

Appendix G

Traditional Ecological Knowledge (TEK)

Appendix G1

Project Site TEK Report

Canadian Premium Sand Inc.

Hollow Water First Nation Traditional Ecological Knowledge Report

Prepared by:

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Date: December, 2018

Project #: 60588114

Distribution List

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	✓	Canadian Premium Sand Inc.
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Bob Archibald
Chief Operating Officer
Canadian Premium Sand Inc.
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December 17, 2018

Project #
60588114

Dear Mr. Archibald:

Subject: Hollow Water First Nation Traditional Ecological Knowledge Draft Report

AECOM Canada Ltd. (AECOM) was retained by Canadian Premium Sand Inc. (CPS) to conduct a Traditional Ecological Knowledge (TEK) information gathering session at the Hollow Water First Nation Band office on October 25, 2018. We are pleased to submit our draft Hollow Water First Nation Traditional Ecological Knowledge report for review by CPS.

Should you have any questions or require additional information, please contact Cliff Samoiloff at 204 928 7427.

Sincerely,
AECOM Canada Ltd.



Cliff Samoiloff
Mining Market Sector Lead, Canada
Senior Environmental Scientist

CG:rz
Encl.

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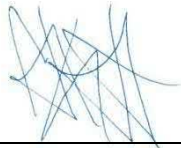
Quality information

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1. Introduction

Canadian Premium Sand Inc. (CPS) and AECOM Canada Ltd. (AECOM) held a Traditional Ecological Knowledge (TEK) information gathering session at the Hollow Water First Nation Band office on October 25, 2018. The Hollow Water First Nation Reserve 10 is located adjacent to, and east of, the Claim Post Resources Inc. (now CPS) quarry lease areas within which the proposed silica sand extraction project (the 'Project') will be located. The purpose of the TEK was to gather site-specific current and past land and resource uses for traditional purposes and from an Indigenous perspective to identify key phenomena, places and processes, why they are important and if they may be potentially affected by the proposed Project.

A TEK study was previously conducted with Hollow Water First Nation Respected Elders (Elders) by the University of Manitoba, with information gathering completed in 2017. However, the University of Manitoba initiated TEK study has not yet been published or made available as of November 2, 2018.

In addition, a medicinal plant identification walk within the Project Site area was conducted on October 12, 2018 with Elders experienced in traditional medicines. The purpose of the medicinal plant identification walk was to identify traditional medicinal plants observed and to gather information on the general abundance of medicinal plants within the Project Site area.

2. Methods

2.1 Mapping Exercise

To collect the TEK, AECOM conducted a mapping exercise with eight Elders. The mapping exercise was used to provide a simple and effective way to scope the area for completion of a site-specific TEK. To complete the TEK exercise, two base maps were created to identify the Project Site and surrounding local area. These maps were printed on ANSI D size (56 x 86 cm) paper and brought to the Elders meeting. The first map version included the locations of roads, communities, the outer boundary of the quarry lease areas, the Project Site area boundary, the outline of the proposed sand wash plant and associated infrastructure area and proposed access roads. A second map version did not show proposed development areas other than the existing quarry lease areas within which Project component would be located.

During the mapping exercise with the Elders, areas of past and current land uses were discussed. Elders were asked questions about the area, such as traditional travel routes, areas used to harvest blueberries, hunt or trap. During the discussion, Elders would describe and point out areas while discussing their land uses. Areas of importance identified by the Elders were circled, travel routes were assigned lines, and numbers were assigned to the areas discussed for documentation and subsequent interpretation purposes.

3. Past and Current Land Uses

Past and current land uses were discussed with the Elders as part of the TEK. The TEK information collected is illustrated in a TEK map provided in **Appendix A** and is described in the following sections under the headings of socioeconomic-heritage, trails and travel, and natural resource areas.

3.1 Socioeconomic-Heritage

The socioeconomic-heritage section will discuss fur trading, hunting, trapping, blueberry picking, food processing and the cemetery. These activities also tie into the section discussing trails and travel and natural resource areas.

3.1.1 *Fur Trading Posts*

Although information obtained from government archives suggests that fur trading posts were established in the local region, Elders confirmed during the TEK that they were not aware of the locations of any historical fur trading posts or of any evidence to suggest that fur trading posts were located in the Project area.

3.1.2 *Hunting*

Hunting has traditionally occurred within the CPS quarry lease area boundaries and currently the area is commonly used area for hunting by community members. “Chickens” (*i.e.*, spruce grouse and ruffed grouse) are popular species hunted along and just off the trails in the Project area and quarry lease areas. There is not much, if any, current or past traditional moose hunting in the Project area. It was mentioned that moose and deer have not been seen in the area, but that moose and deer tracks have been observed. In the past moose hunting would occur on Black Island and the meat would be brought by boat to Wanipigow by the hunters to share with their families. Elders indicated that caribou are not seen or hunted in the Project area.

3.1.3 *Trapping*

Unlike the registered trapline system where traplines are assigned to individual trappers, the trapline within the Project area is the Hollow Water First Nation Community Trapline and as a result names of individuals trapping along the line is not recorded. It was mentioned that people from Manigotagan have traps set in the bushes within the quarry leased area.

The area within the CPS quarry lease boundaries is an area that is used by community members for snaring rabbits. Traps have been set up for marten, mink, lynx and occasionally for wolf, coyote and fox. Traps are typically set adjacent to roads and trails. Elders mentioned that they trap beaver in Lake Winnipeg, local area rivers, ponds and other waterways in the area, but only eat the beaver from the lake or the rivers because they have a better taste.

3.1.4 Blueberry Picking

Blueberry picking was identified as one of the most important activities that occurs within the Project area. It has significant historic and present importance to the Elders and youth. Blueberry areas are further discussed in the Natural Resource Areas Section below.

3.1.5 Cemetery

The nearest cemetery is a new Catholic cemetery located 140 m north of the Project area, off the road to Seymourville. This area was discussed by the Elders and is identified in **Appendix A**. CPS will provide a 100 m buffer around this cemetery to protect the site from Project-related activities. Old burial grounds were identified at the northern point of land at Wanipigow. Elders mentioned a building is located on top of the old burial grounds.

The nearest incidental discovery of human remains were located at point #7 (**Appendix A**), in the backyard of one of the residences at Hollow Water First Nation. The remains were blessed and reburied in another location. No known or suspected human burial sites within the Project Site area were identified by Elders.

3.1.6 Sawmills

An old sawmill that had been in operation in the past was identified in the area of #13 in **Appendix A**, and two sawmills that had operated in the area were pointed out to have been located in the area marked as #14 in **Appendix A**.

3.2 Trails and Travel

There are several current and historic trails used throughout the Project Site area, as shown in **Appendix A**. TEK information regarding traditional travel routes by land and water are described below.

3.2.1 Travel by Land

Elders spoke of an 'Old Sleigh Road' that was a historically important link for the communities of Hollow Water First Nation, Wanipigow and Seymourville to access areas further south, including the community of Manigotagan. Although the Elders could not recall the exact historical route of Old Sleigh Road, they indicated that it followed a general north-south route through the Project Site area. The existing trail network (**Appendix A**), which also transects the Project area in a north-south direction, was used to access the land for hunting and trapping purposes. The terrain through which the trail network transects is known by the Elders and locals as a "checkerboard" due to the oscillating occurrence of sand, swamp, sand and swamp. Due to the rugged nature of the existing trail network, a powerful all-terrain vehicle is required to travel the many trails in the checkerboard landscape that lead in and around the Project area.

There are several trails within the area identified as #4 in **Appendix A**, including trails #10, #11 and #12 that were used to travel from Seymourville to Wanipigow, along with many other unidentified trails. Trails #11 and #12 were identified as old trails, potentially used as travel trails or old cut-line trails for exploration and small-scale forest harvesting.

Trail #9 (**Appendix A**) is an old logging trail that is accessible and currently used by quads. The trail is accessible until point #5 identified on the map, where the terrain is not suitable for vehicle usage.

There are several trails that connect with the trails #2, #5, #9, #10, #11 and #12. These trails are suspected to be old logging roads.

3.2.2 Travel by Water

Water was, and remains, an important travel link for the Hollow Water first Nation, historically connecting the community with Manigotagan and Black Island (for hunting/community/cultural practices). Boats would usually be launched in the area identified as #8 on **Appendix A**.

3.3 Natural Resource Areas

3.3.1 Blueberry areas

Blueberries were discussed as being the most important resource in the area. Area #1 (**Appendix A**) was described as being one of the most important blueberry areas due to proximity to the communities and existence of access trails to the area. Blueberries can also be found along the road in area #3. From further discussions with the Elders, blueberries are quite common throughout the area, although areas #1 and #3 are commonly used for blueberry picking.

3.3.2 Medicinal Plants






During the mapping exercise completed with the Elders, no specific areas of traditional medicinal plants were identified within the quarry boundaries.




In addition to the mapping exercise, the AECOM terrestrial team conducted a walkthrough of several representative locations within the Project area with three local Elders to identify medicinal plants that may be growing in these areas. One of the Elders who led the medicinal plant walk is very well-respected 'medicine man', and is registered in Ottawa's federal database as a knowledge keeper of Indigenous traditional medicine practices.

The Elders and AECOM terrestrial team walked within representative land cover types to identify medicinal plants. Areas targeted during the medicinal plant identification walk included the proposed main silica sand extraction area, the northern portion of the main access road route, and trails near a new cemetery. AECOM explained to the Elders that the new cemetery will be protected by a 100-metre buffer during the life of the Project.

During the medicinal plant identification walk with the Elders, it was indicated by an experienced Elder that all medicinal plants observed during the walkthrough (**Appendix A**) were common to the Project area and general region. The Elder indicated that there were no concerns about the Project in terms of impacts on medicinal plants because the plants encountered during the medicinal walkthrough are all very common to the region.

Table 3-1: Medicinal plants identified in Project Site Area by Hollow Water First Nation Elder Oct. 12, 2018

Common Name(s)	Scientific Name(s)	Photograph
Labrador Tea	<i>Rhododendron groenlandicum</i> <i>Rhododendron decumbens</i> (both species used)	
White Birch; Paper Birch	<i>Betula papyrifera</i>	
Black Birch; Water Birch	<i>Betula Occidentalis</i>	
Bunchberry	<i>Cornus canadensis</i>	
Bearberry; Kinnikinnick	<i>Arctostaphylos uva-ursi</i>	

<p>Spruce resin from Black or White Spruce</p>	<p><i>Picea mariana; Picea glauca</i></p>	
<p>Wild Rose</p>	<p><i>Rosa acicularis; Rosa sp.</i></p>	
<p>Raven's Foot Fern; Wood Fern</p>	<p><i>Dryopteris sp.</i></p>	

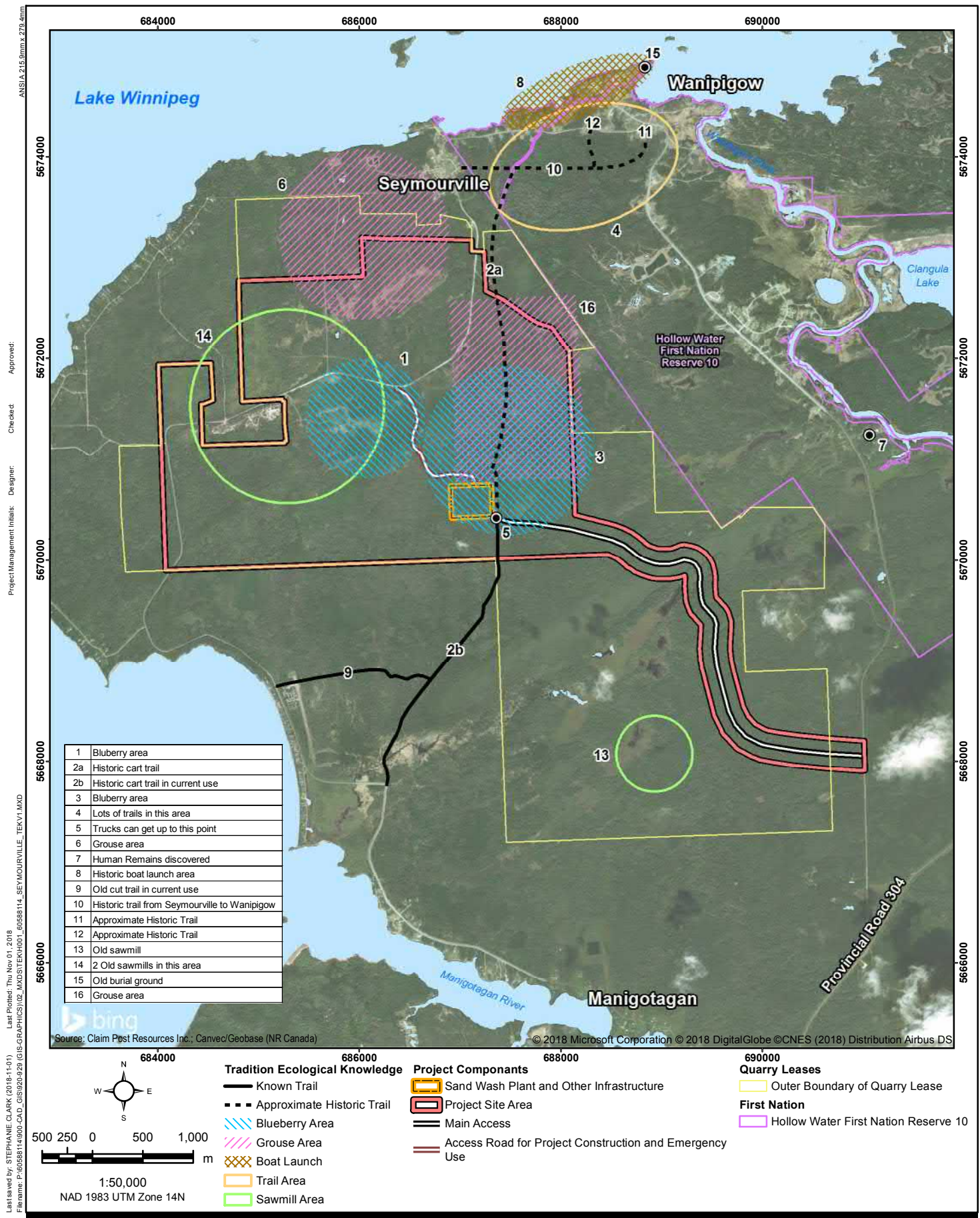
Other medicinal plants that were observed or mentioned by the Elder common to the Project area where photographs were not obtained included wild sarsaparilla (*Aralia nudicaulis*) which is common in the trembling aspen dominant forested areas, 'Rat Root' (*Acorus calamus*) and tamarack (*Larix laricina*) which are common to wet lowland areas, and yarrow (*Achillea millefolium*) which is common to the open edges of existing roads and trails. The Elder indicated that over hundred (100) plants are used to prepare traditional medicines in the local area, and that he did not see medicinal plants in the Project Site area that were uncommon.

3.4 Summary

In summary, the Elders identified that the most common and traditional resource uses that occur within the Project Site include hunting grouse, snaring rabbits, trapping, and blueberry picking. Elders identified historic and current trails within the Project Site, including the past location of a historic sleigh road that was used to travel between Hollow Water First Nation, and adjacent communities, south to Manigotagan. The walk with three Elders, including a respected 'medicine man', in representative land cover areas within the Project Site identified 12 plants that were used for the preparation of traditional medicines that are all common to the Project Site and Regional Project Area.

APPENDIX A

TEK MAP



**SEYMOURVILLE SAND EXTRACTION PROJECT
TRADITIONAL ECOLOGICAL KNOWLEDGE STUDY
CLAIM POST RESOURCES INC.**

