Fisheries and Oceans Canada

Lower Fraser Area

Fisheries Act and the Project Review Process

1.1 The Fisheries Act

Under the authority of the Federal *Fisheries Act* (the *Act*), Fisheries and Oceans Canada (DFO) has decision-making authority for the conservation and protection of fish and fish habitat.

The *Fisheries Act* (Section 34) defines fish habitat as:

> "spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes."

and the definition of fish in the *Act* (Section 2) includes:

> "shellfish, crustaceans, marine animals, the eggs, sperm, spawn, spat and juvenile stages of fish, shellfish, crustaceans, and marine animals."

The fish and fish habitat protection provisions of the Federal *Fisheries Act* provide mechanisms to allow development of projects to occur while providing for the protection of fish and fish habitat. Section 35 of the *Act*, which prohibits the harmful alteration, disruption or destruction (HADD) of fish habitat, provides the Minister with the power to authorize terms and conditions which would allow projects to proceed in compliance with the *Act*. DFO's "Policy for the Management of Fish Habitat" document (1986) provides direction for interpreting the broad powers mandated in the *Act* in a way, which is consistent with the concept of sustainable development.

1.2 Policy Objective

DFO's "Policy for the Management of Fish Habitat" describes in detail the objectives in administering the habitat provisions of the *Fisheries Act*, the goals of the policy and the principles, which guide the interpretation of the policy. The following selection is a summary of the key aspects of the policy, which are particularly important to Proponents.

The long-term policy objective of DFO is to achieve an overall Net Gain in the productive capacity of fish habitats. Progress toward this objective of increasing the productive capacity can be achieved through three policy goals:

- Conservation of the current productive capacity of habitats,
- Restoration of damaged fish habitats; and
- Development of new habitats.

The conservation and protection of existing habitat through preferred location, design and mitigation is fundamental to conserving the current productive capacity of habitats. The conservation goal is implemented using the No Net Loss Guiding Principle. Under this principle, DFO works with Proponents and other government agencies so that projects are designed in a way that maintains the productive capacity of fish habitat. **Proponents must pursue location and design options which will avoid impacts to fish habitat before DFO will consider authorizing works** which would require habitat compensation to achieve a no net loss of fish habitat. The hierarchy of management options is presented below from most to least preferred.

Most Preferred

Relocation
Redesign
Mitigation

Habitat Compensation

Least Preferred

All project plans should meet the No Net Loss Guiding Principle of fish habitat. In cases where losses of fish habitat can not be avoided, habitat replacement or enhancement, on a case-by-case basis may compensate the unavoidable losses.

1.3 Review Process

Fisheries and Oceans Canada staff review project proposals to determine whether the project is likely to cause a harmful alteration, disruption or destruction (HADD) of fish habitat. A HADD is whereby the biophysical attributes of fish habitat are modified such that the habitat is rendered less suitable for fish production. For example, activities that may result in a HADD include installation of a culvert, removal of streamside vegetation or other works in or about a watercourse.

The decision framework for determining whether a HADD of fish habitat is likely to occur, or whether an authorization should be issued is illustrated in Figure 1. In order to avoid a HADD, options for project relocation, redesign or other mitigation should be considered. If these options are not feasible, a clear rationale for moving from a more preferred option to a less preferred option should be included in the project documentation. A decision is then made as to whether the HADD should be authorized (Step 4) and whether the loss of fish habitat can be compensated (Step 5). If it is decided that the HADD can be authorized and compensated for, then the proponent is asked to prepare a compensation plan. The compensation plan must be approved by DFO prior to an authorization being granted. In cases where the potential impacts to fish and fish habitat are judged to be unacceptable, the project may not be authorized.

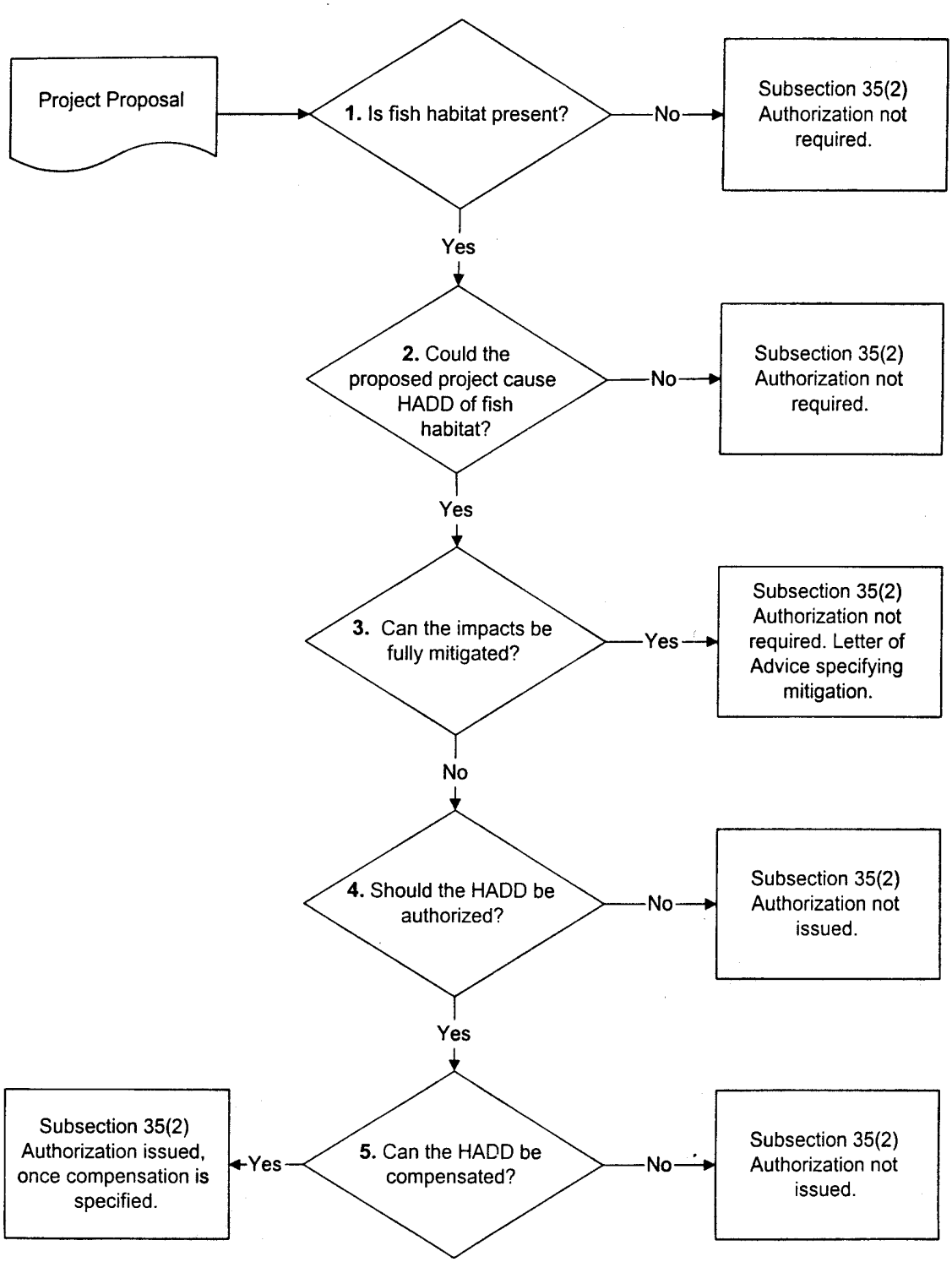

Figure 1: A decision framework for the determination and authorization of harmful alteration, disruption or destruction of fish habitat.

1.3.1 Relocation

Relocation of a project may be necessary if the project represents a substantial risk to fish habitat, particularly critical habitat. For example, a bridge may be moved downstream to protect spawning habitat.

1.3.2 Redesign

If relocation is not possible, the next option is to redesign the project. For example, redesign measures might include building a clear span bridge rather than installing a culvert for a stream crossing.

1.3.3 Mitigation

Mitigation measures are likely to be implemented during the project's planning, design, construction and/or operation phases in order to protect fish and fish habitat. It is the responsibility of the Proponent to prepare the mitigation plans. DFO staff may provide advice for the development of mitigation measures, but the responsibility for the effectiveness of those measures rests with the Proponent.

Commonly used mitigation measures include:

- Working within fisheries timing windows to minimize interference with fish migration and spawning;
- Selecting the least harmful equipment/ materials/ construction methods;
- Ensuring fish passage around obstructions during and after construction;
- Implementing measures to control siltation at construction sites.

Guideline documents, developed and used on a regional or national basis, may provide helpful information on mitigation options. DFO policy and guideline documents are available on-line at:

http://www-heb.pac.dfo-mpo.gc.ca/publications/publications_e.htm

1.3.4 Habitat Compensation

Habitat compensation is an option for achieving no net loss when residual impacts of projects on habitat productive capacity are deemed harmful after relocation, redesign or mitigation options have been implemented. Compensation is not an option for the loss of critical habitats or for the loss of habitat productive capacity due to deposition of deleterious substances in any type of habitat.

Habitat compensation involves replacing the loss of fish habitat with newly created habitat or improving the productive capacity of some other natural habitat. Depending on the nature and scope of the compensatory works, habitat compensation may require, but not limited to, 5 years of post-construction monitoring.

The following compensatory options are presented in hierarchical order from most to least preferred:

- Create similar habitat at or near the development site within the same ecological unit;
- Create similar habitat in a different ecological unit that supports the same stock or species;
- Increase the productive capacity of existing habitat at or near the development site and within the same ecological unit;
- Increase the productive capacity of a different ecological unit that supports the same stock or species; and,
- Increase the productive capacity of existing habitat for a different stock or different species of fish either on or off the site.

1.4 Canadian Environmental Assessment Act

The *Canadian Environment Assessment Act* (CEAA) applies to projects for which the Federal Government has a decision making authority- either as a Proponent, land manager, source of funding or regulator. DFO is required to invoke CEAA on a project that includes situations where an authorization under the Federal *Fisheries Act* is required.

1.5 Other Regulatory Processes

Please note that other regulatory agencies may need to be contacted, as approvals may be required.

Ministry of Water, Land and Air Protection instream works best management practices information bulletins and checklists are available at:

http://wlapwww.gov.bc.ca/sry/fwh/hp/indexur.htm

1.6 Project Review Information for Works Affecting Fish Habitat

Proponents are responsible for providing a description of the project, the fisheries resources and habitat present at and around the project site, how the project might affect fish and fish habitat, and how they propose to mitigate potential impacts and compensate for anticipated residual impacts. If sufficient information is not readily available, it will be necessary for the Proponent to conduct the studies required to obtain it.

The Lower Fraser Area "Project Review Information Requirements for Works Affecting Fish Habitat" form is available at:

http://www-heb.pac.dfo-mpo.gc.ca/publications/pdf/dfo_proj_review_info_e.pdf

The information on this form is the minimum necessary for Fisheries and Oceans Canada to evaluate compliance with the Federal *Fisheries Act* and completed forms should be submitted to the appropriate Lower Fraser Area office for project review.

Reference

Fisheries and Oceans Canada, Policy for the Management of Fish Habitat, October 1986