

First Nations Liaison/Field Monitor Report

Completed by: Austin Paul

Report covering the period from: April 11th- May 4th, 2016

Dates: April 11th, 19th, 21st, 26th, 28th, 2016

Activities conducted

Muskellunge fishing and tracking between Hart's Island and the McKinley ferry. This work was carried out in conjunction with the Canadian Rivers Institute in support of the Mactaquac Aquatic Ecosystem study.

Pertinent Tasks

- Prepare fishing boat for launch and organize and inspect safety gear.
- Conduct active monitoring of tagged fish using a Vemco hydrophone and receiver.
- No fish were detected during the survey.
- Conduct active angling to acquire new Muskellunge specimens for the purpose of tagging and tracking.
- Seeing that no fish were caught or detected between Hart's Island and McKinley ferry, the team decided to conduct active monitoring near the Mactaquac Generating Station.
- No fish were detected; we will test areas further downstream in the near future in an attempt to ascertain the location of the radio-tagged Muskellunge.
- April 19th, 21st, 26th and 28th were spent angling from the shore near McKinley ferry. Tagged fish were detected but not caught on a line as the water temperature was cold (5 degrees in the dead waters).

Interests and Potential Concerns from a First Nations Perspective

We were working in the area known as Ekpahak (head of the tide). The head of the tide on nearly every River system within New Brunswick is host to archaeological sites. Ekpahak Island (formerly known as Savage Island), is host to a fairly large archaeological site that has been suffering from erosion for many years. Erosion is a natural process that cannot be fully mitigated. Time and safety concerns did not allow me to survey the site for eroded artifacts. The South side of the St. John River, overlooking the Grand Pass, is being heavily developed by private land owners. The riverbank has been deforested of old growth trees and saplings alike and heavy machinery is being used to alter the landforms. Small scale development projects that do not trigger an environmental impact assessment do not trigger archaeological assessments either. As such, these operations have the potential to impact archaeologically rich areas. NB Power is not affiliated with the development of the Ekpahak area and is outside of the scope of this report; however I feel that areas of high archaeological potential should require an archaeological monitor at the very least.

The islands and riverbanks below McKinley Ferry have been used for resource procurement for thousands of years. Mahsusiyl (Fiddleheads) abound on the low-lying areas, which are harvested annually by many First Nations individuals. Psesqis (wild peppermint) also grows along the riverbank which is used to add flavor to black salmon which can be caught in the spring.

Photographs



High water and cold weather = very few Muskies.



High water at McKinley ferry

Dates: April 15th, 20th, 22nd, 27th, 29th and May 2nd, 2016

Activities Conducted:

Participated in migratory bird surveys near the Mactaquac Generating Station. The work was carried out in conjunction with Stantec Consulting in support of NB Power's Comparative Environmental Review.

Pertinent Tasks:

- To begin the migratory bird surveys, we selected areas that offered a wide field of view.
- Using binoculars we would identify and record the number of birds that passed by as well as their species. This aspect of the survey involved 3 hours of continuous observation.
- We also made regular excursions to migratory bird stop-over areas near Duplesis' farm, the area of the head pond immediately in front of the main spillway and near the Jewett's Mills causeway.
- We selected areas to survey for owls on either side of the river. Game cameras were set up to capture images of birds in the area.
- The species of migratory birds that we identified included: Geese, Mergansers, Black Ducks, Wood Ducks, Teals, Dark eyed Juncos, Song Sparrows, Killdeer, Cormorants, Ring-Billed Gulls, Crows, Pigeons, Eagles and Ospreys. These birds were identified visually with the use of binoculars and the help of a bird expert employed by Stantec Consulting.

Dates: April 18th, 22nd, 27th and May 2nd, 2016

Activities Conducted

Owl surveys near the Mactaquac Generating Station.

Pertinent Tasks

- Strategic areas were selected near stands of deciduous trees on either side of the River.
- At dusk, we would arrive in the study area and play recordings of Saw-whets, Screech-owls and Barred owls. Typically, owls will come to the sound of the recordings, although we have been unable to identify any owls in the areas as of yet.
- Game cameras were set up in the study areas in hopes of capturing images of owls and other birds.

Interests and Potential Concerns from a First Nations Perspective

All of the areas that we have surveyed have been previously altered by the construction of the dam, as such, I could not identify and potential concerns in terms of traditional resource and/or archaeological sites. Our studies only involve the observation of birds and pose no threat to their well-being.

Photographs



The location of game cam #1



Location of game cam #2

Date: May 3rd, 2016

Activities Conducted:

Kelt (Black Salmon) fishing for the purpose of tagging and tracking near the Forks Pool on the Tobique River. This work was done in support of the Salmon studies being carried out by The Canadian Rivers Institute's Mactaquac Aquatic Ecosystem Study.

Pertinent Tasks:

- CRI staff members arrived at site with live wells equipped with aerators which would be used to transport fish.
- A fish-pen was placed within the river to hold fish prior to surgery.
- Active angling was carried out using barbless spoon lures, although there were no fish caught.
- Seeing as we were unable to acquire Kelts for tagging, we packed up our gear and made the journey back to Fredericton.

Interests and Potential Concerns from a First Nations Perspective

The area known as the Forks Pool is located near the junction of the Little Tobique, Memazeekal, Sisson and Serpentine Streams, as such the area should be rich in archaeological heritage resources. The water levels were high and no beaches were exposed, no artifacts were present in our working area. During a conversation with local inhabitants, I was told that artifacts have been found in the area over the years. Our work was non-invasive and no First Nations concerns had been identified.

Date: May 4th, 2016

Activities Conducted:

Striped Bass fishing near the main spillway of the Mactaquac Generating Station for the purpose of tagging and tracking.

Pertinent Tasks:

- Active angling was carried out near the main spillway of the MGS, our goal was to capture striped bass for the purpose of tagging.
- A secondary goal was to pump the stomachs of the fish that we caught in order to analyze the stomach contents. This analysis would give insight in terms of the dietary habits of striped bass and to determine whether or not the bass eat salmon smolt.
- Unfortunately, no fish were caught at this time.

Interests and Potential Concerns from a First Nations Perspective

The area that our team was working near is a popular location for First Nations fishermen. Seeing as it is early in the season, no First Nations fishermen were present. When other anglers are using the area, we respectfully share the area, giving priority to the First Nations fishermen. In terms of cultural heritage sites, the area had been heavily developed by the construction of the dam, as such, I have not found any

traces of archaeological material. Our work in the area is non-invasive and poses no threat to heritage resources.

Photographs



Active angling for striped bass near the main spillway of the MGS