

Nuttby Mountain Wind Energy Mi'kmaq Ecological Knowledge Study



**Membertou Geomatics Consultants
May, 2008**

M.E.K.S. Project Team

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Executive Summary

This Mi'kmaq Ecological Knowledge Study, also commonly referred to as M.E.K.S. or a Traditional Ecological Knowledge Study (T.E.K.S.), was developed by Membertou Geomatics Consultants for CBCL Limited, on behalf of the Atlantic Wind Power Corporation (AWPC) and Cobequid Wind Power Inc. (CWP). These two companies are collaborating on a wind energy project known as the Nuttby Mountain Wind Farm. This project proposes to establish 22 wind turbines at Nuttby, in the Cobequid Mountains area, located in Colchester County, Nova Scotia. The project activities involve land clearing for the development of access roads, construction of a substation, construction of foundations for the turbines, placement of electrical cables and the assembling and placement of the wind turbines on site. The result of the project will be the generation of electricity from the 22 wind turbines, which will then be sold to Nova Scotia Power Inc. under their renewable energy target. The anticipated project completion has identified the project to be completed by the fall of 2009.

In order to proceed with the implementation of the project, the proponent must receive required approvals from various regulatory departments. This approval process will likely involve the development of an environmental assessment for the project. As a mechanism to ensure that Mi'kmaq traditional knowledge and use of the study area is included in the environmental data and considered within the environmental snapshot of the project, this MEKS has been developed for the proponent.

This MEKS mandate has been to consider the land and water area that the project will utilize and identify what is the Mi'kmaq traditional use activity that has or is currently taking place within and what Mi'kmaq ecological knowledge presently exists in regards to the area. In order to ensure accountability and ethic responsibility of this MEKS, the development of it has adhered to the "Mi'kmaq Ecological Knowledge Protocol". The protocol is a document that has

been established by the Assembly of Nova Scotia Mi'kmaq Chiefs, which speaks to the process, procedures and results that are expected of all MEKS developed.

The MEKS consisted of two major components:

- **Mi'kmaq Traditional Land and Resource Use Activities**, both past and present,
- **A Mi'kmaq Significance Species Analysis**, considering the resources that are important to Mi'kmaq use.

The Mi'kmaq Traditional Land and Resource Use component utilized interviews as the key source of information regarding Mi'kmaq traditional use in the study area. Numerous interviews were undertaken by the MEKS Team with Mi'kmaq hunters, fishers and plant gatherers, who shared with us the details of their traditional use activities. The interviews involved the showing of maps of the study area and surrounding areas to the interviewees and they were asked to identify where they undertake their traditional activities. All interviews were recorded, if permitted by the interviewee, and their information was incorporated into a GIS project. The significance of these interviews is they allowed the MEKS to reflect the most recent Mi'kmaq traditional use in this area.

The Mi'kmaq Significance Species analysis involved the consideration of the food/sustenance resources, medicinal/ceremonial plant resources, and Art/Tools resources. These resources were considered for their availability or abundance in the study area, their use and importance with regards to the Mi'kmaq and their availability in areas adjacent or in other areas outside of the study area.

From the data collected, the MEKS was able to identify various hunting areas that have been, or are presently utilized for the harvesting of small game and deer. Fishing sites were also identified, including the species of fish being taken, with trout being the species most harvested by Mi'kmaq. Medicinal plant

gathering sites and areas were also identified through our interviews, including some Mi'kmaq food plant gathering sites. Notably, the ecological knowledge gathered through the study identified that some resources are becoming less prevalent than in previous years, specifically trout, salmon and porcupine.

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1.0 Introduction

1.1 *Membertou Geomatics Consultants*

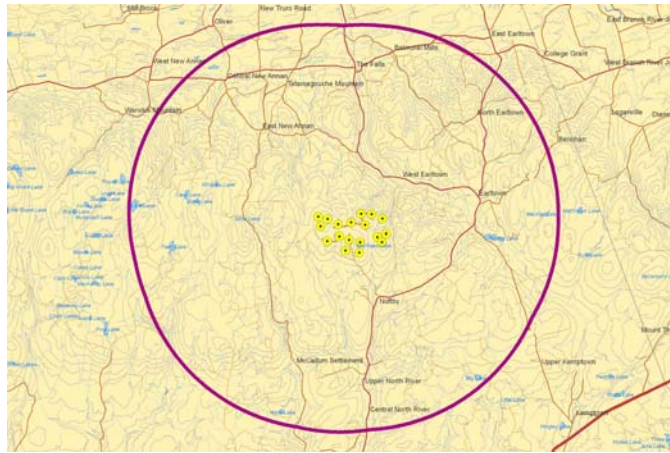
Membertou Geomatics Consultants (MGC) is a Membertou First Nation Company that was developed as a result of the 2002 Supreme Court Marshall Decision. MGC was established as a commercially viable company that could provide expertise in the field of GIS Services, Data Base Development, Land Use Planning Services and Mi'kmaq Ecological Knowledge Studies. MGC is one of many companies established by the Membertou First Nation – Membertou Corporate Division that provide employment opportunities for aboriginal persons and contribute to Membertou's efforts of growth and development. Also, Membertou's excellent management and accountability of their operations is further enhanced by their ISO 9001:2000 certification. Most recently, Membertou has undergone an ISO audit, and have been successfully recertified to 2009.

For the development of this MEKS for CBCL, MGC brings to the table a team of five individuals whose expertise and skills with land documentation have developed this sound Mi'kmaq Ecological Knowledge Study. Our team skills include expertise within the area of historical Mi'kmaq research, GIS data analysis, Mi'kmaq oral history, Mi'kmaq environmental knowledge and sound Mi'kmaq community connections.

1.2 *Nuttby Mountain Wind Farm*

The Nuttby Wind Farm Project is an initiative that is being pursued by Atlantic Wind Power Corporation (2005) Ltd. and Cobequid Wind Power Inc. (CWP), both of which are Nova Scotia registered companies.

The Project is seeking to establish 22 wind turbines in the Cobequid Mountain Region, located in Colchester County, N.S. The purpose of the wind turbines will be to produce Wind Energy, with the project seeking to produce 45 mega watts (MW) of electricity. If the project implementation is successful, it will provide the electricity generated to Nova Scotia Power Incorporated by feeding into the NSPI grid.



The activities that the project will have to undertake will include the construction of the Wind Turbines and the physical work required for the preparation of the land area. These activities will involve transporting the wind turbines to the project area, construction of access roads to each turbine, excavation of land for concrete foundations, and placement and assembly of wind turbines. Underground cables will be utilized by the project in order to connect the turbines to the grid and a substation will have to be constructed.

The anticipated timeline for the construction activities is targeted for August, 2009 and will continue through until November, 2009.

2.0 Mi'kmaq Ecological Knowledge Study Overview

2.1 *Mi'kmaq Ecological Knowledge and MEKS*

The Mi'kmaq people have a long-existing, unique and special relationship with the land and its' resources which involves exploitation and conservation of resources and, as well, is a source of spiritual ideologies. This relationship is intimate in its' overall character, as it has involved collective and individual harvesting of the resources for various purposes, be it sustenance, medicinal, ceremonial and/or conservation. This endearing relationship has allowed the Mi'kmaq to accumulate years of ecological information regarding the lands, waters and the resources provided. This ecological knowledge is maintained by the Mi'kmaq people today and continues to be acquired by each new generation, youth to elder, *kisaku kinutemuatel mijuijij*.

The assortment of Mi'kmaq Ecological Information which is held by various individuals is the focus of Mi'kmaq Ecological Knowledge Studies (MEKS), also commonly referred to as Traditional Ecological Knowledge Studies (TEKS). When conducting a MEKS, ecological information regarding Mi'kmaq/Aboriginal use of specific lands, waters, and their resources are identified and documented by the project team.

Characteristically, MEKS have some similar components to that of an Environmental Impact Assessment; yet differ in many ways as well. Among its' purpose, Environmental Assessments seek to measure the impact of developmental activity on the environment and its' resources. This is often done by prioritizing significant effects of project activities in accordance with resource legislation, such as *Species at Risk*. Mi'kmaq Ecological Knowledge Studies are also concerned with the impacts of

developmental activities on the land and its' resources, but they do so in accordance with the land and resource practices and knowledge of the Mi'kmaq people. This is extremely important to be identified when developing an environmental snapshot of a study area as Mi'kmaq use of the land, waters and their resources differs from that of dominant society. Thus, the MEKS will provide ecological data which is significant to Mi'kmaq society and may add to the ecological understandings of the study area.

2.2 *Mi'kmaq Ecological Knowledge Study Mandate*

In January of 2008, Membertou Geomatics Consultants (MGC) was awarded a contract to undertake a Mi'kmaq Ecological Knowledge Study for CBCL, on behalf of the Atlantic Wind Power Corporation (AWPC) and Cobequid Wind Power Inc (CWP). AWPC and CWP are proposing to develop a wind farm in the Nuttby Mountain region of Nova Scotia, which will involve the placement of 22 wind turbines in the study area. This project will require the documentation of key environmental information in regards to the project activities and its possible impacts.

MGC proposed to assist with the gathering of necessary data by developing an MEKS which will identify Mi'kmaq traditional land use activity within the study area and in surrounding areas within a 10 kilometer radius. The MEKS will identify, gather, and document the collective body of ecological knowledge which is held by individual Mi'kmaq people. The information that is gathered by MGC will be documented within this report and will present a more thorough and accurate understanding of the Mi'kmaq peoples land and resource use within the study area.

MGC understands that this study will be included in the Environmental Assessment that will be submitted by the project proponents to the regulators and will be used as a primary indicator identifying Mi'kmaq traditional land and resource use within the site area.

However, it must be stated that this MEKS is not intended to be used for Consultation purposes by government and/or companies or to replace any consultation process that may be required or established in regards to Aboriginal people. As well, this report cannot be used for the justification of the Infringement of S.35 Aboriginal Rights that may arise from the project.

2.3 Mi'kmaq Ecological Knowledge Study Scope & Objective

This MEKS will identify Mi'kmaw ecological information regarding Mi'kmaq traditional land, water and resource use within the Nuttby Mountain Wind Project Study Area, both past and present. The MEKS team will undertake Interviews with Mi'kmaq who utilize the land and its resources in their traditional activities. It will also consider the project activities with regard to impact on Mi'kmaq resources and lands and will do so in accordance with Mi'kmaq understandings of land and resource significance. Such impacts identified by the MEKS may correlate with some of the findings of the overall project EA, but the MEKS will ensure that Mi'kmaq concerns are identified in accordance with Mi'kmaq ecological knowledge and use of the land.

All of the data gathered will be documented within the MEKS and presented so as to assist the project proponents and regulators with identifying where the Nuttby Wind Project activities may affect Mi'kmaq traditional land and resource use. If the MEKS identifies any possible infringements that the project may incur, with respect to Mi'kmaq

constitutional rights, the MEKS will provide recommendations on necessary steps to initiate formal consultation with the Mi'kmaq.

2.4 MEKS Study Area

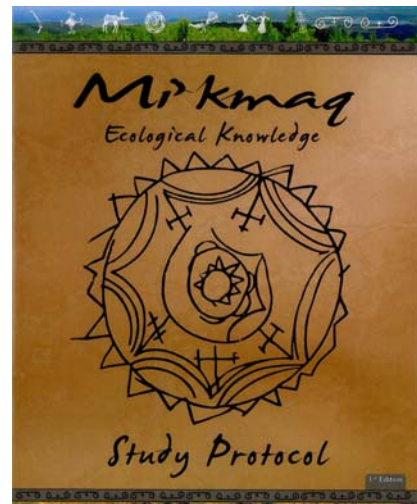
The Nuttby Mountain Wind Project will be situated on 9.33km² of land situated in the Cobequid Mountain Region of Nova Scotia, located in Colchester County. The location of the land is approximately 6 kilometres west from Earltown, N.S., this being the closest populated town to the project area. The Project will involve the placement of 22 wind turbines in the project area, just north of the Old Nuttby Mountain Road. This MEKS will consider this area with regard to Mi'kmaq traditional use activities, but will also include surrounding areas within a 10 kilometre radius. This inclusion of surrounding lands will ensure that the MEKS is able to document traditional use activities in a comprehensive manner.

3.0 Methodology

3.1 Interviews

As a first step to the interview process, the MEKS team developed a possible interviewee list consisting of those Mi'kmaq individuals who undertake traditional land use activities or are knowledgeable of such. Interviews were undertaken with individuals from the Millbrook community located in Truro and the Pictou Landing community located in Pictou.

In regards to the interviews that were conducted, all followed the procedures identified within the Mi'kmaq Ecological Knowledge Protocol (MEKP). The protocol is a document that has been established by the Assembly of Nova Scotia Mi'kmaq Chiefs, which speaks to the process, procedures and results that are expected of all MEKS developed.



Prior to each interview taken place, interviewees were provided general background information regarding this MEKS. They were then asked to read and sign a consent form which allowed MGC to utilize their interview information within the MEKS. During the interview process, Individuals were shown maps of the study area and asked various questions regarding their own Mi'kmaq use activities in the area. The questions asked included; where they undertook their activities, when they did such activities, and what type of resource they would have harvested. The Interviewees were also asked to provide any information in regards to other people that may have utilized the study area lands and resources for traditional use activities.

Where permission was granted, interviews were audio recorded. This assisted with the data accuracy checks and allowed for a comparison of audio data with the information documented on the maps, providing further assurance to quality of the information gathered.

3.2 *Literature and Archival Research*

With respect to this Mi'kmaq Ecological Knowledge Study, numerous archival documents and published works were reviewed in order to obtain information regarding past or present Mi'kmaq occupation of the study area. Documents reviewed included 19th century census records, colonial government records, and numerous published books. A complete listing of the documents that were referenced is outlined within the *Sources Cited* section.

3.3 *Field Sampling*

Visits to the Study Area were completed by members of the MEKS team. The MEKS Manager and a Mi'kmaq individual competent in the area of Mi'kmaq Ecological Knowledge visited the site area at four separate times. As a result, the area where the wind turbines will be placed was walked through thoroughly, including surrounding roads areas.

Plant species growths were noted at this time and also signs of animal habitation. Much of the study area consisted of a numerous amount of clear cut land areas. In these areas, old rotting beech trees were found as well as birch and poplar.



Some species of plant growth were sparingly found throughout the site. This included various berries, specifically blackberry plants, *Ajioqimink*, and also golden thread, *Wasawtaqil'jkl*.

With regard to animal resources it was noted by the site visit that some locations of the study area, particularly in the western area, contained evidence of an abundant population of rabbit, partridge and deer.

4.0 Mi'kmaq Land, Water and Resource Use

4.1 Overview

The Mi'kmaq Land, Water and Resource component of the MEKS provides data and data analysis with regard to the Mi'kmaq traditional use activities that are occurring within the study area. It identifies what traditional use activities have occurred in the past and are presently taking place. Within the study presentation the MEKS also distinguishes the areas where activities are taking place and finally it considers the significance of the resource to the Mi'kmaq.

When interpreting the Mi'kmaq traditional use activities that are identified by interviewees, all information that is provided to the MEKS team, including activities from the present, the historic past, and the recent past, are included in the analysis. The Present is defined as activity which has occurred within the last 10 years, the Recent Past is activity which has occurred 11- 25 years ago and Historic is any time previous to 25 years ago.

Interpretation of the data within this MEKS also involves considering the “type” of resource that is being harvested and the “use” that the resource is utilized for. The MEKS will first present the traditional activity that is occurring in the study area; such as fishing, hunting, etc., and will also identify the resource being harvested.

The study will also provide an analysis of the traditional use data in consideration of the type of Mi'kmaq land and resource use and the abundance of the resource that is being accessed. The type of resource and its use is arranged into the following categories: Food/Sustenance Use, Medicinal/Ceremonial Use, and Tools/Art Use. This is the Mi'kmaq

Significant Species component of the MEKS, an analysis which ascertains whether a species may be extremely significant to Mi'kmaq use alone and if a loss of the resource was to occur through project activities, would the loss be unrecoverable and prevent Mi'kmaq use in the future. This component is significant to the study as it provides details as to Mi'kmaq Use Activities that must be considered within the environmental understanding of the project on the study area.

4.2 *Limitations*

Through the review of available documentation and in discussions with Mi'kmaq individuals, this study has identified Mi'kmaw Traditional Use activities that are or may have occurred in the Study Area. For the purpose of this study, individuals from the Millbrook First Nation and Pictou Landing First Nation were the primary communities that were interviewed regarding their traditional use activities.

The data that has been provided to us through the interviews that were completed have been those that were done with key Mi'kmaq community people who are involved in traditional use activities. This will assure that this MEKS represents a sound body of data. However, it should be noted that the MEKS is highly dependant on the information that is provided by Mi'kmaq traditional activity users and therefore, there always remains the likelihood that traditional use activity that is occurring within the study area may not have been identified.

4.3 *Historical Review Findings*

A historical review of the study area was undertaken as a mechanism for identifying the past relationship that Mi'kmaq may have had with the land and the resources located here. The Historical Review involved

consultation of various literature sources, and this included both primary and secondary sources.

The Nuttby Mountain area is located in Colchester County, east of the Cobequid Mountain region. This area currently does not have any Mi'kmaq land settlements within the immediate area but there are two Mi'kmaq reserves located in the vicinity. One community is Millbrook, which is located south of the study area at approximately 50 kilometers, just south of the town of Truro. Also, the Pictou Landing Mi'kmaq community is located to east of the study area at approximately 80 kilometers away.

During the 18th Century the Mi'kmaq that occupied the regions near the study area were known as the "Cobequid" Mi'kmaq.¹ This Mi'kmaq community was located near the waters of the Minas Basin, specifically Cobequid Bay, known as *We'kopekitk*, meaning "End of the Bore".² However, by the 19th century, there also existed a Mi'kmaq community in the Salmon River area, probably due to the abundance of resources located there. It is this community in Salmon River that became the present day Millbrook community, as during the latter part of the 19th century it became located south of Truro, its' present day location.³ During the 1800's, the community's population was at 100 people and the community livelihood was based on hunting and fishing and selling baskets and other goods. Because of the central location of Millbrook, with regard to travel routes from other Mi'kmaq communities, other Mi'kmaq often frequented here for short periods of time so as to sell their wares to the local townspeople.

¹

² Silas Rand, Mi'kmaq Place Names, 283,

³

The Non-Mi'kmaq community of Earltown is also located near the study area as well. Earltown was established during the mid 1770's, primarily by Highland settlers from the Pictou area. However, from the documentation reviewed it appears that very little permanent Mi'kmaq land occupation ever occurred in the Earltown area during 18th or 19th centuries.⁴

4.4 *Mi'kmaq Traditional Use Findings*

Mi'kmaq traditional use data was gathered from the Nuttby Mountain Wind Project area, also known as the Study Area, which is approximately 400 km². This Study Area runs from central North River at its' most northern point and the most southern point being The Falls. This study area includes a 10 kilometer buffer zone surrounding the proposed wind Project area. This larger study area is utilized by the MEKS so as to thoroughly capture Mi'kmaq traditional use activities. Some Mi'kmaq traditional activities; such as hunting, fishing, trapping or plant gathering, will often cover a very large area of land or water. Relying on a larger land area to capture traditional use data, allows the data to be analyzed in its' complete form, thus allowing for a more representative reflection of Mi'kmaq traditional use activities.

The data for this MEKS was drawn from one primary source of data, which allowed the study team to identify the various traditional use activities, resources and areas that are used by the Mi'kmaq people. The set of data relied upon was the primary interviews that were undertaken by our team members with Mi'kmaq ecological knowledge holders from the surrounding Mi'kmaq communities. These interviews occurred between February and April of 2008.

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In addition, other data regarding traditional use was also considered by the project, such as previous Mi'kmaq traditional use interviews that had been undertaken prior to this MEKS. This data was not relied upon as a source for documenting traditional activity, but rather was used as a data set which was compared with our most recent interviews. This data comparison allowed the MEKS team to ensure the consistency and reliability of the data and demonstrate consistency in the traditional use activities that continue to be pursued by the Mi'kmaq.

From the data gathered, Mi'kmaq traditional use activities are occurring in the study area, with patterns occurring in specific surrounding areas of the wind turbine proposed placements. Most of these activities have occurred in the Recent Past.

Fishing

Throughout the study area it was identified that fishing is a traditional Mi'kmaw activity that has occurred in the recent past and continues to be undertaken by Mi'kmaq today. Mi'kmaq fish in the many brooks, streams and lakes that are found throughout the study area and the study identified this activity to be undertaken primarily for food purposes. The most significant fish species that is harvested by Mi'kmaq is that of **Trout**.

Trout fishing occurs primarily at Earltown Lake and in Earltown but trout is also fished in the Falls area, specifically at Waughs River. As well, the Nuttby area is accessed for fishing activity with trout being harvested from the North Branch River the Upper North River and Central North River. With regards to the actual wind turbine area, MacRaes Lake is fished for trout as well.

Salmon is also a primary fish species that is harvested by Mi'kmaq within the study area,



with this traditional activity primarily occurring specifically at the Falls, on the Waugh's River. The site that is closest to the wind turbine site that the MEKS identified where salmon is harvested is that at the Middle Branch North River. In addition, the Sugarloaf Mountain area, Central New Annan and the Tatamagouche Mountain area have also been identified as areas that are frequented by Mi'kmaq for Salmon fishing.

Smelts were also found to be a primary fishing species that Mi'kmaq harvest. Smelts are fished primarily in the Falls, on the Waugh's River. However, smelts are also harvested from the North River, this area being the closest to that of the wind turbine site.

Through analysis of the data gathered by the MEKS team, the majority of the fishing activities identified are, currently occurring (currently occurring being defined as activity that is being carried out currently or within the last ten years).

Hunting

The data gathered by this MEKS identified hunting as a traditional activity that Mi'kmaq currently pursue within the study area. The primary species that Mi'kmaq harvest is that of **Deer, Rabbit and Partridge**. **Moose** and **Porcupine** are also harvested as well, but to a lesser extent.

The MEKS identified **Deer** as being harvested primarily in the areas of Earltown, Central New Annan, Sugarloaf Mountain, Silica Mountain and the West Branch Area. The closest hunting deer area located to the wind turbine site is that of the Nuttby Mountain area and near Middle Branch North River.

Rabbit and **Partridge** are two smaller resources that are also hunted within the study area by Mi'kmaq, and this is largely for food. The primary area where Rabbit is hunted appears to be that of the Nuttby/ Middle

Branch North River area. Rabbit is also identified as being hunted in the Farm Lake area, the Polson Mountain area, Silica Mountain and Sugarloaf Mountain and as well as East New Annan through to Central New Annan.

Data regarding **Moose** and **Porcupine** was also documented by this MEKS as species being harvested, although to a somewhat lesser degree than that of deer and rabbit. Moose has been hunted in the area of Nuttby and the Middle Branch North River and porcupine is also hunted in this area.

Based on the information gathered by the study, the majority of the hunting activities documented by this MEKS are currently occurring.

Plants

The MEKS identified **blueberries** and **apples** as two primary plants that are harvested by Mi'kmaq throughout the study area. From the data gathered it is evident that Mi'kmaq harvest these resources primarily in the Sugarloaf Mountain area and also in Central New Annan. However, these species are also harvested from Silica Lake, Earltown, Clydesdale, South Branch North River area, Central New Annan/Sugarloaf Mountain and Upper Kempton.

In addition, the MEKS identified that some medicinal plants are harvested in the study area. **Sweetgrass**, *Switte*, (Hierochloe odorata L.), **goldenthread** *Wisswtaqji'jkl* and **Flagroot**, *Ki'kwesu'sk* have all been harvested west of the Earltown Lake area. **Fir** and various types of **hardwood** and **princess pine** are also harvested from the Nuttby Mountain area and the Silica Mountain area.



Based on the information gathered by the study, the majority of the plant gathering activities documented by this MEKS are currently occurring.

Campsite

The data gathered by the MEKS also identified a camping site that is currently used by the Mi'kmaq, when hunting in the area. The area is located at Upper North River and is used periodically as an overnight camping area when hunting.

4.5 *Mi'kmaq Significant Species Process*

In order to identify possible project activities which may be of significance to the Mi'kmaq and their use of the land and resources within the Study Area, two primary factors of availability and importance are considered by this study.

Availability and Importance

The first factor that is considered is the **Availability** of the resource that was identified within our interviews. Resources that have been identified within the MEKS as those being harvested within the study area are analyzed in consideration of their abundance in the study area or whether this resource appears to be rare. As a second component of availability and importance, the study also considered other information in this regards, such as the availability of the resource in other areas that are outside of the study area. These areas are considered first followed by a broader scope of the province of Nova Scotia. By proceeding in this manner, the study can provide comments on whether in our opinion; a resource may be rare or abundant. This allows the study team to provide comment as to whether a resource being possibly destroyed by the project activities being proposed will affect the traditional use activity being undertaken.

The second factor the study considers when attempting to identify the Significance of a resource to Mi'kmaq use is the **Importance** that the resource may have to Mi'kmaq traditional use activities. This can be a somewhat subjective process, as any traditional resource use will be of importance to the individual who is acquiring it, regardless if the use is for food or art. However, the study also utilizes other factors to identify importance; such as the frequency of the use, whether it is commonly used by more than one individual, and then the use itself. Again, this allows the study to identify whether the loss of a resource will be a significant issue to future Mi'kmaq traditional use, if destroyed by the project activities.

Type of Use

Before the MEKS considers the availability and importance of a resource, it also reviews the resources that have been identified in the study and categorizes them in two manners:

Initially, all data gathered is identified into various general categories regarding the **Type of Use**. The categories used are **Medicinal/Ceremonial, Sustenance, and Tool/Art**. These general headings are used, instead of specific resource heading, so as to ensure further confidentiality with respect to each specific resource and the area where it is harvested. As well, the total number of instances where a resource harvest has been documented by the study is quantified here as well.

It is then that we begin to consider this data in accordance with their Availability:

Rare – only known to be found in a minimum of areas, may also be on the species at risk or endangered plants list

Common – known to be available in a number of areas

Abundant – easily found throughout the study area or in other areas in the vicinity.

Final considerations involve analyzing the use of the resource and the availability of the resource and formulating an opinion as to whether specific resources will be affected by the project.

4.6 *Mi'kmaq Significance Species Findings*

This MEKS identified numerous species that are found within and adjacent the study area, that continues to be utilized by the Mi'kmaq people. The data documented was identified as occurring within the Nuttby Wind Farm Project Area, but also throughout a 10 kilometer buffer zone surrounding the immediate study area.

The study identified the following:

Type Of Use	Number of Areas/Sites	Number of Species
Food/Sustenance	251	30
Medicinal/Ceremonial	25	8
Tools/Art	33	13

Note: *The number of sites identified for each category listed above may also correspond with sites identified in other categories as well.*

Based on the data gathered and considered within this MEKS, the majority of the plant species documented can be classified as common. The species are commonly found throughout Nova Scotia and the harvesting

of these resources by Mi'kmaq in the study area is undertaken to a lesser degree. Some of the species identified as common include such plants as **Golden Thread**, **Wisswtaqji'jkl**, **Flagroot**, **Ki'kwesu'sk**, and **Sweetgrass**, (**Hierochloe odorata L.**) **Switte'**. None of the plants which the MEKS documented are identified in the "Species at Risk" N.S. legislation. However, the importance of the plants is considered to be very high in relation to traditional use in the Mi'kmaq community, specifically species that are used for medicine.

With regards to food species, the most significant species that was documented by the MEKS was those that are acquired through hunting and fishing activities. **Trout**, **Salmon**, **Smelt** were the most significant fish species that were identified as being harvested and **Deer**, **Rabbit** and **Partridge** were the most significant animal resources identified as being harvested. Other fish and animals were also identified as being harvested, such as mackeral, beaver and porcupine, but to a very minimal degree.



From the data provided to the MEKS team, most of the species identified as being harvested are current, in varying degrees, depending on the species itself and the time of year. Some of the species are not fished anymore, such as **salmon**, as it has been identified as a species whose numbers have been decreasing from previous years. Interviewees also stated that in instances where an activity is still being undertaken today, the species are still available at the same levels as previous years. However, in regards to **trout**, and **salmon**, their numbers have been decreasing at Ferguson Lake, North River and New Annan.

Moose found on the mainland of Nova Scotia, is considered endangered. Mi'kmaq Interviewees also informed us that they no longer hunt moose in the study area as it's availability is rare and is no longer abundant on the mainland.

5.0 CONCLUSIONS AND RECOMMENDATIONS

This MEKS has documented and analyzed the traditional use activities that have, and continue to occur within the lands and waters of the Nuttby Mountain Wind Project study area, located in Nuttby Mountain. The traditional use activity data documented was provided to the MEKS team by Mi'kmaq individuals from both the Millbrook and Pictou Landing Mi'kmaq communities.

Based on the data gathered, the MEKS has identified that the Mi'kmaq people have undertaken traditional use activities in the study area historically and in the present. The data identified in the MEKS clearly demonstrates that resource use is in the form of hunting, fishing and some medicinal plant gathering, although the latter being minimal. Hunting and fishing are clearly the most prevalent traditional use activity that occurs in the study area.

Bodies of water that are most frequently fished by Mi'kmaq are at the Waughs River, the Falls area, Earltown Lake, North River, and North Branch River. With regards to hunting activities the areas near Earltown, Central New Annan, Sugarloaf Mountain, Silica Mountain and Balmoral Mills area and Nuttby Middle Branch River areas are the most frequented by Mi'kmaq.

Areas that have been identified for traditional use activities can be found throughout the study area, however at least 10 sites for traditional use activity have been identified as being in close proximity to the wind turbine sites. Two fishing sites occur on the Middle Branch North River, another fishing site has been identified at MacRaes Lake and one also on the Waughs River. Mi'kmaq hunting sites also occur at Nuttby and Middle Branch North River.

Recommendation:

The Nuttby Wind Project MEKS identified Mi'kmaq Traditional Use activities occurring in the Study Area and identified that some of the site areas where traditional activities occur are in close proximity to the wind turbine area. Although the possible effects of the project could be minimal, it is recommended that the project meet with the Assembly of Nova Scotia Mi'kmaq Chiefs to determine possible future steps to be taken.

6.0 References

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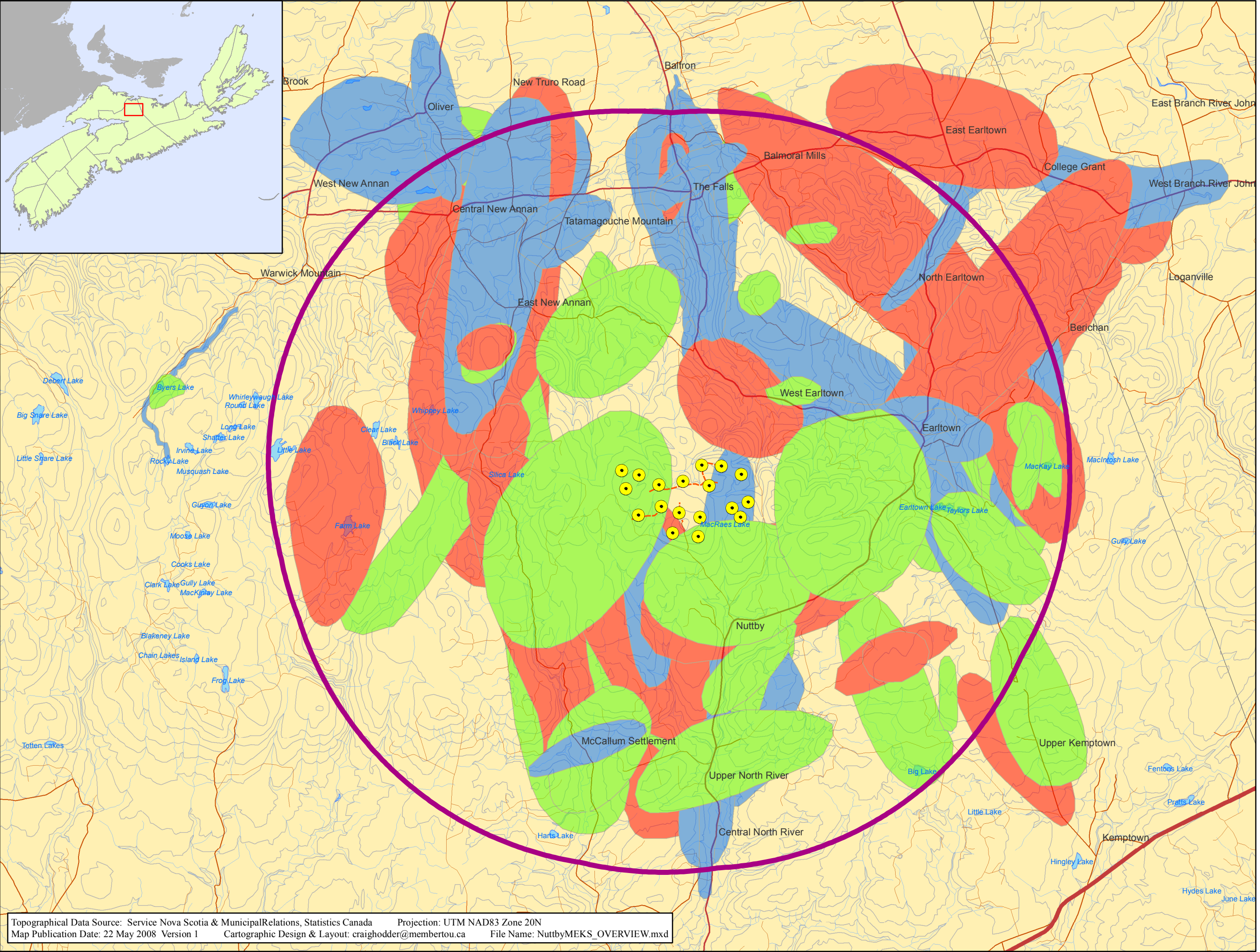
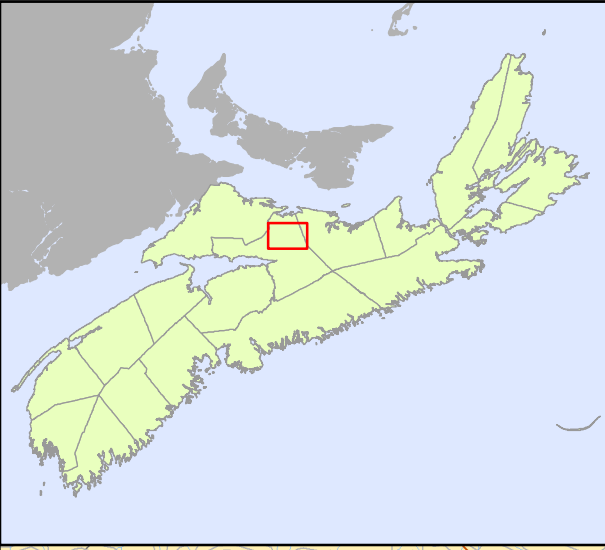
APPENDIX

Map A
Mi'kmaq Traditional and Current Use Areas

MEKS: Nuttby Mountain

Colchester Co., Nova Scotia

Mi'kmaq Traditional and Current Use Areas



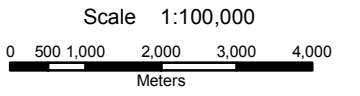
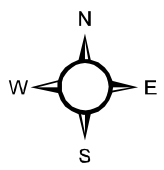
Legend

- Proposed Road
- Proposed Turbines
- MEKS Study Area
- Fishing Areas
- Hunting Areas
- Land Occupation Areas
- Plant Gathering Areas

Disclaimer:

This map is for graphical purposes only, and may not accurately represent actual topographical features, or proposed features/infrastructure. Use of this map is for the specified project only. Membertou Geomatics Consultants does not accept any responsibilities for use of the map other than the specified project.

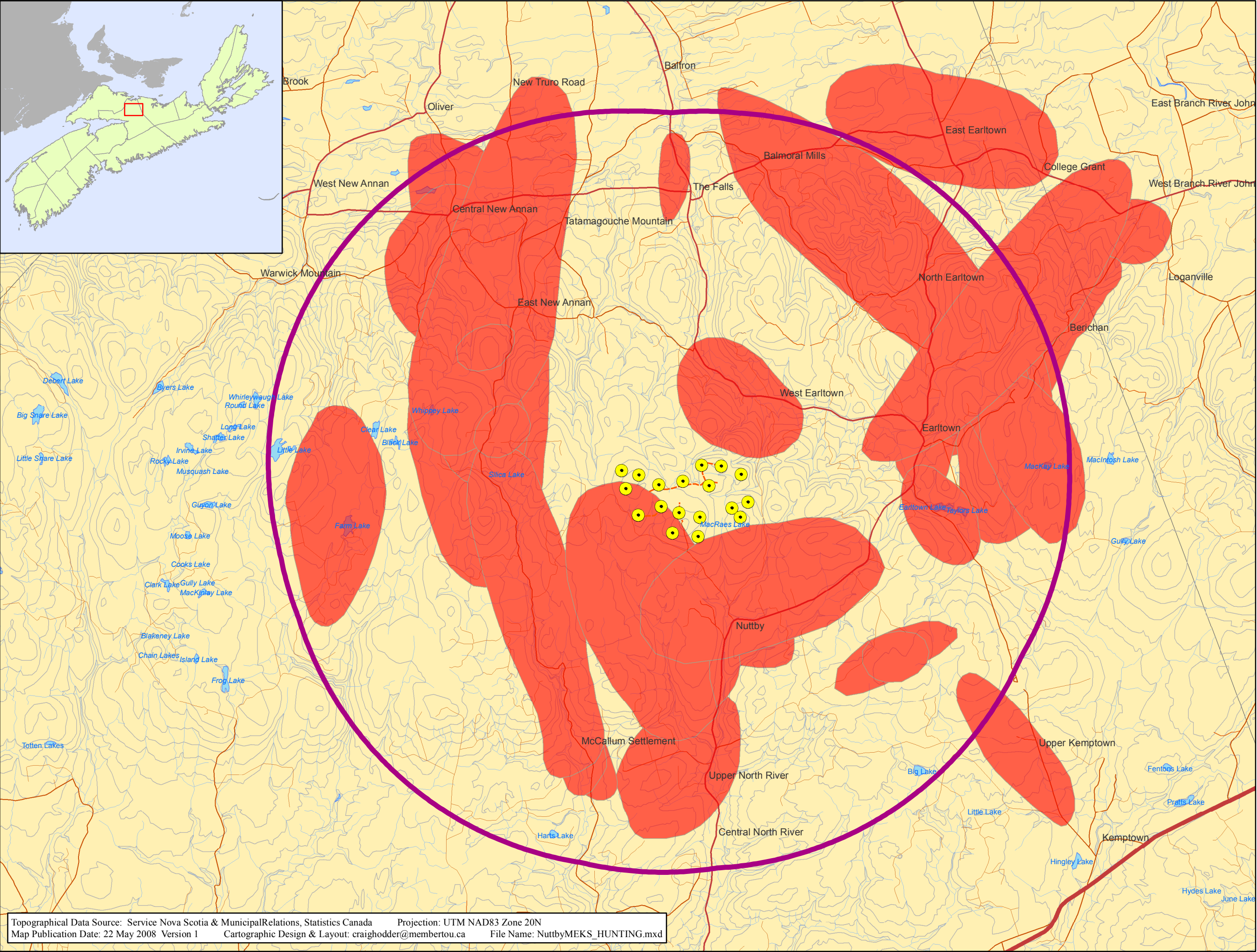
Traditional uses mapped out are a sampling of traditional knowledge held by those interviewed, and should not be interpreted as an absolute measure of Mi'kmaq ecological knowledge and land use.



Map B
Mi'kmaq Traditional and Current Hunting Areas

**MEKS:
Nuttby Mountain**
Colchester Co., Nova Scotia

Mi'kmaq Traditional and
Current Hunting Areas



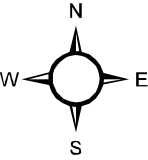
Legend

- Proposed Road
- Proposed Turbines
- MEKS Study Area
- Hunting Areas

Disclaimer:

This map is for graphical purposes only, and may not accurately represent actual topographical features, or proposed features/infrastructure. Use of this map is for the specified project only. Membertou Geomatics Consultants does not accept any responsibilities for use of the map other than the specified project.

Traditional uses mapped out are a sampling of traditional knowledge held by those interviewed, and should not be interpreted as an absolute measure of Mi'kmaq ecological knowledge and land use.



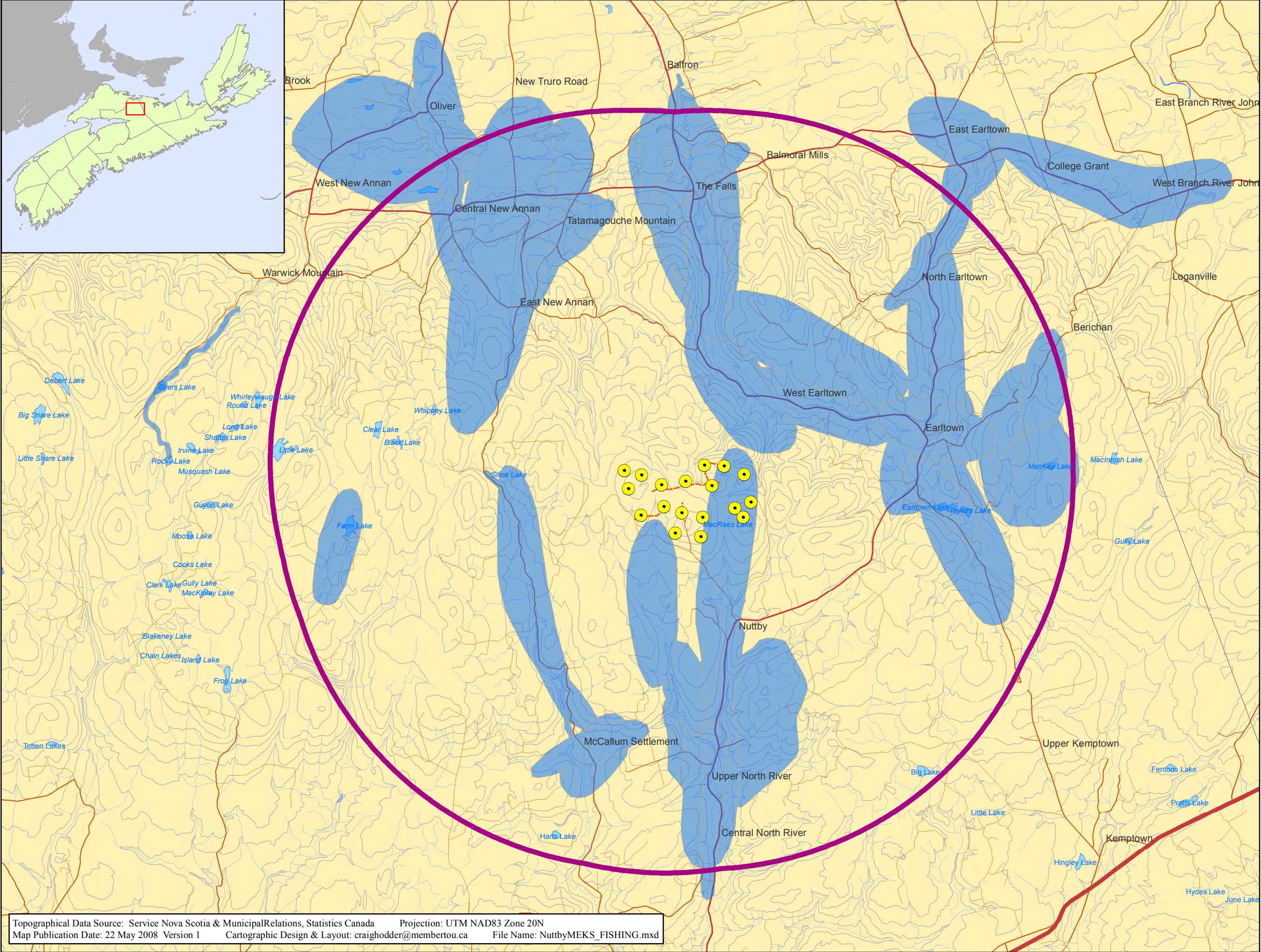
Scale 1:100,000
0 500 1,000 2,000 3,000 4,000
Meters

Map C
Mi'kmaq Traditional and Current Fishing Areas

MEKS: Nuttby Mountain

Colchester Co., Nova Scotia

Mi'kmaq Traditional and
Current Fishing Areas



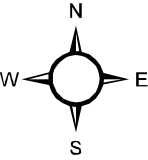
Legend

- Proposed Road
- Proposed Turbines
- MEKS Study Area
- Fishing Areas

Disclaimer:

This map is for graphical purposes only, and may not accurately represent actual topographical features, or proposed features/infrastructure. Use of this map is for the specified project only. Membertou Geomatics Consultants does not accept any responsibilities for use of the map other than the specified project.

Traditional uses mapped out are a sampling of traditional knowledge held by those interviewed, and should not be interpreted as an absolute measure of Mi'kmaq ecological knowledge and land use.



Scale 1:100,000
0 500 1,000 2,000 3,000 4,000
Meters

Map D
Mi'kmaq Traditional and Current Plant Areas

MEKS: Nuttby Mountain

Colchester Co., Nova Scotia

Mi'kmaq Traditional and Current Plant Gathering Areas

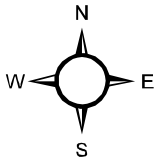
Legend

- Proposed Road
- Proposed Turbines
- MEKS Study Area
- Plant Gathering Areas

Disclaimer:

This map is for graphical purposes only, and may not accurately represent actual topographical features, or proposed features/infrastructure. Use of this map is for the specified project only. Membertou Geomatics Consultants does not accept any responsibilities for use of the map other than the specified project.

Traditional uses mapped out are a sampling of traditional knowledge held by those interviewed, and should not be interpreted as an absolute measure of Mi'kmaq ecological knowledge and land use.



Scale 1:100,000
0 500 1,000 2,000 3,000 4,000
Meters

Map E
Mi'kmaq Ecological Knowledge Study
Protocol

DRAFT

ASSEMBLY OF NOVA SCOTIA MI'KMAQ CHIEFS

MI'KMAQ ECOLOGICAL KNOWLEDGE STUDY PROTOCOL



ANCIENT INSIGNIA WORN BY MI'KMAQ CHIEFS, REPRESENTING MI'KMAKI

SUBMITTED TO: ASSEMBLY OF NOVA SCOTIA MI'KMAQ CHIEFS

SUBMITTED BY: MEK TECHNICAL TEAM

DATE: NOVEMBER 22, 2007

Assembly of Nova Scotia Mi'kmaq Chiefs

Mi'kmaq Ecological Knowledge Study Protocol

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Foreword

The enclosed Mi'kmaq Ecological Knowledge Study Protocol (MEKS Protocol) represents an important milestone for the Nova Scotia Mi'kmaq to manage the collection and distribution of Mi'kmaq Ecological Knowledge throughout Nova Scotia. The protection of Mi'kmaq Ecological Knowledge¹ (MEK) has been highlighted as a key issue through the Assembly of Nova Scotia Mi'kmaq Chiefs (the “Assembly”). The Assembly exists as an institution of governance for the Mi'kmaq of Nova Scotia with respect to issues of common interest and concern. It includes representation from all the thirteen Mi'kmaq Bands located throughout the province of Nova Scotia.

The purpose of the MEKS Protocol is to identify the essential components of an MEKS in accordance with the concerns and aspirations of the Assembly. By enacting this MEKS Protocol, the Assembly trusts that it will contribute to the following objectives: acknowledgment and respect of Mi'kmaq cultural practices, values and traditions; preservation of a Mi'kmaq cultural identity; an open, transparent and accountable MEKS process that is receptive to the unique needs of the Nova Scotia Mi'kmaq.

Although this MEKS Protocol will serve as the primary basis for any proposed MEKS in Nova Scotia, it should not be read in isolation from other Mi'kmaq regional or provincial processes regarding MEKS. Furthermore, the MEKS Protocol does not operate as to replace other applicable Mi'kmaq research ethics practices or procedures that exist or may be created from time to time. Where said provincial and regional processes exist, this MEK Protocol shall be liberally interpreted for consistency with said regional and provincial processes. If in the event that there is a clear conflict between this MEKS Protocol and other provincial and regional processes, this MEKS Protocol shall take precedence and prevail.

The MEKS Protocol is also a working or rolling document that through the course of time will undergo further discussion and change. Therefore, when undertaking an MEKS in Nova Scotia, please check for the latest revised document to ensure that any proposed MEKS practices are in keeping with the most recent positions and perspectives of the Nova Scotia Mi'kmaq.

¹ Throughout this document, Mi'kmaq Ecological Knowledge is intended to reflect the concept and meaning of Aboriginal Traditional Knowledge. However, it should also be noted that Mi'kmaq Ecological Knowledge is also specific to the unique practices, culture, values and traditions that the Mi'kmaq people have to all components of the natural environment.

Mi'kmaq Ecological Knowledge Study Protocol

Section I – Introduction:

Since time immemorial, the Mi'kmaq have used and occupied their traditional territory known as Mi'kma'ki which includes Nova Scotia, Prince Edward Island, New Brunswick and parts of Quebec, Newfoundland and the northeastern part of Maine. Mi'kmaq Paleo-Indian sites in Nova Scotia provide archaeological evidence of Mi'kmaq occupation for over 10,500 years. Today, the Mi'kmaq continue to use and occupy Mi'kma'ki and share a deep and profound relationship with their traditional lands.²

In Mi'kmaq cultural tradition, the Mi'kmaq utilize Netukulimk – a Mi'kmawey concept which includes the use of the natural bounty provided by the Creator for the self-support and well-being of the individual and the community at large. Netukulimk also encompasses ecological beliefs through the interplay of collective and individual responsibilities of the Mi'kmaq to the natural world. Such relationships with the land are holistic in nature and consider many aspects of the natural and spiritual world. These include, but are not limited to, land/marine resource use, management, conservation and Mi'kmaq spiritual beliefs.

Throughout history and today, Mi'kmaq subsistence and spiritual practices encompass the natural world in a manner that is, at times, distinct from understandings inherent in western society. The Mi'kmaq do not perceive the natural and spiritual world as separate and distinct spheres. This longstanding relationship that the Mi'kmaq have maintained for centuries with their natural surroundings is the foundation for MEK. For the Mi'kmaq, MEK is not just simply an exercise in the examination of Mi'kmaq land and resource use; rather, it also involves a unique approach to the gaining of this information through Mi'kmaq cultural practices and tradition.

Secondly, MEK is not static. It is constantly reanalyzed and tested through the experiences of new generations of Mi'kmaq. This experience considers and incorporates new and emerging resource issues thus enabling reliable MEK data to emerge through a shared experience. In light of this cultural dialogue or practice, it is important that a guiding and interpretive framework be advanced to take into account these unique practices, beliefs and perspectives through a respect for cultural difference.

² Taken from confidential source material from: The Confederacy of Mainland Mi'kmaq, Membertou Corporate Inc., and the Unama'ki Institute of Natural Resources.

Section II – Definitions

2.1 Within this Mi'kmaq Ecological Knowledge Study Protocol:

- a) “Assembly” means the Assembly of Nova Scotia Mi'kmaq Chiefs which operates as an institution of governance for the Mi'kmaq of Nova Scotia.
- b) “Consultant” means a company, group or individual that has primary responsibility to undertake and deliver a Mi'kmaq Ecological Study within the province of Nova Scotia.
- c) “Consultation” means any Crown and Mi'kmaq government³ discussion, negotiation or meeting used to justify Crown infringement of Aboriginal and treaty rights.
- d) “Government” means any federal, provincial or municipal department, agent or representative.
- e) “MEK” means Mi'kmaq Ecological Knowledge and includes the collection and adaptation of knowledge that Mi'kmaq people have with all components of the natural environment and the interrelationships that exist between all life forms from a unique historical, cultural and spiritual perspective.
- f) “MEKS Protocol” means the Mi'kmaq Ecological Knowledge Study Protocol and includes all attached appendices and amendments that may be made from time to time.
- g) “Mi'kmaq Ecological Knowledge Study” means all components related to the planning, collection, analysis, reporting and distribution of Mi'kmaq Ecological Knowledge in Nova Scotia.
- h) “MEK Report” means any document that considers MEK data pursuant to any Project defined in this MEKS Protocol.
- i) “Mi'kmaq Community” means any of the Mi'kmaq First Nation Bands, affiliated communities or other Mi'kmaq communities that exist throughout Nova Scotia.
- j) “Mi'kmaq Participant” means any person of Mi'kmaq descent who has agreed to participate in an MEKS.

³ Mi'kmaq Government is intended to mean any of the thirteen Nova Scotia Mi'kmaq Bands in whole or in part.

- k) “Netukulimk” means the Mi'kmaq use of the Creator's natural bounty for self-support and well-being and the interplay of collective and individual responsibilities that the Mi'kmaq have to the natural world.
- l) “Project” means any undertaking that has triggered an MEKS to occur.
- m) “Proponent Company” means a company, group or person responsible for undertaking a Project.

Section III – Interpretation:

3.1 Nothing in this MEKS Protocol or any related discussions, communications or documentation shall be interpreted as to abrogate, derogate, or in any way, affect, limit or detract from the existing Aboriginal and treaty rights that the Mi'kmaq people individually and collectively enjoy throughout Nova Scotia.

3.2 For greater certainty to Section 3.1, nothing in this document shall be interpreted as Consultation for purposes of justifying an infringement on Mi'kmaq Aboriginal or Treaty rights that exist or may be found to exist in the future.

3.3 This MEKS Protocol shall be read to compliment any Mi'kmaq regional or provincial processes that pertain to MEK data collection and, in the event of a conflict between said process(s) and this Protocol, this Protocol shall take precedence and prevail.

Section IV – MEKS Methodology:

4.1 MEKS methodology provides guidelines and standards⁴ on suggested practices and procedures relevant to the planning/design, development, implementation and reporting stages of an MEKS.

i) Phase I - Planning and Design

This Phase includes all preliminary work specific to the development of an MEKS. Although Consultants may differ on the approach or substance of the components contained within this Phase, it is a requirement that an MEKS both consider and address each of the following elements:

A) Communications:

Communication is a key activity to the Phase I component of the MEKS. At the front end of the MEKS process, the Consultant shall draft a letter outlining its intention to the proposed MEKS process. At a minimum, this letter should include the following:

⁴ This MEKS Protocol provides both standards and recommended guidelines for all stages of an MEKS. For greater certainty, guidelines should be interpreted as general “rules of thumb” or “best practices.” Standards exist as requirements or obligations that are to be followed at various stages of an MEKS.

- information on the Proponent Company
- outline the nature of the Project
- include background information on the Consultant
- outline the purpose of the MEKS
- specify the proposed MEKS process and related activities
- comment on the intended use of the MEKS
- provide relevant contact information
- provide an opportunity for feedback/input

The letter should be sent to the Assembly, Union of Nova Scotia Indians, The Confederacy of Mainland Mi'kmaq, Kwilmu'kw Maw-klusuaqn and the political leadership of each Mi'kmaq First Nation Band that the Consultant intends to collect MEKS data within. For a list of relevant contact persons and Mi'kmaq Bands see Appendix B.

B) Research Principles and Protocols – Mi'kmaw Ethics Watch:

The Research Principles and Protocols provides a prescribed approval process to the collection, analysis and reporting of research data generated from Mi'kmaq First Nation communities throughout the province of Nova Scotia. The Consultant should consider the Research Principles and Protocols as an additional research process requirement in the early planning stages of an MEKS. For a copy of the Mi'kmaq Research Ethics Protocol, see Appendix D.

ii) Phase II - Delivery and Implementation:

This Phase includes all work specific to the delivery and implementation of a MEKS in Nova Scotia. As previously stated, although Consultants may differ on the approach or substance contained within this Phase, it is highly recommended that a MEKS both consider and address, at a minimum, each of the following elements:

A) Informed Consent and Confidentiality:

Before data collection of MEK data takes place, it is highly recommended that the Consultant first secure informed consent with the Mi'kmaq Participant. Two key elements to informed consent involve education and agreement. The Consultant should ensure that the interviewee is provided information and demonstrate a clear understanding of the following:

1) Education:

- proposed project specifics
- purpose of an MEKS
- use of MEKS data in the approval process(s)

- the MEKS is not intended to be Consultation for the purpose of justifying an infringement on Aboriginal and Treaty rights

2) Agreement:

- that participation is voluntary
- written Consent and Release form is explained and completed

B) Project Scoping:

The collection of MEK data is based on the concept of Netukulimk. When determining the study area, the Consultant should take into account the nature of MEK data which demands the inclusion of the following:

- MEK data is project and time specific and as such will require recent and updated MEK data
- collection of MEKS data within a buffer area may be considered to be more extensive than the proposed Project footprint
- the collection of Mi'kmaq use and occupation sites and their importance to Netukulimk
- the significance of the inclusion and recognition of Mi'kmaq historical, spiritual and cultural information

C) Developing a Relationship and Interviewing:

This MEKS Protocol does not restrict or define who does a MEKS. However, it does recognize that every Mi'kmaq community has the right to decide whether they should participate with a Consultant on a MEKS. When engaging a Mi'kmaq Participant through an MEKS interview process a number of areas should be considered in terms of developing an approach to the collection of MEK data. At a minimum, these areas should include the following:

- interviews are conducted in the Interviewee's language of preference
- interviews should be conducted at the place of preference to the interviewee
- the interviewer should have appropriate materials including maps and recording devices
- tokens of Appreciation and Gratitude
- the interviewer should be knowledgeable and respectful of Mi'kmaq cultural norms
- the interviewer should take into account "response burden"
- first and second hand accounts should be considered in the collection of MEKS data

D) Sufficiency of MEK data:

It is important that the Consultant ensure that an adequate amount of MEKS data is collected within the proposed study area. The collection of MEK data is dependent on a number of factors. When conducting a MEKS, the Consultant shall make every effort to uncover MEK data from a target group of Mi'kmaq Participants. The target group, at a minimum, must include Mi'kmaq Participants who have specific MEK knowledge or have conducted land use activities in the proposed study area. It is recommended that the Consultant ensure that appropriate time, funding and resources are available to account for the collection of sufficient MEK data. In the event that the Consultant is not able to collect a sufficient amount of MEK data, the reasons or potential causes for this circumstance must be outlined in the MEK Report.

E) Historical Research and Ground Truthing:

The MEKS must include a historical review of Mi'kmaq activity both within and surrounding the proposed study area and an “on the ground” site visit. At a minimum, these activities should include the following:

- historical research from primary and secondary resource materials and oral accounts
- site visits identifying and confirming MEK data
- due regard to safety issues

iii) Phase III - Finalizing the MEKS Report and Disclosure:

This Phase includes all work specific to the analysis of MEK data, reporting and disclosure of MEK information. It is recommended that a MEKS both consider and address, at a minimum, the following two key elements:

A) MEK Data Analysis:

- when reporting MEK data, the Consultants shall use a GIS software program
- when determining the significance of MEK Data the Consultant shall have due regard to both scientific and Mi'kmaq cultural practice and tradition
- the Consultant utilize the following factors when determining the significance of MEK data:
 - the uniqueness and nature of the land or resource use/occupation
 - the cultural use or spiritual meaning of the land or resource use/occupation
 - the availability and the importance of the land or resource use/occupation

B) Disclosure and Reporting of MEK Data:

- MEKS Report findings should contain MEK baseline information such as the type of use and species including numbers present
- only MEK of significance be outlined in the report through the use of a GIS
- consideration and due regard should be granted to confidentiality of a Mi'kmaq Participant's MEK data
- the MEKS should provide suggestions on mitigation or remediation of potential impacts in a manner that reflects sound environmental practice from a scientific and Mi'kmaq cultural perspective
- the MEKS Report should be distributed in a timely manner to the Mi'kmaq political organizations as outlined in Appendix C
- the MEKS Report must account for the explicit reservation and protection of Intellectual Property Rights that the Mi'kmaq individually and collectively enjoy in Nova Scotia
- the Consultant shall make explicit reference in the MEKS Report that it is not intended nor is it to be interpreted as constituting Consultation for the purpose of justifying an infringement on the existing Aboriginal and Treaty rights of the Mi'kmaq in Nova Scotia

Section V – Amendments:

6.1 This MEKS Protocol can be amended at any time by resolution through majority vote at a duly convened Assembly meeting.

6.2 In the event that an amendment is made to this MEKS Protocol, the said amendment shall be recorded in the Assembly minutes and a copy of the motion shall be attached to the MEKS Protocol as an Appendix.

Section VI – Appendices:

See Attached

APPENDIX A

ASSEMBLY OF NOVA SCOTIA MI'KMAQ CHIEFS

Resolution Respecting:

A Mi'kmaq Protocol on Mi'kmaq Ecological Knowledge Studies in Nova Scotia

Whereas the Assembly of Nova Scotia Mi'kmaq Chiefs (hereinafter the “Assembly”) exists as an institution of governance for the Mi'kmaq of Nova Scotia in respect of issues of common interests and concerns;

And Whereas the Assembly is, in part, responsible to communicate to Canada and Nova Scotia the common position of the Mi'kmaq of Nova Scotia on matters of concern to all the Mi'kmaq people in Nova Scotia;

And Whereas the Assembly, by motion at a duly convened meeting on January 25th 2007, have identified the need to undertake a Mi'kmaq Protocol specific to the design, development and implementation of Mi'kmaq Ecological Knowledge Studies (MEKS) within the province of Nova Scotia;

And Whereas the overall objective of the Protocol is to set up standards and understandings on items that the Assembly considers to be proper MEKS in Nova Scotia;

And Whereas for said purpose, the Assembly has mandated the composition of a committee of technical representatives from the various Mi'kmaq organizations throughout Nova Scotia;

And Whereas the technical committee has jointly developed the attached MEKS Protocol for consideration and approval by the Assembly;

Now Therefore The Assembly Resolves That:

The attached MEKS Protocol is formally adopted by the Assembly of Nova Scotia Mi'kmaq Chiefs.

Passed at Old Orchard Inn, Wolfville, Nova Scotia, this 22nd, day of November, 2007.

Moved By: Chief Wilbert Marshall, Chapel Island (Potloteck) First Nation

Seconded By: Councilor Ian Knockwood, Proxy, Shubenacadie (Indian Brook) First Nation

Decision: Carried by Consensus.

APPENDIX B

List of Nova Scotia Mi'kmaq First Nation Bands and Designated Contact Persons

Acadia First Nation Band

RR#4 Box 5914-C

Yarmouth, NS, B5A 4A8

Telephone (902) 742-8854

Contact Person: Chief Deborah Robinson

Annapolis Valley First Nation Band

P.O. Box 89, Cambridge Station

Kings County, NS, B0P 1G0

Telephone (902) 538-7149

Fax (902) 538-7734

Contact Person: Chief Brian Toney

Bear River First Nation Band

P.O. Box 210, Bear River, NS, B0S 1B0

Telephone (902) 467-3802

Contact Person: Chief Theresa Meuse

Eskasoni First Nation Band

Eskasoni, NS, B0A 1J0

Telephone (902) 379-2800

Fax (902) 379-2801

Contact Person: Chief Charlie Dennis

Glooscap First Nation Band

P.O. Box 449 Hantsport, NS, B0P 1P0

Telephone (902) 684-9788

Fax (902) 684-9890

Contact Person: Chief Shirley Clarke

Shubenacadie (Indian Brook) First Nation Band

MicMac Post Office, Indian Brook, NS, B0N 1W0

Telephone (902) 758-2049

Fax (902) 758-2017

Contact Person: Chief Jerry F. Sack

Membertou First Nation Band

111 Membertou Street, Membertou, NS, B1S 2M9

Telephone (902) 564-6466

Fax (902) 539-6645

Contact Person: Chief Terrance J. Paul

Millbrook First Nation Band
P.O. Box 634 Truro, NS, B2I 5E5
Telephone (902) 897-9199
Fax (902) 893-4785
Contact Person: Chief Lawrence Paul

Paq'tnkek First Nation Band
RR#1 Afton, Antigonish County, NS, B0H 1A0
Telephone (902) 386-2897
Fax (902) 386-2043
Contact Person: Chief M. Gerard Julien

Pictou Landing First Nation Band
Box 55, Site #6 Pictou Landing NS, B0K 1X0
Telephone (902) 752-4912
Fax (902) 755-4715
Contact Person: Chief Ann Francis- Muise

Chapel Island (Potlotek) First Nation Band
Box 538 Chapel Island, NS, B0E 3B0
Telephone (902) 535-3317
Fax (902) 535-3004
Contact Person: Chief Wilbert Marshall

Waycobah First Nation Band
P.O. Box 149,
Whycocomagh, NS, B0E 3M0
Telephone (902) 756-2337
Fax (902) 295-3398
Contact Person: Chief Morley Googoo

Wagmatcook First Nation Band
P.O. Box 30001, Wagmatcook, NS. B0E 3N0
Telephone (902) 295-2598
Fax (902) 295-3398
Contact Person: Chief Lester Peck

APPENDIX C

A List of Relevant Mi'kmaq Organizations and Designated Contact Persons

Assembly of Nova Scotia Mi'kmaq Chiefs
72 Church Rd. Truro, NS. B2N 6N4
Contact Person: Janice Maloney

Treaty and Aboriginal Rights Research Centre of Nova Scotia
Box 341 Shubenacadie, NS. B0N 2H0
Telephone (902) 758-1953
Fax (902) 758-1759
Contact Person: James Michael

Unama'ki Institute of Natural Resources
4123 Shore Rd. P.O. Box 8096 Eskasoni, NS. B1W 1C2
Telephone (902) 379-2163
Fax (902) 379-2250
Contact Person: Lisa Young

The Confederacy of Mainland Mi'kmaq
840 Willow St. Box 1590 Truro, NS. B2N 5V3
Telephone (902) 895-6385
Fax (902) 893-1520
Contact Person: Michael Cox

Union of Nova Scotia Indians
Box 961 Sydney, NS. B1P 6J4
Telephone (902) 539-4107
Fax (902) 564-2137
Contact Person: Kimberly Paul

Eskasoni Fish And Wildlife Commission
4123 Shore Road Eskasoni, NS. B1W 1A6
Telephone (902) 379-2024
Fax (902) 379-2159
Contact Person: Tom Johnson

Kwilmu'kw Maw-klusuaqn (Mi'kmaq Rights Initiative)
72 Church Rd. Truro, NS. B2N 6N4
Telephone (902) 843-3880
Fax (902) 843-3882
Contact Person: Janice Maloney

APPENDIX D

Research Principles and Protocols - Mi'kmaw Ethics Watch

Background

Wla wjit Mi'kmaq kisutmi'tij Sante' Mawio'mi 1999 ek. Wla nekmokw Sante' Mawio'mi ika'lapni maw ni'kmnew koqoey.

Don Julian, Executive Director, Confederacy of Mainland Mi'kmaq
Eleanor Bernard, Executive Director, Mi'kmaw Kina'matnewey
Dr. Marie Battiste, Academic Director, Aboriginal Education Research Centre,
Professor, Department of Education Foundations, University of Saskatchewan
Stephen J. Augustine, Curator of Ethnology Eastern Maritime, Canadian Museum of
Civilization
Lindsay Marshall, Associate Dean, Mi'kmaq College Institute, Cape Breton University
Erik Zscheile, Legal Advisor, Confederacy of Mainland Mi'kmaq

Nike' wla Nipniku's 11, 2000 na elkitmi'tij Eskinuapimk ta'n kisutaq Sante' Mawio'mi wjit Mi'kmaq. Wla nike' ninen ewikasultiek kisi-te'tmek tlwisin "Ethics" *Eskinuapimk* weja'tekemk na tlwi'tisnen "Ethics" *Eskinuapimk*.

A Mi'kmaq Ethics Committee has been appointed by the Sante' Mawio'mi (Grand Council) to establish a set of principles and protocols that will protect the integrity and cultural knowledge of the Mi'kmaw people. These principles and protocols are intended to guide research and studies in a manner that will guarantee that the right of ownership rests with the various Mi'kmaw communities. These principles and protocols will guarantee only the highest standards of research. Interpretation and conclusions drawn from the research will be subject to approval to ensure accuracy and cultural sensitivity.

At Chapel Island on July 25, 1999, the Sante' Mawio'mi established a committee to study and develop principles and guidelines to protect Mi'kmaq people and their knowledge. The committee studied the issues involved in research among Indigenous peoples, and developed a set of standards so that Mi'kmaq people might be informed of research - its benefits and costs, be treated fairly and ethically in their participation in any research, and have an opportunity to benefit and gain from any research conducted among them. These principles and guidelines are now being disseminated broadly to each of the Mi'kmaw communities for their review, discussion, and ratification.

[Note: The author of this document is the Mi'kmaw Ethics Watch.]

Principles

Mi'kmaq people are the guardians and interpreters of their culture and knowledge system - past, present, and future.

Mi'kmaw knowledge, culture, and arts, are inextricably connected with their traditional lands, districts, and territories.

Mi'kmaq people have the right and obligation to exercise control to protect their cultural and intellectual properties and knowledge.

Mi'kmaw knowledge is collectively owned, discovered, used, and taught and so also must be collectively guarded by appropriate delegated or appointed collective(s) who will oversee these guidelines and process research proposals.

Each community shall have knowledge and control over their own community knowledge and shall negotiate locally respecting levels of authority.

Mi'kmaw knowledge may have traditional owners involving individuals, families, clans, associations, and societies which must be determined in accordance with these peoples' own customs, laws, and procedures.

Any research, study, or inquiry into collective Mi'kmaw knowledge, culture, arts, or spirituality which involves partnerships in research shall be reviewed by the Mi'kmaw Ethics Watch. (Partnerships shall include any of the following: researchers, members of a research team, research subjects, sources of information, users of completed research, clients, funders, or license holders.)

The Sante' Mawio'mi is the authorized body of the Mi'kmaq people and thus has to delegate authority as to how the Watch is composed.

All research, study, or inquiry into Mi'kmaw knowledge, culture, and traditions involving any research partners belongs to the community and must be returned to that community.

The Mi'kmaq Ethics Watch (Committee, etc.) shall conduct a fair and timely review of all research conducted among Mi'kmaq people and shall maintain control over all research processes.

Obligations and Protocols

For researchers/students/agencies/organizations/corporations conducting research involving Mi'kmaq people and whose research/inquiry enters the public domain (theses, dissertations, published journals, books, technical reports):

All research on the Mi'kmaq is to be approached as a negotiated partnership, taking into account all the interests of those who live in the community(ies). Participants shall be recognized and treated as equals in the research process instead of as "informants" or "subjects".

All research partners must show respect for language, traditions, standards of the communities, and for the highest standards of scholarly research.

All research scholars shall assume responsibility to learn the protocols and traditions of the local people with whom they do research and to be knowledgeable and sensitive to cultural practices and issues that ensure respect and accommodation to local norms.

All research partners shall provide descriptions of research processes in the participant's own language (written and oral) which shall include detailed explanations of the usefulness of the study, potential benefits and possible harmful effects on individuals, groups and the environment. Researchers must clearly identify sponsors, purposes of the research, sources of financial support and investigators for the research (scholarly and corporate), tasks to be performed, information requested from Mi'kmaq people, participatory research processes, the publication plans for the results, and anticipated royalties for the research. All consent disclosures shall be written in both Mi'kmaq and English, depending on the community norms. No coercion, constraint, or undue inducements shall be used to obtain consent. All individuals and communities have the right to decline or withdraw from participating at any time without penalties.

All research involving children (under the age of 14) or information obtained about personal histories of children will involve informed consent of parents or guardians.

All research partners shall inform participants in their own language about the use of data gathering devices - tape, video recordings, photos, physiological measurements, and how this data will be used. They shall also provide information on the anonymity or confidentiality of their participation, and if not possible, to inform the participant that anonymity is not possible. Participants shall be informed of possible consequences of their choice to remain in the research and their right to withdraw consent or participation in the research at any time.

All research partners shall provide each person or partner involved in the research with information regarding the anticipated risks involved in their participation, and any anticipated benefits.

All research partners must be duly informed of each research step along the way and be provided with information about the research process and the distribution of results and information.

All research partners should attempt to impart new skills into the community, e.g. data collection, whenever possible, advisable or desirable by the community.

All research scholars shall invite Mi'kmaw participation in the interpretation and/or review of any conclusions drawn from the research to ensure accuracy and sensitivity of interpretation.

All research scholars should consider a variety of research processes, including

qualitative and participatory research methods and move beyond the dominant quantitative methods to empower indigenous voices and skills.

Mi'kmawey L'nui Skmaq (Obligations for Mi'kmaw Ethics Watch)

These principles have been initiated by the Sante' Mawio'mi:

The Mi'kmaw Ethics Watch shall come from local community representatives authorized to review ethic principles, standards, protocols, practices of research conducted, knowledge, and heritage.

Each community shall decide levels of authority locally, and who shall speak for the community.

Members of the Watch shall work collaboratively to avoid misuse of information supplied by individuals without permission of the community.

The Mi'kmaw Ethics Watch shall operate on the basis of self-determination of each community and consider the risks and benefits of research and the rights of individuals and collectives to be recognized and protected.

The Mi'kmaw Ethics Watch shall consider the credentials and intentions of each research project, its sensitivity to Mi'kmaw culture and heritage, and consider how the research can benefit the community.

The Mi'kmaw Ethics Watch shall consider problems surrounding the purchase or publication of private materials and removal of artifacts. Private papers, photographs, or artistic productions are protected under copyright. One cannot legally cite, reproduce, publish, refer to, or distribute, documents without permission, from the authors, heirs, or institutions that hold copyright.

Any research involving the collection of human genes, Mi'kmaw genetic material, or involving the Human Genome Diversity Project shall be rejected or considered only as to its benefits to the Mi'kmaq people.

The Mi'kmaw Ethics Watch shall increase efforts to educate each community and its individuals to the issues, concerns, benefits, and risks of research involving Mi'kmaq people, heritage, environment, and promote ethical conduct and conformity concerning protocols and guidelines for doing research in and about Indigenous peoples with some kind of disciplinary action against those who do not comply.

The Mi'kmaw Ethics Watch shall consider the context of the research being requested and the issues of power and control that influence research topics, questions, and results.

The Mi'kmaw Ethics Watch shall encourage researchers to consult with and interpret

the research from the tribal perspective and to make research and results available to Mi'kmaq people in their own language(s) and/or orthographies.

Applications to Conduct Research

Shall include:

1. Name of researcher(s) and/or supervisor(s) and related department(s). Name of contact person(s) and contact address (indicate summer addresses if pertinent).
2. Anticipated start date of the research study and expected completion date. Include anticipated field research dates.
3. Title of study.
4. Abstract (100-250 words), giving a brief statement of the hypotheses (or brief statement of research questions and significant proposed research) to be examined.
5. Funding source: indicate the source of research or study funds, and whether grant funds have already been provided.
6. Participants: describe the procedures for recruiting, selecting, and assigning participants.
7. Consent: describe the process by which participants consent to participate in the research project; that is, how will participants be informed of their rights as participants, and by what means they will signify their understanding of those rights and consent to participate. Any research involving children shall require parental informed consent.
8. Language: describe how language and cultural differences of Mi'kmaq people will be accommodated in communicating or deriving consent. Describe process for determining and using appropriate protocols and traditions for entering into Mi'kmaq territories and homes.
9. Methods/Procedures: indicate if any aspects of the study involve risk to the participants or to the Mi'kmaq people collectively. Describe any risk to the person/persons as a result of the findings being reported or published.
10. Risk or deception: indicate if any aspects of the study involve risk to the participants or to the Mi'kmaq people collectively. Describe any risk to the person/persons as a result of the findings being reported or published.
11. Usefulness and Benefits: describe any benefit(s) for the individual Mi'kmaq person or to the Mi'kmaq Nation as a whole as a result of this study or its published report or

findings.

12. Interpretation of Results: explain how the data will be analyzed and whether any Mi'kmaq people will be involved in, consulted with, or informed about, the interpretation process of analyzing the data or the presentation of its findings and conclusions.

13. Storage of data: detail how the data will be stored to ensure safety and confidentiality of the participants in the study. How long will the data be kept? Will the data be used again in another aspect of the study? Will the participants have the right to consent to this next phase of the study?

14. Confidentiality: describe what measures will be taken to protect Mi'kmaq participants and third party privacy (confidentiality and anonymity).

15. Publication and royalties: describe anticipated publications or plans for publication from this research and how any royalties from book sales will be shared with the participants of the study.

Send application to:

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