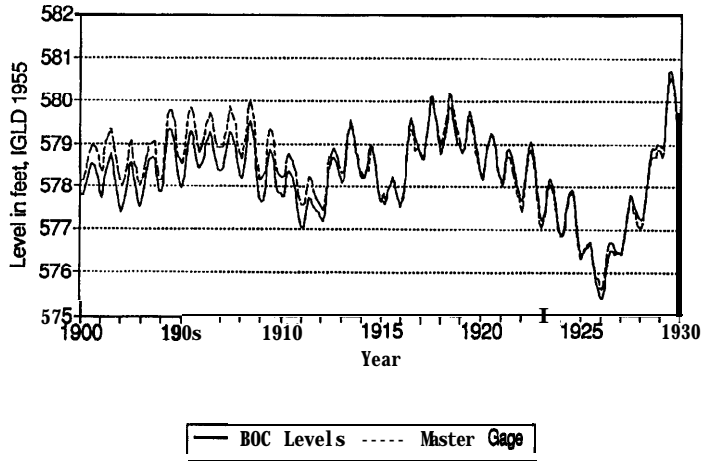
Lake Superior
Basis of Comparison, 1930-1960



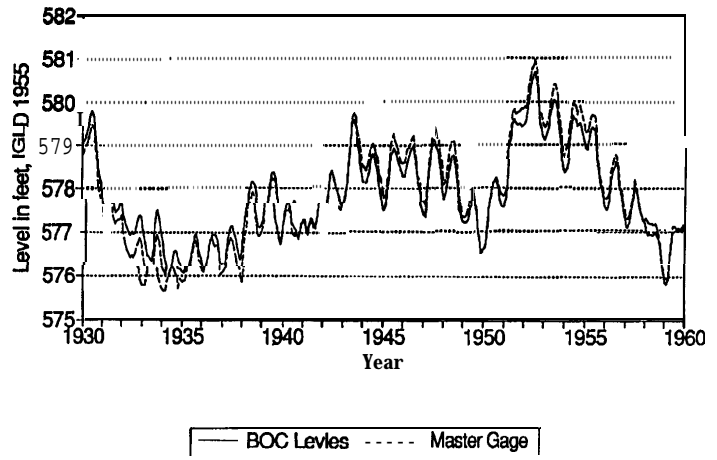
Lake Superior
Basis of Comparison, 1960-1990



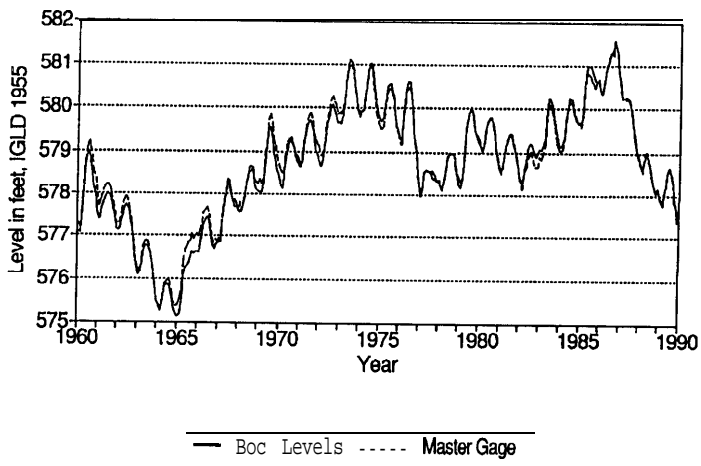
Lakes Michigan-Huron Basis of Comparison, 1900-1930



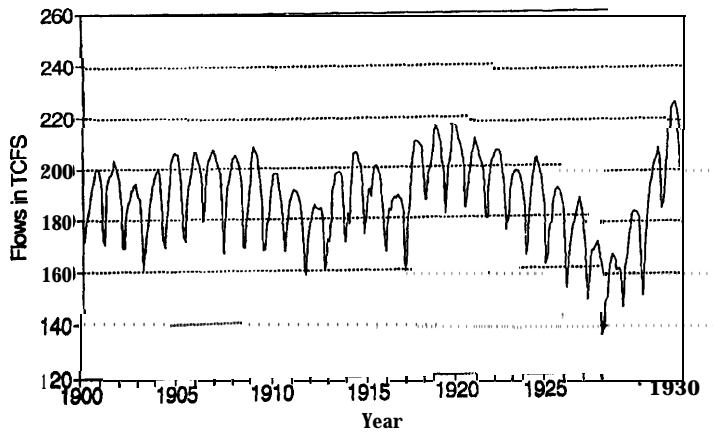
Lakes Michigan-Huron Basis of Comparison, 1930-1960



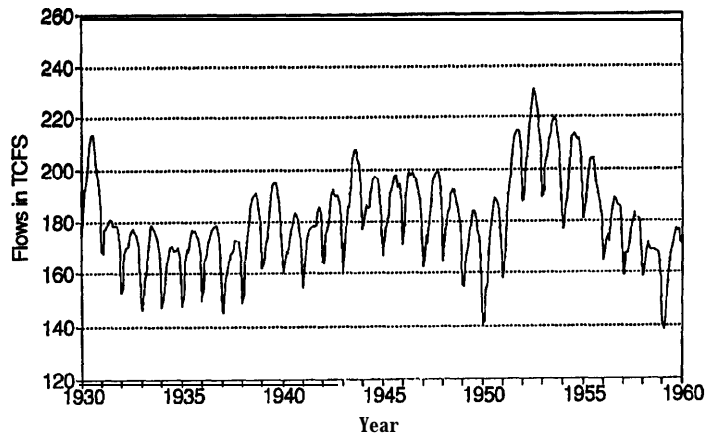
Lakes Michigan-Huron Basis of Comparison, 1960-1990



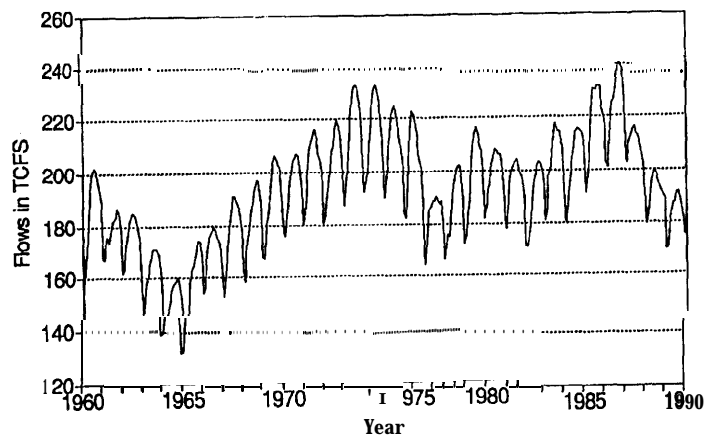
Lake Michigan-Huron
Basis of Comparison, 1900-1930



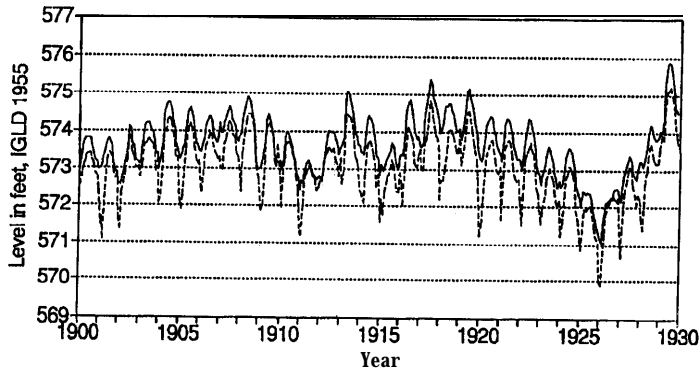
Lake Michigan-Huron
Basis of Comparison, 1930-1960



Lake Michigan-Huron
Basis of Comparison, 1960-1990

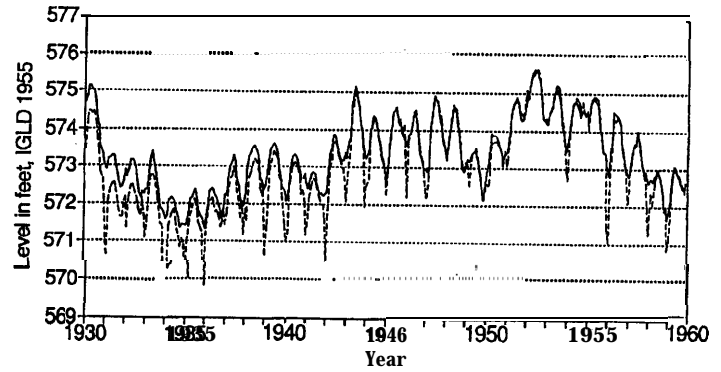


Lake St. Clair
Basis of Comparison, 1900-1930



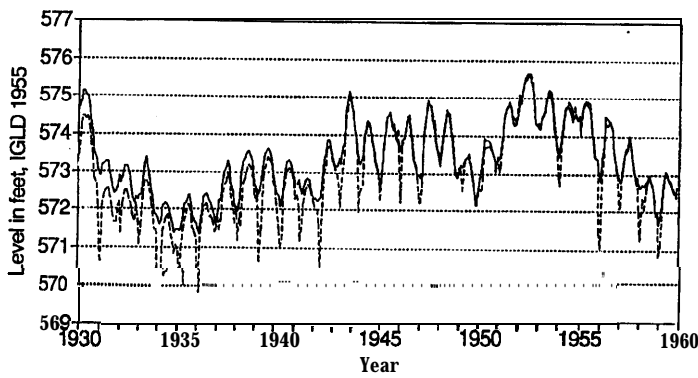
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Lake St. Clair
Basis of Comparison, 1930-1960



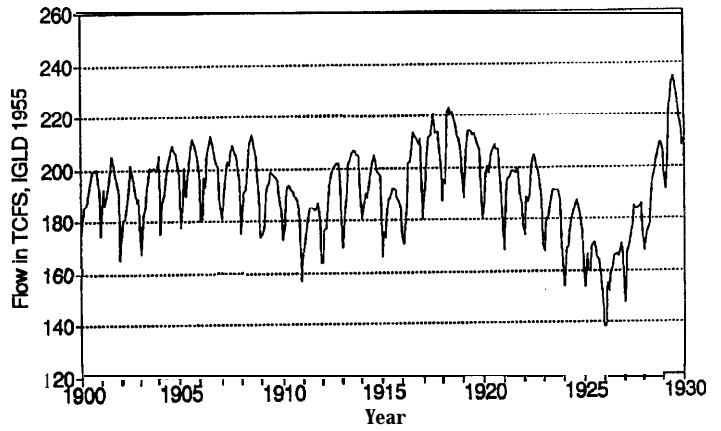
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Lake St. Clair
Basis of Comparison, 1930-1960

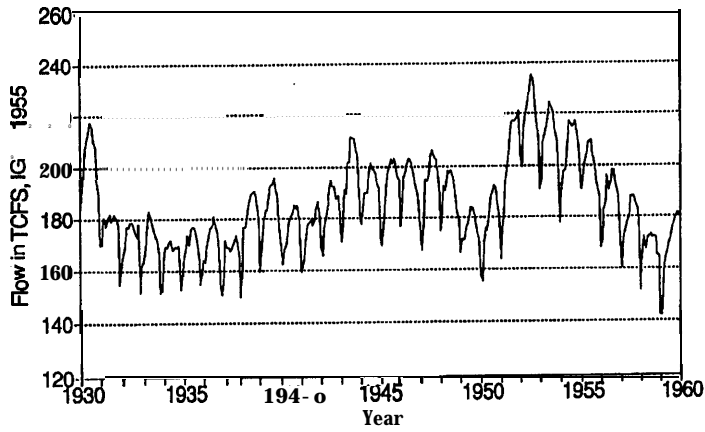


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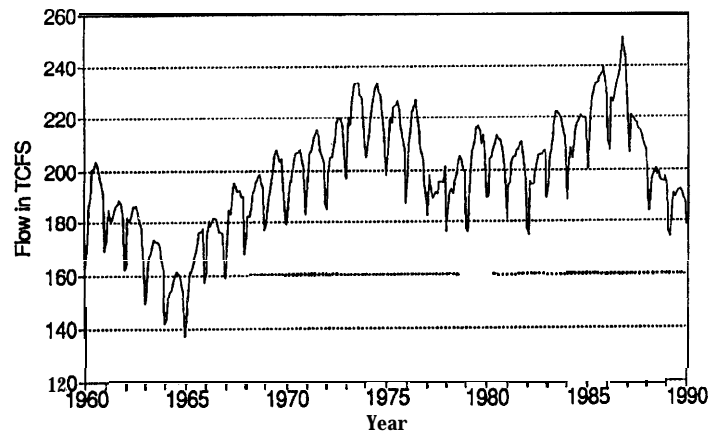
Lake St. Clair
Basis of Comparison, 1900-1930



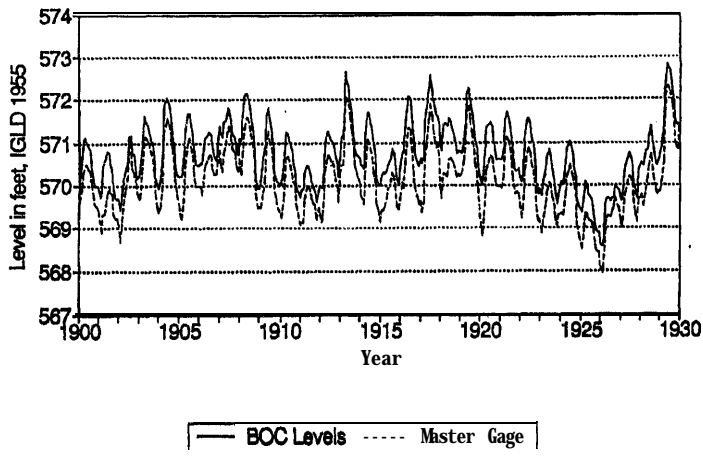
Lake St. Clair
Basis of Comparison, 1930-1960



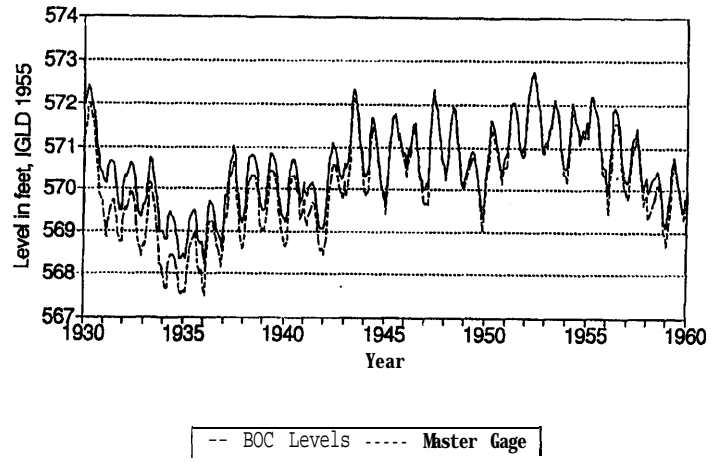
Lake St. Clair
Basis of Comparison, 1960-1990



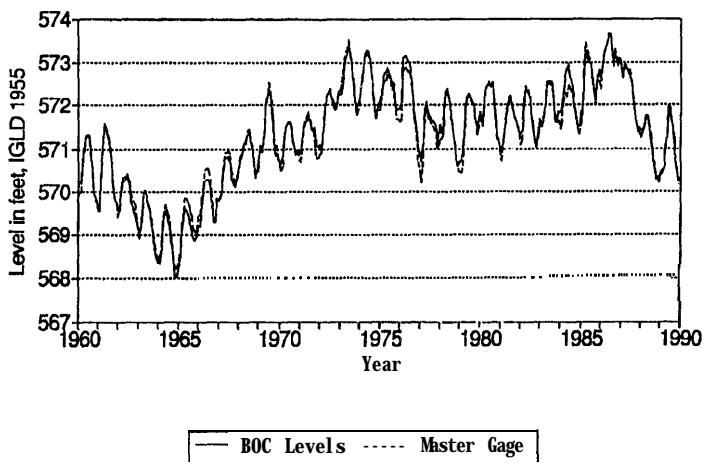
Lake Erie
Basis of Comparison, 1900-1930



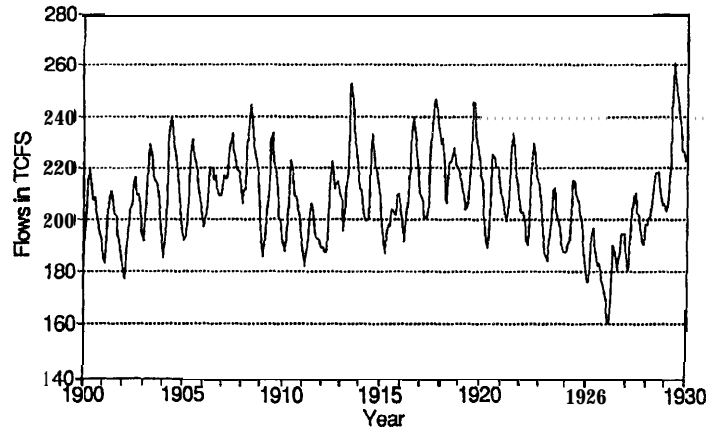
Lake Erie
Basis of Comparison, 1930-1960



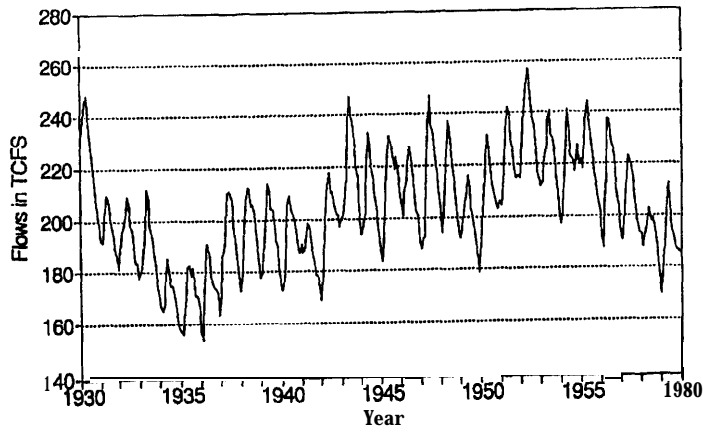
Lake Erie
Basis of Comparison, 1960-1990



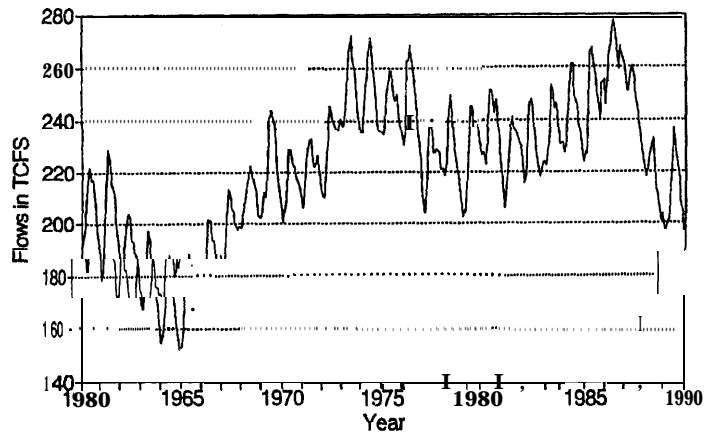
Lake Erie
Basis of Comparison, 1900-1930



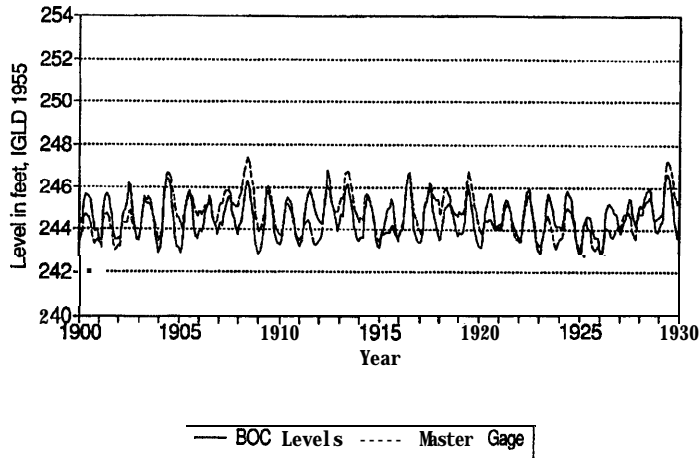
Lake Erie
Basis of Comparison, 1930-1960



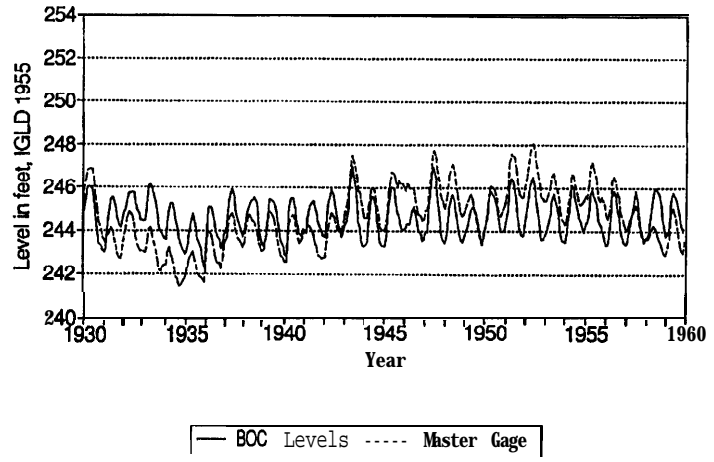
Lake Erie
Basis of Comparison, 1960-1990



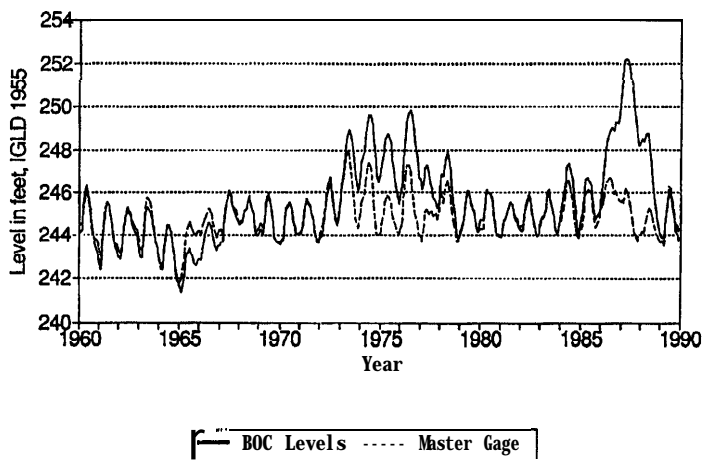
Lake Ontario
Basis of Comparison, 1900-1930



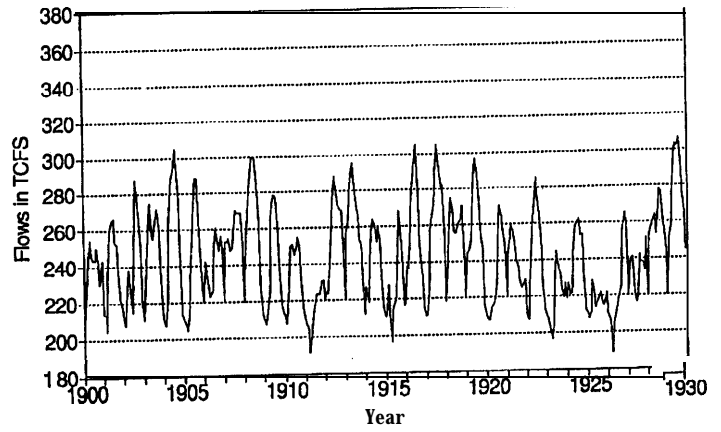
Lake Ontario
Basis of Comparison, 1930-1960



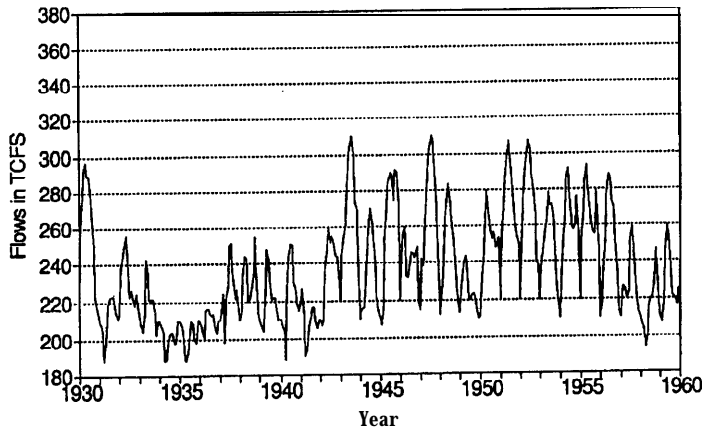
Lake Ontario
Basis of Comparison, 1960-1990



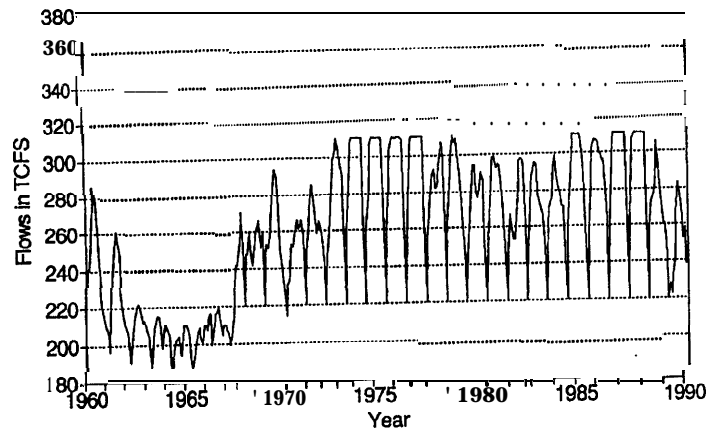
Lake Ontario
Basis of Comparison, 1900-1930



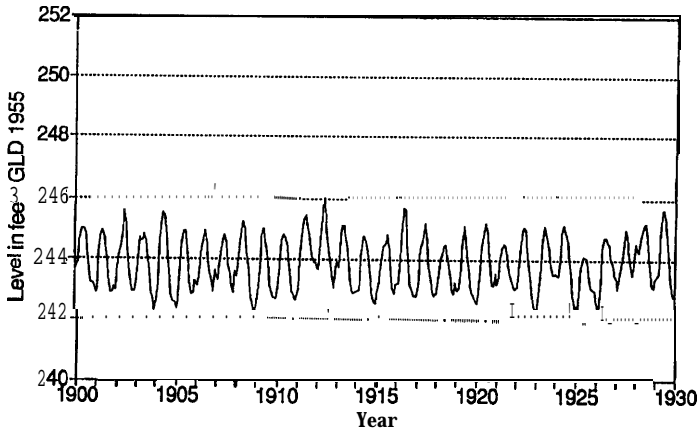
Lake Ontario
Basis of Comparison, 1930-1960



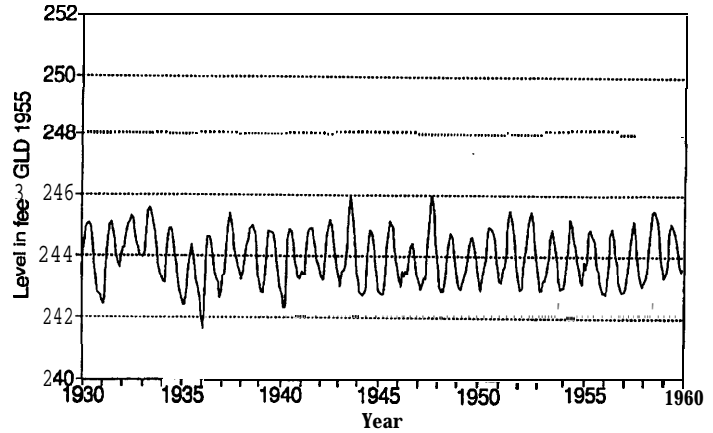
Lake Ontario
Basis of Comparison, 1960-1990



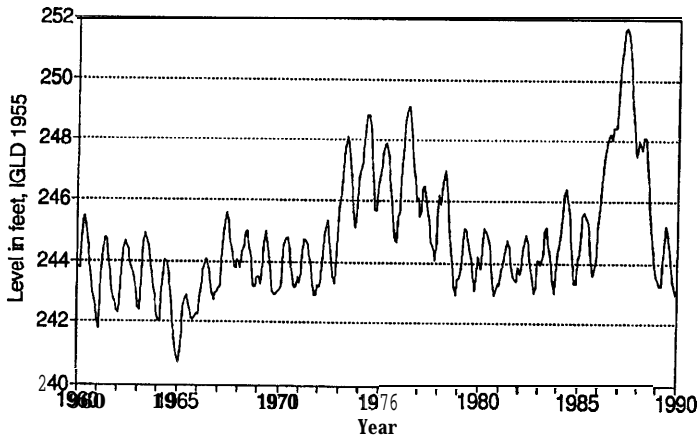
Ogdensburg, New York
Basis of Comparison, 1900-1930



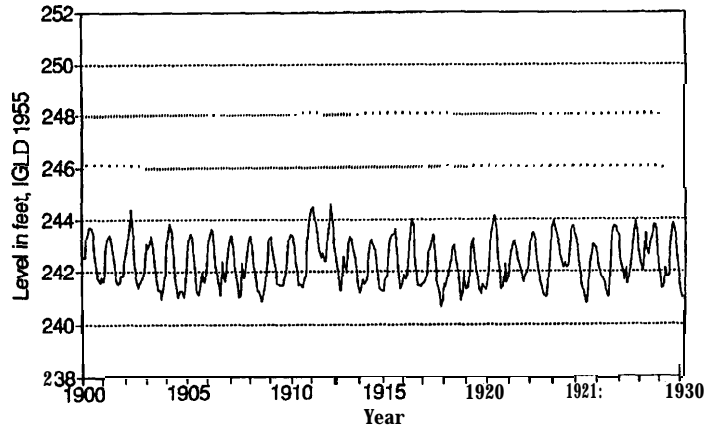
Ogdensburg, New York
Basis of Comparison, 1930-1960



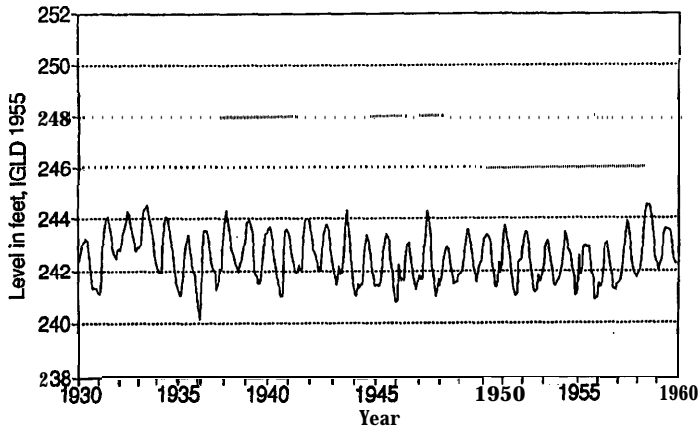
Ogdensburg, New York
Basis of Comparison, 1960-1990



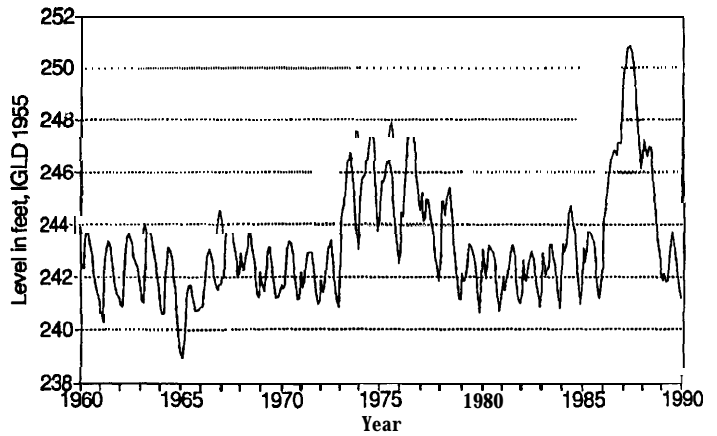
Cardinal, Ontario
Basis of Comparison, 1900-1930



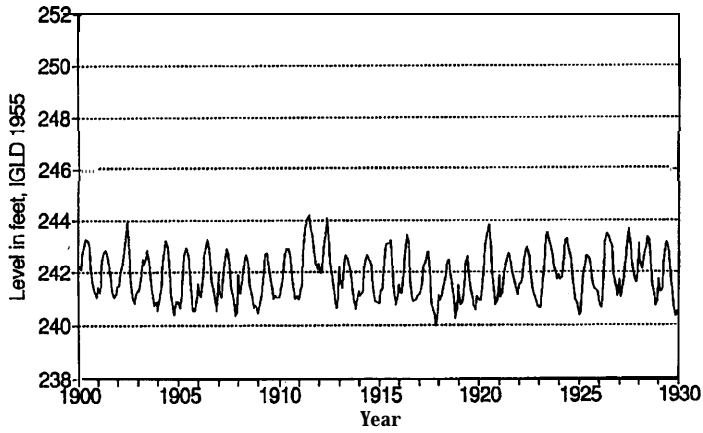
Cardinal, Ontario
Basis of Comparison, 1930-1960



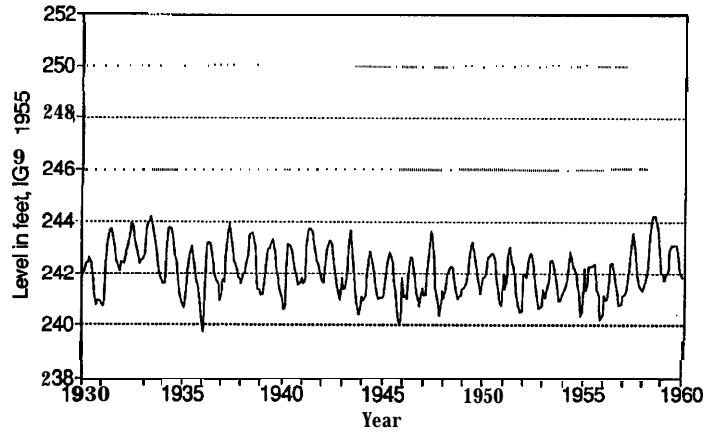
Cardinal, Ontario
Basis of Comparison, 1960-1990



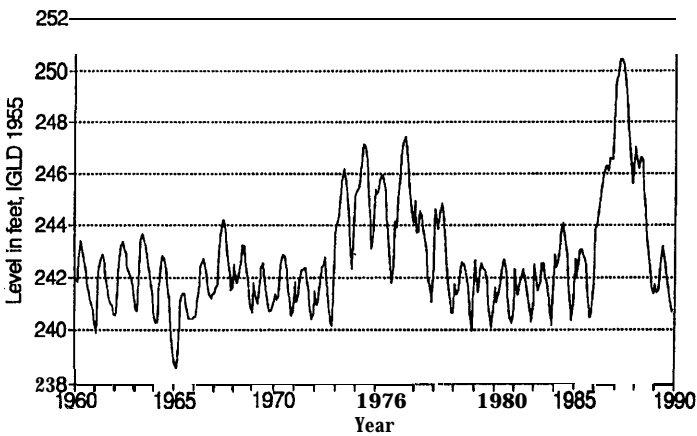
Iroquois, Ontario
Basis of Comparison, 1900-1930



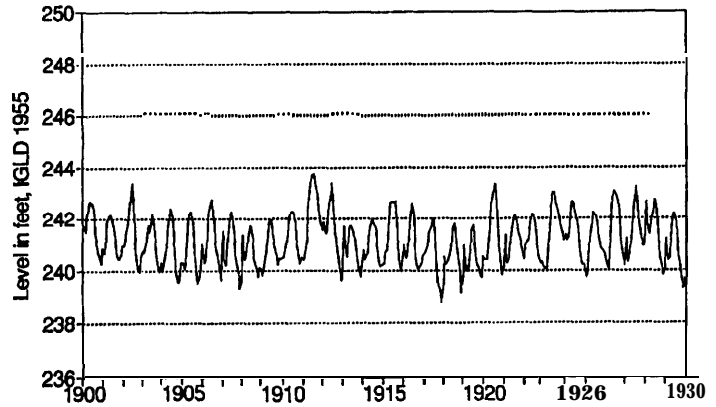
Iroquois, Ontario
Basis of Comparison, 1930-1960



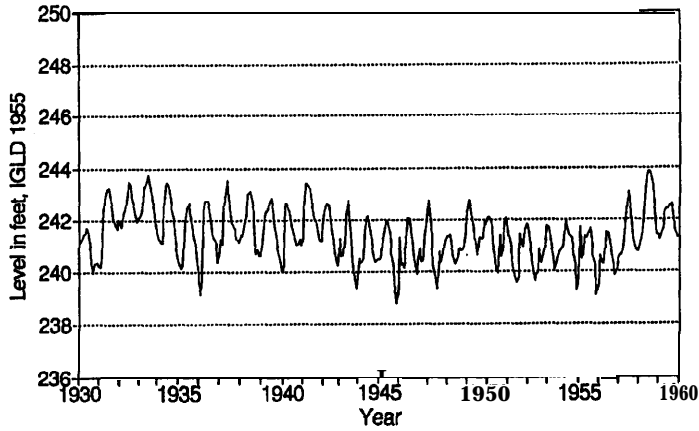
Iroquois, Ontario
Basis of Comparison, 1960-1990



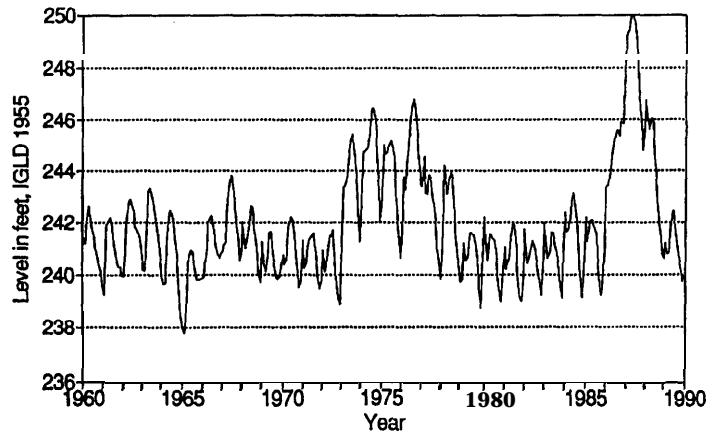
Morrisburg, Ontario
Basis of Comparison, 1900-1930



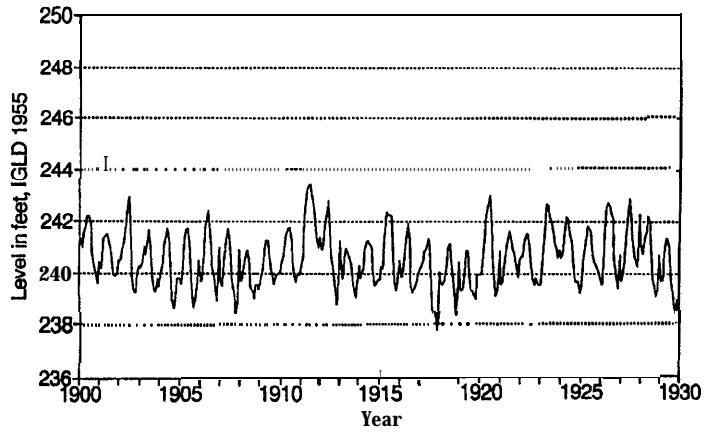
Morrisburg, Ontario
Basis of Comparison, 1930-1960



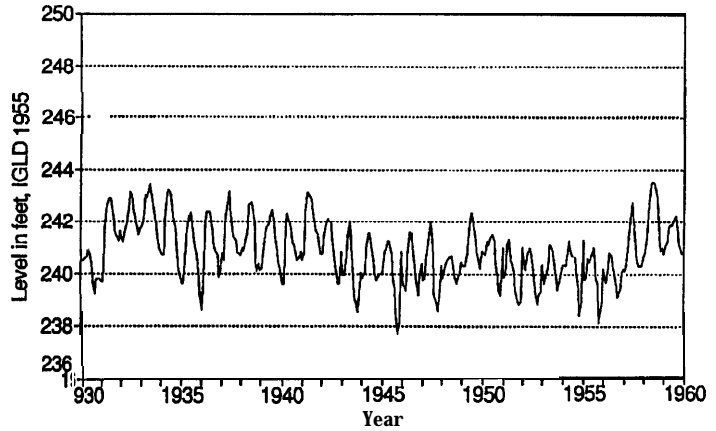
Morrisburg, Ontario
Basis of Comparison, 1960-1990



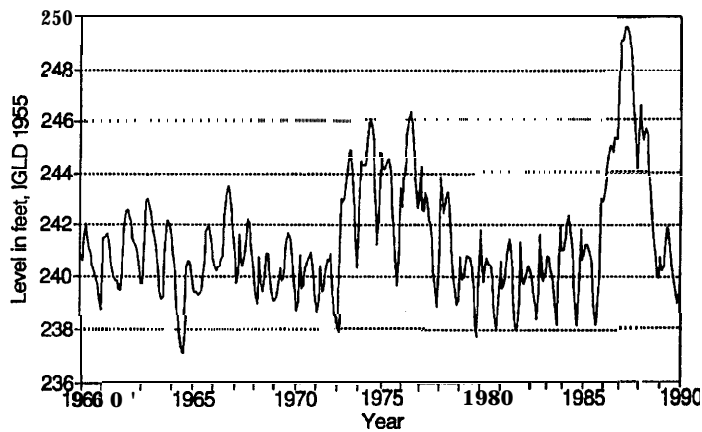
Long Sault Dam, New York
Basis of Comparison, 1900-1930



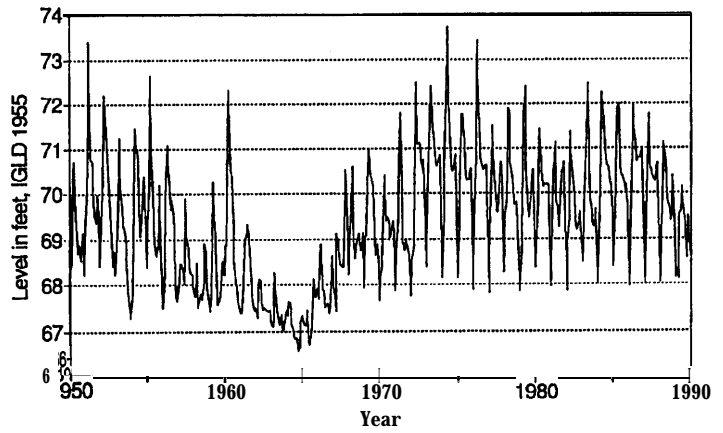
Long Sault Dam, New York
Basis of Comparison, 1930-1960



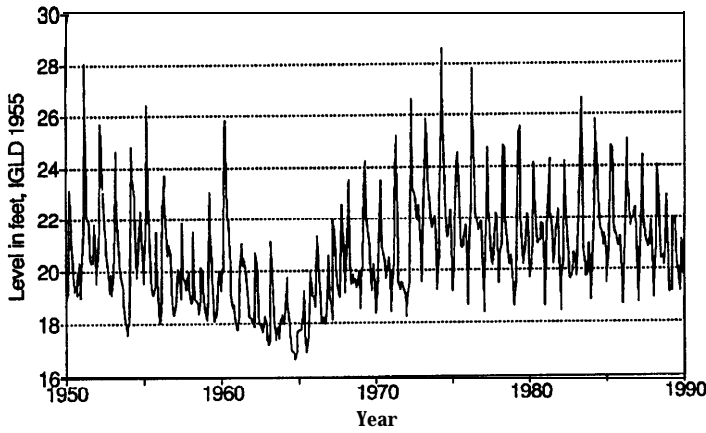
Long Sault Dam, New York
Basis of Comparison, 1960-1990



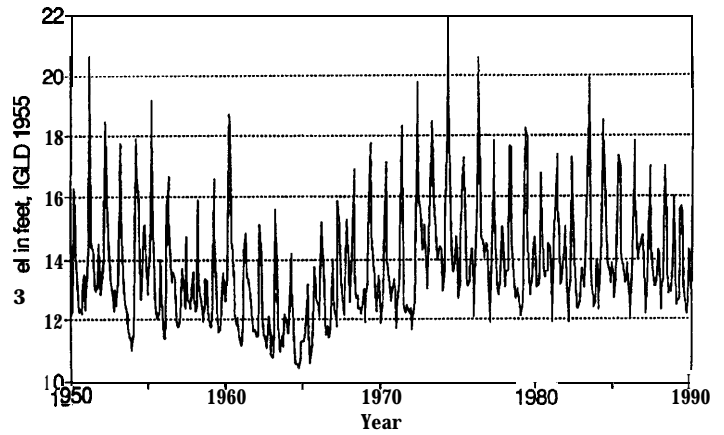
Pointe Claire, Quebec Basis of Comparison, 1950-1990



Montreal Harbour, Quebec Basis of Comparison, 1950-1990



Lake St. Pierre, Quebec Basis of Comparison, 1950-1990



APPENDIX B - Basis of Comparison Levels and Flows - TABLES

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Superior Monthly Mean Levels, IGLD 1955

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	600.25	600.07	599.92	599.90	600.07	600.17	600.38	600.80	601.28	601.51	601.36	601.04	600.56
1901	600.67	600.38	600.23	600.27	600.42	600.66	600.96	601.09	600.98	600.91	600.82	600.53	600.66
1902	600.21	599.98	599.86	599.92	600.16	600.45	600.63	600.67	600.69	600.69	600.66	600.50	600.37
1903	600.23	599.92	599.80	599.99	600.43	600.74	600.84	600.96	601.02	601.02	600.88	600.55	600.53
1904	600.20	600.03	599.93	599.90	600.18	600.56	600.70	600.85	601.06	601.21	601.11	600.77	600.54
1905	600.40	600.16	600.15	600.25	600.49	600.81	601.05	601.22	601.36	601.33	601.19	601.00	600.78
1906	600.71	600.49	600.30	600.31	600.55	600.84	601.00	601.00	601.00	600.94	600.82	600.63	600.72
1907	600.39	600.22	600.14	600.11	600.34	600.71	600.88	601.09	601.34	601.31	601.05	600.66	600.69
1908	600.28	600.08	599.93	599.93	600.32	600.82	601.06	601.09	601.01	600.87	600.58	600.29	600.52
1909	600.05	599.87	599.75	599.74	600.08	600.35	600.57	600.80	600.81	600.72	600.68	600.60	600.33
1910	600.36	600.10	599.91	599.93	600.08	600.15	600.20	600.31	600.34	600.23	600.08	599.82	600.13
1911	599.55	599.36	599.18	599.12	599.40	599.84	600.25	600.54	600.64	600.56	600.35	600.16	599.91
1912	599.96	599.77	599.69	599.85	600.18	600.45	600.61	600.73	600.80	600.75	600.57	600.32	600.31
1913	600.04	599.76	599.79	600.01	600.32	600.59	600.81	601.01	601.14	601.19	601.13	600.92	600.56
1914	600.57	600.30	600.09	600.13	600.44	600.68	600.82	600.91	600.94	600.84	600.66	600.34	600.56
1915	600.08	599.98	599.74	599.72	599.97	600.34	600.64	600.68	600.82	600.99	601.02	600.95	600.41
1916	600.78	600.58	600.41	600.65	601.18	601.55	601.66	601.62	601.66	601.66	601.44	601.20	601.20
1917	600.91	600.61	600.53	600.53	600.62	600.85	601.01	601.12	601.20	601.12	600.92	600.64	600.84
1918	600.39	600.23	600.05	600.01	600.33	600.70	600.90	601.01	601.02	601.03	601.07	600.98	600.64
1919	600.75	600.51	600.32	600.34	600.54	600.67	600.73	600.72	600.71	600.62	600.56	600.45	600.58
1920	600.23	600.10	600.16	600.36	600.54	600.79	601.01	601.05	600.91	600.78	600.61	600.42	600.58
1921	600.18	599.89	599.79	599.99	600.35	600.51	600.58	600.63	600.58	600.43	600.16	599.81	600.24
1922	599.49	599.28	599.20	599.38	599.76	600.09	600.33	600.46	600.45	600.31	600.06	599.80	599.88
1923	599.57	599.33	599.17	599.22	599.38	599.55	599.75	599.90	599.95	599.95	599.87	599.68	599.61
1924	599.44	599.20	599.01	599.04	599.20	599.30	599.47	599.72	599.91	599.92	599.75	599.43	599.45
1925	599.15	598.97	598.88	598.97	599.15	599.38	599.61	599.72	599.79	599.71	599.45	599.19	599.33
1926	598.96	598.76	598.68	598.71	598.87	599.20	599.56	599.83	600.07	600.22	600.21	600.12	599.43
1927	599.93	599.78	599.81	600.03	600.47	600.86	601.06	601.07	600.95	600.84	600.67	600.45	600.49
1928	600.23	600.02	599.91	600.05	600.38	600.74	601.02	601.21	601.36	601.51	601.46	601.17	600.75
1929	600.89	600.72	600.67	600.75	600.86	600.97	601.15	601.23	601.22	601.21	601.07	600.83	600.96
1930	600.57	600.39	600.23	600.16	600.36	600.72	601.02	601.04	600.95	600.86	600.70	600.45	600.62

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Superior Monthly Mean Levels, IGLD 1955

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1931	600.15	599.86	599.61	599.55	599.73	599.96	600.13	600.16	600.16	600.22	600.25	600.16	600.00
1932	599.95	599.79	599.65	599.64	599.93	600.17	600.34	600.55	600.46	600.22	600.05	599.86	600.05
1933	599.64	599.50	599.37	599.43	599.85	600.19	600.31	600.32	600.30	600.28	600.15	599.93	599.94
1934	599.74	599.60	599.50	599.57	599.86	600.14	600.27	600.32	600.45	600.54	600.52	600.41	600.08
1935	600.19	600.00	599.92	600.09	600.32	600.56	600.79	600.82	600.67	600.58	600.48	600.27	600.39
1936	600.06	599.92	599.91	600.03	600.43	600.76	600.69	600.59	600.52	600.32	600.07	599.87	600.26
1937	599.71	599.67	599.61	599.71	600.12	600.37	600.52	600.66	600.60	600.46	600.37	600.17	600.16
1938	599.93	599.77	599.74	600.04	600.48	600.83	600.99	601.00	600.98	600.85	600.70	600.52	600.49
1939	600.33	600.20	600.12	600.21	600.54	600.97	601.19	601.23	601.17	600.95	600.65	600.30	600.65
1940	600.00	599.77	599.55	599.49	599.82	600.32	600.56	600.52	600.38	600.23	600.11	599.99	600.06
1941	599.77	599.55	599.37	599.55	599.95	600.21	600.38	600.45	600.64	600.83	600.73	600.49	600.16
1942	600.24	600.00	599.89	600.00	600.35	600.59	600.66	600.75	600.76	600.75	600.73	600.52	600.44
1943	600.24	600.06	599.96	600.02	600.38	600.96	601.29	601.33	601.26	601.09	600.89	600.56	600.67
1944	600.22	599.95	599.78	599.82	600.18	600.69	601.08	601.28	601.33	601.14	600.90	600.65	600.59
1945	600.33	600.19	600.28	600.55	600.75	600.83	600.91	601.01	601.05	600.91	600.74	600.54	600.67
1946	600.32	600.17	600.16	600.26	600.39	600.60	600.75	600.76	600.80	600.87	600.80	600.55	600.54
1947	600.24	599.98	599.79	599.93	600.35	600.87	601.14	601.14	601.13	601.01	600.78	600.48	600.57
1948	600.17	599.91	599.77	600.07	600.40	600.44	600.52	600.65	600.62	600.38	600.26	600.14	600.28
1949	599.94	599.76	599.62	599.67	599.95	600.29	600.58	600.66	600.52	600.46	600.36	600.12	600.16
1950	599.91	599.73	599.63	599.76	600.30	600.90	601.19	601.31	601.28	601.23	601.20	601.02	600.62
1951	600.71	600.56	600.57	600.80	601.17	601.40	601.49	601.55	601.68	601.71	601.60	601.41	601.22
1952	601.20	600.97	600.77	600.87	601.04	601.21	601.60	601.82	601.70	601.31	600.97	600.76	601.18
1953	600.54	600.38	600.30	600.41	600.79	601.24	601.53	601.62	601.52	601.25	600.99	600.76	600.94
1954	600.52	600.33	600.17	600.30	600.79	601.19	601.31	601.21	601.11	601.00	600.86	600.63	600.78
1955	600.31	600.11	600.03	600.20	600.49	600.62	600.73	600.86	600.85	600.78	600.75	600.54	600.52
1956	600.25	600.01	599.76	599.74	600.04	600.33	600.54	600.68	600.64	600.51	600.32	600.14	600.25
1957	599.88	599.66	599.61	599.79	600.07	600.31	600.51	600.53	600.47	600.33	600.21	600.09	600.12
1958	599.87	599.70	599.54	599.54	599.66	599.86	600.14	600.31	600.37	600.29	600.16	599.96	599.95
1959	599.67	599.46	599.35	599.40	599.75	600.13	600.27	600.48	600.73	600.75	600.53	600.22	600.06
1960	599.99	599.77	599.57	599.76	600.31	600.65	600.74	600.79	600.76	600.63	600.53	600.32	600.32

Basis of Comparison, IJC Phase II Levels Reference Study
Lake Superior Monthly Mean Levels, IGLD 1955

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1961	600.00	599.85	599.83	599.92	600.14	600.34	600.41	600.37	600.36	600.40	600.29	600.11	600.17
1962	599.86	599.69	599.64	599.65	599.95	600.23	600.29	600.37	600.43	600.30	600.02	599.74	600.01
1963	599.54	599.38	599.32	599.47	599.70	600.00	600.22	600.26	600.24	600.11	599.94	599.67	599.82
1964	599.42	599.23	599.05	599.21	599.73	600.19	600.37	600.49	600.60	600.52	600.35	600.18	599.95
1965	599.93	599.74	599.66	599.77	600.18	600.53	600.63	600.66	600.71	600.72	600.69	600.61	600.32
1966	600.40	600.20	600.16	600.30	600.53	600.66	600.67	600.76	600.70	600.55	600.44	600.25	600.47
1967	600.07	599.92	599.82	600.05	600.35	600.53	600.69	600.74	600.64	600.51	600.41	600.18	600.33
1968	599.95	599.74	599.69	599.98	600.34	600.70	601.15	601.43	601.60	601.69	601.52	601.26	600.75
1969	601.16	601.03	600.82	600.90	601.16	601.24	601.26	601.31	601.23	601.03	600.84	600.58	601.05
1970	600.35	600.17	600.00	600.08	600.51	600.84	601.02	601.08	601.03	601.08	601.13	601.03	600.69
1971	600.76	600.60	600.57	600.67	601.01	601.29	601.38	601.38	601.33	601.35	601.34	601.15	601.07
1972	600.92	600.73	600.63	600.74	600.98	601.14	601.27	601.54	601.69	601.54	601.33	601.12	601.14
1973	600.85	600.62	600.61	600.75	601.00	601.27	601.41	601.55	601.55	601.44	601.29	601.05	601.12
1974	600.83	600.64	600.46	600.55	600.87	601.18	601.42	601.57	601.57	601.46	601.38	601.21	601.09
1975	601.02	600.88	600.70	600.63	600.82	601.13	601.30	601.26	601.18	601.06	601.04	600.98	601.00
1976	600.72	600.52	600.48	600.68	600.84	600.97	601.11	601.04	600.81	600.53	600.24	599.92	600.66
1977	599.66	599.52	599.62	599.88	600.03	600.16	600.37	600.59	600.95	601.13	601.02	600.91	600.32
1978	600.66	600.36	600.16	600.12	600.31	600.57	600.79	601.02	601.12	600.95	600.69	600.45	600.60
1979	600.20	600.04	600.13	600.43	600.87	601.31	601.50	601.44	601.35	601.34	601.30	601.07	600.91
1980	600.82	600.62	600.39	600.39	600.55	600.66	600.77	600.92	601.10	601.11	600.92	600.61	600.74
1981	600.29	600.19	600.21	600.39	600.63	600.89	601.05	600.97	600.83	600.70	600.57	600.37	600.59
1982	600.13	599.89	599.79	599.94	600.33	600.57	600.80	601.04	601.11	601.28	601.38	601.32	600.63
1983	601.15	600.92	600.78	600.85	601.06	601.21	601.31	601.36	601.33	601.33	601.38	601.21	601.16
1984	600.89	600.71	600.60	600.66	600.83	601.11	601.38	601.45	601.44	601.37	601.24	601.07	601.06
1985	600.85	600.65	600.58	600.72	601.02	601.22	601.34	601.47	601.62	601.76	601.86	601.77	601.24
1986	601.47	601.24	601.18	601.38	601.56	601.60	601.72	601.75	601.73	601.68	601.51	601.25	601.51
1987	600.97	600.75	600.58	600.48	600.55	600.66	600.80	600.93	600.86	600.66	600.50	600.36	600.67
1988	600.16	599.92	599.79	599.88	600.06	600.18	600.22	600.47	600.69	600.61	600.70	600.70	600.28
1989	600.47	600.26	600.11	600.20	600.49	600.82	600.90	600.86	600.75	600.57	600.37	600.08	600.49
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Average	600.25	600.06	599.95	600.05	600.33	600.61	600.79	600.88	600.90	600.84	600.71	600.50	600.49
Std.Dev	0.48	0.47	0.47	0.48	0.48	0.47	0.47	0.45	0.44	0.45	0.47	0.48	0.43
Maximum	601.47	601.24	601.18	601.38	601.56	601.60	601.72	601.82	601.73	601.76	601.86	601.77	601.51
Minimum	598.96	598.76	598.68	598.71	598.87	599.20	599.47	599.72	599.79	599.71	599.45	599.19	599.33

Basis Of Comparison, IJC Phase II Levels Reference Study
Lake Superior Monthly Mean Outflows, TCFS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEE'	OCT	NOV	DEC	AVG
1900	76.80	73.50	70.60	70.10	73.30	75.30	68.60	75.80	94.20	100.30	87.80	84.20	79.21
1901	84.20	79.00	76.20	76.90	79.40	93.10	98.80	99.20	87.50	81.30	87.30	83.90	85.57
1902	76.00	71.80	69.70	70.40	74.70	80.30	87.20	77.10	72.70	72.30	77.30	80.50	75.83
1903	76.40	70.60	55.90	71.70	79.90	106.80	93.40	93.70	87.50	84.30	83.40	82.70	82.19
1904	74.20	72.60	70.80	70.10	67.70	76.60	77.20	69.10	76.10	81.50	87.60	84.10	75.63
1905	79.50	74.90	74.70	76.60	80.70	93.40	93.80	94.10	94.40	99.80	87.70	84.20	86.15
1906	84.20	81.20	77.50	77.70	92.90	93.40	98.90	87.50	81.20	79.70	76.20	76.80	83.93
1907	75.70	76.00	74.60	74.00	77.60	87.20	87.40	81.70	94.40	99.80	87.50	82.90	83.23
1908	70.70	73.20	70.80	70.80	71.20	87.30	93.80	87.60	79.20	76.70	71.70	64.80	76.48
1909	66.60	57.90	61.50	58.40	71.10	78.60	67.30	80.80	77.40	74.30	76.00	83.50	71.12
1910	78.80	73.70	70.20	70.60	73.30	73.90	65.40	60.90	62.50	57.60	55.00	55.00	66.41
1911	55.00	55.00	55.00	55.00	55.00	55.00	68.40	84.20	87.20	84.20	72.90	62.70	65.80
1912	65.20	61.50	60.70	64.10	75.10	80.50	87.10	77.30	77.00	68.80	70.10	57.90	70.44
1913	64.20	55.00	55.00	72.40	75.40	78.50	75.10	81.80	79.90	87.70	87.60	84.20	74.73
1914	84.20	77.50	73.70	74.40	79.90	93.20	87.30	84.30	79.10	79.80	72.40	75.80	80.13
1915	59.50	69.90	67.60	55.10	71.30	78.40	97.90	87.20	78.80	87.50	87.50	84.10	77.07
1916	84.20	84.20	79.50	84.20	113.20	129.80	135.70	122.60	111.10	100.70	87.90	84.20	101.44
1917	84.30	84.20	84.10	84.10	93.00	87.40	83.70	72.60	74.70	73.30	71.10	66.50	79.92
1918	66.20	70.70	72.60	64.60	67.00	72.40	78.60	74.90	73.90	70.10	78.10	83.30	72.70
1919	83.90	84.10	77.90	78.20	87.10	77.60	73.00	65.70	59.10	60.10	55.00	63.70	72.12
1920	62.60	73.80	74.90	78.80	92.90	93.40	93.70	87.50	80.30	64.80	67.70	61.50	77.66
1921	71.20	64.80	55.00	65.10	78.40	81.40	76.40	76.20	67.10	61.30	55.10	55.00	67.25
1922	55.00	55.00	55.00	55.00	55.00	57.00	58.60	57.80	56.20	55.00	55.00	55.00	55.80
1923	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
1924	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
1925	55.00	54.50	53.00	54.50	55.00	55.00	55.00	55.00	55.00	59.80	55.00	55.00	55.15
1926	54.30	50.90	49.60	50.10	52.80	55.00	55.00	55.00	64.10	76.20	75.50	74.40	59.41
1927	71.00	68.10	68.60	72.40	80.30	107.30	120.50	118.60	103.70	98.50	87.20	80.50	89.72
1928	76.20	72.60	70.20	72.80	78.80	98.20	104.00	99.50	99.90	100.30	87.90	84.20	87.05
1929	84.30	84.20	84.20	84.20	98.60	79.40	72.80	77.70	65.00	71.80	70.80	71.40	78.70
1930	73.10	73.60	76.00	74.50	72.80	74.70	84.30	83.70	70.50	72.20	70.10	71.70	74.77
1931	71.70	65.90	56.90	55.00	55.00	71.30	71.30	70.30	64.80	63.60	68.60	69.50	65.32

Basis of Comparison, IJC Phase II Levels Reference Study
Lake Superior Monthly Mean Outflows, TCFS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	71.30	65.10	64.00	64.10	65.50	74.70	78.20	87.10	80.50	73.90	64.50	62.10	70.92
1933	58.90	60.00	61.20	62.10	63.50	75.30	77.70	77.90	76.00	75.40	72.60	70.00	69.22
1934	66.00	64.90	63.20	64.30	69.70	74.20	76.60	77.50	80.10	92.90	87.10	79.50	74.67
1935	75.50	71.80	70.40	73.70	77.30	106.00	118.40	116.80	106.50	93.00	80.70	76.90	88.92
1936	73.10	70.40	70.20	72.40	79.40	106.90	122.20	102.40	97.60	77.90	67.80	65.00	83.78
1937	65.20	66.30	65.10	66.70	73.80	78.40	97.60	102.60	97.80	80.70	78.80	75.30	79.02
1938	71.00	67.90	67.60	71.00	80.70	107.20	115.20	103.90	98.90	93.50	87.20	84.00	87.34
1939	78.10	75.70	74.00	75.80	102.20	115.10	121.50	113.50	104.50	98.80	87.20	77.10	93.62
1940	69.90	67.90	63.90	63.20	61.50	77.90	97.80	92.90	73.50	64.00	58.40	58.80	70.81
1941	57.80	55.00	55.40	55.00	71.00	75.50	78.80	80.30	87.20	98.50	87.20	81.00	73.56
1942	76.40	72.00	70.20	72.00	78.10	102.40	87.20	84.20	84.20	78.50	84.00	83.90	81.09
1943	76.10	72.90	71.30	72.20	79.00	93.70	109.40	99.80	87.70	80.80	77.00	71.60	82.62
1944	68.10	69.50	68.10	55.00	75.00	87.20	99.10	104.90	105.20	99.30	87.40	84.10	83.58
1945	78.10	75.50	77.10	84.20	113.70	107.20	93.60	87.50	87.50	82.10	71.90	71.90	85.86
1946	72.40	75.10	74.90	76.80	79.00	84.20	84.20	80.20	73.70	79.80	87.30	84.00	79.30
1947	76.40	71.80	68.50	63.90	78.20	93.50	108.60	94.00	87.60	83.70	75.50	72.10	81.15
1948	74.10	68.90	56.10	66.40	79.20	80.30	74.80	71.50	75.90	67.20	60.10	64.20	69.89
1949	61.70	62.80	58.70	60.50	61.80	77.30	93.00	93.10	84.10	77.80	78.80	74.20	73.65
1950	70.40	67.20	64.50	67.30	77.50	107.50	121.50	117.20	109.40	99.50	87.70	84.20	89.49
1951	84.20	84.20	84.20	84.20	113.10	126.90	134.10	106.00	111.20	3100.90	88.00	84.40	100.12
1952	84.40	84.30	84.20	84.30	112.30	87.70	94.80	120.60	111.30	94.30	65.90	65.70	90.82
1953	66.00	71.90	76.10	79.70	87.30	99.60	110.50	122.70	110.50	87.70	76.30	75.70	88.67
1954	80.00	78.20	75.10	77.50	98.30	108.90	109.40	94.10	80.80	74.10	59.60	61.80	83.15
1955	58.10	60.40	66.20	74.40	81.00	81.80	74.90	75.90	77.30	74.70	77.20	82.40	73.69
1956	75.60	72.00	66.20	57.40	72.80	78.20	77.20	79.90	70.40	67.80	63.80	60.10	70.12
1957	62.40	55.00	58.80	63.20	72.90	77.70	81.40	81.90	73.80	70.70	59.20	63.20	68.35
1958	57.80	59.10	60.20	61.20	61.50	58.90	74.60	77.70	78.80	77.50	72.50	71.30	67.59
1959	66.20	62.70	60.60	61.50	63.40	74.00	76.60	81.00	98.20	98.20	92.90	75.50	75.90
1960	70.90	66.50	59.70	59.70	77.70	98.00	87.30	78.40	71.50	66.90	64.30	69.40	72.53
1961	60.50	60.70	67.00	70.40	74.40	78.10	79.50	75.00	63.40	63.60	65.30	59.00	68.07

Basis of Comparison, IJC Phase II Levels Reference Study
Lake Superior Monthly Mean Outflows, TCFS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	62.20	55.00	60.80	60.70	58.80	76.00	77.30	75.30	76.40	75.60	64.20	55.00	66.44
1963	55.20	61.30	60.30	62.90	66.70	65.30	75.80	76.60	76.40	74.20	68.30	66.30	67.44
1964	62.00	58.60	55.50	58.10	67.00	74.90	78.40	80.50	102.40	97.60	78.20	75.10	74.03
1965	70.60	67.20	65.60	67.80	74.90	81.40	110.00	115.70	106.70	98.20	87.20	84.00	85.78
1966	79.50	75.70	74.90	77.50	105.90	120.70	106.50	98.30	102.80	87.10	80.10	76.80	90.48
1967	73.30	70.60	68.80	72.90	77.90	97.70	93.20	87.30	84.20	69.80	72.50	63.60	77.65
1968	57.00	56.10	55.00	63.40	78.10	93.20	108.70	118.00	110.80	100.80	88.00	84.20	84.44
1969	84.40	84.30	84.30	84.30	113.10	123.70	104.90	94.30	94.10	81.30	74.00	69.90	91.05
1970	69.20	75.30	72.00	73.50	92.80	98.50	93.80	93.90	80.80	74.10	82.70	84.20	82.57
1971	84.20	84.20	84.20	84.20	108.00	113.80	109.80	99.90	87.80	84.50	87.80	84.20	92.72
1972	84.30	84.20	84.20	84.20	112.00	108.60	99.70	100.40	111.30	100.40	80.50	80.90	94.23
1973	76.90	74.70	78.50	84.20	93.70	104.90	100.00	94.70	94.80	71.90	70.70	68.80	84.48
1974	69.40	70.90	74.40	74.50	87.40	94.10	105.50	100.50	100.50	74.90	76.40	79.70	84.02
1975	80.50	84.30	84.20	84.20	84.30	84.40	87.80	83.70	65.10	64.60	60.60	76.30	78.33
1976	73.00	78.10	77.60	83.40	98.50	74.20	78.30	71.00	57.70	55.00	55.00	55.00	71.40
1977	55.00	55.00	55.00	62.20	72.80	66.10	65.70	70.70	72.10	94.00	87.50	84.10	70.02
1978	84.20	78.60	74.90	74.20	77.70	82.40	82.80	84.30	87.60	81.30	68.10	65.90	78.50
1979	67.60	68.50	74.60	80.10	98.60	109.50	115.00	121.30	82.70	83.10	84.40	84.20	89.13
1980	80.00	84.20	79.20	79.20	87.10	79.10	71.90	67.30	67.30	75.40	72.80	69.20	76.06
1981	65.20	68.10	75.80	79.40	97.90	87.40	99.00	83.70	70.70	57.70	57.20	55.10	74.77
1982	61.00	60.10	55.00	61.50	75.80	87.10	74.90	87.50	81.60	84.40	87.80	84.20	75.08
1983	84.40	84.30	84.20	84.30	112.40	99.50	94.30	87.80	82.30	77.50	84.50	84.30	88.32
1984	84.30	84.20	84.20	84.20	103.30	87.60	99.90	94.60	87.90	81.70	79.50	76.10	87.29
1985	76.00	78.10	79.00	81.40	93.80	104.70	94.40	94.60	94.90	95.10	88.30	84.60	88.74
1986	84.50	84.40	84.40	84.50	110.60	128.70	119.90	116.50	95.10	81.50	73.80	62.90	93.90
1987	61.50	68.30	74.70	79.10	71.70	70.40	62.70	69.20	61.70	55.00	55.00	55.00	65.36
1988	55.00	57.50	55.00	59.00	65.40	63.90	60.60	55.00	76.10	73.20	70.10	84.10	64.57
1989	80.80	76.80	74.00	75.50	80.80	103.20	103.50	87.40	83.70	72.90	71.90	60.80	80.94
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Average	71.13	70.05	68.94	70.58	80.40	87.30	89.45	87.11	83.39	79.44	74.85	72.85	77.96
Std.Dev	9.55	9.43	9.64	9.66	15.92	17.62	18.55	16.90	15.15	13.29	11.05	10.30	9.97
Maximum	84.50	84.40	84.40	84.50	113.70	129.80	135.70	122.70	111.30	100.90	92.90	84.60	101.44
Minimum	54.30	50.90	49.60	50.10	52.80	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00

Basis of Comparison, IJC Phase II Levels Reference Study
Lakes Michigan-Huron Monthly Mean Levels, IGLD 1955

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	577.82	577.77	577.79	577.88	578.08	578.19	578.38	578.54	578.53	578.47	578.38	578.14	578.16
1901	577.87	577.72	577.83	578.13	578.35	578.52	578.70	578.77	578.55	578.27	577.99	577.74	578.20
1902	577.57	577.40	577.45	577.64	577.88	578.18	578.53	578.58	578.39	578.12	577.90	577.70	577.95
1903	577.52	577.54	577.75	578.02	578.28	578.49	578.61	578.65	578.69	578.61	578.32	578.04	578.21
1904	577.88	577.84	578.05	578.48	578.95	579.28	579.36	579.30	579.17	578.99	578.69	578.33	578.69
1905	578.07	577.95	578.08	578.29	578.60	579.02	579.27	579.30	579.18	578.92	578.66	578.46	578.65
1906	578.43	578.53	578.57	578.73	578.98	579.18	579.27	579.14	578.92	578.69	578.52	578.40	578.78
1907	578.37	578.39	578.43	578.61	578.86	579.12	579.27	579.23	579.12	578.91	578.63	578.43	578.78
1908	578.26	578.18	578.30	578.59	579.04	579.38	579.53	579.43	579.07	578.68	578.26	577.90	578.72
1909	577.70	577.65	577.67	577.95	578.45	578.78	578.87	578.77	578.57	578.22	577.93	577.87	578.20
1910	577.83	577.75	577.75	577.99	578.26	578.36	578.32	578.21	578.07	577.88	577.63	577.32	577.95
1911	577.11	577.06	577.03	577.18	577.50	577.73	577.72	577.60	577.52	577.48	577.44	577.39	577.40
1912	577.31	577.24	577.20	577.38	577.96	578.41	578.53	578.64	578.69	578.59	578.47	578.33	578.06
1913	578.18	578.08	578.17	578.61	579.11	579.35	579.41	579.33	579.09	578.84	578.71	578.50	578.78
1914	578.29	578.22	578.21	578.32	578.53	578.82	578.98	578.93	578.77	578.51	578.19	577.83	578.47
1915	577.65	577.66	577.64	577.60	577.70	577.89	578.06	578.13	578.14	577.98	577.77	577.64	577.82
1916	577.60	577.67	577.77	578.20	578.80	579.33	579.61	579.53	579.31	579.15	578.97	578.86	578.73
1917	578.80	578.66	578.68	578.97	579.29	579.70	580.09	580.08	579.82	579.50	579.21	578.95	579.31
1918	578.78	578.82	579.03	579.27	579.61	579.84	579.83	579.71	579.43	579.17	579.03	578.99	579.29
1919	578.93	578.79	578.87	579.20	579.59	579.75	579.68	579.48	579.19	578.99	578.81	578.59	579.16
1920	578.35	578.18	578.32	578.70	578.94	579.09	579.24	579.21	579.09	578.88	578.56	578.32	578.74
1921	578.22	578.09	578.14	578.55	578.84	578.88	578.81	578.68	578.54	578.31	578.02	577.87	578.41
1922	577.74	577.67	577.82	578.26	578.72	578.93	579.07	578.99	578.73	578.38	578.01	577.72	578.34
1923	577.43	577.24	577.24	577.51	577.88	578.14	578.18	578.07	577.92	577.74	577.42	577.15	577.66
1924	576.96	576.85	576.93	577.15	577.46	577.71	577.84	577.94	577.88	577.54	577.17	576.82	577.35
1925	576.52	576.41	576.48	576.59	576.57	576.61	576.70	576.57	576.30	576.03	575.79	575.61	576.35
1926	575.48	575.41	575.44	575.68	576.02	576.34	576.53	576.53	576.49	576.44	576.48	576.52	576.11
1927	576.45	576.45	576.60	576.86	577.25	577.60	577.79	577.76	577.62	577.49	577.39	577.33	577.22
1928	577.25	577.23	577.33	577.73	578.19	578.53	578.80	578.92	578.88	578.91	579.01	578.98	578.31
1929	578.96	578.92	579.07	579.65	580.31	580.68	580.73	580.56	580.22	579.86	579.55	579.21	579.81
1930	579.01	579.06	579.15	579.26	579.45	579.68	579.80	579.65	579.27	578.85	578.45	578.11	579.15
1931	577.82	577.57	577.45	577.46	577.53	577.65	577.64	577.42	577.29	577.19	577.08	576.96	577.42

Basis of Comparison, IJC Phase II Levels Reference Study
Lakes Michigan-Huron Monthly Mean Levels, IGLD 1955

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	576.93	577.04	576.97	576.99	577.20	577.35	577.38	577.34	577.13	576.88	576.66	576.52	577.03
1933	576.47	576.41	576.37	576.62	577.15	577.47	577.50	577.31	577.02	576.76	576.50	576.32	576.83
1934	576.25	576.12	576.03	576.24	576.47	576.59	576.61	576.43	576.34	576.26	576.17	576.17	576.31
1935	576.09	576.07	576.21	576.39	576.51	576.74	576.97	576.96	576.83	576.62	576.47	576.32	576.52
1936	576.19	576.20	576.28	576.47	576.74	576.95	576.97	576.94	576.93	576.84	576.55	576.32	576.61
1937	576.28	576.32	576.30	576.48	576.85	577.06	577.16	577.15	577.04	576.84	576.67	576.48	576.72
1938	576.39	576.58	576.95	577.33	577.64	577.93	578.11	578.13	578.05	577.81	577.51	577.29	577.48
1939	577.16	577.13	577.19	577.42	577.79	578.14	578.33	578.34	578.21	577.93	577.62	577.34	577.72
1940	577.08	576.89	576.75	576.78	577.06	577.41	577.62	577.70	577.67	577.45	577.23	577.14	577.23
1941	577.09	577.00	576.85	576.96	577.20	577.29	577.29	577.15	577.06	577.20	577.32	577.29	577.14
1942	577.20	577.11	577.24	577.54	577.88	578.25	578.41	578.28	578.10	577.96	577.82	577.71	577.79
1943	577.64	577.67	577.87	578.17	578.59	579.17	579.55	579.59	579.40	579.06	578.82	578.55	578.67
1944	578.27	578.14	578.12	578.21	578.38	578.65	578.80	578.68	578.55	578.36	578.10	577.85	578.34
1945	577.62	577.50	577.59	577.85	578.22	578.68	578.93	578.89	578.78	578.65	578.50	578.34	578.30
1946	578.25	578.26	578.44	578.63	578.75	578.93	578.96	578.76	578.48	578.20	577.88	577.63	578.43
1947	577.49	577.40	577.35	577.70	578.35	578.84	579.10	579.10	578.97	578.78	578.52	578.15	578.31
1948	577.84	577.73	577.89	578.25	578.55	578.73	578.74	578.57	578.23	577.76	577.51	577.38	578.10
1949	577.25	577.24	577.21	577.31	577.48	577.67	577.84	577.71	577.39	577.08	576.78	576.54	577.29
1950	576.56	576.67	576.80	577.17	577.56	577.84	578.11	578.19	578.12	577.95	577.74	577.59	577.52
1951	577.57	577.66	577.87	578.43	578.95	579.18	579.46	579.60	579.51	579.46	579.47	579.41	578.88
1952	579.45	579.50	579.56	579.90	580.28	580.44	580.61	580.70	580.49	579.96	579.54	579.35	579.98
1953	579.19	579.10	579.18	579.43	579.67	579.90	580.04	580.01	579.78	579.42	579.04	578.69	579.45
1954	578.41	578.32	578.40	578.69	579.06	579.42	579.65	579.56	579.42	579.48	579.49	579.26	579.10
1955	579.06	578.90	578.86	579.08	579.33	579.39	579.31	579.07	578.66	578.32	578.12	577.84	578.83
1956	577.64	577.53	577.53	577.71	578.07	578.38	578.51	578.59	578.42	578.08	577.78	577.52	577.98
1957	577.30	577.14	577.10	577.23	577.52	577.81	578.03	577.99	577.77	577.55	577.38	577.30	577.51
1958	577.21	577.06	576.94	576.96	576.95	576.94	577.01	576.97	576.84	576.64	576.36	576.07	576.83
1959	575.88	575.84	575.95	576.34	576.81	576.99	577.00	577.07	577.10	577.04	577.03	577.04	576.67
1960	577.08	577.10	577.08	577.36	578.09	578.66	578.92	578.97	578.80	578.46	578.19	577.92	578.05
1961	577.57	577.40	577.43	577.61	577.77	577.90	578.01	577.97	577.93	577.83	577.61	577.36	577.70

Basis of Comparison, IJC Phase II Levels Reference Study
Lakes Michigan-Huron Monthly Mean Levels, IGLD 1955

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	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	577.18	577.13	577.18	577.36	577.59	577.74	577.73	577.64	577.46	577.20	576.87	576.52	577.30
1963	576.24	576.08	576.15	576.39	576.63	576.76	576.78	576.75	576.60	576.36	576.09	575.76	576.38
1964	575.53	575.36	575.26	575.40	575.68	575.83	575.89	575.87	575.78	575.60	575.37	575.22	575.57
1965	575.13	575.16	575.25	575.61	576.08	576.30	576.34	576.39	576.56	576.66	576.61	576.65	576.06
1966	576.65	576.62	576.81	577.08	577.27	577.43	577.46	577.35	577.10	576.79	576.70	576.79	577.00
1967	576.86	576.85	576.89	577.31	577.73	578.07	578.29	578.20	578.00	577.80	577.69	577.69	577.61
1968	577.65	577.56	577.55	577.71	577.95	578.23	578.44	578.53	578.59	578.45	578.22	578.10	578.08
1969	578.07	578.05	578.04	578.28	578.72	579.19	579.53	579.54	579.24	578.96	578.80	578.59	578.75
1970	578.38	578.23	578.15	578.33	578.69	579.00	579.24	579.22	579.15	579.08	578.88	578.76	578.76
1971	578.68	578.66	578.80	579.11	579.43	579.62	579.72	579.67	579.50	579.28	579.01	578.90	579.20
1972	578.82	578.67	578.69	578.99	579.40	579.64	579.80	579.99	580.07	579.93	579.74	579.65	579.45
1973	579.66	579.63	579.81	580.21	580.64	581.03	581.13	581.08	580.86	580.53	580.24	579.97	580.40
1974	579.90	579.89	579.92	580.21	580.60	580.90	581.04	580.96	580.70	580.36	580.08	579.86	580.37
1975	579.69	579.67	579.77	579.98	580.28	580.52	580.58	580.48	580.27	579.88	579.58	579.45	580.01
1976	579.29	579.27	579.65	580.13	580.46	580.62	580.59	580.34	579.90	579.40	578.96	578.53	579.76
1977	578.11	577.96	578.18	578.50	578.59	578.57	578.55	578.55	578.57	578.45	578.33	578.35	578.39
1978	578.33	578.23	578.16	578.35	578.71	578.92	578.99	578.99	578.99	578.90	578.66	578.41	578.64
1979	578.24	578.16	578.38	578.95	579.46	579.78	579.90	579.96	579.82	579.51	579.38	579.29	579.24
1980	579.19	579.09	579.01	579.22	579.52	579.69	579.79	579.78	579.65	579.38	579.08	578.80	579.35
1981	578.58	578.57	578.65	578.88	579.17	579.35	579.43	579.40	579.28	579.10	578.91	578.65	579.00
1982	578.45	578.29	578.30	578.62	578.91	579.09	579.20	579.19	579.08	578.94	578.88	579.02	578.83
1983	579.09	579.04	579.11	579.36	579.84	580.22	580.24	580.10	579.90	579.65	579.46	579.30	579.61
1984	579.13	579.12	579.23	579.43	579.74	580.02	580.15	580.10	579.95	579.81	579.70	579.67	579.67
1985	579.63	579.65	579.96	580.50	580.91	581.00	580.96	580.91	580.83	580.70	580.65	580.62	580.53
1986	580.47	580.35	580.45	580.71	580.92	581.12	581.33	581.30	581.41	581.59	581.31	580.92	580.99
1987	580.61	580.35	580.22	580.23	580.25	580.22	580.10	579.93	579.76	579.41	579.09	578.98	579.93
1988	578.87	578.72	578.66	578.85	579.02	578.91	578.73	578.53	578.30	578.10	578.12	578.16	578.58
1989	578.02	577.87	577.87	578.08	578.29	578.56	578.67	578.53	578.25	577.91	577.69	577.41	578.10

Average	577.83	577.77	577.83	578.08	578.40	578.65	578.76	578.72	578.57	578.35	578.14	577.96	578.26
Std.Dev	1.11	1.10	1.12	1.15	1.17	1.18	1.19	1.18	1.16	1.14	1.12	1.11	1.12
Maximum	580.61	580.35	580.45	580.71	580.92	581.12	581.33	581.30	581.41	581.59	581.31	580.92	580.99
Minimum	575.13	575.16	575.25	575.40	575.68	575.83	575.89	575.87	575.78	575.60	575.37	575.22	575.57

Basis of Comparison IJC Phase II Levels Reference Study
Lakes Michigan-Huron Monthly Mean Outflows, TCFS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	172.00	171.40	177.70	180.50	184.60	187.70	192.60	196.40	199.30	200.40	200.10	192.60	187.94
1901	172.10	170.40	184.60	193.50	196.70	197.60	200.50	203.70	200.70	198.30	194.20	185.70	191.50
1902	169.10	168.80	180.70	185.70	187.50	191.30	191.60	194.10	193.90	188.80	188.20	180.60	185.03
1903	160.70	164.50	173.70	177.60	183.50	189.10	191.90	196.00	198.30	200.10	196.90	185.90	184.85
1904	171.90	168.70	180.90	183.90	194.10	201.80	204.60	206.10	206.00	205.50	201.80	192.60	193.16
1905	173.00	171.20	184.50	192.10	194.10	198.70	203.90	206.60	206.80	203.60	201.30	194.70	194.21
1906	179.20	185.20	195.90	202.00	203.40	206.10	207.60	205.80	203.80	200.70	197.80	190.80	198.19
1907	166.50	173.80	187.40	191.90	196.30	200.90	203.60	204.80	205.30	201.80	198.30	191.90	193.54
1908	169.20	168.80	178.30	185.10	193.70	202.40	208.30	207.60	204.90	199.40	196.10	188.00	191.82
1909	167.70	168.10	177.10	181.80	187.00	193.20	197.30	197.80	197.50	194.00	188.80	185.20	186.29
1910	167.10	171.80	180.10	184.40	186.40	189.30	191.30	190.30	189.90	187.20	185.00	176.50	183.28
1911	160.00	158.70	170.70	174.20	179.00	183.40	185.20	184.20	183.70	183.20	183.80	177.80	176.99
1912	159.90	163.30	171.70	170.60	180.00	189.90	193.50	196.80	197.90	198.10	196.90	193.80	184.37
1913	171.20	170.70	182.00	177.60	191.20	200.50	204.90	206.40	205.30	202.40	200.50	194.60	192.28
1914	173.70	176.80	189.70	191.20	188.30	194.80	200.30	200.80	199.40	197.20	194.00	182.80	190.75
1915	168.30	167.00	181.20	183.00	182.70	186.60	188.20	187.10	188.60	187.70	186.90	181.90	182.43
1916	159.40	163.20	179.00	185.00	192.70	203.10	209.70	210.40	210.10	209.60	208.00	201.10	194.28
1917	186.80	186.90	197.90	198.40	201.70	208.00	214.40	216.30	215.00	209.60	203.30	197.40	202.97
1918	181.40	185.40	199.90	202.70	212.20	217.70	217.50	216.40	211.40	208.30	206.60	202.70	205.18
1919	183.70	187.30	196.10	201.00	205.00	208.80	210.90	208.10	204.80	203.10	200.90	198.00	200.64
1920	179.70	179.30	192.80	199.50	201.90	203.70	206.10	206.10	206.50	204.10	198.90	192.00	197.55
1921	174.40	177.10	182.50	190.30	195.80	197.70	197.80	198.00	197.60	194.80	190.70	183.50	190.02
1922	164.70	169.70	181.20	188.40	196.30	198.60	203.00	203.40	199.80	195.80	192.00	184.80	189.81
1923	161.60	164.00	173.00	178.90	184.70	188.30	190.10	190.70	189.70	188.20	184.00	176.00	180.77
1924	152.40	155.20	167.90	171.90	174.70	178.70	180.80	185.60	186.90	181.50	178.40	169.00	173.58
1925	148.00	151.60	159.20	166.00	166.70	167.10	169.70	167.90	164.00	161.40	157.70	154.60	161.16
1926	136.80	139.90	148.60	151.40	156.60	164.00	167.70	167.20	165.60	161.70	162.10	160.70	156.86
1927	147.40	150.70	161.20	166.20	172.80	178.80	182.60	184.00	183.90	183.70	182.20	173.40	172.24
1928	151.60	154.00	171.20	182.40	189.80	194.40	197.70	201.20	203.90	206.40	209.30	204.20	188.84
1929	185.20	187.90	197.90	203.60	213.60	224.20	226.00	226.90	223.60	219.50	213.40	201.30	210.26
1930	174.40	181.10	192.10	195.00	200.60	208.70	213.10	213.70	208.60	201.60	198.10	188.90	197.99
1931	169.00	167.80	177.00	177.00	178.70	180.60	180.60	178.50	178.30	178.30	178.10	171.80	176.31

Basis of Comparison, IJC Phase II Levels Reference Study
Lakes Michigan-Huron Monthly Mean Outflows, TCFS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	153.00	154.50	167.40	170.00	170.50	174.80	176.20	177.60	176.00	175.00	171.30	162.50	169.07
1933	146.70	146.30	157.30	160.60	168.50	174.50	178.70	178.00	175.90	173.50	171.20	164.60	166.32
1934	147.40	150.10	158.00	162.40	167.10	169.90	170.80	169.00	168.70	169.30	169.90	165.90	164.04
1935	148.00	151.00	164.80	169.50	168.30	173.50	176.60	176.00	176.40	174.60	173.10	167.20	168.25
1936	149.70	154.80	165.10	167.50	171.20	175.40	176.70	178.00	178.20	178.10	173.80	167.70	169.68
1937	146.20	145.30	157.80	159.10	163.40	167.70	167.50	169.70	172.90	172.60	172.20	166.70	163.42
1938	148.70	151.50	164.40	172.30	178.90	185.00	188.60	189.70	190.90	188.60	185.10	178.70	176.87
1939	162.20	163.00	171.10	174.20	181.60	189.10	193.60	195.30	194.80	192.30	187.90	181.00	182.18
1940	160.30	161.80	168.90	167.50	170.30	174.60	179.20	183.00	183.30	181.20	178.60	172.90	173.47
1941	154.40	158.50	168.90	172.90	176.40	177.50	178.30	177.90	178.30	182.90	185.80	183.10	174.58
1942	164.60	164.30	174.60	176.80	182.80	188.20	192.40	190.90	189.60	189.90	186.90	180.90	181.83
1943	159.60	166.50	177.20	186.10	185.00	194.90	203.00	207.70	207.80	204.20	201.70	196.30	190.83
1944	177.00	178.50	186.60	185.30	185.40	190.70	196.20	197.50	197.40	196.30	193.60	185.50	189.17
1945	167.00	170.30	177.30	180.10	182.90	190.40	195.30	197.50	197.90	193.10	194.40	188.30	186.21
1946	171.20	176.50	189.20	197.30	198.90	198.00	198.70	197.70	196.50	193.40	189.10	182.60	190.76
1947	162.30	164.10	174.50	171.20	181.30	186.90	195.10	197.60	198.10	199.20	197.30	187.40	184.58
1948	164.80	168.00	176.80	183.20	185.00	190.50	192.10	192.20	189.10	184.70	181.70	176.50	182.05
1949	155.50	155.10	166.80	170.50	174.40	179.20	183.80	183.90	180.60	176.40	173.80	164.80	172.07
1950	141.10	141.60	153.70	156.60	168.30	176.60	184.20	189.10	188.60	187.00	184.70	174.10	170.47
1951	158.00	160.40	171.00	182.70	193.50	198.50	205.90	211.90	213.10	214.50	214.80	206.50	194.23
1952	187.90	188.40	199.10	207.20	216.30	220.90	226.70	230.90	228.20	222.20	216.20	208.60	212.72
1953	189.30	190.10	200.50	207.30	211.00	213.80	217.80	219.40	218.10	214.20	208.50	199.10	207.43
1954	179.60	176.80	185.30	189.20	196.30	205.50	212.60	213.50	212.30	211.40	211.50	204.10	199.84
1955	180.70	183.40	187.60	194.90	200.80	204.00	204.40	202.10	195.50	190.90	189.90	181.20	192.95
1956	164.90	168.50	171.90	174.60	171.90	181.80	186.70	188.70	188.10	186.50	185.20	178.20	178.92
1957	158.90	159.10	167.60	167.80	171.00	178.30	179.50	182.90	181.20	181.10	180.40	173.70	173.46
1958	158.50	159.10	166.50	171.60	169.20	168.80	168.70	168.80	168.50	168.20	166.60	157.90	166.03
1959	140.30	138.40	145.20	153.60	161.60	167.20	170.10	173.70	177.10	176.10	176.60	171.10	162.58
1960	153.90	156.80	167.50	170.00	185.10	194.20	200.80	202.50	201.50	198.60	196.20	189.00	184.68
1961	167.70	167.00	174.40	176.20	173.90	178.10	182.20	182.50	184.20	186.90	185.60	178.20	178.07

Basis of Comparison, IJC Phase II Levels Reference Study
Lakes Michigan-Huron Monthly Mean Outflows, TCFS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	161.50	163.40	170.10	176.40	181.60	183.90	185.20	184.50	183.60	179.80	174.30	165.40	175.81
1963	146.70	149.00	157.10	160.30	165.10	168.20	170.70	171.70	171.30	169.60	166.60	157.90	162.85
1964	139.20	139.40	145.50	147.50	150.90	154.70	157.00	158.10	158.80	159.40	157.20	151.50	151.60
1965	132.50	133.00	141.30	148.70	158.10	163.10	164.90	167.10	171.50	174.50	174.00	169.20	158.16
1966	153.50	156.00	167.20	173.80	175.90	178.20	179.80	178.60	176.10	174.30	172.00	165.40	170.90
1967	152.20	155.80	165.50	172.50	180.30	186.40	191.00	191.00	189.70	186.20	184.60	178.00	177.77
1968	162.00	157.90	170.70	176.40	181.80	185.20	189.80	193.10	197.30	197.40	194.10	185.90	182.63
1969	168.20	167.10	180.80	184.10	189.50	197.50	203.80	206.30	205.10	203.00	201.70	193.90	191.75
1970	176.80	176.00	183.50	187.10	193.90	199.90	204.70	206.00	207.00	206.20	202.70	196.20	195.00
1971	180.40	182.40	190.80	201.20	209.30	211.80	215.70	216.00	212.20	207.10	204.80	199.10	202.57
1972	180.90	182.90	189.40	195.50	202.20	207.60	209.90	215.70	219.40	217.10	211.20	203.50	202.94
1973	187.10	191.30	199.70	210.80	221.10	227.20	231.00	232.80	231.60	227.50	222.80	212.70	216.30
1974	192.60	193.90	200.90	208.90	217.60	225.80	231.10	232.40	230.80	226.30	221.20	211.60	216.09
1975	189.90	191.50	200.60	208.20	216.80	221.20	224.50	223.10	217.90	212.90	209.40	202.90	209.91
1976	184.40	182.50	190.70	208.30	215.80	222.20	220.80	218.50	213.60	205.90	201.10	191.60	204.62
1977	164.10	167.70	177.80	185.20	186.30	188.80	188.40	190.30	189.50	187.30	188.70	180.10	182.85
1978	165.90	167.90	176.10	174.70	185.20	191.40	196.20	198.90	201.80	202.50	199.90	190.80	187.61
1979	172.70	174.60	183.30	191.10	203.20	210.40	213.50	216.50	213.70	209.70	207.80	201.20	199.81
1980	182.10	186.80	192.70	194.80	202.10	205.30	208.20	207.30	206.50	206.50	203.90	195.60	199.32
1981	178.50	177.90	189.80	196.50	200.50	202.40	203.20	204.30	201.90	198.50	197.50	190.60	195.13
1982	171.60	171.40	173.40	179.80	191.00	194.20	198.60	202.20	203.20	202.50	200.40	195.70	190.33
1983	181.00	184.30	197.60	201.80	207.40	216.80	217.70	214.50	214.60	212.40	208.80	198.00	204.57
1984	180.80	180.60	190.70	196.50	203.50	207.90	214.10	215.40	215.10	214.30	214.10	210.00	203.58
1985	191.00	194.00	201.60	214.10	227.30	230.40	230.20	231.80	231.70	231.10	223.60	218.40	218.77
1986	202.60	201.10	208.60	219.50	224.90	226.50	232.30	234.60	240.00	240.30	237.90	223.20	224.29
1987	202.70	202.90	210.80	212.40	215.30	216.30	213.50	212.80	211.10	207.50	202.60	194.90	208.57
1988	179.70	179.80	187.80	194.50	199.50	199.90	198.00	195.40	193.70	191.50	190.80	189.30	191.66
1989	169.90	170.40	181.00	184.30	187.60	187.10	190.90	191.50	188.20	185.30	182.10	175.30	182.80
====S=m====													
Average	166.98	168.57	178.40	183.29	188.63	193.49	196.67	197.72	197.07	195.06	192.60	185.52	187.00
Std.Dev	14.80	14.75	14.61	15.77	16.55	16.72	16.99	17.11	16.75	16.17	15.55	14.99	15.23
Maximum	202.70	202.90	210.80	219.50	227.30	230.40	232.30	234.60	240.00	240.30	237.90	223.20	224.29
Minimum	132.50	133.00	141.30	147.50	150.90	154.70	157.00	158.10	158.80	159.40	157.20	151.50	151.60

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake St. Clair Monthly Mean Levels, IGLD 1955

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	572.86	573.04	573.46	573.69	573.78	573.78	573.78	573.82	573.60	573.40	573.26	573.13	573.47
1901	572.97	573.02	573.06	573.26	573.44	573.70	573.82	573.74	573.54	573.19	572.95	572.89	573.30
1902	572.61	572.54	572.65	572.92	573.23	573.52	574.11	574.05	573.71	573.58	573.23	573.19	573.28
1903	573.13	573.11	573.64	574.10	574.18	574.20	574.23	574.04	573.95	573.69	573.39	573.43	573.76
1904	572.99	573.35	573.70	574.48	574.68	574.78	574.75	574.55	574.32	574.03	573.71	573.50	574.07
1905	573.26	573.38	573.52	573.66	574.08	574.51	574.64	574.52	574.28	574.01	573.69	573.59	573.93
1906	573.49	573.45	573.63	573.79	574.14	574.34	574.40	574.28	574.01	573.80	573.69	573.74	573.90
1907	574.21	573.98	573.95	574.23	574.39	574.56	574.66	574.51	574.28	574.14	573.86	573.73	574.21
1908	573.85	573.93	574.29	574.60	574.84	574.92	574.81	574.68	574.20	573.87	573.31	573.01	574.19
1909	572.96	573.05	573.29	573.73	574.27	574.45	574.35	574.14	573.80	573.40	573.24	573.16	573.65
1910	573.23	572.97	573.23	573.64	573.98	573.96	573.77	573.63	573.41	573.25	572.96	572.78	573.40
1911	572.44	572.66	572.61	572.90	573.14	573.24	573.10	572.96	572.84	572.81	572.69	572.80	572.85
1912	572.80	572.65	572.84	573.46	573.87	574.01	574.00	573.98	573.99	573.80	573.65	573.40	573.54
1913	573.59	573.64	573.84	575.03	575.10	574.98	574.82	574.58	574.22	573.96	573.85	573.67	574.27
1914	573.62	573.48	573.40	573.78	574.32	574.42	574.34	574.23	574.02	573.71	573.35	573.27	573.83
1915	572.82	573.14	572.95	573.04	573.25	573.32	573.51	573.70	573.63	573.39	573.07	572.98	573.23
1916	573.35	573.42	573.35	573.95	574.52	574.78	574.87	574.68	574.31	574.03	573.80	573.88	574.08
1917	573.63	573.59	573.70	574.44	574.80	575.14	575.43	575.30	574.92	574.68	574.56	574.29	574.54
1918	573.98	573.99	574.20	574.71	574.70	574.77	574.76	574.62	574.44	574.16	574.02	574.01	574.36
1919	574.10	573.80	574.17	574.70	575.11	575.17	574.93	574.74	574.43	574.19	574.00	573.59	574.41
1920	573.31	573.22	573.39	573.89	574.17	574.33	574.43	574.39	574.14	573.91	573.68	573.52	573.87
1921	573.43	573.23	573.76	574.22	574.39	574.33	574.21	573.96	573.73	573.51	573.27	573.29	573.78
1922	573.25	572.98	573.28	573.85	574.15	574.36	574.33	574.16	573.94	573.57	573.16	572.91	573.66
1923	572.90	572.61	572.82	573.16	573.42	573.64	573.59	573.35	573.16	572.92	572.65	572.51	573.06
1924	572.70	572.53	572.63	573.00	573.34	573.52	573.60	573.47	573.28	573.04	572.58	572.41	573.01
1925	572.24	572.00	572.42	572.43	572.36	572.40	572.37	572.26	572.06	571.77	571.61	571.32	572.10
1926	571.21	571.07	571.38	571.87	572.10	572.14	572.20	572.25	572.29	572.46	572.51	572.47	572.00
1927	572.17	572.14	572.50	572.89	573.11	573.32	573.41	573.26	573.01	572.80	572.72	573.02	572.86
1928	573.25	573.26	573.10	573.31	573.63	573.93	574.19	574.17	573.92	573.81	573.70	573.88	573.69
1929	574.05	574.00	574.40	575.30	575.85	575.88	575.86	575.51	575.10	574.69	574.52	574.51	574.97
1930	574.81	574.68	574.90	575.14	575.15	575.05	575.00	574.68	574.32	574.02	573.54	573.34	574.55
1931	573.10	572.93	572.91	573.19	573.21	573.28	573.27	573.03	572.81	572.63	572.44	572.47	572.94

Basis of Comparison, IJC Phase II Levels Reference **Study**
 Lake St. Clair Monthly Mean Levels, IGLD 1955

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	572.61	572.90	572.73	572.86	573.18	573.16	573.11	572.95	572.68	572.30	572.18	572.35	572.75
1933	572.25	572.38	572.37	572.84	573.23	573.37	573.16	572.88	572.50	572.21	571.90	571.84	572.58
1934	571.80	571.59	571.73	572.08	572.15	572.16	572.12	571.93	571.80	571.59	571.37	571.46	571.82
1935	571.46	571.43	571.54	571.82	572.14	572.17	572.35	572.39	572.12	571.85	571.69	571.64	571.88
1936	571.51	571.35	571.65	572.12	572.33	572.41	572.35	572.20	572.16	571.99	571.79	571.59	571.95
1937	571.94	572.29	572.23	572.70	573.04	573.13	573.30	573.14	572.74	572.42	572.14	571.97	572.59
1938	571.96	572.31	572.88	573.28	573.38	573.50	573.56	573.53	573.31	573.03	572.73	572.57	573.00
1939	572.36	572.48	572.86	573.32	573.47	573.59	573.62	573.52	573.32	572.97	572.73	572.48	573.06
1940	572.35	572.11	572.23	572.66	572.94	573.27	573.33	573.21	573.14	572.89	572.68	572.71	572.79
1941	572.80	572.56	572.41	572.60	572.79	572.86	572.80	572.59	572.40	572.30	572.31	572.23	572.55
1942	572.25	572.35	572.70	573.34	573.54	573.85	573.85	573.73	573.49	573.21	573.16	573.18	573.22
1943	573.41	573.21	573.63	573.83	574.61	575.00	575.17	574.96	574.61	574.24	573.96	573.63	574.19
1944	573.34	573.22	573.45	573.95	574.24	574.38	574.30	574.00	573.77	573.50	573.21	573.12	573.71
1945	572.86	572.62	573.14	573.66	574.12	574.45	574.58	574.36	574.14	574.23	573.88	573.80	573.82
1946	573.72	573.58	573.85	573.92	574.03	574.41	574.41	574.12	573.71	573.40	573.12	572.91	573.77
1947	572.97	572.88	572.90	573.95	574.43	574.91	574.86	574.73	574.46	574.06	573.72	573.53	573.95
1948	573.41	573.20	573.70	574.15	574.55	574.52	574.44	574.15	573.76	573.21	572.97	572.89	573.75
1949	573.00	573.21	573.18	573.36	573.40	573.42	573.41	573.17	572.84	572.57	572.21	572.23	573.00
1950	572.76	573.10	573.30	573.93	573.89	573.87	573.86	573.69	573.59	573.39	573.17	573.41	573.50
1951	573.39	573.58	574.01	574.47	574.72	574.82	574.83	574.72	574.47	574.27	574.28	574.53	574.34
1952	574.77	575.01	575.18	575.53	575.64	575.66	575.61	575.49	575.29	574.70	574.30	574.27	575.12
1953	574.19	574.18	574.44	574.69	574.89	575.14	575.13	574.96	574.63	574.21	573.90	573.70	574.51
1954	573.44	573.66	574.03	574.53	574.74	574.79	574.75	574.54	574.36	574.52	574.55	574.41	574.36
1955	574.52	574.27	574.67	574.85	574.92	574.84	574.68	574.40	574.09	573.80	573.49	573.39	574.33
1956	573.05	572.81	573.38	573.77	574.50	574.44	574.38	574.39	574.15	573.65	573.20	573.03	573.73
1957	572.86	572.78	572.93	573.39	573.67	573.71	574.01	573.73	573.46	573.09	572.83	572.94	573.28
1958	572.73	572.63	572.74	572.69	572.84	572.85	572.98	572.89	572.69	572.38	571.98	571.89	572.61
1959	571.66	571.94	572.45	572.81	573.08	573.02	572.86	572.74	572.55	572.51	572.47	572.67	572.56
1960	572.81	572.87	572.91	573.48	573.77	574.18	574.21	574.19	573.94	573.51	573.18	572.98	573.50
1961	572.72	572.68	573.06	573.50	573.90	573.88	573.81	573.73	573.54	573.19	572.88	572.73	573.30

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake St. Clair Monthly Mean Levels, IGLD 1955

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	572.45	572.44	572.90	573.06	573.12	573.22	573.12	573.00	572.74	572.55	572.35	572.14	572.76
1963	571.83	571.59	572.01	572.47	572.56	572.57	572.43	572.32	572.08	571.77	571.48	571.33	572.04
1964	571.11	571.03	571.28	571.67	571.90	571.90	571.84	571.73	571.52	571.15	570.90	570.84	571.41
1965	570.92	571.15	571.57	571.94	572.09	572.13	572.08	571.99	571.98	571.94	571.89	572.10	571.82
1966	572.07	572.06	572.45	572.75	572.94	573.06	573.01	572.89	572.63	572.19	572.19	572.62	572.57
1967	572.54	572.48	572.72	573.23	573.46	573.64	573.73	573.57	573.29	573.18	573.10	573.34	573.19
1968	573.26	573.56	573.50	573.65	573.73	573.99	574.07	574.02	573.85	573.59	573.39	573.54	573.68
1969	573.59	573.82	573.69	574.14	574.57	574.88	575.10	574.97	574.50	574.13	573.94	573.88	574.27
1970	573.57	573.56	573.72	574.05	574.24	574.41	574.52	574.40	574.21	574.14	574.00	574.04	574.07
1971	573.86	573.90	574.38	574.53	574.58	574.75	574.68	574.58	574.51	574.45	574.11	574.10	574.37
1972	574.10	573.89	574.28	574.66	574.96	575.05	575.18	575.17	575.08	574.97	575.01	575.14	574.79
1973	575.17	575.05	575.56	575.84	575.99	576.32	576.28	576.08	575.75	575.41	575.18	575.14	575.65
1974	575.26	575.35	575.69	575.95	576.12	576.17	576.11	575.88	575.51	575.17	574.98	575.01	575.60
1975	575.06	575.11	575.46	575.60	575.61	575.78	575.69	575.59	575.54	575.16	574.84	574.83	575.36
1976	574.70	574.96	575.78	575.84	575.98	575.90	575.92	575.63	575.15	574.74	574.27	573.93	575.23
1977	573.92	573.62	574.12	574.44	574.53	574.35	574.35	574.23	574.31	574.24	573.95	574.33	574.20
1978	574.18	574.07	574.18	574.79	574.79	574.79	574.62	574.46	574.28	574.05	573.80	573.76	574.31
1979	573.60	573.53	574.12	574.85	575.00	575.13	575.15	575.08	574.99	574.68	574.57	574.65	574.61
1980	574.67	574.39	574.62	575.09	575.17	575.28	575.27	575.31	575.13	574.66	574.29	574.14	574.84
1981	573.81	574.04	574.19	574.41	574.68	574.88	574.96	574.83	574.78	574.66	574.41	574.19	574.49
1982	574.03	573.97	574.56	574.93	574.80	574.90	574.84	574.60	574.33	574.14	574.17	574.51	574.48
1983	574.55	574.45	574.50	574.92	575.42	575.52	575.49	575.45	575.08	574.78	574.67	574.87	574.98
1984	574.64	574.82	575.12	575.34	575.46	575.69	575.56	575.38	575.15	574.94	574.75	574.77	575.13
1985	574.89	574.92	575.72	576.14	576.10	576.09	576.02	575.83	575.69	575.48	575.87	575.94	575.72
1986	575.66	575.73	576.14	576.19	576.26	576.51	576.55	576.36	576.24	576.56	576.19	576.18	576.21
1987	575.91	575.61	575.63	575.79	575.65	575.55	575.49	575.25	575.05	574.66	574.39	574.50	575.29
1988	574.26	574.17	574.32	574.49	574.47	574.25	574.06	573.87	573.58	573.34	573.44	573.40	573.97
1989	573.39	573.29	573.38	573.79	573.95	574.43	574.39	574.12	573.84	573.44	573.25	573.02	573.69
=====													
Average	573.27	573.25	573.50	573.88	574.10	574.22	574.22	574.08	573.85	573.60	573.38	573.33	573.72
Std.Dev	1.02	1.02	1.06	1.05	1.03	1.04	1.04	1.02	0.99	0.99	1.00	1.02	0.99
Maximum	575.91	575.73	576.14	576.19	576.26	576.51	576.55	576.36	576.24	576.56	576.19	576.18	576.21
Minimum	570.92	571.03	571.28	571.67	571.90	571.90	571.84	571.73	571.52	571.15	570.90	570.84	571.41

Basis of Comparison, IJC Phase II Levels Reference Study
Lake St. Clair Monthly Mean Outflows TCFS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	174.90	177.80	185.80	185.60	187.70	190.80	195.20	199.50	199.80	200.10	200.40	191.70	190.77
1901	174.40	186.30	192.90	186.20	189.80	194.70	201.20	205.20	201.40	198.50	195.30	191.30	193.10
1902	165.10	174.70	180.20	180.90	187.00	193.70	201.70	198.40	196.50	191.20	187.40	189.40	187.18
1903	172.00	167.30	182.40	185.10	192.50	197.00	200.80	200.10	201.00	199.70	199.90	205.60	191.95
1904	175.40	187.90	190.70	194.50	201.40	203.20	206.70	209.20	207.20	206.00	203.40	199.30	198.74
1905	177.50	187.70	200.50	190.10	195.80	203.10	209.90	211.50	209.10	207.40	204.00	197.20	199.48
1906	179.90	180.00	197.30	193.20	205.10	211.10	212.70	208.70	206.10	202.50	201.10	189.50	198.93
1907	182.70	180.90	192.00	196.50	203.10	201.50	206.50	209.10	207.80	204.80	200.70	195.60	198.43
1908	175.30	184.40	191.20	192.50	202.20	209.00	212.50	213.00	206.20	204.90	198.00	188.70	198.16
1909	173.70	174.60	176.70	190.90	193.70	195.10	199.10	198.10	197.30	197.00	195.50	190.60	190.19
1910	182.70	173.00	177.40	189.00	192.70	193.90	192.00	191.20	190.10	188.90	188.10	180.60	186.63
1911	156.80	165.60	170.90	174.20	180.40	185.20	185.30	184.70	184.00	184.50	187.10	180.00	178.22
1912	164.30	164.10	176.70	176.80	188.30	194.10	198.50	199.80	201.30	202.00	201.90	197.60	188.78
1913	173.30	169.60	183.90	191.30	201.60	203.50	205.60	206.80	206.30	205.40	204.90	194.20	195.53
1914	180.70	182.60	190.80	188.60	193.70	197.30	201.80	205.30	202.90	198.90	198.40	197.00	194.83
1915	165.90	175.70	173.20	182.10	188.50	188.40	192.10	192.60	192.00	188.60	187.90	184.80	184.32
1916	173.90	170.90	176.00	187.00	202.20	202.40	209.10	213.80	211.80	211.60	209.00	211.10	198.23
1917	180.40	187.00	195.30	204.20	212.00	212.30	215.90	220.70	213.00	214.10	208.00	199.90	205.23
1918	187.60	196.00	194.10	221.10	223.30	220.30	221.50	219.40	216.50	211.20	211.50	205.70	210.68
1919	197.80	189.00	206.60	214.10	214.20	213.90	212.10	213.10	210.30	208.80	207.20	196.10	206.93
1920	180.30	187.60	198.60	201.00	198.00	204.60	207.00	208.60	206.90	207.20	200.70	189.80	199.19
1921	173.70	168.20	192.40	196.20	196.40	198.90	198.90	198.90	197.90	199.60	190.50	186.30	191.49
1922	177.50	174.20	188.60	186.80	190.70	200.10	204.20	204.80	200.80	198.10	194.50	188.40	192.39
1923	170.60	167.50	178.60	181.70	185.30	190.20	191.60	191.30	191.00	190.90	187.10	170.60	183.03
1924	160.10	154.20	168.40	170.10	175.50	180.80	182.20	186.50	187.70	184.20	181.30	175.20	175.52
1925	157.20	153.70	166.70	160.00	160.50	169.30	171.20	168.80	165.70	164.00	161.70	147.90	162.22
1926	138.50	138.60	155.40	152.10	159.30	161.50	165.90	166.10	166.60	165.70	170.40	166.50	158.88
1927	147.70	150.40	166.30	169.50	174.20	178.70	185.00	183.70	183.80	184.70	186.10	175.60	173.81
1928	167.90	171.80	175.70	177.00	190.80	195.50	198.30	202.00	205.40	209.10	209.30	206.80	192.47
1929	196.90	191.70	204.70	221.00	227.40	232.70	234.40	230.00	224.50	219.00	214.00	208.00	217.02
1930	183.80	187.50	198.10	206.90	211.10	212.90	217.70	215.50	210.30	208.00	197.30	189.50	203.22
1931	170.00	170.30	178.40	180.90	177.00	180.30	182.00	179.20	180.50	181.70	180.20	177.50	178.17

Basis of Comparison IJC Phase II Levels Reference Study
 Lake St Clair Monthly Mean Outflows, TCFS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	154.60	162.10	165.30	168.90	176.90	176.60	178.30	178.70	177.70	175.10	172.80	177.80	172.07
1933	151.60	161.80	163.60	169.10	174.80	182.90	181.90	178.70	175.40	172.90	172.40	166.40	170.96
1934	151.80	152.40	167.30	169.40	168.60	170.70	171.60	168.10	168.50	169.20	169.00	169.60	166.35
1935	153.00	159.10	164.40	168.80	173.70	170.30	176.00	176.60	176.70	175.60	171.70	165.40	169.27
1936	154.60	159.70	164.40	163.40	168.60	175.30	176.30	177.60	181.10	177.20	174.10	167.80	170.01
1937	152.30	150.80	157.70	171.60	168.60	168.60	167.80	168.80	170.30	173.50	171.50	166.00	165.63
1938	149.90	159.30	176.80	176.50	181.40	184.70	188.50	189.50	190.80	189.20	186.20	180.40	179.43
1939	159.90	168.70	179.20	183.60	183.10	189.20	192.90	193.10	196.10	191.80	188.90	180.20	183.89
1940	166.80	162.40	169.10	168.80	171.30	178.30	180.70	182.50	185.00	183.70	185.00	179.90	176.12
1941	159.10	160.50	165.30	170.40	176.90	178.40	179.70	177.40	179.00	182.90	186.70	180.50	174.73
1942	168.60	165.60	175.60	180.00	184.60	191.40	194.50	192.20	192.50	187.20	188.60	185.50	183.86
1943	171.50	170.70	191.40	189.40	201.40	201.70	211.50	211.40	210.70	207.60	203.80	194.20	197.11
1944	178.80	177.60	189.80	189.70	189.70	197.20	201.40	199.00	199.00	197.20	193.50	191.70	192.05
1945	170.50	169.40	178.80	184.60	196.00	198.30	202.60	201.20	202.90	201.30	195.90	194.80	191.36
1946	176.70	185.70	196.00	198.00	200.60	203.20	201.80	200.50	196.20	193.50	188.60	183.00	193.65
1947	171.40	167.50	179.10	195.10	193.90	197.60	203.90	206.30	204.10	202.40	198.30	190.60	192.52
1948	174.90	177.80	192.10	190.40	198.20	197.20	198.90	197.70	193.40	186.00	182.00	179.10	188.98
1949	166.30	171.90	171.40	176.50	177.40	180.20	184.20	183.70	181.10	177.50	173.20	171.90	176.27
1950	157.70	155.30	169.70	176.10	174.60	180.50	188.20	190.30	192.20	190.90	186.20	181.20	178.57
1951	163.80	173.70	182.20	193.30	199.30	206.10	212.00	216.90	217.40	216.90	218.50	221.10	201.77
1952	203.90	199.60	212.40	218.40	222.20	225.40	231.90	235.50	233.70	223.70	218.60	210.60	219.66
1953	190.60	194.20	208.50	213.50	214.80	219.30	224.20	222.40	220.10	214.00	209.60	201.00	211.02
1954	177.70	189.40	197.70	198.50	201.90	211.80	217.30	214.60	215.20	217.20	213.70	207.40	205.20
1955	190.60	190.80	199.40	201.90	205.40	208.60	210.20	203.60	203.30	197.70	193.20	187.70	199.37
1956	168.10	171.10	182.70	186.00	196.30	190.30	193.00	198.60	198.30	193.40	188.40	180.20	187.20
1957	161.90	161.00	171.00	174.70	178.40	180.10	187.60	188.00	188.10	185.00	183.10	179.40	178.19
1958	151.70	163.00	172.70	167.70	172.00	172.40	173.20	171.90	172.30	172.00	165.30	165.10	168.28
1959	142.40	142.10	160.70	163.80	167.00	169.30	171.80	175.90	178.50	179.90	181.60	180.40	167.78
1960	162.70	164.40	173.30	186.40	189.90	200.80	201.30	203.90	203.20	199.80	197.00	191.10	189.48
1961	169.00	173.00	179.50	185.10	180.00	182.10	185.50	186.20	187.30	188.80	187.50	182.00	182.17

Basis of Comparison, IJC Phase II Levels Reference Study
Lake St. Clair Monthly Mean Outflows, TCFS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEE?	OCT	NOV	DEC	AVG
1962	162.30	164.20	182.20	180.40	182.50	186.50	186.10	186.20	184.90	180.80	178.00	168.40	178.54
1963	149.20	149.80	165.20	167.20	168.10	171.60	173.10	172.60	172.70	170.90	166.80	162.60	165.82
1964	142.00	142.70	152.40	153.50	154.70	156.90	159.40	161.60	161.20	160.20	158.00	154.20	154.73
1965	137.10	144.40	153.50	161.50	161.20	164.30	167.20	168.50	172.20	176.00	176.10	177.50	163.29
1966	157.70	161.30	174.90	180.60	178.60	181.60	181.60	181.10	179.00	176.20	175.90	175.20	175.31
1967	159.20	160.20	176.50	184.90	183.20	192.00	195.40	194.10	192.00	192.30	189.80	190.20	184.15
1968	167.90	173.80	182.30	182.10	185.90	191.20	193.10	195.50	198.30	198.80	196.20	193.00	188.18
1969	176.70	178.90	188.00	192.90	195.80	201.60	205.90	208.10	205.40	203.50	204.80	196.50	196.51
1970	179.10	179.80	190.30	195.10	196.30	201.40	206.10	206.70	207.00	207.90	205.30	201.60	198.05
1971	182.90	188.70	201.90	206.70	208.10	212.20	214.30	215.40	212.70	207.40	205.50	202.90	204.89
1972	187.10	185.30	199.80	205.10	204.90	208.00	211.80	217.70	219.80	219.20	217.50	211.70	207.33
1973	198.20	197.40	220.10	216.90	224.10	231.00	232.90	233.70	233.70	228.80	227.50	220.40	222.06
1974	207.50	205.00	213.90	218.80	224.70	227.00	232.00	233.60	230.50	229.00	223.10	214.50	221.63
1975	198.50	201.70	212.20	219.50	218.00	223.40	224.80	226.60	223.20	217.00	212.40	208.30	215.47
1976	187.30	198.30	209.90	215.50	221.40	223.70	226.90	221.80	215.50	209.00	204.20	194.80	210.69
1977	187.90	182.40	198.20	194.30	189.40	190.40	191.60	190.60	195.50	196.10	195.20	201.40	192.75
1978	175.80	181.40	190.80	192.70	190.70	195.70	198.40	201.70	205.50	203.80	201.10	199.40	194.75
1979	177.40	175.90	196.30	207.70	208.20	212.10	215.80	216.60	214.90	210.10	213.40	209.30	204.81
1980	189.20	189.90	204.10	205.10	207.40	209.70	213.20	211.50	211.90	209.00	206.20	199.10	204.69
1981	181.30	193.90	195.50	203.30	205.10	205.00	207.70	208.10	210.20	210.80	204.00	196.50	201.78
1982	176.90	174.80	196.00	194.40	194.80	199.80	203.30	205.60	206.00	205.80	207.00	207.80	197.68
1983	189.20	193.50	203.70	211.40	217.20	222.10	221.90	221.20	219.60	217.50	213.70	212.00	211.92
1984	188.30	199.30	208.30	204.10	207.40	215.40	217.40	219.30	220.90	219.40	219.90	218.90	211.55
1985	200.50	209.00	222.70	227.10	230.90	232.80	233.70	235.60	235.70	237.60	239.50	229.70	227.90
1986	211.30	207.70	227.00	225.70	227.60	232.40	235.50	237.30	245.70	251.00	242.90	232.80	231.41
1987	209.50	206.30	220.80	219.90	218.10	217.50	215.40	214.90	214.00	210.60	208.40	206.70	213.51
1988	184.50	183.90	196.80	198.80	201.00	198.40	199.40	196.80	195.90	195.40	197.50	193.80	195.18
1989	175.90	174.20	186.50	190.60	189.30	190.40	191.80	192.20	190.70	188.80	187.80	178.50	186.39
Average	172.79	175.06	185.93	189.58	193.15	196.65	199.59	200.01	199.40	197.71	195.39	190.42	191.31
Std.Dev	16.06	15.94	16.69	17.24	17.43	17.42	17.64	17.84	17.28	16.92	16.47	16.37	16.27
Maximum	211.30	209.00	227.00	227.10	230.90	232.80	235.50	237.30	245.70	251.00	242.90	232.80	231.41
Minimum	137.10	138.60	152.40	152.10	154.70	156.90	159.40	161.60	161.20	160.20	158.00	147.90	154.73

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Erie Monthly Mean Levels, IGLD 1955

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	569.75	570.04	570.64	571.06	571.12	571.02	570.91	570.83	570.50	570.22	570.00	570.01	570.51
1901	569.91	569.73	569.87	570.45	570.60	570.81	570.78	570.54	570.37	569.96	569.72	569.67	570.20
1902	569.71	569.42	569.69	570.15	570.38	570.58	571.16	571.18	570.76	570.74	570.37	570.16	570.36
1903	570.21	570.44	571.00	571.62	571.52	571.43	571.36	571.12	570.97	570.63	570.20	569.98	570.87
1904	569.91	570.15	570.84	571.88	571.96	572.05	571.91	571.57	571.29	570.92	570.55	570.28	571.11
1905	570.22	570.20	570.28	570.89	571.29	571.68	571.66	571.46	571.18	570.86	570.51	570.48	570.89
1906	570.48	570.54	570.53	570.97	571.11	571.21	571.25	571.20	570.90	570.71	570.60	570.92	570.87
1907	571.39	571.25	571.14	571.48	571.52	571.80	571.78	571.51	571.22	571.11	570.85	570.72	571.31
1908	571.11	571.07	571.62	572.09	572.16	572.08	571.84	571.63	571.17	570.74	570.16	569.93	571.30
1909	569.92	570.15	570.69	570.96	571.61	571.82	571.58	571.31	570.87	570.31	570.13	570.07	570.78
1910	570.02	570.09	570.58	570.89	571.24	571.19	570.99	570.82	570.55	570.35	569.97	569.86	570.55
1911	569.73	569.89	569.93	570.31	570.47	570.46	570.26	570.08	569.94	569.88	569.62	569.91	570.04
1912	569.99	569.91	570.07	571.00	571.22	571.25	571.10	571.04	571.01	570.73	570.52	570.20	570.67
1913	570.80	571.10	571.21	572.69	572.52	572.30	572.03	571.68	571.18	570.84	570.70	570.69	571.48
1914	570.63	570.50	570.41	571.09	571.68	571.71	571.49	571.24	571.01	570.70	570.19	570.03	570.89
1915	569.98	570.24	570.33	570.27	570.36	570.47	570.63	570.87	570.78	570.56	570.13	570.01	570.39
1916	570.46	570.76	570.79	571.37	571.71	572.07	572.01	571.62	571.15	570.75	570.52	570.46	571.14
1917	570.66	570.53	570.69	571.56	571.83	572.29	572.59	572.29	571.96	571.60	571.61	571.38	571.58
1918	570.93	570.82	571.43	571.44	571.37	571.55	571.50	571.36	571.19	570.95	570.75	570.81	571.17
1919	570.79	570.76	571.02	571.63	572.20	572.29	572.00	571.72	571.36	571.07	570.85	570.52	571.35
1920	570.21	569.98	570.15	570.89	571.35	571.39	571.46	571.35	571.06	570.72	570.59	570.61	570.81
1921	570.59	570.59	570.87	571.48	571.69	571.55	571.39	571.04	570.75	570.39	570.33	570.40	570.92
1922	570.21	570.06	570.31	571.23	571.53	571.56	571.40	571.15	570.96	570.52	570.05	569.80	570.73
1923	569.94	569.75	569.98	570.44	570.70	570.85	570.75	570.42	570.16	569.83	569.56	569.80	570.18
1924	569.99	570.06	570.03	570.58	570.88	570.96	571.03	570.72	570.43	570.21	569.66	569.51	570.34
1925	569.44	569.36	569.81	570.10	570.00	569.78	569.69	569.61	569.43	569.09	568.95	568.90	569.51
1926	568.63	568.57	568.73	569.59	569.68	569.68	569.62	569.68	569.72	569.98	569.90	569.88	569.47
1927	569.64	569.65	569.93	570.44	570.60	570.76	570.69	570.52	570.17	569.85	569.69	570.34	570.19
1928	570.51	570.53	570.45	570.79	570.83	571.10	571.37	571.25	570.79	570.53	570.47	570.60	570.77
1929	570.75	570.95	571.40	572.27	572.85	572.77	572.68	572.31	571.89	571.48	571.38	571.45	571.85
1930	572.17	572.01	572.26	572.44	572.33	572.16	571.95	571.56	571.21	570.86	570.50	570.37	571.65
1931	570.24	570.11	570.11	570.52	570.65	570.66	570.59	570.34	570.00	569.72	569.50	569.52	570.16

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Erie Monthly Mean Levels, IGLD 1955

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	570.03	570.33	570.26	570.42	570.62	570.60	570.48	570.25	569.91	569.47	569.37	569.34	570.09
1933	569.63	569.61	569.83	570.38	570.74	570.71	570.45	570.15	569.74	569.40	568.99	569.01	569.89
1934	569.01	568.82	568.83	569.34	569.47	569.40	569.33	569.18	568.98	568.67	568.36	568.36	568.98
1935	568.48	568.36	568.64	568.99	569.28	569.43	569.51	569.53	569.16	568.82	568.72	568.76	568.97
1936	568.49	568.22	568.81	569.58	569.71	569.61	569.49	569.24	569.06	568.95	568.78	568.61	569.05
1937	569.19	569.84	569.81	570.12	570.66	570.78	571.03	570.79	570.21	569.68	569.36	569.20	570.06
1938	569.28	569.60	570.13	570.76	570.76	570.82	570.80	570.73	570.38	570.03	569.71	569.58	570.22
1939	569.51	569.53	570.02	570.60	570.83	570.81	570.75	570.60	570.23	569.87	569.62	569.45	570.15
1940	569.28	569.22	569.46	570.15	570.46	570.70	570.71	570.49	570.32	570.01	569.67	569.79	570.02
1941	570.15	569.90	569.83	570.03	570.09	570.14	570.02	569.79	569.48	569.21	569.09	569.09	569.73
1942	569.08	569.45	569.91	570.75	570.89	571.10	571.02	570.91	570.59	570.35	570.24	570.26	570.38
1943	570.61	570.49	570.71	571.14	571.87	572.37	572.35	572.07	571.60	571.17	570.90	570.63	571.33
1944	570.30	570.29	570.52	571.29	571.69	571.67	571.43	571.09	570.77	570.45	570.15	569.98	570.80
1945	569.88	569.70	570.42	571.05	571.35	571.73	571.78	571.53	571.18	571.34	571.02	570.85	570.99
1946	570.89	570.55	570.88	571.02	571.08	571.53	571.58	571.22	570.77	570.42	570.18	569.97	570.84
1947	570.01	570.13	570.07	571.14	571.83	572.37	572.14	571.89	571.58	571.07	570.72	570.60	571.13
1948	570.52	570.26	570.78	571.54	571.87	571.85	571.70	571.34	570.92	570.39	570.17	570.06	570.95
1949	570.20	570.45	570.69	570.87	570.90	570.84	570.71	570.41	570.03	569.77	569.40	569.37	570.30
1950	570.15	570.78	570.89	571.63	571.62	571.44	571.21	570.92	570.73	570.48	570.32	570.72	570.91
1951	570.81	570.91	571.50	571.90	572.06	572.02	571.87	571.58	571.21	570.94	570.90	571.09	571.40
1952	571.56	572.14	572.26	572.65	572.71	572.65	572.41	572.14	571.90	571.34	570.93	571.04	571.98
1953	571.14	571.13	571.34	571.64	571.88	572.10	571.95	571.76	571.35	570.94	570.64	570.52	571.37
1954	570.47	570.54	571.09	571.83	572.03	571.82	571.61	571.39	571.12	571.29	571.43	571.34	571.33
1955	571.60	571.36	571.91	572.17	572.17	571.98	571.71	571.52	571.09	570.85	570.56	570.50	571.45
1956	570.22	569.92	570.63	571.15	571.85	571.93	571.78	571.65	571.32	570.77	570.31	570.22	570.98
1957	570.15	570.19	570.36	570.96	571.23	571.24	571.44	571.05	570.67	570.25	569.95	570.12	570.63
1958	570.28	569.93	570.05	570.22	570.30	570.30	570.45	570.38	570.09	569.67	569.33	569.12	570.01
1959	569.12	569.63	570.02	570.50	570.76	570.63	570.33	570.05	569.70	569.61	569.48	569.71	569.96
1960	570.06	570.20	570.27	570.75	571.04	571.29	571.32	571.21	570.89	570.39	570.00	569.81	570.60
1961	569.73	569.67	570.29	570.82	571.50	571.41	571.22	571.09	570.81	570.27	569.87	569.75	570.54

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Erie Monthly Mean Levels, IGLD 1955

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	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	569.57	569.63	569.99	570.35	570.37	570.39	570.26	570.09	569.76	569.62	569.44	569.35	569.90
1963	569.12	568.92	569.28	569.95	570.04	569.95	569.71	569.56	569.23	568.85	568.59	568.42	569.30
1964	568.37	568.37	568.70	569.28	569.56	569.48	569.33	569.11	568.84	568.35	568.07	568.02	568.79
1965	568.27	568.49	569.06	569.40	569.61	569.57	569.41	569.25	569.11	568.93	568.85	568.99	569.08
1966	569.19	569.19	569.58	569.92	570.24	570.32	570.25	570.10	569.80	569.28	569.28	569.81	569.75
1967	569.79	569.81	569.91	570.45	570.81	570.80	570.83	570.65	570.31	570.15	570.12	570.34	570.33
1968	570.52	570.87	570.80	571.11	571.10	571.30	571.37	571.22	570.91	570.52	570.33	570.53	570.88
1969	570.72	571.09	570.91	571.46	571.96	572.22	572.40	572.16	571.61	571.14	570.84	570.91	571.45
1970	570.61	570.70	570.87	571.28	571.50	571.58	571.61	571.43	571.15	571.03	570.91	570.98	571.14
1971	570.90	570.90	571.45	571.60	571.63	571.75	571.59	571.42	571.40	571.47	571.06	571.03	571.35
1972	571.11	570.98	571.37	571.83	572.24	572.29	572.36	572.18	572.00	571.87	571.97	572.22	571.87
1973	572.28	572.25	572.58	573.11	573.14	573.41	573.30	573.01	572.56	572.21	571.92	571.98	572.65
1974	572.14	572.45	572.91	573.21	573.29	573.30	573.09	572.74	572.31	571.87	571.77	571.97	572.59
1975	572.11	572.21	572.64	572.73	572.78	572.87	572.70	572.52	572.55	572.19	571.87	571.89	572.42
1976	571.93	572.09	573.13	573.15	573.18	573.02	572.97	572.70	572.21	571.83	571.31	571.03	572.38
1977	570.83	570.71	571.20	571.83	572.08	571.81	571.78	571.65	571.62	571.51	571.14	571.39	571.46
1978	571.55	571.36	571.48	572.34	572.39	572.26	571.96	571.65	571.29	571.03	570.75	570.65	571.56
1979	570.71	570.77	571.25	572.02	572.21	572.28	572.21	572.09	572.02	571.72	571.47	571.61	571.70
1980	571.85	571.55	571.72	572.42	572.46	572.55	572.45	572.54	572.29	571.72	571.29	571.19	572.00
1981	570.88	570.94	571.37	571.53	571.85	572.13	572.16	571.98	571.85	571.67	571.51	571.34	571.60
1982	571.31	571.40	571.86	572.47	572.30	572.30	572.12	571.74	571.35	571.08	571.10	571.47	571.71
1983	571.68	571.53	571.57	572.02	572.53	572.54	572.51	572.47	572.01	571.64	571.59	571.83	571.99
1984	571.82	571.87	572.28	572.77	572.85	572.95	572.72	572.43	572.06	571.81	571.54	571.50	572.22
1985	571.83	571.73	572.72	573.26	573.11	573.04	572.93	572.61	572.42	572.06	572.55	572.84	572.59
1986	572.60	572.89	573.18	573.37	573.41	573.63	573.60	573.30	572.91	573.22	572.92	573.09	573.18
1987	572.98	572.77	572.65	572.97	572.83	572.71	572.69	572.37	572.12	571.67	571.37	571.47	572.38
1988	571.41	571.42	571.52	571.77	571.68	571.45	571.16	570.98	570.60	570.29	570.35	570.32	571.08
1989	570.46	570.49	570.52	571.05	571.31	571.92	571.83	571.45	571.11	570.63	570.39	570.27	570.95
Average	570.39	570.42	570.71	571.21	571.41	571.47	571.39	571.18	570.88	570.58	570.34	570.34	570.86
Std.Dev	0.98	0.98	1.01	0.99	0.95	0.97	0.95	0.92	0.90	0.91	0.92	0.96	0.91
Maximum	572.98	572.89	573.18	573.37	573.41	573.63	573.60	573.30	572.91	573.22	572.92	573.09	573.18
Minimum	568.27	568.22	568.64	568.99	569.28	569.40	569.33	569.11	568.84	568.35	568.07	568.02	568.79

Basis of Comparison, IJC Phase II Levels Reference Study
Lake Erie Monthly Mean Outflows, TCFS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEE'	OCT	NOV	DEC	AVG
1900	182.10	189.80	204.80	214.00	220.40	216.20	207.50	208.90	204.00	199.10	196.50	191.30	202.88
1901	185.40	183.40	188.50	200.80	209.00	211.40	204.80	202.50	201.20	193.70	190.90	184.50	196.34
1902	181.30	177.20	184.80	194.40	204.50	206.70	213.20	216.50	209.60	210.20	204.20	194.50	199.76
1903	191.70	198.30	212.60	226.50	229.40	225.30	217.50	215.30	214.10	207.90	200.80	190.80	210.85
1904	185.40	192.00	209.00	232.50	239.50	239.40	230.20	225.30	221.30	214.20	208.20	197.10	216.18
1905	192.00	193.20	197.10	210.20	224.30	230.90	224.40	222.80	218.80	212.80	207.30	201.30	211.26
1906	197.40	200.50	202.50	212.00	220.10	220.30	215.10	216.90	212.60	209.60	209.30	210.90	210.60
1907	217.40	215.80	215.70	223.30	229.40	233.60	227.20	223.90	219.70	218.40	214.50	206.60	220.46
1908	211.20	212.00	226.60	237.40	244.10	240.10	228.40	226.70	218.50	210.20	199.90	189.70	220.40
1909	185.70	192.20	205.70	211.90	231.40	234.10	222.50	219.50	212.00	201.00	199.20	192.80	209.00
1910	187.60	190.90	203.60	210.20	223.10	219.90	209.30	208.60	204.90	201.90	196.00	188.40	203.70
1911	181.80	186.70	189.70	197.90	206.20	203.90	193.60	192.80	192.10	192.00	188.80	189.40	192.91
1912	187.10	187.20	192.60	212.60	222.70	221.20	211.80	213.40	215.00	209.90	207.40	195.50	206.37
1913	204.40	212.60	217.30	251.60	252.60	245.30	233.00	227.70	218.80	212.50	211.40	205.70	224.41
1914	200.70	199.60	199.90	214.60	233.00	231.70	220.50	217.80	215.10	209.30	200.60	191.90	211.22
1915	186.80	194.10	198.10	196.90	204.00	204.10	201.40	209.70	210.10	206.40	199.30	191.50	200.20
1916	197.10	205.20	208.00	221.00	233.80	239.90	232.40	226.30	218.00	210.50	207.40	200.90	216.71
1917	201.30	200.10	205.90	225.10	236.50	245.10	246.10	241.90	236.50	229.30	231.60	221.00	226.70
1918	207.10	206.40	222.10	222.40	226.00	227.90	220.70	220.60	218.90	214.90	212.40	208.50	217.32
1919	204.10	205.10	213.00	226.80	245.10	245.10	232.20	228.80	222.90	217.40	214.50	202.20	221.43
1920	191.70	188.60	194.50	210.20	225.60	224.40	219.90	220.40	216.20	209.70	209.00	204.10	209.53
1921	199.70	201.40	209.80	223.30	233.30	228.00	218.30	213.40	209.30	202.80	203.40	199.60	211.86
1922	191.70	190.20	197.70	217.80	229.60	228.30	218.60	215.90	213.80	205.40	197.50	187.00	207.79
1923	186.00	183.90	190.90	200.60	211.30	212.40	204.10	200.00	196.70	190.90	187.50	187.20	195.96
1924	187.10	190.20	191.80	203.50	215.10	214.80	210.20	206.50	202.50	198.80	189.60	181.30	199.28
1925	175.80	175.90	187.20	193.40	196.40	189.90	181.80	183.30	181.80	176.10	175.40	169.10	182.18
1926	160.10	160.70	166.00	182.90	189.90	187.70	180.50	184.60	187.70	194.20	194.50	188.70	181.46
1927	180.00	181.80	189.70	200.50	209.00	210.40	202.80	202.20	197.00	191.40	190.20	198.40	196.12
1928	198.00	200.20	200.80	208.00	214.00	217.80	217.80	218.10	210.30	205.60	206.50	203.90	208.42
1929	203.30	209.30	221.40	241.70	260.70	256.50	248.40	242.50	234.90	226.60	226.40	222.50	232.85
1930	235.30	233.20	241.40	245.50	248.20	241.90	231.00	225.20	219.50	212.80	207.00	198.90	228.32
1931	192.20	191.30	193.40	202.20	210.10	208.20	200.70	198.30	193.40	188.80	186.30	181.40	195.53

Basis of Comparison, IJC Phase II Levels Reference Study
Lake Erie Monthly Mean Outflows, TCFS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	187.90	195.80	196.60	200.10	209.50	207.00	198.40	196.40	191.60	183.70	183.70	177.80	194.04
1933	179.70	181.00	187.60	199.40	212.00	209.30	197.60	194.30	188.00	182.30	176.30	171.20	189.89
1934	167.40	165.40	167.80	179.00	185.50	182.10	174.60	174.60	173.00	168.00	164.20	158.90	171.62
1935	157.30	156.60	164.30	171.10	181.80	182.70	178.20	181.70	176.40	170.90	170.90	166.50	171.53
1936	157.50	154.10	167.50	182.80	190.50	186.40	177.80	175.70	174.50	173.50	172.10	163.60	173.00
1937	170.90	185.70	187.40	193.80	210.50	210.90	210.10	207.90	197.80	187.90	183.50	175.00	193.45
1938	172.70	180.80	193.90	207.50	212.60	211.80	205.20	206.70	201.30	195.10	190.50	182.50	196.72
1939	177.40	179.40	191.70	204.10	214.10	211.60	204.00	203.90	198.20	191.80	188.70	180.10	195.42
1940	172.80	173.30	180.20	194.50	206.10	209.20	203.30	201.50	200.20	194.70	189.80	187.00	192.72
1941	190.50	187.00	187.80	191.90	198.30	197.20	188.60	186.90	182.80	178.50	178.10	172.90	186.71
1942	168.80	177.70	189.40	207.20	215.30	218.00	209.90	210.70	205.80	201.90	201.50	196.70	200.24
1943	200.20	199.30	206.40	215.70	237.40	247.10	240.40	236.90	228.20	219.70	215.70	204.50	220.96
1944	193.70	195.00	202.10	219.10	233.10	230.70	219.20	214.70	209.70	204.00	199.70	190.90	209.32
1945	184.90	182.90	200.10	213.70	225.60	232.00	227.20	224.30	218.70	223.50	218.40	209.20	213.37
1946	206.20	200.70	210.10	213.10	219.60	227.60	222.60	217.50	209.80	203.40	200.30	190.60	210.12
1947	187.50	191.70	192.70	215.80	236.40	247.00	235.40	232.70	227.80	217.40	211.80	203.80	216.67
1948	198.20	194.40	207.90	224.80	237.40	234.80	225.30	220.10	213.10	202.70	200.10	192.50	212.61
1949	191.60	198.50	205.80	209.70	215.70	212.20	203.20	199.80	194.00	189.70	184.30	178.30	198.57
1950	190.40	205.60	210.20	226.80	231.60	225.40	214.30	210.70	208.80	204.60	203.30	206.50	211.52
1951	204.60	208.40	223.70	232.90	241.90	238.70	229.20	225.50	219.40	214.50	215.70	214.50	222.42
1952	221.30	236.20	241.20	250.80	257.20	253.80	241.80	238.40	235.20	223.50	216.30	213.30	235.75
1953	211.70	213.20	220.20	227.00	237.60	240.70	231.00	229.70	222.60	214.70	209.90	202.20	221.71
1954	197.10	200.40	214.50	231.40	241.00	234.20	223.30	221.30	217.40	222.30	227.30	220.10	220.86
1955	222.00	218.30	233.20	239.30	244.50	237.80	225.50	224.20	216.80	212.60	208.40	201.60	223.68
1956	191.90	187.30	204.60	216.00	237.00	236.70	227.00	227.00	221.90	210.90	202.90	195.90	213.26
1957	190.50	193.00	198.70	211.70	222.80	221.00	219.30	213.60	207.70	199.70	195.60	193.70	205.61
1958	193.20	187.50	192.30	196.00	202.60	200.60	197.70	199.10	195.30	187.80	183.00	173.40	192.38
1959	169.50	181.40	191.60	201.90	212.60	207.50	195.20	192.30	187.30	186.50	186.00	185.30	191.43
1960	188.50	193.20	196.90	207.20	218.60	222.10	216.60	217.20	212.40	202.60	196.50	187.30	204.93
1961	181.80	182.20	197.30	208.70	228.90	224.70	214.40	214.70	210.50	200.20	193.90	186.10	203.62

Basis of Comparison, IJC Phase II Levels Reference Study
Lake Erie Monthly Mean Outflows, TCFS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	178.60	181.40	190.90	198.70	204.10	202.40	193.60	193.00	188.60	186.80	185.00	178.10	190.10
1963	169.60	167.30	176.70	190.30	197.30	193.20	182.30	182.30	177.90	171.60	168.60	160.10	178.10
1964	155.10	157.00	165.30	176.80	187.40	183.80	174.60	173.20	170.20	161.90	158.90	152.60	168.07
1965	153.40	159.10	172.20	179.00	188.40	185.50	176.20	176.00	175.50	173.00	173.60	170.90	173.57
1966	171.00	172.70	182.60	189.60	201.50	201.00	193.40	193.20	189.30	179.90	182.00	187.40	186.97
1967	183.00	185.10	189.30	200.70	213.50	211.30	205.90	204.90	200.00	197.70	198.90	198.50	199.07
1968	198.20	207.60	208.30	215.00	220.00	222.40	217.70	217.40	212.70	205.50	203.40	202.50	210.89
1969	202.50	212.30	210.50	223.00	239.40	243.50	241.60	239.00	228.40	219.00	214.30	210.60	223.68
1970	200.20	203.80	209.70	218.80	229.00	228.70	223.30	222.20	218.20	216.40	215.90	212.10	216.52
1971	206.60	208.20	222.60	226.10	231.90	232.60	222.80	222.00	223.60	226.40	219.20	213.10	221.26
1972	211.20	210.00	220.70	231.40	246.00	245.00	240.70	239.40	237.40	235.40	239.80	240.40	233.12
1973	238.00	238.80	248.90	261.90	267.80	272.20	263.50	259.50	250.60	243.30	238.70	234.80	251.50
1974	234.60	243.70	256.90	264.50	271.50	269.70	258.40	252.70	244.60	235.50	235.10	234.50	250.14
1975	234.00	238.00	250.40	252.60	258.90	259.00	248.80	247.40	250.30	242.80	237.60	232.70	246.04
1976	229.70	235.10	262.40	263.00	268.80	262.70	255.40	251.80	242.30	234.60	224.80	213.20	245.32
1977	205.00	204.00	217.00	231.30	242.20	233.80	227.00	227.00	228.60	227.20	221.00	221.30	223.78
1978	220.90	218.30	223.40	243.20	249.60	244.40	231.30	227.00	221.20	216.50	212.40	205.00	226.10
1979	202.40	205.30	218.20	235.80	245.30	244.80	237.20	237.20	237.80	232.10	228.40	226.30	229.23
1980	227.70	222.60	228.70	245.10	251.30	251.20	242.70	248.00	244.20	232.20	224.20	216.80	236.22
1981	206.10	209.10	220.70	224.60	237.00	241.20	236.00	234.80	234.00	231.00	229.40	220.20	227.01
1982	215.50	219.20	232.10	246.40	247.30	245.30	235.10	229.10	222.70	217.80	220.00	223.00	229.46
1983	224.00	222.30	225.30	235.70	253.00	251.10	244.20	246.20	237.70	230.30	231.10	231.40	236.03
1984	227.20	230.00	241.80	253.60	260.70	261.00	249.20	245.30	238.90	234.10	229.90	223.70	241.28
1985	227.40	226.90	252.40	265.60	267.10	263.30	254.30	249.50	247.20	240.00	253.60	255.10	250.20
1986	245.60	254.30	263.60	268.40	274.50	277.90	271.10	266.60	259.00	267.80	262.50	261.40	264.39
1987	254.80	251.20	250.60	258.40	260.10	255.10	248.50	243.80	240.10	230.90	226.10	223.10	245.23
1988	217.80	219.60	224.10	229.90	232.90	225.70	213.20	212.10	206.00	200.50	203.80	198.00	215.30
1989	197.00	199.30	202.10	213.80	224.60	236.40	228.20	222.60	217.30	207.80	204.80	196.80	212.56
Average	196.15	198.41	206.81	217.85	227.41	226.75	218.87	217.11	212.64	207.23	204.28	198.91	211.04
Std.Dev	20.90	21.05	22.15	22.10	21.44	21.72	21.31	20.26	19.52	19.44	19.60	20.47	19.93
Maximum	254.80	254.30	263.60	268.40	274.50	277.90	271.10	266.60	259.00	267.80	262.50	261.40	264.39
Minimum	153.40	154.10	164.30	171.10	181.80	182.10	174.60	173.20	170.20	161.90	158.90	152.60	168.07

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Ontario Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	244.15	244.28	244.52	245.26	245.65	245.66	245.60	245.44	244.92	244.35	243.92	243.99	244.81
1901	243.66	243.49	243.50	244.90	245.56	245.74	245.52	245.10	244.64	244.03	243.54	243.54	244.44
1902	243.66	243.55	244.17	244.80	245.00	245.42	246.21	246.09	245.26	244.51	243.94	243.58	244.68
1903	243.50	243.73	244.54	245.56	245.52	245.35	245.54	245.41	244.92	244.32	243.73	243.30	244.62
1904	242.93	243.18	243.85	245.36	246.12	246.46	246.36	245.86	245.15	244.46	243.73	243.22	244.72
1905	243.16	242.94	243.13	244.36	245.07	245.61	245.83	245.60	244.98	244.24	243.68	243.58	244.35
1906	243.89	244.00	243.86	244.30	244.79	245.30	245.63	245.34	244.69	244.29	244.11	243.79	244.50
1907	244.23	244.35	244.18	244.66	245.09	245.46	245.57	245.39	244.82	244.43	244.09	243.77	244.67
1908	244.16	244.28	244.63	245.46	246.12	246.27	246.02	245.50	244.56	243.93	243.44	243.05	244.78
1909	242.86	243.05	243.58	244.39	245.62	245.86	245.62	245.23	244.58	243.93	243.57	243.41	244.31
1910	243.31	243.45	244.08	244.65	245.31	245.50	245.38	245.18	244.80	244.29	243.74	243.45	244.43
1911	243.24	243.35	243.58	244.36	245.24	245.73	245.92	245.66	245.36	245.09	244.71	244.51	244.73
1912	244.48	244.30	244.27	245.30	246.22	246.80	246.43	245.74	245.18	244.71	244.26	243.92	245.13
1913	244.37	244.76	244.64	245.78	246.09	246.11	245.75	245.27	244.66	244.12	243.83	243.59	244.91
1914	243.51	243.65	243.64	244.76	245.44	245.57	245.38	245.06	244.80	244.21	243.63	243.24	244.41
1915	243.13	243.52	243.90	244.10	244.60	244.93	245.08	245.46	245.20	244.62	243.86	243.49	244.32
1916	243.78	243.98	243.98	244.94	245.75	246.56	246.62	245.71	244.72	244.00	243.62	243.42	244.76
1917	243.40	243.48	243.94	245.12	245.38	245.79	246.18	245.78	245.02	244.39	244.13	243.75	244.70
1918	243.53	243.56	244.28	244.98	245.11	245.20	245.27	245.00	244.70	244.33	244.05	243.71	244.48
1919	243.86	243.82	243.89	244.50	245.48	246.11	245.79	245.15	244.54	244.02	243.72	243.45	244.53
1920	243.24	243.16	243.42	244.31	244.92	245.31	245.74	245.70	245.21	244.62	244.08	244.01	244.48
1921	244.14	244.00	244.26	244.81	245.16	245.24	245.17	244.84	244.46	244.14	243.92	243.74	244.49
1922	243.61	243.66	244.15	245.13	245.75	245.88	245.95	245.35	244.70	244.09	243.56	243.10	244.58
1923	243.01	242.94	243.27	244.22	245.00	245.70	245.64	245.28	244.89	244.46	244.16	244.14	244.39
1924	244.13	244.14	244.07	244.75	245.61	245.87	245.71	245.40	244.80	244.39	243.67	243.17	244.64
1925	242.79	242.77	243.66	244.32	244.53	244.64	244.58	244.40	244.09	243.70	243.64	243.65	243.90
1926	243.22	242.94	242.88	243.82	244.88	245.19	245.24	245.14	245.06	244.88	244.67	244.39	244.36
1927	244.02	243.81	244.01	244.39	244.61	245.19	245.48	245.40	244.88	244.48	244.18	244.62	244.59
1928	245.09	245.19	245.04	245.52	245.78	245.84	246.01	245.78	245.02	244.37	244.05	243.91	245.13
1929	244.02	244.29	244.47	245.62	246.54	246.66	246.44	245.85	245.08	244.44	243.97	243.66	245.09
1930	244.22	244.92	245.53	245.94	246.06	246.02	245.91	245.24	244.58	243.94	243.45	243.27	244.92
1931	243.11	243.00	243.16	243.94	244.79	245.49	245.60	245.39	245.06	244.66	244.33	244.14	244.39

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Ontario Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	244.46	244.91	244.91	245.45	245.76	245.73	245.79	245.75	245.34	244.95	244.79	244.52	245.20
1933	244.51	244.43	244.52	245.51	246.10	246.11	245.96	245.64	245.27	244.70	244.16	243.95	245.07
1934	243.86	243.67	243.61	244.35	245.05	245.25	245.28	244.88	244.52	244.18	243.76	243.41	244.32
1935	243.19	242.96	242.97	243.34	243.87	244.40	244.80	244.59	244.12	243.66	243.43	243.13	243.71
1936	242.73	242.28	242.71	244.42	245.07	245.08	244.85	244.40	244.05	243.76	243.59	243.20	243.84
1937	243.39	243.90	244.02	244.44	245.43	245.91	245.91	245.53	244.91	244.40	244.27	243.96	244.67
1938	243.72	244.06	244.46	245.02	245.21	245.36	245.44	245.54	245.27	244.81	244.08	243.65	244.72
1939	243.39	243.33	243.81	244.84	245.47	245.42	245.35	245.25	244.90	244.49	243.99	243.59	244.49
1940	243.25	242.91	242.87	243.88	245.08	245.52	245.52	245.09	244.53	244.20	243.86	243.80	244.21
1941	244.10	244.05	243.93	244.56	245.15	245.34	245.35	245.15	244.78	244.40	244.21	243.96	244.58
1942	243.79	243.71	244.20	245.30	245.67	245.91	245.68	245.40	244.86	244.33	244.00	243.76	244.72
1943	244.09	244.25	244.48	245.09	246.07	246.97	246.74	246.18	245.32	244.47	244.16	243.62	245.12
1944	243.33	243.30	243.49	244.33	245.28	245.61	245.58	245.08	244.55	243.97	243.50	243.36	244.28
1945	243.30	243.28	244.01	245.08	245.67	246.04	245.94	245.41	244.79	244.81	244.34	244.03	244.73
1946	244.11	244.14	244.35	244.32	244.37	244.92	245.11	244.90	244.45	244.12	243.88	243.53	244.35
1947	243.68	244.03	243.97	244.99	245.89	246.93	246.91	246.48	245.64	244.60	243.94	243.56	245.05
1948	243.52	243.46	243.98	245.08	245.54	245.68	245.44	245.01	244.44	243.88	243.68	243.50	244.43
1949	243.63	243.96	244.27	244.74	245.02	245.13	245.16	244.82	244.45	244.12	243.64	243.41	244.36
1950	243.91	244.39	244.53	245.65	245.83	245.71	245.52	245.22	244.82	244.30	244.01	244.02	244.83
1951	244.19	244.46	244.99	246.00	246.49	246.28	246.06	245.42	244.81	244.17	243.81	243.78	245.04
1952	244.21	244.92	245.24	246.04	246.39	246.50	246.06	245.46	244.84	244.20	243.64	243.66	245.10
1953	243.78	243.96	244.14	244.81	245.39	245.77	245.51	245.17	244.66	244.04	243.57	243.58	244.53
1954	243.51	243.77	244.59	245.33	246.15	246.02	245.58	245.02	244.66	244.44	244.25	243.97	244.77
1955	244.40	244.39	244.84	245.71	245.89	245.66	245.32	245.02	244.50	244.34	244.22	243.62	244.83
1956	243.39	243.38	243.79	244.58	245.62	245.89	245.53	245.04	244.70	244.06	243.56	243.44	244.42
1957	243.41	243.61	243.92	244.38	244.95	245.50	245.85	245.37	244.79	244.10	243.72	243.58	244.43
1958	243.72	243.72	244.03	244.83	245.53	245.90	245.96	245.85	245.69	245.21	244.61	244.10	244.93
1959	243.80	243.93	244.32	245.37	245.80	245.71	245.50	245.10	244.64	244.30	244.07	244.20	244.73
1960	244.39	244.54	244.52	245.35	246.20	246.34	245.88	245.29	244.60	243.99	243.60	243.13	244.82
1961	242.72	242.38	243.04	243.95	244.99	245.46	245.48	244.99	244.51	243.87	243.44	243.23	244.01

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Ontario Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	242.96	242.84	243.07	244.10	244.87	245.14	245.04	244.95	244.54	244.34	244.07	243.95	244.16
1963	243.46	243.02	242.92	243.99	244.96	245.34	245.22	245.07	244.58	244.02	243.68	243.43	244.14
1964	242.94	242.64	242.60	243.32	244.06	244.46	244.46	244.16	243.74	243.11	242.56	242.03	243.34
1965	241.61	241.39	241.58	242.10	242.92	243.22	243.38	243.18	242.96	242.68	242.62	242.82	242.54
1966	242.87	242.82	243.36	243.81	244.17	244.60	244.57	244.30	243.97	243.52	243.28	243.52	243.73
1967	243.55	243.67	243.67	244.52	245.33	245.87	246.10	245.91	245.39	245.02	244.86	244.58	244.87
1968	244.63	244.70	244.58	245.15	245.18	245.55	245.72	245.41	245.00	244.38	244.01	244.07	244.86
1969	244.06	244.33	244.09	244.77	245.49	245.92	245.76	245.30	244.53	243.90	243.71	243.68	244.63
1970	243.61	243.77	243.91	244.65	245.27	245.45	245.58	245.30	244.75	244.42	244.13	244.06	244.57
1971	244.09	244.11	244.50	245.15	245.70	245.59	245.36	245.00	244.78	244.31	243.82	243.70	244.68
1972	243.84	243.98	244.16	244.96	245.89	246.10	246.39	246.08	245.35	244.67	244.44	244.72	245.05
1973	245.62	246.46	247.02	248.19	248.61	248.91	248.80	248.32	247.57	246.90	246.25	245.99	247.39
1974	246.71	247.45	247.91	248.63	249.25	249.60	249.59	249.17	248.39	247.53	246.74	246.47	248.12
1975	246.93	247.38	247.81	248.44	248.71	248.74	248.30	247.56	246.91	246.48	245.89	245.49	247.39
1976	245.92	246.36	247.54	248.60	249.29	249.69	249.87	249.65	248.97	248.36	247.59	246.72	248.21
1977	246.55	246.17	246.40	247.16	247.30	246.84	246.53	246.16	245.75	245.60	245.28	245.39	246.26
1978	246.27	246.85	246.68	247.55	247.95	247.69	247.01	246.22	245.44	244.74	244.14	243.76	246.19
1979	244.04	244.26	244.73	245.75	246.10	246.04	245.68	245.33	245.11	244.71	244.22	244.13	245.01
1980	244.74	244.76	244.68	245.72	246.15	246.03	245.85	245.59	245.00	244.32	243.99	243.96	245.07
1981	243.93	244.04	244.70	244.73	245.01	245.36	245.52	245.47	245.24	244.76	244.63	244.32	244.81
1982	244.44	244.47	244.54	245.45	245.76	245.92	245.72	245.14	244.68	244.25	243.97	244.02	244.86
1983	244.62	244.89	244.86	245.23	246.04	246.16	245.68	245.31	244.82	244.34	244.01	244.27	245.02
1984	244.89	245.29	245.82	246.57	247.22	247.40	247.16	246.60	245.89	245.07	244.41	244.12	245.87
1985	244.76	244.99	245.80	246.56	246.66	246.59	246.34	245.76	245.30	244.74	244.92	245.12	245.62
1986	245.63	246.49	247.07	248.05	248.37	248.75	248.99	249.02	248.86	249.23	249.19	249.50	248.26
1987	250.47	251.06	251.36	252.21	252.27	252.07	251.78	250.99	250.18	249.39	248.48	248.17	250.70
1988	248.32	248.49	248.36	248.73	248.75	248.30	247.46	246.68	245.82	245.13	244.75	244.30	247.09
1989	244.04	243.91	243.86	244.65	245.36	246.00	245.92	245.31	244.71	244.22	244.06	243.72	244.65
Average	244.05	244.16	244.42	245.22	245.78	246.02	245.96	245.60	245.08	244.57	244.18	243.98	244.92
Std.Dev	1.21	1.37	1.39	1.40	1.30	1.23	1.16	1.11	1.05	1.05	1.00	1.02	1.12
Maximum	250.47	251.06	251.36	252.21	252.27	252.07	251.78	250.99	250.18	249.39	249.19	249.50	250.70
Minimum	241.61	241.39	241.58	242.10	242.92	243.22	243.38	243.18	242.96	242.68	242.56	242.03	242.54

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Ontario Monthly Mean Outflows, TCFS, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	210.00	213.50	232.50	245.00	254.50	246.00	243.80	243.50	250.50	241.80	229.80	243.50	237.87
1901	213.50	213.50	204.00	238.20	259.20	265.20	266.00	253.20	252.00	237.50	221.20	217.20	236.72
1902	211.20	207.00	220.80	237.80	224.80	214.50	246.00	287.80	282.80	268.20	249.50	220.50	239.24
1903	210.00	222.50	247.00	269.20	275.20	255.80	254.50	264.80	271.80	261.00	241.50	215.50	249.07
1904	210.00	207.00	221.00	262.50	281.20	288.80	293.80	305.00	295.50	278.20	250.50	212.50	258.83
1905	210.00	207.00	204.00	214.50	235.50	255.80	278.20	288.50	288.20	270.20	245.50	224.20	243.47
1906	220.00	242.20	236.50	228.50	222.50	225.80	250.00	261.20	255.80	248.00	256.50	251.00	241.50
1907	220.00	253.00	252.50	255.00	247.80	249.50	258.20	270.50	268.80	268.80	269.20	251.00	255.36
1908	220.00	252.00	262.50	280.00	294.50	299.50	300.00	298.20	271.20	253.50	226.00	212.00	264.12
1909	210.00	207.00	216.00	225.00	266.00	276.00	278.20	276.20	259.50	242.20	221.50	215.50	241.09
1910	210.00	207.00	222.80	234.20	249.50	250.80	245.50	250.00	254.80	249.20	234.00	215.50	235.28
1911	210.00	207.00	204.80	191.20	200.20	212.50	219.50	223.00	223.00	223.20	230.20	231.00	214.63
1912	220.00	225.00	223.00	239.50	262.50	275.00	288.20	283.00	272.50	269.50	269.00	252.20	256.62
1913	220.00	255.80	262.20	282.20	290.80	295.80	285.00	272.80	266.00	253.20	249.80	229.20	263.57
1914	211.00	226.50	218.20	242.20	261.00	264.20	260.80	251.20	260.00	252.50	232.80	214.80	241.27
1915	210.00	212.50	227.50	209.00	195.80	213.80	220.20	236.00	268.20	263.20	245.80	216.50	226.54
1916	216.80	238.00	237.00	253.20	272.00	288.00	302.50	305.00	276.20	249.20	229.50	214.80	256.85
1917	210.00	210.80	222.80	257.50	265.00	271.50	290.80	305.50	297.50	281.20	282.50	255.80	262.57
1918	218.20	227.20	254.20	275.20	269.20	256.50	255.50	257.80	261.80	263.20	271.00	244.20	254.50
1919	220.00	244.20	246.20	252.50	270.50	293.00	297.00	288.80	269.50	254.80	246.20	216.20	258.24
1920	210.00	207.00	207.20	214.50	215.20	217.20	226.20	260.00	269.80	265.00	257.20	250.00	233.27
1921	220.00	24-4.50	251.50	259.20	257.00	247.50	240.50	236.50	229.80	224.80	227.00	229.00	238.94
1922	210.00	207.00	226.50	247.00	265.20	271.00	285.80	275.00	265.00	247.50	224.50	212.00	244.71
1923	210.00	207.00	204.00	196.50	203.80	235.80	244.80	235.80	231.20	223.50	219.00	227.20	219.88
1924	218.50	227.20	220.80	221.50	244.20	257.50	259.50	262.20	253.00	254.00	231.80	212.20	238.53
1925	210.00	207.00	210.50	227.80	221.20	213.50	217.80	220.00	221.20	215.50	214.80	221.00	216.69
1926	210.00	207.00	204.00	188.20	204.20	210.50	217.20	220.20	225.00	255.00	264.80	260.80	222.24
1927	220.00	235.20	239.80	241.20	221.00	215.50	218.00	242.20	238.50	238.20	233.80	251.20	232.88
1928	220.00	253.50	257.20	260.80	264.00	252.80	266.00	277.80	276.20	259.50	256.20	245.50	257.46
1929	220.00	251.80	257.80	278.20	298.80	303.20	302.50	307.00	289.20	274.50	265.50	245.00	274.46
1930	220.00	258.20	279.00	293.00	296.80	289.00	288.50	276.00	265.20	249.80	221.00	213.00	262.46
1931	210.00	207.00	204.00	188.00	196.80	218.50	221.80	222.50	223.00	221.00	214.00	210.80	211.45

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Ontario Monthly Mean Outflows, TCFS Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	212.50	238.80	241.50	250.00	255.80	237.00	222.50	226.50	223.00	217.50	224.20	219.00	230.69
1933	211.50	208.00	204.00	213.80	243.00	235.50	220.80	221.20	221.50	214.00	202.50	210.00	217.15
1934	210.00	207.00	204.00	188.00	188.50	196.00	202.50	203.50	202.80	197.20	198.00	210.00	200.62
1935	210.00	207.00	204.00	188.00	188.00	193.00	205.00	210.00	208.50	199.20	198.00	210.00	201.72
1936	210.00	207.00	204.00	199.20	215.20	216.20	213.20	212.20	212.80	206.80	203.20	210.00	209.15
1937	210.00	212.80	224.20	197.50	222.20	227.50	249.80	251.50	236.00	221.20	226.80	216.20	224.64
1938	210.00	214.20	233.20	244.50	242.50	219.20	221.20	224.00	235.00	254.50	236.20	213.50	229.00
1939	210.00	207.00	204.20	225.00	248.20	243.20	231.20	220.50	221.80	221.80	213.80	210.00	221.39
1940	210.00	207.00	204.00	188.00	217.80	243.50	250.80	250.20	229.20	226.20	218.80	214.80	221.69
1941	220.00	226.00	215.00	190.00	193.20	207.00	211.80	216.50	216.80	209.00	205.20	210.00	210.04
1942	210.00	207.00	209.00	239.20	248.00	259.80	251.80	254.80	251.50	245.00	243.50	235.00	237.88
1943	220.00	245.20	254.20	261.20	279.00	300.80	305.20	310.00	300.80	272.80	270.50	243.50	271.93
1944	210.00	214.80	216.50	224.50	248.00	259.50	270.20	262.00	252.80	239.80	221.20	213.50	236.07
1945	210.00	207.00	215.20	254.20	269.00	283.50	290.50	289.00	274.20	291.80	290.00	271.80	262.18
1946	220.00	250.20	256.80	259.80	232.50	232.00	241.00	245.80	245.20	242.80	248.80	219.00	241.16
1947	214.80	242.20	238.00	256.80	279.00	300.20	304.50	310.00	307.80	279.80	262.80	231.00	268.91
1948	211.20	220.20	231.50	264.20	278.50	283.20	273.20	263.80	254.00	239.20	227.80	216.20	246.92
1949	212.50	228.00	239.00	243.50	238.20	220.00	220.00	222.50	222.80	221.50	212.80	210.00	224.23
1950	211.00	233.50	238.80	267.20	278.80	266.80	257.20	252.50	256.50	248.50	249.50	253.20	251.12
1951	220.00	254.20	269.80	284.80	298.50	307.20	300.00	284.50	276.00	260.80	253.20	249.00	271.50
1952	220.00	258.80	276.80	292.80	301.50	307.50	302.20	288.20	280.00	266.80	239.20	238.50	272.69
1953	220.00	242.00	244.20	258.80	261.80	278.00	270.80	271.20	263.50	249.50	226.80	220.80	250.62
1954	210.00	219.50	250.80	263.50	287.50	291.50	278.20	258.80	257.80	260.20	275.80	258.50	259.34
1955	220.00	253.50	267.00	285.00	294.00	281.20	262.00	260.20	256.50	255.20	279.50	246.20	263.36
1956	210.00	217.00	235.50	250.50	276.50	288.50	285.80	273.00	270.20	256.00	231.00	214.00	250.67
1957	210.00	219.00	226.50	225.50	219.20	223.50	252.50	258.80	250.50	232.00	218.20	213.50	229.10
1958	210.00	207.00	204.00	194.00	200.80	215.50	219.20	220.20	225.80	247.20	238.50	216.20	216.53
1959	210.00	207.00	218.50	245.00	259.20	256.50	243.00	221.20	220.80	219.80	216.50	224.80	228.53
1960	220.00	238.80	241.50	249.80	270.80	286.50	280.20	263.20	247.80	231.00	221.20	213.00	246.98
1961	210.00	207.00	204.00	196.00	236.80	251.80	261.20	256.20	250.20	230.50	220.20	212.50	228.03

Basis of Comparison, IJC Phase II Levels Reference Study
Lake Ontario Monthly Mean Outflows, TCFS, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	210.00	207.00	204.00	189.80	203.00	213.20	216.20	220.50	221.20	218.00	211.20	212.50	210.55
1963	210.00	207.00	204.00	188.00	192.80	208.20	210.50	215.20	214.20	203.00	198.00	210.00	205.07
1964	210.00	207.00	204.00	188.00	188.00	196.50	201.80	203.20	204.20	193.80	198.00	210.00	200.38
1965	210.00	207.00	204.00	188.00	188.00	192.80	201.00	204.80	208.20	202.80	200.20	210.00	201.40
1966	210.00	207.00	214.20	215.80	198.80	209.80	215.50	217.20	219.20	210.50	204.00	210.00	211.00
1967	210.00	207.00	204.00	198.80	204.50	214.20	229.20	242.20	241.50	255.20	271.00	252.00	227.47
1968	220.00	247.80	247.80	259.80	244.20	241.50	252.00	258.80	266.20	257.80	251.20	259.50	250.55
1969	220.00	253.50	251.00	258.50	270.20	286.20	294.20	291.20	273.00	251.20	241.50	236.00	260.54
1970	214.00	231.00	233.00	241.80	252.80	251.50	260.20	266.20	261.20	263.00	266.20	257.50	249.87
1971	220.00	249.20	260.00	272.50	285.80	277.80	264.50	258.20	265.80	263.50	256.20	244.20	259.81
1972	220.00	247.00	252.00	266.00	288.80	299.00	303.80	310.00	304.50	295.80	291.00	259.80	278.14
1973	220.00	260.00	280.00	307.50	310.00	310.00	310.00	310.00	310.00	310.00	310.00	271.00	292.38
1974	220.00	260.00	280.00	307.00	310.00	310.00	310.00	310.00	310.00	310.00	310.00	272.50	292.46
1975	220.00	260.00	280.00	303.00	308.80	309.80	309.50	310.00	310.00	310.00	309.20	262.00	291.02
1976	220.00	260.00	280.00	307.50	310.00	310.00	310.00	310.00	310.00	310.00	310.00	265.80	291.94
1977	220.00	255.20	266.80	278.50	289.80	292.50	282.50	284.20	293.80	307.00	302.80	259.50	277.72
1978	220.00	260.00	280.00	300.80	310.00	307.20	309.20	300.50	290.00	275.50	263.00	245.50	280.14
1979	220.00	247.80	263.20	284.50	294.20	294.20	280.80	276.20	284.80	290.80	286.50	247.50	272.54
1980	220.00	256.50	264.00	286.00	298.00	298.80	292.50	294.50	293.50	280.80	273.50	248.20	275.52
1981	220.00	247.00	266.50	263.00	253.20	252.80	262.00	278.00	296.50	297.80	296.00	265.50	266.52
1982	220.00	255.20	260.50	288.00	292.50	295.20	294.00	277.50	273.20	268.00	266.80	244.50	269.62
1983	220.00	257.50	270.00	276.00	292.20	298.50	289.20	281.50	277.20	271.20	271.00	244.00	270.69
1984	220.00	260.00	280.00	297.80	310.00	310.00	309.50	310.00	309.20	298.20	285.50	249.20	286.62
1985	220.00	257.90	280.00	302.20	306.20	307.00	305.80	299.20	300.00	295.50	296.50	268.80	286.58
1986	220.00	260.00	280.00	307.50	310.00	310.00	310.00	310.00	310.00	310.00	310.00	278.20	292.98
1987	220.00	260.00	280.00	307.50	310.00	310.00	310.00	310.00	310.00	310.00	310.00	269.50	292.25
1988	220.00	258.80	273.50	276.50	283.80	305.80	293.20	283.80	271.80	259.20	261.20	246.50	269.51
1989	220.00	227.80	221.80	233.50	241.00	267.80	283.00	276.20	264.80	252.00	258.20	238.50	248.72
Average	214.96	230.13	237.09	246.69	255.61	260.24	262.55	262.98	259.99	253.17	246.82	233.25	246.96
Std.Dev	4.79	20.88	26.27	35.96	36.96	35.99	33.48	31.77	29.75	29.42	31.08	20.55	25.03
Maximum	220.00	260.00	280.00	307.50	310.00	310.00	310.00	310.00	310.00	310.00	310.00	278.20	292.98
Minimum	210.00	207.00	204.00	188.00	188.00	192.80	201.00	203.20	202.80	193.80	198.00	210.00	200.38

Basis of Comparison, IJC Phase II Levels Reference Study
 Ogdensburg, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	243.63	243.74	243.88	244.57	244.92	245.00	244.96	244.78	244.16	243.62	243.23	243.20	244.14
1901	243.08	242.90	242.97	244.23	244.80	244.94	244.70	244.34	243.85	243.29	242.88	242.92	243.74
1902	243.09	243.01	243.58	244.14	244.44	244.94	245.59	245.15	244.27	243.56	243.09	242.94	243.98
1903	242.93	243.09	243.78	244.72	244.62	244.59	244.82	244.58	243.99	243.41	242.93	242.67	243.84
1904	242.32	242.62	243.22	244.56	245.24	245.54	245.40	244.74	244.02	243.41	242.84	242.61	243.88
1905	242.56	242.35	242.58	243.82	244.44	244.88	244.94	244.60	243.90	243.23	242.84	242.91	243.59
1906	243.28	243.22	243.12	243.66	244.23	244.76	244.94	244.54	243.87	243.50	243.22	242.92	243.77
1907	243.64	243.52	243.34	243.84	244.36	244.77	244.82	244.51	243.90	243.46	243.08	242.89	243.84
1908	243.58	243.44	243.74	244.52	245.13	245.25	244.96	244.40	243.59	243.04	242.74	242.44	243.90
1909	242.24	242.47	242.97	243.78	244.81	244.99	244.72	244.29	243.72	243.14	242.92	242.79	243.57
1910	242.73	242.89	243.46	244.00	244.60	244.79	244.70	244.45	244.00	243.49	243.00	242.84	243.75
1911	242.65	242.79	243.06	243.96	244.84	245.29	245.44	245.15	244.84	244.54	244.09	243.87	244.21
1912	243.91	243.68	243.66	244.65	245.49	246.03	245.52	244.80	244.27	243.76	243.27	243.04	244.34
1913	243.79	243.94	243.75	244.86	245.12	245.10	244.79	244.37	243.74	243.26	242.96	242.88	244.05
1914	242.94	242.96	243.02	244.05	244.64	244.77	244.58	244.30	243.95	243.36	242.90	242.62	243.67
1915	242.53	242.94	243.23	243.58	244.18	244.44	244.55	244.85	244.33	243.73	243.04	242.87	243.69
1916	243.19	243.24	243.24	244.18	244.90	245.67	245.62	244.57	243.72	243.17	242.92	242.81	243.94
1917	242.82	242.91	243.31	244.33	244.55	244.95	245.22	244.64	243.85	243.30	243.00	242.82	243.81
1918	242.91	242.86	243.42	244.02	244.22	244.42	244.50	244.19	243.82	243.41	243.01	242.89	243.64
1919	243.25	243.01	243.07	243.69	244.62	245.13	244.74	244.09	243.58	243.13	242.87	242.84	243.67
1920	242.65	242.58	242.87	243.76	244.42	244.81	245.22	244.94	244.32	243.71	243.18	243.16	243.80
1921	243.55	243.20	243.43	243.97	244.38	244.54	244.51	244.18	243.82	243.52	243.26	243.05	243.78
1922	243.05	243.12	243.51	244.42	244.96	245.06	245.01	244.44	243.80	243.28	242.88	242.49	243.83
1923	242.40	242.34	242.73	243.78	244.57	245.12	244.99	244.67	244.28	243.87	243.57	243.49	243.82
1924	243.55	243.49	243.47	244.19	244.96	245.15	244.96	244.60	244.01	243.56	242.95	242.56	243.95
1925	242.17	242.16	243.10	243.68	243.96	244.12	244.04	243.82	243.48	243.11	243.05	243.01	243.31
1926	242.63	242.35	242.31	243.42	244.44	244.73	244.74	244.62	244.50	244.08	243.76	243.49	243.76
1927	243.42	243.06	243.26	243.66	244.04	244.70	244.99	244.75	244.22	243.78	243.48	243.82	243.93
1928	244.56	244.44	244.24	244.74	245.00	245.15	245.23	244.88	244.05	243.48	243.16	243.10	244.34
1929	243.42	243.46	243.61	244.71	245.56	245.66	245.42	244.71	244.00	243.42	242.98	242.82	244.15
1930	243.63	244.09	244.60	244.94	245.04	245.07	244.95	244.30	243.67	243.09	242.80	242.66	244.07
1931	242.51	242.42	242.61	243.54	244.39	245.00	245.10	244.87	244.52	244.10	243.80	243.62	243.87

Basis of Comparison, IJC Phase II Levels Reference Study
 Ogdensburg, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	243.94	244.24	244.22	244.74	245.04	245.14	245.29	245.23	244.81	244.43	244.22	243.96	244.60
1933	244.00	243.94	244.06	245.04	245.50	245.55	245.48	245.14	244.75	244.19	243.69	243.41	244.56
1934	243.32	243.13	243.09	243.96	244.70	244.87	244.88	244.45	244.06	243.74	243.29	242.84	243.86
1935	242.60	242.38	242.41	242.91	243.47	244.00	244.35	244.10	243.61	243.17	242.94	242.54	243.21
1936	242.10	241.64	242.12	243.99	244.58	244.58	244.35	243.88	243.50	243.24	243.08	242.61	243.31
1937	242.81	243.34	243.39	244.02	244.92	245.39	245.25	244.82	244.26	243.82	243.64	243.38	244.09
1938	243.18	243.51	243.80	244.32	244.54	244.86	244.93	245.02	244.66	244.01	243.36	243.06	244.10
1939	242.81	242.77	243.31	244.26	244.78	244.77	244.76	244.74	244.35	243.92	243.42	243.03	243.91
1940	242.67	242.32	242.30	243.48	244.57	244.86	244.82	244.36	243.90	243.56	243.25	243.22	243.61
1941	243.50	243.40	243.36	244.18	244.78	244.91	244.89	244.64	244.25	243.90	243.72	243.42	244.08
1942	243.25	243.18	243.70	244.66	245.00	245.18	244.98	244.65	244.09	243.56	243.22	243.01	244.04
1943	243.50	243.47	243.65	244.26	245.20	246.02	245.73	245.06	244.18	243.47	243.14	242.79	244.21
1944	242.75	242.69	242.88	243.72	244.58	244.85	244.74	244.24	243.74	243.21	242.84	242.76	243.58
1945	242.72	242.72	243.44	244.31	244.85	245.14	244.95	244.38	243.82	243.66	243.17	242.99	243.85
1946	243.51	243.31	243.49	243.42	243.70	244.30	244.44	244.18	243.69	243.35	243.04	242.90	243.61
1947	243.10	243.26	243.22	244.18	245.00	245.98	245.93	245.40	244.47	243.56	242.98	242.83	244.16
1948	242.94	242.82	243.29	244.23	244.62	244.74	244.56	244.15	243.61	243.11	242.99	242.89	243.66
1949	243.06	243.30	243.54	244.02	244.36	244.61	244.64	244.26	243.87	243.52	243.06	242.84	243.76
1950	243.36	243.72	243.83	244.82	244.93	244.90	244.77	244.48	244.00	243.50	243.16	243.14	244.05
1951	243.60	243.62	244.08	245.08	245.51	245.19	245.00	244.43	243.82	243.24	242.91	242.92	244.12
1952	243.62	244.09	244.30	245.06	245.38	245.44	244.98	244.44	243.82	243.23	242.85	242.88	244.17
1953	243.16	243.18	243.36	243.97	244.60	244.87	244.65	244.26	243.77	243.20	242.88	242.94	243.74
1954	242.94	243.15	243.80	244.51	245.22	245.04	244.66	244.21	243.82	243.55	243.20	243.04	243.93
1955	243.82	243.55	243.93	244.76	244.87	244.72	244.51	244.19	243.65	243.48	243.13	242.76	243.95
1956	242.82	242.75	243.04	243.79	244.72	244.92	244.54	244.11	243.75	243.16	242.83	242.83	243.60
1957	242.84	242.98	243.25	243.76	244.42	244.98	245.15	244.59	244.02	243.41	243.11	242.99	243.79
1958	243.18	243.19	243.54	244.44	245.14	245.46	245.49	245.37	245.17	244.50	243.92	243.54	244.41
1959	243.25	243.42	243.75	244.70	245.06	244.98	244.85	244.57	244.08	243.72	243.50	243.58	244.12
1960	243.82	243.84	243.80	244.64	245.41	245.44	244.98	244.47	243.84	243.31	242.96	242.51	244.09
1961	242.09	241.74	242.48	243.50	244.35	244.75	244.69	244.20	243.71	243.18	242.78	242.62	243.34

Basis of Comparison, IJC Phase II Levels Reference Study
Ogdensburg, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	242.35	242.25	242.52	243.70	244.43	244.66	244.53	244.41	243.96	243.78	243.53	243.40	243.63
1963	242.89	242.44	242.35	243.59	244.58	244.90	244.76	244.58	244.06	243.54	243.20	242.86	243.65
1964	242.32	242.03	242.01	242.88	243.67	244.04	244.01	243.69	243.24	242.63	242.02	241.34	242.82
1965	240.88	240.68	240.90	241.59	242.47	242.75	242.86	242.62	242.37	242.10	242.06	242.21	241.96
1966	242.26	242.23	242.75	243.22	243.72	244.10	244.04	243.73	243.38	242.96	242.73	242.95	243.17
1967	243.00	243.14	243.16	244.09	244.91	245.42	245.58	245.29	244.74	244.24	243.92	243.77	244.27
1968	244.07	243.94	243.81	244.34	244.50	244.92	245.02	244.64	244.12	243.50	243.16	243.15	244.10
1969	243.46	243.49	243.24	243.94	244.63	244.98	244.73	244.24	243.54	243.04	242.92	242.93	243.76
1970	243.02	243.06	243.20	243.94	244.53	244.73	244.81	244.46	243.88	243.50	243.15	243.15	243.79
1971	243.50	243.29	243.62	244.23	244.73	244.68	244.54	244.19	243.88	243.38	242.90	242.88	243.82
1972	243.23	243.16	243.31	244.08	244.92	245.06	245.34	244.95	244.16	243.48	243.26	243.84	244.07
1973	245.13	245.78	246.24	247.32	247.76	248.10	247.97	247.44	246.62	245.87	245.13	245.15	246.54
1974	246.28	246.83	247.21	247.80	248.46	248.84	248.83	248.38	247.52	246.56	245.69	245.66	247.34
1975	246.51	246.76	247.10	247.62	247.88	247.91	247.43	246.60	245.88	245.40	244.73	244.66	246.54
1976	245.44	245.66	246.80	247.76	248.50	248.94	249.13	248.90	248.16	247.49	246.63	245.98	247.45
1977	246.11	245.48	245.65	246.39	246.47	245.94	245.68	245.26	244.72	244.44	244.10	244.55	245.40
1978	245.82	246.18	245.87	246.66	247.04	246.76	245.99	245.18	244.41	243.75	243.20	242.93	245.32
1979	243.44	243.47	243.85	244.80	245.10	245.04	244.75	244.40	244.08	243.58	243.05	243.29	244.07
1980	244.19	243.94	243.78	244.75	245.12	245.00	244.84	244.54	243.88	243.22	242.92	243.12	244.11
1981	243.32	243.23	243.79	243.85	244.24	244.62	244.73	244.54	244.11	243.56	243.43	243.36	243.90
1982	243.86	243.62	243.66	244.43	244.74	244.90	244.68	244.18	243.70	243.27	242.97	243.20	243.93
1983	244.06	244.07	243.94	244.29	245.05	245.14	244.68	244.34	243.82	243.34	242.97	243.48	244.10
1984	244.35	244.49	244.91	245.60	246.22	246.42	246.16	245.54	244.74	243.91	243.29	243.27	244.91
1985	244.22	244.18	244.89	245.55	245.63	245.54	245.27	244.68	244.15	243.56	243.64	244.22	244.63
1986	245.14	245.80	246.30	247.16	247.50	247.92	248.18	248.20	248.04	248.44	248.40	248.90	247.50
1987	250.18	250.64	250.88	251.65	251.71	251.49	251.18	250.34	249.47	248.62	247.62	247.52	250.11
1988	247.96	247.96	247.72	248.11	248.09	247.45	246.62	245.84	244.98	244.32	243.89	243.50	246.37
1989	243.44	243.24	243.23	244.00	244.72	245.21	245.00	244.38	243.80	243.38	243.14	242.94	243.87
=====													
Average	243.48	243.49	243.73	244.51	245.06	245.28	245.19	244.80	244.25	243.75	243.37	243.26	244.18
Std.Dev	1.27	1.36	1.36	1.33	1.24	1.17	1.13	1.09	1.03	1.02	0.95	1.00	1.09
Maximum	250.18	250.64	250.88	251.65	251.71	251.49	251.18	250.34	249.47	248.62	248.40	248.90	250.11
Minimum	240.88	240.68	240.90	241.59	242.47	242.75	242.86	242.62	242.37	242.10	242.02	241.34	241.96

Basis of Comparison, IJC Phase II Levels Reference Study
 Cardinal, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	242.49	242.58	242.52	243.20	243.51	243.70	243.66	243.47	242.64	242.09	241.78	241.55	242.77
1901	241.81	241.60	241.80	242.88	243.30	243.41	243.10	242.82	242.24	241.75	241.48	241.57	242.31
1902	241.85	241.80	242.30	242.77	243.27	243.96	244.38	243.38	242.34	241.64	241.34	241.54	242.55
1903	241.68	241.70	242.22	243.08	242.89	243.09	243.38	242.98	242.14	241.57	241.25	241.29	242.27
1904	240.94	241.34	241.88	242.97	243.57	243.86	243.61	242.63	241.84	241.30	241.00	241.26	242.18
1905	241.24	241.03	241.33	242.66	243.15	243.44	243.24	242.68	241.78	241.20	241.08	241.47	242.03
1906	241.96	241.60	241.55	242.30	243.06	243.63	243.59	242.96	242.21	241.86	241.39	241.09	242.27
1907	242.39	241.80	241.60	242.19	242.92	243.38	243.34	242.81	242.08	241.52	241.01	241.05	242.17
1908	242.32	241.74	241.96	242.69	243.27	243.36	242.98	242.28	241.64	241.22	241.24	241.06	242.15
1909	240.85	241.17	241.64	242.50	243.24	243.33	242.96	242.46	241.97	241.50	241.51	241.44	242.05
1910	241.44	241.67	242.14	242.64	243.18	243.40	243.35	243.00	242.39	241.83	241.45	241.50	242.33
1911	241.34	241.55	241.89	243.07	243.97	244.37	244.48	244.12	243.76	243.41	242.80	242.54	243.11
1912	242.72	242.39	242.38	243.36	244.10	244.60	243.82	243.00	242.48	241.89	241.26	241.22	242.77
1913	242.57	242.30	241.98	243.09	243.31	243.22	242.97	242.61	241.91	241.48	241.17	241.36	242.33
1914	241.67	241.50	241.68	242.61	243.10	243.20	243.03	242.80	242.26	241.63	241.33	241.24	242.17
1915	241.20	241.65	241.81	242.44	243.28	243.39	243.45	243.63	242.61	241.94	241.32	241.52	242.35
1916	241.90	241.68	241.70	242.62	243.27	244.02	243.76	242.41	241.73	241.44	241.40	241.47	242.28
1917	241.55	241.64	241.96	242.76	242.93	243.34	243.42	242.48	241.58	241.10	240.68	240.90	242.03
1918	241.54	241.37	241.68	242.13	242.46	242.88	243.00	242.58	242.07	241.53	240.90	241.16	241.94
1919	241.93	241.31	241.36	242.04	242.95	243.28	242.73	242.02	241.66	241.30	241.10	241.48	241.93
1920	241.34	241.30	241.64	242.60	243.35	243.78	244.16	243.46	242.58	241.88	241.33	241.42	242.40
1921	242.28	241.55	241.72	242.29	242.82	243.13	243.18	242.84	242.49	242.18	241.84	241.57	242.32
1922	241.82	241.94	242.16	243.00	243.43	243.48	243.23	242.66	242.00	241.59	241.43	241.12	242.32
1923	241.04	241.02	241.51	242.81	243.64	243.94	243.70	243.42	243.01	242.62	242.32	242.12	242.60
1924	242.30	242.13	242.18	243.02	243.67	243.75	243.49	243.03	242.42	241.85	241.41	241.21	242.54
1925	240.77	240.80	241.87	242.35	242.74	243.04	242.89	242.61	242.19	241.82	241.76	241.63	242.04
1926	241.32	241.03	241.01	242.49	243.49	243.76	243.70	243.53	243.35	242.48	241.96	241.66	242.48
1927	242.14	241.50	241.68	242.15	242.85	243.67	243.98	243.44	242.85	242.33	242.03	242.20	242.57
1928	243.47	242.94	242.66	243.21	243.50	243.80	243.75	243.18	242.16	241.68	241.32	241.39	242.75
1929	242.14	241.76	241.86	242.95	243.75	243.82	243.52	242.56	241.90	241.36	240.95	241.05	242.30
1930	242.38	242.45	242.80	243.04	243.12	243.26	243.12	242.48	241.83	241.32	241.37	241.32	242.37
1931	241.18	241.10	241.38	242.62	243.50	243.98	244.07	243.80	243.38	242.92	242.64	242.47	242.75

Basis of Comparison, IJC Phase I₁ Levels Reference Study
 Cardinal, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	242.82	242.88	242.82	243.34	243.64	243.95	244.28	244.16	243.72	243.34	243.02	242.78	243.40
1933	242.92	242.88	243.06	244.07	244.31	244.45	244.51	244.12	243.66	243.10	242.65	242.24	243.50
1934	242.13	241.95	241.94	243.11	243.92	244.05	244.00	243.50	243.08	242.76	242.24	241.57	242.85
1935	241.28	241.06	241.13	241.91	242.54	243.09	243.38	243.04	242.49	242.09	241.83	241.21	242.09
1936	240.68	240.16	240.79	243.02	243.53	243.52	243.30	242.75	242.32	242.07	241.93	241.30	242.11
1937	241.54	242.13	242.04	243.07	243.84	244.34	243.96	243.42	242.94	242.58	242.30	242.13	242.86
1938	241.96	242.30	242.42	242.91	243.20	243.82	243.88	243.95	243.41	242.40	241.85	241.79	242.82
1939	241.54	241.52	242.19	243.06	243.41	243.45	243.58	243.66	243.20	242.70	242.21	241.80	242.69
1940	241.37	241.00	241.00	242.56	243.49	243.57	243.42	242.88	242.60	242.23	241.94	241.97	242.34
1941	242.23	242.04	242.12	243.32	243.97	243.99	243.92	243.60	243.14	242.82	242.66	242.26	243.01
1942	242.05	242.01	242.58	243.37	243.67	243.75	243.61	243.18	242.54	241.98	241.58	241.44	242.65
1943	242.22	241.86	241.96	242.62	243.55	244.30	243.88	242.96	241.95	241.46	241.07	241.04	242.41
1944	241.46	241.33	241.53	242.43	243.17	243.36	243.09	242.59	242.10	241.62	241.42	241.43	242.13
1945	241.42	241.46	242.21	242.77	243.24	243.42	243.10	242.39	241.89	241.42	240.78	240.85	242.08
1946	242.24	241.60	241.72	241.60	242.30	243.03	243.09	242.72	242.13	241.75	241.28	241.52	242.08
1947	241.81	241.64	241.66	242.59	243.31	244.26	244.13	243.40	242.22	241.47	240.98	241.28	242.40
1948	241.68	241.40	241.83	242.55	242.83	242.92	242.83	242.45	241.92	241.51	241.52	241.55	242.08
1949	241.79	241.88	242.04	242.55	243.03	243.52	243.56	243.09	242.63	242.22	241.80	241.56	242.47
1950	242.17	242.32	242.39	243.23	243.23	243.34	243.29	243.00	242.36	241.86	241.42	241.34	242.50
1951	242.35	241.92	242.28	243.32	243.69	243.17	243.04	242.52	241.88	241.36	241.04	241.12	242.31
1952	242.37	242.44	242.46	243.20	243.48	243.48	242.98	242.48	241.80	241.25	241.18	241.23	
1953	241.82	241.56	241.74	242.30	243.02	243.16	242.98	242.49	241.99	241.47	241.40	241.55	242.12
1954	241.69	241.82	242.20	242.90	243.46	243.19	242.90	242.59	242.12	241.76	241.06	241.11	242.23
1955	242.61	241.84	242.14	242.92	242.95	242.93	242.92	242.55	241.93	241.74	240.91	240.97	242.20
1956	241.54	241.37	241.48	242.19	242.99	243.08	242.64	242.27	241.86	241.32	241.27	241.51	241.96
1957	241.56	241.62	241.86	242.48	243.30	243.92	243.80	243.06	242.47	241.97	241.79	241.70	242.46
1958	241.96	242.02	242.45	243.58	244.31	244.54	244.53	244.40	244.10	243.10	242.50	242.31	243.32
1959	242.05	242.28	242.54	243.36	243.62	243.56	243.56	243.46	242.90	242.49	242.26	242.26	242.86
1960	242.60	242.40	242.32	243.23	243.91	243.75	243.26	242.85	242.28	241.86	241.56	241.14	242.60
1961	240.67	240.29	241.22	242.50	243.04	243.34	243.15	242.60	242.09	241.70	241.37	241.28	241.94

Basis of Comparison, IJC Phase II Levels Reference Study
Cardinal, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	240.98	240.90	241.26	242.79	243.49	243.65	243.47	243.28	242.76	242.58	242.37	242.20	242.48
1963	241.63	241.14	241.06	242.69	243.75	243.98	243.79	243.54	242.94	242.47	242.14	241.59	242.56
1964	240.96	240.64	240.66	241.88	242.78	243.11	243.02	242.64	242.10	241.52	240.75	239.74	241.65
1965	239.18	238.97	239.30	240.38	241.40	241.67	241.71	241.38	241.03	240.78	240.77	240.81	240.62
1966	240.87	240.88	241.41	241.94	242.72	243.05	242.91	242.53	242.09	241.70	241.52	241.71	241.94
1967	241.75	241.95	242.02	243.14	244.02	244.50	244.54	244.08	243.44	242.67	242.07	242.12	243.02
1968	242.90	242.41	242.24	242.74	243.12	243.65	243.65	243.10	242.38	241.73	241.38	241.25	242.55
1969	242.18	241.77	241.50	242.26	242.96	243.18	242.76	242.17	241.55	241.24	241.22	241.32	242.01
1970	241.72	241.56	241.70	242.49	243.06	243.32	243.30	242.80	242.16	241.65	241.16	241.27	242.18
1971	242.22	241.58	241.84	242.43	242.88	242.92	242.92	242.57	242.08	241.49	240.98	241.14	242.09
1972	241.90	241.45	241.58	242.34	243.07	243.12	243.42	242.82	241.87	241.10	240.90	242.05	242.14
1973	244.12	244.46	244.80	245.80	246.30	246.70	246.55	245.92	244.92	243.99	243.06	243.52	245.01
1974	245.41	245.69	245.94	246.38	247.13	247.58	247.56	247.04	246.01	244.86	243.77	244.14	245.96
1975	245.67	245.61	245.82	246.22	246.46	246.48	245.92	244.91	244.00	243.40	242.55	243.02	245.00
1976	244.47	244.32	245.46	246.34	247.18	247.69	247.91	247.64	246.77	245.98	244.94	244.58	246.11
1977	245.23	244.16	244.24	245.00	244.96	244.29	244.09	243.57	242.75	242.19	241.82	242.91	243.77
1978	244.89	244.93	244.35	245.09	245.44	245.13	244.16	243.25	242.41	241.78	241.27	241.18	243.66
1979	242.15	241.82	242.08	242.98	243.23	243.15	242.97	242.60	242.06	241.32	240.69	241.54	242.22
1980	243.04	242.28	241.99	242.90	243.21	243.04	242.92	242.51	241.67	241.01	240.74	241.36	242.22
1981	242.02	241.54	241.97	242.09	242.70	243.17	243.19	242.75	241.92	241.19	241.04	241.40	242.08
1982	242.66	241.91	241.88	242.47	242.80	242.96	242.70	242.30	241.75	241.28	240.91	241.49	242.09
1983	242.88	242.43	242.10	242.46	243.20	243.23	242.76	242.44	241.85	241.33	240.84	241.83	242.28
1984	243.22	242.92	243.18	243.81	244.42	244.68	244.36	243.58	242.55	241.64	241.02	241.52	243.07
1985	243.07	242.56	243.15	243.70	243.74	243.62	243.29	242.63	241.93	241.22	241.30	242.42	242.72
1986	244.14	244.49	244.86	245.61	246.00	246.49	246.80	246.83	246.63	247.11	247.06	247.87	246.16
1987	249.66	249.94	250.09	250.77	250.82	250.58	250.24	249.29	248.30	247.31	246.14	246.36	249.12
1988	247.26	246.98	246.60	247.02	246.93	245.98	245.10	244.27	243.37	242.72	242.16	241.88	245.02
1989	242.16	241.82	241.88	242.66	243.42	243.70	243.26	242.56	242.01	241.66	241.26	241.28	242.31
Average	242.25	242.08	242.28	243.10	243.64	243.86	243.72	243.24	242.61	242.08	241.71	241.75	242.69
Std.Dev	1.42	1.44	1.41	1.34	1.26	1.21	1.20	1.19	1.15	1.13	1.03	1.07	1.14
Maximum	249.66	249.94	250.09	250.77	250.82	250.58	250.24	249.29	248.30	247.31	247.06	247.87	249.12
Minimum	239.18	238.97	239.30	240.38	241.40	241.67	241.71	241.38	241.03	240.78	240.68	239.74	240.62

Basis of Comparison, IJC Phase II Levels Reference Study
Iroquois, Monthly Mean Levels IGLD 1955 Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	242.16	242.24	242.10	242.76	243.05	243.28	243.25	243.04	242.16	241.62	241.34	241.05	242.34
1901	241.44	241.21	241.46	242.45	242.81	242.90	242.58	242.33	241.73	241.28	241.06	241.18	241.87
1902	241.49	241.46	241.92	242.34	242.90	243.65	243.98	242.78	241.70	241.04	240.80	241.13	242.10
1903	241.32	241.29	241.73	242.54	242.31	242.60	242.91	242.45	241.54	240.99	240.74	240.90	241.78
1904	240.55	240.98	241.49	242.45	243.00	243.27	242.99	241.91	241.11	240.63	240.44	240.88	241.64
1905	240.86	240.65	240.98	242.31	242.74	242.96	242.67	242.03	241.09	240.56	240.54	241.04	241.54
1906	241.57	241.10	241.08	241.89	242.70	243.28	243.14	242.44	241.69	241.35	240.82	240.53	241.80
1907	242.02	241.27	241.06	241.66	242.46	242.93	242.85	242.25	241.49	240.90	240.36	240.49	241.65
1908	241.93	241.20	241.40	242.08	242.63	242.70	242.31	241.57	241.02	240.65	240.79	240.66	241.58
1909	240.45	240.80	241.26	242.11	242.71	242.77	242.38	241.86	241.42	241.00	241.10	241.04	241.58
1910	241.06	241.32	241.75	242.22	242.72	242.94	242.92	242.53	241.87	241.32	240.98	241.10	241.89
1911	240.97	241.19	241.55	242.81	243.71	244.08	244.18	243.78	243.42	243.06	242.40	242.12	242.77
1912	242.35	241.99	242.00	242.95	243.62	244.11	243.24	242.40	241.90	241.29	240.64	240.66	242.26
1913	242.20	241.77	241.41	242.49	242.69	242.56	242.36	242.03	241.33	240.94	240.62	240.91	241.78
1914	241.30	241.07	241.28	242.16	242.59	242.69	242.52	242.32	241.72	241.09	240.86	240.84	241.70
1915	240.82	241.28	241.38	242.11	243.02	243.07	243.10	243.24	242.05	241.36	240.79	241.12	241.94
1916	241.52	241.20	241.23	242.12	242.73	243.45	243.12	241.67	241.09	240.90	240.95	241.08	241.76
1917	241.18	241.27	241.56	242.25	242.40	242.80	242.80	241.75	240.82	240.41	239.96	240.30	241.46
1918	241.14	240.92	241.14	241.52	241.89	242.38	242.50	242.07	241.52	240.94	240.24	240.63	241.41
1919	241.54	240.79	240.83	241.52	242.39	242.65	242.05	241.34	241.04	240.74	240.57	241.08	241.38
1920	240.97	240.94	241.28	242.24	243.02	243.46	243.82	242.98	242.02	241.30	240.76	240.88	241.97
1921	241.90	241.04	241.20	241.75	242.32	242.68	242.75	242.42	242.08	241.78	241.42	241.12	241.87
1922	241.46	241.59	241.74	242.54	242.92	242.95	242.62	242.08	241.42	241.08	241.00	240.73	241.84
1923	240.66	240.64	241.16	242.54	243.36	243.56	243.29	243.02	242.62	242.24	241.95	241.71	242.23
1924	241.93	241.71	241.80	242.66	243.25	243.28	243.01	242.52	241.92	241.31	240.95	240.82	242.10
1925	240.37	240.42	241.51	241.94	242.38	242.70	242.54	242.24	241.80	241.44	241.38	241.22	241.66
1926	240.94	240.65	240.64	242.22	243.20	243.46	243.37	243.19	242.98	241.97	241.38	241.09	242.09
1927	241.75	241.04	241.20	241.68	242.48	243.36	243.67	243.02	242.42	241.88	241.59	241.70	242.15
1928	243.13	242.45	242.14	242.71	242.99	243.36	243.25	242.60	241.54	241.11	240.74	240.87	242.24
1929	241.75	241.23	241.32	242.37	243.12	243.17	242.86	241.82	241.21	240.71	240.32	240.52	241.70
1930	242.00	241.92	242.21	242.40	242.46	242.64	242.49	241.88	241.24	240.78	240.96	240.93	241.83
1931	240.80	240.73	241.02	242.36	243.24	243.67	243.74	243.46	243.02	242.56	242.30	242.13	242.42

Basis of Comparison, IJC Phase II Levels Reference Study
Iroquois, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	242.49	242.46	242.38	242.88	243.17	243.56	243.96	243.83	243.38	243.00	242.65	242.42	243.01
1933	242.58	242.56	242.76	243.77	243.92	244.09	244.20	243.80	243.33	242.77	242.35	241.89	243.17
1934	241.78	241.61	241.60	242.86	243.69	243.80	243.73	243.22	242.78	242.47	241.94	241.20	242.56
1935	240.90	240.68	240.77	241.64	242.28	242.83	243.08	242.72	242.16	241.78	241.52	240.82	241.76
1936	240.28	239.75	240.42	242.74	243.21	243.20	242.97	242.42	241.96	241.73	241.60	240.92	241.77
1937	241.17	241.77	241.64	242.79	243.51	244.01	243.52	242.96	242.52	242.21	241.90	241.76	242.48
1938	241.60	241.94	241.99	242.46	242.76	243.49	243.55	243.61	243.02	241.89	241.38	241.41	242.42
1939	241.17	241.16	241.86	242.69	242.97	243.03	243.21	243.32	242.85	242.32	241.86	241.44	242.32
1940	240.99	240.62	240.64	242.30	243.16	243.15	242.97	242.40	242.19	241.82	241.56	241.59	241.95
1941	241.84	241.62	241.75	243.08	243.73	243.71	243.63	243.28	242.80	242.50	242.34	241.92	242.68
1942	241.70	241.66	242.25	242.96	243.24	243.28	243.16	242.70	242.05	241.49	241.07	240.96	242.21
1943	241.84	241.36	241.43	242.09	243.00	243.68	243.22	242.23	241.21	240.82	240.42	240.50	241.82
1944	241.09	240.93	241.13	242.04	242.72	242.87	242.54	242.05	241.58	241.13	241.01	241.04	241.68
1945	241.04	241.10	241.84	242.27	242.71	242.83	242.46	241.73	241.27	240.68	240.02	240.19	241.51
1946	241.86	241.06	241.17	241.02	241.88	242.63	242.66	242.26	241.64	241.26	240.74	241.11	241.61
1947	241.43	241.15	241.18	242.08	242.74	243.64	243.50	242.70	241.46	240.80	240.37	240.81	241.82
1948	241.31	240.99	241.39	242.00	242.24	242.31	242.26	241.90	241.38	241.02	241.08	241.15	241.59
1949	241.42	241.45	241.58	242.09	242.61	243.18	243.22	242.73	242.25	241.84	241.43	241.20	242.08
1950	241.82	241.89	241.94	242.70	242.66	242.82	242.80	242.52	241.84	241.35	240.88	240.79	242.00
1951	241.97	241.39	241.70	242.73	243.06	242.46	242.36	241.88	241.24	240.77	240.48	240.57	241.72
1952	241.99	241.92	241.85	242.57	242.82	242.80	242.29	241.82	241.15	240.63	240.68	240.73	241.77
1953	241.42	241.06	241.24	241.76	242.51	242.58	242.43	241.91	241.42	240.94	240.95	241.14	241.61
1954	241.32	241.42	241.69	242.38	242.86	242.56	242.31	242.07	241.58	241.19	240.38	240.52	241.69
1955	242.24	241.31	241.56	242.31	242.29	242.33	242.40	242.02	241.39	241.19	240.22	240.42	241.64
1956	241.18	240.97	241.00	241.68	242.41	242.46	242.01	241.68	241.26	240.75	240.80	241.12	241.44
1957	241.20	241.22	241.43	242.08	242.96	243.58	243.36	242.56	241.98	241.53	241.40	241.32	242.05
1958	241.61	241.68	242.14	243.33	244.05	244.24	244.23	244.08	243.77	242.64	242.06	241.95	242.98
1959	241.70	241.95	242.17	242.92	243.14	243.08	243.14	243.11	242.54	242.12	241.90	241.86	242.47
1960	242.23	241.95	241.85	242.78	243.40	243.17	242.68	242.33	241.79	241.42	241.15	240.74	242.12
1961	240.26	239.89	240.86	242.21	242.62	242.87	242.64	242.10	241.58	241.26	240.95	240.89	241.51

Basis of Comparison, IJC Phase II Levels Reference Study
Iroquois, Monthly Mean Levels, IGLD 1955, Without Deviations

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	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	240.59	240.52	240.91	242.53	243.21	243.34	243.14	242.94	242.39	242.22	242.02	241.85	242.14
1963	241.26	240.76	240.70	242.43	243.51	243.68	243.50	243.21	242.61	242.16	241.83	241.22	242.24
1964	240.56	240.26	240.28	241.60	242.52	242.84	242.73	242.33	241.77	241.21	240.40	239.31	241.32
1965	238.72	238.51	238.87	240.05	241.11	241.37	241.38	241.03	240.65	240.41	240.41	240.42	240.24
1966	240.48	240.50	241.02	241.56	242.44	242.73	242.57	242.17	241.70	241.33	241.17	241.34	241.58
1967	241.39	241.61	241.68	242.86	243.74	244.21	244.21	243.68	243.02	242.17	241.47	241.60	242.64
1968	242.54	241.93	241.76	242.22	242.67	243.24	243.20	242.61	241.82	241.18	240.84	240.66	242.06
1969	241.79	241.24	240.96	241.73	242.41	242.57	242.10	241.49	240.91	240.69	240.72	240.84	241.45
1970	241.35	241.11	241.24	242.03	242.58	242.86	242.81	242.25	241.60	241.06	240.53	240.69	241.68
1971	241.84	241.05	241.28	241.84	242.26	242.34	242.38	242.05	241.51	240.89	240.40	240.62	241.54
1972	241.51	240.93	241.03	241.78	242.45	242.45	242.74	242.09	241.11	240.34	240.14	241.48	241.50
1973	243.80	244.01	244.30	245.24	245.76	246.17	246.01	245.36	244.31	243.33	242.34	242.97	244.47
1974	245.13	245.29	245.49	245.85	246.62	247.09	247.07	246.52	245.46	244.24	243.09	243.61	245.46
1975	245.40	245.20	245.35	245.69	245.92	245.94	245.35	244.29	243.34	242.70	241.80	242.48	244.46
1976	244.16	243.87	244.98	245.80	246.67	247.20	247.44	247.15	246.24	245.42	244.32	244.10	245.61
1977	244.94	243.73	243.77	244.50	244.43	243.71	243.54	242.98	242.08	241.44	241.06	242.38	243.21
1978	244.60	244.50	243.83	244.52	244.84	244.54	243.50	242.59	241.74	241.15	240.67	240.65	243.09
1979	241.77	241.32	241.52	242.37	242.59	242.51	242.38	242.00	241.40	240.58	239.94	241.00	241.62
1980	242.68	241.76	241.42	242.28	242.56	242.37	242.28	241.83	240.95	240.32	240.06	240.82	241.61
1981	241.63	241.02	241.38	241.52	242.22	242.70	242.68	242.15	241.20	240.42	240.26	240.78	241.50
1982	242.29	241.38	241.32	241.82	242.14	242.31	242.04	241.68	241.12	240.65	240.27	240.97	241.50
1983	242.52	241.90	241.51	241.86	242.57	242.57	242.12	241.82	241.21	240.69	240.17	241.32	241.69
1984	242.87	242.40	242.60	243.18	243.78	244.06	243.72	242.89	241.80	240.89	240.30	240.98	242.46
1985	242.71	242.04	242.57	243.04	243.08	242.94	242.60	241.94	241.19	240.46	240.54	241.83	242.08
1986	243.81	244.04	244.36	245.04	245.43	245.95	246.27	246.30	246.10	246.59	246.55	247.48	245.66
1987	249.48	249.68	249.78	250.40	250.45	250.20	249.85	248.87	247.83	246.81	245.58	245.94	248.74
1988	247.03	246.63	246.19	246.62	246.50	245.43	244.56	243.73	242.83	242.21	241.61	241.38	244.56
1989	241.77	241.40	241.48	242.24	243.00	243.19	242.67	241.97	241.44	241.12	240.68	240.78	241.81
=====w=s=====													
Average	241.88	241.65	241.83	242.64	243.17	243.38	243.23	242.72	242.07	241.56	241.19	241.29	242.22
Std.Dev	1.45	1.46	1.41	1.34	1.26	1.22	1.23	1.23	1.20	1.16	1.06	1.08	1.15
Maximum	249.48	249.68	249.78	250.40	250.45	250.20	249.85	248.87	247.83	246.81	246.55	247.48	248.74
Minimum	238.72	238.51	238.87	240.05	241.11	241.37	241.38	241.03	240.65	240.32	239.94	239.31	240.24

Basis of Comparison, IJC Phase II Levels Reference Study
 Morrisburg, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	241.68	241.74	241.49	242.12	242.38	242.68	242.66	242.44	241.43	240.90	240.69	240.28	241.71
1901	240.89	240.65	240.97	241.83	242.09	242.15	241.79	241.61	240.96	240.57	240.44	240.59	241.21
1902	240.96	240.95	241.36	241.71	242.40	243.24	243.41	241.86	240.72	240.08	239.96	240.52	241.43
1903	240.78	240.68	241.00	241.73	241.44	241.88	242.22	241.66	240.61	240.08	239.95	240.30	241.03
1904	239.97	240.44	240.90	241.68	242.16	242.40	242.06	240.78	239.96	239.56	239.55	240.30	240.81
1905	240.29	240.09	240.46	241.82	242.16	242.28	241.82	241.04	239.99	239.54	239.71	240.40	240.80
1906	241.00	240.34	240.36	241.29	242.18	242.79	242.50	241.68	240.89	240.58	239.94	239.66	241.10
1907	241.47	240.45	240.22	240.87	241.78	242.28	242.14	241.41	240.58	239.93	239.33	239.61	240.84
1908	241.38	240.38	240.52	241.15	241.66	241.70	241.26	240.45	240.04	239.77	240.12	240.08	240.71
1909	239.86	240.25	240.68	241.54	241.94	241.94	241.49	240.93	240.57	240.24	240.48	240.46	240.86
1910	240.52	240.80	241.16	241.61	242.06	242.28	242.28	241.84	241.10	240.53	240.26	240.52	241.25
1911	240.42	240.67	241.07	242.47	243.36	243.70	243.77	243.34	242.95	242.57	241.83	241.52	242.31
1912	241.83	241.42	241.44	242.36	242.95	243.40	242.36	241.49	241.00	240.35	239.64	239.78	241.50
1913	241.67	240.98	240.54	241.58	241.74	241.58	241.42	241.14	240.42	240.08	239.76	240.22	240.93
1914	240.76	240.41	240.70	241.49	241.84	241.93	241.76	241.61	240.89	240.26	240.15	240.25	241.00
1915	240.26	240.73	240.75	241.63	242.66	242.63	242.63	242.68	241.20	240.48	239.98	240.54	241.35
1916	240.96	240.48	240.52	241.38	241.92	242.60	242.14	240.52	240.08	240.08	240.26	240.50	240.95
1917	240.64	240.73	240.97	241.48	241.60	242.00	241.87	240.60	239.63	239.28	238.77	239.37	240.58
1918	240.55	240.25	240.30	240.56	241.02	241.64	241.78	241.29	240.66	240.01	239.18	239.81	240.59
1919	240.96	239.99	240.02	240.72	241.56	241.69	241.00	240.27	240.08	239.86	239.73	240.50	240.53
1920	240.42	240.40	240.76	241.75	242.57	243.03	243.36	242.26	241.16	240.40	239.86	240.04	241.33
1921	241.35	240.26	240.38	240.94	241.57	242.02	242.14	241.81	241.48	241.20	240.79	240.46	241.20
1922	240.94	241.10	241.14	241.87	242.17	242.16	241.71	241.18	240.54	240.28	240.35	240.14	241.13
1923	240.08	240.08	240.65	242.15	242.98	243.04	242.69	242.46	242.05	241.69	241.41	241.10	241.70
1924	241.39	241.10	241.23	242.15	242.65	242.61	242.30	241.75	241.16	240.49	240.25	240.24	241.44
1925	239.76	239.84	240.99	241.34	241.85	242.24	242.04	241.71	241.24	240.88	240.82	240.62	241.11
1926	240.38	240.09	240.10	241.86	242.81	243.06	242.93	242.72	242.48	241.20	240.49	240.20	241.53
1927	241.19	240.32	240.46	240.98	241.96	242.92	243.24	242.42	241.80	241.22	240.93	240.92	241.53
1928	242.66	241.73	241.38	241.97	242.26	242.72	242.52	241.74	240.58	240.22	239.85	240.06	241.47
1929	241.19	240.41	240.47	241.48	242.16	242.20	241.85	240.66	240.12	239.68	239.31	239.68	240.77
1930	241.46	241.13	241.30	241.42	241.46	241.71	241.55	240.96	240.34	239.94	240.33	240.35	241.00
1931	240.23	240.18	240.51	242.01	242.88	243.24	243.30	243.00	242.53	242.05	241.81	241.64	241.95

Basis of Comparison, IJC Phase II Levels **Reference** Study
 Morrisburg, Monthly Mean Levels, IGLD 1955, **Without** Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	242.02	241.83	241.74	242.23	242.50	243.03	243.52	243.36	242.90	242.54	242.12	241.90	242.47
1933	242.12	242.12	242.35	243.37	243.38	243.60	243.78	243.36	242.86	242.31	241.92	241.40	242.71
1934	241.28	241.12	241.12	242.53	243.40	243.48	243.37	242.84	242.38	242.08	241.51	240.66	242.15
1935	240.34	240.12	240.24	241.25	241.93	242.48	242.69	242.27	241.69	241.34	241.06	240.26	241.31
1936	239.67	239.12	239.86	242.35	242.76	242.75	242.53	241.95	241.46	241.25	241.12	240.36	241.26
1937	240.62	241.25	241.04	242.42	243.05	243.55	242.92	242.31	241.92	241.67	241.30	241.21	241.94
1938	241.10	241.43	241.36	241.80	242.14	243.04	243.10	243.15	242.45	241.12	240.69	240.87	241.85
1939	240.62	240.64	241.40	242.17	242.33	242.42	242.68	242.86	242.35	241.79	241.34	240.92	241.79
1940	240.43	240.05	240.10	241.94	242.70	242.55	242.32	241.71	241.61	241.22	240.99	241.05	241.39
1941	241.29	241.02	241.22	242.75	243.42	243.33	243.22	242.84	242.34	242.05	241.90	241.42	242.23
1942	241.19	241.18	241.79	242.36	242.62	242.60	242.51	242.00	241.31	240.74	240.30	240.24	241.57
1943	241.28	240.61	240.62	241.30	242.16	242.78	242.24	241.10	240.03	239.82	239.39	239.67	240.92
1944	240.54	240.34	240.55	241.47	242.06	242.15	241.73	241.25	240.79	240.39	240.38	240.47	241.01
1945	240.49	240.58	241.32	241.54	241.92	241.96	241.50	240.70	240.30	239.52	238.78	239.11	240.64
1946	241.31	240.25	240.31	240.13	241.24	242.06	242.04	241.57	240.92	240.51	239.90	240.50	240.90
1947	240.88	240.40	240.46	241.31	241.88	242.74	242.54	241.63	240.26	239.74	239.38	240.10	240.94
1948	240.77	240.37	240.73	241.17	241.34	241.38	241.40	241.07	240.57	240.28	240.42	240.58	240.84
1949	240.88	240.82	240.88	241.41	242.00	242.72	242.75	242.22	241.70	241.28	240.89	240.66	241.52
1950	241.32	241.26	241.28	241.92	241.79	242.05	242.09	241.82	241.05	240.57	240.06	239.92	241.26
1951	241.42	240.57	240.81	241.84	242.10	241.39	241.32	240.90	240.25	239.85	239.58	239.72	240.81
1952	241.44	241.12	240.92	241.60	241.82	241.75	241.23	240.81	240.12	239.64	239.90	239.97	240.86
1953	240.84	240.30	240.48	240.96	241.75	241.72	241.60	241.03	240.54	240.11	240.29	240.52	240.85
1954	240.79	240.84	240.92	241.59	241.96	241.60	241.42	241.29	240.76	240.30	239.30	239.57	240.86
1955	241.71	240.49	240.67	241.37	241.29	241.42	241.63	241.22	240.56	240.34	239.08	239.57	240.78
1956	240.63	240.37	240.28	240.92	241.54	241.51	241.03	240.76	240.31	239.86	240.09	240.55	240.65
1957	240.66	240.63	240.81	241.51	242.48	243.12	242.72	241.82	241.24	240.88	240.82	240.77	241.46
1958	241.10	241.19	241.69	243.00	243.72	243.86	243.83	243.66	243.30	241.98	241.40	241.42	242.51
1959	241.19	241.48	241.65	242.30	242.45	242.40	242.54	242.64	242.02	241.59	241.37	241.28	241.91
1960	241.70	241.28	241.16	242.11	242.66	242.30	241.81	241.54	241.05	240.76	240.54	240.14	241.42
1961	239.66	239.27	240.34	241.82	242.02	242.20	241.89	241.33	240.81	240.60	240.33	240.31	240.88

Basis of Comparison, IJC Phase II Levels Reference Study
Morrisburg, Monthly Mean Levels IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	240.01	239.96	240.38	242.18	242.82	242.91	242.70	242.45	241.86	241.70	241.53	241.34	241.65
1963	240.72	240.21	240.16	242.08	243.19	243.31	243.10	242.77	242.14	241.72	241.40	240.69	241.79
1964	239.98	239.66	239.71	241.21	242.18	242.47	242.33	241.90	241.30	240.77	239.87	238.62	240.83
1965	237.97	237.77	238.19	239.57	240.69	240.94	240.91	240.51	240.08	239.86	239.87	239.82	239.68
1966	239.88	239.92	240.44	241.02	242.03	242.28	242.08	241.66	241.14	240.80	240.67	240.81	241.06
1967													
1968	242.03	241.20	241.02	241.44	242.03	242.66	242.56	241.87	240.96	240.32	240.00	239.74	241.32
1969	241.24	240.41	240.14	240.92	241.58	241.65	241.07	240.42	239.92	239.83	239.93	240.10	240.60
1970													
1971	241.28	240.24	240.41	240.94	241.31	241.45	241.59	241.27	240.62	239.96	239.47	239.80	240.69
1972	240.93	240.12	240.20	240.92	241.50	241.43	241.72	240.94	239.88	239.09	238.91	240.60	240.52
1973													
1974	244.77	244.74	244.86	245.10	245.92	246.42	246.40	245.80	244.65	243.32	242.06	242.84	244.74
1975	245.05	244.66	244.71	244.94	245.16	245.18	244.54	243.38	242.33	241.62	240.62	241.66	243.65
1976													
1977	244.57	243.10	243.08	243.81	243.66	242.86	242.74	242.12	241.06	240.24	239.84	241.56	242.39
1978	244.21	243.90	243.07	243.68	243.99	243.67	242.52	241.57	240.71	240.16	239.72	239.83	242.25
1979													
1980	242.18	240.96	240.54	241.33	241.55	241.34	241.28	240.77	239.79	239.18	238.96	239.97	240.65
1981	241.06	240.22	249.48	240.66	241.48	242.01	241.93	241.24	240.05	239.17	239.00	239.80	240.59
1982													
1983	242.01	241.11	240.59	240.94	241.60	241.56	241.13	240.85	240.21	239.68	239.10	240.53	240.78
1984	242.39	241.64	241.72	242.24	242.82	243.12	242.76	241.84	240.64	239.69	239.13	240.13	241.51
1985													
1986	243.38	243.42	243.64	244.21	244.63	245.19	245.54	245.57	245.35	245.89	245.84	246.97	244.97
1987	249.28	249.36	249.40	249.96	249.99	249.73	249.36	248.32	247.22	246.12	244.79	245.36	248.24
1988													243.90
1989	241.21	240.76	240.89	241.63	242.41	242.45	241.78	241.06	240.55	240.30	239.77	240.00	241.07
Average	241.36	241.01	241.16	241.98	242.49	242.69	242.51	241.95	241.27	240.75	240.39	240.60	241.51
Std.Dev	1.52	1.50	1.43	1.37	1.32	1.29	1.32	1.34	1.32	1.27	1.17	1.13	1.19
Maximum	249.28	249.36	249.40	249.96	249.99	249.73	249.36	248.32	247.22	246.12	245.84	246.97	248.24
Minimum	237.97	237.77	238.19	239.57	240.69	240.94	240.91	240.27	239.63	239.09	238.72	238.62	239.68

Basis of Comparison, IJC Phase II Levels Reference Study
 Long Sault Dam, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	241.28	241.34	240.98	241.59	241.82	242.18	242.17	241.94	240.84	240.32	240.15	239.64	241.19
1901	240.44	240.19	240.58	241.32	241.50	241.52	241.14	241.01	240.32	239.98	239.92	240.10	240.67
1902	240.52	240.54	240.90	241.20	241.98	242.90	242.95	241.11	239.90	239.30	239.26	240.01	240.88
1903	240.34	240.18	240.38	241.06	240.72	241.29	241.66	241.01	239.84	239.33	239.29	239.80	240.41
1904	239.48	240.00	240.42	241.04	241.46	241.69	241.29	239.84	239.00	238.66	238.81	239.82	240.13
1905	239.82	239.63	240.02	241.42	241.68	241.71	241.10	240.21	239.08	238.69	239.01	239.86	240.19
1906	240.52	239.71	239.76	240.79	241.76	242.38	241.98	241.04	240.23	239.93	239.20	238.93	240.52
1907	241.02	239.77	239.52	240.21	241.21	241.74	241.55	240.70	239.83	239.12	238.47	238.87	240.17
1908	240.94	239.70	239.80	240.38	240.85	240.87	240.39	239.52	239.23	239.03	239.56	239.59	239.99
1909	239.36	239.79	240.21	241.07	241.30	241.25	240.75	240.16	239.86	239.60	239.96	239.97	240.27
1910	240.06	240.38	240.69	241.10	241.50	241.74	241.77	241.27	240.46	239.87	239.67	240.04	240.71
1911	239.95	240.24	240.67	242.19	243.09	243.39	243.44	242.98	242.56	242.16	241.35	241.02	241.92
1912	241.40	240.94	240.97	241.87	242.40	242.82	241.64	240.73	240.26	239.58	238.80	239.05	240.87
1913	241.24	240.32	239.82	240.84	240.97	240.76	240.64	240.41	239.67	239.37	239.05	239.65	240.23
1914	240.32	239.87	240.21	240.94	241.22	241.30	241.14	241.02	240.21	239.57	239.56	239.76	240.43
1915	239.78	240.28	240.22	241.24	242.36	242.27	242.24	242.23	240.50	239.75	239.31	240.05	240.85
1916	240.50	239.88	239.93	240.77	241.25	241.90	241.32	239.55	239.24	239.39	239.70	240.02	240.29
1917	240.19	240.28	240.48	240.86	240.95	241.34	241.10	239.64	238.63	238.34	237.78	238.59	239.85
1918	240.06	239.69	239.60	239.77	240.30	241.03	241.18	240.65	239.94	239.24	238.30	239.13	239.91
1919	240.48	239.32	239.34	240.07	240.87	240.90	240.12	239.38	239.28	239.12	239.03	240.01	239.83
1920	239.95	239.95	240.34	241.34	242.20	242.67	242.98	241.68	240.44	239.66	239.11	239.35	240.81
1921	240.90	239.61	239.70	240.26	240.94	241.47	241.64	241.30	240.99	240.71	240.26	239.90	240.64
1922	240.51	240.69	240.64	241.32	241.55	241.52	240.96	240.44	239.80	239.62	239.82	239.66	240.54
1923	239.60	239.62	240.24	241.84	242.68	242.60	242.20	242.00	241.58	241.24	240.96	240.60	241.26
1924	240.94	240.60	240.77	241.73	242.16	242.06	241.72	241.11	240.53	239.81	239.67	239.75	240.90
1925	239.27	239.36	240.56	240.85	241.41	241.86	241.64	241.28	240.78	240.42	240.36	240.11	240.66
1926	239.92	239.63	239.65	241.57	242.50	242.73	242.57	242.34	242.06	240.57	239.75	239.45	241.06
1927	240.72	239.72	239.86	240.40	241.54	242.57	242.89	241.93	241.29	240.66	240.38	240.28	241.02
1928	242.28	241.14	240.74	241.36	241.65	242.19	241.93	241.02	239.78	239.50	239.11	239.40	240.84
1929	240.73	239.74	239.76	240.75	241.38	241.39	241.02	239.70	239.21	238.82	238.47	238.98	240.00
1930	241.01	240.47	240.54	240.60	240.62	240.94	240.76	240.20	239.58	239.24	239.81	239.87	240.30
1931	239.76	239.72	240.08	241.72	242.60	242.88	242.94	242.62	242.13	241.62	241.40	241.25	241.56

Basis of Comparison, IJC Phase II Levels Reference Study
 Long Sault Dam, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	241.64	241.32	241.20	241.68	241.95	242.59	243.17	242.99	242.52	242.16	241.69	241.48	242.03
1933	241.75	241.76	242.02	243.04	242.94	243.19	243.45	243.00	242.48	241.94	241.57	240.99	242.34
1934	240.87	240.71	240.73	242.27	243.16	243.22	243.09	242.52	242.05	241.76	241.16	240.21	241.81
1935	239.88	239.66	239.80	240.93	241.64	242.19	242.36	241.91	241.30	240.98	240.70	239.79	240.93
1936	239.17	238.60	239.40	242.04	242.40	242.39	242.16	241.56	241.04	240.85	240.73	239.90	240.85
1937	240.18	240.82	240.55	242.11	242.68	243.18	242.41	241.76	241.42	241.24	240.82	240.77	241.50
1938	240.68	241.00	240.85	241.26	241.63	242.68	242.73	242.78	241.98	240.48	240.12	240.42	241.38
1939	240.17	240.21	241.02	241.73	241.80	241.92	242.25	242.49	241.94	241.35	240.91	240.48	241.36
1940	239.97	239.58	239.65	241.65	242.32	242.06	241.78	241.13	241.12	240.74	240.52	240.60	240.93
1941	240.83	240.51	240.78	242.48	243.16	243.03	242.90	242.47	241.94	241.68	241.54	241.02	241.86
1942	240.78	240.77	241.40	241.88	242.11	242.03	241.98	241.42	240.70	240.13	239.66	239.64	241.04
1943	240.83	239.98	239.94	240.64	241.48	242.03	241.42	240.17	239.05	238.98	238.52	238.98	240.17
1944	240.08	239.85	240.06	241.00	241.52	241.56	241.05	240.58	240.14	239.78	239.87	240.00	240.46
1945	240.03	240.14	240.88	240.93	241.26	241.22	240.71	239.84	239.49	238.53	237.74	238.21	239.91
1946	240.85	239.56	239.61	239.39	240.72	241.60	241.53	241.01	240.31	239.89	239.21	240.00	240.31
1947	240.42	239.77	239.86	240.67	241.17	241.99	241.76	240.74	239.26	238.84	238.57	239.52	240.21
1948	240.32	239.86	240.18	240.49	240.60	240.62	240.68	240.38	239.90	239.65	239.87	240.09	240.22
1949	240.44	240.30	240.30	240.85	241.50	242.34	242.37	241.80	241.26	240.81	240.44	240.21	241.05
1950	240.90	240.74	240.73	241.27	241.08	241.42	241.50	241.24	240.40	239.92	239.37	239.20	240.65
1951	240.98	239.89	240.06	241.10	241.31	240.48	240.45	240.09	239.43	239.08	238.83	239.00	240.06
1952	241.00	240.46	240.15	240.80	240.99	240.88	240.34	239.97	239.27	238.83	239.25	239.32	240.10
1953	240.35	239.66	239.85	240.28	241.12	241.00	240.92	240.30	239.81	239.42	239.73	240.02	240.21
1954	240.35	240.36	240.29	240.94	241.22	240.80	240.68	240.64	240.08	239.58	238.40	238.78	240.18
1955	241.28	239.81	239.93	240.59	240.45	240.66	240.98	240.56	239.86	239.65	238.14	238.86	240.06
1956	240.18	239.87	239.68	240.29	240.82	240.72	240.22	239.99	239.53	239.12	239.51	240.08	240.00
1957	240.21	240.13	240.29	241.04	242.09	242.74	242.20	241.21	240.63	240.33	240.34	240.32	240.96
1958	240.68	240.79	241.32	242.73	243.45	243.54	243.50	243.32	242.92	241.44	240.87	240.99	242.13
1959	240.78	241.08	241.22	241.78	241.88	241.84	242.05	242.24	241.60	241.15	240.94	240.79	241.45
1960	241.26	240.74	240.59	241.56	242.04	241.59	241.09	240.88	240.44	240.22	240.03	239.66	240.84
1961	239.15	238.75	239.90	241.49	241.52	241.65	241.27	240.70	240.18	240.05	239.82	239.83	240.36

Basis of Comparison, IJC Phase II Levels Reference Study
 Long Sault Dam, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	239.52	239.48	239.95	241.90	242.52	242.57	242.32	242.06	241.43	241.28	241.12	240.91	241.25
1963	240.28	239.75	239.72	241.80	242.93	243.00	242.76	242.41	241.75	241.36	241.05	240.24	241.42
1964	239.49	239.18	239.24	240.89	241.90	242.16	242.01	241.54	240.92	240.40	239.44	238.05	240.43
1965	237.36	237.16	237.62	239.17	240.35	240.59	240.52	240.08	239.61	239.41	239.43	239.32	239.22
1966	239.39	239.45	239.96	240.56	241.70	241.93	241.69	241.23	240.68	240.36	240.25	240.37	240.63
1967	240.43	240.70	240.82	242.18	243.09	243.52	243.38	242.67	241.93	240.80	239.77	240.14	241.62
1968	241.62	240.60	240.40	240.80	241.50	242.18	242.03	241.26	240.25	239.60	239.29	238.96	240.71
1969	240.78	239.72	239.44	240.24	240.90	240.89	240.22	239.52	239.08	239.11	239.27	239.49	239.89
1970	240.34	239.86	240.00	240.80	241.30	241.64	241.48	240.76	240.06	239.40	238.72	239.02	240.28
1971	240.83	239.56	239.69	240.20	240.52	240.71	240.94	240.62	239.89	239.19	238.69	239.12	240.00
1972	240.45	239.45	239.51	240.20	240.70	240.58	240.86	239.99	238.87	238.04	237.88	239.86	239.70
1973	243.02	242.86	242.98	243.76	244.35	244.82	244.64	243.88	242.65	241.48	240.30	241.47	243.02
1974	244.48	244.30	244.34	244.48	245.34	245.88	245.86	245.22	243.99	242.57	241.20	242.20	244.15
1975	244.77	244.20	244.19	244.34	244.54	244.56	243.88	242.63	241.50	240.73	239.65	240.99	243.00
1976	243.42	242.70	243.77	244.42	245.40	246.00	246.27	245.95	244.91	243.96	242.66	242.83	244.36
1977	244.27	242.58	242.51	243.24	243.02	242.16	242.07	241.40	240.20	239.24	238.83	240.88	241.70
1978	243.89	243.41	242.44	243.00	243.28	242.96	241.70	240.72	239.84	239.34	238.92	239.14	241.55
1979	240.75	239.89	239.94	240.67	240.80	240.71	240.72	240.34	239.50	238.43	237.70	239.46	239.91
1980	241.78	240.30	239.81	240.54	240.71	240.48	240.45	239.89	238.83	238.24	238.04	239.26	239.86
1981	240.59	239.56	239.73	239.94	240.87	241.44	241.31	240.49	239.10	238.12	237.95	238.98	239.84
1982	241.33	239.86	239.74	239.96	240.29	240.45	240.15	239.94	239.33	238.84	238.39	239.48	239.81
1983	241.60	240.46	239.83	240.17	240.80	240.73	240.31	240.05	239.38	238.83	238.21	239.88	240.02
1984	241.99	241.01	241.00	241.47	242.03	242.36	241.96	240.96	239.66	238.69	238.16	239.43	240.73
1985	241.81	240.62	240.96	241.25	241.24	241.07	240.67	239.96	239.03	238.20	238.30	240.18	240.27
1986	243.03	242.90	243.05	243.54	243.97	244.56	244.94	244.98	244.74	245.31	245.26	246.56	244.40
1987	249.11	249.10	249.10	249.60	249.62	249.35	248.97	247.88	246.72	245.56	244.14	244.89	247.84
1988	246.52	245.80	245.19	245.65	245.45	244.01	243.14	242.28	241.37	240.79	240.06	239.97	243.35
1989	240.75	240.23	240.40	241.13	241.92	241.84	241.04	240.30	239.82	239.61	239.00	239.35	240.45
Average	240.92	240.49	240.61	241.43	241.93	242.11	241.91	241.32	240.60	240.09	239.73	240.02	240.93
Std.Dev	1.58	1.54	1.47	1.42	1.38	1.37	1.42	1.45	1.44	1.38	1.29	1.18	1.25
Maximum	249.11	249.10	249.10	249.60	249.62	249.35	248.97	247.88	246.72	245.56	245.26	246.56	247.84
Minimum	237.36	237.16	237.62	239.17	240.29	240.45	240.12	239.38	238.63	238.04	237.70	238.05	239.22

Basis of Comparison, IJC Phase II Levels Reference Study
 Pointe Claire, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1981	67.95	69.78	70.57	71.13	69.88	69.69	69.26	69.62	70.51	70.54	70.70	69.42	69.92
1982	67.85	68.96	69.39	71.39	70.87	70.28	70.01	69.32	69.19	69.32	69.59	69.13	69.61
1983	68.50	69.62	70.28	70.80	72.51	71.29	69.88	69.55	69.32	69.26	69.65	68.93	69.97
1984	67.98	69.59	70.31	72.28	71.72	71.29	70.87	70.64	70.57	70.24	70.21	69.42	70.43
1985	68.41	69.46	70.70	71.92	72.01	70.64	70.44	70.41	70.24	70.05	70.21	69.59	70.34
1986	67.95	69.29	70.11	71.98	71.49	71.16	70.70	70.80	70.80	70.93	71.03	69.98	70.52
1987	68.01	69.23	70.24	71.78	70.54	70.57	70.41	70.31	70.28	70.54	70.67	69.72	70.19
1988	68.04	69.36	69.72	71.13	70.80	70.37	69.82	69.69	69.42	69.59	70.41	69.26	69.80
1989	68.14	68.37	68.11	69.55	69.59	70.14	69.75	69.39	68.93	68.60	69.52	68.70	69.07
Average	67.93	69.66	69.23	70.75	70.57								
Std.Dev	0.34	0.83				69.89	69.55	69.31	69.25	69.24	69.34	68.83	69.38
Maximum	68.50	69.78	1.19	1.62	1.70	1.37	1.21	1.12	1.06	1.14	1.27	0.80	1.02
Minimum	67.26	67.09	71.52	73.43	73.72	72.34	71.13	71.10	70.80	70.93	71.03	69.98	70.84
			67.09	67.13	67.16	66.77	66.73	66.83	66.86	66.57	66.67	67.19	67.10

Basis of comparison, IJC Phase II Levels Reference Study
 Montreal Harbour, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1950	18.70	18.93	19.19	23.16	22.83	21.19	19.88	19.26	19.49	19.13	19.78	20.34	20.16
1951	19.00	20.05	21.52	28.05	24.64	22.01	21.98	20.60	20.31	20.34	21.78	21.19	21.79
1952	19.55	20.70	21.46	25.69	25.00	23.59	21.88	21.33	20.54	20.21	19.16	19.88	21.58
1953	19.09	20.14	21.75	24.61	22.15	20.73	20.01	19.78	19.36	18.93	18.08	18.04	20.22
1954	17.59	18.24	20.70	24.80	23.59	22.97	21.16	19.78	20.08	21.88	22.34	21.23	21.20
1955	19.52	20.18	21.42	26.44	23.16	20.93	19.59	19.23	19.09	19.42	21.49	19.78	20.85
1956	18.01	18.08	18.80	22.51	23.69	22.57	21.26	20.57	21.00	20.67	19.13	18.47	20.40
1957	18.34	18.70	19.55	20.08	19.59	18.96	21.85	19.78	19.62	19.29	19.69	19.98	19.62
1958	19.26	18.77	18.86	21.46	18.96	18.86	18.80	18.37	18.96	20.14	20.05	18.86	19.28
1959	18.31	18.14	18.54	23.06	21.98	20.24	19.06	18.08	18.27	18.64	19.69	20.01	19.50
1960	19.23	20.11	19.98	25.43	25.85	21.98	21.92	20.34	19.16	18.57	18.73	18.18	20.79
1961	17.78	17.81	18.21	20.05	21.06	20.18	20.47	19.95	19.85	18.86	18.24	18.18	19.22
1962	18.04	17.98	17.88	20.70	20.18	18.44	17.98	17.98	17.68	17.91	18.27	18.01	18.42
1963	17.45	17.22	17.42	21.10	19.52	18.18	17.42	17.52	17.88	17.45	18.04	18.31	18.13
1964	18.14	17.95	18.67	19.78	18.70	17.95	17.32	16.96	16.93	16.67	16.93	17.65	17.80
1965	17.78	17.72	17.78	18.44	19.23	17.39	16.93	17.45	18.27	20.01	19.29	19.06	18.28
1966	19.00	18.60	20.31	21.33	19.75	19.13	18.01	18.24	18.01	17.98	18.50	20.57	19.12
1967	18.96	18.83	18.14	22.01	21.49	20.51	19.75	19.09	19.00	20.70	22.57	20.83	20.16
1968	19.16	20.05	20.90	23.52	20.21	19.49	19.85	19.52	19.69	19.36	19.46	20.01	20.10
1969	18.54	19.98	19.98	23.82	24.25	22.01	21.33	21.00	19.98	19.26	20.24	19.75	20.84
1970	18.37	18.93	19.19	22.47	23.49	20.87	20.73	20.31	19.69	19.98	20.47	20.01	20.38
1971	18.41	19.46	20.28	24.02	25.16	20.96	19.55	19.26	19.55	19.46	19.19	19.13	20.37
1972	18.24	19.06	19.52	23.16	26.64	23.16	22.97	22.70	21.95	21.88	22.54	20.90	21.89
1973	19.55	21.16	24.18	25.82	25.26	23.49	22.60	21.88	21.62	21.98	22.08	21.26	22.57
1974	19.26	20.47	22.24	25.69	28.58	25.26	22.70	21.56	21.23	21.42	22.31	21.46	22.68
1975	19.19	20.28	21.65	24.25	24.54	22.64	21.16	20.83	20.93	21.26	21.72	20.70	21.60
1976	18.64	20.47	22.60	27.85	25.46	22.51	22.18	21.82	21.52	21.85	21.82	20.37	22.26
1977	18.37	19.46	22.24	24.70	22.51	20.83	20.31	20.18	20.64	22.21	22.05	20.83	21.19
1978	19.49	20.67	20.96	24.80	24.67	22.01	21.23	20.73	20.21	20.51	19.95	19.39	21.22
1979	18.60	19.49	22.18	25.26	25.56	22.28	20.73	20.18	20.87	21.78	22.15	21.36	21.70

Basis of Comparison, IJC Phase II Levels Reference Study
 Montreal Harbour, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1980	19.69	20.24	20.96	24.11	22.93	21.29	20.96	21.13	21.10	21.75	21.69	20.44	21.36
1981	18.60	21.69	22.67	24.28	22.21	21.65	20.24	20.47	21.62	21.82	22.34	20.54	21.51
1982	18.44	19.65	20.37	24.21	22.93	21.26	20.70	19.75	19.65	19.88	20.64	20.57	20.67
1983	19.78	20.87	21.98	23.46	26.64	23.56	20.67	20.11	19.75	19.82	20.96	20.44	21.50
1984	18.83	20.87	21.78	25.79	24.11	23.13	22.28	21.59	21.36	20.90	21.39	20.67	21.89
1985	19.46	20.54	22.51	24.77	24.61	21.75	21.39	21.39	20.90	20.87	21.26	20.54	21.67
1986	18.70	20.18	21.36	24.97	23.59	22.60	21.65	21.85	22.05	22.31	22.41	21.19	21.91
1987	18.80	19.98	21.49	24.38	21.52	21.69	21.16	20.83	20.87	21.29	21.82	21.19	21.25
1988	18.93	20.34	20.67	24.02	22.77	21.19	20.37	20.51	20.14	20.96	22.90	20.57	21.11
1989	19.13	19.36	19.16	21.98	22.01	21.85	20.47	19.85	19.36	19.16	21.10	19.78	20.27
=====													
Average	18.75	19.53	20.48	23.65	23.03	21.28	20.51	20.04	19.95	20.16	20.56	19.99	20.66
Std.Dev	0.60	1.09	1.62	2.15	2.36	1.74	1.50	1.34	1.24	1.42	1.59	1.08	1.23
Maximum	19.78	21.69	24.18	28.05	28.58	25.26	22.97	22.70	22.05	22.31	22.90	21.46	22.68
Minimum	17.45	17.22	17.42	18.44	18.70	17.39	16.93	16.96	16.93	16.67	16.93	17.65	17.80

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake St. Pierre, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1950	12.27	12.11	12.30	16.31	15.65	14.14	12.83	12.24	12.37	12.17	12.89	13.48	13.23
1951	12.30	12.96	14.21	20.67	17.13	14.40	14.30	13.19	12.93	13.06	14.50	14.11	14.48
1952	12.83	13.45	14.01	18.50	17.62	16.14	14.34	13.85	13.16	13.02	12.27	12.99	14.35
1953	12.43	13.25	14.96	17.78	15.35	13.52	12.80	12.50	12.17	11.84	11.42	11.42	13.29
1954	11.02	11.58	13.78	17.95	16.67	15.85	13.85	12.63	13.06	14.99	15.12	14.11	14.22
1955	12.83	13.12	14.30	19.19	16.11	13.68	12.47	12.14	12.01	12.27	14.01	12.63	13.73
1956	11.42	11.38	11.91	15.68	16.67	15.16	13.81	13.22	13.58	13.39	12.27	11.81	13.36
1957	11.75	11.98	12.89	13.68	13.09	12.34	14.73	12.63	12.53	12.34	13.09	13.62	12.89
1958	12.83	12.27	12.40	15.88	13.19	12.66	12.43	11.94	12.43	13.35	13.29	12.24	12.91
1959	11.78	11.75	12.07	16.60	15.06	13.32	12.27	11.58	11.71	12.14	13.32	13.55	12.93
1960	12.60	13.29	13.12	18.73	18.54	14.57	14.34	13.12	12.17	11.78	12.07	11.52	13.82
1961	11.19	11.15	11.91	14.34	14.83	13.42	13.42	12.93	12.86	12.07	11.61	11.68	12.62
1962	11.45	11.45	11.48	15.12	14.40	12.07	11.48	11.52	11.09	11.55	12.11	11.55	12.11
1963	10.89	10.76	11.06	15.58	13.91	11.84	10.93	11.09	11.48	11.12	12.17	11.98	11.90
1964	11.68	11.55	12.43	14.21	13.02	11.88	11.06	10.56	10.56	10.43	10.73	11.25	11.61
1965	11.32	11.29	11.48	12.47	13.19	11.22	10.60	11.06	11.81	13.75	13.06	12.63	11.99
1966	12.47	12.11	13.88	15.16	13.81	12.76	11.48	11.78	11.42	11.55	12.17	14.01	12.72
1967	12.40	12.24	11.75	15.85	15.22	14.07	13.16	12.30	12.14	13.91	15.26	13.94	13.52
1968	12.53	13.06	14.01	16.90	13.52	12.66	12.76	12.34	12.40	12.17	12.43	12.99	13.15
1969	11.91	12.99	12.99	17.19	17.78	14.73	13.85	13.48	12.83	12.24	13.45	12.99	13.87
1970	11.84	12.24	12.53	16.11	17.16	13.94	13.65	12.99	12.60	12.93	13.35	12.96	13.53
1971	11.71	12.47	13.25	16.90	18.37	13.81	12.43	12.20	12.50	12.40	12.17	12.37	13.38
1972	11.65	12.07	12.57	16.14	19.78	16.01	15.58	15.19	14.30	14.47	15.12	13.88	14.73
1973	12.99	14.21	16.99	18.50	17.95	15.88	15.06	14.37	13.98	14.37	14.37	14.27	15.24
1974	12.93	13.55	15.03	18.47	21.52	17.78	15.12	13.98	13.55	13.71	14.73	14.37	15.40
1975	12.66	13.16	14.44	16.83	17.29	15.12	13.42	13.09	13.29	13.71	14.34	13.85	14.27
1976	12.07	13.52	15.62	20.60	18.27	14.93	14.70	14.57	14.04	14.50	14.40	13.35	15.05
1977	11.84	12.40	15.09	17.85	15.39	13.48	12.93	12.80	13.16	15.03	14.80	13.98	14.06
1978	13.06	13.62	13.65	17.68	17.59	14.63	13.65	13.12	12.70	13.02	12.73	12.40	13.99
1979	12.11	12.60	15.35	18.27	17.95	14.96	13.35	12.80	13.52	14.40	14.70	14.40	14.53

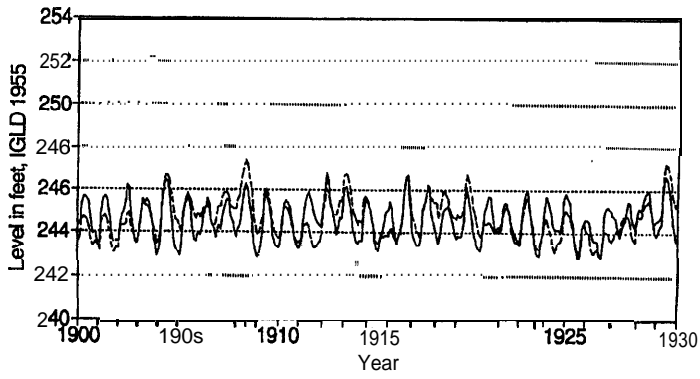
Basis of Comparison, IJC Phase II Levels Reference Study
 Lake St. Pierre, Monthly Mean Levels, IGLD 1955, Without Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1980	13.06	13.12	13.68	16.77	15.35	13.68	13.39	13.58	13.62	14.47	14.40	13.48	14.05
1981	11.91	14.83	15.55	17.39	15.65	14.96	13.16	13.25	14.04	14.40	15.03	13.52	14.47
1982	11.88	12.63	13.35	17.32	15.98	13.81	13.16	12.37	12.34	12.57	13.42	13.68	13.54
1983	13.02	13.75	14.76	16.63	19.95	16.27	13.19	12.66	12.40	12.53	13.98	13.94	14.42
1984	12.30	13.88	14.57	18.54	16.77	15.65	14.76	13.88	13.58	13.19	13.88	13.52	14.54
1985	12.70	13.32	15.12	17.36	17.03	14.17	13.85	13.85	13.22	13.42	13.88	13.29	14.27
1986	12.07	13.06	14.17	17.85	16.21	14.90	14.01	14.21	14.47	14.73	14.76	13.98	14.53
1987	12.17	12.83	14.17	17.03	13.94	14.17	13.52	13.09	13.19	13.65	14.30	14.17	13.85
1988	12.30	13.19	13.32	17.03	15.45	13.55	12.83	13.16	12.86	13.81	16.01	13.62	13.93
1989	12.43	12.57	12.63	15.58	15.68	14.67	13.02	12.50	12.17	12.27	14.27	12.96	13.40
Average	12.16	12.67	12.57	16.92									
Std.Dev	0.58	0.90			16.20	14.17	13.29	12.84	12.76	13.07	13.55	13.16	13.70
Maximum	13.06	14.83	1.36	1.70	2.02	1.39	1.15	0.99	0.88	1.13	1.24	0.92	0.90
Minimum	10.89	10.76	16.99	20.67	21.52	17.78	15.58	15.19	14.47	15.03	16.01	14.40	15.40
			11.06	12.47	13.02	11.22	10.60	10.56	10.56	10.43	10.73	11.25	11.61

**APPENDIX C - Lake Ontario and St. Lawrence River Levels and Flows with Past
Discretionary Actions Tables and Graphs**

Lake Ontario with Discretionary Actions

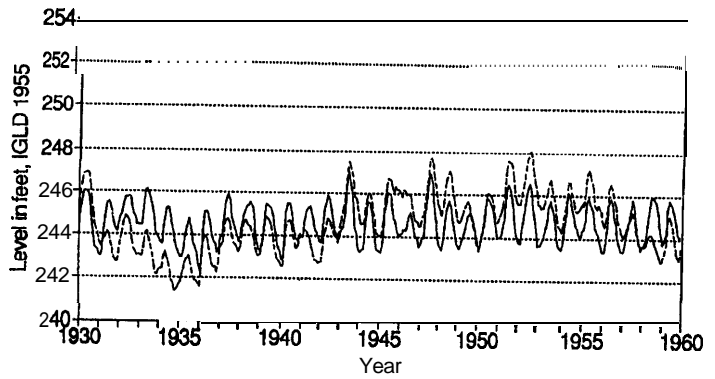
Basis of Comparison, 1900-I 930



— BOC Levels - - - - Master Gage

Lake Ontario with Discretionary Actions

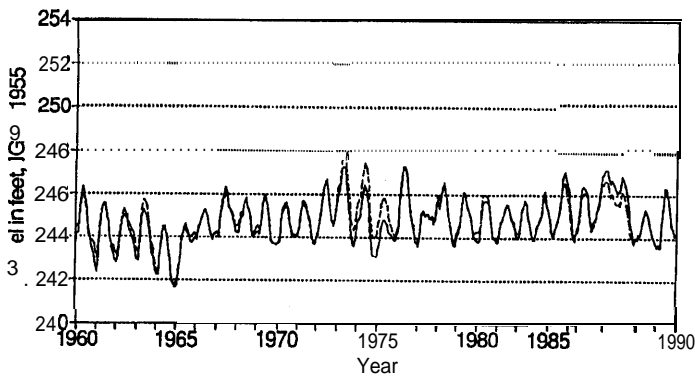
Basis of Comparison, 1930-I 960



— BOC Levels - - - - Master Gage

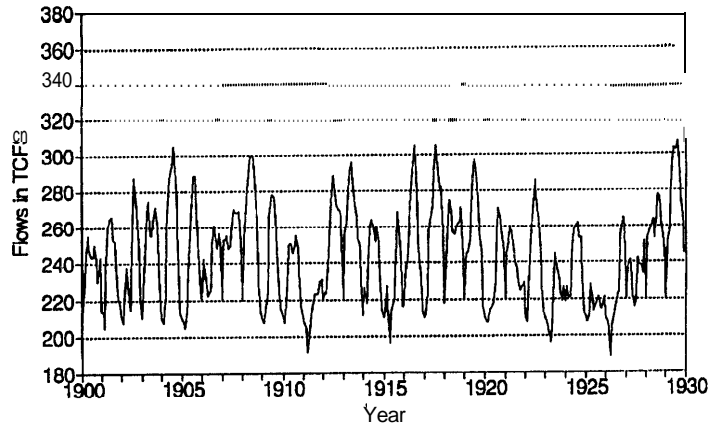
Lake Ontario with Discretionary Actions

Basis of Comparison, 1960-I 990

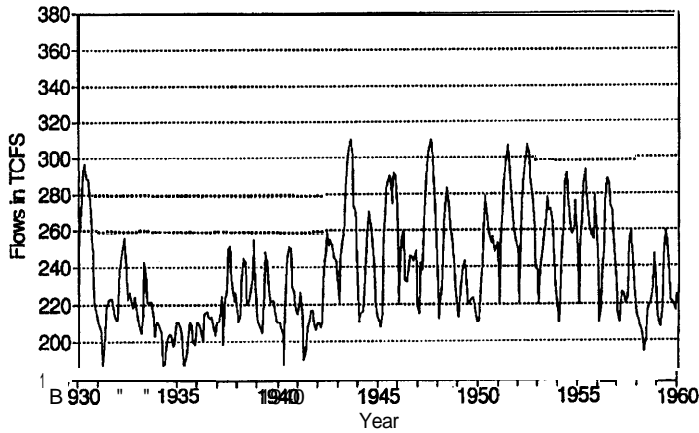


— BOC Levels - - - - Master Gage

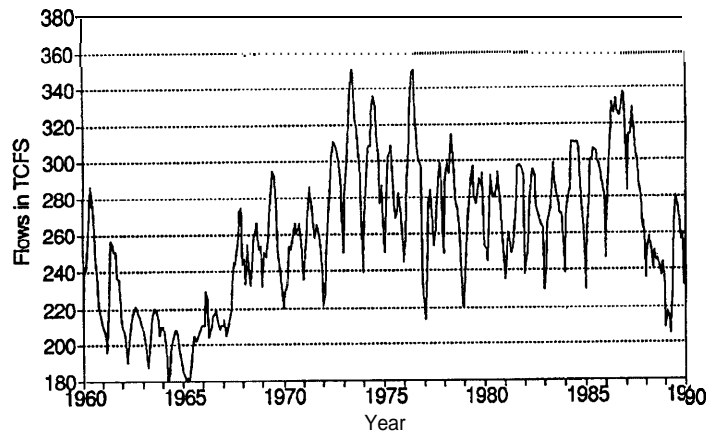
Lake Ontario with Discretionary Actions Basis of Comparison, 1900-1 930



Lake Ontario with Discretionary Actions Basis of Comparison, 1930-1960



Lake Ontario with Discretionary Actions Basis of Comparison, 1960-1 990



Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Ontario Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEE'	OCT	NOV	DEC	AVG
1900	244.15	244.28	244.52	245.26	245.65	245.66	245.60	245.44	244.92	244.35	243.92	243.99	244.81
1901	243.66	243.49	243.50	244.90	245.56	245.74	245.52	245.10	244.64	244.03	243.54	243.54	244.44
1902	243.66	243.55	244.17	244.80	245.00	245.42	246.21	246.09	245.26	244.51	243.94	243.58	244.68
1903	243.50	243.73	244.54	245.56	245.52	245.35	245.54	245.41	244.92	244.32	243.73	243.30	244.62
1904	242.93	243.18	243.85	245.36	246.12	246.46	246.36	245.86	245.15	244.46	243.73	243.22	244.72
1905	243.16	242.94	243.13	244.36	245.07	245.61	245.83	245.60	244.98	244.24	243.68	243.58	244.35
1906	243.89	244.00	243.86	244.30	244.79	245.30	245.63	245.34	244.69	244.29	244.11	243.79	244.50
1907	244.23	244.35	244.18	244.66	245.09	245.46	245.57	245.39	244.82	244.43	244.09	243.77	244.67
1908	244.16	244.28	244.63	245.46	246.12	246.27	246.02	245.50	244.56	243.93	243.44	243.05	244.78
1909	242.86	243.05	243.58	244.39	245.62	245.86	245.62	245.23	244.58	243.93	243.57	243.41	244.31
1910	243.31	243.45	244.08	244.65	245.31	245.50	245.38	245.18	244.80	244.29	243.74	243.45	244.43
1911	243.24	243.35	243.58	244.36	245.24	245.73	245.92	245.66	245.36	245.09	244.71	244.51	244.73
1912	244.48	244.30	244.27	245.30	246.22	246.80	246.43	245.74	245.18	244.71	244.26	243.92	245.13
1913	244.37	244.76	244.64	245.78	246.09	246.11	245.75	245.27	244.66	244.12	243.83	243.59	244.91
1914	243.51	243.65	243.64	244.76	245.44	245.57	245.38	245.06	244.80	244.21	243.63	243.24	244.41
1915	243.13	243.52	243.90	244.10	244.60	244.93	245.08	245.46	245.20	244.62	243.86	243.49	244.32
1916	243.78	243.98	243.98	244.94	245.75	246.56	246.62	245.71	244.72	244.00	243.62	243.42	244.76
1917	243.40	243.48	243.94	245.12	245.38	245.79	246.18	245.78	245.02	244.39	244.13	243.75	244.70
1918	243.53	243.56	244.28	244.98	245.11	245.20	245.27	245.00	244.70	244.33	244.05	243.71	244.48
1919	243.86	243.82	243.89	244.50	245.48	246.11	245.79	245.15	244.54	244.02	243.72	243.45	244.53
1920	243.24	243.16	243.42	244.31	244.92	245.31	245.74	245.70	245.21	244.62	244.08	244.01	244.48
1921	244.14	244.00	244.26	244.81	245.16	245.24	245.17	244.84	244.46	244.14	243.92	243.74	244.49
1922	243.61	243.66	244.15	245.13	245.75	245.88	245.95	245.35	244.70	244.09	243.56	243.10	244.58
1923	243.01	242.94	243.27	244.22	245.00	245.70	245.64	245.28	244.89	244.46	244.16	244.14	244.39
1924	244.13	244.14	244.07	244.75	245.61	245.87	245.71	245.40	244.80	244.39	243.67	243.17	244.64
1925	242.79	242.77	243.66	244.32	244.53	244.64	244.58	244.40	244.09	243.70	243.64	243.65	243.90
1926	243.22	242.94	242.88	243.82	244.88	245.19	245.24	245.14	245.06	244.88	244.67	244.39	244.36
1927	244.02	243.81	244.01	244.39	244.61	245.19	245.48	245.40	244.88	244.48	244.18	244.62	244.59
1928	245.09	245.19	245.04	245.52	245.78	245.84	246.01	245.78	245.02	244.37	244.05	243.91	245.13
1929	244.02	244.29	244.47	245.62	246.54	246.66	246.44	245.85	245.08	244.44	243.97	243.66	245.09
1930	244.22	244.92	245.53	245.94	246.06	246.02	245.91	245.24	244.58	243.94	243.45	243.27	244.92
1931	243.11	243.00	243.16	243.94	244.79	245.49	245.60	245.39	245.06	244.66	244.33	244.14	244.39

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Ontario Monthly Mean Levels IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEE'	OCT	NOV	DEC	AVG
1932	244.46	244.91	244.91	245.45	245.76	245.73	245.79	245.75	245.34	244.95	244.79	244.52	245.20
1933	244.51	244.43	244.52	245.51	246.10	246.11	245.96	245.64	245.27	244.70	244.16	243.95	245.07
1934	243.86	243.67	243.61	244.35	245.05	245.25	245.28	244.88	244.52	244.18	243.76	243.41	244.32
1935	243.19	242.96	242.97	243.34	243.87	244.40	244.80	244.59	244.12	243.66	243.43	243.13	243.71
1936	242.73	242.28	242.71	244.42	245.07	245.08	244.85	244.40	244.05	243.76	243.59	243.20	243.84
1937	243.39	243.90	244.02	244.44	245.43	245.91	245.91	245.53	244.91	244.40	244.27	243.96	244.67
1938	243.72	244.06	244.46	245.02	245.21	245.36	245.44	245.54	245.27	244.81	244.08	243.65	244.72
1939	243.39	243.33	243.81	244.84	245.47	245.42	245.35	245.25	244.90	244.49	243.99	243.59	244.49
1940	243.25	242.91	242.87	243.88	245.08	245.52	245.52	245.09	244.53	244.20	243.86	243.80	244.21
1941	244.10	244.05	243.93	244.56	245.15	245.34	245.35	245.15	244.78	244.40	244.21	243.96	244.58
1942	243.79	243.71	244.20	245.30	245.67	245.91	245.68	245.40	244.86	244.33	244.00	243.76	244.72
1943	244.09	244.25	244.48	245.09	246.07	246.97	246.74	246.18	245.32	244.47	244.16	243.62	245.12
1944	243.33	243.30	243.49	244.33	245.28	245.61	245.58	245.08	244.55	243.97	243.50	243.36	244.28
1945	243.30	243.28	244.01	245.08	245.67	246.04	245.94	245.41	244.79	244.81	244.34	244.03	244.73
1946	244.11	244.14	244.35	244.32	244.37	244.92	245.11	244.90	244.45	244.12	243.88	243.53	244.35
1947	243.68	244.03	243.97	244.99	245.89	246.93	246.91	246.48	245.64	244.60	243.94	243.56	245.05
1948	243.52	243.46	243.98	245.08	245.54	245.68	245.44	245.01	244.44	243.88	243.68	243.50	244.43
1949	243.63	243.96	244.27	244.74	245.02	245.13	245.16	244.82	244.45	244.12	243.64	243.41	244.36
1950	243.91	244.39	244.53	245.65	245.83	245.71	245.52	245.22	244.82	244.30	244.01	244.02	244.83
1951	244.19	244.46	244.99	246.00	246.49	246.28	246.06	245.42	244.81	244.17	243.81	243.78	245.04
1952	244.21	244.92	245.24	246.04	246.39	246.50	246.06	245.46	244.84	244.20	243.64	243.66	245.10
1953	243.78	243.96	244.14	244.81	245.39	245.77	245.51	245.17	244.66	244.04	243.57	243.58	244.53
1954	243.51	243.77	244.59	245.33	246.15	246.02	245.58	245.02	244.66	244.44	244.25	243.97	244.77
1955	244.40	244.39	244.84	245.71	245.89	245.66	245.32	245.02	244.50	244.34	244.22	243.62	244.83
1956	243.39	243.38	243.79	244.58	245.62	245.89	245.53	245.04	244.70	244.06	243.56	243.44	244.42
1957	243.41	243.61	243.92	244.38	244.95	245.50	245.85	245.37	244.79	244.10	243.72	243.58	244.43
1958	243.72	243.72	244.03	244.83	245.53	245.90	245.96	245.85	245.69	245.21	244.61	244.10	244.93
1959	243.80	243.93	244.32	245.37	245.80	245.71	245.50	245.10	244.64	244.30	244.07	244.20	244.73
1960	244.39	244.54	244.52	245.35	246.20	246.34	245.88	245.29	244.60	243.96	243.56	243.09	244.81
1961	242.68	242.34	243.01	243.92	245.07	245.59	245.60	245.21	244.75	244.08	243.49	243.18	244.08

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Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Ontario Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	242.88	242.77	243.00	244.02	244.79	245.06	244.96	244.88	244.47	244.27	243.98	243.84	244.08
1963	243.35	242.91	242.85	243.97	244.94	245.33	245.20	244.97	244.44	243.79	243.30	243.02	244.01
1964	242.52	242.24	242.26	243.11	243.97	244.38	244.38	244.06	243.60	242.86	242.22	241.80	243.12
1965	241.66	241.76	242.26	242.97	243.89	244.31	244.48	244.27	244.10	243.88	243.76	243.93	243.44
1966	243.97	243.91	244.32	244.63	244.89	245.30	245.26	244.99	244.67	244.22	243.91	244.14	244.52
1967	244.17	244.24	244.20	245.00	245.72	246.16	246.34	246.10	245.55	245.16	244.98	244.62	245.19
1968	244.31	244.21	244.23	244.90	245.05	245.55	245.78	245.49	245.08	244.46	244.09	244.16	244.78
1969	244.16	244.34	244.16	244.85	245.58	246.01	245.85	245.39	244.62	243.99	243.79	243.74	244.71
1970	243.65	243.78	243.94	244.71	245.33	245.52	245.65	245.37	244.82	244.48	244.20	244.13	244.63
1971	244.11	244.06	244.50	245.16	245.74	245.64	245.44	245.08	244.86	244.39	243.90	243.78	244.72
1972	243.94	244.20	244.54	245.29	246.21	246.41	246.63	246.28	245.54	244.79	244.54	244.80	245.26
1973	245.41	245.91	246.22	247.16	247.32	247.19	246.58	245.72	244.88	244.18	243.66	243.58	245.65
1974	244.17	244.72	245.02	245.58	246.20	246.47	246.18	245.44	244.52	243.66	243.14	243.11	244.85
1975	243.07	243.44	243.90	244.47	244.80	244.85	244.59	244.33	244.17	244.16	243.94	243.89	244.13
1976	244.06	244.36	245.56	246.57	247.12	247.18	246.85	246.26	245.51	244.96	244.32	243.84	245.55
1977	243.74	243.62	244.30	245.15	245.30	245.06	245.12	245.06	244.90	244.90	244.66	244.91	244.73
1978	245.60	245.77	245.35	246.13	246.56	246.25	245.64	245.14	244.62	244.11	243.68	243.56	245.20
1979	244.00	244.21	244.70	245.71	246.13	246.04	245.66	245.32	245.09	244.70	244.20	243.98	244.98
1980	243.87	243.81	243.86	245.12	245.63	245.69	245.69	245.57	245.03	244.35	244.02	243.94	244.72
1981	243.80	243.83	244.60	244.67	245.03	245.39	245.56	245.51	245.27	244.80	244.66	244.28	244.78
1982	243.97	243.99	244.18	245.22	245.58	245.75	245.56	245.01	244.57	244.18	243.93	243.94	244.66
1983	244.24	244.61	244.70	245.11	246.02	246.19	245.70	245.34	244.85	244.37	244.03	244.25	244.95
1984	244.63	244.79	245.30	246.11	246.86	247.04	246.80	246.24	245.53	244.82	244.32	244.05	245.54
1985	244.50	244.63	245.45	246.22	246.40	246.34	246.09	245.51	245.06	244.52	244.67	244.94	245.36
1986	245.28	245.70	246.04	246.88	246.94	247.12	247.11	246.88	246.50	246.72	246.40	246.26	246.49
1987	246.10	246.23	246.13	246.84	246.65	246.33	246.04	245.35	244.78	244.30	243.86	244.02	245.55
1988	243.94	244.09	244.13	244.75	245.21	245.36	245.20	244.97	244.51	244.14	244.02	243.73	244.50
1989	243.58	243.60	243.63	244.68	245.62	246.33	246.30	245.71	245.12	244.58	244.37	244.10	244.80
=====													
Average	243.79	243.88	244.15	244.96	245.53	245.77	245.70	245.35	244.84	244.35	243.97	243.78	244.67
Std.Dev	0.67	0.78	0.77	0.76	0.67	0.61	0.54	0.47	0.41	0.45	0.48	0.54	0.47
Maximum	246.10	246.23	246.22	247.16	247.32	247.19	247.11	246.88	246.50	246.72	246.40	246.26	246.49
Minimum	241.66	241.76	242.26	242.97	243.87	244.31	244.38	244.06	243.60	242.86	242.22	241.80	243.12

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake Ontario Monthly Mean outflows , TCFS, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	210.00	213.50	232.50	245.00	254.50	246.00	243.80	243.50	250.50	241.80	229.80	243.50	237.87
1901	213.50	213.50	204.00	238.20	259.20	265.20	266.00	253.20	252.00	237.50	221.20	217.20	236.72
1902	211.20	207.00	220.80	237.80	224.80	214.50	246.00	287.80	282.80	268.20	249.50	220.50	239.24
1903	210.00	222.50	247.00	269.20	275.20	255.80	254.50	264.80	271.80	261.00	241.50	215.50	249.07
1904	210.00	207.00	221.00	262.50	281.20	288.80	293.80	305.00	295.50	278.20	250.50	212.50	258.83
1905	210.00	207.00	204.00	214.50	235.50	255.80	278.20	288.50	288.20	270.20	245.50	224.20	243.47
1906	220.00	242.20	236.50	228.50	222.50	225.80	250.00	261.20	255.80	248.00	256.50	251.00	241.50
1907	220.00	253.00	252.50	255.00	247.80	249.50	258.20	270.50	268.80	268.80	269.20	251.00	255.36
1908	220.00	252.00	262.50	280.00	294.50	299.50	300.00	298.20	271.20	253.50	226.00	212.00	264.12
1909	210.00	207.00	216.00	225.00	266.00	276.00	278.20	276.20	259.50	242.20	221.50	215.50	241.09
1910	210.00	207.00	222.80	234.20	249.50	250.80	245.50	250.00	254.80	249.20	234.00	215.50	235.28
1911	210.00	207.00	204.80	191.20	200.20	212.50	219.50	223.00	223.00	223.20	230.20	231.00	214.63
1912	220.00	225.00	223.00	239.50	262.50	275.00	288.20	283.00	272.50	269.50	269.00	252.20	256.62
1913	220.00	255.80	262.20	282.20	290.80	295.80	285.00	272.80	266.00	253.20	249.80	229.20	263.57
1914	211.00	226.50	218.20	242.20	261.00	264.20	260.80	251.20	260.00	252.50	232.80	214.80	241.27
1915	210.00	212.50	227.50	209.00	195.80	213.80	220.20	236.00	268.20	263.20	245.80	216.50	226.54
1916	216.80	238.00	237.00	253.20	272.00	288.00	302.50	305.00	276.20	249.20	229.50	214.80	256.85
1917	210.00	210.80	222.80	257.50	265.00	271.50	290.80	305.50	297.50	281.20	282.50	255.80	262.57
1918	218.20	227.20	254.20	275.20	269.20	256.50	255.50	257.80	261.80	263.20	271.00	244.20	254.50
1919	220.00	244.20	246.20	252.50	270.50	293.00	297.00	288.80	269.50	254.80	246.20	216.20	258.24
1920	210.00	207.00	207.20	214.50	215.20	217.20	226.20	260.00	269.80	265.00	257.20	250.00	233.27
1921	220.00	244.50	251.50	259.20	257.00	247.50	240.50	236.50	229.80	224.80	227.00	229.00	238.94
1922	210.00	207.00	226.50	247.00	265.20	271.00	285.80	275.00	265.00	247.50	224.50	212.00	244.71
1923	210.00	207.00	204.00	196.50	203.80	235.80	244.80	235.80	231.20	223.50	219.00	227.20	219.88
1924	218.50	227.20	220.80	221.50	244.20	257.50	259.50	262.20	253.00	254.00	231.80	212.20	238.53
1925	210.00	207.00	210.50	227.80	221.20	213.50	217.80	220.00	221.20	215.50	214.80	221.00	216.69
1926	210.00	207.00	204.00	188.20	204.20	210.50	217.20	220.20	225.00	255.00	264.80	260.80	222.24
1927	220.00	235.20	239.80	241.20	221.00	215.50	218.00	242.20	238.50	238.20	233.80	251.20	232.88
1928	220.00	253.50	257.20	260.80	264.00	252.80	266.00	277.80	276.20	259.50	256.20	245.50	257.46
1929	220.00	251.80	257.80	278.20	298.80	303.20	302.50	307.00	289.20	274.50	265.50	245.00	274.46
1930	220.00	258.20	279.00	293.00	296.80	289.00	288.50	276.00	265.20	249.80	221.00	213.00	262.46
1931	210.00	207.00	204.00	188.00	196.80	218.50	221.80	222.50	223.00	221.00	214.00	210.80	211.45

Basis of Comparison, IJC Phase II Levels Reference Study
Lake Ontario Monthly Mean Outflows , TCFS, With Deviations

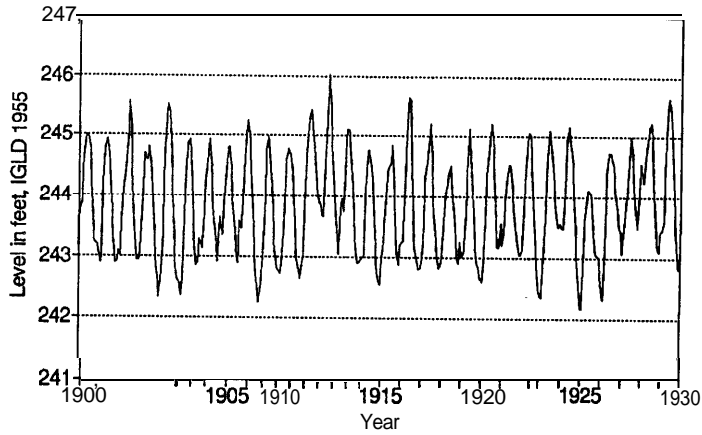
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	212.50	238.80	241.50	250.00	255.80	237.00	222.50	226.50	223.00	217.50	224.20	219.00	230.69
1933	211.50	208.00	204.00	213.80	243.00	235.50	220.80	221.20	221.50	214.00	202.50	210.00	217.15
1934	210.00	207.00	204.00	188.00	188.50	196.00	202.50	203.50	202.80	197.20	198.00	210.00	200.62
1935	210.00	207.00	204.00	188.00	188.00	193.00	205.00	210.00	208.50	199.20	198.00	210.00	201.72
1936	210.00	207.00	204.00	199.20	215.20	216.20	213.20	212.20	212.80	206.80	203.20	210.00	209.15
1937	210.00	212.80	224.20	197.50	222.20	227.50	249.80	251.50	236.00	221.20	226.80	216.20	224.64
1938	210.00	214.20	233.20	244.50	242.50	219.20	221.20	224.00	235.00	254.50	236.20	213.50	229.00
1939	210.00	207.00	204.20	225.00	248.20	243.20	231.20	220.50	221.80	221.80	213.80	210.00	221.39
1940	210.00	207.00	204.00	188.00	217.80	243.50	250.80	250.20	229.20	226.20	218.80	214.80	221.69
1941	220.00	226.00	215.00	190.00	193.20	207.00	211.80	216.50	216.80	209.00	205.20	210.00	210.04
1942	210.00	207.00	209.00	239.20	248.00	259.80	251.80	254.80	251.50	245.00	243.50	235.00	237.88
1943	220.00	245.20	254.20	261.20	279.00	300.80	305.20	310.00	300.80	272.80	270.50	243.50	271.93
1944	210.00	214.80	216.50	224.50	248.00	259.50	270.20	262.00	252.80	239.80	221.20	213.50	236.07
1945	210.00	207.00	215.20	254.20	269.00	283.50	290.50	289.00	274.20	291.80	290.00	271.80	262.18
1946	220.00	250.20	256.80	259.80	232.50	232.00	241.00	245.80	245.20	242.80	248.80	219.00	241.16
1947	214.80	242.20	238.00	256.80	279.00	300.20	304.50	310.00	307.80	279.80	262.80	231.00	268.91
1948	211.20	220.20	231.50	264.20	278.50	283.20	273.20	263.80	254.00	239.20	227.80	216.20	246.92
1949	212.50	228.00	239.00	243.50	238.20	220.00	220.00	222.50	222.80	221.50	212.80	210.00	224.23
1950	211.00	233.50	238.80	267.20	278.80	266.80	257.20	252.50	256.50	248.50	249.50	253.20	251.12
1951	220.00	254.20	269.80	284.80	298.50	307.20	300.00	284.50	276.00	260.80	253.20	249.00	271.50
1952	220.00	258.80	276.80	292.80	301.50	307.50	302.20	288.20	280.00	266.80	239.20	238.50	272.69
1953	220.00	242.00	244.20	258.80	261.80	278.00	270.80	271.20	263.50	249.50	226.80	220.80	250.62
1954	210.00	219.50	250.80	263.50	287.50	291.50	278.20	258.80	257.80	260.20	275.80	258.50	259.34
1955	220.00	253.50	267.00	285.00	294.00	281.20	262.00	260.20	256.50	255.20	279.50	246.20	263.36
1956	210.00	217.00	235.50	250.50	276.50	288.50	285.80	273.00	270.20	256.00	231.00	214.00	250.67
1957	210.00	219.00	226.50	225.50	219.20	223.50	252.50	258.80	250.50	232.00	218.20	213.50	229.10
1958	210.00	207.00	204.00	194.00	200.80	215.50	219.20	220.20	225.80	247.20	238.50	216.20	216.53
1959	210.00	207.00	218.50	245.00	259.20	256.50	243.00	221.20	220.80	219.80	216.50	224.80	228.53
1960	220.00	238.80	241.50	249.80	270.80	286.50	280.20	263.20	247.80	233.80	221.20	213.00	247.22
1961	210.00	207.00	204.00	195.50	222.00	256.80	255.00	250.50	251.00	236.20	236.00	215.80	228.32

Basis of Comparison, IJC Phase II Levels Reference Study
Lake Ontario Monthly Mean Outflows, TCFS, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	210.00	207.00	204.00	189.80	203.00	213.20	216.20	220.20	221.20	218.00	215.00	212.50	210.84
1963	208.50	207.20	197.80	187.20	192.50	207.80	215.20	220.20	218.80	214.50	204.80	210.00	207.04
1964	210.00	206.80	193.20	177.00	183.80	196.50	201.80	207.20	208.00	205.20	198.20	192.20	198.32
1965	184.80	182.00	179.00	181.80	176.20	189.50	201.00	204.80	201.50	203.00	206.00	210.00	193.30
1966	210.80	210.00	229.00	226.00	203.80	209.80	215.50	217.20	219.20	212.50	207.80	211.00	214.38
1967	210.00	213.80	204.00	206.50	213.50	218.00	233.50	245.50	243.80	257.50	272.50	274.80	232.78
1968	243.50	247.20	232.80	254.20	234.50	232.00	248.20	258.50	266.50	257.80	251.50	254.00	248.39
1969	231.80	250.50	247.50	258.80	270.20	286.50	294.50	291.50	273.50	251.20	242.20	236.20	261.20
1970	220.00	229.00	231.80	239.00	252.80	251.50	260.20	266.20	261.20	263.00	266.20	255.00	249.66
1971	234.50	243.20	258.80	270.00	285.80	276.00	263.20	258.20	265.80	263.50	256.20	242.50	259.81
1972	221.00	227.00	250.00	269.00	288.80	301.80	311.00	310.00	307.50	300.80	290.20	270.00	278.93
1973	250.20	284.50	298.20	324.20	336.80	349.80	350.00	323.50	317.00	306.50	292.80	269.00	308.54
1974	238.80	268.50	300.20	308.50	308.20	327.50	336.00	330.50	314.20	303.50	276.80	287.20	299.99
1975	254.80	249.50	286.80	301.80	304.80	309.00	275.50	268.20	272.50	282.20	273.80	259.50	278.20
1976	244.80	258.20	289.00	306.00	328.20	348.20	349.80	326.00	309.20	301.50	296.50	235.00	299.37
1977	220.00	212.80	247.20	277.50	284.20	266.50	253.00	261.50	276.00	299.00	295.80	253.00	262.21
1978	249.20	290.50	298.80	292.80	314.50	308.50	291.50	278.20	272.80	262.50	246.80	220.50	277.22
1979	220.20	245.80	268.50	282.20	291.00	297.00	280.50	275.80	284.50	290.00	286.00	293.00	276.21
1980	253.20	251.50	245.20	272.80	292.00	281.20	280.00	285.20	293.20	280.80	273.50	255.50	272.01
1981	235.00	239.20	261.00	258.00	249.00	252.80	262.00	278.00	296.50	297.80	296.00	292.20	268.12
1982	237.50	247.50	249.80	279.00	292.50	295.20	291.50	275.20	271.00	266.50	265.00	263.80	269.54
1983	230.00	240.00	265.80	273.50	282.20	298.80	289.00	281.50	277.00	271.00	270.80	260.20	269.98
1984	238.20	270.00	279.80	284.80	309.80	310.50	309.50	310.00	308.00	284.20	274.80	262.80	286.87
1985	230.20	259.80	278.20	300.00	301.20	307.00	305.80	299.20	298.50	293.20	289.00	280.20	286.86
1986	246.50	287.50	298.50	316.80	331.50	325.20	334.20	327.20	325.00	324.50	337.50	336.50	315.91
1987	298.20	283.50	314.50	313.50	329.20	313.50	305.50	298.00	286.50	282.00	262.20	266.80	296.12
1988	235.50	249.20	258.00	252.00	240.00	250.50	244.50	246.00	242.50	236.80	244.00	236.80	244.65
1989	208.80	217.80	214.00	204.80	230.50	264.50	280.50	274.50	266.20	257.00	260.80	231.20	242.55
=====													
Average	219.21	229.75	237.05	245.73	255.26	260.39	262.36	262.13	258.92	252.32	245.26	234.77	246.93
Std.Dev	14.83	23.07	29.03	36.21	38.58	37.81	35.32	31.94	29.16	27.52	28.37	25.31	26.00
Maximum	298.20	290.50	314.50	324.20	336.80	349.80	350.00	330.50	325.00	324.50	337.50	336.50	315.91
Minimum	184.80	182.00	179.00	177.00	176.20	189.50	201.00	203.50	201.50	197.20	198.00	192.20	193.30

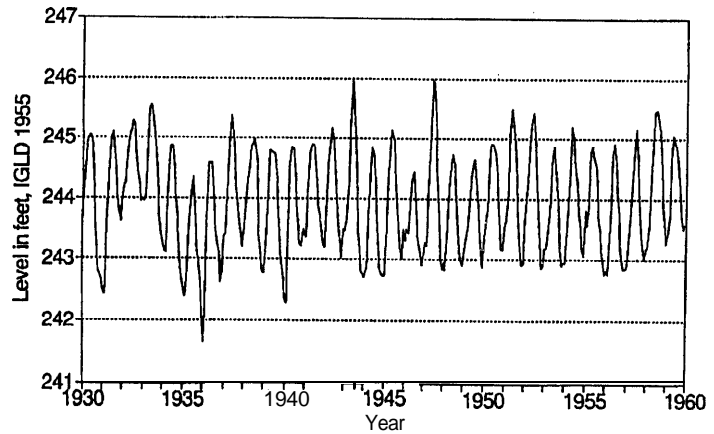
Ogdensburg, with Discretionary Actions

Basis of Comparison, 1900-i 930



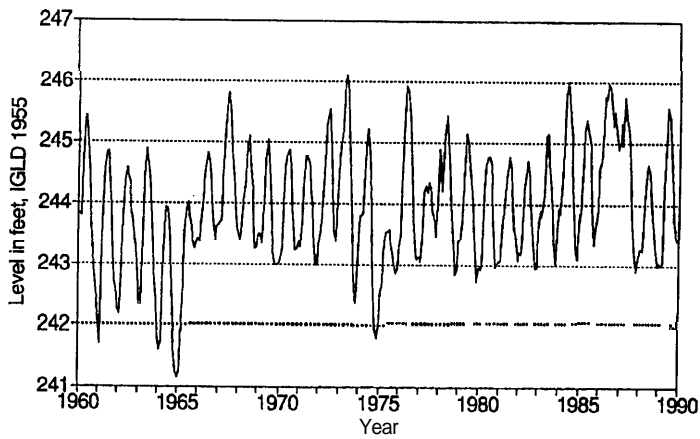
Ogdensburg, with Discretionary Actions

Basis of Comparison, 1930-I 960



Ogdensburg, with Discretionary Actions

Basis of Comparison, 1960-I 990



Basis of Comparison, IJC Phase II Levels Reference Study
 Ogdensburg, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	243.63	243.74	243.88	244.57	244.92	245.00	244.96	244.78	244.16	243.62	243.23	243.20	244.14
1901	243.08	242.90	242.97	244.23	244.80	244.94	244.70	244.34	243.85	243.29	242.88	242.92	243.74
1902	243.09	243.01	243.58	244.14	244.44	244.94	245.59	245.15	244.27	243.56	243.09	242.94	243.98
1903	242.93	243.09	243.78	244.72	244.62	244.59	244.82	244.58	243.99	243.41	242.93	242.67	243.84
1904	242.32	242.62	243.22	244.56	245.24	245.54	245.40	244.74	244.02	243.41	242.84	242.61	243.88
1905	242.56	242.35	242.58	243.82	244.44	244.88	244.94	244.60	243.90	243.23	242.84	242.91	243.59
1906	243.28	243.22	243.12	243.66	244.23	244.76	244.94	244.54	243.87	243.50	243.22	242.92	243.77
1907	243.64	243.52	243.34	243.84	244.36	244.77	244.82	244.51	243.90	243.46	243.08	242.89	243.84
1908	243.58	243.44	243.74	244.52	245.13	245.25	244.96	244.40	243.59	243.04	242.74	242.44	243.90
1909	242.24	242.47	242.97	243.78	244.81	244.99	244.72	244.29	243.72	243.14	242.92	242.79	243.57
1910	242.73	242.89	243.46	244.00	244.60	244.79	244.70	244.45	244.00	243.49	243.00	242.84	243.75
1911	242.65	242.79	243.06	243.96	244.84	245.29	245.44	245.15	244.84	244.54	244.09	243.87	244.21
1912	243.91	243.68	243.66	244.65	245.49	246.03	245.52	244.80	244.27	243.76	243.27	243.04	244.34
1913	243.79	243.94	243.75	244.86	245.12	245.10	244.79	244.37	243.74	243.26	242.96	242.88	244.05
1914	242.94	242.96	243.02	244.05	244.64	244.77	244.58	244.30	243.95	243.36	242.90	242.62	243.67
1915	242.53	242.94	243.23	243.58	244.18	244.44	244.55	244.85	244.33	243.73	243.04	242.87	243.69
1916	243.19	243.24	243.24	244.18	244.90	245.67	245.62	244.57	243.72	243.17	242.92	242.81	243.94
1917	242.82	242.91	243.31	244.33	244.55	244.95	245.22	244.64	243.85	243.30	243.00	242.82	243.81
1918	242.91	242.86	243.42	244.02	244.22	244.42	244.50	244.19	243.82	243.41	243.01	242.89	243.64
1919	243.25	243.01	243.07	243.69	244.62	245.13	244.74	244.09	243.58	243.13	242.87	242.84	243.67
1920	242.65	242.58	242.87	243.76	244.42	244.81	245.22	244.94	244.32	243.71	243.18	243.16	243.80
1921	243.55	243.20	243.43	243.97	244.38	244.54	244.51	244.18	243.82	243.52	243.26	243.05	243.78
1922	243.05	243.12	243.51	244.42	244.96	245.06	245.01	244.44	243.80	243.28	242.88	242.49	243.83
1923	242.40	242.34	242.73	243.78	244.57	245.12	244.99	244.67	244.28	243.87	243.57	243.49	243.82
1924	243.55	243.49	243.47	244.19	244.96	245.15	244.96	244.60	244.01	243.56	242.95	242.56	243.95
1925	242.17	242.16	243.10	243.68	243.96	244.12	244.04	243.82	243.48	243.11	243.05	243.01	243.31
1926	242.63	242.35	242.31	243.42	244.44	244.73	244.74	244.62	244.50	244.08	243.76	243.49	243.76
1927	243.42	243.06	243.26	243.66	244.04	244.70	244.99	244.75	244.22	243.78	243.48	243.82	243.93
1928	244.56	244.44	244.24	244.74	245.00	245.15	245.23	244.88	244.05	243.48	243.16	243.10	244.34
1929	243.42	243.46	243.61	244.71	245.56	245.66	245.42	244.71	244.00	243.42	242.98	242.82	244.15
1930	243.63	244.09	244.60	244.94	245.04	245.07	244.95	244.30	243.67	243.09	242.80	242.66	244.07
1931	242.51	242.42	242.61	243.54	244.39	245.00	245.10	244.87	244.52	244.10	243.80	243.62	243.87

Basis of Comparison, IJC Phase II Levels Reference Study
Ogdensburg, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	243.94	244.24	244.22	244.74	245.04	245.14	245.29	245.23	244.81	244.43	244.22	243.96	244.60
1933	244.00	243.94	244.06	245.04	245.50	245.55	245.48	245.14	244.75	244.19	243.69	243.41	244.56
1934	243.32	243.13	243.09	243.96	244.70	244.87	244.88	244.45	244.06	243.74	243.29	242.84	243.86
1935	242.60	242.38	242.41	242.91	243.47	244.00	244.35	244.10	243.61	243.17	242.94	242.54	243.21
1936	242.10	241.64	242.12	243.99	244.58	244.58	244.35	243.88	243.50	243.24	243.08	242.61	243.31
1937	242.81	243.34	243.39	244.02	244.92	245.39	245.25	244.82	244.26	243.82	243.64	243.38	244.09
1938	243.18	243.51	243.80	244.32	244.54	244.86	244.93	245.02	244.66	244.01	243.36	243.06	244.10
1939	242.81	242.77	243.31	244.26	244.78	244.77	244.76	244.74	244.35	243.92	243.42	243.03	243.91
1940	242.67	242.32	242.30	243.48	244.57	244.86	244.82	244.36	243.90	243.56	243.25	243.22	243.61
1941	243.50	243.40	243.36	244.18	244.78	244.91	244.89	244.64	244.25	243.90	243.72	243.42	244.08
1942	243.25	243.18	243.70	244.66	245.00	245.18	244.98	244.65	244.09	243.56	243.22	243.01	244.04
1943	243.50	243.47	243.65	244.26	245.20	246.02	245.73	245.06	244.18	243.47	243.14	242.79	244.21
1944	242.75	242.69	242.88	243.72	244.58	244.85	244.74	244.24	243.74	243.21	242.84	242.76	243.58
1945	242.72	242.72	243.44	244.31	244.85	245.14	244.95	244.38	243.82	243.66	243.17	242.99	243.85
1946	243.51	243.31	243.49	243.42	243.70	244.30	244.44	244.18	243.69	243.35	243.04	242.90	243.61
1947	243.10	243.26	243.22	244.18	245.00	245.98	245.93	245.40	244.47	243.56	242.98	242.83	244.16
1948	242.94	242.82	243.29	244.23	244.62	244.74	244.56	244.15	243.61	243.11	242.99	242.89	243.66
1949	243.06	243.30	243.54	244.02	244.36	244.61	244.64	244.26	243.87	243.52	243.06	242.84	243.76
1950	243.36	243.72	243.83	244.82	244.93	244.90	244.77	244.48	244.00	243.50	243.16	243.14	244.05
1951	243.60	243.62	244.08	245.08	245.51	245.19	245.00	244.43	243.82	243.24	242.91	242.92	244.12
1952	243.62	244.09	244.30	245.06	245.38	245.44	244.98	244.44	243.82	243.23	242.85	242.88	244.17
1953	243.16	243.18	243.36	243.97	244.60	244.87	244.65	244.26	243.77	243.20	242.88	242.94	243.74
1954	242.94	243.15	243.80	244.51	245.22	245.04	244.66	244.21	243.82	243.55	243.20	243.04	243.93
1955	243.82	243.55	243.93	244.76	244.87	244.72	244.51	244.19	243.65	243.48	243.13	242.76	243.95
1956	242.82	242.75	243.04	243.79	244.72	244.92	244.54	244.11	243.75	243.16	242.83	242.83	243.60
1957	242.84	242.98	243.25	243.76	244.42	244.98	245.15	244.59	244.02	243.41	243.11	242.99	243.79
1958	243.18	243.19	243.54	244.44	245.14	245.46	245.49	245.37	245.17	244.50	243.92	243.54	244.41
1959	243.25	243.42	243.75	244.70	245.06	244.98	244.85	244.57	244.08	243.72	243.50	243.58	244.12
1960	243.82	243.84	243.80	244.64	245.41	245.44	244.98	244.47	243.84	243.25	242.92	242.46	244.07
1961	242.05	241.70	242.44	243.47	244.53	244.84	244.86	244.48	243.97	243.36	242.72	242.54	243.41

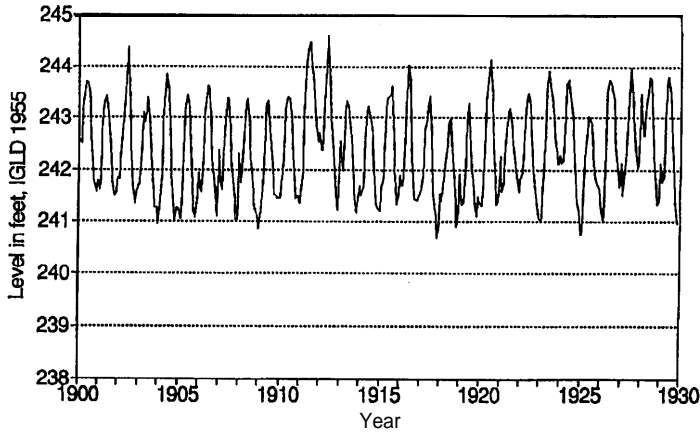
Basis of Comparison, IJC Phase II Levels Reference Study
 Ogdensburg, Monthly Mean Levels, IGLD 1955, With Deviations

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	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	242.27	242.17	242.43	243.62	244.35	244.58	244.45	244.34	243.89	243.70	243.40	243.28	243.54
1963	242.79	242.32	242.32	243.58	244.57	244.90	244.71	244.44	243.88	243.20	242.75	242.41	243.49
1964	241.88	241.59	241.72	242.73	243.59	243.95	243.92	243.54	243.05	242.28	241.64	241.24	242.59
1965	241.14	241.27	241.82	242.55	243.56	243.92	244.03	243.80	243.63	243.38	243.24	243.39	242.98
1966	243.43	243.37	243.68	244.03	244.45	244.84	244.78	244.48	244.12	243.69	243.39	243.62	243.99
1967	243.65	243.69	243.72	244.56	245.27	245.71	245.81	245.48	244.90	244.36	244.05	243.62	244.57
1968	243.54	243.41	243.55	244.11	244.42	244.97	245.12	244.72	244.21	243.59	243.24	243.28	244.01
1969	243.48	243.52	243.36	244.02	244.73	245.07	244.82	244.33	243.64	243.14	242.99	242.98	243.84
1970	243.02	243.08	243.24	244.02	244.60	244.81	244.89	244.53	243.96	243.57	243.23	243.25	243.85
1971	243.40	243.28	243.63	244.26	244.78	244.74	244.63	244.27	243.96	243.46	242.98	242.98	243.86
1972	243.33	243.56	243.74	244.42	245.28	245.40	245.56	245.17	244.35	243.56	243.38	243.86	244.30
1973	244.70	244.97	245.20	246.04	246.11	245.84	245.13	244.41	243.51	242.80	242.36	242.49	244.46
1974	243.44	243.79	243.83	244.38	245.09	245.23	244.81	244.01	243.12	242.24	241.92	241.78	243.64
1975	242.07	242.53	242.69	243.19	243.54	243.54	243.58	243.36	243.14	243.02	242.86	242.94	243.04
1976	243.27	243.49	244.54	245.53	245.95	245.84	245.46	245.00	244.30	243.75	243.07	243.10	244.44
1977	243.12	243.05	243.50	244.19	244.30	244.19	244.36	244.23	243.92	243.70	243.47	244.12	243.85
1978	244.91	244.77	244.21	245.15	245.45	245.14	244.62	244.17	243.64	243.17	242.83	242.92	244.25
1979	243.40	243.42	243.77	244.78	245.16	245.01	244.74	244.39	244.06	243.57	243.04	242.72	244.01
1980	242.96	242.92	243.04	244.20	244.61	244.75	244.77	244.59	243.92	243.26	242.96	243.02	243.75
1981	243.06	243.06	243.72	243.82	244.29	244.66	244.77	244.58	244.15	243.61	243.47	243.06	243.85
1982	243.22	243.17	243.36	244.26	244.54	244.70	244.52	244.05	243.60	243.20	242.94	242.96	243.71
1983	243.58	243.90	243.80	244.18	245.11	245.17	244.71	244.37	243.86	243.38	243.00	243.34	244.03
1984	243.94	243.85	244.33	245.20	245.82	246.01	245.75	245.13	244.34	243.76	243.28	243.10	244.54
1985	243.86	243.77	244.52	245.19	245.38	245.26	244.99	244.40	243.89	243.33	243.54	243.91	244.34
1986	244.59	244.71	245.00	245.78	245.72	245.98	245.89	245.68	245.28	245.53	245.05	244.90	245.34
1987	245.02	245.33	244.96	245.76	245.41	245.20	244.94	244.23	243.70	243.20	242.89	243.03	244.47
1988	243.22	243.26	243.23	243.96	244.56	244.64	244.51	244.25	243.78	243.42	243.23	242.97	243.75
1989	243.03	242.98	243.04	244.22	245.07	245.59	245.44	244.84	244.26	243.74	243.47	243.41	244.09
=====													
Average	243.18	243.19	243.43	244.23	244.77	244.99	244.91	244.52	243.99	243.50	243.15	243.03	243.91
Std.Dev	0.65	0.70	0.65	0.62	0.52	0.48	0.43	0.41	0.40	0.44	0.44	0.48	0.38
Maximum	245.02	245.33	245.20	246.04	246.11	246.03	245.93	245.68	245.28	245.53	245.05	244.90	245.34
Minimum	241.14	241.27	241.72	242.55	243.47	243.54	243.58	243.36	243.05	242.24	241.64	241.24	242.59

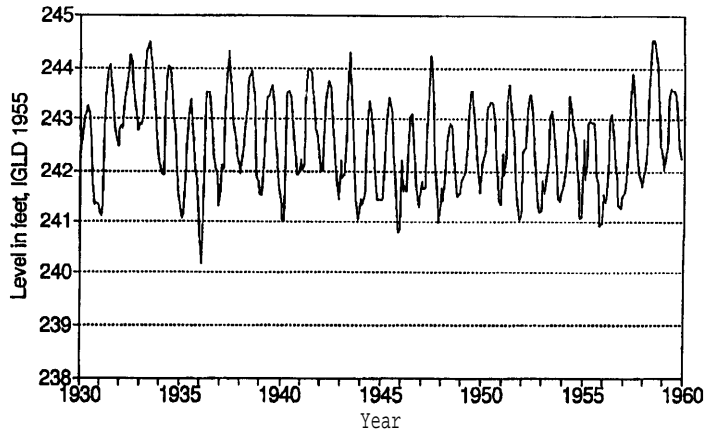
Cardinal, with Discretionary Actions

Basis of Comparison, 1900-1 930



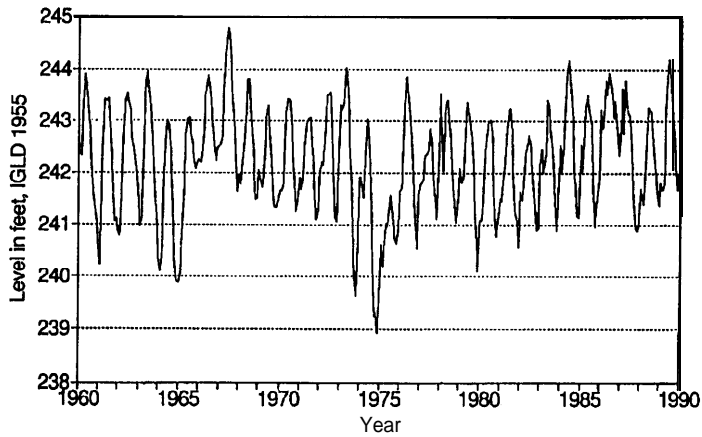
Cardinal, with Discretionary Actions

Basis of Comparison, 1930-1 960



Cardinal, with Discretionary Actions

Basis of Comparison, 1960-1 990



Basis of Comparison, IJC Phase II Levels Reference Study
 Cardinal, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	242.49	242.58	242.52	243.20	243.51	243.70	243.66	243.47	242.64	242.09	241.78	241.55	242.77
1901	241.81	241.60	241.80	242.88	243.30	243.41	243.10	242.82	242.24	241.75	241.48	241.57	242.31
1902	241.85	241.80	242.30	242.77	243.27	243.96	244.38	243.38	242.34	241.64	241.34	241.54	242.55
1903	241.68	241.70	242.22	243.08	242.89	243.09	243.38	242.98	242.14	241.57	241.25	241.29	242.27
1904	240.94	241.34	241.88	242.97	243.57	243.86	243.61	242.63	241.84	241.30	241.00	241.26	242.18
1905	241.24	241.03	241.33	242.66	243.15	243.44	243.24	242.68	241.78	241.20	241.08	241.47	242.03
1906	241.96	241.60	241.55	242.30	243.06	243.63	243.59	242.96	242.21	241.86	241.39	241.09	242.27
1907	242.39	241.80	241.60	242.19	242.92	243.38	243.34	242.81	242.08	241.52	241.01	241.05	242.17
1908	242.32	241.74	241.96	242.69	243.27	243.36	242.98	242.28	241.64	241.22	241.24	241.06	242.15
1909	240.85	241.17	241.64	242.50	243.24	243.33	242.96	242.46	241.97	241.50	241.51	241.44	242.05
1910	241.44	241.67	242.14	242.64	243.18	243.40	243.35	243.00	242.39	241.83	241.45	241.50	242.33
1911	241.34	241.55	241.89	243.07	243.97	244.37	244.48	244.12	243.76	243.41	242.80	242.54	243.11
1912	242.72	242.39	242.38	243.36	244.10	244.60	243.82	243.00	242.48	241.89	241.26	241.22	242.77
1913	242.57	242.30	241.98	243.09	243.31	243.22	242.97	242.61	241.91	241.48	241.17	241.36	242.33
1914	241.67	241.50	241.68	242.61	243.10	243.20	243.03	242.80	242.26	241.63	241.33	241.24	242.17
1915	241.20	241.65	241.81	242.44	243.28	243.39	243.45	243.63	242.61	241.94	241.32	241.52	242.35
1916	241.90	241.68	241.70	242.62	243.27	244.02	243.76	242.41	241.73	241.44	241.40	241.47	242.28
1917	241.55	241.64	241.96	242.76	242.93	243.34	243.42	242.48	241.58	241.10	240.68	240.90	242.03
1918	241.54	241.37	241.68	242.13	242.46	242.88	243.00	242.58	242.07	241.53	240.90	241.16	241.94
1919	241.93	241.31	241.36	242.04	242.95	243.28	242.73	242.02	241.66	241.30	241.10	241.48	241.93
1920	241.34	241.30	241.64	242.60	243.35	243.78	244.16	243.46	242.58	241.88	241.33	241.42	242.40
1921	242.28	241.55	241.72	242.29	242.82	243.13	243.18	242.84	242.49	242.18	241.84	241.57	242.32
1922	241.82	241.94	242.16	243.00	243.43	243.48	243.23	242.66	242.00	241.59	241.43	241.12	242.32
1923	241.04	241.02	241.51	242.81	243.64	243.94	243.70	243.42	243.01	242.62	242.32	242.12	242.60
1924	242.30	242.13	242.18	243.02	243.67	243.75	243.49	243.03	242.42	241.85	241.41	241.21	242.54
1925	240.77	240.80	241.87	242.35	242.74	243.04	242.89	242.61	242.19	241.82	241.76	241.63	242.04
1926	241.32	241.03	241.01	242.49	243.49	243.76	243.70	243.53	243.35	242.48	241.96	241.66	242.48
1927	242.14	241.50	241.68	242.15	242.85	243.67	243.98	243.44	242.85	242.33	242.03	242.20	242.57
1928	243.47	242.94	242.66	243.21	243.50	243.80	243.75	243.18	242.16	241.68	241.32	241.39	242.75
1929	242.14	241.76	241.86	242.95	243.75	243.82	243.52	242.56	241.90	241.36	240.95	241.05	242.30
1930	242.38	242.45	242.80	243.04	243.12	243.26	243.12	242.48	241.83	241.32	241.37	241.32	242.37
1931	241.18	241.10	241.38	242.62	243.50	243.98	244.07	243.80	243.38	242.92	242.64	242.47	242.75

Basis of Comparison, IJC Phase II Levels Reference Study
 Cardinal, Monthly Mean Levels, IGLD 1955, With Deviations

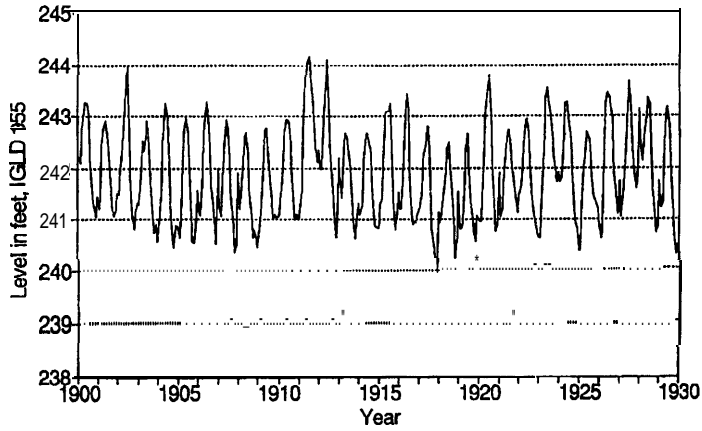
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEE'	OCT	NOV	DEC	AVG
1932	242.82	242.88	242.82	243.34	243.64	243.95	244.28	244.16	243.72	243.34	243.02	242.78	243.40
1933	242.92	242.88	243.06	244.07	244.31	244.45	244.51	244.12	243.66	243.10	242.65	242.24	243.50
1934	242.13	241.95	241.94	243.11	243.92	244.05	244.00	243.50	243.08	242.76	242.24	241.57	242.85
1935	241.28	241.06	241.13	241.91	242.54	243.09	243.38	243.04	242.49	242.09	241.83	241.21	242.09
1936	240.68	240.16	240.79	243.02	243.53	243.52	243.30	242.75	242.32	242.07	241.93	241.30	242.11
1937	241.54	242.13	242.04	243.07	243.84	244.34	243.96	243.42	242.94	242.58	242.30	242.13	242.86
1938	241.96	242.30	242.42	242.91	243.20	243.82	243.88	243.95	243.41	242.40	241.85	241.79	242.82
1939	241.54	241.52	242.19	243.06	243.41	243.45	243.58	243.66	243.20	242.70	242.21	241.80	242.69
1940	241.37	241.00	241.00	242.56	243.49	243.57	243.42	242.88	242.60	242.23	241.94	241.97	242.34
1941	242.23	242.04	242.12	243.32	243.97	243.99	243.92	243.60	243.14	242.82	242.66	242.26	243.01
1942	242.05	242.01	242.58	243.37	243.67	243.75	243.61	243.18	242.54	241.98	241.58	241.44	242.65
1943	242.22	241.86	241.96	242.62	243.55	244.30	243.88	242.96	241.95	241.46	241.07	241.04	242.41
1944	241.46	241.33	241.53	242.43	243.17	243.36	243.09	242.59	242.10	241.62	241.42	241.43	242.13
1945	241.42	241.46	242.21	242.77	243.24	243.42	243.10	242.39	241.89	241.42	240.78	240.85	242.08
1946	242.24	241.60	241.72	241.60	242.30	243.03	243.09	242.72	242.13	241.75	241.28	241.52	242.08
1947	241.81	241.64	241.66	242.59	243.31	244.26	244.13	243.40	242.22	241.47	240.98	241.28	242.40
1948	241.68	241.40	241.83	242.55	242.83	242.92	242.83	242.45	241.92	241.51	241.52	241.55	242.08
1949	241.79	241.88	242.04	242.55	243.03	243.52	243.56	243.09	242.63	242.22	241.80	241.56	242.47
1950	242.17	242.32	242.39	243.23	243.23	243.34	243.29	243.00	242.36	241.86	241.42	241.34	242.50
1951	242.35	241.92	242.28	243.32	243.69	243.17	243.04	242.52	241.88	241.36	241.04	241.12	242.31
1952	242.37	242.44	242.46	243.20	243.48	243.48	242.98	242.48	241.80	241.25	241.18	241.23	242.36
1953	241.82	241.56	241.74	242.30	243.02	243.16	242.98	242.49	241.99	241.47	241.40	241.55	242.12
1954	241.69	241.82	242.20	242.90	243.46	243.19	242.90	242.59	242.12	241.76	241.06	241.11	242.23
1955	242.61	241.84	242.14	242.92	242.95	242.93	242.92	242.55	241.93	241.74	240.91	240.97	242.20
1956	241.54	241.37	241.48	242.19	242.99	243.08	242.64	242.27	241.86	241.32	241.27	241.51	241.96
1957	241.56	241.62	241.86	242.48	243.30	243.92	243.80	243.06	242.47	241.97	241.79	241.70	242.46
1958	241.96	242.02	242.45	243.58	244.31	244.54	244.53	244.40	244.10	243.10	242.50	242.31	243.32
1959	242.05	242.28	242.54	243.36	243.62	243.56	243.56	243.46	242.90	242.49	242.26	242.26	242.86
1960	242.60	242.40	242.32	243.23	243.91	243.75	243.26	242.85	242.28	241.75	241.51	241.08	242.58
1961	240.62	240.24	241.18	242.48	243.41	243.38	243.44	243.02	242.40	241.85	241.06	241.14	242.02

Basis of Comparison, IJC Phase II Levels Reference Study
 Cardinal, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	240.88	240.80	241.16	242.70	243.40	243.55	243.38	243.20	242.68	242.49	242.18	242.05	242.37
1963	241.52	240.99	241.11	242.68	243.74	243.97	243.68	243.32	242.68	241.94	241.53	241.06	242.35
1964	240.41	240.11	240.47	241.83	242.73	243.01	242.92	242.43	241.84	240.96	240.29	239.90	241.41
1965	239.89	240.08	240.77	241.57	242.76	243.04	243.05	242.74	242.58	242.28	242.08	242.22	241.92
1966	242.26	242.20	242.33	242.78	243.50	243.89	243.76	243.40	242.97	242.53	242.24	242.47	242.86
1967	242.52	242.53	242.67	243.60	244.34	244.80	244.77	244.27	243.60	242.80	242.21	241.63	243.31
1968	241.98	241.76	242.13	242.54	243.14	243.82	243.81	243.22	242.48	241.84	241.48	241.50	242.47
1969	242.06	241.86	241.70	242.36	243.08	243.30	242.88	242.30	241.66	241.36	241.31	241.38	242.10
1970	241.66	241.62	241.76	242.62	243.14	243.42	243.40	242.88	242.25	241.74	241.26	241.43	242.26
1971	241.93	241.66	241.88	242.50	242.94	243.03	243.05	242.67	242.19	241.60	241.10	241.29	242.15
1972	242.01	242.20	242.14	242.71	243.52	243.50	243.58	243.11	242.07	241.13	241.06	241.96	242.42
1973	243.29	243.19	243.31	244.02	243.95	243.42	242.45	241.90	240.77	239.98	239.62	240.20	242.17
1974	241.91	241.92	241.50	242.10	243.02	242.93	242.24	241.24	240.27	239.23	239.33	238.92	241.22
1975	239.91	240.62	240.19	240.60	241.03	240.96	241.56	241.40	241.03	240.73	240.65	240.97	240.80
1976	241.61	241.70	242.60	243.62	243.86	243.43	242.90	242.66	241.99	241.38	240.54	241.54	242.32
1977	241.77	241.78	241.88	242.32	242.36	242.46	242.84	242.58	242.00	241.36	241.10	242.51	242.08
1978	243.54	242.86	242.03	243.32	243.40	243.10	242.66	242.28	241.68	241.23	241.05	241.52	242.39
1979	242.10	241.80	241.91	242.99	243.35	243.08	242.96	242.59	242.05	241.32	240.69	240.11	242.08
1980	241.07	241.08	241.32	242.40	242.64	242.97	243.01	242.72	241.72	241.06	240.78	241.13	241.82
1981	241.49	241.44	241.96	242.12	242.82	243.22	243.24	242.80	241.98	241.24	241.09	240.59	242.00
1982	241.62	241.46	241.66	242.38	242.55	242.71	242.53	242.16	241.66	241.22	240.90	240.94	241.82
1983	242.19	242.46	241.98	242.36	243.40	243.26	242.81	242.48	241.90	241.37	240.88	241.46	242.21
1984	242.53	242.00	242.46	243.48	243.94	244.17	243.86	243.05	242.05	241.66	241.18	241.14	242.63
1985	242.53	242.03	242.72	243.26	243.49	243.26	242.93	242.27	241.61	240.95	241.30	241.86	242.35
1986	243.20	242.84	243.04	243.79	243.51	243.94	243.70	243.53	243.03	243.37	242.54	242.34	243.24
1987	242.94	243.64	242.75	243.80	243.15	243.09	242.87	242.07	241.54	240.96	240.88	240.98	242.39
1988	241.68	241.55	241.38	242.38	243.25	243.22	243.14	242.80	242.28	241.92	241.58	241.36	242.21
1989	241.81	241.64	241.76	243.23	243.94	244.19	243.83	243.17	242.55	242.04	241.64	241.97	242.65
=====													
Average	241.85	241.73	241.92	242.76	243.30	243.50	243.37	242.91	242.30	241.78	241.44	241.45	242.36
Std.Dev	0.69	0.65	0.56	0.56	0.49	0.53	0.54	0.58	0.64	0.68	0.63	0.58	0.43
Maximum	243.54	243.64	243.31	244.07	244.34	244.80	244.77	244.40	244.10	243.41	243.02	242.78	243.50
Minimum	239.89	240.08	240.19	240.60	241.03	240.96	241.56	241.24	240.27	239.23	239.33	238.92	240.80

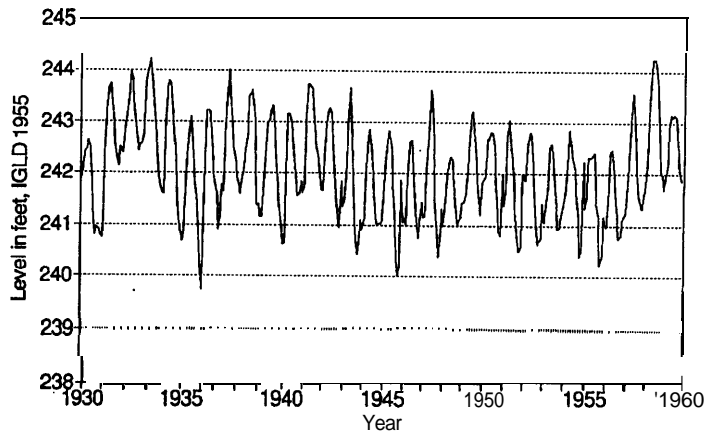
Iroquois, with Discretionary Actions

Basis of Comparison, 1900-i 930



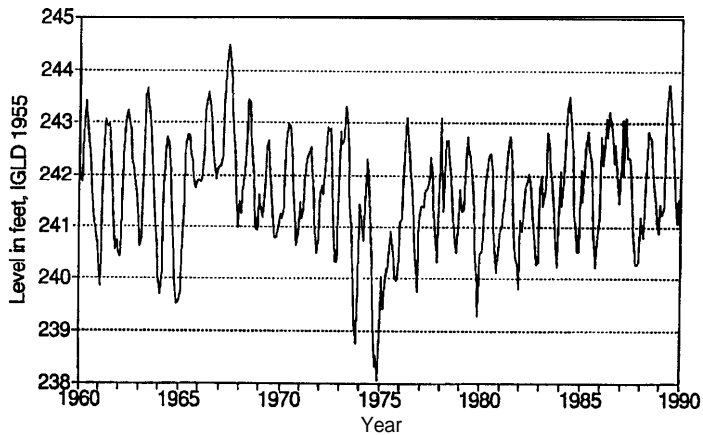
Iroquois, with Discretionary Actions

Basis of Comparison, 1930-l 960



Iroquois, with Discretionary Actions

Basis of Comparison, 1960-1990



Basis of Comparison, IJC Phase II Levels Reference Study
 Iroquois, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	242.16	242.24	242.10	242.76	243.05	243.28	243.25	243.04	242.16	241.62	241.34	241.05	242.34
1901	241.44	241.21	241.46	242.45	242.81	242.90	242.58	242.33	241.73	241.28	241.06	241.18	241.87
1902	241.49	241.46	241.92	242.34	242.90	243.65	243.98	242.78	241.70	241.04	240.80	241.13	242.10
1903	241.32	241.29	241.73	242.54	242.31	242.60	242.91	242.45	241.54	240.99	240.74	240.90	241.78
1904	240.55	240.98	241.49	242.45	243.00	243.27	242.99	241.91	241.11	240.63	240.44	240.88	241.64
1905	240.86	240.65	240.98	242.31	242.74	242.96	242.67	242.03	241.09	240.56	240.54	241.04	241.54
1906	241.57	241.10	241.08	241.89	242.70	243.28	243.14	242.44	241.69	241.35	240.82	240.53	241.80
1907	242.02	241.27	241.06	241.66	242.46	242.93	242.85	242.25	241.49	240.90	240.36	240.49	241.65
1908	241.93	241.20	241.40	242.08	242.63	242.70	242.31	241.57	241.02	240.65	240.79	240.66	241.58
1909	240.45	240.80	241.26	242.11	242.71	242.77	242.38	241.86	241.42	241.00	241.10	241.04	241.58
1910	241.06	241.32	241.75	242.22	242.72	242.94	242.92	242.53	241.87	241.32	240.98	241.10	241.89
1911	240.97	241.19	241.55	242.81	243.71	244.08	244.18	243.78	243.42	243.06	242.40	242.12	242.77
1912	242.35	241.99	242.00	242.95	243.62	244.11	243.24	242.40	241.90	241.29	240.64	240.66	242.26
1913	242.20	241.77	241.41	242.49	242.69	242.56	242.36	242.03	241.33	240.94	240.62	240.91	241.78
1914	241.30	241.07	241.28	242.16	242.59	242.69	242.52	242.32	241.72	241.09	240.86	240.84	241.70
1915	240.82	241.28	241.38	242.11	243.02	243.07	243.10	243.24	242.05	241.36	240.79	241.12	241.94
1916	241.52	241.20	241.23	242.12	242.73	243.45	243.12	241.67	241.09	240.90	240.95	241.08	241.76
1917	241.18	241.27	241.56	242.25	242.40	242.80	242.80	241.75	240.82	240.41	239.96	240.30	241.46
1918	241.14	240.92	241.14	241.52	241.89	242.38	242.50	242.07	241.52	240.94	240.24	240.63	241.41
1919	241.54	240.79	240.83	241.52	242.39	242.65	242.05	241.34	241.04	240.74	240.57	241.08	241.38
1920	240.97	240.94	241.28	242.24	243.02	243.46	243.82	242.98	242.02	241.30	240.76	240.88	241.97
1921	241.90	241.04	241.20	241.75	242.32	242.68	242.75	242.42	242.08	241.78	241.42	241.12	241.87
1922	241.46	241.59	241.74	242.54	242.92	242.95	242.62	242.08	241.42	241.08	241.00	240.73	241.84
1923	240.66	240.64	241.16	242.54	243.36	243.56	243.29	243.02	242.62	242.24	241.95	241.71	242.23
1924	241.93	241.71	241.80	242.66	243.25	243.28	243.01	242.52	241.92	241.31	240.95	240.82	242.10
1925	240.37	240.42	241.51	241.94	242.38	242.70	242.54	242.24	241.80	241.44	241.38	241.22	241.66
1926	240.94	240.65	240.64	242.22	243.20	243.46	243.37	243.19	242.98	241.97	241.38	241.09	242.09
1927	241.75	241.04	241.20	241.68	242.48	243.36	243.67	243.02	242.42	241.88	241.59	241.70	242.15
1928	243.13	242.45	242.14	242.71	242.99	243.36	243.25	242.60	241.54	241.11	240.74	240.87	242.24
1929	241.75	241.23	241.32	242.37	243.12	243.17	242.86	241.82	241.21	240.71	240.32	240.52	241.70
1930	242.00	241.92	242.21	242.40	242.46	242.64	242.49	241.88	241.24	240.78	240.96	240.93	241.83
1931	240.80	240.73	241.02	242.36	243.24	243.67	243.74	243.46	243.02	242.56	242.30	242.13	242.42

Basis of Comparison, IJC Phase II Levels Reference Study
 Iroquois, Monthly Mean Levels, IGLD 1955, With Deviations

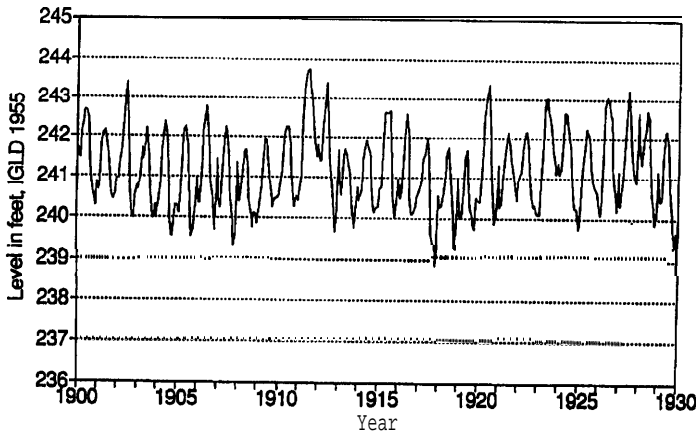
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	242.49	242.46	242.38	242.88	243.17	243.56	243.96	243.83	243.38	243.00	242.65	242.42	243.01
1933	242.58	242.56	242.76	243.77	243.92	244.09	244.20	243.80	243.33	242.77	242.35	241.89	243.17
1934	241.78	241.61	241.60	242.86	243.69	243.80	243.73	243.22	242.78	242.47	241.94	241.20	242.56
1935	240.90	240.68	240.77	241.64	242.28	242.83	243.08	242.72	242.16	241.78	241.52	240.82	241.76
1936	240.28	239.75	240.42	242.74	243.21	243.20	242.97	242.42	241.96	241.73	241.60	240.92	241.77
1937	241.17	241.77	241.64	242.79	243.51	244.01	243.52	242.96	242.52	242.21	241.90	241.76	242.48
1938	241.60	241.94	241.99	242.46	242.76	243.49	243.55	243.61	243.02	241.89	241.38	241.41	242.42
1939	241.17	241.16	241.86	242.69	242.97	243.03	243.21	243.32	242.85	242.32	241.86	241.44	242.32
1940	240.99	240.62	240.64	242.30	243.16	243.15	242.97	242.40	242.19	241.82	241.56	241.59	241.95
1941	241.84	241.62	241.75	243.08	243.73	243.71	243.63	243.28	242.80	242.50	242.34	241.92	242.68
1942	241.70	241.66	242.25	242.96	243.24	243.28	243.16	242.70	242.05	241.49	241.07	240.96	242.21
1943	241.84	241.36	241.43	242.09	243.00	243.68	243.22	242.23	241.21	240.82	240.42	240.50	241.82
1944	241.09	240.93	241.13	242.04	242.72	242.87	242.54	242.05	241.58	241.13	241.01	241.04	241.68
1945	241.04	241.10	241.84	242.27	242.71	242.83	242.46	241.73	241.27	240.68	240.02	240.19	241.51
1946	241.86	241.06	241.17	241.02	241.88	242.63	242.66	242.26	241.64	241.26	240.74	241.11	241.61
1947	241.43	241.15	241.18	242.08	242.74	243.64	243.50	242.70	241.46	240.80	240.37	240.81	241.82
1948	241.31	-240.99	241.39	242.00	242.24	242.31	242.26	241.90	241.38	241.02	241.08	241.15	241.59
1949	241.42	241.45	241.58	242.09	242.61	243.18	243.22	242.73	242.25	241.84	241.43	241.20	242.08
1950	241.82	241.89	241.94	242.70	242.66	242.82	242.80	242.52	241.84	241.35	240.88	240.79	242.00
1951	241.97	241.39	241.70	242.73	243.06	242.46	242.36	241.88	241.24	240.77	240.48	240.57	241.72
1952	241.99	241.92	241.85	242.57	242.82	242.80	242.29	241.82	241.15	240.63	240.68	240.73	241.77
1953	241.42	241.06	241.24	241.76	242.51	242.58	242.43	241.91	241.42	240.94	240.95	241.14	241.61
1954	241.32	241.42	241.69	242.38	242.86	242.56	242.31	242.07	241.58	241.19	240.38	240.52	241.69
1955	242.24	241.31	241.56	242.31	242.29	242.33	242.40	242.02	241.39	241.19	240.22	240.42	241.64
1956	241.18	240.97	241.00	241.68	242.41	242.46	242.01	241.68	241.26	240.75	240.80	241.12	241.44
1957	241.20	241.22	241.43	242.08	242.96	243.58	243.36	242.56	241.98	241.53	241.40	241.32	242.05
1958	241.61	241.68	242.14	243.33	244.05	244.24	244.23	244.08	243.77	242.64	242.06	241.95	242.98
1959	241.70	241.95	242.17	242.92	243.14	243.08	243.14	243.11	242.54	242.12	241.90	241.86	242.47
1960	242.23	241.95	241.85	242.78	243.40	243.17	242.68	242.33	241.79	241.30	241.10	240.68	242.10
1961	240.22	239.84	240.82	242.19	243.06	242.91	242.97	242.56	241.91	241.39	240.57	240.73	241.60

Basis of Comparison, IJC Phase II Levels Reference Study
 Iroquois, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	240.49	240.42	240.80	242.44	243.11	243.24	243.04	242.85	242.31	242.13	241.81	241.69	242.03
1963	241.16	240.61	240.77	242.42	243.50	243.68	243.36	242.98	242.32	241.57	241.18	240.67	242.02
1964	240.00	239.70	240.12	241.58	242.49	242.73	242.62	242.10	241.49	240.59	239.92	239.53	241.07
1965	239.57	239.77	240.49	241.30	242.54	242.78	242.76	242.43	242.28	241.97	241.75	241.88	241.63
1966	241.91	241.85	241.92	242.40	243.21	243.60	243.44	243.06	242.61	242.19	241.91	242.12	242.52
1967	242.19	242.18	242.36	243.31	244.04	244.50	244.43	243.87	243.18	242.29	241.61	240.99	242.91
1968	241.50	241.25	241.69	242.03	242.73	243.45	243.38	242.73	241.93	241.29	240.95	240.94	241.99
1969	241.62	241.34	241.18	241.84	242.54	242.69	242.22	241.62	241.03	240.81	240.80	240.90	241.55
1970	241.26	241.17	241.32	242.18	242.67	242.96	242.91	242.34	241.70	241.16	240.64	240.87	241.76
1971	241.48	241.16	241.32	241.93	242.32	242.45	242.53	242.16	241.62	241.00	240.51	240.78	241.60
1972	241.62	241.80	241.63	242.15	242.92	242.84	242.89	242.40	241.30	240.34	240.32	241.36	241.80
1973	242.84	242.60	242.66	243.30	243.16	242.54	241.50	241.04	239.87	239.09	238.77	239.50	241.41
1974	241.44	241.32	240.73	241.34	242.31	242.12	241.35	240.30	239.36	238.30	238.55	238.05	240.43
1975	239.26	240.04	239.42	239.77	240.21	240.12	240.92	240.77	240.38	240.00	239.96	240.36	240.10
1976	241.11	241.15	241.95	242.94	243.10	242.56	241.98	241.84	241.21	240.60	239.74	241.07	241.60
1977	241.37	241.40	241.38	241.70	241.72	241.90	242.36	242.05	241.37	240.59	240.32	242.00	241.51
1978	243.10	242.22	241.30	242.69	242.68	242.39	242.00	241.66	241.05	240.62	240.50	241.12	241.78
1979	241.71	241.30	241.32	242.38	242.73	242.42	242.36	241.99	241.39	240.59	239.94	239.29	241.45
1980	240.49	240.52	240.81	241.80	241.97	242.37	242.42	242.08	241.00	240.37	240.10	240.54	241.21
1981	241.02	240.95	241.40	241.58	242.34	242.74	242.74	242.20	241.26	240.47	240.32	239.81	241.40
1982	241.14	240.93	241.13	241.76	241.88	242.04	241.87	241.55	241.04	240.60	240.26	240.32	241.21
1983	241.76	242.00	241.40	241.76	242.82	242.60	242.17	241.86	241.26	240.74	240.22	240.88	241.62
1984	242.09	241.40	241.84	242.89	243.27	243.51	243.19	242.34	241.28	240.98	240.52	240.53	241.99
1985	242.12	241.48	242.11	242.60	242.83	242.57	242.23	241.55	240.86	240.19	240.58	241.19	241.69
1986	242.74	242.20	242.37	243.08	242.72	243.20	242.91	242.76	242.24	242.60	241.66	241.46	242.49
1987	242.23	243.06	241.99	243.10	242.34	242.36	242.16	241.34	240.85	240.25	240.26	240.35	241.69
1988	241.21	241.02	240.80	241.88	242.83	242.76	242.70	242.34	241.81	241.46	241.08	240.88	241.73
1989	241.45	241.24	241.38	242.94	243.58	243.72	243.28	242.61	242.00	241.50	241.06	241.53	242.19
Average	241.45	241.29	241.45	242.29	242.81	243.01	242.86	242.38	241.75	241.24	240.92	240.97	241.87
Std.Dev	0.69	0.63	0.55	0.58	0.55	0.61	0.64	0.69	0.75	0.79	0.74	0.65	0.48
Maximum	243.13	243.06	242.76	243.77	244.05	244.50	244.43	244.08	243.77	243.06	242.65	242.42	243.17
Minimum	239.26	239.70	239.42	239.77	240.21	240.12	240.92	240.30	239.36	238.30	238.55	238.05	240.10

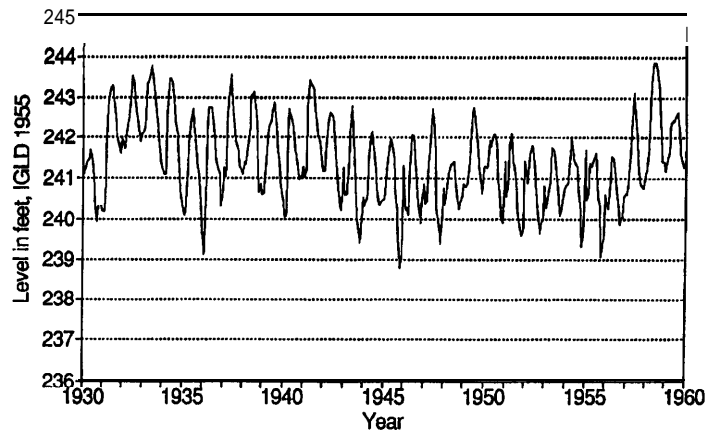
Morrisburg, with Discretionary Actions

Basis of Comparison, 1900-1 930



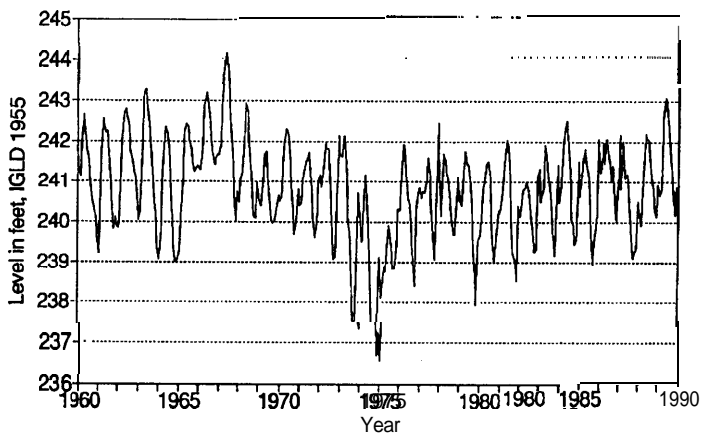
Morrisburg, with Discretionary Actions

Basis of Comparison, 1930-1 960



Morrisburg, with Discretionary Actions

Basis of Comparison, '1960-1 990



Basis of Comparison, IJC Phase II Levels Reference Study
 Morrisburg, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	241.68	241.74	241.49	242.12	242.38	242.68	242.66	242.44	241.43	240.90	240.69	240.28	241.71
1901	240.89	240.65	240.97	241.83	242.09	242.15	241.79	241.61	240.96	240.57	240.44	240.59	241.21
1902	240.96	240.95	241.36	241.71	242.40	243.24	243.41	241.86	240.72	240.08	239.96	240.52	241.43
1903	240.78	240.68	241.00	241.73	241.44	241.88	242.22	241.66	240.61	240.08	239.95	240.30	241.03
1904	239.97	240.44	240.90	241.68	242.16	242.40	242.06	240.78	239.96	239.56	239.55	240.30	240.81
1905	240.29	240.09	240.46	241.82	242.16	242.28	241.82	241.04	239.99	239.54	239.71	240.40	240.80
1906	241.00	240.34	240.36	241.29	242.18	242.79	242.50	241.68	240.89	240.58	239.94	239.66	241.10
1907	241.47	240.45	240.22	240.87	241.78	242.28	242.14	241.41	240.58	239.93	239.33	239.61	240.84
1908	241.38	240.38	240.52	241.15	241.66	241.70	241.26	240.45	240.04	239.77	240.12	240.08	240.71
1909	239.86	240.25	240.68	241.54	241.94	241.94	241.49	240.93	240.57	240.24	240.48	240.46	240.86
1910	240.52	240.80	241.16	241.61	242.06	242.28	242.28	241.84	241.10	240.53	240.26	240.52	241.25
1911	240.42	240.67	241.07	242.47	243.36	243.70	243.77	243.34	242.95	242.57	241.83	241.52	242.31
1912	241.83	241.42	241.44	242.36	242.95	243.40	242.36	241.49	241.00	240.35	239.64	239.78	241.50
1913	241.67	240.98	240.54	241.58	241.74	241.58	241.42	241.14	240.42	240.08	239.76	240.22	240.93
1914	240.76	240.41	240.70	241.49	241.84	241.93	241.76	241.61	240.89	240.26	240.15	240.25	241.00
1915	240.26	240.73	240.75	241.63	242.66	242.63	242.63	242.68	241.20	240.48	239.98	240.54	241.35
1916	240.96	240.48	240.52	241.38	241.92	242.60	242.14	240.52	240.08	240.08	240.26	240.50	240.95
1917	240.64	240.73	240.97	241.48	241.60	242.00	241.87	240.60	239.63	239.28	238.77	239.37	240.58
1918	240.55	240.25	240.30	240.56	241.02	241.64	241.78	241.29	240.66	240.01	239.18	239.81	240.59
1919	240.96	239.99	240.02	240.72	241.56	241.69	241.00	240.27	240.08	239.86	239.73	240.50	240.53
1920	240.42	240.40	240.76	241.75	242.57	243.03	243.36	242.26	241.16	240.40	239.86	240.04	241.33
1921	241.35	240.26	240.38	240.94	241.57	242.02	242.14	241.81	241.48	241.20	240.79	240.46	241.20
1922	240.94	241.10	241.14	241.87	242.17	242.16	241.71	241.18	240.54	240.28	240.35	240.14	241.13
1923	240.08	240.08	240.65	242.15	242.98	243.04	242.69	242.46	242.05	241.69	241.41	241.10	241.70
1924	241.39	241.10	241.23	242.15	242.65	242.61	242.30	241.75	241.16	240.49	240.25	240.24	241.44
1925	239.76	239.84	240.99	241.34	241.85	242.24	242.04	241.71	241.24	240.88	240.82	240.62	241.11
1926	240.38	240.09	240.10	241.86	242.81	243.06	242.93	242.72	242.48	241.20	240.49	240.20	241.53
1927	241.19	240.32	240.46	240.98	241.96	242.92	243.24	242.42	241.80	241.22	240.93	240.92	241.53
1928	242.66	241.73	241.38	241.97	242.26	242.72	242.52	241.74	240.58	240.22	239.85	240.06	241.47
1929	241.19	240.41	240.47	241.48	242.16	242.20	241.85	240.66	240.12	239.68	239.31	239.68	240.77
1930	241.46	241.13	241.30	241.42	241.46	241.71	241.55	240.96	240.34	239.94	240.33	240.35	
1931													241.95

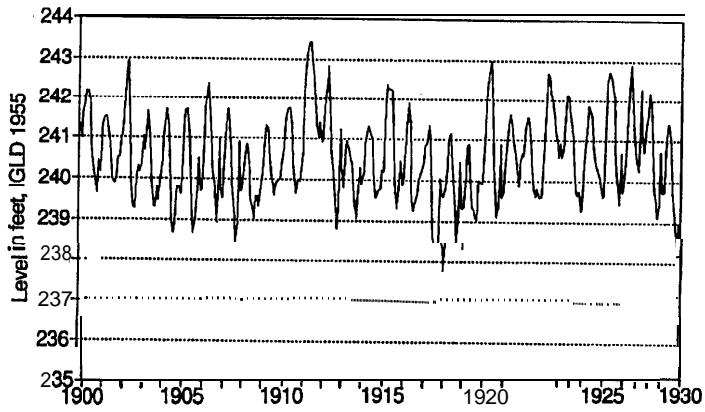
Basis of Comparison, IJC Phase II Levels Reference Study
 Morrisburg, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	242.02	241.83	241.74	242.23	242.50	243.03	243.52	243.36	242.90	242.54	242.12	241.90	242.47
1933	242.12	242.12	242.35	243.37	243.38	243.60	243.78	243.36	242.86	242.31	241.92	241.40	242.71
1934	241.28	241.12	241.12	242.53	243.40	243.48	243.37	242.84	242.38	242.08	241.51	240.66	242.15
1935	240.34	240.12	240.24	241.25	241.93	242.48	242.69	242.27	241.69	241.34	241.06	240.26	241.31
1936	239.67	239.12	239.86	242.35	242.76	242.75	242.53	241.95	241.46	241.25	241.12	240.36	241.26
1937	240.62	241.25	241.04	242.42	243.05	243.55	242.92	242.31	241.92	241.67	241.30	241.21	241.94
1938	241.10	241.43	241.36	241.80	242.14	243.04	243.10	243.15	242.45	241.12	240.69	240.87	241.85
1939	240.62	240.64	241.40	242.17	242.33	242.42	242.68	242.86	242.35	241.79	241.34	240.92	241.79
1940	240.43	240.05	240.10	241.94	242.70	242.55	242.32	241.71	241.61	241.22	240.99	241.05	241.39
1941	241.29	241.02	241.22	242.75	243.42	243.33	243.22	242.84	242.34	242.05	241.90	241.42	242.23
1942	241.19	241.18	241.79	242.36	242.62	242.60	242.51	242.00	241.31	240.74	240.30	240.24	241.57
1943	241.28	240.61	240.62	241.30	242.16	242.78	242.24	241.10	240.03	239.82	239.39	239.67	240.92
1944	240.54	240.34	240.55	241.47	242.06	242.15	241.73	241.25	240.79	240.39	240.38	240.47	241.01
1945	240.49	240.58	241.32	241.54	241.92	241.96	241.50	240.70	240.30	239.52	238.78	239.11	240.64
1946	241.31	240.25	240.31	240.13	241.24	242.06	242.04	241.57	240.92	240.51	239.90	240.50	240.90
1947	240.88	240.40	240.46	241.31	241.88	242.74	242.54	241.63	240.26	239.74	239.38	240.10	240.94
1948	240.77	240.37	240.73	241.17	241.34	241.38	241.40	241.07	240.57	240.28	240.42	240.58	240.84
1949	240.88	240.82	240.88	241.41	242.00	242.72	242.75	242.22	241.70	241.28	240.89	240.66	241.52
1950	241.32	241.26	241.28	241.92	241.79	242.05	242.09	241.82	241.05	240.57	240.06	239.92	241.26
1951	241.42	240.57	240.81	241.84	242.10	241.39	241.32	240.90	240.25	239.85	239.58	239.72	240.81
1952	241.44	241.12	240.92	241.60	241.82	241.75	241.23	240.81	240.12	239.64	239.90	239.97	240.86
1953	240.84	240.30	240.48	240.96	241.75	241.72	241.60	241.03	240.54	240.11	240.29	240.52	240.85
1954	240.79	240.84	240.92	241.59	241.96	241.60	241.42	241.29	240.76	240.30	239.30	239.57	240.86
1955	241.71	240.49	240.67	241.37	241.29	241.42	241.63	241.22	240.56	240.34	239.08	239.57	240.78
1956	240.63	240.37	240.28	240.92	241.54	241.51	241.03	240.76	240.31	239.86	240.09	240.55	240.65
1957	240.66	240.63	240.81	241.51	242.48	243.12	242.72	241.82	241.24	240.88	240.82	240.77	241.46
1958	241.10	241.19	241.69	243.00	243.72	243.86	243.83	243.66	243.30	241.98	241.40	241.42	242.51
1959	241.19	241.48	241.65	242.30	242.45	242.40	242.54	242.64	242.02	241.59	241.37	241.28	241.91
1960	241.70	241.28	241.16	242.11	242.66	242.30	241.81	241.54	241.05	240.61	240.48	240.08	241.40
1961	239.61	239.22	240.29	241.79	242.57	242.21	242.28	241.87	241.16	240.70	239.81	240.12	240.97

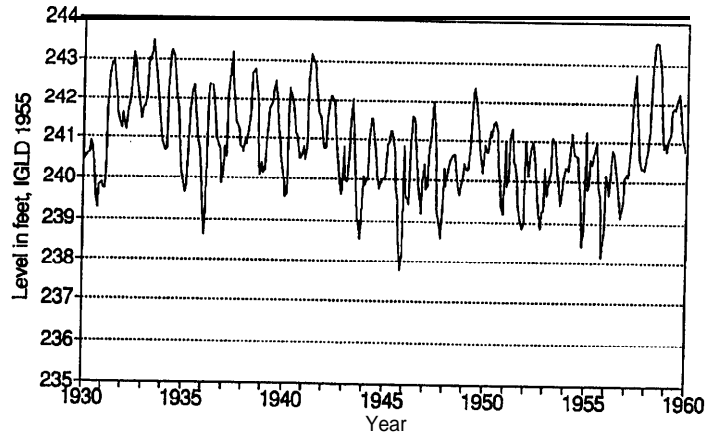
Basis of Comparison, IJC Phase II Levels Reference Study
Morrisburg, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	239.90	239.84	240.27	242.08	242.72	242.81	242.59	242.36	241.77	241.60	241.28	241.17	241.53
1963	240.63	240.04	240.28	242.08	243.18	243.31	242.93	242.50	241.81	241.03	240.67	240.10	241.55
1964	239.37	239.07	239.61	241.24	242.16	242.36	242.22	241.63	240.98	240.04	239.36	238.99	240.59
1965	239.07	239.31	240.08	240.93	242.25	242.45	242.37	242.00	241.86	241.52	241.26	241.38	241.21
1966	241.41	241.36	241.32	241.84	242.83	243.20	243.02	242.60	242.12	241.70	241.43	241.64	242.04
1967	241.71	241.68	241.93	242.92	243.66	244.12	243.96	243.31	242.58	241.54	240.68	239.98	242.34
1968	240.76	240.47	241.04	241.27	242.15	242.94	242.77	242.00	241.08	240.44	240.10	240.08	241.26
1969	240.98	240.54	240.39	241.03	241.72	241.78	241.20	240.56	240.04	239.96	240.02	240.17	240.70
1970	240.65	240.51	240.65	241.53	241.98	242.30	242.19	241.54	240.87	240.26	239.66	239.98	241.01
1971	240.80	240.40	240.47	241.06	241.38	241.59	241.76	241.39	240.75	240.09	239.60	239.99	240.77
1972	241.04	241.20	240.86	241.30	242.02	241.84	241.83	241.29	240.08	239.06	239.12	240.41	240.84
1973	242.17	241.68	241.66	242.18	241.95	241.15	239.97	239.66	238.39	237.58	237.34	238.35	240.17
1974	240.74	240.40	239.50	240.11	241.20	240.85	239.91	238.76	237.82	236.70	237.24	236.57	239.15
1975	238.20	239.12	238.12	238.40	238.88	238.74	239.90	239.79	239.32	238.82	238.85	239.39	238.96
1976	240.32	240.28	240.94	241.92	241.94	241.18	240.52	240.54	239.96	239.34	238.40	240.35	240.47
1977	240.78	240.86	240.60	240.75	240.72	241.05	241.64	241.24	240.40	239.35	239.08	241.22	240.64
1978	242.46	241.23	240.15	241.73	241.57	241.28	240.98	240.70	240.07	239.68	239.66	240.50	240.83
1979	241.14	240.53	240.39	241.48	241.79	241.41	241.46	241.09	240.35	239.42	238.73	237.93	240.48
1980	239.56	239.64	240.00	240.90	240.95	241.46	241.52	241.12	239.86	239.24	239.01	239.62	240.24
1981	240.30	240.20	240.53	240.76	241.64	242.06	241.98	241.30	240.12	239.23	239.07	238.52	240.48
1982	240.40	240.12	240.33	240.81	240.84	241.00	240.83	240.60	240.07	239.62	239.25	239.32	240.27
1983	241.14	241.33	240.51	240.84	241.95	241.60	241.18	240.90	240.28	239.73	239.16	239.96	240.71
1984	241.44	240.47	240.89	242.01	242.26	242.52	242.17	241.22	240.06	239.90	239.46	239.56	241.00
1985	241.52	240.63	241.20	241.59	241.83	241.50	241.13	240.42	239.66	238.94	239.42	240.14	240.66
1986	242.09	241.24	241.34	242.00	241.48	242.08	241.68	241.57	241.00	241.41	240.25	240.02	241.35
1987	241.11	242.19	240.80	242.04	241.08	241.22	241.06	240.20	239.74	239.10	239.26	239.33	240.59
1988	240.51	240.20	239.90	241.12	242.22	242.09	242.06	241.66	241.11	240.77	240.30	240.13	241.01
1989	240.94	240.65	240.83	242.54	243.08	243.04	242.46	241.77	241.15	240.67	240.17	240.88	241.51
Average	240.87	240.63	240.75	241.60	242.10	242.27	242.11	241.58	240.92	240.41	240.10	240.24	241.13
Std.Dev	0.73	0.64	0.60	0.69	0.72	0.81	0.85	0.90	0.98	1.01	0.95	0.81	0.63
Maximum	242.66	242.19	242.35	243.37	243.72	244.12	243.96	243.66	243.30	242.57	242.12	241.90	242.71
Minimum	238.20	239.07	238.12	238.40	238.88	238.74	239.90	238.76	237.82	236.70	237.24	236.57	238.96

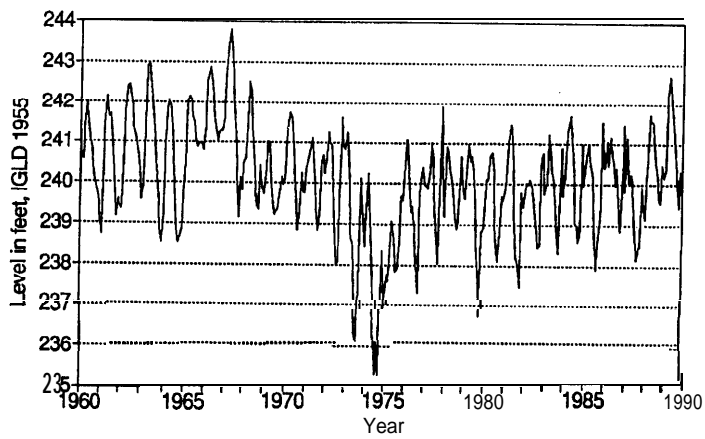
Long Sault, with Discretionary Actions
Basis of Comparison, 1900-1 930



Long Sault, with Discretionary Actions
Basis of Comparison, 1930-1 960



Long Sault, with Discretionary Actions
Basis of Comparison, 1960-1 990



Basis of Comparison, IJC Phase II Levels Reference Study
 Long Sault Dam, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1900	241.28	241.34	240.98	241.59	241.82	242.18	242.17	241.94	240.84	240.32	240.15	239.64	241.19
1901	240.44	240.19	240.58	241.32	241.50	241.52	241.14	241.01	240.32	239.98	239.92	240.10	240.67
1902	240.52	240.54	240.90	241.20	241.98	242.90	242.95	241.11	239.90	239.30	239.26	240.01	240.88
1903	240.34	240.18	240.38	241.06	240.72	241.29	241.66	241.01	239.84	239.33	239.29	239.80	240.41
1904	239.48	240.00	240.42	241.04	241.46	241.69	241.29	239.84	239.00	238.66	238.81	239.82	240.13
1905	239.82	239.63	240.02	241.42	241.68	241.71	241.10	240.21	239.08	238.69	239.01	239.86	240.19
1906	240.52	239.71	239.76	240.79	241.76	242.38	241.98	241.04	240.23	239.93	239.20	238.93	240.52
1907	241.02	239.77	239.52	240.21	241.21	241.74	241.55	240.70	239.83	239.12	238.47	238.87	240.17
1908	240.94	239.70	239.80	240.38	240.85	240.87	240.39	239.52	239.23	239.03	239.56	239.59	239.99
1909	239.36	239.79	240.21	241.07	241.30	241.25	240.75	240.16	239.86	239.60	239.96	239.97	240.27
1910	240.06	240.38	240.69	241.10	241.50	241.74	241.77	241.27	240.46	239.87	239.67	240.04	240.71
1911	239.95	240.24	240.67	242.19	243.09	243.39	243.44	242.98	242.56	242.16	241.35	241.02	241.92
1912	241.40	240.94	240.97	241.87	242.40	242.82	241.64	240.73	240.26	239.58	238.80	239.05	240.87
1913	241.24	240.32	239.82	240.84	240.97	240.76	240.64	240.41	239.67	239.37	239.05	239.65	240.23
1914	240.32	239.87	240.21	240.94	241.22	241.30	241.14	241.02	240.21	239.57	239.56	239.76	240.43
1915	239.78	240.28	240.22	241.24	242.36	242.27	242.24	242.23	240.50	239.75	239.31	240.05	240.85
1916	240.50	239.88	239.93	240.77	241.25	241.90	241.32	239.55	239.24	239.39	239.70	240.02	240.29
1917	240.19	240.28	240.48	240.86	240.95	241.34	241.10	239.64	238.63	238.34	237.78	238.59	239.85
1918	240.06	239.69	239.60	239.77	240.30	241.03	241.18	240.65	239.94	239.24	238.30	239.13	239.91
1919	240.48	239.32	239.34	240.07	240.87	240.90	240.12	239.38	239.28	239.12	239.03	240.01	239.83
1920	239.95	239.95	240.34	241.34	242.20	242.67	242.98	241.68	240.44	239.66	239.11	239.35	240.81
1921	240.90	239.61	239.70	240.26	240.94	241.47	241.64	241.30	240.99	240.71	240.26	239.90	240.64
1922	240.51	240.69	240.64	241.32	241.55	241.52	240.96	240.44	239.80	239.62	239.82	239.66	240.54
1923	239.60	239.62	240.24	241.84	242.68	242.60	242.20	242.00	241.58	241.24	240.96	240.60	241.26
1924	240.94	240.60	240.77	241.73	242.16	242.06	241.72	241.11	240.53	239.81	239.67	239.75	240.90
1925	239.27	239.36	240.56	240.85	241.41	241.86	241.64	241.28	240.78	240.42	240.36	240.11	240.66
1926	239.92	239.63	239.65	241.57	242.50	242.73	242.57	242.34	242.06	240.57	239.75	239.45	241.06
1927	240.72	239.72	239.86	240.40	241.54	242.57	242.89	241.93	241.29	240.66	240.38	240.28	241.02
1928	242.28	241.14	240.74	241.36	241.65	242.19	241.93	241.02	239.78	239.50	239.11	239.40	240.84
1929	240.73	239.74	239.76	240.75	241.38	241.39	241.02	239.70	239.21	238.82	238.47	238.98	240.00
1930	241.01	240.47	240.54	240.60	240.62	240.94	240.76	240.20	239.58	239.24	239.81	239.87	240.30
1931	239.76	239.72	240.08	241.72	242.60	242.88	242.94	242.62	242.13	241.62	241.40	241.25	241.56

Basis of Comparison, IJC Phase II Levels Reference Study
 Long Sault Dam, Monthly Mean Levels, IGLD 1955, With Deviations

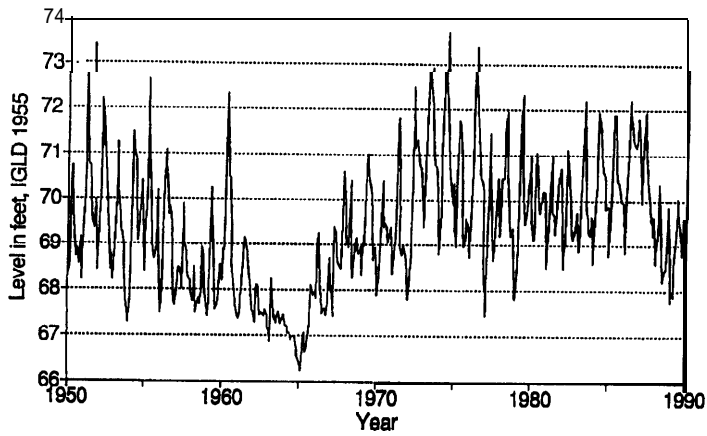
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1932	241.64	241.32	241.20	241.68	241.95	242.59	243.17	242.99	242.52	242.16	241.69	241.48	242.03
1933	241.75	241.76	242.02	243.04	242.94	243.19	243.45	243.00	242.48	241.94	241.57	240.99	242.34
1934	240.87	240.71	240.73	242.27	243.16	243.22	243.09	242.52	242.05	241.76	241.16	240.21	241.81
1935	239.88	239.66	239.80	240.93	241.64	242.19	242.36	241.91	241.30	240.98	240.70	239.79	240.93
1936	239.17	238.60	239.40	242.04	242.40	242.39	242.16	241.56	241.04	240.85	240.73	239.90	240.85
1937	240.18	240.82	240.55	242.11	242.68	243.18	242.41	241.76	241.42	241.24	240.82	240.77	241.50
1938	240.68	241.00	240.85	241.26	241.63	242.68	242.73	242.78	241.98	240.48	240.12	240.42	241.38
1939	240.17	240.21	241.02	241.73	241.80	241.92	242.25	242.49	241.94	241.35	240.91	240.48	241.36
1940	239.97	239.58	239.65	241.65	242.32	242.06	241.78	241.13	241.12	240.74	240.52	240.60	240.93
1941	240.83	240.51	240.78	242.48	243.16	243.03	242.90	242.47	241.94	241.68	241.54	241.02	241.86
1942	240.78	240.77	241.40	241.88	242.11	242.03	241.98	241.42	240.70	240.13	239.66	239.64	241.04
1943	240.83	239.98	239.94	240.64	241.48	242.03	241.42	240.17	239.05	238.98	238.52	238.98	240.17
1944	240.08	239.85	240.06	241.00	241.52	241.56	241.05	240.58	240.14	239.78	239.87	240.00	240.46
1945	240.03	240.14	240.88	240.93	241.26	241.22	240.71	239.84	239.49	238.53	237.74	238.21	239.91
1946	240.85	239.56	239.61	239.39	240.72	241.60	241.53	241.01	240.31	239.89	239.21	240.00	240.31
1947	240.42	239.77	239.86	240.67	241.17	241.99	241.76	240.74	239.26	238.84	238.57	239.52	240.21
1948	240.32	239.86	240.18	240.49	240.60	240.62	240.68	240.38	239.90	239.65	239.87	240.09	240.22
1949	240.44	240.30	240.30	240.85	241.50	242.34	242.37	241.80	241.26	240.81	240.44	240.21	241.05
1950	240.90	240.74	240.73	241.27	241.08	241.42	241.50	241.24	240.40	239.92	239.37	239.20	240.65
1951	240.98	239.89	240.06	241.10	241.31	240.48	240.45	240.09	239.43	239.08	238.83	239.00	240.06
1952	241.00	240.46	240.15	240.80	240.99	240.88	240.34	239.97	239.27	238.83	239.25	239.32	240.10
1953	240.35	239.66	239.85	240.28	241.12	241.00	240.92	240.30	239.81	239.42	239.73	240.02	240.21
1954	240.35	240.36	240.29	240.94	241.22	240.80	240.68	240.64	240.08	239.58	238.40	238.78	240.18
1955	241.28	239.81	239.93	240.59	240.45	240.66	240.98	240.56	239.86	239.65	238.14	238.86	240.06
1956	240.18	239.87	239.68	240.29	240.82	240.72	240.22	239.99	239.53	239.12	239.51	240.08	240.00
1957	240.21	240.13	240.29	241.04	242.09	242.74	242.20	241.21	240.63	240.33	240.34	240.32	240.96
1958	240.68	240.79	241.32	242.73	243.45	243.54	243.50	243.32	242.92	241.44	240.87	240.99	242.13
1959	240.78	241.08	241.22	241.78	241.88	241.84	242.05	242.24	241.60	241.15	240.94	240.79	241.45
1960	241.26	240.74	240.59	241.56	242.04	241.59	241.09	240.88	240.44	240.04	239.97	239.60	240.82
1961	239.10	238.70	239.85	241.46	242.17	241.64	241.72	241.30	240.54	240.12	239.17	239.61	240.45

Basis of Comparison, IJC Phase II Levels Reference Study
 Long Sault Dam, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1962	239.41	239.36	239.83	241.80	242.41	242.46	242.22	241.96	241.34	241.17	240.85	240.74	241.13
1963	240.19	239.58	239.87	241.79	242.92	243.00	242.58	242.10	241.39	240.58	240.25	239.61	241.16
1964	238.84	238.54	239.19	240.98	241.90	242.06	241.89	241.25	240.57	239.58	238.90	238.54	240.19
1965	238.66	238.92	239.75	240.62	242.02	242.17	242.05	241.65	241.51	241.14	240.88	240.98	240.86
1966	241.00	240.94	240.81	241.39	242.51	242.88	242.67	242.23	241.71	241.30	241.04	241.24	241.64
1967	241.32	241.28	241.57	242.60	243.34	243.80	243.59	242.85	242.09	240.91	239.92	239.15	241.87
1968	240.16	239.82	240.51	240.64	241.67	242.52	242.26	241.40	240.37	239.74	239.41	239.36	240.66
1969	240.45	239.88	239.74	240.36	241.05	241.03	240.35	239.67	239.22	239.26	239.36	239.56	239.99
1970	240.16	239.96	240.10	241.00	241.40	241.75	241.60	240.87	240.18	239.51	238.84	239.25	240.39
1971	240.25	239.78	239.76	240.33	240.60	240.87	241.12	240.75	240.03	239.32	238.83	239.34	240.08
1972	240.56	240.70	240.23	240.60	241.27	241.01	240.95	240.36	239.06	237.98	238.10	239.62	240.04
1973	241.62	240.93	240.84	241.27	240.94	239.99	238.69	238.51	237.14	236.32	236.14	237.38	239.15
1974	240.15	239.62	238.46	239.09	240.28	239.80	238.70	237.47	236.53	235.36	236.13	235.32	238.08
1975	237.32	238.35	237.04	237.25	237.76	237.58	239.05	238.98	238.44	237.84	237.92	238.58	238.01
1976	239.68	239.56	240.11	241.08	240.98	240.04	239.30	239.46	238.92	238.28	237.29	239.76	239.54
1977	240.29	240.42	239.97	239.96	239.89	240.34	241.04	240.58	239.58	238.31	238.04	240.58	239.92
1978	241.92	240.41	239.18	240.94	240.65	240.37	240.13	239.90	239.25	238.88	238.95	239.99	240.05
1979	240.68	239.90	239.62	240.72	241.01	240.57	240.71	240.34	239.49	238.45	237.71	236.79	239.67
1980	238.80	238.90	239.32	240.15	240.09	240.71	240.78	240.32	238.90	238.31	238.09	238.84	239.43
1981	239.71	239.58	239.81	240.08	241.07	241.49	241.37	240.55	239.17	238.18	238.02	237.44	239.71
1982	239.78	239.44	239.66	240.02	239.98	240.13	239.98	239.82	239.26	238.79	238.41	238.49	239.48
1983	240.62	240.77	239.76	240.08	241.23	240.76	240.37	240.10	239.45	238.90	238.28	239.19	239.96
1984	240.90	239.70	240.10	241.28	241.42	241.70	241.32	240.29	239.03	239.00	238.58	238.76	240.17
1985	241.02	239.94	240.44	240.74	241.01	240.62	240.22	239.48	238.65	237.90	238.45	239.26	239.81
1986	241.55	240.43	240.49	241.10	240.46	241.15	240.66	240.58	239.96	240.42	239.07	238.82	240.39
1987	240.17	241.47	239.80	241.15	240.04	240.28	240.14	239.25	238.81	238.15	238.44	238.48	239.68
1988	239.92	239.52	239.15	240.49	241.73	241.54	241.53	241.10	240.53	240.20	239.66	239.52	240.41
1989	240.51	240.17	240.38	242.20	242.67	242.48	241.79	241.08	240.46	239.99	239.42	240.33	240.96
=====													
Average	240.39	240.08	240.17	241.02	241.50	241.67	241.48	240.92	240.23	239.72	239.43	239.63	240.52
Std.Dev	0.77	0.66	0.68	0.82	0.90	1.00	1.05	1.10	1.18	1.20	1.14	0.97	0.76
Maximum	242.28	241.76	242.02	243.04	243.45	243.80	243.59	243.32	242.92	242.16	241.69	241.48	242.34
Minimum	237.32	238.35	237.04	237.25	237.76	237.58	238.69	237.47	236.53	235.36	236.13	235.32	238.01

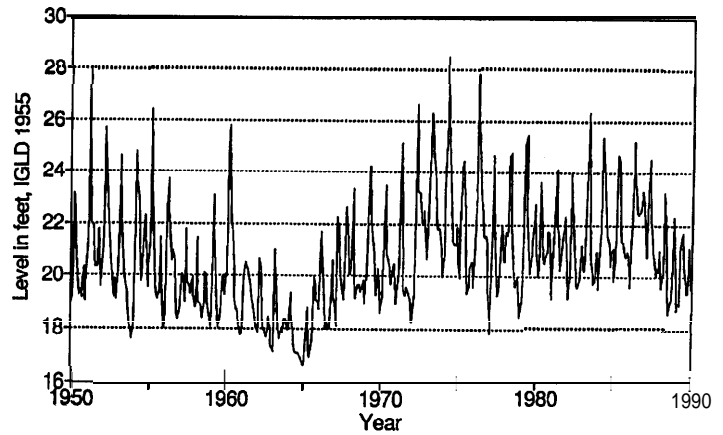
Pointe Claire, Discretionary Actions

Basis of Comparison, 1950-1990



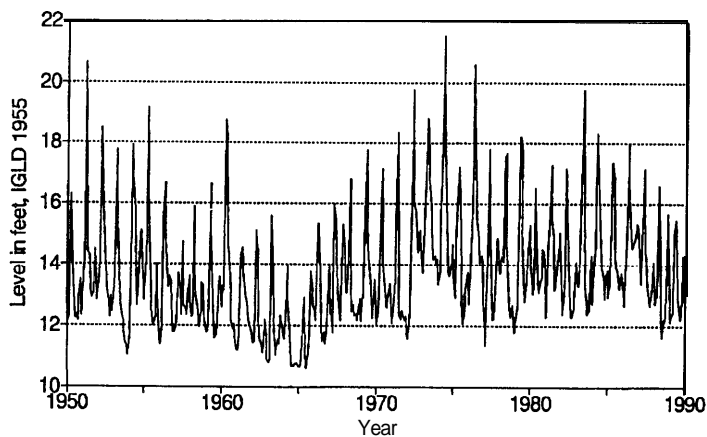
Montreal Harbour, Discretionary Actions

Basis of Comparison, 1950-1990



Lake St. Pierre, Discretionary Actions

Basis of Comparison, 1950-1990



Basis of Comparison, IJC Phase II Levels Reference Study
 Pointe Claire, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1950	67.78	68.27	68.50	70.67	70.73	69.78	69.03	68.70	68.90	68.54	68.80	69.16	69.07
1951	68.18	69.19	70.18	73.43	71.95	70.77	70.73	69.82	69.55	69.36	69.98	69.52	70.22
1952	68.41	69.55	70.21	72.21	72.08	71.49	70.64	70.18	69.72	69.32	68.41	68.77	70.08
1953	68.18	69.00	69.72	71.29	70.14	69.72	69.29	69.26	68.93	68.50	67.68	67.55	69.11
1954	67.29	67.78	69.39	71.49	71.13	70.90	69.95	69.06	69.19	70.01	70.41	69.69	69.69
1955	68.37	69.19	70.01	72.67	70.96	69.88	68.96	68.80	68.67	68.90	70.21	68.96	69.63
1956	67.49	67.62	68.21	70.24	71.10	70.83	70.14	69.65	69.85	69.46	68.27	67.72	69.22
1957	67.65	68.01	68.47	68.47	68.27	68.01	69.91	69.03	68.83	68.37	68.24	68.21	68.46
1958	67.98	67.75	67.75	68.50	67.49	67.75	67.81	67.68	68.01	68.93	68.77	67.91	68.03
1959	67.59	67.42	67.75	70.28	70.05	69.16	68.37	67.55	67.65	67.78	68.18	68.54	68.36
1960	68.21	68.90	68.86	71.62	72.34	70.51	70.47	69.39	68.57	68.14	67.95	67.62	69.38
1961	67.42	67.39	67.45	67.88	68.50	69.16	69.13	68.83	68.93	68.34	68.21	67.55	68.23
1962	67.52	67.42	67.29	68.11	68.08	67.59	67.45	67.52	67.45	67.42	67.55	67.45	67.57
1963	67.19	67.09	66.86	68.24	67.59	67.39	67.29	67.39	67.52	67.42	67.26	67.39	67.39
1964	67.45	67.32	67.22	67.19	67.03	67.06	66.90	66.96	66.99	66.96	66.70	66.57	67.03
1965	66.44	66.37	66.24	66.90	67.06	66.63	66.73	67.03	67.26	68.11	67.91	67.88	67.05
1966	67.95	67.81	69.09	69.26	68.08	67.88	67.49	67.59	67.59	67.45	67.62	68.70	68.04
1967	67.95	68.11	67.42	69.39	69.26	68.73	68.60	68.50	68.44	69.32	70.60	70.01	68.86
1968	69.00	69.06	68.93	70.44	68.64	68.27	68.83	68.93	69.16	68.83	68.80	68.96	68.99
1969	68.31	69.03	68.96	70.80	71.03	70.51	70.28	70.11	69.32	68.64	68.93	68.57	69.54
1970	67.88	68.14	68.31	69.82	70.44	69.42	69.49	69.42	69.03	69.13	69.39	69.00	69.12
1971	68.34	68.64	69.26	71.33	71.82	69.78	68.93	68.77	69.00	68.93	68.70	68.34	69.32
1972	67.78	67.91	68.73	70.96	72.51	71.16	71.33	71.10	70.83	70.64	70.73	69.85	70.29
1973	69.39	70.51	72.01	72.87	72.93	72.54	72.11	71.10	70.80	70.70	70.37	69.72	71.25
1974	68.80	69.65	71.13	72.44	73.69	72.77	71.82	71.19	70.60	70.41	69.91	70.37	71.07
1975	69.32	68.96	70.41	71.75	71.69	71.00	69.39	68.96	69.13	69.59	69.49	69.32	69.92
1976	68.73	69.36	70.93	73.39	72.80	72.08	71.92	71.06	70.51	70.41	70.28	68.41	70.82
1977	67.81	67.45	69.78	71.49	70.54	69.13	68.67	68.86	69.39	70.47	70.41	69.19	69.43
1978	69.26	70.47	70.47	71.72	71.95	70.70	69.85	69.42	69.19	69.39	68.70	67.81	69.91
1979	67.85	68.67	70.34	71.82	72.34	70.73	69.75	69.46	69.88	70.34	70.51	70.96	70.22
1980	69.52	69.13	69.16	71.06	70.96	69.82	69.72	69.91	70.14	70.21	70.18	69.46	69.94

Basis of Comparison, IJC Phase II Levels Reference Study
 Pointe Claire, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1981	68.47	69.55	70.41	71.00	69.75	69.69	69.26	69.62	70.51	70.54	70.70	70.24	69.98
1982	68.47	68.73	69.03	71.13	70.87	70.28	69.95	69.26	69.13	69.29	69.55	69.75	69.62
1983	68.86	69.03	70.14	70.73	72.21	71.33	69.88	69.55	69.32	69.23	69.65	69.49	69.95
1984	68.60	69.95	70.28	71.95	71.72	71.29	70.87	70.64	70.54	69.82	69.88	69.85	70.45
1985	68.77	69.55	70.67	71.88	71.88	70.64	70.44	70.41	70.18	69.98	69.98	69.95	70.36
1986	68.83	70.21	70.67	72.21	72.08	71.59	71.36	71.26	71.19	71.36	71.82	71.65	71.19
1987	70.51	69.95	71.23	71.95	71.06	70.67	70.31	69.95	69.55	69.69	69.23	69.65	70.31
1988	68.60	69.06	69.23	70.37	69.39	68.64	68.21	68.44	68.44	68.83	69.85	68.93	69.00
1989	67.75	68.01	67.85	68.60	69.23	70.05	69.65	69.32	69.00	68.77	69.62	68.47	68.86
Average	68.25	68.63	69.21	70.69	70.53	69.88	69.52	69.24	69.17	69.19	69.24	68.93	69.37
Std.Dev	0.76	1.00	1.35	1.67	1.78	1.51	1.34	1.15	1.05	1.04	1.16	1.07	1.08
Maximum	70.51	70.51	72.01	73.43	73.69	72.77	72.11	71.26	71.19	71.36	71.82	71.65	71.25
Minimum	66.44	66.37	66.24	66.90	67.03	66.63	66.73	66.96	66.99	66.96	66.70	66.57	67.03

Basis of Comparison, IJC Phase II Levels Reference Study
 Montreal Harbour, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1950	18.70	18.93	19.19	23.16	22.83	21.19	19.88	19.26	19.49	19.13	19.78	20.34	20.16
1951	19.00	20.05	21.52	28.05	24.64	22.01	21.98	20.60	20.31	20.34	21.78	21.19	21.79
1952	19.55	20.70	21.46	25.69	25.00	23.59	21.88	21.33	20.54	20.21	19.16	19.88	21.58
1953	19.09	20.14	21.75	24.61	22.15	20.73	20.01	19.78	19.36	18.93	18.08	18.04	20.22
1954	17.59	18.24	20.70	24.80	23.59	22.97	21.16	19.78	20.08	21.88	22.34	21.23	21.20
1955	19.52	20.18	21.42	26.44	23.16	20.93	19.59	19.23	19.09	19.42	21.49	19.78	20.85
1956	18.01	18.08	18.80	22.51	23.69	22.57	21.26	20.57	21.00	20.67	19.13	18.47	20.40
1957	18.34	18.70	19.55	20.08	19.59	18.96	21.85	19.78	19.62	19.29	19.69	19.98	19.62
1958	19.26	18.77	18.86	21.46	18.96	18.86	18.80	18.37	18.96	20.14	20.05	18.86	19.28
1959	18.31	18.14	18.54	23.06	21.98	20.24	19.06	18.08	18.27	18.64	19.69	20.01	19.50
1960	19.23	20.11	19.98	25.43	25.85	21.98	21.92	20.34	19.16	18.67	18.73	18.18	20.80
1961	17.78	17.81	18.21	20.01	20.54	20.37	20.28	19.72	19.88	19.09	18.86	18.31	19.24
1962	18.04	17.98	17.88	20.70	20.18	18.44	17.98	17.98	17.68	17.91	18.44	18.01	18.44
1963	17.39	17.26	17.16	21.06	19.52	18.14	17.59	17.72	18.08	17.88	18.34	18.31	18.20
1964	18.14	17.95	18.27	19.36	18.54	17.95	17.32	17.13	17.09	17.13	16.96	16.96	17.73
1965	16.77	16.67	16.77	18.18	18.80	17.22	16.93	17.45	18.01	20.01	19.52	19.06	17.95
1966	19.03	18.70	20.83	21.69	19.95	19.13	18.01	18.24	18.01	18.04	18.67	20.60	19.24
1967	18.96	19.09	18.14	22.28	21.82	20.64	19.91	19.23	19.09	20.77	22.64	21.59	20.35
1968	20.08	20.08	20.34	23.33	19.85	19.13	19.69	19.49	19.69	19.36	19.46	19.82	20.03
1969	18.93	19.88	19.85	23.82	24.25	22.05	21.33	21.00	20.01	19.26	20.28	19.75	20.87
1970	18.57	18.86	19.16	22.38	23.49	20.87	20.73	20.31	19.69	19.98	20.47	19.91	20.37
1971	18.93	19.26	20.21	23.95	25.16	20.90	19.49	19.26	19.55	19.46	19.19	19.09	20.37
1972	18.27	18.34	19.42	23.29	26.64	23.26	23.20	22.70	22.05	22.05	22.51	21.26	21.92
1973	20.64	22.01	24.70	26.28	26.02	24.67	23.82	22.34	21.85	21.88	21.52	21.19	23.08
1974	19.95	20.77	22.87	25.75	28.51	25.75	23.52	22.24	21.36	21.23	21.23	21.92	22.93
1975	20.51	19.91	21.85	24.25	24.44	22.60	20.01	19.32	19.59	20.28	20.54	20.57	21.16
1976	19.55	20.44	22.87	27.82	25.98	23.69	23.43	22.38	21.52	21.59	21.36	19.29	22.49
1977	18.41	17.85	21.52	24.67	22.34	19.91	19.23	19.36	20.01	21.95	21.82	20.64	20.64
1978	20.57	21.75	21.59	24.61	24.80	22.05	20.64	19.91	19.59	20.01	19.39	18.44	21.11
1979	18.57	19.42	22.38	25.20	25.46	22.38	20.73	20.14	20.87	21.75	22.11	22.80	21.82
1980	20.96	20.08	20.31	23.65	22.74	20.67	20.54	20.80	21.06	21.75	21.69	20.70	21.25

Basis of Comparison, IJC Phase II Levels Reference Study
 Montreal Harbour, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1981	19.16	21.46	22.47	24.11	22.05	21.65	20.24	20.47	21.62	21.82	22.34	21.42	21.57
1982	19.16	19.39	19.98	23.95	22.93	21.26	20.60	19.65	19.55	19.82	20.57	21.23	20.67
1983	20.18	20.28	21.82	23.36	26.35	23.56	20.64	20.11	19.75	19.82	20.96	21.00	21.49
1984	19.52	21.26	21.75	25.39	24.08	23.13	22.28	21.59	21.33	20.41	21.03	21.13	21.91
1985	19.85	20.64	22.44	24.70	24.44	21.75	21.39	21.39	20.83	20.77	21.00	20.96	21.68
1986	19.62	21.19	21.95	25.23	24.28	23.06	22.44	22.41	22.54	22.77	23.29	23.06	22.65
1987	21.59	20.77	22.64	24.57	22.15	21.78	21.03	20.41	20.01	20.34	20.21	21.06	21.38
1988	19.55	20.05	20.11	23.26	21.29	19.26	18.57	19.09	19.06	20.14	22.34	20.24	20.25
1989	18.70	19.00	18.86	21.00	21.62	21.72	20.37	19.78	19.39	19.36	21.16	19.52	20.04
Average	19.10	19.50	20.45	23.58	22.99	21.28	20.48	19.97	19.87	20.10	20.45	20.09	20.65
Std.Dev	1.01	1.29	1.79	2.20	2.44	1.92	1.69	1.40	1.25	1.32	1.48	1.37	1.30
Maximum	21.59	22.01	24.70	28.05	28.51	25.75	23.82	22.70	22.54	22.77	23.29	23.06	23.08
Minimum	16.77	16.67	16.77	18.18	18.54	17.22	16.93	17.13	17.09	17.13	16.96	16.96	17.73

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake St. Pierre, Monthly Mean Levels, IGLD 1955, With Deviations

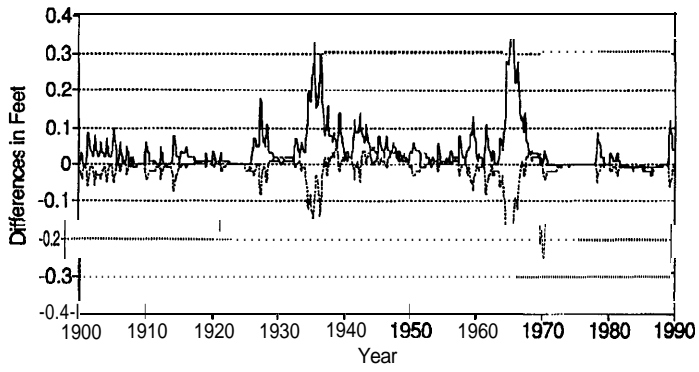
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1950	12.27	12.11	12.30	16.31	15.65	14.14	12.83	12.24	12.37	12.17	12.89	13.48	13.23
1951	12.30	12.96	14.21	20.67	17.13	14.40	14.30	13.19	12.93	13.06	14.50	14.11	14.48
1952	12.83	13.45	14.01	18.50	17.62	16.14	14.34	13.85	13.16	13.02	12.27	12.99	14.35
1953	12.43	13.25	14.96	17.78	15.35	13.52	12.80	12.50	12.17	11.84	11.42	11.42	13.29
1954	11.02	11.58	13.78	17.95	16.67	15.85	13.85	12.63	13.06	14.99	15.12	14.11	14.22
1955	12.83	13.12	14.30	19.19	16.11	13.68	12.47	12.14	12.01	12.27	14.01	12.63	13.73
1956	11.42	11.38	11.91	15.68	16.67	15.16	13.81	13.22	13.58	13.39	12.27	11.81	13.36
1957	11.75	11.98	12.89	13.68	13.09	12.34	14.73	12.63	12.53	12.34	13.09	13.62	12.89
1958	12.83	12.27	12.40	15.88	13.19	12.66	12.43	11.94	12.43	13.35	13.29	12.24	12.91
1959	11.78	11.75	12.07	16.60	15.06	13.32	12.27	11.58	11.71	12.14	13.32	13.55	12.93
1960	12.60	13.29	13.12	18.73	18.54	14.57	14.34	13.12	12.17	11.84	12.07	11.52	13.83
1961	11.19	11.15	11.91	14.34	14.53	13.55	13.29	12.76	12.86	12.20	12.01	11.78	12.63
1962	11.45	11.45	11.48	15.12	14.40	12.07	11.48	11.52	11.09	11.55	12.20	11.55	12.11
1963	10.86	10.76	10.89	15.58	13.91	11.84	11.02	11.22	11.58	11.42	12.34	11.98	11.95
1964	11.68	11.55	12.20	13.94	12.93	11.88	11.06	10.66	10.66	10.73	10.76	10.79	11.57
1965	10.63	10.63	10.83	12.30	12.93	11.12	10.60	11.06	11.68	13.75	13.22	12.63	11.78
1966	12.50	12.17	14.21	15.35	13.91	12.76	11.48	11.78	11.42	11.58	12.27	14.01	12.79
1967	12.40	12.40	11.75	16.01	15.42	14.14	13.25	12.37	12.17	13.98	15.29	14.44	13.63
1968	13.09	13.06	13.68	16.80	13.29	12.43	12.66	12.34	12.40	12.17	12.43	12.89	13.10
1969	12.14	12.93	12.89	17.19	17.78	14.73	13.85	13.48	12.83	12.24	13.48	13.02	13.88
1970	12.01	12.20	12.50	16.08	17.16	13.94	13.65	12.99	12.60	12.93	13.35	12.93	13.53
1971	12.07	12.34	13.22	16.86	18.37	13.78	12.40	12.20	12.50	12.40	12.17	12.34	13.39
1972	11.68	11.58	12.50	16.24	19.78	16.04	15.72	15.19	14.37	14.57	15.09	14.07	14.74
1973	13.68	14.76	17.32	18.80	18.41	16.67	15.88	14.67	14.14	14.30	14.01	14.21	15.57
1974	13.32	13.75	15.45	18.54	21.52	18.08	15.68	14.44	13.65	13.58	14.04	14.67	15.56
1975	13.52	12.93	14.57	16.83	17.22	15.09	12.66	12.07	12.37	13.06	13.58	13.75	13.97
1976	12.70	13.52	15.78	20.60	18.60	15.72	15.52	14.93	14.04	14.30	14.11	12.63	15.20
1977	11.84	11.35	14.63	17.81	15.26	12.89	12.20	12.24	12.76	14.86	14.63	13.81	13.69
1978	13.71	14.30	14.07	17.55	17.68	14.67	13.25	12.57	12.27	12.70	12.34	11.81	13.91
1979	12.11	12.57	15.45	18.24	17.91	15.03	13.35	12.80	13.52	14.37	14.70	15.32	14.61
1980	13.91	13.02	13.25	16.50	15.22	13.29	13.09	13.35	13.62	14.47	14.40	13.68	13.98

Basis of Comparison, IJC Phase II Levels Reference Study
 Lake St. Pierre, Monthly Mean Levels, IGLD 1955, With Deviations

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1981	12.27	14.70	15.42	17.29	15.55	14.96	13.16	13.25	14.04	14.44	15.03	14.07	14.51
1982	12.37	12.47	13.09	17.16	15.98	13.81	13.09	12.30	12.27	12.53	13.39	14.07	13.54
1983	13.29	13.32	14.67	16.60	19.78	16.27	13.19	12.66	12.40	12.50	13.98	14.30	14.41
1984	12.73	14.14	14.57	18.34	16.73	15.68	14.76	13.88	13.55	12.86	13.65	13.81	14.56
1985	12.93	13.39	15.09	17.36	16.93	14.17	13.85	13.85	13.19	13.35	13.71	13.55	14.28
1986	12.63	13.71	14.57	18.01	16.63	15.22	14.53	14.60	14.80	15.03	15.35	15.19	15.02
1987	14.04	13.35	14.96	17.16	14.40	14.24	13.42	12.83	12.63	12.99	13.25	14.07	13.94
1988	12.73	12.99	12.96	16.57	14.50	12.27	11.61	12.24	12.14	13.32	15.65	13.39	13.36
1989	12.14	12.30	12.43	14.99	15.45	14.57	12.96	12.43	12.20	12.40	14.30	12.80	13.25
Average	12.39	12.65	13.56	16.88	16.18	14.17	13.27	12.79	12.70	13.02	13.47	13.23	13.69
Std.Dev	0.82	1.03	1.46	1.73	2.06	1.51	1.30	1.05	0.90	1.08	1.18	1.09	0.96
Maximum	14.04	14.76	17.32	20.67	21.52	18.08	15.88	15.19	14.80	15.03	15.65	15.32	15.57
Minimum	10.63	10.63	10.83	12.30	12.93	11.12	10.60	10.66	10.66	10.73	10.76	10.79	11.57

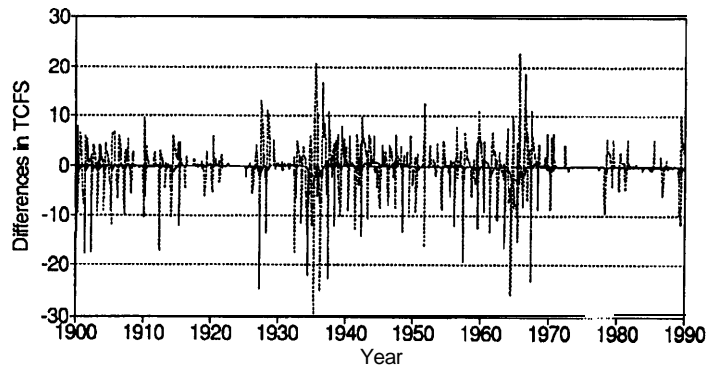
APPENDIX D - The Difference in the Basis of Comparison Levels and Flows with and without Criterion C

Differences in BOC Levels With minus Without Criterion C



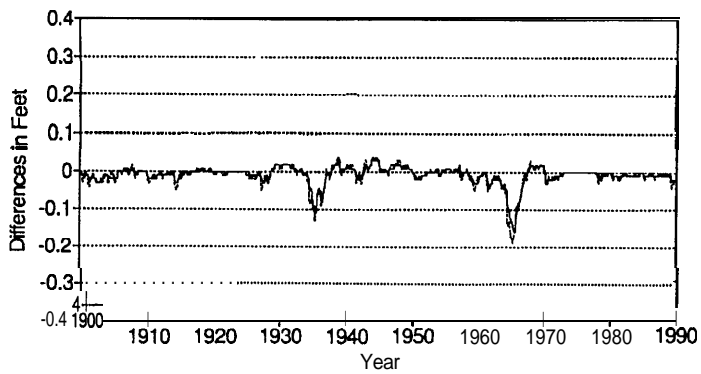
..... Michigan-Huron — Superior

Differences in BOC Outflows With minus Without Criterion C



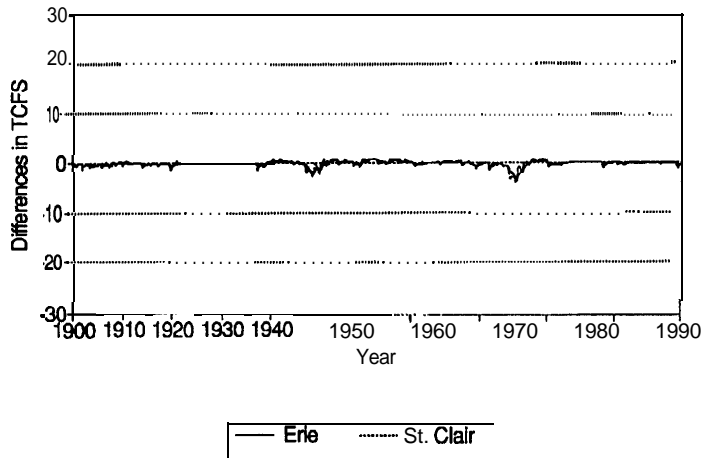
..... Superior — Michigan-Huron

Differences in BOC Levels With minus Without Criterion C

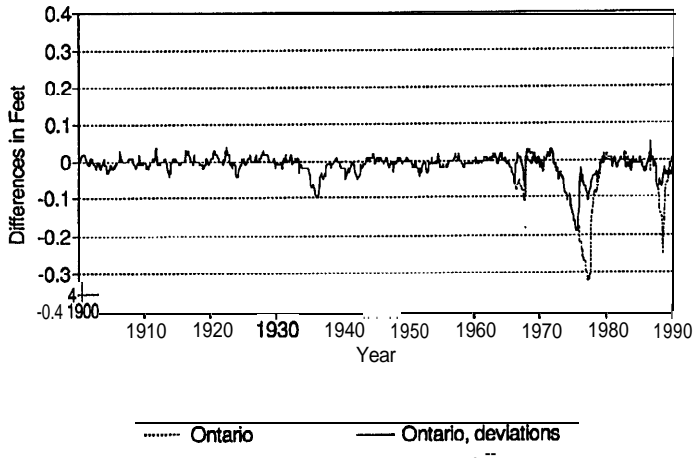


..... St. Clair — Erie

Differences in BOC Outflows With minus Without Criterion C



Differences in BOC Levels With minus Without Criterion C



Differences in BOC Outflows With minus Without Criterion C

