

Little Buffalo River Water Quality Project
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Introduction:

The objective of this proposal was two-fold: a capacity building exercise that also gave us some baseline data on the Little Buffalo River system from a water quality perspective. There have been indications that there may be some development in the watershed. The NWTMN wanted to get data pre-development that would allow us to participate when development does eventually occur in the area. The information that was obtained will be retained in the Hay River, Fort Smith and Fort Resolution Metis Council offices. As stated above the project was to give some field experience in conducting water quality programs to members of the above two Metis Council offices (Fort Resolution and Fort Smith), and to obtain some base line data on the river system.

There were one member from the Fort Smith Metis Councils and two members from the Fort Resolution Metis Council that assisted in the project. The member of the Fort Smith Metis Councils has considerable field experience, and is a harvester in the area of Fort Smith. The members that were used in Fort Resolution were also harvesters in the area of the project. The use of these persons as a field assistant, and their knowledge of the area were of great benefit to the project. Having intimate knowledge of the river, and area was needed, as this river can be dangerous with thin ice cover, and overflows. From a safety aspect these persons input in the field was invaluable.

This project was conducted in conjunction with an existing program that is being conducted by INAC personnel. The INAC personnel are monitoring just the upper part of the river system; we have decided that the mouth of the river needs to be sampled as well. The combination of these two programs will allow the NWTMN to be able to make informed decisions on the area in the future. As stated in the proposal we want to continue this program into the future; water is an important aspect of the Metis way of life, and we need to have information available if we are to participate in management of the land and water.

Methods:

The fieldwork that was completed was a single trip to obtain water samples in the winter period. The sampling method was a dip from a hole that was chiseled in the ice at mid-stream for both sites that were sampled. Due to the timing of the funding allocation to this project, the NWTMN was able to complete only one sampling of this river. The opportunities to have community people participate, and provide some traditional knowledge was welcomed. The use of local traditional knowledge holders was an important aspect of this project; they have knowledge of the river and ice cover. Attempts were made to use the trained Environmental Monitors, unfortunately they were either unavailable, or had obtained work elsewhere.

The Fort Smith and Fort Resolution Metis Councils were involved in the preparation and execution of the proposal. The NWTMN as the regional body that represents these communities was the primary contact and leader in the project.

Results:

The Little Buffalo River system is relatively untouched with two bridges that span the river at highway crossing points. There is one monitoring project that is being conducted by INAC personnel at the Fort Smith site currently, but there was no monitoring at the mouth of the river near Fort Resolution. For this reason the NWTMN felt that the opportunity to collect baseline data on an undeveloped river was now.

This project was designed to monitor, and train local members in the water quality aspect of the river system. The valued component that was to be monitored by this project was water quality.

The training that was conducted had a ½ day introduction to water quality monitoring. The participants then had an understanding of what we were looking at and why. Before any development occurs on the river system, we needed to know the state of the water quality. This was done by examining past records from the Fort Smith site, and it is hoped this project will continue into the future, allowing for a better understanding of the river system to emerge. This understanding will allow for a clearer understanding of cumulative effects by the membership. The membership will have access to data pre-development, during development, and post development. This will give a clear picture of what effects just one development will have on a river system. This understanding will lead to better questions being asked, and a better idea of what we mean by cumulative effects.

Discussion / Conclusions:

Until now all of the developments that have occurred in the Traditional Land Use area of the NWTMN have not had the benefit of membership involvement. The majority of the

developments have had disturbances from past activities. This project is an example of pre-development river system; this is needed to show the membership what a natural running river system looks like from the water quality side. Now there is a starting point for the membership to compare to, especially when development occurs. This starting point is important, because there were members involved in the field work, and their knowledge was used in an important aspect of the project: sample timing, and site selection.

There were two membership meetings held: one in Fort Smith and one in Fort Resolution to explain why this project was being done at this time. The feedback from the membership was this is a good time to conduct this field study, and be used as an example for future studies. The information disseminated to the members was well received, and clearly understood. There was full support for this project, and expectations that this would continue into the future. It is projects such as this, where members have the ability to participate in the project development, and field work.

This is the first year of data gathering, and there will be community meetings to discuss results of the project. At this point there will be not much to discuss other than explain the results. As opportunities arise, the results of this project will be communicated to the membership of the NWTMN, and any other interested parties. For the most part the communication efforts will be concentrated on the NWTMN membership. The data and a small plain language summary will be produced for each of the communities (Hay River, Fort Resolution and Fort Smith), and be available upon request.

The budget for this project was submitted at the proposal stage, and a final budget will be available once audited statements have been produced through our annual audit.