

Resource Consent Application Form 57

Wetland Creation



Otago
Regional
Council

This application is made under Section 88 of the Resource Management Act 1991

Phone: 0800 474 082
Website: www.orc.govt.nz

IMPORTANT NOTES TO THE APPLICANT

Consent for Wetland Creation is required under Clause 45C of the [Resource Management \(National Environmental Standards for Freshwater\) Regulations 2020](#).

This form is to be used for activities associated with the creation of an artificial wetland that requires consent.

This form should not be used where an existing natural wetland is being restored.

If you are planning to create an artificial wetland near an existing natural inland wetland please contact us for specific advice as different rules may apply to your proposal.

If the creation of your artificial wetland includes the reclamation of the bed of any river or lake please contact us for specific advice as there are specific requirements for this activity under Regulation 57 of the National Environmental Standards for Freshwater.

Before you get started with your consent application, we recommend that you have a pre-application meeting with a staff member in our Consents Team to discuss what you are planning. The Consents Planner will be able to help you assess which rules are relevant to your wetland creation project.

To book a pre-application meeting fill in [this form](#) and email it to: consents.applications@orc.govt.nz.

Ensure that you complete this Application Form xx and Resource Consent Application Form 1 in full.

Reclamation: *means the manmade formation of permanent dry land by the positioning of material into or onto any part of a waterbody, bed of a lake or river or the coastal marine area (including the construction of causeways and excluding the construction of natural hazard protection)*

Natural inland wetland: means a [wetland \(as defined in the Act\)](#) that is not:

- a. in the coastal marine area; or
- b. a deliberately constructed wetland, other than a wetland constructed to offset impacts on, or to restore, an existing or former natural inland wetland; or
- c. a wetland that has developed in or around a deliberately constructed water body, since the construction of the water body; or
- d. a geothermal wetland; or
- e. a wetland that:
 - (i) is within an area of pasture used for grazing; and
 - (ii) has vegetation cover comprising more than 50% exotic pasture species (as identified in the National List of Exotic Pasture Species using the Pasture Exclusion Assessment Methodology (see clause 1.8)); unless
 - (iii) the wetland is a location of a habitat of a threatened species identified under clause 3.8 of this National Policy Statement, in which case the exclusion in € does not apply.

For the consent application to be processed efficiently in the minimum time and at minimum cost, it is critical that as much relevant information as possible is included with the application. If all the necessary information is not entered on the form or supplied with the application then Otago Regional Council may return your application, request further information, or publicly notify your application. This will lead to delays in the processing of your application and may increase processing costs. This application form, when properly completed, should provide an adequate "Assessment of Effects on the Environment" (AEE) where the adverse effects of a proposal are not significant. However, this can only be determined on application.

You may wish to provide a separate AEE using this form as template.

PART A: GENERAL

A.1 Is this application for (tick which applies)

- For a **NEW** consent to create an artificial wetland?
- To **REPLACE** an existing consent to maintain an artificial wetland?

Current Consent Number: _____

Expiration Date: _____

A.2 *Please identify all of the activities that you will be carrying out as part of the wetland restoration:*

- Earthworks or land disturbance within 10m of the wetland using machinery (not handheld tools)
- Clearance of exotic vegetation
- Clearance of willow trees
- Clearance of indigenous vegetation
- Damming water
- Diverting water
- Discharging water or contaminants (including sediment)
- Reclaiming all or part of any river, creek or waterbody
- Draining any part of the wetland
- Constructing a bund
- Constructing a defence against water (structure specifically established for the purpose of flood hazard mitigation)
- Placing a culvert
- Erecting any of the following wetland utility structures:
 - jetties
 - boardwalks and bridges connecting them
 - walking tracks and bridges connecting them
 - signs
 - bird-watching hides
 - monitoring devices
 - maimai
 - Other similar structure to those above
- Other

A.3 What is the reason you require consent?

If you don't tick any of the criteria below, your wetland restoration activity may be permitted Regional Plan Water for Otago (RPW) and the National Environmental Standards for Freshwater (NES-FW):

- The damming or diversion of water that cannot meet permitted rule 12.3.2.1 [of the RPW](#)
- The diversion of water that includes the alteration of the bed (including the bank) of a lake or river that cannot meet permitted rules 13.5.1.1., 13.5.1.5 or 13.5.1.10 [of the RPW](#)
- The taking and use of surface water that cannot meet permitted rules 12.1.2.2, 12.1.2.3, 12.1.2.4 or 12.1.2.5 [of the RPW](#).
- The taking and use of groundwater that cannot meet permitted rules 12.2.2.2, 12.2.2.4, 12.2.2.5 or 12.2.2.6 [of the RPW](#).
- The vegetation clearance that cannot meet permitted rules 13.7.1.1 or 13.7.1.2 [of the RPW](#).
- The river or lake bed disturbance that cannot meet permitted rules 13.5.1.1., 13.5.1.5 or 13.5.1.10 [of the RPW](#).
- The placement of a dam structure water that cannot meet permitted rule 12.3.2.1 [of the RPW](#).
- The reclamation of the bed of any lake or river.
- The placement, use, alteration, extension or reconstruction of a weir that cannot meet the permitted activity requirements of [Regulation 72 of the NES-FW](#).
- The placement, use, alteration, extension or reconstruction of a culvert that cannot meet the permitted activity requirements in [Regulation 70 of the NES-FW](#).
- The placement of a culvert or pipe that cannot meet permitted rule 13.2.1.1 [of the RPW](#)

Note: A culvert includes any pipe that will be used to pipe all of the water in a watercourse, even if it will not be used as a crossing for vehicles or pedestrians.

PART B: NATURE OF THE CONSTRUCTION ACTIVITY

B.1

Location of the Activity

Location where the wetland will be created

Name of landowner(s): _____

Address/Location: _____

Legal description(s) of the property (as shown on Certificate of Title)

Please attach a current (less than 3 months old) Certificate of Title to the application

Note: If the applicant is not the owner of the land where the proposed wetland is located, we recommend that you obtain the approval of the landowner to carry out the activity prior to applying for consent.

B.2

Wetland to be created

How big is the proposed wetland? _____ square metres

<p>B.3</p>	<p>Map or aerial image</p> <p>Please provide a map or aerial image showing:</p> <ul style="list-style-type: none"> <input type="checkbox"/> An outline marking the location of the new wetland <input type="checkbox"/> The location of where each activity will take place including: <ul style="list-style-type: none"> <input type="radio"/> Vegetation to be cleared <input type="radio"/> Earthworks or bed disturbance <input type="radio"/> Location of any take, use, damming, diversion, or discharge of water <input type="radio"/> The location of any proposed structures, utilities or infrastructure (with NZTM coordinates for each structure) <input type="radio"/> Location of any associated activities, such as planting <input type="checkbox"/> Within and near the area where, identify: <ul style="list-style-type: none"> <input type="radio"/> Any critical source areas <input type="radio"/> Any water bodies (including rivers, lakes, ponds, and streams) that flow to or from the wetland <input type="radio"/> Any surrounding wetlands <input type="radio"/> Any subsurface drainage <input type="radio"/> Any bores or soak holes <input type="radio"/> Any sites of historic heritage <input type="radio"/> Any known habitat areas <input type="checkbox"/> Nature of the terrain surrounding the wetland, including slope (flat, rolling, steep) and direction of slope <input type="checkbox"/> A north symbol (oriented to the top of the page if possible) and scale bar <p>B.4 Please attach colour photographs of the existing site including:</p> <ul style="list-style-type: none"> • Photos of any existing structures at the site • Photos of the waterbody looking downstream and upstream of the site • Photos showing a cross section of the site • Cross sections 50 m upstream and downstream of the site <p>B.5 <i>Additional information regarding the location:</i></p> <p>In addition to the map or aerial image required in B.3, you may also provide some photos of the location in its current state.</p> <p>Please provide a description of any photos included. For example: “Photo of proposed wetland location from road access facing west”</p>
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PART C: DESCRIPTION OF THE ENVIRONMENT

C.1 Describe the existing environment in its current state:

Note: This may include the values, functions, vegetation types present, soils, any habitat for fish and birds, flow of water into, through and out of the site, existing artificial features or structures

C.2 Please describe the aquatic life present at the site or existing water body(ies). This may include fish (native and introduced species), invertebrates, aquatic vegetation and riparian vegetation.

Note: Schedule 1 of the RPW will provide some guidance on ecological values within the water body but this is not be an exhaustive list of ecological values.

Note: An Ecological Report may be needed to support some applications, depending on the existing environment and the proposal. One of our planners can give you specific advice about when this will be required

PART D: NATURE OF THE PLANNED WETLAND

D.1

Describe the nature of the wetland that is being proposed

Note: This may include the proposed extent, functions, vegetation types, soils underlying the wetland, proposed habitat for fish and birds, flow of water into, through and out of the wetland, existing features in the land or structures that will be incorporated into the wetland such as existing fencing, the nature of the surrounding land use, management of stock near the wetland area, water management near the wetland

D.2

When are works expected to start, and for how long will they continue until completion.

D.3

How will you manage the wetland creation works.

Please provide details of how you will manage the activity. This may include the management of water on the site, oversight of the works, disposal of cleared vegetation and earth. Management strategies may change across the site, and through different aspects of the process, so please be as specific as possible

PART E: FLOW OF WATER TO THE PLANNED WETLAND

E.1 Describe how water will flow into and out of the wetland:
Note: This may include areas of earthworks or land disturbance, machinery, and equipment to be used, any works that may affect water quantity or quality, setbacks between works and any water bodies, the timing of when water will enter different areas of the wetland, construction or placement of structures required to divert water or to maintain water levels in the wetland.

E.2 Describe the works involved with getting water to flow into the wetland:
Note: This may include areas of earthworks or land disturbance, machinery, and equipment to be used, any works that may affect water quantity or quality, setbacks between works and any water bodies, the timing of when water will enter different areas of the wetland, construction or placement of structures required to divert water or to maintain water levels in the wetland

E.3 Describe any structures that are required to get water to flow into the wetland:
For example, a dam or weir, a pipe, a channel, intake structure or bore

E.4 Describe any structures that are required to get water to flow out of the wetland:
For example a pipe or channel

E.5	<p><i>In addition to the plan provided in Section B.3 of this form, please provide plans showing specific details of how water will flow into and out of the proposed wetland</i></p> <hr/> <hr/> <hr/>
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PART F: DIVERTING WATER

F.1	<p><i>Does the wetland creation include the diversion of water from a watercourse?</i></p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p>If yes, please answer the further questions in this section.</p>
F.2	<p><i>Is the proposal for a full or partial diversion of the watercourse?</i></p> <p><input type="checkbox"/> Full</p> <p><input type="checkbox"/> Partial</p>
F.3	<p><i>Will the diversion be:</i> Intermittent <input type="checkbox"/> or continuous <input type="checkbox"/></p> <p>If intermittent, how often does the river typically flow?</p> <p>_____ Hours per day</p> <p>_____ Days per week</p> <p>_____ Weeks per month</p> <p>_____ Months per year</p>
F.4	<p><i>Please describe the diversion of water to the wetland:</i></p> <hr/> <hr/> <hr/> <hr/>

PART G: DAMMING WATER

G.1 *Does the wetland creation include the damming of water?*

Yes

No

If yes, please answer the further questions in this section

Note: The following definition may be relevant

To dam: *in relation to the damming of water, is the process of impounding the water for any purpose and for any period of time, as in a reservoir.*

Prohibited damming

The damming/diversion of the following rivers is prohibited by Rules 12.3.1.1 to 12.3.1.4 of the RPW.

- Kawarau River main stem from Scrubby Stream to the Lake Wakatipu control gates (F41:035680 to F41:738667).
- Shotover River main stem at or about F41:765680 to E40:662173);
- Dart River/Te Awa Whakatipu main stem from Lake Wakatipu to confluence with Beans Burn (at or about E41:438853 to E40:375077).
- Rees River main stem from Lake Wakatipu to confluence with Hunter Creek (at or about E41:448852 to E40:499117).
- Diamond Lake, Diamond Creek and Lake Reid (at or about E40:435975; E40:444963 to E40:450918).
- Lake Wanaka and the Upper Clutha River/Mata-Au between F40:050089 to F40:088067, other than for the duration of an emergency as declared by the Guardians of Lake Wanaka under the Lake Wanaka Preservation Act 1973.

Damming is prohibited for the below water bodies except for stock water supply purposes only

- Pomahaka River, including its tributaries, from its sources to its confluence (G45:447454) with the Clutha River/Mata-Au;
- Waipahi River from its source to its confluence(G45:194520) with the Pomahaka River; and
- Lower Clutha River/Mata-Au from its confluence (G45:447454) with the Pomahaka River to the sea at the mouths of the Matau and Koau Branches.

G.2 *Is your proposal in one of the above catchments?*

Yes (Please speak with a Consent Planner – you may be unable to apply for a consent)

No

G.3 Please indicate what provisions of Permitted Activity Rule 12.3.2.1 of the Regional Plan: Water for Otago cannot be met by the proposed damming activity. A copy of the permitted activity rule can be found in the RPW

- The size of the catchment upstream of the dam is greater than 50 hectares in area (note: this does not apply to off-line dams where no catchment runoff is collected).*
 - *Size of catchment upstream of dam: _____*
- The water immediately upstream of the dam is more than 3 metres deep.*
 - *Maximum water depth immediately behind dam: _____*
- The volume of water stored by the dam is more than 20,000 cubic metres.*
 - *Maximum volume of water able to be stored behind dam: _____*
- A lawful take will be adversely affected by the damming.*
 - *Identify take(s) affected, and water permit numbers, if known: _____*
- A wetland identified in Schedule 9 of the Regional Plan: Water or any wetland higher than 800 metres above sea level will be adversely affected by the dam.*
 - *Name/describe the wetland(s): _____*
- The dam will cause either flooding, erosion, land instability, sedimentation or damage of another person's property.*
 - *Name which effect above, and whose property (if relevant): _____*

G.4 *Is the water body:*

- Perennial (flows all year round):*
- Ephemeral (flows for parts of the year only e.g. spring):*
- Intermittent (flows occasionally, e.g. after heavy rainfall)*

G.5 *Describe frequency and duration of flows if ephemeral or intermittent (if known)*

G.6 *What is the mean flow of the water body (if known): (L/s or m³/s)*

PART H: CONSTRUCTING A DAM (INCLUDING A WEIR)

Dam: a structure used or to be used for the damming of any water, or waterbody.

H.1 *Does the wetland creation include the construction of a dam in a watercourse?*

- Yes
 No

If yes, please answer the further questions in this section

Note: if a dam with a risk greater than “low”, as defined by NZSOLD Guidelines (2015), is being proposed further information will need to be provided than is requested in this form.

H.2 *Is the proposed/existing dam structure going to be located on the same parcel of land described in question B.1 above?*

- Yes
 No - If no please provide the

(a) Full name(s) of owner(s)

(b) Full name(s) of occupier(s)

(c) Address/Location

Legal Description(s) (as shown on Record of Title)

H.3 *If land is currently/will be inundated because of the proposed dam structure, please describe the property(s) to be inundated:*

(a) Full name(s) of owner(s)

(b) Full name(s) of occupier(s)

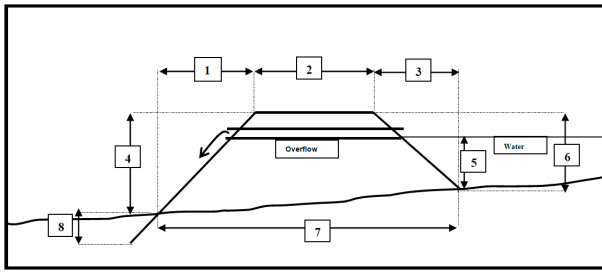
(c) Address/Location

Legal Description(s) (as shown on Record of Title)

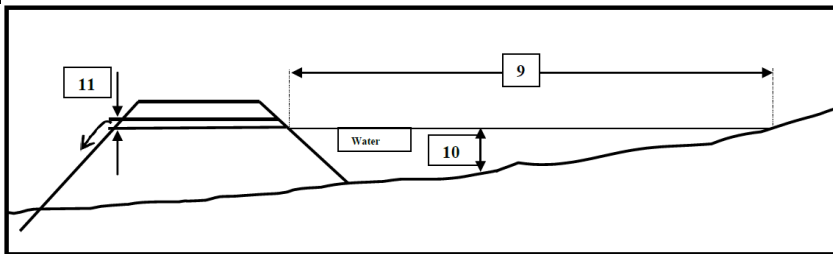
H.4 Please provide a map reference of the proposed/existing dam structure in NZTM 2000:

Dam Design and Dimensions

H.5 *Please fill in the dimensions shown on the diagrams in the lists below (if the dam design is different from that shown below, please include a diagram showing all dimensions).*



1. Downstream batter width:
2. Crest width:
3. Upstream batter:
4. Downstream batter height:
5. Overflow pipe height or spillway crest:
6. Upstream batter height:
7. Dam base width:
8. Depth dam is to be keyed into existing ground:



9. Length of pond behind dam:
10. Maximum depth of reservoir:
11. Diameter of overflow pipe:

Other dimensions not shown on diagrams

12. Crest length:
13. Spillway width:
14. Spillway depth:
15. Spillway inlet height:
16. Spillway gradient:
17. Spillway surface material:
18. Material used for erosion protection of dam faces:

H.6 What material/materials is the dam made from (or to be made of)?

H.7 Please supply accurate design drawings of the dam including the location and design of any proposed mitigation measures, such as low flow outlets / bypasses and fish passes.

H.8 Please supply a drawing/map showing the dam and the surrounding environment. This map should include the following:

1. Natural ground contours.
2. The pattern of land inundation that will occur when the proposed dam is full and land inundation at different operating levels (if relevant).
3. The legal boundaries of all property(ies) that will be affected by the proposal, including the names of the owners and/or occupiers of those properties.
4. The flow-path of any water body(s) (please indicate the direction of flow with an arrow).

- | | |
|--|---|
| | <ol style="list-style-type: none">5. Any other relevant features, such as roads, bridges, dwellings, other structures (such as farm buildings) heritage or waahi tapu sites, cultural sites or other landmarks.6. The location of any consented activities or known permitted activities including any upstream or downstream water users (include name(s) and distance(s) if known).7. Overflow / flood paths (include buildings and infrastructure that may be within the flood path)8. A north symbol; and9. A scale |
|--|---|

PART I: DISTURBANCE OF THE BED OF A LAKE OR RIVER

- I.1** *Does the wetland creation include disturbance of the bed of a lake or river including to erect, place, extend, alter, replace, reconstruct or demolish any structure in, on or over the bed of a waterbody e.g. bridges, culverts, boardwalks, pipes, cables, steps, buildings, fords, retaining walls, gabion baskets, jetties, planting etc?*
- Yes
 No
- If yes, please answer the further questions in this section
- I.2** *What aspect of the the disturbance of the bed of the waterbody associated with the proposed works comply not with permitted activity Rule 13.5.1.1 of the Regional Plan: Water?*
- there will be an increase in scale of an existing structure
 bed disturbance will be wider than the general area of the structure
 bed disturbance will cause flooding or erosion
 time to complete the work in the wetted bed will exceed 10 hours
 sediment discharge associated with bed disturbance will result in a conspicuous change in colour or water clarity more than 200 m downstream
 a lawful water take will be adversely affected
 site will not be left tidy upon completion
 there will be a change to the hydrological function of a Regionally Significant Wetland
 there will be damage to fauna, or New Zealand native flora, in or on a Regionally Significant Wetland
- Please describe:
- I.3** *Describe how the proposed works will be undertaken, including (but not limited to):*
- What the structure is / will be made of;
 For culverts, the fill material to be used over the culvert;
 For culverts, the gradient that the culvert is / will be laid in the stream bed;
 Details of any secondary flow path proposed;
 Hours of operation;
 Total duration of the works and proposed commencement and completion dates;
 Who will be undertaking the works;
 Whether the work will be undertaken in stages and what the different stages involve;
 Machinery to be used and whether it will be operated from the bank or within the bed of the waterbody;
 How you will minimise the mobilisation / release of sediment.
- I.4** *Please attach technical drawings of the structure / proposed structures, along with details showing how the structure(s) will be secured in place. These drawings must show all of the following details:*
- For crossings, the length of crossing approach and the length of the crossing itself;
 For culverts, the diameter / height / width of the culvert;
 For bridges / boardwalks, the cross sectional area beneath the structure, plus the height of the underside of the structure relative to the adjacent natural ground level;
 Width and depth of the original stream channel;
 Top width of the original stream channel;
 For culverts, the depth of fill over the culvert;
 For bridges, the number, location, dimension and material of any piles used;
 Details and location of any wingwalls / abutments / foundations;
 Secondary flow path location and dimensions (where applicable).

1.5	<i>Please attach hydrological and hydraulic design details and calculations for the structure (if relevant/available).</i>
1.6	<i>Will the works be undertaken in flowing water, or will the water be dammed or diverted in any way to provide a dry working area? Please describe.</i>
1.7	<i>Will public access to any part of the waterbody be restricted during or following the works? If yes, please describe to what extent and for how long.</i>
1.8	<i>Are there any alternative locations of methods for undertaking the proposed works? If yes, please describe and explain why have you chosen this location and method over others.</i>
1.9	<i>Will there be any discharge of concrete or any other contaminant to water as a result of the proposed works?</i>

PART J: ADDITIONAL INFORMATION FOR THE CONSTRUCTION OF A CULVERT

J.1 Does the wetland creation include the construction of a culvert?

- Yes
- No

If yes, please answer the further questions in this section

J.2 Is this application (tick which applies):

- For a NEW consent to place, use, alter, extend, or reconstruct a culvert?
- To REPLACE a current consent to place, use, alter, extend, or reconstruct a culvert?

Current consent number: _____

Expiry date: _____

J.3 What is the reason you require consent for the culvert (under the relevant rules in the NES-FW or the RPW)?

If you don't meet any of the criteria below, your culvert activity may be permitted under Clause 70 of the National Environmental Standards for Freshwater.

- The culvert will not provide for the same passage of fish up and downstream as would occur without the culvert (except as required to place, alter, extend, or reconstruct the culvert)
- The culvert will not be laid parallel to the slope of the bed of the river or connected area
- The mean cross-sectional water velocity in the culvert will be greater than that in the immediately adjoining river reaches
- The culvert does not meet the following guides where w = bed width, in metres, and s = culvert width where it intersects the bed, in metres or where w (bed width, in metres) $\leq 3m$, $s \geq 1.3 \times w$ or where $w > 3m$, $s \geq (1.2 \times w) + 0.6$
- The culvert is not open bottomed, and the invert is placed such that less than 25% of the diameter is below the level of the bed
- The bed substrate will not be present over the full length of the culvert when the flow rate is at or below the flow for 80% of the time
- The culvert does not provide for continuity of geomorphic processes, such as the movement of sediment and debris

If you don't meet any of the criteria below, your culvert activity may be permitted under Rule 13.2.1.1 of the RPW.

- The fence, pipe, line or cable does not cross a lake or river identified in Schedule 1A as being an "Outstanding natural feature or landscape" unless it is attached to an existing lawfully established support structure; and
- No part of the fence, pipe, line or cable is fixed to the bed of the lake or river unless it is attached to an existing lawfully established support structure; and
- No part of any pipe, line or cable is less than two metres above the 1 percent probability flood level, unless it is attached to an existing lawful structure; and
- Where it is attached to an existing lawful structure, no part of any pipe, line or cable extends below the underside of the existing structure; and
- Any fence over the bed of a lake or river, or a wetland, does not impede the flow of flood water or debris, or is installed and maintained so it results in no flooding or erosion of the bed or banks of the lake or river, or of a wetland; and
- The fence, pipe, line or cable does not interfere with navigation; and
- For existing overhead network utility services over the bed of a lake or river, there is no reduction in the height of clearance above the waterway; and

- The fence, pipe, line or cable is maintained in good repair. *J.4. Further information about the river or connected area where culvert is or will be:*
- The flow of the river or connected area:

For example, none, low, moderate, high

- Is the river or connected area tidal? Yes No
- If yes, please describe:
- Where the culvert is or will be, what is the width of the river or connected area at the water's surface?
- Where the culvert is or will be, what is the width of the bed of the river or connected area?

J.4 Nature of the culvert

Some of these matters may be more relevant to culverts that have already been placed. If the culvert has not yet been placed, please answer as best possible, or advise if not known or not applicable

- Asset identification number of the culvert (if known):
- Ownership of the culvert:

For example, held by the Crown, regional council, territorial authority, New Zealand Transport Authority, KiwiRail Holdings Limited, publicly by another person or organisation, privately or unknown

- Number of barrels that (will) make up the culvert:
- Shape of the culvert:
- Length of the culvert:
- Culvert diameter, or width and height:
- Height of the drop (if any) from the culvert outlet:
- Length of the undercut or erosion (if any) from the culvert outlet:
- Material from which the culvert is made:
- Mean depth of water through the culvert:
- Mean water velocity through the culvert:
- What is the bed substrate that is in most of the culvert?

For example, gravel, silt, sand

- What is the slope of the culvert?

Describe the alignment of the culvert:

- Are there any remediation features in the culvert?

For example, baffles or spat rope Yes No

If yes, please describe:

- Does the culvert have wetted margins? Yes No

If yes, please describe:

J.5 Describe any structures associated with the culvert:

For example such as wingwalls, screens, aprons or ramps For these associated structures, please include details of length, drop height (if any), construction material, slope and surface, water velocity, bed substrate

J.6

How will you manage the placement of the culvert?

Please provide details of how you will manage the placement of the culvert.

This may include:

- timing of the placement
- flow conditions and rain flow
- equipment used to place the culvert
- preparation works to place the culvert

J.7

Ongoing use of the culvert

Describe any maintenance for the culvert:

This may include:

- Fencing to avoid stock damage, in accordance with the Resource Management (Stock Exclusion) Regulations 2020
- Regular checks of the culvert
- Clearing of the culvert
- Clearing the upstream area of debris

o Actions taken during high rainfall events

PART K: CONSTRUCTION OF A WEIR

K.1 Does the wetland creation include the construction of a weir?

- Yes
 No

If yes, please answer the further questions in this section

K.2 Is this application (tick which applies):

- For a NEW consent to place, use, alter, extend, or reconstruct a weir?
 To REPLACE a current consent to place, use, alter, extend, or reconstruct a weir?

Current consent number: _____

Expiry date: _____

K.3 What is the reason you require consent for the weir and/or the related damming of water? (under the relevant rules in the NES-FW or the RPW)?

If you don't meet any of the criteria below, your weir activity may be permitted under Clause 72 of the National Environmental Standards for Freshwater.

- The weir will not provide for the same passage of fish up and downstream as would occur without the weir (except as required to place, alter, extend, or reconstruct the weir)
- The fall height of the weir will be more than 0.5 m
- The slope of the weir must be steeper than 1:30
- The weir will not have roughness elements to create a hydraulically diverse flow structure across the weir Roughness elements are mixed grade rocks of 150 to 200 mm diameter, irregularly spaced no more than 90 mm apart
- The weir's lateral profile will not:
- be V-shaped;
 - be sloping up at the banks;
 - have a low-flow channel in the centre; or
 - have a lateral cross-section slope between 5 and 10 degrees

If you don't meet any of the criteria below, your weir activity may be permitted under Rule 13.2.1.3 of the National Environmental Standards for Freshwater.

- The conditions of Rule 12.3.2.1 are met; and (*This rule relates to the damming of water see note below*)
- The Otago Regional Council is notified of the location and nature of the dam, at least seven working days prior to commencing the erection or placement; and
- The structure is maintained in good repair; and
- The site is left tidy following the erection or placement.

Note: The erection of a dam structure is a different activity to the damming of water. The damming of water is covered in section G of this form. If you have assessed that you require a consent for damming water in section G the weir will not be able to meet permitted Rule 13.2.1.3 of the RPW.

K.4 Further information about the river or connected area where weir is or will be:

- The flow of the river or connected area:

For example, none, low, moderate, high

- Is the river or connected area tidal? Yes No
- If yes, please describe:

- Where the weir is or will be, what is the width of the river or connected area at the water's surface?
- Where the weir is or will be, what is the width of the bed of the river or connected area?

K.5 Nature of the weir

Some of these matters may be more relevant to weirs that have already been placed. If the weir has not yet been placed, please answer as best possible, or advise if not known or not applicable

- Asset identification number of the weir (if know):
- Ownership of the weir:

For example, held by the Crown, regional council, territorial authority, New Zealand Transport Authority, KiwiRail Holdings Limited, publicly by another person or organisation, privately or unknown

- The type of weir:
- Shape of weir's crest:
- Height of the weir:
- Width of the weir:
- Material from which the weir is made:
- What is the bed substrate that is present across most of the weir? For example, gravel, silt, sand Slope of the weir:
- Backwater distance from the weir: The backwater distance means the distance furthest upstream where the water level is influenced by the weir
- Are there any remediation features in the weir?

For example, baffles or spat rope Yes No If yes, please describe:

- Does the weir have wetted margins? Yes No

If yes, please describe:

K.6 *Describe any structure associated with the weir, such as wingwalls, screens, aprons or ramps. For these associated structures, please include details of length, drop height (if any), construction material, slope and surface, water velocity, bed substrate.*

K.7 Placement of the weir

This section only applies if the weir hasn't been placed yet. If the weir has already been placed. How will you manage the placement of the weir?

- Please provide details of how you will manage the placement of the weir. This may include:
 - timing of the placement
 - flow conditions and rain flow
 - equipment used to place the weir
 - preparation works to place the weir

PART L: ASSESSMENTS OF EFFECTS

L.1 Please describe the actual and potential effects your proposal activity may have on the values of the existing environment, the catchment, and if relevant the coastal environment (see table below)

Diversion	Yes	No	N/A
<i>Will the diversion have an effect on water availability to downstream users and/or affect access to neighbouring properties?</i>			
<i>Will the diversion cause any flooding or other problems to neighbouring properties?</i>			
<i>Are there any alternative sites or methods for the diversion?</i>			
<i>Are there any of the following features within a reasonable distance up or downstream of the diversion:</i>			
<i>Obvious signs of fish, eels, insect life, aquatic plants</i>			
<i>Existing wetlands (e.g., swamp areas)</i>			
<i>Waste discharges (e.g., rural, industrial sewage, landfill)</i>			
<i>Recreational activities carried out (e.g., swimming, fishing)</i>			
<i>Areas of particular aesthetic or scientific value (e.g., scenic waterfall, rapids, archaeological sites)</i>			
<i>Areas or aspects of significance to Iwi</i>			
<i>If you have answered "Yes" to any of the above, describe what effects your diversion may have and the steps you propose to take to mitigate these. If the adverse effect is significant describe alternative locations or methods you have considered for undertaking the diversion:</i>			
<i>Describe the bed of the watercourse in the vicinity of the diversion site (e.g., is it gravelly, muddy or sandy?)</i>			
<i>Please attach your calculations which show that the diversion design is adequate, including design flood flows, return periods, etc.</i>			
<i>Please provide any further relevant information:</i>			

Damming/Impounding water	Yes	No	N/A
<p><i>Will there be habitat loss (on terrestrial and aquatic habitat) from the reservoir existence/creation.</i></p> <p><i>If yes, please describe:</i></p>			
<p><i>Are you proposing any off-set measures proposed for loss of indigenous biological diversity</i></p> <p><i>If yes, please describe:</i></p>			
<p><i>For instream dams (and off-line dams that may affect water bodies), provide an independent ecological assessment of the effects the damming will have on the water body and any connected water bodies including existing reservoirs.</i></p> <p><i>Yes (attached to application)</i> <i>No (please outline reasons why an independent ecological assessment has not been undertaken in your application).</i></p>			
<p><i>Please describe the effects on aquatic life including invertebrates, native fish and sports fish with consideration of effects on spawning and juvenile rearing locations as a result of changes in flow process/sediment movement and food availability.</i></p> <ul style="list-style-type: none"> ○ <i>Effects on fish passage including trout movement upstream from providing fish passage</i> ○ <i>Effects on mahika kai (e.g. long-fin eels, waikōura)</i> ○ <i>The need for residual flows to maintain aquatic values downstream of the damming</i> ○ <i>The need for flushing flows to remove algal biomass build-up or sediment build up downstream of the dam</i> 			
<p><i>Please provide any further relevant information:</i></p>	Yes	No	N/A
Water Quality			
<p><i>Fuel storage tanks and machinery working and stored in the construction area shall be maintained at all times to prevent leakage of oil and other contaminants into water, and no refuelling of machinery shall occur within or near the waterbody</i></p>			
<p><i>All machinery shall be water-blasted prior to being brought on site, to reduce the potential for pest species being introduced to water.</i></p>			
<p><i>At no time during the proposed works shall machinery be washed within the bed of the waterbody.</i></p>			
<p><i>All reasonable steps shall be taken to minimise the release of sediment</i></p>			

<i>to water by undertaking the following methods (please tick):</i>			
<i>Sediment traps</i> <i>Note: The relevant permitted activity rule for sediment traps in the RPW is 13.5.1.10</i>			
<i>Undertaking work when flows are low / waterbody is dry</i>			
<i>Diverting water from the working area</i>			
<i>Other (please specify)</i>			
<i>Where wet concrete may be used in the waterbody (please tick):</i>			
<i>Sediment traps</i>			
<i>If you have answered "NO" to any of the measures above, you MUST explain why:</i>			
<i>Bed / Habitat Disturbance</i>	Yes	No	N/A
<i>Works will be undertaken when flows in the waterbody are low.</i>			
<i>Works will not be undertaken between certain months avoid disturbing spawning habitat (please specify months)</i>			
<i>Fish passage will be provided for.</i>			
<i>Bed disturbance will be limited only to the extent necessary to carry out the works.</i>			
<i>Machinery used to undertake the works will not be operated from the wet bed.</i>			
<i>Pest species management and the potential for the activity to increase the spread of weeds/pests</i>			
<i>Effects on avian fauna e.g. removal of nesting river environment, creation/removal of pond/lake habitat.</i>			
<i>If you have answered "NO" to any of the measures above, you MUST explain why:</i>			

<i>Other Waterbody Values</i>	Yes	No	N/A
<i>Amenity and natural character of the waterbody will not be significantly affected by the proposed works.</i>			
<i>The site will be tidied upon completion of works.</i>			
<i>Public access to the waterbody will not be impeded by the proposed works.</i>			
<i>Hours of work will be between 7.00 am and 7.00 pm, Monday to Friday, and will not be undertaken on Public Holidays. If hours of work to differ from that given, please state here:</i>			
<i>If kōiwi tāngata (human skeletal remains), Māori artefact material, or archaeological material that predates 1900 is found, work will stop until an inspection by the appropriate authorities can be made.</i>			
<i>Effects on heritage values will be avoided.</i>			

<p><i>If you have answered “NO” to any of the measures above, you MUST explain why:</i></p>			

Erosion	Yes	No	N/A
<i>Damage to riparian vegetation will be minimised when undertaking the works</i>			
<i>Any damage to the stream banks, including riparian vegetation, as a result of the works will be reinstated within one month.</i>			
<i>Where permanent diversions of water are undertaken:</i>			
<i>All reasonable measures will be undertaken to promote bank stability of any new channel as rapidly as possible</i>			
<i>There will be no reduction in the surface flow of the waterbody as a result of the diversion.</i>			
<p><i>If you have answered “NO” to any of the measures above, you MUST explain why:</i></p>			

Culvert
<p><i>Describe the actual and potential effects your culvert activity may have on river form. This includes during works related to the placement, alteration, extension, or reconstruction, as well as the ongoing use of the culvert. The culvert activity has the potential to has the potential to affect the river catchments. This may include:</i></p> <ul style="list-style-type: none"> • <i>Upstream and downstream effects from construction and ongoing use</i> • <i>Flood flows and low flow events</i> • <i>Subsidence and erosion</i> • <i>Aggradation and/or degradation</i> <p><i>In this section, describe how your culvert activity will be managed to ensure adverse effects on river form are avoided or minimised as best possible.</i></p>
<p><i>Are there any structures in/over/next to the culvert activity? If yes, describe the actual and potential effects your culvert may have on those structures.</i></p>
<p><i>Describe the actual and potential effects your culvert may have on fish passage.</i></p> <p><i>Section 3.26 of the National Policy Statement for Freshwater Management requires that instream structures maintain or improve fish passage, except where it is desirable to prevent the passage of some fish species in order to protect desired fish species, their life stages</i></p>

or their habitats.

Describe the cumulative effects of your culvert

Cumulative effects are effects which arise over time, in combination with other effects. While the effects of your activity on its own may be environmentally acceptable, cumulative effects recognise that similar effects over time from many activities may not be acceptable.

Describe the actual and potential effects your culvert may have on Kāi Tahu cultural and spiritual beliefs, values and uses.

Culverts have the potential to impact Kāi Tahu values. In this section, describe any nearby Rūnanga sensitive receptors (Statutory Acknowledgements, wāhi tapu etc), and how your weir might affect these features and the associated cultural values.

Describe the actual and potential positive effects of your culvert

Weir

Describe the actual and potential effects your weir may have on river form. This includes during works related to the placement, alteration, extension, or reconstruction, as well as the ongoing use of the weir. Weirs have the potential to has the potential to affect the river catchments. This may include:

- *Upstream and downstream effects from construction and ongoing use*
- *Flood flows and low flow events*
- *Subsidence and erosion*
- *Aggradation and/or degradation*

In this section, describe how your weir activity will be managed to ensure adverse effects on river form are avoided or minimised as best possible.

Are there any structures in/over/next to the weir?

If yes, describe the actual and potential effects your weir may have on those structures.

Describe the actual and potential effects your weir may have on fish passage.

Section 3.26 of the National Policy Statement for Freshwater Management requires that instream structures maintain or improve fish passage, except where it is desirable to prevent the passage of some fish species in order to protect desired fish species, their life stages or their habitats.

Describe the cumulative effects of your weir.

Cumulative effects are effects which arise over time, in combination with other effects. While the effects of your activity on its own may be environmentally acceptable, cumulative effects recognise that similar effects over time from many activities may not be acceptable.

Describe the actual and potential effects your weir may have on Kāi Tahu cultural and spiritual beliefs, values and uses. Weirs have the potential to impact Kāi Tahu values. In this section, describe any nearby Rūnanga sensitive receptors (Statutory Acknowledgements, wāhi tapu etc), and how your weir might affect these features and the associated cultural values.

Describe the actual and potential positive effects of your weir:

PART M: ALTERNATIVES

M.1	Have any alternatives to the restoration activity, either as a whole or specific aspects, been considered? If so, why is the proposed restoration activity being utilised over those alternatives?
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PART N: CONSULTATION

N.1	<p>Please describe any consultation undertaken with persons/parties potentially affected by your proposed activity. Potentially affected parties may include Public Health South, landowners (if the applicant is not the landowner), neighbours, Aukaha, Te Ao Marama, Fish and Game Otago and Department of Conservation.</p>
N.2.	<p>Written approvals Were any written approvals obtained as part of this application?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, please describe who written approval was obtained from, and why</p>
N.3.	<p>Please attach any written approvals received to the application. Please note that the Council only accepts unconditional written approvals and any conditions proposed by affected parties need to be agreed to and incorporated into the application.</p>

CONTACT US

If you have any queries relating to the information requirements, please contact one of our Otago Regional Council Offices:

<p>Dunedin: 70 Stafford St Private Bag 1954 Dunedin 9054</p> <p>Phone 03 474 0827 Fax 03 479 0015</p>	<p>Alexandra: Dunorling St PO Box 44 Alexandra 9340</p> <p>Phone 03 448 8063 Fax 03 448 6112</p>	<p>Queenstown: Terrace Junction 1092 Frankton Road Queenstown 9300</p> <p>Phone 03 442 5681 Fax 03 442 5682</p>
<p>Freephone: 0800 474 082 Website: www.orc.govt.nz Email: public.enquiries@orc.govt.nz</p>		