



1.0 About this code of practice

This code of practice outlines Fisheries and Oceans (DFO)'s national best practices for routine maintenance dredging. Dredging is considered routine maintenance when it is required to maintain the design depths of navigation channels, harbours, marinas, boat launches, docking sites and port facilities, which all contribute to Canadian tourism, recreation and the transportation of goods. Navigation areas are typically dredged using clam buckets, draglines, backhoes or suction.

For the purpose of this code of practice, routine maintenance dredging includes the mechanical removal of accumulated sediment from the bed of a water body in an area where dredging for navigation purposes has previously occurred and was reviewed by DFO.

You can protect fish and fish habitat (including [aquatic species at risk](#), their critical habitat and residences) when proceeding with a routine maintenance dredging by following the measures listed below. When implemented correctly, this can mitigate risks to fish and fish habitat associated with routine maintenance dredging, which can include:

- disturbance of watercourse beds and banks
- release of sediments or other [deleterious substances](#)
- changes to aquatic habitat
- fish injury and mortality

DFO is responsible for the conservation and protection of fish and fish habitat across Canada. Under the [Fisheries Act](#), no one may carry out works, undertakings and activities that result in the [harmful alteration, disruption or destruction \(HADD\)](#) of fish habitat, or the death of fish, unless it has been authorized by DFO. DFO's approval under the [Species at Risk Act](#) is also required if an activity affects an aquatic species at risk, any part of its critical habitat or the residences of its individuals.

The purpose of this code of practice is to describe the conditions under which the code can be applied to your project and the measures you are required to implement in order to prevent harmful impacts to fish and fish habitat and avoid contravention of the *Fisheries Act* and the *Species at Risk Act*. If you cannot meet all of the conditions and implement all of the applicable measures listed below,

your project may result in a violation of the *Fisheries Act* and the *Species at Risk Act* and you could be subject to enforcement action.

If you are uncertain about whether this code of practice is applicable to your project, it is recommended that you consult our [website](#) or a [qualified environmental professional](#) to determine if [other codes of practice](#) should also be implemented, or if further review by DFO may be necessary. For any remaining questions, please contact the [Fish and Fish Habitat Protection Program office](#) located in your area. It remains your responsibility to comply with the *Fisheries Act* and the *Species at Risk Act*.

It is your [duty to notify](#) DFO if you have caused, or are about to cause, the unauthorized death of fish by means other than fishing/harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to the [Fish and Fish Habitat Protection Program office](#) located in your area.

This code of practice does not remove nor replace the obligation to comply with the requirements of any other federal, territorial, provincial or municipal regulatory agency including guidance regarding species and habitats managed by these jurisdictions.

It is good practice to notify nearby Indigenous communities of the works, undertakings and activities.

A project review by DFO is not required when the project activities meet the description in [section 1](#) and the conditions in [section 2](#), and when the measures to protect fish and fish habitat set out in [section 3](#) of this code of practice are applied. [Request a project review](#) if your project does not meet all of these requirements.



2.0 Conditions

The following conditions describe when this code of practice can be applied:

- You determine if there are aquatic species at risk within the [affected area](#) by consulting our [aquatic species at risk map](#), and you confirm that the work is not taking place within:
 - the distribution area of molluscs listed under schedule 1 of the *Species at Risk Act*
 - the critical habitat or residences of any other aquatic species at risk
- You are dredging in an area that has been dredged within the past 10 years.
- Your project does not include propeller wash dredging.
- The amount dredged is restricted to the area and depth previously required for navigation.
- The project does not include bottom stockpiling or side casting of dredged material.
- You dispose of dredged material and stabilize it on land following provincial legislation or you dispose of dredged material in water by applying for a disposal at sea permit. Note: Environment and Climate Change Canada is responsible for ensuring that all dredged material meets environmental standards under the *Canadian Environmental Protection Act* and the *Disposal at Sea regulations*
- You implement the measures in [section 3](#) to protect fish and fish habitat when carrying out the works, undertakings and activities.

As a condition of this code of practice, please submit a [notification form](#) (PDF, 50 KB) to [your regional DFO office](#) 10 working days before starting work. Notification forms will inform the continuous improvement of the codes of practice over time.

You must download and save this PDF form to your computer before filling it out. [How to download and open a PDF form.](#)

3.0 Measures to protect fish and fish habitat

3.1 Protection of fish

- Plan in-water works, undertakings and activities to respect fish protection [timing windows](#).
- Limit the duration of the in-water works, undertakings and activities.

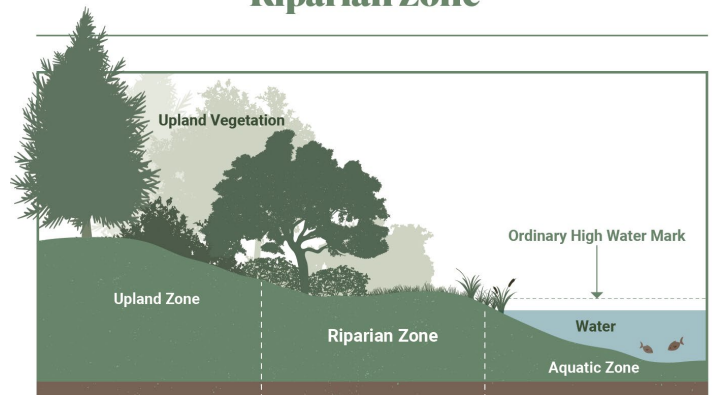
3.2 Protection of the [riparian zone](#)

- Limit vegetation removal, pruning and grubbing to the area required for accessing the site of the works, undertakings and activities.
- Restore the banks and [riparian vegetation](#) affected by the works, undertakings and activities.
 - Re-vegetate the disturbed areas with native species suitable for the site.

3.3 Protection of aquatic habitat

- For water-based operations, avoid placing vertical spuds or other anchors into sensitive fish habitat outside the footprint of the dredge area (e.g., eelgrass or kelp beds, saltmarshes, shellfish harvesting areas and known spawning areas).

Riparian Zone





3.4 Protection of fish and fish habitat from sediment

- Operate machinery on land, from barges or on ice.
- Install erosion and sediment control measures prior to the beginning of the works, undertakings and activities.
- Develop and implement an erosion and sediment control plan.
 - Inspect the erosion and sediment control measures and structures regularly during all phases of the works, undertakings and activities.
 - Maintain the erosion and sediment control measures and structures during all phases of the works, undertakings and activities.
 - Monitor the water body regularly for signs of sedimentation during all phases of the works, undertakings and activities and take corrective action if required.
 - Use biodegradable erosion and sediment control measures on land whenever possible.
 - Keep the erosion and sediment control measures in place until all disturbed sediment has stabilized or resettled.
 - Remove all erosion and sediment control materials (unless biodegradable) once sediment has stabilized or resettled.

3.5 Protection of fish and fish habitat from other deleterious substances

3.5.1 Develop a prevention plan

- Do not allow the deposit of deleterious substances in any water body.
 - Develop a plan to prevent deleterious substances from entering a water body.
 - Maintain all machinery on site in a clean condition and free of fluid leaks.
 - Wash, refuel and service machinery in such a way as to prevent any deleterious substances from entering a water body.
 - Store fuel and other materials for the machinery in such a way as to prevent any deleterious substances from entering a water body.
 - Dispose of all waste materials on land in a designated area away from the [ordinary high water mark](#) of any water body.

3.5.2 Implement a response plan

- Implement a response plan immediately in the event of a spill of a deleterious substance (including sediment).
 - Stop all works, undertakings and activities.
 - [Report](#) spill immediately when a deleterious substance enters a water body.
 - Contain water with deleterious substances.
 - Clean-up and dispose of water contaminated with deleterious substances.
 - Use an emergency spill kit.



4.0 Glossary

Affected area: The area within which all of the proposed project impacts are likely to occur either directly (i.e., project footprint) or indirectly (i.e., downstream or other surrounding areas).

Aquatic species at risk: Any aquatic species listed under schedule 1 of the Species at Risk Act as endangered, threatened, or extirpated.

Deleterious substance: Any substance that, if added to water, would degrade, alter, or form part of a process of degradation/alteration to the quality of that water so that it is possibly rendered deleterious to fish, fish habitat, or to the human use of fish that frequent that water. For example: fuel, lubricants, paint, primers, rust, solvents, degreasers, antifreeze, uncured concrete, creosote, chlorinated water, herbicides, etc.

Harmful alteration, disruption or destruction (HADD): Any temporary or permanent change to fish habitat that directly or indirectly impairs the habitat's capacity to support one or more life processes of fish.

Ordinary high water mark: The usual or average level to which a body of water rises at its highest point and remains for sufficient time to change the characteristics of the land. In flowing waters (e.g., rivers, streams) this refers to the "active channel/bank-full level" which is often the 1:2 year flood flow return level. In inland lakes, wetlands or marine environments it refers to those parts of the water body, bed and banks that are frequently flooded by water so as to leave a mark on the land and where the natural vegetation changes from predominately aquatic vegetation to terrestrial vegetation (excepting water tolerant species). For reservoirs this refers to normal high operating levels (i.e., full supply level).

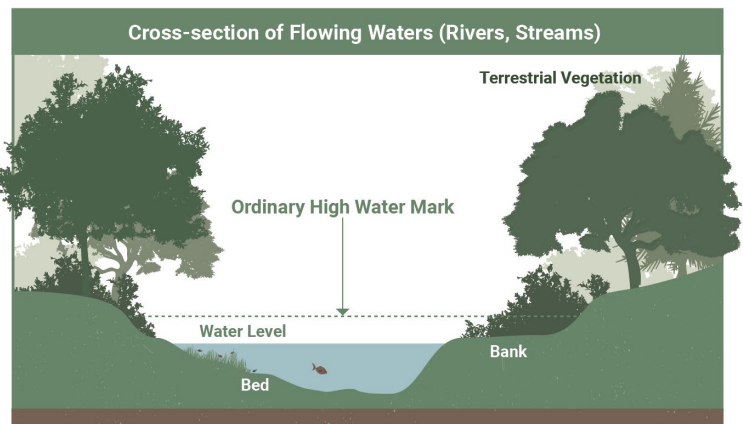
Riparian vegetation: Occurs adjacent to the water body and directly contributes to fish habitat by providing shade, cover and areas for spawning and food production.

Riparian zone: Area located between a water body's ordinary high water mark and upland area.

Qualified Environmental Professional (QEP): A person who is experienced in identifying and assessing potential impacts to fish and fish habitat generated from various works, undertakings or activities conducted in or near water, and implementing management measures to avoid and mitigate them. QEPs possess a post-secondary degree or diploma in biological, geophysical or environmental sciences and are often referred to as:

- aquatic biologist
- fisheries biologist
- fluvial geomorphologist
- applied scientist
- fisheries technician
- environmental consultant or
- natural resource consultant

Ordinary High Water Mark



Ordinary High Water Mark

