



**ORDINARY MEETING OF THE
WATER RACE SUB-COMMITTEE
TO BE HELD IN THE
EXECUTIVE MEETING ROOM
ON MONDAY 12 NOVEMBER 2018
COMMENCING AT 12.30PM**

If you are unable to attend the meeting please advise the Secretary
maree.pycroft@selwyn.govt.nz or phone (03) 347-2891

AGENDA
OF THE WATER RACE SUB-COMMITTEE
EXECUTIVE MEETING ROOM
ON MONDAY 12 NOVEMBER 2018 – 12.30pm

Committee Members in Attendance

1. Nigel Barnett (Chairman)
2. Cr Pat McEvedy
3. Mike Chaffey (Ellesmere)
4. Harry Schat (Ellesmere)
5. Martin Le Comte (Paparua Water Race Irrigation User Group)
6. Tim Morris (Paparua)
7. Mike Mora (Christchurch City Council - representing Waimairi and Wigram Wards)
8. John Clarkson (Malvern)
9. John Shanks

In Attendance

1. Mayor Sam Broughton
2. Creagh Robinson, Accountant
3. Daniel Meehan, Surface Water Operations Engineer
4. James Skurupey, Surface Water Engineer
5. Maree Pycroft, Secretary

1. FISH SCREEN DRONE FOOTAGE

2. APOLOGIES

Cr Craig Watson
Kerry Pauling, Malvern Community Board representative
Murray England, Strategic Manager Water Services

3. IDENTIFICATION OF ANY EXTRAORDINARY BUSINESS

4. CONFLICT OF INTEREST

5. PUBLIC FORUM

Councillor Iaeen Cranwell, ECAN

6. CONFIRMATION OF MINUTES FROM THE MEETING HELD 20 AUGUST 2018

'That the Water Race Sub Committee confirms the minutes of the meeting of the Water Race Sub Committee held on Monday 20 August 2018'.

7. CORRESPONDENCE

7.1 Letter from Araawa Stud, 934 Leeston Dunsandel Road

Selwyn DC has given a water race rate rebate for a period not supplied with water. The water race is still not repaired. Closure cannot proceed as not all landowner's agreement signatures have been received. The water race is listed as an important mudfish habitat and ecological value.

7.2 Letter of Resignation from Clayton Fairbairn (Paparua)

For noting and vacancy to be discussed under 8. Terms of Reference.

8. TERMS OF REFERENCE

The Water Race Sub Committee to review the representation outlined in the Terms of Reference following the resignation of Clayton Fairbairn and consider whether it is necessary to replace the Paparua vacancy in the short term now that Council is operating under the new water race funding model.

The election of officers to the Water Race Sub Committee takes place following the Local Government elections in November 2019.

9. 2019 MEETING SCHEDULE

10. FINANCIAL

10.1 Finance Report to 30 September 2018

'That the financial report to 30 September 2018 is accepted for information.'

10.2 Unplanned Expenditure over \$5,000

'That the Water Race Subcommittee receives this report "Items of Unplanned Expenditure Over \$5,000" for information'.

11. WATER SERVICES REPORT

11.1 Proposed Water Race Closures to Proceed to Public Consultation

'That the Water Race Sub Committee approve to proceed to public consultation for the proposed closure of 2 lengths of water races in the Paparua and Malvern Water Race Schemes as outlined in the report.'

11.2 Old West Coast Road Water Race Status

Two Landowners have requested a change to the status of approx. 2.2km of Water Race along Old West Coast Road from SDC cleaned to private clean. They want to maintain sections themselves and this would require an agreement / memorandum of understanding between landowner and Council. Is the Water Race sub-Committee comfortable with such an agreement and have any clauses they wish to include.

A complaint was received from landowners regarding race cleaning Old West Coast Road. Landowner has claimed that he had cleaned the race 2 months prior, SDC clean was not required, and the operator has caused major damage to race. Investigation showed that SDC

contractors removed significant amount of material from race which was slowing flows, the operator cleaning was new and had made some minor errors where the bank had been hit. This was deemed minor by Water Race staff but have agreed to repair damage at entranceway.

12. MATTERS UNDER INVESTIGATION

Meeting Referred from	Item	Responsibility	Date
20 Aug '18	<p><i>Marshs Road / Cross Boundary Rates Collection</i></p> <p>Selwyn District Council staff have had two meetings with the Christchurch City Council equivalents to discuss a cross boundary rating agreement. These meetings were positive in nature. Following these meetings, Selwyn DC has formally written to Christchurch City Council outlining our position and seek their formal acceptance. Correspondence is ongoing between organisations.</p>	Murray England	12 Nov meeting
20 Aug '18	<p><i>Springfield Water Race Flooding Issues</i></p> <ul style="list-style-type: none"> • Check flooding events in Springfield • Ensure Council have done everything to avoid a reoccurrence. • Clear gravel build up from Culverts • Follow up NZ Rail's responsibilities clean the rail culverts • Write to Dr Smith to confirm Council Policy is that it does not maintain private property assets (carried over) • Investigate the maintenance programme of the Malvern Race through Springfield (carried over) <p>Memo to the Water Race Sub Committee refers.</p>	Daniel Meehan	12 Nov meeting

13. HEALTH & SAFETY

There have been no issues to report.

14. GENERAL BUSINESS

RESOLUTION TO EXCLUDE THE PUBLIC

Recommended

‘That the public be excluded from the following proceedings of this meeting.’

The general subject matter to be considered while the public is excluded, the reason of passing this resolution in relation to the matter, and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered		Reasons for passing this resolution in relation to each matter	Ground(s) under section 48(1) for the passing of this resolution
1	Minutes and actions of the PX section	Good reason to withhold exists under section 7 (as set out below)	Section 48(1)(a)
2	Public Excluded Memorandum from the Asset Manager Water Services in relation to the closure of the Upper Ellesmere Water Race		

This resolution is made in reliance on section 48(1) (a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by section 7 of that Act, as the case may require, which would be prejudiced by the holding of the whole or the relevant part of the proceedings of the meeting in public are as follows:

1	Enable the local authority holding the information to carry out, without prejudice or disadvantage, commercial activities.	Section 7(2)(h)
2	Enable the local authority holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations).	Section 7(2)(i)

That appropriate officers remain to provide advice to the Committee.

15. CONFIRMATION OF MINUTES FROM THE PUBLIC EXCLUDED MEETING HELD 20 AUGUST 2018

‘That the Water Race Sub Committee confirms the minutes of the Public Excluded meeting of the Water Race Sub Committee held on Monday 20 August 2018’.

16. ELLESMERE WATER RACE CLOSURE

Update on the investigation and implementation of the Upper Ellesmere Water Race closure.

MINUTES
OF THE WATER RACE SUB-COMMITTEE
EXECUTIVE MEETING ROOM
ON MONDAY 20 AUGUST 2018 – 1.30pm

Committee Members in Attendance

1. Nigel Barnett (Chairman)
2. Cr Pat McEvedy
3. Mike Chaffey (Ellesmere)
4. Harry Schat (Ellesmere)
5. Tim Morris (Paparua)
6. Mike Mora (Christchurch City Council - representing Waimairi and Wigram Wards)
7. Kerry Pauling (Malvern Community Board representative)
8. John Clarkson (Malvern)
9. John Shanks
10. Cr Craig Watson

In Attendance

1. Mayor Sam Broughton
2. Murray England, Strategic Manager Water Services
3. Daniel Meehan, Surface Water Operations Engineer
4. James Skurupey, Surface Water Engineer
5. Creagh Robinson, Accountant
6. Maree Pycroft, Secretary
7. Greg Bell, Finance Manager (attended from 3.00pm)

1. APOLOGIES

Clayton Fairbairn (Paparua)
Martin Le Comte (Paparua Water Race Irrigation User Group)

2. PUBLIC FORUM

Dr Bruce Smith
32 Pococks Road, Springfield

Dr Smith provided a history of his property located at 32 Pococks Road, Springfield which was originally owned by the Selwyn District Council to house the water race operator. There is only one access to the property by way of a bridge which crosses the main Malvern water race and which has no easement for any other access.

The deck of the bridge is in need of repair and Dr Smith requested assistance from the Council.

It was clarified that the water race was a natural water course, maintained by Council but any access infrastructure is the responsibility of the property owner.



Dr Smith also provided an outline of the water race that runs in front of his property, down Tramway Road for a short distance before crossing through properties in Albert Street Springfield, across the railway (the culvert of which is maintained by NZ Rail) across open farmland. Surface water follows the natural lie of the land south.

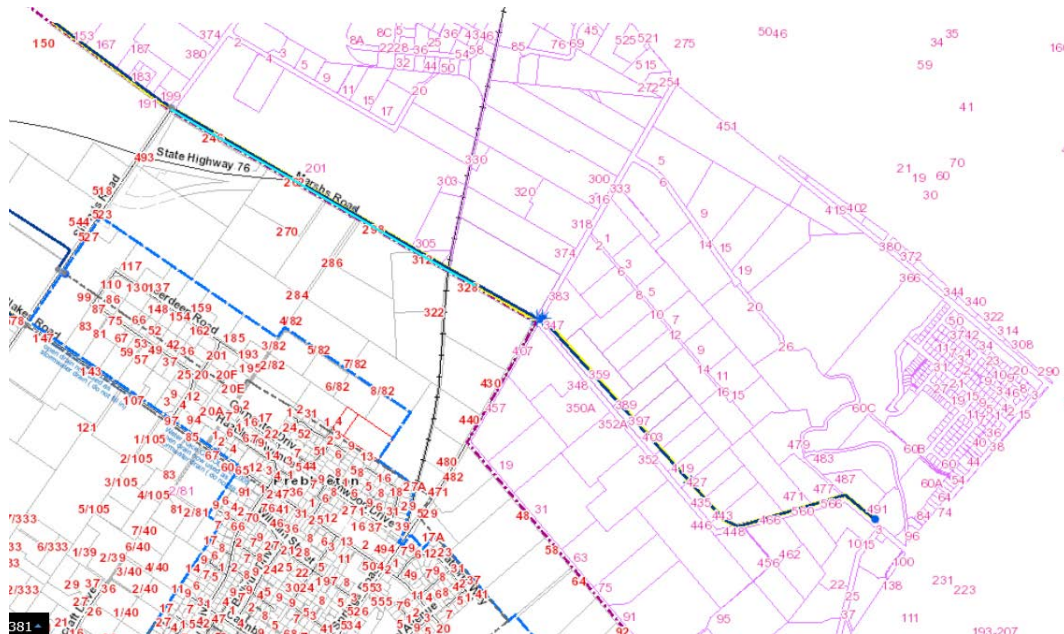
Dr Smith raised concerns of future flooding after a rain event earlier this year when the water race overflowed and flooded properties in Albert Street. He provided some potential solutions for the future. A large part of the flooding was due to gravel build up at culverts which Council will investigate. Council needs to investigate further whether it is a matter for the Water Race Subcommittee or a stormwater issue.

Adrienne Grose
359 Marshs Road, Halswell, Christchurch
Ms Grose was supported by Jan Buckland of 487 Marshs Road.

Ms Grose restated the issues of the Paparua water race which runs along the boundary of her property on Marshs Road. There has been no improvement to the flow or quality of the race since raising the issues at the Water Race Subcommittee meeting on 12 June 2017.

- Inconsistent supply - often dry
- Water rats
- Bank erosion
- Pollution from road run off
- Water sometimes runs in the opposite direction since the sub division has been developed
- Not all property owners take responsibility for cleaning the race on their properties causing blockages

Ms Grose's property is located within the Christchurch City Council boundary but pays a water race rate to Selwyn DC. However, Selwyn DC maintenance responsibility for the water race finishes at the Selwyn District Boundary at 328 Marshs Road. The water race crosses Springs Road and continues down Marshs Road where it goes to ground at 491 Marshs Road.



All property owners on Marshs Road that pay Selwyn DC water race rates have signed closure application forms. However, the process for closure requires public consultation with all properties affected and there are a number that do not pay rates.

This area is a complicated and inconsistent rating arrangement which is being addressed by senior SDC staff. A meeting with CCC to discuss cross boundary rating has been scheduled for the 4th September at 9am and the outcomes will be reported back to the next Water Race Subcommittee meeting and Ms Grose will be notified of next steps at that point.

3. CONFIRMATION OF MINUTES FROM THE MEETING HELD 14 MAY 2018

Moved Cr Craig Watson – Seconded Kerry Pauling

"That the minutes from the Water Race Subcommittee held on 14 May 2018 be confirmed as a true and accurate record."

CARRIED

4. CORRESPONDENCE

Email received from Mike Mora, Halswell, Hornby, Riccarton Community Board Chairperson on Friday 13 July 2018 requesting a list of all properties on Marshs Road who pay water race rates, those who don't and whether the water race will be piped under the SM2 Motorway. The correspondence was acknowledged and will be forwarded to Murray England for a response.

5. FINANCIAL

5.1 Finance Report to 30 June 2018

Creagh Robinson, Finance Manager provided an overview of the closing financial operating position of all water race schemes for the year ended 31 March 2018.

The water rate rating system approved through the LTP process will allow accounts to break even at the end of the 10 year period. When capital is introduced it will cause a deficit in the short term.. There is a diminishing end point - higher rates and more closure does not take away the need for operational maintenance.

Mike Chaffey asked what the outcome was on the request for the current Malvern rates to continue for a transitional period. The matter was considered at the LTP deliberations and it was agreed to apply the rating consistently across all three schemes.

It was restated that budget increases for water race maintenance is a combination of providing a higher level of service, deferred maintenance and health and safety requirements under the Act.

Moved Kerry Pauling / Seconded John Clark

"That the financial report year ending 30 June 2018 be received for information".

CARRIED

5.2 Unplanned Expenditure over \$5,000

Noted

6. Targeted Stream Augmentation (TSA) Project Trial Update

Dr Brett Painter, presented an overview of the Targeted Stream Augmentation (TSA) projects which are looking at the feasibility of supplying streams with alternative sources, such as groundwater, consented but unused stockwater or water from the Central Plains Water (CPW) community irrigation scheme could be used in the future.

A pilot experiment that used an irrigation bore to augment two dry tributaries of Boggy Creek showed benefits from increased flow and reduced nutrient concentration and no significant risks, such as changes in the temperature or the dissolved oxygen content of the mixed water.

A new groundwater bore was then installed beside the springs of a lower Selwyn River tributary, just north of Brookside, which is of high value to native freshwater fish species.

The tributary will be re-stocked with native fish, with help from the Enviroschools programme, following habitat enhancements during the 2016-17 summer and once it is understood what population the augmentation setup will support.

Other TSA opportunities are also being explored for future implementation.

The Water Race Subcommittee endorsed this approach which provides benefits for biodiversity and potential cost savings in the future.

3.00pm *Murray England departed the meeting*
Greg Bell attended the meeting

7. WATER SERVICES REPORT

7.1 Long Term Plan Deliberation Minutes

The Water Race Subcommittee noted the recommendation to proceed with the new water race funding model as proposed in the Draft 2018-2028 Long Term Plan.

7.2 Upper Ellesmere Rates

The purpose of the report is to highlight and explore matters that have been raised by a ratepayer in relation to the water rates paid for the Upper Ellesmere Water Race.

The water race rates that have been assessed for Mr Hobson's property are in accordance with the rates set by the Council. The charges reflect the new rating system introduced from the 1 July 2018 that has made the water race rates consistent across the three water race networks, and put in place a new water race rate of \$20 for all rate payers in the district. This change is designed to spread the cost of maintaining the race network across all ratepayers, reflecting the boarder environmental and amenity benefits of the network. This means that ratepayers that do not receive a service are now paying \$446,000 (including GST) towards the costs of the network. This contribution will increase over time so that those that have water races available will fund a reducing proportion of the total costs, albeit that all water race rates are expected to increase over time.

In the report to the Water Race Subcommittee, options for reducing water rates was reviewed. These are:

- provide a rate remission
- pursue closure on the Upper Ellesmere water race network
- develop an alternative rating approach for water race rates.

In relation to second option, the Subcommittee did not see any basis for a remission and noted that any remission would need to be applied to other similar properties. This would reduce the rates collected and result in a shortfall of funds to maintain the network.

In relation to the third option, the Subcommittee indicated that the possibility of closing the Upper Ellesmere network is being explored. This is not a straightforward process, but is part of the sub-committee's work programme.

In relation to the forth option, the Subcommittee recognised that a new rating system has recently been implemented (as described above) and that it will not be considering changes to the rating approach at this time.

In summary, this means that Mr Hobson's current year's rates remain as assessed. However, the possibility of closing the Upper Ellesmere water race network is being considered by the sub-committee. Any closure may take some time, but if it were to go ahead it would remove the service charge and area based charge from your property and replace it with the modest amenity charge paid by all ratepayers.

Moved Harry Schat – Seconded, John Clarkson

“That the Water Race Subcommittee proceed with Option 1, Status Quo, and write to Mr Hobson and explain that the Subcommittee has considered the matter he has raised and that the property rates are correctly calculated in accordance with the rates that the Council has set and therefore the rates will remain as they are.”

The 2018-28 LTP signals that Council will “*Work towards the closure of the Upper Ellesmere Water Race network*” (page 84). Closure of the network is subject to a number matters including: support for the closure from water race users (approval threshold needs to be met); supporting water race irrigators to secure alternative water supply, amendment or mutual termination of the Upper Ellesmere Water Race Infrastructure Agreement, fish salvage and environmental mitigation measures as required. Due to the complexity and scale of this closure, the process may take a number of years.

CARRIED

PUBLIC EXCLUDED SESSION

Cr Pat McEvedy moved, seconded by Cr Craig Watson to move into Public Excluded at 3.30pm to discuss Glenroy Community Irrigation Company Ltd, Lynton Irrigation Limited and Canterbury Grasslands Ltd.

CARRIED

*Public Excluded Session was suspended at 4:00 pm
Executive Session continued.*

Cr Pat McEvedy moved, seconded by Cr Craig Watson to return to the regular session at 4.00pm

CARRIED

7.3 Water Race Closures

Staff sought recommendations from the Water Race Subcommittee for the proposed closures that were approved for public consultation at the May 2018 meeting.

Moved Craig Watson - Seconded Mike Chaffey

That the Subcommittee approve:

Malvern – the closure of 7752 m of race through 7 properties between Beattys Road and Bealey Road; and

Ellesmere – the closure of 2.9km of race through 2 property/owners on Feredays / Main Rakaia Road – this closure is immediately upstream of previously approved Lill Closure, approved in November 2016.

APPROVED and CARRIED

7.4 Fish Screen Project Update

Proposals received to repair flood damage to Intake

A visit to a working fish screen site is to be arranged for the Subcommittee the morning of the next Water Race Subcommittee meeting on 12 November 2018.

7.5 River works and flood protection in river

Complete - noted

7.6 Ecological Report Findings - Lower Ellesmere Closure - Discussion

Noted

8. HEALTH & SAFETY

Contractors working through completion of remaining P2 sites. New traveller and harness system has been installed and successfully trialled at Waimak Ladder. Supplier gave us credit back for supplying original system which was unfit for purpose. No Health and Safety incidents to report.

ACTIONS FROM THE PUBLIC FORUM

- Check flooding events in Springfield
- Ensure Council have done everything to avoid a reoccurrence.
- Clear gravel buildup from Culverts
- Follow up NZ Rail's responsibilities clean the rail culverts.

- Write to Dr Smith to confirm Council Policy is that it does not maintain private property assets.
- Investigate the maintenance programme of the Malvern Race through Springfield.

9. GENERAL BUSINESS

9.1 Matters Under Investigation

The following matters are to remain on the Agenda and recorded under “Matters Under Investigation”:

1. Marshs Road / Cross Boundary Rating
2. Upper Ellesmere Scheme Closure

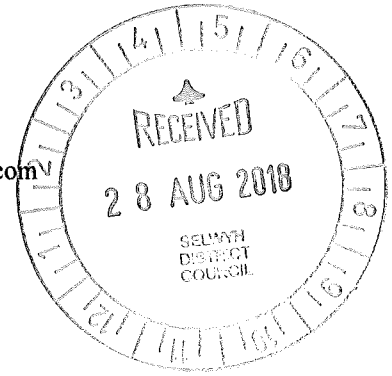
9.2 Next Meeting

12 November 2018 - 12.30pm

The formal meeting will be preceded by a visit to an operating Fish Screen.

180828004

Araawa Stud
934 Leeston Dunsandel Road
Killinchy, RD 2
Leeston 7632
Phone (03) 3254232 or e-mail araawastud7@gmail.com



Selwyn District Council
P O Box 90
Rolleston 7643

Dear Sir/Madam

Submission: Re remission of Water Rate Charges Valuation No 2409010603

The property owned by the Harmer Family Trust is situated at 934 Leeston Dunsandel Road. We are one of 5 properties serviced by a local water race that feeds from the junction of Leeston Dunsandel and Southbridge Dunsandel Roads.

This local water race divides in the property owned by the Groundwater's, and continued down across the Irwell Rakaia Road and into a property owned by the Croziers, formerly the Boons. That leg of the water race was terminated towards the end of last year with a boulder hole having been installed.

At or about the same time, a request to close our leg of the water race was circulated and I understand the closure was supported by properties owned by the Bains, (where the race terminates in a boulder hole) Dunsheas, ourselves and the Groundwater's.

As the flow of water in the race ceased in late October 2017, we all believed the race to have been closed. As none of the properties mentioned used the race for stock water, and, as all have had internal reticulated stock water for many years, the fact of no flow was not reported.

When the advice of rate charges was received recently from the council for the 2018-19 year it was noted that there was two charges associated with the water race, an area wide charge of \$300 per property, and an area charge of \$17.00 per hectare.

On our property that means we have a water race charge of \$491.75 for something that we do not use and if we had, would have had no service since October 2017. This charge is 22.1% of our rate account, and equivalent to \$43.59 per hectare.

Contact has been made with the owners of all properties that are on the race from the junction of the two roads mentioned above:

- the Groundwater's are a dairy farm and have no use of the water as there cows are fenced from gaining access to the water race (Council policy?),
- the Bains and Dunsheas like ourselves have no use for and do not want the race.
- the Riches on the North side of our property are the only property who supports the race, and they like the race as a water feature on the front lawn and to water their roadside trees.

This use is not the primary purpose of the race, and imposes an unfair rate penalty on the other properties affected by its retention.

As no water has flowed in this portion of the race since October 2017, including one of the driest periods ever recorded without rainfall in November/December 2017, the argument for its retention is weakened. Any ecological benefit of the race will have disappeared because of the extended period without water (now some 10 months)

The requirement to clean the race is also an added burden on the property owners, especially the Groundwater's who have possibly 75% of the said race adjacent to or through their property, for which they have no benefit or use, as the dairy cows cannot access the race as they are fenced out of it. This is a local race terminating in the Bain property, and will have no effect on the provision of stock water to the identified properties.

Application is made to the Council for a refund of the portion of water rates on 24009010603 for the period of no flow from October 2017 until June 2018 (last rating year), and for a full remission of rates on the same valuation number for the 2018-19 and subsequent rating years.

Selwyn District Council had a policy in regards to the public and private good of rating charges, and water races always had a high private good component, meaning the rates were targeted to the users and benefactors of the service.

This local race charges a disproportional high rate to the small properties that are adjacent to it, who draw no water or benefit from its existence.

Its closure would not affect the provision of stock water to properties over its length, as no property is reliant on this water for the primary purpose that the races exist for, ie stock water race.

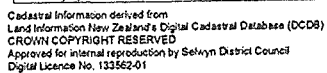
I have included a series of photographs taken in the race in early July following an extremely wet winter and high ground water flows, which shows minimal amounts of surface water within the race, and no actual flows.

I look forward to your considerations and advice of a rate remission.

Yours sincerely

A handwritten signature in cursive script, appearing to read 'K L Harmer'.

Kevin Harmer for Harmer Family Trust



Selwyn
DISTRICT COUNCIL

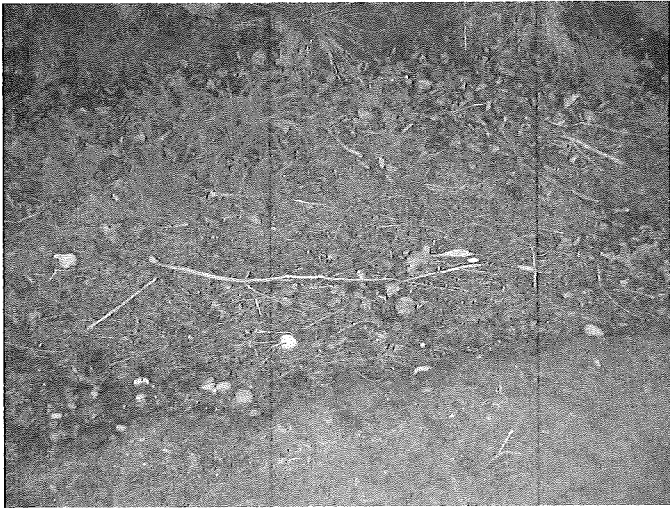


PHOTO 1



PHOTO 2



PHOTO 3



PHOTO 4

PHOTO ① & ② WATER RACE @ 934 LEESTON DUNSTON ENTRY.

PHOTO ③ VIEW TO WEST FROM ENTRY GATE

PHOTO ④ VIEW DOWN DUNSTON FRONTAGE

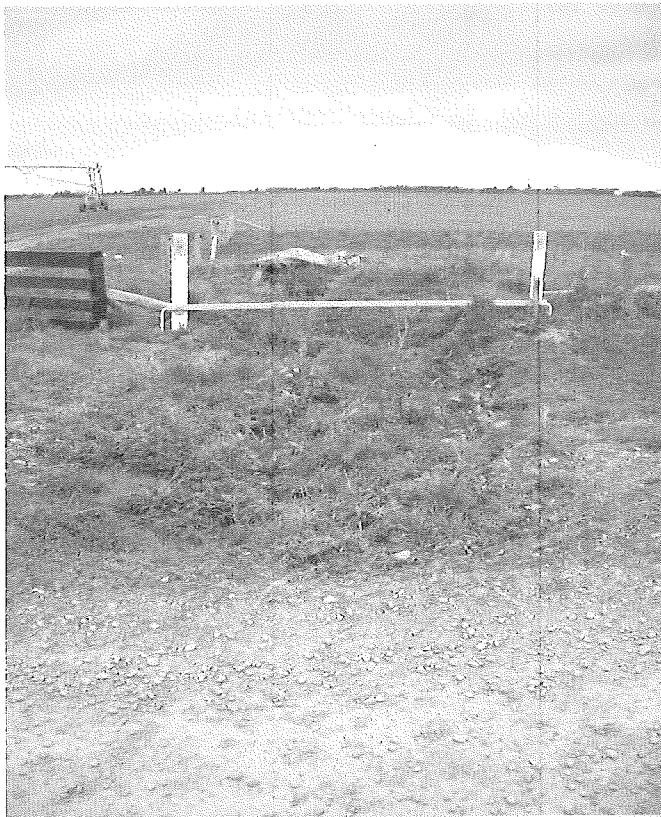


PHOTO 5



PHOTO 6



PHOTO 7

PHOTO 8

PHOTO ⑤ & ⑥ Boulder Hole & Filled in Race - Crozier Property.
 PHOTO ④ PARTIALLY FILLED IN RACE - GROUNDWATERS.
 PHOTO ⑧ RACE ADJACENT TO RESERVE 1544



PHOTO 9



PHOTO 10



PHOTO 11



PHOTO 12

PHOTO 9 - VIEW OF RACE TOWARDS CORNER LEESTON - SOUTHBRIDGE DUNSANDER ROADS.

PHOTO 10 - VIEW DOWN SOUTHBRIDGE DUNSANDER ROAD.

PHOTO 11 - FENCELESS RACE IN CROUNWATERS AT LEESTON - DUNSANDER ROAD CROSSING

PHOTO 12 - DRY RACE BEHIND HEDGE IN RICHES PROPERTY.

29/08/18
Clayton Fairbairn
54 Manchester Street
Christchurch, 8011

Maree Pycroft
2 Norman Kirk Drive
Rolleston, 7614

SCANNED
SCANNED

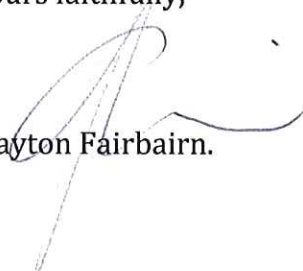


Dear Maree,

I would like to thank the Selwyn District Council for giving me the opportunity to be a representative on the Selwyn District Council Water Race Subcommittee.

Due to other commitments I am unable to give the subcommittee the time it deserves, so with regret I tender my resignation as a representative from the subcommittee.

Yours faithfully,


Clayton Fairbairn.



**SELWYN DISTRICT COUNCIL WATER RACE SUB-COMMITTEE
TERMS OF REFERENCE 2016-2019**

1. The Selwyn District Council Water Race Sub-Committee is established for the purpose of:
 - (a) providing direct user representation into the management and operation of the respective water race systems in accordance with Council Bylaws;
 - (b) reviewing the Council's Water Race Bylaws and Policy and recommending amendment from time to time to accommodate change;
 - (c) enabling local knowledge and expertise to be utilised to the benefit of the overall system;
 - (d) recommending the level of the funds to be raised from respective water areas e.g. so as to ensure sufficient finance is available to meet the proper maintenance needs of the system;
 - (e) in conjunction with Council's engineering staff recommending the annual capital and maintenance work programmes following consideration of the maintenance needs of the scheme;
 - (f) recommending priority of water race works where necessary;
 - (g) recommending the timing and scheduling of water race system pending works;
 - (h) approving water race closure consultation documents;
 - (i) hearing water race closure submissions;
 - (j) making recommendations to Council as to:
 - (i) the significance of proposed water race closures; and
 - (ii) whether to close significant water races; and
 - (k) determining proposed water race closures which are not significant.

The Selwyn Water Race Subcommittee shall be comprised of a maximum of up to 12 members with the following representation:

Representing	No
Malvern Water Race Users	2
Paparua Water Race Users	2
Ellesmere Water Race Users	2
Paparua Water Race Irrigation User Group	1
Malvern Community Board	1

Ellesmere Wards	1
Selwyn Central Wards	1
Christchurch City Council (representing both Harewood and Hornby Wards)	1
Councillor	1

In order to provide specialist knowledge or assistance the power to co-opt such persons as required will be permitted.

Note: there is no representation from the Springs Ward due to the very small amount of stock water race within this ward

2. The quorum of the Sub-Committee is half if even number of members or half plus one if odd numbers of members. Vacancies are not included in calculating the quorum.
3. The term of office shall be three years and will finish after the November meeting following the Triennial Local Government Elections.
4. Elections will be held in the month of November following the Local Government elections.
5. The Subcommittee shall elect from within its numbers a Chairman, such appointment to be made annually. Secretarial services will be provided by Council staff.
6. Frequency of meetings shall be determined by the Subcommittee but with a minimum of two meetings per year.
7. Non-confirmed minutes of meetings shall be available on the Council's webpage before the next meeting of Malvern Community Boards and the Council meeting.
8. The Sub-Committee in conjunction with Council's engineering staff shall prepare an estimate of income and expenditure for each water race system and submit these as part of the normal annual budgetary process for consideration by Council.
9. Works issues coming to the attention of the Subcommittee are to be conveyed to the Asset Delivery Manager or his nominee.

PUBLIC REPORT

TO: Chief Executive

FOR: Ellesmere, Malvern and Paparua water race scheme
Sub-Committee – 12 November 2018

FROM: Management Accountant

DATE: 20 October 2018

SUBJECT: **Financial Report to 30 September 2018**

1. RECOMMENDATION

That the financial report for the district wide water race schemes to 30 September 2018 be received for information.

2. PURPOSE

That the consolidated financial report, to 30 September 2018, be received for information.

3. SIGNIFICANCE ASSESSMENT/COMPLIANCE STATEMENT

Not applicable.

4. HISTORY/BACKGROUND

Prior to the 1st July 2018, the financial reports for Ellesmere, Malvern and Paparua water race schemes were compiled and reported on separately. During the 2018 – 2028 LTP process council, after consultation with affected parties, put in place a district wide rating scheme which streamlined the calculation of rates. Costs continue to be attributed on a site by site basis and accounts for each scheme are attached to this report.

The accounts represent a consolidated operating position of the Ellesmere, Malvern and Paparua water race schemes for the period ended 30 September 2018.

COMMENTARY

A Summary of the accounts as at the 30 September 2018 follows.

District Wide Water Races - Consolidated Operational Position Summary

Revenue	YTD Actual \$	YTD Budget \$	Variance	2017/2018 Actual
Targeted Rate	597,907	572,766	25,141	1,792,640
Other Income	101,085	95,733	5,352	614,317
Total Revenue	698,992	668,499	30,493	2,406,957
Expenditure				
Total Operational Expenditure	555,958	611,873	55,915	2,029,457
Total Support	58,230	58,230	0	257,369
Total Operational Projects	0	36,999	36,999	22,780
Total Renewals	14,296	63,631	49,335	58,553
Total Expenditure	628,484	770,733	142,249	2,368,159
Operating Surplus/(Deficit)	70,508	(102,234)	172,742	38,798

Operating Position Summary

	YTD Actual \$	YTD Budget \$	Variance	2017/2018 Actual
Opening Account Balance	(3,159,235)	(3,844,079)	684,844	(1,226,166)
Plus Operating Surplus/(Deficit)	70,508	(102,234)	172,742	38,798
Plus Prior year Projects Carried Forward	0	684,647	(684,647)	
Less Capital Projects	52,980	8,432	44,548	1,664,783
Net Reserves Transfers	(315,704)	(266,369)	(49,335)	(307,086)
Closing Account Balance	(3,457,411)	(3,536,467)	79,056	(3,159,237)

Special Funds Account - Renewals

	YTD Actual \$	YTD Budget \$	Variance
Opening Account Balance	115,053	115,053	0
Plus Transfers in	330,000	330,000	0
Plus Interest	0	0	0
Less Funding of Renewals	(14,296)	(63,631)	49,335
Closing Account Balance	430,757	381,422	49,335

Year to Date Commentary

Consolidated operations to the 30 September 2018 resulted in a net operating surplus of \$70,508 against a budgeted deficit for the same period of (\$102,234).

Revenue

Total revenue to the 30 September 2018 is favourable to budget by \$30,493 largely due to increased revenue from rates - \$25,141. The budget had assumed a lower hectare number for 2018 - 19 than what is actually rated for.

Operational Expenditure

Operating expenditure to the 30 September 2018 is favourable to budget by \$55,915. Costs are favourable to budget across all sites. Total maintenance costs are favourable to budget by \$31,994 and Insurance costs are favourable to budget by \$13,523.

There has been no project expenditure to the 30 September 2018 against a budget of \$36,999.

Renewal expenditure is favourable to budget by \$49,335. Renewals are funded from reserves at year end and do not have an impact on the operating result.

Capital Projects

Capital expenditure to the 30 September 2018 totals \$52,980 against a year budget of \$8,432. The expenditure to date largely relates to the Glentunnel intake upgrade.

5. PROPOSAL

That the consolidated financial report to 30 June 2018 be received for information.

6. OPTIONS

Not applicable.

7. VIEWS OF THOSE AFFECTED/CONSULTATION

a) Views of those affected

Not applicable.

b) Consultation

Not applicable.

c) Maori implications

Not applicable.

8. RELEVANT POLICY/PLANS

Not applicable.

9. COMMUNITY OUTCOMES

Not applicable.

10. NEGATIVE IMPACTS

Not applicable.

11. LEGAL IMPLICATIONS

Not applicable.

12. FUNDING IMPLICATIONS

Not applicable.

13. HAS THE INPUT/IMPACT FROM/ON OTHER DEPARTMENTS BEEN CONSIDERED?

Assets Department has been consulted in preparation of this report.

Creagh Robinson
MANAGEMENT ACCOUNTANT

ENDORSED FOR AGENDA

Greg Bell
MANAGER CORPORATE SERVICES

Financial Month is set to 09/18 and Budget AB01 is in use.

District Wide Water Races - Consolidated
Statement of Operations

September 2018



Account	Detail	Month Actual	Month Budget	Month Variance	YTD Actual 2018/19	Ytd Budget 2018/19	Ytd Variance	Committed Expenditure	FYR Budget 2018/19	Last Year 2017/18
Opening Balance										
	District opening bal	-	-	-	(\$3,159,235)	(\$3,844,079)	\$684,844		(\$3,844,079)	(\$1,226,166)
	Total Opening Balance	-	-	-	(\$3,159,235)	(\$3,844,079)	\$684,844		(\$3,844,079)	(\$1,226,166)
Income										
	Targeted Rate District	\$198,877	\$190,922	\$7,955	\$597,907	\$572,766	\$25,141	-	\$2,291,067	\$1,792,640
	Other - Ellesmere	\$53,932	\$9,333	\$44,599	\$53,932	\$27,999	\$25,933	-	\$112,000	\$120,178
	Other - Malvern	-	\$3,667	(\$3,667)	\$619	\$11,001	(\$10,382)	-	\$44,000	\$24,897
	Other - Paparua	-	\$18,911	(\$18,911)	\$46,534	\$56,733	(\$10,199)	-	\$226,919	\$469,242
	Total Income	\$252,809	\$222,833	\$29,976	\$698,992	\$668,499	\$30,493	-	\$2,673,986	\$2,406,957
Expenditure										
	Ellesmere total	\$43,092	\$46,576	\$3,484	\$131,564	\$149,534	\$17,970	\$11,600	\$568,716	\$492,546
	Malvern total	\$87,203	\$65,317	(\$21,886)	\$224,717	\$232,175	\$7,458	\$502	\$820,756	\$723,638
	Paparua total	\$60,036	\$73,292	\$13,256	\$199,677	\$230,164	\$30,487	-	\$889,788	\$813,273
	Total Expenditure	\$190,331	\$185,185	(\$5,146)	\$555,958	\$611,873	\$55,915	\$12,102	\$2,279,260	\$2,029,457
Support										
	Ellesmere total	\$7,376	\$7,376	-	\$22,127	\$22,128	\$1	-	\$88,510	\$97,800
	Malvern total	\$8,346	\$8,346	-	\$25,039	\$25,038	(\$1)	\$502	\$100,156	\$110,669
	Paparua total	\$3,688	\$3,688	-	\$11,064	\$11,064	-	-	\$44,255	\$48,900
	Total Support	\$19,410	\$19,410	-	\$58,230	\$58,230	-	\$502	\$232,921	\$257,369
Projects										
	Ellesmere total	-	-	-	-	-	-	-	-	\$1,359
	Malvern total	-	\$10,833	\$10,833	-	\$32,499	\$32,499	-	\$130,000	\$21,421
	Paparua total	-	\$1,500	\$1,500	-	\$4,500	\$4,500	-	\$18,000	-
	Total Projects	-	\$12,333	\$12,333	-	\$36,999	\$36,999	-	\$148,000	\$22,780
Transfers - Operations										
	Ellesmere trf	(\$390)	-	(\$390)	(\$195)	-	(\$195)	-	-	\$235,704
	Malvern trf	-	-	-	(\$51,317)	-	(\$51,317)	-	-	\$2,314,250
	Paparua trf	-	-	-	-	-	-	-	\$153,000	\$302,392
	District trf	-	-	-	-	-	-	-	-	(\$3,159,432)
	Ellesmere Carry Forwards	-	-	-	-	\$282,448	(\$282,448)	-	\$282,448	-
	Malvern Carry Forwards	-	-	-	-	\$249,199	(\$249,199)	-	\$249,199	-
	Paparua Carry Forwards	-	-	-	-	\$153,000	(\$153,000)	-	\$153,000	-
	Total Transfers - Operations	(\$390)	-	(\$390)	(\$51,512)	\$684,647	(\$736,159)	-	\$837,647	(\$307,086)
	Operating Surplus/(Deficit)	\$42,678	\$5,905	\$36,773	(\$3,125,943)	(\$3,198,035)	\$72,092	(\$12,604)	(\$2,992,627)	(\$1,435,901)
Capital Projects										
	Ellesmere total	-	\$932	\$932	-	\$932	\$932	-	\$121,184	\$431,100
	Malvern total	\$34,600	-	(\$34,600)	\$52,980	-	(\$52,980)	(\$502)	\$23,000	\$1,233,683
	Paparua total	-	\$7,500	\$7,500	-	\$7,500	\$7,500	-	\$15,000	-
	Total Capital Projects	\$34,600	\$8,432	(\$26,168)	\$52,980	\$8,432	(\$44,548)	(\$502)	\$159,184	\$1,664,783
Renewals										
	Ellesmere total	-	\$20,409	\$20,409	-	\$20,409	\$20,409	-	\$211,668	\$3,738
	Malvern total	\$554	\$34,137	\$33,583	\$5,211	\$34,137	\$28,926	-	\$529,203	\$34,139
	Paparua total	-	-	-	\$9,085	\$9,085	-	-	\$170,003	\$20,676
	Total Renewals	\$554	\$54,546	\$53,992	\$14,296	\$63,631	\$49,335	-	\$910,874	\$58,553
	Closing balance	\$7,524	(\$57,073)	\$64,597	(\$3,193,219)	(\$3,270,098)	\$76,879	(\$12,102)	(\$4,062,685)	(\$3,159,237)
Special Funds										
	District Renewal Reserve	-	-	-	\$1,064,618	\$1,064,813	(\$195)	-	-	\$1,064,813
	Total Special Funds	-	-	-	\$1,064,618	\$1,064,813	(\$195)	-	-	\$1,064,813

**District Wide Water Races - Consolidated
Operational Position Summary**

Revenue	YTD Actual \$	YTD Budget \$	Variance	2017/2018 Actual
Targeted Rate	597,907	572,766	25,141	1,792,640
Other Income	101,085	95,733	5,352	614,317
Total Revenue	698,992	668,499	30,493	2,406,957
Expenditure				
Total Operational Expenditure	555,958	611,873	55,915	2,029,457
Total Support	58,230	58,230	0	257,369
Total Operational Projects	0	36,999	36,999	22,780
Total Renewals	14,296	63,631	49,335	58,553
Total Expenditure	628,484	770,733	142,249	2,368,159
Operating Surplus/(Deficit)	70,508	(102,234)	172,742	38,798

Operating Position Summary

	YTD Actual \$	YTD Budget \$	Variance	2017/2018 Actual
Opening Account Balance	(3,159,235)	(3,844,079)	684,844	(1,226,166)
Plus Operating Surplus/(Deficit)	70,508	(102,234)	172,742	38,798
Plus Prior year Projects Carried Forward	0	684,647	(684,647)	
Less Capital Projects	52,980	8,432	44,548	1,664,783
Net Reserves Transfers	(315,704)	(266,369)	(49,335)	(307,086)
Closing Account Balance	(3,457,411)	(3,536,467)	79,056	(3,159,237)

Special Funds Account - Renewals

	YTD Actual \$	YTD Budget \$	Variance
Opening Account Balance	115,053	115,053	0
Plus Transfers in	330,000	330,000	0
Plus Interest	0	0	0
Less Funding of Renewals	(14,296)	(63,631)	49,335
Closing Account Balance	430,757	381,422	49,335

Financial Month is set to 09/18 and Budget AB01 is in use.										
ELLESMERE WATER RACE OPER.										
September 2018										
Statement of Operations										
Account	Detail	Month Actual	Month Budget	Month Variance	YTD Actual 2018/19	Ytd Budget 2018/19	Ytd Variance	Committed Expenditure	FYR Budget 2018/19	Last Year 2017/18
Opening Balance										
3921 980 01	Ellesmere W/Rc Oper Open Blnce	-	-	-	\$196	(\$282,448)	\$282,644	-	(\$282,448)	\$230,187
	Total Opening Balance	-	-	-	\$196	(\$282,448)	\$282,644	-	(\$282,448)	\$230,187
Income										
3921 101	Targeted Rate	(\$180)	-	(\$180)	(\$180)	-	(\$180)	-	-	\$440,669
3921 101 01	Ellesmere Unit charge	-	-	-	-	-	-	-	-	\$12,315
3921 187	Irrigation charges	\$53,932	\$9,333	\$44,599	\$53,932	\$27,999	\$25,933	-	\$112,000	\$107,863
	Total Income	\$53,752	\$9,333	\$44,419	\$53,752	\$27,999	\$25,753	-	\$112,000	\$560,847
Expenditure										
3921 410 01	ERROR	-	-	-	-	-	-	-	-	-
3921 541	Insurance	-	-	-	\$7,114	\$9,806	\$2,692	-	\$9,806	\$8,997
3921 583 101	Maint - General S	\$30,053	\$30,833	\$780	\$90,160	\$92,499	\$2,339	-	\$370,000	\$360,641
3921 583 102	Maint - General R	\$12,889	\$6,667	(\$6,222)	\$21,461	\$20,001	(\$1,460)	-	\$80,000	\$68,877
3921 583 282	Maint - Removal R	-	\$3,333	\$3,333	-	\$9,999	\$9,999	-	\$40,000	-
3921 583 602	Maint - Source/Well/Headwork R	-	-	-	-	-	-	-	-	\$111
3921 593 03	Infrastructure Agreement Fee	-	\$5,417	\$5,417	\$11,517	\$16,251	\$4,734	\$11,600	\$65,000	\$52,885
3921 598 02	ERROR	-	-	-	-	-	-	-	-	-
3921 868	ECan/Los Monitoring	\$96	\$250	\$154	\$1,176	\$750	(\$426)	-	\$3,000	\$383
3921 868 01	SCADA Costs	\$54	\$76	\$22	\$136	\$228	\$92	-	\$910	\$652
	Total Expenditure	\$43,092	\$46,576	\$3,484	\$131,564	\$149,534	\$17,970	\$11,600	\$568,716	\$492,546
Support										
3921 890 3900	Support Charges-WTR RACE	\$7,376	\$7,376	-	\$22,127	\$22,128	\$1	-	\$88,510	\$97,800
	Total Support	\$7,376	\$7,376	-	\$22,127	\$22,128	\$1	-	\$88,510	\$97,800
Projects										
3921 063	Upper Ellesmere Water Race Closure	-	-	-	-	-	-	-	-	\$1,359
	Total Projects	-	-	-	-	-	-	-	-	\$1,359
Transfers - Operations										
3921 970 01	Transfer (to)/from Reserves	(\$390)	-	(\$390)	(\$195)	-	(\$195)	-	-	\$235,704
3921 970 99	Carry Forward Projects	-	-	-	-	\$282,448	(\$282,448)	-	\$282,448	-
	Total Transfers - Operations	(\$390)	-	(\$390)	(\$195)	\$282,448	(\$282,643)	-	\$282,448	\$235,704
	Operating Surplus/(Deficit)	\$2,894	(\$44,619)	\$47,513	(\$99,938)	(\$143,663)	\$43,725	(\$11,600)	(\$545,226)	\$435,033
Capital Projects										
3921 900 37	Fish Screen - Lower Rakaia	-	-	-	-	-	-	-	-	\$431,100
3921 900 48	Terricelee auto gate SCADA	-	-	-	-	-	-	-	\$75,000	-
3921 900 50	Emergency tipout for irrigators	-	-	-	-	-	-	-	\$35,000	-
3921 900 51	Health and Safety improvements	-	\$932	\$932	-	\$932	\$932	-	\$11,184	-
	Total Capital Projects	-	\$932	\$932	-	\$932	\$932	-	\$121,184	\$431,100
Renewals										
3921 905 100	Renewals - Linear (Pipe Valve)	-	\$16,625	\$16,625	-	\$16,625	\$16,625	-	\$166,259	\$3,738
3921 905 110	Renewals - P&E (PS TP Teley)	-	\$3,784	\$3,784	-	\$3,784	\$3,784	-	\$45,409	-
	Total Renewals	-	\$20,409	\$20,409	-	\$20,409	\$20,409	-	\$211,668	\$3,738
	Closing balance	\$2,894	(\$65,960)	\$68,854	(\$99,938)	(\$165,004)	\$65,066	(\$11,600)	(\$878,078)	\$195
Special Funds										
3921 982 50	Renewal Reserve	\$390	-	(\$390)	\$390	-	(\$390)	-	-	\$115,053
	Total Special Funds	\$390	-	(\$390)	\$390	-	(\$390)	-	-	\$115,053

ELLESMERE WATER RACE - FINANCIAL COMMENTARY FOR THE QUARTER ENDED SEPTEMBER 2018

Account	Expenditure	Actual	Budget	Variance	Details
3921 541	Insurance	\$7,114	\$9,806	\$2,692	July - Marsh - 7113.70
3921 583 101	Maint - General S	\$90,160	\$92,499	\$2,339	July, Aug, Sep - Sicon Ltd - C1241 Claim Water Service O&M
3921 583 102	Maint - General R	\$21,461	\$20,001	(\$1,460)	July - James Bull - 240.00, Sicon - 2998.96, Aug - Sicon - 5333.05, Sep - Sicon - 12888.96
3921 583 282	Maint - Removal R	\$0	\$9,999	\$9,999	
3921 583 602	Maint - Source/Well/Headwork R	\$0	\$0	\$0	
3921 593 03	Infrastructure Agreement Fee	\$11,517	\$16,251	\$4,734	Aug - Glenroy Agreement - 11516.96
3921 868	ECan/Los Monitoring	\$1,176	\$750	(\$426)	Ecan consent monitoring - July - 1080.00, Sep - 95.74
3921 868 01	SCADA Costs	\$136	\$228	\$92	Aug - 2way - 5.38, Qtech - 76.57, Sep - 2way - 10.76, Qtech - 43.07
Total Expenditure		\$131,564	\$149,534	\$17,970	
3921 890 3900	Support Charges-WTR RACE	\$22,127	\$22,128	\$1	July, Aug, Sep - Selwyn District Council - Standard Charge
Total Support		\$22,127	\$22,128	\$1	
Projects					
3921 063	Health and Safety Improvements	\$0	\$0	\$0	
Total Projects		\$0	\$0	\$0	
Capital					
3921 900 37	Fish Screen - Lower Rakaia	\$0	\$0	\$0	
3921 900 48	Terricelee auto gate SCADA	\$0	\$0	\$0	
3921 900 50	Emergency tipout for irrigators	\$0	\$0	\$0	
3921 900 51	Health and Safety improvements	\$0	\$932	\$932	
Total Capital Projects		\$0	\$932	\$932	
Renewals					
3921 905 100	Renewals - Linear (Pipe Valve)	\$0	\$16,625	\$16,625	
3921 905 110	Renewals - P&E (PS TP Teley)	\$0	\$3,784	\$3,784	
Total Renewals		\$0	\$20,409	\$20,409	

Financial Month is set to 09/18 and Budget AB01 is in use.										
MALVERN AREA WATER RACE										
September 2018										
Statement of Operations										
Account	Detail	Month Actual	Month Budget	Month Variance	YTD Actual 2018/19	Ytd Budget 2018/19	Ytd Variance	Committed Expenditure	FYR Budget 2018/19	Last Year 2017/18
Opening Balance										
3951 980 01	Malvern W/Rc Oper Open Blnce.	-	-	-	-	(\$249,199)	\$249,199	-	(\$249,199)	(\$1,030,298)
3951 980 02	Opening Balance	-	-	-	-	-	-	-	-	(\$5,000)
3951 980 04	Opening Balance	-	-	-	-	-	-	-	-	(\$5,000)
3951 980 07	Opening Balance	-	-	-	-	-	-	-	-	(\$3,332)
3951 980 08	Opening Balance	-	-	-	-	-	-	-	-	(\$2,000)
3951 980 09	APPROPRIATION ACCOUNT	-	-	-	-	-	-	-	-	(\$24,656)
	Total Opening Balance	-	-	-	-	(\$249,199)	\$249,199	-	(\$249,199)	(\$1,070,286)
Income										
3951 101	Targeted Rate	-	-	-	-	-	-	-	-	\$854,689
3951 101 01	Urban Public Good	-	-	-	-	-	-	-	-	\$23,491
3951 162	General Receipts	-	-	-	\$619	-	\$619	-	-	\$1,406
3951 162 02	Malvern irrigation	-	\$3,667	(\$3,667)	-	\$11,001	(\$11,001)	-	\$44,000	-
	Total Income	-	\$3,667	(\$3,667)	\$619	\$11,001	(\$10,382)	-	\$44,000	\$879,586
Expenditure										
3951 410 01	ERROR	-	-	-	-	-	-	-	-	-
3951 450	Electricity	\$210	\$250	\$40	\$647	\$750	\$103	-	\$3,000	\$2,196
3951 540	Rates	-	-	-	-	-	-	-	\$732	\$710
3951 541	Insurance	-	-	-	\$27,407	\$36,224	\$8,817	-	\$36,224	\$33,235
3951 583 101	Maint - General S	\$47,302	\$50,000	\$2,698	\$141,905	\$150,000	\$8,095	-	\$600,000	\$567,619
3951 583 102	Maint - General R	\$39,556	\$10,000	(\$29,556)	\$53,865	\$30,000	(\$23,865)	-	\$120,000	\$117,129
3951 583 602	ERROR	-	-	-	-	-	-	-	-	-
3951 593 282	Maint - Bank Removal R	-	\$4,167	\$4,167	-	\$12,501	\$12,501	\$502	\$50,000	-
3951 868	ECan/LoS Monitoring	\$78	\$333	\$255	\$548	\$999	\$451	-	\$4,000	\$1,501
3951 868 01	Scada Costs	\$57	\$150	\$93	\$345	\$450	\$105	-	\$1,800	\$1,248
3951 871	Urban Enhancement	-	\$417	\$417	-	\$1,251	\$1,251	-	\$5,000	-
	Total Expenditure	\$87,203	\$65,317	(\$21,886)	\$224,717	\$232,175	\$7,458	\$502	\$820,756	\$723,638
Support										
3951 890 3900	Support Charges-WTR RACE	\$8,346	\$8,346	-	\$25,039	\$25,038	(\$1)	\$502	\$100,156	\$110,669
	Total Support	\$8,346	\$8,346	-	\$25,039	\$25,038	(\$1)	\$502	\$100,156	\$110,669
Projects										
3951 074	Health and Safety improvements	-	-	-	-	-	-	-	-	\$21,356
3951 096	CPW Transition	-	-	-	-	-	-	-	-	\$65
3951 097	Dalethorpe autoflush design	-	\$833	\$833	-	\$2,499	\$2,499	-	\$10,000	-
3951 098	Waimak tunnel invest design	-	\$10,000	\$10,000	-	\$30,000	\$30,000	-	\$120,000	-
	Total Projects	-	\$10,833	\$10,833	-	\$32,499	\$32,499	-	\$130,000	\$21,421
Transfers - Operations										
3951 970 01	Transfer (to)/from Reserves	-	-	-	(\$51,317)	-	(\$51,317)	-	-	\$2,314,250
3951 970 99	Carry Forward Projects	-	-	-	-	\$249,199	(\$249,199)	-	\$249,199	-
	Total Transfers - Operations	-	-	-	(\$51,317)	\$249,199	(\$300,516)	-	\$249,199	\$2,314,250
	Operating Surplus/(Deficit)	(\$95,549)	(\$80,829)	(\$14,720)	(\$300,454)	(\$278,711)	(\$21,743)	(\$1,004)	(\$1,006,912)	\$1,267,822
Capital Projects										
3951 900 66	Fish Screen-Waimak Intake	-	-	-	-	-	-	(\$502)	-	\$512,004
3951 900 67	Fish Screen-Upper Kowai Intake	(\$532,842)	-	\$532,842	(\$532,842)	-	\$532,842	-	-	\$530,354
3951 900 72	Glentunnel Intake Upgrade	\$563,491	-	(\$563,491)	\$580,046	-	(\$580,046)	-	-	\$130,974
3951 900 77	SCADA monitoring Sites	\$3,951	-	(\$3,951)	\$3,951	-	(\$3,951)	-	\$20,000	\$2,852
3951 900 78	H&S Upgrades	-	-	-	\$1,825	-	(\$1,825)	-	-	\$56,076
3951 900 79	Flow Gauge	-	-	-	-	-	-	-	-	\$1,423
3951 900 80	sink hole repair procedure	-	-	-	-	-	-	-	\$3,000	-
	Total Capital Projects	\$34,600	-	(\$34,600)	\$52,980	-	(\$52,980)	(\$502)	\$23,000	\$1,233,683
Renewals										
3951 905 100	Renewals - Linear (Pipe Valve)	-	\$34,137	\$34,137	-	\$34,137	\$34,137	-	\$409,642	\$16,112
3951 905 110	Renewals - P&E (PS TP Teley)	\$554	-	(\$554)	\$5,211	-	(\$5,211)	-	\$119,561	\$18,027
		\$554	\$34,137	\$33,583	\$5,211	\$34,137	\$28,926	-	\$529,203	\$34,139
	Closing balance	(\$130,703)	(\$114,966)	(\$15,737)	(\$358,645)	(\$312,848)	(\$45,797)	(\$502)	(\$1,559,115)	-
Special Funds										
3951 982 50	Renewal Reserve	-	-	-	-	-	-	-	-	\$525,292
	Total Special Funds	-	-	-	-	-	-	-	-	\$525,292

MALVERN AREA WATER RACE - FINANCIAL COMMENTARY FOR THE QUARTER ENDED SEPTEMBER 2018

3.00 # months

Account	Expenditure	Actual	Budget	Variance	Details	3.00 # months
3951 450	Electricity	\$647	\$750	\$103	Meridian - July - 230.21, Aug - 207.09, Sep - 209.97	\$0
3951 540	Rates	\$0	\$0	\$0		\$0
3951 541	Insurance	\$27,407	\$36,224	\$8,817	July - Marsh - 27406.68	(\$0)
3951 583 101	Maint - General S	\$141,905	\$150,000	\$8,095	July, Aug, Sep - Sicon Ltd - C1241 Claim Water Service O&M	(\$0)
3951 583 102	Maint - General R	\$53,865	\$30,000	(\$23,865)	July - James Bull - 188.50, ChCh Press - 216.00, Sicon - 9146.74, Aug - Sicon - 4461.17, Boraman - 297.00, Sep - Refuse disposal - 99.13, Boraman - 116.64, Curle - 300.00, Hydrological - 181.51, Sicon - 38858.31	\$0
3951 593 282	Maint - Bank Removal R	\$0	\$12,501	\$12,501		\$0
3951 868	ECan/LoS Monitoring	\$548	\$999	\$451	Ecan Consent Monitoring - July - 469.50, Sep - 78.26	(\$0)
3951 868 01	Scada Costs	\$345	\$450	\$105	July - Spark - 15.00, Boraman - 155.52, Aug - Spark - 15.00, Qtech - 102.10, Sep - Qtech - 57.43	\$0
3951 871	Urban Enhancement	\$0	\$1,251	\$1,251		\$0
3951 890 3900	Total Expenditure	\$224,717	\$232,175	\$7,458		\$1
	Support Charges-WTR RACE	\$25,039	\$25,038	(\$1)	July, Aug, Sep - Selwyn District Council - Standard Charge	
	Total Support Charges	\$25,039	\$25,038	(\$1)		
3951 074	Health and Safety improvements	\$0	\$0	\$0		\$0
3951 096	CPW Transition	\$0	\$0	\$0		\$0
3952 097	Dalethorpe autoflush design	\$0	\$2,499	\$2,499		\$0
3951 098	Waimak tunnel invest design	\$0	\$30,000	\$30,000		\$0
	Total Projects	\$0	\$32,499	\$32,499		\$0
3951 900 66	Fish Screen-Waimak Intake	\$0	\$0	\$0		\$0
3951 900 67	Fish Screen-Upper Kowai Intake	(\$532,842)	\$0	\$532,842	Sep - Isaac - 29,625.30, Correction of coding - (562467.02)	\$0
3951 900 72	Glentunnel Intake Upgrade	\$580,046	\$0	(\$580,046)	July - Sicon - 575.82, Aug - Jacobs - 15979.00, Sep - Ecan - 1024.00, Coding correction - 562467.02	(\$0)
3951 900 77	SCADA monitoring Sites	\$3,951	\$0	(\$3,951)	Sep - Nairns - 3950.79	(\$0)
3951 900 78	H&S Upgrades	\$1,825	\$0	(\$1,825)	Aug - Sicon - 1825.45	\$0
3951 900 79	Flow Gauge	\$0	\$0	\$0		\$0
3951 900 80	sink hole repair procedure	\$0	\$0	\$0		\$0
	Total Capital Projects	\$52,980	\$0	(\$52,980)		\$0
3951 905 100	Renewals - Linear (Pipe Valve)	\$0	\$34,137	\$34,137		\$0
3951 905 110	Renewals - P&E (PS TP Telev)	\$5,211	\$0	(\$5,211)	Jul - Tonkin & Taylor - 4657.33, Sep - Tonkin & Taylor - 553.88	\$0
	Total Renewals	\$5,211	\$34,137	\$28,926		\$0

Financial Month is set to 09/18 and Budget AB01 is in use.										
PAPARUA WATER RACE										
September 2018										
Statement of Operations										
Account	Detail	Month Actual	Month Budget	Month Variance	YTD Actual 2018/19	Ytd Budget 2018/19	Ytd Variance	Committed Expenditure	FYR Budget 2018/19	Last Year 2017/18
Opening Balance										
3954 980 01	Paparua W/Rc Oper Open Blnce.	-	-	-	\$1	(\$153,000)	\$153,001	-	(\$153,000)	(\$386,067)
	Total Opening Balance	-	-	-	\$1	(\$153,000)	\$153,001	-	(\$153,000)	(\$386,067)
Income										
3954 101	Targeted Rate	-	-	-	-	-	-	-	-	\$497,282
3954 101 01	Public Good Rate	-	-	-	-	-	-	-	-	\$59,213
3954 101 02	Urban Public Good	-	-	-	-	-	-	-	-	\$141,679
3954 135	CCC Share-Public Good	-	\$5,975	(\$5,975)	\$35,848	\$17,925	\$17,923	-	\$71,696	\$71,696
3954 162	General Receipts	-	-	-	\$686	-	\$686	-	-	-
3954 187	Irrigation Charges	-	\$13,769	(\$13,769)	-	\$41,307	(\$41,307)	-	\$165,223	\$182,062
3954 187 02	Irrigation Rebate	-	(\$833)	\$833	\$10,000	(\$2,499)	\$12,499	-	(\$10,000)	\$14,592
	Total Income	-	\$18,911	(\$18,911)	\$46,534	\$56,733	(\$10,199)	-	\$226,919	\$966,524
Expenditure										
3954 410 011	ERROR	-	-	-	-	-	-	-	-	-
3954 450	Electricity	\$32	\$58	\$26	\$94	\$174	\$80	-	\$700	\$350
3954 541	Insurance	-	-	-	\$8,274	\$10,288	\$2,014	-	\$10,288	\$9,439
3954 583 101	Maint - General S	\$55,579	\$57,500	\$1,921	\$166,738	\$172,500	\$5,762	-	\$690,000	\$667,946
3954 583 102	Maint - General R	\$4,296	\$10,000	\$5,704	\$14,032	\$30,000	\$15,968	-	\$120,000	\$107,872
3954 583 272	Maint - Cleaning R	-	-	-	\$226	-	(\$226)	-	-	\$4,440
3954 583 602	Maint - Source/Well/Headwork R	-	-	-	\$9,620	-	(\$9,620)	-	-	\$22,825
3954 593 282	Maint - Bank Removal R	-	\$4,167	\$4,167	-	\$12,501	\$12,501	-	\$50,000	-
3954 868	ECan/LoS Monitoring	\$104	\$125	\$21	\$637	\$375	(\$262)	-	\$1,500	\$135
3954 868 01	Scada Costs	\$25	\$25	-	\$56	\$75	\$19	-	\$300	\$266
3954 871	Urban Enhancement	-	\$1,417	\$1,417	-	\$4,251	\$4,251	-	\$17,000	-
	Total Expenditure	\$60,036	\$73,292	\$13,256	\$199,677	\$230,164	\$30,487	-	\$889,788	\$813,273
Support										
3954 890 3900	Support Charges-WTR RACE	\$3,688	\$3,688	-	\$11,064	\$11,064	-	-	\$44,255	\$48,900
	Total Support	\$3,688	\$3,688	-	\$11,064	\$11,064	-	-	\$44,255	\$48,900
Projects										
3954 082	Health and Safety improvements	-	\$1,500	\$1,500	-	\$4,500	\$4,500	-	\$18,000	-
	Total Projects	-	\$1,500	\$1,500	-	\$4,500	\$4,500	-	\$18,000	-
Transfers - Operations										
3954 970 01	Transfer (to)/from Reserves	-	-	-	-	-	-	-	-	\$302,392
3954 970 99	Carry Forward Projects	-	-	-	-	\$153,000	(\$153,000)	-	\$153,000	-
	Total Transfers - Operations	-	-	-	-	\$153,000	(\$153,000)	-	\$153,000	\$302,392
	Operating Surplus/(Deficit)	(\$63,724)	(\$59,569)	(\$4,155)	(\$164,206)	(\$188,995)	\$24,789	-	(\$725,124)	\$20,676
Capital Projects										
3954 900 07	Railway Road - tipout point	-	\$7,500	\$7,500	-	\$7,500	\$7,500	-	\$15,000	-
	Total Capital Projects	-	\$7,500	\$7,500	-	\$7,500	\$7,500	-	\$15,000	-
Renewals										
3954 905 100	Renewals - Linear (Pipe Valve)	-	-	-	\$9,085	\$9,085	-	-	\$170,003	\$20,676
	Total Renewals	-	-	-	\$9,085	\$9,085	-	-	\$170,003	\$20,676
	Closing balance	(\$63,724)	(\$67,069)	\$3,345	(\$173,291)	(\$205,580)	\$32,289	-	(\$910,127)	-
Special Funds										
3954 982 50	Renewal Reserve	-	-	-	-	-	-	-	-	\$424,468
	Total Special Funds	-	-	-	-	-	-	-	-	\$424,468

PAPARUA WATER RACE - FINANCIAL COMMENTARY FOR THE QUARTER ENDED - SEPTEMBER 2018

Account	Expenditure	Actual	Budget	Variance	Description
3954 410 011	External Consultants Fee	\$0	\$0	\$0	
3954 450	Electricity	\$94	\$174	\$80	Jul - Meridian - 30.70, Aug - 31.57, Sep - 31.57
3954 541	Insurance	\$8,274	\$10,288	\$2,014	Jul - Marsh - 8274.17
3954 583 101	Maint - General S	\$166,738	\$172,500	\$5,762	July, Aug, Sep - Sicon Ltd - C1241 Claim Water Service O&M
3954 583 102	Maint - General R	\$14,032	\$30,000	\$15,968	Jul - James Bull - 180.00, Sicon - 4366.40, Aug - Boraman - 617.40, Sicon - 4571.91, Sep - Refuse disposal - 214.12, Sicon - 4081.77
3954 583 272	Maint - Cleaning R	\$226	\$0	(\$226)	Jul - Refuse disposal - 226.02
3954 583 602	Maint - Source/Well/Headwork R	\$9,620	\$0	(\$9,620)	Aug - Sicon - 9620.35
3954 593 282	Maint - Bank Removal R	\$0	\$12,501	\$12,501	
3954 868	Ecan/LoS Monitoring	\$637	\$375	(\$262)	Ecan consent monitoring - July - 532.50, Sep - 104.35
3954 868 01	Scada Costs	\$56	\$75	\$19	Aug - 2way - 5.38, Qtech - 25.45, Sep - 2way - 10.76, Qtech - 14.36
3954 871	Urban Enhancement	\$0	\$4,251	\$4,251	
	Total Expenditure	\$199,677	\$230,164	\$30,487	
3954 890 3900	Support Charges-WTR RACE	\$11,064	\$11,064	\$0	July, Aug, Sep - Selwyn District Council - Standard Charge
	Total Support	\$11,064	\$11,064	\$0	
Projects					
3954 082	Health and Safety improvements	\$0	\$4,500	\$4,500	
	Total Projects	\$0	\$4,500	\$4,500	
Capital Projects					
3954 900 07	Railway Road - tipout point	\$0	\$7,500	\$7,500	
	Total Capital Projects	\$0	\$7,500	\$7,500	
Renewals					
3954 905 100	Renewals - Linear (Pipe Valve)	\$9,085	\$9,085	\$0	Jul - Sicon - 9085.00
	Total Renewals	\$9,085	\$9,085	\$0	

TO: Asset Manager, Water Services

FOR: Water Race Sub Committee Meeting – 12 November 2018.

FROM: Daniel Meehan – Surface Water Operations Engineer

DATE: 31 October 2018

SUBJECT: Items Of Unplanned Expenditure Over \$5,000

1. RECOMMENDATION

1.1 That the Water Race Subcommittee receives this report. “Items Of Unplanned Expenditure Over \$5,000” for information

2. PURPOSE

2.1 Provide the Water Race Subcommittee with information detailing the water race schemes and individual unplanned expenditure items over \$5,000 during July, August and September 2018.

3. SIGNIFICANCE ASSESSMENT/COMPLIANCE STATEMENT

3.1 This report covers the period July, August and September 2018.

Activity occurring over \$5000		
Scheme	Amount	Activity
Malvern	\$8,084.50	Install 25m culvert where slip continues to block race - Morrisons
Ellesmere	\$8,740.00	Mulching and bank repairs Terrace Lea return to River
Malvern	\$5,545.88	Replacement of soakhole Reynolds Road
Malvern	\$6,857.40	Kowai Fish Screen Maintenance – Lift out screen replace axel stubs and Teflon pads. Chain adjustments. Waterblasting screen. (Annual maintenance work)

3.2 Items of expenditure over \$5,000 committed in the next period. October 2018 November 2018 September 2018.

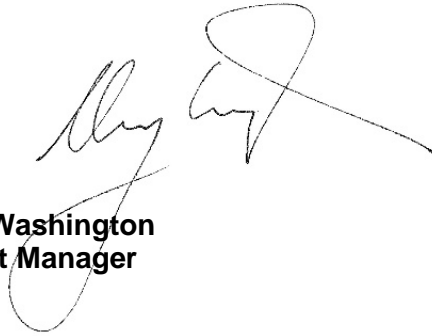
Activity planned over \$5000		
Scheme	Amount	Activity
Malvern	\$7,000.00	(Approx Cost) Waimakariri Fish Screen Maintenance – Lift out Screens, inspection of axel stubs and Teflon pads, replace if required. Chain adjustments. Water Blasting Screen. (Annual maintenance work)

ENDORSED FOR AGENDA

A bold, black, handwritten signature, likely of Daniel Meehan, consisting of several overlapping, stylized strokes.

Daniel Meehan

Surface Water Operations Engineer

A handwritten signature in black ink, likely of M F Washington, featuring a large, looped 'M' and a stylized 'F'.

**M F Washington
Asset Manager**

REPORT

TO: Chief Executive
FOR: Water Race Sub Committee Meeting – 12 Nov 2018
FROM: Surface Water Engineer
CC: Corporate Services Manager
DATE: 12 Nov 2018
SUBJECT: **Proposed Water Race Closures To Proceed to Public Consultation**

1. RECOMMENDATION

That the Sub-Committee:

- a) Agree to proceed to public consultation for the proposed closure of 1 Length of water race totalling approximately 920m in the Paparua Water Race Scheme and 1 length of water race at 1380m length and another at 5100m in the Malvern Water Race Scheme.*
- b) Advise the Council that the proposed closure is considered to be of low significance, not impacting the intended level of service nor ecological and amenity provisions for the Paparua and Malvern Water Race Schemes.*

2. PURPOSE

Seek approval from the Sub-Committee to proceed to public consultation for the following proposed water race closures:

Paparua

- 1. Closure of 920 m of race through 1 property on Dawsons Road.

Malvern

- 1. Closure of 1380 m of race through 1 property on Wards Road.
- 2. Closure of 5100 m of race through 7 Properties on Coaltrack Road (2 properties are SDC Quarry's)

3. SIGNIFICANCE ASSESSMENT/COMPLIANCE STATEMENT

Explicit provision has been made in the 2018/28 LTP for water race closures^[1] initiated by rate payers. The 2018/28 LTP has identified the following as major projects:

- Work with Central Plans Water and other third parties to develop shared water services / infrastructure where such ventures provide benefit to and are supported by Council.
- Progress ratepayer initiated water race closures to public consultation once approved by the Water Race Committee for closure. The committee will consider ratepayer initiated closures once 80% written support from directly affected property owners is obtained. All closures are subject to Council approval. Council initiated race closure will also occur over this LTP period.
- Work towards the closure of the Upper Ellesmere Water Race network.
- Work with Environment Canterbury and key stakeholders to realise opportunities to use consented stock water for environmental enhancement including targeted stream augmentation and habitat enhancement.

Significance is interpreted in section 5 of the Local Government Act 2002. The Council's Significance and Engagement Policy further outlines the meaning of 'significance' by stating that:

Significance should be assessed in terms of consequences for:

- The district or region
- Any persons who are likely to be particularly affected by or interested in the proposal, decision or matter
- The capacity of the local authority to perform its role, and the financial and other costs of doing so.

The Significance and Engagement Policy also sets out criteria for assessing significance which are applied in section 3.1 below.

The 2018/28 LTP identifies Water Races as a strategic asset. Strategic assets are assets or groups of assets that the local authority needs to retain to maintain its capacity to achieve or promote any outcome that is important to the current or future wellbeing of a community.

The LTP states that the level of significance of a decision will determine the process used by the decision maker considering Council's commitment to constructive community engagement. An assessment of significance has been included below for the Committee's discussion and recommendation.

3.1 Decision Making Considerations

The proposed water race closure(s) included in this report in Table 4.1 have been considered against the criteria for assessing significance from the Significance and Engagement Policy contained in the LTP 2018/28 (p. 220):

^[1] LGA 2002 S97(2)a

Policy and Outcomes

Council has indicated its intention to progress rate payer initiated water race closures. The proposed closures are not known to conflict with other Council policies or strategies

The following community outcomes are considered relevant to proposed water race closures:

Table 3.1 – Community Outcomes

Community Outcome	Level of Support
A living environment where the rural theme of Selwyn is maintained	Rural land use is changing. The proposed water race closures are being driven by the Community in line with their changing needs, therefore water race closures support this community outcome.
Selwyn has a strong economy which fits within and complements the environmental, social and cultural environment of the District.	Council seeks to support existing agriculture and other land based sectors. Ceasing to operate inefficient and ineffective assets that are no longer required by the Community supports the local economy.

- Closing water races that are no longer required by the community provides commercial and economic benefit to the rural communities of the District and reflects the changing needs of these communities.
- Closing water races can represent a cost saving to Council and rate payers. This is discussed further in section 12.
- There are no known impacts on Council's capacity to undertake its statutory responsibilities.
- There are no known inconsistencies with any existing policy, plan or legislation. The role of water races in maintaining a living environment where the rural theme of the District is maintained, has been recognised in the LTP. Providing an effective water race service and delivering levels of service is a key part of delivering community outcomes. Where a race cannot be supplied due to consent limits at the intakes or operational issues and leakage, maintaining channels that are not used or that have intermittent flow is counter to achieving this objective.

Communities

- The number of property owners affected by each closure is detailed in table 4.1. Consultation to the wider community will occur along with notification of key stakeholders include Department of Conservation, Fish and Game, Environment Canterbury and Ngāi Tahu.
- Affected persons are directly consulted on all water race closures. These include rated and non-rated properties that have a water race on or adjacent to their property. Where a closure has attracted 100% support from directly affected property owner, the closure is considered to be of low significance.

- Following approval by the Water Race Sub Committee, public advertisement of the proposed closures will occur.
- Council are considering the ecological impact of race closures by facilitating fish salvage where appropriate.
- It is not expected that proposed water race closures will generate wider national or international interest.

Ngāi Tahu

- See section 7.3 of this report.

Context and Implications

- An assessment of the options considered as alternatives to water race closure is included in section 6 of this report.
- The proposed water race closures are not expected to have any unintended consequences for community interests. The environmental, social and cultural impacts of the closures have been considered as outlined below:
 1. Cultural interests – the race closures proposed are not considered to impact the character of the District they are often on private land and exist extensively in other parts of the District. Potential implications for Ngāi Tahu (only as identified at this early pre-consultation stage) are discussed in section 7.3.
 2. Social interests – water races on private property are not considered to provide amenity value to the wider community and their closure is therefore not considered significant. Race closures on the roadside may have some visual impact in areas with high amenity. Under Council's process, for a rate payer initiated race closure to proceed, all affected property owners (those with a race on or adjacent to their property regardless of whether they are rated for stock water) are consulted and approval is required for closure to be progressed. Further public submissions are invited from the wider community.
 3. Economic interests – the proposed race closures will have no identifiable economic impact on the wider Selwyn District. Council and rate payers will benefit from operational and capital cost savings and Council will monitor the cumulative impact on rate revenue reduction which is discussed further in section 12.
 4. Quality of the Environment – opportunities for fish salvage will be provided in consultation with the Department of Conservation prior to any race closure. Closing ineffective and inefficient races provides environmental benefit as discussed further in section 7.
- The proposed water race closures are not considered to impact a scarce resource. The provision of water for stock can generally be provided from alternative sources.
- The proposed water race closures are considered as irreversible where they cross private property. Council do not hold easements for most water races and are unlikely to have the power to enforce reinstatement of water race channels on private property. However, stock water supply can generally be provided from other sources.

- By undertaking public consultation on the proposed water race closures, Council will establish whether the proposed closures are considered controversial.
- All water race closures will be progressed following appropriate consultation in a timely manner
- Closures that have attracted 100% support do not present uncertainty or lack of clarity for Council. Council initiated closures being progressed to consultation with 70% support or greater attract some degree of uncertainty. Greater certainty will be obtained during the consultation period.

The proposed water race closures represent the following loss to each of the schemes:

<p>Paparua</p> <ul style="list-style-type: none"> • Reduction in length of water races 0.05% • Loss of targeted rates income 0.08% <p>Malvern</p> <ul style="list-style-type: none"> • Reduction in length of water races 0.37% • Loss of targeted rates income 0.1%
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** Based on Total Targeted Water Race Rates and Total lengths from AMS*

The Paparua and Malvern proposed closure is negligible percentage reductions when considered against the total length of water race as indicated above. Of the 7 properties in the Lee Closure (Malvern), only one property, Peter Lingard's, will lose targeted rates due to the other properties being effected by another main water race asset.

Of the 7 properties of the Lee Closure, 2 are SDC Clean fill Pits. One of the pits, Broughtons Pit, will be leased to Rooney Contracting with the Lease Agreement stated the following:

- p) The Compliance Works and clean filling works must allow for a soakage area for the water race to be directed into at some time in the future (this is a contingent requirement to provide for possible groundwater re-charge opportunities). The location for this will be agreed to between the Lessor and Lessee.

Given that the nearby (see Appendix A for Maps) main water race is within the groundwater catchment, groundwater re-charging will still be possible in the future from the nearby main races; therefore, closing the proposed Lees water races section will not affect groundwater resources. This will be confirmed during the consultation period.

Based on the above assessment, it is recommend that the proposed closures are considered of **low significance**. The level of significance impacts the degree of consultation undertaken on the engagement spectrum. Council takes a conservative approach to consultation.

4. HISTORY/BACKGROUND

4.1 Proposed Closures Recommended for Progression

Council has received requests for closure of the following races.

Table 4.1 – Proposed Water Race Closures Recommended for Approval to Progress to Public Consultation

Ref	Scheme	Received from	Road Name	Number of affected Props	Approx metre Race	Progress
1	Paparua	Fulton Hogan Ltd	Dawsons Rd	1	920	The inlet pipes have been closed to the property. No water is flowing at this time.
2	Malvern	Paul Prattley Contracting Ltd	Wards Rd	1	1380	
3	Malvern	Peter Lingard	Coaltrack Rd	7	5100	Half the water race has been dry due to sink holes
TOTAL				9	7400	

Appended to this report (Appendix A) are maps showing the location of the above sections of race proposed for closures.

5. PROPOSAL

Approval to proceed to public consultation for the following proposed closure once all signed agreement forms have been received:

1. Closure of 920 m of race through 1 property along Dowsons Road near State Highway 1 (Fulton Hogan Ltd)
2. Closure of 1380 m of race through 1 property on Wards Road (Paul Prattley Contracting Ltd).
3. Closure of 5100 m of race through 7 Properties on Coaltrack Road (Lee Closure)

6. OPTIONS

Where a request for water race closure is received, there are a number of potential options available to Council.

Table 6.0 – Alternative Options Considered

Option	Details	Advantage	Disadvantage
1. Water race closure	Race closure with the agreement of all affected land owners (rate payers on the race or directly adjacent to the race), subject to public consultation and reasoned consideration and response to issues raised during consultation.	Objective is achieved and wishes of rate payers considered.	Loss of rating income. Ecological values of races not maintained.
2. Piping of water race	Piping can be considered if downstream property owners wish to maintain supply. Piping to be funded by each landowner. Piping a water race will not maintain the ecological value of an open water race channel.	Supply to downstream property owners maintained.	Landowners responsible for maintenance of pipes with potential upstream impacts if not maintained. Higher cost to land owners. Ecological values of races not maintained.
3. Race relocation	Relocation could be considered if downstream property owners wish to maintain supply for stock water purposes. Costs to be met by landowners.	Rating income retained.	Unlikely to achieve benefits of race closure required by land owners. Potential impacts on adjacent land owners. Cost to land owners.
4. Race retained	Do nothing races retained.	Rating income retained.	Needs of rate payers requesting closure not met.
5. Onsite alternatives	On site alternatives e.g. a well, could be considered if land owners wish to	Stock water supply retained.	High cost to property owners for installation

Option	Details	Advantage	Disadvantage
	retain a stock water service.		and ongoing maintenance. Ecological and other race values not retained.

These options are alternatives to closure of an open race if a downstream landowner requires a stock water supply to continue. Water race closures will only occur for short lengths of race (excluding whole or major part of scheme closures) if 100% support from affected land owners is obtained.

7. VIEWS OF THOSE AFFECTED/CONSULTATION

7.1 Views of those affected

The Local Government Act 2002 section 82 requires consultation with persons affected by or have an interest in a decision. They must also be provided with a reasonable opportunity to present their views to the Local Authority.

The level of significance of a proposed water race closure will inform the level of consultation undertaken. The LTP outlines an engagement spectrum which ranges from informing the community to empowering the community.

Significant closures are required to be provided for the LTP. Rate payer initiated closures and closure of the Upper Ellesmere water race has been provided for the 2018/28 LTP.

For an individual race closure to be progressed, the Council's water race closure process requires that the initiator of the water race closure request obtain agreement from all affected property owners and provide Council with a 'Agreement to Close Water Race' form signed by all affected property owners.

Where a proposed closure has 100% support from affected land owners, the closure is likely to be of low significance; therefore, the inform/consult end of the engagement spectrum is considered appropriate. An affected property owner has been deemed to be those with a race on or adjacent to the property, regardless of whether the property is rated.

Once unanimous support is obtained from land owners, the closure request can proceed to public notification and the water closure request is publicly notified. If interested parties wish to present their views there will be an opportunity at the Water Race Committee meeting every quarter. Should objections to an advertised closure be received, the hearing panel will consider the objection and its relevance to stock water supply and pass recommendation to the Water Race Sub-Committee to consider as part of their decision making.

Where a proposed water race closure has attracted 100% support and no further objections are received, the Sub-Committee will progress the closure once approved by Council. For Council initiated closures or strategic closures, Council's process requires 70% support to be gained for proposed closures to progress to public consultation.

7.2 Interested Parties Consultation

To allow any parties with an interest in water race closures to input into the process as required by S 82 (1 (a)) of the LGA, all race closures will be publically advertised for a minimum of 2 weeks in Council Call and on the Council website. Maps of proposed water race closures will be available to view at Council or on the website. A summary of the proposed water race closures is made available on the Council website.

A letter will be sent to all directly affected property owners to notify them that the proposed closure has been approved to progress to public consultation.

Specific stakeholders identified as Department of Conservation, Fish and Game, Historic Places Trust (specifically where structures e.g. headworks are involved) and Ngāi Tahu will be directly provided with a copy of the above advertisement.

Should any parties wish to present their views on the advertised closures, an opportunity will be provided at the Water Race Sub Committee meeting prior to approval being considered by the Committee.

A recommendation to Council has been made to delegate powers to hear submissions to the Water Race Sub Committee and make recommendation on the significance of water race closures and agree closures not deemed significant.

Minutes from the Water Race Subcommittee meetings are available for public viewing on Council's website.

A public hearing will only occur if persons wish to be heard. Hearing are only expected to be required for significant closures or those progressing with 70% support. Any objections to race closures on grounds other than stock water supply will be considered during public hearing (if applicable) and the hearing decision confirmed by the Water Race sub-committee. Consideration will need to be given to whether objectors are stock water rate payers and directly or indirectly affected. Should a race be retained for reasons other than stock water supply a different rating mechanism may be required.

Once approved by the sub-committee a public advert for the above listed closures will be placed.

Letters will also be sent to the following key stakeholders informing them of the proposed closures and providing a copy of the above advert.

- MKT & Te Taumutu Runanga
- Department of Conservation
- Fish and Game
- Fire and Emergency

7.3 Māori implications

The entire Selwyn district lies within the rohe of Ngāi Tahu. The importance of Ngāi Tahu is recorded in the Council's Significance and Engagement Policy (section 6).

Te Rūnanga O Ngāi Tahu Freshwater Policy recognises the importance of providing a stock water supply to communities. This principal is considered alongside a number of others which seek to protect the environment and its inhabitants. By proposing the closure of ineffective, inefficient and no longer required water race assets, Council is proposing to better balance the needs of rate payers, Iwi and the environment.

Mahaanui, The Iwi Management Plan (IMP) 2013, recognises the importance of the water race network and states that they should be managed as waterways. In support of these principals Council require that heavy stock (deer and cattle) is fenced from entering the water races and provides advice to landowners on how to provide stock access to drink without entering the channel.

In support of the principles outlined in the (IMP) and per the Regional Councils direction, the Council have installed fish screens at the Paparua, Upper Kowai, Glentunnel (Selwyn River), Waimakariri and Lower and Upper (Terrace Lea) Rakaia intakes.

At the time of advertising closures, details of the proposed closure are provided to Ngāi Tahu via MKT. It should be noted that in general water races requested for closure are often tail end races (lateral races) where excess water is disposed of to ground. Where a water race feeds another water course further consideration will be given to impacts on that waterway.

7.4 Ecological Considerations

The Canterbury Water, Selwyn Wahiora Zone Implementation Programme acknowledges that Council are reviewing the operation of the stock water race network and seeking opportunities for rationalisation while managing some races for biodiversity and community values.

The Implementation Plan supports race rationalisation and recognises the importance of reliable stock water supplies while identifying opportunities for supporting an aquatic corridor from mountains to sea via water races and creating wetlands at discharge to ground locations.

Mahaanui, the Iwi Management Plan 2013 recognises the importance of the water race network for biodiversity and habitat for native freshwater fish. Upon guidance from a suitably qualified ecologist, a fish salvage and relocation program will be provided to DoC and Fish and Game prior to a water race closure.

DOC have indicated that in general terms if a race has been dry for a period of time, low levels of aquatic life are expected to be present and limited to isolated pools. In a memo to Council dated 6 July 15, which can be found in Appendix B, DOC have indicated that the level of input from DOC may need to be prioritised based on predicted distribution of threatened species and external contractors may need to

be used. DOC may provide guidance to Council and Contractors on the process the suitable sites for relocation.

Fish salvage may be necessary. Closures need to take into consideration the Resource Management Act 199, Freshwater Fisheries Regulations 1983, and the Fisheries Act 1996, and/or the Conservation Act 1987. See Appendix E for Fish Salvaged Guidance by ECan and CCC. Where DOC or NIWA staff are not available to undertake fish salvage and it is deemed necessary by a suitably qualified and experienced person, consulting companies exist that are equipped to undertake electrofishing, however this may attract significant cost. The Agreement to Close Water Race form states that the benefiting property owners are liable for their share of the costs associated with the closure. It has been deemed that no fish salvage is necessary given that the proposed section of water race is isolated, with the intake and discharge points being capped from a main race on the other side of the road when the race was dry. This was inspected and verified by the Council.

The Council undertook an assessment of sites of high ecological and aesthetic values within the Water Race schemes in 2011, refer appendix D. Maps showing the proposed closures in relation to the Strategic Races are included in Appendix E. There are no identified areas of significant value in the proposed closures identified in this desktop assessment.

8. RELEVANT POLICY/PLANS

- Council Policy W107 Closure of Water Races
- Significance and Engagement Policy

9. COMMUNITY OUTCOMES

See section 3.1 above.

10. NEGATIVE IMPACTS

Negative impacts or effects will be considered as part of the race closure approvals process and closures will only proceed if negative effects are mitigated or minimised and affected land owners agree. There are no known negative impacts of this closure.

11. LEGAL IMPLICATIONS

The recommendation complies with the requirements in the Local Government Act 2002 and the Council's policies and internal procedures. See Appendix E for a Flow Chart of the Water Race Closure Process.

12. FUNDING IMPLICATIONS

12.1 Rating Impact

The proposed race closures detailed in this report are expected to have the following impact on rating income:

Table 12.1 – Funding Implications of Proposed Race Closures

Ref	Scheme	Received from	Road Name	Loss of Targeted Rating Income	Percentage of Total Rating Income (District Account)
1	Paparua	Fulton Hogan Ltd	Dawsons Rd	\$ 2,095.00	0.08%
2	Malvern	Paul Prattley Contracting Ltd	Wards Rd	\$ 951.20	0.04%
3	Malvern	Peter Lingard (Lee Closure)	Coaltrack Rd	\$ 1682.25	0.06%
TOTAL				\$ 3,046.20	0.18%

The cumulative impact of closures will continue to be considered as more closure requests are received.

12.2 Cost Savings

Closures to date have typically been short lengths of lateral water race that are maintained by the property owners. Closure of these races have minimal impact on operational costs.

12.3 Closure Costs

The cost of any rate payer requested closures will be met by the benefiting property owners. No fish salvage is needed for this closure.

13. HAS THE INPUT/IMPACT FROM/ON OTHER DEPARTMENTS BEEN CONSIDERED?

A copy of this report has been provided to the Corporate Services Manager as income accounts will be affected.

PREPARED AND REVIEWED BY



**JAMES SKURUPEY
SURFACE WATER ENGINEER**



**MURRAY ENGLAND
ASSET MANAGER, WATER SERVICES**

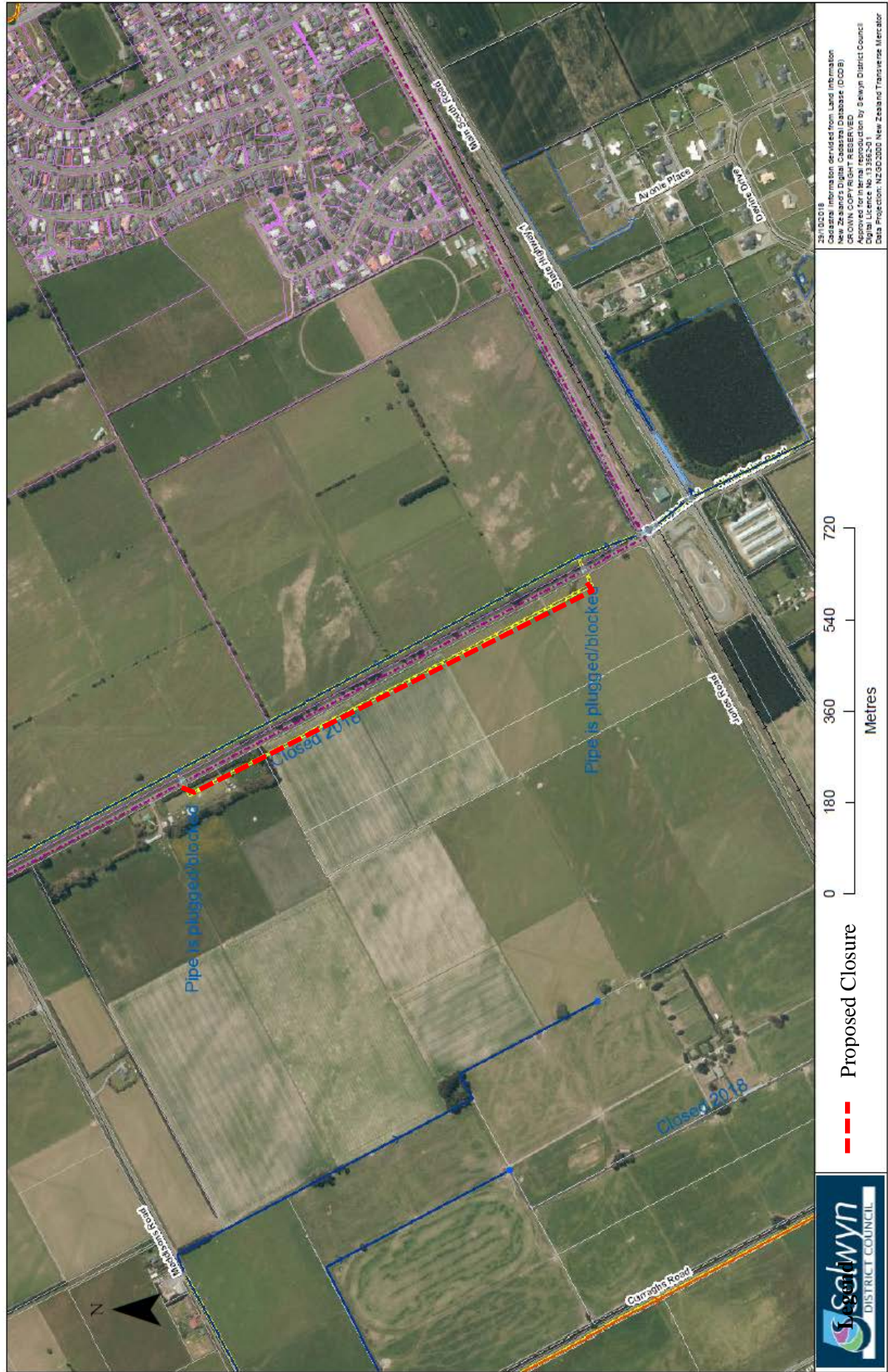
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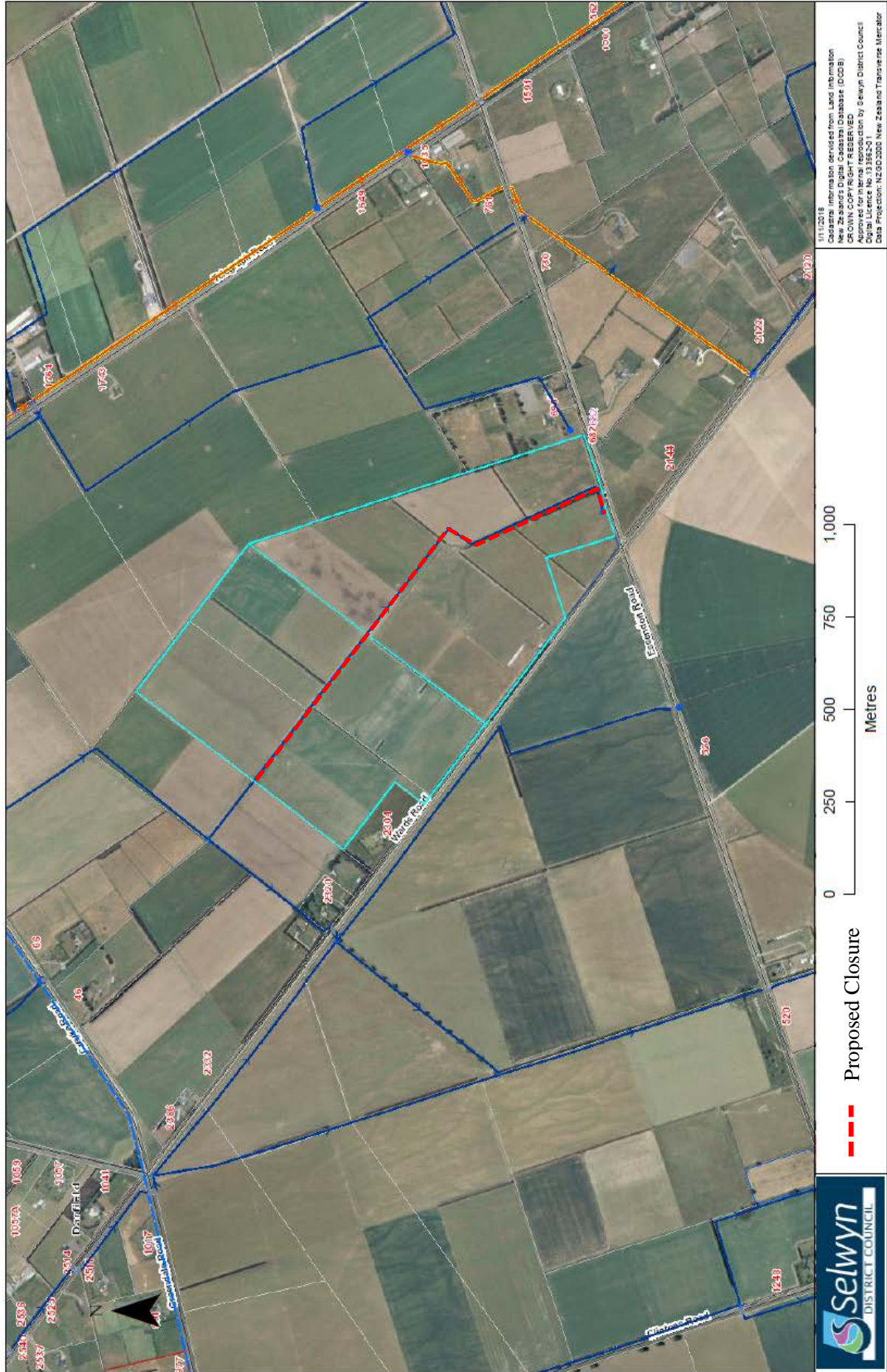
MURRAY WASHINGTON, ASSET MANAGER

APPENDIX A – WATER RACE MAPS PROPOSED CLOSURE

Fulton Hogan Closure Map



Prattley Closure



Metres

1,500 2,250 3,000

 = SDC Pits



APPENDIX B – MEMO FROM DEPARTMENT OF CONSERVATION



Date: 6 July 2015

To: Jo Golden – Water Services Engineer – Selwyn District Council

CC: Murray England – Asset Manager – Water Services – Selwyn District Council
Anita Spencer – Biodiversity Ranger, Conservation Services, Mahaanui District, Department of Conservation
Rosemary Miller – Freshwater Manager, Science & Capability Group, National Office, Department of Conservation

From: Nicholas Dunn – Freshwater Science Advisor, Science & Capability Group, National Office, Department of Conservation

Memo: Notes from fish salvage from the Selwyn District Council stockwater race below Crossgates Road prior to closure

This memo describes the freshwater fish salvage conducted by Department of Conservation staff in the Selwyn District Council stockwater race below Crossgates Road, Southbridge, and considerations for future salvage operations.

Crossgates Road salvage

Fish salvage was conducted on 11 and 12 May 2015 in 2.3 kms of stockwater race below Crossgates Road in the Ellesmere scheme. Below this, 730 m until the end of the water was not considered fish habitat. A further 1.96 km of race below this again was dry. The salvage followed recognisance visits on 19 November 2014 and 30 April 2015.

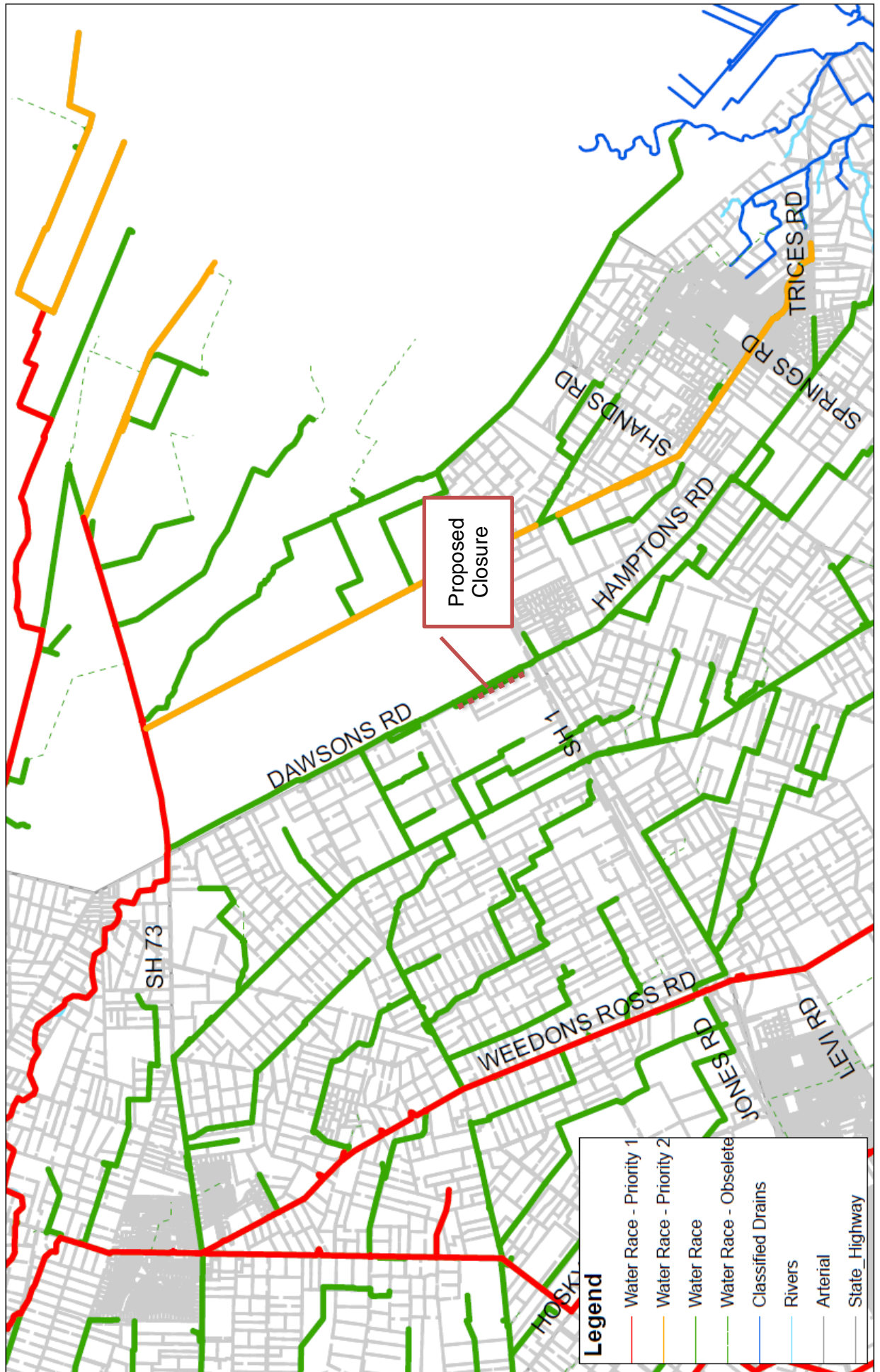
A total of 225 upland bully (*Gobiomorphus breviceps*) and 2 longfin eel (*Anguilla dieffenbachii*) were captured over the two day period, being relocated to a section of race on North Rakaia Road near the intake from the Rakaia River.

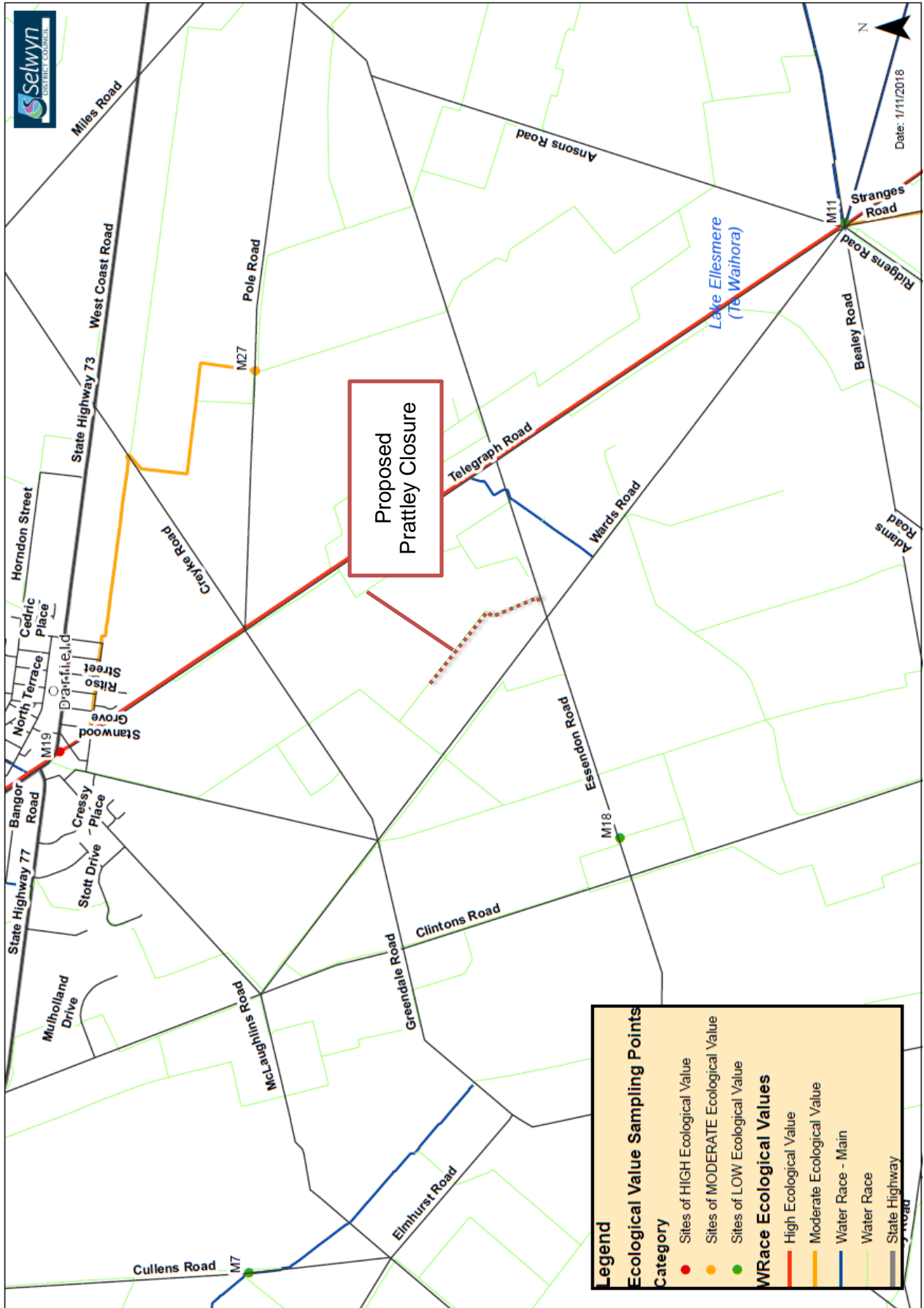
Future salvage

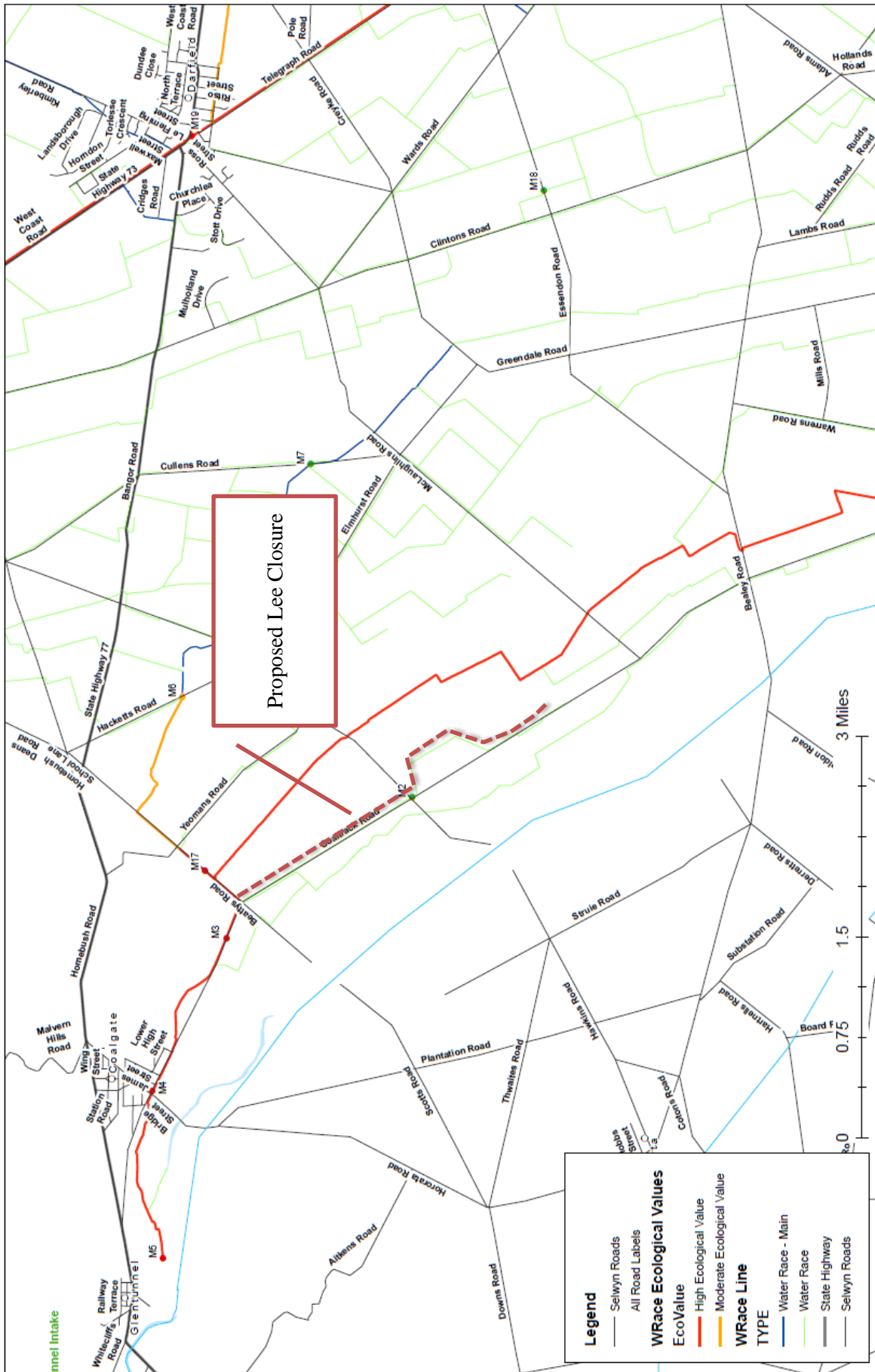
Observations during the current salvage could be used to guide future salvages:

- Three staff members took part in the salvage each day. This level of input needs to be prioritised against other biodiversity work. Future salvages may need to be guided by DOC staff, but be undertaken by external contractors.
- Dependant on the location of the race closure, the level of input from DOC may need to be prioritised by the known or predicted distribution of species based on their conservation status under the New Zealand Threat Classification System.
- Having the water race ranger on site during recognisance visits is beneficial. This allows identification of sections of race that have previously dried or had low water levels, or lack bankside vegetation and instream macrophytes, and thus likely represent low quality fish habitat.

Strategic Water Races - Ecological and Aesthetics (Working Draft)







SDC High Water Race Ecological and Aesthetic Values Map

Date: 2/11/2018

APPENDIX D – EOS ECOLOGY, SITES OF HIGH ECOLOGICAL VALUE – 2011



Fish Salvage Guidance for Works in Waterways

12 October 2017

Greg Burrell (CCC) and Duncan Gray (ECAN)

1. Background

Freshwater fish, including eels, are found in a range of aquatic environments, ranging from native forest streams through to wetlands, ponds, and highly modified urban drains and artificial waterways. There is a responsibility under several Acts of Parliament to protect these fish, which has implications for anybody undertaking works in and around waterways. Individuals or groups attempting to obtain a resource consent for an activity that will adversely impact fish communities may be required to carry out fish salvage. It is important to note that fish salvage should not be the first mitigation considered. If it is possible to preserve the habitat of fish from effects, that should occur preferentially. The ability to salvage any fish present does not mitigate against unnecessary habitat destruction.

This document provides guidance around fish salvage¹ in Canterbury, to help address uncertainties around what is required of contractors and councils working in waterways. In particular, the purpose of this document is to provide guidance as to:

- Where fish salvage needs to be considered in relation to waterway works.
- What kinds of activities may trigger the need for fish salvage.
- What types of salvage methods are available.
- Who needs to be involved.

This information will be critical in the preparation of an Assessment of Environmental Effects (AEE) to avoid requests for further information and ensure the smooth processing of a consent application or compliance assessment.

Many of New Zealand's freshwater fish species are endemic, which means they are native to this country and found nowhere else. Native fish (found naturally in New Zealand and elsewhere) are found in waterbodies throughout Canterbury (Figure 1); commonly encountered species include several bully species, inanga (a whitebait species), and eels (Figure 2 and Figure 3). Rare and threatened species, such as Canterbury mudfish, lamprey or lowland longjaw galaxiids tend to have more restricted ranges.

When working in rivers the Freshwater Fisheries Regulations 1983 dictate that indigenous, or native, fish shall not be knowingly destroyed, as detailed under Section 70:

Section 70 No killing of indigenous fish

- (1) *No person shall in any water intentionally kill or destroy indigenous fish.*

¹ We define fish salvage here as removing fish from a work area prior to commencing works, with the aim of avoiding and minimising impacts of work activities on aquatic species. Note that fish passage is a separate matter, which is generally better provided for through the resource consent process.

- (2) *No person, having taken indigenous fish from any water, shall leave the fish upon the bank or shore of any stream or lake, except where such indigenous fish is used in accordance with any provisions of a District Anglers Notice relating to lures.*

Many organisations and contractors are unaware of the legal requirements that may apply to, and may require, fish salvage to be undertaken for waterway projects and maintenance. Permits, consents or approvals must be obtained under any relevant legislation (including the Resource Management Act 1991, the Freshwater Fisheries Regulations 2003, the Fisheries Act 1996, and/or the Conservation Act 1987). Offences could be committed under these Acts and Regulations for not having an appropriate approval, taking the wrong fish or using the wrong method to take them, or killing fish.

Note that this document does not cover all of the legal requirements associated with working around waterways, and only provides guidance for fish salvage. For example, works in or around waterways will usually trigger the need for a resource consent under the Resource Management Act. Seek the advice of an expert before conducting any works around waterways.

This document was prepared by Christchurch City Council and Environment Canterbury with input from internal and external construction and drainage engineers, ecologists and planners.

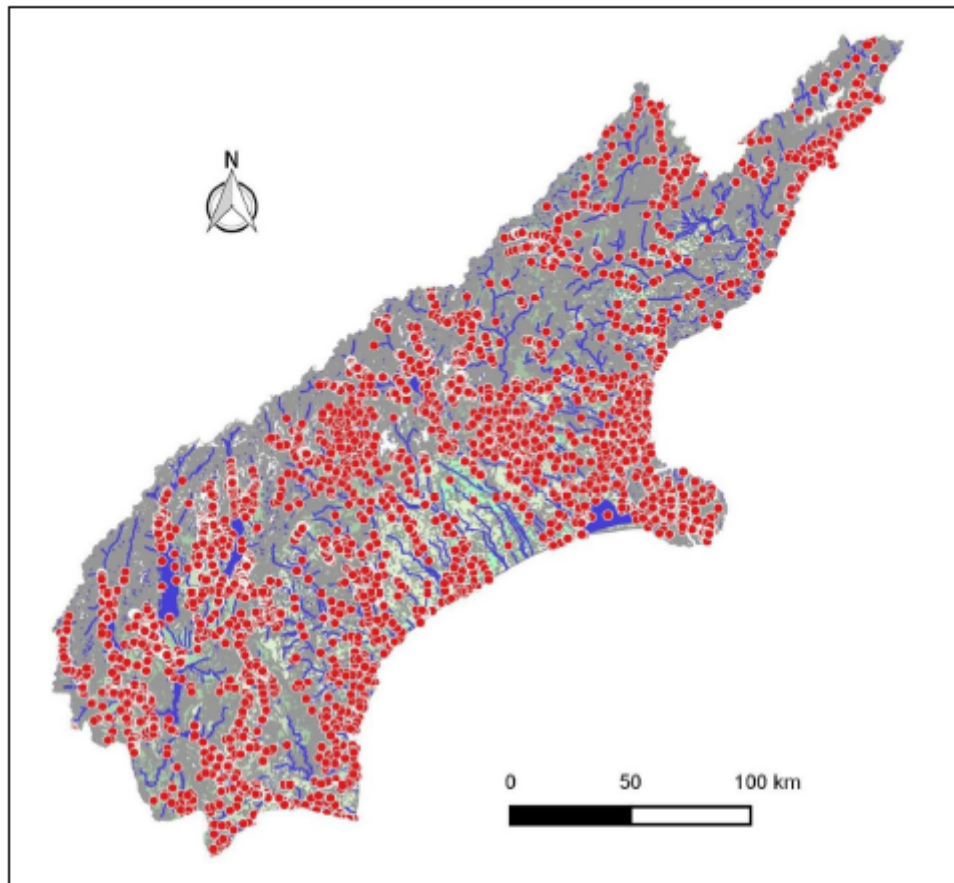


Figure 1: Location of native fish recorded in Canterbury, extracted from the New Zealand Freshwater Fish Database on 22 March 2017. Note that the absence of a record at a given location may simply mean the site has not been sampled, not that fish are absent from that location.



Figure 2: A large longfin eel caught in a Canterbury waterway. Longfin eels are an At Risk species in decline².

² Goodman, J. M., Dunn, N. R., Ravenscroft, P. J., Allibone, R. M., Boubee, J. A. T., David, B. O., Griffiths, M., Ling, N., Hitchmough, R. A., and Rolfe, J. R. (2014). Conservation status of New Zealand freshwater fish, 2013. New Zealand Threat Classification Series 7, Department of Conservation.



Figure 3: An adult inanga. Juvenile inanga are commonly known as whitebait. Inanga are classified as an At Risk species in decline².

2. Where is Fish Salvage Necessary?

General Advice: If a watercourse has water in it most of the time and the water depth is more than one or two centimetres, then it may contain fish and fish salvage may be required.

While deeper waterways provide habitat for a greater range of species, even very small streams, or concrete and timber-lined drains with minimal water, will often contain small-bodied species such as bullies or juvenile eels. Several species of fish, notably eels and lamprey, will burrow into stream beds or banks during times of low flow such that a temporary absence of water does not indicate an absence of fish. Fish are also highly mobile, recolonising a previously dewatered reach rapidly once flow returns. Even waterways that are mostly dry may include isolated pools that contain fish.

3. What Activities may Require Fish Salvage?

General Advice: If the activity involves channel dewatering or will disturb the bed and submerged banks of a watercourse, and the watercourse may contain fish that might be harmed or killed by the activity, then fish salvage or other mitigation will likely be required.

Particular activities that may require fish salvage or other mitigation include:

- Decommissioning waterways prior to piping or realigning.
- Waterway restoration projects.
- Installation of fish passes.
- Channel dewatering (including isolated areas).
- Bank protection works.
- Bridges and other structures on the bank – both new builds and repairs.
- Sediment removal (including routine waterway maintenance).

The Freshwater Fisheries Regulations 1983 make no distinction regarding the scale of the activity, so fish salvage or other mitigation should always be considered, regardless of the size of the project. However, the scale and specifics of the activity will determine the most appropriate method of salvage or other mitigation. The most appropriate methods should be determined with the guidance of a council or consulting freshwater ecologist who can tell you the most appropriate methods of fish salvage and ensure the work is done correctly. An activity that involves dewatering of an area of stream will likely require fish salvage to be carried out

by an ecologist or other suitably trained and permitted person under the guidance of an ecologist.

Activities that may result in fish being stranded on the bank will require fish to be returned to a suitable stretch of water by an ecologist or suitably trained person. Such activities include the removal of weed and sediment using a digger or dredging methods. Activities with the potential to impact downstream water quality to the detriment of fish should be mitigated primarily through monitoring of water quality (with trigger levels that dictate when works should cease) and changing the timing of the works, but fish salvage may be required in the event of fish stranding or suffocation.

General Advice: Speak to a council or consulting ecologist during the project planning or consent application phase to determine if and how fish salvage should be undertaken.

A Case study of Waterway Maintenance

Many lowland waterways are subjected to regular aquatic plant and fine sediment removal to aid drainage and mitigate against flooding. Studies have highlighted the ecological and water quality effects of standard practice methods of drainage clearance and the need for associated fish salvage.^{3,4,5} Consequently, Environment Canterbury's "Code of Practice for Defences Against Water and Drainage Schemes" states on page 24 that:

Where works are undertaken in water and there is potential for fish to be stranded, the person or organisation undertaking the works shall ensure that native and sport fish recovery is conducted for the duration of the works and at least one day after they have been completed. Fish recovery shall be conducted both instream (for suffocating fish) and bank side (for stranded fish). Recovered fish shall be returned upstream of the targeted section of waterway.

The Environment Canterbury Code of Practice for Defences Against Water and Drainage Schemes provides an example of an approach to fish salvage developed between engineers and ecologists.

4. What Fish Salvage Methods should be used?

General Advice: A range of fish salvage methods are available, but the method used should be effective at avoiding and minimising fish mortality, and be appropriate for the scale and significance of potential effects caused by the activity.

Prior to conducting any work, an initial fish population assessment may be helpful to identify the scale and significance of potential effects and the most appropriate fish salvage method or mitigations to employ. Timing of the works in relation to sensitive periods (e.g., fish spawning or migration) is a key first consideration for avoiding and minimising effects. The next step is ensuring all practicable steps have been taken to isolate the worksite (e.g., by

³ Hudson, H.R. and Harding, J.S., 2004. Drainage management in New Zealand: A review of existing activities and alternative management practices. Department of Conservation, Science for Conservation 235.

⁴ Ballantine, D. and Hughes, A., 2012. The effects of drain clearing on water quality of receiving environments; Water quality effects of drain clearing. Prepared by NIWA for Environment Southland. May 2012.

⁵ James, A., 2013. A review of the ecological effects of macrophyte management in soft-bottomed waterways. Waikato Regional Council Technical Report 2013/03. Prepared by EOS Ecology for Waikato Regional Council, January 2013.

using sheet piling). The types of fish salvage methods that may be used include electric fishing, trapping (e.g., fyke nets and minnow traps), and seine netting. If the activity may result in fish stranding on the bank (e.g., weed clearance or sediment removal), then salvage may involve both in-channel salvage (e.g., trapping or electric fishing) as well as examining the banks (including sediment spoil piles) for stranded fish. The decision on which method to use should be made with the guidance of a council or consulting ecologist.

All fish salvage methods assume appropriate permissions, permits, and controls are in place. The method chosen will rely on expert judgement and will depend on factors such as fish species present, water depth and velocity, fine sediment depth, and macrophyte (weed) cover.

5. Who should be Involved?

General Advice: A freshwater ecologist should be involved in any project likely to require fish salvage and they can advise on mitigations.

A council or consulting freshwater ecologist with fisheries experience is the appropriate person to assess whether fish salvage is required and what methods should be used.

Fish salvage requires a Special Permit under Section 97 of the Fisheries Act 1996, and the permits are issued by the Ministry for Primary Industries (MPI). Additional authorisations are also typically required from the Department of Conservation, Fish and Game, and rūnanga. While "general authorisation" Special Permits may be valid for a wide range of projects, they still usually require that MPI and other organisations are notified in advance of any salvage work being conducted. In addition, there are a number of activities not covered by general authorisations (e.g., relocating fish outside of the catchment it was caught from) that may require a project-specific Special Permit and associated authorisations from the Department of Conservation, Fish and Game, and rūnanga.


Special Permits and other authorisations typically include a reporting requirement (usually an annual report in the case of Special Permits), including as a minimum what species were caught and their abundance.

Environment Canterbury Regional Council

Christchurch City Council

Peer reviewed by:

Signature:




Position:

Surface Water Manager

Waterways Ecologist

Date:

1 March 2018

26 March 2018

Approved by:

Signature:




Position:

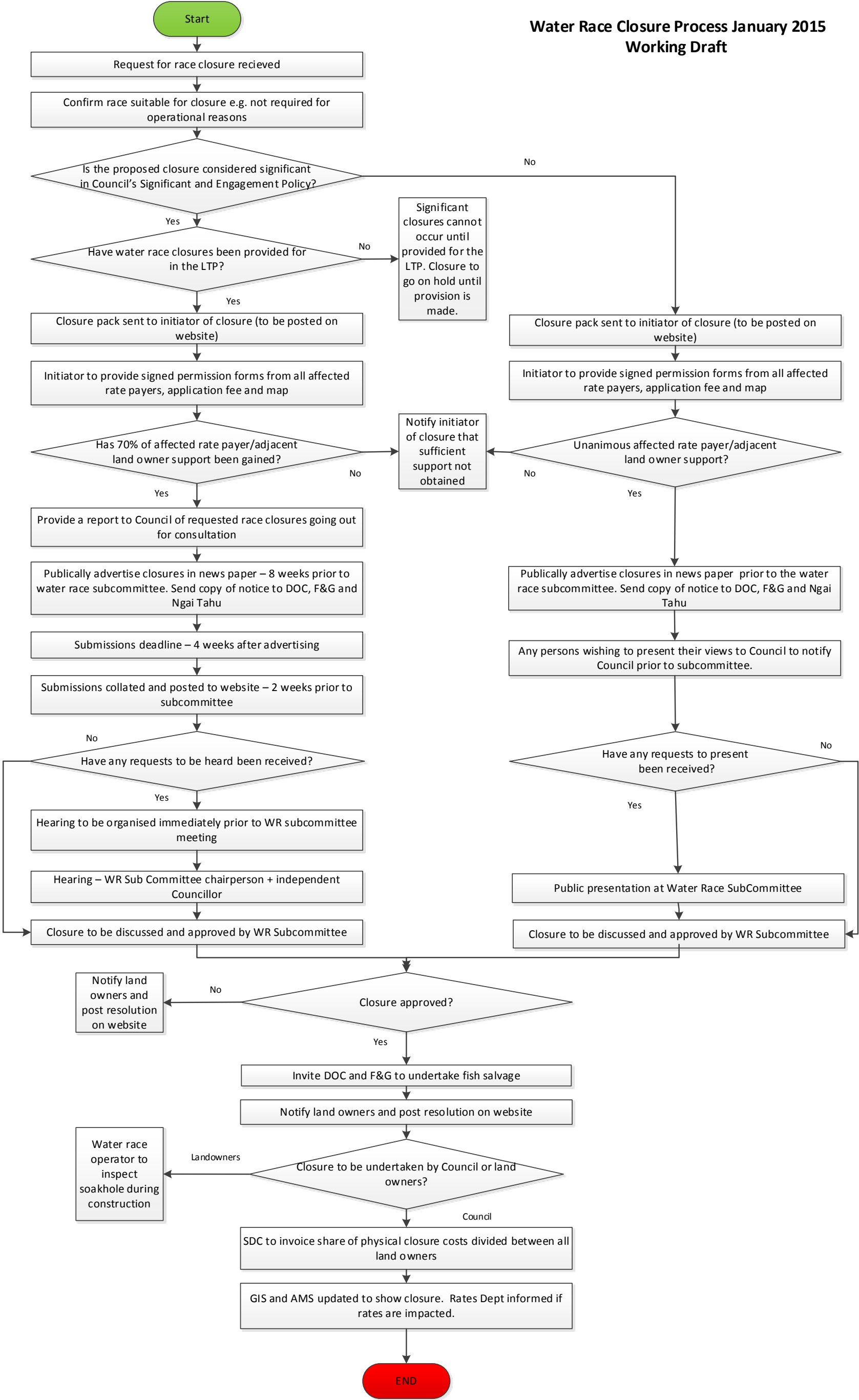
Director, Science

Manager, Planning & Delivery WWW

Date:

1 March 2018

26 March 2018



MEMORANDUM

To: Water Race Sub-Committee

From: Daniel Meehan – Surface Water Operations Engineer

Date: 15th October 2018

Subject: Springfield Water Race – Investigation of Flooding Issues

Introduction

This Memo has been prepared for the Selwyn District Council Water Race Sub-Committee. During the August 2018 meeting landowner Dr Bruce Smith spoke to the committee raising a number of concerns for the water race which runs through Springfield. His primary concern was that the water race was contributing to the flood risk of the Springfield Township. This memo has been written at the request of the Water Race Sub-Committee to investigate the concerns raised, highlight the potential issues, and propose some solutions. This report will not discuss Dr. Smith's culvert, this is a private structure not managed by SDC water race staff or contracts. The culvert is the landowners responsibility.



(Picture 1 – Tramway Road where race flowed across road)

Recommendations

- Remove gravel at each culvert during annual operational works and during this summer works period.
- Continue to clear gravel from the section below the Railway yard.
- Remove small willow seedlings growing in race.
- Repair scour at Pockocks Road culvert.

Inspection Findings,

- Overall condition of the creek is good.
- Some scouring at Pococks Road Bridge which will require minor rock protection. Small amount of gravel to remove at this location. Also recommend spraying inside corner. (See Picture 02)
- Material built up in channel on the upstream side of Tramway Road culvert needs to be removed. (See Picture 03)
- Small willow seedlings to be removed through township.
- Minor amount of gravel built up at Railway yard culvert, downstream needs to be monitored and cleared frequently.
- Improvement could be made to overland flow paths to connect flood waters to culvert at end of King St. (Not within scope of water race management)



(Picture 2 – Scouring Pococks Road)



(Picture 3 – Gravel at Tramway road culvert)

Springfield Water Race History

The Kowai intake was the first intake constructed for the Malvern water race scheme in the late 1870's. The scheme was initiated to take water from the Kowai River and supply the plains with water.

The first stage started with the construction of dams, tunnels and open races for a distance of approx. 4km's bringing water from the Kowai River then discharging into Bishops Creek. This allowed engineers to work with the natural contours of the land and utilise the natural creek channel which would normally run dry. The initial section is still in operation today and is crucial for the supply of water across the 61,648ha Malvern Stockwater Scheme.

There is a number of structures which have been installed in the channel of Bishops creek for various reason. Weirs have been installed to prevent erosion and severe drops in fall within the race. Another structure which remains in the race is an old water wheel housing structure which was used to pump water into Steam trains.

The maintenance of water races including of the Bishops creek section through Springfield is managed by SDC contractors. This includes clearing of obstructions to flow such as vegetation and gravel / silt build-up. SDC contractors also manage the intake flows, for Kowai this means shutting down the intake during flood events.

Bishops Creek

Appendix 1 Shows connection between Bishops Creek and the water Races.

Bishops creek has a catchment area in the foot hills southwest of Springfield with a catchment area of approx. 685ha. Bishops Creek is generally a dry creek but when there is even moderate rainfall the creek will flow and top up the water taken from the Kowai intake. Smaller rain events only require minimal operator adjustment of flows at Kowai intake. Larger rain events require the intake to be shut completely and the tip-outs to be opened up. Apart from a couple of minor races there is no ability to tip water out of the main race (Bishops Creek) between confluence of Bishops creek and Odgers Divide approx. 5km downstream of Springfield. After rain events Bishops Creek can continue to flow for several days afterwards.

The water race scheme is controlled at Odgers divide where a set flow continues down through the Malvern water race network, and larger flood flows carry on via the original Bishops creek channel down to the Hawkins River.

As Bishops Creek is a natural water way with relatively steep grade, this results in gravels and silts being transported during rain events.



(Picture 4 – Bishops Creek Confluence with Water Race, Looking up Bishops Gully)

Inspection

An inspection of the Water Race, culverts and Bishops Creek through Springfield Township was undertaken on 8th October 2018. The inspection was carried out by SDC Surface Water Operations Engineer and Sicon Water Race Operators.

The channel was inspected from Bishops Creek confluence, the main culverts under each road. And finished at the Springfield Railway yard culverts. The aim of this inspection was to confirm the condition of the main channel and identify issues. The amount of material accumulated at each culvert was also determined.

Findings.

- Overall condition of the creek is good.
- Some scouring at Pockocks Road Bridge which will require minor rock protection. Small amount of gravel to remove at this location. Also recommend spraying inside corner. (See Picture 02)
- Material built up on upstream side of Tramway Road culvert needs to be removed. (See Picture 03)
- Small willow seedlings to be removed through township.
- Minor amount of gravel built up at Railway yard culvert, this will be difficult to remove.
- Large amount was removed downstream following 2017 flood events, this is important to keep clear to allow gravel to suck through culvert.

As the creek is a natural water way with relatively steep grade, gravels will always move through system and accumulate at points of low flow velocity.

The work proposed to remove built up gravels from culverts is within the scope of operational contract with Sicon. Sicon will be instructed to do this work.

The section of race immediately downstream of Railway yard has been identified as an area which accumulates gravel and is very an important section to keep clear and free flowing.

The Tramway Road culvert was installed with the invert level below the natural creek bed level, this causes gravel to naturally build up above and below this culvert.

By removing the gravel post rain events the culverts can remain clear and these areas can become effectively gravel traps in the system.

The section of through Dr Smith's property has no access to clean due to trees and vegetation. This section however has good fall and there was no apparent build-up of gravels and sediments. The trees shade the race so aquatic weeds are not an issue. The bridge on Dr Smith's property was observed to be in poor condition, this is the landowners responsibility to maintain.

There is a culvert underneath the Railway yard at the end of King St. If flow paths are opened up this could be used as an emergency culvert. This is outside of the scope for water race management and budgets but can be investigated for township stormwater improvement. Overtime land use may have changed on these properties which could also affect the overland flow paths towards this culvert.

Recommendations

- Remove gravel at each culvert during annual operational works and during this summer works period. Digging deeper to create gravel traps.
- Continue to clear the section below the Railway yard.
- Remove small willow seedlings growing in race.
- Repair scour at Pockocks Road culvert.

Flood Events

Water Race operators are always aware of weather and river conditions as the effects on the operation of the Malvern scheme can be impacted greatly. Conditions at Kowai Intake can change quickly with rising waters in the Kowai River. Council has recently automated the control of the intake gates reducing the time taken to shut the intake down in adverse weather events. Operators also open 'tip-outs' along the main race between the intake and confluence of Bishops Creek. Once the race enters Bishops Creek the only other tip out is at Odgers divide below Springfield where the water race flows towards Sheffield and Bishops Creeks flows to the Hawkins River.

Bishops Creek has a large catchment area above Springfield Township and the confluence with the main water race. When the Creek is in flood the flood waters cannot be controlled.

To prevent flood in the township operators monitor levels and clear build-ups of debris and material. This is generally at the main culverts. Keeping culverts clear prevents water from breaching the banks and flowing overland. Some channel flows simply too much for the channel

2017 Flood; (See Appendix 5 Flood 2017)

- This was a significant flood event where water breached banks within Springfield Township.
- Water was observed to be backing up at Tramway Road and Railway Culverts
- Water overtopped the bank at Albert St and flowed towards king / Queen St.
- Operators worked overnight clearing culverts and where water was backing up.
- Bank was repaired where it overtopped below Albert St.



(Picture 5 - Gravel Removed below Railway Yard – Post Flood 2017)

Bishops Creek is one of the main tributaries of the Hawkins River. Springfield located with Bishops Creek flowing through the middle of it. There is a known history of the township being hit by large flood events and there always will be a risk of flooding during large rain events. By continuing to keep the main channel clear of obstructions and material build up this will help minimise flood water backing up within the township.

Flood tip-out:

Dr Smith had requested Selwyn District Council to investigate the viability of 'tipping out' flood water via culverts under SH73 and the railway line.

These culverts are believed to have been installed for an old 'private' water race channel which used to feed Kowai Pastures area.

This channel appears to flow no further than the midland railway line. Because this channel has no clear discharge point it would not be recommended to discharge flood water into this until the effects are fully understood. Significant earthworks would be required to develop channels to take flood flows. To divert flood water and discharge into Kowai River and associated earthworks would require resource consent and further investigation. Environment Canterbury consents would need to be obtained and easements granted with the adjacent landowners.

This work involved in investigation of diverting flood flows and flood control is beyond current water race management scope. This may be included in current work being done by the Selwyn District Council stormwater working group.

References

Water Race Management Plan – July 2013

Bishops Creek Flood Control – 4.5.7 of Water Race Management Plan

Letter Dr. Bruce Smith to Council 17th September 2018

Letter to Springfield Civil Defence - July 2002

Appendices

Appendix 1 – Relationship between Bishops Creek and Kowai water Races

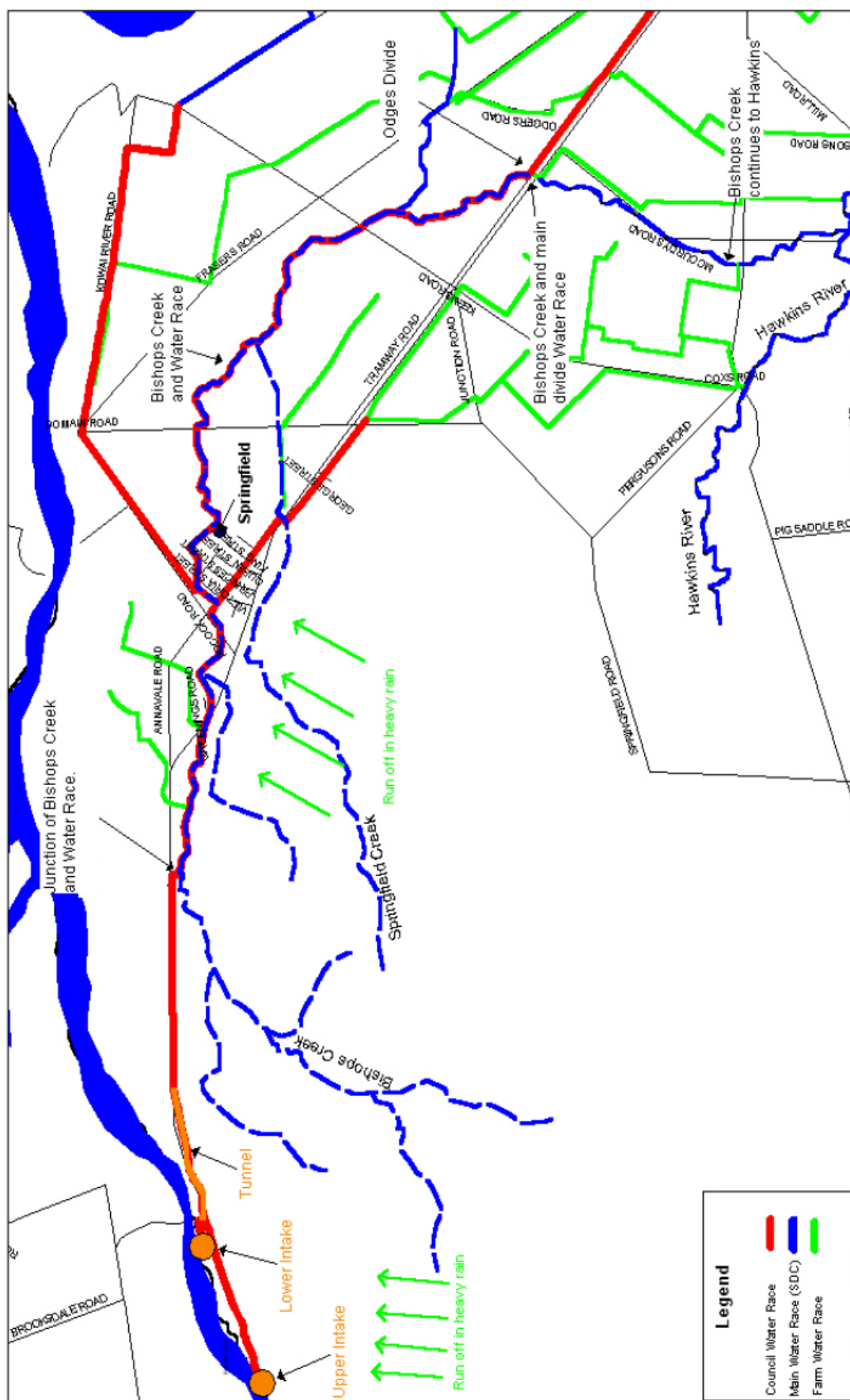
Appendix 2 – Springfield Topo Map

Appendix 3 – Springfield Races 1

Appendix 4 – Springfield Operational Work

Appendix 5 – Springfield Observed Flooding 2017

Appendix 1 – Connection between Bishops Creek and Kowai Water Races



Date printed: 17/06/2002

Connection between Bishops Creek and Upper and Lower Kowai water races

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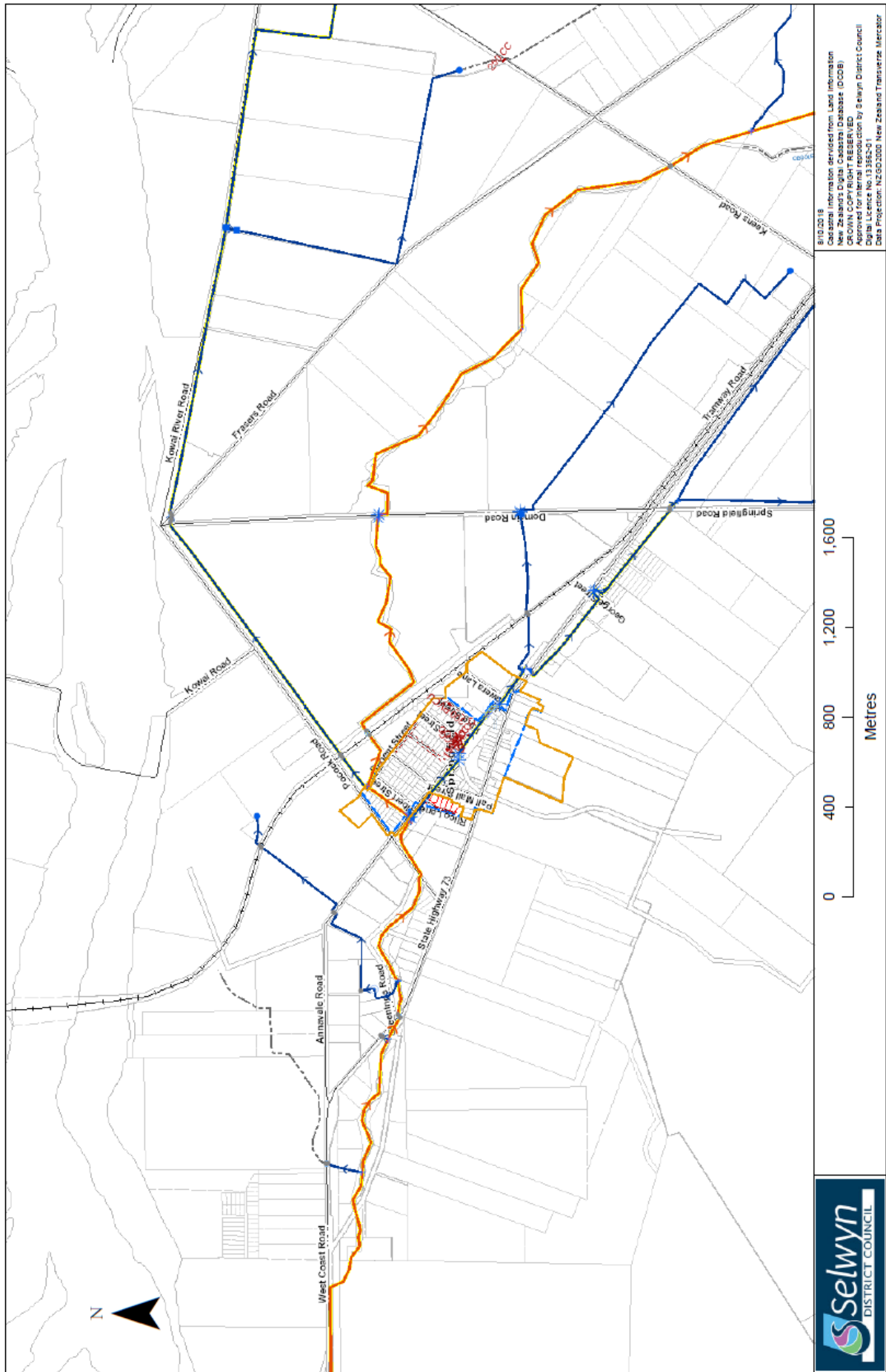
Appendix 2 – Springfield Topo Map

A detailed topographic map of the Springfield area in New Zealand. The map features a grid of roads, including State Highway 1, and various local roads like Kowai Road, Waimakariri Road, and Springfield Road. The Kowai River and Waimakariri River are prominent, with the Kowai River flowing through the center and the Waimakariri River to the north. The terrain is marked with contour lines, indicating elevations ranging from 100 to 300 meters. Key locations include Springfield, Kowai, and Waimakariri. The map also shows the Kowai River Bridge and the Kowai River Dam. A scale bar at the bottom indicates distances in kilometers. A north arrow is located in the bottom left corner. The map is overlaid with a blue grid.

12/10/2018
Cadastral Information derived from Land Information
New Zealand's Digital Cadastral Database (DCDB)
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Data Projection: NZGD2000 New Zealand Transverse Mercator

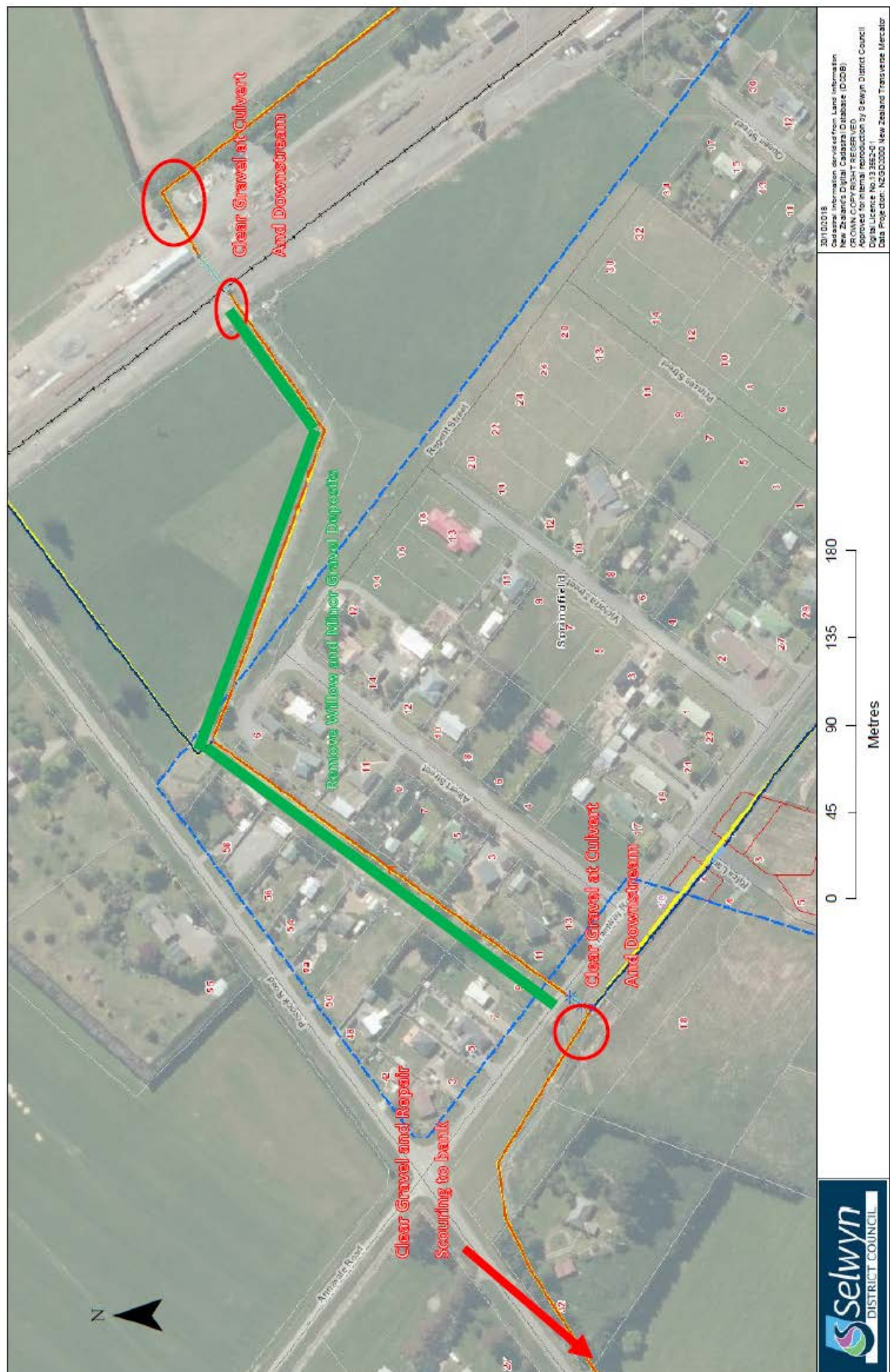
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Water Races Springfield



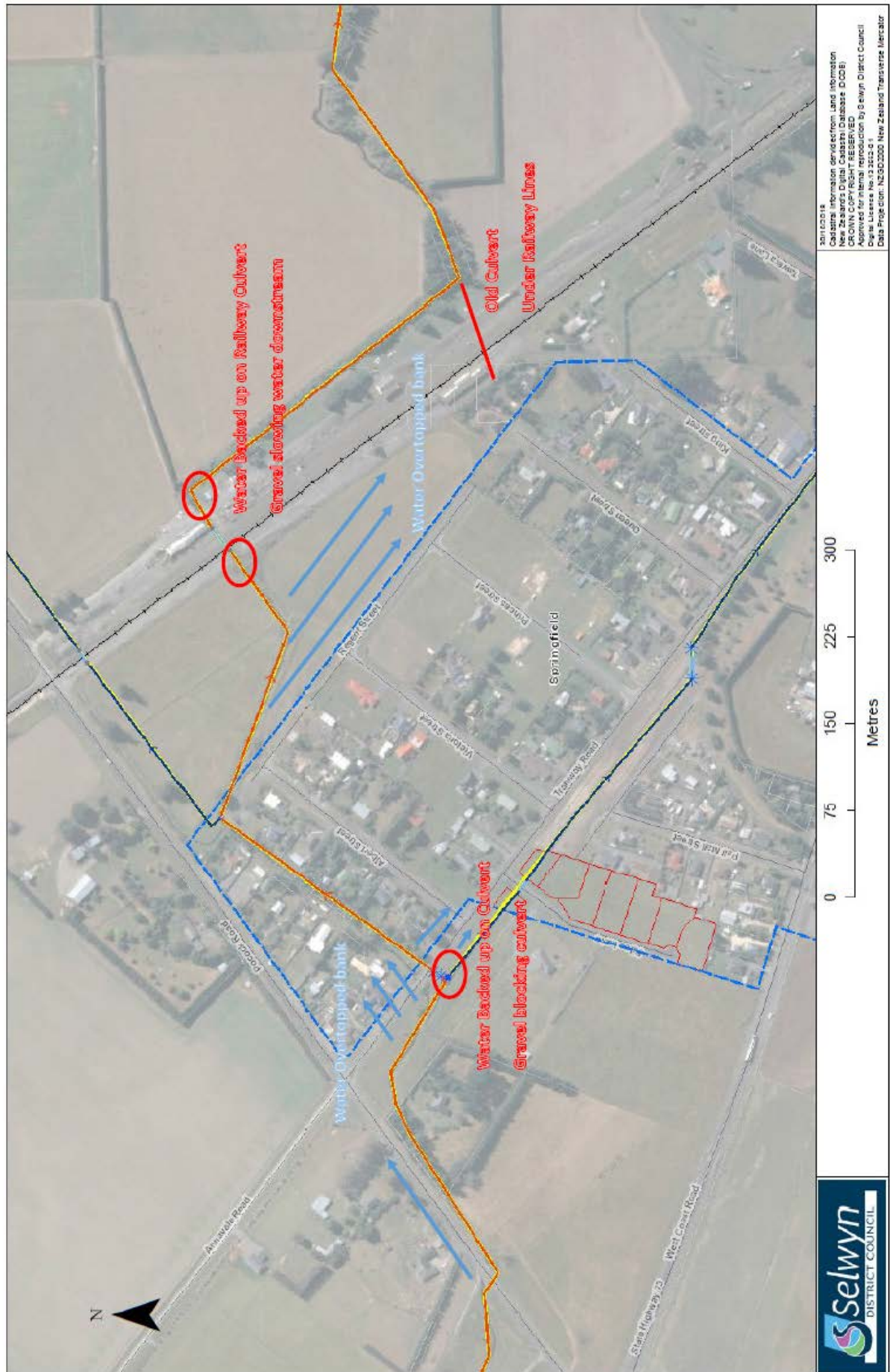
Appendix 4 – Springfield Operational Work

Springfield Operational Work



Appendix 5 – Springfield Observed Flooding 2017

Springfield 2017 Flood



REVIEW OF ISSUES RAISED IN PUBLIC FORUM

RESOLUTION TO EXCLUDE THE PUBLIC

Recommended:

'That the public be excluded from the following proceedings of this meeting. The general subject matter to be considered while the public is excluded, the reason of passing this resolution in relation to the matter, and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered		Reasons for passing this resolution in relation to each matter	Ground(s) under section 48(1) for the passing of this resolution
1	Public Excluded Memo for Asset Manager Water Services in relation to the closure of the Upper Ellesmere Water Race	<i>Good reason to withhold exists under section 7 (as set out below)</i>	<i>Section 48(1)(a)</i>

This resolution is made in reliance on section 48(1) (a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by section 7 of that Act, as the case may require, which would be prejudiced by the holding of the whole or the relevant part of the proceedings of the meeting in public are as follows:

1	Enable the local authority holding the information to carry out, without prejudice or disadvantage, commercial activities.	Section 7(2)(h)
2	Enable the local authority holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations).	Section 7(2)(i)

2. *That appropriate officers remain to provide advice to the Committee.*