



This guidance provides information to assist applicants completing **Application form for exemption for existing culvert or ford impeding fish passage (refer regulation 42(2) of the Freshwater Fisheries Regulations 1983)**.

We recommend you contact the Department of Conservation office closest to the location where the culvert or ford is located to discuss your application prior to completing the application form. 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.

Note: The application should be completed by the *owner or occupier* of the land where the ford or culvert is located. 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:

- **Culvert** – a connection between two water bodies, typically a pre-formed concrete tube located below roads or other constructions.
- **Ford** – a shallow place in a river or a stream allowing one to walk or drive across.
- **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; hinder.
- **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.

Completing section B. Description of: culvert or ford

Describe the existing structures location, type, design, and any current operating, monitoring and maintenance of the culvert/ford.

- Location – New Zealand Transverse Mercator (NZTM) GPS coordinates and a map with general description of the structure site (e.g. 'stable spring fed soft bottom stream with a culvert walkway crossing').
- Type – Describe the type of structure and what it is made of (e.g. single or multiple barrel concrete culvert/ford). See Figure 4-1 <https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf>.
- Design – Include a diagram that shows general dimensions of the structure and the placement of the structure in relation to the waterway.
- Operating, monitoring and maintenance – Describe any current operating, monitoring and maintenance details. See page 45 and 60 for some considerations for culverts <https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf>, and [fish passage assessment tool](#) that can be used to monitor structures risk to fish passage over time.

Also provide the name and status of the land, and a description of the site and waterway including details of 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).

What features make this structure a barrier to fish passage?

Assess your structure using the [Fish Passage Assessment Tool](#) to provide a standard assessment of what risk it poses to fish passage, and provide a summary of the results for the reach and structure.

Consider national guidance on what creates a barrier to fish movements (see page 186 <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

Completing section C. Purpose of culvert / ford

Describe the purpose of the structure, include consideration of what the objectives and performance standards are for this structure (see page 26 <https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf>).

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 of the invasive species in certain locations (see chapter 6, page 98 for further information on where, in limited situations, impeding passage may be beneficial <https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf>).

Is this culvert of ford temporary or permanent?

A culvert/ford is deemed temporary if it will be in place for < 2 months and any operating, monitoring and maintenance that is being undertaken or proposed will have no lasting impact on fish passage upstream or downstream. Please provide further explanation on how long and for what species/life stages, it is impeding passage and any details on how/if this is being mitigated.

If the culvert/ford is deemed permanent (> 2 months) provide details of duration, timing, operating, monitoring and maintenance that is currently been undertaken or proposed for this structure, and provide further explanation on how this is impeding fish passage (what species/life stage) and if there are any fish facility being considered or associated with this structure.

Completing section D. Freshwater values of the area & assessment of impact of fish passage

The following questions need to be addressed in the application to provide details of the freshwater fish values of the 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?

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>).

The species present at the site who could use the location as a migration pathway upstream or downstream need to be identified.

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, a variety of sources of information can be used to determine the values of the site / wider catchment and assess the impact of impeding fish passage 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 culvert or ford 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 culvert/ford preventing passage of invasive/undesirable species and protecting passage of native species? What/Are freshwater fish and/or values are being protected by this culvert/ford?

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 of the exotic species that have been introduced to New Zealand (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>).

Is the quality and quantity (in length, km, or area, ha) of habitat upstream and / or downstream of the culvert or ford barrier sufficient to provide adequate habitat for species currently impeded?

Is there adequate flow and habitat through the culvert or ford (needs to be considered here if the culvert or ford is a fish facility).

Have remediation options to provide partial or full passage or removal been considered?

Consider national guidance (section 5, specifically section 5.3 for good practice remediation design considerations <https://www.niwa.co.nz/static/web/freshwater-and-estuaries/NZ-FishPassageGuidelines-upto4m-NIWA-DOC-NZFPAG.pdf>), lessons learnt factsheets and other information available via www.doc.govt.nz/fishpassage.

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 ford/culvert.