

Horsefly Regional Emergency Spillway Project - Summary of Issues

This document provides a high-level summary of the issues submitted to the Impact Assessment Agency of Canada on the Horsefly Regional Emergency Spillway Project (the Project) during the comment period on the Initial Project Description submitted by the Municipal District of Taber (the proponent). Original submissions are posted on the Canadian Impact Assessment Registry (Reference Number # 83135). The issues highlight information needs to support the Agency's decision on whether an impact assessment is required under section 16 of the *Impact Assessment Act* and— if an assessment is required—to inform the planning phase documents and further assessment. Categories are listed in alphabetical order.

Accidents and Malfunctions
Clarity on the nature and potential for accidents and malfunctions that may occur as a result of the Project, such as leaks, fuel spills and fires, and corresponding adverse effects to air quality, water quality, wildlife and wildlife habitat such as from the accidental release of high concentrations of hydrocarbons and other contaminants to surrounding waters. Include planned protocol to notify Indigenous peoples on the land in the event of an accident or malfunction.
Potential effects to surface water and water quality during construction and operation phases of the Project. Include effects from erosion, sedimentation, runoff, deposition of airborne particles, and contact water (run-off, discharges, and spills). Lack of information on planned mitigation measures and monitoring activities.
Acoustic Environment
Potential impacts on ambient noise levels from the increase in machinery use, construction activities, and increased traffic during the construction phase of the Project. Clarity on what studies will be implemented.
Atmospheric Environment
Clarity on potential changes to air quality due to Project emissions of sulfur oxides, nitrogen oxides, volatile organic compounds, fugitive dust, particulate matter, and other identified air pollutants, their deposition in surrounding environments, the resulting potential adverse local, regional and cumulative effects to human health, terrestrial and aquatic ecosystems, the standards to assess potential Project effects to air quality, and planned mitigation measures.
Clarity on whether federal or provincial air quality standards, such as the Canadian Ambient Air Quality Standards or Alberta Ambient Air Quality Objectives, were used to assess potential effects to human health from air pollutants, based on predicted concentrations.
Climate Change and Greenhouse Gas Emissions
Potential contribution to climate change due to greenhouse gas emissions from the Project, impacts to carbon sinks, including forested areas and wetlands, and through direct removal or indirectly through changes to regional hydrology.
Clarity on the implications on whether the Project may hinder or contribute to the Government of Canada's ability to meet its commitments in respect of climate change, the circumstances in which an upstream GHG assessment will be required, and the circumstances in which a credible plan to achieve net-zero GHG emissions by 2050 will be required.
Cumulative Effects
Potential cumulative effects to riparian habitat and the South Saskatchewan Watershed, including the Oldman River, due to Project activities impairing natural processes and affecting water quality, quantity, and biological indicators.

Effects of the Environment on the Project
Potential impacts on the Project infrastructure and activities and resiliency to these impacts.
Fish and Fish Habitat
Clarity needed on the potential effects of each Project component on fish and fish habitat, including habitat alteration, disruption, and destruction, and fish mortality. Include detailed descriptions of the Project design, construction methodology, and proposed mitigation strategies.
Potential effects to fish and fish habitat, including to Bull Trout and species of cultural importance to Indigenous peoples, in waterbodies within and near the Project area including existing canals.
Clarity needed on measures and strategies to mitigate fish entrainment within the Project.
Gender Based Analysis+
Collection of disaggregated baseline data and disaggregated gender analysis, including potential impacts on communities potentially affected by the Project, including information such as social, economic and health impacts, gender and poverty, division of labour, consideration of key indicators, and subgroups, including diverse or vulnerable groups, within the population.
Clarity on the health, social and economic conditions of, and the Project's potential effects to nearby population centres, including non-Indigenous populations and employees (e.g. MD of Taber).
Clarity on key gender gaps issues, and other disparities and identifying mitigation measures to narrow these issues, as demonstrated through GBA+ (gender based analysis plus) assessment, and means of mitigation including a GBA+ implementation framework.
Clarity on the inclusivity of engagement and consultation activities including a description of plans to adequately consult with women or diverse groups in a transparent manner such that it will support the identification of different needs.
Clarity on data gaps in both quantitative and qualitative data and steps to narrow those gaps regarding Indigenous peoples, women, low income, under or unemployed, disabled, seniors and systematically marginalized groups.
Clarity needed on the Proponent's commitment to promoting equality, social justice, and positive change.
Human Health and Well-Being
Clarity on the locations of all potential human receptors in the local and regional study area, including residences and sensitive receptors, the distance of these receptors from key Project components and activities, and potential effects to human health at these receptor locations from changes to air quality, water quality, noise levels, and visual disruptions.
Potential effects from related deposition of pollutants on terrestrial vegetation or surface water and emissions.
Potential impacts on waterbodies with current and potential use for recreational and ceremonial purposes.
Confirm the use of appropriate control to the canals for public safety.
Indigenous Consultation and Engagement
Need for continued consultation with Indigenous groups to strengthen relationships and build partnerships through the regulatory process including the post-decision phase.
Need for proper consultation and engagement to be carried out in a timely, effective, responsive, transparent, accessible, predictable, fair, flexible, and respectful manner throughout the impact assessment process, including providing capacity support for Indigenous groups to participate.

Clarity required on methods of engagement with Indigenous peoples to assess impacts to their rights.
Indigenous Knowledge
Inclusion of known and available traditional land use studies in the Project Description, and Impact Statement, if one is required.
Indigenous Peoples' Current Use of Lands and Resources for Traditional Purposes
Clarity on the types medicinal plants in the Project area harvested by Indigenous peoples, how the information will be relayed to Indigenous peoples, and what opportunities will be provided to harvest medicinal plant species.
Indigenous Peoples' Health Conditions
Potential impacts on Indigenous health from contamination of water bodies used for traditional purposes and drinking water sources.
Potential impacts to the health of Indigenous peoples through consumption or use of drinking water, country foods, and medicinal plants exposed to contaminants from the Project in water, air, or soil. Include consideration of impacts to food security and the associated impacts to health and well-being.
Indigenous Peoples' Rights
Need to consider the historical connection of Indigenous groups to the Project area in determining potential impacts to Indigenous rights, rather than the current location of reserve lands and/or band offices.
Indigenous Peoples' Social and Economic Conditions
Clarity on if training and employment opportunities will be offered to Indigenous peoples, and if Indigenous peoples expressed interest on this.
Indigenous Peoples' Spiritual, Physical, and Cultural Heritage
Potential impacts to physical and cultural heritage and structures, sites, and things of historical, archaeological, paleontological, or architectural significance to Indigenous communities, including cultural and ceremonial sites. Lack of information on strategies and opportunities for Indigenous involvement for mitigation of impacts.
Clarity on the preservation and protection of any historical resources of importance to Indigenous communities discovered within the Project footprint, and the protocol for notifying Indigenous groups of any chance finds.
Migratory Birds and their Habitat
Potential effects through all phases of the Project on migratory birds, including species at risk, and their habitat.
Potential effects, including cumulative effects, to migratory birds from accidental spills and degradation of habitat.
Potential effects and cumulative effects to migratory birds, including species at risk and species of cultural significance to Indigenous peoples, from habitat alteration or fragmentation, exposure to deleterious substances, movement obstruction, effects to reproduction, loss of habitat for reproduction, migratory patterns, avoidance of habitats adjacent to the Project, disorientation from or attraction to the Project area resulting in injury or death from sensory disturbance (i.e. noise, vibrations, light) or Project related collisions (e.g. infrastructure or vehicles), and the presence of workers.
Navigation
Potential effects to navigation and which existing regulatory mechanisms would address these effects.
Project Description and Other
Clarity on the need for additional approvals (e.g. <i>Fisheries Act</i> Authorization, <i>Canadian Navigable Waters Act</i> , <i>Explosives Act</i>) from other regulatory authorities.
Positive and negative impacts on natural ecosystem processes.

Provide more detailed maps and figures of routes.
Clarity on potential effects to the existing canal footprint.
Clarity on the frequency of Project use and the effects of repeated operation on the Region's waterbodies, including the Oldman River, wetlands, and other lakes.
Vulnerable Population Groups (Gender Based Analysis Plus)
Identify and assess potential issues of gender-based violence as a result of the Project, such as sexual harassment, violence against women, human trafficking, and means to mitigate and avoid these potential issues.
Clarity on the inclusivity of engagement and consultation activities including a description of plans to adequately consult with women or diverse groups in a transparent manner such that it will support the identification of different needs including negotiations and agreements.
Identify barriers to equality for various groups with respect to decision-making, participation, access, and control over resources.
Potential impacts to Indigenous people related to gender-based violence, discrimination, and cultural heritage for all phases of the Project.
Water – Groundwater and Surface Water
Potential impacts on waterbodies, including those used or that could be used, from methylmercury and information on the methylmercury monitoring plan.
Describe the return period for an event that would result in a flow rate of 40m/s.
Potential impacts to water quality and quantity released in the Oldman River from the Project, and clarity on conditions of release.
Clarity on the operating parameters of the Project, including turndown structures and the SMRID Main Canal, under flood conditions.
Potential impacts on the Town of Taber, including increased flooding, from the increased inputs to the Taber Lake and Horsefly Reservoir.
Potential effects of floodwater overtopping the spillway canal between Horsefly Reservoir and Taber Lake and subsequently mixing with water in lagoons on the Lantic Industrial complex.
Potential effects from equipment contact with waterbodies including the canals and water flowing into the canals.
Potential impacts on water quality and quantity of downstream waterbodies as a result of all phases of the Project.
Potential impacts to surface water, water quality, and the terrestrial environment from contaminants during all phases of the Project. Include effects from erosion, sedimentation, runoff, deposition of airborne particles, contact water (runoff, discharges, and spills) and chemicals from the Lantic Industrial Complex. Provide planned mitigation measures and monitoring activities.
Potential impacts to ecosystem receptors (fish and fish habitat, migratory birds, plants, species at risk, and wildlife) from water quality degradation. Include planned mitigation measures.
Wetlands
Additional detail on the footprint and associated effects of the expanded wetland at the inlet of Taber Lake.
Potential impacts to wetlands, their ecological functions, the hydrological regimes, and quality and availability of habitat for migratory birds, species at risk, and other wildlife for breeding migration, foraging, and nesting from the Project and associated activities.
Potential impacts to wetlands due to the Project's linear disturbance including the introduction of invasive species.