



DEVELOPMENT TITLE: *ECCC Water Survey Canada hydrometric gauge maintenance and operations*

PROPONENT:

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PROPOSED DEVELOPMENT DATE(S): August 25, 2025 to indefinite

DEVELOPMENT DESCRIPTION:

Environment and Climate Change Canada (ECCC) Water Survey, operates four Hydrometric Gauges within the current boundaries of Nahanni National Park Reserve. Two sites, 10EB001 and 10EA003, were established around the early 1960s prior to the Parks formation. Two additional sites, 10GD002 and 10GD001, were established as requirements for the Prairie Creek Access Road. The purpose of the project is to improve fire safety, access, and lifespan of the Hydrometric Gauges, within Nahanni National Park Reserve, and ensure ongoing operation. Each of the sites is visited 4 - 7 times annually depending on gauge rating stability and operational needs. Access is normally by helicopter from Fort Simpson via day trips, however depending on operational need technicians may overnight at the 10EB001 site.

Sites include:

South Nahanni River above Virginia Falls - 10EB001
Flat River Near the Mouth – 10EA003
Sundog Creek Near Km 30 Canadian Zinc Road – 10GD001
Tetcela River At Canadian Zinc Road – 10GD002

Annual site usage:

Each site has 4-7 visits annually which includes site access, maintenance of equipment and gear, manual water level and discharge measurements, use of augers in the winter, and remote camera servicing (used for both water and wildlife monitoring, in partnership with Parks Canada). These four stations are a part of a network of approximately 600 ECCC-maintained cableway and hydrometric gauging stations across the Pacific, Yukon and NWT areas. The hydrometric data supports activities such as policy development, infrastructure design, water allocation, flood and drought response, recreation, navigation, ecosystem protection, and scientific study. In addition to this, the data collected from sites with Nahanni National Park Reserve is utilized by Parks Canada staff as part of their safety protocols and has been integrated into the NNPR ecological integrity monitoring program.



Scope:

Fire Safety - Perform brushing and clearing of vegetation as prescribed via FireSmart Guidelines:

- a) Zone 1 (0-1.5 m) - Clear all vegetation and combustible material. Prune and maintain regularly. Excess fuels will be cut, piled, and burnt on site according to Park's Canada's Safe Work Practices for Burning Vegetation Piles (2020). *
- b) Zone 2 (1.5-10m) – Remove all shrubs and pole sized trees (≤ 14 cm diameter breast height (DBH)) to create an average of 3-5 meters of horizontal spacing between trees. Selectively remove trees > 14 cm DBH when necessary to achieve this horizontal spacing between large trees. Prune all branches up to 2m from the ground. Continue to remove all dead and down woody debris to burn on site as per the mitigations for pile burning outlined above. *
- c) Zone 3 (10-30m) – Selectively remove pole sized trees (≤ 14 cm DBH) and selectively remove larger coniferous and dead trees if necessary to achieve 2-3m of horizontal spacing between trees. Remove all coniferous branches to a height of 2m from the ground. Continue to remove all dead and down woody debris to burn on site as per the mitigations for pile burning outlined above. *

* Sound wood of appropriate size will be salvaged in coordination with other functions' requirements and processed appropriately for use as firewood, tent poles, or other infrastructure needs on site. All salvaged wood will be stored at least 10m away from values in accordance with FireSmart guidelines.

Specific to 10EB001 - South Nahanni River above Virginia Falls we also intend to include the following:

Lifespan improvement - Install Fire safe siding and roofing, as well as an emergency egress window to the existing shelter. No Earthmoving or excavation will be required.

Access Improvement - Incorporate a Helicopter landing area adjacent to the shelter into the FireSmart risk reduction plan. Will allow for direct access to the shelter and reduce boating requirements for staff from Parks Sun Blood Cabin.

Helicopter Landing Site will be at 61.6361, -125.757

This would include removing dead trees within striking distance of the pad, total pad with should be less than 20m square. Heli landing area will be situated approx. 30m inshore of River and situated away from any obvious game trails.

Specific to 10EA003 - Flat River near the mouth:

We would like to install a Helipad adjacent to the Gauge site to remove the need to boat upriver during high flows from the Rat River Cabin Site. The Heli pad would be roughly 20m square. Depending on a site slope an aluminum helipad may be installed.

Specific to Tetcela River at Canadian Zinc Road – 10GD002:



Ongoing maintenance of the onsite Helipad.

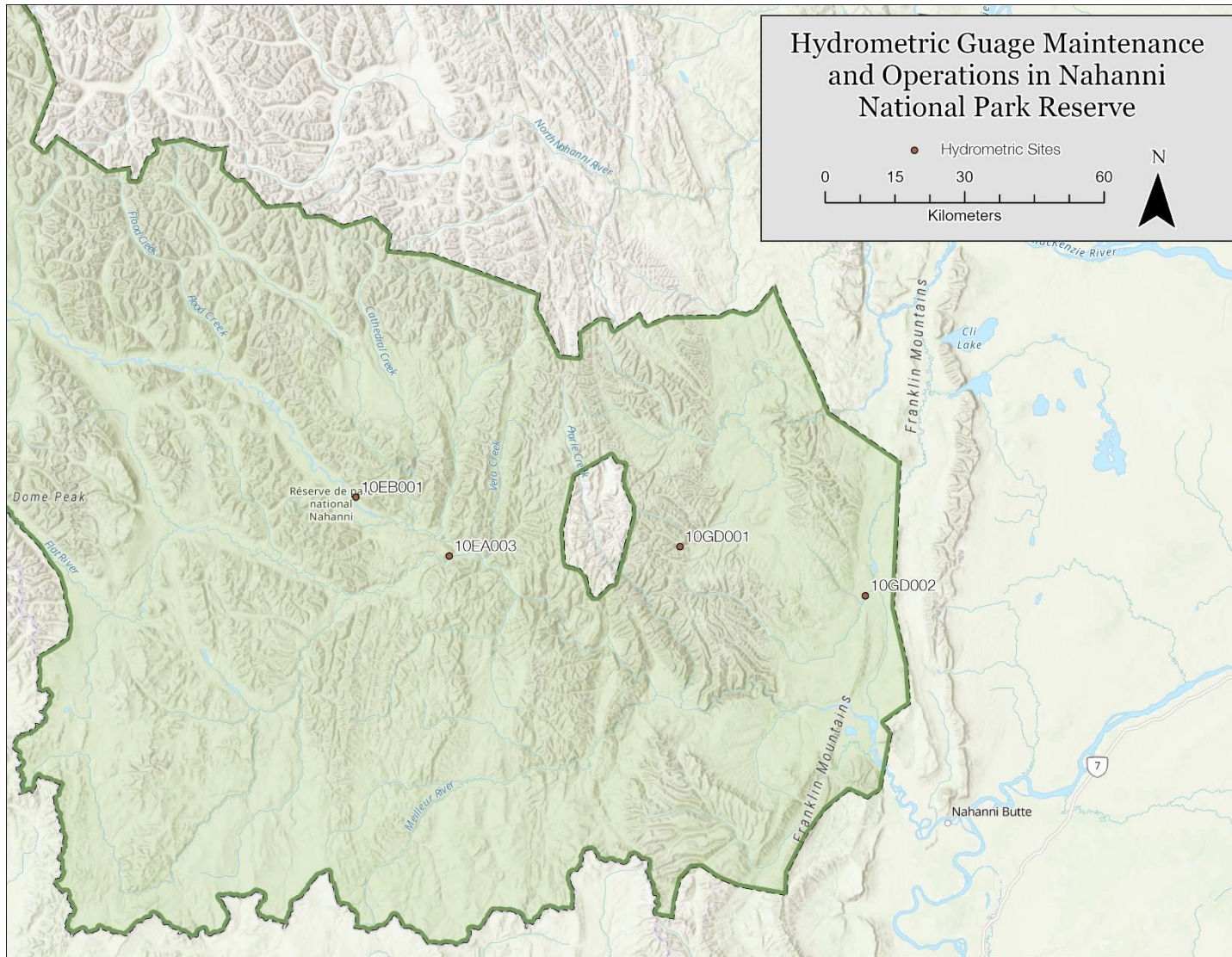
Locations (see map, Appendix 1)

Site Name	Site Number	Coordinates
South Nahanni River above Virginia Falls	10EB001	61°38'10.0" N, 125°47'49.3" W
Flat River Near the Mouth	10EA003	61°31'47.0" N, 125°24'38." W
Sundog Creek near Km 30 Canadian Zinc Road	10GD001	61°33'39.9" N, 124°28'40.2" W
Tetcela River at Canadian Zinc Road	10GD002	61°28'21.1" N, 123°43'27.4" W

Mitigations

- The Nahanni National Park Reserve best practices for aircraft operations and outfitters will be observed by ECCC staff, particularly when flying or overnighing within the park.
- The Nahanni National Park Reserve fuel caching protocol will be followed for storing all fuels
- Best practices to reduce risks of soil, aquatic, vegetation, and wildlife disturbances will be observed.
- No vegetation removal or pile burning will occur within Migratory Bird Window, unless a Danger Tree is classified as imminent failure where target can't be moved or altered, and wildlife surveys are completed prior.
- Best practices to reduce risk to species at risk will be maintained.
- Impacts to Valued Components including visitor experience and preserving heritage viewscapes will be minimised. Attention will be taken when removing trees not to reveal human features for operational activities. Brush will be piled out of view of campsites and where possible chainsaw cuts will be hidden from view and stumps will be crosshatched to expedite decomposition. Burning will be done in open areas to limit damage to remaining vegetation and will only be conducted in shoulder season when weather conditions are conducive with good smoke venting to ensure no impact to aircraft operations within NPRs. No felling operations will occur when visitors are present at a site, and communications to ensure safety and awareness of staff and visitors will be maintained at each site before and during operations.

Appendix 1



Appendix 2 - Distribution List

<i>Organization</i>	<i>Contact</i>
Mackenzie Valley Environmental Impact Review Board	preliminaryscreening@reviewboard.ca
Mackenzie Valley Land and Water Board	jpotten@mvlwb.com ; tyree@mvlwb.com
Grand Chief Herb Norwegian Dehcho First Nations	herb_norwegian@dehcho.org
Executive Director Dehcho First Nations	Executivedirector@dehcho.org
Chief Steve Vital Nahanni Butte Dene Band	chiefsteve.nbdb@gmail.com
Band Manager Soham Srimani Nahanni Butte Dene Band	manager@nahadehe.ca
Chief Kele Antoine Łíídlıı Kúę First Nation	chief@liidliikue.com
Interim Executive Director Derek Squirrel Łíídlıı Kúę First Nation	exdir@liidliikue.com
Chief Melanie Norwegian Menacho Tthets'ėhk'edėlı First Nation	chief@jmrfn.com
Chief Michael Vandell Deh Gáh Got'ıę First Nation	chief@dehgahgotie.ca
Chief Lloyd Chicot Ka'a'gee Tu First Nation	kaageetu_chief@northwestel.net
Chief Dolphus Jumbo Sambaa K'e Dene Band	chief@sambaakefn.com
Chief Lloyd Moses Pehdzeh Ki First Nation	info@pkfn.ca chief@pkfn.ca
Chief Kenneth Cayen West Point First Nation	chief@wpfn.ca
President Clifford McLeod Fort Providence Métis Council	finance_pvmetis@northwestel.net fpmcpres@northwestel.net
President Daniel Peterson Fort Simpson Métis	metisnation52@northwestel.net
Air Tindi	info@airtindi.com
Alpine Aviation	alpineaviation@gmail.com
Black Sheep Aviation & Cattle Co. Ltd.	flyblacksheep@outlook.com
Goose Flying Services	info@flygoose.ca
Kluane Airways Ltd	info@kluaneairways.com
Liard Air Ltd	flights@liardair.com
Northern Rockies Air Charter Ltd.	northernrockiesair@gmail.com
North-Wright Airways Ltd	info@north-wrightairways.com
Simpson Air 1981 Ltd	info@simpsonair.ca

Solitude Excursions Ltd	info@nahanniheliadventures.com
South Nahanni Airways	info@southnahanniairways.ca ; charters@southnahanniairways.ca
Summit Air and Summit Helicopters	info@summithelicopters.ca info@flysummitair.com
Trans North Turbo Air Limited	dpachiorka@tntaheli.com
Black Feather The Wilderness Adventure Company	info@blackfeather.com
Nahanni Wilderness Adventures	adventures@nahanniwild.com
Canoe North Adventures	info@canoenorthadventures.com
Jennifer Thistle, Regional Superintendent, Dehcho Industry, Tourism and Investment, Government of the Northwest Territories	Jennifer_Thistle@gov.nt.ca
Chief Executive Officer Donna Lee Demarcke NWT Tourism	executive@spectacularnwt.com
CPAWS, NWT Chapter	nwtadmin@cpaws.org
Tulít'a, Land/Financial Corporation	president@tulitalandcorp.ca executivedirector@tulitalandcorp.ca
Tulít'a, District Land Corporation	district@allstream.net
Tulít'a, Renewable Resources Council	trrc@northwestel.net
Fort Norman Metis Land Corporation	rockynorwegian@gmail.com execdirno60@gmail.com
Colville Lake - Renewable Resources Council	josephkochon@behdziahda.ca
Norman Wells Land Corporation	receptionist@nwlc.ca
Norman Wells - Renewable Resources Council	sahtuapple@hotmail.com nwrrc@nwlc.ca
Déłıne - Déłıne Got'ıne Government	drrc.manager@gov.deline.ca
Fort Good Hope - Renewable Resources Council	fgh.rrc@northwestel.net