Standardized General Avoidance and Mitigation Measures

Fish and Fish Habitat Protection Program

March 2026

Fisheries and Oceans Canada
Pêches et Océans Canada
Canada

Published by:

Fisheries and Oceans Canada
200 Kent Street
Ottawa, Ontario
K1A 0E6

Standardized General Avoidance and Mitigation Measures

Cat No. Fs23-810/2026E-PDF ISBN 978-0-660-99086-6

Fisheries and Oceans Canada. 2026. Standardized General Avoidance and Mitigation Measures. 3p.

Standardized general avoidance and mitigation measures are intended to assist proponents in preparing their request for review applications, authorization applications, or permit applications. The measures are classified by pressure to facilitate risk analysis using Pathway of Effects diagrams. Mitigation measures are applied to projects to reduce the spatial scale, duration, and/or intensity of pressures on fish and fish habitat. Proponents can use these measures in their applications to Fisheries and Oceans Canada, adding any project-specific mitigation measures necessary to manage risks. At any time, if proponents are unsure whether they can avoid or mitigate risks when carrying out their project, they are advised to contact a qualified environmental professional, such as an aquatic biologist or fish biologist, river geomorphologist, fisheries technician, or environmental consultant, for advice.

Table 1: Standardized general avoidance and mitigation measures.

Standardized measures
Death of fish pressure
Avoidance measures
Avoid killing fish by means other than fishing.
Avoid using explosives in or near water.
Mitigation measures
Carry out the project in accordance with timing windows.*
Limit the duration of in-water works, undertakings and activities.
Capture fish trapped within an isolated or enclosed area and relocate them to the same watercourse or water body.*
Follow interim fish capture and relocation standard.
Dewater gradually to reduce the potential for stranding fish.
Capture and relocate any fish as per applicable permits.
Screen intake pipes during all phases of the project.*
Follow interim water intake end-of-pipe fish screens standard
Reduce noise and energy during all phases of the project.*
Refer to: Guidelines for the use of Explosives in or near Canadian Fisheries Waters.
Temporary changes to fish passage pressure
Avoidance measures
Avoid changing flow or water level.
Avoid obstructing or interfering with the movement and migration of fish.
Mitigation measures
Maintain fish passage during all phases of the project.*
Maintain hydrological conditions (i.e., flow) for bypass channels during all phases of the project.
Temporary changes to riparian zone pressure
Avoidance measures
Use existing trails, roads, access points of cut lines.
Mitigation measures
Maintain a functioning vegetated riparian zone between the project site and the ordinary high water mark.*

Mitigation measures continued
Limit vegetation removal, pruning and grubbing to the area required for accessing the project site.
Limit access to shorelines and banks or areas adjacent to the watercourse or water body.
Construct roads, access points and approaches perpendicular to the watercourse or water body.
Use methods to reduce soil compaction (e.g., swamp mats, pads).
Reinstate stream banks and slopes of the affected riparian zone.
Re-vegetate the affected riparian zone with native species suitable for the project site.
Temporary changes to habitat structure and cover pressure
Avoidance measures
Avoid conducting any work, undertaking or activity in water.
Mitigation measures
Ensure that equipment and machinery are clean and free of aquatic invasive species prior to arriving on the project site.*
Limit disturbance of fish habitat features (e.g., aquatic plants, rocks, woody material) to the area required to carry out the project.*
Operate machinery on land, from barges or on ice during all phases of the project.
Limit operation of vehicles and machinery to the area required to carry out the project.
Maintain base flow and seasonal flow of water during all phases of the project.*
Restore the bed and banks, gradient and contour affected by the project.*
Temporary changes in sediment concentration pressure
Avoidance measures
Avoid introducing sediment in the water, like silt, clay and sand.
Mitigation measures
Manage sediment laden water flowing onto or through the site during all phases of the project.*
Install erosion and sediment controls prior to beginning the project.
Pump sediment laden water into a vegetated area or a filtration system (e.g., settling basin).
Release water gradually when suspended sediment has settled in the settling basin and water is clear.
Conduct all operations in isolation of open or flowing water.
Follow in-water site isolation standard.
Install a turbidity curtain.
Install cofferdams, diversion channels, flumes and elevated pipes or pump arounds to work in the dry.
Develop and implement an erosion and sediment control plan for all phases of the project.
Follow interim planning for land-based erosion and sediment control standard.
Regularly observe the watercourse or water body for signs of suspended sediment during all phases of the project and take corrective action when and where required.
Inspect the erosion and sediment controls regularly during all phases of the project.
Repair the sediment controls during all phases of the project.
Use biodegradable materials for erosion and sediment controls whenever possible.

Mitigation measures continued
Remove all non-biodegradable erosion and sediment controls once the site has been stabilized.
Dispose of, and stabilize, all excavated material above the ordinary high water mark or top of bank of nearby watercourses or water bodies.
Use only clean materials.
Keep the erosion and sediment controls in place until all disturbed ground has been stabilized and suspended sediments have settled.
Temporary changes to wetted area pressure
Refer to: Death of fish, temporary changes to fish passage, and temporary changes to structure and cover.
Avoid any temporary or permanent increase in existing footprint below the ordinary high water mark.

*Note: mitigation measures marked with an asterisk are considered critical for achieving the program's objective to conserve, protect, and restore fish and fish habitat.

Environment and Climate Change Canada is responsible for the administration and enforcement of the *Fisheries Act* pollution prevention provisions dealing with the deposit of deleterious substances into water frequented by fish. The following best practices can help to prevent the deposit of deleterious substances.

Deposit of deleterious substances
Best practices
Develop a plan to prevent deleterious substances from entering a watercourse or 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 watercourse or water body.
Store fuel and other materials for the machinery in such a way as to prevent any deleterious substances from entering a watercourse or water body.
Plan activities near water such that materials (e.g., paint, primers, blasting abrasives, rust solvents, degreasers, grout, poured concrete or other chemicals) do not enter a watercourse or water body.
Ensure that building material used in a watercourse or water body has been handled and treated in a manner that prevents the release or leaching of deleterious substances into a watercourse or water body.
Dispose of all waste materials on land in a designated area away from the ordinary high water mark of any watercourse or water body.
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 watercourse or water body.
Contain water with deleterious substances.
Clean-up and dispose of water contaminated with deleterious substances.
Use an emergency spill kit.