



Basic Impact Analysis (BIA)

Saltons Brook (Visitor Centre) Wharf Repairs

Terra Nova National Park

February 11, 2015



**Parks
Canada** **Parcs
Canada**

Canada

**1. PROJECT TITLE**

Saltons Brook (visitor centre) Wharf Repairs

2. PROJECT LOCATION

Terra Nova National Park.

3. PROJECT SITE(S)

The proposed project will be localized to the wharf and immediately adjacent shoreline at the Saltons Brook Visitor Centre located in Terra Nova National Park (WGS84 coordinates 48°34'45.36"N, 53°56'50.79"W).

PROPONENT

This project is being managed by Public works and Government Services Canada, on behalf of Parks Canada. The PWGSC Project Manager for this project is Dave Bursey (709) 637-4563. Kevin Robinson, A/Asset Operations Manager is the representative for Parks Canada and may be contacted at (709) 533-3182. Any environmental-related questions can be directed to Mark McNeil, PWGSC Environmental Specialist at (709) 637-4481 or Janet Feltham, Parks Canada Acting Ecologist Team Leader at (709) 533-3156.

5. PROPONENT CONTACT INFORMATION

General Delivery, Terra Nova National Park, Glovertown, NL. Phone: (o) 709-533-3136, (c) 709-235-1327

6. PROJECT DATES

Planned commencement: 2015-04-01

Planned completion: 2015-06-01

7. INTERNAL PROJECT FILE #

TN-2015-04

8. PROJECT DESCRIPTION**Project objective:**

The proposed project will involve general wharf maintenance and repairs including the removal and replacement of vertical fendering, chocks, ladders, wheelguard (including blocking) and mooring rings along the entire wharf structure (headblock and stem section). A damaged section of longitudinal crib timbers will also be removed and replaced from the stem section of the wharf.

As part of the repairs, an existing undermined slab-on-grade section of the wharf approach will also be removed, infilled and a new concrete slab approach installed. Existing shoreline protection will also be repaired. Specifically, existing large armourstone will be consolidated and interstitial voids filled with appropriately sized rip-rap. Rock fill will be added to an existing, eroding bank to smooth the slope and reduce erosion.

Project rationale (optional):

The proposed project is being completed to ensure the continued provision of safe and reliable berthing facilities at the Saltons Brook wharf, which is currently in a state of disrepair.





Project phases and activities:

The exact method for completing the proposed project will be determined by the successful contractor. However, it will likely be completed utilizing a combination of both heavy equipment and manual labour. Given the relatively small spatial scope of the project, site preparation will be minimal and will likely only involve the mobilization of the contractor and required equipment to site.

Fendering, wheelguards, etc., will be removed from the entire wharf face (a distance of approximately 200 metres). Damaged longitudinal crib timbers will be removed from one section of the stem only. Any CCA/creosote treated timber removed from the wharf may be re-used where environmentally suitable or otherwise transported to a provincially approved landfill and disposed of pursuant to applicable federal/provincial regulations. All water lines and electrical connections temporarily removed as a result of the wharf repairs will be reinstated following completion of the project. Note that an existing navigational light on the wharf may also be temporarily removed as part of the project. This light will be reinstated upon completion of the project. Parks Canada will determine appropriate mitigations for the temporary removal of the light.

Concrete may be poured on-site as part of the rehabilitation of the wharf approach. Concrete and concrete washwater will not be permitted to enter the watercourse and must be transported off-site and disposed of pursuant to applicable federal/provincial regulations.

Riprap and infill will be sourced from an approved location and trucked to the site. The majority of shoreline rehabilitation work will occur above the high-water mark. Any in-water work will be completed in such a manner as to avoid sedimentation of the waterbody and any potential impacts to fish and fish habitat. Parks Canada will determine if consultation with Fisheries and Oceans Canada is required prior to the commencement of any in-water work.

Project location:

The proposed project will be localized to the wharf and immediately adjacent shoreline at the Saltons Brook Visitor Centre located in Terra Nova National Park (WGS84 coordinates 48°34'45.36"N, 53°56'50.79"W). Given the small spatial and temporal scale of the project, the surrounding area is not anticipated to be impacted by the project.

As previously indicated, any armourstone, riprap or fill required for the project will be sourced from an approved location, in accordance with applicable regulations and contract specifications.





Details regarding proposed timing (if available):

It is anticipated that the proposed project will commence as soon as possible, likely in March of 2015. The proposed work should be completed within several weeks once work commences.

Additional details (as required)

This is Parks Canada project being delivered by Public Works and Government Services Canada. Upon visiting the DFO website to determine whether this project requires review from DFO, it was determined that it does not meet the requirements for a review (ie. does not cause serious harm to fish or fish habitat) <http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>. However, there are mitigating measures included in this BIA that must be followed in order to prevent serious harm to fish or fish habitat.



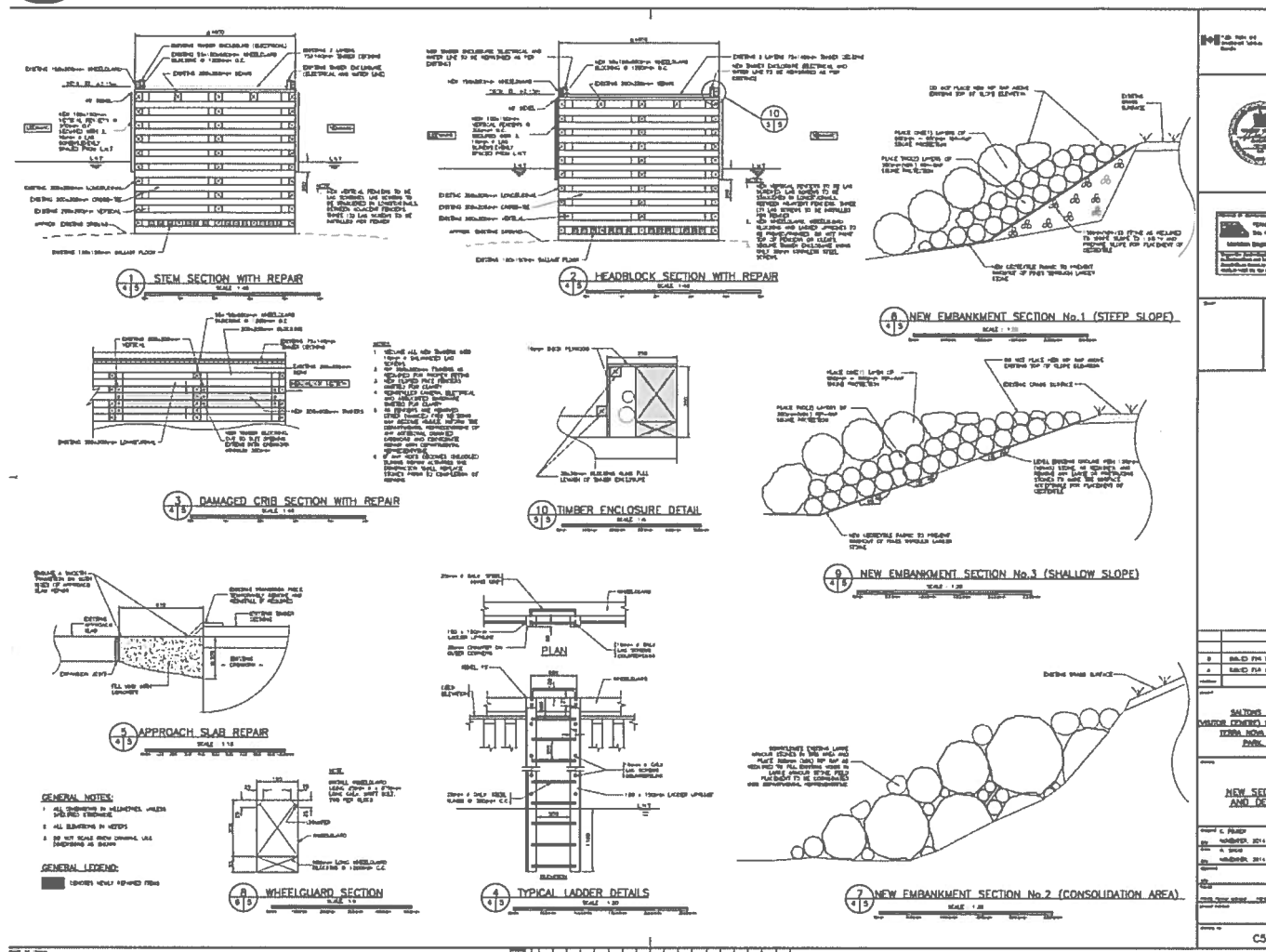
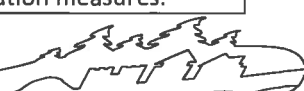


Figure 2. C5 – Wharf sections and details for tender.

9. VALUED COMPONENTS LIKELY TO BE AFFECTED AND MITIGATING MEASURES

Environmental Component	Description of Effect	Mitigation
N/A	N/A	<p>General:</p> <ul style="list-style-type: none"> The contractor is not to limit his/her environmental responsibilities to this screening report and will be responsible to adhere to Provincial, Federal and Municipal regulations. The mitigation measures presented in this screening report are subject to additions or alterations prior to and during project implementation. The contractor will be responsible for the activities of any sub-contractors employed by him/her and their compliance to these mitigation measures.

April 2014



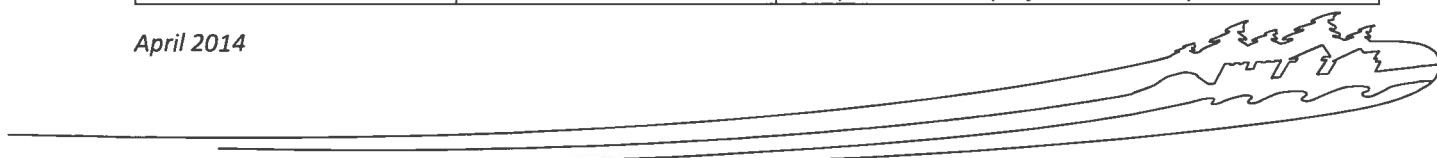


		<ul style="list-style-type: none"> • All work is restricted to within the established construction perimeter unless otherwise approved by the Parks Canada Environmental Protection Officer (EPO). • The EPO is to have access granted at all times to anywhere on the construction site.
Air Quality and Noise	Decreased ambient air quality	<ul style="list-style-type: none"> • Unnecessary idling of equipment, including trucks will not be permitted. • Stabilize soil and other material storage piles against wind erosion. • Cover and contain fine particulate materials during transportation to and from the site and during storage. • Minimize vehicle traffic on exposed soils. • Wet down exposed soil and dry areas. • Identify energy and water conservation opportunities for building design and outdoor lighting protocol compliant with Dark-sky Preserves (DSP's).
	Increased ambient noise levels	<ul style="list-style-type: none"> • Confine "noise" activities to daylight hours
Soils and Topography	Changes in slopes, landforms and landscape diversity	<ul style="list-style-type: none"> • Assess slope stability (based on slope length, soil texture, steepness, soil depth). Adjust activities to avoid these areas if possible (particularly where slopes are 15 degrees or greater and where soils are shallow and likely to move with disturbance). • Hand clear on steep slopes that do not require grading. Wait to clear steep slopes until immediately before scheduled construction and reclaim immediately afterwards. • Use appropriate geo-technical control measures to stabilize slopes.
	Loss of topsoil, topsoil and subsoil mixing, soil erosion, slope instability	<ul style="list-style-type: none"> • Avoid equipment operation on steep or unstable slopes. • Keep site clearing to a minimum to maintain vegetative cover; where possible, leave stumps and roots in place. • Prepare Sediment Control and Erosion Plan where applicable. • If a prolonged period of exposure is expected, protect exposed soils with temporary cover (e.g. mulch, gravel, erosion blanket, vegetative cover). • Halt activity on exposed soils during periods of high rainfall and runoff and implement control measures as required (e.g. tarps, erosion blankets, silt fencing). • Stabilize slopes as appropriate for local site conditions. Possible methods include: armour stones, crib walls, erosion control blankets and sediment fencing. • Topsoil should be replaced in the order it was removed.



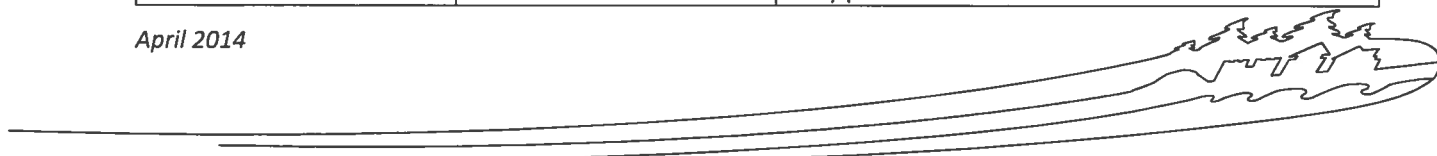


		<ul style="list-style-type: none"> • Minimize the amount of time that excavations and trenches remain open.
	Soil contamination – leaks, accidental spills or historic use	<ul style="list-style-type: none"> • Ensure machinery is in good working order and free of leaks. • Identify and handle all toxic/hazardous materials as required under the <i>Canadian Environmental Protection Act</i>, <i>Transportation of Dangerous Goods Act</i> and <i>Workplace Hazardous Materials Information Service</i>. • Prepare an appropriate Spill Response Plan • Ensure spill containment equipment is on hand and personnel are trained in its use. • Store fuel and hazardous materials in a berm or secondary containment designed to contain 110% of the product's volume. Ensure other materials are stored appropriately to prevent spills. • Designate refuelling areas on hardened surfaces at least 100 m away from water bodies. • Report all spills to Resource Conservation - TNNP at (709) 533-2801 or Jasper Dispatch at (877) 852-3100 • Clean up all spills immediately, as per the Spill Response Plan. If contamination is found, cease work and inform the Site Supervisor or Environmental Protection Officer. • Dispose of contaminated soil at provincially certified disposal sites outside of the field unit. • Documentation confirming proper disposal must be provided to Parks Canada • When building demolition is required, a check for hazardous materials is required by trained personnel (e.g. asbestos, PCBs, etc.).
	Ground subsidence or heaving from soil thaw or poor excavation or backfilling.	<ul style="list-style-type: none"> • Ensure backfilling is undertaken using suitable materials free of ice and frozen soils and that adequate soil compaction is conducted to avoid ground subsidence. • Backfilling should be allowed to settle to prevent subsidence. • Provide additional backfill where subsidence has occurred.
Hydrological and Aquatic Resources	Adverse modifications to surface drainage patterns; stormwater runoff volumes and rate of runoff; stream or shoreline morphology; water flow volumes, levels and rates	<ul style="list-style-type: none"> • Retain vegetated buffer around waterbodies. • Locate staging areas away from drainage features. • Fueling of equipment will take place 100m away from any watercourse. • Absorbent material will be available on-site • Fuels will be stored in the compound area when not in use. • Fuel spills will be reported to Resource Conservation – TNNP (709) 533-2801 or Jasper Dispatch at (877) 852-3100. • Contaminated material to be disposed of in an approved manner. • Maintain effective surface drainage upon completion of the project, which may include re-



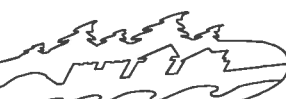


		<p>establishment of, or improvement to the original site drainage.</p> <ul style="list-style-type: none"> • Minimize changes to the ground surface that affect infiltration and runoff.
	<p>Reduced water quality and clarity due to increased erosion, sedimentation, transport of debris, point or non-point sources of pollution</p>	<p>DFO Guidelines: Repairs to existing breakwaters, groynes, piers and wharves must include:</p> <ul style="list-style-type: none"> • No temporary or permanent increase in existing footprint below the High Water Mark • No new temporary or permanent fill placed below the High Water Mark • Site isolation measures (e.g., silt boom or silt curtain) for containing suspended sediment where in-water work is required (e.g., dredging, underwater cable installation) • Measures for containing and stabilizing waste material (e.g., dredging spoils, construction waste and materials, commercial logging waste, uprooted or cut aquatic plants, accumulated debris) above the high water mark of nearby waterbodies to prevent re-entry. • Regular inspection and maintenance of erosion and sediment control measures and structures during the course of construction. • Halt activity on exposed soil during events of high rainfall and runoff. • Designate refuelling areas on hardened surfaces at least 100 m away from watercourses or wet areas (Spill response materials must be onsite). • Ensure cleared vegetation does not enter watercourses. • Do not place or allow to disperse any rock, silt, cement, grout, asphalt, petroleum product, lumber, vegetation, domestic waste, or any deleterious substance into any waterbody, stormwater system or sanitary sewer. • Backfill and compact excavations as soon as possible. Optimize degree of compaction to minimize erosion and allow for revegetation. • Do not use herbicides in areas where residue/runoff may enter a waterbody or drainage pathway.
Vegetation	<p>Damage to and/or removal of vegetation</p>	<ul style="list-style-type: none"> • Operate machines carefully to avoid damaging surrounding vegetation. • Ensure excavated material does not damage or bury plant material that is to be retained on the site



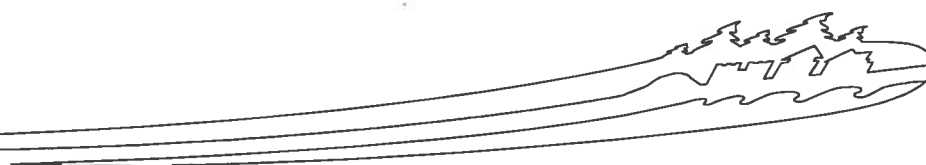


		<p>or in adjacent areas. Store excavated soils and construction materials in a well-defined area. Use tarps and/or fences to limit damage to vegetation.</p> <ul style="list-style-type: none"> • Identify and avoid areas with rare plants or valued vegetation features. • Minimize the area of vegetation removal. Clearly mark the area to be cleared with flagging tape and/or temporary fencing. • Vegetative material is disposed on-site and/or removed, depending on quantity and location, and may be limbed and bucked to lie flat, processed for firewood, chipped and/or burned. Appropriate disposal is determined on a case-by-case basis in consultation with the Resource Conservation Officer • Only native tree species will be used in all planting activities • All stems (brush and trees) shall be cut flush at ground level • Excavations from stump removal will be backfilled and landscaped • When trimming branches, at least 4cm of the branch node should remain on the tree to prevent damage to bark and the onset of disease.
	Introduction of non-native invasive plant species	<ul style="list-style-type: none"> • Equipment should be pressure washed before arriving at the work site. • All soils sourced from outside Terra Nova National Park must be clean and free from seeds, use certified weed free topsoil (e.g. High Point Peat). • Revegetate at the first opportunity.
Wildlife	Loss of habitat (food and cover)	<ul style="list-style-type: none"> • Maintain forest structural attributes such as wildlife trees, coarse woody debris, rock outcrops, and boulder fields/talus. • Minimize disturbance to understory plants and soil (clear only minimum area required).
	Damage to nests and/or disruption of nesting birds, disruption of denning animals or breeding bats	<ul style="list-style-type: none"> • Consult with Resource Conservation - TNNP to discuss any localized wildlife concerns. • Conduct any clearing outside of the bat breeding and/or nesting season for migratory and resident birds known to breed in the area. Owls and corvids may begin nesting from February onwards. Songbirds generally nest from May until mid-July. Some migratory raptors (e.g. osprey) rear their young well into August. The little brown myotis is typically active from May through September. • If clearing takes place during the breeding and nesting season, sweep for bird nests before commencing work. Young birds must be allowed to fledge before nests are disturbed. • Check the area for dens and bats before commencing work. Active dens and breeding bats (nursery colonies) must not be disturbed.





		<ul style="list-style-type: none"> • If any active dens, nests or bats are located, contact Resource Conservation – TNNP at (709) 533-2801.
	Wildlife habituation/attraction to artificial food sources	<ul style="list-style-type: none"> • Keep site free of garbage and dispose of garbage in wildlife proof containers or remove daily from the site. • Educate workers that wildlife harassment or feeding is not permitted. • Communicate potential problem and/or habituated wildlife to Resource Conservation – TNNP at (709) 533-2801. • Store hazardous chemicals (e.g. antifreeze) that might be attractants in animal proof containers.
	Disruption to park visitors, residents and businesses due to increased noise and traffic, and changes in aesthetics	<ul style="list-style-type: none"> • Retain and limit damage to vegetation where possible, especially trees and shrubbery. • All stumps are to be cut flush to the ground where possible. • Parks Canada will authorize burning of slash piles only when optimum smoke venting conditions are present. • All waste should be disposed of at the local Waste Management facility, sorted to promote reuse/recycling of materials. • Complete thorough clean-up of the site, including removal of general litter, survey stakes, flagging tape etc. at project completion. • Use appropriate signage for closed facilities (trails, picnic areas, etc.) and identify detours/alternatives. • Develop a communications plan as needed to keep stakeholders, general public and visitors informed of the project.
Cultural Heritage	Loss or disruption of heritage, archaeological and paleontological features	<ul style="list-style-type: none"> • If any artefacts are uncovered, stop work until the TNNP Cultural Resource Specialist or the Environmental Protection Officer is consulted.
Socio-Economic Conditions Human Health	Injuries to public and workers arising from a change in the environment and/or improper handling of hazardous materials	<ul style="list-style-type: none"> • All trenches or ditches left unattended overnight must be fenced or barricaded. • All road signage must be in accordance with provincial standards. • Notify utility companies to identify buried resources/lines. • All workers on-site must wear the proper personal protective equipment (PPE) for their assigned tasks and be trained in its proper use. • First Aid kits must be available on all job sites.
	Disruption to park visitors, residents and businesses due to increased noise and traffic, changes in air, water quality and aesthetics	<ul style="list-style-type: none"> • Evaluate site layout, access routes and construction activities to minimize their visual impact. <p>During transport of materials to and from site, ensure that cargo is secured and contained within</p>





		<p>the vehicle (ie. dump truck loads should be covered when necessary)</p> <ul style="list-style-type: none">• Limit noise producing activities to daylight hoursOutline traffic control measures and assess the need for flagging personnel.• Time construction activities to minimize vehicle conflicts.• Heavy equipment operated (e.g. tracked excavator) on paved surfaces should be equipped with street pads or some kind of barrier to protect pavement.• Store materials within the confines of the work site.• Develop and implement a communications plan to keep all stakeholders, general public and visitors informed of the project.
--	--	--

11. MITIGATION MEASURES

See section 9.

12. CONSIDERATION OF THE NEED FOR PUBLIC PARTICIPATION & ABORIGINAL CONSULTATION

12 a) Indicate whether opportunity for public participation should be offered:

☒ No

☐ Yes

12 b) Indicate whether there is a requirement for Aboriginal Consultation in relation to project impacts:

☒ No

☐ Yes

13. EFFECT SIGNIFICANCE

There are no anticipated residual effects from this project if mitigating measures are followed. It is anticipated that this project will be completed in one month prior to the visitor season. Public concern for this project should be avoided if project is completed on schedule. Since the project involves repairs to the existing wharf and activity occurs within a high visitor use area, there are no significant effects anticipated. Work must be completed while adhering to the prescribed mitigating measures and within the time frame outlined in this analysis.

14. SURVEILLANCE

Document whether surveillance (also referred to as compliance monitoring or site inspection) will be required while the project is underway, to verify that required mitigation measures are implemented.

☒ Surveillance required (there are templates on the [EA intranet tools & guidance page](#))
☐ Surveillance not required

- Daily surveillance is required throughout the duration of the project to ensure that all mitigating measures are followed as outlined in this BIA. In particular, during wharf repair work near water as well as the installation of armour stone and bank stabilization, care must be taken to prevent sediment runoff and debris from entering the water.

15. SPECIES AT RISK MONITORING

April 2014





N/A

16. SARA NOTIFICATION

N/A

17. EXPERTS CONSULTED*Include Parks Canada experts. Add as many entries as necessary for the project.*

Department/Agency/Institution: http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/measures-mesures-eng.html	Date of Request: YYYY-MM-DD
Expert's Name:	Title:
Contact Information:	
Expertise Requested: Indicate the discipline or subject area in which expertise was sought.	
Response: Summarize the expert's response to the request (append correspondence as required and add to attachment list in <u>Section 21</u>).	

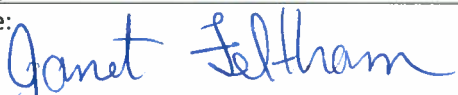
18. DECISION

Taking into account implementation of mitigation measures outlined in the analysis, the project is:


☒ **X** not likely to cause significant adverse environmental effects.☐ likely to cause significant adverse environmental effects.

NOTE: If the project is identified as likely to cause significant adverse effects, CEAA 2012 prohibits approval of the project unless the Governor in Council (Cabinet) determines that the effects are justified in the circumstances. A finding of significant effects therefore means that the project CANNOT go ahead.

19. SIGNATURES AND APPROVAL**EA Author** (Add additional signature blocks for multiple authors as required)

Name: Janet Feltham	Date: 2015-02-13
Position: A/ Ecologist Team Leader	
Signature: 	

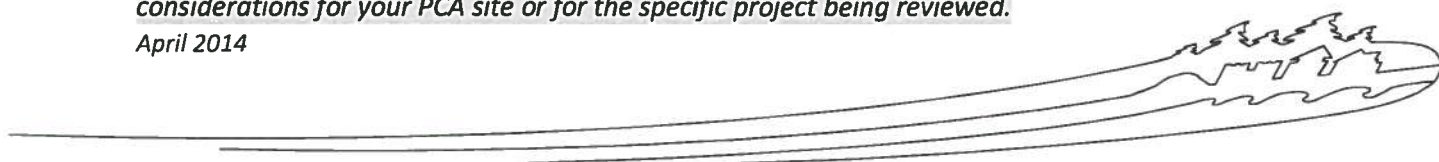
Decision Approval

Name: Karen Wolfrey	Date: 2015-02-13
Position: (Field Unit Superintendent, or Designate) A/Field Unit Superintendent, Newfoundland East	
Signature: 	

Appendix 1 Environmental Impact Analysis Tools: Effects Identification Matrix

Use the matrix to identify potential impacts. You may wish to change the components listed under the headings to specify the natural or cultural resource or visitor experience objectives that are priority considerations for your PCA site or for the specific project being reviewed.

April 2014





Section A focuses on direct effects of the project and **Section B** on indirect effects that are caused by changes to the environment.

A. Direct Effects (during preparation/construction phases)														
			Components potentially directly affected by the proposed project											
			Natural Resources					Cultural Resources		Visitor Experience				
			Air	Soil & landforms	Water (surface, salt water)	Flora (grasses along shoreline)	Flora (specify, including SAR)	Insert heritage values	Insert heritage values	Visitor access & services	Recreational/Accomm. opportunities	Viewscapes and soundscapes	Visitor Safety	Essence of place
Phase	Examples of Associated Activities													
Project Components	Preparation / construction	Supply and storage of materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Burning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Clearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Demolition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Disposal of waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Blasting/ Drilling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Dredging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Drainage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Excavation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Grading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Backfilling	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Use of machinery	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Transport of materials/ equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Building of fire breaks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Use of Chemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Set up of temporary facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Other...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SAR- species at risk





A. Direct effects continued (during operation/implementation/decommissioning phases)														
<p><i>You may wish to change the components listed under the headings to specify the natural or cultural resource or visitor experience objectives that are priority considerations for your PCA site or for the specific project being reviewed.</i></p>		Components potentially affected by the proposed project												
		Natural Resources					Cultural Resources		Visitor Experience					
		Air	Soil & landforms	Water (surface, ground, crossings, etc.)	Flora (specify, including SAR)	Flora (specify, including SAR)	Insert heritage values for your site	Insert heritage values for your site	Visitor access & services	Recreational & Accommod. opportunities	Views and soundscapes	Visitor Safety	Essence of place	
Project Components	Phase	Examples of Associated Activities												
	Operation/Implementation/Decommissioning		Waste disposal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			Wastewater disposal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Use/Removal of temporary facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Use of Chemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Active fire stage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Prescribed burn cleanup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Planting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			Culling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Vehicle Traffic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Other...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section B- next page

April 2014





Section B of the matrix should be used to identify potential indirect effects that may result from impacts on components of the environment you have identified on the preceding pages (see Section A - direct effects to natural resources). This is required under CEAA 2012 Sections 5(1)(c) and 5(2)(b).

For example:

- if the proposed project could lead to adverse effects to water quality and quantity, could this then effect the quantity and quality of water resources (e.g. potable water) used by an Aboriginal community?
- could there also be adverse socio-economic effects to a community that relies on recreational fishing tourism?

B. Indirect Effects (all phases)				
<p><i>You may wish to change the components listed under the headings to specify the natural resources that are priority considerations for your PCA site or for the specific project being reviewed.</i></p>		Impacts as a result of changes to the environment		
		With respect to non-Aboriginal peoples:	With respect to Aboriginal peoples:	
		Health and socio-economic conditions	Health & socio-economic conditions	Current use of lands and resources for traditional purposes
Phase	Natural resource components affected by the project			
All phases: Preparation /construction operation/implementation/decommissioning	Could impacts to <u>air</u> lead to adverse effects on...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Could impacts to <u>soils and landforms</u> lead to adverse effects on...	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Could impacts to <u>water</u> (e.g. surface, ground water and water crossings) lead to adverse effects on...	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Could impacts to <u>flora</u> (including SAR) lead to adverse effects on...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Could impacts to <u>fauna</u> (including SAR) lead to adverse effects on...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Other...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





Appendix 2: SARA-Compliant Authorization Decision Tool

(Note: Please consult a representative of the Species Conservation and Management team when completing this form)

Date this document was completed:	Where this activity will occur: (i.e., PCA site)	SAR implicated by this activity:	Title of proposed activity (e.g., Trail development in Blue Meadow):	Author of this Document:	*Collaborators involved in drafting this document:
2015-02-13	Terra Nova National Park	none	Saltons Brook Wharf Repairs	Janet Feltham	Mark McNeil, PWGSC

*Identify at the outset who might have to be involved in this document from a cross-functional collaboration/review perspective.

Part A – Is a SARA authorization required?

1. Will the activity affect a listed endangered (En), threatened (Th) or extirpated (Ex) species at risk, its residence or critical habitat?

Affect = kill, harm, harass, capture, or take individuals; possess, collect, buy, sell or trade individuals or parts of individuals; damage or destroy residence; destroy any part of critical habitat, or carry out an activity that is prohibited under a protection order. Note that indirect and direct effects of the activity on the species, residence, critical habitat, etc. must be considered.

<input checked="" type="checkbox"/> No	<p>The activity will not affect a listed species (En, Th, or Ex), its residence, or its critical habitat AND the activity is not prohibited in a protection order. A SARA authorization is NOT required.</p> <ul style="list-style-type: none">These wharf repairs are unlikely to affect a species at risk or its habitat because it occurs outside of critical habitat for marten, and is localized to the wharf itself and the approach area immediately surrounding it. The activities do not include any direct or indirect effects on this species if carried out as outlined in this BIA, with mitigating measures to stop work if any species at risk are encountered, though highly unlikely.
--	---

Describe the activity and explain why there is no expected effect, including an explanation of mitigation measures taken to prevent potential effects on species at risk, their residence or their critical habitat.
If an impact assessment is being conducted, refer to the mitigations in the impact assessment.

<input type="checkbox"/> Yes	<p>The activity will affect a listed species (En, Th, or Ex), its residence, or its critical habitat OR the activity is prohibited in a protection order.</p> <ul style="list-style-type: none">If you checked YES, <u>use this box</u> to describe the activity and its effects on the species and continue to Question 2.
------------------------------	---

Note – if you are contemplating an activity that may destroy critical habitat or is an activity prohibited in a protection order, it must be discussed with VPs and the CEO. If possible, find alternatives and mitigation measures to prevent destruction of critical habitat or non-compliance with an order prohibition (i.e., to avoid an effect on the critical habitat/prohibited activity and the requirement for an authorization).

2. Is the activity already authorized in a final recovery document or required for public safety, health, or national security AND authorized by or under another Act of Parliament?

<input type="checkbox"/> Yes	<p>SARA authorization is NOT required.</p> <ul style="list-style-type: none">If you checked YES, <u>use this box</u> to explain why the activity is exempt and STOP – you have completed the Tool.
	<ul style="list-style-type: none">Explain why the activity is needed for public safety, health or national security and make a reference to the Act of Parliament under which the activity is authorized. <p>OR</p>





	<ul style="list-style-type: none">If the activity is authorized in a final recovery document, refer to the published recovery and explain why the activity is exempt under section 83 of SARA). <p>Note - An activity that is exempt for public safety, health, or national security should be an activity that is imperative or an emergency-type situation pertaining to health and safety of the general public, and cannot be delayed for the normal SARA permitting process (e.g., wildfire control measures).</p>
<input type="checkbox"/> No	<p>SARA authorization is required.</p> <ul style="list-style-type: none">If you checked NO, continue to Part B.

Part B – Can a SARA authorization be issued?

****Complete ONLY if you have answered **NO** to Question 2, above****

3. Does the activity fall into one of the following three categories?

Check the appropriate box and continue to Question 4. An authorization can only be issued if it fits into one of the categories below (SARA s. 73[1]). If the proposed activity DOES NOT fit in any of the three categories below the activity CANNOT be authorized and you should continue to **Part E**.

- ☐ The activity is scientific research related to the conservation of the species and conducted by qualified persons; OR
- ☐ The activity benefits the species or is required to enhance its chance of survival in the wild ; OR
- ☐ Affecting the species is incidental* to the activity (i.e., the purpose of the activity is not to engage in an activity that is prohibited under SARA e.g., kill, harm, harass ... an individual, destroy critical habitat, contravene a prohibition in an Emergency Protection Order, etc.).

*Affecting the species is incidental - For example, fishing for a listed species cannot be permitted, but accidental by-catch *may* be. Additionally, harm to a listed plant species cannot be permitted, but repairs to a bridge that incidentally disturb the plant *may* be.

4. If you concluded that the activity can be authorized, have alternatives that would reduce the impact(s) on the species been considered?

- ☐ No The activity CANNOT be authorized as alternatives have not been/cannot be considered.
- If you checked this box, continue to **Part E**.

- ☐ Yes The activity MAY be authorized.
- If you checked YES, use this box to explain the considered alternatives and continue to Question 5.

Identify all reasonable alternatives that were considered to reduce the impact on the species (including alternatives to the project and alternative means of carrying out the project, including a "no action" alternative). The explanation must demonstrate that the best solution has been adopted.

5. Will all feasible measures be taken to minimize the impact of the activity?

- ☐ No The activity CANNOT be authorized.
- If you checked NO, continue to **Part E**.
- ☐ Yes The activity MAY be authorized.
- If you checked YES, use this box to identify the feasible measures that will be taken to avoid or lessen potential impacts of the project on the species and continue to Question 6.

- Measures and conclusion must be consistent with exiting recovery documents, COSEWIC assessment reports, etc.
- Note: If this authorization is considered as part of an impact assessment, the information provided should be consistent with the mitigation section of the impact assessment.

6. Will the activity jeopardize the survival or recovery of the species?





If an activity will not jeopardize the survival or recovery of the species, you should provide a sound rationale to demonstrate that the possible effect on recovery is minor and temporary AND that the species is capable of safely incurring such effects to its recovery.

<input type="checkbox"/> Yes	<p>The activity CANNOT be authorized.</p> <ul style="list-style-type: none"> If you checked YES, continue to Part E.
<input type="checkbox"/> No	<p>The activity MAY be authorized.</p> <ul style="list-style-type: none"> If you checked NO, <u>use this box</u> to explain why the activity will not jeopardize survival or recovery,, based on best available information, then continue to Part C. <p> <ul style="list-style-type: none"> Indicate whether the project will increase mortality, decrease fertility/recruitment, affect a key life stage/cycle. Indicate whether the project will increase an existing threat to the point where survival/recovery might be jeopardized. Make reference to known effects of similar activities based on existing literature. Discuss other factors relevant to assessing jeopardy for the species and site (e.g., likelihood of a negative impact on the population, species' sensitivity to the impact, potential cumulative effects from other impacts). </p>

Part C - How will the SARA authorization be issued?

7. Under which process will the authorization be issued? Will the impact assessment (EIA) process or Research and Collection Permit System (RCPS) be used to issue the authorization?

<input type="checkbox"/> SARA permit (s.73)	<ul style="list-style-type: none"> If you checked this box, ensure that it is appropriate to use s. 73*, that a SARA authorization is issued (see <u>template on intranet</u>) and that an explanation is posted on the SAR Public Registry (using the information provided above – see <u>template on intranet</u>). <p><small>*Note that PCA does not typically issue s. 73 permits. To do so, please contact a representative from the Species Conservation and Management team.</small></p>
<input type="checkbox"/> An existing PCA process (and SARA s.74)	<ul style="list-style-type: none"> If you checked this box, <u>use this box</u> to indicate whether the PCA EIA process or the PCA Research and Collection Permits System will be used to issue the authorization. Ensure that a SARA authorization is issued (see <u>template on intranet</u>) and that an explanation is posted on the SAR Public Registry (using the information provided above – see <u>template on intranet</u>).

Part D – How will the authorized activity impact ER, VE, and Agency priorities?

8. Will the activity impact ER or VE programs or Agency priorities?

If so, we will work with colleagues to creatively address any potential loss of programming or opportunities.

<input type="checkbox"/> The authorized activity will not impact ER or VE programs or Agency priorities	<ul style="list-style-type: none"> If you checked this box, <u>use this box</u> to describe why the activity does not have an impact on ER or VE. <p>Indicate if this decision was made with the support of ER or VE staff, and if so, whom.</p>
<input type="checkbox"/> The authorized activity will impact ER	<ul style="list-style-type: none"> If you checked this box, <u>use this box</u> to describe the impact that the activity will have on ER or VE.





or VE programs or Agency priorities	Indicate how this decision was made and who was involved. Identify next steps to creatively address potential loss of ER or VE programming or opportunities
-------------------------------------	--

Part E – Summary of Decisions

9. Does the activity require a SARA authorization and can a SARA authorization be issued?

Indicate selection.

<input type="checkbox"/>	This activity does not require a SARA authorization. Refer to Questions 1 and 2 for explanation.
<input type="checkbox"/>	This activity requires a SARA authorization but WILL NOT be authorized because it does not fit into one of the three required categories (see response to Question 3) OR it does not meet one of the SARA pre-conditions (see responses to Questions 4-6).
<input type="checkbox"/>	This activity meets the SARA authorization requirements.

Part F – Signatures and Approval

Author (Add additional signature blocks for multiple authors as required)

Name:	Janet Feltham	
Position:	A/Ecologist Team Leader	Date: 2015-02-13


Species Conservation Management Recommendation by

Name:	Janet Feltham	
Position:	A/Ecologist Team Leader	Date: 2015-02-13

Was a legal opinion related to this activity requested?

Name of Legal Counsel:		Date: YYYY-MM-DD
Summary of opinion/legal risks:		

Decision Approval

Name:	Karen Wolfrey	
Position (Field Unit Superintendent, or Designate):	A/Superintendent, NEFU	
Signature:		Date: 2015-02-13