

Meeting Minutes
Lake Champlain Fish and Wildlife Management Cooperative
Policy Committee Meeting

New York State Department of Environmental Conservation
625 Broadway Albany, New York
Date: August 12, 2014

Introductions, announcements

U.S. Fish and Wildlife Service Regional Director Wendi Weber welcomed Vermont Fish and Wildlife Department Commissioner Louis Porter, New York State DEC Fish, Wildlife and Marine Resources Director Patricia Riexinger, and managers and technical staff in attendance from the agencies, the Lake Champlain Basin Program, and the U.S. Department of Agriculture, Wildlife Services. See attached list of participants. The New York State DEC was assigned to prepare the meeting minutes.

Brief agency staff and budget updates

U.S. Fish and Wildlife Service (Service): Wendi noted that FWS is conducting an assessment of the fish hatchery system, identifying priorities for program outputs. Aquatic Invasive Species (AIS) are also an important issue at this time. Anticipates another continuing resolution, thus budget should be fairly stable for the upcoming fiscal year.

New York Department of Environmental Conservation (DEC): Patty indicated the 2014 budget was stable. She noted that Governor Cuomo is keenly interested in promoting outdoor recreation in New York, which has led to capital funds, \$4M in 2014 and the same amount anticipated in 2015, being made available for fish hatchery system infrastructure repairs. There is also an access initiative which will fund improvements at 50 sites across the state. Staffing is reduced substantially over levels from 6-7 years ago. Staff losses due to retirement were noted, as well as the ability to fill some of these vacancies. Patty announced that Doug Stang had been formally appointed as a Commissioner to the Great Lakes Fishery Commission, a significant and well deserved honor for Doug.

Vermont Fish and Wildlife Department (DFW): Louis stated that Vermont's budget was in relatively good shape, although there was a slight reduction in the agency's base budget. He and staff are currently going through a prioritization process to review use of existing resources.

USDA Wildlife Services

Martin Lowney announced that his agency has lost funding and positions, eliminating their ability to do cormorant management in New York. USDA Wildlife Services has cancelled cormorant management nationwide, except where states or others provide the necessary funding.

Sea Lamprey Control

Overview, budget and accomplishments

Brad Young (USFWS) discussed fall 2013 sea lamprey control treatments. Successful treatments were conducted in the Saranac and Lamoille rivers, though relatively few lamprey were present in the Lamoille. The Saranac River treatment utilized TFM and Niclosamide. Putnam Creek was treated but was not highly effective due to difficulties associated with high gradient, low flow, and high inputs of groundwater that serve to dilute the chemical block as it moves downstream. Stone Bridge Brook was also treated.

In fall 2014, plans are to treat the basin tributaries and deltas based on a geographic approach, beginning with the NY waters in the northern portion of the lake except for the Saranac River. Seven treatments are planned for the NY portion of the lake in 2014, and 1 in VT. Treatments will rotate around the basin in future years. This strategy will save both time and travel costs. When implemented over a period of years, this will have all lamprey in designated portions of the lake reaching transformation stage in the same year, which may maximize attraction of adults.

Brad reviewed the sea lamprey control program's budget, which currently depends on \$700,000 annually from the Great Lakes Fishery Commission (GLFC) to purchase lampricides and fund the added staff and operations costs incurred by USFWS leading the lamprey control program. Vermont Senator Patrick Leahy's active involvement in the budgeting process each year has ensured the funding since the program began. Current level funding should sustain the program through 2017. He noted that chemical costs have been reduced due to various efficiencies, including new formulations such as were used on the Saranac River. FWS staffing size and structure are currently adequate to support the program. For this fall's treatments, Brad indicated he'll need 4 biologists and 2 technicians from VT and 3 biologists and 2 technicians from NY.

Brad reported that the Morpion Weir was installed, and it operated successfully this spring. Total cost of this barrier was \$1.5 million. Trapping was successful and 134 adult lamprey were captured. There is good local support for the project and the role of the weir in helping to reduce lamprey spawning success and future predation. Town employees will actually run the trapping operation in future years, at a small annual cost of approximately \$12,000-\$15,000. A small amount of remedial work will be needed at one end of the weir/barrier.

2014 treatment/permit status

Brad reported that all permits required for NY treatments were in place. Still awaiting a permit (threatened /endangered species permit) from VT due to presence of listed mussel species.

Lake Champlain investigations in lamprey control

Ellen Marsden (University of Vermont) reported on 2 projects. One project is examining sea lamprey transformer out-migration, which typically starts in fall and can last through winter and early spring. A second is examining the feasibility of using electrical fields to guide transformers into traps at barriers. Both projects utilize funding that is separate from that used to fund the chemical treatment program.

Wounding rate assessment

Brian Chipman (Vermont DFW) presented sea lamprey wounding data from 2013. Sea lamprey wounding rates calculated for lake trout increased from 2012 and continue to exceed the target of 25 wounds per 100 fish. The lake trout wounding rate in 2013 was 54 wounds per 100 fish. Wounding rates for salmon in the main lake decreased slightly from 2012 and are very close to the target rate of 15 wounds per 100 fish. Wounding rates are higher for salmon in the Inland Sea and Mallets Bay, at 33 wounds per 100 fish.

Landlocked salmon investigations

Bill Ardren was unable to attend the meeting so Dave Tilton provided a brief summary of the ongoing research projects. The ongoing projects are identified in a handout provided by Dave entitled "Enhancing River-runs of Landlocked Atlantic Salmon in Lake Champlain" which will be attached to the final copy of the minutes. More detailed descriptions of the various studies were contained in the minutes of the 2013 Policy Committee meeting.

Invasive Species

Meg Modley, Lake Champlain Basin Program Invasive Species Coordinator, provided an update of the activities of the Lake Champlain Rapid Response Task Force. Spiny waterflea (SWF) continues to be a

concern. Sampling in southern portions of Lake Champlain has yet to detect SWF but Meg indicated “they are coming” via a hydrologic connection between the Hudson River and Lake Champlain basin. Overland transport via boating interests is also a spread mechanism of concern. As a visual predator, SWF are less likely to be highly successful in turbid portions of Lake Champlain (southern end) whereas they may be more successful in clearer portions of the main lake and in Mallets Bay. Potential impacts of SWF include reduced zooplankton diversity, food web effects, competition with native macroinvertebrates, and possible reduction in growth or reproductive rates in planktivorous fishes.

Meg also reported that a contract for a hydrologic barrier feasibility study was close to being finalized. Meg also reviewed a number of regulatory actions taken recently in VT and NY, an ongoing boat steward program, and various sampling programs underway in the Adirondacks. She re-emphasized the importance of addressing pathways or vectors as a primary strategy in combating AIS.

Fisheries

Fisheries Technical Committee Annual Report

Chet MacKenzie, Chair of the Fisheries Technical Committee, presented a brief overview of the Tech committee annual report for 2013. The Annual Report of the Fisheries Technical Committee provides a summary of fisheries activities in 2013. The Annual Report was distributed earlier in the year and interested readers may refer to that report and the authors of various sections of the report for more information. Some highlights of the 2013 report are as follows:

Salmonid stocking (MacKenzie)

Total stocking was 512,000 smolt equivalents, or 98% of target stocking policy numbers.

Walleye restoration (MacKenzie)

An intensive rearing culture program was developed at Ed Weed Fish Culture Station (FCS). VT personnel partner with the Lake Champlain Walleye Association, which rears walleye fingerlings in private ponds along the lake shore. Total stocking was 173,000 fry and 79,000 fingerlings, all into the Missisquoi Bay basin of the lake.

Research projects (MacKenzie)

Chet noted that research projects or reports for 2013 were directed at lamprey mortality, black bass post-tournament movements, work involving stonecats, and the aforementioned river run restoration of landlocked Atlantic salmon.

Smelt, alewife assessment (Chipman)

Bernie Pientka was unable to attend due to ongoing biological sampling work. Brian noted that alewife, rainbow smelt, white perch and cisco are the current forage species while historically rainbow smelt, cisco and Mysis were the dominant forage species. Various forage assessment and monitoring tools are currently used: mid-water trawls, hydroacoustic sampling, netting using floating gillnets, and water chemistry profiles. At present time alewife are generally abundant but rainbow smelt are not abundant. In the main lake smelt are primarily age 2+, with other year classes being weak and growth rates being reduced compared to the pre-alewife era. Brian noted that smelt are less abundant in the Mallets Bay-Northeast Arm portion of the lake as compared to numbers in the open lake. The fish community is still changing.

Salmonid assessment (Chipman)

Brian presented results of salmon and lake trout assessment surveys in 2013. Sampling sites included adult returns to fish passage facilities on the Winooski and Boquet rivers, electrofishing adult returns to Hatchery Brook, and nearshore electrofishing near the Grand Isle ferry landing, Willsboro and Whallon bays. Adult salmon returns to the Winooski (115 fish) increased considerably from 2012. Fifteen salmon were captured at the Boquet River fish ladder.

Nearshore sampling primarily captured lake trout, although the catches also included salmon, steelhead and brown trout. Brian noted that more large lake trout are surviving than previously. Sampling in Whallon Bay and Willsboro Bay yielded far fewer salmon than previously, despite increased sampling effort. Hatchery Brook netting and electrofishing produced large numbers of salmon (411 fish) and modest numbers of steelhead (11) and brown trout (21). As in 2012, larger salmon (> 640 mm) continued to be more prevalent than previously. Sampling in the Lamoille River produced 134 salmon, the largest number collected at that river since 1998.

Update on Early Mortality syndrome (EMS) Marsden

Ellen reported on her ongoing research into EMS. Eggs from feral lake trout have been collected since 2004. Many adult lake trout are spawning in the lake, and many fry emerge from spawning sites; however, very few of these successfully recruit to the population. Alewife are implicated in recruitment failures in other waters and for a variety of trout and salmon species. Eric Palmer pointed out that lake trout recruitment failure in Lake Champlain pre-dates the introduction of alewife to the lake. Ellen continues to pursue explanations for the near total recruitment failure.

Kevin Kelsey reported on the thiamine deficiency (EMS) in salmon at Ed Weed FCS. He has worked with George Ketola (USGS, now retired) previously examining dose, type of treatment, and life stage in an effort to optimize treatments and subsequent survival. Salmon fry are responding favorably to elevated thiamine treatments. Current protocol for egg treatment is disinfection in iodophor for the first 30 minutes of water hardening, then treatment with thiamine while water hardening continues.

Acoustic monitoring (Marsden)

Ellen reported that an acoustic receiver array network is being developed in Lake Champlain. This network will provide a platform for research into the movements of various species of fish in the lake. Similar approaches are underway in waters such as the Hudson River and Lake Erie. She indicated that soon there will be 24 receivers deployed around the lake. Current project focus is on the spawning movements on lake trout.

International affairs (Tilton)

Neither Pierre nor Steve from Quebec was able to attend the meeting, so Dave presented some information on American eel. Severe decline of eels over the past 4-5 decades has been reported. Ladders to facilitate passage of eel and other species at two dams on the Richelieu River in Quebec were installed in 1997 (Chambly Dam) and 2001 (St. Ours Dam). Night time electrofishing and PIT-tagging of eels to track their movements were described by Dave. One PIT-tagged eel was recaptured in 2014- the first such recap.

Brad Young noted that many eels are seen as part of the Service's lamprey control activities, and Chet MacKenzie also reported seeing a number of eels. A glass eel stocking program was conducted from 2005-2008, but the predominately large eels being reported are not believed to have originated from those stockings.

Wendi Weber pointed out that the USFWS is in the midst of a status review for American eel in response to a petition for listing the species as endangered or threatened. The Service will make a decision on listing (or not) American eel in September 2015. Webinars will be conducted this fall regarding eel status, and they will be directed in part for Fish chiefs in the Northeast.

Cormorant management on Lake Champlain (Lowney)

Martin reported that USDA/Wildlife Services is taking the lead on the development and public review of process for a federal Environmental Assessment (EA) on the management of double-crested cormorants and ring-billed gulls on Lake Champlain. In addition, a Colonial Waterbird Conservation Plan for Lake Champlain is also being prepared by an interstate/interagency technical group for public review. The EA and the Colonial Waterbird Conservation Plan will be released for public comment simultaneously, possibly this October.

There was discussion of the current density of cormorants on the lake, and current efforts under way to limit those numbers. Martin indicated there may be up to 70,000 cormorants on the lake, well beyond a tentative goal of 2-4 breeding pairs per square kilometer. Lethal control methods, egg oiling, and hazing have been employed on one or both sides of the lake (NY and VT). Martin and others noted a need to find a stable source of funding for cormorant control. Possibilities mentioned include: NY Conservation Fund and the environmental trust fund for the Champlain-Hudson Power Express Inc. power line project. There was uncertainty regarding whether or not the project's environmental trust fund could be used for cormorant control. Dave Tilton expressed concern that impacts to fish population or fisheries from cormorant depredation hasn't been adequately documented, if such impacts are to be used as one of the reasons for cormorant control on Lake Champlain. Existing data on population or fisheries impacts of cormorant depredation are inadequate.

(Post-meeting, DEC can report that there are 4 priority projects in the power line project's certificate conditions: fish habitat assessments; critical habitat restoration; AIS management; and development/implementation of fish population and recreational fisheries surveys. Initially, \$2.5 million will be available at closing for priority projects, possibly early next year. The next round of funding becomes available when construction starts, which may not be for another 3-4 years. A Trust Fund Governance Committee will review and determine specific projects to be funded. Bottom line: it may be a number of years before this fund would be able to consider and support cormorant management efforts.)

ACTION ITEM: Patty Riexinger and Louis Porter will coordinate efforts to seek a funding platform for long term cormorant management on Lake Champlain.

Future funding of lamprey control on Lake Champlain (Tilton)

As has been noted previously, needed funding has been dependent upon VT Senator Leahy securing an annual appropriation. A strategy or approach is needed to help ensure the continuity of the lamprey control program when the time comes that Senator Leahy is no longer serving in Congress. It should be noted that USFWS supports the current staffing level at a cost of about \$400,000 annually, and the base budget for USFWS needs to be able to support the permanent staff needed to oversee and conduct the program. Adequate funding to pay for lamprey control in Lake Champlain should be placed into the Great Lakes Fishery Commission budget, and this funding should not "compete" with funds needed to fulfill lamprey control needs in the Great Lakes.

Note: Chair of the Policy Committee rotates to NYS DEC next year, for a 2-year term.

Meeting adjourned at 3:00 PM EDT.

List of participants
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August 12, 2014
NYSDEC Central Office, Albany, New York

<u>Name</u>	<u>Affiliation</u>
Dave Tilton Wendi Weber Sherri White Brad Young	U.S. Fish and Wildlife Service
Gordon Batcheller Lance Durfey Phil Hulbert Shaun Keeler Ed Reed Patricia Riexinger Doug Stang	New York State DEC, Division of Fish, Wildlife, and Marine Resources
Brian Chipman Shawn Good Kevin Kelsey Chet MacKenzie Adam Miller Eric Palmer Louis Porter	Vermont Fish and Wildlife Department
Meg Modley	Lake Champlain Basin Program
Martin Lowney	U.S. Department of Agriculture, Wildlife Services
Ellen Marsden	University of Vermont