# Water Intake Maintenance Dredging Environmental Protection Plan

# 1.0 Purpose

This accepted environmental protection plan (EPP) outlines the project scope and conditions to follow when undertaking maintenance dredging activities around existing water intakes. This work has the potential to impact or alter aquatic habitat and water quality, impair vegetation and animal species, but if work is done in a manner as outlined in this EPP, these impacts can be minimized.

For this EPP, maintenance dredging refers to an activity that involves removing accumulated sediments and debris from the bottom of a watercourse or water body to ensure access to water supplies for existing raw water intakes.

An EPP is a regulatory tool implemented by the Province of Saskatchewan that waives the need for a standard permit to perform low-risk activities in or near water, reducing administrative delays for clients. All conditions under section 3.0 must be met by clients qualifying for this EPP and any others working on their behalf (i.e., contractors).

This EPP does not replace or supersede any approval, licences or authorizations, including building permits that may be required under



Please contact WSA at 866.727.5420 or <u>client.service@wsask.ca</u> if you have any questions about the EPP process or requirements.

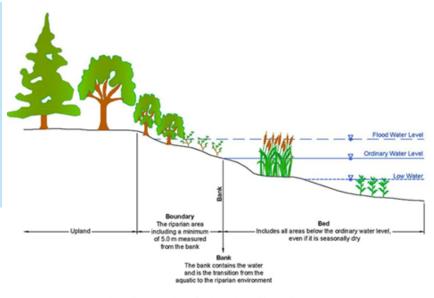
municipal, provincial or federal legislation. The client is responsible for adherence to all such approvals, licences or authorizations that may be required.

The client and anyone working for or on behalf of the client are solely responsible for all design, safety and workmanship aspects of all works associated with this EPP. The Water Security Agency (WSA) may order the client to cease any or all work regarding this project if WSA finds the conditions are not being met or the work is causing or may cause adverse environmental effects.

If the maintenance dredging project involves one or more ineligible activities, please contact WSA to discuss the proposal or submit an Aquatic Habitat Protection Permit application for review prior to commencing work. Please contact WSA if you need help determining if your project is eligible for this EPP.

# 2.0 Eligibility

- **2.1** This EPP applies to maintenance dredging projects that involve one or more of the following **eligible** activities:
- a. dredging work commenced and completed under dry or frozen conditions at an existing water intake site (e.g. pump station);
- b. in-water or under ice maintenance dredging work at an existing water intake site that:
  - i. is performed by a single excavator or hydro excavation truck;
  - ii. does not exceed a footprint of 50 square metres and 1.5 meters deep (538 square feet x 5 feet deep);
  - iii. is performed from a stable location (e.g. ice, access ramp, etc.) provided that the excavator remains in water no deeper than the height of the excavator tracks/wheels;
  - iv. has spoil placed above the bank; and
  - v. is isolated if dredging will take more than one hour (see section 3.4 if dredging will take more than one hour).
- **2.2** The following dredging activities are **not eligible** under this EPP:
  - a. dredging work for agricultural drainage purposes;
  - b. channel clearing or channelization work;
  - c. dredging work for any new projects;
  - d. dredging contaminated sediments;
  - e. activities involving earthworks to areas of the bank or boundary, or construction of an access road or trail to a site;
  - f. dredging work associated with ferry crossings, boat launches or marinas.



Graphics distinguishing bed, bank and boundary zones

Before beginning any work under this EPP, you must confirm you meet the eligibility requirements above and the conditions below by completing and submitting an <u>EPP Notification</u> Form to WSA. Pre-construction photos of the worksite must be submitted by email with the notification form. The total size of the email must not exceed 25 MB.

Clients are advised that this EPP is only for Aquatic Habitat Protection and that other approvals from WSA might be required. If no other approvals or permits are required, clients can proceed with the work immediately after they submit a duly completed notification form and photos. An environment officer may attend the work site at any time to inspect to ensure that the EPP is being complied with.



**EPP Notification Form** 

# 3.0 Conditions

#### 3.1 General

- 3.1.1. An EPP notification form must be completed and submitted to WSA before starting any work associated with this EPP.
- 3.1.2 All contractors must be provided a copy of this EPP prior to conducting any work, and the EPP (paper or electronic copy) must be available on-site during construction.
- 3.1.3 This EPP expires one year following the date of notification by the client. Re-application is required if work is not complete or further work is planned.

# **3.2 Solid Waste and Construction Debris Management**

- 3.2.1. Any project debris entering the water or that falls onto the ice must be removed.
- 3.2.2 All refuse dredging work components and temporary structures, such as temporary work pads and project debris, must be removed from the site.

# 3.3 Equipment or Heavy Machinery Use and Harmful Substances Management

- 3.3.1 Equipment or heavy machinery must:
  - arrive at the site clean and free of fluid leaks and maintained in this condition throughout project work;
  - be cleaned, fuelled and serviced in a manner that will not contaminate the bed, bank or boundary of the watercourse or water body;
  - c. be located and operated from a stable location (section 4.2 for guidance). Working from the ice during frozen conditions is permitted, but the equipment must be removed from the ice surface at the end of each workday.
- 3.3.2 To prevent harmful substances from entering the watercourse or water body:
  - fuel, oil, and grease must be stored where they cannot contaminate any watercourse or water body;
  - b. all stationary and portable fuel tanks, pumps and engines within 100 metres of a water

- body or watercourse must have secondary containment (e.g., a water pump and its fuel supply will be placed in a container capable of holding 110 per cent of the total volume of fuel and oils);
- c. functional spill kits for clean-ups must be onsite and accessible (section 4.3 for guidance).

#### 3.4 Site Isolation

3.4.1 In-water work less than one hour in duration may proceed without a turbidity curtain. Where in-water work exceeds one hour in duration, the site must be adequately isolated by installing a turbidity curtain (floating or staked), sediment fence or similar before work starts to prevent suspended sediment from migrating off the worksite. Sediment control measures must remain in place upon completion of the work and suspended sediments are settled (section 4.5 for guidance).

#### 3.5 Erosion Prevention and Site Rehabilitation

- 3.5.1 Vegetation outside of the immediate work area must not be disturbed.
- 3.5.2 Dredged spoils must be disposed of above the top of the bank and separated from the open water by a minimum of 5 metres vegetated buffer area.
- 3.5.3 All disturbed soils from maintenance dredging work activities, including slopes adjacent to the water body or watercourse, must be stabilized with temporary erosion and sediment control measures tailored to site conditions to prevent sediment-laden runoff from entering the watercourse or water body. These temporary measures must be monitored, maintained, replaced or upgraded as necessary before, during and after the project implementation.
- 3.5.4 For all exposed or disturbed soil, site remediation must be performed with permanent erosion and sediment control measures tailored to site conditions upon project completion. These measures must be monitored and upgraded until all remediated sites are fully stabilized (section 4.5 for guidance).

# 4.0 Additional Information

Construction activities performed in or near water can negatively impact water quality, aquatic habitat and the species that rely on the habitat. The following are environmental protection best management practices associated with maintenance dredging work that clients should consider implementing before, during and after project completion to prevent or minimize impacts on the aquatic environment.

## 4.1 Project Scheduling and Timing

Maintenance dredging performed within a watercourse or waterbody should be timed when water levels and flows are at their lowest. In Saskatchewan, this usually coincides with late summer and fall. Where in-water work will be conducted within fish-bearing waters, proponents should plan to start and complete the work outside fish spawning and incubation periods outlined in the Saskatchewan Restricted Activity Timing Windows for the Protection of Fish and Fish Habitat.



Saskatchewan Restricted Activity Timing Windows for the Protection of Fish and Fish Habitat

### 4.2 Soft Shoreline Stabilization

For areas along the shoreline where it is soft and unstable, it is recommended to install rig mats or geogrid as a temporary work platform before starting dredging maintenance activity. This will help minimize soil rutting and bank erosion caused by heavy machinery operation and help adhere to condition 3.3.1 c).

# 4.3 Preventing and Reporting Discharges and Spread of Harmful Substances

Even with conditions 3.3.1 and 3.3.2 in place to prevent hazardous substances from being released into the environment, accidental spills can still occur on worksites. If a spill happens, report it immediately by calling the provincial toll-free spill line at 1-800-667-7525, available 24/7.



Machinery Operation, Hazardous Substances and Spill Containment

# 4.4 Managing Suspended Sediment

Suspended sediment increases water turbidity, which harms aquatic life and degrades nearby habitats. When maintenance dredging lasts more than an hour in open water, and to meet condition 3.4.1, install sediment control measures, such as turbidity curtains (floating barriers), to minimize turbidity.



Site Isolation, Maintaining Downstream Flow and Dewatering

# 4.5 Remediating Disturbed Sites

To ensure disturbed areas remain stable and prevent erosion, clients must adhere to condition 3.5.4. Remediation can be achieved by revegetating with topsoil and seed materials and installing temporary erosion and sediment control (ESC) measures. These measures reduce seed dispersion from wind or water runoff and improve germination.



Revegetating
Disturbed Lands

Species-at-Risk: Self-screening using the Saskatchewan Conservation Data Centre's online platform, HABISask, should be performed before construction work starts to confirm there are no species at risk listed at the project location. Contact WSA at 1.866.727.5420 for guidance if self-screening cannot be performed or if a threatened or endangered species is identified in HABISask or at your worksite.



The Hunting, Angling and Biodiversity Information of Saskatchewan (HABISask)

## 4.6 Managing Species at Risk

Human developments and activities can negatively impact species at risk. Taking steps to avoid impacts or altering your activities can help protect these species and the habitats they rely on. HABISask is a self-screening tool that can be used to determine the presence of a species at risk at specific locations in Saskatchewan. The tool displays occurrences for species listed as Threatened or Endangered under the federal *Species at Risk Act* and those for which Saskatchewan Activity Guidelines for Sensitive Species have been developed.



Saskatchewan Activity Restriction Guidelines for Sensitive Species



Threatened or Endangered Species List

## 5.0 Duty to Consult Assessment

Projects that meet the parameters outlined in this document have been assessed under the Government of Saskatchewan First Nation and Métis Consultation Policy Framework, 2023. Based on this assessment, these projects do not trigger the Duty to Consult under the provincial policy. (ref. Government of Saskatchewan First Nation and Métis Consultation Policy Framework, 2023).

#### **Contact Us**

**866.727.5420** 

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