



Save The River

Upper St. Lawrence **RIVERKEEPER**[®]

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FACT SHEET

Water Levels Regulation on the St. Lawrence River

Since the completion of the Moses-Saunders hydropower dam nearly 50 years ago, the ecosystem of the St. Lawrence River has suffered consistent losses to its globally significant biodiversity due to unnatural and damaging water levels regulation. Since the dam was completed, water levels have been artificially constrained causing a loss of biodiversity in coastal wetlands and significant impacts to many fish species and nesting water birds.

Water levels and flows through the dam are regulated by the International Joint Commission (IJC) – a bi-national organization established by the Boundary Waters Treaty of 1909 – to benefit a few special interests such as commercial navigation and hydropower. Since environmental considerations were not part of the planning in the 1950's, the needs of the natural environment are completely left out of the current regulation plan. As a result, the plan does not allow for the natural variability that is essential for a healthy River, but instead significantly limits the range of water level fluctuations.

As a result of this unnatural water level management, the St. Lawrence River is experiencing significant losses to the biodiversity of coastal wetlands. Limited water level fluctuation has reduced the diversity of plant species in River wetlands, which in turn, has impacted population levels of many fish and other wildlife that depend upon these communities.

In 2000, the IJC commissioned a 5-year, \$20+ million study to develop a new regulation plan that incorporates the needs of the River environment for the first time^[1]. The study's final report, which included research from more than 180 scientists throughout the U.S. and Canada, outlined many of the impacts of the current management plan. A few examples of the study board's findings:

- The study reports significant reductions in coastal wetland diversity along the St. Lawrence including a "...50% reduction in meadow-marsh and emergent floating vegetation since regulation was implemented in the late 1950s."
- The study reports that River wetlands are breeding and feeding grounds for many animal species including several species at risk.
- Study board members note that more varied water levels have a direct positive impact on the breeding and nesting success of the many bird and fish species that use marsh areas.

The report concludes:

"Water level regulation has reduced the variety of plant species along the coast, which creates stresses on animal populations that thrive on plant types that suffer under regulated water levels. In general a more diverse environment will better resist from the two greatest environmental threats in the Great Lakes: toxics and invasive species."

After thorough scientific review and public consultation, the study board identified several options for revising the old regulation plan. One proposed option, Plan B+, includes many positive elements that would finally reverse the trend of discounting the environment, and provide some significant environmental benefits for the River. This new plan identifies a clear way forward that would, for

the first time in 50 years, take the River environment into consideration when regulating the St. Lawrence River, and would help “tip the scale” for the River making for a healthier system that can be more resilient to other ecosystem stressors.

For the first time in 50 years, the IJC has a rare opportunity to reduce the ecological impacts of unnatural water levels management on the St. Lawrence River. Plan B+ will allow for more natural variability in water levels along the River which will have a significant and direct positive influence on fish spawning and nursery grounds in coastal wetlands and, in turn, create a River ecosystem that is able to thrive.

Plan B+ has been endorsed by a majority of the study board members as well as numerous federal and state agencies, including US Fish and Wildlife Service and the New York State Department of Environmental Conservation. Additionally, Plan B+ received strong support from regional and national conservation organizations such as Save The River, The Nature Conservancy, Ducks Unlimited, Audubon NY, and many more. This plan has also received broad public support throughout the region from citizens and elected officials.

However, despite this clear path forward, the IJC is shying away from making the environmentally responsible choice. Save The River learned that this fall that the IJC was poised to announce a hybrid plan that did nothing to ameliorate historic ecosystem damages, and would have worsened ecological damages to the River. While it is good news that the decision was delayed, the IJC’s deliberations are currently a black box. The timeline for an announcement from the IJC is uncertain but it is anticipated sometime in spring or summer 2008.

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Save The River is a non-profit, member-based environmental organization whose mission is to preserve and protect the ecological integrity of the Upper St. Lawrence River through advocacy, education and research.

^[1] International Lake Ontario-St. Lawrence River Study Board. Final Report by the International Lake Ontario – St. Lawrence River Study Board to the International Joint Commission. Annexes: Options for Managing Lake Ontario and St. Lawrence River Water Levels and Flows. International Joint Commission, Washington, DC. March 2006. Available on-line at www.losl.org.