



Parks Canada Preliminary Screening under the *Mackenzie Valley Resource Management Act*

TYPE OF DEVELOPMENT:

- New
- Amended
- Requires a permit, licence or authorization under the *Preliminary Screening Requirement Regulations* (issuance of a Business Permit pursuant to the *National Parks of Canada Business Regulations* s 4.1)
- Does not require permit, licence or authorization and is proposed by PCA

1. DEVELOPMENT TITLE & LOCATION

Nahanni, River of Forgiveness film production
Nahanni National Park Reserve

2. PROPONENT INFORMATION

Geoff Bowie
Elan Film Productions
98 St. Clarens Avenue
Toronto, Ontario
Canada M6K 2S5
(416) 531-8213
fax: (416) 531-3295
gbowie@rogers.com

Gordon Henderson
90th Parallel Productions
203 Gerrard Street East
Toronto, Ontario
Canada M5A2E7
(416) 364-9090
fax: (416) 364-0580
info@90thparallel.ca

3. PROPOSED DEVELOPMENT DATES

Planned commencement: 2018-05-15
Planned completion: 2018-09-30

4. INTERNAL FILE #

NAH2018-004



5. DEVELOPMENT DESCRIPTION

Nahanni River of Forgiveness will be an educational documentary film about Dene culture as revealed through a traditional moose skin boat journey down the Nahʔą Dehé (South Nahanni River); a recreation of an historic annual journey undertaken by Dene ancestors. In June 2018, members of the Dehcho First Nations, with members of the Shúhtaot'ine First Nation, will build a 40-foot moose skin boat on the shores of the Nahʔą Dehé at Bunny Bar, Nahanni National Park Reserve (Nahanni). Accompanied by a film crew and supported by Parks Canada staff and eco-tourism outfitters licenced to operate in Nahanni, Dene participants will navigate the boat down the Nahʔą Dehé, stopping at Gahnjthah (Rabbit Kettle), and Nájljcho (Virginia Falls) where the boat will be portaged by helicopter to below the Falls. The team will continue to Nahanni Butte, then along the Nácháh Dehé (Liard River) and the Deh Cho (Mackenzie River) to Łíídlj Kúé (Fort Simpson) (Figure 1); aiming to complete the journey within three weeks. The trip aims to build hope, vision, and strength to strive for a better future and to create awareness about the values of the people of the Denendeh.

Herb Norwegian, Grand Chief of the Dehcho First Nations explains the goals of the film: *This is a trip to honour our ancestors. It is our ancestors making the trip once again through their descendants. It is a chance to reaffirm our identity, to nourish our collective memory, to build pride in our young people about who they are and build hope in the communities. It will make a statement to the world that the Dene is a people of bravery and survival.*

NOTE: This preliminary screening applies only to the components of the development related to commercial filming (i.e.: fuel caching, generator operation, drone operation, motorized boat operations in support of filming) and outfitter support (i.e.: camp operations), not to Dene traditional harvesting, which is authorized under the *Canada National Parks Act*. Traditional harvesting activities conducted by Dene related to this development will include the cutting of approximately 10 spruce trees for construction of the moose skin boat, motorized boat operation to support traditional activities, and may include hunting/fishing and cooking fires.

Schedule: (Note: maximum team members = 35)

Date	Location	Activities
Week 1	Bunny Bar, Nahanni	<ul style="list-style-type: none"> • <i>Boat construction and camping:</i> Approximately 10 spruce trees will be harvested, using chainsaws, and used to build the boat frame. Two inflatable motorized boats will be used for traditional activities at the site. Team members will camp either on Bunny Bar or nearby in the forest; an old outfitter campsite on Bunny Bar may be used. • <i>Aircraft access:</i> Crew and materials (e.g.: moose hides, tools, camping gear and food/supplies) will be transported to and from Bunny Bar using fixed or rotary wing aircraft.



Week 2	Bunny Bar to Nájłıcho, Nahanni	<ul style="list-style-type: none"> • <i>Bunny Bar to Gahnjthah</i>: Moose skin boat will be accompanied by the film crew and other team members in the escort boats (two inflatable motorized boats, two rafts, and two canoes). The team will camp at Gahnjthah for two nights; film crew will access the tufa mounds under guidance of Parks Canada and Dene participants will undertake traditional ceremonies at the tufa mounds. • <i>Gahnjthah to Nájłıcho</i>: Also accompanied by the escort boats. This will be a resting spot; Dene participants will undertake traditional ceremonies and outfitters will replenish food and other necessary supplies. The moose skin boat will be portaged by helicopter to below the falls.
Week 3	Nájłıcho to Łíıdlıı Kúé, Nahanni and outside of the park	<ul style="list-style-type: none"> • <i>Nájłıcho to Nahanni Butte</i>: The team will stop, and hike if applicable, at locations important to the Dene that may include Third Canyon, Tthetaetłıyah (the Gate), Second Canyon, Dahaethth'ı (Deadmen Valley), Ala Tthe Zhıngoı?a (First Canyon), Tu Kádeegai (Whitespray), Tułetsęę (Kraus Hot Springs), and Nintsı Daheda (the sand blowouts). • The team is expecting to camp for one night in Nahanni Butte. • The moose skin boat will be towed down the Nácháh Dehé as far as the ferry crossing. It will be paddled from the ferry crossing to Fort Simpson.

Logistical/equipment details:

- Dene participants will be supported by eco-tourism outfitters licenced to operate in Nahanni (Black Feather, Canadian River Expeditions, and Nahanni Wilderness Adventures). These operators will be responsible for camp location and management, food storage, preparing meals, cleaning up, waste management, moving camp, river travel consultation, and safety.
- Other than the campsites noted in the table above, campsite and lunch stop locations will depend on water levels and group speed. Sites will be selected to ensure sufficient space for team gear and tents and to ensure minimal impact to the environment.
- Some team members (Dene, film crew, Parks Canada staff) may visit the Cirque of the Unclimbables and Brintnell Glacier in the Ragged Range. This will be scheduled either during the stay at Bunny Bar or at Gahnjthah; flight will be via helicopter.
- Equipment: chainsaw(s), two inflatable powerboats (above Nájłıcho), multiple types of handheld/tripod mounted and go-pro cameras, two drones (use subject to Transport Canada regulations), two 2000 watt Honda generators, and may include motorized vessels below Nájłıcho.
- Fuel for the escort boats and film-related equipment will be cached at Nájłıcho and Gahnjthah using the existing Parks Canada fuel caches.



- All access flights will be via fixed or rotary winged aircraft by operators licenced for Nahanni National Park.

6. VALUED COMPONENTS (Note: because the majority of the development occurs within the World Heritage Site portion of Nahanni, a broad scope of valued components has been identified)

Soil/Land Resources

- The park is located within the Taiga and Boreal Cordillera Ecological regions of the Northwest Territories. These regions include a complex landscape of rugged peaks and ridges, rolling hills, eroded plateaus, deep V- and U-shaped valleys, fast-flowing braided rivers and streams and slow-flowing meandering rivers, and in the south and west, glaciers and ice fields. Glacial deposits are widely distributed and occur mainly on the floors and lower slopes of valleys, lakes and ponds are small and sparsely distributed, and wetlands are locally common only on the floodplains and lower slopes of large rivers and on a few broad plateaus. It is an area of discontinuous permafrost (ECG, 2010). The area within the original Nahanni park boundary is a UNESCO World Heritage Site, recognized for its exceptional representation of on-going geological processes, including karst topography, hot springs/tufa mounds, and caves. Several of these areas are Zone 1, Special Preservation, and visitor access is restricted (Parks Canada, 2010).

Air/Noise Quality

- No formal observations of air/noise quality have occurred in the park, however it is expected that these valued components are excellent and representative of their natural state. The majority of the park is Zone II Wilderness, which represents "extensive areas that are good representations of a natural region and are conserved in a wilderness state" and "in much of Zone II, visitors have the opportunity to experience remoteness and solitude. Motorized access is not permitted except for controlled air access" (Parks Canada, 2010).

Aquatic Resources

- No SARA-listed fish species have been reported in the South Nahanni River watershed or in the Nahanni North Karst area (Babaluk, 2015), however Bull Trout (*Salvelinus confluentus*) has been recommended by COSEWIC to be listed as Special Concern.
- The South Nahanni River is silt-laden (March and Scotter, 1975), as is common of many of the rivers and streams in this area as they flow through glacial deposits (ECG, 2010).

Flora and Fauna

- Migratory and SARA-listed birds are present in the parks and may nest at locations visited by guided groups; the general nesting season for this area extends from approximately May 1 to August 25. Common Nighthawk (*Chordeiles minor*), a ground-nesting species has been observed nesting on the Prairie Creek alluvial fan (Tate, pers. com., 2017).



- Little Brown Bat (*Myotis lucifugus*), Northern Myotis (*M. septentrionalis*), both SARA-listed bat species, Longeared Myotis (*M. evotis*), Long-legged Myotis (*M. volans*), Big Brown Bat (*Eptesicus fuscus*), Hoary Bat (*Lasiurus cinereus*), and Eastern Red Bat (*L. borealis*) have been recorded at various locations along the shoreline of the South Nahanni River (Lausen *et al.* 2014). There are no confirmed bat hibernacula in the parks other than in Grotte Valerie. However, based on evidence of bat usage in many more caves, it is possible that other hibernacula exist. Current evidence suggests that Grotte Valerie is likely used as a hibernacula by five species: Little Brown Bat, Northern Myotis, Long-legged Myotis, Big Brown Bat and Longeared Myotis (C. Lausen and G. Horne, pers. comm., 2017)
- Interaction with other SARA-listed species in the park (i.e.: Collared pika (*Ochotona collaris*), Caribou (*Rangifer tarandus* - boreal population) and Woodland caribou (*Rangifer tarandus caribou* - Northern Mountain population) will be minimal as visitors either do not frequent habitats where these species are located or visitation does not occur during periods of significant congregation such as calving. No adverse effects are anticipated if the mitigation measures described in this screening are followed.
- No SARA-listed vegetation species will be impacted. Nahanni Aster (*Symphyotrichum nahanniense*), a SARA-listing candidate, exists at various locations along the Flat and South Nahanni rivers (COSEWIC, 2014). Three of these populations are protected as Zone I Special preservation (no public access except by permit or with Parks staff present) and the remaining two are in Zone II Wilderness areas (Parks Canada, 2010); revised zoning or alternate protection measures will be examined for these latter populations during the current management planning process.

Social/Cultural Environment (including Wildlife Harvesting)

- Harvesting (wildlife, plants, and trees) and motorized access for traditional activities within park boundaries is a right of local First Nations and Sahtu Métis (Parks Canada 2010).

Heritage Resources

- Heritage resources are defined as a human work, an object, or a place that is determined, on the basis of its heritage value, to be directly associated with an important aspect or aspects of human history and culture of an heritage area (Parks Canada, 2013). Heritage resources include archaeological or historic sites, burial sites, artifacts and other objects of historical, cultural, or religious significance, and historical or cultural records (MVRMA (s.2)). Heritage resources exist through the park. Although surveys have been conducted to identify these resources at certain locations along major river valleys, lakes, and in the Glacier Lake/Cirque of the Unclimbables area, there remains a high potential for the presence of undocumented resources.



7. EFFECTS ANALYSIS

For general effects related to camping, hiking, and aircraft operations in the park see:

- "Parks Canada Best Management Practice (BMP) for Commercially Guided Eco-tourism Activities in Nahanni and Nááts'ihch'oh National Park Reserves of Canada" (Appendix 1), and
- "Parks Canada Best Management Practice (BMP) for Aircraft Operations and Landings in Nahanni and Nááts'ihch'oh National Park Reserves of Canada" (Appendix 1).

Additional effects specific to this development:

Aquatic Resources:

- Reduced water quality due to transportation of contamination (i.e. from fuel leaks/spills or residue from cleansers) and invasive species (i.e.: on boat hulls and propellers)
- Habitat disturbance and erosion from propellers/boat wake

Soil/Land Resources:

- Soil contamination from fuel spills
- River bank erosion from boat wake
- Disturbance from large group size

Flora and Fauna

- Increased possibility of disturbance to aquatic or shore-based species due to disturbance from motorized vessels and large groups size

Heritage Resources

- Mitigations applicable to camping are covered by existing Nahanni's Best Management Practices (BMPs) that have been reviewed by Cultural Resource management staff and the Nah?á Dehé Consensus Team. Potential impacts from camping will be compounded due to the unusually large size of the group travelling.

CUMULATIVE EFFECTS:

- Park visitors have predominantly camped and hiked at the same locations along the Nah?á Dehé since commercial guiding was established along this river in the mid 1960's. Therefore, cumulative effects from this repetitive activity can occur, particularly when impacts from private groups are added to those of commercially guided groups. Strict controls on visitor numbers and BMPs designed to address effects from eco-tourism and aircraft operations are in place to anticipate and address cumulative effects.



8. MITIGATION MEASURES

Equipment Operations

1. During operation, generators must be secured to prevent movement and set up on an impermeable fuel mat with a berm or within a container that can contain 110% of the volume of fuel in the generator.
2. Generators, chainsaws, jerry cans, oil containers, and any other fuel containing equipment or storage container must be stored on an impermeable fuel mat with a berm or within a container that can contain 110% of the total volume of fuel.
3. Refueling must take place on an impermeable fuel mat with a berm or within an impermeable container that can contain up to 110% of the fuel being dispensed. Leaks and spills during refueling must be cleaned up and contaminated materials must be disposed of appropriately. Fuel must never be spilled or deposited into the environment or any water body.

Motorized Boat Operation Related to Filming

4. If the boat is being transferred from another body of water (i.e.: all boats being brought in by aircraft to above Nájljcho (Virginia Falls)) clean the hull and propeller, including removing any attached vegetation, before transfer to avoid the introduction of exotic species. Avoid using cleaners that contain phosphates and other toxic cleansers.
5. Avoid producing a wake that disturbs the shoreline and can cause erosion. Approach river banks and islands at slow speeds to minimize disturbances to banks, shorelines, and shallow water habitats.
6. Avoid passing over shallow spawning habitat (i.e.: where tributaries enter the South Nahanni River) where propeller wash may disrupt habitat and/or smother eggs and larval fish.
7. Maintain visual contact with all boats in a group and stay within easy calling distance, when feasible, to minimize the spatial extent of, and repeated impacts to, wildlife.
8. When viewing wildlife, move to the opposite side of the river, stay in the boat, and remain as quiet as possible.
9. Do not approach swimming animals as this may cause stress and endanger them.
10. Portable fuel tanks and removable engine-mounted tanks must be taken at least 50 m ashore (where feasible, otherwise, as far as possible away from the river bank) to refuel. Refueling must take place on an impermeable fuel mat with a berm or within an impermeable container that can contain up to 110% of the fuel being dispensed. Leaks and spills during refueling must be cleaned up and contaminated materials must be disposed of appropriately. Fuel must never be spilled or deposited into the environment or any water body.



Camping, Hiking, Aerial Filming and Aircraft Operations

11. A Parks Canada liaison will accompany the film crew to ensure site specific mitigations.
12. Outfitters will adhere to the mitigations described in the *Parks Canada Best Management Practice for Commercially Guided Eco-tourism Activities in Nahanni and Nááts'jch'oh National Park Reserves of Canada*.
13. The group shall endeavour to predominantly camp at places already used by outfitters and restrict their activities to within the boundaries of areas that have already been impacted.
14. All drone operations are subject to Transport Canada regulations as described in the terms and conditions of the business licence.
15. Aircraft operators will adhere to the mitigations described in the *Parks Canada Best Management Practice for Aircraft Landings and Operations in Nahanni and Nááts'jch'oh National Park Reserves of Canada*.
16. *Gahnjthah*: Only Dene participants may access the secondary small tufa mound; filming of activities in this location may be accomplished by drone or by cameras mounted with telephoto lens. The Parks Canada liaison will indicate where the film crew can set up to avoid Nahanni Aster populations and will accompany the film crew if they access the primary tufa mound.
17. *Prairie Creek*: Common Nighthawk are known to nest on the Prairie Creek Fan; nesting period begins in late May/early June and potentially extends to early August. This species nests in open areas, typically on sand if they can find it and may use a shrub or log as a backing object for their nest. Nests are difficult to locate, but they will have an adult on them during the day. To avoid stepping on a nest pay close attention while walking through an area of high risk, and if you flush a bird off the ground, back up and make a large circle around the area to avoid stepping on the eggs or nestlings. Once a location of a nest is known set up a no-disturbance buffer area; typically 50 to 100 m. Sightings of Common Nighthawk must be reported to Parks Canada.
18. *Tu Kádeegai (Whitespray)*: Overnight camping is not permitted in this location.
19. *Nintsí Daheda (the sand blowouts)*: The film crew must be accompanied by the Parks Canada liaison if they access this area.
20. Entering caves in the park is not permitted.

Heritage Resources

21. If heritage resources are encountered, please do the following:
 - a. Photograph them with something to indicate scale;
 - b. Leave them where they are found;
 - c. Record the GPS coordinates for the location;
 - d. Provide a copy of all information gathered to the Nahanni National Park Reserve office, attention of the Cultural Resource Management (CRM) Advisor.



9. OTHER CONSIDERATIONS

- ✓ Surveillance: NNPR conducts pre and post-season teleconferences with its business license holders; this is considered to be the surveillance for this development.
- Follow-up monitoring, general
- Follow-up monitoring, required by legislation or policy (indicate basis of requirement e.g. required by the *Species at Risk Act*)
- SARA Notification

10. SIGNIFICANCE OF RESIDUAL ADVERSE EFFECTS

Given the limited geographic and temporal magnitude of effects, the location in predominantly pre-impacted areas, and the application of mitigation measures, this development is not expected to cause residual adverse effects to natural/heritage resources or visitor experience.

11. EXPERTS CONSULTED/CONSULTATION RECORD

<i>Department:</i> Parks Canada / Government of Canada	<i>Date of Request:</i> April 23, 2018
<i>Expert's Name & Contact Information:</i> Patrick Carroll PO Box 750, Fort Smith, NT X0E 0P0 Patrick.carroll@pc.gc.ca / Tel: 867-872-7936	<i>Title:</i> Cultural Resource Management Advisor, SW NWT Field Unit
<i>Expertise Requested:</i> General information on increased potential of disturbance to heritage resources from large group size and motorized boat use	
<i>Response:</i> See "Heritage Resources" information in section 7 (Effects Analysis) and 8 (Mitigation Measures)	

- This development was discussed on October 21, 2016, March 14, 2017 and February 9, 2018, March 1, 2018 with the Nahᓃą Dehé Consensus Team and on April 11 and August 16, 2017 at their joint meeting with the Nááts'ihch'oh Management Committee. Both committees are supportive of the project.
- This preliminary screening was publically circulated for a 21 day review period (April 6 to April 27, 2018). Only one comment was received; a positive email of support from Heli Dynamics (April 6).



11.1 References

Babaluk *et al.* 2015. *Distribution of Fish Species within the South Nahanni River Watershed, Northwest Territories*. Department of Fisheries and Oceans Canada. Winnipeg, MB

COSEWIC. 2014. *COSEWIC assessment and status report on the Nahanni Aster *Symphotrichum nahanniense* in Canada*. Committee on the Status of Endangered Wildlife in Canada. Ottawa. ix + 39 pp. (www.registrelep-sararegistry.gc.ca/default_e.cfm).

Ecosystem Classification Group (ECG). 2010. *Ecological Regions of the Northwest Territories – Cordillera*. Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT, Canada. Available online at: http://www.enr.gov.nt.ca/sites/enr/files/resources/cordillera_ecological_land_classification_report.pdf

Mackenzie Valley Resource Management Act (MVRMA). 2016. Available online at: <http://laws-lois.justice.gc.ca/eng/acts/M-0.2/>

March, A.H. and G.W. Scotter. 1975. *Vegetation Survey and Impact Assessment of the Nahanni Hot Springs and Virginia Falls Areas, Nahanni National Park*. Prepared for Parks Canada by the Canadian Wildlife Service, Edmonton.

Parks Canada. 2013. *Cultural Resource Management Policy*.

Parks Canada. 2010. *Nahanni National Park Reserve of Canada Nahʔq Dehé Management Plan*.

Lausen *et al.* 2014. *Bats of Nahanni National Park Reserve and Surrounding Areas, Northwest Territories*. *Northwestern Naturalist*. 95:186-196.

Lausen, Cory, and Greg Horne. Email, November 2017.

Tate, Doug. 2017. Personal communication June 2017. Ecologist Team Leader, Lake Superior National Marine Conservation Area, Parks Canada.

12. DECISION

Taking into account the analysis and implementation of mitigation measures outlined in the analysis, the development:

- Might have a significant adverse impact on the environment, and the proposal should be referred to the *Mackenzie Valley Environmental Impact Review Board* for environmental assessment.
- ✓ Does not have a likelihood of causing significant adverse impact on the environment.
- Might be a cause for public concern, and the proposal should be referred to the *Mackenzie Valley Environmental Impact Review Board* for environmental assessment.



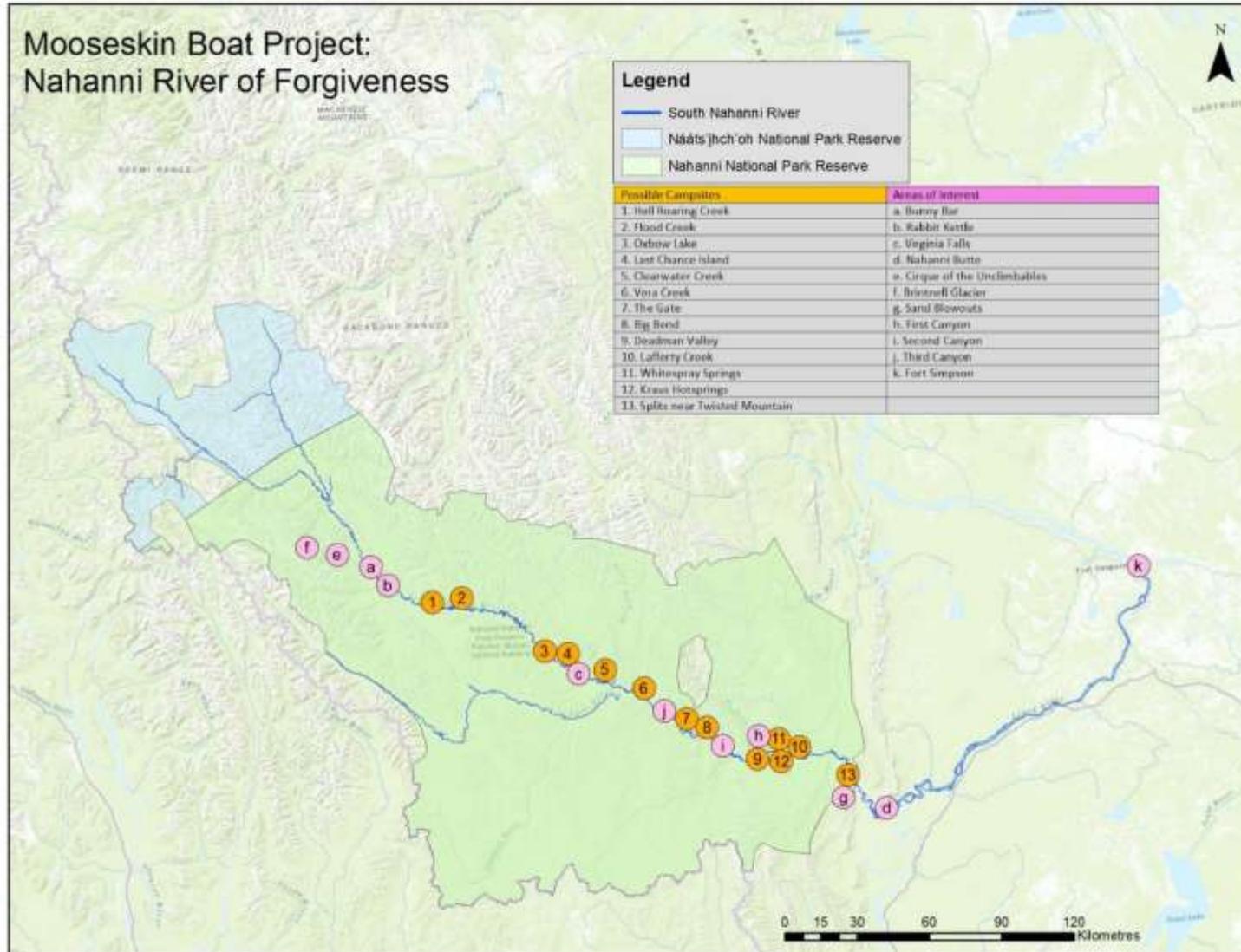
✓ Does not have a likelihood of causing public concern.

13. APPROVAL

Prepared by: <i>Jacquie Bastick</i> Impact Assessment Specialist, Natural Resource Conservation Branch, Parks Canada	Date: April 30, 2018
Approved by:  <i>Jonathan Tsetso</i> Superintendent, Nahanni National Park Reserve	Date: April 30, 2018



Figure 1: Development location map.





APPENDIX 1:

The following Best Management Practices (BMPs) will be included as attachments in the email notification of preliminary screening completion.

- *Parks Canada Best Management Practice (BMP) for Commercially Guided Eco-tourism Activities in Nahanni and Nááts'ihch'oh National Park Reserves of Canada*
- *Parks Canada Best Management Practice (BMP) for Aircraft Operations and Landings in Nahanni and Nááts'ihch'oh National Park Reserves of Canada*