

First Nations Liaison/Field Monitor Report

Mactaquac Project

Completed by: Austin Paul

Report covering the period from: November 9th- 23rd, 2016

Date: November 9th, 16th, 18th, 2016

Activities Conducted:

Salmon studies were conducted by the Canadian Rivers Institute on the Tobique River watershed in support of the Mactaquac Aquatic Ecosystem Study.

Pertinent Tasks:

- The goal of this study is to capture 10 kelts (black salmon) for the purpose of tagging and tracking. There are tracking receivers placed within the fore bay of the Mactaquac Dam, the receivers near the dam should provide insight into how the Salmon migrate downstream.
- Using spoon lures with barbless straight hooks, the team actively angled for salmon.
- Salmon that were caught would be placed in a holding cage within the river until it was time to perform the necessary surgery. During the surgery, a tracking tag is inserted into the abdomen of the salmon, at this time, the length and weight of the fish would also be recorded.
- After the tracking tags were in place, the fish were kept in an aerated holding tank and trucked to the village of Bath where they would be released.

Interests and Potential Concerns from a First Nations Perspective

The salmon work is relatively non-invasive and does not pose a risk to traditional land use or resource sites. No ground disturbances or vegetation clearing was involved. None of the exposed shorelines were host to eroded archaeological material.

The site of the Tobique Forks pool and the barrier pool just up-river appear to have an elevated potential for the presence of archaeological material. The area was once famous for salmon fishing, a very important resource to the Wolastoqiyik people. The deer population is quite strong: the area has many hardwood ridges that would provide adequate browse. During the pre-European contact period, New Brunswick had a large population of woodland caribou; this resource would have drawn humans into the area.

Although I did not find any usable, fine-grained tool-stone in the area, there are many varieties of suitable materials in the Tobique watershed. Tobique Rhyolite/chert tools are present in most major archaeological sites within Wolastoqiyik territory. The bedrock source/quarry site remains undiscovered to this day; however, you can safely assume that people frequented the area to access this deposit of stone. Although the source of the stone remains unknown, the river itself has transported many cobbles of the stone downriver and is readily accessible.

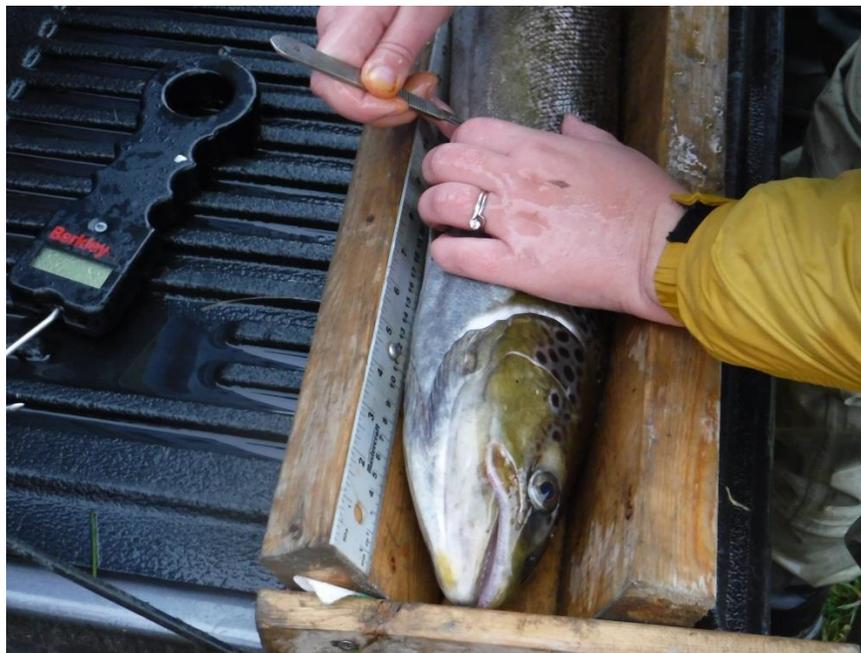
Photograph



Above: The recovery/transportation tank. The barrier pool is in the background.



Above: An 8 pound kelt or black salmon caught at the barrier pool.



Above: CRI staff preparing to insert a tracking tag.

Date: November 15th, 2016

Activities conducted

The Canadian Rivers Institute is conducting river substrate mapping in support of the Mactaquac Aquatic Ecosystem Study.

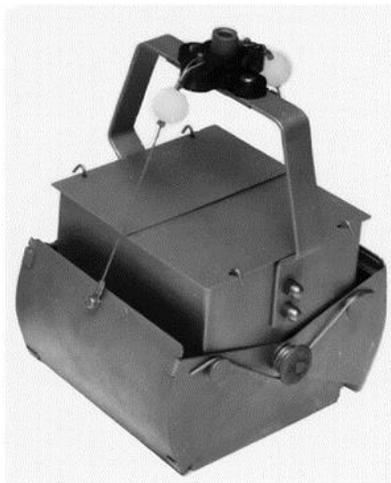
Pertinent Tasks

- Using watercraft, we would navigate to predetermined study areas and begin the survey by analyzing the composition of the shoreline. We then define the shoreline using a Samsung Tablet and GIS (geographic information system) software. We define the substrate by categorizing composition of the substrate, for example: silt, sand, pebble, cobble, boulder, fine organics, and coarse organics.
- We would use an Ekman grab to acquire sediment samples throughout the River (see photo below). The samples obtained through the use of the Ekman grab would be analyzed. The sediment would be categorized and recorded on the Samsung Tablet.
- The mapping of river substrate will be used to generate a computer model based on river flow dynamics. This model will allow scientists to predict how flow changes will affect the current ecosystem in the St. John River Valley.

Interests and Potential Concerns from a First Nations Perspective

This aspect of fieldwork is relatively non-invasive and does not pose a threat to any traditional land use sites or species of interest.

Photograph



Above: An Ekman grab. The device is lowered to the river bottom. A weight is slid down the rope, this triggers the release of the jaws and a sediment sample can be pulled to the surface.

Fundy Isles Project

Date: November 22nd, 2016

Activities Conducted:

Conducted an archaeological assessment on Deer Island. Fieldwork was conducted in the Project Development Area associated with the riser station for the proposed sub-sea cable extending from Deer Island to Campobello, New Brunswick. This work was carried out by Stantec Consulting in support of the Fundy Isles Project.

Pertinent Tasks

- The team arrived on-site and prepared all necessary gear. We use Flint GIS (geographic information system) devices to track our movements, record notes and draw polygons around areas of heightened archaeological potential.
- We began the survey by walking the inter-tidal zone at low tide. If we could find pre-contact artifacts on the beaches, it would be a good indication that in situ archaeological sites exist within the landforms adjacent to the beaches. One pre-contact stone tool fragment was found within the inter-tidal zone. Another possible pre-contact artifact was found near the roots of a tree that had been blown over by wind.
- We carefully searched the beaches and found contact period artifacts as well: a European trade pipe stem fragment and portions of broken earthenware.
- Our team carefully walked the landforms adjacent to the Project Development Area and found no traces of cultural material, but did identify areas suitable for shovel test pitting. The subsurface testing will begin in 2017 when all appropriate approvals and permits are acquired.

Interests and Potential Concerns from a First Nations Perspective

The Deer Island archipelago hosts a myriad of archaeological sites, many of which I visit on a regular basis. I was initially concerned that the project might be located on a significant archaeological site. To my surprise, the beaches of Chocolate cove did not contain the amount of pre-contact archaeological material that many of the other beaches on the island exhibit. I continue to believe that we will find

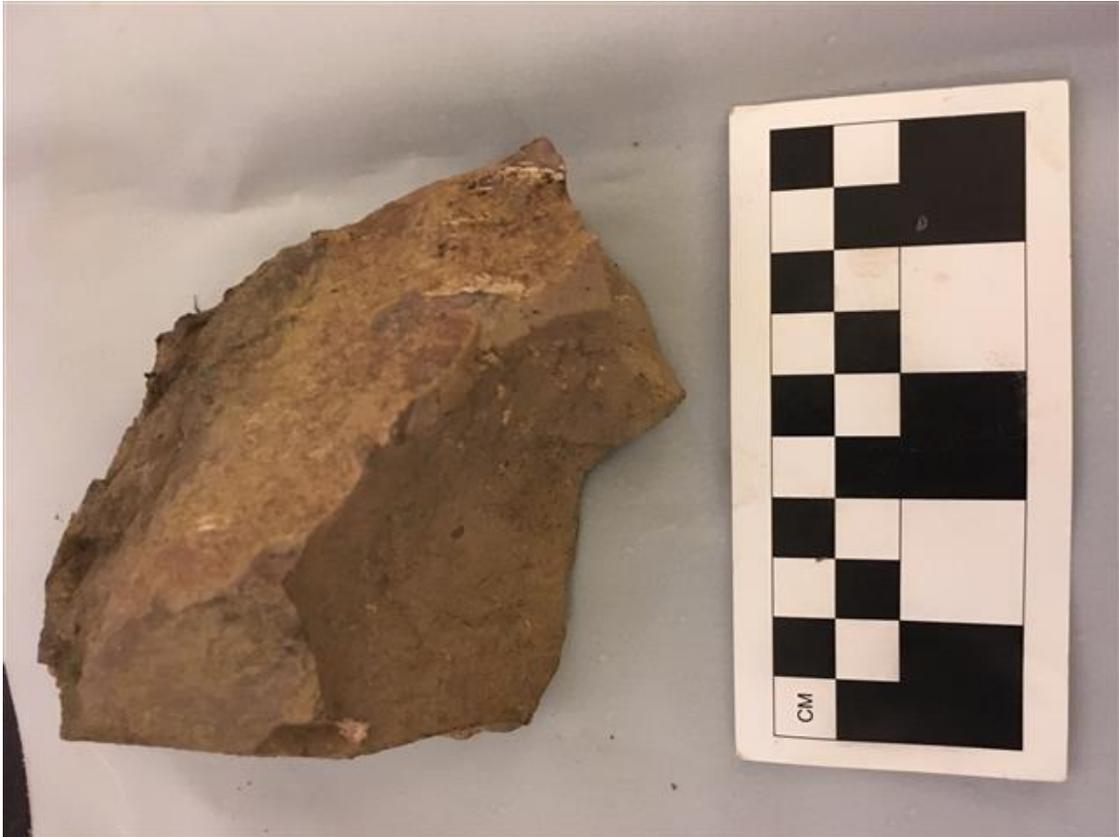
archaeological sites on the stable landforms; however, I now believe that they will be small in both concentration and area.

While working as a sea kayak guide on Deer Island years ago, we often had to use Chocolate Cove and Hibernia Cove as stop over spots while waiting for the tide to subside. The tidal flow is very strong in the area when the tide is at full bore. We would only need to stay in the cove for an hour or two to wait for slack tide, at this time we would continue our journey. This may explain the lack of large sites in the cove. Perhaps the area was only used as a stop-over point while travelling to Deer Island Point or Indian Island.

Photograph



Above: A stone tool fragment found on the shoreline of Chocolate Cove, Deer Island NB



Above: A possible stone tool core from Chocolate Cove, Deer Island NB. A core is the parent piece of material used to dislodge flakes which would be used as cutting tools or preforms for projectile point manufacture.



Above: A fragment of a European trade pipe stem. These pipes were commonly traded with Native people during the early contact period. Many local fishermen also used pipes of this sort.

Date: November 23rd, 2016

Activities Conducted:

Conducted an archaeological assessment on Grand Manan. Fieldwork was conducted in the Project Development Area associated with the riser station for the proposed sub-sea cable extending from Campobello Island to Grand Manan, New Brunswick. This work was carried out by Stantec Consulting in support of the Fundy Isles Project.

Pertinent Tasks

- The team arrived on-site and prepared all necessary gear. We use Flint GIS (geographic information system) devices to track our movements, record notes and draw polygons around areas of heightened archaeological potential.
- We began the survey by walking the inter-tidal zone at low tide. If we could find pre-contact artifacts on the beaches, it would be a good indication that in situ archaeological sites exist within the landforms adjacent to the beaches.
- The beach adjacent to the Project Development Area was covered with large rounded cobbles and the surf pounded the shoreline relentlessly. Archaeological sites on the coast are rarely situated on such rough shorelines as landing a watercraft would be very challenging. Furthermore, artifacts would be difficult to identify on such beaches; the dynamic nature of the beaches tends to move material around in a way that can be destructive to fragile artifacts. No artifacts were found on the shoreline of Grand Manan during our survey.
- The shoreline is steeply sloped, which is not ideal for the presence of an archaeological site.
- The riser station is situated on a terrace which has been blasted into the bedrock. The proposed footprint of the new riser station is directly on top of the old location. As such, there should not be any negative impacts to archaeological sites in the area.

Interests and Potential Concerns from a First Nations Perspective

Although the Grand Manan area is host to archaeological sites, the current project design will not negatively impact any archaeological / traditional resource procurement sites. Many of the shorelines are steeply banked and quite inhospitable. While driving around the island, we did notice many areas that appeared to have a high potential to host archaeological sites, however, they are on the opposite side of the island and will not be impacted by the Fundy Isles Project.

Photographs



Above: A Stantec crew member taking notes adjacent to the riser station on Grand Manan.



Above: The rugged shoreline of the Project Development Area on Grand Manan. For a sense of scale, the waves depicted in the photo were 2 meters high.