

Miramichi Salmon Association
Conservation Planning Committee and Land-Use Committee Joint Meeting
Friday, April 30, 2021 at 10 am

ATTENDANCE

Robyn McCallum, Manley Price, Gord Mouland, Rip Cunningham, Debbie Norton, Brad Burns, Rick Cunjak, Mark Hambrook, Dan Cain, Holly Labadie, Lyndsay Jay-Keating, Matt Alexander, Allan Wilson, Bill Utley

Manley called the meeting to order at 10:04 am and welcomed the group.

PROJECT – REMOVING SPAWNING OBSTRUCTION

Brad provided some background information on a fish passage tool/ flow device he would like to try for beaver dams this year. These devices allow salmon to traverse beaver dams. These devices were developed in Massachusetts and have been used in Labrador by a former WWF biologist who is now working for DFO. Brad has corresponded with this biologist, and she says the devices work well and have not sustained any damage through the winter. DFO hopes to add cameras and will keep MSA in the loop about what camera equipment they use and how well it works. The device is described as a large (approx. 8 foot) box that is secured at the bottom of the river. There is a long (approx. 30 foot) plastic pipe that runs from the upstream end of the box, through a notch on the beaver dam, and part-way into a wire cage on the other side of the beaver dam. Soft netting guides salmon to a one-way door at the far end of the dam. This device creates a current that attracts the fish, and if it is built correctly, it will not interfere with the beaver or dam.

Brad plans to construct a couple of these devices himself. Debbie mentioned that NB Wildlife Trust Fund has another round of funding open that closes today, but Robyn could put in an application to assist with construction of these devices. Rip mentioned it would be worth looking into an underwater camera to see what is going on. Selecting the right sites is key- Brad and members of this committee have suggestions (e.g., Big Hole Brook, Doak Brook). These devices may be useful for drawing water from the bottom of the dam (e.g., cold water).

Action: Robyn will submit an application to NBWTF for funding for three of these devices. Brad and Debbie will work to secure additional funding (e.g., NBWTF will not support capital expenditures over \$100, like the underwater camera). Robyn will design a project for MSA that includes electrofishing pre- and post- installation to gauge success.

Note: Robyn submitted this application April 30.

REVIEW OF 2020 FIELD PROGRAMS

Holly delivered an overview of 2020 programs.

Beaver Dam Management:

- There was no beaver dam management program in fall 2020
- Permits for beaver dam management have been secured for 2021.

Smolt Estimate:

- Data analysis for 2020 smolt estimates is complete. The data from the Northwest Miramichi River (30k) and Wayerton Bridge are good, however, the smolt estimates from the Little Southwest (LSW) (200k) are expected to be inaccurate due to high currents and some of the fish escaping.
- Holly shared a graph from Jason Daniels at ASF showing survival rate of smolts from these two rivers, from headwaters to Miramichi Bay. Survival is good in the headwaters but, moving into the bay, decreases. Southwest Miramichi fish have further to travel than Northwest fish and therefore have lower survival.
- The final report for 2020 smolt tracking is not completed.
- MSA has secured a permit for 2021 smolt estimates in the Northwest Miramichi River and expects to secure a permit for the Dungarvon River. (Note- we received this permit late April 30).

Striped Bass Study 2018-2020:

- The striped bass egg and larval study was a three-year study that ended in 2020. The study found eggs in the Northwest and Southwest, and found larvae in the Northwest, Southwest, and Tabusintac. Reports from this study went to COSEWIC in January to help with the reclassification of the status of striped bass in the Gulf Region.
- Robyn is working with MSA staff to complete a manuscript and send to Rick for review. Robyn is still working with Kelsey to locate and analyze raw data.

Electrofishing:

- In 2020, the electrofishing program occurred in 26 sites: 15 in the Northwest and 11 in the Southwest, including some previously stocked sites.

Stocking:

- As part of the SAS program, 30k fry fish went to the Juniper area, 14k fry fish went to the Northwest, and 30k fry fish went to the Millstream.
- Broodstock were not collected in 2020 since wild smolts were collected instead. This means there will be no stocking program in 2021.

Cold Water Restoration/Enhancement:

- There was no cold water pool restoration in 2020. Follow-up temperatures were taken from 24 sites under warm-water protocol from DFO, including 8 pools that MSA has done work on.

2021 FIELD PROGRAMS

Lyndsay provided updates on the field programs planned for 2021.

Smolt Wheels:

- MSA will be using four smolt wheels in 2021, one on the Dungarvon River, one at Ludlow (SW Miramichi River), and two on the Northwest Miramichi River at the Wayerton bridge. Cables have already been installed at these locations and smolt wheel assembly will begin on May 4th.
- MSA is partnering with ASF for smolt tracking in May 2021. ASF will be placing transmitters in smolts from the Northwest Miramichi and Rocky Brook. The MSA will be using the Northwest wheels to provide ASF with 80 smolts for their study. MSA has already received these permits.
- MSA will be continuing to provide 60 smolts from the Northwest wheels for DFO to determine if smolts are experiencing episodic acid and aluminum events in the Northwest Miramichi River.

Electrofishing:

Holly and Lyndsay will be taking courses this summer and continue to carry out electrofishing.

Broodstock:

- Broodstock will be collected in fall of 2021 on the Southwest Miramichi River. No broodstock collection will be done in 2021 on the Dungarvon and Northwest Miramichi Rivers.
- MSA plans to compare two fry-stocking techniques to wild fry production in the Dungarvon. MSA will be testing baseline wild fry production, collecting wild broodstock for fry stocking, and collecting smolts, raising them to maturity, and releasing their fry. This is a long-term research experiment.
- MSA has received encouragement from First Nations, Tommi Linnansaari team from UNB, and DFO for the Dungarvon research project. This is an MSA-led project but anyone is welcome to join in. The focus of the study is fry stocking at this time, as DFO will not permit adults to be released.

Permits:

- MSA has received permits to collect 800 smolts from the Dungarvon and Ludlow Rivers and transport them to the MSA to grow until they reach adults. These permits clearly outline MSA's intentions for fry-stocking and MSA is working with DFO to secure a documented agreement regarding the 2023 release of these fry.
- Cables have been installed across the Dungarvon and Ludlow rivers and the smolt wheels are expected to be installed on May 5th.
- The smolts collected by MSA in 2020 will be ready for stocking in June of 2023.
- Mark mentioned that the Ludlow collection will be a larger collection. Brad asked about the SAS fish in the hatchery that were collected from the Northwest. Manley wondered if those fish could be released in the Southwest. Mark clarifies that MSA was denied permits to release these fish in either the Northwest or Southwest. According to DFO, just because MSA is not aware of a genetic difference between SAS fish and wild fish does not mean there is no genetic difference. Mark is hoping that the report coming from Plamu First will accept stocking as a strategy and that MSA will be able to release their SAS fish into the Northwest river. Manley asked and Robyn agrees about coming up with some graphics to illustrate the last few years and future of the stocking program at MSA. Brad asks about angling as a method of broodstock collection. Mark says that angling is the preferred method of broodstock collection, but that there is a breakdown in DFO communication, between the issuer of the permits and the enforcement officers, that causes complications for MSA when angling to collect broodstock. Manley asked if MSA does an analysis of where to collect fish. Mark said MSA would likely collect fish from Cains, Juniper, and possibly Burnt Hill. Robyn says that MSA is being cognizant of how many adults we are taking from each area.

Action: Robyn will communicate with DFO to reduce confusion.

Cold Water Restoration/Enhancement:

- NSMDC has received \$1mil in funding to restore cold water pools in the Miramichi over the next five years. In 2021 they will be restoring Grey Rapid's Brook and Morse Brook. In 2021, MSA will be following up on past cold water pool restoration by performing snorkeling surveys, recording temperature data, and assessing obstruction of water flow.
- Coldwater pool restoration is not a long-term solution, and pools that were restored in the past will require follow-up work. Robyn is involved with Cold Water Steering Committee where MSA, ASF, UNB, and NSMDC will be discussing cold water sites.
- MSA met with local tubing businesses in 2020 regarding two cold water pools located on the tubing run: an important cold water pool in Black Brook and a smaller one off McKenzie Brook that was restored in 2020. When tubers enter these cold water pools, it causes the fish in them to disperse. Signage was added to these areas and tubing businesses agreed to instruct tubers to stay away from these areas. MSA intends to follow-up with local businesses to once again communicate about this important issue. There was some discussion about asking Deborah Power to follow up with the tubing companies about the Black Brook and McKenzie Brook cold water pools. Mark mentioned roping off these pools using floatation devices. Manley suggested using social media to spread awareness to tubers.

Action: Robyn will connect with tubing businesses.

Funding:

Manley asked if MSA needed to tap into discretionary funds for any of their 2021 projects, as they could propose a motion at the upcoming meeting. Robyn does not expect there will be a need for that but will connect with the board if the need arises.

SUMMER STUDENTS

- We received 38 applications for summer student positions.
- Six students have been hired and will be starting their placement at different times throughout the summer.
- This year's group of student workers is a new crew.

PROJECT - BARRIER MAINTENANCE

- The barrier contract has been drafted and MSA expects to receive it within the month from DNRED.
- The barrier contract is for \$200k/year, to be renewed for two years with an option to renew for a third year.
- Barrier operations will run from June 1st until mid-October.
- Unlike the agreement for MSA to run the barriers in 2020, this contract will outline expectations. This may have an effect on hiring, capital expenses, and operating expenses.
- MSA does not have any expectation of gaining "profit" from this contract. Any discretionary income from the barrier contract can be used to subsidize barrier operations in the coming year.

-Capital expenses that the MSA should consider for the barrier this year include installing internet and repairing the roof.

-Manley is concerned about barrier employees' job security and wonders if MSA would be willing to expense barrier operations for a few weeks to be able to offer those employees work until MSA receives the contract. Mark expects that MSA will have to expense barrier operations for a few weeks anyway because we are unsure when we will receive payment, but it is too soon to guarantee work yet.

SMALLMOUTH BASS ERADICATION

-Permits have not yet been approved, but the working group is expecting to hear back soon.

-The working group is moving forward with activities such as ordering product and feeders and arranging personnel.

-If the rotenone eradication is approved, the first application will occur on August 15th and the second application will occur on September 15th. To be effective, it is necessary to have a month buffer between the two application dates.

-After the treatment has deactivated, the river will be monitored by Anqotum.

-The working group is proposing a team of 78 applicators, as well as additional crews for safety, security, and fish rescue.

-A barrier will be put in place by Slate Island to prevent other fish from moving upriver into the treatment area. This barrier will be in place from August 1st until, at least, September 17th.

-ASF has negotiated a contract with the Smallmouth Bass Eradication group about handling all public relations so that all partners can present a clear and consistent message. In the future ASF will publicize a protocol for anglers if they catch a smallmouth bass.

-Robyn has been working with the province and DNR for NB to sign on to the Federal Aquatic Invasive Species Act. This is a process that could take two years. Signing the act will help speed up permit processes for invasive species in the future.

-If necessary, the Smallmouth Bass Eradication group will solicit the help of anglers to catch smallmouth bass.

CAST UPDATE

-The CAST program finished in December 2020.

-Dr. Tommi Linnansaari's final report for CAST, up until the end of March 2021, has been submitted to ACOA and DFO.

-The CAST seminar took place on April 16th. A follow-up presentation by David Roth, Jack Fenety Scholarship recipient, took place on April 27th.

-MSA is working with Plamu First to outline the next five years. A report by Plamu First is still in the working stages.

-Despite MSA's best efforts to meet with Andrew to discuss CAST, a meeting has not yet been set.

-Manley asked if the recording of David's April 27th presentation could be distributed to the Board of Directors. Manley also asked if Rick would be able to summarize David's presentation in easily understood terms. Rick is concerned that there are important follow-up questions that arose from the CAST program (e.g., egg survival) that are not going to be pursued.

FORESTRY PRACTICES

-A meeting was held at the JD Irving tree farm and research facility where a presentation was given by Andrew Willett on harvesting techniques, clear cutting vs select cutting, risk management for repairing buffers and protecting stream crossings, road and ditch practices, and the technology that is being used, especially in labs. After the presentation, there was a tour of the Maritime Innovation Ltd research facility.

-JDI is working on tree-breeding programs to discover spruce bud-resistant strains of trees.

-JDI is hosting a follow-up presentation and tour on June 18th at the Doaktown Mill where they will be discussing the effect of herbicides on trees and allowing MSA to view the cross-sectional effects on growth.

-MSA hopes to assess JDI's practices and bring this information to the Board of Directors.

-Gord will prepare a report from the Land Use Committee to circulate before the AGM for comments. Gord hopes to have Andrew present to the entire board at some point after Covid-19. He expects MSA will require multiple follow-ups to assess and inform the board. Manley brought up an article he read by Rodney Savidge commenting on climate change in Canada and how it is affecting trees. Rick has not read the article but knows Rodney is a tree physiologist. Gord agrees with Rick that our primary goal needs to be salmon conservation. Dan wants to know if Antoin O'Sullivan's work on cold water and his suggestions are being considered by JDI. Gord says JDI is adopting the recommendations made by Antoin. Dan asked about the protected natural areas- Robyn says the protected natural areas have not been released yet. Although JDI is the biggest player, the group hopes to include other cutters in this conversation by reaching out to connected board members.

Action: MSA Staff will follow up with Brad and Manley about Bill Utley as a director- clarify if MSA US Director, or MSA Director.

Dates to Remember:

-Saint John MSA Dinner scheduled for October 22.

-MSA AGM May 29