

Analysis Report



WHETHER TO DESIGNATE THE **CLEARWATER PEAT HARVESTING PROJECT** IN ALBERTA PURSUANT TO THE *IMPACT ASSESSMENT ACT*

March 2023



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Purpose

The Impact Assessment Agency of Canada (the Agency) prepared this report for consideration by the Minister of Environment and Climate Change (the Minister) in their response to a request to designate the Clearwater Peat Harvesting Project (the physical activities referred to as the Project) pursuant to section 9 of the *Impact Assessment Act* (the IAA).

Context of Request

On November 18, 2022, the Minister received a request to designate the Project from Rae and Company on behalf of O'Chiese First Nation (the requester). The requester raised concerns regarding the potential effects of the Project on the biophysical environment, areas of federal jurisdiction and the ability of O'Chiese First Nation to exercise inherent and Treaty rights as well as cumulative effects. The Agency focused its assessment on the potential effects within federal jurisdiction as outlined in subsections 9(1) and 9(2) of the IAA for the purposes of the designation request, and followed the Agency's Operational Guide: Designating a Project under the *Impact Assessment Act*¹.

The Agency sought input from Premier Tech Horticulture (the Proponent), federal authorities, the Government of Alberta, and 11 potentially affected Indigenous groups: Elizabeth Métis Settlement, Ermineskin Cree Nation, Fishing Lake Métis Settlement, Louis Bull Tribe, Métis Nation of Alberta (MNA) Region 3, Montana First Nation, Siksika Nation, Stoney Nakoda Nations (Bears paw First Nation, Chiniki First Nation and Goodstoney First Nation) and Sunchild First Nation.

On December 20, 2022, the Agency suspended the time limit for 28 days in response to the Proponent's request to allow sufficient time to address information requested by the Agency. The Proponent responded to the Agency on January 17, 2023, with information about the Project, a response to the requester's concerns, and its view that the Project should not be designated.

Advice on potential effects of the Project, and applicable legislative frameworks, was received from Fisheries and Oceans Canada (DFO), Environment and Climate Change Canada (ECCC), Natural Resources Canada (NRCan), Health Canada (HC), Transport Canada (TC), Indigenous Services Canada (ISC), Women and Gender Equality Canada and the Government of Alberta.

¹ <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/designating-project-impact-assessment-act.html>

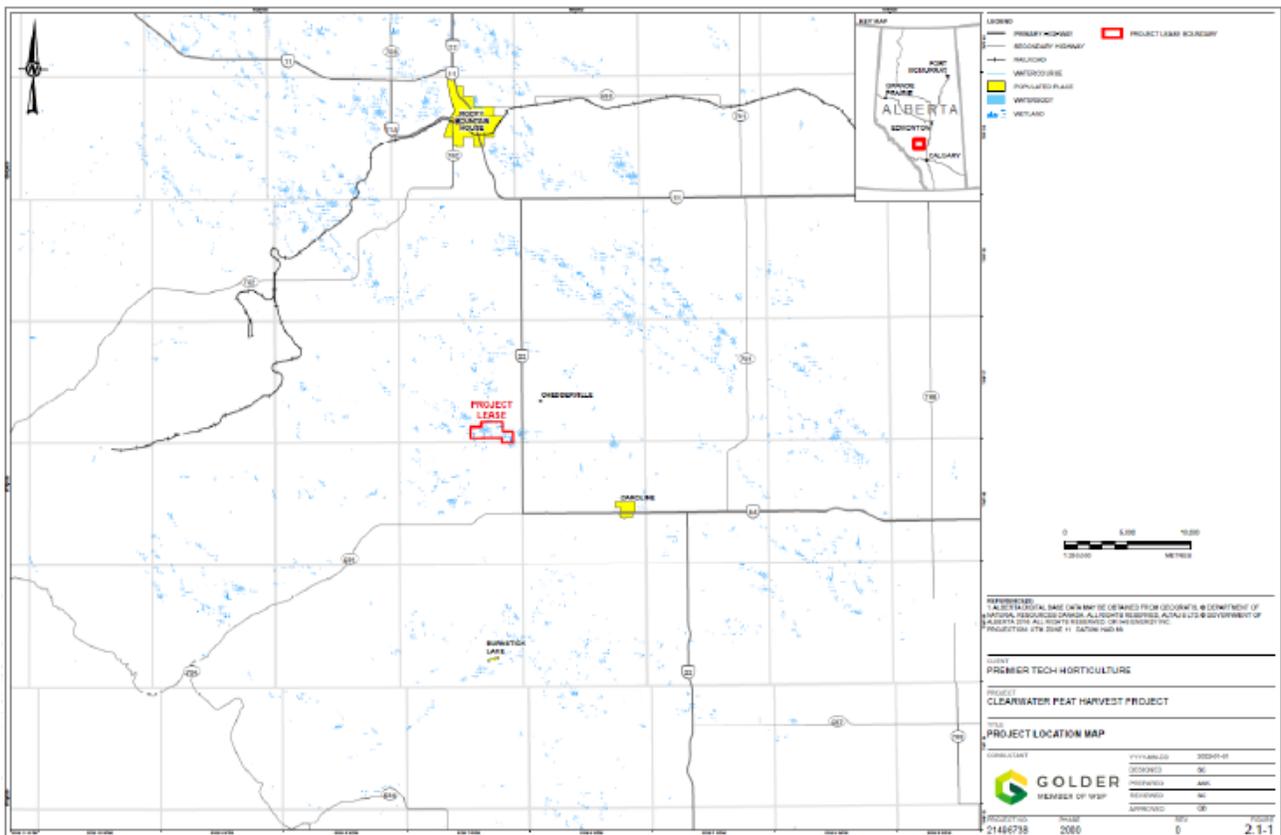


Project Context

Project Overview

The Proponent is proposing the construction, operation, decommissioning and abandonment of the Clearwater Peat Harvesting Project, located approximately 10 kilometres northwest of Caroline, in central Alberta (Figure 1). As proposed, the Project would include clearing and drainage of peatland for horticulture purposes and will consist of harvest sections, an access road, harvest roads, sedimentation ponds and drainage ditches. The Project would harvest approximately 135 hectares of peat from a Project footprint of approximately 156 hectares over 35 years.

Figure 1: Location of the Project



Source: Premiere Tech Horticulture, Response to IAAC information request pursuant to section 9(3) of the Impact Assessment Act, January 17, 2023

Figure Description: The Project is oriented east to west and is located west of highway 22. Rocky Mountain House is approximately 22 kilometres north of the Project and the Town of Caroline is approximately 10 kilometres southwest.

Project Components and Activities

The Project would include site clearing and construction of an access road, buildings, a drainage network and sediment ponds. The majority of the construction activities are planned to be completed in year one, while site clearing would occur sequentially over five years. Harvesting is expected to occur over a total of 21 years. The harvesting process includes harrowing the fields prior to harvesting to loosen the top layer of peat. Peat moss is harvested in intervals and left to dry, and then vacuumed and stockpiled along harvest roads. Harvested peat piles will be monitored to ensure temperature stability to prevent decomposition; piles will then be covered to prevent humidity and moisture from entering the piles. Peat harvested from the Project site will be processed and bagged at the Proponents facility located in Olds, Alberta, approximately 65 kilometers from the harvest site.

Restoration is planned to occur sequentially as harvesting is completed in each of the harvest areas. During restoration, donor peat will be spread on the harvested areas based on guidelines from the Peatland Restoration Guide². Ditches and sediment ponds will be filled and culverts removed to allow the natural water table to be restored at the site. The estimated Project lifespan including all phases is 35 years.

Main project components include the following:

- Ten metre wide access road from provincial highway 22 and township road 365A to the harvest site (approximately three kilometres);
- Staging area at the northern part of the harvest site consisting of a main office, garage, and a diesel tank on an 80 metre by 80 metre pad;
- Large perimeter drainage ditches, and smaller lateral and cross drainage ditches. Trenches would be spaced 30 metres apart; and
- Sedimentation ponds to collect water from the perimeter ditches prior to release from the harvest site.

Analysis of Designation Request

Authority to Designate the Project

The *Physical Activities Regulations* (the Regulations) of the IAA identify the physical activities that constitute designated projects. The Project, as described in the information submitted by the Proponent, is not included in the Regulations.

Under subsection 9(1) of the IAA the Minister may, by order, designate a physical activity that is not prescribed in the Regulations. The Minister may do this, if, in the Minister's opinion, the physical activity may

² https://www.gret-perg.ulaval.ca/fileadmin/Fichiers/centre_recherche/Peatland_Restoration_guide_2ndEd.pdf



cause adverse effects within federal jurisdiction or adverse direct or incidental effects, or public concerns related to those effects warrant the designation.

The Minister cannot designate a physical activity if the carrying out of the physical activity has substantially begun, or a federal authority has exercised a power or performed a duty or function in relation to the physical activity (subsection 9(7) of the IAA).

The Agency is of the view that the Minister may consider designating the Project pursuant to subsection 9(1) of the IAA as the carrying out of the Project has not substantially begun and no federal authority has exercised a power or performed a duty or function that would permit the Project to be carried out, in whole or in part.

Existing Legislative Mechanisms

Key federal and provincial legislative mechanisms that are or may be relevant to the Project are summarized below. This is followed by the Agency's analysis of potential adverse effects within federal jurisdiction or adverse direct or incidental effects, and public concerns related to those effects, as outlined in subsection 9(1) of the IAA, and potential adverse impacts on the rights of Indigenous peoples as outlined in subsection 9(2) of the IAA.

Federal Legislative Mechanisms

Fisheries Act

The Fish and Fish Habitat Protection Program of DFO reviews projects for their impacts to fish and fish habitat by ensuring compliance with the *Fisheries Act* and *Species at Risk Act* (SARA). Through this program, DFO may provide information to the Proponent in order to avoid and mitigate the negative impacts of the Project.

A *Fisheries Act* Authorization would be required if the Project is likely to cause the harmful alteration, disruption, or destruction to fish habitat and/or is likely to result in the death of fish. The *Fisheries Act* also prohibits the deposit of deleterious substances into waters frequented by fish, unless authorized by regulations or other federal legislation. As outlined in section 6, and detailed in section 32 to 56 of the SARA, DFO has the responsibility to provide for the recovery of wildlife species that are extirpated, endangered or threatened as the result of human activity. ECCC administers and enforces subsection 36(3) of the *Fisheries Act*, which prohibits the deposit of deleterious substances into waters frequented by fish, unless the deposit is authorized by regulations. The owner/operator will be required to ensure there are no deposits of deleterious substances that would degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish.

Consideration of the issuance of a *Fisheries Act* Authorization includes consultation with Indigenous groups. The *Fisheries Act* gives explicit consideration under section 2.4, where the Minister of Fisheries and Oceans must consider any adverse effects that the decision (under paragraphs 34.4(2)(b) and 35(2)(b)) may have on the rights of Indigenous peoples recognized and affirmed by section 35 of the *Constitution Act, 1982*. The



precise nature of DFO's consultation activities is dictated by developing a shared understanding with each respective community, and determining a mutual path forward. Feedback from Indigenous groups would be incorporated into DFO's assessment of impacts, and contribute to methods used to mitigate, offset, and monitor impacts within the bounds of DFO's mandate.

If granted, a *Fisheries Act* Authorization would include legally-binding conditions for avoidance, mitigation, and offsetting requirements commensurate with project impacts. Monitoring to validate impacts, and verify efficacy of mitigation measures and offsetting are also part of Authorization conditions.

DFO's Fish and Fish Habitat Program notified the Proponent in 2017 that a *Fisheries Act* Authorization was not required as the Project would not cause "serious harm to fish". The *Fisheries Act* has since been updated and on January 26, 2023, DFO notified the Proponent that the Project requires another review to ensure compliance with the current *Fisheries Act*, and with any updates related to aquatic species under the *Species at Risk Act*. This would include review of the Project with respect to the up-listing of Bull trout (Saskatchewan - Nelson rivers populations) to 'Threatened' within Schedule 1 of the SARA in 2019.

Species at Risk Act

For non-aquatic species listed in Schedule 1 of SARA as Extirpated, Endangered, or Threatened, a permit may be required from ECCC (e.g., under section 73 of SARA) for activities that affect a listed terrestrial wildlife species, any part of its critical habitat, or the residences of its individuals, where those prohibitions are in place. Such permits may only be issued if: all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted; all feasible measures will be taken to minimize the impact of the activity on the species or its critical habitat or the residences of its individuals; and if the activity will not jeopardize the survival or recovery of the species.

ECCC does not expect that it will be required to exercise a power or perform a duty or function related to the Project to enable it to proceed. It is possible that prohibitions may come into force through Orders in Council for individuals, residences, and critical habitat on Project-implicated, non-federal lands and a SARA permit may be required for the Project.

Migratory Birds Convention Act, 1994

The *Migratory Birds Convention Act, 1994* protects migratory birds and their eggs and nests, wherever they occur, regardless of land tenure. A permit may be required for activities affecting migratory birds, with some exceptions detailed in the *Migratory Birds Regulations*. The *Migratory Birds Convention Act, 1994* prohibits the disturbance or destruction of migratory bird nests and eggs, including for those species also listed under SARA. It also prohibits the deposit of harmful substances into waters or areas frequented by migratory birds or in a place from which the substance may enter such waters or such an area.

Canadian Environmental Protection Act, 1999

The Project may be required to provide greenhouse gas (GHG) emissions reporting as required by the Greenhouse Gas Reporting Program under the *Canadian Environmental Protection Act, 1999* if ten kilotonnes or more of GHGs are emitted in carbon dioxide equivalent units per year.



Canadian Navigable Waters Act

The *Canadian Navigable Waters Act* applies to projects that will interfere with navigable waters. Transport Canada indicated that the Project is unlikely to require approval under the *Canadian Navigable Waters Act* based on current available information.

Provincial Legislative Mechanisms

Environmental Protection and Enhancement Act

The *Environmental Protection and Enhancement Act* (EPEA) supports and promotes the protection, enhancement and wise use of the environment. Alberta Environment and Parks (AEP) reviews applications under EPEA to assess the potential environmental impacts of a proposed project.

If an environmental impact assessment is required, an approval issued under EPEA would identify a proponent's obligations and responsibilities for design, construction, operation, and reclamation relative to air, water, land, and biodiversity. A reclamation certificate issued under EPEA asserts that all reclamation requirements have been met and allows a proponent to close their project(s) and end their surface lease(s).

The Government of Alberta has not received a request for a provincial Environmental Impact Assessment (EIA) determination from the Proponent. The Project is not captured as a mandatory activity requiring assessment in the *Environmental Assessment (Mandatory and Exempted Activities) Regulation*³. Therefore, the Project is considered a discretionary activity under the provincial EIA process and statutory criteria under the EPEA would be considered to determine whether this activity would be subject to the provincial EIA process. For discretionary activity projects, the Director may decide that more information is needed to determine if an EIA report is required through the preparation of a Screening Report. If an EIA is required, the Proponent prepares Proposed Terms of Reference and, if required, a First Nations Consultation Plan. Once the terms are accepted by AEP, the EIA process will commence. Alternately, they may decide an EIA is not required, and the Proponent can apply for any approvals that may be required.

Water Act

The *Water Act* supports and promotes the conservation and management of water, through the use and allocation of water in Alberta. It requires the establishment of a water management framework and sets out requirements for the preparation of water management plans. Approvals and licenses require an assessment of potential adverse effects on the aquatic environment, and approvals contain conditions which are expected to address various potential environmental effects and require ongoing monitoring and reporting.

Under the *Water Act*, the AEP ensures that companies use and manage water safely by:

- reviewing applications that relate to the *Water Act*;
- issuing water approvals for activities that occur in or near water bodies, including wetlands;

³ https://kings-printer.alberta.ca/1266.cfm?page=1993_111.cfm&leg_type=Regs&isbncln=9780779796250



- issuing water licences and temporary diversion licences for energy resource operations that require water;
- requiring companies to have a licence before using surface water and groundwater; and
- allocating the amount of water companies can use.

An updated application for the Project under the *Water Act* was submitted by the Proponent to the Government of Alberta for review in 2018 and included a Wetland Assessment Impact Report. The initial application was submitted in 2010.

Public Lands Act

The *Public Lands Act* regulates public land allocations, the sale or transfer of public land to other levels of government or private entities, and the uses (including recreational use, commercial use and industrial use) of public land. Proponents may be delegated procedural aspects of Indigenous consultation (proponent-led consultation) as part of their approval. The application process and considerations for peat projects on public land are covered in the Allocation and Sustainable Management of Peat Resources on Public Land Directive. Approvals under this Act would contain conditions governing restoration and reclamation of peatlands, and would be issued concurrently with any approvals granted under the *Water Act*.

An application for a Surface Material Lease for peat extraction was submitted by the Proponent to the Government of Alberta under the *Public Lands Act* in 2009, and the application was amended in 2017. The application review is in progress.

Historical Resources Act

The *Historical Resources Act* provides for the use, designation and protection of moveable and immovable historic resources. Clearance is required prior to any site preparation or construction activities.

Under the *Historical Resources Act*, proponents are required to address lands with an identified Historic Resource Value within the project area via the submission of a Historic Resources Application. Historic Resources include archaeological sites, paleontological sites, Indigenous traditional use sites of a historic resource nature, and historic structures.

The Proponent received a *Heritage Resource Act* approval for the Project in April 2022.

Potential Adverse Effects within Federal Jurisdiction

The Agency's analysis identified the potential for adverse effects within federal jurisdiction that may result from carrying out the Project. The Agency is of the view that existing legislative mechanisms and processes provide a framework to address the potential adverse effects within federal jurisdiction.

Fish and Fish Habitat



The Agency considered information provided by the requester, Indigenous groups, DFO, ECCC, the Government of Alberta and the Proponent. The Agency is of the view that there is potential for a change to fish and fish habitat, as defined in subsection 2(1) of the *Fisheries Act*, and existing legislation provides a framework to address potential adverse effects.

Concerns expressed by the requester and Indigenous groups included Project effects on the biophysical environment in the requester's traditional territory, including wetlands and effects to water and the watershed.

DFO stated that the scale and extent of the Project's potential to cause harmful alteration, disruption, or destruction of fish habitat or the death of fish is unclear at this time and that the Project may require authorization under the *Fisheries Act*. Additional information regarding the duration and seasonality of changes to flow are also required for DFO to characterize fish and fish habitat downstream of the Project, and understand if there is potential for impacts. DFO noted that the Project is eight kilometres upstream from critical habitat of Bull Trout (Saskatchewan – Nelson rivers populations; Clearwater River), and that Mud Creek (adjacent to the Project) is within the distribution of this species.

ECCC noted that the Project could have adverse effects on the quality of groundwater and surface water, as well as on the hydrological regimes of watercourses and water bodies. Peat harvesting typically involves draining water from peat and collecting it in sedimentation ponds via drainage ditches and releasing it to natural watercourses. This could cause changes in surface water quantity, which in turn may cause erosion and sedimentation and negatively impact water quality by increasing suspended solids, changing pH, and mobilizing contaminants to surrounding waters. The removal of peatlands and surrounding wetlands will also affect water quality by removing the natural process of filtration that peatlands provide. Contaminants may be introduced into waterbodies through wastewater discharge, groundwater resurgence, spills, or through the deposition of airborne particulate matter resulting in adverse effects to water quality.

The Government of Alberta stated that the Project has the potential to cause an impact to the aquatic environment and water management, and therefore will require an approval under the provincial *Water Act*. Effects to fish and fish habitat will be assessed in the *Water Act* Approval application for the Project.

The Proponent acknowledges that there is potential for impacts to the aquatic environment through several pathways of effects. Construction, drainage, and harvesting activities could result in increased sediment loads to downstream waterbodies, and cause changes in flow regimes to Mud Creek. Elevated levels of suspended sediment may reduce water quality, which may interfere with fish spawning, navigation and the ability to locate food and escape predators. Changes in flow regimes could affect creek channel stability and use of the creek by fish. There is also potential for the introduction of aquatic invasive species, and accidents and malfunctions could cause the release of deleterious substances into Mud Creek. The Proponent noted that a Wetland Assessment Impact Report was submitted to the Government of Alberta as part of the provincial *Water Act* updated application, and that impacts to wetlands and mitigation measures will be assessed under the *Water Act* approval process.

The Proponent indicated that potential impacts to fish and fish habitat would be mitigated through:

- minimizing the surface area being drained or disturbed;
- avoiding the disruption of water bodies by maintaining a 100-meter buffer;
- implementing erosion and sediment control practices;



- maintaining low hydraulic gradients in the drainage network to reduce peak flows;
- dewatering harvest areas gradually; and
- directing drainage to sediment ponds prior to discharging to Mud Creek to help reduce concentration of suspended solids, dissolved organic matter, nitrogen, and phosphorous.

Additionally, the Proponent will implement the following:

- monitoring, maintenance, and cleaning of drainage ditches and sedimentation ponds will be completed so they are functioning as designed;
- water quality monitoring program to provide input for adaptive management and mitigation;
- preparation of an emergency response plan prior to the commencement of construction activities for implementation in case of emergency;
- secondary containment will be incorporated where appropriate which will be capable of containing a spills, and will be regularly maintained and inspected for leaks; and
- restoration of the landscape to natural conditions such that it has similar characteristics to the pre-disturbance conditions.

The Proponent specified that residual effects to fish and fish habitat, water hydrology and water quality are predicted to be negligible due to the implementation of mitigation measures. The Proponent indicated that DFO's Fish and Fish Habitat Program provided a response in 2017 that a *Fisheries Act* Authorization was not required as the Project would not cause "serious harm to fish". DFO has since advised the Proponent that an additional review will be required to ensure the Project is in compliance with the current version of the *Fisheries Act*, and the SARA.

Potential effects of the Project to fish, fish habitat, water quality and quantity will be assessed through the provincial approval process under the *Water Act*. The Project is required to undergo additional review via DFO's Fish and Fish Habitat Protection Program, including with respect to Bull trout (Saskatchewan - Nelson rivers populations), and effects to fish and fish habitat would be further assessed through the federal SARA and *Fisheries Act* if an authorization is required.

Aquatic Species

The Project will not result in a change to aquatic species, as defined in subsection 2(1) of the SARA as it will not affect the marine environment or marine plants.

Migratory Birds and Terrestrial Species at Risk

The Agency considered information provided by the requester, Indigenous groups, ECCC, the Government of Alberta, and the Proponent. The Agency is of the view that existing legislation provides a framework to address changes to migratory birds, as defined in subsection 2(1) of the *Migratory Birds Convention Act, 1994*, and effects on federally listed terrestrial species at risk under SARA.

Concerns expressed by the requester and Indigenous groups included effects to wetlands in the requester's traditional territory and related effects to the biophysical environment, including vegetation.



ECCC does not expect that it will be required to exercise a power or perform a duty or function related to the Project to enable it to proceed. ECCC noted the Project will remove habitat important for nesting, foraging, staging, and overwintering for migratory birds. Individual mortality and the destruction of nests and eggs or any other structure necessary for the reproduction and survival of species at risk could occur during the Project. Mortality of migratory birds and species at risk could also occur due to collisions with vehicles or infrastructure related to the Project. Accidental oil or chemical spills could also have adverse effects if these substances come into contact with migratory birds and species at risk.

ECCC stated that the Project activities linked to harvesting peatlands would have negative effects on wetlands and their ecological functions. Carrying out the Project could alter the existing hydrological regimes essential for maintaining wetlands and thus affect the quality or availability of habitat for migratory birds and other wildlife, including species at risk. The destruction and modification of wetlands may cause negative effects or harm to migratory birds and species at risk that use these areas for breeding and migration, as well as for foraging or resting areas. The Project may also create pathways for the introduction and dispersal of invasive species.

ECCC noted that the Project is not located on federal lands and there are no SARA orders in place for the proposed project location. Only SARA prohibitions pertaining to migratory birds would apply and these would not apply to critical habitat unless an order is put in place. The Project is within the range of the yellow rail, a species listed as “special concern” under SARA, and there may be potential habitat on the Project location. Sandhill crane and other shorebird species that use open wetland areas are likely to be breeding in the Project area.

The Government of Alberta identified that effects to migratory birds and species at risk would be addressed in a *Water Act* application for the Project.

The Proponent undertook wildlife and breeding bird surveys in 2020. No federally listed breeding bird species were detected during these surveys. The western toad, a species listed as “special concern” under SARA, were present within the Project area. Impacts to Western toads are expected to be within the adaptability and resilience tolerance for the species, individuals are expected to be able to move to adjacent habitats, and drainage ditches and sedimentation ponds may provide suitable habitat. The Project is not located within federal lands and the tree clearing will be completed during the winter in accordance with the *Migratory Birds Convention Act, 1994*. A wildlife mitigation and monitoring plan will be developed and implemented as part of the Peat Development and Operations Plan required under the provincial *Public Lands Act*.

Potential effects to migratory birds and species at risk will be considered in the provincial approval processes under the *Water Act* and *Public Lands Act*. The Proponent will also be required to adhere to applicable federal legislation, such as the *Migratory Birds Convention Act, 1994* and SARA.

Indigenous Peoples

The Agency considered information provided by the requester, Indigenous groups, ISC, HC, ECCC, the Government of Alberta, and the Proponent. The Agency sought views from 11 affected impacted Indigenous groups and received input from one, the Métis Nation of Alberta Region 3 (MNA Region 3).



The Agency is of the view that existing legislation will provide a framework to address potential impacts of the Project on Indigenous peoples, including health, social and economic conditions, as well as potential impacts on Aboriginal and treaty rights and interests. Existing legislative mechanisms would also provide a framework to consider any impact resulting from any change to the environment on physical and cultural heritage, the current use of lands and resources for traditional purposes, or on any structure, site, or thing that is of historical, archaeological, paleontological or architectural significance to the Indigenous peoples.

The requester and MNA Region 3 expressed concerns regarding Project effects such as:

- disturbance and destruction of wetlands for the purpose of peat harvesting will have an adverse effect on areas of federal jurisdiction;
- access to lands for the exercise of the requester's Indigenous inherent and Treaty Rights;
- cultural landscapes (and the location of confirmed requester gravesites within six kilometers of the Project area);
- the creation of landscape conditions (barriers, physical and non physical) that are a detriment to the requester, and inherent and Treaty Rights and the requester's Natural laws;
- avoidance by the requester's members of the Project site and vicinity for exercising their inherent and Treaty Rights or in conducting cultural activities critical to their well being and livelihood due to contamination, aesthetic and biophysical impacts, or fear of being charged or harassed;
- the removal of other vegetation within the area that may negatively impact the ecosystem enough that fishing, trapping or hunting may be affected;
- animals and plants avoidance of the Project area;
- the sustainability of removing peat that could negatively affect the local ecosystem and any changes to that area would affect traditional, and harvest rights in a negative way; and,
- impact the section 35 rights of Métis citizens living in Alberta by reducing available lands to exercise harvesting rights, and changes to the ecosystem as a result of resource extraction that in turn affect the ability to exercise harvesting rights.

In addition, MNA Region 3 noted that job procurement may be a positive impact on the Métis Nation and its citizens, but that the Proponent has not engaged with the MNA or MNA Region 3.

ISC indicated that Project activities will likely interfere with land use/access, loss of traditional lands and ability to hunt (loss of terrestrial habitat), fish, gather and/or trap as well as the ability for Indigenous people to practice their culture. ISC expressed concerns regarding potential loss of food security (i.e., traditional foods), loss of lands with native habitats and associated wildlife, impacts to soils, waters, and fish habitat, and the social well-being and economic prosperity of Indigenous groups.

HC indicated that although detailed information about the Project is lacking at this time, there is known traditional land use claimed by the requester and the Project is in proximity of two requester reserves. HC indicated that there is uncertainty regarding traditional land use practices (hunting, trapping, fishing, harvesting plants and drinking water and recreational water use) and that there is a need for clarification on traditional land use practices in the region in order to identify the extent of any direct effects on Indigenous peoples.

ECCC advised that construction of the Project may adversely affect air quality through the combustion of fossil fuels by construction equipment and through physical disturbance of land, introducing particulate matter



into the air. Air pollutants as a result of the Project could potentially affect human health and sensitive ecosystem receptors at local and regional extents. Furthermore, emissions of air contaminants as a result of the Project may add cumulatively to the emissions from other activities, contributing to degradation of air quality in the region.

The Government of Alberta noted that proposed projects applied for under the *Water Act* and *Public Lands Act* are reviewed by the Alberta Government Aboriginal Consultation Office (ACO) to verify the recommended requirement for adequacy of First Nations consultation. It has been determined that level three, extensive consultation is required for the Project. The Proponent is required to: 1) prepare a consultation plan and notifications to First Nations or Métis Settlements; 2) prepare a response to concerns raised by those communities; and 3) to follow up⁴.

The Proponent indicated that it engaged with all potentially affected Indigenous groups identified by the province and will continue to do so through the *Water Act* and *Public Lands Act* approval processes. Engagement to date has included providing information, and following up through correspondence and virtual meetings. The Indigenous groups that the Proponent identified and engaged with are:

- Montana First Nation;
- Sunchild First Nation; and
- O'Chiese First Nation.

The Proponent has received concerns from the requester (listed below) and has been continuing to engage with them since July 2022. Montana First Nation and Sunchild First Nation did not express concerns to the Proponent regarding the Project.

The requester concerns received by the Proponent include:

- disturbance to wildlife, fish, and vegetation;
- culturally critical resources;
- access to Project site;
- activity restrictions;
- native ecosystems;
- ACO consultation;
- capacity funding;
- greenhouse gas emission and carbon sequestration; and,
- lands unavailable with Project approval and cumulative effects.

The Proponent has confirmed that the Project will not impact gravesites identified six kilometers outside the Project footprint. The Proponent intends to continue working with the requester to address concerns, and has invited the requester to visit the Project site and other similar active sites. The Proponent has also offered to include the community in monitoring activities during the various Project phases, and will develop and implement an Access Management Plan for the requester to access parts of the Project site. The Proponent

⁴ <https://open.alberta.ca/dataset/27af23c5-e71a-482d-9d49-afdb0ec8064e/resource/73b6152a-d449-4bf6-9b67-4093b8dc9f63/download/ir-go-a-proponent-guide-to-first-nations-and-metis-settlements-consultation-procedures-2019.pdf>



noted it views the consultation process as iterative, and intends to continue working with the community to address concerns as details become available.

Potential effects to Indigenous peoples will be considered during the provincial approval processes under the *Water Act* and *Public Lands Act*, which will include consultation on potential impacts to Indigenous peoples. Additionally, the Project has been evaluated under the provincial *Historical Resource Act* and has received a *Historical Resource Act* approval. The approval is subject to requirements regarding chance discoveries, including discoveries of Indigenous traditional use sites, and that any chance finds be immediately reported to the Alberta Minister of Culture⁵. Potential effects to Indigenous peoples will also be considered as part of a *Fisheries Act* Authorization, should one be required.

Federal Lands

The Project is not located on or near federal land and the Proponent indicated that the Project is located on provincial crown land. O'Chiese First Nation is located approximately 70 kilometres north of the Project area. The Agency is of the view that any change to the environment occurring on federal lands would be unlikely, and that existing legislative mechanisms provide a framework to consider downstream or indirect effects.

Transboundary Effects

The Agency is of the view that existing legislation will provide a framework to address the potential for the Project to cause a change to the environment that would occur in a province other than the one in which the Project is being carried out or outside Canada.

Concerns expressed by the requester included the Project's contribution to climate change due to loss of peatland carbon storage and sequestration area. The requester noted that peat harvesting is a non-renewable activity with peat harvesting to take up to thousands of years and that peatlands store large amounts of carbon and play a key role in regulating greenhouse gases and buffering the impacts of climate change.

ECCC noted that Project activities may result in GHG emissions, or impact carbon sinks and may hinder the Government of Canada's ability to meet its commitments in respect of climate change. Combustion of fossil fuels during construction can result in the emission of air contaminants such as sulfur oxides, nitrogen oxides, volatile organic compounds, and fine particulate matter.

The Proponent stated that the average year of production for the proposed Project will account for between 0.0005 percent and 0.0012 percent of Alberta's 2020 emissions. The Proponent noted that carbon sequestration is halted during the harvest phase, and therefore harvest and restoration will occur in a progressive manner to limit the amount of time that carbon sequestration is halted. The Proponent noted that a cumulative effects assessment will be included in the provincial *Water Act* application.

⁵ <https://open.alberta.ca/dataset/1b6b899d-684b-4d83-8134-1f57a77e414d/resource/2407dca7-d69c-4abe-9d7c-187e389ebe8b/download/culture-standard-requirements-historical-resources-act-reporting-discovery-historic-resources-20.pdf>



Approval under Alberta's *Water Act* would include measures to mitigate adverse effects to the environment, specifically wetlands. The Project will also be subject to federal GHG emissions reporting requirements, pursuant to the *Canadian Environmental Protection Act, 1999*, if ten kilotonnes or more of GHGs are emitted in carbon dioxide equivalent units per year.

Potential Adverse Direct or Incidental Effects

Direct or incidental effects refer to effects that are directly linked or necessarily incidental to a federal authority's exercise of a power or performance of a duty or function that would permit the carrying out, in whole or in part, of a physical activity, or to a federal authority's provision of financial assistance for the purpose of enabling that physical activity to be carried out, in whole or in part.

The Project may require a *Fisheries Act* authorization from DFO if the Project could cause harmful alteration, disruption, or destruction of fish habitat or death of fish. As such, the carrying out of the Project has the potential to cause adverse direct or incidental effects; however, the Agency is of the view that existing legislation provides a framework to address them.

Public Concerns

The Agency is of the view that existing legislation provides a framework to address the concerns within federal jurisdiction and adverse direct or indirect effects and include opportunities for public participation and consideration of public comments. The provincial *Water Act* approval process includes opportunity for public comment.

The Proponent submitted applications under the *Water Act* to the Government of Alberta in 2010 and 2018 and public notices for the Project associated with each application were published in the respective years of submission. A public meeting to introduce the public to the Project was hosted by the Proponent in 2010.

Concerns related to the Project in 2010 included, but are not limited to:

- long term water quality and quantity of Mud Creek;
- impact to groundwater and the surrounding area;
- impact of surface water source and water quality in Mud Creek;
- if the Proponent would be submitting a water quality monitoring program;
- how drainage may affect Mud Creek and adjacent landowners;
- dust control on local roads; and
- how operations will impact the environment.

The Proponent received nine statements of concern associated with the *Water Act* application submitted in 2018 and is currently working with the Government of Alberta, landowners and stakeholders to address these. The public concerns raised in 2018 were not provided to the Agency.

Potential Adverse Impacts on the Section 35 Rights of Indigenous Peoples

The Project is located within Treaty 6 territory and within the Métis Nation of Alberta Region 3 (MNA Region 3). The Agency sought views from 11 potentially affected Indigenous groups and received input from one group. The Agency considered submissions from the requester and MNA Region 3. In relation to subsection 9(2) of the IAA, the Agency is of the view that while there is the potential for the Project to cause adverse impacts on rights that are recognized and affirmed by section 35 of the *Constitution Act, 1982* (section 35 rights), existing legislative mechanisms applicable to the Project may trigger the duty to consult thereby providing a framework to address potential impacts and would include consultation with potentially affected Indigenous groups.

Potential adverse impacts on the section 35 rights of Indigenous peoples would be considered in the *Fisheries Act* Authorization process (if required) and the provincial approval processes under the *Water Act* and *Public Lands Act*; both will involve consultation and/or accommodation on potential impacts to Indigenous peoples.

Other Considerations

Cumulative Effects

The Agency considered information provided by the requester, Indigenous groups, ISC, ECCC, DFO, the Government of Alberta and the Proponent in relation to effects set out in subsections 9(1) and 9(2) of the IAA, and is of the view that existing legislation provides a framework to address cumulative effects.

The requester and Indigenous groups expressed concerns related to cumulative effects of the Project in the Project area and the lack of direction on how cumulative effects are being considered in relation to other project approvals in the area.

ISC indicated that the potential impacts of the Project to Indigenous communities should be considered over an extended period of time (80 – 100 years) and with particular attention to anticipated impacts of advancing climate change on food security and traditional activities of Indigenous people. They also noted that cumulative impacts from other resource development should be considered.

ECCC indicated that existing cumulative effects of habitat destruction are high in the area surrounding the Project, including impacts from agriculture, oil and gas, forestry, and housing development.

The Government of Alberta noted that cumulative effects on the aquatic environment; cumulative hydraulic, hydrological, and hydrogeological effects; and cumulative effects on household users, licensees and traditional agriculture users may be considered when reviewing a proposal under the *Water Act*.



The Proponent has indicated that cumulative effects will be addressed through the ability to restore peat-producing wetlands within a decade of the completion of harvest and with the implementation of progressive restoration.

Cumulative effects are typically assessed as part of the provincial approval processes under the *Water Act*. DFO noted that the *Fisheries Act* provides a framework of considerations to guide ministerial decision-making, including consideration of cumulative effects. Potential cumulative effects would be considered during the assessment conducted under the *Fisheries Act* if an authorization is required.

Regional and Strategic Assessments

There are no regional or strategic assessments pursuant to sections 92, 93, or 95 of the IAA that are relevant to the Project.

Conclusion

The Agency took into account the information it received as part of the designation request process for the Project to inform its analysis. The Agency is of the view that existing legislative mechanisms provide a framework to assess the potential for adverse effects within federal jurisdiction, adverse direct or incidental effects, and public concerns related to those effects, as described in subsection 9(1) of the IAA.

The Agency also considered the potential adverse impacts the Project may have on the section 35 rights of Indigenous peoples, as described in subsection 9(2) of the IAA. The Agency is of the view that existing legislative mechanisms applicable to the Project may trigger the duty to consult thereby providing a framework to address potential impacts and would include consultation with potentially affected Indigenous groups.

Existing legislative mechanisms include the provincial approval processes under the *Water Act* and *Public Lands Act*, which can include enforceable terms and conditions to mitigate potential environmental effects for all stages of the development if the Project is approved, and federal legislative mechanisms such as authorization under the *Fisheries Act*, which would include Indigenous consultation activities if required.