



# Preapproved Routine Impact Assessment Beach Maintenance

Northern Prairies Field Unit  
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 as a manager of federal lands under the *Impact Assessment Act* (IAA).

## **Scope of Application:**

This PRIA includes:

Maintenance activities within the footprint of existing public beaches. The following activities are included in this PRIA:

- Introduction of new beach material to existing beaches.
- Grading and raking.
- Removing terrestrial vegetation that encroaches onto the beach area

## **Conditions and Exceptions:**

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

- Creating a new beach.
- Expanding the current footprint (size) of an existing beach.
- Work below the high-water-mark, including placement of sand materials, removal of aquatic weeds or vegetation, or sediment dredging.

## **Other considerations**

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

Work is taking place in an area where aquatic invasive species may be present.

## **Approved geographic areas of application:**

This PRIA may be used in:

Designated public beaches within the Northern Prairies Field Unit (Prince Albert and Elk Island National Parks).

## **Valued Components and Effects Analysis**

### **Fish and Fish Habitat**

Removal of riparian vegetation and woody debris could impact near-shore fish habitat through alteration of shoreline cover, shade, and temperature. Maintenance activities may also result in sedimentation of near-shore areas. Sedimentation could directly affect fish health and destroy fish habitat, including sensitive spawning areas.

### **Soil Quality and Vegetation**

The operation of heavy machinery along shorelines may result in soil compaction, disturbance, and the destruction of riparian vegetation. Disturbed areas may become prone to bank erosion, which could facilitate the establishment of non-native seeds.

### **Water Quality**

Removal activities increase run-off and increase sedimentation of water bodies, which may reduce water quality near the work area.

### **Soil and Water Quality**

Leaks or spills from machinery could contaminate soils or water during work activities.

### **Visitor Safety and Experience**

Use of heavy machinery may pose a risk to public safety during operation.

Maintenance activities of public beaches are likely to enhance visitor experience in the park.

## **Mitigation Measures**

### ***Introduction of New Beach Material***

- Use only clean granular material that is free of debris, silt, clay, organic material or other contaminants.
- Material used on beaches must be obtained from above the ordinary high water mark (HWM) of any water body (see Appendix B for definition of HWM).
- Ensure new beach material is weed-free.
- New material must only be placed above the HWM within the existing footprint of the beach.
- Place new beach material on flat or gently sloping areas of the beach to prevent material from entering the water body.
- Avoid altering surface drainage patterns. Place material in a manner that does not obstruct runoff or concentrate runoff from adjacent upland areas to the water body.

### ***Grading, Raking, and Vegetation Clearing***

- Remove vegetation encroaching on beach areas by hand. For clearing of riparian vegetation outside of beach footprints, refer to the *Riparian Vegetation Clearing BMP*.
- Remove dead aquatic vegetation that washes onshore by hand.
- Dispose of removed vegetative waste material adjacent to the water body, above the high water mark, in a manner that prevents it from re-entering the water. If extensive vegetative matter is removed, it can be disposed of according to the *Construction Waste Management BMP*:
  - **Prince Albert National Park:** Bear Trap
  - **Elk Island National Park:** Wood Yard
- Grade and rake beaches by hand or using heavy machinery above the high water mark only.
- Grade or rake beaches parallel to the shoreline to avoid dragging beach material towards the lake or under the high water mark.

### ***Use of Heavy Machinery***

- Use existing trails, roads or cut lines wherever possible to avoid disturbance to soils and vegetation and keep heavy machinery within the approved workspace.
- Heavy machinery and equipment must be operated above the high water mark of the water body. Heavy machinery and equipment must not be operated within the water.
- Conduct all maintenance and servicing activities at least 100 m away from water courses
- Machinery must have a spill kit capable of containing 110% of fuel onsite at all times.

### ***Erosion and Sediment Control***

- Use existing trails, roads, or cut lines to access the site. Avoid disturbance to shoreline soils and riparian vegetation.
- Minimize work along banks and shorelines.
- Install erosion and sedimentation control in areas where work occurs within 5m of a bank and maintain for the duration of the work.

### ***Shoreline Re-vegetation and Stabilization***

- Shoreline or banks disturbed by any activity associated with beach maintenance must be immediately stabilized and restored to prevent erosion and/or sedimentation.
- Shoreline stabilization techniques may include re-vegetation with an approved native seed mixture representative of the surrounding area and installation of appropriate erosion control measures (e.g. Nillex, coconut matting) that is maintained until vegetation establishes.

- If further restoration or stabilization is required, refer to the *In-stream, Shoreline, and Riparian Area Work BMP*.

### ***Visitor Safety and Experience***

- Appropriate public access restrictions must be maintained for the duration of the work.
- Maintenance activities should be planned outside of heavy visitor use times (i.e. outside of April to October) to reduce disturbances.

### **Approval**

Original document approved and signed by Cal Martin, Northern Prairies Field Unit Superintendent, on October 9, 2020

### **References:**

Department of Fisheries and Oceans Canada. 2007. Public Beach Maintenance. Saskatchewan Operational Statement, Version 3.0.