



Preapproved Routine Impact Assessment Frontcountry Areas

Parks Canada National Office
IAA 2019

Preapproved Routine Impact Assessments (PRIA) are pre-determined environmental management and mitigation measures for a defined class of routine, repetitive projects or activities with well understood and predictable effects. Approved PRIAs are an acceptable Impact Assessment pathway as they fulfill Parks Canada's obligations under the *Impact Assessment Act* (IAA) as a manager of federal lands.

This PRIA applies to the modification, maintenance, repair, replacement, decommissioning or abandonment of buildings or other structures that are carried out on developed land that is accessible by road within a national historic site including historic canals or any area of a national park that is zoned "Zone IV" or "Zone V" in accordance with the management plan for the site.

Construction or expansion of buildings and parking lots are not included in this PRIA, however, installation of other structures is permitted.

Buildings or other structures include, but are not limited to, playgrounds, staff offices, washroom facilities (e.g. dry and flush toilets, showers), service lines, trailhead area amenities, cook shelters, staff kiosks and accommodations or storage sheds. Examples of other structures that meet the scope of this PRIA are: sidewalks, boardwalks, pathway, fences, railings, electric vehicle charging stations, class B pedestrian bridges, generators, interpretive displays and exhibits, fireplaces or monuments.

Service lines include underground and aboveground service lines for water, sanitary waste, storm water, natural gas, power and communication. Utilities (water, sanitary sewer, storm water, natural gas) that are provided in pipes are usually located under roadways.

Developed land is a land that is permanently altered from its natural state for human use or is landscaped and maintained for human use.

Expansion is an increase in the exterior dimensions or the production capacity of a physical work.

Water body includes a lake, a canal, a reservoir, an ocean, a river and its tributaries and a wetland, up to the annual high-water mark, but does not include sewage or waste treatment lagoon, a mine tailings pond, an artificial irrigation pond, a dugout or a ditch that does not contain fish habitat as defined in subsection 2(1) of the *Fisheries Act*.

High water mark is the usual or average level to which a body of water rises at its highest point and remains for a sufficient time so as to leave a mark on the land. (Fisheries and Oceans Canada, 2015.) Upper Controlled Water Elevation (UCWE) is used as definition of high water mark in managed waterways.

Scope of Application:

This PRIA includes:

- Modification, maintenance, repair, replacement, decommissioning or abandonment of buildings.
- Installation, modification, maintenance, repair, replacement, decommissioning or abandonment of other structures.

- Construction, installation, maintenance, repair, decommissioning or abandonment of sidewalks, boardwalks, fences or railings.
- Replacement, rehabilitation, maintenance, repair, decommissioning or abandonment of existing service lines.
- Construction or burial of hook-up power lines.

Conditions and Exceptions:

This PRIA does not apply under the following exceptions/conditions:

Location:

- In backcountry or in zone I, II, and III
- Project results in residual adverse effects to sensitive natural or cultural resources (e.g., nests, dens and roosts, fish spawning areas, cultural resources, riparian areas, wildlife corridors, rare ecotypes, or areas of management concern)
- Project involves the placement of temporary or permanent fill in a waterbody

Buildings, other structures and service lines:

- Projects that alter the purpose or function of or results in an expansion of a physical work
- Projects that result in increased visitor capacity
- Projects that involve historic buildings and/or structures, known archaeological resources or extant archaeological resources, unless the work has been pre-approved by a Parks Canada Cultural Resource Management Advisor and/or Archaeologist

For modification, repair, replacement, decommissioning or abandonment projects:

- Installation or modification of a septic field
- Cutting or removing trees through the use of heavy equipment (e.g. skidders, harvesters or excavators)

General:

- The project permanently alters the characteristics of a water body (e.g., temperature, pH, turbidity, flow, water level, water body bed).
 - This includes fill placed in a water body or permanently increasing a physical work's footprint below the high water mark; dredging; and construction of a permanent diversion channel.
- The project results in **residual** adverse effects on migratory birds or their nests.
 - Refer to the draft- *Parks Canada Guidance on Reducing Risk to Migratory Birds* and associated draft- *Conservation Measures for Minimizing Impacts to Migratory Birds During the Nesting Period*.
- The project results in **residual** adverse effects on an individual, a residence or the critical habitat of a listed species at risk under the *Species at Risk Act*.
 - Determine if mitigations are needed to ensure no residual adverse effects to species at risk. Such mitigations should be included in the Supplementary Mitigations section.

- The project is likely to require an [approval](#) under the *Canadian Navigable Waters Act* (s. 5(1)). Check if your project is a Major Works in any Navigable Water or Works in Navigable Waters Listed on the [Schedule](#).
- The project is likely to require an [authorization](#) under the *Fisheries Act* (s.35(1) or 36(3)). Check if your projects needs a [review](#).
- The project involves the removal of or causes damage to cultural resources of heritage value, for example, heritage buildings designated by the Federal Heritage Buildings Review Office, archaeological sites, historical and archaeological objects, or cultural landscapes.
- The project involves the removal of or causes damage to paleontological resources.
- The project results in loss or reduction in size of a wetland.
- The project adversely impacts sites of significance to Indigenous peoples or current access and use of areas where hunting, fishing or gathering rights are exercised by Indigenous peoples.

Other Considerations:

Use of the PRIA may not be appropriate in circumstances such as:

- If the building, other structure or service line is in a zone susceptible to natural hazards such as a land slide zone, floodplain, or area vulnerable to storm surge and sea level rise or in natural, previously undeveloped areas.

Approved Geographic Areas of Application:

This PRIA may be used on developed land that is accessible by road within a national historic site including historic canals or any area of a national park that is zoned “Zone IV” or “Zone V” in accordance with the management plan.

Parks Canada Specialists:

Impact Assessment:

If there are any questions on how to apply this PRIA, consult a member of the Impact Assessment Team.

Species at Risk:

If there is any uncertainty regarding potential adverse effects to species at risk, consult a member of the Species Conservation Team.

Environmental Management:

If there are questions on environmental management issues (e.g., treated wood, contaminated sites, hazardous materials or greening operations), consult a member of the Environmental Management Team.

Cultural Resources:

If there is any uncertainty regarding potential adverse effects to known or potential cultural resources, consult a member of the Cultural Resource Management Protection Team or, if applicable, the local Field Unit specialist.

Valued Components and Effects Analysis

Soil/Land Resources

- Soil contamination from wastes (e.g., garbage, litter, sewage, fuel)
- Increased disturbance footprint
- Soil compaction and rutting
- Soil erosion, loss of topsoil and exposure of subsoil
- Change in slopes, landforms and landscape

Air/Noise Quality

- Temporary decreased ambient air quality (e.g., dust, equipment emissions)
- Increased ambient noise level

Water Quality

- Reduced water quality due to transportation of debris and contamination (i.e. from leaks and accidental spills, etc.)
- Localized changes to surface water hydrology

Wildlife and Vegetation

- Wildlife habituation/attraction to artificial food sources
- Impeded/altered wildlife movement
- Habitat destruction or alteration
- Mortality from project activities
- Introduction of invasive species, or expansion of existing populations
- Damage to and removal of vegetation, disturbance of adjacent natural areas, root exposure and physiological distress

Visitor Experience and Safety

- Reduced quality of visitor experience due to noise and presence of construction equipment
- Reduced accessibility to portions of the site where work is taking place
- Hazard to visitors and staff due to construction activities

Cultural Resources

- Adverse effects to the heritage value or character-defining elements of a cultural resource or a heritage place
- Impacts to archaeological resources (known or potential) from displacement or destruction, resulting in loss of heritage value
- Impacts to cultural landscapes, buildings, objects, engineering works.

Mitigation Measures

Pre-Project Planning:

- 1) Work within the vicinity of waterbodies or wetlands may require a site specific Erosion and Sediment Control Plan.

- 2) Schedule work to avoid wet, windy and rainy periods or very dry periods that may increase erosion and sedimentation.
- 3) Clearly identify and avoid sensitive environmental features and habitats in the work area and schedule work to avoid critical wildlife life stages. If useful, complete the Environmental Timing Windows Table.
- 4) Work with a Cultural Resource Management (CRM) Advisor and CRM specialists (archaeologists, historians, and built heritage advisors) to assess the impact of intervention to cultural resources and identify necessary mitigation measures.
- 5) A Spill Response Plan should be developed prior to work starting.
- 6) Treated wood is prohibited in certain situations and must be handled, installed, and disposed of according to current guidance prepared by Parks Canada.

Example: Environmental Timing Windows Table (to be deleted or adapted)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Fish	AVOID INSTREAM WORK					Least risk window for work in and around freshwater, June 15 – Sept 15				AVOID INSTREAM WORK		
Birds	Reduced risk for harm to birds		AVOID VEGETATION REMOVAL Bird Nesting Period: April - Mid August				Reduced risk for harm to birds					
Bats	Bat in Hibernacula			Bats Nursing Pups							Bat in Hibernacula	
Turtles	Hibernation		Road Mortality	Nesting -avoid disturbance		Road Mortality		Hatchlings – avoid disturbing	Road Mortality	Hibernation		
Snakes	Avoid disturbance of Hibernacula			Road Mortality		Peak : breeding, live young Mitigate road mortality			Migration Road mortality	Avoid disturbance of Hibernacula		

Work Site Conditions/Staging/Laydown:

- 7) Key contacts and their respective roles and responsibilities must be identified prior to work starting and communicated to all on-site workers.
- 8) People working on the project/activities must review the mitigation measures and any site specific considerations with designated Parks Canada staff before work begins.
- 9) Clearly mark the work site and restricted areas with stakes, biodegradable flagging tape or other means to minimize the disturbance footprint; remove when the project is completed.
- 10) Staging areas, material/equipment drop sites, and parking areas must be identified and within an existing disturbed footprint (e.g., roadways, gravel surface, previously disturbed areas with high resiliency) or approved by designated Parks Canada staff.
- 11) Use existing roadways, trails, disturbed areas or other areas as approved by designated Parks Canada staff for site access, travel within the site and construction activities.

Wildlife:

- 12) When possible, conduct any clearing of vegetation outside critical wildlife timing windows such as the bird nesting period and bat maternity season.

- 13) On-site workers must receive any required wildlife awareness training, according to field unit policy.
- 14) On-site workers must be made aware of and subsequently report any incidental sightings of species at risk immediately to designated Parks Canada staff.
- 15) If active nests, dens or roosts are discovered, stop work and contact designated Parks Canada staff immediately for direction.
- 16) When possible, conduct activities during daylight hours, avoiding critical foraging times (dusk and dawn). Consult with Parks Canada staff for site-specific advice.
- 17) Minimize the time excavations remain open and cover or fence when left unattended to reduce the potential for wildlife injury.
- 18) Never approach or harass wildlife (e.g., feeding, baiting, luring). If wildlife is observed at or near the work site, allow the animal(s) the opportunity to leave the work area.
- 19) Designated Parks Canada staff must be alerted immediately to any potential wildlife conflict (e.g., aggressive behaviour, persistent intrusion), distress or mortality.

Vegetation:

- 20) All clearing activities must be flagged and plans pre-approved by designated Parks Canada staff.
- 21) Clear minimum area necessary; trees should be removed only if necessary for project completion or visitor/staff safety.
- 22) When felling trees, precautions must be taken to minimize damage to surrounding vegetation.
- 23) The felling of trees with obvious wildlife use (e.g., snags with cavity nests, large trees with stick nests) must be avoided wherever possible; if unavoidable, Parks Canada staff consultation and approval is required.
- 24) All cut wood is the property of Parks Canada; consult with designated Parks Canada staff to determine appropriate cutting methods, use and disposal of cut wood and other plant material.
- 25) Employ pruning techniques to minimize risk of tearing the bark and harming the tree; ensure that only branch tissue is removed and stem or trunk tissue is left undamaged (refer to Appendix A).
- 26) Protect roots of trees to drip line to prevent disturbance or damage. Avoid traffic, dumping and storage of materials over root zone.
- 27) Retain a 15-30 meter vegetated buffer, from the high water mark of waterbodies. In sloped areas, buffers should increase in width as the slope increases.
- 28) Removal of riparian vegetation should be kept to a minimum and undertaken only when absolutely required. Ensure the root structure and stability are maintained.
- 29) Where re-vegetation is required, use native plants/soils/seed mix approved by designated Parks Canada staff.

Invasive Alien Species:

- 30) All construction equipment from outside the Parks Canada protected heritage place must be washed outside the site prior to arrival to minimize risk of introducing invasive weed species. Proof that this mitigation was applied may be requested before equipment is permitted into the protected heritage place.
- 31) If invasive species are a serious issue, consider more effective cleaning methods such as pump and high pressure hose or high pressure water unit.
- 32) Work in uninfested sites before moving to infested sites.

- 33) All soil, gravel, untreated construction lumber, erosion and sediment control products or other applicable materials from outside the protected heritage place must be approved by the designated Parks Canada staff.
- 34) Organic material (e.g, topsoil, borrow and fill material, gravel) taken from the construction site will not be used in other parts of the protected heritage place unless approved by the designated Parks Canada staff.
- 35) Minimize ground disturbance, vegetation removal and bare soil exposure (e.g., cover stockpiled material with tarps, plant native species, cover with natural mulch/ground coverings).
- 36) Stabilize and re-vegetate disturbed areas as soon as possible. If there is insufficient time remaining in the growing season, stabilize the site to prevent erosion and vegetate the following spring.
- 37) Monitor disturbed and re-vegetated areas until native vegetation is growing successfully and invasive alien species spread is prevented.

Visitor Experience and Safety:

- 38) If possible, schedule noisy activities outside peak visitor season or adjust hours of noisy work to minimize disturbance to visitors using the area.
- 39) Close and mark the work site and safety hazards with appropriate signage while active construction, repair or maintenance is underway; consider temporary detours or reroutes as appropriate.
- 40) If closing the area is not possible, maintain a safe working distance between work activities and visitors. If traffic control is required, a flag person should manage traffic through the construction/hazard area.
- 41) Visitor access trails and roads outside the construction area must be free of construction materials, waste, machinery and equipment.

Cultural Resources:

- 42) The designated Parks Canada staff should ensure that on-site workers receive appropriate cultural resource awareness training if required.
- 43) Avoid known potential cultural resources and archaeological sites.
- 44) Apply additional mitigation measures (in supplementary mitigation section) that may have been previously identified by a Parks Canada archaeologist or cultural resource advisor for the immediate area of work.
- 45) If cultural resources (i.e., structural remains and/or artifact concentrations) are encountered, work must cease in the immediate area, the site secured and the designated Parks Canada staff contacted for further direction.

Equipment Operations:

- 46) Use low pressure or rubber tracked equipment or access matting where feasible to minimize soil compaction and ground disturbance.
- 47) Select equipment appropriate to the nature of work being conducted (e.g., avoid using large scale machinery when hand tools or smaller scale machinery could be used).
- 48) Heavy equipment operating on paved surfaces should be equipped with street pads; damage to paved surfaces must be restored to original conditions.
- 49) Equipment must be properly tuned, clean and free of contaminants, in good operating order, free of leaks (e.g., fuel, oil or grease), and fitted with standard air emission control devices and spark arrestors prior to arrival on site.

- 50) Machinery must be stored, maintained and refuelled on a flat surface, outside the dripline of trees (The area defined by the outermost circumference of a tree canopy where water drips from and onto the ground) and above the High Water Mark and in such a way as to prevent any deleterious substances from entering the water. Increase the buffer zone depending on the level of risk and site-specific conditions.
- 51) Refuelling must take place on an impermeable fuel mat with a berm or within a container. Leaks and spills during refuelling must be cleaned up, reported and contaminated materials must be disposed of appropriately. Fuel must never be dispelled or deposited into the environment or any water body.
- 52) Any required cleaning of tools and equipment should be done off-site. If it must be on-site, it must be in an appropriate area at least 30m from a waterbody.
- 53) Gas generators must be secured to prevent movement during the operation 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.

Demolition:

- 54) Prior to commencement of demolition activities, all structures must be surveyed by experienced personnel from within or approved by Parks Canada for the presence of wildlife (e.g., roosting bats, nests, dens). Should wildlife be discovered, work will cease in the immediate area and designated Parks Canada staff contacted for further direction.
- 55) Prior to commencement of demolition activities, water and septic systems, lines and/or fields must be identified and precautions taken during the operation of heavy equipment to avoid damaging them.
- 56) Residual septic systems, water lines and wells of no further use must be removed, capped or decommissioned according to the appropriate federal or provincial legislation.
- 57) If undocumented contamination is found, cease work immediately and contact designated Parks Canada staff.
- 58) Consult with designated Parks Canada staff to determine whether full excavation and removal of all subsurface infrastructure (e.g., pipes, cement structures, wires) is required. Backfill any excavation with clean, weed-free topsoil.
- 59) Ensure wastes from demolition activities do not enter waterbodies (e.g., use tarps to capture debris). Any waste that does fall into a waterbody will be immediately retrieved, provided worker safety is not compromised, and if removal can be done without excessive disturbance of bottom sediment.

Site Clean-up and Waste Management:

- 60) All wildlife attractants must be secured (e.g., petroleum products, human food, recyclable drink containers and garbage) in wildlife-proof containers, a secure building or vehicle. When possible, keep food waste separate from construction waste and remove daily.
- 61) All salvageable, non-combustible and non-hazardous materials will be removed, reused and recycled to the greatest extent possible. Remaining material considered to be waste and demolition debris is to be disposed of at an approved disposal facility.
- 62) Secure all materials (e.g., construction waste and materials, excavation, vegetation) above the high water mark of nearby waterbodies and ensure wastes do not enter waterbodies (e.g., use tarps to capture debris). Any waste that does fall into a waterbody will be immediately retrieved, provided

worker safety is not compromised, and if removal can be done without excessive disturbance of bottom sediment.

- 63) Contain wastes and transport to an approved waste landfill site outside the Parks Canada site unless otherwise directed; cover waste loads during transportation.
- 64) Any hazardous material (e.g. asphalt shingles, creosote treated wood, asbestos, lead paint, moulds, animal excrement, paints, automotive products, electrical equipment) and pollutants such as fuels and solvents found on-site will be separated and disposed of contaminated materials at provincially or territorially certified disposal sites.
- 65) All construction materials must be removed from the site on project completion. Burning or burying is not permitted unless approved by Parks Canada.
- 66) Concrete mixing activities must take place over tarps and a minimum of 30 meters from waterbodies. Fresh, wet, uncured concrete and concrete dust must not come into contact with waterbodies. Secondary containment measures such as collection/drip trays and berms lined with air and water-tight material such as plastic and a layer of sand, and double-lined fuel tanks are required.
- 67) Excess concrete must be disposed of at an appropriate facility outside of the Parks Canada protected heritage place. If excess concrete from pump trucks must be dumped prior to transport outside the protected heritage place, it must be deposited in a location approved by Parks Canada and removed following hardening for disposal at an approved facility.
- 68) If present, portable sanitary facilities must be serviced on a regular basis and accumulated waste disposed of at a sanitary waste disposal facility. The portable facilities must have sufficient capacity and be managed to ensure waste is not discharged to the receiving environment.

Spill Response Plans and Hazardous Material Management:

- 69) Ensure that all on-site workers receive a briefing about the Spill Response Plan and are aware of the location and use of spill kits and containment devices.
- 70) Follow all applicable regulations and codes for the management and handling of hazardous waste.
- 71) Spill containment equipment must be present on-site. A spill contingency response kit including sorbent material and berms to contain 110% of the largest possible spill related to the work must be available on site at each location of potential spills (sites where equipment is working and at refuelling, lubrication, and repair locations).
- 72) All spills must be contained and cleaned-up as soon as it is possible to safely do so. In the event of a major spill, all other work must stop until the spill has been adequately contained and cleaned up.
- 73) Notify the designated Parks Canada staff and the emergency contact immediately of any spill. In the event of a major spill, call the first contact authority.
- 74) Contaminants must be recovered at the source and disposed of according to applicable laws, policies and regulations site (consult with the Environmental Management Team). The site will be inspected by Parks Canada staff to ensure completion to expected standards.
- 75) Petrochemical products, paints and chemicals must be used and stored in such a way as to prevent any deleterious substances from entering the water.
- 76) If hazardous waste or potentially contaminated material is uncovered during excavation / construction, work must stop and excavated materials must be secured onsite in a manner that prevents contamination of the surrounding environment, including leaching. The designated Parks Canada staff must be contacted for further direction.

Trenching and Excavation:

- 77) Erosion control measures that prevent sediment transport into any waterway, water body or wetland shall be implemented.
- 78) Select erosion and sediment control measures that correspond with the nature and duration of the project and they must be installed before starting work, especially within 30 meters of a waterbody.
- 79) Regularly inspect and maintain erosion and sediment control structures during all phases of the project and alter measures when necessary.
- 80) Use erosion and sediment control products made of 100% biodegradable materials (e.g., jute, sisal or coir fibre) when possible. Ensure backing materials are also biodegradable.
- 81) Use of hay or straw in erosion and sediment control must be approved by designated Parks Canada staff.
- 82) Use sediment and erosion control products that reduce potential for wildlife entanglement when possible. These options include:
 - a) Net-less erosion control blankets made of excelsior or loose mulch and unreinforced silt fences.
 - b) Netting with a loose-weave wildlife safe design.
- 83) Limit duration of soil exposure; phase activities whenever possible and restore disturbed areas as soon as possible.
- 84) Avoid equipment operation on steep or unstable slopes unless absolutely necessary.
- 85) Manage water flowing onto the site as appropriate for the project:
 - a) Divert uplands surface runoff away from exposed areas.
 - b) Filter water being pumped/diverted from the site; silt-laden water must not be pumped directly into a waterbody (e.g., pump/divert water to a vegetated area 30 meters from the waterbody, a constructed settling basin or other filtration system).
 - c) Minimize slope length and gradients of disturbed areas.
 - d) Cover erodible soils with mulch, vegetation, or rip rap.
 - e) Construct check dams or similar devices in constructed swales and ditches.
- 86) Any trenches to be dug for services e.g., electrical lines, must follow an existing "right of way" as much as possible.
- 87) Topsoil separation is required; stockpile topsoil away from subsoil and spoil material and above the high water mark or top of bank of nearby waterbodies and ensuring sediment re-entry to the watercourse is prevented.
- 88) Stockpiled material must not be permitted to damage or bury known cultural resources.
- 89) Reuse excavated material on site, unless there are any indicators of potential contamination.
- 90) Excavations must be drained (but not directly into a waterbody), backfilled and compacted as soon as possible.
- 91) Under thawed conditions, backfill material will be compacted prior to topsoil replacement; distribute topsoil over the excavated area.
- 92) Under frozen ground conditions, material will be sufficiently spread over the excavated site to allow for a settlement under thawed conditions
- 93) Re-vegetation must be undertaken in consultation with designated Parks Canada staff.
- 94) Maintain effective sediment and erosion control measures until any required re-vegetation of disturbed areas is achieved.
- 95) Remove temporary erosion and sediment control products, especially non-biodegradable materials, when they are no longer required.

Supplementary Mitigations:

96) A few supplementary mitigation(s) may be required to ensure all potential impacts are mitigated.

Approvals

Original signed by Julie Tompa

Dec 13, 2019

Julia Tompa
Director, Natural Resource Management
Branch

Date

Original signed by Calvin Mercer

Dec 09, 2019

Calvin Mercer
Director, Asset Management and Project
Delivery Branch

Date

References:

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Parks Canada. 2009. *Model Class Screening Report for Routine Projects in National Park Communities*.

Parks Canada. 2016. *National Best Management Practices for Campground and Day Use Area Maintenance and Modification*.

Parks Canada. 2017. *National Best Management Practices for Common Activities*.

Appendix A – Proper Pruning Method

To request a copy of this document with images, please contact ia-ei@pc.gc.ca.

To find the proper place to cut a branch, look for the branch collar, an often visible swelling that forms at the base of a branch where it is attached to its parent branch or to the tree's trunk. On the upper surface, there is usually a branch bark ridge that runs (more or less) parallel to the branch angle, along the stem of the tree. A proper pruning cut does not damage either the branch bark ridge or the branch collar.

A – The first cut is a shallow undercut to prevent bark tearing.

B – The second cut completely removes the limb.

C – The third cut removes the stub and is cut flush with the branch collar