



This guidance provides specific information to assist applicants completing an **Application for dam/diversion structure fish facility requirement assessment or proposed fish facility alteration**.

We recommend that you contact the Department of Conservation (DOC) office closest to the location of the dam/diversion structure to discuss your application prior to completing the application forms. Please provide all information requested in as much detail as possible. Applicants will be advised if further information is required before this application can be processed by the Department.

Complete this application form, attach Form 1a and any other applicable forms/information and send to permissions@doc.govt.nz.

Helpful definitions

The following definitions are provided to help you complete your application:

- **Dam** – any structure designed to confine, direct, or control water, whether permanent or temporary; includes weirs.
- **Dispensation** – an exemption from the Act's requirement(s) to include a fish facility
- **Diversion structure** – any structure designed to divert or abstract natural water from its natural channel or bed whether permanent or temporary.
- **Fish facility** – any structure or device, including any fish pass or fish screen inserted in or by any water course or lake, to stop, permit, or control the passage of fish through, around, or past any dam or other structure impeding the natural movement of fish upstream or downstream.
- **Passage** – the action or process of moving through or past somewhere on the way from one place to another.
- **Impede** – delay or prevent by obstructing them.
- **Fish pass** – any structure providing passage through or over any barrier to their passage.
- **Bankfull** – the water level/flow that just fills the active waterway channel
- **Fish screen** – water intake design that aims to bar entry or carrying of freshwater fish into the intake channel and allows fish to return to the natural active channel

Note: For the purposes of these regulations, a **dam or diversion structure** shall not include—

(a) any net, trap, or structure erected and used solely for the purpose of taking or holding fish in accordance with the provisions of the Conservation Act 1987, or of these regulations:

(b) any dam constructed on dry or swampy land or ephemeral water courses for the express purpose of watering domestic stock or providing habitat for water birds:

(c) any water diversion not being incorporated into or with a dam, that is solely and reasonably required for domestic needs or for the purposes of watering domestic stock and that empties, without dead ends, into any viable fish habitat:

(d) any structure authorised by a Regional Water Board not requiring a water right that in no way impedes the passage of fish.

If your structure falls within any of the categories [(a) through (d)] above, you do not need to apply for a fish facility assessment under the Freshwater Fisheries Regulations 1983.

Completing section C. Overview of dam / diversion structure

Describe the structure type, general dimensions, placement, design, installation and operating details, and proposed monitoring and maintenance of the dam/diversion.

Please consider national guidance for planning, design and monitoring for structures under 4m provided in <https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf>) and other guidance available at www.doc.govt.nz/fishpassage.

It is important clear objectives and performance standards are defined (see page 27 <https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf>).

Provide a description of the site and waterway including details of the type of waterway (e.g. spring, stream, braided river with description of predominant substrate), average wetted width, bankfull width and average water depth (see Figure 4-8 in <https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf> for explanation).

If the dam/diversion is temporary (< 2 months) state duration, timing, installation proposal, how this will provide or impede fish passage, and how this is being mitigated if appropriate.

If the dam/diversion is permanent (> 2 months) provide details of duration, timing, installation and maintenance proposal, and how this will provide or impede fish passage, including details of any proposed fish facility.

Completing section D. Fish species predicted to be affected by proposed structure or modified fish facility

The following questions need to be addressed in the application to provide details of the freshwater fish values of the proposed area, and importance of this waterway as a pathway for freshwater fish.

What freshwater fish and/or other values are/would likely to be using this pathway?

What species are recorded upstream of the structure?

What species are recorded downstream of the structure?

Section 2 of the national guidelines provide a summary of why fish passage needs to be considered (see page 19 <https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf>).

Include information on what species are present at the site and could use the location as a migration pathway upstream or downstream needs identification.

Many of our iconic native fish species, such as whitebait and eels, need to move between the sea and rivers to complete their lifecycles. They also migrate upstream and downstream between different habitats within freshwater.

In addition to undertaking specific surveys and assessments to determine the values of the area, a variety of sources of information can be used to determine the values of the site and wider catchment including:

- NIWA Freshwater Fish Database (see <https://www.niwa.co.nz/our-services/online-services/freshwater-fish-database>).
- DOC GIS maps known freshwater values (see <https://www.doc.govt.nz/our-work/maps-and-data/>).
- Figure D-3 of <https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf> provides an overview of freshwater fish migration.

- Fish spawning indicator can be used to inform about some species presence and spawning timing <http://www.mpi.govt.nz/growing-and-harvesting/forestry/national-environmental-standards-for-plantation-forestry/fish-spawning-indicator/>. The data contained in this includes the New Zealand Freshwater Fish Database, predicted occurrence of species, and known habitats of non-migratory species.

Does this dam or diversion impede passage?

- a) For ALL or some species/life stages that are likely or found in this area?
- b) At all or some of the time.

Is this dam or diversion going to impact freshwater values of the area (include consideration of key spawning and migration times)?

Is this structure preventing invasive species and protecting native species? Are freshwater fish and/or values are being protected by this structure?

While providing unimpeded fish passage is advantageous to most fish, some of our native freshwater fish, other instream species and freshwater habitats cannot cope and/or compete with some invasive/undesirable species in certain locations (see chapter 6 page 98 for further information <https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf>).

What fish habitat is available upstream that is impeded?

Is the quality and quantity of habitat upstream and/or downstream of the structure sufficient to provide adequate habitat for species?

Completing section E. Proposed fish facility or modification to existing fish facility (Technical Specifications)

Specify the type, design, placement, general dimensions, installation and operating details/maintenance of any fish facility to enable fish to pass or stop the passage of fish (e.g. fish screen or intake design).

Please consider national guidance on fish pass design in section 5.3

(<https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf>), fish screen design guidance

(<https://www.doc.govt.nz/Documents/conservation/native-animals/Fish/fish-passage/fish-screen-guidelines.pdf>) and other guidance available at www.doc.govt.nz/fishpassage.

If you are proposing to modify an existing fish facility provide details of the timing and how you are proposing to modify the existing fish facility, and how these modifications will provide passage.

Include details of:

- What fish species (and life stages) the fish facility will provide passage for, and when/how? (i.e. will passage be provided at all times or just some months/times).
- The proposed flow of water through any fish pass and the periods of the day and year when the pass is expected to be operational.
- If appropriate – the volume, velocity, and placement of additional water to attract migrating fish to any fish pass. See *national fish passage guidance for structures up to 4 meters* including information held within Section 4.2.2.3 on design flows, page 175 Appendix D which highlights fish swimming abilities, and page 186 Appendix E which summarises water velocities, turbulence and attraction flows to provide passage (<https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf>).

- The type and scope of any remedial works proposed relating to any dam or diversion structure or fish pass to enable fish to approach the structure or to be returned to the normal course of the water channel.
- The proposed volume or relative proportion of water that shall remain downstream of any dam or diversion structure and the proposed period of day or year that such water flows would be provided.
- Provide details of any monitoring proposed for this structure (see Section 7 - <https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf> and the [Fish Passage Assessment Tool](#)).

Details here should include, but are not limited to, freshwater fish and/or other values using this pathway; recorded species upstream/downstream; and values protected by the dam/diversion.