

LEVELER

E-Newsletter from the Lake Ontario Riparian Alliance

Issue 7 March 11, 2012

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

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We would like to thank Congresswoman Ann Marie Buerkle for taking the lead in protecting not only her constituents but also many others along the south shore. Below are notes from the Congresswoman's meeting with IJC Commissioners Pollack and Glance. They are published with the permission of the Congresswoman. The IJC's answers noted are printed here to advance public awareness. In including them, we do not suggest that the points made by the IJC are necessarily accurate or true.

International Joint Commission Meeting Notes:

Date: February 29, 2012; 2:30 – 4:00 p.m.

Participants: Rep. Buerkle, Commission Chairwoman Pollack, Commissioner Glance, Mr. Frank Bevacqua, Mr. Timothy Drumm (Buerkle), Mr. Matthew Satterley (Buerkle), Mrs. Deborah Essley (Buerkle)

Subject: The International Joint Commission (IJC) – Proposed Plan BV7

Notes:

2:30 – 2:45 Commissioner Pollack provided background regarding the IJC charter, organizational structure, responsibilities, decision-making processes.

2:45 – 3:10 Questions:

Rep. Buerkle: What auspices do you fall under?

Chair Pollack: Department of State (DoS) however the IJC "serves without instruction" administratively from the DoS.

Rep. Buerkle: What is your budget?

Chair Pollack: \$8M annually from the United States, as well as \$8M annually from Canada. IJC has three staffed offices one in Washington DC, Ottawa and Windsor. Further, IJC has received on the order of around \$15M to conduct a study on Lake Ontario with much of the work being contracted out.

Commissioner Glance: Before we get too far, I will provide background regarding the process the IJC will be using moving forward as BV7 is considered.

- Public information meetings have been moved from March to May and June to better accommodate Riparians and other stakeholders. Meeting sites have been set for Olcott, Greece, Williamson, Oswego, Clayton, and Massena. Five meetings will also be conducted on the Canadian side.

- There will be six formal Public Hearing set to start in late August, times and locations to follow.
- There is no internal suspension date for final IJC determination of Plan BV7 however, IJC would like to finalize by year's end.

D. Essley: Who has ultimate authority to approve the new orders?

Chair Pollack: IJC goes through the Canada desk at the DoS. There is an additional interagency process that is chaired by DoS. On the Canadian side, it is the Dept. of Foreign Affairs.

3:10 – 4:00 Briefing Slide Presentation by Mr. Bevacqua (See attached) with Discussion

T. Drumm: What Modeling & Simulation programs did you use to run your models and what were the underlying assumptions?

F. Bevacqua: Not certain.

T. Drumm: How did the M&S used compare to industry standards?

F. Bevacqua: Not certain but believe the programs used were cutting edge.

D. Essley: Were wind and wave action taken into consideration during lake level analysis?

F. Bevacqua: No. **(editor's note: please see next section for explanation of these effects)**

D. Essley: So in fact the water levels stated in the study would actually be higher than reported as a result of wind and waves.

F. Bevacqua: Correct.

Chair Pollack: It is estimated that \$28M is spent per year to protect shoreline property that is the entire shoreline, U.S. and Canada.

Rep. Buerkle: Who constructed the BV7 plan?

Chair Pollack: Both governments allocated funding and provided some direction to the Army Corps and the IJC to address environmental concerns/problems that are not considered under the current order. This resulted in the 2007 plan which was a deviation of the D plan. The environmental benefits of the plan have a substantial impact to 64,000 acres of wetland, but not necessarily new wet lands.

Rep. Buerkle: What was the "problem" you are trying to solve?

F. Bevacqua: All the stakeholders (rec boaters, shoreline owners, fisherman, etc.) stated the lake water management plan was unacceptable.

T. Drumm: When developing your plan, what specific areas were you willing to take more risk in (i.e shoreline impact, economic impact)?

F. Bevacqua: Under our charter, we have to take all risks and concerns into consideration.

T. Drumm: Was there any concern regarding national security impacts vis-à-vis Ginna power plant.

F. Bevacqua: No. There has been very little concerned raised from that aspect.

D. Essley: Was the organic comeback of the wetlands reexamined?

F. Bevacqua: No. There is no expectation of a measurable organic comeback.

Rep. Buerkle: How was the economic analysis based? Why would you compare to 1950 levels that didn't include a dam structure? That isn't a plausible scenario because the dam exists.

Chair Pollack: The language in the treaty forces the IJC to look back to pre-dam levels.

D. Essley: In looking at the list of the Working Group Participants I see many environmental agencies at the table. Who was there to represent the Riparian's interests?

F. Bevacqua: There were none.

T. Drumm: Who specifically did the contract work? What company?

F. Bevacqua: Baird & Associates along with select government entities from the U.S. and Canada.

Rep. Buerkle: Back to the economic analysis. Why weren't the secondary and tertiary effects taken into consideration? Why just the direct impact?

F. Bevacqua: Because they were difficult to measure and that isn't how the analysis was structured.

D. Essley: Were municipalities and infrastructure such as sewers and storm drains taken into consideration?

F. Bevacqua: Roads and buildings were.

M. Satterley: How did those crafting the policy account for the amount of 'accepted' degradation to the shore line with regard to needed benefit and improvement in the wetland?

Chair Pollack: It is a consideration, as you said, that is very hard to measure. It's a realistic consideration that we hope will become more evident throughout the public hearing processes.

Rep. Buerkle & Chair Pollack discussion on climate change and how much influenced environmental.

Chair Pollack ended the meeting wanting to assure Rep. Buerkle and staff that no decision has been made or will be made until after public input is complete at which time the six commissioners will meet exclusively to discuss all options.

Lake level probabilities

In a previous issue, we posted information that was based on the former Lake Ontario - St Lawrence River Study (2000-2005). Recently we have received updated information from the IJC to a question. The question was: What is the probability that Lake Ontario would be above 247 in the spring months of the year?

Below is a chart with the new information. As you can see Plan BV7 is only slightly better than the previously proposed Plan B+, and is almost 3 times as bad as the current plan.

Plan	Amt. of time above 247.0 ft during spring months (March - May)		
Modeled 58DD	 2.8%		
Plan B+	 8%		
Plan BV7	 7.8%		

In the notes from Congresswoman Buerkle, there is mention that wind and wave action were **not** taken into consideration during the lake-level analysis.

Effect of storm set-up on lake levels

When the south shore experiences a storm, particularly a northeastern storm, and the winds are blowing out of the north or northeast, these winds can drive the lake to the south and have a net effect of raising the water level more than flat water conditions. Along the south shore this could range from 9 inches at Rochester to over 21 inches along the eastern shore.

We have been told that although the frequency of BV7 reaching its maximum level of 248.5 feet is remote, it is 800% more likely than under the current plan. If we were to get a storm while at this maximum level, we could see the lake rise above 250 feet!

Additionally, the type of shore protection can have a wave run-up of 2-3 ft.

Example:

Estimating Storm Water Level and Wave Run-up Elevation on a house on Edgemere Drive, Rochester, NY.

Step 1: Determine highest predicted lake level

With plan BV7, the predicted highest lake level is 248.5 ft (chart datum= 243.4 ft)

Step 2: Determine storm surge

For Rochester area, the range is from .7 ft to 1.4 ft.

Step 3: Select an appropriate minimum wave run-up value.

For a vertical wall shore protection, the value is 3 ft.

Step 4: Estimate wave run-up elevation

Highest still water level (Step 1)	5.1 ft above chart datum	5.1 ft
Typical storm surge (Step 2)	0.7ft	1.4ft
Minimum wave run-up (Step 3)	3.0	3.0 ft
Lake Ontario elevation	<u>243.4</u> ft above NAVD 1988	<u>243.4</u> ft
Estimated wave run-up elevation	= 252.2 ft	252.9 ft

Step 5: Compare the wave run-up elevation with a building site elevation

Building site ground elevation	251.0 ft	251.0 ft
Wave run-up elevation	<u>252.1</u> ft	<u>252.9</u> ft
Difference	= -1.2 ft	-1.9 ft

Answer: the land surrounding the home is 1.2 ft (14.4 inches) to 1.9 ft (22.8 inches) inundated.¹

Analogy for those who have not lived on lake during a storm when the water level is high as may occur with BV7:

Imagine you have a bowl of soup sitting on the table. If you tip it, the soup it shifts to one side. This is what happens with storm surge. Now if you blow air across the surface of the soup, it will create waves, in a very minor scale, which is what happens with wave run-up.

Corrections and Clarifications

In a previous issue we stated:

"In the 1950's when the Moses-Saunders Dam and the St. Lawrence Seaway was initially proposed, the US and Canadian governments established a social contract with the shoreline property owners of Lake Ontario as a means to have the moneys appropriated for construction. This contract established that the levels of the lake would be controlled to reduce to the extent possible, flooding conditions that occurred earlier in the 1950's. The 1956 Orders and Criteria, and later amended as 58D, were written to state this contract."²

At this time, we do have documentation that the IJC and Governments promised to reduce the extent of flooding on Lake Ontario. However, we have not been able to find documentation relating to the US Government appropriation of money for the project. We continued to review congressional records to verify the statement.

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

² <http://www.ijc.org/en/activities/losl/documents/LOSL-June-25-52.pdf>