

16.0 CURRENT USE OF LAND AND RESOURCES FOR TRADITIONAL PURPOSES BY ABORIGINAL PERSONS

16.1 SCOPE OF THE REVIEW

The scope of the Comparative Environmental Review (CER) considers potential interactions between the Options and current use of land and resources for traditional purposes by Aboriginal persons.

In this CER, "current use" refers to the use of land and/or resources for traditional purposes by Aboriginal persons within approximately the last 100 years. This includes the time prior to construction of the Mactaquac Generating Station (the Station). "Use" refers to traditional activities such as hunting, fishing and gathering conducted by Aboriginal persons for traditional purposes, which includes subsistence, social, and ceremonial uses.

Current use of land and resources for traditional purposes by Aboriginal persons is a valued component (VC) in recognition of the current and past use of the land and resources by Aboriginal persons in carrying out their traditional activities as an integral part of their lives and culture, and in recognition of the constitutionally protected rights of Aboriginal persons to carry out such activities. The focus of this section is on current use for traditional activities specifically by Aboriginal persons; uses by non-Aboriginal people are addressed in other VCs (e.g., Section 12, Human Occupancy and Resource Use).

Aboriginal people have lived in the territory now known as New Brunswick for at least 8,000 years, with the Maliseet (Wolastoqiyik) concentrated along the Saint John River (THRIVE Consulting 2015), and the Mi'kmaq generally concentrated along New Brunswick's coastlines and interior highlands. The lands and resources of New Brunswick have thus been, and are being, used by Aboriginal persons for traditional hunting, fishing, trapping, gathering, subsistence and related purposes.

It is important to note that the information presented in this section is purposely general, and preliminary. At the time of writing the Draft CER Report in September 2015, no traditional ecological knowledge or traditional land and resource use studies had been completed specifically for the Mactaquac Project. NB Power initiated an extensive Aboriginal engagement process beginning in 2014, which is ongoing, and has since funded a Traditional Knowledge/Traditional Land Use study to be carried out by the six Maliseet communities of New Brunswick, the results of which were not available to the Study Team at the time of finalizing the CER Report in August 2016. As such, the information provided in this section is based on general knowledge of First Nations use and culture, supplemented by literature sources such as publicly-available Traditional Land and Resource Use reports and Traditional Ecological Knowledge reports for the Saint John River basin (a detailed list is provided in Section 16.2.1). NB Power will be informed by at least one separate Traditional Knowledge/Traditional Land Use study to assist in its decision-making regarding the Preferred Option.

This section provides general information about possible traditional activities that may be carried out by Aboriginal persons (as informed by general knowledge). However, since the Study Team was provided with no specific information from First Nations communities in relation to their use of the Saint John River or the headpond specifically, limited discussion of the interactions between the Options and Current Use has been provided, and no mitigation recommendations have been made, in this section of the

CER Report. In this light, this chapter does not presume or replace information that may become available through further engagement of First Nations or in any Traditional Knowledge/Traditional Land Use study. The Traditional Knowledge/Traditional Land Use study of the six Maliseet communities of New Brunswick, once available, will provide NB Power with specific information relating to lands and resources used for traditional purposes in the area of review, and potential interactions with the Project Options.

16.1.1 Area of Review

The area of review includes the area between the Station and the town of Woodstock that was flooded by the creation of the headpond, and areas downstream of the Station to approximately the Princess Margaret Bridge in Fredericton (Figure 16.1). It also includes the tributaries to the Saint John River where lands have been flooded (e.g., Kelly’s Creek, Long’s Creek, Meduxnekeag River). This area of review encompasses the main part of the Saint John River that may be affected by the Options, within the traditional Maliseet territory. The communities of Woodstock First Nation, Kingsclear First Nation, and St. Mary’s First Nation are also within this area of review.

16.1.2 Key Issue

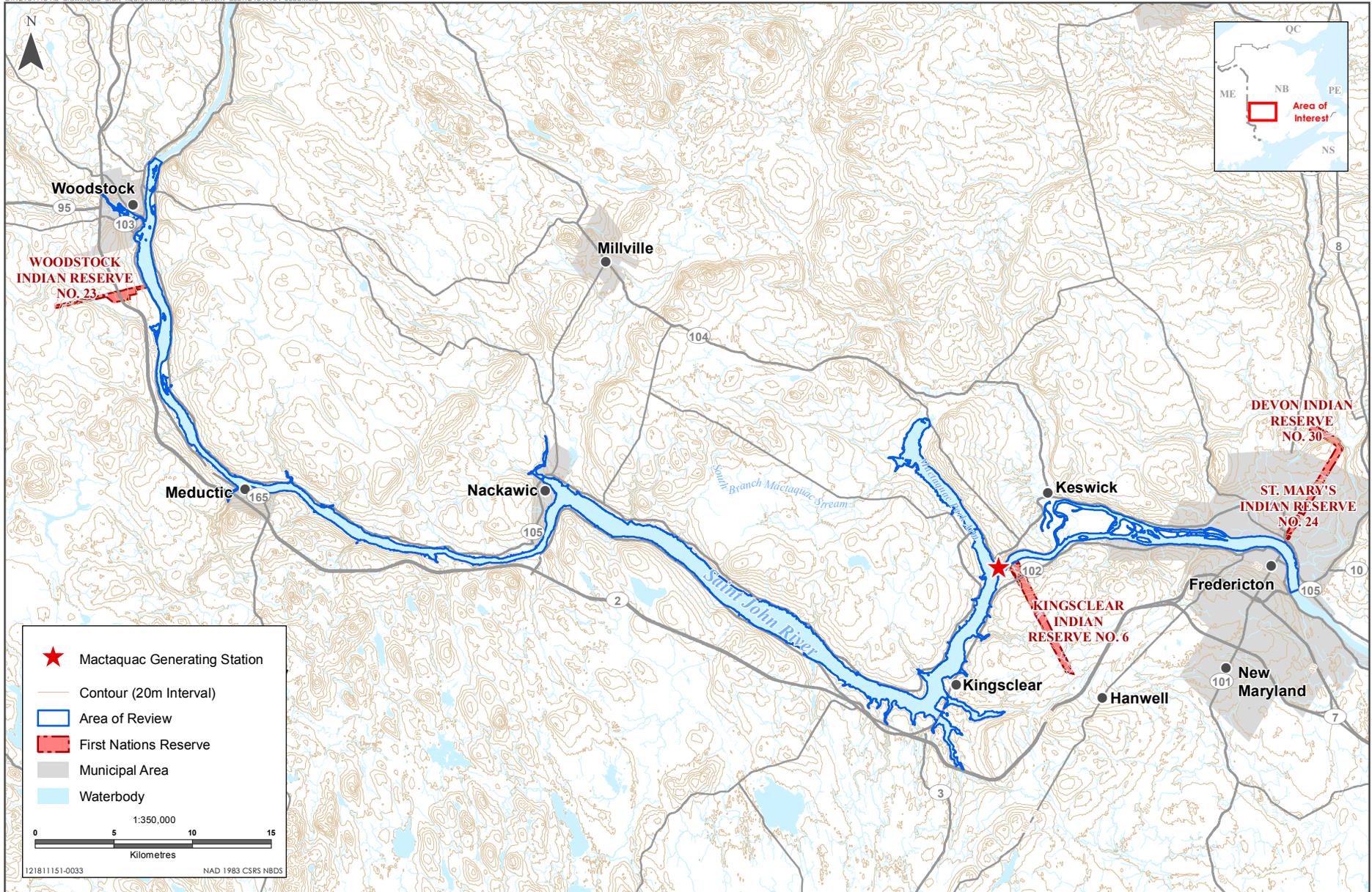
Subject to confirmation through the Traditional Knowledge/Traditional Land Use study, the key issue of concern for current use of land and resources for traditional purposes by Aboriginal persons is listed in Table 16.1.

Table 16.1 Description of Key Issue

Key Issue	Description
Potential change in traditional use	<ul style="list-style-type: none"> • Temporary or permanent change to traditional activities by Aboriginal persons (e.g., hunting, fishing, trapping, gathering, harvesting), including access. • Temporary or permanent change to cultural or spiritual practices or sites.

16.2 EXISTING CONDITIONS

As described above, this section does not presume or replace information that may become available through further engagement of First Nations or in the Traditional Knowledge/Traditional Land Use study. Further information on existing conditions relating to the use of lands and resources for traditional purposes by Aboriginal persons in the area of review will be available for NB Power in the Traditional Knowledge/Traditional Land Use study.



Base Data: Contours, First Nations Reserve and Roads are from SNB and Waterbodies and Watercourses data from NBDNR. All data downloaded from GeoNB.
 Project Data: All Heritage Resources data from Archaeological Services.

Disclaimer: This map is for illustrative purposes to support this Stantec project; questions can be directed to the issuing agency.



16.2.1 Sources of Information

Because First Nations people use oral traditions to store and transfer knowledge and information rather than create a written record of their history or their traditional practices (THRIVE Consulting 2015), traditional knowledge or traditional land use studies conducted by First Nations communities are normally the best sources of baseline data for obtaining information relating to current use of land and resources for traditional purposes by Aboriginal persons. These studies usually contain geographically-relevant data, provide site-specific information (e.g., locations of campsites, cabins, trails, portage routes and sacred areas, such as burial sites or ceremonial sites), provide detailed information about community concerns regarding a specific project, and sometimes provide mitigation recommendations. They may also gather ecological knowledge about a particular natural and cultural environment, such as plant and animal habitats and population health and diversity, animal migration patterns, and vegetation growth. This traditional knowledge is normally based on the experience of multiple generations living within a particular area, passed on from one generation to another.

As previously noted, at the time of finalizing the CER Report in August 2016, baseline data specific to the Project was not yet available, although a Traditional Knowledge/Traditional Land Use study was in progress at that time. Therefore, alternative information sources were used to provide an overview of existing conditions for current use of land and resources for traditional purposes by Aboriginal persons within the area of review. They included:

- publicly available traditional land and resource use reports from regulatory applications for other developments;
- publicly available traditional ecological knowledge reports for the Saint John River Basin and New Brunswick;
- a social ecological history of the Saint John River watershed, with focus on the Mactaquac dam region (THRIVE Consulting 2015);
- general historical and ethnographic literature;
- the New Brunswick Aboriginal Affairs Secretariat website;
- Canadian Rivers Institute (CRI) Annual Reports; and
- academic libraries and databases.

16.2.2 Overview of Existing Conditions

This section provides a brief overview of current use of land and resources for traditional purposes by Aboriginal persons by the Wolastoqiyik people (Maliseet) within the portion of the Saint John River valley that is now the Mactaquac headpond, as available through the sources described above. It refers to a 100-year period that spans the time prior to and after construction of the Station. This information can be used in conjunction with future Traditional Knowledge/Traditional Land Use studies to determine how the Options could interact with current use of land and resources for traditional purposes by Aboriginal persons. It could also be used to develop mitigation measures once the Preferred Option is selected.

16.2.2.1 Wolastoqiyik (Maliseet) Communities along the Saint John River

Since Europeans arrived in North America, the Aboriginal peoples of the western and southern portions of what is now New Brunswick have been called the Maliseet. The exact origin of this name is not clear. In their own language, the Maliseet call themselves the Wolastoqiyik, meaning “the people of the good river”. They call the Saint John River, the main river around which their territory is centred, the Wolastoq, meaning “the good river” (Rayburn 1975). Samuel de Champlain named it the Saint John River when he arrived at the mouth of the river in 1604, so named after John the Baptist. The Maliseet people are known to be traditional hunters, fishers, trappers and gatherers whose history and culture is intricately connected to the Saint John River. Although the Maliseet crisscrossed the entire Saint John River basin extensively as their traditional territory, and continue to do so, today, six Maliseet First Nation communities are located along or near the river (Figure 16.2):

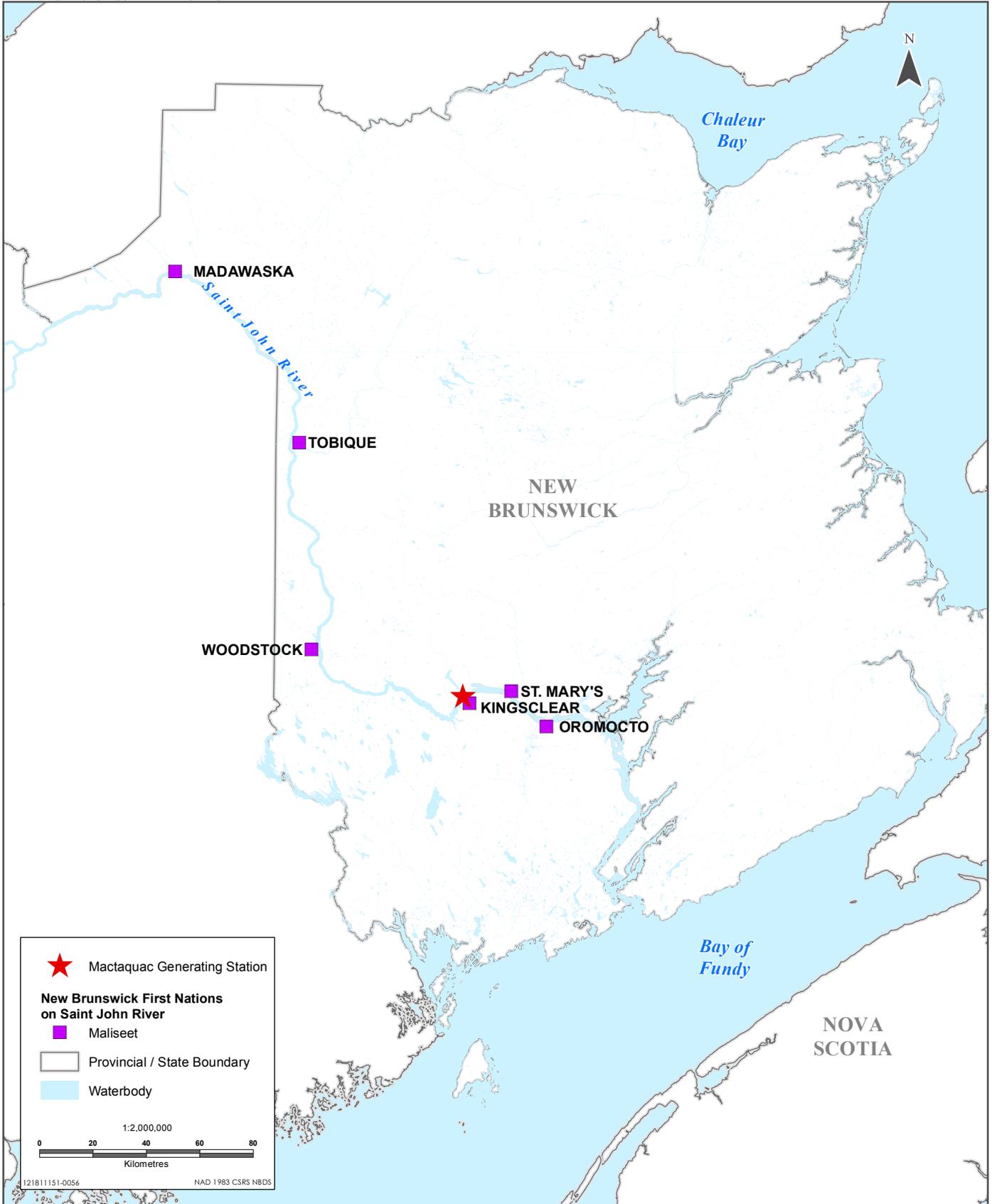
- Madawaska Maliseet First Nation;
- Tobique First Nation;
- Woodstock First Nation;
- Kingsclear First Nation;
- St. Mary's First Nation; and
- Oromocto First Nation.

The communities of the Woodstock First Nation, Kingsclear First Nation, and St. Mary's First Nation are located within the area of review. The Woodstock First Nation is located upstream of the Station (Figure 16.2), while the St. Mary's First Nation and Kingsclear First Nation are located downstream.

The traditional territory of the Maliseet is thought to include the greater Saint John River watershed as far north as the Gulf of St. Lawrence to Québec City, west through the state of Maine where it meets the Passamaquoddy territory, then south to the Bay of Fundy, and east where it meets the neighbouring Mi'kmaq traditional territory. Today, most Maliseet people live in western New Brunswick, and are mainly concentrated along the Saint John River; there are smaller communities in Québec and Maine (including the Houlton Band of Maliseet Indians).

16.2.2.2 Pre-dam Conditions for Current Use of Land and Resources for Traditional Purposes by Aboriginal Persons

The following summary identifies some of the key resources that are thought to have been used by Aboriginal persons prior to construction of the Station. Additional information will be available from the Traditional Knowledge/Traditional Land Use study.



Base Data: Watercourses and waterbodies from NBHN. Project Data: New Brunswick First Nations points created from First Nations Reserve areas from SNB. Data downloaded from GeoNB

Disclaimer: This map is for illustrative purposes to support this Stantec project; questions can be directed to the issuing agency.

As noted in THRIVE Consulting (2015):

“For thousands of years, the seasons influenced where and how the people lived: people were semi-nomadic and followed available food. (...) During the winter months, when food was scarce and animals ranged widely across the landscape, the people went inland into the woods and lived in small family groups, in 1 or 2 wigwams. These small camps belonged to clans of 200-800 people, who spread out during the winter and came together again in other seasons. In the summer, when fish and other aquatic animals were plentiful, people lived in larger groups near rivers or along the ocean, to harvest, smoke, and store fish and the meat of sea mammals for the winter months; and to trade, conduct political negotiations, marriages, and share other celebrations and ceremonies.

Mi'kmaq and Maliseet ideas about the role of people in ecosystems are very different from Eurocentric or western notions. Ecosystems are composed of land, water, plants, and animals, and their interactions. In First Nations culture, ecosystems also include people. In Aboriginal traditions, spiritual, cultural, social, and biophysical elements are integrated—humans are understood to be part of the ecosystem, bestowed by the Creator with the very special role of stewards or caretakers of the lands, waters, plants, and animals.”

These paragraphs highlight the deep spiritual and cultural connection of First Nations to the land and resources they contain, as an integral part of their lives and culture. The discussion that follows provides further details on how First Nations may have used the lands and resources of the Saint John River valley, with particular emphasis on the late 19th and early 20th Centuries; this information is subject to confirmation by the Traditional Knowledge/Traditional Land Use study.

The literature suggests that the Saint John River and its tributaries primarily delineate the boundaries of the Maliseet territory. Not only was the river culturally and historically important, the lands adjacent to the river were important because they provided resources such as wood, bark and roots, which were used for canoes, housing, tools, baskets and cordage (Perley 2005). The exposed river banks provided clay for manufacturing pottery. In addition, cobbles from the river were used for heating, cooking and ceremonial purposes (e.g., traditional sweat lodge) (Perley 2005). Despite the changes to Aboriginal culture as a result of disease and 400 years of colonial settlement in the Saint John River valley, Aboriginal peoples still practiced traditional crafts during the late 19th Century and the 20th Century prior to construction of the Station. However, Maliseet crafts changed: a new focus was placed on making items for trade or sale, such as farming supplies (e.g., potato baskets, butter tubs, barrels, scale baskets) (Leavitt 2003 in Aboriginal Affairs Secretariat).

Literature sources report that the Saint John River and surrounding lands provided everything necessary for life. Different resources were used during each season. For example, in March, maple tree sap was collected in bark containers. Early European accounts note that sap was used to quench thirst (Timmins *et al.* 1992). During late spring and early summer, fiddleheads were “historically abundant” and harvested along streams and on many of the islands within the Saint John River for consumption and for selling to non-natives at local markets (Maliseet Nation Conservation Council 2011). Participants in a spoken history study recounted participating in fiddlehead harvesting during May (Perley and Blair 2003). Annual temporary camp sites associated with the harvesting of fiddleheads and other plants

were established on Little Bear and Big Bear Island, Long Island, and the Snowshoe Islands (Perley and Blair 2003).

In addition to fiddleheads, information sources suggest that the Maliseet people gathered many plant resources within the Saint John River valley for both consumption and for medicinal and ceremonial purposes. Some of the plants harvested in the Saint John River valley included: calamus roots, wild onions, sweet grass, and rice (Maliseet Nation Conservation Council 2011) as well as hemlock bark (Perley and Blair 2003). For example, sweet grass was often used as smudge for ceremonial purposes, while hemlock bark was used for medicinal purposes (Perley and Blair 2003). During the summer, sweet grass was also used in basket making, as were white ash and black ash. Larger baskets were sold to local farmers for gathering potatoes, apples and fish, and for use as pack baskets and clothes baskets. Smaller and more ornate baskets were made for storing sewing notions and buttons, combs and handkerchiefs, or were sold as decorative Easter baskets (Perley and Blair 2003). Many baskets were used for trading with local farmers and residents along the Saint John River, but the Maliseet people also used them. In exchange for baskets, the local farmers provided Maliseet people with goods such as eggs, potatoes, salt pork, beef and produce. Accounts from the 1880's note that Aboriginal persons from Kingsclear frequently visited the farms at Jewett's Mills to trade baskets for food items (Gordon and Grant 1972).

Literature sources report that some of the tree species within the area of review were used to make various items related to transportation along the Saint John River, including canoes, snowshoes and toboggans, which were required for gathering resources and establishing trade networks. Cedar and birch trees were used extensively to build canoes. Maple, butternut or ash was often used to make paddles. Boiled pine resin was made into pitch for sealing and mending canoes (Timmins *et al.* 1992). Additionally, black ash, white ash and other tree species from the Saint John River valley were used for furniture making, string and axe handles (ash or rock maple). Alder, maple, willow and birch bark was also used for furniture making, particularly chairs.

After ice breakup on the Saint John River, trap lines were set up in various places within the area of review, including the Mactaquac stream. Muskrat and mink were reportedly caught and used to make clothing. Other commonly trapped species included beaver, fox, otter and weasel.

Hunting along or near the Saint John River occurred year-round. The Maliseet people hunted several animal species in the area, including deer, moose and caribou (Perley and Blair 2003). Hunted animals were used for food, and various parts of the animals were used to make snowshoes, hats, gloves and winter moccasins.

Fishing was, and continues to be, very important to the Maliseet people. Although accounts suggest that salmon populations in the Saint John River had declined prior to construction of the Station, fishing was still an important component of traditional life. Brooks and deMarsh (2011) note that hunting and fishing were used as a means to supplement the rations provided by Indian agents during the earlier part of the 20th Century.

16.2.2.3 Post-dam Conditions for Current Use of Land and Resources for Traditional Purposes by Aboriginal Persons

The period following construction of the Station has been characterized as a time of rural to urban transition within New Brunswick society. In addition to the construction of the Station, other changes have contributed in this rural-to-urban transition including changes in the economic environment (e.g., a focus on government employment, infrastructure and university education), with people generally moving from rural areas to a more centralized urban setting in order to facilitate their participation in those economic activities. In addition to these societal changes that affect Aboriginal and non-Aboriginal people alike, a dramatic decline in traditional resource availability and use has occurred in the area which affected Aboriginal traditional land and resource use. Many Aboriginal people have adapted to, and are participating in, this changing economic environment. Resources that were used traditionally are still being used, but likely more as a component of the modern economy (e.g., participating in recreational fishing as opposed to subsistence fishing) or in an effort to preserve traditional lifestyles and knowledge.

Changing the Saint John River to a more lake-like environment caused dramatic changes in a number of plant and animal species; many of the resources that were used for traditional purposes are no longer present, or not as abundant as they were prior to the construction of the Station. For example, many of the trees that currently grow along the headpond are upland species, such as pine and fir, rather than river valley species, such as ash, that were previously exploited. Additionally, access to the land has been and continues to be altered by residential development along the shores of the headpond. Although some of the tree species that were traditionally used still grow in the area (e.g., maple), many are located on privately-owned properties. Some of the land adjacent to these properties is Crown land or land retained by NB Power, but Aboriginal persons are unlikely to seek resources close to these properties.

A participant in a traditional ecological knowledge study conducted by the Conservation Council of New Brunswick for another project noted that the creation of the headpond affected, and in some cases eliminated, a number of traditional plant species, such as sweet grass and sweet flag (Gagnon and Glynn 2009). Traditional plant gathering locations, such as the many islands that were located in what is now the headpond, are also no longer available, which were primary fiddlehead picking locations (Maliseet Nation Conservation Council 2001). Natural fish passage for such species as Atlantic salmon and striped bass was eliminated as a result of the presence of the Station. Traditional fishing in the Saint John River is a treaty right for Aboriginal persons, but with declines in fish populations, many First Nations feel it is irresponsible to take that which is no longer in abundance; therefore, fewer do compared to past practices.

It is important to highlight that specific information relating to current use activities for traditional purposes by Aboriginal persons in the area of review is not yet available, and thus the above is simply a high-level general overview of potential existing conditions. Specific uses, use patterns, and locations of such uses will be documented as part of the separate Traditional Knowledge/Traditional Land Use study for the six Maliseet communities of New Brunswick that was underway at the time of finalizing the CER Report in August 2016.

16.3 POTENTIAL INTERACTIONS BETWEEN CURRENT USE OF LAND AND RESOURCES FOR TRADITIONAL PURPOSES BY ABORIGINAL PERSONS AND THE OPTIONS

Because the Traditional Knowledge/Traditional Land Use study had not yet been completed during the finalization of the CER Report, it would be inappropriate to presume how Aboriginal persons are specifically practicing current use activities for traditional purposes in the area of review, or how the Project Options might affect their use (and potentially their Aboriginal and treaty rights). Therefore, the brief discussion that follows presents a preliminary understanding of how the Options might interact with current use activities for traditional purposes by Aboriginal persons, based solely on the Study Team's general knowledge and experience. It is fully acknowledged that this high-level discussion does not necessarily reflect the breadth or nuance of the unique perspectives and values that Aboriginal persons may have, on how the Options might affect them and the practice of their traditional activities. This high-level discussion does not purport to presume, nor diminish, those unique perspectives and values held by Aboriginal persons, but rather offers some basic context to those potential issues and interactions. The Traditional Knowledge/Traditional Land Use study that was underway at the time of finalizing the CER Report in August 2016 will provide detailed, specific information in this regard, and will be considered by NB Power in its decision-making.

16.3.1 Option 1 or 2

Construction of Option 1 or Option 2 will require excavation of an area of land on the right bank of the Saint John River, south of the existing earthen dam. This area currently includes a variety of cleared sites, a large parking area for viewing the Station, a commercial property (Riverside Hotel and Resort), roads, and some wooded areas. Any traditional activities currently being practiced in this area would cease as it is used to make way for Project components.

During operation of Option 1 or 2, the continued presence of the headpond would continue to restrict some traditional activities that could occur if the headpond wasn't present. Key species of traditional importance to First Nations, such as Atlantic salmon, will continue to be restricted from upstream passage unless fish passage is improved (see Section 8).

16.3.2 Option 3

Decommissioning of the Station would return the headpond to a near-natural river environment, over time. This likely will eventually improve habitat for some of the plant and animal resources that decreased in abundance after the Station was constructed. These improvements, while potentially helpful to some fish, game, or plant populations, would not affect the influence of other more global factors on some species that have recently experienced challenges to their populations. As noted in Section 8, the changing river ecology from a lake-like to a river-like environment would also likely result in changes to the fish populations upstream of the dam.

16.4 SUMMARY

It is not known with certainty what resources Aboriginal persons may be using in the headpond because a Traditional Knowledge /Traditional Land Use study has not been completed at the time of finalizing the CER Report. As such, it would be inappropriate at this time to presume if or how Aboriginal persons are specifically practicing current use activities for traditional purposes in the area of review, or how the

Project Options might affect their use. The high-level discussion in this chapter provides preliminary information based on general knowledge and literature sources that is intended to be supplemented by Aboriginal traditional knowledge.

Specific information on traditional uses in the area of review, potential interactions of the Options with such traditional activities, and potential mitigation will be informed by the separate Traditional Knowledge/Traditional Land Use study that was underway at the time of finalizing the CER Report in August 2016. This information will be used by NB Power, separately from the CER Report, in making its recommendation regarding its Preferred Option.

