

Lake Ontario Committee

Renaissance Fallsview Hotel
Niagara Falls, ON
March 29-30, 2005

Executive Summary

Members

Rob McGregor (OMNR) Chair, Steve LaPan (NYSDEC) Vice-Chair, Leon Carl (USGS), Gavin Christie (GLFC), John Casselman (OMNR), Bill Culligan (NYSDEC), Marc Gaden (GLFC), Jim Johnson (MI DNR) Chuck Krueger (GLFC), Denny Lavis (USFWS), Dave McLeish (OMNR), Alastair Mathers (OMNR), Bruce Morrison (OMNR), Kurt Newman (MI DNR), Bob O’Gorman (USGS), Paul Sullivan (DFO).

1. Status of Sea Lamprey in Lake Ontario (handout)

Christie asked the LOC to provide input on the status and abundance of sea lamprey in Lake Ontario, short-term and long-term control plans, and any other concerns the LOC has in regard to sea lamprey. Sullivan gave a synopsis of current sea lamprey status in Lake Ontario. Through the 1990s sea lamprey were adequately controlled, but in 2004 there was a significant increase in spawner abundance. This increase is disconcerting because these animals are the ones who inflict the wounding the previous year and 2003 had the lowest marking rates in history. Thus there is a disconnect between the spawner numbers and the wounding. In 2004, two streams were re-treated that had residual lampreys. In 2005, three more streams will be treated for residual lamprey populations. Post-treatment assessments are underway to identify any more residual populations. Sullivan does not expect to see a long-term increase in abundance and anticipates a decline soon.

Morrison asked what the relationship was between sea lamprey abundance, wounding, and lake trout mortality. Christie replied that he was unsure, but that it was something he intends to further investigate to make sure they have a good representation of lake trout wounding in relation to spawner abundance. Abundance of lake trout is down, and it seems as though lamprey wounding is occurring on different fish. O’Gorman thinks that Chinooks are more plentiful than originally thought. Therefore, they are hungry and moving around in the lake more, and thus, encountering more lamprey. MacGregor asked Christie if the up-tick in wounding should be of concern to the LOC. Christie replied that they must stay vigilant and check on residual populations from treatments in 2001 and 2002 to make sure the up-tick is not an upward trend. LaPan remarked that the GLFC had decided in the past to cut back on TFM applications (for environmental and monetary reasons), but with the discovery of residual populations it seems that re-treating areas might be more expensive than doing a higher concentration initial treatment. Christie informed the LOC that he doesn’t have a strong idea what the cost-effectiveness difference is between post-treatments and higher initial levels of TFM. MacGregor asked if the Niagara River was being assessed. Sullivan answered that the habitat will be looked at first, and then larval and transformer assessments will be done in 2007.

2. Update on American Eel

Mathers reminded the LOC that last spring, when OMNR closed their commercial eel fishery, one of the commitments OMNR made was to work with hydro power facilities to reduce eel mortality. Rob MacGregor and Serge Tremblay from Quebec co-chaired a workshop in February 2005 with the objective of identifying methods to reduce downstream mortality. Mathers spoke with the GLFC to potentially put the presentation materials, abstracts of the research papers, and the summary from ESSA (the facilitators of the workshop) on their website. Newman asked if EPRI was invited to the workshop. Mathers replied that Doug Dixen was not able to attend, but Bill Richkis attended and provided summaries of current and past relevant work. Quebec Hydro, Ontario Power Generation (OPG) and New York Power Authority (NYPA) were the power authorities in attendance at the workshop. Newman asked about louvers, and MacGregor responded that it was a difficult topic as the hydro facilities won't spill any water (all of it has to go through the turbines) unless a boat comes through. Ontario asked them to cut the turbines and the hydro authorities quoted large amounts of money that it would cost them to do so. Fish friendly turbines as long term solutions were discussed at the workshop and there were many presentations on them. However, OPG just finished replacing their turbines and NYPA is starting now. It will be another 40 years before they will need to be replaced again. A short term solution looked at was trap and transfer. A decision analysis approach will be used to assess the cost and effectiveness of this approach. The hydro facilities are concerned about the potential listing of the American eel in the Endangered Species Act. The passage workshop was the initial step in eel management, followed by installing a fish counter, enhancing the current eel ladder, adapting the management program, and eel stocking. MacGregor feels that stocking (500,000 and 1 million are being stocked in Quebec) is just a band-aid, as these stocked fish still have to pass through the turbines at the hydro facilities, at approximately 45% mortality rate. However, stocking (and tagging) will track the eels and help managers learn about their migration, behavior, and population dynamics.

MacGregor pointed out that neither the commercial fisherman nor the hydro facilities take the blame for the reduction in American eel numbers, and point the blame at each other. Ideally, OMNR would like to see an eel management plan in place in a year. The scope of the plan should include the St Lawrence River and Lake Ontario. However, there isn't one body or agency that could organize and oversee all the jurisdictions in the plan area.

3. Allegheny National Fish Hatchery

Archambault announced that in light of budget cuts, ANFH only received a slight budget increase for 2005, and 2006's budget is not going to receive more. He said representatives from AHFH met with people on the Hill, received some positive responses and thinks there will be a request from the House to get more money for ANFH's infrastructure needs. The contract with Pennsylvania Fish and Boat Commission is renewed annually in the fall and they still have room at ANFH to raise their 100,000 fish.

4. Disease Issues: Baitfish, Deepwater Ciscoes

Morrison informed the LOC that Rob Penny of OMNR lead a fish health backed study on microsporidian and the risks regarding transfer of the disease. The main avenues for disease transfer in Lake Ontario are fish eating birds, boats, and water ways. Baitfish is a large industry that is regulated, but not assessed as well as it should be. The volumes of fish used in the baitfish

industry are not known, nor is where they go and if they have diseases such as heterosporis. Christie asked Morrison about the number of ships that come through Lake Ontario with ballast water. Morrison replied that there are only two that come for a cement plant, but they can't regulate them until they know more about the transfer of diseases in the baitfish industry. Morrison reminded the committee that heterosporis is just the poster disease, and there could be a larger picture for disease problems. So far, the fish they have studied were without any clinical signs and are not sure if these fish will ever show clinical signs of the disease.

Morrison reported that they were not able to collect any deepwater cisco gametes from Lake Superior for the broodstock this past year. The Fish Health Committee has requested to be shown that the fish raised from the deepwater cisco gametes are disease-free. They plan on collecting gametes now through early next year, as they don't all spawn at one time. They will contract with CORA to start the collecting. NYSDEC was planning on doing all the disease testing.

5. CAP proposals: EO's, Great Lakes Cormorant Research

LaPan announced that NYSDEC was contemplating submitting a CAP proposal to bring in experts with experience with research, and to take the quality of science in the EO's up to a higher standard.

McLeish stated that he had spoken with OMNR regarding Cormorant Research and they suggested using the International Fisheries Association. LaPan wanted to make sure there was still support for Cormorant research and potential control, and reminded everyone that this should be beyond the Great Lakes basin in order to be most effective.

