

Lake Champlain Fish and Wildlife Management Cooperative Policy Committee Meeting Minutes

Date: August 22, 2018

Time: 10:00 a.m. – 3:10 p.m.

Location: Marsh-Billings-Rockefeller National Historic Park, Woodstock, VT

Attendees

VTFWD: Louis Porter, Eric Palmer, Adam Miller, Chet Mackenzie, Bernie Pientka, Brian Chipman, Shawn Good

NYSDEC: Tony Wilkinson, Lance Durfey, Steve Hurst

USFWS: Wendi Weber, Sherry White, Bill Ardren, Steve Smith, Brad Young, B.J. Allaire, Chris Smith, Andrew Milliken, Daniel Wong, Nick Staats,

LCBP: Meg Modley

Senator Leahy's Office: Tom Berry

USDA-APHIS: Fred Pogmore, David Allaben

UVM: Ellen Marsden

1. Meeting convened at 10:00 AM
 - a. Christina Marts gave a presentation on the Marsh Billings National Park and the Forest Center
2. Minutes – taken by Lance Durfey, NYSDEC
3. Last meeting minutes (August 28, 2017) approved – no changes.
4. Agency Announcements and Budget Updates –
 - a. Louis Porter: tough budget year starting next July
 - b. Wendi Webber: FY18 – flat; FY17 – slight increase; FY19 – decrease anticipated; thank you to Tom Berry for Senator Leahy's support for Lake Champlain sea lamprey control. Louis: also, thanks to the Senator for his support re: Lake Memphremagog.
 - c. Tony Wilkinson: NYSDEC budget is flat. Hatchery staffing is a priority; there has been a substantial investment in hatchery infrastructure; hatchery/water flow alarm system installation underway; an anticipated green initiative may bring in additional funding. Steve Hurst: we are partnering with SUNY Cobleskill to assess hatchery innovation and will pay for a shared position; thanks to VT and USFWS for their assistance; we will be pursuing a Top Waters initiative
 - d. Tom Berry: FY19 - Senator Leahy is vice-Chairman of the Appropriations Committee; close to regular order of business for this time of year; holding off poison-pill riders; budget process well underway: Champlain-specific funding anticipated to be \$7 million for things like sea lamprey control, lake trout research, ECHO, etc. EPA/Basin Program funding is anticipated to be \$11 million (preliminary figure); funding for water chestnut control and the hydrologic barrier; IJC flood study fully funded; wetland conservation will occur through the Farm Bill

- e. Andrew Milliken: Great Lakes Fishery Commission members and staff will be coming for a visit to Lake Champlain during the week of June 26.

5. Annual Report Highlights

Bill Ardren provided a brief summary of the draft annual report and asked that edits be sent to him for their inclusion. Individual portions of the report were summarized by various Fisheries Technical Committee members including the following:

- a. Salmonid assessment - Brian Chipman. Brian provided a summary of the salmonid assessments conducted during 2017. Data has been collected from fish passage and trap facilities around the lake as well as tributary and nearshore electrofishing. The Winooski Fish Lift recorded 84 fish – similar to last year. However, the Hatchery Brook trap catch was down substantially from its peak in 2015. Missisquoi River, Lamoille River and Otter Creek runs were also down. Sampling in 2016 showed a lack of 1st lake-year salmon, and that same year-class was still down in 2017. Age 0 salmon numbers seemed normal in 2017. Flows in tributaries in 2017 were down as a result of hot, dry weather.

Brown trout and steelhead are stocked in lower numbers and thus they have fewer returns. Fall stocking was discontinued due to poor returns; Spring stocking was instituted in 2015.

Lake trout are sampled in Hatchery Cove, Whallon Bay and Willsboro Bay. The lake trout had good abundance and size distributions.

Landlocked Atlantic Salmon (LLS) feral and domestic evaluations. LLS were differentially marked with fin clips and stocked in multiple locations. Both strains had similar length-at-age; angler returns in the creel of feral-origin fish in the lake fishery were similar to domestic-origin LLS, though angler diary returns showed better feral returns. Feral egg-take will be preferred, with domestics as a backup.

Chambers Creek and Magog strain steelhead evaluations were conducted. Five streams were stocked with differentially marked steelhead. Returns were roughly equivalent. VT has switched to exclusively Chambers Creek strain.

- b. River-run Salmon Restoration Update – Bill Ardren. Our LLS are genetically distinct from European fish and in Champlain, and have faced many challenges such as dams, habitat degradation, sea lamprey predation and changes in the forage base. The lake receives about 300K smolts/year. The goal of the program is to increase returns, to enhance the tributary fishery, and to restore natural reproduction. To help achieve those objectives we conducted research on hatchery rearing techniques using well versus brook water. Brook-reared fish returned 2-4 times better than well-water reared fish.
- c. Sturgeon Assessment – Chet Mackenzie. VTFWD is developing a monitoring and assessment program using acoustic tagging to monitor fish movement and habitat use, and remote sensing to estimate abundance. Spawning site assessment can be difficult and inconsistent due to river conditions; lake assessment methods could be more effective. The goal is to identify critical habitats (so that they can be adequately protected) and identify how often fish return to spawn.

- d. Sauger Restoration – Lance Durfey provided an update on sauger restoration activities. NYSDEC developed a sauger management plan for NY in 2013 and included Lake Champlain. The St. Lawrence, Richelieu and upper Mississippi rivers were identified as potential sources for stocking Lake Champlain with sauger to restore the species. NYSDEC staff visited Quebec in 2016 to look for potential egg collection sites on Lac St. Pierre. Preliminary sampling collected 56 sauger for disease testing, and staff determined that no importation and border crossing issues would be encountered if the decision is made to import sauger eggs from Quebec. Disease testing found no diseases in the Quebec samples tested by the USFWS Lamar Fish Health Center. The Upper Mississippi River population is currently being used as an egg source for Wisconsin sauger stocking – that population has also been disease tested and cleared as a good source. Genetic work done on both populations, and on archived sauger scale samples from Lake indicate all three are genetically distinct. To prevent possible genetic influences from Champlain-stocked fish descending the Richelieu into the St. Lawrence, the Lac St. Pierre population is for now the preferred source. In Wisconsin, sauger are being used a glochidia host for T&E mussel species. It's not known if sauger served the same purpose in Lake Champlain. NYSDEC is writing a specific Champlain sauger management plan, which should be completed by late winter or early spring. NYSDEC has done a similar restoration on the Allegheny Reservoir which has been successful in establishing a sauger population; reproduction has not yet been documented, though the oldest of these fish are just reaching sexual maturity. NYSDEC is currently searching for a regional hatchery that could raise sauger if an egg source can be found; the USFWS has developed a cost estimate for the hatchery modifications needed to raise sauger at White River National Fish Hatchery.
- e. Lake Trout research - Ellen Marsden. Bottom trawling is conducted below the thermocline every 2-3 weeks at depths of 35-60m. The catch-per-unit-of-effort of wild fish is increasing. Wild fish are documented from the central and south sampling areas, but not the north. Trawling is effective on Age 1 and 2 fish but not Age 3 fish.
- f. Hatchery Updates – VT– Adam Miller:
- It's been a good year for walleye;
 - Kevin Kelsey is in France giving a professional presentation;
 - Thanks to Eisenhower and DEC for their help with the strain comparison;
 - Solar projects are underway at hatcheries to reduce energy consumption;
 - Roxbury Hatchery rebuild from flood damage is underway;
 - Thanks to Senator Leahy and the USFWS for their help
- Federal Hatchery update – Dan Wong:
- Next spring's fish are looking good;
 - Major construction project underway: replacement of drainage at Eisenhower National Fish Hatchery;
 - The wells were redone;
 - We're involved in a cooperative research project on thiamine deficiency
- g. Fish passage / habitat
- Lance Durfey gave an update on the Imperial Dam fish ladder project. Assuming no permit delays, construction could begin in summer 2019.

- Chris Smith gave a presentation on culvert replacements and a basin-wide approach using watersheds and the town's own prioritization; GIS decision support tools are also employed; they use a dam GIS-layer, and are on track for 24 projects /year, with 18-20 in the Connecticut River basin; Madeleine Lyttle has retired, making the job harder for existing staff.
6. Lunch – during lunchbreak, the new sea lamprey control lab trailer was on display
 7. Lamprey Control Update – Brad Young.
 - There are new tributaries in NY that warrant treatment. NEPA has been addressed on these.
 - This fall, they have scheduled 6 stream TFM treatments, 2 TFM-Niclosamide treatments, and 4 delta treatments using Bayluscide.
 - Our treatment strategy is now geographically focused (the geographic re-alignment has been completed)
 - wounding rates are close to target for LLS, but there was a large increase in wounding rates on lake trout; there seems to be a 4-year cycle for unknown reasons
 - wounding rates may have more to do with host population numbers and dynamics rather than sea lamprey populations
 - Chet: wounding rates on lake sturgeon are down and this may be leading to recovery of sturgeon populations
 - we have improved/hardened trapping sites to make them more functional during high-water events
 - we are developing an experimental weir as a trapping/exclusion device
 - dam repairs/modifications are planned to prevent passage of spawning sea lamprey on the Lamoille and Great Chazy rivers
 - we have purchased a new mobile lab for conducting treatments
 - sonar delta assessment to evaluate potential lamprey habitat
 - Toxicity Study – VT Dept. Health (VTDOH) concerned with uncertainty and assumptions on TFM toxicity based on old information and data; USGS, GLFC, VTDOH, and USFWS designed a toxicity study; cost is \$324,000. VTDOH has agreed to provide a new drinking water threshold for TFM within 30 days of the study being released.
 - the sea lamprey control budget is looking good thanks to Senator Leahy.
 8. Lake Champlain Basin Program updates – Meg Modley
 - The State-of-the-Lake Report was issued in June
 - Meg described the Aquatic Invasive Species issues and the spread prevention program
 - Basin Program has issued a request for pre-proposal projects in the following areas: 1) nutrient loading; 2) water quality; 3) native species restoration; 4) contaminant control
 - Meg gave an update on the hydraulic barrier feasibility study for the Champlain/Hudson canal
 - The International Joint Commission has initiated a flood mitigation study
 9. Strategic Plan Update – Steve Hurst.
 - the plan has been delayed
 - an outline is in place

- team members will meet in person in November
- will be completed by this time next year
- we need to do a better job of letting the public know of our successes; better communication with the public is a necessity
- Andrew Milliken: 2019 is the “Year of the Salmon” and USFWS may have a dedicated employee who could facilitate public communication
- We may want to explore a “State of the Lake” report / public presentation

10. Cormorant Management on Champlain – Fred Pogmore.

- There have been 4 regional meetings regarding fishery impacts from cormorant predation
- Fred discussed the depredation order and its associated Environmental Assessment (EA) – limited, and did not include impacts to fish populations
- An SDM process will be used to ID the management steps needed
- A new depredation order could be a year or two out
- The Great Lakes has the needed info regarding cormorant impacts on fisheries, but many feel the process was backwards and regret that the EA was not written better
- The USFWS is being conservative and will include population data to make the decision more defensible
- Lake Champlain permits have been issued: 1500 nests were oiled on Four Brothers; the nest count was 2500, up from a low of 1600 nests
- Limited management options at this time
- Some dispersal work is conducted
- Bottom line: the cormorant population is increasing

Q: Andrew: Is egg oiling sufficient to bring the population under control?

A: Fred: We have lost the ability to do control to achieve the population level of several years ago

There was discussion of the USFWS process for depredation permitting, further clarity on what exactly is needed and how long it will take. Andrew asked if a subcommittee should be activated. Tony asked if it would help. Andrew replied that it would help with messaging. Steve suggested they draft some messages and that the management committee members could review them with wildlife and USDA Wildlife Services.

11. Additional Agenda Items;

- Tony asked if there were any additional business items
- Andrew asked if there were any tour requests for White River National Fish Hatchery - none noted
- Steve mentioned the upcoming strategic plan meetings
- Steve: NY will host the Policy Committee meeting next year

3:10 p.m. **Adjourn**

LAKE CHAMPLAIN FISH AND WILDLIFE MANAGEMENT COOPERATIVE

Policy Committee Meeting

August 22, 2018, 10:00 a.m. – 4:00 p.m.

Forest Center, Marsh-Billings-Rockefeller Nat. Hist. Park

Woodstock, VT

Agenda

9:30 a.m. **Coffee and Treats**

10:00 a.m. **Convene**

Introductions, Review Agenda, Logistics

*Tony Wilkinson, Steve Hurst (NYSDEC),
Andrew Milliken (USFWS)*

Review/Approve Minutes and Action Items from 2017

*Policy Committee: Louis Porter (VTFWD),
Tony Wilkinson, Wendi Weber (USFWS)*

Agency Announcements and Budget Updates

FY 18 and 18 Federal Budget and Legislative Updates
Relevant to Lake Champlain

Tom Berry (Senator Leahy)

Report on Great Lakes Fishery Commission Visit

Andrew Milliken, Tom Berry

10:45 a.m. **Fisheries**

Fisheries Technical Committee Annual Report

Bill Ardren (USFWS) 15 min

Salmonid Assessment

Brian Chipman (VT F&W) 15 min

River-Run Salmon Restoration Updates

Bill Ardren 15 min

Sturgeon Assessment

Chet MacKenzie (VTF&W) 15 min

Sauger Restoration Updates

Lance Durfey (NYSDEC) 15 min

Hatchery Updates

*Adam Miller (VTF&W), Dan Wong
(USFWS) 15 min*

Lake Trout Research Results

Ellen Marsden (UVM) 15 min (via phone)

Fish Passage Restoration Updates

*Lance Durfey, Chris Smith (USFWS), 15
minutes*

12:45 p.m. **Lunch (order box lunch or bring your own) Trails at Marsh Billings, Sea Lamprey Mobile Lab Tour**

1:30 p.m. **Sea Lamprey Control**

Status, Assessment Results, Updates, 2019 Plans
Lampricide Toxicity Study Update, Next Steps

Brad Young (USFWS)

2:15 p.m. **Strategic Plan Review and Update**

Progress over past year and revised plan and approach going forward including; increased focus on outreach

Steve Hurst (NYSDEC), Brad Young (USFWS), Chet MacKenzie, Lance Durfey

3:00 p.m. **Cormorant Management on Lake Champlain**

Results of recent flyway meetings, status and next steps of review process for addressing impacts on free-swimming fish

Andrew Milliken (USFWS) Steve Hurst (NYSDEC), Eric Palmer, Fred Pogmore (USDA APHIS)(invited)

3:30 p.m. **Lake Champlain Basin Program Updates**

State of the Lake and RFP Opportunities for Healthy Ecosystems; Update on Canal AIS Barrier

Meg Modley (LCBP)

3:45 p.m. **Additional Agenda Items; Review Next Steps and Action Items**

Policy Committee

4:00 p.m. **Adjourn**

4:30 p.m. **Optional Tour White River National Fish Hatchery, Bethel VT (20 minute drive)**

Paul Boynton, (USFWS)