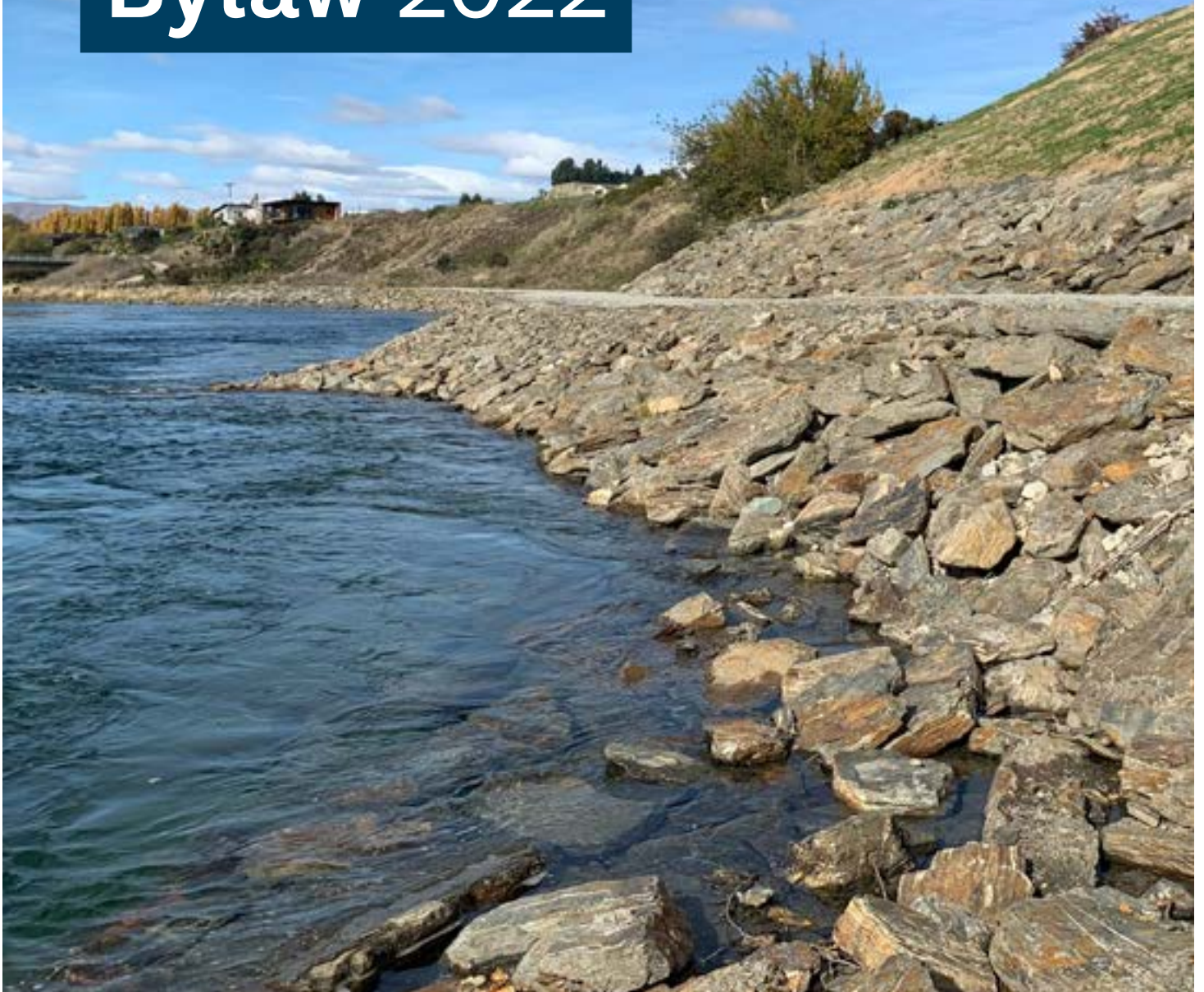


Flood Protection Management Bylaw 2022



Otago
Regional
Council

CHAIRPERSON'S FOREWORD

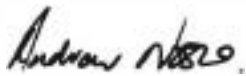
This Flood Protection Management Bylaw 2022 has been prepared under the Local Government Act 2002.

Management, regulation and protection of flood protection works is necessary in order to ensure the effective operation and integrity of flood protection works / schemes owned by, or under the control of, the Otago Regional Council.

Flood protection works are the following features as mapped in the Bylaw: drains, overland flow paths, defences against water, floodways, groynes, cross-banks, training line, and flood protection vegetation.

This Bylaw is only intended to control those activities which may affect the integrity or operation of flood protection works.

This Bylaw replaces the former Flood Protection Management Bylaw 2012.



Andrew Noone
Chairperson
Otago Regional Council

1 September 2022
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ADOPTION OF BYLAW

That pursuant to sections 149(1), 155 and 156 of the Local Government Act 2002, the Otago Regional Council hereby resolves that the Flood Protection Management Bylaw 2022 adopted on 29 June 2022, is hereby confirmed, and shall come into force on 1 September 2022.

The foregoing resolution was passed at a meeting of the Otago Regional Council on 29 June 2022.

This bylaw was amended by a resolution passed pursuant to Section 156(2) of the local Government Act 2002 at a meeting of the Otago Regional Council on 28 September 2022 and 26 April 2023. Those amendments have been incorporated into the First, Second, Third and Fourth Schedules of the Bylaw.

*The Common Seal of the
Otago Regional Council
was hereunto affixed
in the presence of:*



Chairperson

A handwritten signature in blue ink, appearing to be "W. A. Stone", written over a faint horizontal line.

Councillor

A handwritten signature in blue ink, consisting of a stylized, looped shape, written over a faint horizontal line.

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FLOOD PROTECTION MANAGEMENT BYLAW 2022

The Otago Regional Council, pursuant to the powers contained in the Local Government Act 2002, makes the following Bylaw:

Title

This Bylaw shall be known as the Flood Protection Management Bylaw 2022.

Commencement

This Bylaw shall come into force on the 1 September 2022.

1.0 PURPOSE

The purpose of this Bylaw is to manage, regulate and protect the effective operation and integrity of flood protection works owned by or under the control of the *Council*.

This Bylaw controls activities that may affect the integrity or operation of flood protection works.

2.0 DEFINITIONS

Note: Where a word is defined it is shown in the Bylaw text in *italics*.

Approval means written approval issued by the *Council* under this Bylaw.

Authorised access means legally established access that was in place prior to this Bylaw coming into effect or access that is authorised under this Bylaw.

Bed means the space of land which the waters of the *river* cover at its fullest flow without overtopping its banks.

Council means the Otago Regional Council and includes any person duly authorised by the *Council* to exercise any of the powers conferred upon the *Council* by this Bylaw.

Cross-bank means any cross-bank shown in the Fourth Schedule.

Cultivation means the alteration or disturbance of land (or any matter constituting land including soil, clay, sand and rock) to a depth of no more than 300 millimetres below the existing ground surface for the purpose of sowing, growing or harvesting of pasture, crops or domestic gardening. Cultivation does not include the planting of trees, shrubs or hedges.

Defence against water means any defence against water shown in the Second Schedule. The beds of the Water of Leith and Lindsay Creek and associated flood protection structures are defences against water. The locations of the Water of Leith and Lindsay Creek are marked in blue in the Second Schedule.

Drain, in clause 3.3 Floodways, means any artificial watercourse designed, constructed, or used for the drainage of surface water or subsurface water, but excludes artificial watercourses used for the conveyance of water for electricity generation, irrigation, or water supply purposes.

Earthworks means the alteration or disturbance of land, including by moving, removing, placing, blading, cutting, contouring or excavation of earth (or any matter constituting the land including soil, clay, sand and rock).

Excavation means the removal of material, which results in a hole or cavity.

Excavation-sensitive areas means any excavation-sensitive area shown in the Second Schedule.

Flood protection works include scheduled drains, overland flow paths, defences against water, floodways, groynes, cross-banks, training lines and flood protection vegetation.

Flood protection vegetation means all trees and shrubs, including those deliberately planted, or self-seeded, owned or controlled by Council for flood or erosion protection purposes occurring between the ‘*Flood protection vegetation*’ lines in the Fourth Schedule. Where only one ‘flood protection vegetation’ line is shown, the area of vegetation to be managed for flood protection will be the area between the line and the adjacent edge of the active channel in the Fourth Schedule.

Floodway means any floodway shown in the Third Schedule.

Groyne means any groyne shown in the Fourth Schedule.

Occupier in relation to any property, means the lawfully authorised inhabitant occupier of that property and persons who have legal right to undertake activities on that property.

Overland flow path means any overland flow path shown in the First Schedule.

Owner in relation to any property, means the person entitled to receive the rack rent thereof, or who would be so entitled if the property were let to a tenant at a rack rent, and includes the owner of the fee simple of the land.

River means a continually or intermittently flowing body of fresh water; and includes a stream and modified watercourse.

Scheduled drain means any *drain* or *river* shown as a Scheduled drain in the First Schedule.

Structure includes any building, crossing, equipment, device or other facility made by people and which is fixed to land; and includes any raft (and also includes, but is not limited to, any driveway, fence, gate, line or cable and any culvert, pipe, or other kind of conduit) but does not include any lines or cables to be carried upon existing bridges or utility support structures authorised in accordance with this Bylaw.

Training line means any training line shown in the Fourth Schedule.

3.0 ACTIVITIES REQUIRING BYLAW APPROVAL

Nothing in this Bylaw applies to Council employees or persons authorised by Council undertaking maintenance or emergency works on those flood protection works subject to the Bylaw

Resource consent or authorisation may also be required from the *Council*, relevant territorial authority or the Department of Conservation.

Note: *Diagrams are included in Appendix 1 to illustrate the relevant areas of the flood protection works covered by clauses 3.1 and 3.2.*

3.1 Scheduled Drains and Overland Flow Paths

No person shall, without the prior *approval* of the Council –

- a. Alter any *scheduled drain* or *overland flow path*;
- b. Remove or interfere with any machinery or equipment relating to any *scheduled drain*;
- c. Plant any tree, shrub, hedge or part thereof
 - i. in any *scheduled drain* or *overland flow path*, or
 - ii. on, or within seven metres of the top of the bank of, any *scheduled drain*;
- d. Construct or put any *structure*
 - i. in, over, through or under any *scheduled drain* or *overland flow path*, or
 - ii. on, or within seven metres of the top of the bank of, any *scheduled drain*;
- e. Dump or deposit any thing in any *scheduled drain* or *overland flow path*;
- f. Obstruct any *scheduled drain* or *overland flow path*;
- g. Drive, take or operate any vehicle, machinery or equipment, in or through any *scheduled drain*;
- h. Allow livestock in or through any *scheduled drain*;
- i. Connect any pipe, channel or other conduit to any *scheduled drain* or *overland flow path*.

3.2 Defences Against Water and Excavation-Sensitive Areas

No person shall, without the prior *approval* of the Council –

- a. Alter any *defence against water* except as provided for by clause 3.2 (g);
- b. Remove or interfere with any machinery or equipment relating to any *defence against water*;
- c. Plant any tree, shrub, hedge or part thereof
 - i. on any *defence against water*, or
 - ii. within seven metres of the landward side of any *defence against water*, or
 - iii. between the bank of any river and associated *defence against water*;

- d.** Cut down or remove any tree
 - i.** on any *defence against water*, or
 - ii.** within seven metres of the landward side of any *defence against water*, or
 - iii.** between the bank of any river and associated *defence against water*;
- e.** Construct or put any *structure*
 - i.** in, on, over, through or under any *defence against water*, or
 - ii.** within seven metres of the landward side of any *defence against water*, or
 - iii.** between the bank of any river and associated *defence against water*;
- f.** Remove or alter any *structure*
 - i.** in, on, over, through or under any *defence against water*, or
 - ii.** within seven metres of any *defence against water*, or
 - iii.** between the bank of any river and associated *defence against water*, or
 - iv.** within any *excavation-sensitive area*;
- g.** Dump or deposit any thing
 - i.** on any *defence against water*, or
 - ii.** within seven metres of the landward side of any *defence against water*, or
 - iii.** between the bank of any river and associated *defence against water*;

excluding materials for maintenance of existing authorised access;
- h.** Allow livestock, vehicles, machinery or equipment to adversely affect the integrity of any *defence against water*;
- i.** Carry out any *earthworks*
 - i.** in, on, through or under any *defence against water*, or
 - ii.** within 20 metres of the landward side of any *defence against water* unless the *earthworks* relate to *cultivation*, or
 - iii.** between the bank of any river and associated *defence against water*, or
 - iv.** within any *excavation-sensitive area*, if the *earthworks* involve *excavation*.

3.3 Floodways

No person shall, without the prior *approval* of the *Council* –

- a.** Alter any *floodway* except as provided for by clauses 3.3 (e) and (g);
- b.** Remove or interfere with any machinery or equipment relating to any *floodway*;
- c.** Plant any tree, shrub, hedge or part thereof in any *floodway*;
- d.** Construct or put any *structure* in, on, over, through or under any *floodway*;
- e.** Dump or deposit any thing in any *floodway*, excluding materials for maintenance of existing authorised access, or as a result of maintenance of *drains* undertaken in accordance with clause 3.3 (g);
- f.** Obstruct any *floodway*;
- g.** Carry out any *earthworks* in any *floodway*, excluding maintenance of *drains*;
- h.** Connect any pipe, channel or other conduit to the Hilderthorpe or Hendersons and Waikoura Creeks floodways.

3.4 Groynes, Cross-banks and Training Lines

No person shall, without the prior *approval* of the Council—

- a. Alter any *groyne cross-bank* or *training line*
- b. Remove or interfere with any machinery or equipment relating to any *groyne cross-bank* or *training line*
- c. Plant any tree, shrub, hedge or part thereof
 - i. on any *groyne, cross-bank* or *training line*; or
 - ii. within seven metres of any *groyne* or *cross-bank* or *training line*;
- d. Construct or put any *structure*
 - i. in, on, over, through or under any *groyne, cross-bank* or *training line*, or
 - ii. within seven metres of any *groyne, cross-bank* or *training line*;
- e. Remove or alter any *structure*
 - i. in, on, over, through or under any *groyne, cross-bank* or *training line*, or
 - ii. within seven metres of any *groyne, cross-bank* or *training line*;
- f. Dump or deposit any thing on, or within fifty metres of any *groyne, cross-bank* or *training line*; excluding materials for the purpose of authorised access maintenance;
- g. Carry out any *earthworks*
 - i. in, on, through or under any *groyne, cross-bank* or *training line*, or
 - ii. within fifty metres of any *groyne, cross-bank* or *training line* unless the earthworks relate to *cultivation*, or
 - iii. between the bank of any river and associated *groyne, cross-bank* or *training line*;
- h. Allow livestock, vehicles, machinery or equipment to adversely affect the integrity of any *groyne, cross-bank* or *training line*.

3.5 Flood Protection Vegetation

No person shall, without the prior *approval* of the Council—

- a. Remove, alter or interfere with any *flood protection vegetation*; or
- b. Plant any tree, shrub, hedge or part thereof within any *flood protection vegetation*;
- c. Allow stock to graze within any *flood protection vegetation*.

4.0 ACTIVITIES REQUIRED TO BE UNDERTAKEN

4.1 Structures

The *owner* of every *structure* impacted by clause 3.1 to 3.4 shall keep it in good repair.

4.2 Floodways

- a. Within any *floodway* every fence and gate shall be maintained free of debris.
- b. Within the Hilderthorpe *Floodway*, every fence shall include a floodgate which enables the free flow of flood water.

4.3 Fencing of Drains

The *Council's* Chief Executive may, by written notice, require every *owner*, and every *occupier* of land adjoining any *scheduled drain* to, in the time and manner stated in the notice, erect fencing to prevent livestock entering the *scheduled drain* at the cost of the *owner*, if in the opinion of the Chief Executive, fencing is necessary to ensure the effective operation and integrity of the *scheduled drain*.

4.4 Access

The *Council's* Chief Executive may, by way of notice displayed on site, prohibit or restrict access to any *flood protection works*, if, in the opinion of the Chief Executive the restriction or prohibition is necessary to ensure the effective operation and integrity of the *flood protection works*.

5.0 APPLYING FOR AN APPROVAL

5.1 Approval

- a. An application to the *Council* for *approval* under this Bylaw shall be made in accordance with the Bylaw Approval Application Form (Appendix Two) and be accompanied by the prescribed fee;
- b. Any *approval* under this Bylaw may be granted on such conditions as the *Council* considers appropriate. When considering applications for *approval*, the *Council* shall have regard, but not be limited to, the following assessment criteria, in order to ensure the effective operation and integrity of the *flood protection works*:
 - Capacity
 - Stability, scour and erosion risk
 - Access for inspection and maintenance purposes
 - Duration of approval
 - Water quality
- c. If *Council* refuses an application for *approval*, the *Council* shall give written reasons for that decision.
- d. Every person to whom an *approval* is granted shall produce that *approval* for inspection on request by the *Council*.

5.2 Fees

- a. The *Council* may, by using the special consultative procedure in Section 83 of the Local Government Act 2002, prescribe any fee payable by any person who applies for an *approval* under this Bylaw.
- b. The *Council* may, in such situations as the *Council* may determine, refund, remit, or waive the whole or any part of any fee payable under this Bylaw.

5.3 Objections Process

- a. Any person who applies for *approval* under this Bylaw, within 20 working days of receiving any decision or *approval* in relation to this Bylaw, may object in writing to the *Council* in regard to that decision or *approval*. Objections to a decision or *approval* are limited to a refusal of the *approval* or the conditions placed on the *approval* and must state the reasons for the objection.
- b. The *Council* may uphold, amend or rescind the decision or *approval*, and in making its determination must have regard to:
 - i. the evidence on which the decision or *approval* was based;
 - ii. the matters presented in support of the objection; and
 - iii. any other relevant matters.
- c. The *Council* must, as soon as practicable, give written notice to the applicant, including the reasons for that determination.

6.0 COMPLIANCE AND ENFORCEMENT

6.1 Revocation of Approval

- a. The *Council* may, in accordance with this clause, revoke any *approval* granted under this Bylaw, if the holder of the *approval* contravenes or fails to comply with any condition of the *approval*.
- b. Subject to 6.1(d), before revoking any *approval*, the *Council* shall give written notice to the holder of the *approval* that the *Council* may revoke the *approval* which:
 - i. sets out the matters in which the holder has contravened or failed to comply with any condition of the *approval*; and
 - ii. if the breach or failure is capable of remedy, gives the holder a reasonable time within which to remedy it; and
 - iii. warns the holder that the *Council* may revoke the *approval* if the holder does not either:
 1. remedy the breach or failure within the time specified or within such further time as the *Council* may allow on application; or
 2. make, within 20 working days, a written submission to the *Council* setting out reasons why the *approval* should not be revoked.
- c. On receipt of a request by the holder for further time pursuant to clause 6.1(a)(iii)(1), or of a submission pursuant to clause 6.1(a)(iii)(2), the *Council* may at its sole discretion:
 - i. grant the further time sought; or
 - ii. accept the submission made (as the case may be); or
 - iii. or revoke the *approval*.
- d. *Council* may revoke *approval* to obtain immediate efficacy and effectiveness of the *flood protection works* or in the event of pending or current flood events.
- e. Nothing in this clause applies to a revocation of *approval* under clause 6.1(d).

6.2 Offence

- a. Every person commits an offence against this Bylaw who -
 - i. Commits a breach of clauses 3 or 4 of this Bylaw;
 - ii. Causes or permits to be done anything in contravention of clauses 3 or 4 of this Bylaw;
 - iii. Omits to do anything required by this Bylaw or the conditions of the relevant *approval*;
 - iv. Fails to comply with any written notice served under this Bylaw.
- b. Every person who commits an offence against this Bylaw is liable to the penalties prescribed by section 242 of the Local Government Act 2002.

6.3 Notice to Remedy

The *Council* may, by written notice, require any mitigation or remediation considered necessary by *Council*, in relation to the contravention of clauses 3 or 4, or the conditions of the relevant *approval*, in the time, and in the manner stated in the notice, at the cost of the *owner*.

6.4 Removal of Works

The *Council*, or any agent of the *Council*, may remove or alter any work or any thing, constructed or being in contravention of any provision of this Bylaw, or any conditions of an *approval*, and may recover the costs incurred by the *Council* in connection with the removal or alteration.

The undertaking of this action shall not relieve any person from liability to any penalty incurred by reason of the breach.

FIRST SCHEDULE

Scheduled Drains and Overland Flow Paths

Maps of *scheduled drains* and *overland flow paths* owned by or under the control of the *Council*, to which this Bylaw applies.

- ▶ Lower Clutha Scheduled Drains
- ▶ Tokomairiro Scheduled Drains
- ▶ East Taieri Scheduled Drains and Overland Flow Paths
- ▶ West Taieri Scheduled Drains and Overland Flow Paths



Map Scale @ A2: 1:50,000

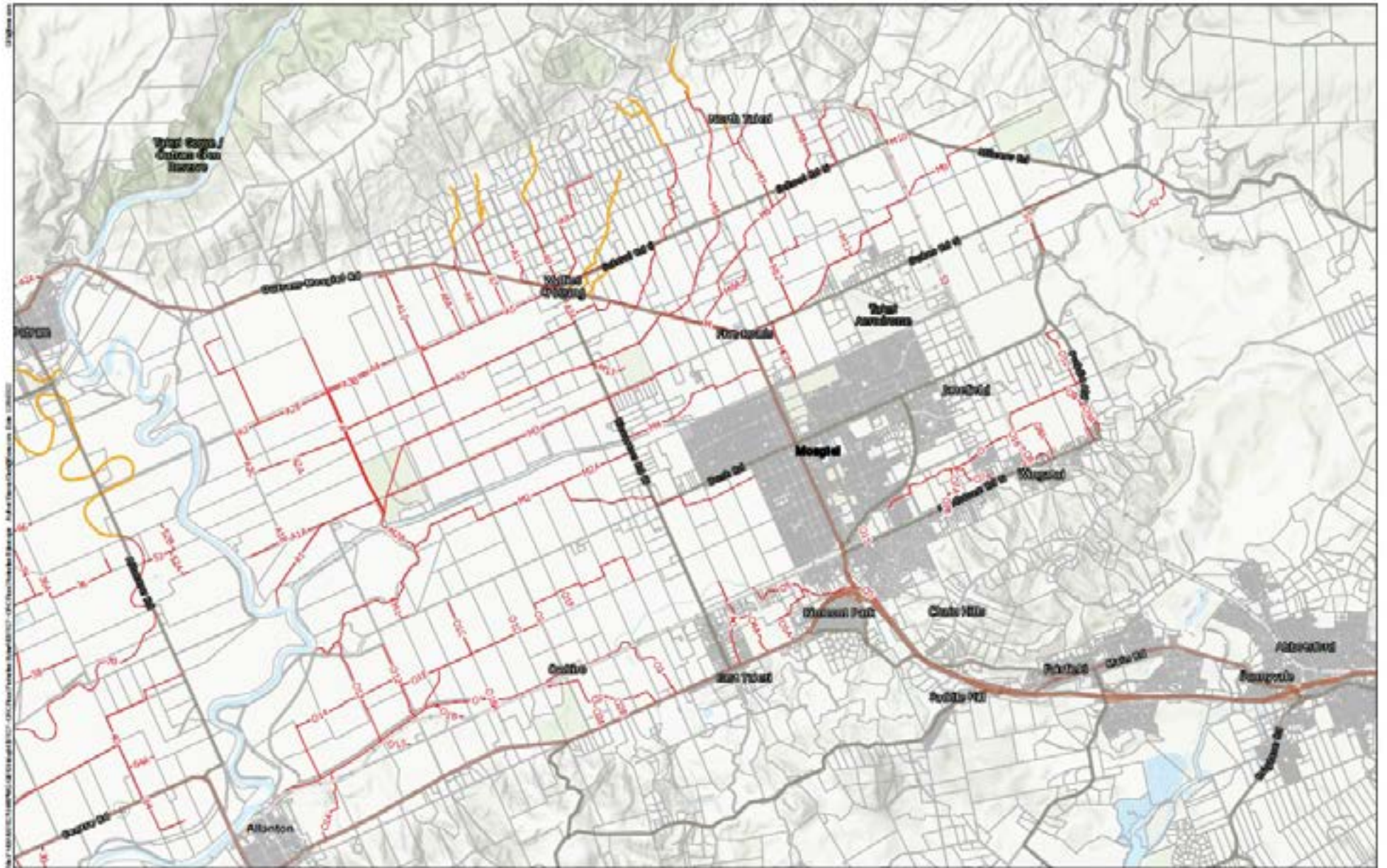
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First Schedule
Lower Clutha Scheduled Drains

Legend

- Scheduled Drains
- NZ Primary Land Parcels

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First Schedule

East Taieri Scheduled Drains and Overland Flow Paths

Legend

- Scheduled Drains
- Overland Flow Paths
- NZ Primary Land Parcels

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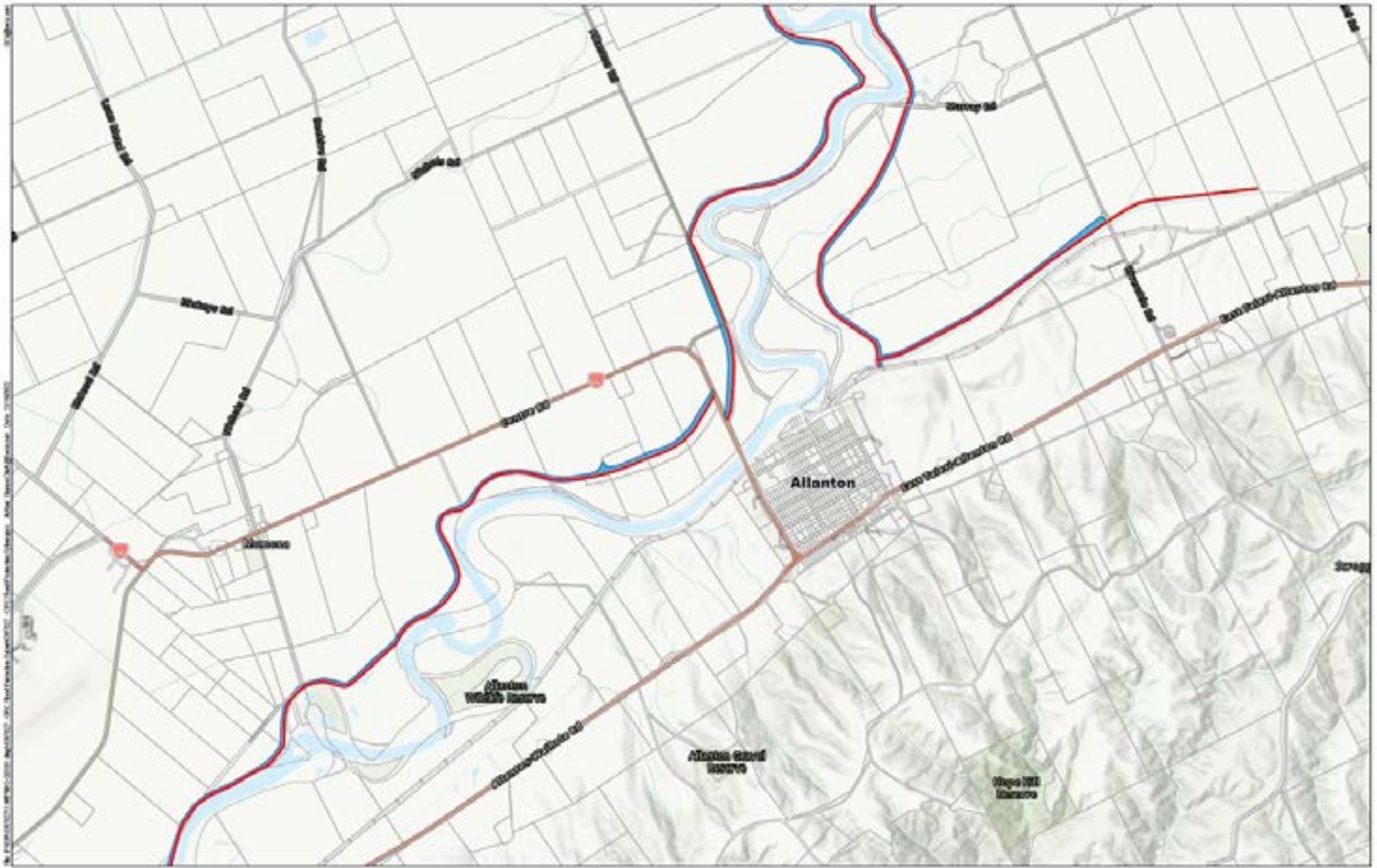
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SECOND SCHEDULE

Defences Against Water and Excavation - Sensitive Areas

Maps of *defences against water* and *excavation-sensitive areas* owned by or under the control of the *Council*, to which this Bylaw applies.

- ▶ Lower Clutha Defences Against Water
- ▶ Lower Taieri Defences Against Water and Excavation-Sensitive Areas
- ▶ Leith Lindsay Defences Against Water
- ▶ Alexandra Defences Against Water
- ▶ Albert Town Defences Against Water



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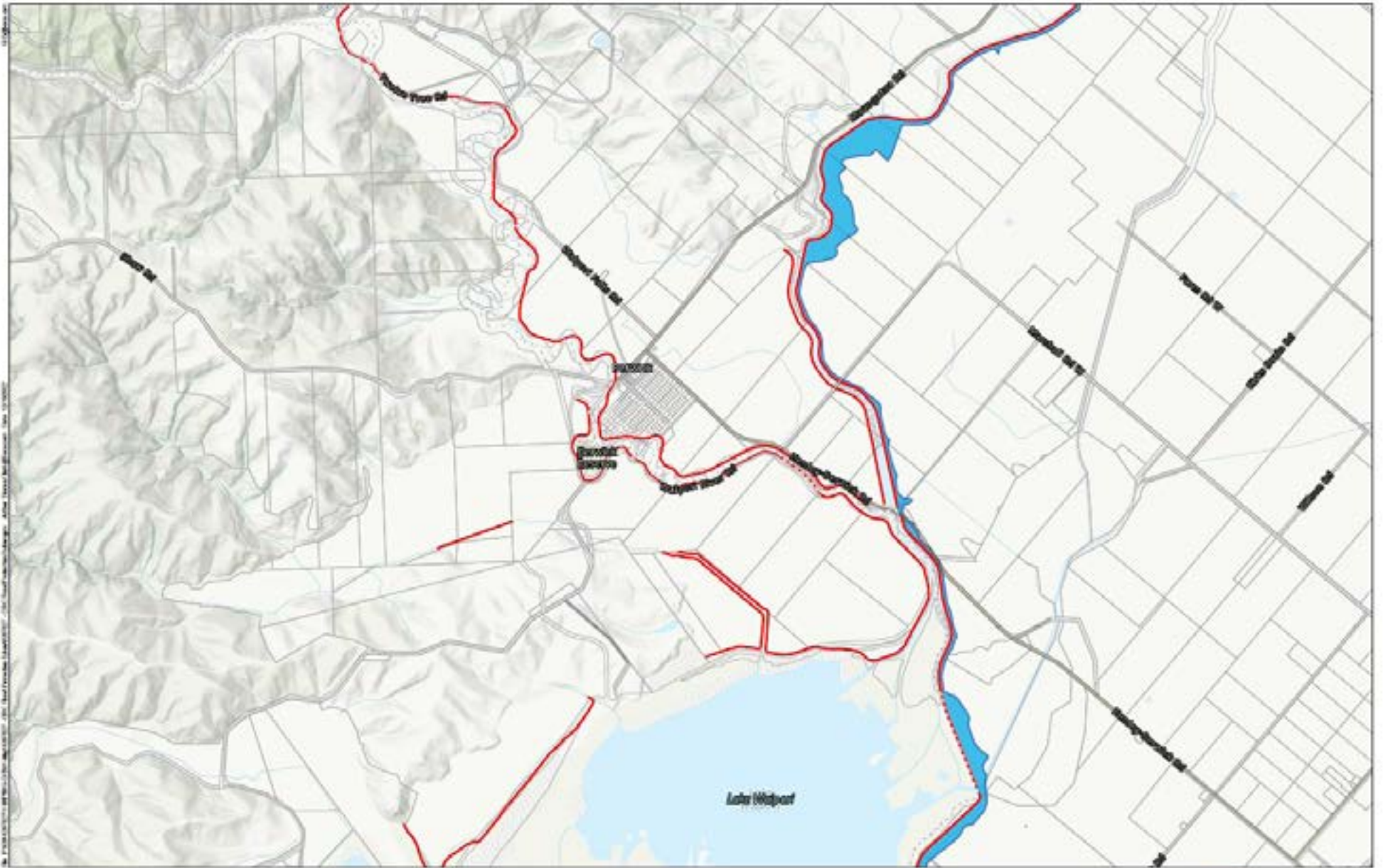
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Second Schedule
Lower Taieri Defences Against Water
Sheet 4

Legend

- Defence Against Water
- Excavation Sensitive Area
- NZ Primary Land Parcels

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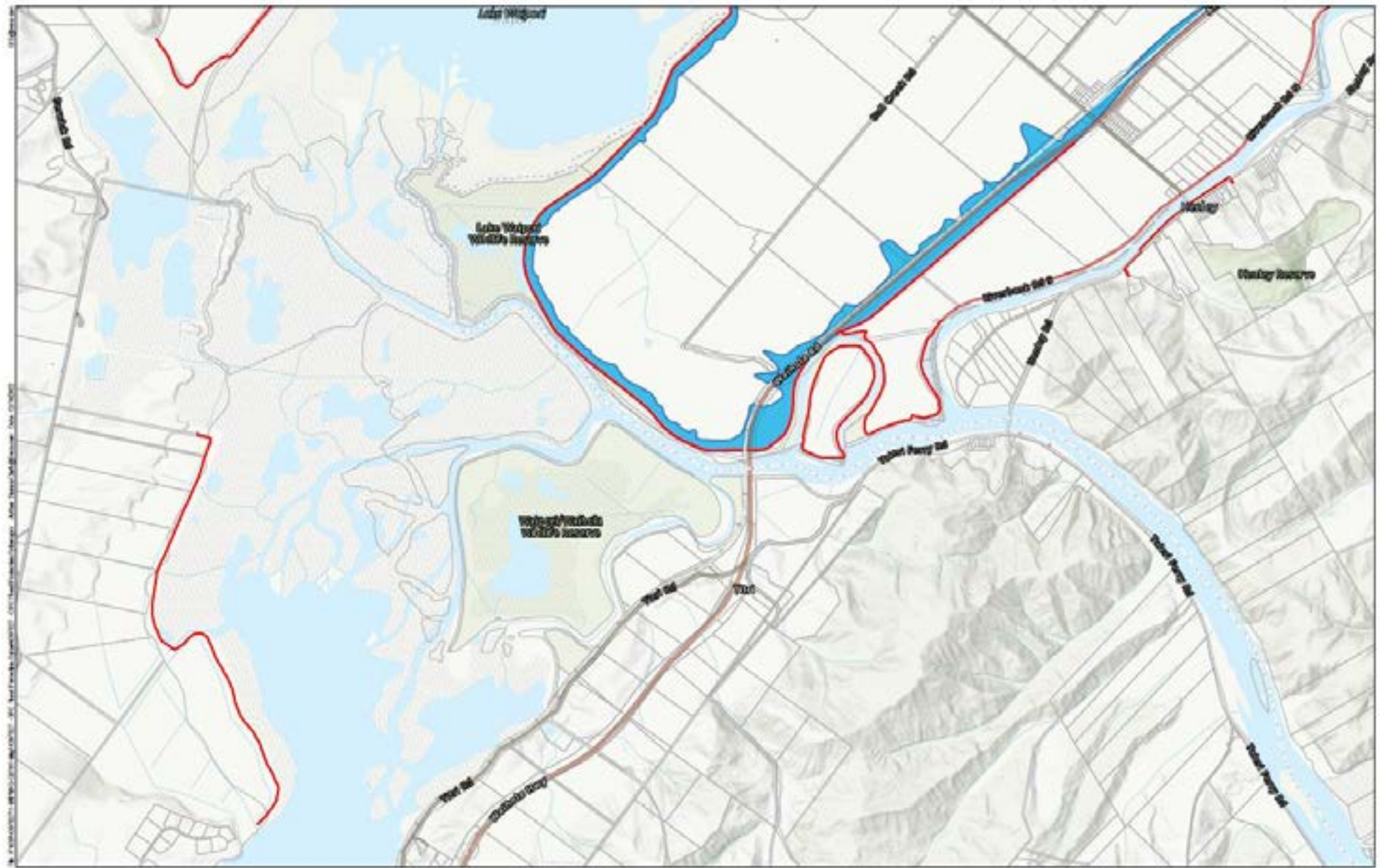
Second Schedule
Lower Taieri Defences Against Water
Sheet 5

Legend

- Defence Against Water
- Excavation Sensitive Area
- NZ Primary Land Parcels

 Otago Regional Council

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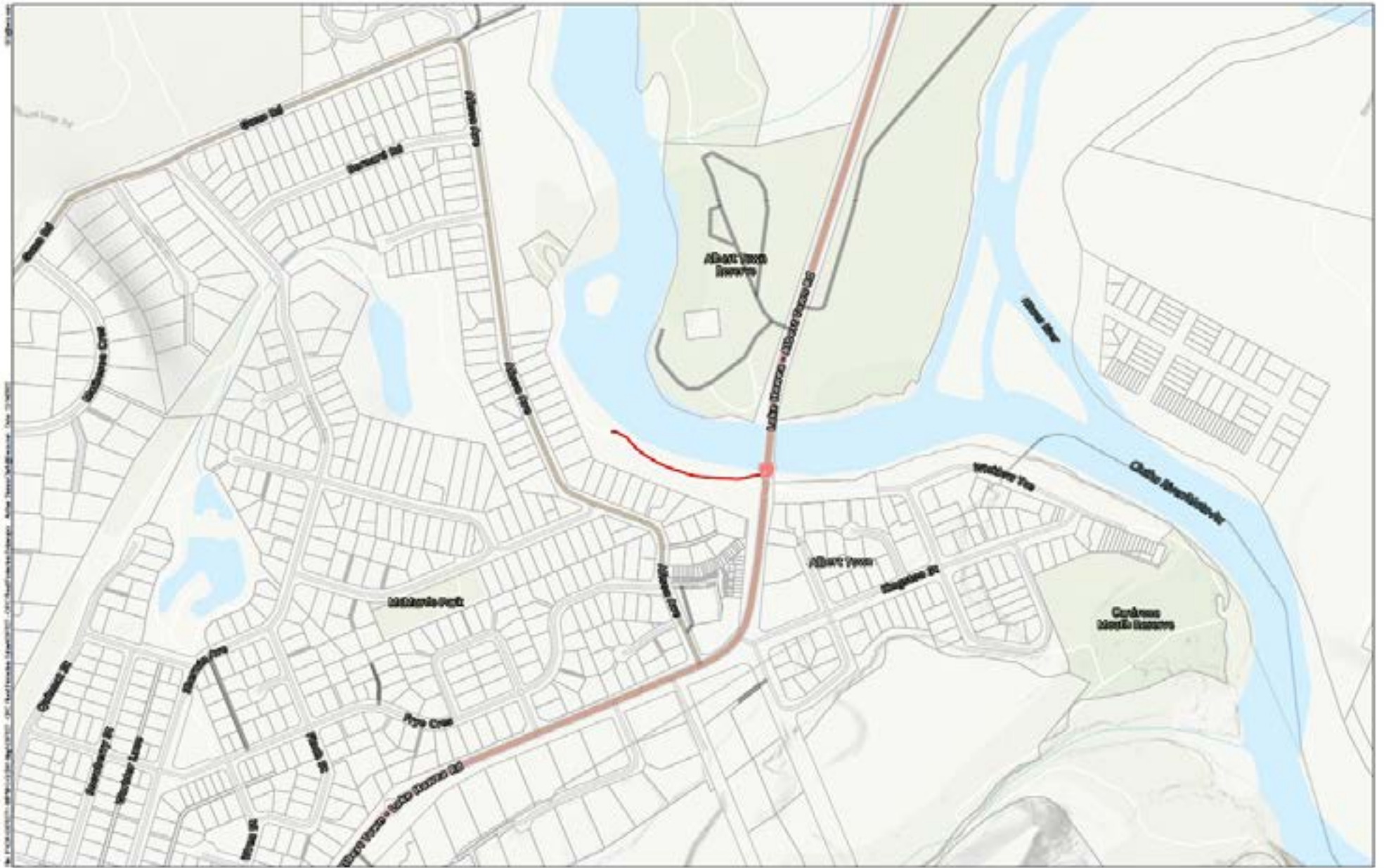


Second Schedule
 Lower Taieri Defences Against Water
 Sheet 7

- Legend**
- Defence Against Water
 - Excavation Sensitive Area
 - NZ Primary Land Parcels



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Map Scale @ A2: 1:5,000

500
Metres

Second Schedule
Albert Town Defences Against Water

Legend

- Defence Against Water
- NZ Primary Land Parcels



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THIRD SCHEDULE

Floodways

Descriptions and maps of *floodways* owned by or under the control of the *Council*, to which this Bylaw applies.

- ▶ Lower Clutha Floodway
- ▶ Lower Taieri (Upper Pond) Floodway
- ▶ East Taieri Silver Stream Floodway
- ▶ Lower Taieri River Floodway
- ▶ Miller Road and Otokia Road Contour Channel Floodways
- ▶ Hendersons and Waikoura Creeks Floodway
- ▶ Hilderthorpe Floodway

Lower Clutha Floodway

This channel provides flood relief to Balclutha, shortening the flow path of the Koau branch between the Bifurcation (point at which the Clutha splits into the Koau and Matau branches) and Finegand. It runs in a SSE direction, is approximately 500 m wide and 1.9 km long. The floodway is grass-lined (pastoral farmland when not in operation) with floodbanks on either side and a lower height sill at the bottom end (to prevent the bottom end being drowned in river flows less than the operating threshold).

Lower Taieri (Upper Pond) Floodway

The Lower Taieri Flood Protection Scheme incorporates two flood storage ponds designed to maximise the peak flow the Scheme can accommodate. The northern most pond (upper pond) has a defined spill point from the Taieri River. A demountable barrier structure (with collapsible props) gives some control to the discharge but most of the spillway is 'uncontrolled' (flatter riverward batter and a steeper landward batter lined with rock, with concrete grouting). Although not physically delineated, the area of pastoral farmland between the spillway and Riverside Road conveys flow spilled from the Taieri River to the upper ponding area.

East Taieri Silver Stream Floodway

Although not physically delineated, this floodway encompasses an area adjacent to the Silver Stream (Gordon Road) Spillway. This floodway conveys flow spilled from the Silver Stream which eventually discharges to the Upper Ponding Area via gated culverts through the cut-off bank.

The Silver Stream (Gordon Road) Spillway is a lowered section (approximately 1km long) of the true right Silver Stream floodbank between Gordon Road and Riccarton Road. This section is a design feature of the Lower Taieri Flood Protection Scheme. It is designed to mitigate the flood risk for Mosgiel (protected by the true left floodbank) by allowing spilling over the true right floodbank.

Lower Taieri River Floodway

The Taieri River Floodway defines the area of river berm between Allanton and the Waipori River confluence that assists with the conveyance of flood flows. The true left extent of the floodway between Allanton and the Waipori River confluence is defined by higher ground (lower than the opposite bank floodbank crest level). The true right side of the river from Otokia to the Waipori River confluence is defined by floodbanks or elevated sections of State Highway 1 (locally known as the “Flood Free Highway”).

Miller Road and Otokia Road Contour Channel Floodways

Two uncontrolled spillways are located on the Contour Channel left bank, one just upstream of Miller Road and one immediately downstream of Otokia Road. These spillways consist of a lowered (relative to adjoining sections) section of Contour Channel floodbank. Thus when the water level in the Contour Channel reaches the spillway crest level, spill will begin automatically. The spilled water occupies the floodways before reaching the old course of Lee Creek (now a scheduled drain). This water eventually reaches the Waipori pump station and is discharged into Lake Waipori.

Hendersons and Waikoura Creeks Floodway

The Hendersons and Waikoura Creeks floodway consists of artificially constructed channels designed to collect flood flows on the north-eastern side of Georgetown-Pukeuri Road (SH83) and convey them to the Waitaki River during significant rainfall events. This floodway is not part of a wider flood protection scheme.

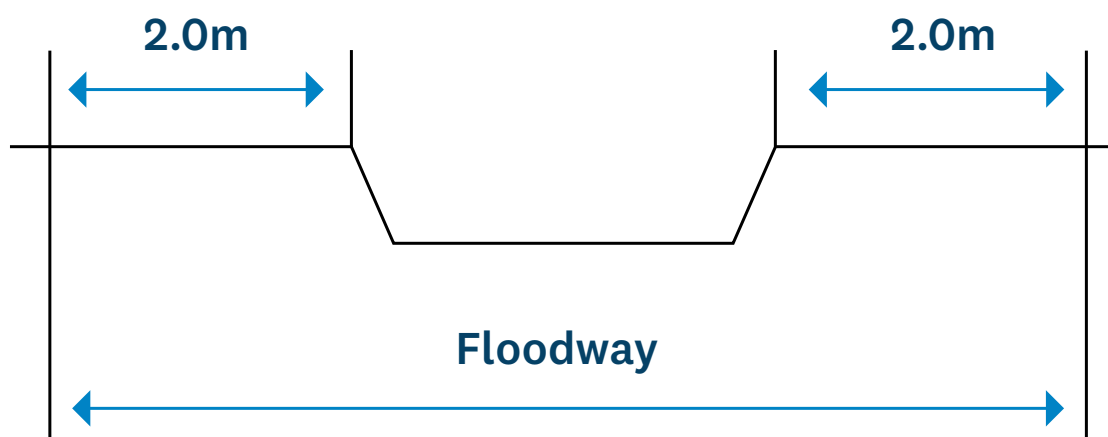
The floodway starts at the artificially constructed sections of the creeks and join at Irvine Road where combined, they follow Irvine Road for approximately 800 metres then follow Jardine Road for about 2,500 metres before entering the Waitaki River through a drop structure.

Hilderthorpe Floodway

The Hilderthorpe Floodway is a channel, both natural and artificially constructed, designed to convey overland flow from Gray Road to the Hilderthorpe Race alongside Steward Road during significant rainfall events. This floodway is not part of a wider flood protection scheme.

The natural sections of the channel follow the course of a paleochannel.

The map indicates the extent of the Hilderthorpe floodway. The general cross section of the Hilderthorpe floodway is shown below.



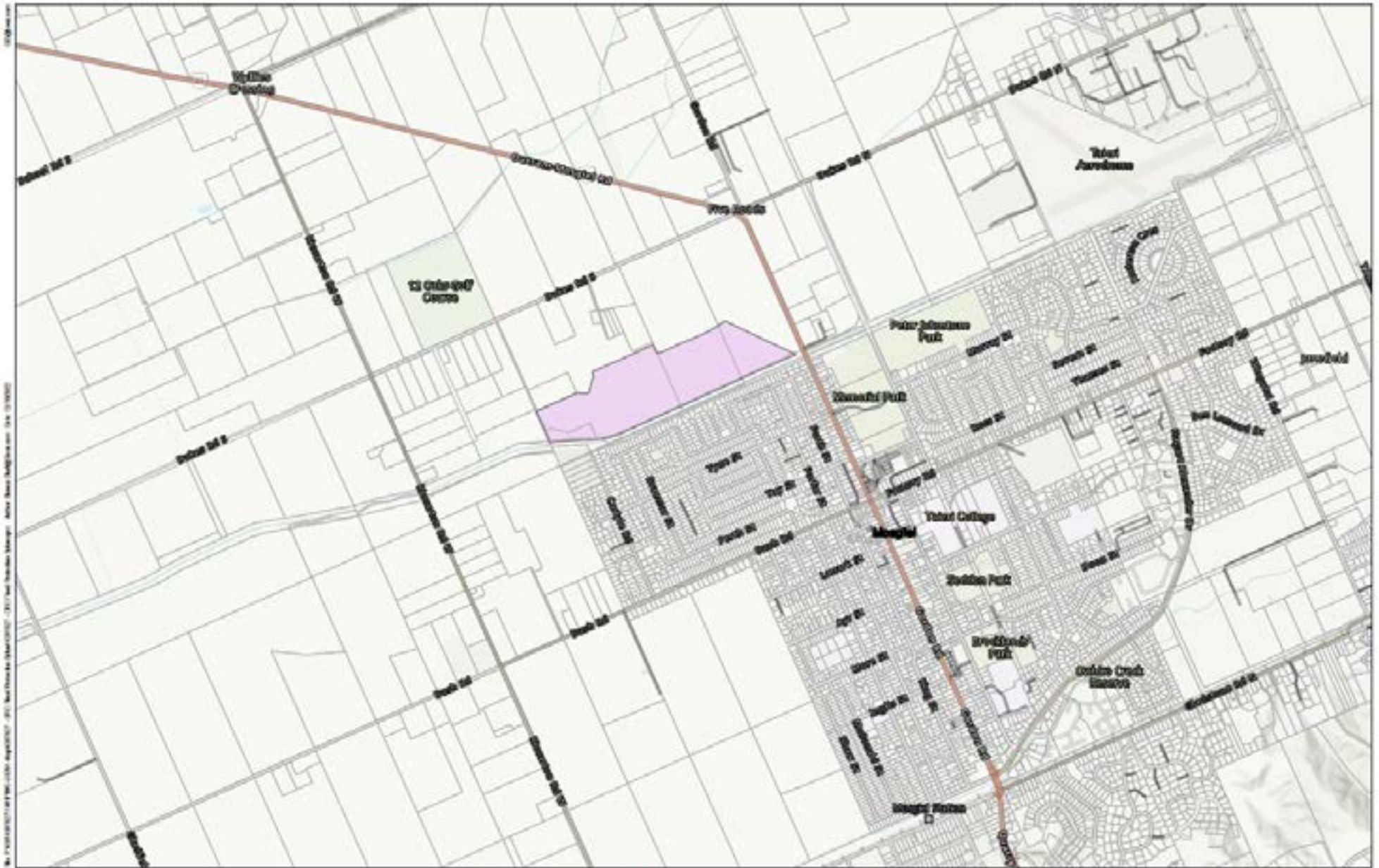


Third Schedule
Riverside Road Floodway

- Legend**
- Floodway
 - NZ Primary Land Parcels



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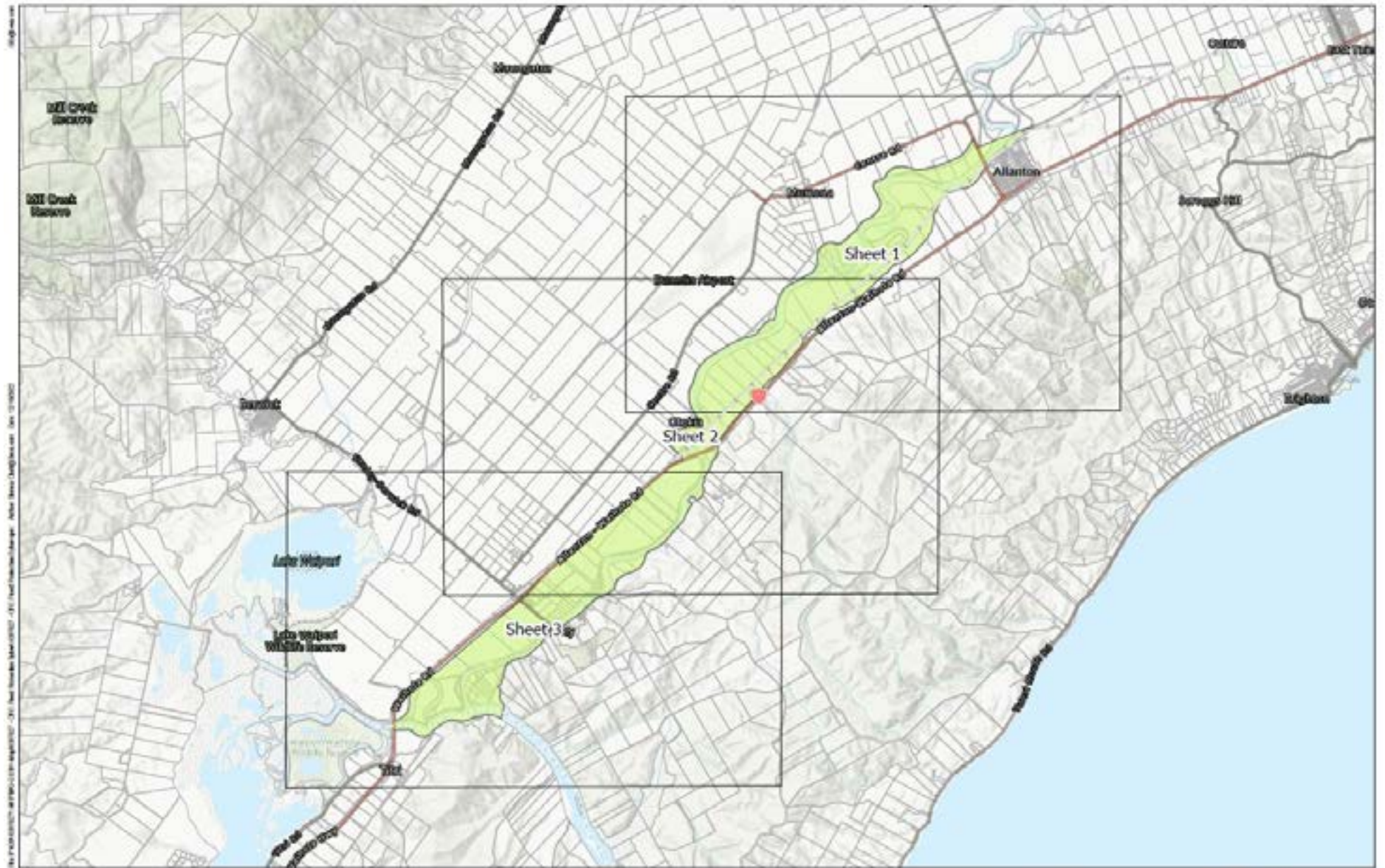


Third Schedule
Gordon Road Floodway

- Legend**
- Floodway
 - NZ Primary Land Parcels



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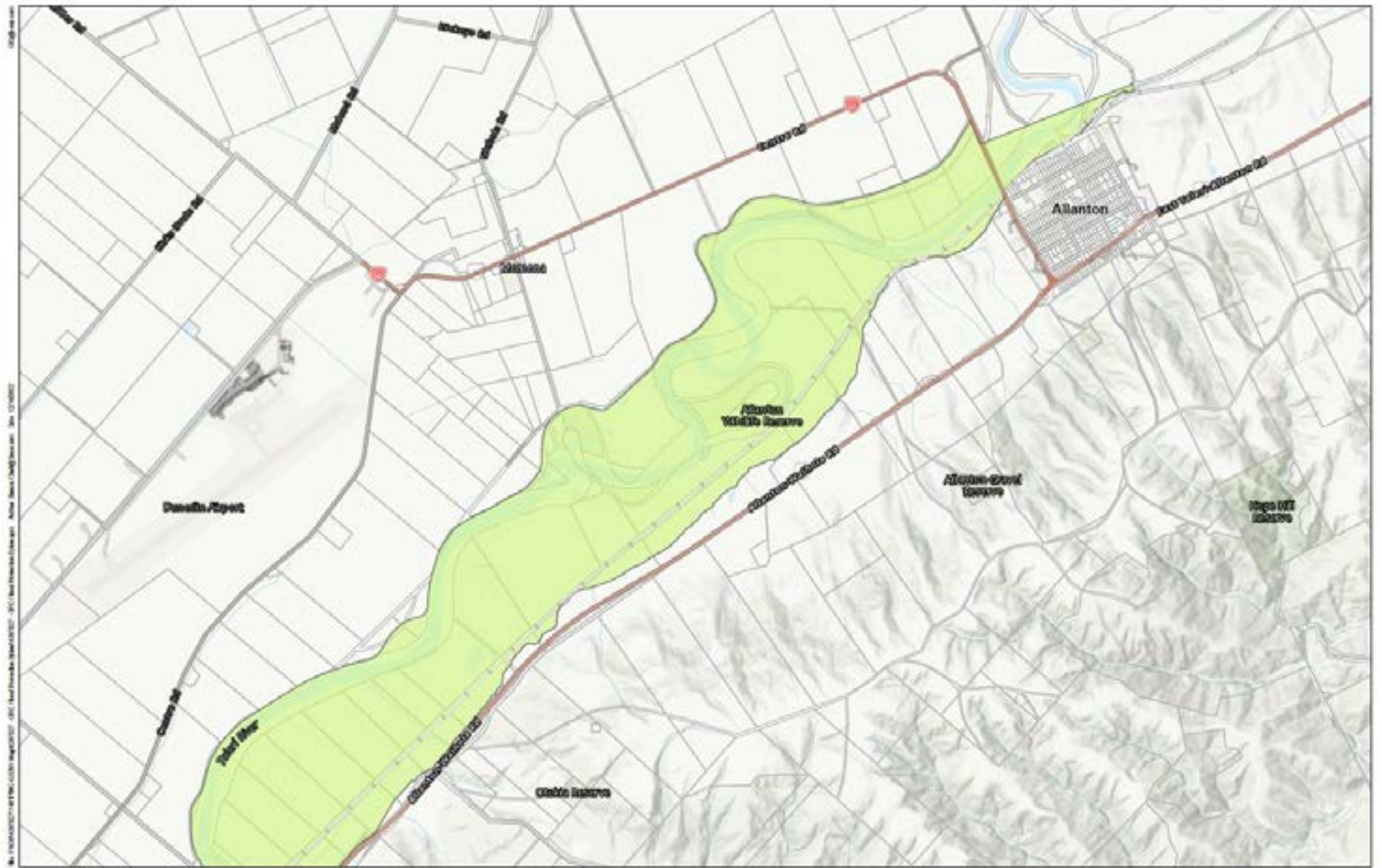
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 0.5
 Kilometres

Third Schedule
 Lower Taieri River Floodway
 Overview

Legend
 Floodway
 NZ Primary Land Parcels



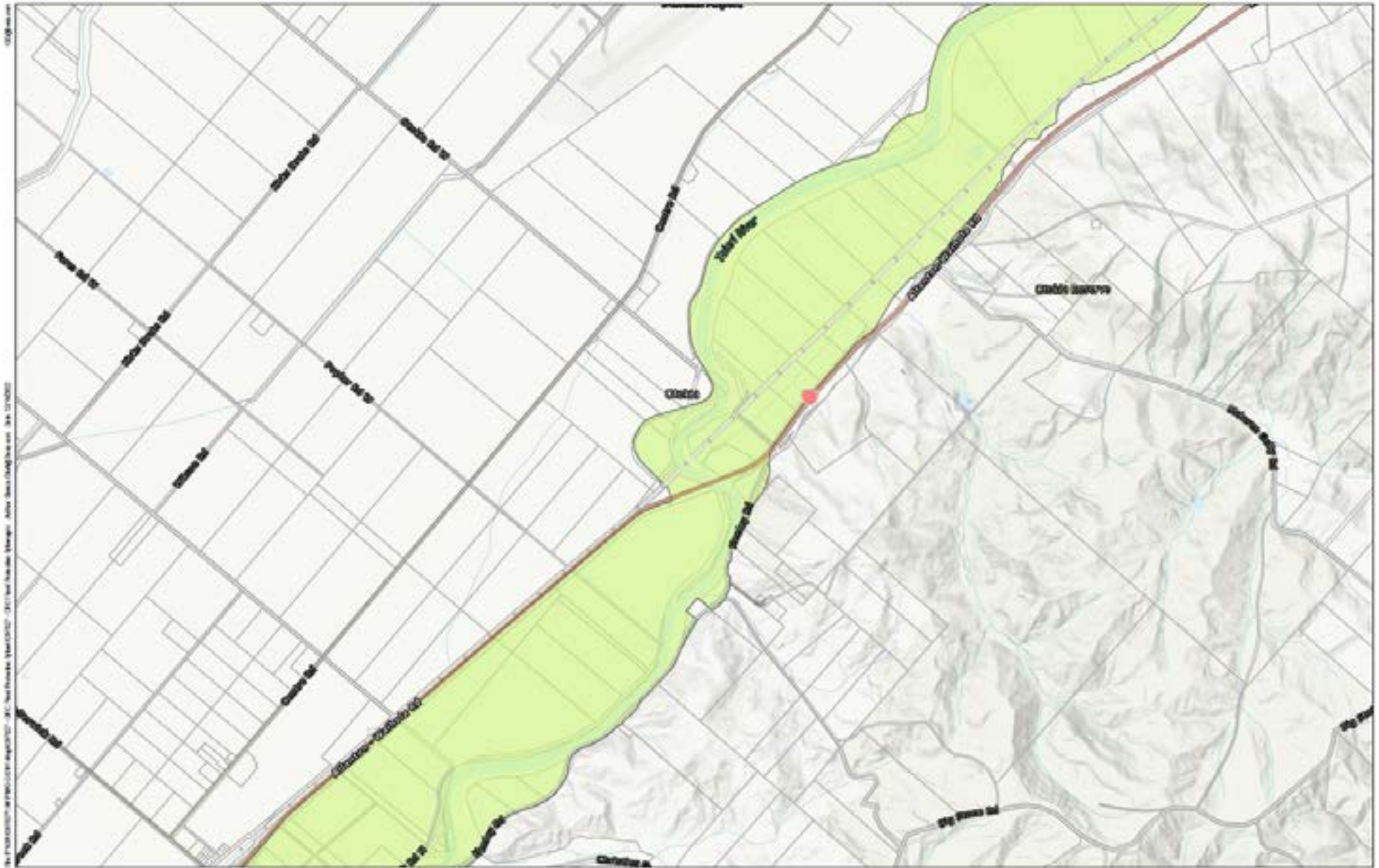
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Map scale @ A2: 1:20,000
 0.5
 Kilometres

Third Schedule
 Lower Taieri River Floodway
 Sheet 1

Legend
 Floodway
 NZ Primary Land Parcels



Map Scale @ A2: 1:20,000
 0.5
 Kilometres

Third Schedule
 Lower Taieri River Floodway
 Sheet 2

Legend
 Floodway
 NZ Primary Land Parcels



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Map Scale @ A1: 1:5,000

0.5
Kilometres

Third Schedule
Otokia Road Contour Channel Floodway

Legend

- Floodway
- NZ Primary Land Parcels

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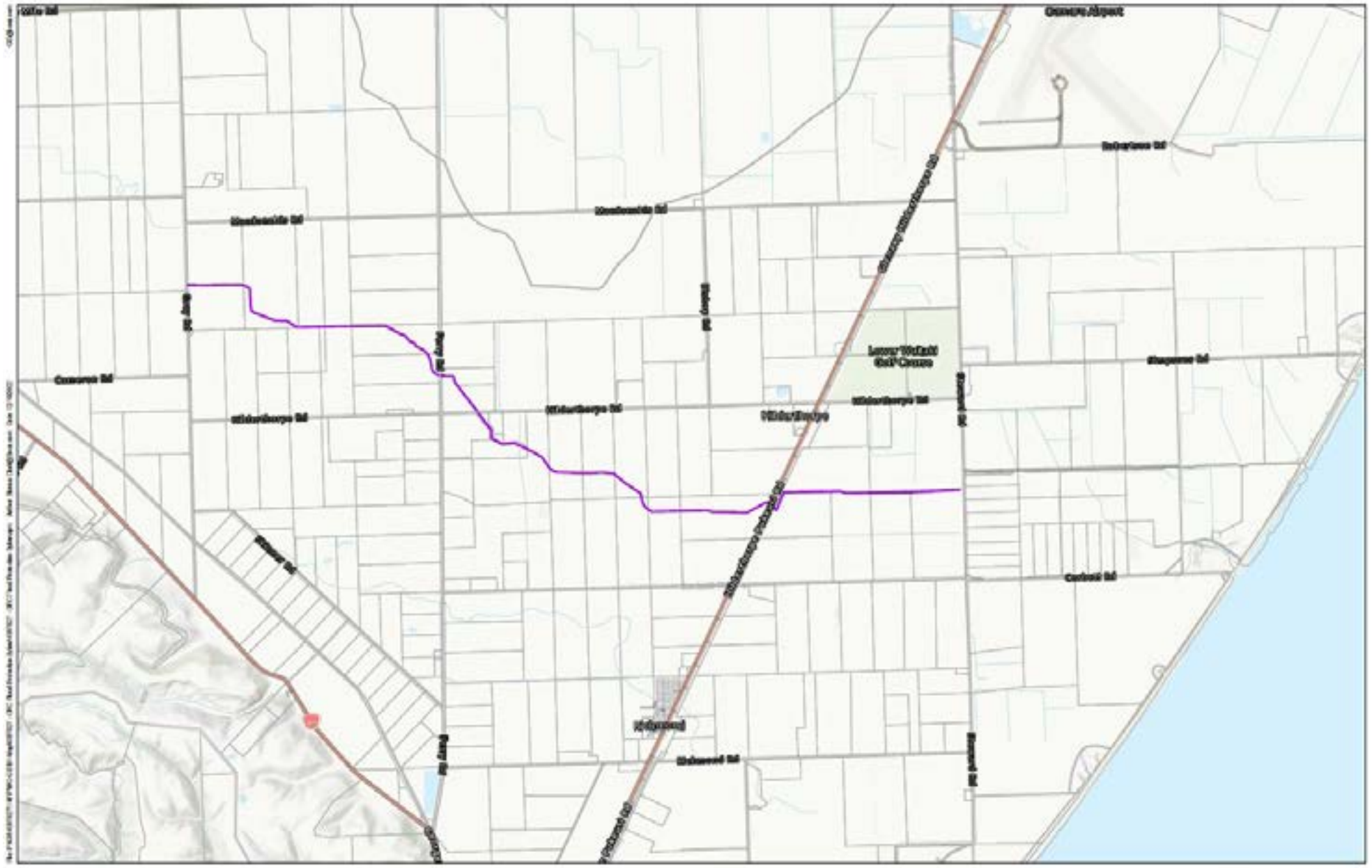


Map Scale @ A2: 1:50,000
 0.5 Kilometres

Third Schedule
 Henderson and Waikoura Creeks Floodway

Legend
 Floodway
 NZ Primary Land Parcels

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Map Scale @ A2: 1:25,000

0.5 Kilometres

Third Schedule
Hilderthorpe Floodway

Legend

- Floodway
- NZ Primary Land Parcels

Otago Regional Council

FOURTH SCHEDULE

Groynes, Cross-Banks, Training Line and Flood Protection Vegetation

Maps of groynes, cross-banks, training line and flood protection vegetation owned by or under the control of the *Council*, to which this Bylaw applies.

- ▶ Lower Waitaki River Groynes, Cross-Banks and Flood Protection Vegetation
- ▶ Shotover River Training Line and Flood Protection Vegetation




Fourth Schedule
Groyne, Cross-bank and Flood Protection Vegetation Boundary
Lower Waitaki Overview

Map Scale @ A2: 1:62,000

● 500
Metres

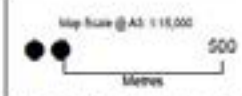
Legend

- Groyne
- Cross-bank
- Flood Protection Vegetation Boundary
- NZ Primary Land Parcels
- Regional Council Boundaries



Otago
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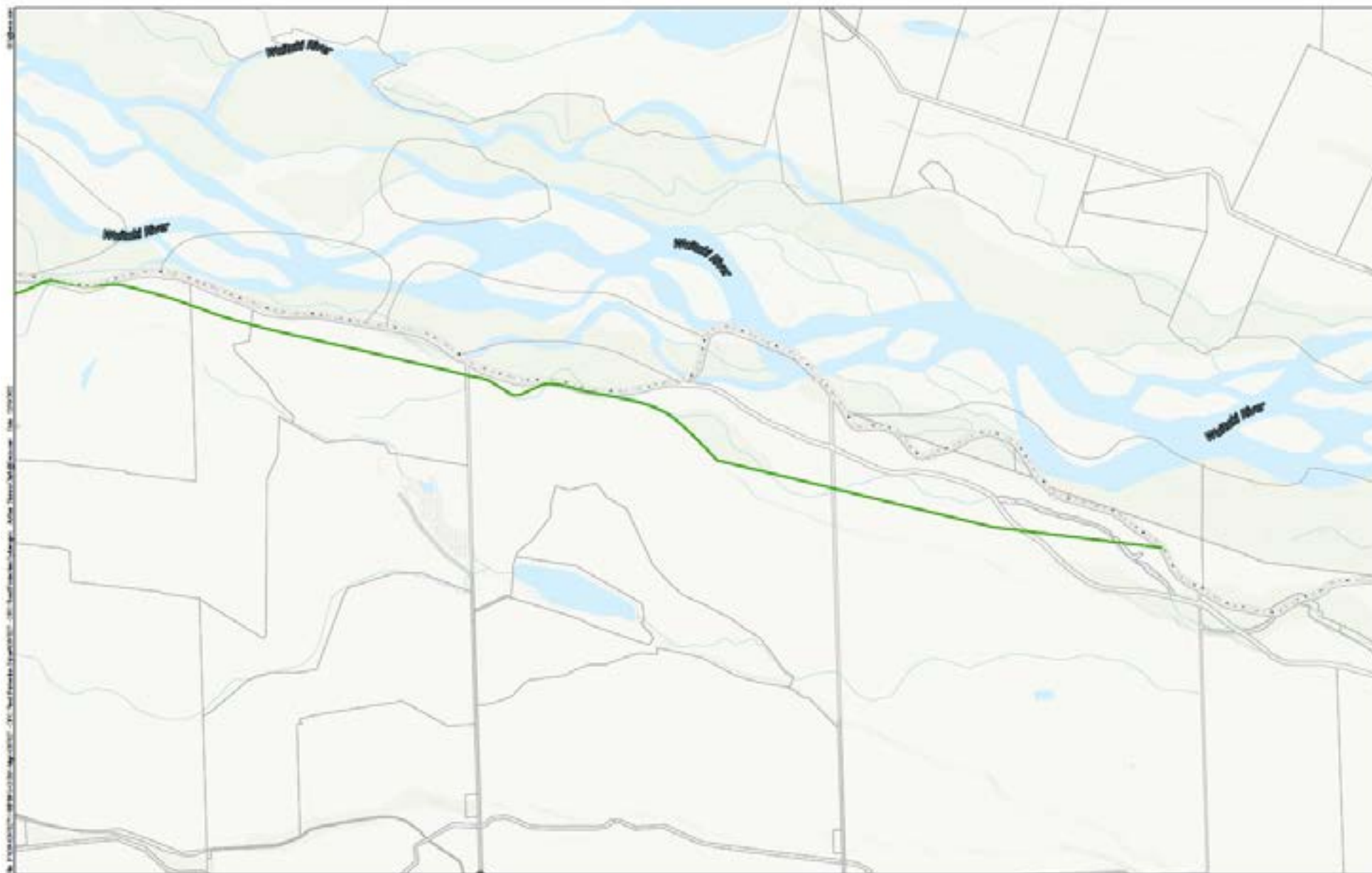


Fourth Schedule
Groynes, Cross-banks and Flood Protection Vegetation Boundary
Lower Waitaki Sheet 2

- Legend**
- ▬ Groynes
 - ▬ Cross-banks
 - ▬ Flood Protection Vegetation Boundary
 - NZ Primary Land Parcels
 - Regional Council Boundaries



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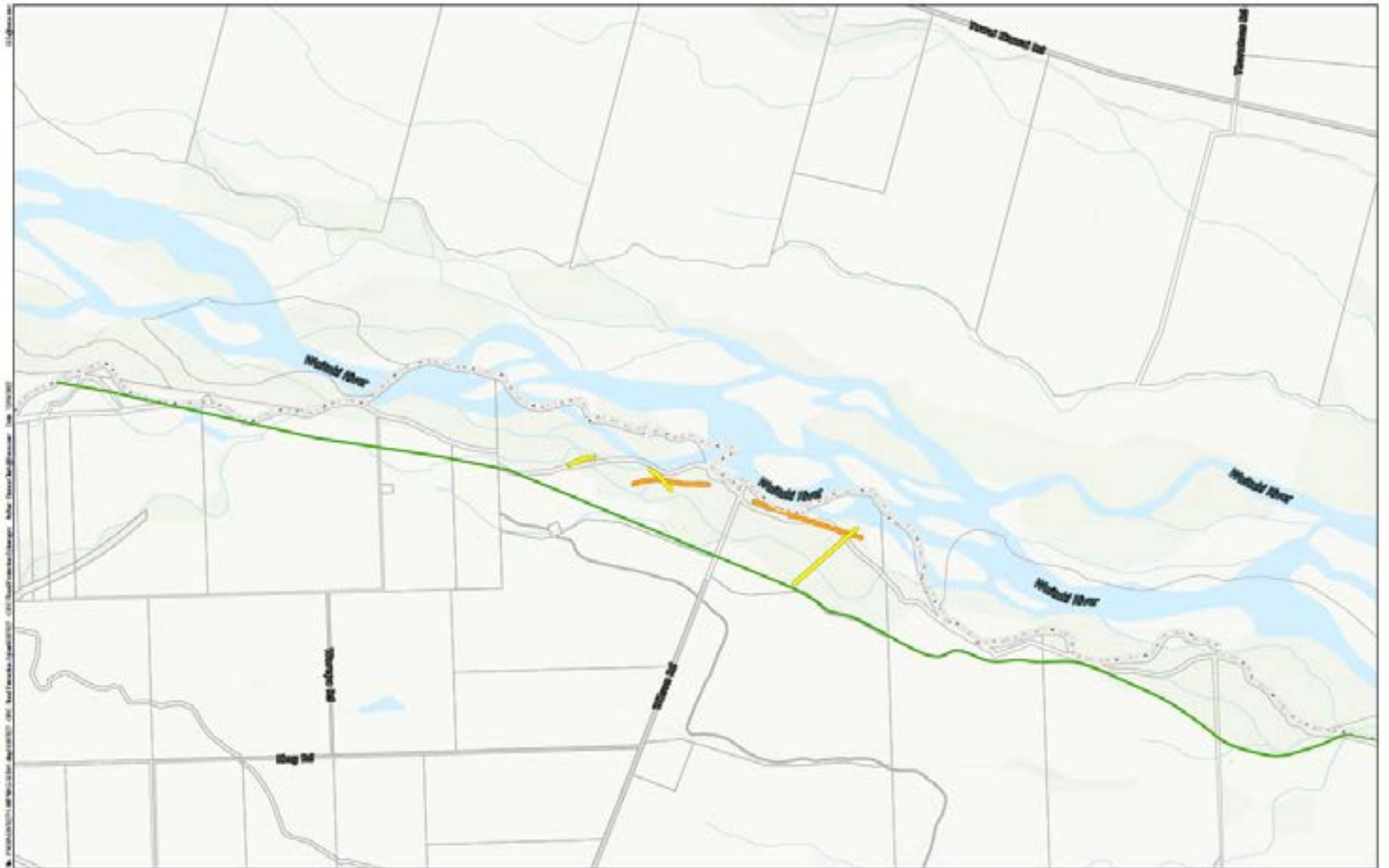


Fourth Schedule
 Groynes, Cross-banks and Flood Protection Vegetation Boundary
 Lower Waitaki Sheet 3

- Legend**
- Flood Protection Vegetation Boundary
 - NZ Primary Land Panels
 - Regional Council Boundaries



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Map Scale @ A3: 1:10,000

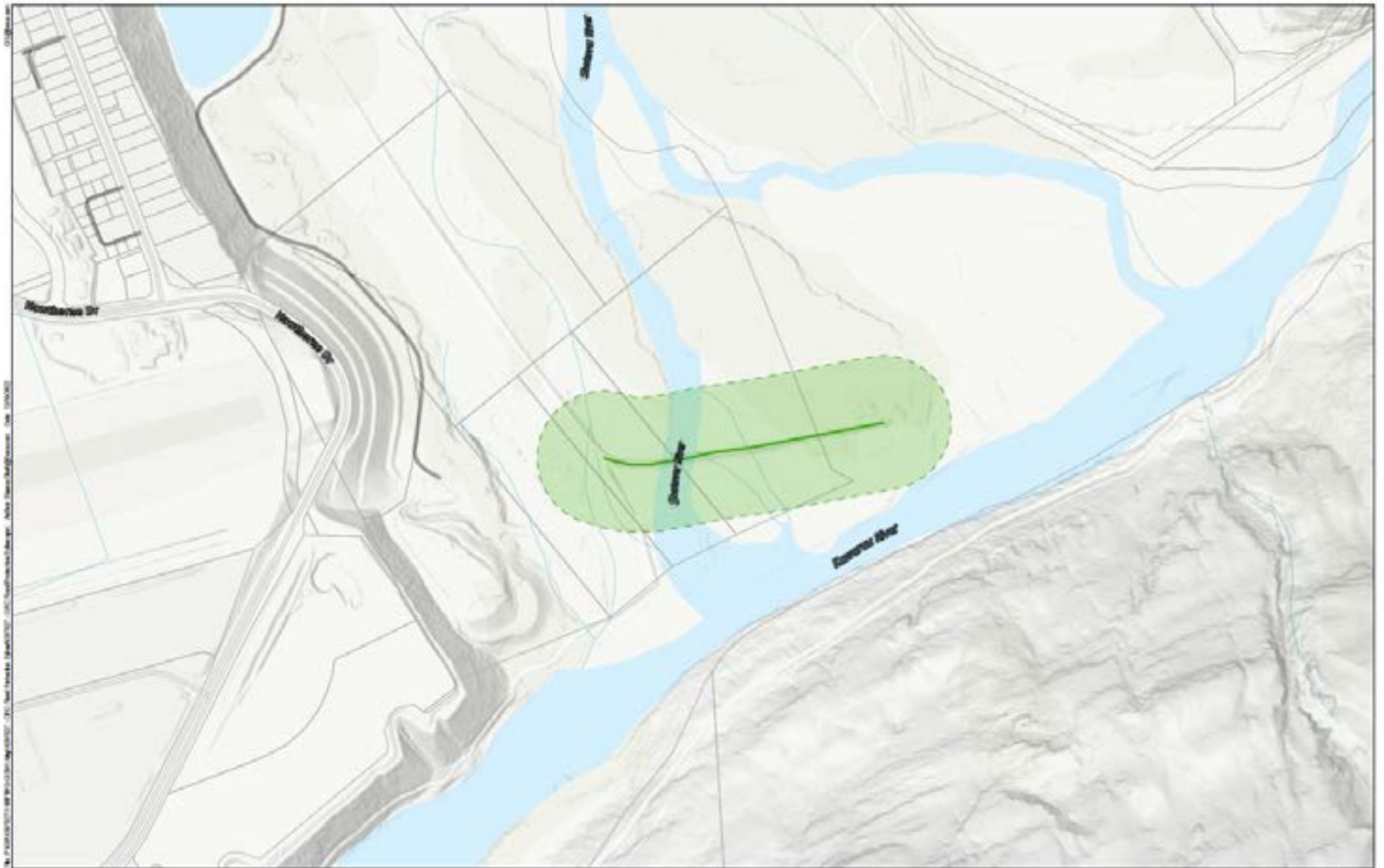
500 Metres

Fourth Schedule
Groynes, Cross-banks and Flood Protection Vegetation Boundary
Lower Waitaki Sheet 4

Legend

- Groynes
- Cross-banks
- Flood Protection Vegetation Boundary
- NZ Primary Land Parcels
- Regional Council Boundaries

Otago Regional Council



Map Scale @ A3: 1:5,000

500
Metres

Fourth Schedule

Training Line and Flood Protection Vegetation Boundary Shotover

Legend

- Shotover Training Line
- Flood Protection Vegetation Boundary
- NZ Primary Land Parcels
- Regional Council Boundaries

Otago Regional Council

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APPENDIX ONE

Diagrams referencing Activities requiring Bylaw Approval

Note: These diagrams are for illustrative purposes and are not to scale.

Figure 1: Scheduled drains and overland flow paths

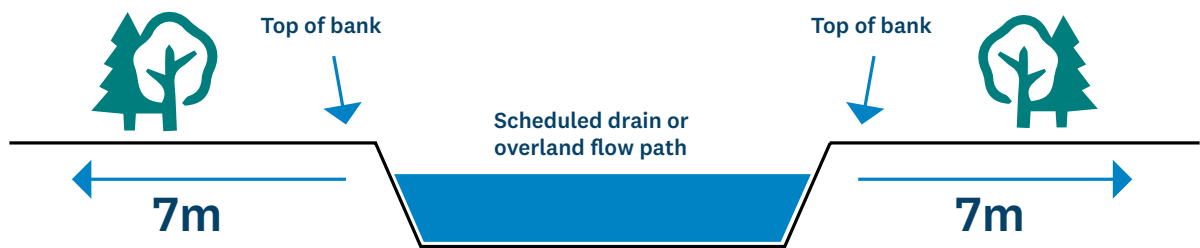


Figure 2: Defences against water - floodbank

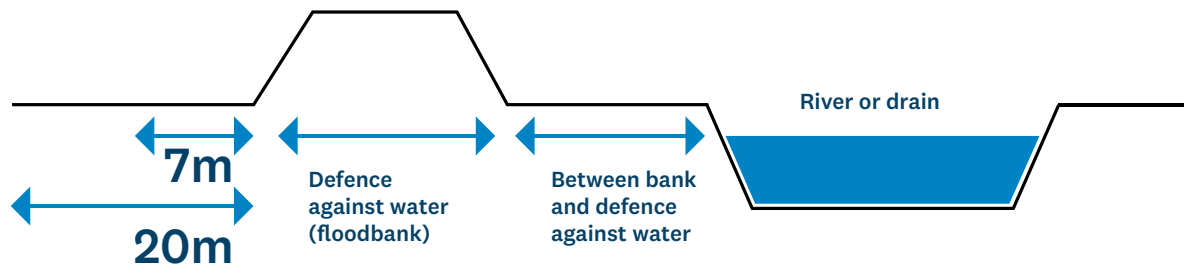
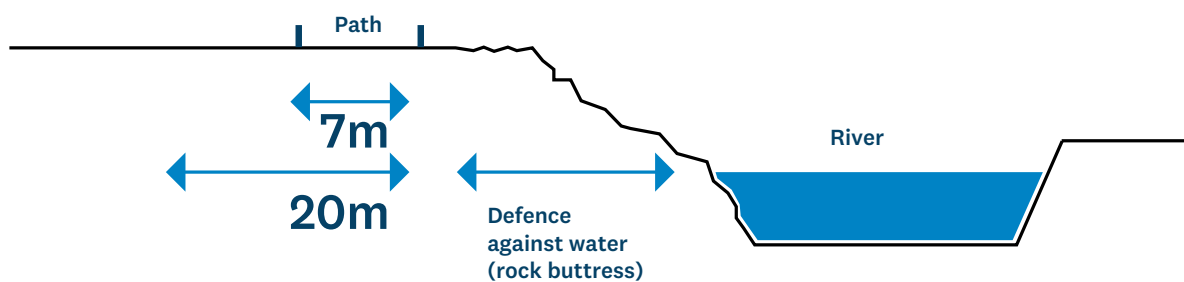


Figure 3: Defences against water – rock buttress



APPENDIX TWO



Bylaw Approval Application Form

1. Applicant(s) Details

Name:

Organisation name (if applicable):

Are you: the owner an occupier agent on behalf

Key contact details for applicant:

Postal Address

.....

Post Code

Phone Number Business Mobile

Email Address

Key contact details for consultant (if applicable):

Postal Address

.....

Post Code

Phone Number Business Mobile

Email Address

2. Property to which this Bylaw Approval relates

Property Address

.....

Legal description:

Co-ordinates (NZTM 2000): Northing Easting

3. Clause(s) of the Bylaw to which this Approval relates

.....

.....

.....

.....

6. Assessment against the assessment criteria



Please assess the effects of the proposed works against the following assessment criteria.

Capacity:

Stability, scour and erosion risk:

Access for inspection and maintenance purposes:

Water quality:

Duration of approval sought

Proposed start date: -----

Proposed end date: -----

Signed ----- **Dated** -----

Note:

It is the applicant's responsibility to ensure they have all the required permissions from Otago Regional Council and other regulatory agencies, such as District Councils, Department of Conservation, Heritage New Zealand Pouhere Taonga. Please contact these agencies to discuss your proposal.