



Parks Canada (Preliminary Screening)

1. PROJECT TITLE & LOCATION

Wildfire Risk Reduction in Saoyú-ʔehdacho National Historic Site

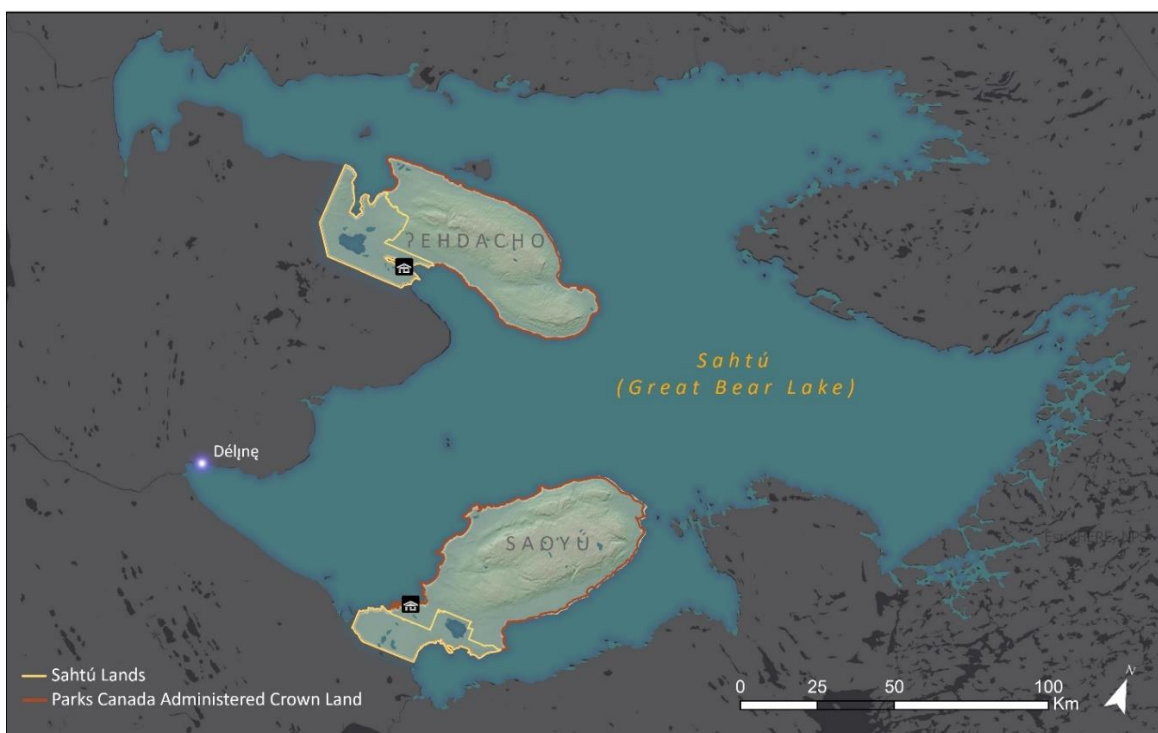


Figure 1 Overview of SENHS Region

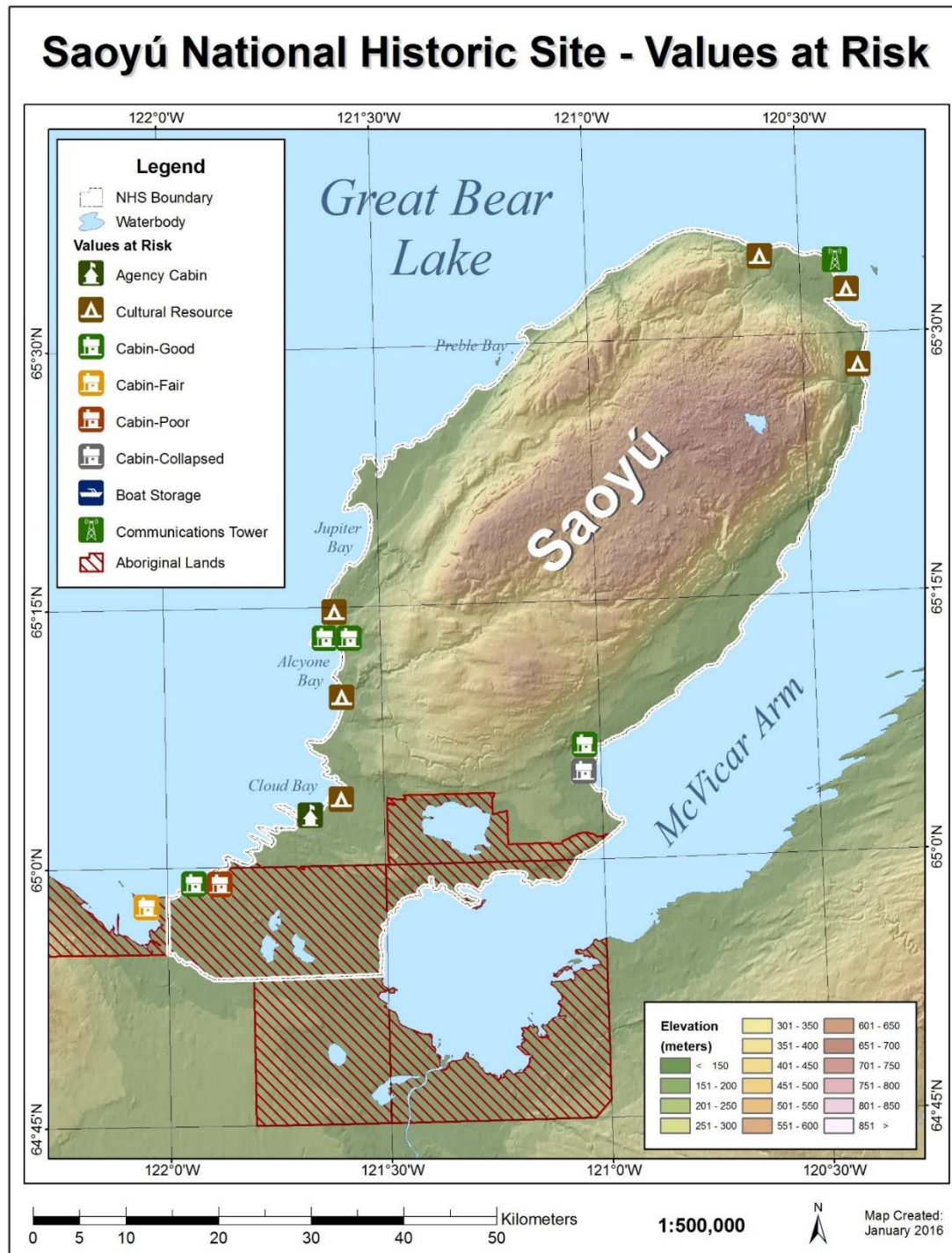


Figure 2 Saoyú Peninsula

The project will take place at the Agency cabin on Saoyú [figure 2] with the intention of the community continuing the work at other values-at-risk in the future.



Figure 3 Aerial View of Agency Cabin (Tłı̄ehdá Knowledge Camp)

2. PROPOSED PROJECT DATES

Planned commencement: 2025-03-01
Planned completion: 2025-03-31

The project will occur while the ground is frozen to minimize ground and species-at-risk disturbance, as well as allow all cut piles to be burned before the end of the project. The work period, exclusive of travel to Deline and the work site, is expected to take up two weeks, but with some flexibility to modify the time based on the remote location, difficulty and expense of travel, ice and weather conditions, to ensure that goals are achieved, especially around skill development and providing a solid framework with which the community may carry on with this work.

3. PROJECT DESCRIPTION

This Wildfire Risk Reduction plan was previously conducted in the winter of 2019. The current project will be a continuation of the previous efforts to both FireSmart high-risk Values at Risk and provide training to local community members in order that they can carry out similar projects at other Values at Risk in the future, both within the Historic Site as well as to the benefit of the community elsewhere. This proposal is to provide a FireSmart training session and demonstration to community members at the Tłı̄ehdá Knowledge Camp (“Agency Cabin” in Cloud Bay on the Saoyú Peninsula). This educational event would see Parks Canada staff sharing FireSmart information and performing FireSmart techniques with the community. By providing this awareness session on the FireSmart program, Parks Canada staff will be able to encourage community members to utilize the concepts of FireSmart to reduce the risk of wildfire at their private cabins located throughout Saoyú-ᑲehdacho’s fire prone environment. By providing active demonstrations, the Parks Canada team will provide an interactive learning environment while reducing risk at the Tłı̄ehdá Knowledge Camp site. The project team will include the



Site Manager, the Western Arctic Visitor Safety and Fire Operations Coordinator, and a member from the Wood Buffalo National Park Fire Program as the FireSmart specialist. For this project, the plan is to involve the Indigenous Guardians program as the community members to develop a working relationship and foster cooperation to provide for future annual maintenance, and the application of the FireSmart principles to other areas of community interests. If the Indigenous Guardians program is not available, the project will solicit interest from community members as done previously. The local wildfire branch from Environment and Climate Change (Government of NWT) will also be advised and invited to participate at their own expense.

The project will focus on the Home Ignition Zone with chainsaws and axes used to fell trees within the project area (the immediate zone will be recommended for follow-up during the summer season). Remove large surface fuels and shrubs, limb trees to 2.0m in height, and remove conifer regeneration that would act as a ladder fuel (i.e., live or dead vegetation that allows fire to climb from the forest floor into the tree). Reduce aerial fuels by stem thinning to create breaks in the canopy. Groups of ~5 trees should be separated by 3m of space between each tree crown. The treatment does not discriminate toward a single age class to ensure a representative forest, but snags will be removed. Removed and remaining vegetation will be piled and burned on site at the end of the project. The total project area will be 1 hectare.

4. VALUED COMPONENTS THAT MAY BE AFFECTED

Water Resources:

- Reduced water quality due to increased erosion, sedimentation, transportation of debris and contamination (i.e. from leaks and accidental spills, etc.)

Soil/Land Resources:

- Soil compaction and rutting
- Slope instability, due to increased soil exposure
- Soil contamination

Air quality:

- Decreased ambient air quality due to smoke from fire management operations
- Decreased ambient air quality (i.e. from dust, equipment emissions, etc.)
- Increased ambient noise levels
- Temporary increased levels of CO₂ and other pollutants

Flora and Fauna:

- Damage to and/or removal of vegetation in immediate or adjacent areas
- Introduction of non-native species populations, or expansion of existing populations
- Wildlife sensory disturbance causing displacement/preferred habitat avoidance
- Wildlife habituation/attraction to artificial food sources
- Impeded/altered wildlife movement
- Damage to nests, dens, roosts/disruption of nesting animals
- Mortality from project activities

Cultural Resources:

- Adverse effects on the heritage value or character-defining elements of a cultural resource or a heritage place, including:



- Impacts to archaeological resources (known or potential) from displacement or destruction resulting in loss of heritage value
- Adverse effects on cultural landscapes or landscape features of heritage value

Visitor Safety and Experience:

- Reduced quality of visitor experience from noise and equipment operation (e.g., heavy equipment and chain saw operation, helicopter use, tree removal)
- Visual impacts and landscape changes
- Reduced accessibility to portions of the site where work is taking place
- Hazard to visitors and staff due to construction activities

Socio-Economic:

- Adverse effects on socio-economic values from decreased use within and adjacent to Parks Canada administered sites

5. MITIGATION MEASURES

General:

- All work must be performed in accordance with the ordinances and laws set out in the *National Parks Act* and Regulations and any other applicable legislation.
- All work is subject to the identified mitigations in the project plan and these best management practices.
- Modification to identified mitigations may be required in response to any unforeseen problems. These will be brought to the attention of the Fire Operations Coordinator to be addressed.

Public Safety:

- Closures will be put in place, as required, to inform and protect the public during fire or fuel management activities.
- Closures will adhere to the park or historical site standard protocols and forms.
- Evacuations for wildfires will follow the protocols set out in the park/site Visitor Safety Plan and any agreements with local community.

Species at Risk:

- All on-site personnel will be made aware of and report any incidental sightings of species at risk immediately to designated Parks Canada staff.
- Work should be halted if Boreal Caribou are observed within 500m of the work site.

Wildlife:

- Work to ensure habitat considerations are included in project planning, like:
 - Maintaining wildlife movement corridors,
 - Retaining residual patches of vegetation for songbirds,
 - Retaining shade trees on the south and west sides of standing water to protect amphibian breeding sites,
- All food and garbage must be stored in wildlife proof containers.
- Any problems including aggressive encounters with wildlife will be reported immediately to the Duty Officer.



- Observations of carcasses, wildlife features (e.g. dens, nests), or other wildlife encounters will be reported immediately to the Fire Operations Coordinator.
- Trees with nests or cavities will only be removed if necessary to ensure worker and public safety.

Vegetation:

- Rare plants will be identified, mapped and protected as required.
- To minimize windthrow from thinning projects, retain strong rooted, long lived, and wind firm trees. Tree clumping will be used.

Non-Native Plants:

- Non-native vegetation in the project area will be identified and appropriate mitigations will be implemented to minimize non-native vegetation colonization.
- Pretreatment by chemical, hand or mechanical means prior to work may be required in heavily infested areas to prevent the transmission of weed seed by equipment and vehicles.
- All equipment shall be thoroughly cleaned prior to entering the park so it does not introduce residual soil, seeds or vegetation from outside of the park.
- Methods used to action weeds will follow regional non-native plant guidelines.

Soil and Terrain:

- Work will be undertaken while the soil is frozen as much as possible to minimize compaction, rutting, erosion and transport of non-native seed.
- Use protective barriers (ex: floatation mats or mat of tree limbs) on harvesting trails, wet, moist areas and areas with sensitive vegetation to reduce soil compaction and disturbance.
- Minimize broadcast burning on highly erodible soils.

Aquatics and Hydrology:

- All work and activities will comply with the *Fisheries Act* and the *Measures to Avoid Causing Harm to Fish and Fish Habitat* (Department of Fisheries and Oceans).
- Plan ignition phase to apply lower intensity fire to riparian areas and forested vegetation immediately adjacent to creeks to reduce riverbank soil erosion, cover and shade loss.
- All intake hoses must be screened according to the *Measures to Avoid Causing Harm to Fish and Fish Habitat* (Department of Fisheries and Oceans).
- If work is required in riparian zones or to cross streams it will be undertaken in accordance with the *Fisheries Act* (*Measures to Avoid Causing Harm to Fish and Fish Habitat*) and applicable territorial guidelines.

Air Quality:

- Communication plans will provide public information to promote understanding and appreciation for the role of fire in park ecosystems and minimize impacts from smoke.
- Impacts on human health and disturbance to populated areas from smoke will be minimized during ignition by burning when dispersion and venting conditions are good.



- Fuel load will be reduced where possible through mechanical removal (thinning) or chipping, with transport of wood chips for other uses. Alternative uses for the wood should be considered.
- Prescribed fires and pile/slash burning will take place under atmospheric conditions that minimize the potential for inversions trapping smoke in valley bottoms.
- Pile/slash fires will be kept hot to minimize smoke output. Burning will cease during unfavorable conditions if the smoke has the potential to affect the community.
- Signs advising of “smoke in area” will be placed in prominent locations near project work to advise and inform the public.

Archaeological, Cultural or Spiritual Sites:

- Archaeological and cultural resources within the site will be identified and mapped with Indigenous people, cultural resource management (CRM) Advisor and Parks Canada Terrestrial Archaeologist and appropriate mitigation measures identified and implemented for each.
- Personnel directly involved in the fire management operations will be briefed on the location of the known resources, buffer zones and the importance of protecting these cultural features, as appropriate based on sensitivity of the sites.
- Information concerning all cultural and archaeological sites will be considered confidential unless otherwise identified; including any new finds.
- The location of new sites or resources will be immediately relayed to the CRM Advisor. Work will stop in the immediate area and a Parks Canada Terrestrial Archaeologist will be consulted for advice. This process can be expedited by providing the archaeologist with GPS coordinates and images of the newly encountered cultural resources. Site protection and re-routing of work activities will be implemented as needed to protect the site.
- Fire line, access trails and snowmobile route will avoid known archaeological and cultural resources.
- To protect cultural resources:
 - Archaeological sites will have appropriate buffer zones identified.
 - Protection measures will be identified in consultation with the Parks Canada Terrestrial Archaeologist and CRM Advisor (i.e. avoidance, buffer zones, sprinkler systems).
 - Removal of debris and thinning of trees in areas of high archaeological potential may be applied to lessen the potential impacts.
 - Vehicle travel in the vicinity of known archaeological and Indigenous ceremonial areas may be restricted or prohibited. Parks Canada will visibly mark them as “no go” zones for personnel and equipment as determined by the Parks Canada Terrestrial Archaeologist and CRM Advisor or Indigenous cultural advisor who have site specific knowledge.
 - All haul, forwarding and ghost trails will be pre-flagged by Parks Canada to avoid known or potential archaeological features and off-trail travel will be prohibited.
 - Stockpiles and/or wood debris will not be permitted to damage or bury known cultural resources.



6. Indigenous Engagement or Consultation

The community of Déljné has raised concerns around wildfire in the Historic Site and expressed interest in this project leading to its development and planning. Consultations have occurred with the SENHS Co-Management Board and Community Representatives on May 6th and December 19, 2024.