

Manifestly Insignificant Development in Nááts'ihch'oh National Park Reserve: Divide Lake Pit Privy

Parks Canada is making the determination of "manifestly insignificant" concerning the following development, pursuant to the *Mackenzie Valley Resource Management Act* section 124 (2)(a). Consequently, a preliminary screening is not required for the development.

Development Description:

Parks Canada is designing and building a pit privy for placement at the Divide Lake cabin and camping area in the Upper Broken Skull River Basin, Nááts'ihch'oh National Park Reserve (Figure 1). It will consist of a 4'W x 4'L x 8'H structure, constructed out of 2"x4" dimensional lumber. The top enclosed outhouse portion will be anchored on a framed plywood base and the whole structure will sit over a 3'W x 3'L x 5'H pit. The exterior of the structure will be protected with a coat of water-based wood stain. When the privy's pit is full, it will be sealed with backfill before the outhouse is moved to a suitable nearby location with a new pit. As the site receives low visitation (<60 people/year) and is operational only in the summer months, it is anticipated that the privy will need to be moved only every 5 years. A vault-style privy is not currently a feasible option at this site due to fuel- and cost-related constraints that would be incurred in helicoptering waste barrels away from this location; the closest disposal locations are in Tungsten, which is 120 km away from Divide Lake, and Tulita, which is 240 km away.

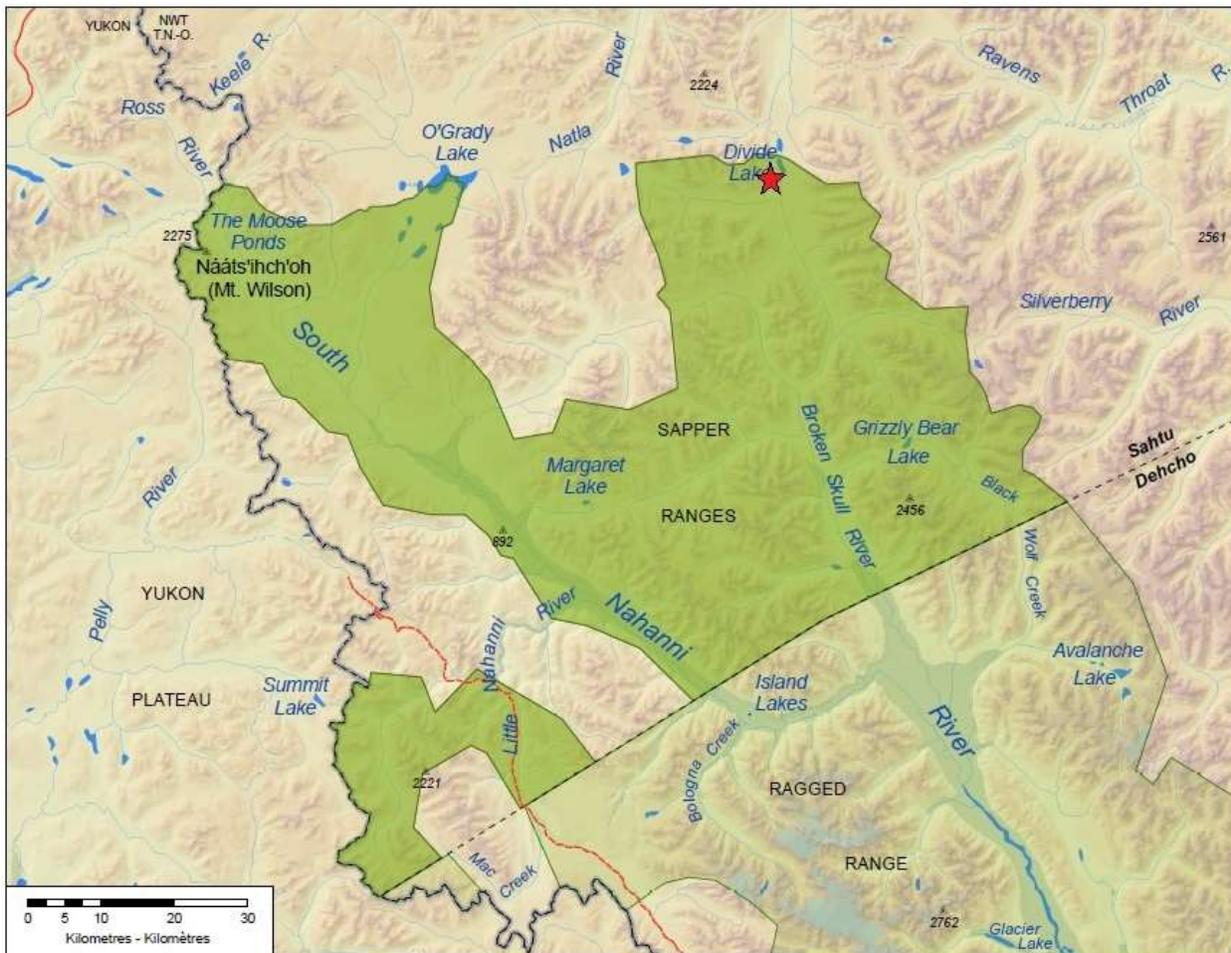


Figure 1: Red star indicates the Divide Lake cabin (63.01316497, -128.183674) area, where the privy will be located.

Development Rationale:

The Divide Lake area is used by an increasing number of visitors travelling down the Broken Skull River. Outfitters often use this site to stage river trip departures; the cabin was built by an outfitting company prior to the park's establishment. Today it is an unofficial campground and, despite its use of approximately 50 people/year, there is no proper useable privy, leading to waste management issues. The practice of digging cat holes (small holes approximately 4-6 inches deep) to dispose of human waste is currently commonplace. Issues associated with cat holes include:

- inadequately deep waste burial, which poses health risks for visitors;
- toilet paper is not always disposed of appropriately;
- cat holes are in relatively close proximity to the lake, which poses a hazard to safe drinking water; and
- various paths leading to cat hole areas increases the footprint of the cabin and campsite over time.

Installation of a privy at Divide Lake is consistent with the Nááts'j'ch'oh National Park Reserve Management Plan (2017) to enhance the experience of visitors within the park. Additionally, it is consistent with corporate direction to support the increase in visitation to National Parks while maintaining ecological integrity as required under the *Canada National Parks Act*.

Development Activities:

The privy and base will be prefabricated in Tulita, at the Parks Canada office location. Parks Canada will utilize a float plane to bring the privy components into the park. Assembly at the Divide Lake site will occur during a field visit from July 24th to 31st, 2018, when other activities (ecological monitoring) in the area will also be conducted. In 2017, Parks Canada archaeologists assessed the site and found no evidence of cultural resources there. Parks staff will use shovels to dig the pit and hand tools to fully assemble the privy components. The privy will stay in place year-round and its door secured using a knob and an exterior latch. It is expected that the pit will take at least 5 years of use to fill due to the short (2-3 months) summer season during which visitors and traditional users are in the area. Parks staff will be able to check the filling rate annually during their scheduled visits to the Divide Lake area and to make arrangements to shift the structure to a new pit location nearby when it is reaching capacity. The pit, when filled to within 1 foot of the ground surface, will be backfilled.

Determination of 'manifestly insignificant':

It is Parks Canada's opinion that the impact of this development (installation and operation of a pit privy at the Divide Lake cabin area) on the environment is manifestly insignificant because:

1. The development has been recommended by the Nááts'j'ch'oh Management Committee.
2. Activities involved in this development are below thresholds required by authorizations within national parks.
3. It is self-contained and all human waste will be consolidated at one location that is a safe distance from the lake, streams, and cabin site. Additionally, it will reduce the footprint of park visitors using the site since there will only be one trail to and from the privy. This will substantially reduce the impact to the environment from human waste/traffic at this campsite;
4. Parks Canada archaeologists surveyed the site in 2017 and found no evidence of cultural resources in the area. Therefore, there are no anticipated impacts to cultural heritage during construction or use of the privy;
5. The privy's location has well-drained soils that is >100 m away from any surface waters, so as to prevent excessive groundwater accumulation in the pit or contamination of aquatic ecosystems and drinking water supply;

6. There will be no requirements for materials from the park for construction and operation of the privy, as these will be flown in. All surplus construction material will be flown out of the park and either recycled for other projects or disposed of at an approved facility (Tulita land fill);
7. The use of treated lumber has been assessed and managed according to the *Parks Canada Treated Wood Management Standard* (April 2017) and the *Parks Canada Treated Wood Management Guide* (April 2017). See Appendix 1 for associated form;
8. Construction of the pit privy is in accordance with guidance provided in Parks Canada's Human Waste Management Solutions Planning Guide (2018);
9. Hand tools (hammer/nails, drill/screws, shovels) will be used for digging the pit and assembly of the privy at the site. Construction noise will be kept to a minimum and no fuel is required on site to operate equipment;
10. It will be placed within the existing campsite area surrounding the cabin so that minimal new disturbance of the environment is required;
11. The design of the base will ensure that the privy is animal proof. It will be constructed out of 2"x4"s, making it a thick walled wooden box that is securely anchored over the pit, and the plywood portion of the base will be wrapped with chicken wire mesh. This will ensure that bears will not be able to knock it over and that smaller wildlife – such as porcupines – will not be able to chew through and access the human waste. A latch will also be placed on the door's exterior to ensure it stays shut. Therefore, this privy will not serve to increase human/wildlife interactions or serve as a source of contamination to wildlife;
12. Use of float planes will follow Parks Canada's *Best Management Practice for Aircraft Operations and Landings in Nahanni and Nááts'j'ch'oh National Park Reserves of Canada*, which include wildlife considerations; and
13. The privy will be assembled and maintained outside the timeframe of scheduled river trips or anticipated traditional use so there will be no adverse impacts to park visitors or traditional users.

Approval:

Author:	Tess Espey
Title:	Resource Management Technician II, Nááts'j'ch'oh National Park Reserve
Date:	May 17, 2018
Approver:	Faye d'Eon-Eggertson
Title:	A/ Superintendent, Nááts'j'ch'oh National Park Reserve
Date:	May 23, 2018

APPENDIX 1: Rationale for Use of Treated Wood in Parks Canada Operations

Field Unit:	SWNWT
Context and Location:	Divide Lake cabin site, Nááts'ihch'oh National Park Reserve
Quantity (m ³):	Approx. 1.5 m ³ lumber, with stained surface on exterior of privy structure

Part 1: Are there applicable alternatives to Treated Wood?

	YES	NO	Explanation
Untreated Wood	<input type="checkbox"/>	<input type="checkbox"/>	All lumber was purchased heat treated only (no pesticide). A water-based stain will be applied only to the outermost surfaces of the structure.
Composites	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cost
Plastic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cost
Metal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Aluminum doorframe will be used.
Concrete	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cost, weight

Part 2: Treatment / Use Compliance

CSA Stamped:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	Please Select Preservative Type:	
Intended use consistent with preservative label:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	ACQ	<input type="checkbox"/>
Pesticide Label obtained and reviewed: (N/A)	YES <input checked="" type="checkbox"/>	NO <input checked="" type="checkbox"/>	Borate	<input type="checkbox"/>
			CA-B	<input type="checkbox"/>
			Zinc Naphthenate	<input type="checkbox"/>
			Copper Naphthenate	<input type="checkbox"/>
			ACZA	<input type="checkbox"/>
			CCA	<input type="checkbox"/>
			Creosote	<input type="checkbox"/>
			PCP	<input type="checkbox"/>
			Other: small amount of glycol solvents in stain	<input checked="" type="checkbox"/>

Part 3: Best Practices

Recommended hardware will be used: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Is the selected preservative type listed a toxic substance under Schedule 1 of CEPA 1999 *? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> , if yes please provide a brief justification.
Other Best Practices Followed: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Explain: Staff will work in accordance with safe work practices by wearing correct PPE and minimising contact with the stain during its application.

*Preservatives with active ingredients listed under Schedule 1 of CEPA 1999 include ACZA, CCA, Creosote and PCP-based

Part 4: Conclusion

The use of Treated Wood is acceptable based on the above rationale: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	A/Field Unit Superintendent :	
	Faye d'Eon-Eggertson	May 23, 2018