Public Interest Advisory Group
Year 1 Report

April 2002

International Lake Ontario - St. Lawrence River Study
Étude internationale sur le lac Ontario et le fleuve Saint-Laurent

May 1, 2002

Commissioners:

As the Study completes Year 1, the Public Interest Advisory Group (PIAG) is pleased to submit their Year 1 Report to the International Lake Ontario – St. Lawrence River Study Board and to the International Joint Commission.

The PIAG Year 1 Report was written with the objective of describing PIAG activities, accomplishments and findings from the inception of the Study in December 2000 to the end of Year 1 defined as March 31, 2002. It is a summary of the data and information collected by the PIAG, and reflects the thoughts and opinions of the PIAG and the people who attended public meetings and filled out survey questionnaires. Every attempt was made to ensure that the public's impressions, opinions and feedback were accurately captured. The opinions and thoughts do not necessarily reflect those of the International Lake Ontario – St. Lawrence River Study Board. Any mention of, or reference to, statements contained in this report should not be construed as their endorsement.

Questions regarding this report can be directed to Arleen Kreusch in the United States at (716) 879-4438 or Amanda Morelli in Canada at (613) 992-5727.

Ce rapport est également disponible en français.

Respectfully submitted,

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Attachment

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Acronyms

cfs	Cubic feet/second
cms	Cubic metres/second
ft.	foot/feet
IJC	International Joint Commission
PIAG	Public Interest Advisory Group
TWG	Technical Work Group
U.S.	United States

International Lake Ontario - St. Lawrence River Study
Public Interest Advisory Group
Year 1 Report

Executive Summary

In December 2000, the International Joint Commission (IJC) formed the International Lake Ontario – St. Lawrence River Study Board to assess and evaluate the methods and criteria used to regulate outflows from Lake Ontario through the St. Lawrence River. The IJC also appointed a bi-national Public Interest Advisory Group (PIAG) to ensure the continuous involvement of all interests throughout the study.

The 22-member volunteer PIAG participates in all aspects of the study, working to ensure effective communication between the study team and the public and ensuring input from the public is considered. PIAG membership is equally made up of American and Canadian members. PIAG members were selected based on their knowledge and experience in one or more interest areas associated with the lake and river system. Individual PIAG members are assigned to the various Study Technical Work Groups and the PIAG Chairs are members of the Study Board.

During their first year, the PIAG served as a speaker's bureau, giving 30 presentations to various associations in the United States and Canada. The PIAG held three advertised public meetings in various locations along the Lake Ontario-St. Lawrence River System, along with round table discussions prior to each meeting with selected invitees. The combined attendance for all of these meetings is approximately 1,115 attendees. A detailed summary of questions and comments received at the public meetings is provided in this report.

Over 230 responses were received to the PIAG questionnaire that was distributed during PIAG public outreach activities. The survey was designed to provide the PIAG with input on public concerns regarding coastal/shoreline erosion, recreational boating, and environmental and wetland concerns. Responses were analyzed by the PIAG members and are presented in detail in this report. This information is provided to the Technical Work Groups and to the Study Board as part of the process to integrate ongoing public input during the Study. The PIAG has identified a need to develop a clearer understanding of the Great Lakes System particularly in the Lake Ontario-St. Lawrence River System area. The public hold many misconceptions regarding the system and the amount of change in water level that is actually brought about by regulation.

During the first year, a newsletter and a website were developed to assist in keeping the public informed about Study activities. The Study database now contains over 3,000 people who have indicated that they have an interest in the Study.

The results of the first year of public outreach and interactions will be used to direct the PIAG activities in subsequent years.

1. Public Interest Advisory Group, Who are we and what do we do?

To emphasize the importance of public outreach, consultation, and participation during the International Lake Ontario-St. Lawrence River Study, the International Joint Commission appointed a 22-member bi-national Public Interest Advisory Group (PIAG) for the Study. The co-chairs of the PIAG are members of the Study Board. PIAG terms are 18 months with the ability to be reappointed and remain a member throughout the Study. A list of the current membership, their location along the system, and their affiliation areas is in Appendix A.

The mission of the Public Interest Advisory Group (PIAG) is to

- Advise the public about the details of the Study in each of the sectors being investigated;
- Gather from the public their views and experience concerning water levels in the sectors that interest them;
- Advise the Study Board on the responsiveness of the Study process to public concerns;
- Advise the Study Board on public consultation, involvement and information exchange;
- Serve as a conduit for public input to the Study process, and for public dissemination of Study outcomes;
- Serve as liaison to and participate in the activities of Technical Working Groups as Public Interest Advisory Group members desire; and
- Provide a public liaison function to the Study Board through Public Interest Advisory Group co-chairs who serve as members of the Study Board.

The PIAG's objective is to ensure that the results of the Study reflect the interests and the "natural knowledge" of the public.

The PIAG held their initial meeting in January, 2001 in Burlington, Ontario to outline the actions that they would like to complete during their first year. Their second meeting was held in March, 200l in Rochester, New York, to develop a survey to gather information from the public and outline a presentation to be used during informational meetings with local groups around the Lake Ontario-St. Lawrence River System. The PIAG's multi-year work plan was presented to the Study Board in July, 2001 and approved.

Members of the PIAG are on each of the following Technical Work Group (TWG) teams:

- The Coastal Processes TWG;
- The Commercial Navigation TWG;
- The Hydrology and Hydraulic Modelling TWG;
- The Recreational Boating and Tourism TWG;
- The Water Uses TWG;
- The Hydroelectric Power Generation TWG; and
- The Environmental TWG.

Work plans for each TWG are developed with PIAG input.

The PIAG met in March, 2002 to discuss their Year 2 Work Plan, the Year 1 Report, and the development of an educational video.

2. Public Meeting and Survey Results

2.a Public Meeting Summaries

The PIAG conducted thirty meetings with the public (total attendance approximately 1,115) during Year 1 as part of the International Lake Ontario - St. Lawrence River Study. A summary of the organizations, meeting locations, and attendance are included in Appendix B. The primary focus of the PIAG's public contact was with general public interest groups and individual citizens, specifically: shoreline/riparian landowners; recreational boaters; and environmental groups. The PIAG developed a 56-slide presentation that gave an overview of the Lake Ontario-St. Lawrence River System, provided insight into the concerns of various users along the system and explained why the Study is being done. Meeting participants were given the opportunity to express their concerns, ask questions, and were encouraged to complete the PIAG Year 1 Survey. A listing of the major concerns expressed and questions asked during the three public meetings follows:

Public Meeting in Clayton, NY

Afternoon Workshop - The following concerns were raised:

- Thousand Islands Area Regional Association conducted resident survey. Top concern was water quality; also concerned about marshes and wetlands; prefer stable water levels; received comment that "when flows are increased due to high Lake Ontario levels, someone forgets to turn off the tap."
- Study links water level management to decline in Northern Pike; another study from Cornell researchers values contribution of Northern Pike fishery to area economy at $24 million per year.
- Fall drawdowns affect muskrat, a "keystone" species in the local ecosystem. Lack of cattails may force muskrats out of wetland areas.
- The Plan of Study does not look at any potential measures to remediate wetlands. This issue should be addressed by Study.
- Investigations by The Nature Conservancy show that barrier beaches on eastern Lake Ontario have been starved for sand supply for the last 12 years. The impact of water levels on sand movement is still unclear. Need to determine the interaction between coastal processes, wetlands, fisheries and wildlife.
- A growing body of evidence suggests that climatic trends causing wet and dry water supply cycles last for a substantial period of time. No one knows how long each cycle may last. These trends are not necessarily related to "climate change". Study should consider worst-case scenarios.
- A good hydraulic and hydrologic model could be an important public communication tool. This will help people understand the impacts various regulation scenarios could have on other interests. We will not get very far as long as people believe their interest will win if they lobby hard enough.

- More extensive monitoring of water levels at different points in the river is needed to fine tune regulation decisions.
- People of NYS and USA have an interest in St. Lawrence River, not just people in the region. Study needs to be supported by all who have an interest.
- The U.S. Army Corps of Engineers has been asked by Congress to study enhancements to navigation in the Great Lakes System. We must find out what the impacts of additional dredging in the St. Lawrence, and other modifications for navigation, would have on regulation. We are undertaking a major review; one hand of government must know what the other hand is doing.

Evening Open Meeting - The following points were noted:

- Concerns about water diversions to the Southwestern United States.
- There was some confusion regarding the hydraulic relationships between water levels on Lake Ontario and various locations along the St. Lawrence River to Montreal.
- Studies are needed to look at how new structures at the outlet of Lake St. Louis and below Montreal Harbour could be used to regulate water levels in these parts of the system.
- Public notification is needed in advance of regulation decisions that cause abrupt changes in river water levels.

Question (Q.): Will 12-month navigation be considered in the Study?
Answer (A.): Yes, in the individual impact studies, particularly shoreline erosion.

Q.: Will the U.S. Army Corps of Engineers Great Lakes Navigation Study be considered?
A.: We are concerned about the navigation study. PIAG will take action to get more information.

Public Meeting in Greece, NY

Afternoon Workshop - Questions and Comments:

Q.: When did the clock started ticking for the five years (for the Study)?
A.: December, 2000.

Q.: Are there public members on the Technical Work Groups?
A.: Yes.

Comment: Loss of life should be added as a concern regarding high water levels.

Q.: How much can you control the outflow with the dam?
A.: Maximum outflow is 8,782 cubic metres/second (cms) or 310,000 cubic feet/second (cfs); higher outflows bypass the dam and go over the spillway. If you increase the flow 850 cms (30,000 cfs), you can lower the lake by 2.5 centimetres (1 inch) in one week.

Q.: If the dam wasn't there, and there was no control what would be the difference?
A.: 10 or 11 centimetre (about 4 inches) difference, which is the difference between the present level and the pre-project level.

Q.: Does the Study take into account the algae problem for the Great Lakes Basin and Lake Ontario? Will the Study cover water quality issues?
A. No for the basin, yes for the Lake as a part of the research performed by the Environmental or Water Uses Technical Work Groups.

Q.: Where does the interest of major corporations with water intakes get taken into consideration.
A.: The Water Uses Technical Work Group will look at municipal, industrial, and domestic water intakes.

Q.: When you make a recommendation, who do you present the information to?
A.: A report will be prepared for the IJC.

Q.: Does the IJC have to implement your recommendation?
A.: There will be a series of public hearings describing the recommended proposal and presenting the alternatives. If the public likes the plan, it will move forward. If the plan is not approved we would continue to use Plan 1958D. The Technical Work Groups are in place to find out if the plan can be changed to the benefit of all interests. It is a challenge to put all interests on the table.

Q.: How will it be quantified as to the public's support or lack of support?
A.: We want the public involved throughout the process. We are taking an aggressive approach to involving them through newsletters, website, and media coverage throughout the Study. There are PIAG members on all of the Technical Work Groups.

Q.: The Technical Work Group approach is good. What happens with the feedback you receive from the public as the Study develops?
A.: The surveys we are handing out will provide feedback. We will then keep adjusting based on the feedback and bring our progress back to the public. Workshops will be put together for the public to participate in. Open houses will be held to show what the Study has done and to solicit feedback. The survey will be reviewed to look at the interests of riparians, recreational boaters, and environmental interests to see how the water levels affect each particular group.

Q.: Who are you asking to complete the surveys?
A.: Any group where we have a presentation. We have received 140 back, which will be compiled into a database. The most valuable information is in the text field. This information will be shared with the Technical Work Groups.

Q.: Are Technical Work Group meetings open to the public?
A.: Yes, performance indicators are being developed. We can post the Technical Work Group meetings on the website. Meetings are held all around the system.

Q.: Can someone from the Rochester area be on the Environmental Technical Work Group?
A.: E-mail Mark Bain. PIAG members try to keep informed of the status of all Technical Work Groups.

Q.: To what extent can the outflow from Lake Ontario be controlled?
A.: In theory, the outflow is completely controlled; except for what would pass through the Long Sault Dam. The inflow and therefore the levels are not controlled.

Evening Open Meeting - Questions and Comments:

Q.: The level dropped 20 centimetres (8 inches) in a couple of weeks in the fall. Why does the lake level drop by a foot and a half or more during September and October?
A.: The lake naturally declines in the fall due to a lack of runoff. This past summer was unusually dry and hot, leading to increased evaporation. Also, in the fall, additional outflows are provided to help ships leaving the system through Montreal Harbour.

Comment and Q.: Continual studies are being done. The Study fails to include the marshes. The marshes are necessary for cleansing the water. If you pull the water out a cattail cannot do its work. Wells are going dry and the marsh is being drained. A consultant did a $88,000 (U.S.) study of water levels in Braddock Bay to determine where six-foot water levels are, but water levels now are lower than this. To study this isn't enough - the fact is the water levels are too low. What about water in marshes? Need water over the cattails.
A.: The Technical Work Groups are studying the environment and the wetlands. Braddock Bay is one of the wetlands that will be studied. Suggested contacting Mark Bain.

Comment: I am concerned about fish spawning, the swamps, and waterfowl. The introduction of foreign species out of ballast water is very destructive. The water was down so low this year I couldn't take my boat out. There is a great deal of destruction around bridge abutments because of the ice jams.

Comment: It will be difficult to maintain a balance that will keep everyone happy. I have pictures of my property during Hurricane Agnes during early damage; severe damage. I have boated in Braddock Bay since 1957. Low levels in wetlands are not only a function of water level, but also silt from runoff. Bays are building up sediment that does not get flushed out. I prefer levels at long-term average.

Comment and Q.: Water quality has been decreasing over the past seven years and algae growth is a major concern. What Technical Work Group is addressing this situation?
A.: This question was raised during our afternoon roundtable. The issue should be covered by Environmental or Water Uses TWG.

Comment: I am concerned about low levels between Clayton and Cape Vincent. I have to withdraw my boats in August. The fishing season is way down and has degenerated. I lost my dock because the water level is so low that ice forms and then damages it.

Comment: In mid-August, water levels decline too rapidly. I used to fish in the Long Pond Road area. If the water levels stayed higher longer I could boat past Labor Day. Now I need to go fishing in other areas. I consider levels unnaturally low.

Comment and Q.: In the 1950's I used to drive my truck down the beach. Where did the beach go?
A.: There is insufficient water coming in and this was a dry season. The other lakes are way below their long-term average. When there is high water, there are sandbars. Now all of the sand has moved out into the lake.

Comment: Silt in the bay is a result of chemicals released in the 60's and 70's, which killed vegetation and left sludge. I stress educating people about proper use of property and the value of vegetation.

Comment: Opposed diverting water to Southwestern U.S.

Public Meeting in Burlington, ON

Afternoon Workshop - Q. and A.:

Q.: Regarding information that has been gathered through the mapping of coastal topography and bathymetry applied from Hamilton Harbour to where the Niagara River comes in and from that point over towards Toronto, it appears no further information is required. Is there a need for more information in that area or is there nothing to study?
A.: To evaluate needs through topography and imagery for the entire system; the cost to cover both shores to Trois-Rivières was estimated at $5 million (Canadian). Due to budget restrictions, Technical Work Groups examined only the areas lacking information or in need of concentration. A contractor was hired to collect and investigate data. It was found that some areas had a lot of information but from Hamilton Harbour to Niagara it was lacking and needed work. As a result, over the first year, a priority was made to look at this deficient area. Basically, the shoreline from Burlington through to the east end of Toronto has been somewhat protected and is hardened. This area is not as sensitive to water level fluctuations as is the shoreline from here to Niagara, which is erosion prone. The view of the Study Board was that the response to changing water levels from here to Niagara was needed. More analysis of water levels is needed to study erosion rates. A driving force in this study is that the high water levels experienced around the lake over the last 10 years have increased erosion. If levels were dropped, the impression might be that the erosion would decrease, but not necessarily. You have to understand the dynamics. Specific areas of the shoreline are to be studied. From here to Toronto are many high priced properties. However, we also have to look at how wetlands respond. Information on water depths is needed to examine the impacts of changing water levels.

Recent detail on bathymetric data is available at the Royal Botanical Gardens. Aerial photos are being reviewed at the Canada Centre for Inland Waters.

Q.: Regarding basic information on the Lake Ontario shoreline, who was contacted for information?
A.: The Conservation Authorities and municipalities between Toronto and Niagara have been contacted. A lot of regional data is in place but exactly who has what needs to be organized.

Q.: When I first found out about the Study through a newsletter and when I received the map shown today on the slides, I was disappointed that aerial photography was planned for the south shoreline of Lake Ontario from Grimsby to Hamilton but no bathymetry work. The shoreline in this area is eroding. Years ago, profiles were done but as federal and provincial money disappeared the Conservation Authorities were unable to provide funding and it was discovered that the instruments being used were beyond the detection level from year to year. This is seen as a gap, which comes up frequently in conversation. The erosion is occurring because of the down cutting of the lakebed. The information on this is old and the rate of erosion is unknown. The second gap relates to local planning concerns and we do not know what is happening in terms of local fisheries issues. The levels of quality control and quantity control continue to be debated, especially with restraints on resources. We are not sure of what we are to be protecting and we also are lacking a biologist on staff. Any comments?
A.: Those messages will certainly be taken back. With regards to the fisheries, the relationship between water levels and fisheries is one issue. Other implications exist.

Q.: Is the erosion problem in Hamilton Harbour a priority?
A.: We are still investigating all of Lake Ontario. Once that is done, characteristic sites will be selected. There is insufficient funding to cover the entire lake. Erosion data will be considered when reviewing these sites.

Q.: How much regulation is actually occurring or are lake levels changing due to seasonal variations or level variations?
A.: It is a combination of both, based on water supply conditions, i.e. low supplies and low levels. The output is generally made on a weekly basis. However, daily changes can happen and some short-term changes do occur due to critical water level intakes that are needed. Supplies in the water level situations basically dictate the flow but deviations are needed. The regulation was developed in 1958. As soon as the regulation started, supplies began that were never experienced earlier. Deviations occurred when wet conditions were encountered in the 1970's and 1980's. In the new Study, various extremes will be reviewed to develop a modified plan. Historic averages and projected levels are charted to show water level variations before and after seaway construction. A lot of variation occurred during construction. The variation has been reduced from eight feet to less than six feet, and the target is four feet. Water supply since the 1960's has been fairly extreme and the 1.2 metre (4-foot) target could not be achieved. It is actually the dam that has caused the range of fluctuations to be squeezed considerably. When you squeeze the range of levels on the lake, the flows will change in the St. Lawrence River.

Consideration of many details will be incorporated with the new plan. In the presentation, a slide was shown to illustrate the control of flows. If the flow is altered at the Moses Saunders Hydropower Dam to effect a two centimeter change and enough extra water is let out at the Dam to lower the lake over one week, this is an example of an artificial change versus a natural change. Holdbacks or releases will impact the various water levels. For example, holdbacks over and above normal controls made to increase levels in Lake Ontario would impact other bodies of water and would either raise or lower lake levels in other areas of the St. Lawrence.

Q.: How long does it take to store the water? Is it a gradual process?
A.: It is done on an opportunistic basis. If there is a lot of precipitation then you can store a bit extra on the lake. The spring thaw offers an opportunity. These opportunities, however, are fairly short-term and will depend on supplies.

Q.: I think the reality is that we cannot be storing now at this part of the lake because of shipping on the seaway at the lower part of the Montreal Harbour where problems are occurring.
A.: There is a very small opportunity now for storing water. At present, approximately one third of a centimetre per week can be stored with the rain over the last few weeks. The lake is already going up naturally.

Q.: I understand that the goal of the RAP (Remedial Action Plan) is to keep a 1.2 metre (4-foot) range throughout the year. Does that relate to the average mean of Lake Ontario at 74.7 metres (245 ft.)? Does that translate to trying to keep it from 74.1-75.3 metres (243-247 ft.)? How does that work?
A.: It is set as a goal not to go above. Under the existing plan, it is preferred for the lake to stay around a 1.2 metre (4-foot) range. Under the new plan, that number may change.

Q.: What are people asking for on the low end (of the range)? It is the lower water that affects the boaters. I've heard some comments that the Rochester area has erosion. What type of level are they looking for? Basically, the north shore boaters don't have major problems with the average. When you get substantially below the average that is when problems start to occur. Can you give us a minimal level that is acceptable with the boating community?
A.: In July, levels are fine. At the end of August, Frenchmen's Bay and other small bays and rivers start to have problems. The need for a range from May 1 to October 31 is starting to be better understood. Most clubs expect a drop after that time. A 74.7 metre (245.1 ft.) maximum and 74.2 metre (243.4 ft.) minimum range is desired.

Discussion

Participants continued to discuss items of interest. Concerns on the management of wetlands were expressed.

- **Cootes Paradise**

Regarding fish and wildlife habitat restoration, work continues on the marshes at Cootes Paradise and Grindstone Creek. A fishway has been constructed at the Desjardins Canal in an effort to control carp movement. Through the Remedial Action Plan, one goal is to restore Cootes Paradise as a wetland and to increase emergent and submergent vegetation. In response to earlier discussion on the change in ranges from eight feet historically to four feet at present, it was noted that without such a range problems are presented for wetlands. Two to three successive years are needed to re-establish aquatic vegetation. A lake level of 74.4 metres (244 ft.) is preferred during the growing season, which coincidentally corresponds to the boating season. Wetlands are very important to fish farm areas. Higher water levels are needed to enhance spawning. Degraded wetlands need to be restored.

The regulated treatment of the lake was compared to the similar management of a reservoir and was considered disturbing. With regards to cycles, if a series of lows could be achieved for three years, it is probable that the wetland at Cootes Paradise could be restored and a strong plant community established to the point of where it could survive other conditions and future shocks of water levels. Within one year, Grindstone Creek could be turned into an instant marsh if proper growing conditions were available. Exposure to water during germination is critical in the early growing season. Plants will become better established with high water levels. Wetlands rely on exposure and periods of flooding. The compression of water levels, dynamics, characteristics and the level needed to get the best exposure are points not to be overlooked.
It was expected that two to three dry years at Cootes Paradise are needed to get 10 years of good wetland conditions. It was requested that these concerns be considered as an environmental issue for future planning.

It is a challenge to reconcile goals of the wetlands when in conflict with goals of water retention for other purposes. The idea of controlling Cootes artificially was raised.

- **Rattray Marsh**

Rattray Marsh is located between Burlington and Toronto. It is an unprotected area with a natural shingle beach where the water fills in by rain and sediment falls in when the pressure is too great. If water levels in Lake Ontario stay low, there is no opportunity for build up, then the birds and fish are lost. Neighbours are concerned with dredging. Low levels cause a problem. With low levels, the shingle bars cannot build up and only a river is achieved. High levels are not a problem because the wetland spreads nicely. It was noted, however, that a winning condition for one wetland can be a loss for another.

- **Conclusions**

Wetland discussions were very informative. It was noted that various wetlands respond in different ways. Both good year experiences and bad should be detailed in order to

review the conditions needed for wetlands to flourish. The required elevations are recognized but exactly how representative this information is to other wetlands is unknown. Characteristics of the four major wetlands need to be further studied to learn more on how they relate to the basin.

Basically, water levels will be controlled artificially, similar to a reservoir, whether regulated for environmental concerns or for shipping. The fact remains that dams exist across the river. The environment will experience adverse effects. It is a complex situation. There certainly are limits. The regulation plan by itself will not solve everything. However, the integration of various interests and economic relationships would be considered.

The balancing decisions are based on serving several purposes. Trade-offs are needed and in reality, flows are deviated from the plan. Running different scenarios over a course of time will help to determine what some of the trade-offs might be. The upstream controls the system. The objective is to get an appreciation of the system as a whole since upstream and downstream perception of controls and costs can contrast dramatically. The primary goal is to preserve the integrity of the system.

Evening Open Meeting - Questions from the Audience:

Comment cards were gathered for discussion and questions were raised.

Q.: You said you could control to within four feet. Is that correct?
A.: No. The amount of water coming from the Great Lakes varies over high years and low years. Since the project has been in operation, they have lowered the upper part 60 centimetres and they have raised the bottom 60 centimetres (24 inches). That is over a long period. In a given year, the lake normally moves up 50 to 60 centimetres (20 to 24 inches). The amount that can be controlled for a given inflow varies from high flows to low flows.

Q.: In the Study, are you looking at the effects of global warming?
A.: Yes that is certainly one of the elements being considered by the environmental group. Recently, at a meeting in New York, a retired climatologist expressed interest and commented that he felt we were coming into a cycle now that could run as long as ten years.

Q.: I noticed all the low levels occurred in the mid-1920's to mid-1930's. Any comments?
A.: When somebody like the climatologist says something like that, connected to the 1930's, we will have to really try to see how much we can control. In response to asking how much we can control, for example, one of the sensitive areas downstream is Lake St. Louis with the water intake for the City of Montreal. Another is Montreal Harbour, the major navigation center. If they don't keep a little water back in Lake Ontario over the summer, then in the fall down at Montreal they are running the ships aground. So, there

is a certain amount of control possible. But just to give you an idea on the scale of what they deal with, early in last summer they had 7 centimetres (2.8 inches) of extra water. Then as the summer went by and the levels were so low, some ships that were given clearance to come in to Montreal were then told they are short 15 centimetres (6 inches). At that point, they can call the Control Board to send down a block of water to raise the level just so much.

Q.: I understand that you are saying you need some controls. Staggered barrages have been built on other rivers with the same problem. Any comments?
A.: Studies on this were done 30 years ago. Montreal sells itself as being an open-sea harbour and if you start telling these deep-sea captains that they have to go through two locks, to get to Montreal…You have to have keep the water up to get around it.

Q.: When you raise the water two centimetres (0.8 inches), it comes up 30 centimetres (12 inches), so in high water you are making more power. Do you have any kind of an agreement with the power companies?
A.: Yes, they were the ones who guided us through the original development of the plan.

Q.: How does this relate to Cootes Paradise?
A.: At Cootes Paradise, a number of factors are considered stressors. One major stressor is water levels. At the start of the growing season, exposed mudflats, and we saw this in 1999 in a portion of the mudflats, the seed bank that is there, will suddenly blossom and plants start to grow. Even if the water level is coming up, as long as the growth stays head above water, that growth will continue. If you have a condition where year after year, you come so close to that seed bank being exposed, but if not exposed, you don't have growth. So the low water level regime is important to the Cootes Paradise marsh. It can make a difference of seeing a 15 to 50 percent increase in emergent aquatic vegetation formed under those conditions. If water levels in Cootes Paradise marsh, or any other marsh, didn't fluctuate and once in awhile we had a high regime in order to drown some of those tall standing plants, we would have only cattails. It is a limiting factor as to how much of the marsh is formed depending on water level fluctuations. A good place to see the impact of water levels is at the mouth of Grindstone Creek, where you have similar mudflats. Restoration of the marsh is limited if water levels do not cooperate.

Q.: What are the effects of re-licensing the power plant operations?
A.: Re-licensing does not have anything directly related to this Study.

Q.: From your slides, it says that 85 percent comes from the upper lakes. If everything is regulated, what good will it do us? Is there anything to look forward to?
A.: In any river project like this, Mother Nature is always in charge. We have to live with what she gives us and 85 percent of that is coming down from the Great Lakes. So with the regulation plan, we will take into account the different levels of supply from the upstream area. If, for example, we have 7,000 cms (247,200 cfs) available, we will control that to satisfy all criteria. If we have 8,000 cms (282,400 cfs), the plan will be slightly different. Each time the effort will be to satisfy the whole system the best we

can. We have to remember that we have many contradictory interests. The objective of the 1993 study was driven by people thinking that control dams would help water level fluctuation issues. The conclusion from that study was that building dams was not the solution. You could certainly reduce the range of water level fluctuations on the upper lakes but in order to do so you also have to change the outflow further downstream.

Q.: What are the impacts of low water levels for boating on the upper lakes?
A.: At the western end of Lake Ontario, water levels are an issue for boaters. This is not so much a problem here but boaters would like to see higher water levels, clean water and fish in the water. We need to widen the range. It is probably a long-term educational issue and compromise is needed as we go along. Seasonal fluctuations can be a concern.

Q.: Regarding the municipal water requirement, are we at the low end of a 30-year cycle?
A.: In terms of a short-term or long-term cycle, where we are, is an issue to be examined. There is a study underway in the boating community and critical lows and highs will be examined. One-page position papers should be drafted by the various interest groups to outline the dynamics to be studied.

Q.: Does anybody regulate the Chicago diversions?
A.: Yes. From a U.S. Supreme Court decision that predates the Boundary Water Treaty of 1909, they have the right to take out a certain amount of water, 91 cms (3,200 cfs). Due to concern expressed from both sides, a clause outlines that a specified amount be capped.

Q.: Is diversion done by the state of Illinois?
A.: Yes.

Q.: Are studies being done for the other four Great Lakes?
A.: Yes.

Q.: Is there funding?
A.: Yes, through the IJC.

Q.: How much does the evaporation vary from year to year?
A.: In terms of millimetres per year, in this area, on a dry summer it might amount to 300 millimetres (12 inches) and for a wet summer 100 mm (4 inches). There is a lot of variability. No numbers are confirmed. That number will be researched for next meeting. The Royal Botanical Gardens or Guelph University may have information available on that number. Pan evaporation sites would vary a lot. There is no way to define this throughout the entire Great Lakes. Temperature, evaporation losses and water temperature are factors to be considered.

The Public Interest Advisory Group thanks those who participated in their meetings for their involvement and comments. Over the course of the next four years, other presentations will be provided and progress will be reported.

2.b Year 1 Survey Results

A survey (see Appendix C) was made available during PIAG meetings for the purpose of providing a vehicle for feedback following the meetings. It was not the intent of the survey to obtain a sampling with any specific statistical power. Rather, many people do not care to make public comments at the meetings plus they and others want time to put their thoughts together before raising questions or making comment. All information received on the survey was captured in an MS Access database. Comments from the comment section of the survey are listed in Appendix D.

The initial Year 1 Survey was designed to solicit input in any or all of three categories:

- Coastal/Shoreline Erosion
- Environment and Wetlands
- Recreational Boating

The main body of the survey was divided into two parts. The first part asked members of the public to identify the geographic area of the system where they resided or where they used the system. They were also asked to approximate the critical high and low water levels that caused them problems or hardships for their area or use. The second part of the survey asked for their comments in the three areas of concern identified as well as additional general comments they would like to offer.

Part One

Approximately 230 surveys were returned to PIAG. About 90 percent of these were from the U.S. and virtually all of the returns received were from the public/stakeholder meeting audiences. The results of survey returns by geographic area are indicated in Table 1. Unfortunately, both from the perspective of meetings held and surveys completed Year 1 involvement of the public in West and North Shores of Lake Ontario and Lake St. Francis is substantially less then other geographic areas of Lake Ontario and the St. Lawrence River.

Table 1

Geographic Area	Responses	(% of Total)
Lake Ontario - South Shore	114	(50)
Lake Ontario - West Shore	2	(1)
Lake Ontario - North Shore	0	(0)
Lake Ontario - East Shore	50	(22)
St. Lawrence River - 1000 Isles to Lake St. Lawrence	36	(16)
St. Lawrence River - Lake St. Lawrence	14	(6)
St. Lawrence River - Lake St. Francis	1	(<1)
St. Lawrence River - Lac St. Louis/Montreal	3	(1)
St. Lawrence River - Lac St. Pierre	7	(3)
No Location Given	3	(1)
Totals	230	(100)

Among all 230 respondents to the survey, 152 (66%) indicated a specific ***high*** critical water level, 99 (43%) indicated a specific ***low*** critical water level and 87 (38%) indicated ***both*** specific critical high and low levels. The distribution of those identifying critical water levels survey results across and within geographic areas is identified below in Table 2.

Table 2

		Identified Critical Levels		
	No. of	**HIGH**	**LOW**	**BOTH**
GEOGRAPHIC AREA	**Responses**	**# (%)[1]**	**# (%)**	**# (%)**
Lake Ontario - South Shore	114	78 (68)	37 (32)	37 (32)
Lake Ontario - East Shore	50	29 (58)	20 (40)	16 (32)
1000 Isles to Lake St. Lawrence	36	30 (83)	21 (58)	20 (55)
Lake St. Lawrence	14	11 (79)	13 (93)	11 (79)
Lac St Louis/Montreal	3	1 (33)	1 (33)	0 (0)
Lac St. Pierre	7	2 (29)	6 (86)	2 (29)
No Location Given	3	1 (33)	1 (33)	1 (33)
Totals	230[2]	152 (66)	99 (43)	87 (38)

These results were consistent with those in other parts of the survey. Responses above fifty percent within an area appeared to indicate a significant concern by the public. For example, 58-68 percent of Lake Ontario (South and East shores) residents indicated a specific high critical level, while only 32-40 percent specified low critical levels. Residents on the St. Lawrence River above the Moses-Saunders Dam demonstrated concerns for both high levels (79-83 percent) and low levels (58-93 percent). Respondents from Lac St. Pierre were most concerned with low critical levels (86 percent).

It was apparent that our survey left many respondents confused as how to determine their specific high or low critical level (i.e., vertical *vs.* horizontal measurements). The numerical results were certainly less useful than was their interest in identifying their critical levels. Among those respondents sharing some common levels (Lake Ontario and the uppermost reaches of the St. Lawrence River), most wanted a less than a four-foot range. Not surprisingly, Lake Ontario south shore residents favored an upper limit somewhat lower than that preferred by upper St. Lawrence River respondents.

Part Two

The second part of the survey asked members of the public about their general concerns and other information they might care to share with us, in their own hand, in four categories (see Table 3). The respondents made at least some comments on every survey returned. The approximately 20,000 words of comments were entered into the MS Access database. The complete text of these comments has been collated and sorted by category and geographic area.

[1] Percentage of responses within the specific geographic area.
[2] Responses from areas without any indication of levels (3 - Lake Ontario - West and North and Lake St. Francis) were not included in Table 2

They appear in four separate attached reports (Appendices D.1 through D.4). Table 3 shows the distribution of the category comments received across all of the geographic areas.

Table 3

Comment Category	No. of Comments	(% of Total)
Shoreline Erosion/Damage	152	(66)
Recreational Watercraft Problems/Concerns	149	(65)
Environmental Observations/Concerns	110	(49)
Additional Comments	160	(70)

PIAG members with special interest and knowledge in the various categories reviewed the four reports individually and collectively. These comments are meant to give readers an overview of the various and diverse needs and opinions about desirable water levels within the parameters of study as tabulated through January 14th, 2002. Any surveys returned after that date will be summarized in the PIAG year 2 report. Comment summaries follow:

Coastal/Shoreline Erosion Comments Summary

Respondents from Lake Ontario largely favored having lower water levels rather than higher levels, detailing individual circumstances of property damage and highlighting the years in which the most damage occurred.

On the east shore, respondents favored lower levels. Ten respondents noted erosion and loss of land including beaches and points, three noted loss of dunes, three loss of banks, two loss of trees, two damage to stairs, three the need to move buildings, and others damage to docks, boat ramps and decks. The most significant damage was attributed to circumstances in 1972, 1973, 1995 and 1996.

On the south shore, basically all respondents favored lower water levels. Forty-one respondents described loss of land including beaches and frontage, 34 noted damage to break-wall structures including rip-rap, 15 described damage to homes, nine described loss of trees, and others described damage to docks (eight), stairs (six), hills and bluffs, boathouses, decks, boat hoists, ramps, boats and launches. Damages were described as happening in 29 of the last 52 years, but the years in which the most damage was indicated included 1973, 1993, 1996, 1997, 1998 and 1999.

From the west shore, the one respondent noted problems with high water levels and cited break-wall damage in 1998.

Among the respondents from the St. Lawrence River - Lake St. Lawrence region, seven of nine cited soil and shoreline erosion problems. These problems were associated with high water levels, high flow rates and ship's wakes.

In the St. Lawrence River - Lake St. Peter region, all four respondents favored lower water levels, damages were cited in 1993, 1994, 1997 and 1999, and the problems noted included basement flooding, shoreline erosion, dock damages and ship wakes.

In the region of the St. Lawrence River from the Thousand Islands to Ogdensburg, eight respondents cited problems with high water levels and two noted low water problems. Damages were described as affecting docks, seawalls, buildings and banks, and as occurring primarily in 1973, 1993, 1994 and 1997.

While respondents generally urged lower water levels, survey results suggest that there may be some common position as far as the operational range of a regulation plan. It may be possible to maintain water at levels fully useable for boaters from May to September and then beginning to drop levels immediately thereafter, for the winter and spring, rather than dropping the levels significantly in July and August. The exact range of levels would be determined by the TWG's.

Finally, there is a general consensus that is in error by the participants of the survey on how the lake and river interact. This leads to a misjudgment on how fast the regulation plan can affect changes in levels on the lake. Put another way the mechanics of the regulation plan are not understood.

Environmental Comments Summary

The theme for Lake Ontario survey respondents was high-water erosion and environmental damage. Lake St. Peter and Thousand Islands to Ogdensburg respondents indicated low water decreases spawning and vegetation conducive to fish. In the Lake St. Peter area it was indicated that cattail growth is over-taking area mudflats.

As with most issues concerning the water levels of Lake Ontario and the St. Lawrence River, there were concerns about high water affecting certain aspects of the environment, low water affecting others and constant levels causing damage as well.

Lake Ontario - East Shore:

Many were concerned about erosion of dunes, loss of bank vegetation, as well as other natural features with high levels. Vehicular damage to dunes and bird nesting is a problem. At low levels, there is less fish spawning and a loss of fresh water supplies.

Lake Ontario - South Shore:

High water had destructive impacts on public and private property including environmental detriments such as the destruction of dunes, spawning areas, waterfowl nesting sites and wetlands. Low water has drained wetlands and impacted wetlands and fish spawning. Algae problem is worse every year.

St. Lawrence River - Thousand Islands to Lake St. Lawrence:

Low water levels have affected spawning areas, other habitat and in the fall lead to greater weed growth. Interest was shown in greater fluctuation as well as higher levels. Loss of wetlands due to fluctuations in water level.

St. Lawrence River - Lake St. Lawrence:

Seaweed clogs everything. Seasonal timing and abruptness of the water level changes are critical. Two large wildlife management areas are located here. Some interests adversely affected by high levels, others at low levels.

St. Lawrence River - Lake St. Peter:

Wetlands have been completely changed. Cattails have encroached and reduced the number of plant and bird species since there are not the wide fluctuations as there was before the Seaway. Primarily low water issues.

St Lawrence - Lake St Louis:

Three individual comments stated that during low water intervals, people cannot launch boats.

In conclusion, wildlife picks its own areas and suffers when we interfere.

Watercraft/Recreational Boating Comments Summary

Lake Ontario - Upper St. Lawrence River

Adequate Water Depth - Slow Speed and Calm Water:

Generally throughout the area of study adequate water for 95% of recreational boaters operating at slow speeds with small swells, normally in a channel or approaching docks is loosely interpreted as between two to three metres (8-10 ft.) of depth.

Floating Docks:

Where floating docks exist in an area and approaches to the docks have a consistent minimum adequate depth then moderate fluctuations of the water level are generally not a problem. In a few areas where a fixed break wall exists, high water may make the break wall ineffective.

Low Water Safety Issues:

Low water can cause damage to keels, rudders, shafts and props due to running aground. In addition to the potential of major expense it is first and foremost a matter of safety. Grounding or other damage generally reduces or makes steerage and control of the craft ineffective. This can cause collisions with other vessels or objects and restrict the ability of the craft and the crew to reach a harbour of refuge, safe anchorage or docks.

Weeds growing to within two metres (six ft.) of the water surface can have the same dangerous affect.

High in the Spring - Low in the Fall:

Recreational boaters generally realize the affect of higher water levels in the spring and water levels too low in the fall. The reduced depth is normally felt starting in mid-August. In

some cases people report that the early high water causes damage to docks even to the point of water over the docks. In other cases areas feeling the affect of greater than average drop of the water levels will restrict their usage in late August and September and in some cases need to be hauled out of the water earlier in the fall season than desirable.

Silting, Sandy Bottom and River Mouths:

Harbours and channels located at creek and river mouths create their own problems. Sand bottoms, spits and points experience shifting and unpredictable water depths. Boaters are frustrated but understand the nature of the shifting sand and silting problem. Often in the 'pond' areas a greater water depth to assist boat passage would be devastating to the riparians who are often one in the same. Dredging in most areas is only a short term and expensive solution.

Fluctuation is too Large:

At the risk of interpreting hundreds of individual comments, most boaters experience various degrees of problems with both high water (normally in the spring) and low water (normally in the fall). While people can design some flexibility into floating docks and ramps that could handle a four-foot range, the reality of bottom depth (low) and flooding (high) in many areas is beyond the capability of design control factors.

Lower St. Lawrence River

Pleasure Boating and Tourism on Lac Saint-François:

Lac Saint-François is the reservoir above the Hydro-Québec powerplant at Beauharnois, and as such is maintained at its normal operating level virtually continuously. Peaking and ponding sequences can cause rises and falls in the level either daily or over a weekend in the order of 20 cm. Hydro-Québec's operating permit allows them just 30 centimetres (12 inches) of variation annually, whereas natural variation before construction of the first powerplant in 1928 was about 1.5 metres (5 ft.).

Pleasure boaters find this an ideal arrangement, and take advantage of it from early in the spring until late in the autumn. Fishers and water-fowl hunters also consider the lake one of their favourite haunts due to its constant level.

Most of the tourism around the lake is associated with the environment at two main centres, the Lac Saint-François Wildlife Area on the right bank, and Cooper Marsh on the left bank, both of them about 20 kilometres (12 miles) downstream from Cornwall. Although as managed marshes they are isolated from the lake by dykes, the constant level in the lake facilitates control of the marshes and enhances waterfowl movements back and forth.

Pleasure Boating and Tourism on Lac Saint-Louis:

Flow out of the lake is controlled by the rock sill at the head of the Lachine Rapids, so the levels are a direct function of the discharge going over this natural layout. In 1999 and again in 2001, summer water levels have been very close to record low levels recorded about 65 years ago, in the range of elevation 20.7 metres (68 ft.), corresponding to a flow leaving the Moses-Saunders powerplant of about 6,200 cms (218,860 cfs). At the average summer level of 21.5

metres (71 ft.), or a Moses-Saunders discharge of 7,000 cms (247,100 cfs), boaters, marinas and yacht clubs can operate normally, and obstacles in the lake are known and located so navigation is routine.

As the level falls below 21.5 metres (71 ft.), the problems arise progressively. At first, deep draft sailboats cannot get in or out of the harbours, or if they do, they run the risk of hitting obstacles in the lake that they would normally go over safely. Next, shallower draft sailboats and larger powercraft are hindered in their movements. Finally, as in 1999 and 2001, with the levels about 80 centimetres (31 inches) below average, the harbours and lake are limited to usage only by shallow draft runabouts or hunting and fishing boats. Serious problems were encountered in launching boats in the spring, and even worse in trying to get them out in the autumn. The disappointment and economic loss to the marina and yacht club operators is obvious.

One other major impact of this situation on the industry is the loss of interest by the boat owners in pursuing their activity any longer. The summer period is very short in Québec; people have always made full use of the summer, and in this industry, it scares everyone when you invest thousands of dollars on a boat that you can't sail where you want to because the water is too low.

Tourism on the lake is associated mostly with boating, say fishing and hunting, with some birdwatching in the wetlands on the south shore. Recent low water levels did allow some regeneration of vegetation on the exposed mudflats which was interpreted as an advantage for shorebirds.

The collective preference is to maintain the lake at 21.5 metres (71 ft.) with a Moses-Saunders discharge of 7,000 cms (247,100 cfs) or greater over the summer and into the autumn to allow safe removal of the boats from the water. High spring flood levels must exceed 22.5 metres (74 ft.), corresponding to a Moses-Saunders discharge of 10,500 cms (370,650 cfs), before they cause any damage to harbour works. Levels below this value down to 21.5 metres (71 ft.) are considered as improving boating operations.

Residents of the islands in the Lachine Rapids and operators of rapids-shooting tour boats would have requirements similar to those for Lac Saint-Louis, and would benefit from the same criteria described above.

One respondent suggested construction of the Lachine Rapids Power Project, that was last proposed in the 1980's. It includes a dam at the head of the rapids that would maintain Lac Saint-Louis at elevation 21.5 metres (71 ft.) all year long. The project was refused by the provincial government on environmental grounds, in particular concerning the wildlife conservation areas on the islands in the rapids.

One of the key attractions for pleasure boating is the presence of an ample supply of sports fish in the lake. The low waters of the last two to three years are suspected of having severe negative effects on fish spawning. For example, during the summer of 2001, over 25,000 carp died as they all tried to spawn on the reduced area spawning beds in Lac des Deux Montagnes, Lac Saint-Louis and down as far as Québec City.

Pleasure Boating and Tourism in Montreal Harbour Reach:

Chart datum in Montreal Harbour is elevation 5.55 metres (18.2 ft.), normally corresponding to the lowest level possible, while average summer levels are about 6.5 metres (21 ft.). During the summers of 1999 and 2001, water levels were below chart datum for long periods, with daily minimums of 5.4 metres (17.7 ft.). With about a metre of water missing in the reach, pleasure boating was virtually shut down for all except small runabouts and fishing boats. Rapids-shooting tours were alright, since they operate out of the main harbour, so have lots of water for their shallow draft jet-boats in the harbour area, and encountered problems only when they went up the Lachine Rapids.

The preference in this reach is to maintain a summer level of 6.5 metres (21 ft.), which would require the same Moses-Saunders flow of 7,000 cms (247,100 cfs) as described for Lac Saint-Louis. Spring flood damage to marina and yacht club works begins at elevation 7.5 metres (25 ft.), corresponding to a local discharge of about 12,000 cms (423,600 cfs). Occurrence of such conditions are complicated by the varying contribution to the flows around Montréal Island from the Ottawa River, so it is not possible to suggest a corresponding Moses-Saunders discharge.

Pleasure Boating and Tourism on Lac Saint-Pierre:

Similar to the other reaches immediately upstream, flow out of the lake is controlled by the natural bathymetry of the outlet, so the levels are a function of the discharge. However, the situation is complicated by the presence of tidal level changes which come up the St. Lawrence and are damped out in the lake. Low-tide average summer level is 4.3 metres (14 ft.), and the waterfront infrastructures are built to function at this level.

Low water levels over the last three summers, 1999, 2000, and 2001, down to 3.7 metres (12 ft.), caused severe difficulties for marina operators and sailing schools on the lake. Some were shut down. Preferred water level is that corresponding to a 7,000 cms (247,100 cfs) or greater Moses-Saunders outflow, which would give a low-tide water elevation of 4.3 metres (14 ft.) or above.

Another aspect of the impacts of sustained low water levels on the boating industry in the area of the Lac Saint-Pierre, is in reference to the majority of marinas being located on the shores of smaller streams feeding the lake. The outfalls of these streams become jammed with sand when the water levels or currents are too low to keep them clear. During the peak boating season, boaters can find themselves stuck in the stream or unable to come back in. This has resulted in many requests for dredging rivers, with the well known financial and environmental costs associated with these operations, particularly for the disposal of the sediments.

Flooding by high water is not a major concern, since most of the shore works take into account the occasional ice jam at the lake outlet that can raise the levels several metres. High discharges in the order of 11,000 cms (388,300 cfs) in 1993-1994 and again in 1997 were inconvenient at times, but caused little damage.

Additional Comments Summary

As previously mentioned, seventy percent (70%) of the respondents provided some feedback to PIAG in this category. Many comments were simply a continuation from another category, and quite similar in nature. More often, respondents made general comments in this category, expressing their feelings and opinions on the manner in which water levels were being regulated. Comments here were more apt to be interpretive of the causes of problems and to place blame on those they believed to have caused them.

The review of the comments in this section leads this author to conclude that there are clearly defined *"information gaps"* and *"trust gaps"* between the public and the regulating bodies. We must examine, understand and bridge these gaps if we are to communicate with the public effectively during this ongoing study process.

The public seems to be well aware that there are differing concerns and desires thoughout the system and that everyone cannot be happy all the time. This has been repeated to them many times over the years - many feel they have been beaten over the head with this concept. However, few understand ***why*** this is so. Few understand how the system works and don't understand the teminology used when attempts are made to explain it. There exists both a lack of understandable information and an abundance of misinformation.

We are always using the terms of *average* and *long-term averages*. To most people, the term average is not interpreted as - the mean value, $[\Sigma n_{o} \ldots n_{i}]/n$, or the sum of the values, divided by the number of the values, etc., etc. To many, average means ordinary, like "that's a pretty *average* looking person". Our usage of *long-term average* in describing water level control has led many to believe that it is the guide that water levels are supposed to adhere to. Most of those who have an understanding of the term *average*, think of a single value when we refer to the *long-term average* water level for a location (i.e., a *long-term average* for Lake Ontario might be 75 metres (245.5 ft). They are not interpreting it as a *long-term average* for that day of the year. Most believe that the levels are "above average" in the late spring/early summer and "below average" in the fall/winter seasons. Therefore, when they are told in early June that water levels are at their average level, they simply don't believe it and think someone is deliberately trying to mislead them. Many are unfamiliar with the manner and magnitude of the natural rise and fall of water levels thoughout the system - throughout the year.

Another area of wide spread misunderstanding is timing and impact of the St. Lawrence River Power Project. Some think it happened as early as 1940. Others believe regulation began in 1952 with the Orders of Approval, in 1956 with the authorization for a regulation plan or in 1958 (i.e., Plan 1958D). Many have expressed a desire to see an unbiased and understandable comparison of pre-project vs. post-project levels and conditions. The lack of such an understandable presentation/comparison has but reinforced the widely held belief that water levels on Lake Ontario have been held *artificially higher* since regulation began. Since the public also generally associates higher water levels with shoreline damage, dune erosion and selected environmental impacts, it is believed that these damages have been *artificially caused* as well. Until the public has a clearer understanding of pre-project and post-project conditions, they will be unable to grasp just what can and cannot be accomplished with regulation plan changes.

There were quite a number of misunderstandings about the system that surfaced through the public's comments in this survey/questionnaire section such as:

- Low water levels occur in the Thousand Isles area because the water levels are raised in Lake St. Lawrence to aid shipping.
- Water levels drop sharply in the Brockville area each year in August because of the additional water released at the Iroquois Dam.
- Low water levels occur in Lake St. Louis because Hydro Quebec holds the water back at Beauharnois.
- Lake Ontario levels cannot be adjusted in March/April because the St. Lawrence River is still frozen. Lake Ontario levels have to lowered before November 15-25 before the river freezes.
- Present regulatory strategy is to go into winter with high Lake Ontario levels.
- Since the 1950's Lake Ontario has been kept 0.5-0.6 metres (1.5-2 ft.) higher for shipping and hydropower interests.
- Homes have been built up north where they never were before (Montreal) and now those people complain about flooding.
- By regulation, Lake Ontario was supposed to be kept at 73.8-75.0 metre (242-246 ft.).
  Why then is it being kept in the 74.4-75.3 metre (244-247 ft.) range?
- Lake Ontario levels have varied 0.9 metres (three ft.) each year over the past five to six years.
- The U.S. Army Corps of Engineers makes up the average levels and they don't compare with local observations.

These are but a sampling of the comments received. It is clear that many misunderstandings exist. They create a communication barrier or *"information gap"* between the public and the Lake Ontario - St. Lawrence River Study personnel who are trying to exchange information with the public. Only a thorough, understandable and ongoing eductional program can bridge this gap. This *"information gap"* is not the public's fault. It is our failure to communicate effectively.

Additionally, comments from our survey as well as those received during our meetings with the public reveal an entrenched distrust for water level regulators - the *"trust gap"*. Much of this, of course, results directly from the *"information gap"*. People simply will not trust what they do not understand. Unfortunately, this level of distrust appears to have built up in many layers over the years. It will likely take both an independent and authoritative voice to lower these communication barriers. It will not happen overnight. This process should begin as soon as possible in order to establish open avenues of communication ***during*** the Study. If we hesitate and wait until near the conclusion of the Study to initiate this process, it will be too late.

3. Public Awareness Tools

3.a Website

The website for the Study and PIAG is www.losl.org. It has received over 3,000 visitors since it was made public in July, 2001.

3.b Newsletter

The first volume of the Study and PIAG newsletter, the *Ripple Effects* was published in July 2001. Distribution is available by mail or electronically. On the U.S. side, an initial mailing of 2,878 copies was made with a request to send a postcard back if the recipient wanted to remain on the mailing list. Letters were sent to over 200 friends of the St. Lawrence River and 10,000 recipients of the Great Lakes Water Levels Bulletin to ask if they would like to be added to the Study mailing list. On the Canadian side *Ripple Effects* were mailed to over 1,700 recipients. Letters were sent to 1,250 recipients of the Great Lakes Water Levels Bulletin in Canada to ask if they would like to be added to the Study mailing list. Attempts are being made by the communications team to network with other organizations to expand the Study mailing list.

Appendix A

Public Interest Advisory Group Members and Affiliation

PIAG Member	Affiliation
Daniel Barletta Rochester, NY, U.S.	Grandview Beach Association South Shore Advisory Committee Lake Ontario Levels Oversight
Bruce Carpenter Rome, NY, U.S.	New York Rivers United Great Lakes United
Dalton Foster Massena, NY, U.S.	International Water Levels Coalition Wilson Hill Association
John Hall Burlington, ON, Canada	Hamilton Harbour Remedial Action Plan
Marc Hudon Québec, QC, Canada	Stratégies Saint-Laurent
Elaine Kennedy St. Andrews West, ON, Canada	Cornwall and District Environment Committee
Michel Lamontagne Montreal, QC, Canada	Ville de Montréal
Cpt. Ivan A. Lantz Montreal, QC, Canada	The Shipping Federation of Canada
Sandra Lawn Prescott, ON, Canada	
Thomas McAuslan Mexico, NY, U.S.	Port of Oswego
Anthony McKenna Olcott, NY, U.S.	
John Osinski Albany, NY, U.S.	New York Power Authority
Fred Parkinson Beaconsfield, Montreal, QC, Canada	
Bea Schermerhorm Hammond, NY, U.S.	Save the River International Water Levels Coalition
Sally Sessler Sandy Creek, NY, U.S.	Private Landowners' Committee of Ontario Dunes Coalition
Max Streibel Greece, NY, U.S.	Rochester Harbor Town Planning/Advisory Committee South Shore Collaborative
Henry Stewart Rochester, NY, U.S.	Lake Ontario South Shore Council International Great Lakes Coalition South Shore Advisory Committee
Michel Turgeon Montreal, QC, Canada	Administration portuaire de Montréal

PIAG Member	Affiliation
Paul Webb Iroquois, ON, Canada	International Water Levels Coalition
Stephanie Weiss Clayton, NY, U.S.	Save the River
Al Will Hamilton, ON, Canada	Ontario Sailing Association

Appendix B

Public Interest Advisory Group Meetings

Audience - Organization	Location	Date	Approx. No. of Attendees
Marine Corps League (Det#685) Annual Installation Dinner Meeting	Massena, NY	May 12, 2001	60
Press conference at Lachine Marina	Lachine, QC	Jun 01, 2001	20
International Water Levels Coalition Annual Meeting	Rockport, ON	Jun 02, 2001	57
AGM of ZIP committee Ville-Marie	Montreal, QC	Jun 06, 2001	52
AGM of ZIP committee Des Seigeuries	Varenne,QC	Jun 07, 2001	50
AGM of Great Lakes United Board	Windsor, ON	Jun 09, 2001	20
AMG of ZIP committee Haut-Saint-Laurent	Quebec	Jun 12, 2001	72
Private Landowners committee of the Ontario Dunes Coalition	East Shore - Lake Ontario	Jun 23, 2001	5
Wilson Hill Association Annual Meeting	Louisville, NY	Jul 12, 2001	55
Grandview Beach Association	Greece, NY	Jul 2001	60
North Rainbow Shores Association	East Shore - Lake Ontario	Jul 14, 2001	15
Berthierville Marina	Lac St-Pierre area	Jul 21, 2001	20
Friends of Sandy Pond Beach	Sandy Creek, NY	Jul 26, 2001	12
Ontario Dunes Association	Sandy Creek, NY	Aug 02, 2001	50
Ile Perrot Marina	Ile Perrot, QC	Aug 04, 2001	35
Greece Rotary Club	Greece, NY	Aug 2001	80
Sailing Club - Pointe Du Lac	Lac St-Pierre area	Aug 17, 2001	5
Louisville Marina	Lac St-Pierre area	Aug 18, 2001	7

Audience - Organization	Location	Date	Approx. No. of Attendees
Lake Ontario South Shore Council	Hamlin, NY	Aug 21, 2001	20
PIAG General Public Meeting	Clayton, NY	Aug 22, 2001	53
North Rainbow Shores Association	East Shore - Lake Ontario	Aug 25, 2001	20
Renshaw Beach Association	East Shore - Lake Ontario	Aug 26, 2001	30
Environmental Management Council - St. Lawrence County	Canton. NY	Sep 19, 2001	15
Big Rideau Lake Association	Rideau Lake - Ontario	Sep 22, 2001	15
PIAG General Public Meeting	Rochester, NY	Oct 11, 2001	40
PIAG General Public Meeting	Hamilton, ON	Nov 08, 2001	20
Save the River Annual Winter Meeting	Alexandria Bay, NY	Feb 09, 2002	60
ECO Museum	Ste. Anne de Bellevue, QC	Mar 13, 2002	36
Upper St. Lawrence ZIP Administrative Committee	Valleyfield, QC	Mar 19, 2002	31
Grandview Beach Association	Greece, NY	Mar 19, 2002	100
30 Meetings		**Total =**	**1,115**

Appendix C
International Joint Commission
International Lake Ontario - St. Lawrence River Study
Public Interest Advisory Group

We are asking for your help in describing the water levels that affect you and your area within the Lake Ontario/St. Lawrence River system. At this point we are specifically requesting your input in any (or) all of the following categories:

I. Coastal/Shoreline Erosion
II. Recreational Boating
III. Environment and Wetlands

It is important that members of the public contribute to the current Lake Ontario/St. Lawrence River Study. You have essential information that needs to be included in the overall studies.

The following definitions have been developed to help you fill out the questionnaire. Please review them.

Critical High Water:

1) When water levels are sufficient to cause damage to shoreline property and/or erosion.
2) When water levels overrun docks causing damage or cessation of business operations.
3) When some shoreline environments can be damaged by high water, or suffer if they do not have high water levels.

Critical Low Water:

1) When low water conditions do not allow use of docks, prevents launching, causes boat damage in normally safe area, or curtails business operations.
2) When some shoreline environments can be damaged by low water, or suffer if they do not have low water levels.

Since the International Lake Ontario - St. Lawrence River Study Board is charged with evaluation of the problems associated with fluctuating water levels in the Lake Ontario/St. Lawrence River system, it is important that you indicate the **DATE** and **LOCATION** of your observations.

Date: _____ **Location:** _____

(examples: In Lake Ontario – Toronto, Rochester, Kingston, Oswego, etc. St. Lawrence River – 1000 Islands, Brockville, Ogdensburg, Morrisburg, Cornwall, Montreal, Trois Rivieres, or distance in miles/kilometers upstream or downstream (N, E, S, W) from a well defined point on the lake/river.)

From where your water level is today – measure or estimate the vertical distance up to your critical high level and down to your critical low level. Please indicate inches (in) or centimeter (cm).

The distance from today's level ***up to my critical high level*** is approximately_____

The distance from today's level ***down to my critical low level*** is approximately_____

Additional questions and comments

Does the wind's direction have any effect on the conditions you observe? Yes ___ No ___
If so, from which direction? _____

Have you experienced shoreline erosion? Yes ___. No ___. If Yes, what year (s) did you experience the greatest erosion? _____. How many ft/m? _____.

Have you personally experienced shoreline property damage? Yes ___. No ___. Do you know the month/year? _____
Can you describe the damage?

_____

_____

_____

Continued on back side

Have you had problems with fluctuating water levels and the function of your recreational watercraft, docks or marina operations? Yes___ No___. Can you describe the problems and the dates they occurred?

_____

_____

_____

Are you aware of situations in which fluctuating water levels have an environmental impact in your location (such as in fish spawning beds, waterfowl nesting sites, dune erosion, wetland degradation, etc)? If so, please describe what you have observed. If you can, please indicate the type of wildlife or plants involved. Also include the month and the year of the observed impact.

_____

_____

_____

Additional comments on the above issues, or anything else you may be concerned about:

_____

_____

_____

_____

_____

_____

_____

Would you like to be informed of further developments regarding the International Lake Ontario/ - St. Lawrence River Study? Yes____ No____. If yes, please tell us how to reach you (Name/Address/Phone/Fax/E-mail).

_____

_____

_____

_____

It is very important that the information you have provided be returned to the Public Interest Advisory Group (PIAG) so we can make it available to the Technical Working Groups researching this information.

Your information can be returned in any of the following methods:

1) Give it to the program director of the group/association sponsoring the PIAG program.
2) Give it to the PIAG member who just gave the program to your group/association.
3) Mail, fax or e-mail it to either chairmen of the PIAG. Their addresses/numbers are as follows:

United States Residents:
Dalton Foster
4 Butternut Ridge
Massena, NY 13662
Fax: (315) 769-6232
E-mail: dpfoster@twcny.rr.com

Canadian Residents:
Fred Parkinson
298 Oakdale Ct.
Beaconsfield. Quebec Canada H9W 1X2
Fax: (613) 995-9644
E-mail: parkolas@sympatico.ca

Thank you for your help!

Appendix D

D.1 PIAG Year 1 Survey - Coastal/Shoreline Erosion Comments

Location	Wind Direction	Damage Year(s)	Damage Description
Lake Ontario - East Shore			
Lake Ontario Montario Point, Mannsville, NY	SW	March 1973	Combination of high water and wind destroyed our sandy beach. Since that year one had to put in large boulders and top soil to hold back the lake.
S. of Monterio Pt. - Rhenshaw Bay area		95-96	Constant erosion of beach - especially 1974 to date - 95-96 blocks are being moved and eroded -
Rainbow Shores, Town of Sandy Creek	W, NW	3/73	Approximately 40 ft. of the dune in front of my camp was lost by erosion, leaving only eight in front of my camp foundation. In the late 1980's and Spring of 2001 some of the rip-rap put in to replace the 1970's damage had to be replaced because of continued erosion.
North of Sandy Pond - Lake Ontario			Loss of shoreline via inundation and erosion has been ongoing problem. Every year results in less beachfront. The previously sandy beach filled with rocks suggesting current changes also, Homes are in danger of collapse.
Lake Ontario - North of Sandy Pond Channel	W	70-76,95,96	Extensive erosion due to high water combined with severe storms conditions out of west.
Lake Ontario- North of Sandy Pond Channel	W	70-75, mid 90's	High water and storms combined to take 1/7th of property depth and undermine protective wall put in around 1976.
Lake Ontario - North of Sandy Pond	W		The same year Oswego College put rip-rap in front of our place. We also used the same contractor to keep the pounding water from washing the sand and our house away.
E. Lake Ontario (Mexico Bay, 2 miles south)	NNW, W	Yearly	Minor wear and tear on well casing and cover - 4 ft. dia. cement. Lake level affects water level in well; its clarity, odor, non-potable.

Oswego Co. @ Selkirk State Park	July 4, 1997	High water & wind

Intense erosion has reduced the beach area by 30 ft. undermined my wall which was below water level.

Location	Wind Direction	Damage Year(s)	Damage Description
Jefferson Park, Sunset Bluff (Lake Ontario)	W	1972	Loss of shoreline sand bank including trees and vegetation and soil steps down to beach. Also the beach with rocks. Basically loss of frontage. becoming close to cottage, disappeared and was left
Sunset Bluff	w	1972	The bank we live on eroded so bad as to take away good trees. Spring water too high. March the level rises. 1972 and through to now
Southwick Beach	W	6/72	Can't remember but there have been about four years (summers) where been allowed to approach 3 feet above average needed to prevent compromising erosion since Ontario Lake levels have and sandbags/rocks were 1972.
Sandy Pond	W	1972	Washed away part of my point (3 ft.)
Lake Ontario	W, NW	1976	We lost 10 feet of front shoreline. It required adding fill and concrete shoreline block and stone in front of
Lake Ontario - Montario Pt.	SW, W	5/72-5/73	Railroad ties were behind camp - off a barge which broke loose - stones windows). Drainpipe was exposed 10 ft. were everywhere (to the (boulders, too)
N. Rainbow Shores - Pulaski, NY	W & N		Dock & boat ramp damage recently. Loss of land & cottage moved 2x in movement of rip-rap. 55 years. Constant loss &
N. Rainbow Shores Rd. - So. Sandy Pond	West	1973	Summer residence had to be moved in order to be saved from going into when the water levels are high, and the wind is lose a little bit more property - sometimes it's a few feet - it happens almost every year. the lake. Every Spring, strong out of the west we few inches - sometimes it's a
N. Rainbow Shores (Sandy Creek)	NW, W	73, 93, 98	40 ft. sand dune completely washed out, water splashed on cottage - came through walls.
Jefferson Co., Town of Ellisburg	West		It started in the 70's with the large flood. Damage has been occurring since the breakwall has been built on the mouth of the Salmon River.

Jefferson Co. - East Shore - Lake Ontario of cubic yard concrete blocks was destroyed was washed into the surf.	W/SW	1996	A newly installed bulkhead by overriding wave action &
Lake Ontario - just north of Sandy Pond - starting to be moved and eroded.		95-96	Breakwall blocks are

Location	Wind Direction	Damage Year(s)	Damage Description
Lake Ontario - N. Sandy Pond concrete walls 36" high - You let the water go down be let down middle of October - We lose a because there is no water. Also - our shore line the lake is dropped too soon.	W-up; E-dn		No damage - I have a month too soon - should month of boating season wells also are low because
Lake Ontario - Woodville, NY - Sunset Bluff	West	10/2000	Bank erosion
Lake Ontario - Montario Point 1986: Stones and debris washed back over the in the house. Raised the cottage 2 ft. to	WSW	1973	Spring of 1973 & Spring lawn 65'. Flooding occurred protect property.
So. Sandy Pond - Lake Ontario Took big pieces of the dune & sea grass out	W	Fall 1995	Big waves on Lake Ontario. - trees down also.
Sunset Bluff (3/4 m North of Southwick State) away. I am on a 15 ft. high bluff. During hi have a beach until Labor Day.			Early 90's. My stair washed water summers we may not
lake side of house.	NW, W	May 1992	Collapse (near) of deck on
Renshaw Bay (near Sandy Pond) N. Parsons feet in width	W		Loss of sandy beach - 30
Sandy Island Beach at North Sandy Pond for 30 years except 2000, 2001. Undercut built in 1993-4. Current process is considerable water.	W, NW		Dune erosion for most years dune walkover structure build-up due to very low
Eastern end of Ontario just north of outlet from wall (2 levels of cinderblock), eroded land from vacation, dock of house was almost others giving. Deck corner near collapse.	NW	5/92	Water flooded behind sea behind it and when I arrived gone. One support gone and
Sandy Pond (North Pond) South East end feet of beach on the dune system	West		We have lost as much as 15
Lake Ontario - South Shore			
Rochester (West Irondequoit) levels have (over the past 10 years) almost breakwall and caused severe erosion of the 25 protect.	NE		Fluctuating high water completely destroyed my ft. hill it was designed to

Payne Beach - Hilton, NY	NE	1973	Lost flower beds & steps to entire yard & crawl space of our four bedroom cottage.
Oswego	East	1993	All my rip-rap shoreline protections.

Location	Wind Direction	Damage Year(s)	Damage Description
Rochester barriers and yard erosion. The following year less basis.	NE	1973	Washed out shore line but on a continuous/regular
Between Youngstown, NY and Wilson, NY washed away. Stone was placed to protect one		winter 2000	Ten tons of stone was end of a seawall.
Lake Ontario, Sodus Bay, Sodus Point, NY carpets, furniture; deck, and dock destruction; winds at that time.	SE, SW, S	Spring 1993	Water damage - floors; wall and windows from
Lake Ontario South Shore, Niagara County; for metal stairs leading up from water was partially - making it and stairs unusable. The repairs impossible without very significant and retaining wall(s).	N, NW	1999/2000	A 12 x 12 concrete landing undermined and has fallen extent of erosion makes expensive construction of
  on and off; it is constant. The problem is the is pure cement and it's eroding constantly and			This erosion damage is not lake is too high. Our shore badly.
30 Mi. Point (30 mi. east of Nia. River) 30 ft. lost between 1961-73 for a total of 55 coastal/shore line.	NE	1973-86	Lost 25 ft. in addition to the ft. (5,500 sq. ft.) of lost
Town of Yates (5 miles west of Point Breeze) several trees. As a result we installed a reinforce it in 1991.	NE	April 1973	Lost dock, boat hoist and concrete wall then had to
Rochester, NY jams in the creek that runs the length of my flooding of my home	N	3/93	High water levels led to ice property, which leads to
Payne Beach, Hilton, NY, Lake Ontario homes? If yes, no, we had no damage. If no, then yes, we lost 20 ft. of front lawn.	NW, N, NE		By property, do you mean by property, you mean land,
Hamlin, NY on beach all summer before hi-water. Bank rock work began & continues.	NE	Mar-Apr 50-51	Sand beach gone. Kept boat badly eroded, frontage lost,
Lake Ontario - Rochester (Greece lake front) damaged. Correction cost $25,000	NW to E	winter 1992	Concrete breakwall was
shoreline embankment; also our stairs down	E		Extensive. We lost 15 ft. of to beach.

Lake Ontario	NW	June 1972	Took away trees and land
Lake Ontario	N	1974	1974 was the worst 20 ft. Since then about 1 ft. per year. 10 years ago my breakwall was destroyed, now I have a 20 ft. cavity.

Location	Wind Direction	Damage Year(s)	Damage Description
960 Lake Road, Webster, NY 14580 to patch/repair erosion undermining of foundation $20,000 +			$5,000 spent in 1999-2000 breakwall; estimate for new
Lake Ontario (4 mi. east of Old Fort Niagara) eroded shoreline well above tones of rip rap.	NE	1998	Lake so high wave action My yard slipped in the lake.
Hamlin, NY behind the NW corner of my breakwall and a considerable expense among many others water.	NW, NW		The wave action washed out endangered my lawn. It was over the years due to high
46 Lakeside Blvd., Hilton, NY (west of were 2 foot or less washed into lake.		4/98	I had rip rap and stones that
Hamlin, NY	East	1973	Lake walk had to be rebuilt
Rochester being washed into Lake and eroding shoreline			Rocks for retaining wall are
Grand View Beach - Lake Ontario (Rochester, window trim	Northeast	April 1993	Damage to yard, siding and
Williamson Township, 2 miles west of bank between large rocks, plus a black locust tree		1998	10' wide by 6' deep into went over onto beach area.
1 mile west of Lakeside Park wiped out - we are on a bluff and when the steps (~$10K) came down		1999	Our dock and steps were bluff eroded the dock and
1.8 miles East of 4 Mile Creek, Town of Porter extremely high and constant wave action caused turn causes our breakwall to collapse. The properly in Massena, NY.	N	March 10, 1997	The water level was erosion of land, which in water was not metered
Lake Ontario, Olcott Beach 20 ft. of my property. Destroyed my cribs and had to buy more rocks for protection and from high water Winter of 1998.	N, NE	March 1986	Washed out and erosion of which was my protection they are getting damaged
Rochester, NY breakwall & landscaping ended up in my front	N & E	1993	Lost 20% of installed lawn.
Rochester - Lake Ontario threatened breakwall and our residence which is 20 ft. Significant water in basement, challenging house		7/4/98	Loss of beach (60') behind breakwall.

foundation.

Location	Wind Direction	Damage Year(s)	Damage Description
Lakeland Beach, Kendall, NY - Orleans Co.	NW-N-NE	4-73,4-93,4-97	1973 was Hurricane Agnes - I lost all 40' in 2 days. 1993 - High water cost me $4,000 to rebuild stone. 1997 - Destroyed my L---? Ramp - forced me to install gabions on my rocks - $3,000.
Lake Ontario	NE	1997-1998	I lost a section of bank approx. 22' across affecting 6-8' deep into my lot.
Hamlin Lakefront		Winter 97-98	Rocks thrown up on lawn
Oak Orchard-On-The-Lake, Orleans Co., NY		1980's	Undermined Sea Wall
Sodus Bay			I don't remember the year but we had water & debris up to our foundation. It was around 1990-92.
Lake Ontario - Rochester	NE	1994/1999	One corner of breakwall eroded - $12,000 to get replaced.
Wilson, NY	NE		Continual erosion
Orlean Co.	NE	1971-1973	March 17, 1972 - Lost 20 ft. of beach and breakwall - all the sand that was in the water 150' or more disappeared never to return.
Little Sodus Bay (Fair Haven Bay)	NE	5/89 & 5/90	Shubbery, trees & lawn washed away & slip filled in with silt.
Lake Ontario - Oak Orchard	NE		Have experienced damage from 79-84. Then again in 96.
Lake Ontario	N, NE, NW	1994-98	Lost 15 ft. of boat launch - several osage orange trees & a black walnut + 25 ft. of backyard. - Which is very expensive land for lakefront.
Youngstown, NY		1998	Loss of property
Rochester, NY	NE	1973	April to July - Storm damage to retaining wall
Hamlin, NY	All but S		We lost 19 ft. of land & had rocks thrown into our yard & water splash as close as 38' to the house. Neighbors had to board windows. Our Gabions were taken out by the high water.
Lake Ontario lakefront	E, NE	March 1998	Wooden stairway from embankment top to shoreline beach partially damaged at beach level.
Rochester, NY	NE	94-98?	High water and wave damage to my seawall - broken concrete, undermining of patio, sink holes in my property.
Sodus Bay, Sodus Pt., NY	Mostly S	4/46	Cottage lake porch floor

destroyed. Cottage had to be moved in 1951.

Location	Wind Direction	Damage Year(s)	Damage Description
Rochester - Genesee River outlet buildings in "U" shape at lakeshore next to the Coast caused exposed columns under shoreline Bldgs. inspected and considered safe. Barriers, then cost of $80,000 by assessing residents. 1998 barriers & boulders and repairs. We still need repairs but this takes lower priority after our	NE	4/93, 3/98	This is a condo - 14 Guard. 1993 - High water #1 & #14. These were boulders were installed at a - Over $100,000 for more $20,000 to finish beach devastating fire of 1999.
Rochester, NY (Where Gen. River runs into lake) came into 4 buildings nearest the shore. I live Harbor, Rochester, NY My condo has 8 1998 (248.5 ft.)	N & NE	1993,1998	April 22-23, 1993 - Water at (Westage at the Harbor) buildings. Storm March 21,
Point Breeze, NY area (1 mile east of Oak tolerate NE storm. Waves came over 8 ft. Cracked cement and dragged dirt/grass from biggest hole approx. 8 ft. wide and 3.5 ft. thousand dollars to repair concrete and replace rolled money for same.	NE	April 1998	Water level too high to rocks/cement breakwall. yard leaving holes in yard - deep. Needs several rock. I don't have the
Hamlin, NY water was over the top of the rocks holding undermined and pulled out away from the	NE	1993	In the summer of 1993 the the shoreline. The rock was shoreline.
Rochester (Greece - live on lakeshore) ft. at a depth of 12" to 15" as wave action built in 1952.	NE	1973	Water covered area for 350 undermined shore protection
Rochester	E, NE	1973	Lost many feet of shoreline.
Thirty Mile Point/Golden Hill State Park lost to the Lake Feb. - May 1998. We have which is made up of a shale rock surface. The a point where it fractured and collapsed into rowboat that had been stored upside down for the from the water edge a good 30 ft. from the	N, NE	5/98	About 5 ft. of frontage was 100 ft. of frontage all of water undercut the ledge to the water. I also lost a winter and was back away waters edge when we went

south in January. The Lake was "low" when we left. We lost more in 1998 than in the previous 12 years combined.			
Hamlin, NY	NE		We have experienced limited erosion whenever high winds & storms come from the northeast.
Little Sodus Bay - Lake Ontario	S	4/99	Shoreline flooded - docks covered & water in lower level of residence.

Location	Wind Direction	Damage Year(s)	Damage Description
Lake Ontario Shore Line (5.5 miles east of the ft. long concrete wall to stop erosion. Wall still years of lake action.	Northeast		In 1978 we installed a 104 in good condition after 23
Kendall, NY (halfway between Hamlin State	North		Erosion. The earth is gone!
Lake Ontario-Somerset (Niagara County) 1974. 1980-2001 rebuilt part of the wall twice. occurring on the east side of the wall threatening the	NE		Installed retaining wall in Significant erosion is integrity of the front wall.
Somerset, NY soil - loss of 50-ft of shoreline x 100-ft.	N, NW	1950-2000	Erosion of 100,000 cu. ft. of
Parma, NY (Hilton Beach) erosion was a problem - water was too high.	NW, NE	Spring 1973	Spring 1993. Shoreline
Hamlin, NY sandy shoreline & 30' front yard. 1950's lost & cement retaining wall - trees and shrubs.	NE	52, 73, 93	In 1921 when built - 90' of sand; 1970's lost more sand 1990's more front yard.
7 miles east of Niagara River outlet to Lake broke my concrete dock in half. On several bank.	NW, NE	?	Damaged and eventually occasions lost 1 - 3 feet of
Kendall, NY ft. along shoreline. Waves were crashing over onto the flat area of our lawn.	NW-N-NE	3-17-75	Loss of land of 15-ft. x 80- out 8-ft. bank and breaking
Sodus Bay (Sodus Point) building.	NE	3/73	Sand built up 3' against
Olcott, NY 1973. We have a fence that is marked out in foot plus three sections in 29 years.	NE	Since 1973	We have lost 31 ft. since 10 ft. sections - have lost 1
Hamlin, NY back 50 ft. in 1952, loss of frontage due to frontage due to erosion. Water was washing road. Both times required damage to house to joist over half the structure. Rebuild entire of lawn and property at lake side.	N, NW	1952	Our house had to be moved erosion. 1973 again lost under the house across the be rebuilt including floor lakeside of house. Erosion

Location	Wind Direction	Damage Year(s)	Damage Description
Hamlin, NY (Lake Ontario) Sandy Creek Area shoreline damage several times over the past property here on Lake Ontario. The worst spring of 1974 (?). At that time I lost about received about $5,000 from the US Government was necessary to repair the damage. My and large quarried stones were put in place to I've had additional stones and plastic 1995 (?). Plus a concrete cement black wall.	NE, NW		I have experienced serious 38 years I have owned the erosion happening about the 30 ft. of beach front. I for the restoration work that lake front yard was refilled help prevent future erosion. webbing put in place in
Hamlin, NY shoreline (1973). Erosion of soil from surge stone and gravel behind rip-rap wall. destruction of dock (all 1973).	N, NE	73, 93, 99	Damage to masonry walls at behind wall (1973). Loss of Destruction of boat launch -
Hamlin Beach get through. It has happened all seasons, others.	N - NE	Every Year	Breakwall damage - waves some years worse than
Lake Ontario damage each year to whatever I use for	NW & NE	1993	Destroyed breakwall & protection.
Lake Ontario shoreline (see my address) 98. Other house - 1 mile from here on damage to home and property. 93 & 98 recent heavy spray causing erosion on beach and basement.	NE, E, W		1972 worst, recently 93 and shoreline. 1972 extensive storm induced water (wave), in yard and water inside of
Lake Ontario - Town of Porter - Ransomville front door. Some trees are missing.	W		Lake moving in towards the
1531 lake Road, 3 miles east of Fort Niagara since we bought in 1954.	E, NW		We have lost over 100 foot
Grand View Beach - Lake Ontario (Rochester, to be replaced	N,NE,NW	3/73 - 5//93	Concrete pier & support had
Lake Ontario (2 mi. east of Pt. Breeze) June, average erosion of one foot since 1952, property.	N		Every year, April through the first year we own the
Youngstown, NY	E, W		Some undermining of my

seawall faster.

Olcott, NY	NW-N-NE	Loss of dock due to shore ice 10 years ago. Loss of shoreline property up until year 2000.

Location	Wind Direction	Damage Year(s)	Damage Description
Wilson, NY		Since 1992	Since 1992 have lost approximately 10-12 ft. of lake shoreline due to erosion. Most of the erosion occurred about 4 years ago when the lake level was so high. At the present rate we lose a large portion of our property before we have an opportunity to build there.
Barker, NY	NW, N	Since 1974	The loss of 40 ft. plus of land plus a row of trees. After a large retention wall was erected we experienced underwashing of land leaving large areas of land washed away behind the wall.
Niagara Co.	NE		Removal of dirt and small rocks between rip-rap rocks and shifting of rocks. Repair was done in '98, so damage was done in '97-'98, although highest water since we moved here in '92 was in '93.
Rochester, NY	NE	Mar-Apr 93	Moved my breakwall.
Lake Ontario - Kent, NY	NE	1991	We lost 16 ft. of lakefront property to high water. Another 50 ft. and we would have lost our house.
2 miles W. 30 mile Point, Lake Ontario	NE	82-83	Boat house destroyed in the 1980's
Lake Ontario (1.5 miles east of Wilson, NY)	NE or NW	7/8/01	Shoreline trees destroyed. Steps washed out despite boulders, which have been scattered
Lake Ontario, Kent, NY (1.5 miles east of Oak	NW	March 1998	Our property has a shoreline cliff about 10-12 feet above water level. The lake bottom is rocky. Boulders that were placed in the 1970's rolled out toward the water and considerable erosion of the cliff took place. We had a new rock revetment placed costing $8,000. At that time the water level was above the top of the rocks nearest the lake. Since that time the water has been well below the top of those rocks when the water is calm.
half way between Wilson and Olcott, NY	E		Had concrete retaining or break walls installed. They have tipped over and erosion of approximately 20 ft. has occurred behind where the walls were.
Rochester (Hamlin)	NE	April 1993, 1998	I have a gabion retaining wall that I covered with cement. The current

			spring lake levels do some damage each year. In April of 1993, and 1998, I suffered much damage and considered moving out.
Lake Ontario (Youngstown/Wilson)	NW	1972	Approximately 10 feet deep chunks broke and fell

Location	Wind Direction	Damage Year(s)	Damage Description
	NW		Early 1950's lose of footings, 2 porches, warping and dry rotting. 1970's additional damage and loss of more footings.
Hilton, NY (west of Braddock Bay)	NE		The rocks that were trucked in had to be pulled back up periodically. In 1997 I put in a massive new breakwall using rebar and concrete.
1/2 mile NE of Sodus Point on Charles	N/NW	1997	Combination of high water and high wind in spring (always in the spring) carried huge timbers 10 x 10's, railroad ties, electric poles, etc., crashing against the cement and steel foundation and were thrown up against the cottage causing cracked floors, walls, shifting of windows and doors and inside damage to electric plumbing as well as furnishings. 1993 - was only loss of a tremendous amount of land - never to be replaced!	
Lake Ontario - West Shore			
Stoney Creek, ON	NE	1998	The water level during the winter of 1998 was extremely higher than average and is most likely a large contributing factor to the washing away of our breakwall.
No Location Given on Survey			
			The next worse was in the year 1998 or '99 (last 20 ft. or 30 ft. of bank) Our erosion has been fairly minor because we put a large rock wall up. However, it is always a concern
St. Lawrence River - Lake St. Lawrence			
St. Lawrence River (Lake St. Lawrence)	West		Soil erosion
Lake St. Lawrence - Wilson Hill	West	Early 60's	I put in a railroad tie break water two ties high better than 1 foot
Lake St. Lawrence	E		Oil spill
Wilson Hill - Lake St. Lawrence	SW		Shoreline erosion at the bank

Location	Wind Direction	Damage Year(s)	Damage Description
Lake St. Lawrence eroded up to 9 ft. along the shoreline. The pasture land and needs stabilization. No been done since the project flooding.	SW, NE	Apr-May '98	Strong northeast winds shoreline here was former shoreline stabilization has
Lake St. Lawrence - Wilson Hill	W	2000-2001	Spring
Wilson Hill Island, Lake St. Lawrence for 37 years and any wind from the north Sometimes serious until I paid for rip-rap out erosion. Now with rip-rap the erosion is far less at all.	W, N	1964-2001	I have been at this location causes the erosion damage. of pocket to control the serious. NYPA did no work
10 km downstream from Morrisburg 0.5 m over the period 1959 to 2001.	E. W		Shoreline erosion has been
Lake St. Lawrence and May. June and July it is still high. August have no beach and dock damage).	West		Water is very high in April and September just right (I
St. Lawrence River - Lake St. Peter			
Pointe du Lac, Lake St. Peter shorelines eroded by the ships' wakes.	E, W	1997	Dock swept away and the
Contrecoeur of property shoreline.	SSW	April 1999	Basement flooding. Erosion
Louiseville, Lake St. Peter significant, but it generates sediment during high in the navigation channel in the small river low years, there is not enough draft for boats in dredge, but cannot get permit.	NE		Erosion of the shores not water years which deposits leading to Louiseville. In the channel - will have to
Sorel Islands continuously with shoreline regression varying the project was built. During years with high rapidly erode the silt and clay shorelines.	E	1993, 94, 97	Many islands being eroded between 3 and 60 m since water, the ships wakes
St. Lawrence River - Thousand Islands to Ogdensburg			
Chippewa Bay - 1000 Islands seawalls and on portions of man-made part of	SW & N	93-94	Caused erosion behind island.

Alexandria Bay, NY	SW, NE	4-5 yrs ago	High water in winter caused docks to become frozen in. Spring thaw ("ice-out") caused docks, staving to be ripped out.

Location	Wind Direction	Damage Year(s)	Damage Description
Millens Bay - 1000 Islands	NE	1997	Water above dock & flooding in storage hut.
Wellesley Island	N. NE, W	1970's	Decking around boathouse damaged - some lost
1000 Islands - Clayton	SW, ENE		I am on a bluff/severe spring rains caused bluff damage due to run off.
Clayton, NY	N, E	1992	High winds and waves destroyed 40 ft cedar crib type dock - tore the decking off the cribs - then damaged the crib construction.
Brockville Narrows (across from Channel	NE		Boat house built on cedar posts 1903. After Seaway system opened 1956; boat house was built on cribs made of cedar logs & filled with rocks from channel blasting work done in winter. Inspected winters until 1982. My family purchased property 1984. Boat house received replacements of sills (32 ft. beams), cribs & walkway 1986. Redoing and replacement of dock, slip & floor 1991. Ice damage less since large icebergs have been blasted to protect seaway locks. Pressure treated used since 1986 repair & replacement. Internal floor & supports cedar. Low water level last 2 years caused damage to metal boat from rock in slip.
St. Lawrence River, 1000 Islands		72-73	High water damages our docks boathouses and seawalls. Wakes from ships & boats washed out behind the bulkhead.
St. Lawrence River - Thousand Islands	NNE & SSE	07/1976	High water caused oil spill to cover top of dock.
T.I. Park, Wellesley I, NY	NE		Storms destroyed docks
St. Larwrence River (next to Cedar Point S.P.)	NE	Spring	Loss of the bank rocks.
Chippewa Bay, New York			Over the years we experienced seawall damage, spring and fall. We live on the St. Lawrence Chippewa Bay.
1000 Islands - Clayton	E, W	5/93, 5-7/73	Docks and electrical damage. Also levels less than 1 foot above chart datum makes docks/slips unusable and/or causes boat damage.

D.2 PIAG Year 1 Survey - Environmental Comments

Location	Environmental Comments
Lake Ontario - East Shore	
Sandy Pond, Oswego Co.	High water has caused significant erosion of the
dune system along the lake in the area of Sandy	Pond. Water levels above ~ 247-ft. have impacted
tern nesting in the area.	Shoreline erosion every year except 1999. Sand
Jefferson Co., Town of Ellisburg	Yes: dune erosion; wetlands - bog buckmoth
has moved out from shore.	Fall 1998 - water high in Spring.
N. Rainbow Shores (Sandy Creek)	Since 1972 there have been many poplar trees and
(rare) affected - not as many as before - observed	with the associated dunes that have been lost to
Southwick Beach	occurred due to the dune erosion. The dunes take
beach grasses patches that have been gobbled	The dunes blew away and affected the sand
beach erosion; then, further wind erosion	Dune erosion - I have lost about 60 ft. - We have
years to build/repair.	we were forced to put in in 1976. There never has
Lake Ontario - Montario Pt.	can't walk along the water edge - no beach - 76 -
swallows nesting.	Dune erosion has been most notable. Increased
S. of Monterio Pt. - Rhenshaw Bay area	sand for aeolian transport and washing away
no beach - water breaks over the retaining wall	induced action. Vegetation is lost as these dunes
been a time when the water went down. We	Large dunes on the north of Sandy Pond Inlet
continue	years. High water allows plant erosion, which
North of Sandy Pond - Lake Ontario	Dunes have disappeared because high water has
water levels appear to be affecting available	I fish with charter captains who strongly believe
dunes that were not previously impacted by wave	much damage to that years spawning success - the
erode.	Late summer and fall - low water - high algae.
Lake Ontario - North of Sandy Pond Channel	
have been eroded continually for the last 20	
allows wind to move sand away.	
Lake Ontario- North of Sandy Pond Channel	
eroded plants so that wind can blow sand away.	
Cape Vincent, NY	
the low water experienced some Springs caused	
DEC would have better details on this.	
Sandy Pond, NY	

Spring high water and cormorants eating fish in pond.

Location	Environmental Comments
N. Rainbow Shores Rd. - So. Sandy Pond	Dune erosion - occurs every Spring when the ice melts and high winds combine. Worst year was March to June of 1973 but we lose a little bit of land every year.
Lake Ontario - North of Sandy Pond	Dune erosion loss due to high water. Lack of beach - extreme lack since 1994. Loss of beach since 1980's.
North Sandy Pond	In 1987 and 1999 wells went dry during the traditional low level times after August and several other years. Wells on shoreline follow lake hydraulics.
Sandy Pont (Oswego County)	Since 1990 every year by late August the water levels in Lake Ontario drop. Most of the channels on Sandy Pond make it almost impossible to navigate watercraft onto the pond they get choked up with weeds and start drying up.
Sandy Pond	Navigation of opening to the lake and silting of entrance to Lake Ontario. Sand bar from opening to island less than 2 feet of water to cover the bar.
E. Lake Ontario (Mexico Bay, 2 miles south of Salmon River)	Wetlands (Snake Creek) outfall easily blocked; vulnerable to adjacent property owners "unhindered" interference which exacerbates negative impacts on wetlands.
Sunset Bluff (3/4 m North of Southwick State Park)	High water in Apr, May, and June means nothing grows on my beach. Some years, like 2001, the beach remains. If 2001 lake levels could become the norm, plant growth would be likely.
Sunset Bluff	Trees were removed by surge of water and this place eroded plants, roots of grass March 1972
Jefferson Park, Sunset Bluff (Lake Ontario)	High water causes dune erosion. Bank on front of property to erode includes trees - willow, popular, cottonwood, etc., beach grasses, etc. 1972 and after caused by Hurricane Agnes! Most recent years 2000, 1998. High water throughout the 1970's. Most damage occurs in April - Sept.
Lake Ontario	Dune erosion has been continuing since 1976. Every year has resulted in a degree of shore and dune erosion.
Lake Ontario - Sandy Pond	Whenever water levels are above 75 m we lose sand dunes, up to 3-4 feet per year. Camps, stands of hardwood trees, and the priceless beauty of the dunes are being lost since the Seaway maintenance of historically high water levels doesn't permit lower water (below 74.5 m) needed to naturally replenish the dunes.

Renshaw Bay (near Sandy Pond)	N. Parsons Rd.	Dune erosion on-going

Location	Environmental Comments
Sandy Pond (North Pond) South East end	We have a stone break wall at our cottage and it
has pretty much stopped any erosion and	
years. We can lose 15-20 feet of sand	damage but our beach property gets hit hard many
shore!!	easily. At times we are down by up to 30 feet of
Eastern end of Ontario just north of outlet from North Sandy	
our beach have caused huge, stabilizing old trees	Rising water levels up and down what is left of
dunes. Lake threatens to break through to bay	to die and/or tumble off dunes. I live on protected
for many shore migrating birds. Such an	on other side, totally destroying nesting habitats
totally change the environment of the bay to say	occurrence - and it looks like "when" vs. "if" will
in summers for 65 years, and my father	nothing of destroying property. I have lived here
years have the lake levels risen so high. We are	before me, since 1907. Never until the last 30
because there is no place to walk and the only way to	now discouraged from using the lake front
trespass on others' property.	get to sandy beach we always enjoyed is to
	Waterfowl nesting sites (great blue herons, etc.)
eliminated by high water. Incomparable damage	to dunes (very fragile) and all flora, including
large trees.	
N. Rainbow Shores - Pulaski, NY	Dune erosion, plants & trees - oak, white birch -
most every Spring.	
Sandy Island Beach at North Sandy Pond	Continuing over years of dune erosion due to high
water (and high waves).	
Lake Ontario - just north of Sandy Pond - channel inlet	Dune erosion/Beach erosion: The water level has
not gone down since '74.	
Lake Ontario - N. Sandy Pond	2001 - I noticed that there were almost no
spawning bass beds because the water was too low	this Spring.
Lake Ontario - Montario Point	Dune erosion. Swallows nesting in the dunes in
the Spring have disappeared.	
So. Sandy Pond - Lake Ontario	Dune erosion - Storms in Spring. Dune cherries
and dune grass disruption from high water.	Sea weeds - spawning beds from low water each
Spring and each Fall.	
Lake Ontario - South Shore	
Rochester, NY	Long Pond & Cranberry Pond when high water
exists, it affects all of the above.	
Hamlin, NY	Over 50 years - hi-water environmentalists "over-
played their hands".	

Lakeland Beach, Kendall, NY - Orleans Co. which is just to the west of me, is under water - No takes place all other times is gone.	In all the high water years Bald Eagle marsh, land or cattails - Lake water takes over - whatever
Grand View Beach - Lake Ontario (Rochester, NY)	No first hand knowledge

Location	Environmental Comments
46 Lakeside Blvd., Hilton, NY (west of Rochester)	Sandy Creek news articles have indicated high water ruined spawning area up creek and
Hamlin, NY	destroyed some wetlands for ducks and geese.
geese no long nest here - wetlands area 4 miles	Water fowl nesting sites, wetland degradation,
wavers at least 20 feet.	east of Hamlin Beach. Shoreline eroded by
Rochester - Lake Ontario	None
Rochester - Genesee River outlet	I wonder if fluctuating water levels could possibly account for our periodic "alewife" problems!
Payne Beach - Hilton, NY	Rose Marsh at the east end of Payne Beach has
been adversely impacted in the variety and	numbers of waterfowl. This impact has happened
over the last 20 yrs. of widely fluctuating	water levels. Nests are either high and dry or
flooded out. The frog population has dwindled to	almost zero due to inconsistencies in water levels
(and to much increased pollution). The	Eastern Painted turtle population has also
decreased as has the snapping turtle population.	Nesting areas for these species have been
repeatedly flooded and destroyed.	
Lake Ontario - Rochester	Long Pond - high water causes large portions of
the land to be washed into Lake Ontario - entire	west spit washed away.
Orlean Co.	Since the mid-60's fishing the lake @ our location
has changed dramatically - silver bass & white	perch were plentiful - we have not caught either
species in about 10 years.	
Hamlin, NY	Wetlands east of Hamlin Beach - apparently
resolved with rock barrier.	
Point Breeze, NY area (1 mile east of Oak Orchard)	Parts of our street are high above the lake and
continue to suffer severe erosion of the cliffs.	Neighbors have banded together at one end and
spent $30,000 to try to save 3 yards.	
Little Sodus Bay (Fair Haven Bay)	I don't see any problems at all in this area.
Lake Ontario - Oak Orchard	Not aware
Barker, NY	Exact dates and times are only kept by those who
know something wrong is/going to happen.	The past almost 30 years has proved to lessen the
natural beauty - wildlife and habitat along the	Lake Ontario shoreline.
Lake Ontario	Mostly lose a lot of crownvetch & dogwoods. Try
to secure soil erosion. When (shubs &	weeds taken out by storm - we see very little
geese & ducks nesting on the banks.	

Location	Environmental Comments
Hamlin, NY	The wetlands at the end of our road (Yantz Swamp) was effected by the high water.
Rochester, NY	We have a terrible algae problem - may not be related to water level.
Sodus Bay	No
Lake Ontario	When the water is high or erosion takes place the water is full of dirt
Lake Ontario (1.5 miles east of Wilson, NY)	The water was so high all summer we had no beach at all - it brought in tons of seaweed which coated everything and prohibited any swimming. Didn't recede at all until season was over.
Lake Ontario	High water has destroyed wetlands in ponds abutting my property. Winds blow islands of cattails away. Braddock Bay has been destroyed by high water - sand bars driven into Bay.
7 miles east of Niagara River outlet to Lake Ontario	Years blend together after a while but on low lake level years in the Spring it's common to see Canadian geese, mallards & purple martins all have nests down at the beach/dock.
Lake Ontario-Somerset (Niagara County)	None Observed
Kendall, NY (halfway between Hamlin State Park & Pt.	Not aware
Lake Ontario Shore Line (5.5 miles east of the Niagara River)	Heavy seaweed about 20 ft. wide collects on our shoreline during the month of July
Thirty Mile Point/Golden Hill State Park	Golden Hill Creek flows into the Lake at the boat launch. High water keeps the Creek replenished for fish spawning in the spring. Low water and the Creek is dry or fouled with algae and muck.
Hamlin Beach	Open shoreline just west of western town Beach Rd. Hamlin has most definitely eroded over last ten years.
Hamlin, NY	1985 - now to the west of my house there used to be a marshy area. As time went on and the shoreline eroded away, the marsh drained out and is now dry.
Somerset, NY	Have observed in the past that low water levels have affected trout streams in the Golden Hill State Park Etc. (Somerset area).
Parma, NY (Hilton Beach)	Right now we are at low water levels and driving up and down the shoreline I do not see a (-) impact on wildlife at all. There is still plenty of areas for the wildlife spawning, nesting, etc.
Rochester (Greece - live on lakeshore)	No problems as swamp lands can adjust to varying levels and provide the majority of habitat.

Location	Environmental Comments
Hamlin, NY	No fish can spawn in the water in front of our houses (see pictures). Yet the Army Corps of Engineers won't let us put extra protection in front of our breakwall, they want us to put sand bags on top of breakwall. No consideration for erosion of lower part of breakwall. On top they would be useless if the bottom falls out!
1/2 mile NE of Sodus Point on Charles Point/Crescent Beach	Have not observed any impact on fishing or water fowl nesting sites but dune erosion is constant at Charles Point, Crescent Beach, Chimmage Bluffs and all along the South Shore of the lake. Also an influx of, what I call, water lilies and other weeds.
Lake Ontario shoreline (see my address)	Flooding of marsh lands and habitat 1972, 93, and 98. Other years also - do not have that data readily available.
1.8 miles East of 4 Mile Creek, Town of Porter	No noticeable impact has been detected on wildlife.
3/4 mile East of Oak Archard, Lake Ontario	Not aware re: my 200 ft. water front
Lake Ontario (2 mi. east of Pt. Breeze)	High water causes the most damage. Erosion is a problem every year. Loss of vegetation and tall trees on property.
Lake Ontario - Town of Porter - Ransomville Road	I am seeing unusual birds - long-legged, blue or gray - elongated body, very long beaks about 3-4 inches shorter legs with oval bodies, larger than the sea gulls longer legged then sea gulls seen spring, summer, and fall. Lots of geese and Canadian White Geese and a couple of swans in spring and late fall.
Lake Ontario, Kent, NY (1.5 miles east of Oak Orchard River)	Higher cliffs just to the East of us have eroded considerably over the 7 years we have lived here.
Hamlin, NY	Sports fishing demands for salmon & trout, etc. We no longer have alewives, which always kept the seaweed & algae at a minimum. What year did they disappear from lake? Zebra mussels introduced by foreign ships - not a good addition to the lake. - they clogged our water intake pipes, etc.
Rochester (Hamlin)	1998 the Yontie Creek water marsh area was washed out.
Lake Ontario - Kent, NY	On Sep 2, 1990 I counted 110 fishing boats in front of my home the first night I lived here.. Now I rarely count six at a time. Obviously the fishing has changed.
Somerset, NY	Not aware of any mentioned. The main one is erosion and loss of a great deal of land and

elimination of beach area for swimming.

Location	Environmental Comments
Rochester, NY	Not especially in my area although it is my understanding that the spawning areas in the St. Lawrence River are impacted.
St. Lawrence River - Lake St. Lawrence	
Wilson Hill Island, Lake St. Lawrence	We are very aware results - seaweed so dense that our dock area is about useless. Fish in dock area have left. Dead fish mixed with seaweed.
Lake St. Lawrence	In 1997 the water levels dropped abruptly in May, drying out spawning beds and exposing nesting waterfowl to land predators. After the early low levels of both 1997-98, the small local population of Blanding's turtles have no longer been seen. The local nesting common mergansers, loons and other waterfowl did return in 1999-2000 along with the larger raptors.
Lake St. Lawrence - Wilson Hill	With Wilson Hill Game preserve connected to it - large impact.
Lake St. Lawrence	Much more of a weed bed closer to shore
St. Lawrence River (Lake St. Lawrence)	More Canadian geese eating grass and depositing waste on shore
St. Lawrence Lake	yes
St. Lawrence River - Lake St. Peter	
Sorel Islands	Before construction of the seaway, there were regular ice jams in Lake St. Peter which caused very high water levels - 10 to 12 foot rises - which maintained the shore wetlands. Without this water level fluctuation, the wetlands have been taken over by cattails, arrowheads, etc.
Pointe du Lac, Lake St. Peter	Low lake levels have created wide mudflat along shore that has dried to form a smooth, hard surface. Four-wheel all-terrain vehicle operators race along shoreline, killing what vegetation there is left, and scaring away all the birds.
Contrecoeur	For several years now during August and September, there are no waterfowl in the Contrecoeur Archipelago due to the low water levels.
Contrecoeur	The tributary used to be navigable, and fishing was good. Now there are no more catfish. Erosion along the river has scoured out trees on the shoreline, the islands are diminishing. At the marina, they had to move the floating docks further out to get into deep enough water for the boats.

Location	Environmental Comments
Louiseville, Lake St. Peter	Vegetation on the shores has changed completely since construction of the seaway. The cattails are taking over everywhere.

St. Lawrence River - Thousand Islands to Ogdensburg

1000 Islands - T.I. Park, NY	In the years 1998 - 2001 - In the bay near us we have noticed declining cattails, therefore declining nesting such as red-wing blackbirds. Bull frogs once heard regularly there - have been absent as well.
Fishers Landing, 1000 Islands	No fish.
St. Lawrence River - Thousand Islands	Caused wetland degradation
Wellesley Island, NY	Low levels have significantly effected fish spawning areas in the back bays of the river. Wildlife habitat is destroyed in some areas by lack of sufficient water.
Chippewa Bay - 1000 Islands	Lack of fluctuations have caused an increase in size of cattail marshes - Oak Island area.
St. Larwrence River (next to Cedar Point S.P.)	None near here.
Brockville	Large sections of shoreline are virtually dry 6 to 10 ft. from shore, similar to a tide.
1000 Islands, Ivy Lea	No personal observations
Brockville Narrows (across from Channel Marker on Stoven	Loss of weed beds in front of boat house affecting spawning grounds, perch, small mouth bass, pike, and minnows in shallow warm water on east side, next to boathouse.
Oak Point, NY - 75 45 W 44 31 N	I have not observed such on the river.
3 Mi. east of Cape Vincent	When the water receded the ducks and Blue Herons left our area. Wave action is more prominent.
Schermerhorn Landing	Water level changes are going from low in Spring to very low in fall. Cattail areas are drying up and turning into fields, northern pike are no longer spawning where they have for decades.
St. Lawrence River, 1000 Islands	Yes. The low Spring water levels keep the creeks (such as Otter Creek) too low for efficient spawning.
1000 Islands	There has been no perch or pike ice fishing in Millens Bay for the past 5 years - maybe caused by lower water levels.

Location	Environmental Comments
Millens Bay - 1000 Islands	It must affect the spawning beds.
Cape Vincent	Low water levels eliminating fish spawning beds in June. Also impacted by extremely excessive zebra mussel infestations.
Cape Vincent, NY	For autumn northern pike production, we need more natural fluctuations in water levels. I'd prefer to see this approach used instead of trying to placate all the users & their own self interests. But understanding that what you are doing is a political exercise, I opt for higher levels.
1000 Islands - Clayton	No, except for increased milfoil woods around shoreline & depths less than 10-ft.
Chippewa Bay, New York	Bull rushes in many areas where they weren't years ago - loon nest sites disappearing. I haven't seen a bass bed in years. Fewer perch and rock bass around our docks.

D.3 PIAG Year 1 Survey - Watercraft/Recreational Boating Comments

Location	Watercraft/Recreational Problem Description
Lake Ontario - East Shore	
Oswego Co. @ Selkirk State Park	Cannot dock on lake
Sandy Pond - Lake Ontario	During last five years - low water levels make it difficult to navigate from marina (Jones) to North Sandy Pond and sometimes from North Sandy Pond to Lake Ontario via the channel.
Eastern end of Ontario just north of outlet from North Sandy Pont at inlet (outlet) because of drift of	Sailboat, which draws 24" running aground in North sand at channel from lake. August 2001
So. Sandy Pond - Lake Ontario	Fall almost each year low water on the Pond - hit bottom at the end of 90 ft. dock. Very low water in channel between S. Sandy & No. Sandy Ponds - no lake access.
Jones Marina, Sandy Pond	During the high and low water levels, it is difficult to navigate from our marina (Jones) to the North Pond and sometimes to the channel into the lake. At one time in high water over docks were under water.
North Sandy Pond	Low water preventing effective lake access and marina launching in North Sandy Pond area.
Sandy Pont (Oswego County)	By mid to late August most boats will have a hard time getting onto Lake Ontario because of shallow water conditions.
Sandy Pond	Too low for comfortable access from my dock!!
Sunset Bluff (3/4 m North of Southwick State Park)	On the beach we can have no watercraft due to storm waves. We know this when we buy here.
Sunset Bluff	We live on open lake and cannot moor boats or docks
Sandy Pond (North Pond) South East end	The problems occur every year. We try to estimate dock and lift positions in April and can be jacking up docks that are under water by June and moving docks and lifts out to get enough water to float our boat in August.

Location	Watercraft/Recreational Problem Description
Jefferson Park, Sunset Bluff (Lake Ontario)	No docks or marinas. Launch of watercraft not possible from beach due to drop off from banks
	from erosion of beach. Also high water prevents room to access water with automobile and trailers.
	High water prevents use of the beach because is NO beach. Water is up against the bank. No
	personal or recreational use of beach.
Sandy Pond, NY	Water level low in late August and fall - difficulty driving boat from dock (Fall 2000)
Lake Ontario - just north of Sandy Pond - channel inlet	We haven't been able to keep a small boat in front of our cottage because of loss of beach. The
	water comes up to the breakwall.
North of Sandy Pond - Lake Ontario	We use canoes and do not experience such problems.
Sandy Pond	Sandy Pond water level has been low for a number of years - entrance to Lake Ontario from Sandy
	Pond has been treacherous. Boats have gone aground thus damaging motors & props. - It needs to
	be dredged.
Lake Ontario - North of Sandy Pond Channel	High water allows water action to fill in water channels. Change noted each summer for last 6 - 7
	years.
Lake Ontario- North of Sandy Pond Channel	Each summer high water and storms have moved & caused channels to become more shallow and
	narrow.
Lake Ontario - Sandy Pond	Our boats are small enough that we can adapt to low water conditions.
Pulaski, NY	Shallow water - water too low to use channel to lake.
Lake Ontario - North of Sandy Pond	Water is too high to safely put boat in water. Problems taking boats through channel.
Henderson Harbor, NY	For the past 4-5 years water is TOO LOW! This year - I've lost several charters - boat is on bottom
	in the MUD. I haven't been able to use my boat since mid-August. Water is so low I can't get out of
	slip or navigate the channel into the lake. Excessive prop damage - loss of Charter Revenue - you
	add it up!
Lake Ontario - East Shore - Pine Grove	Late summer - too low to operate
Lake Ontario - N. Sandy Pond	April 15th the water was too low even before the boating season started. By Labor Day we didn't
	have enough water to float a pontoon boat.

Location	Watercraft/Recreational Problem Description
Sandy Island Beach at North Sandy Pond	Low water last few years significantly shortened boating season in and exiting North Sandy Pond.
channel to lake (dredged 2000). High water	Unable to access own property, several marinas, or causes extensive dune erosion.
Henderson Harbor, NY	Have not been able to get in or out of my boat house since the end of August.
Cape Vincent, NY	Have most years experienced water levels by mid September that have dropped enough to make fall fishing and using my boat a hardship - been here 33 years.
Henderson Harbor, NY	Obviously at the present level, which was reached on 9/29/01, not possible to use slip for any watercraft.
N. Rainbow Shores (Sandy Creek)	Do not have dock on lake.
N. Rainbow Shores Rd. - So. Sandy Pond	High water causes problems with docks being under water & sections floating away - can happen every year.
Chaumont Bay	Low levels prevent me from keeping my boat in the water beyond the end of August each year.
Renshaw Bay (near Sandy Pond) N. Parsons Rd.	No boat or dock
Lake Ontario - Montario Pt.	Don't have a big boat - just a canoe and rowboat.
Sandy Pont (North Pond), Oswego Co., NY	Every year in late summer and fall, low water levels cause problems - impossible to get our boat into our dock or up Little Sandy Creek to the marina where we keep our boat (Jones Marina).
	Sailboat must detour around an island to get to channel as sand drift into bay widens.
N. Rainbow Shores - Pulaski, NY	Early summer (high water) dock destruction (storm related). Late summer (low water) boat launching.
Lake Ontario - South Shore	
half way between Wilson and Olcott, NY	Had 40 feet of boat dock, power winch, dolly and track for boat. Due to high water levels, large trash in rough water and erosion have lost dock and track, no longer able to keep boat at home on shore.

Location	Watercraft/Recreational Problem Description
Lake Ontario - Town of Porter - Ransomville Road	My husband put large rocks on the bank to hold the water back just 3 years ago. Those rocks, large 500 lbs. or larger are now working their way into the lake. Sometimes we have water from the lake splashing the lake front windows.
Rochester (Hamlin)	I also own a boat and travel Lake Ontario. Both in April and May of 1993 and 1998, we traveled to Toronto and the Thousand Islands. We continuously witnessed massive shore erosion, docks under water, etc.
	Unable to keep docks due to erosion of sand.
Lake Ontario	Tough getting boats out when we continuously get large pieces of old foundations (concrete) moving in & out.
Rochester, NY	Unable to float in late August & September
Lake Ontario - Rochester	Too high water - Docks were under water 3-week period.
Lake Ontario, Kent, NY (1.5 miles east of Oak Orchard)	We don't have a dock.
13 mi. West of Genesee River	High water
Lake Ontario - Oak Orchard	Dawson's Creek channel - lower - not a serious problem.
Orlean Co.	Other than high-low water levels, which we learn to live with - this year's algae seems much worse than before - began 7/1/01 through 8/7/01 - marine rail unusable.
Rochester, NY	We spend a lot of money setting up to launch and retrieve our watercraft. If the water level is unexpectedly high or low, we cannot launch. Now it is too low to launch.
Sodus Bay, Sodus Pt., NY	Dock flooded in June and July 1989, also in 2000 which endangered the safety of the Whaler tethered to the dock.
Sodus Bay	Currently, at the level as of 8/25/01, I can just get to my dock at Fowler's Marina in Sodus Bay.
46 Lakeside Blvd., Hilton, NY (west of Rochester)	I am a member of the Brockport Yacht Club located at 7393 Sandy Harbor Drive (Sandy Creek), Hamlin, NY 14464. High wave washed out part of jetty & beach (1998) low water necessitated we had to dredge creek in 1999.

Location	Watercraft/Recreational Problem Description
Little Sodus Bay (Fair Haven Bay)	The highs in May & June when above 246.3 cause erosion problems. The lows in Sept. & Oct. when below 244.8 stop activity completely.
Point Breeze, NY area (1 mile east of Oak Orchard Creek at Black North is closed this year? Due to	Don't know why the free launch on Oak Orchard pollution water level - sign just says unsafe area.
2 miles W. 30 mile Point, Lake Ontario	Docks
Lakeland Beach, Kendall, NY - Orleans Co.	My boat house was flooded '73,'93,'97. When water is "low" 244-243-242 ft., I adjust my dock - Lake Ontario is 800' deep - I can always use my boat.
Lake Ontario, Sodus Bay, Sodus Point, NY	Spring - high water - not able to keep boat at our dock even with a hoist.
Little Sodus Bay - Lake Ontario	Aug through Oct - yearly = 1999, 2000, 2001. Each year seems to get/have lower water levels.
Lake Ontario	At worst, I have to use more track to get my boat out.
Hamlin, NY	Earlier conditions never returned (low water). 1972 lake water overflowed Newco Dr. along parkway - damnedable mess!
Lake Ontario South Shore, Niagara County; Olcott, NY	Both years our sailboat "grounded" (towards late August) due to low levels. We continuously battle algae growth as Lake level drops over summer season.
Hamlin, NY	No watercraft
Lake Ontario (2 mi. east of Pt. Breeze)	These are minor problems when you consider watching your property wash away.
Hamlin, NY	The last couple of years, 1999-2000, by August we were unable to launch our boat.
Lake Ontario-Oak Orchard Creek Point Breeze	Low water effecting deep draft sailboats at the mouth of Oak Orchard Creek/Pt. Breeze, NY (this has been aggravated by silting).
Thirty Mile Point/Golden Hill State Park	I have a 24 ft. inboard-outboard boat. I use the NY State Golden Hill Marine Launch. Received prop damage September 10, 99. Right now, 12/19/01 the lake is 12 inches lower than it was at that time.
Hamlin, NY	In general, the water level fluctuates every year. The dock needs to be lowered every summer. From August on the boat is difficult to launch.
Sodus Bay	Low water at the dock - can't move dock out as bottom is flat - we experience this each fall.

Location	Watercraft/Recreational Problem Description
Hamlin, NY	Due to need for rock placements, etc., - no longer can launch even a canoe. In 1999 Corps of Engineers allowed us to build gabions to hold prevailing bank. We were denied permission to do this after the 1970's erosion - why?
Hilton, NY (west of Braddock Bay)	When water is low, usually in the fall, my canoe scrapes over the rocks. I also have a sailfish that I can't launch in low water.
Lake Ontario-Somerset (Niagara County)	I have a wooden dock on wheels. Due to fluctuating water levels I have had to modify the dock 3-4 times over the last 30 years. Local marina (Golden Hill) suffers from both high and low water level changes.
Brockport YC - Hamlin, NY	One Spring, about 10-12 years ago, the lake was so high that I had to wear boots to get to my boat - dock floated up about 4".
Rochester (Greece - live on lakeshore)	I can always make adjustments to handle low water but no one can adjust to high water.
1/2 mile NE of Sodus Point on Charles Point/Crescent bay, not on the lake shoreline. We can	The fluctuating water levels are a horrible problem but have not caused a problem with docks and marinas and boats as they are located in the protected compensate low water by extending docks, etc.
Lake Ontario shoreline (see my address)	People that live here get their boats out without problems. People from inland usually are the biggest complainers of low water or dredging necessities (which they don't understand).
30 Mi. Point (30 mi. east of Nia. River)	Permanent boat launch ramps were not built for low water launching. Some ramps cannot be used - ramps were built at time of high water.
10 Miles East of Oak Orchard River	Where boat is docked at marina - 2 miles west of Hamlin Beach State Park - low water levels and winds cause silt to be deposited at mouth of marina. Ok at normal levels.
Rochester	Low has been much better than high even with an inconvenience of dock access.
1.8 miles East of 4 Mile Creek, Town of Porter	In the fall (Sept.-Oct.) the water level has been so low it caused problems with boat docking on the lower Niagara River and made it hard to remove the boat from Fort Niagara boat launch.
3/4 mile East of Oak Archard, Lake Ontario	Only problem with low level is that lake stone is eroded, leaving no beach and no cover for revetment.

Location	Watercraft/Recreational Problem Description
Lake Ontario - Rochester (Greece lake front property)	Frequently in the fall (late Aug. - Sept.) the lake level falls too low. But then is left too high going into winter so that our spring high level causes shoreline problems, especially when we get "northeasters".
Hamlin Beach	High water with storm conditions leaves boat in sling hoist in jeopardy - especially in the middle of the night when worst waves (rogues) can come in.
Kendall, NY	We can't walk along the shoreline; we cannot launch any craft; my boat ramp is being washed away.
Olcott, NY	Everything from docks under water to 2 feet below nominal level.
Hamlin, NY	Dock and boat launch destroyed in 1973. Have replaced with a different design not as vulnerable to wave action. In 1993 & 1999 we sustained damage to our shore wall.
Rochester, NY	Too high in Braddock's Bay when water level gets to 246.3'.
Lake Ontario	Fluctuation is too large.
Somerset, NY	I do not have a watercraft (as is the case with the majority of property owners who pay property taxes). Our beach area has been eliminated by high water.
Rochester, NY	Generally mid to late September each year, low water at docks is a problem.
7 miles east of Niagara River outlet to Lake Ontario	By fall/late summer on normal years, the river/lake is lower anyway, so it may be slightly more difficult to launch at Ft. Niagara but never impossible. My boat's only a 16' aluminum with 50 HP motor - no big deal!
Sodus Bay (Sodus Point)	High water level in '73 flooded my marina.
Grand View Beach - Lake Ontario (Rochester, NY)	Low water prevented the launch of my watercraft
Rochester - Lake Ontario	I have a catamaran and my neighbors have motor boats and docks. Low water merely results in deeper docking or mooring from the shoreline.

Location	Watercraft/Recreational Problem Description
Lake Ontario - West Shore	
Stoney Creek, ON	We did not have a beach in the summer of 2000. This was especially disappointing, as we knew that the levels were higher than normal due to the conserving of water for the St. Lawrence. We were fortunate this past summer, 2001, we were able to enjoy our beach.
St. Lawrence River - Lake St. Lawrence	
Lake St. Lawrence	Water is too high in spring - April, May, June.
10 km downstream from Morrisburg	Low water levels in various years between 1967 and 1998, particularly 1969,1973, 1993, 1997-8
Lake St. Lawrence	When water is low, old stumps, rocks, shoals cause craft to be damaged
Lake St. Lawrence - Wilson Hill	Had to lower dock twice about 8" each time to dock boats.
Lake St. Lawrence	Could not get boat off lift
Lake St. Lawrence	Extremely low water levels ended the boating seasons in early August. Docksides were dry, marked channels were non-navigable, some boats became stranded. Sailboats at the St. Lawrence Yacht Club were tipped over on their keels. Many public docks and boat ramps became unusable.
Lake St. Lawrence - Wilson Hill	In fall of 1997 could not get boat out.
Wilson Hill Island, Lake St. Lawrence	We have 90 ft. cement dock and we used to be able to go the 90 foot length with knee boots with about 6 inches of water at very end of dock - could not use any boat like 1997-99.
St. Lawrence River (Lake St. Lawrence)	Hit prop of boat in Wilson Hill ramp marked channel
Lake St. Lawrence	When water is low, stumps and large rocks interfere with swimming area and boat uses.
Wild River	Water too low to get boat off runway
St. Lawrence Lake	Late summer unable to remove boat from boat lift
St. Lawrence River - Lake St. Louis	
Notre-Dame-de-L'Ile Perrot, Lake St. Louis	Some of the mooring sites could not be used due to low water level.

Location	Watercraft/Recreational Problem Description
Ile Perrot Marina	Water level too low to allow use of even small outboard motorboats. Had to change marinas.
Lake St. Louis	The water level is so low that we cannot install the floating docks.
St. Lawrence River - Lake St. Peter	
Sorel Islands	High water is not problem. Low water levels make access to chalet difficult. Dock is out of water, must wade through soft, deep mud to reach shore.
Pointe du Lac, Lake St. Peter	Water level in the lake is so low that there is no access to the docks for the sailboats. Must walk and drag boats through the mud to get into deep enough water to sail. Lost many clients at the sailing school.
Louiseville, Lake St. Peter	Low water level in the lake means that we cannot get through with our boats, cannot take clients fishing, hunting or for tourism, i.e., bird watching.
Contrecoeur	Water level too low in the channel, impossible to reach our property in the summer.
Contrecoeur	Had to move floating docks further out at considerable cost. Number of boaters moved to marinas with deeper water.
Pointe du Lac, Lake St. Peter	Water level too low. Had to walk up to 100 m in mud to get out to water deep enough to go windsurfing.
St. Lawrence River - Thousand Islands to Ogdensburg	
Schermerhorn Landing	Just about every fall the level is too low to haul 30' to 40' boats. The fall of 1999 I had four 40's when the water was too low to haul them. I had to wait for a southwest wind to raise the water level.
Wellesley Island, NY	My boathouse has less than 6" of water from mid-Sept. throughout the fall. Same for Fall 1999, 2000, 2001. As year-round resident, I need my boat till ice.
1000 Islands	Fall of 2000 water levels down causing problems in and out of boat house.

Location	Watercraft/Recreational Problem Description
Chippewa Bay - 1000 Islands	Low water levels & floating docks grounded on river bottom. Owner could have moved docks to deeper water.
Fishers Landing, 1000 Islands	There is getting to be too little water to float my 19' SeaRay at my dock. My Dad ruined a prop on his 25' SeaRay a few weeks ago.
Chippewa Bay, New York	Problems with skiff slides - when Seaway built we were promised, guaranteed, assured water levels would remain constant. Robert Moses did not tell the truth.
St. Lawrence River, 1000 Islands	Low water levels in Aug - Dec. in our boathouses.
1000 Islands, Mallorytown, Rockport	Fluctuating water levels mess up docking. We have had to utilize floating docks. Doesn't stop taxes from going up and real estate prices dropping.
St. Lawrence River at Treasure Island	Water level too low. Difficult without dredging for draft and haul-outs. August to October. Docks and anchors need constant re-adjustment costing time and money.
1000 Islands - Clayton	Required to pull boat due to low water levels
Brockville Narrows (across from Channel Marker on	Too much water released at Montreal. Lack of rain & snow. Last 3 years has made operation of boat lift located inside boat house slip and use of 15 hp Honda short shaft 4 stroke engine very hazardous to boat & motor.
Densmore Bay, Wellesley Island	By September it is difficult to use our dock for our recreational boat.
3 Mi. east of Cape Vincent	Last year (2000) I was able to leave my boat in until 3rd week of Sept. This year (2001) I had to pull my boat off the 3rd week of August.
1000 Islands - T.I. Park, NY	Lately we have to put up for the season - our 22' Hutchinson boat - about Labor Day because the water level is too low to back out of the boathouse. We would like 2 months more use.
Cape Vincent	Low water levels every fall.
Alexandria Bay, NY	Low water is a big problem. Current level prevents use of boathouse slips for 3 boats. This level in the past several years has caused the same problem.
1000 Islands - Clayton	Not when levels are 1.5 - 4.0 feet above datum.
Cape Vincent, NY	Levels currently seriously diminish launch & docking opportunities.

Location	Watercraft/Recreational Problem Description
Wellesley Island	Water level in boathouse gets too low each fall to allow in-water tie up.
Escott, 15 mi. west of Brockville	Unable to access docks except with small outboard motor - Summer 2000. Unable to swim off island dock - Summer 2000.
Clayton, NY	Have to lay up deep draft boats early in autumn because of low water. Autumn weather favors the use of larger, more protected boats. Water levels favor jet-skis.
Goose Bay - 1000 Islands	Each Fall the water level drops drastically on or shortly after Labor Day - generally a 36" drop - this leaves my boat stuck on the boat hoist.
T.I. Park, Wellesley I, NY	August - low water; boats may not have enough water to land or enter boat house. May - June: the water is too high - docks are submerged and boats cannot get in or get out of boathouse doorways.
1000 Islands, Ivy Lea	Low water precludes access to some docks
Brockville	Water is being released at Iroquois Dam causing water levels to drop dramatically, August 1st.
St. Lawrence River - Wellesley Island	Every year from approximately mid-August on, the water level drops so low that docking becomes difficult and in September, impossible.
St. Larwrence River (next to Cedar Point S.P.)	No docks involved, but it's a long haul to water today with a boat.
Oak Point, NY - 75 45 W 44 31 N	Low water has had no detrimental effect on us. Our power boat is usually out of the water by the time the water is too low to remain at the dock. My other boating is rowing a shell which I put in the water when I use it. Lower water is preferable to higher water in my universe - there is less risk to dock and shoreline from ice.
Alexandria Bay, NY	Summer 1999, 2000, Fall 2001. Could not use dock full season.
Clayton, NY	This year our boating activity was terminated the weekend following Labor Day as we couldn't float our 18 1/2 ft fiberglass I/O boat off the trolley system used to run our boat into the boathouse.
Rose Bay - between Cape Vincent & Clayton	I now lose 2 months of boating (Sept & Oct) because of low water levels. This is the second year I've had to pull my boat by Labor Day.
Fineview - Wellesley Island	We have had to put our wooden boat up by Labor Day and the pontoon by the end of September because of such low water in the boat house and water going to Ivy Lea.

Location	Watercraft/Recreational Problem Description
Millens Bay - 1000 Islands	Boat must be taken out in early September. We are lucky because our dock goes out further. Most people around us have to pull up in mid to late August.
1000 Islands	For about the last 5 years - about Labor Day it seems - they just open the gates and I am unable to use my boat even through September.
Clayton	Low water, subsequent pleasure boat damage, i.e., props, fiberglass.

D.4 PIAG Year 1 Survey - Additional Comments

Location	Additional Comments
Lake Ontario - East Shore	
Lake Ontario- North of Sandy Pond Channel	Shore owners property is being sacrificed by the high water levels. Certainly government doesn't seem to be interested in helping.
Cape Vincent, NY	If "PLAN" is able to have some control on the water level - it seems most would be best served if the water levels were several inches above average May-Sep and several inches below average the remainder of the year.
Henderson Harbor, NY	While low water on my property is not a very troublesome thing, the present levels certainly are troublesome to recreational boaters who use their equipment into the fall season. Dockage is severely impacted.
Jefferson Co., Town of Ellisburg	I had to build a retaining in 1972. It was rebuilt in 1998. I may have to build it this year again. Lake levels have been constantly eroding shoreline every year. The erosion is nor symmetrical - it works very different. Sand dunes are collapsing into the river and ponds in the system.
N. Rainbow Shores (Sandy Creek)	Water levels have been on high side of average since mid 1960's - most adjustments seem to be keeping levels higher rather than allowing levels to go low naturally. Boaters got used to high levels, did not dredge to keep access clear.
	A few things that really need to be done. Stop all foreign boats on the seaway. Reason why. They run ill light dirty boats. Don't our laws (ban) dumping bilge water? Bottoms covered with growth which fall off in fresh water. Have ruined our Great Lakes shipping mfg. I see no pumps for sewage at the ports. No place for garbage bags to be dumped, they will soon cover the bottom. The worst threat is the smuggling of atomic or other destruction to the center of our country. Now on power, to get the most power out of water you keep your head water as high as possible and dredge out your tail race. When the powers that be want more money they use many exercises, and shoreline community suffer. Beside the power that is lost by lowering the head. The truth is if the ships can't get past Montreal they better start dredging like they do on rivers in the rest of the world. I have a lot more that I think but if you can set me straight I wish you would.

Location	Additional Comments
N. Rainbow Shores - Pulaski, NY	Since the purchase of this property in 1945 the lake levels
have continued to wreck havoc on the building	which originally was on a sand dune. As noted on the
front, the building had to be moved twice, to the	point where there is no property left to move toward/on.
Lake Ontario - Montario Pt.	Everyone brought in boulders to rebuild the frontage they
had lost to protect them. Sandbags were	issued, too. We had a lovely beach at that time only in
the late summer, which continues to this day.	
Lake Ontario Montario Point, Mannsville, NY 13661	When my deceased husband and I bought our summer lot
in 1966 it was a beautiful sandy lake front.	Since the high water in 1973 we now have high water and
rocks most of year, except late summer early	fall. Had the lake been like it has been since then I
question whether we would have bought it and	erected our summer home.
S. of Monterio Pt. - Rhenshaw Bay area	Have had constant erosion since the Seaway was built.
We have lost easily 60 ft. Never seen low water	to allow sand dunes to rebuild. Bad erosion in ‘74 and
‘76. Put in a seawall in ‘76 - now the water	breaks over it. If the beautiful beach is destroyed the
area will lose a great deal and further depress the	area.
Rainbow Shores, Town of Sandy Creek	In the past few years we have had little or no beach in
June or July. The water levels drop in September	and October when the property is not in use. This year
the water levels did not drop until August.	
North of Sandy Pond - Lake Ontario	I am very interested in what we can do to protect our
beaches. I understand that beach erosion is a	natural process, however, this process has been greatly
exacerbated on my property due to increased	water levels. Dune erosion affects flora and fauna that
depend on the dune ecosystem. My beachfront	has been severely impacted. Very little beach is available
for recreation, my structures are in peril, and	some of my neighbors buildings are near collapse. Please
keep me informed of your actions.	
Henderson Harbor, NY	In Spring, water levels are often over my walkway in the
boathouse. By late August or September the	water level is so low that I can't get my boat in or out of
the slip. This year by mid September, there was	no water in my boathouse where a month earlier there was
an excess of two feet. Water levels vary	between 3-4 feet seasonally. Why the extremes? This
seems to have occurred starting 5-6 years ago.	

Lake Ontario - North of Sandy Pond Channel

Our property will eventually disappear if water levels are kept high. In addition to my personal loss, the value loss will reduce tax payments to our govt. & school district.

Location	Additional Comments
N. Rainbow Shores Rd. - So. Sandy Pond	water levels have caused us to lose a lot of beach. We feel there is a lack of concern for lake 1973 we probably will lose our summer
Pulaski, NY	August. A lot less problems would be avoided if the September.
Sandy Pond, Oswego Co.	It is one of the few remaining on the south natural shoreline (no breakwall with fill behind erosion and damage. Most of the breakwalls which the years. Our part of the pond has a shallow we can't use our dock or the marina where our based on damage to natural areas such as the dunes structures who complain when those structures are structures were put there for 1 of 2 reasons: been or, 2) to increase the size of someone's dictate policies for regulating water levels.
Lake Ontario - North of Sandy Pond	as a result of the high lake level.
Sandy Pond, NY	Inability to drive boat to Greens Point - sand has of Snake Island - concern that water will
North Sandy Pond	concern is poor access to the lake caused by areas.
Sandy Pond	Impaired traffic flow.
Sunset Bluff (3/4 m North of Southwick State Park)	ft. of bluff. Lake Ontario has a "natural

Location	Additional Comments
	We don't feel low lake levels are even an issue. High property over the past 40 years. We no longer have a property owners. If we have another Spring like that of residence as we have no room to move.
	The lake level is reduced every year in the middle of reduction in lake levels could be started the middle of
	The cottage has been in my family for over a 100 years. shore of Sandy Pond that has open water frontage and a it). The natural shoreline protects the property from shouldn't be there anyway, have experienced damage over sand bottom and when the level drops below ~245.5-ft. boat is stored. I believe that future policies should be rather than based on people living behind man-made damaged. Those people have got to understand that those 1) so that something could be built where it shouldn't have front yard. Neither one of these should be justification to
	When lake is real rough the water still sprays up real high
	Channel going out into Lake Ontario, sand shifting. drifted into the pond and created a sand bar on west side become impassible for boating.
	My main concern is wells around shoreline and secondary low levels in marinas and other sheltered back water
	The dredging done two years ago was insufficient.
	I came here in 1943. Since then we have lost about 8-10 pattern" of hi/lo levels. 1940's lo. 1950's hi. 1960's lo.

1970's hi. 1980's lo. 1990's hi. 2000-01 level is satisfactory. Sunset Bluff maintained approximately 15 feet of beach throughout the winter and did not lose it to high water in Apr/May. Of course more beach would be lovely, but the wetlands, the marinas built in the 1970's in high water years, power boaters, electric power producers, and Montreal Harbor need water.

Location	Additional Comments
Sunset Bluff	Lake levels should remain low. The wind from the West,
Northwest, takes a toil on properties. It's	about time somebody listened to the land owners. We
have lived here a long time - 30 years. We saw a	lot happen keeping the lake level low ensures the sand
coming back like it was 50 years ago.	
Jefferson Park, Sunset Bluff (Lake Ontario)	High water also prevents intended use of property for
recreation and personal enjoyment besides loss of	property. This should change the value of the property
and therefore demand reassessment to lower	value and less taxes! Prior to 1972 water levels were
extremely lower and have never returned to those	levels - why? In those years occasional dredging of
canals, marinas, and channels occurred as	commonplace and maintenance. Also a lot of
development took place in the 1970's. People have a false	sense that the water levels are low now compared to high
water levels in the 1970's. Watercraft has	increased in size and draft from 16 ft. outboards to 30 ft.
inboard/outboards that are high performance	needing deeper water. Continued erosion of dunes will
destroy marsh and wetland habitat leaving it open	to the lake. Looking at the history 40-50 years back there
were larger dunes and wider beaches. Please	lower the water level to prior 1972!
Lake Ontario	If lake is at this or no more then + 5 feet level then
erosion is held down to a minimum	
Oswego Co. @ Selkirk State Park	Zebra mussels have cleaned the water in our area.
Sandy Pond	This area would be a likely storm shelter for boats
needing refuge from Lake Ontario storms. Docks are	available at several marinas.
So. Sandy Pond - Lake Ontario	It would be nice if the water level swings could be kept to
a minimum e.g., say from 14" above the levels	at 9/27/01for LOW to say a level of 24" above today's
level for HIGH.	
Henderson Harbor, NY	The people regulating (IJC) don't need to spend $$
studying - they need to wake up and realize that the	water is a diminishing resource with an ever increasing
demand. Hydropower generation should not =	economic loss to us. DO NOT AUTHORIZE anyone to
SELL or SHIP our water resources in	Supertankers to foreign countries - this is the most
ridiculous idea I've seen.	
Sandy Island Beach at North Sandy Pond	As vice chair (and alternating for years as chair) of the
Ontario Dune Coalition (of 30 +/- federal, state,	local government, private property groups, others with
interest, such as Nature Conservancy, etc.) I	relate to different "constituencies" with widely varying

conditions and interests. My comments here are personal, reflecting my own circumstances - not TODC).

Sandy Pond (north - facing Lake Ontario) The sand dunes facing Ontario on the East near Sandy Pond are eroding down at a rapid rate due to high water levels. I am in favor of lower water levels on the lake.

Location	Additional Comments
Lake Ontario - N. Sandy Pond	If you have to maintain a certain water level at Montreal
for shipping, why don't they build a dam past	Montreal toward the ocean?
Lake Ontario - Montario Point	My cottage is adjacent to 17 miles of Wildlife
Conservancy with beautiful dunes that are abused by	people using the area for camping, landing boats, etc.
DEC formerly erected sign warning people to stay	off the dunes and other limitations.
	We have had to put in both a seawall and rip rap to try to
stabilize our shore line. We have lost all access	to the beach on which we grew up.
Lake Ontario - just north of Sandy Pond - channel inlet	We can no longer walk down the beach or keep a boat out
in front of our home. If the erosion continues	at the rate it has, I am frankly concerned about people
losing their homes and cottages over the coming	years if nothing is done.
Sandy Pond (North Pond) South East end	I wish we could plan on the water level not dropping so
fast in July and August. I have to move 100 ft.	of dock and 3 lifts to higher water. A "mid point" of
depth that could be stable would be ideal for	recreation & the environment. I have been on Sandy
Pond since 1965 and know the water well enough	to keep my boat and prop safe in low water but I cannot
get safely out into the Lake on some days in	August and into September (23 ft. boat).
Renshaw Bay (near Sandy Pond) N. Parsons Rd.	The level of Lake is close to breaking in back of cottages,
which will cause demolition of 40 cottages. I	have enclosed photo which shows boulders brought in and
placed on former sandy beach. The water	level must be lowered.
Jefferson Co. - East Shore - Lake Ontario	As a 27 yr. owner of shoreline property, I have seen a
continual degradation of sand beach & extensive	erosion of the dunes despite attempts to stabilize them.
The constant high water levels increase the	erosion of the sand dunes. Without low water levels to
replenish the dunes, this process will eventually	destroy the barrier beach eco-system. This may degrade
property values, which could have an economic	impact locally if this valuable tax base is depleted.
Southwick Beach	If the current philosophies continue there may be no
dunes for future generations to admire and enjoy	since their demise has continued since 1972.
Sandy Pont (North Pond), Oswego Co., NY	Our shoreline, in fact, the entire shore of North Pond,
suffers from low water levels every fall and late	summer. The past few years, water level has been below
normal even during summer and occasionally	in the spring. Even though our property has a natural

shoreline, we never experience shoreline erosion or property damage even as a result of the most severe storms.

Location	Additional Comments
Lake Ontario - South Shore	
in the Kuckville area (Point Breeze). Our	We recently purchased our property (Nov. 2000), we are
and we are considering some type of breakwall.	shore has eroded about 20 feet more than our neighbors
time. We have been told that at one time there	The first estimates are far more than we can afford at this
	were grants given to help offset the cost.
Lake Ontario	Lake Ontario should never be over 245 ft. high. This year with all the other Great Lakes being so low it is unbelievable what is being done with Ontario. The shore owners are being sacrificed. I may live long enough to see my home on Ridge Road become lake front
property again.	
stone. We have been fortunate through the years	A large breakwall was built in 1994. Our beach is all
Thanks for the excellent job the organization is	as compared to our neighbors to the east and west of us.
	doing.
Rochester - Lake Ontario	The residences on the south shore of Lake Ontario in
Rochester have been here for over 70 years. They	were built with an expectation that artificially high water
levels would not be encouraged.	
	We also own a home on Lake Road, Ransomville, NY
Hamlin, NY	I have written many times to IJC and Board of Control for
many years and have attended meetings -	nothing ever resulted except I get answers to my letters
explaining why I have problems, but no	corrections are ever forthcoming. I can see clearly that if
I were a boater or shipping magnate, I would	probably be happy with high water levels. With some
adjustments, homeowners (who have had to make	adjustments for years!) and boaters and shipping would
all be happy. It is the homeowners very life!	Lower lake levels and save hundreds of homes. I have
owned this property since 1957.	
Rochester - Genesee River outlet	4/93 -500' x 35' beach lost to high water; 100' concrete
block planter wall was damaged.; 250' fencing	fell down due to soil erosion of hill; ca. Catch basins on
east and west parking lots destroyed; ca. 4 garage	floors ruined. 3/98 - Entire beach lost; planter wall
completely destroyed; fencing fell again; catch basins	damaged again; water entered front buildings both times -
also in courtyard.	
Rochester, NY	We south shore residents get the brunt of high water

levels when north & east spring storms hit our shoreline.

Location	Additional Comments
Rochester, NY (Where Genesee River runs into Lake)	The two storms eroded our shoreline - right up to the
Lakefront buildings. We have used highway	barriers and large boulders to secure our buildings in the
future. I think we are OK now if the Lake	doesn't get over 248 ft. with NE winds. The work has
cost us a total of about $160,000 since 1993 and	we still need to replace the sand beach with good sand
over an area of 30 ft. x 500 ft. The US Corps of	Engineers and local people advised us on how to keep the
water away. There may be other ways to do it	but the costs are too high.
1 mile west of Lakeside Park	Would like to see algae problem and zebra mussels
problem addressed.	
Olcott, NY	Problems with fluctuating levels - No beach, ice builds on
shoreline during the winter damaging docks	and any shore structure.
Barker, NY	We can no longer enjoy lakefront living by having a
beach to swim from. The shore is blocked by	retention walls - boulders and the like - eliminating the
beauty and the reason for living by the water.	The need for power and money has cost the homeowner
the land that they paid extra for because it was	more costly to buy lakefront property.
Hamlin, NY	I have been on the lakeshore since 1964. The best
shoreline protection is willow trees. I have a	willow tree - has been in and out of the water since 1964.
In 1973 I was involved in Operation For-Site.	Designed gabion breakwalls for 30 miles of shoreline.
My current revetment covers 300 ft. of shoreline	- over 1,200 tons of boulders installed by me. Come have
a look.	
Niagara Co.	We realize a balance is required; however, the Corps
seems to err on high side.	
Grand View Beach - Lake Ontario (Rochester, NY)	Maintaining a level near the current level would be least
damaging to my property. Lower levels would	be easily tolerated during the winter months.
46 Lakeside Blvd., Hilton, NY (west of Rochester)	I live on the lake and sail on it (member of Brockport
Yacht Club) and hope to have water regulated at	245.3 feet - not too high, not to low - so at 245.66 today
(8/2/01). Your doing fine but in winter I would	like it foot lower especially when northeaster's hit.
Oswego & Cayuga Co. shores	I am more interested about vehicular damage to the dunes
and bird nesting than about water levels per se	e.g., in 1984 or ‘85 a dead piping plover juvenile (chick)
from the first known nesting at Sandy Pond in	over 25 years was found lying in an ATV track on the
beach (specimen was deposited in NYS Museum,	

Albany).

Location	Additional Comments
Hamlin, NY	If the water was lowered enough in the Fall there is not a
high water problem in the Spring. It's when the	water is left too high in the Fall that causes high water
damage. The homeowners have seen it happen	many times. The lake should always be as low as it can
go in the Fall. Even with the lack of rain this	year, when we had a north wind blow the lake was close
to touching our land again and the waves did	cause land slash.
Brockport YC - Hamlin, NY	Generally the range of water levels over the past fifteen
years have created no problems for me	personally. A concern is water quality, concentrations of
algae along the shore which interfere with	boating and swimming - and smell!
Rochester, NY	The past 2-3 years have brought on the algae problem -
thick smelly seaweed rotting on our beaches and	floating just offshore. This problem takes away the fun of
living on the lake in the summer. High water,	however, can be dangerous and devastating.
Sodus Bay, Sodus Pt., NY	It would be beneficial to have the lake level maintained at
245' until Oct. 1.	
Wilson, NY	My erosion won't be a big problem at this stage if the
State of NY would issue me a permit for minor	bank protection. Erosion occurs mostly in Spring during
high water levels. Usually after June it is OK	except for the usual storms.
Sodus Bay	I am concerned more with high levels. My property is
very valuable to me and I would hate to see it	destroyed. My recreation and fishing can be done at
another time if I still have my home and property.	
Rochester, NY	An ideal level for the boating season would be 247 ft.
During the winter months 244 ft. would protect	riparian interests.
2 miles west of Pultneyville	I do not have a dock and the lake bottom is stone here. I
have a concrete wall pinned to the rock lake	bottom so high water is of little concern.
Lake Ontario	Lost $8,000 in docking. Lost over 3,200 cubic yards of
soil - $25,000. Lost $2,000 worth of seed,	crownvetch & dogwoods. Lost most use of beach
covered in seaweed & mud. Spent $30,000 on rocks	& boulders to protect waterfront. When water is down
only have 2-ft of beach.	
Point Breeze, NY area (1 mile east of Oak Orchard)	Algae problem worse every year. Stench has been
overwhelming several days already. We cannot let	our children swim in Lake Ontario because the rotting
algae is so deep at our shoreline just east of Oak	

Orchard Creek. I am worried it will never clear up.

Neighbors putting cottage up for sale.

Location	Additional Comments
Lake Ontario - Town of Porter - Ransomville Road	they were 20 years ago? When we moved here blooming then the ice boom would be let go West towards Canada. Now we don't have schools close to shore. Now we can't see them frequently! Why? We are seeing more rodents. population. There are considerably more bugs because suggestions? What type of plants would help owner to help protect our lake and our property?
Hamlin, NY	with basic factors. Wildlife picks its own areas there first!!). Early days (1923 - on) on Lake High water spoiled it all! Political power
Little Sodus Bay (Fair Haven Bay)	June & July - and the lows in August , period should be between 246.5 and 245.0 ft. trouble 1.) in the Spring when water levels are 245.0 ft. I am the President of the Bay with 200 property owners, 5 marinas, Village of Wedge), and Corps of Engineers.
Orlean Co.	better - The algae bloom worries me, Temp.; pollution is a big concern. Swimming is a no-no this spill over "upwelling".
Lake Ontario, Sodus Bay, Sodus Point, NY	higher but no more than that. I am a property
Lake Ontario South Shore, Niagara County; Olcott, NY	(above 80) days when breeze comes from N, low lake levels, and stench increases until
Lake Ontario - Town of Porter - Ransomville Road	Why is there less fish or are they bigger and deeper than 20 years ago, the spring would be warm and flowers were and there would be dead fish as far as you could see East - that and the large salmon etc., would be swimming in that often. Even the large "Goldfish" are not seen as We do not feed the birds because of the rodent the smaller birds aren't staying around. Do you have any keep the lake banks in tact? What can I do as a property Why does Canada have more beaches than the States? Indians did very well before our time and our meddling & sufferers when we interfere (Irondequoit deer were Ontario were beautiful - beach, swimming, boating, etc. grabbers upset the applecart!
Little Sodus Bay (Fair Haven Bay)	I feel the Lake Ontario weekly highs are too high in May, September and October are too low. The range for this The marinas and property owners in Fair Haven Bay have above 246.0 ft and 2.) in the Fall when water is below Betterment Association, for 10 years, and I have contact F.H., Chamber of Commerce, Fire Dept./, DEC (Les
Orlean Co.	The lake elevation over the past 7 years has been much water clarity; zebra mussels; phosphates - in general year. The lake looks and smells like a big black septic
Lake Ontario, Sodus Bay, Sodus Point, NY	Levels for today seem to be good, could be 4-6 inches
Lake Ontario South Shore, Niagara County; Olcott, NY	owner in Sodus Point and Crescent Beach, NY Odor has often been substantial, particularly on hot Northeast. Late summer algae blooms are exacerbated by mid-September when temperatures begin to cool.

Town of Yates (5 miles west of Point Breeze) correspond with our own experience of 45

like to have sound limits installed and enforced

aggravation.

The Army Corps of Engineers average water levels do not

years. They seem to be considerably higher. We would

on jet ski boats. They are an annoying and unnecessary

Location	Additional Comments
Payne Beach, Hilton, NY, Lake Ontario	I believe that the loss of peoples, land, and homes, is far,
far, more important than a few having problems	getting their boats in the water. This is our home. We
have a tremendous investment. There are	thousands like us. Our interests should come before
boating, shipping, and power. I understood the lake	level was supposed to be kept between 242 & 246 ft.
However, it varies from 244 to 246 ft., never going	below 244 ft.. If it could be kept between 242 & 246 ft., I
would never have any problems. I've always	been curious as to why the lake is always somewhere
between 244 & 247 ft., not 242 to 246 ft..	
Lake Ontario	We have lived at this address for 4 years. The "right -of-
way" borders our property. Our property has a	breakwall, there is none on the right-of-way. Each year it
would lose about 2 ft. of dirt. We finally	decided in 2000 to build a breakwall at the cost of $3,000
for property that does not belong to us.	
Oak Orchard-On-The-Lake, Orleans Co., NY	Stink after storms from seaweed
Lakeland Beach, Kendall, NY - Orleans Co.	I - being a life long boater - cannot equate losing my
property to floating my boat. Lower water can be	dealt with - higher water ruins everything. When people
say they are losing money because of low water	they are not making as much as they do when the water is
high. I pay out for it out of my pocket. I'm	the real loser! P.S. Lake Ontario always peaked on or
about May 1. Why does it stay high all summer -	this hurts.
Lake Ontario - Oak Orchard	Each year I lose some shoreline. It varies by water level.
If above 247' & NE wind I could lose	shoreline. 245' seems to be optimal for erosion control &
boating access.	
Hamlin, NY	Every year for as long as I can remember, the algae
washes up on our frontage in the lake. It lasts	sometimes all summer (2000) and other times it comes in
and washes out and returns again. It smells so	bad we cannot have windows open. This problem
occurred long before the Zebra Mussels were found in	Lake Ontario.
7 miles east of Niagara River outlet to Lake Ontario	The hell with the Power Authority. They don't do enough
for this area considering how much they rape	us for! Lower the Lake! An old timer that passed away a
couple of years ago showed me pictures of	how much space was behind our houses and it's a
disgrace! Don't tell me you can't lower the lake, you	lowered it 1 foot in a month in January a few years ago
when it was real high & you were worried about	law suits.

Location	Additional Comments
Lake Ontario-Somerset (Niagara County)	I have lived along Lake Ontario shoreline for all of my 59
years and have seen many negative results in	the "control" of Lake Ontario's water level. Nothing, and
I mean nothing, the control board says will	convince me that since the late 1950's the water level has
been gradually high 18 - 24 inches for the	benefit of shipping and electric power only without
consideration of the average taxpayer along the	lakeshore. I had 20 - 30 feet of shore in the 40's and 50's,
it is gone and never returned.	
Kendall, NY (halfway between Hamlin State Park &	1) Location of property is 16557 Banner Beach Road,
Kendall, NY 14476-9706. 2) There is so much	red tape involved in erecting a protective wall (if that's
possible), that I am discouraged from doing so.	3) Does anyone know what the best design for a
protective wall would be? I haven't seen a wall that	holds up for < 10 years.
Thirty Mile Point/Golden Hill State Park	I have been near or on the southern shore between
Rochester and the Niagara River for the past 50	years. There was always a rock/pebble beach for most of
that distance. One could walk the shoreline in	the 90's; that beach has been mostly nonexistent in the late
90's. The water was at levels where it was	impossible to walk the shore. Today even at low times
those stones and pebbles are gone. At my	property, when there is a beach to absorb the waves no
problem. These protective stones are gone. I	have about a 24" margin between shore erosion and boat
prop damage. The boat launch is only 1.5 miles	from my residence. Good Luck!
Somerset, NY	I am glad to have this study being done. As a Lake
Ontario shoreline property owner, the shoreline has	eroded considerably since 1990. The 250 ft. of shoreline
is very important to me; is crucial to my	business.
Hamlin, NY	In 1993 an area of shoreline between 4 & 12 ft. deep and
160 ft. long was lost. Further to my west on	state land a point was wiped out (40 ft.), many trees fell in
due to erosion, and when the wind blows	from the northeast, more land and trees are consumed
even to this day.	
Lake Ontario (2 mi. east of Pt. Breeze)	We have owned the property on Lake Ontario 2 mi. east
of Pt. Breeze since 1952. Spring erosion is a	problem every year and erosion is self promoting making
the lake shallower and wider. Building and	maintaining break walls costs tens of thousands of dollars,
but nothing stops the lake for long. The lake	level can and must be controlled better. The lakeshore
owners need more consideration. Please, please,	

please. Thank you.

Location	Additional Comments
Hamlin, NY	Surely the marina owners cannot in good conscience
begrudge us property owners the right to save our	homes - just so they can retain the many boat slips they
wish to have. It seems it would be cheaper for	them to dredge out their marina basins than it would be
for us to rebuild our homes! This property is not	a permanent residence - only a summer cottage, but it has
been in our family since 1921 when it was	built.
2 miles W. 30 mile Point, Lake Ontario	Lived here since 1963. Had property since 1952 with
boathouse, which was moved back 3 times.	Through the years, many storms. 1975 - breakwall
erected; shale beneath disintegrated and spent $7,500	reinforcing it in 1993. Storm in 1998 over the top and
around end - washing out dirt.	
Hilton, NY (west of Braddock Bay)	This looks like a good, well-managed study.
Lake Ontario - Rochester (Greece lake front property)	Algae impact on water quality & smell. Unable to swim
in lake many days of the season. Impact of	poor water quality flowing into Lake Ontario. The
strategy seems to always favor high water going into	the fall/winter and hope the level can be dropped if
necessary. The deviation always seems to be above	long-term average which seems to be causing our long-
term average to go up.	
Kendall, NY	I would like to see jetties put up and out into the lake to
break the wave action. The jetties are at Hamlin	State Park and seem to be working.
Hamlin, NY (Lake Ontario) Sandy Creek Area	This year the Lake Ontario water level has been carefully
regulated. This has kept erosion at a	minimum. The beach is presently eroded up to stones
placed on the beach front.	
Sodus Bay	The water level is reduced too soon in the summer/fall
season. We need 245.75 ft. to utilize our dock.	If the water level could be lowered starting in mid-
September instead of August, it would be	advantageous to us.
1/2 mile NE of Sodus Point on Charles Point/Crescent	The greatest damage to businesses and property owners
occurs in early to late Spring and keeping the	level lower at that time would greatly help all of us. Also
rock formations (not a breakwall) placed 30 -	50 ft. out from the shoreline would greatly break-up the
wave action and cut down tremendously on	erosion of the shoreline of property owners etc. The
prevailing Northwest winds along the south shore	give us a tremendous problem but there are solutions if
the government would help us a bit.	

Location	Additional Comments
1531 lake Road, 3 miles east of Fort Niagara	My husband and son (I'm not sure of year) placed steel
through tractor tires that did not hold - this was	done on 600 feet. In 1975 we placed 300 feet of 3 x 4
blocks (cement) and on other 300 feet furnace	blocks were placed. The cement blocks have turned over
and blocks slide into lake. We have sold 400	and on remaining 200 feet we have the shore line done
with rock at a cost of $3,000 (2001). Perhaps if	people in charge could see what we have tried you could
understand our concerns. This spring while	waiting for permit and paperwork we lost 5 feet more.
For the cement work federal Gov. gave us	$5,000; this just covered cement - labor and form material
not included.	
Lake Ontario shoreline (see my address)	It has been my observation from years of experience that
controls are causing the long-term average to	rise artificially. Also, homes have been built up north
where they did not exist, therefore, when levels are	critical here, we listen to excuses about flooding up
toward Montreal. Much money has been spent on	studies already. It would be nice if they could be forward
thinking!	
30 Mi. Point (30 mi. east of Nia. River)	Personal property loss is estimated to be in excess of
$30,000 between 1961-1986. In 1986 a rip-rap	retaining wall was built to protect our shore line at a cost
of $7,673. It has been repaired twice since.	1993 - $950 and 1998 - $750 for a total of $9,373.
10 Miles East of Oak Orchard River	Other than costing thousands of dollars over the years for
boulders and concrete the past couple years	have been tolerable with water levels on average but I
know that will change - it always does.	
Rochester	I have witnessed small ski watercraft have to stay out
farther when lake levels are low. This is a plus on	the noise and wake issue.
	When we built this house we had a nice beach and sand.
What have we got now, nothing. The water	level is too high. We had steps leading to the beach.
Now they are covered by big boulders. Bring the	water level down so we on the beach can enjoy our beach.
I can't afford to spend any money for I have a	husband in the nursing home. He has been there for 8.5
years.	
15 miles west of Rochester, NY	Water levels in mid to late August are most desirable for
our area. Breakwalls are safe from erosion	damage at this level.
Lake Ontario - Rochester	Presently the lake level is down, therefore, our beach
front is adequate (as measured distance from house	

to shoreline). Currently there is approximately 75 ft.

However, each spring we worry how far up the water will come, depending on snowfall, rain, and winds,

as the wind direction does seem to shift sand distribution. The property is a summer cottage for us.

We can be reached at this Edgemere Dr. address July and August. Our permanent residence is Victor, NY.

Location	Additional Comments
Lake Ontario, Olcott Beach no raising the levels of Lake Ontario with levels. Water is never let out fast enough when because the Indians are getting flooded out around	Water is down in all the Great Lakes and there should be property owners suffering damages from these higher level is high and then we are told that it can't be let out Montreal. It's about time property owners get relief.
1.8 miles East of 4 Mile Creek, Town of Porter first Annual Public Meeting is 9/13/01. This There doesn't seem to be any future long range to their states, i.e. South West States. 3) Our seems to be an opportunity to capture wind power source in the future when this monitor incoming freighter from other countries to country, i.e. zebra mussels, drugs, illegal immigrants. Ontario have inefficient septic systems and are	1) On page 8 of the Ripple Effects brochure it states the periodical was not received until December 2001. 2) discussion about the fact other states want to divert water country needs to find alternative power sources. There power from the winds across Lake Ontario as an alternate technology is refined. 4) Is there security in place to insure undesirable activity can't be brought into our 5) How many "cottages" and/or homes along Lake allowing septic/sewage into the lake.
3/4 mile East of Oak Archard, Lake Ontario revetment across 200 ft. of our property to protect stone cover of the 3-5 ton interlocking revetment boulders.	Continuing issue of low water level - we installed a against high water erosion. With low water, we lost the rocks, leaving nothing on our beach but these large
Rochester (Greece - live on lakeshore) corrected during the winter when river is frozen, December to allow for excessive snow and wet the spring winds, thaws, and rains. Before the Lake level must be lowered to 242’ and 243’ to conditions wave action 2 - 6 ft. Med. Storm the wind action is 8 - 10 ft.	The height of the water in March/April can not be consequently the height of the lake must be reduced by spring. All damage is done in March/April when we get river freezes, between November 15 - November 25, the prevent spring erosion. The Corps has stated: Normal conditions wave action 6 - 8 ft. Serious Storm condition
We want our beach front back the way it was. craft are larger and in more numbers. We too comes first.	Over 50 years we've experienced erosion to our property. It is not the fault of the property owners that the small have a boat that we use on the lake, however, our property
Lake Ontario, Kent, NY (1.5 miles east of Oak Orchard)	When the lake is rough the water looks quite muddy. I

assume that it is caused by dirt that has washed into the lake over time - more than just a normal disturbance of the lake bottom?

Rochester (Hamlin)

I am concerned that too much emphasis is being placed on shipping and hydroelectric and the revenue they generate. What are high like levels costing US and Canadian taxpayers? I wonder how public municipalities and industry on the shoreline survive and what costs are being passed on to the taxpayer because of high water levels.

Location	Additional Comments
Lake Ontario (1.5 miles east of Wilson, NY)	My family has owned this property for over 50 years and
we used to have a nice beach. The past 5 to	10 years we have had little or no beach to speak of
because of the high water level, which has	considerably diminished the enjoyment of the lake water
itself.	
Lake Ontario (Youngstown/Wilson)	The revetment work done by Army Corps of Engineers in
1970's has now deteriorated from erosion.	We will lose more shoreline at present rate.
Hamlin, NY	Our shoreline is now hardened and therefore largely
unaffected until water levels exceed 246.5 ft. above	sea level. After that, damage is sustained with each
severe windstorm. Once water level exceeds 247.5	ft. we are highly vulnerable and sustain damage on almost
a continuing basis if there is any significant	wave action. In 1973 we were relatively unprotected and
experienced greater damage.	
Lake Ontario - Kent, NY	In 1993-94 we had a bulkhead constructed to protect the
eroding shoreline - Cost $70,000.	
Shady Harbor Drive - Hamlin, NY	We are fortunate to live on a shoreline that generally has a
sandy beach between our stone breakwall and	the lake. Our beach probably averages 100 ft from
shoreline to breakwall. We have a lawn from house	front to breakwall - only very rarely does the lake reach
within 10-15 ft of our breakwall, and that is only	during prolonged storms from the northeast. We do not
suffer shoreline erosion, just shifting sand.	
Rochester	If the water is 1 foot higher than the average it causes
damage to shoreline.	
Hamlin, NY	We have observed an increase in algae buildup in recent
years. The volume of algae/seaweed has been	extremely large at times which made it virtually
impossible to launch motor craft from the shoreline.	Also, the buildup of algae restricts & prevents cottage
owners from swimming in the lake for a portion of	the summer season. This problem has become critical
during the past 3 summers & steps need to be	taken to clean up the lake.
Little Sodus Bay - Lake Ontario	I've owned a marina on Little Sodus Bay in Fair Haven
since 1996. In that time I've been flooded twice	in the Spring - 1996 & 1999. Last year (2000) and this
year (2001) - the water level after August has	caused me to close several of my boat slips & required
some of my customers to find other means of	launching. Presently the depth in my launch is less than 3
feet so several of my clients have needed to	have their boat hauled elsewhere. 125-ft. from shore I'm

down to 37" of water & the drive unit on most clear water conditions have also caused the problem.

of the boats hit in places. The low water in union with the inshore =12" & under weed growth to become a real

Location	Additional Comments
Somerset, NY	I believe the lake level problem is a fraud. The Corps of
Engineers controls the lake level and thereby	establishes the long-term average as it manipulates the
outflow of water. Reports should show the long	term average from 1900 to 1940 as established by nature
prior to the management of the levels by the	Moses Dam and the St. Lawrence Seaway. The level
should be maintained at the averages determined	from 1900 - 1940. However, I know that honesty and
integrity are absent from the people in power.	
Rochester, NY	For my boating needs, once levels drop below 244.7-ft,
docking is not practical at my current location -	Sutters Marina, Irondequoit Bay, Rochester, NY
Sodus Bay (Sodus Point)	In '73 large islands of floating cattails were a navigation
hazard. I also have a lakefront home in Webster	where I've spent $25,000 to control erosion which occurs
when the lake is at or above 247-ft in June or	above 246-ft in March. Lower levels (even up to 246-ft)
early in the Spring when big storms are more	likely are damaging. That is the time of the year when the
shore is most vulnerable. High water is	usually in June, but the level in March is most critical.
Lake Ontario	I believe it is an environmental crime to hold back water and artificially raise the level of Lake Ontario. It is a bigger environmental crime to allow foreign vessels into our Great Lakes. They have destroyed commercial fishing (sea lamprey). Now we have zebra
mussels that are destroying everything.	
Hamlin Beach	Damming up St. Lawrence River to help some has hurt
many lake owners and has damaged the	environment and other life. The State, Fed., and
Internationalists should be held accountable for trillions	in damages. 1) I've busted my chops with sandbags. 2)
We've paid to have our breakwall redone - new	rip-rap - on top of other previous jobs. 3) The glasses in
our wine rack hit on each wave hitting rock with	"high" water. 4) Cracks in foundation. 5) We've had to
clean up trees, pieces of dock etc., behind our	garage.

Lake Ontario - West Shore

Flamborough Township, ON	Summer 1999, August 2001, water level in farm ponds
too low for crop irrigation. Farm pond level in	November 2001 normal distance from low level to
normal, 1.8 m.	

Location	Additional Comments
Stoney Creek, ON	This document attempts to illustrate the impact of the change of water level to our waterfront. We understand that water level is not the sole factor which causes shifts in the shoreline, however, as illustrated by these photos there is a strong correlation between water level and the extent of our beach. We hope that this document will remind your committee of how sensitive shorelines are to your water level determination decisions.
No Location Given on Survey	
	Keep it low in the winter
St. Lawrence River - Lake St. Francis	
Lake St. Francis	There are not really any problems with water levels on Lake St. Francis. Hydro-Québec keeps the reservoir as high as possible, and steady, to get maximum power out of the plant at Beauharnois. Maximum variation in lake/reservoir is + or - 20 cm with daily peaking and ponding operations.
St. Lawrence River - Lake St. Lawrence	
Lake St. Lawrence - Wilson Hill	Low levels has affected our water supply several different years.
Lake St. Lawrence	The road across from Lot #326 should be opened for fire protection & use, as wildlife are on private properties and the existing causeway.
10 km downstream from Morrisburg	Water levels should be established for Lake St. Lawrence to avoid critical high and low water levels. This can be done by control of water outflow from Lake Ontario.
Lake St. Lawrence	Ideal water level for me is 235 feet
Wild River	I have lived in the summertime on the St. Lawrence River since 1939. I have noticed erosion in several places. If you want to see real erosion drive about 7 miles out of Waddington toward Ogdensburg and view the house which has lost about half its frontage and the point above it is also nearly eroded.

Location	Additional Comments
Lake St. Lawrence high/low outflow rates, peaking and ponding as well	Lake St. Lawrence is subject to much variation from
Abrupt changes are environmentally	as wind set-up, particularly from either the ENE or WSW.
negatively impacted when the levels fall below 240	disruptive in the late spring. Recreational boating is
problems begin to occur at levels below 238.5 ft. at	ft. at Long Sault. Significant domestic water intake
the ships' bow wave draw-outs from the bays.	Long Sault and are further exacerbated by east winds and
Wilson Hill Island, Lake St. Lawrence Canada Village on Canadian side, enjoyed better	All have in this area of Lake St. Lawrence and Upper
Ontario being so low that the water is held back in	water conditions in the last 2 years on account of Lake
least 12 inches over a 24 hour span which	our area to do this. They raised and lowered the water at
get your boat off your lift at these times.	means bad boating conditions like you may not be able to
St. Lawrence River - Lake St. Louis	
Notre-Dame-de-L'Ile Perrot, Lake St. Louis put our floating docks in the water. Where	The water level in Lake St. Louis is so low that we cannot
covered with plants. The shoreline no longer	there used to be water, now there is a 200 ft. wide mudflat
Lake St. Louis level all year long and would keep the shores	can be used. A dam across the Lachine Rapids would give us a steady clean.
Ile Perrot Marina holding the water back above Beauharnois so	Everybody around the marina says that Hydro Québec is
	that Lake St. Louis goes down.
St. Lawrence River - Lake St. Peter	
Port of Montréal, Contrecoeur river have been too low for the ships. They	During the years 1999, 2000, 2001, the water levels in the
loaded at Québec, or came from their ports of	could not come up-river with their full load, so either off-
shipping companies.	origin with less cargo. Both solutions are costly for the
Pointe du Lac, Lake St. Peter water in the Great Lakes so the St. Lawrence	Everyone knows that during dry years "they" keep the
all the extra water, so we get flooded.	dries up. In wet years it is just the opposite, "they" dump

Location	Additional Comments
Sorel Islands	The wetlands have been completely changed. There are
only a few plant species now. Fewer kinds of	birds. The cattails have encroached on most of the
surface of Baie des Graces.	

St. Lawrence River - Thousand Islands to Ogdensburg

Chippewa Bay, New York	Get rid of ski doos. Among other things they chase water
birds including loons. They are noisy and dirty	and impact greatly on the environment; freighter speeds;
another oil spill because safe guards are not in	place.
Cape Vincent, NY	It's a shame that someone had to put a valve on the outlet
tap of the Great Lakes. Without it, we	wouldn't be doing this. Mother Nature would be in
control & we'd all accept whatever level she set. (I'd	like to see the results of this survey)
Escott, 15 mi. west of Brockville	Our interest is for shore property and 2 islands. The
problems of low water affect property values. How	can they raise assessed values (and taxes) when the
market value goes down because docks are almost	not accessible.
Clayton, NY	I am concerned with personal injuries occurring on and
along the water. I have been personally injured	falling into a boat at low water, and I have treated quite a
few similar injuries. Have devised several	safety innovations to prevent these injuries - ladders, long
facing boards, safety ropes, "geriatric pole",	etc. Most injuries are multi-factorial, and therefore, are
only partially preventable. Maintaining	adequate water levels in the system is one factor in
preventing injuries - especially in recreational boaters	and waterfronts.
Brockville	Why are realistic, appropriate water levels to permit
boating not maintained through to October 31?	Water is being released at Iroquois Dam starting August
1st and drops significantly every day until there	is no water by September 1st. There seems to be no
problem holding the level through July? Lifetime	resident on water at Brockville.
St. Lawrence River - Wellesley Island	Attached you will find a water level chart I compiled for
the summer of 2000. You will see that July 1,	we had thirty inches of water and then the water dumping
started. By September 30 we only had 6	inches of water . Very unacceptable. Also are enclosed
pictures of ice damage that took place in the	Spring of 2001 caused by the "Ice-Breaker" opening of
the shipping channel. Solutions: dredge Port of	

mid-August, therefore leaving more water until Montreal, refrain from massive dumping of water until later in Fall.

Location	Additional Comments
Clayton, NY	It appears to the recreational boaters whom reside in our
neighboring areas that no consideration or little	consideration is given to the tax paying residents of the
river despite the fact that we pay the highest tax	rate of any residents in the North Country. Thus we feel
more consideration should be given to the	people who reside on and use the river. We also feel we
are being penalized through low water levels for	errant issuing of building permits to Lake Ontario
residents that build their residence on the flood plain	shorelines of Lake Ontario and the profitability of the
shipping industry to keep down river and Lake St.	Lawrence at levels to accommodate larger freighter
payloads. With today's computer technology the	river level should be controlled to a tighter parameter than
4 ft. as identified in Plan of Record 1956.	
Fishers Landing, 1000 Islands	Should get people on the Control Board that are not
connected to power companies. Should get	year-round (especially winter-time) control established.
1000 Islands, Mallorytown, Rockport	With the water levels dropping so drastically in 1999, we
had to vacate our island and bring two of our	boats down to our Prescott boathouse right after Labor
Day or we wouldn't have been able to float	them into the boathouse. WATER TOO LOW!! Ended
up the same way in 2000. Had to purchase a	pontoon craft in order to get to our usual landing on the
Ontario shore across from our island in the 1000	Islands.
Chippewa Bay - 1000 Islands	Loss of wetlands because of rigorous water level
management (compared to water level fluctuations	before the Seaway established in 1950's). Seems to have
had an effect on spawning beds for pike	fishery. Consequential less grass level, wet levels, later
spawning - more mono-culture cattail beds.	
Millens Bay - 1000 Islands	It is a difficult problem, but here most of our summer
season is cut short because of low water. Also,	weed growth multiplies greatly in the Fall due to water
levels (low) creating problems for motors, etc.	
3 Mi. east of Cape Vincent	It is sad when you can only sit and look at the water and
cannot use your boat. We miss the best part of	the boating and fishing season (the Fall). I also think they
should give us some more advance notice	when they draw the water down to give us ample time to
move our boats. Some people only use their	cottages on weekends and come back to find their boats
high and dry.	

Location	Additional Comments
St. Larwrence River (next to Cedar Point S.P.)	Over the past two years I noticed more loss of bank rocks.
If too much goes, we may lose the row of	protective soil/rock holding trees at top of bank. This
damage occurs in early spring, especially during	high wavers from passing freighters. It appears they are
moving at a faster speed mow. If we lose much	more, the trees will fall and with that more bank erosion
and eventually jeopardize the cottage. The best	water level would be half way between today's level and
our high spring level. Since the river was	regulated, people got used to higher water, but it brings
more damage. If the water could be kept at the	1/2 way point it would be the best solution.
Densmore Bay, Wellesley Island	The fluctuating water levels vary greatly from Spring to
Fall. June, July are adequate. August begins to	vary downward and by September it is difficult to use our
boat.	
Brockville Narrows (across from Channel Marker on	The effect of zebra mussels on habitat for small fish.
Also the water and shore birds have less suitable	food for their babies. Low water levels last 3 years have
largely destroyed swamp areas around Molly's	Gut and Lily Bay as well as areas around Islands in that
area. I strongly recommend regulations to do	more thorough dumping of ballast before ships enter the
St. Lawrence since round Gobi have been found	in the Trent Waterway system. Finally, continue bringing
back Osprey.	
1000 Islands	We are always shown graphs of water levels for the last
100 years. I would like to see a graph of levels	for the past 50 years when the water levels were held
higher. In that time a lot of marinas and docks	were built because of the higher water levels. I don't
think it's right that those who built homes on a flood	plain are able to dictate low water levels for everyone
else. I really used to enjoy my boat in September	and October.
T.I. Park, Wellesley I, NY	I run a non-profit boating school. Our program is at risk
when in late August the water in the South Bay,	Wellesley Island drops too far to use our boat ramps.
Goose Bay - 1000 Islands	The main issue is the sudden drop in the water level.
After Labor Day if the level was taken down by 1/2	of the year-end target it would provide water down stream
and OK boating during the Fall. Before	freezing in November, the water could be lowered again
to the end of the year target. Lower water levels	during the winter seems to be a good idea.
Alexandria Bay, NY	I live in close proximity to the American shipping channel. Freighters traveling above the permitted speed

limits (particularly at night) cause water levels in my small bay to drop 15-18 inches in 1-2 minutes' time. This precipitous drop in such a short time has ripped the mooring cleats off my boats, damaged my docks, and roiled the water excessively. Low water levels greatly magnify this effect and disturb the shoreline causing erosion.

Location	Additional Comments
Wellesley Island, NY I'm aware of the Lake Ontario south shore too close to the lakeshore and now complain more significant than devaluation of river economic stimulus provided by shipping and	Being a former resident of Monroe County (Roch. area), group & their arguments. I also know many have built because of this fact. Erosion and/or devaluation isn't any property because of low water levels. We also need the tourism interests in the area.