

Mactaquac Project / Grand Falls Project

First Nations Liaison/Field Monitor Report

Completed by: Austin Paul

Report covering the period from: October 31st - November 3rd, 2016

Date: November 2nd, 2016

Activities Conducted:

Conducted an archaeological walk-over survey of the project development area associated with the proposed **Grand Falls Project**.

Pertinent Tasks:

- A review of previous archaeological investigations in the Grand Falls area was carried out prior to beginning field work.
- The archaeological field crew would walk over the high potential areas of the project development area and identify areas of heightened archaeological potential. These areas would be demarcated with polygons on a GIS device. These areas will be explored further during later phases of the project.
- All shallow stream beds were thoroughly searched for eroded cultural material.
- Tree throws that exhibited exposed soil trapped in the roots were also thoroughly examined.
- The team did identify 2 areas suitable for subsurface testing: the areas appear to be relatively undisturbed. One area is located downstream from the generating station and another is located above the dam.
- No pre-contact artifacts were found during the survey. A nice cobble of fine-grained tool-stone was identified in an ephemeral creek bed. The cobble had been washed out of a deposit of glacial till. Evidently, high quality tool-stone was available on site: a feature that would have been very convenient to the Wolastoqiyik ancestors that frequented the area.
- Located on the erosional face of a glacial deposit, a free flowing spring can be seen percolating out of the till deposit. This spring would have been an attractive feature to the people of the remote past; campsites are often located close to springs.

Interests and Potential Concerns from a First Nations Perspective

The Grand Falls area was undoubtedly an important location to the Wolastoqiyik people. The area is host to deposits of quality tool-stone, spring water and timbers for craft and fuel. The pool below the

falls would have been teeming with fish in the past. The landform feature that the present town of Grand Falls is located on would have provided ideal vantage points both up and down stream, making the area a strategic defensive position. Seeing as the falls could not be safely run by watercraft, a portage or carry-over was a necessity. In New Brunswick, we find campsites at both the beginning and end of portages. As a paddler, I have found that it is very common to stop for the night at large portage points. It can be a great deal of work to carry all of your personal gear over the portage and it usually takes 3-4 trips depending on how much gear you are hauling. Many paddlers will opt to carry their gear to the other side of the portage and rest for the next leg of the journey. While resting, the people of the past would have kept busy repairing/constructing gear, procuring food, cooking and many other activities. The activities carried out on site leads to the deposition, whether accidental or intentional, of archaeological material.

There is relatively little information available concerning archaeological material found in the Grand Falls area. William Ganong wrote that “I have found no record of a settlement here, but no doubt there were camping places at the ends of the important portage around the falls. Professor Bailey in his “Relics of the Stone Age” states that Indian Implements have been found here in considerable variety” (Ganong 1899 p.225). In the early 1900’s an archaeological survey was carried out by William MacIntosh. At the lower level of the portage, MacIntosh found pre-contact stone axes, adzes, projectile points and flaking debris (Blair. 2010 p.4). Clearly, the area had been heavily used by First Nations ancestors, however the previous excavations and impact from construction activities has undoubtedly impacted the heritage resources.

Photograph



Above: A shattered cobble of fine-grained tool-stone embedded in glacial till. This variety of stone is ideal for the production of projectile points and cutting/scraping implements.



Above: The project development area, near the Grand Falls powerhouse.



Above: A relatively non-disturbed portion of the PDA.

Date: November 3rd, 2016

Activities conducted

Fish community studies are being conducted in the Mactaquac head pond. This work is being carried out by the Canadian Rivers Institute in support of the **Mactaquac Aquatic Ecosystem Study**.

Pertinent Tasks

Fyke nets

The fish community study is being carried out to determine which fish species are present in the Wolastoq River. Four fyke nets were used in the study. The nets were left out over-night, in the Mactaquac Arm and subsequently removed from the river the next day. Fyke nets generally have 2 wings and a lead line which guide the fish into a series of cages. Once inside the cages the fish cannot find their way out. The Fyke nets held a variety of fish species: bull head (catfish), yellow perch, white perch, white sucker, pumpkin seed sunfish, fall fish (chub), gaspereau, smelt and small mouthed bass. The fish would be kept in a live well until each individual was measured and weighed. All of the fish caught were released back into the river.

Interests and Potential Concerns from a First Nations Perspective

The fieldwork associated with this study is relatively non-invasive and does not pose a threat to traditional resource procurement areas and/or archaeological sites. All of the fish samples acquired through the study are released back into the river.

Photograph



Above: CRI staff members processing fish from shore.

Date: October 31st, 2016

Activities Conducted:

A striped bass/muskellunge feeding study was conducted by the Canadian Rivers Institute near the Mactaquac Generating Station. This work was carried out in support of the **Mactaquac Aquatic Ecosystem Study**.

Pertinent Tasks

- Active angling was carried out from the shore.
- If fish were hooked and landed, they would be placed in a tank filled with fresh water.
- The fish would be weighed, measured and fitted with an identification tag below the dorsal fin.
- A clipping of the caudal fin and scale samples would be taken and used for genetic studies.
- Analysis of the stomach contents of the striped bass/muskellunge would be carried out using a specially designed stomach pump before returning the fish to the river.
- No fish were caught during this survey; however, we were able to process a muskellunge that ended up in the fish-way of the generating station.

Interests and Potential Concerns from a First Nations Perspective

The striped bass/muskellunge work is non-invasive and does not pose a threat to any archaeological and/or traditional land use sites.

Photograph



Above: A muskellunge recovering in a tank of fresh water, the fish turn right-side up after a few minutes

References

Ganong, W. 1899. A Monograph of Historic Sites in the Province of New Brunswick. Transactions of the Royal Society of Canada.

Blair, C. 2010. Archaeological Assessment Hydroelectric Proposed Generating Station on the St. John River, Grand Falls, New Brunswick. Stantec Consulting.