

LEVELER

E-Newsletter from the Lake Ontario Riparian Alliance

Issue 8 May 3, 2012

**Grassroots Public Advocacy for the Protection, Restoration and Conservation
of Lake Ontario Beaches and Riparian Property**

In this issue:

Data – The Good, Bad and Ugly!

1. Appraisal of Storm Surge info posted by IJC
2. Review of Recreational Boating Reports
3. Review of BV7 vs. 2001-2011 actual water levels
4. New resolution from local government
5. Schedule of IJC Working Group Informational Meetings

Recently, the International Joint Commission posted the following on the LOSLR Study web page: ***IJC Information Note: Storm Surge and Wave Application in FEPS for Lake Ontario Water Level Analysis.***

After reading this new document, we would like to state our disagreement with its findings. It appears that the authors of the document based their calculations on a “typical” lake storm. In a previous LEVELER (LEVELER 7), we stated that our concern was for the rarer type of storm that is known to periodically occur on the lake, which, in conjunction with higher spring water levels, can lead to much greater damages.



**Figure 1 March 1973
Lake Level 247.14 ft**

In this new document, the authors state that the average storm surge for the Rochester and Oswego areas of the lake is 4.9 and 8.5 inches, respectively. For the storms that we as riparians are concerned about, other literature provides a better estimate on storm set-up for these two same areas, of 8.5 and 12 inches, respectively.¹

Regarding wave action, the IJC document goes on to state that wave action can only occur if the land surrounding building is inundated, thus supposedly not being a factor.

Anyone who has lived in proximity to the lake knows that a building can have wave damage without inundation of surrounding property. Ask anyone who was around in 1973, 1987, 1993 or 1997.



**Figure 2 March 1973
Lake Level 247.14**



**Figure 3 April 1993
Lake Level 247.4 ft**



**Figure 4 March 1973
Lake Level 247.4**

¹ Keillor, J. Philip, (1998), Coastal Processes Manual, 2nd edition, Sea Grant, Univ. of Wisconsin.

Before we get into a review of the Recreational Boating Reports that are listed on the IJC's BV7 website, let's begin with a scenario:

Imagine that you are sitting at home and the telephone rings. You answer it and speak with someone who is conducting a phone survey. The questions are:

- 1) Would you like to be paid more money for the amount of work you currently do?
- 2) Would you like to pay less in taxes on this money?
- 3) Would you like to win the lottery?
- 4) Would you like to retire and have enough money to live out the rest of your life without any concerns?

If you answered Yes to the above questions, you have just participated in a survey very similar to the one conducted by the Recreational Boating and Tourism Technical Working Group (TWG) of the Lake Ontario St. Lawrence River Study (LOSL) (2000-2005).

There are a number of concerns about the Recreational Boating TWG's findings.

This TWG started their evaluation with an unproved and unfounded assumption. That assumption was that damages to recreational boating begin when water levels fall below 247 feet on Lake Ontario². Through use of subjective telephone surveys, which this TWG admitted might have bias, this TWG produced data to verify this faulty assumption.

In these subjective surveys, a key question that could have been asked, was not asked. This question was the responding boater's willingness to pay more if fuel costs escalated as they have in recent years.³ The Recreational Boating TWG used anecdotal reports from the 1970s, when boat size was generally less than the present-day size of recreational boats.⁴ The authors of this newsletter have contacted a number of marinas on the South Shore of Lake Ontario, many with deep-water access, and have found that the increased cost for gasoline and other petroleum-based fuels has had a greater negative effect on boater use than the below-average water levels. The effect has been a 10 to 15 % decrease in recreational boating activities.

Additionally, according to the LOSL data, if the assumption that all recreational boating damages begin when levels fall below 247 feet, then all plans proposed or evaluated cause damages to recreational boating 95 to 98% of the time.⁵

The Recreational Boating TWG had other assumptions that were not scientifically tested but deduced. In its words, "We do not have independent data from a year of high or low water to test this assumption (although other factors also affect participation). Thus, we have to examine the assumption deductively."⁶

The TWG admits that its data might have a number of other possible biased assumptions built into it. The hypothetical nature of the estimate of additional days raises the possibility that boaters would not have gone boating on all of those days.

Other types of bias might have affected their answers. "One would be response bias: respondents to the survey might have been more active boaters (boating more days) than non-respondents. We found this to be the case when we compared respondents, and non-respondents answers to a screening interview question regarding days boated thus far in 2002."

The third type of bias is memory-recall bias. "Respondents could have trouble recalling exactly how many days they had boated each month in 2002 by the fall of that year. Past research has shown a general trend toward overestimation of

² *Options for Managing Lake Ontario and St. Lawrence River Water Levels and Flows, Annexes to Final Report, 2006, page 40.*

³ *Buffalo News August 12, 2006, John F. Bonfatti, Many Boat's Few Waves*

⁴ *Options for Managing Lake Ontario and St. Lawrence River Water Levels and Flows, Annexes to Final Report, 2006, page 52*

⁵ *LOSL Boardroom Niagara Falls Version, Levels Distribution page*

⁶ *Options for Managing Lake Ontario and St. Lawrence River Water Levels and Flows, Annexes to Final Report, 2006, page 49*

participation (Connelly et al., 2000). Although we tried to minimize this bias by sending out the questionnaires as soon as possible after the end of the boating season, we believe there is likely some overestimation.”⁷

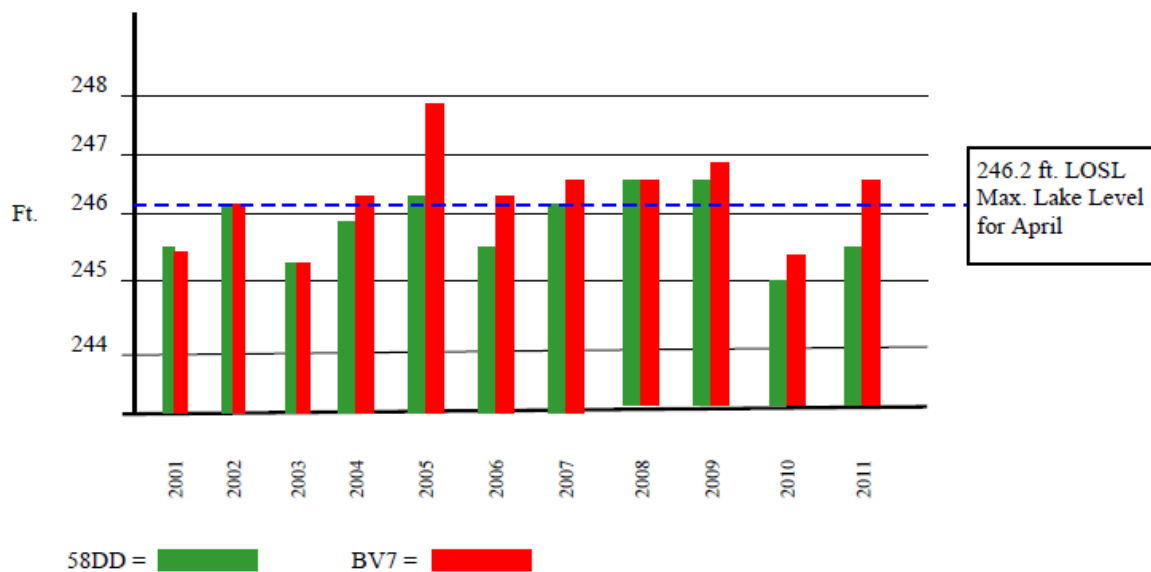
Review of BV7 vs. 2001-2011 actual water levels

A recently posted bit of information on the LOSLR Study web-site includes 11 years of water level charts comparing plan BV7 to the current plan 58DD. While we observe that this data-set is small, there are a few disturbing findings.

Based on the limited data, we have found that the lake would be actually lower in the fall with BV7 than with the current plan approximately 27 % of the time. It would be higher than the current plan 73% of the time; however, when higher in fall, it would lead to higher spring levels, many of which we consider danger levels.

In 8 of the 11 years (72% of the time), BV7 would be equal to or above 58DD, and above 246 feet in April. In 6 of 11 years (55% of the time) BV7 would be significantly higher (4+ inches) with a range of 4 to 9.8 inches higher.

Of particular note, during May 2011, there was a strong Northeastern gale. We have a photo history of problems that did occur at this time under the current regimen. We extrapolate that the damages would have been more significant if BV7 had been implemented at that time and that the lake would have been closer to 8 inches higher than with 58DD.



One last note on the comparison of the two plans: while the posted information is only 11 years of data, the summer high water peak for **Plan 58DD** had **3 of 11** years above **247 feet**, whereas **BV7** would have had **5 of 11** years above **247 feet** and one of these years would have included a mid-summer peak above **248 feet**.

⁷ *Options for Managing Lake Ontario and St. Lawrence River Water Levels and Flows, Annexes to Final Report, 2006, page 50.*

Recently received Resolutions



TOWN OF HAMLIN

Supervisor's Office

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Excerpt from Hamlin Town Board Meeting November 14, 2011

Resolution # 212 Motion was made by Councilperson Rath, seconded dually by Councilmen Rose and Goodrich, requesting Town Board resolution regarding the International Joint Commission for approval of the following:

WHEREAS, the International Joint Commission (IJC) has a proposal to increase the average long term level of Lake Ontario to "248 plus", thereby effectively increasing the water level by a minimum of one foot, and

WHEREAS, the Town Board was requested by certain lakeshore residents to review this proposal, and

WHEREAS, the Town Board heretofore referred the matter to Hamlin's Conservation Board for its review, and

WHEREAS, the Conservation Board has completed its review of the proposal and has submitted a report to the Town Board, and

WHEREAS, the said report contained the following comments, recommendations and conclusions:

1. The Town of Hamlin has an LWRP, developed in conjunction with and sanctioned by the State of New York, which guides how the town facilitates and manages stewardship of the ten miles of shoreline (and tributaries) located within the town.
2. Members of the Conservation Board scrutinized the list of LWRP Policies and, by consensus, conclude that the following policies would be adversely affected by the IJC Proposal: 2A, 5A, 7A, 7B, 11, 12, 13, 14, 18, 25, 33, 33A and 44. These specific policies are itemized on Schedule A to this Resolution.
3. Increasing the water level would have a potential negative impact on the diversity and purity of Yanty Marsh, the parks and beaches that dot the south shoreline of Lake Ontario and specifically Hamlin Beach State Park. The proposal would threaten the effectiveness and functionality of the 40 plus septic systems within the boundaries of the park, resulting in a serious reduction in the number of visitors to the park.
4. The effectiveness and functionality of many of the individual waste water systems that shoreline homeowners have is questionable. It is imperative that such waste water system function as efficiently as possible because a municipal sanitary sewer system is not available to these shoreline homeowners. A higher water table would decrease the ability of the systems to function as designed.

NOW, BE IT RESOLVED, that the Town is opposed to the proposal of the IJC to raise the water level of Lake Ontario due to the adverse impact on the identified LWRP policies, the Hamlin Beach State Park, and on town residents who live along the lake, and be it further RESOLVED, that the Town Supervisor forward a copy of this Resolution to the IJC.

Polled Votes: Councilperson Breslawski aye, Councilperson Goodrich aye, Councilperson Rath aye,
Councilperson Rose aye, Supervisor Terry aye. Motion carried.

Schedule A

POLICY 2A – ENCOURAGE ACQUISITION OR EASEMENTS OF SIGNIFICANT WATERFRONT PARCELS THAT ARE SUITABLE FOR DEVELOPMENT OF WATER-DEPENDENT AND WATER-ENHANCED USES.

POLICY 5A – ENSURE THAT ALL DEVELOPMENT MEETS OR EXCEEDS STATE OF NEW YORK, COUNTY OF MONROE AND TOWN OF HAMLIN CODES CONCERNING MUNICIPAL WATER AND SANITARY SEWER SYSTEMS.

POLICY 7 – SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS, AS IDENTIFIED ON THE COASTAL AREA MAP, WILL BE PROTECTED, PRESERVED AND WHERE PRACTICAL, RESTORED SO AS TO MAINTAIN THEIR VIABILITY AS HABITATS.

POLICY 7A – THE SANDY CREEK HABITAT SHALL BE PROTECTED, PRESERVED AND, WHERE PRACTICAL, RESTORED SO AS TO MAINTAIN ITS VIABILITY AS A HABITAT.

POLICY 7B – YANTY CREEK MARSH AS A LOCALLY SIGNIFICANT HABITAT AND SHALL BE PROTECTED, PRESERVED AND, WHERE PRACTICAL, RESTORED SO AS TO MAINTAIN ITS VIABILITY AS A HABITAT.

POLICY 11 – BUILDINGS AND OTHER STRUCTURES WILL BE SITED IN THE COASTAL AREA SO AS TO MINIMIZE DAMAGE TO PROPERTY AND ENDANGERING OF HUMAN LIVES CAUSED BY FLOODING AND EROSION.

POLICY 12 - ACTIVITIES OR DEVELOPMENTS IN THE COASTAL AREA WILL BE UNDERTAKEN SO AS TO MINIMIZE DAMAGE TO NATURAL RESOURCES AND PROPERTY FROM FLOODING AND EROSION BY PROTECTING NATURAL PROTECTIVE FEATURES, INCLUDING BEACHES, DUNES, BARRIER ISLANDS AND BLUFFS, PRIMAARY DUNES WILL BE PROTECTED FROM ALL ENCROACHMENT THAT COULD IMPAIR THEIR NATURAL PROTECTIVE CAPACITY.

POLICY 13 – THE CONSTRUCTION OR RECONSTRUCTION OF EROSION STRUCTURES SHALL BE UNDERTAKEN ONLY IF THEY HAVE A REASONABLE PROBABILITY OF CONTROLLING EROSION FOR AT LEAST THIRTY YEARS AS DEMONSTRATED IN DESIGN AND CONSTRUCTION STANDARDS/OR ASSURED MAINTENANCE OR REPLACEMENT PROGRAMS.

POLCY 14 – ACTIVITIES AND DEVELOPMENT, INCLUDING THE CONSTRUCTION OR RECONSTRUCTION OF EROSION PROTECTION STRUCTURES, SHALL BE UNDERTAKEN SO THAT THERE WILL BE NO MEASURABLE INCREASE IN EROSION OR FLOODING AT THE SITE OF SUCH ACTIVITIES OR DEVELOPMENT, OR AT OTHER LOCATIONS.

POLICY 18 – TO SAFEGUARD THE VITAL ECONOMIC, SOCIAL AND ENVIRONMENTAL INTERESTS OF THE STATE AND OF ITS CITIZENS, PROPOSED MAJOR ACTIONS IN THE COASTAL AREA MUST GIVE FULL CONSIDERATION TO THOSE INTERESTS, AND TO THE SAFEGUARDS WHICH THE STATE HAS ESTABLISHED TO PROTECT VALUABLE RESOURCE AREAS.

POLICY 25 – PROTECT, RESTORE OR ENHANCE NATURAL AND MAN-MADE RESOURCES WHICH ARE NOT IDENTIFIED AS BEING OF STATEWIDE SIGNIFICIANCE, BUT WHICH CONTRIBUTE TO THE OVERALL SCENIC QUALTIY OF THE COASTAL AREA.

POLICY 33 – BEST MANAGEMENT PRACTICES WILL BE USED TO ENSURE THE CONTROL OF STORM WATER RUNOFF AND COMBINED SEWER OVERFLOWS DRAINING INTO THE COASTAL WATERS.

POLICY 33A – MAINTAIN AND IMPROVE EXISTING DRAINAGE SYSTEMS SERVING THE LAKE ONTARIO STATE PARKWAY AND ADJACENT LANDS

POLICIES 44 – PRESERVE AND PROTECT TIDAL AND FRESHWATER WETLANDS AND PRESERVE THE BENEFITS DERIVED FROM THESE AREAS.

Upcoming Public Information Meetings by IJC Working Group

At the public information sessions, presentations by IJC staff and technical experts will be followed by questions and comments from the audience. Participants are asked to limit prepared comments to two minutes so as many as possible have an opportunity to speak. Written comments and other documents may be submitted at the sessions or [online](#).

Thank you!

<p>Tuesday, May 29, 2012 Massena, New York 7:00 PM Louisville Volunteer Fire Department 14818 State Highway 37</p>	<p>Wednesday, May 30, 2012 Clayton, New York 7:00 PM Clayton Opera House 405 Riverside Drive</p>	<p>Thursday, May 31, 2012 Oswego, New York 7:00 PM Campus Center Auditorium SUNY Oswego, 7060 Route 104</p>
<p>Tuesday, June 5, 2012 Olcott, New York 7:00 PM Olcott Fire Company 1691 Lockport-Olcott Road</p>	<p>Wednesday, June 6, 2012 Hilton, New York 7:00 PM Quest Elementary School Auditorium 225 West Avenue</p>	<p>Thursday, June 7, 2012 Williamson, New York 7:00 PM Williamson High School Auditorium 5891 Route 21</p>

IJC Public Hearings

Before making a decision, the IJC will hold formal public hearings on a proposal that will include a revised order of approval, regulation plan, adaptive management plan and a governance structure. Comments received by June 15, 2012 will be considered in developing the proposal. The schedule for this round of public hearings has not been set.
