



**ORDINARY MEETING OF THE
WATER RACE SUB-COMMITTEE
TO BE HELD IN THE
EXECUTIVE MEETING ROOM
ON MONDAY 20 AUGUST 2018
COMMENCING AT 1.30PM**

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 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. 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. Clayton Fairbairn (Paparua)
9. Kerry Pauling (Malvern Community Board representative)
10. John Clarkson (Malvern)
11. John Shanks
12. Cr Craig Watson

In Attendance

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

1. APOLOGIES

2. PUBLIC FORUM

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

4. CORRESPONDENCE

5. FINANCIAL

5.1 Finance Report to 30 June 2018

5.2 Unplanned Expenditure over \$5,000

6. WATER SERVICES REPORT

6.1 Long Term Plan Deliberation Minutes

6.2 Upper Ellesmere Rates

6.3 Cross Boundary Rates Collection

Senior staff from SDC are meeting with CCC equals to discuss cross boundary rating. The meeting is scheduled for the 4th September at 9am.

6.4 Water Race Closures

6.5 Fish Screen Project Update

Proposals received to repair flood damage to Intake

6.6 River works and flood protection in river

Complete

6.7 Ecological Report Findings - Lower Ellesmere Closure - Discussion

7. 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.

8. GENERAL BUSINESS

8.1 Glenroy Community Irrigation Company Ltd and Lynton Irrigation Limited and Canterbury Grasslands Ltd

8.2 Next Meeting

12 November 2018



MINUTES
OF THE WATER RACE SUB-COMMITTEE
EXECUTIVE MEETING ROOM
ON MONDAY 14 MAY 2018 – 1.30pm

Committee Members in Attendance

1. Nigel Barnett (Chairman)
2. Cr Pat McEvedy
3. Cr Craig Watson
4. Mike Chaffey (Ellesmere)
5. Harry Schat (Ellesmere)
6. John Shanks (Paparua)
7. Martin Le Comte (Paparua Water Race Irrigation User Group)

In Attendance

8. Murray England, Strategic Manager Water Services
9. James Skurupey, Surface Water Engineer
10. Daniel Meehan, Surface Water Operations Engineer
11. Maree Pycroft, Secretary
12. Creagh Robinson, Accountant
13. Mayor Sam Broughton
14. Mark Turner, 931 Halkett Road, Christchurch
15. Ian Lowry, Stuart Lemon, Aaron Lil,

1. APOLOGIES

Tim Morris (Paparua)
Mike Mora (Christchurch City Council - representing Waimairi and Wigram Wards)
Clayton Fairbairn (Paparua)
Kerry Pauling (Malvern Community Board representative)
John Clarkson (Malvern)

Moved Pat McEvedy / Seconded John Shanks

"That the apologies are noted".

CARRIED

2. INTRODUCTIONS

Martin Le Comte introduced Mark Turner who attended the meeting as an observer and interested party of the Paparua Irrigation Users.

3. CONFIRMATION OF MINUTES FROM THE MEETING HELD 26 FEBRUARY 2018

"That the Selwyn District Council Water Race Subcommittee confirm the minutes of the meeting held on Monday, 26 February 2018 as a true and accurate record."

Moved Pat McEvedy / Seconded Harry Schat

4. CORRESPONDENCE

The Selwyn District Council submission to the Christchurch City Council (CCC) highlights the close link with CCC through a number of means other than just our adjacent geography. Our water race network from the Waimakariri River feeds the top end of the Avon River through Christchurch, and the CCC stormwater network in Halswell feeds flows into the Halswell/Huritini River.

CCC contributes (approximately \$80,000/yr) to the management/maintenance of the Paparua water race network in recognition of the environmental and amenity values provided.

SDC is reviewing our rating structure for water races as part of our LTP. CCC's increased contribution to this network is part of our draft proposal.

Creagh Robinson raised an issue of cross boundary ratepayers. A legal opinion highlights the risks of territorial authorities rating properties in other districts. Although the likelihood of rates being challenged is minimal there is risk to Council of complaints or persons refusing to pay the rate leaving Council with the possible situation of trying to enforce the payment of a rate which is ultimately challengeable.

The Water Race Subcommittee requested that Council work with Christchurch City Council to:

- a) Ensure cross-boundary water race user rating compliance is effectively managed.
- b) Fairly share the public good costs of maintaining water race schemes.

5. FINANCIAL

5.1 Finance Report to 31 March 2018

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

Over the past 5 years, substantial changes have been identified which are expected to change the need for and use of the schemes. These include Central Plains Irrigation scheme and strategic pressure via the Canterbury Water Management Strategy process. A number of rating considerations are up for discussion in the Selwyn District Council Long Term Plan. The proposed new rating structure provides three standardised rating factors to replace the existing 10 rating factors.

Some members noted that the proposed increase for Ellesmere and Paparua ratepayers and a decrease for the least performing race Malvern.

Moved John Shanks / Seconded Harry Schat

"That the financial report to 31 March 2018 be received for information".

CARRIED

5.2 Unplanned Expenditure over \$5,000

Council have an important role to play in the community to ensure Council work is undertaken in an environment that is healthy and safe for all people involved and who may be affected

by Council work. Essentially the key changes for workers and Council Contractors is a greater clarity and awareness of duties and improved risk identification and management. Local authorities operate a wide range of functions and activities from high to low risk and many are contracted out. Over time risk identification and management expertise will become part of the core business operating model. But there will be a period of coming up to speed which will show in unplanned expenditure as risks are eliminated or minimized. The new law hasn't created new risks. It's a new framework around managing risk, including clarifying responsibilities. For responsible employers nothing has changed but for those with work to do, it puts them on notice and removes uncertainty by providing clear guidance.

"That the Water Race Sub-Committee receives the Unplanned Expenditure Report".

Moved Harry Schat / Seconded Mike Chaffey

CARRIED

6. WATER SERVICES REPORT

6.1 Lower Ellesmere Water Race Closures

The Department of Conservation has submitted against the closure of a number of lower Ellesmere water races. A moratorium is proposed on race closures within the Lower Ellesmere Water Race scheme until further work is completed to identify sites of high ecological value and cultural value. Three water races have been agreed for closure subject to further investigation and possible fish salvage.

Ian Lowry, Stuart Lemon and Aaron Lil are prepared to fund this activity but wanted an understanding of what the moratorium meant in terms of their closure. The Water Race Subcommittee support DOC to investigate the ecological biodiversity and assessment of environment effects. James Skurupey will discuss the most economical methods.

James Skurupey provided clarification around the Acts under which SDC must operate and outlined the process of doing an ecological survey.

Contrary to staff recommendation, the Water Race Subcommittee voted against a moratorium to identify races of ecological and cultural significance, in preference to performing due diligence.

Moved Pat McEvedy / John Shank

CARRIED

6.2 Proposed Water Race Closure to Proceed to Public Consultation

Council sought approval to proceed to public consultation for the proposed closure of 460.7 m of race through 3 properties between Manion Road and SH1 in support of CSM2 NZTA project and 7752m of race through 7 properties between Beattys Road and Bealey Road.

Moved Craig Watson / John Shanks

"That the Subcommittee agree to proceed to public consultation subject to receiving 100% approval."

CARRIED

6.3 Water Race Bylaw

The Bylaw has been through public consultation and hearing deliberations. The proposed amended Bylaw was presented to Council for adoption 9 May 2018. A verbal update on the changes was provided to the Subcommittee.

3.00pm - Murray England left the meeting

6.4 Fish Screen Project Update

Report was noted.

6.5 Strategic Water Races - Ecological and Aesthetics

The Asset Manager Water Services presented the 'working draft' of the Strategic Water Races - Ecological and Aesthetics' map to both the Christchurch West Melton and the Selwyn Waihora Zone committees. Staff will work with the Zone Committees, Local Runanga, ECAN and DOC to target and succinctly identify sites of ecological value.

The report to Council will be circulated to Subcommittee members. James Skurupey advised DOC and NIWA technically can only do fish salvage but time and money restraints have necessitated consultants being engaged to carry out this activity.

Brett Painter, ECAN is to be invited to a Water Race meeting to present on targeted stream augmentation and enhancement to Selwyn Waihora zone water races.

Moved John Shanks / Seconded Harry Schat

CARRIED

7. HEALTH & SAFETY

1. Site access for water race maintenance has been restricted by 5 farms due to perceived concerns over the spread of Mycoplasma Bovis. Council contractors will follow relevant Biosecurity Protocols.

Pat McEvedy declared a conflict of interest

2. SICON has provided cost estimates for all P2 Health and Safety Sites which are currently being reviewed. John Shanks expressed his concern about ongoing Health & Safety improvements and whether Council can maintain the upward trend of expenditure.

8. GENERAL BUSINESS

8.1 Glenroy Community Irrigation Company Ltd and Lynton Irrigation Limited and Canterbury Grasslands Ltd

Nigel Barnett and Cr Pat McEvedy will meet with Murray England to discuss the agreement Selwyn District Council has with Glenroy Community Irrigation Company Ltd and Lynton Irrigation Limited and Canterbury Grasslands Ltd to explore future options of the Ellesmere Water Race.

9.2 Next Meeting

9 July 2018

John Shanks and James Skurupey's apology was noted for the next meeting.

The meeting closed at 3.30pm

Certified that these minutes are a true and accurate record of the Water Race Subcommittee Meeting held on 14 May 2018 at 1.30pm.

Chairman, 9 July 2018

PUBLIC REPORT

TO: Chief Executive

FOR: Ellesmere, Malvern and Paparua water race scheme
Sub-Committee – 20 August 2018

FROM: Management Accountant

DATE: 23 June 2018

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

1. RECOMMENDATION

That the financial report for Ellesmere, Malvern and Paparua water race scheme to 30 June 2018 be received for information.

2. PURPOSE

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

3. SIGNIFICANCE ASSESSMENT/COMPLIANCE STATEMENT

Not applicable.

4. HISTORY/BACKGROUND

Attached is the financial report for Ellesmere, Malvern and Paparua water race scheme to 30 June 2018

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

COMMENTARY

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

Ellesmere Water Race Operational Position Summary

Revenue	YTD Actual \$	YTD Budget \$	Variance	2016/2017 Actual
Targeted Rate	440,669	449,980	(9,311)	391,420
Ellesmere Unit charge	12,315	12,359	(44)	11,236
Irrigation Charges	107,863	110,000	(2,137)	110,000
Total Revenue	560,847	572,339	(11,492)	512,656
Expenditure				
Total Operational Expenditure	492,351	569,291	76,940	493,565
Total Support	97,800	97,800	0	92,236
Total Operational Projects	1,359	25,346	23,987	119
Total Renewals	3,933	165,000	161,067	0
Total Expenditure	595,443	857,437	261,994	585,920
Operating Surplus/(Deficit)	(34,596)	(285,098)	250,502	(73,264)

Operating Position Summary

	YTD Actual \$	YTD Budget \$	Variance
Opening Account Balance	230,187	210,187	20,000
Plus Operating Surplus/(Deficit)	(34,596)	(285,098)	250,502
Plus Prior year Projects Carried Forward	0	20,000	(20,000)
Less Capital Projects	(431,100)	(538,200)	107,100
Net Reserves Transfers	(26,067)	135,000	(161,067)
Closing Account Balance	(261,576)	(458,111)	196,535

Special Funds Account - Renewals

	YTD Actual \$	YTD Budget \$	Variance
Opening Account Balance	86,014	86,014	0
Plus Transfers in	30,000	30,000	0
Plus Interest	0	0	0
Less Funding of Renewals	(3,933)	(165,000)	161,067
Closing Account Balance	112,081	(48,986)	161,067

Year to Date Commentary

Operations to the 30 June 2018 resulted in a net operating deficit of (\$34,596) against a budgeted deficit for the same period of (\$285,098).

Revenue

Total revenue to the 30 June 2018 is marginally unfavourable to budget by (\$11,492) largely due to reduced revenue as a result of race closures.

Operational Expenditure

Operating expenditure to the 30 June 2018 is favourable to budget by \$76,940. The majority of costs are favourable to budget, in particular Consultants fees, maintenance, CPW Ltd transition, infrastructure agreement and consent monitoring costs of which the favourable variance totals \$77,600.

Project expenditure to the 30 June 2018 totals \$1,359 against a budget of \$25,346. Expenditure to date has been incurred on the Upper Ellesmere water race closure. Projects yet to incur costs are Health and Safety Improvements – full year budget \$20,000 and Consent renewals – full year budget \$5,346.

Renewal expenditure is favourable to budget by \$133,567. 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 June 2018 totals \$431,100 against a full year budget of \$538,200. The expenditure to date entirely relates to the fish screens on the lower Rakaia and this project is unfavourable to budget by (\$56,900). Capital projects yet to incur costs are Health and Safety Improvements – full year budget \$50,000, Emergency Tipout for Irrigators - \$35,000 and Terricelee Auto Gate – SCADA with a full year budget of \$79,000.

Summary

The overall result for the year ended 30 June 2018, after year-end adjustments, has been a \$196,535 improvement on the budgeted deficit of (\$458,111). While expenditure and revenue contribute a net \$65,448 to the improved position, the majority of the improvement has come from deferred expenditure of projects, capital projects and renewals. No operating projects have been carried forward to 2018/19. Capital projects carried forward total \$121,185 from the budgeted \$164,000 and renewals carried forward total \$161,263 from the budgeted \$165,000.

**Malvern Area Water Race
Operational Position
Summary**

Revenue	2017 / 2018 YTD Actual	2017 / 2018 YTD Budget	Variance \$	2016/17 Actual
Targeted Rate	854,689	858,700	(4,011)	715,067
Urban Public Good	23,491	23,740	(249)	19,263
General Receipts	1,406	0	1,406	14,522
Malvern irrigation	0	43,000	(43,000)	43,399
Total Revenue	879,586	925,440	(45,854)	792,251
Expenditure				
Total Operational Expenditure	723,638	785,263	61,625	720,227
Total Support	110,669	110,669	0	104,372
Total Operational Projects	21,421	30,346	8,925	51,492
Total Renewals	34,139	255,000	220,861	33,973
Total Expenditure	889,867	1,181,278	291,411	910,064
Operating Surplus/(Deficit)	\$(10,281)	\$(255,838)	\$245,557	(117,813)

Operating Position Summary

	2017 / 2018 YTD Actual	2017 / 2018 YTD Budget	Variance \$
Opening Account Balance	(1,070,286)	(1,889,794)	819,508
Plus Operating Surplus/(Deficit)	(10,281)	(255,838)	245,557
Plus Prior year Projects Carried Forward	0	819,508	(819,508)
Less Capital Projects	(1,233,683)	(893,503)	(340,180)
Net Reserves Transfers	(133,861)	87,000	(220,861)
Closing Account Balance	(\$2,448,111)	(\$2,132,627)	(315,484)

Special Funds Account - Renewals

	2017 / 2018 YTD Actual	2017 / 2018 YTD Budget	Variance \$
Opening Account Balance	378,081	378,081	0
Plus Transfers in	168,000	168,000	0
Plus Interest			0
Less Funding of Renewals	(34,139)	(255,000)	220,861
Closing Account Balance	\$511,942	\$291,081	220,861

Year to Date Commentary

Operations to the 30 June 2018 have resulted in an operating deficit of (\$10,281) against a budgeted deficit of (\$255,838).

Revenue

Total revenue to the 30 June 2018 is unfavourable to budget by (\$45,854). The revenue from the Malvern irrigators was to be replaced by revenue from CPW. This revenue stream is not commencing until the 2018-19 financial year.

Operational Expenditure

Operating expenditure to the 30 June 2018 is favourable to budget by \$61,625 due to consultants, maintenance, ECan monitoring and urban enhancement costs being favourable to budget by a total of \$68,345. This has been partially offset by insurance and electricity costs being unfavourable to budget by (\$6,710).

Project expenditure are favourable to budget by \$8,925. CPW transition and consent renewal costs are favourable to budget by \$4,522.

Renewal expenses are favourable to budget by \$220,861. Renewal costs are funded from the renewal reserve at year end and do not have an impact on the operating result.

Capital Projects

Capital Projects expenditure to the 30 June 2018 is unfavourable to budget by (\$345,334). The installation of fish screens at the Upper Kowai and Waimakariri account for (\$428,963) of this amount and relates to:

- A number of variations throughout the construction period, of which some were related to unknown site conditions and improvements to remediate. The project costs include variations recommended by consultant and contractor. There were a number of unknowns for contractor and consultation due to the unusualness of this project. There was no river modelling undertaken during the scoping phase;
- The projects were hit by a major flood event during initial construction phase leading to some remediation work and reconfiguration of site;
- A second flood event to Glentunnel site led to council initiating some flood protection and river works as requested by the Golf Club committee and reserves.
- There has been extra consultant costs for consultation and investigation into ECan concerns that the Waimak site was not compliant.

The replacement of fish screens at the Glentunnel intake is favourable to budget by \$55,134. SCADA monitoring sites are also favourable to budget by \$37,148. These projects are funded from targeted rates.

Summary

The overall result for the year ended 30 June 2018, after year-end adjustments, has been unfavourable to budget by (\$315,484). While expenditure and revenue contribute a net position that is favourable to budget by \$15,771, the majority of the increased deficit has come from increased expenditure of capital projects – (\$340,180). No operating projects have been carried forward to 2018/19. Capital projects carried forward total \$20,000 (SCADA monitoring) from the budgeted \$893,503 and renewals carried forward total \$229,199 from the budgeted \$255,000.

Note: There is no budget in 2018-19 for any capital expenditure for fish screens.

**Paparua Water Race
Operational Position
Summary**

Revenue	YTD Actual \$	YTD Budget \$	Variance \$	2016/2017 Actual
Targeted Rate	497,282	512,190	(14,908)	414,530
Public Good Rate	59,213	59,071	142	48,985
Urban Public Good	141,679	140,861	818	109,871
CCC Share-Public Good	71,696	71,696	0	71,696
Irrigation Right Application	0	0	0	0
General Receipts	0	0	0	780
Dawsons Rd Water Race Upgrade	0	0	0	0
Irrigation Charges	182,062	170,000	12,062	167,107
Irrigation Rebate	14,592	(30,000)	44,592	(48,961)
Total Revenue	966,524	923,818	42,706	764,008
Expenditure				
Total Operational Expenditure	813,120	822,165	9,045	823,112
Total Support	48,900	48,900	0	46,118
Total Operational Projects	0	24,146	24,146	2,998
Total Renewal Expenditure	20,676	120,000	99,324	
Total Expenditure	882,696	1,015,211	132,515	872,228
Operating Surplus/(Deficit)	83,828	(91,393)	175,221	(108,220)

Operating Position Summary

	Actual \$	YTD Budget \$	Variance \$
Opening Account Balance	(386,067)	(404,869)	18,802
Plus Operating Surplus/(Deficit)	83,828	(91,393)	175,221
Plus Prior year Projects Carried Forward	0	18,800	(18,800)
Less Capital Projects	0	(65,000)	65,000
Net Reserves Transfers	(111,324)	(12,000)	(99,324)
Closing Account Balance	(413,563)	(554,462)	140,899

Special Funds Account - Renewals

	YTD Actual \$	YTD Budget \$	Variance
Opening Account Balance	302,402	302,402	0
Plus Transfers in	132,000	132,000	0
Plus Interest	0	0	0
Less Funding of Renewals	(20,676)	(120,000)	99,324
Closing Account Balance	\$413,726	\$314,402	\$99,324

Year to Date Commentary

Operations to the 30 June 2018 resulted in an operating surplus of \$83,828 against a budgeted deficit, for the same period, of (\$91,393).

Revenue

Total revenue to the 30 June 2018 is favourable to budget by a total of \$42,706. This variance is due to the irrigation rebate for 2016/2017, being accrued at year end as \$41,777. The actual rebate was \$17,238 providing further revenue to the scheme in excess of budget by \$54,539. Current year irrigation charges are also favourable to budget by \$12,062.

Operational Expenditure

Operating expenditure to the 30 June 2018 is favourable to budget by \$9,045. Maintenance costs are unfavourable to budget by (\$11,999). Flood events in July and August added to the additional maintenance costs. Unfavourable costs have been partially offset by urban enhancement, consultancy and ECan costs being favourable to budget by \$22,107.

Projects

There has been no project expenditure to date.

Renewals

There has been no renewal expenditure to date.

Capital Projects

There has been no capital project expenditure as at the 30 June 2018.

Summary

The overall result for the year ended 30 June 2018, after year-end adjustments, has been a \$140,899 improvement on the budgeted deficit of (\$554,462). While expenditure and revenue contribute a net \$51,751 to the improved position, the majority of the improvement has come from deferred expenditure of projects, capital projects and renewals. A total of \$18,000 of operating projects have been carried forward to 2018/19. Capital projects carried forward total \$15,000 from the budgeted \$65,000 and renewals carried forward total \$120,000 from the budgeted \$120,000.

5. PROPOSAL

That the interim 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 06/18 and Budget AB01 is in use.

ELLESMERE WATER RACE OPER.

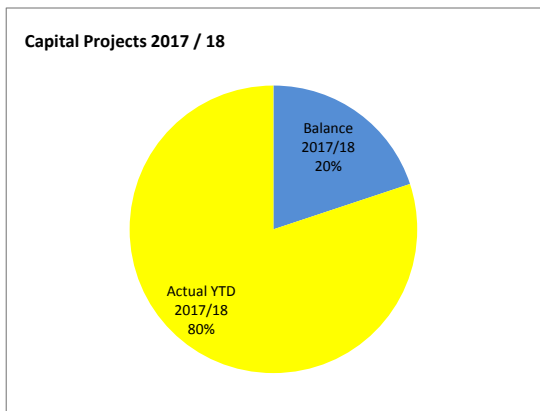
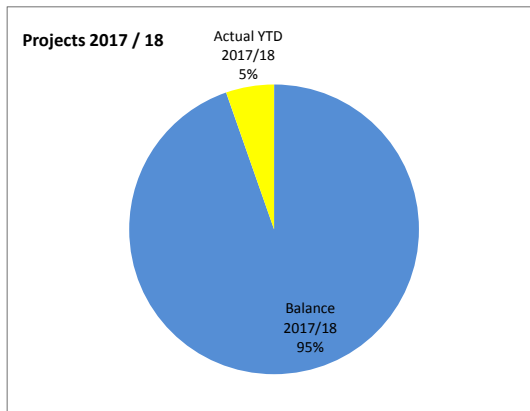
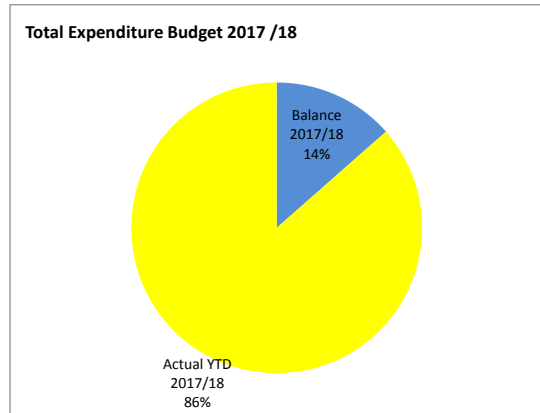
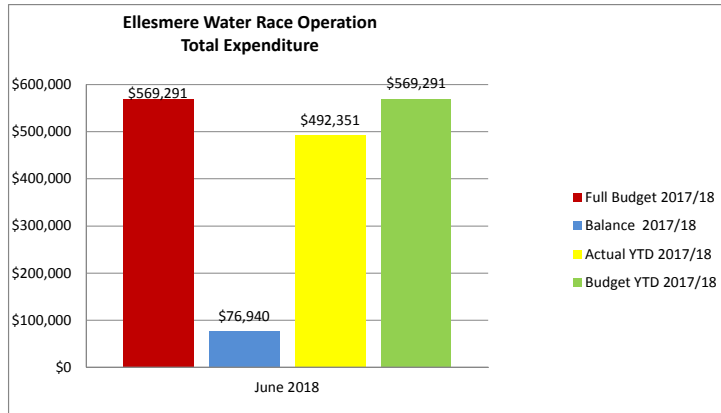
June 2018



Statement of Operations

Account	Detail	Month Actual	Month Budget	Month Variance	YTD Actual 2017/18	Ytd Budget 2017/18	Ytd Variance	Committed Expenditure	FYR Budget 2017/18	Last Year 2016/17
Opening Balance										
3921 980 01	Ellesmere W/Rc Oper Open Blnce	-	-	-	\$230,187	\$210,187	\$20,000	-	\$210,187	\$442,379
	Total Opening Balance	-	-	-	\$230,187	\$210,187	\$20,000	-	\$210,187	\$442,379
Income										
3921 101	Targeted Rate	\$36,989	\$37,502	(\$513)	\$440,669	\$449,980	(\$9,311)	-	\$449,980	\$391,420
3921 101 01	Ellesmere Unit charge	\$1,031	\$1,029	\$2	\$12,315	\$12,359	(\$44)	-	\$12,359	\$11,236
3921 187	Irrigation charges	\$53,932	\$55,000	(\$1,068)	\$107,863	\$110,000	(\$2,137)	-	\$110,000	\$36,241
	Total Income	\$91,952	\$93,531	(\$1,579)	\$560,847	\$572,339	(\$11,492)	-	\$572,339	\$438,897
Expenditure										
3921 410 01	External Consultants Fee	-	\$220	\$220	-	\$2,673	\$2,673	-	\$2,673	\$5,438
3921 541	Insurance	-	-	-	\$8,997	\$7,789	(\$1,208)	-	\$7,789	\$7,418
3921 583 101	Maint - General S	\$30,053	\$30,058	\$5	\$360,641	\$360,641	-	-	\$360,641	\$361,982
3921 583 102	Maint - General R	\$7,094	\$7,586	\$492	\$68,682	\$90,988	\$22,306	-	\$90,988	\$62,465
3921 583 282	Maint - Removal R	-	\$1,663	\$1,663	-	\$20,000	\$20,000	-	\$20,000	-
3921 583 602	Maint - Source/Well/Headwork R	-	-	-	\$111	-	(\$111)	-	-	\$138
3921 593 03	Infrastructure Agreement Fee	-	-	-	\$52,885	\$65,000	\$12,115	-	\$65,000	\$44,701
3921 598 02	CPW transition	-	\$1,250	\$1,250	-	\$15,000	\$15,000	-	\$15,000	\$8,024
3921 868	ECan/Los Monitoring	-	\$500	\$500	\$383	\$6,000	\$5,617	-	\$6,000	\$2,518
3921 868 01	SCADA Costs	\$172	\$100	(\$72)	\$652	\$1,200	\$548	-	\$1,200	\$881
	Total Expenditure	\$37,319	\$41,377	\$4,058	\$492,351	\$569,291	\$76,940	-	\$569,291	\$493,565
Support										
3921 890 3900	Support Charges-WTR RACE	\$8,150	\$8,150	-	\$97,800	\$97,800	-	-	\$97,800	\$92,236
Projects										
3921 061	Renewal of consents	-	\$440	\$440	-	\$5,346	\$5,346	-	\$5,346	-
3921 062	Health and Safety improvements	-	\$1,663	\$1,663	-	\$20,000	\$20,000	-	\$20,000	\$119
3921 063	Upper Ellesmere Water Race Closure	-	-	-	\$1,359	-	(\$1,359)	-	-	-
	Total Projects	-	\$2,103	\$2,103	\$1,359	\$25,346	\$23,987	-	\$25,346	\$119
Transfers - Operations										
3921 970 01	Transfer (to)/from Reserves	(\$26,067)	(\$23,170)	(\$2,897)	(\$26,067)	(\$23,170)	(\$2,897)	-	(\$23,170)	(\$53,948)
3921 970 99	Carry Forward Projects	-	-	-	-	\$20,000	\$20,000	-	\$20,000	-
	Total Transfers - Operations	(\$26,067)	(\$23,170)	(\$2,897)	(\$26,067)	(\$3,170)	\$22,897	-	(\$3,170)	(\$53,948)
	Operating Surplus/(Deficit)	\$20,416	\$18,731	\$1,685	\$173,457	\$86,919	\$86,538	-	\$86,919	\$241,408
Capital Projects										
3921 900 37	Fish Screen - Lower Rakaia	-	-	-	\$431,100	\$374,200	(\$56,900)	-	\$374,200	\$11,222
3921 900 48	Terricelee auto gate SCADA	-	\$5,000	\$5,000	-	\$75,000	\$75,000	-	\$75,000	-
3921 900 49	SCADA steels RD	-	-	-	-	\$4,000	\$4,000	-	\$4,000	-
3921 900 50	Emergency tipout for irrigators	-	-	-	-	\$35,000	\$35,000	-	\$35,000	-
3921 900 51	Health and Safety improvements	-	-	-	-	\$50,000	\$50,000	-	\$50,000	-
	Total Capital Projects	-	\$5,000	\$5,000	\$431,100	\$538,200	\$107,100	-	\$538,200	\$11,222
Renewals										
3921 905 100	Renewals - Linear (Pipe Valve)	-	\$20,000	\$20,000	\$3,738	\$120,000	\$116,262	-	\$120,000	-
3921 905 110	Renewals - P&E (PS TP Teley)	-	\$7,500	\$7,500	\$195	\$45,000	\$44,805	-	\$45,000	-
	Total Renewals	-	\$27,500	\$27,500	\$3,933	\$165,000	\$161,067	-	\$165,000	-
	Closing balance	\$20,416	(\$13,769)	\$34,185	(\$261,576)	(\$616,281)	\$354,705	-	(\$616,281)	\$230,186
Special Funds										
3921 982 50	Renewal Reserve	\$26,067	-	\$26,067	\$112,081	\$86,014	\$26,067	-	\$86,014	\$86,014
	Total Special Funds	\$26,067	-	\$26,067	\$112,081	\$86,014	\$26,067	-	\$86,014	\$86,014

	Full Budget 2017/18	Balance 2017/18	Actual YTD 2017/18	Budget YTD 2017/18	% spent
Total Expenditure	\$569,291	\$76,940	\$492,351	\$569,291	86%
Total Projects	\$25,346	\$23,987	\$1,359	\$25,346	5%
Capital Projects	\$538,200	\$107,100	\$431,100	\$538,200	80%



ELLESMERE WATER RACE - FINANCIAL COMMENTARY FOR THE YEAR ENDED JUNE 2018					
Account	Expenditure	Actual	Budget	Variance	Details
3921 410 01	External Consultants Fee	\$0	\$2,673	\$2,673	
3921 541	Insurance	\$8,997	\$7,789	(\$1,208)	Aug - Infrastructure premium
3921 583 101	Maint - General S	\$360,641	\$360,641	\$0	July, Aug, Sep, Oct, Nov, Dec, Jan, Feb, Mar, Apr, May, June - Sicon Ltd - C1241 Claim Water Service O&M
3921 583 102	Maint - General R	\$68,682	\$90,988	\$22,306	July - Sicon Ltd - 3018.96, Aug - Sicon Ltd - 569.25, 2998.96, Sep - Sicon Ltd - 1464.87, 2998.96, Lincoln Digital - 108.33, Oct - Meridian - 200.42, Sicon Ltd - 18,085.37, Nov - Meridian - 39.90, Sicon Ltd - 2998.96, ChCh Press - 122.00, Dec - Meridian - 38.55, Sicon Ltd - 2998.96, Jan - Meridian - 46.30, Sicon Ltd - 3126.21, Feb - Meridian - 41.54, Sicon Ltd - 3862.13, Mar - Sicon - 3358.96, Meridian - 46.29, Apr - Sicon - 4658.41, May - Sicon - 10805.16, June - Sicon - 7093.91
3921 583 282	Maint - Removal R	\$0	\$20,000	\$20,000	
3921 583 602	Maint - Source/Well/Headwork R	\$111	\$0	(\$111)	Jan - Qtech - 110.50
3921 593 03	Infrastructure Agreement Fee	\$52,885	\$65,000	\$12,115	July - Glenroy Agreement to 30 Sept - 11391.65, LRDG cost share - 7318.15, Oct - Glenroy Agreement to 31 Dec - 11391.65, Dec - Glenroy Agreement to 31 Mar - 11391.65, April - Glenroy Agreement to 31 May - 11391.65
3921 598 02	CPW transition	\$0	\$15,000	\$15,000	
3921 868	ECan/Los Monitoring	\$383	\$6,000	\$5,617	Aug - Ecan consent monitoring - 247.50, Dec - Ecan consent monitoring - 45.00, April - Ecan consent monitoring - 45.00, May - Ecan consent monitoring - 45.00
3921 868 01	SCADA Costs	\$652	\$1,200	\$548	41.75, Oct - 2Way Airtime - 10.76, Nov - 2Way Airtime - 5.38, Qtech Data - 37.81, Dec - 2Way Airtime - 5.38, Jan - 2Way Airtime - 5.38, Qtech Data - 118.07, Feb - Qtech Data - 38.92, Mar - Radio Spectrum - 8.42, Apr - 2 way - 16.14, QTech - 75.64, May - 2 way - 5.38, June - 2 way - 5.38, QTech - 167.03,
	Total Expenditure	\$492,351	\$569,291	\$76,940	
3921 890 3900	Support Charges-WTR RACE	\$97,800	\$97,800	\$0	July, Aug, Sep, Oct, Nov, Dec, Jan, Feb, Mar, Apr, May, June - Selwyn District Council - Standard Charge
	Total Support	\$97,800	\$97,800	\$0	
	Projects				
3921 061	Renewal of consents	\$0	\$5,346	\$5,346	
3921 062	Health and Safety improvements	\$0	\$20,000	\$20,000	
3921 063	Health and Safety Improvements	\$1,359	\$0	(\$1,359)	Aug - Buddie Findlay - 1359.15
	Total Projects	\$1,359	\$25,346	\$23,987	
	Capital				
3921 900 37	Fish Screen - Lower Rakaia	\$431,100	\$374,200	(\$56,900)	July - Mappazzo - 5209.00, Aug - Isacc construction - 59148.04, Orion - 3610.00, Isaacs - 11041.50, Sep - Mappazzo - 5880.00, Isacc construction - 11260.00, Oct - Mappazzo - 2640.00, James Bull - 240.00, Isaac construction - 293,318.28, Nov - Jacobs NZ - 15797.67, Mappazzo - 1440.00, Jan - Nairns - 20615.74, Mappazzo - 900.00
3921 900 48	Terricelee auto gate SCADA	\$0	\$75,000	\$75,000	
3921 900 49	SCADA steels RD	\$0	\$4,000	\$4,000	
3921 900 50	Emergency tipout for irrigators	\$0	\$35,000	\$35,000	
3921 900 51	Health and Safety improvements	\$0	\$50,000	\$50,000	
	Total Capital Projects	\$431,100	\$538,200	\$107,100	
	Renewals				
3921 905 100	Renewals - Linear (Pipe Valve)	\$3,738	\$120,000	\$116,262	Aug - Sicon - 3737.50
3921 905 110	Renewals - Linear (Pipe Valve)	\$195	\$45,000	\$44,805	May - Qtech - 195.00
	Total Renewals	\$3,933	\$165,000	\$161,067	
	Total of above	\$1,026,543	\$1,395,637	\$369,094	

**Ellesmere Water Race
Operational Position Summary**

Revenue	YTD Actual \$	YTD Budget \$	Variance	2016/2017 Actual
Targeted Rate	440,669	449,980	(9,311)	391,420
Ellesmere Unit charge	12,315	12,359	(44)	11,236
Irrigation Charges	107,863	110,000	(2,137)	110,000
Total Revenue	560,847	572,339	(11,492)	512,656
Expenditure				
Total Operational Expenditure	492,351	569,291	76,940	493,565
Total Support	97,800	97,800	0	92,236
Total Operational Projects	1,359	25,346	23,987	119
Total Renewals	3,933	165,000	161,067	0
Total Expenditure	595,443	857,437	261,994	585,920
Operating Surplus/(Deficit)	(34,596)	(285,098)	250,502	(73,264)

Operating Position Summary

	YTD Actual \$	YTD Budget \$	Variance
Opening Account Balance	230,187	210,187	20,000
Plus Operating Surplus/(Deficit)	(34,596)	(285,098)	250,502
Plus Prior year Projects Carried Forward	0	20,000	(20,000)
Less Capital Projects	(431,100)	(538,200)	107,100
Net Reserves Transfers	(26,067)	135,000	(161,067)
Closing Account Balance	(261,576)	(458,111)	196,535

Special Funds Account - Renewals

	YTD Actual \$	YTD Budget \$	Variance
Opening Account Balance	86,014	86,014	0
Plus Transfers in	30,000	30,000	0
Plus Interest	0	0	0
Less Funding of Renewals	(3,933)	(165,000)	161,067
Closing Account Balance	112,081	(48,986)	161,067

Financial Month is set to 06/18 and Budget AB01 is in use.

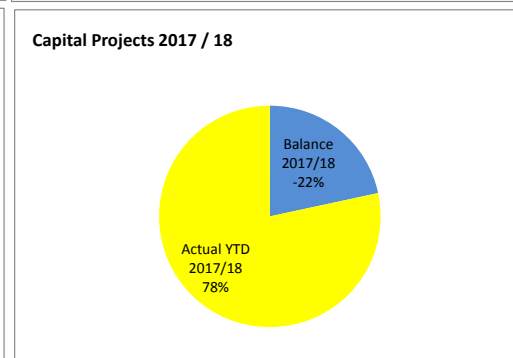
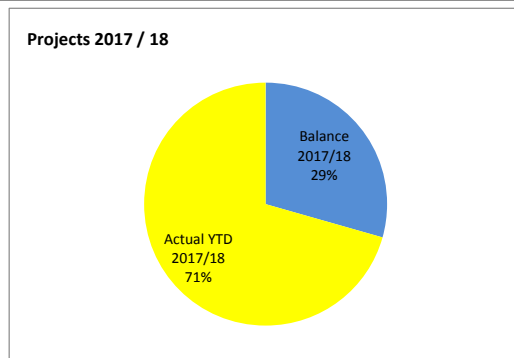
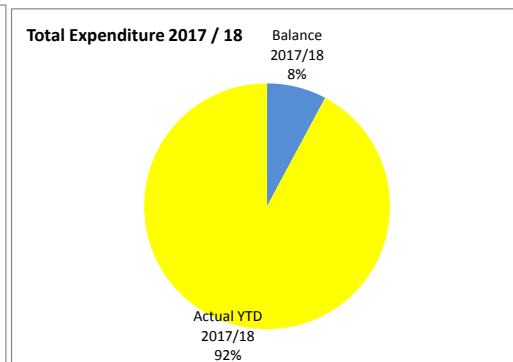
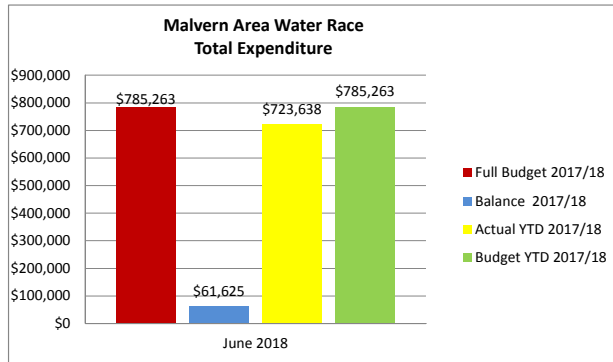
MALVERN AREA WATER RACE
Statement of Operations

June 2018



Account	Detail	Month Actual	Month Budget	Month Variance	YTD Actual 2017/18	Ytd Budget 2017/18	Ytd Variance	Committed Expenditure	FYR Budget 2017/18	Last Year 2016/17
Opening Balance										
3951 980 01	Malvern W/Rc Oper Open Blnce.	-	-	-	(\$1,030,298)	(\$1,889,794)	\$859,496	-	(\$1,889,794)	(\$182,417)
3951 980 02	Opening Balance	-	-	-	(\$5,000)	-	(\$5,000)	-	-	(\$2,500)
3951 980 04	Opening Balance	-	-	-	(\$5,000)	-	(\$5,000)	-	-	(\$2,500)
3951 980 07	Opening Balance	-	-	-	(\$3,332)	-	(\$3,332)	-	-	(\$1,666)
3951 980 08	Opening Balance	-	-	-	(\$2,000)	-	(\$2,000)	-	-	(\$1,000)
3951 980 09	APPROPRIATION ACCOUNT	-	-	-	(\$24,656)	-	(\$24,656)	-	-	(\$12,328)
	Total Opening Balance	-	-	-	(\$1,070,286)	(\$1,889,794)	\$819,508	-	(\$1,889,794)	(\$202,411)
Income										
3951 101	Targeted Rate	\$69,826	\$71,562	(\$1,736)	\$854,689	\$858,700	(\$4,011)	-	\$858,700	\$715,067
3951 101 01	Urban Public Good	\$1,959	\$1,982	(\$23)	\$23,491	\$23,740	(\$249)	-	\$23,740	\$19,263
3951 162	General Receipts	\$394	-	\$394	\$1,406	-	\$1,406	-	-	\$14,522
3951 162 02	Malvern irrigation	-	\$43,000	(\$43,000)	-	\$43,000	(\$43,000)	-	\$43,000	\$43,399
	Total Income	\$72,179	\$116,544	(\$44,365)	\$879,586	\$925,440	(\$45,854)	-	\$925,440	\$792,251
Expenditure										
3951 410 01	External Consultants Fee	-	\$310	\$310	-	\$3,742	\$3,742	-	\$3,742	\$2,223
3951 450	Electricity	\$246	-	(\$246)	\$2,196	-	(\$2,196)	-	-	\$770
3951 540	Rates	-	-	-	\$710	\$700	(\$10)	-	\$700	\$675
3951 541	Insurance	-	-	-	\$33,235	\$28,721	(\$4,514)	-	\$28,721	\$27,281
3951 583 101	Maint - General S	\$47,302	\$47,297	(\$5)	\$567,619	\$567,619	-	-	\$567,619	\$567,619
3951 583 102	Maint - General R	\$15,988	\$9,916	(\$6,072)	\$117,129	\$118,981	\$1,852	-	\$118,981	\$116,130
3951 583 602	Maint - Source/Well/Headwork R	-	-	-	-	-	-	-	-	\$30
3951 593 282	Maint - Bank Removal R	-	\$4,163	\$4,163	-	\$50,000	\$50,000	-	\$50,000	-
3951 868	ECan/LoS Monitoring	-	\$663	\$663	\$1,501	\$8,000	\$6,499	\$450	\$8,000	\$3,949
3951 868 01	Scada Costs	\$238	\$125	(\$113)	\$1,248	\$1,500	\$252	\$156	\$1,500	\$1,550
3951 871	Urban Enhancement	-	\$500	\$500	-	\$6,000	\$6,000	-	\$6,000	-
	Total Expenditure	\$63,774	\$62,974	(\$800)	\$723,638	\$785,263	\$61,625	\$606	\$785,263	\$720,227
Support										
3951 890 3900	Support Charges-WTR RACE	\$9,222	\$9,227	\$5	\$110,669	\$110,669	-	-	\$110,669	\$104,372
	Total Support	\$9,222	\$9,227	\$5	\$110,669	\$110,669	-	-	\$110,669	\$104,372
Projects										
3951 073	Condition inspection of water race	-	-	-	-	-	-	-	-	\$5,000
3951 074	Health and Safety improvements	-	\$1,663	\$1,663	\$21,356	\$20,000	(\$1,356)	-	\$20,000	\$1,369
3951 077	Renewal of consents	-	\$440	\$440	-	\$5,346	\$5,346	-	\$5,346	-
3951 096	CPW Transition	-	\$413	\$413	\$65	\$5,000	\$4,935	-	\$5,000	\$45,123
	Total Projects	-	\$2,516	\$2,516	\$21,421	\$30,346	\$8,925	-	\$30,346	\$51,492
Transfers - Operations										
3951 970 01	Transfer (to)/from Reserves	(\$133,861)	(\$28,140)	\$105,721	(\$133,861)	(\$28,140)	\$105,721	-	(\$28,140)	(\$178,767)
3951 970 99	Carry Forward Projects	-	-	-	-	\$819,508	\$819,508	-	\$819,508	-
	Total Transfers - Operations	(\$133,861)	(\$28,140)	\$105,721	(\$133,861)	\$791,368	\$925,229	-	\$791,368	(\$178,767)
	Operating Surplus/(Deficit)	(\$134,678)	\$13,687	(\$148,365)	(\$1,180,289)	(\$1,099,264)	(\$81,025)	(\$606)	(\$1,099,264)	(\$465,018)
Capital Projects										
3951 900 17	Fix leakage morrisons main race	-	-	-	-	-	-	-	-	\$4,140
3951 900 66	Fish Screen-Waimak Intake	-	-	-	\$512,004	\$302,835	(\$209,169)	-	\$302,835	\$66,293
3951 900 67	Fish Screen-Upper Kowai Intake	-	-	-	\$530,354	\$310,560	(\$219,794)	-	\$310,560	\$466,596
3951 900 72	Glentunnel Intake Upgrade	\$9,600	\$15,509	\$5,909	\$130,974	\$186,108	\$55,134	-	\$186,108	\$34,266
3951 900 77	SCADA monitoring Sites	-	-	-	\$2,852	\$40,000	\$37,148	\$2,200	\$40,000	-
3951 900 78	H&S Upgrades	\$5,727	-	(\$5,727)	\$56,076	\$50,000	(\$6,076)	-	\$50,000	-
3951 900 79	Flow Gauge	-	\$4,000	\$4,000	\$1,423	\$4,000	(\$2,577)	-	\$4,000	-
	Total Capital Projects	\$15,327	\$19,509	\$4,182	\$1,233,683	\$893,503	(\$345,334)	\$2,200	\$893,503	\$571,295
Renewals										
3951 905 08	Waimak Ladder Upgrade	-	-	-	-	-	-	-	-	\$4,850
3951 905 100	Renewals - Linear (Pipe Valve)	\$5,750	\$20,000	\$14,250	\$16,112	\$120,000	\$103,888	-	\$120,000	\$29,123
3951 905 110	Renewals - P&E (PS TP Teley)	\$2,003	\$22,500	(\$20,497)	\$18,027	\$135,000	\$116,973	\$27,997	\$135,000	-
		\$7,753	\$42,500	\$34,747	\$34,139	\$255,000	\$220,861	\$27,997	\$255,000	\$33,973
	Closing balance	(\$157,758)	(\$48,322)	(\$109,436)	(\$2,448,111)	(\$2,247,767)	(\$205,498)	(\$30,803)	(\$2,247,767)	(\$1,070,286)
Special Funds										
3951 982 50	Renewal Reserve	\$133,861	-	\$133,861	\$511,942	\$378,081	\$133,861	-	\$378,081	\$378,081
	Total Special Funds	\$133,861	-	\$133,861	\$511,942	\$378,081	\$133,861	-	\$378,081	\$378,081

	Full Budget 2017/18	Balance 2017/18	Actual YTD 2017/18	Budget YTD 2017/18	% spent
Total Expenditure	\$785,263	\$61,625	\$723,638	\$785,263	92%
Total Projects	\$30,346	\$8,925	\$21,421	\$30,346	71%
Capital Projects	\$893,503	\$(340,180)	\$1,233,683	\$893,503	138%



MALVERN AREA WATER RACE - FINANCIAL COMMENTARY FOR THE YEAR ENDED JUNE 2018					
Account	Expenditure	Actual	Budget	Variance	Details
3951 410 01	External Consultants Fee	\$0	\$3,742	\$3,742	
3951 450	Electricity	\$2,196	\$0	(\$2,196)	July - Meridian - 66.40, Aug - 73.95, Sep - Meridian - 202.57, Oct - 234.51, Nov - 139.35, Dec - 120.66, Jan - 290.10, Feb - 153.18, Mar - 172.50, Apr - 242.72, May - 253.94, June - 246.38
3951 540	Rates	\$710	\$700	(\$10)	Oct - Rates 710.48
3951 541	Insurance	\$33,235	\$28,721	(\$4,514)	Aug - Premium 2017-18
3951 583 101	Maint - General S	\$567,619	\$567,619	\$0	July, Aug, Sep, Oct, Nov, Dec, Jan, Feb, Mar, Apr, May, June - Sicon Ltd - C1241 Claim Water Service O&M
3951 583 102	Maint - General R	\$117,129	\$118,981	\$1,852	July - Sicon Ltd - 4081.77, Aug - Sicon Ltd - 7807.77, Sep - Sicon Ltd - 17501.22, Lincoln Digital - 108.33, Oct - Sicon Ltd - 14236.17, Nov - Sicon Ltd - 8676.26, ChCh Press - 130.00, Dec - Sicon Ltd - 8745.99, Boraman Consulting - 155.52, Jan - Sicon - 5569.52, Feb - Sicon Ltd - 8004.65, Boraman Consulting - 116.64, Mar - Sicon - 9581.65, Apr - Sicon - 10148.02, Curle - 300.00, May - QTech - 420.00, Sicon - 5558.03, June - Sicon - 15771.71, Press - 216.00
3951 583 602	Maint - Source/Well/Headwork R	\$0	\$0	\$0	
3951 593 282	Maint - Bank Removal R	\$0	\$50,000	\$50,000	
3951 868	ECan/LoS Monitoring	\$1,501	\$8,000	\$6,499	Aug - Ecan consent monitoring - 450.00, Sep - Hydrological Links - 173.70, Ecan consent monitoring - 45.00, Dec - Ecan consent monitoring - 180.00, Jan - 495.00, Feb - Ecan consent monitoring - 157.50
3951 868 01	Scada Costs	\$1,248	\$1,500	\$252	Aug - Spark - 30.00, Qtech - 133.12, Boraman - 311.04, Sep - Qtech - 55.67, Nov - Qtech - 50.41, Spark - 45.00, Jan - Qtech - 157.93, Feb - Spark - 30.00, Qtech - 51.91, Mar - Spark - 30.00, Apr Qtech - 100.86, May - Spark - 30.00, June - Spark - 15.00, QTech - 222.66
3951 871	Urban Enhancement	\$0	\$6,000	\$6,000	
	Total Expenditure	\$723,638	\$785,263	\$61,625	
3951 890 3900	Support Charges-WTR RACE	\$110,669	\$110,669	\$0	July, Aug, Sep, Oct, Nov, Dec, Jan, Feb, Mar, Apr, May, June - Selwyn District Council - Standard Charge
	Total Support Charges	\$110,669	\$110,669	\$0	
3951 073	Condition inspection of water race	\$0	\$0	\$0	
3951 074	Health and Safety improvements	\$21,356	\$20,000	(\$1,356)	Sep - Sicon Ltd - 1242.00, Jan - 20114.25
3951 077	Renewal of consents	\$0	\$5,346	\$5,346	
3951 096	CPW Transition	\$65	\$5,000	\$4,935	July - Buddle Findlay - 64.66
	Total Projects	\$21,421	\$30,346	\$8,925	
3951 900 17	Fix leakage morrisons main race	\$0	\$0	\$0	
3951 900 66	Fish Screen-Waimak Intake	\$512,004	\$302,835	(\$209,169)	Aug - Isaacs - 236949.29, Orion - 2585.00, Oct - Isaacs - 234680.26, Nov - Jacobs NZ - 20.00, Mar - 37768.95
3951 900 67	Fish Screen-Upper Kowai Intake	\$530,354	\$310,560	(\$219,794)	Aug - Redpaths - 84.44, Isaacs - 35350.78, Oct - Nairns - 716.56, Isaacs - 2066.68, Nov - HiTech Aerials - 112.96, Jan - Sicon - 713.00, Nairns - 9837.00, Feb - Isaacs - 462535.24, Mar - Isaacs - 9262.51, Nairns - 9675.22
3951 900 72	Glentunnel Intake Upgrade	\$130,974	\$186,108	\$55,134	Nov - Jacobs NZ - 19024.33, Jan - Orion - 3610.00, Nairns - 8149.54, Feb - Sicon - 1632.49, Boraman - 3988.03, Mar - Jacobs - 7612.00, Sicon - 750.89, Apr - Sicon - 396.41, May - D Meehan - 27.83, Sicon - 76182.21, June - Boraman - 123.76, Sicon - 9476.42
3951 900 77	SCADA monitoring Sites	\$2,852	\$40,000	\$37,148	Oct - Nairns - 2344.78, Nov - Qtech - 507.00
3951 900 78	H&S Upgrades	\$56,076	\$50,000	(\$6,076)	Jan - Sicon - 48899.00, Feb - Sicon - 48899.00, James Bull - 300.00, June - 5727.00
3951 900 79	Flow Gauge	\$1,423	\$4,000	(\$2,577)	May - Intech - 1423.00
	Total Capital Projects	\$1,233,683	\$893,503	(\$345,334)	
3951 905 08	Waimak Ladder Upgrade	\$0	\$0	\$0	
3951 905 100	Renewals - Linear (Pipe Valve)	\$16,112	\$120,000	\$103,888	Aug - Sicon - 3737.50, Jan - Sicon - 6624.23, June - Sicon - 5750.00
3951 905 110	Renewals - P&E (PS TP Teley)	\$18,027	\$135,000	\$116,973	Jan - Sicon - 15439.00, May - QTech - 585.00, June - Tonkin & Taylor - 2002.88
	Total Renewals	\$34,139	\$255,000	\$220,861	

**Malvern Area Water Race
Operational Position Summary**

Revenue	2017 / 2018 YTD Actual	2017 / 2018 YTD Budget	Variance \$	2016/17 Actual
Targeted Rate	854,689	858,700	(4,011)	715,067
Urban Public Good	23,491	23,740	(249)	19,263
General Receipts	1,406	0	1,406	14,522
Malvern irrigation	0	43,000	(43,000)	43,399
Total Revenue	879,586	925,440	(45,854)	792,251
Expenditure				
Total Operational Expenditure	723,638	785,263	61,625	720,227
Total Support	110,669	110,669	0	104,372
Total Operational Projects	21,421	30,346	8,925	51,492
Total Renewals	34,139	255,000	220,861	33,973
Total Expenditure	889,867	1,181,278	291,411	910,064
Operating Surplus/(Deficit)	\$(10,281)	\$(255,838)	\$245,557	(117,813)

Operating Position Summary

	2017 / 2018 YTD Actual	2017 / 2018 YTD Budget	Variance \$
Opening Account Balance	(1,070,286)	(1,889,794)	819,508
Plus Operating Surplus/(Deficit)	(10,281)	(255,838)	245,557
Plus Prior year Projects Carried Forward	0	819,508	(819,508)
Less Capital Projects	(1,233,683)	(893,503)	(340,180)
Net Reserves Transfers	(133,861)	87,000	(220,861)
Closing Account Balance	(\$2,448,111)	(\$2,132,627)	(315,484)

Special Funds Account - Renewals

	2017 / 2018 YTD Actual	2017 / 2018 YTD Budget	Variance \$
Opening Account Balance	378,081	378,081	0
Plus Transfers in	168,000	168,000	0
Plus Interest			0
Less Funding of Renewals	(34,139)	(255,000)	220,861
Closing Account Balance	\$511,942	\$291,081	220,861

Financial Month is set to 06/18 and Budget AB01 is in use.

PAPARUA WATER RACE

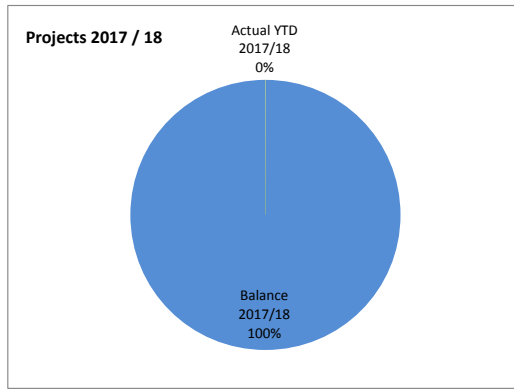
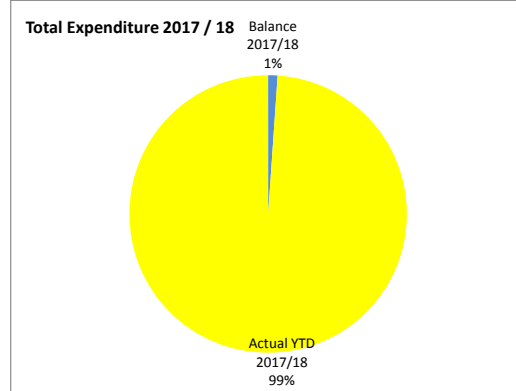
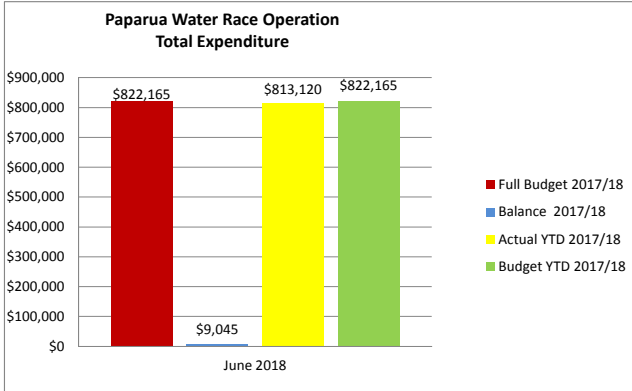
June 2018



Statement of Operations

Account	Detail	Month Actual	Month Budget	Month Variance	YTD Actual 2017/18	Ytd Budget 2017/18	Ytd Variance	Committed Expenditure	FYR Budget 2017/18	Last Year 2016/17
Opening Balance										
3954 980 01	Paparua W/Rc Oper Open Blnce.	-	-	-	(\$386,067)	(\$404,869)	\$18,802	-	(\$404,869)	(\$109,979)
	Total Opening Balance	-	-	-	(\$386,067)	(\$404,869)	\$18,802	-	(\$404,869)	(\$109,979)
Income										
3954 101	Targeted Rate	\$39,916	\$42,677	(\$2,761)	\$497,282	\$512,190	(\$14,908)	-	\$512,190	\$414,530
3954 101 01	Public Good Rate	\$4,939	\$4,918	\$21	\$59,213	\$59,071	\$142	-	\$59,071	\$48,985
3954 101 02	Urban Public Good	\$11,804	\$11,743	\$61	\$141,679	\$140,861	\$818	-	\$140,861	\$109,871
3954 135	CCC Share-Public Good	-	-	-	\$71,696	\$71,696	-	-	\$71,696	\$71,696
3954 162	General Receipts	-	-	-	-	-	-	-	-	\$780
3954 187	Irrigation Charges	\$106	-	\$106	\$182,062	\$170,000	\$12,062	-	\$170,000	\$167,107
3954 187 02	Irrigation Rebate	(\$10,000)	-	(\$10,000)	\$14,592	(\$30,000)	\$44,592	-	(\$30,000)	(\$48,961)
	Total Income	\$46,765	\$59,338	(\$12,573)	\$966,524	\$923,818	\$42,706	-	\$923,818	\$764,008
Expenditure										
3954 410 011	External Consultants Fee	-	\$310	\$310	-	\$3,742	\$3,742	-	\$3,742	-
3954 450	Electricity	\$32	\$50	\$18	\$350	\$600	\$250	-	\$600	\$291
3954 541	Insurance	-	-	-	\$9,439	\$8,093	(\$1,346)	-	\$8,093	\$7,706
3954 583 101	Maint - General S	\$55,579	\$55,581	\$2	\$667,946	\$666,950	(\$996)	-	\$666,950	\$666,950
3954 583 102	Maint - General R	(\$9,983)	\$8,666	\$18,649	\$107,872	\$103,981	(\$3,891)	\$1,200	\$103,981	\$121,082
3954 583 272	Maint - Cleaning R	\$140	-	(\$140)	\$4,287	-	(\$4,287)	-	-	\$2,000
3954 583 602	Maint - Source/Well/Headwork R	\$6,104	-	(\$6,104)	\$22,825	-	(\$22,825)	-	-	\$7,463
3954 593 282	Maint - Bank Removal R	-	\$1,663	\$1,663	-	\$20,000	\$20,000	-	\$20,000	-
3954 868	ECan/LoS Monitoring	-	\$125	\$125	\$135	\$1,500	\$1,365	-	\$1,500	\$750
3954 868 01	Scada Costs	\$61	\$24	(\$37)	\$266	\$299	\$33	-	\$299	\$271
3954 871	Urban Enhancement	-	\$1,413	\$1,413	-	\$17,000	\$17,000	-	\$17,000	\$16,599
	Total Expenditure	\$51,933	\$67,832	\$15,899	\$813,120	\$822,165	\$9,045	\$1,200	\$822,165	\$823,112
Support										
3954 890 3900	Support Charges-WTR RACE	\$4,075	\$4,075	-	\$48,900	\$48,900	-	-	\$48,900	\$46,118
	Total Support	\$4,075	\$4,075	-	\$48,900	\$48,900	-	-	\$48,900	\$46,118
Projects										
3954 082	Health and Safety improvements	-	\$1,563	\$1,563	-	\$18,800	\$18,800	-	\$18,800	\$2,998
3954 084	Renewal of consents	-	\$440	\$440	-	\$5,346	\$5,346	-	\$5,346	-
	Total Projects	-	\$2,003	\$2,003	-	\$24,146	\$24,146	-	\$24,146	\$2,998
Transfers - Operations										
3954 970 01	Transfer (to)/from Reserves	(\$111,324)	(\$32,639)	\$78,685	(\$111,324)	(\$32,639)	\$78,685	-	(\$32,639)	(\$65,170)
3954 970 99	Carry Forward Projects	-	-	-	-	\$18,800	\$18,800	-	\$18,800	-
	Total Transfers - Operations	(\$111,324)	(\$32,639)	\$78,685	(\$111,324)	(\$13,839)	\$97,485	-	(\$13,839)	(\$65,170)
	Operating Surplus/(Deficit)	(\$120,567)	(\$47,211)	(\$73,356)	(\$392,887)	(\$390,101)	(\$2,786)	(\$1,200)	(\$390,101)	(\$283,369)
Capital Projects										
3954 900 07	Railway Road - tipout point	-	-	-	-	\$15,000	\$15,000	-	\$15,000	-
3954 900 09	H&S Upgrades	-	-	-	-	\$50,000	\$50,000	-	\$50,000	-
	Total Capital Projects	-	-	-	-	\$65,000	\$65,000	-	\$65,000	-
Renewals										
3954 905 100	Renewals - Linear (Pipe Valve)	\$20,676	\$20,000	(\$676)	\$20,676	\$120,000	\$99,324	-	\$120,000	\$102,700
	Total Renewals	\$20,676	\$20,000	(\$676)	\$20,676	\$120,000	\$99,324	-	\$120,000	\$102,700
	Closing balance	(\$141,243)	(\$67,211)	(\$74,032)	(\$413,563)	(\$575,101)	\$161,538	(\$1,200)	(\$575,101)	(\$386,069)
Special Funds										
3954 982 50	Renewal Reserve	\$111,324	-	(\$111,324)	\$413,726	\$302,402	(\$111,324)	-	\$302,402	\$302,402
	Total Special Funds	\$111,324	-	(\$111,324)	\$413,726	\$302,402	(\$111,324)	-	\$302,402	\$302,402
		-	-	-	-	-	-	-	-	-

	Full Budget 2017/18	Balance 2017/18	Actual YTD 2017/18	Budget YTD 2017/18	% spent
Total Expenditure	\$822,165	\$9,045	\$813,120	\$822,165	99%
Projects	\$24,146	\$24,146	\$0	\$24,146	0%
Capital Projects	\$65,000	\$65,000	\$0	\$65,000	



PAPARUA WATER RACE - FINANCIAL COMMENTARY FOR THE YEAR ENDED - JUNE 2018					
Account	Expenditure	Actual	Budget	Variance	Description
3954 410 011	External Consultants Fee	\$0	\$3,742	\$3,742	
3954 450	Electricity	\$350	\$600	\$250	Meridian - July - 25.64, Aug - 26.37, Sep - 27.17, Oct - 29.37, Nov - 29.37, Dec - 28.45, Jan - 31.22, Feb - 30.86, Mar - 27.89, Apr - 31.13, May - 30.88, June - 31.57
3954 541	Insurance	\$9,439	\$8,093	(\$1,346)	Aug - Premium 2017/18 - 9438.71
3954 583 101	Maint - General S	\$667,946	\$666,950	(\$996)	July, Aug, Sep, Oct, Nov, Dec, Jan, Feb, Mar, Apr, May, June - Sicon Ltd - C1241 Claim Water Service O&M
3954 583 102	Maint - General R	\$107,872	\$103,981	(\$3,891)	July - HCB Technologies - 674.31, Sicon Ltd - 4265.77, Aug - Sicon - 4455.52, Sep - HCB Technologies - 682.31, Sicon Ltd - 10464.05, Lincoln Digital - 108.33, Oct - James Bull - 100.00, Sicon - 4081.77, Nov - Buddle Findlay - 4533.94, James Bull - 180.00, Sicon Ltd - 7988.90, Dec - Sicon Ltd - 26134.96, HCB Tech - 707.52, Jan - HCB Tech - 707.52, Newlands - 6.54, Buddle findlay - 1045.50, James Bull - 159.21, Sicon - 6773.32, Feb - Sicon - 9824.40, Mar - Sicon - 6857.27, Apr - Independant Signs - 700, Sicon - 6339.34, May - Sicon - 21064.81, June - Sicon - 10691.27, Trf to Renewals - 20676.00
3954 583 272	Maint - Cleaning R	\$4,287	\$0	(\$4,287)	Aug - Refuse Disposal - 186.99, Sep - Refuse Disposal - 208.50, Oct - 77.39, Nov - Refuse Disposal - 97.85, Jan - Refuse Disposal - 132.45, Mar - Refuse Disposal - 3322.96, Apr - Refuse Disposal - 42.85, May - Refuse Disposal - 77.92, June - 140.24
3954 583 602	Maint - Source/Well/Headwork R	\$22,825	\$0	(\$22,825)	Aug - Sicon - 1638.75, Oct - 4574.17, Dec - 1607.13, Jan - 5068.63, Feb - 3832.38, June - 6103.94
3954 593 282	Maint - Bank Removal R	\$0	\$20,000	\$20,000	
3954 868	ECan/LoS Monitoring	\$135	\$1,500	\$1,365	Feb - Ecan - 67.50, May - Ecan - 67.50
3954 868 01	Scada Costs	\$266	\$299	\$33	July - 2way Airtime - 5.28, Aug - Qttech Data - 33.28, Sep - 2way Airtime - 5.38, Qttech Data - 13.92, Oct - 2way Airtime - 10.76, Nov - 2way Airtime - 5.38, Qttech Data - 12.60, Dec - 2way Airtime - 5.38, Jan - 2way Airtime - 5.38, Qttech Data - 39.36, Feb - Qttech Data - 12.97, Mar -Radio Spectrum - 8.42, Apr - 2 way - 16.14, QTech - 25.22, May - 2 way - 5.38, June - 2 way - 5.38, QTech - 55.77
3954 871	Urban Enhancement	\$0	\$17,000	\$17,000	
	Total Expenditure	\$813,120	\$822,165	\$9,045	
3954 890 3900	Support Charges-WTR RACE	\$48,900	\$48,900	\$0	July, Aug, Sep, Oct, Nov, Dec, Jan, Feb, Mar, Apr, May, June - Selwyn District Council - Standard Charge
	Total Support	\$48,900	\$48,900	\$0	
Projects					
3954 082	Health and Safety improvements	\$0	\$18,800	\$18,800	
3954 084	Renewal of consents	\$0	\$5,346	\$5,346	
	Total Projects	\$0	\$24,146	\$24,146	
Capital Projects					
3954 900 07	Railway Road - tipout point	\$0	\$15,000	\$15,000	
3954 900 07	H&S Upgrades	\$0	\$50,000	\$50,000	
	Total Capital Projects	\$0	\$65,000	\$65,000	
Renewals					
3954 905 100	Renewals - Linear (Pipe Valve)	\$20,676	\$120,000	\$99,324	June - Trf from Maintenance - 20676.00
	Total Renewals	\$20,676	\$120,000	\$99,324	

**Paparua Water Race
Operational Position Summary**

Revenue	YTD Actual \$	YTD Budget \$	Variance \$	2016/2017 Actual
Targeted Rate	497,282	512,190	(14,908)	414,530
Public Good Rate	59,213	59,071	142	48,985
Urban Public Good	141,679	140,861	818	109,871
CCC Share-Public Good	71,696	71,696	0	71,696
Irrigation Right Application	0	0	0	0
General Receipts	0	0	0	780
Dawsons Rd Water Race Upgrade	0	0	0	0
Irrigation Charges	182,062	170,000	12,062	167,107
Irrigation Rebate	14,592	(30,000)	44,592	(48,961)
Total Revenue	966,524	923,818	42,706	764,008
Expenditure				
Total Operational Expenditure	813,120	822,165	9,045	823,112
Total Support	48,900	48,900	0	46,118
Total Operational Projects	0	24,146	24,146	2,998
Total Renewal Expenditure	20,676	120,000	99,324	
Total Expenditure	882,696	1,015,211	132,515	872,228
Operating Surplus/(Deficit)	83,828	(91,393)	175,221	(108,220)

Operating Position Summary

	Actual \$	YTD Budget \$	Variance \$
Opening Account Balance	(386,067)	(404,869)	18,802
Plus Operating Surplus/(Deficit)	83,828	(91,393)	175,221
Plus Prior year Projects Carried Forward	0	18,800	(18,800)
Less Capital Projects	0	(65,000)	65,000
Net Reserves Transfers	(111,324)	(12,000)	(99,324)
Closing Account Balance	(413,563)	(554,462)	140,899

Special Funds Account - Renewals

	YTD Actual \$	YTD Budget \$	Variance
Opening Account Balance	302,402	302,402	0
Plus Transfers in	132,000	132,000	0
Plus Interest	0	0	0
Less Funding of Renewals	(20,676)	(120,000)	99,324
Closing Account Balance	\$413,726	\$314,402	\$99,324

TO: Asset Manager, Water Services
FOR: Water Race Sub Committee Meeting – 9 July 2018.
FROM: Daniel Meehan – Surface Water Operations Engineer
DATE: 28 June 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 May and June 2018.

3. SIGNIFICANCE ASSESSMENT/COMPLIANCE STATEMENT

3.1 This report covers the period May and June 2018.

Activity occurring over \$5000		
Scheme	Amount	Activity
Malvern	\$5,500.00	Replace Collapsed Culvert Waireka Road
Paparua	\$8,690.00	Repair Thompsons divide, replace culvert headwall and gate.
Malvern	\$7,733.00	Install 25m culvert where slip continues to block race - Morrisons

3.2 There is no planned items of expenditure over \$5,000 committed in the next period July 2018 and August 2018.

ENDORSED FOR AGENDA



Daniel Meehan

Surface Water Operations Engineer



**M F Washington
Asset Manager**

selwyn
fastforward28»
OUR COMMUNITY PLAN FOR THE NEXT 10 YEARS





The Council is proposing to introduce a new rating structure for the water race network, based on a standard district rate.

WATER RACE RATING REVIEW

The Council has been operating a water race system in parts of Selwyn for approximately 130 years, supplying water to rural properties primarily for livestock purposes. There are currently three water race schemes within the district: Ellesmere, Malvern and Paparua. Over the past five years, however, substantial changes have been identified which are expected to change the need for and use of the schemes. These include Central Plains Water irrigation scheme and changing drivers for the current and future use of the water race network. Alongside these factors, the rating base of water race users is declining, and many of the assets in the system are ageing and nearing the end of their useful life.

Although the demand for water races to supply water for livestock is declining, water races bring other benefits to the Selwyn community. These include environmental benefits such as providing a water source for wildlife, and habitat for some endangered species, along with aesthetic benefits to many townships and residential areas. To

reflect this change in the way that water races are being used, and these wider community benefits, the Council is proposing a change in the way that water races are funded. This will ensure that land owners who benefit directly from access to water races still fund the majority of the costs, but that the wider community also contributes to the costs. Over time, as the traditional use of water races for farming declines, the wider community will pick up an increasing proportion of the costs.

The current rating structure for water races is complicated, with 10 different rating factors operating across the three networks. Water race rates are paid by rateable properties in each rating area where the service is available, and in addition some rural areas and townships pay a public good rate to reflect the broader benefit of water races. The proposed new rating structure provides three standardised rating factors to replace the existing 10 rating factors. The new structure is provided below.

Rate applies to	Rate type (incl. GST)	Start value	Yearly rate % increase
Water race user	Annual charge revenue	\$300	6.0%
Water race user	Per hectare revenue	\$17	6.0%
All rateable properties	Public/environmental good rate revenue	\$20	10.0%

The 10-year impact on the rate increase is as follows:

Year	Annual charge	Per hectare charge	Public good charge
2018/19	\$300	\$17	\$20
2019/20	\$318	\$18	\$22
2020/21	\$337	\$19	\$24
2021/22	\$357	\$20	\$27
2022/23	\$379	\$21	\$29
2023/24	\$401	\$23	\$32
2024/25	\$426	\$24	\$35
2025/26	\$451	\$26	\$39
2026/27	\$478	\$27	\$43
2027/28	\$507	\$29	\$47

For comparison, the current rating structure is shown below:

Current water race targeted rates		2017/18
Ellesmere		
Per hectare charge		\$16
Minimum charge		\$126
Malvern		
Per hectare charge		\$23
Minimum charge		\$157
Urban water race charge		\$14
Paparua		
Per hectare charge		\$17
Annual charge		\$209
Domestic supply charge		\$296
Urban water race charge		\$19
Rural Public Good		\$41



WHAT ARE THE OPTIONS?

The Council's preferred option is to adopt the revised rating structure, as outlined above.

An alternative option to adopting the revised rating structure is to retain the existing rating system for water races.

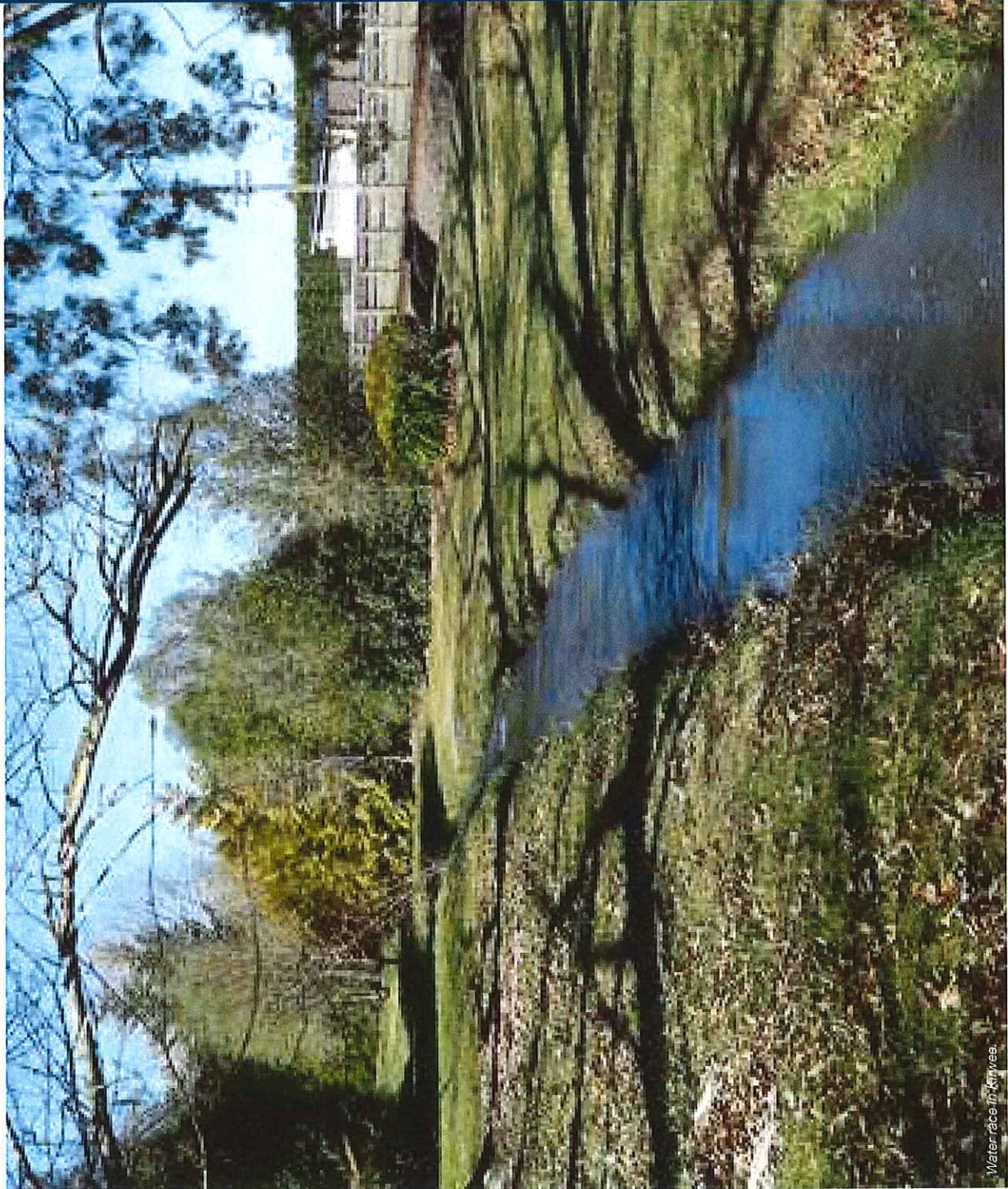
The Council could also consider closing the water race network as it becomes financially unviable from a farming perspective, but this is not being proposed because of the negative impact on the environment and aesthetics of the district. However, it does expect that parts of the network will be closed over time as demand declines and where the impacts of closure are low.

The Council is not proposing these alternative options as it believes the proposal as outlined above provides the best option for ensuring the retention of the network both for farming purposes, and for the wider environmental and aesthetic benefits to the community, while reducing the complexity of the rating system.



HAVE YOUR SAY

Do you support the proposal to replace the current rating system for water races with a standard district rate across all three water race schemes? See question 5 on the submission form or share your views at www.selwyn.govt.nz/fastforward28.



Water race in Kiriwee.

**MINUTES OF THE SELWYN DISTRICT COUNCIL
DRAFT 2018 – 2028 LONG TERM PLAN SUBMISSION DELIBERATIONS
HELD IN THE COUNCIL CHAMBERS, ROLLESTON ON
WEDNESDAY 30 MAY 2018 BETWEEN 9.00AM AND 5.05PM, AND
THURSDAY 24 MAY BETWEEN 9.00AM AND 12.10PM**

PRESENT

Mayor S T Broughton, Councillors, M A Alexander, J B Bland, D Hasson, M P Lemon, M B Lyall D P McEvedy, G S Miller, J B Morten, R H Mugford, N C Reid & C J Watson

ATTENDEES

Messrs D Ward (Chief Executive), G Bell (Corporate Services Manager), A Mazey (Asset Manager, Transportation), C Moody (Corporate Accountant), A Walker (Communication Advisor), T Harris (Environmental Services Manager), M England (Asset Manager – Water Services), J Burgess (Planning Manager), M Rykers (Manager Open Space and Property), J Reid (Major Projects Property Manager), E Sim (Communications Advisor), Ms T Davel (Governance Support Co-ordinator), Mrs D Kidd (Community Relations Manager), and Mrs N Smith (Executive Assistant)

APOLOGIES

Apologies were received from Councillor Lyall for lateness.

Moved Councillor Alexander / **Seconded** Councillor Reid

'That Council receives the apologies for lateness by Councillor Lyall.'

CARRIED

CONFIRMATION OF MINUTES

- 1. Minutes of the Selwyn District Council 2018-2028 Draft Long Term Plan Hearings held at the Selwyn District Council Chambers, on Tuesday 22 May, Wednesday 23 May and Thursday 24 May,**

Moved Councillor Mugford / **Seconded** Councillor Lemon

'That the Council confirms the minutes of the Selwyn District Council 2018-2028 Draft Long Term Plan 2018-2028 Hearings held on Tuesday 22 May 2018, Wednesday 23 May 2018 and Thursday 24 May 2018, as circulated.'

CARRIED

Councillor Mugford asked if this would change over time if there were no repeated transgressions on these schemes, to which the Asset Manager – Water Services noted that history of transgressions only forms one part of the risk matrix, and that this was not the sole reason the decision to chlorinate was made for these schemes.

Councillor Morten stated that if there is a need to spend the money to fix these issues, then it should be done.

Moved Councillor Miller / Seconded Councillor Lemon

'It is recommended that Council continue its risk-based approach to the protection of drinking water schemes with filtration, UV treatment and emergency chlorination, and allow staff to implement the risk matrix approach as required.'

CARRIED

Water Races

Councillor Reid referred to a Submitter's real life example, where they don't use a water race, but will be experiencing a doubling of the rate. She noted her interest in hearing from her fellow Councillors.

Councillor McEvedy supports the changes proposed. He noted that this will continue to be a challenge and the service is not what it used to be. He then referred to the need to let go of some of the old and embrace the new, referring to the work of the Canterbury Water Management Strategy. Councillor McEvedy noted his support of the targeted stream augmentation in Waikewai.

Councillor Watson stated the need to rationalise the water races to ensure Council is doing the best thing. He noted the model supports the Malvern Water Races.

Councillor Miller spoke about the survey of actual use of the water races. Many sections of the races are not relevant, or required by users. He stated that he is open to the idea of an earlier discussion around closures.

Councillor Lemon noted his support for the proposal. He stated that it is fair to say that a large proportion of those on the Water Race Committee are users, and have voted to increase their rate recognising the diverse and unusual range of situations. He noted the need to maintain a degree of the race network for biodiversity reasons. Also referred to targeted stream augmentation, and the effects CPW will have on the lowland schemes.

Councillor Hasson support the \$20 district wide rate. She said, that into the future Council needs to look at a biodiversity fund rather than leave fragments for the community to manage. She referred to land drainage rates and spoke about debt balances on some of the schemes. Councillor Hasson noted her support for the history of the water races and their biodiversity.

Councillor Alexander supports the rate, but thinks the targeted stream augmentation is a matter for the Zone Committees and Water Race Committee to look at.

Councillor Mugford supports the rate as set out in the Draft Long Term Plan.

Councillor Bland supports the rate, and supports targeted stream augmentation if decisions are made on a scientific basis. He asked questions about debt over the water races.

Councillor Morten supports what is in the document, and agrees it is evolving. He spoke to the intended purpose the water race schemes.

Councillor Lyall stated that he is in support of the proposal as it is a far more equitable approach and provided comments on the public good rate. He then referred to water races being the habitat for mudfish.

Mayor Broughton is in support, noting the public good rate should be increased faster.

Moved Councillor Watson / **Seconded** Councillor Hasson

'It is recommended that Council proceed with the new water race funding model as proposed in the Draft 2018 – 2028 Long Term Plan.'

CARRIED

Community Grants

Councillor Lyall likes the idea of packaging up the grants. He stated that Council has underfunded arts and heritage for years and the proposal does not see a huge jump in that funding. He would like Council to rethink how it considers funding for arts and heritage.

Councillor Reid likes that funds are being grouped things together. She however noted that she is wary that Council needs to be actively looking at how it funds biodiversity, arts and heritage, but putting a figure on this is difficult.

Councillor McEvedy stated that Council needs to ensure it is protecting what people think is important, specifically making reference to heritage. He noted the comments from submitters that Council does not do enough about biodiversity. Councillor McEvedy noted his support in principle.

Councillor Watson supports the \$140,000 scheme, but would like to talk about other funding later in the deliberations.

Councillor Miller noted no issue with the lump sum funding, but stated that the key is around communication of when to apply.

Councillor Lemon noted he is supportive of the proposal and is happy to see biodiversity funding is separated from this scheme. He also confirmed the need to ensure communication is done well. He noted that he too would like to see more funding for arts and heritage.

Councillor Hasson stated that if the community supports this, then she would support it. She noted that she was pleased to see that biodiversity is being looked at separately.

Councillor Alexander stated that he is in favour of proposal, and agreed that at some point in the future Council needs to look at extra funding for some categories.

Water race rating review

What was proposed?

Over the coming 10-year period the Council proposes to replace three major community centres, in Prebleton (2020/21), Hororata (2023/24) and Leeston (2025/26). The projects would be funded from the district-wide rate and other sources.

Submissions and comments

More submitters and survey respondents supported this proposal than opposed it, although a significant proportion were undecided. Some submitters expressed the view that the water race network should be funded on a user-pays basis, while others acknowledge the public good value of the network. Some submitters called for the discontinuance of the network.

Council's decision

The new water race rating structure was adopted by the Council as proposed. Councillors noted that the usage of water races is changing over time and will need to be monitored in future.

Changes to community grants processes

What was proposed?

Introduction of a new Community Grants Scheme to bring together various existing funding and grants programmes, promoting improved efficiency and effectiveness, equity, accountability and encouraging community-led development. The proposal included new funding of \$140,000 in addition to existing budgets.

Submissions and comments

A significant majority of submitters and survey respondents supported the proposal for a new community grants process. A number of submitters asked that funding be incorporated for activities such as arts, heritage and biodiversity, while others requested a higher level of funding.

Council's decision

The Council adopted the proposed new community grants fund and process as proposed. The Council will review the level of funding for future years, and indicated its intention to increase funding by \$10,000 each year after the first year, for the next nine years. The Council also agreed to retain a separate funding stream related to the environment and biodiversity. The development of new funding processes and criteria will take account of submission feedback.

New and upgraded community centres

What was proposed?

Over the coming 10-year period the Council proposes to replace three major community centres, in Prebleton (2020/21), Hororata (2023/24) and Leeston (2025/26). The projects would be funded from the district-wide rate and other sources.

Submissions and comments

The proposals for new community centres received strong support from the majority of submitters and survey respondents. A number of submitters noted the lack of suitable community facilities in these townships; others queried the funding of the projects, suggesting targeted rates should be used. Some submissions discussed the timing of the projects.

Council's decision

The Council approved the proposals for the new community centres, to be funded from the district-wide rate and other sources. Further work will be undertaken to assess local needs and confirm the timing of the respective facilities.

Rolleston council offices extension and parking

What was proposed?

Construction of a 385 square metre extension to the Selwyn District Council offices in Rolleston, to meet current and future staff accommodation requirements. The project would be completed in 2019/20.

Submissions and comments

Both online responses and formal submissions on this proposal showed around 50% support, with both undecided and opposed views at around 25%. Some submitters commented on the pressure on current office and parking space both now and in the future, while others queried the levels of staff growth.

Council's decision

The Council resolved to proceed with construction of the extension to the Rolleston offices and car parking as proposed.

Major projects

The projects identified in this 2018/28 LTP all assist in meeting the communities' desired level of service. They are predominantly to serve growth, but in the case of water quality and demand management work, they seek to improve the service level. Other major projects are also underway which relate to the provision of services.

The major growth projects are:

- Water source improvements to provide increased capacity for Darfield, Kinwee, Leeston, Lincoln, Prebbleton and Rolleston including the development of new wells, reservoirs and pump stations. The costs of these improvements are: Darfield \$2.1 million with work to be undertaken between 2018 and 2024, Kinwee 0.83 million dollars 2019/2020, Leeston 2.2 million dollars with work to be undertaken between 2018-2028, Lincoln \$5.9 million with work to be undertaken between 2018-2028 and Prebbleton \$2.6 million with work undertaken between 2019-2020, Rolleston \$10.5 million with work to be undertaken between 2018 and 2028.
- Developing additional infrastructure at the Pines Wastewater Treatment Plant. The treatment plant currently services Rolleston, Lincoln, Prebbleton, Springston and West Melton townships. The treatment plant was designed to be a modular system, with additions staged progressively to increase the plant's treatment capacity to cope with population growth. In 2018/19 extension to the solar drying hall and associated works is planned at a cost of \$3.1 million dollars. Pines IV – plant expansion for additional capacity will occur 2020/21 at a cost of \$5.4 million dollars Costs will be funded largely from development contributions.
- An upgrade of the Ellesmere Wastewater treatment plant (in Leeston) is also planned to provide the scheme (serving Leeston, Southbridge and Doyleston) with more capacity to cope with future growth. The upgrade is planned to be completed by 2024 at an estimated cost of \$7.5 million dollars.

The major levels of service projects are:

- The upgrade of water supply treatment plants across the district to meet or exceed drinking water standards as a budgeted cost of \$6 million dollars with work undertaken between 2018-2021.
- District-wide flood protection and treatment works will be designed and constructed between 2018-2028 in line with the developed stormwater management plans. This work has a budget of \$2.1 million dollars.
- At the Pines Waste Water Treatment Plant a septage receiving facility will be constructed to accept waste collected from the districts septic tanks. This \$1 million dollar project is programmed for 2019/2020.
- In Leeston the new flood diversion channel has commenced construction with the final stage of work taking place between 2018 and 2020. This work has a budget of \$1 million dollars.
- Closure of the Kowhai water race tunnel. The tunnel carries water from the lower Kowhai River intake to Malvern water races. The replacement / renewal of the tunnel

is uneconomic. Over the last couple of years Council has operated the scheme using only the upper intake to trial future permanent closure of the tunnel. This trial was successful.

- Council will review the future of other significant water race assets as they reach the end of their predicted useful life

Other major projects and decisions include:

- Progress the development and implementation of stormwater catchment management plans for all townships.
- Investigate and implement opportunities to improve water supply scheme efficiency and resilience through scheme interconnections.
- Work with Central Plains 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.
- Review rating and governance structure of all land drainage schemes in consultation with the land drainage committees.
- Review the environmental risks relating to the operation of the districts wastewater network.
- The implementation of a risk-based approach to the protection of drinking water schemes with filtration, UV treatment and chlorination as needed, will be progressed. Blanket chlorination of supplies is not planned. The proposal to chlorinate the community supplies at Malvern Hills and Sheffield-Waddington will proceed in the first quarter of the 2018/19 year.

REPORT

TO: Ellesmere, Malvern and Paparua Water Race Scheme Sub-Committee

FOR: 20 August 2018

FROM: Corporate Services Manager

DATE: 1 August 2018

SUBJECT: Upper Ellesmere Water Race Rates

RECOMMENDATION

‘That the Water Race Sub-Committee receives the report and notes the concerns raised by a ratepayer in relation to water race rates charged for Upper Ellesmere Water Race.’

1. PURPOSE

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

2. SIGNIFICANCE ASSESSMENT/COMPLIANCE STATEMENT

This is a report for information on a matter raised by an individual ratepayer and as such is of low significance in terms of the Council’s significance and engagement policy. It does not therefore require consultation, and the outcome of the Sub-Committee’s discussion will be communicated to the ratepayer.

3. HISTORY/BACKGROUND

Mr Hobson has asked the Mayor to consider the level of rates he is charged in respect of water races for his property on Rakaia Terrace Road. Mr Hobson has previously attended the Water Race Sub-Committee on 13 February 2017 and raised similar concerns. After that meeting, staff wrote to Mr Hobson explaining that the committee had confirmed the property shall continue to be rated stockwater race charges and that the water race rating structure was to be reviewed during the long term plan process for 2018/28. This review has taken place and a revised rating structure established, although the change has not brought any reduction for Mr Hobson.

Mr Hobson’s property is 848.12 hectares, which means a rate of \$14,481 for the current year. He has indicated that he no longer uses the water race and gets no value from it. His property is served by a single main water race. Two minor lateral races have been closed and are no longer in service on this property.

4. **PROPOSAL**

Mr Hobson's situation is typical of that faced by large farming properties across the district, and particularly in the Upper Ellesmere area where the availability of water from other sources means that many properties no longer make use of the water race. However, as is the case in other areas, some properties serviced by the network still make use of the water from the races.

On the one hand, the current rating approach seems hard on those that do not use the network anymore and many would support closure. On the other hand this would penalise those that have long relied on the network and it seems unfair that they would lose a service because others have changed their practices.

There is no doubt that in many ways the water race network is a legacy asset with less operational value than in the past. But it still serves a number of properties and brings other benefits. In this context it remains reasonable that those that have secured substantial benefits from the network over a long period of time should continue to fund the legacy network. This is a longstanding principle in local government funding – that the actions of those that have caused the need for the activity should be considered in terms of determining who funds it.

5. **OPTIONS**

There are four options in relation to the water race rates paid by Mr Hobson:

Option 1 - no change. Write to Mr Hobson and explain that the Water Race Sub-Committee has considered the matter he has raised by that his property is correctly rated and therefore the rates will remain as they are.

Option 2 – provide a remission and recalculate Mr Hobson's water race rates based on a smaller area.

Option 3 – pursue closure on the Upper Ellesmere water race network.

Option 4 – develop an alternative rating approach for water race rates.

Consideration of options

Option 1 is the natural option as Mr Hobson's rates are correctly calculated in accordance with the rates that the Council has set.

Option 2 would certainly be welcomed by Mr Hobson and may in some way seem fair as the closure of the minor races means that his property is less well served than in the past. However, the difficulty is that this would change the rates for one property in response to a complaint, whilst many similar large properties would continue to pay rates in accordance with the rates that the Council has set. A rate reduction made in this way would be inequitable to others and will almost certainly result in further requests for a reduction.

Option 3 – 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.

Option 4 – the Council has just adopted a revised approach to water race rating and the next opportunity for a change would be the 2019/20 annual plan process. The new approach was devised in collaboration with the Water Race Sub-Committee, who are fully aware of the complexities of balancing competing arguments on how water races should be funded. Although the Water Race Sub-Committee will want to continue to consider the rating approach it is unlikely to want to start reviewing the approach so soon after adopting a new one.

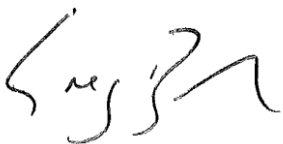
Staff favour option 1, recognising that further work needs to be done in relation to option 3.

6. VIEWS OF THOSE AFFECTED / CONSULTATION

Mr Hobson approached the Mayor directly on this matter.

7. FUNDING IMPLICATIONS

A reduction to the rates charged for an individual property has the potential to have broader financial implications as others could reasonably expect a similar reduction.



Greg Bell
Corporate Services Manager



Murray England
Asset Manager – Water Services

REPORT

TO: Chief Executive
FOR: Water Race Sub Committee Meeting – 20 August 2018
FROM: Water Services Engineer
CC: Corporate Services Manager
DATE: 14 August 2018
SUBJECT: **Proposed Water Race Closures Approval – Post Public Consultation**

1. RECOMMENDATION

That the Sub-Committee:

- a) Consider any submissions received regarding the proposed closures.*
- b) Provide recommendations to Council on the closure of 1 length of water race totalling approximately 7.75 km in the Malvern scheme*
- c) Provide recommendations to council on the May 2018 proposed closure of 1 length of water race totalling approximately 2.9 km in the Ellesmere Schemes.*

2. PURPOSE

1. To seek recommendation from the Committee for the following proposed closures that were approved for public consultation at the sub-committee meeting in May 2018:

Malvern

1. Closure of 7752 m of race through 7 properties between Beattys Road and Bealey Road; and
2. To seek recommendation from the Committee per the Recommendations of the May 2018 Sub-Committee Report (Appendix A) recommendations requiring further ecological assessment for the proposed closure:

Ellesmere

1. 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. This closure is yet to proceed as it is awaiting a fish salvage Report.

3. SIGNIFICANCE ASSESSMENT/COMPLIANCE STATEMENT

Explicit provision has been made in the 2015/25 and 2018/28 LTP for water race closures¹ initiated by rate payers. The 2015/25 LTP has identified the following as major projects:

- Progress ratepayer initiated water race closures once approved by the Water Race Committee for closure.
- Work with Central Plains Water to develop a concept for converting the Kowai River sourced water race network (part of the Malvern Water Race Scheme) into a combined water race and irrigation network. This concept will then be used for further consultation with the community.
- Work with Environment Canterbury and key stakeholders to realise opportunities to use consented stock water for environmental enhancement including targeted stream augmentation.
- To investigate options for integration of the stock water races with Central Plains Water.

The 2018/28 LTP has identified the following as major projects:

- Work with Central Plains 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

¹ LGA 2002 S97(2)a

- 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 2015/25 and 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 2015/25 (pp. 213-214 of the LTP) and LTP 2018/28 (p. 220):

Policy and Outcomes

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 [Identity] 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 economic benefit to the rural communities of the District and reflects the changing needs of these communities.

- 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.

Communities

- Water race closures are generally driven by the Community.
- The number of property owners affected by each closure is detailed in Table 4.1. Consultation to the wider community has occurred along with notification of key stakeholders include Department of Conservation, Fish and Game, Environment Canterbury and New Zealand Fire and Emergency.
- 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 has occurred since May 2018:

DISCONTINUANCE OF A STOCKWATER RACE Malvern Scheme

The Selwyn District Council, in accordance with the special consultative procedure as outlined in the Local Government Act 2002 advises their intention to discontinue the following stock water races

Malvern Scheme

1. Closure of 7.7km of race through 7 property/owners on Coaltrack Road

These closures are considered to be of low significance and do not alter the intended level of service of the overall water race schemes. Directly affected ratepayers have agreed to close these water races.

Detailed information including location maps can be found on the Selwyn District Council website www.selwyn.govt.nz/wrclosure or can be viewed at Council offices in Rolleston.

For more information or to make a submission, please contact; Selwyn District Council, Surface Water Operations Engineer, phone 347 2800 or email waterraces@selwyn.govt.nz by 6 July 2018

- Council are considering the ecological impact of race closures by facilitating salvage of aquatic life where appropriate.

- It is not expected that proposed water race closures will generate wider national or international interest.

Ngāi Tahu

- The impacts on water race closures have been assessed against the Iwi Management Plan and Te Runanga O Ngāi Tahu's Freshwater Policy. These assessments are included in 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 closure(s) 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 closure(s) proposed are not considered to impact the character of the District, as they are often on private land and exist extensively in other parts of the District. There are no historic assets/fabric as part of the proposed closure. There are not known cultural links to this section of closure.
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 – Council will monitor the cumulative impact on rate revenue reduction which is discussed further in section 12.
4. Quality of the Environment – opportunities for salvage of aquatic life 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. An ecological report is provided in Appendix B outlining no significant impacts of the Ellesmere Closure.

- The proposed water race closure(s) 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 closure(s) are considered as irreversible where it cross private property. Council do not hold easements for most water races. A sufficient amount of legal and economic controls will be needed for reinstatement of water race channels on private property, which have cost and political implications. However, stock water supply can be provided from other sources.

- By undertaking public consultation on the proposed water race closure, Council will establish whether the proposed closure is considered controversial.
- All water race closures will be progressed following appropriate consultation in a timely manner
- Closure(s) 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 closure(s) represent the following loss to each of the schemes:

Malvern

- Reduction in length of water races 2%
- Loss of targeted rates income 2%

Ellesmere

- Reduction in length of water races 0.001%
- Loss of targeted rates income 0.24%

Based on the above assessment, it is recommend that the proposed Malvern and Ellesmere closure is considered of **low significance** in terms of consultation requirements. The level of significance impacts the degree of consultation undertaken on the engagement spectrum. Council takes a conservative approach to consultation.

See Appendix A for significance recommendations of the Ellesmere Closure, along with the Ecological Report in Appendix B.

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 Closure(s)

Ref	Scheme	Received from	Road Name	Number of affected Props	Approx KM Race	Progress
1	Malvern	Catherwood	Coaltrack Rd	7	7752 m	The Waikirikiri Farm Partners Ltd have moved their race and still wish to close the race due to a farm dairy conversion. This application was discussed in the previous Water Race (Feb & May 18) committee.
2	Ellesmere	Ian Lowery	Feredays / Main Rakaia Road	2	2900 m	Committee has agreed to recommend closure after further ecological investigation (May 2018).
	TOTAL			9	10,652 m	

Appended to this report are maps showing the location of the above sections of race proposed for closure.

5. PROPOSAL

Approval is sought to close the following sections of water race:

1. Closure of 7752 m of race through 7 properties between Beattys Road and Bealey Road (Dough Catherwood)
2. Closure of 2.9km of race through 2 property/owners on Feredays / Main Rakaia Roa

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 stockwater 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 retain a stockwater service.	Stockwater supply retained.	High cost to property owners for installation 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 stockwater 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 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.

Rate payer initiated closure have been provided for in the 2015/25 and 2018/28 LTP.

As required under Council's water race closure process agreement to close water race forms have been received from all affected properties. 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. A letter was sent to all directly affected property owners to notify them that the proposed closure has been approved to progress to public consultation.

The proposed closures have been publically advertised in the following ways:

- 'Council Call' section in the Selwyn Times newspaper
- Letter to Mahaanui Kura Taiao (MKT) & Te Taumutu Rūnanga, Department of Conservation, Fish and Game and NZ Fire Service
- A summary of proposal, maps and copy of the public advert detailing the proposed race closures was posted on Council's website

Two members of the public emailed for more information to understand how they would be effected, Geoff Booth of 1431 Coaltrack Road and Crispin Deans near Coaltrack Road, both did not replay after further info was provided.

Where a proposed water race closure has attracted 100% support and no submissions are received, the Sub-Committee will progress the closure once approved by Council.

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, the closures were 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.

Specific stakeholders identified as Department of Conservation, Fish and Game, Historic Places Trust (specifically where structures e.g. headworks are involved) and Te Taumutu Rūnanga were directly provided with a copy of the above advertisement. Two letters from key stakeholders were returned to the Council as shown in Appendix E. The following outlines the Stakeholder responses:

- Department of Conversation
 - Recommend Salvage – Due to records of Upland Bullies
- Environment Canterbury
 - Concerns are covered

- Te Taumutu Rūnanga AND MKT on their behalf
 - No response was given. It is therefore prudent to refer to the Mahaanu Management Plan Drain Management Sections on page 96. A copy of this directed section of the IMP is included in Appendix F
- Fish and Game
 - No response
- NZ Fire Service
 - No response

Council has delegated 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.

7.3 Māori implications

Te Runanga O Ngāi Tahu's Freshwater Policy recognises the importance of providing a stockwater 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.

At the time of advertising closures, details of the proposed closure will be 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 stockwater 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 stockwater 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. Where

appropriate opportunities for salvage of aquatic life and relocation will be provided to DoC and Fish and Game prior to a water race closure occurring.

EOS Ecology undertook an assessment of sites of high ecological value within the Ellesmere and Malvern Water Race schemes in 2011. The proposed section of water race is considered **low ecological value** as outlined in Figure 2 of the aforementioned report found in Appendix D.

The Ellesmere race proposed for closure was identified as being of high ecological value with freshwater mussels, native aquatic invertebrate biodiversity in a Scheme wide ecological assessment. However, a localised ecological report provided in Appendix B has assessed the closure site as **low ecological significance**.

In a memo to Council dated 6 July 15, 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 if DoC staff cannot assist. DoC may however provide guidance to Council and Contractors on the process the suitable sites for relocation.

Where DoC staff are not available to undertake salvage of aquatic life and it is deemed necessary, 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. To date this has been the cost of installing a soak hole at approximately \$3,000.

8. RELEVANT POLICY/PLANS

The closures included in this report are consistent with Council Policy W107 Closure of Water Races.

As stated in section 3 Water Race Closures are being done in line with Council's Significance Policy.

9. COMMUNITY OUTCOMES

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.

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.

11. LEGAL IMPLICATIONS

None know.

12. FUNDING IMPLICATIONS

12.1 Rating Impact

See Appendix A for the Ellesmere Rating Impacts. The proposed Malvern 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
1	Malvern	Catherwood	Coaltrack Rd	\$15,639.69
2	Ellesmere	Ian Lowery	Feredays/Main Rakai Rd	\$2,198.50
			TOTAL	\$17,838.19

The cumulative impact of closures will continue to be considered as more closure requests are received. Rates are reviewed and adjusted at each annual plan and long term plan rating review.

12.2 Cost Savings

Many of the closures to date have 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.

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.



JAMES SKURUPEY
WATER SERVICES ENGINEER



MURRAY ENGLAND
ASSET MANAGER, WATER SERVICES

ENDORSED FOR AGENDA

MURRAY WASHINGTON, ASSET MANAGER

APPENDICES

**APPENDIX A – MAY 2018 PROPOSED WATER RACE CLOSURE APPROVAL- POST PUBLIC
CONSULTATION**

APPENDIX B – WILDLANDS ECOLOGICAL REPORT – LOWERY CLOSURE

APPENDIX C – PROPOSE WATER RACE CLOSURE MAPS

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

APPENDIX E – STAKEHOLDER RESPONSE

APPENDIX F – IWI MANAGEMENT PLAN

APPENDIX A- MAY 2018 PROPOSED WATER RACE CLOSURE APPROVAL- POST PUBLIC CONSULTATION

Attached Separately

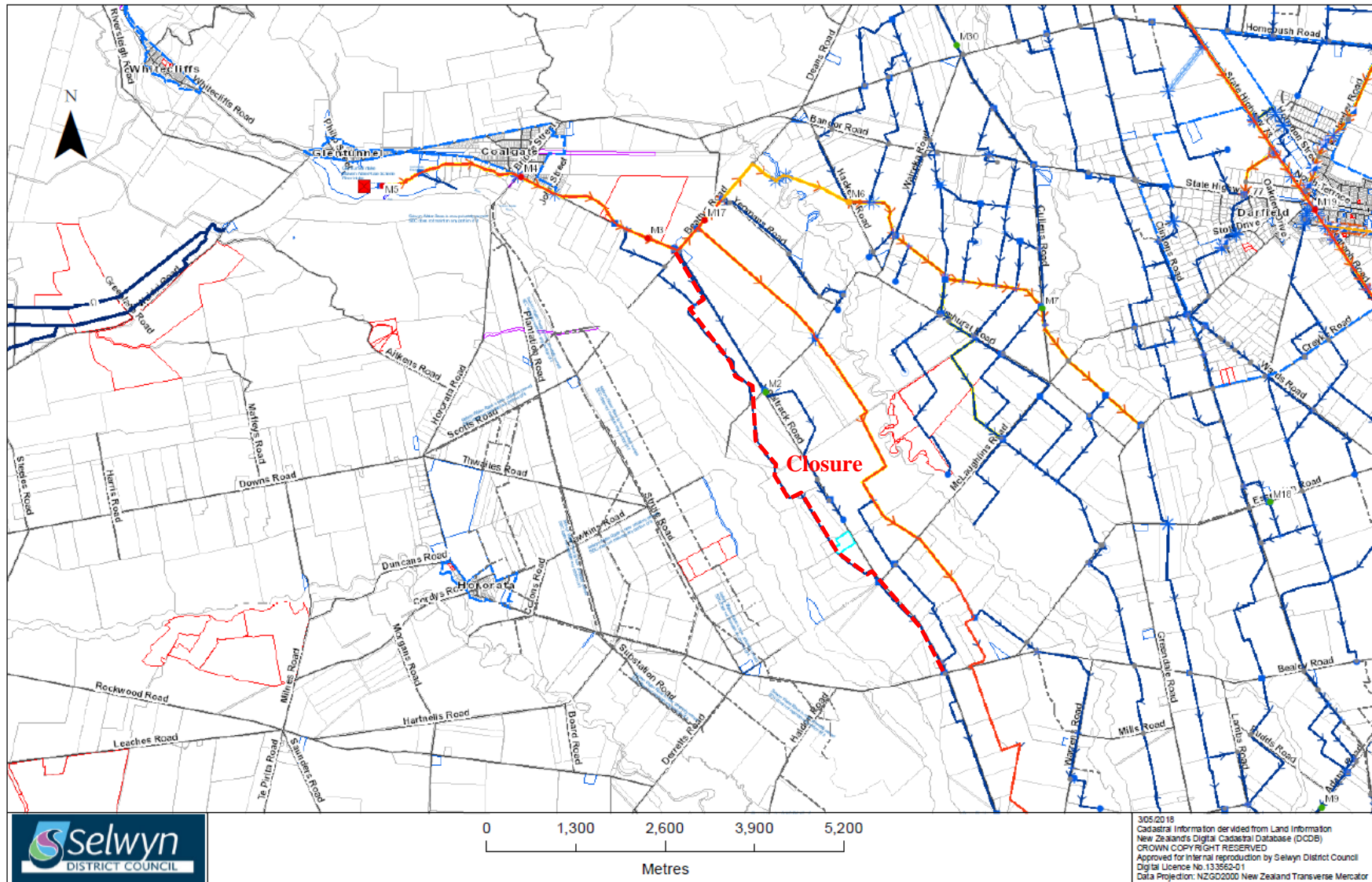
APPENDIX B – WILDLANDS ECOLOGICAL REPORT – LOWERY CLOSURE

Attached Separately

APPENDIX C – WATER RACE MAPS

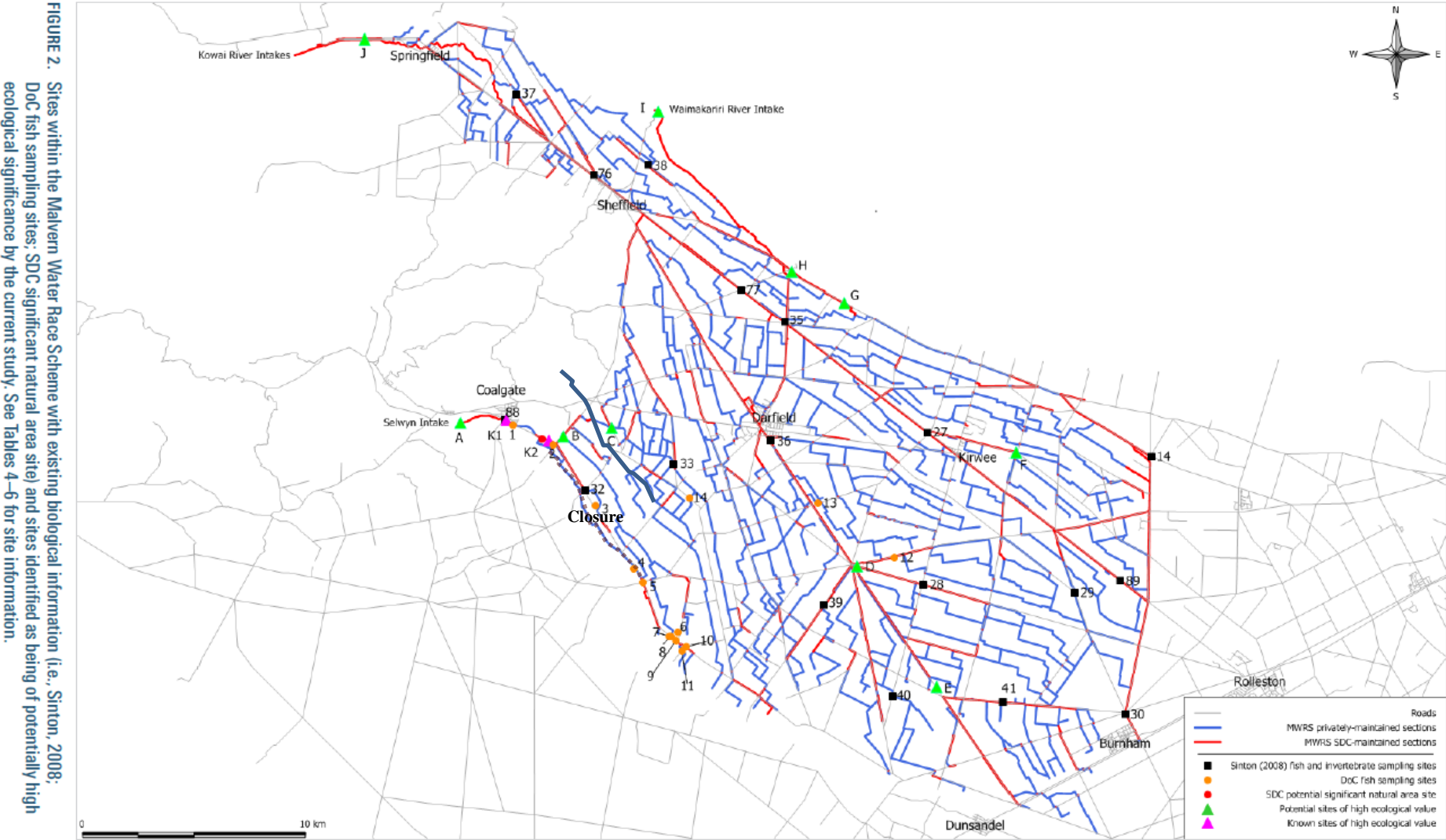
PROPOSED CLOSURE 1 – COALTR (SEE APPENDIX A FOR ELLESMERE MAP)

Catherwood Closure 2422006101



ACK ROAD

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



APPENDIX E –STAKEHOLDER RESPONSE

WaterRaces

From: WaterRaces
Sent: Friday, 13 July 2018 12:39 PM
To: James Skurupey (James.Skurupey@selwyn.govt.nz); Murray England
Subject: FW: Proposed water Race Closure - May 2018
Attachments: Fish Salvage Guidance for Works in Waterways burell and gray 2018.pdf

FYI

From: Anita Spencer [mailto:aspencer@doc.govt.nz]
Sent: Thursday, 12 July 2018 4:17 p.m.
To: WaterRaces <WaterRaces@selwyn.govt.nz>
Subject: RE: Proposed water Race Closure - May 2018

Hi Daniel,

Thanks for the opportunity to comment on this closure. While there aren't records of Canterbury mudfish in this part of the system that we know of, there are several records of Upland Bullies so we recommend that salvage is undertaken such as recommended in this report by Burell and Gray. As always we are keen to hear what intentions SDC has for keeping some sections of water races open for their biodiversity values. It seems there is a general recognition of the ecological value of water races and support from SDC for maintaining some, but we haven't seen any details of this. There are currently no protected water race sites in the Selwyn District.

Ngā mihi
Anita

Anita Spencer
Senior Ranger

Phone 03 341 9109 / 027 542 8056
Mahaanui Office/Department of Conservation/31 Nga Mahi Rd/Sockburn/Christchurch
PO Box 11089/Sockburn 8443/ Christchurch



From: WaterRaces <WaterRaces@selwyn.govt.nz>
Sent: Friday, 22 June 2018 2:55 p.m.
To: Anita Spencer <aspencer@doc.govt.nz>
Subject: Proposed water Race Closure - May 2018

Hi Anita,

During the water race sub-committee meeting on May 14 2018, The committee agreed to proceed to public notification for one length of race closure in the Malvern stock water race scheme.

Please see attached a letter to you as a stake holder advising of this outcome, and offering the chance to make a submission if there are any concerns regarding this decision.

Also attached is a copy of the public notification, and a map showing extent of closures.

You can find more information on the water race page of the Selwyn District Council Website.

<http://www.selwyn.govt.nz/my-property/5waters-services/water-races/water-race-closure-requests/summary-of-proposal-water-race-closures>

Please reply to this email address if you wish to make a submission.

Feel free to contact me if you have any further questions.

Regards,
Daniel,

Daniel Meehan | Surface Waters Operations Engineer | Selwyn District Council
DDI: 03 347 2945 | Mobile: 027 4583 322 (internal 945)



2 Norman Kirk Drive, Rolleston 7614
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Phone: (03) 347-2800 or (03) 318-8338
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www.selwyn.getsgoing.net | m.selwyn@govt.nz

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WaterRaces

From: Sam Leonard <Sam.Leonard@ecan.govt.nz>
Sent: Tuesday, 26 June 2018 11:17 AM
To: WaterRaces
Subject: RE: Proposed Water Race Closure - Malvern Stock Water Race
Attachments: Fish Salvage Guidance for Works in Waterways burell and gray 2018.pdf

Thanks for the quick response Daniel, I think that covers off any concerns.

It probably won't be relevant for this particular closure but the Surface Water Team sent through the attached fish salvage guidance which might be useful for future closures.

I'm also happy to facilitate feedback if you have any concerns that you would like discuss in the future.

Cheers,

Sam

From: WaterRaces [mailto:WaterRaces@selwyn.govt.nz]
Sent: Tuesday, 26 June 2018 10:51 a.m.
To: Sam Leonard <Sam.Leonard@ecan.govt.nz>
Subject: RE: Proposed Water Race Closure - Malvern Stock Water Race

Hi Sam,

Thanks you for your email.

I have attached a higher resolution map below showing the race in question.

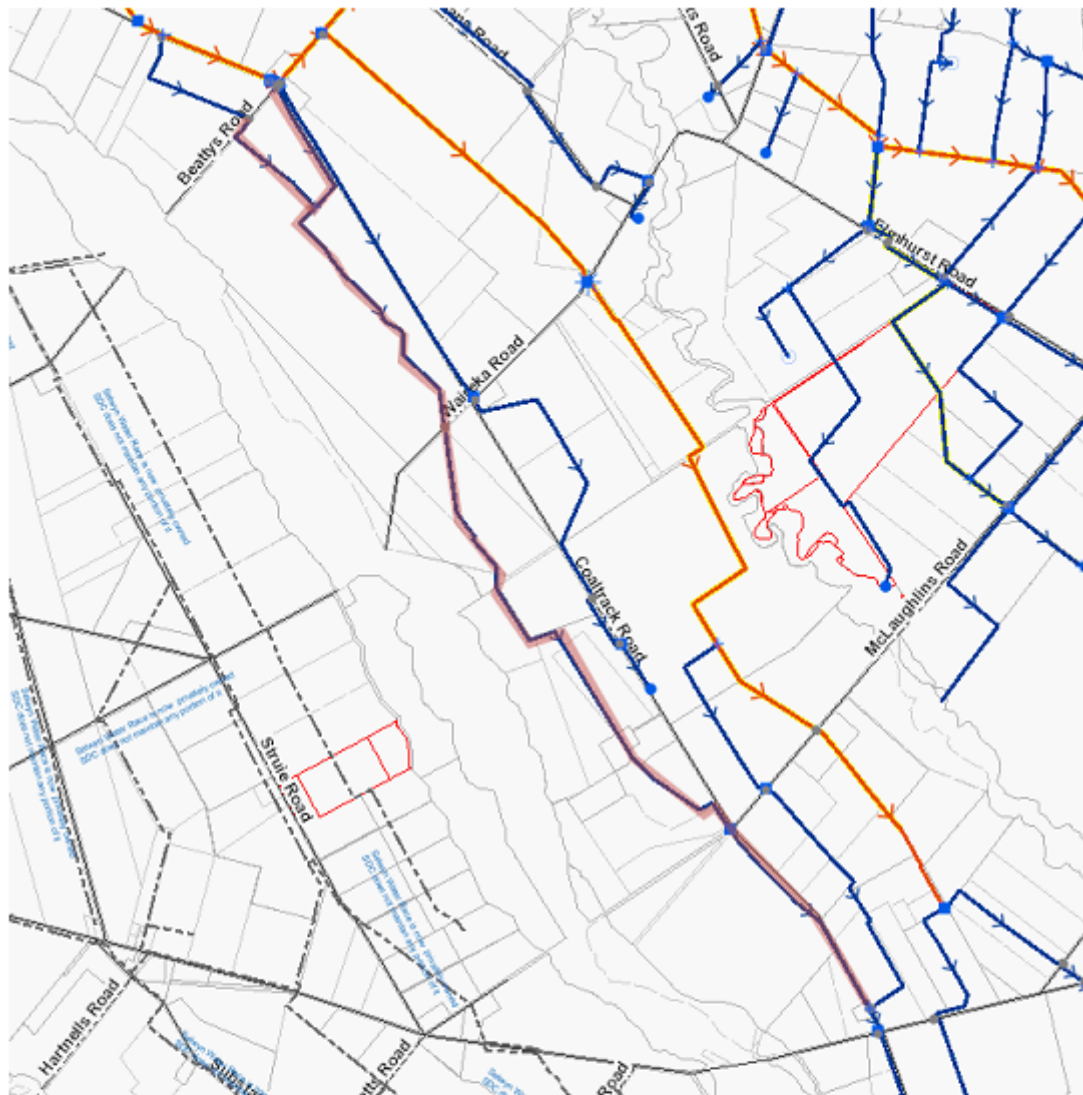
The water for this race originates from the Glentunnel water race intake at Glentunnel. The race ends where it joins back with another main race just above Bealey Road.

One of the reason this race was proposed to closed was reliability because issues getting water to the end. Currently the race is dry and stops flowing somewhere between Waireka road and Madaughlins Road. It would be expensive to repair the soak holes to get race flowing again.

Happy to discuss further if you have any more questions.

Regards,
Daniel,

Daniel Meehan | Surface Waters Operations Engineer | Selwyn District Council
DDI: 03 347 2945 | Mobile: 027 4583 322 (internal 945)



From: Sam Leonard [<mailto:Sam.Leonard@ecan.govt.nz>]
Sent: Monday, 25 June 2018 2:30 p.m.
To: WaterRaces <WaterRaces@selwyn.govt.nz>
Subject: Proposed Water Race Closure - Malvern Stock Water Race

Kia ora,

Thank you for the notification of the proposed closure to the above water race.

Our Water Ecology Team have raised a couple of questions about the intake and outlet for this race. The concern being that closure could have an impact on a receiving water body (i.e. less water supplementing it).

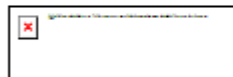
I had look on the website using this link, but was unable to find any further information for this particular closure (<http://www.selwyn.govt.nz/my-property/5waters-services/water-races/water-race-closure-requests/summary-of-proposal-water-race-closures>).

If there is any more info available or if somebody knows where the intake and outlet for the race are would you be able to point me in the right direction?

Thanks for your time and kind regards,

Sam

Sam Leonard
Senior Planner
027 801 7849



PO Box 345 Christchurch 8140
Customer Services 0800 32 46 36
24 Hours 0800 76 55 88

ecan.govt.nz   



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APPENDIX F –IWI MANAGEMENT PLAN

Drain management Page 97

Issue WM14: Drain management can have effects on Ngāi Tahu values, particularly mahinga kai.
Ngā Kaupapa / Policy

WM14.1 To require that drains are managed as natural waterways and are subject to the same policies, objectives, rules and methods that protect Ngāi Tahu values associated with freshwater, including:

- (a) Inclusion of drains within catchment management plans and farm management plans;
- (b) Riparian margins are protected and planted;
- (c) Stock access is prohibited;
- (d) Maintenance methods are appropriate to maintaining riparian edges and fish passage; and
- (e) Drain cleaning requires a resource consent.

WM14.2 To require and uphold agreements with local authorities to ensure that the timing and techniques of drain management are designed to avoid adverse effects on mahinga kai and water quality, including:

- (a) Identifying drains that are or can be used for mahinga kai;
- (b) Returning any fish that are removed from drains during the cleaning process to the waterway;
- (c) Riparian planting along drains to provide habitat and shade for mahinga kai and bank stability while reducing the frequency and costs of maintenance by reducing aquatic plant growth;
- (d) Ensuring drain management/cleaning does not breach the confining layers;
- (e) Use of low impact cleaning methods such as mechanical 'finger buckets', as opposed to chemical methods such as spraying, to minimise effects on aquatic life;
- (f) Notification to tāngata whenua of any chemical spraying of drains used for mahinga kai or connected to waterways used as mahinga kai; and
- (g) Involvement of tāngata whenua in drain maintenance activities where there is a need to return native fish back to the drain (e.g. tuna, kekewai and kanakana).

He Kupu Whakamāhukihuki / Explanation

Drains are a common feature across Ngā Pākihi Whakatekateka o Waitaha, given that much of the land in lower catchment areas was originally swamp. An extensive network of drains provides flood protection for settlement and land use. Some of these drains are modified natural waterways, and many connect or empty into existing waterways and waterbodies. For this reason drain management is an important kaupapa for tāngata whenua. While drains may not be highly valued in the wider community, drains that function as mahinga kai habitat and where mahinga kai resources are gathered may be identified as wāhi taonga by Ngāi Tahu.

"You can't tell a fish what the difference is between a drain, river, stream or spring." David Perenara
O'Connell, Te Taumutu Rūnanga Natural Resource Management Plan 2002.

"Spraying is a quick fix technique, with a very long recovery time." Uncle Waitai Tikao, Ōnuku Rūnanga.

REPORT

TO: Chief Executive
FOR: Water Race Sub Committee Meeting – 14 May 2018
FROM: Water Services Engineer
CC: Corporate Services Manager
DATE: 07 May 2018
SUBJECT: Proposed Water Race Closures Approval – Post Public Consultation

1. RECOMMENDATION

That the Sub-Committee:

- a) Consider any submissions received regarding the proposed closures.*
- b) Provide recommendations to Council on the closure of 1 length of water race totalling approximately 2.9km in the Ellesmere schemes; or*
- c) Postpone recommendation to Council until further ecological investigation is carried out.*

2. PURPOSE

To seek recommendation from the Committee for the following proposed closures that were approved for public consultation at the sub-committee meeting in February 2018:

Ellesmere

- 1. 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. This closure is yet to proceed as it is awaiting a fish salvage.

3. SIGNIFICANCE ASSESSMENT/COMPLIANCE STATEMENT

Explicit provision has been made in the 2015/25 LTP for water race closures¹ initiated by rate payers. The LTP has identified the following as major projects:

¹ LGA 2002 S97(2)a

- Proactively progress the closure of the Haldon water race intake (within the Ellesmere Water Race Scheme) including the down gradient race network which is supplied by this intake. Targeted stream augmentation will possibly be taken into account with some lengths of races remaining open to convey this flow.
- Progress ratepayer initiated water race closures once approved by the Water Race Committee for closure.
- Work with Central Plains Water to develop a concept for converting the Kowai River sourced water race network (part of the Malvern Water Race Scheme) into a combined water race and irrigation network. This concept will then be used for further consultation with the community.
- Work with Environment Canterbury and key stakeholders to realise opportunities to use consented stock water for environmental enhancement including targeted stream augmentation.
- To investigate options for integration of the stock water races with Central Plains Water.

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 2015/25 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 included in this report in Table 4.1 has been considered against the criteria for assessing significance from the Significance and Engagement Policy contained in the LTP 2015/25 (pp. 213-214 of the LTP):

Policy and Outcomes

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 economic benefit to the rural communities of the District and reflects the changing needs of these communities.
- 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.

Communities

- Water race closures are generally driven by the Community.
- The number of property owners affected by each closure is detailed in Table 4.1. Consultation to the wider community has occurred along with notification of key stakeholders include Department of Conservation, Fish and Game, Environment Canterbury and New Zealand Fire and Emergency.
- 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 has occurred since February 2018:



DISCONTINUANCE OF A STOCKWATER RACE Ellesmere Scheme

The Selwyn District Council, in accordance with the special consultative procedure as outlined in the Local Government Act 2002 advises their intention to discontinue the following stock water races

Ellesmere Scheme

1. Closure of 2.9km of race through 2 property/owners on Feredays/Main Rakai Road

These closures are considered to be of low significance and do not alter the intended level of service of the overall water race schemes. Directly affected ratepayers have agreed to close these water races.

Detailed information including location maps can be found on the Selwyn District Council website www.selwyn.govt.nz/wrclosure or can be viewed at Council offices in Rolleston.

For more information or to make a submission, please contact:

James Skurupey, Surface Water Engineer
Phone: 03 347 1840 or Email: waterraces@selwyn.govt.nz
By 16 March 2017

- Council are considering the ecological impact of race closures by facilitating salvage of aquatic life where appropriate.
- It is not expected that proposed water race closures will generate wider national or international interest.

Ngāi Tahu

- The impacts on water race closures have been assessed against the Iwi Management Plan and Te Runanga O Ngāi Tahu's Freshwater Policy. These assessments are included in 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, as they are often on private land and exist extensively in other parts of the District. There are no historic assets/fabric as part of the proposed closure. There are not known cultural links to this section of closure.
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 will monitor the cumulative impact on rate revenue reduction which is discussed further in section 12.
4. Quality of the Environment – opportunities for salvage of aquatic life 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 closure is considered as irreversible where it cross private property. Council do not hold easements for most water races and are unlikely to have sufficient legal and economic controls for reinstatement of water race channels on private property. However, stock water supply can be provided from other sources.
- By undertaking public consultation on the proposed water race closure, Council will establish whether the proposed closure is 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:

Ellesmere

- Reduction in length of water races 0.001%
- Loss of targeted rates income 0.24%

Based on the above assessment, it is recommend that the proposed closure is considered of **low significance** in terms of consultation requirements. The level of significance impacts the degree of consultation undertaken on the engagement spectrum. Council takes a conservative approach to consultation. The impact of the closure has a much higher significance as outlined in the submission from the Department of Conservation.

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

Ref	Scheme	Received from	Road Name	Number of affected Props	Approx KM Race	Progress
1	Ellesmere	Ian Lowery	Feredays / Main Rakaia Road	2	2.9km	100% support from properties
2	TOTAL			2	2.9km	

Appended to this report are maps showing the location of the above sections of race proposed for closure.

5. PROPOSAL

Approval is sought to close the following sections of water race:

Ellesmere

1. Closure of 2.9km of race through 2 property/owners on Feredays / Main Rakaia Road

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 stockwater 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	Stockwater supply retained.	High cost to property owners for installation and ongoing maintenance.

Option	Details	Advantage	Disadvantage
	retain a stockwater service.		Ecological and other race values not retained.

These options are alternatives to closure of an open race if a downstream landowner requires a stockwater 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 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.

Rate payer initiated closure have been provided for in the 2015/25 LTP.

As required under Council's water race closure process agreement to close water race forms have been received from all affected properties. 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. A letter was sent to all directly affected property owners to notify them that the proposed closure has been approved to progress to public consultation.

The proposed closures have been publically advertised in the following ways:

- 'Council Call' section in the Selwyn Times newspaper
- Letter to MKT & Te Taumutu Rūnanga, Department of Conservation, Fish and Game and NZ Fire Service
- A summary of proposal, maps and copy of the public advert detailing the proposed race closures was posted on Council's website

Two letters from key stakeholders were returned to the Council as shown in appendix C:

- Fish and Game
 - Inquiring on fish salvage practices; and
- Department of Conversation
 - **DO NOT Support** – Due to the presence of mudfish and their protected status
- No response was given from Te Taumutu Rūnanga or Mahaanui Kura Taiao on their behalf. It is therefore prudent to refer to the Mahaanu Management Plan Drain Management Sections on page 96. A copy of this directed section of the IMP is included in appendix D.

Where a proposed water race closure has attracted 100% support and no submissions are received, the Sub-Committee will progress the closure once approved by Council.

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, the closures were 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.

Specific stakeholders identified as Department of Conservation, Fish and Game, New Zealand Fire and Emergency and as well Te Taumutu Rūnanga were directly provided with a copy of the above advertisement.

Council has delegated 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.

7.3 Māori implications

Te Runanga O Ngāi Tahu's Freshwater Policy recognises the importance of providing a stockwater 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.

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 stockwater 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 stockwater 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. Where appropriate opportunities for salvage of aquatic life and relocation will be provided to DoC and Fish and Game prior to a water race closure occurring.

EOS Ecology undertook an assessment of sites of high ecological value within the Ellesmere and Malvern Water Race schemes in 2011. A copy of the findings of the assessment is included in Appendix B.

The Ellesmere race proposed for closure has been identified as being of **high ecological value** with freshwater mussels, native aquatic invertebrate biodiversity. DoC staff has provided feedback per appendix C on this closure and recommends **not closing** this section of water race.

In a memo to Council dated 6 July 15, 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 if DoC staff cannot assist. DoC may however provide guidance to Council and Contractors on the process the suitable sites for relocation.

Where DoC staff are not available to undertake salvage of aquatic life and it is deemed necessary, 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. To date this has been the cost of installing a soakhole at approximately \$3,000.

8. RELEVANT POLICY/PLANS

The closures included in this report are consistent with Council Policy W107 Closure of Water Races.

As stated in section 3 Water Race Closures are being done in line with Council's Significance Policy.

9. COMMUNITY OUTCOMES

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.

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.

11. LEGAL IMPLICATIONS

None identified at this time.

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
1	Ellesmere	Ian Lowery	Feredays / Main Rakaia Road	\$2,198.50	0.5%
			TOTAL	\$2,198.50	0.24%

The cumulative impact of closures will continue to be considered as more closure requests are received. Rates are reviewed and adjusted at each annual plan and long term plan rating review.

12.2 Cost Savings

Many of the closures to date have 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.

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.



JAMES SKURUPEY
WATER SERVICES ENGINEER



MURRAY ENGLAND
ASSET MANAGER, WATER SERVICES

ENDORSED FOR AGENDA



MURRAY WASHINGTON, ASSET MANAGER

APPENDICES

APPENDIX A – PROPOSE WATER RACE CLOSURE MAPS

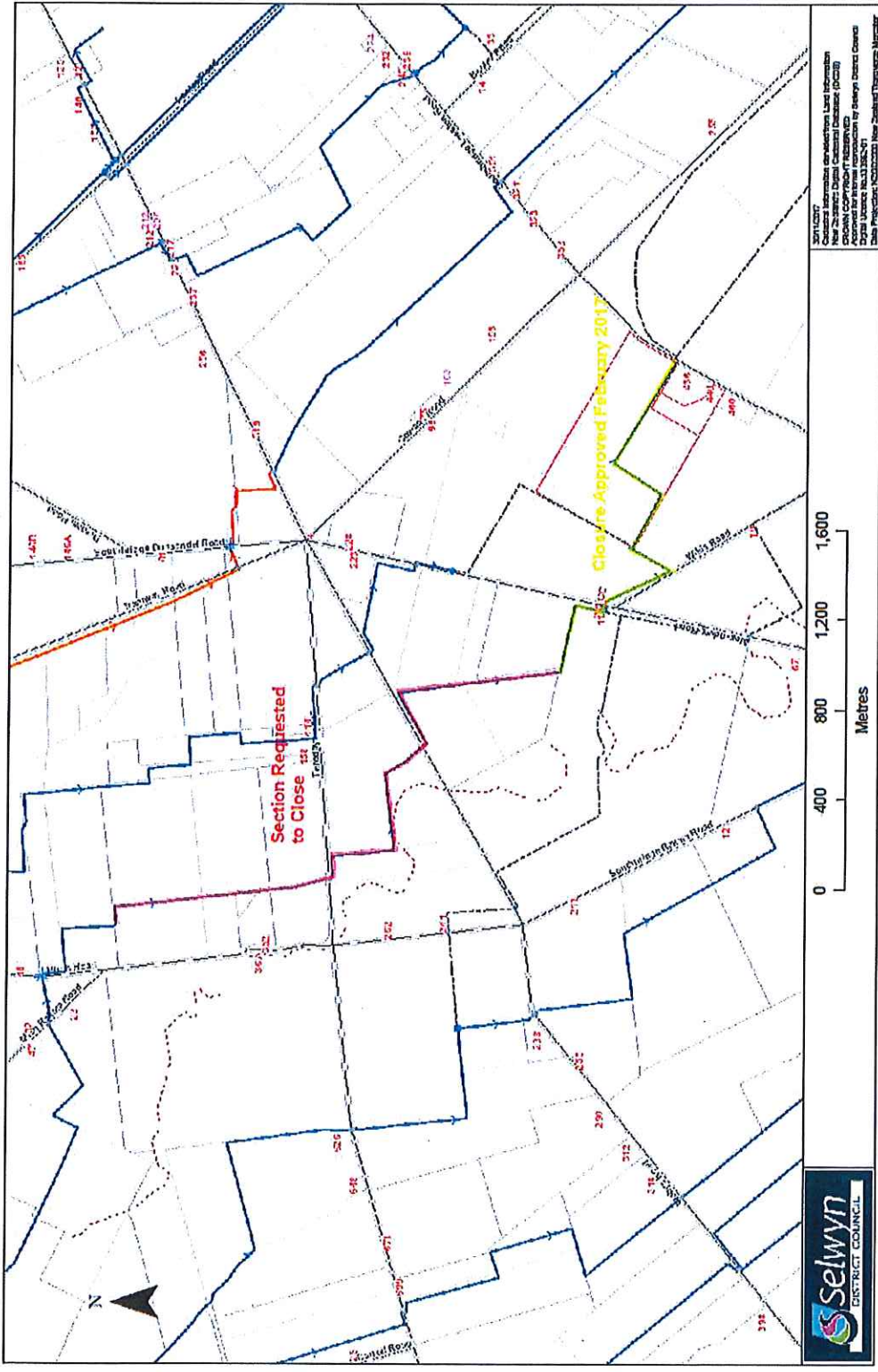
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APPENDIX C – STAKEHOLDER RESPONSE

APPENDIX D – IWI MANAGEMENT PLAN

PROPOSED CLOSURE 1 – TRAMWAY RD

Lowery Closure



APPENDIX B – EOS ECOLOGY, SITES OF HIGH ECOLOGICAL VALUE – 2011.

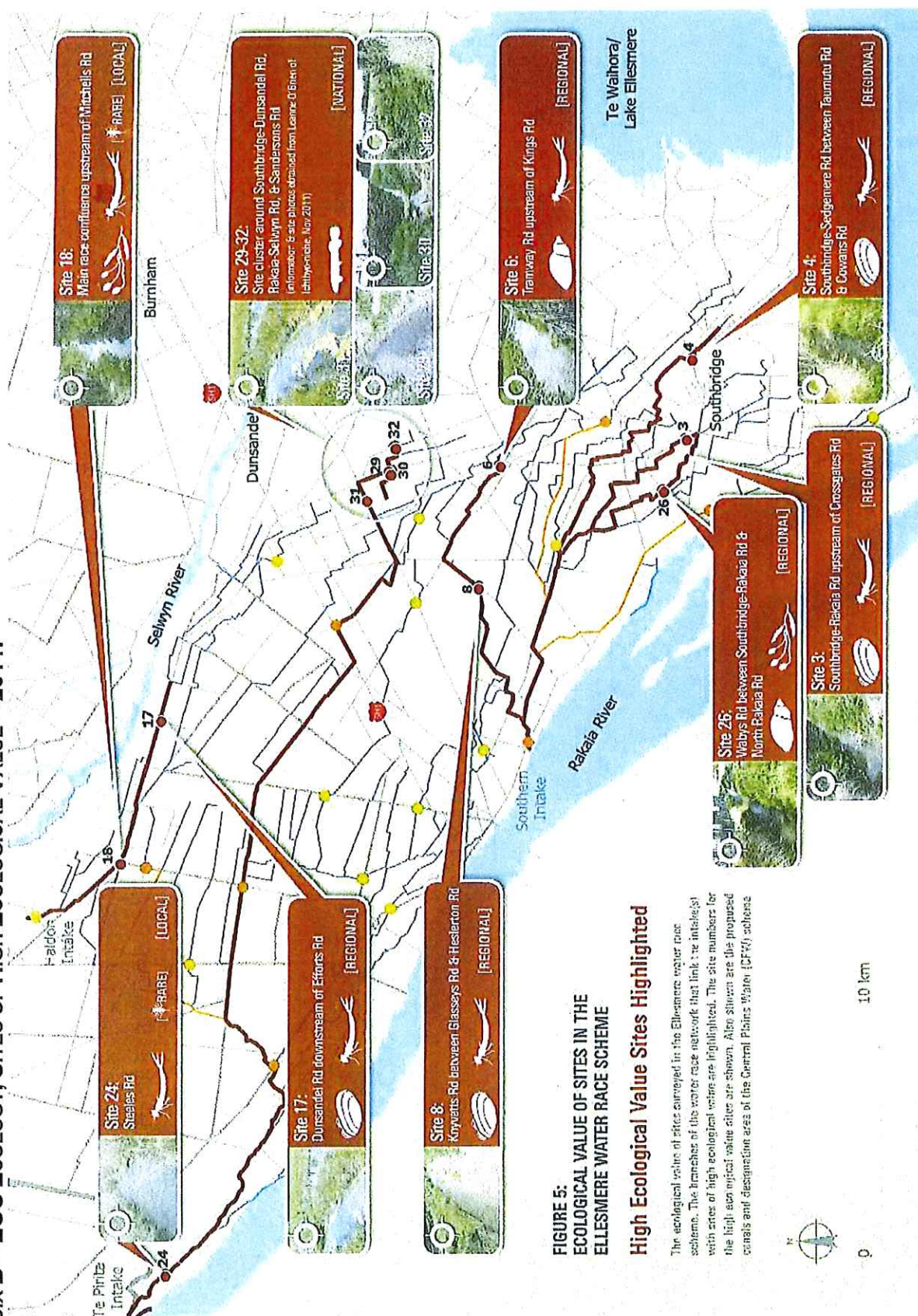


FIGURE 5:
ECOLOGICAL VALUE OF SITES IN THE
ELLESMEERE WATER RACE SCHEME

High Ecological Value Sites Highlighted

The ecological value of sites surveyed in the Ellesmere water race scheme. The branches of the water race network that link the intake(s) with sites of high ecological value are highlighted. The site numbers for the high ecological value sites are shown. Also shown are the proposed canals and designation area of the Central Plains Water (CPW) scheme

APPENDIX C –STAKEHOLDER RESPONSE

James Skurupey

From: Anita Spencer <aspencer@doc.govt.nz>
Sent: Wednesday, 21 March 2018 4:31 p.m.
To: James Skurupey
Subject: RE: Selwyn District Council - Proposed water race closure

Hi James

We've had a look at what we know about these sites. We have no problems with the closure of the Lowery area (closure 1) however the Feredays Rd/Main Rakaia Road is a section which contains mudfish. Given the species has the same threat ranking as kakapo and black stilt the race should be left open.

Our preference is that SDC determines the best sections of water races overall to keep for their biodiversity values which would then allow us to view closures against a baseline of what is currently protected. There are currently no protected water race sites. We don't support the closure of this section. Please feel free to contact me if you have any questions,

Ngā mihi
Anita

Anita Spencer
Senior Ranger

Phone 03 341 9109 / 027 542 8056

Mahaanui Office Department of Conservation/31 Nga Mahi Rd Sockburn/Christchurch
PO Box 11089 Sockburn 8443/ Christchurch



From: James Skurupey [mailto:James.Skurupey@selwyn.govt.nz]
Sent: Tuesday, 27 February 2018 1:11 p.m.
To: Anita Spencer <aspencer@doc.govt.nz>
Subject: Selwyn District Council - Proposed water race closure

Dear Stakeholder,

I am emailing to inform you of a proposed water race closure in the Ellesmere Water Race Scheme. Attached is the official letter outlining information on this closure and a copy of the Public Notice.

If you have any further questions or concerns please contact me.

Ngā mihi,

James Skurupay CEnvPI Surface Water Engineer | Selwyn District Council
DDI: +64 3 347 1840 | Mobile: +64 27 809 7144



Selwyn District Council, 2 Roman Kirk Drive, Rolleston 7614; PO Box 90, Rolleston 7643, Christchurch
Phone: (03) 347-2800 or (03) 318-8338, Fax: (03) 347-2789

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James Skurupey

From: Tony Hawker <thawker@fishandgame.org.nz>
Sent: Monday, 5 March 2018 10:06 a.m.
To: James Skurupey
Subject: RE: Selwyn District Council - Proposed Water Race Closure

Follow Up Flag: Follow up
Flag Status: Completed

Hi James

My only question would be what the council does in regards to fish salvaging when the race is shut down for both native and sports fish.

Regards
Tony

Tony Hawker | Fish & Game Officer

North Canterbury Fish & Game Council

PO Box 50, Woodend 7541, North Canterbury

T +64 03 313 5728 | M +64 021 221 8325 | E northcanterbury@fishandgame.org.nz | W www.fishandgame.org.nz



From: James Skurupey [mailto:James.Skurupey@selwyn.govt.nz]
Sent: Tuesday, 27 February 2018 1:09 p.m.
To: Tony Hawker
Subject: Selwyn District Council - Proposed Water Race Closure

Dear Stakeholder,

I am emailing to inform you of a proposed water race closure in the Ellesmere Water Race Scheme. Attached is the official letter outlining information on this closure and a copy of the Public Notice.

If you have any further questions or concerns please contact me.

Ngā mihi,

James Skurupey CEnvPI Surface Water Engineer | Selwyn District Council
DDI: +64 3 347 1840 | Mobile: +64 27 809 7144



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APPENDIX D –IWI MANAGEMENT PLAN

Drain management Page 97

Issue WM14: Drain management can have effects on Ngāi Tahu values, particularly mahinga kai.
Ngā Kaupapa / Policy

WM14.1 To require that drains are managed as natural waterways and are subject to the same policies, objectives, rules and methods that protect Ngāi Tahu values associated with freshwater, including:

- (a) Inclusion of drains within catchment management plans and farm management plans;
- (b) Riparian margins are protected and planted;
- (c) Stock access is prohibited;
- (d) Maintenance methods are appropriate to maintaining riparian edges and fish passage; and
- (e) Drain cleaning requires a resource consent.

WM14.2 To require and uphold agreements with local authorities to ensure that the timing and techniques of drain management are designed to avoid adverse effects on mahinga kai and water quality, including:

- (a) Identifying drains that are or can be used for mahinga kai;
- (b) Returning any fish that are removed from drains during the cleaning process to the waterway;
- (c) Riparian planting along drains to provide habitat and shade for mahinga kai and bank stability while reducing the frequency and costs of maintenance by reducing aquatic plant growth;
- (d) Ensuring drain management/cleaning does not breach the confining layers;
- (e) Use of low impact cleaning methods such as mechanical 'finger buckets', as opposed to chemical methods such as spraying, to minimise effects on aquatic life;
- (f) Notification to tāngata whenua of any chemical spraying of drains used for mahinga kai or connected to waterways used as mahinga kai; and
- (g) Involvement of tāngata whenua in drain maintenance activities where there is a need to return native fish back to the drain (e.g. tuna, kekewai and kanakana).

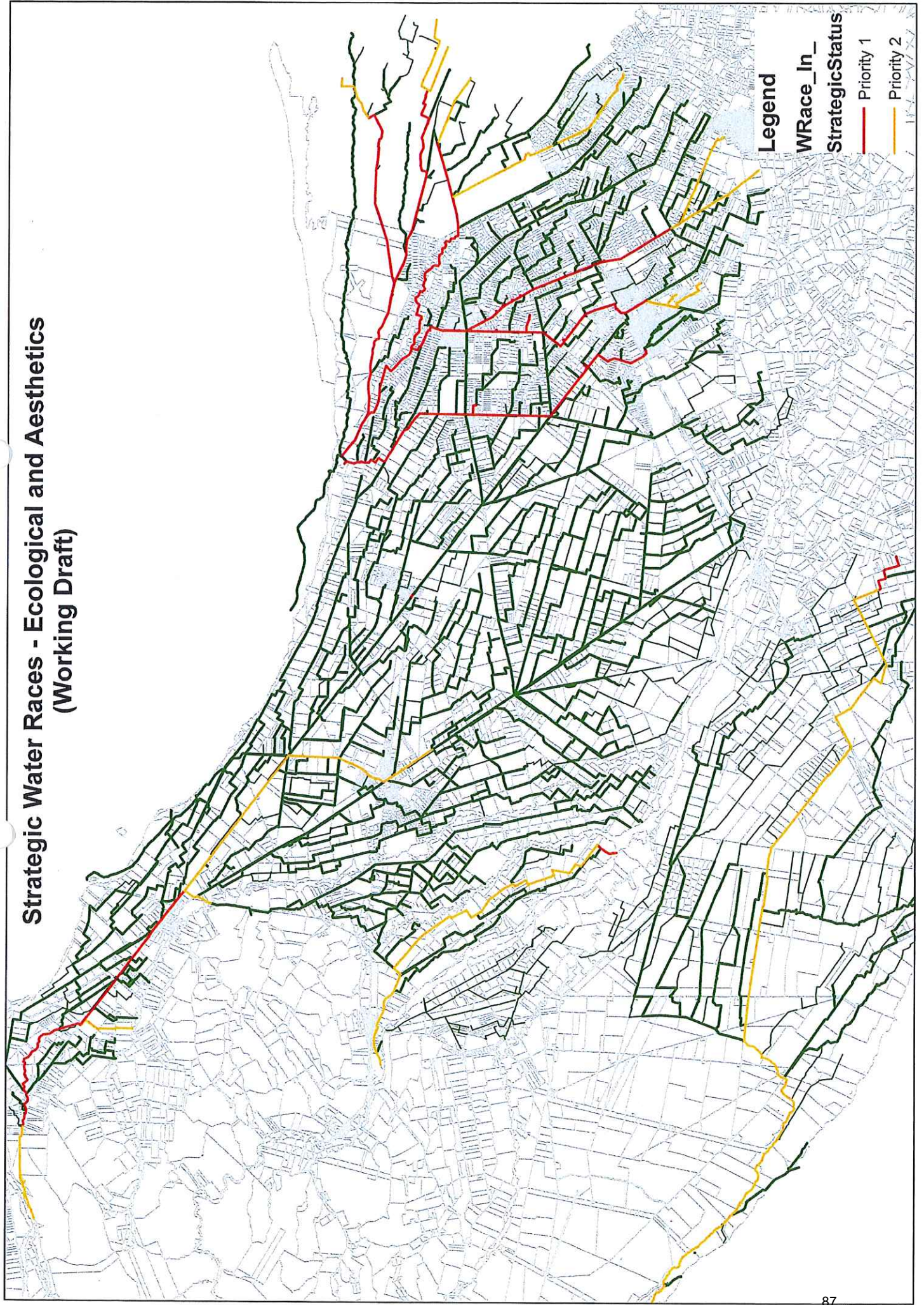
He Kupu Whakamāhukihuki / Explanation

Drains are a common feature across Ngā Pākihi Whakatekateka o Waitaha, given that much of the land in lower catchment areas was originally swamp. An extensive network of drains provides flood protection for settlement and land use. Some of these drains are modified natural waterways, and many connect or empty into existing waterways and waterbodies. For this reason drain management is an important kaupapa for tāngata whenua. While drains may not be highly valued in the wider community, drains that function as mahinga kai habitat and where mahinga kai resources are gathered may be identified as wāhi taonga by Ngāi Tahu.

"You can't tell a fish what the difference is between a drain, river, stream or spring." David Perenara O'Connell, Te Taumutu Rūnanga Natural Resource Management Plan 2002.

"Spraying is a quick fix technique, with a very long recovery time." Uncle Waitai Tikao, Ōnuku Rūnanga.

Strategic Water Races - Ecological and Aesthetics (Working Draft)



18th June 18

Surface Water Operations Engineer
Selwyn District Council

Attention Daniel Meehan

re Lill Lemon Moorhead, Lowery
Water Race Closure.

Hi Daniel,

As instructed at the Water Race
Sub-Committee meeting on the 14th May 2018
we have now completed an Ecological
Investigation of the water races on the
four properties.

We employed Wildland Consultants Ltd
to undertake this with the project being
managed by Helen McLaughan an
experienced freshwater ecologist.

This report came at a considerable cost
of \$6600.63

We hope this satisfies the council and
that you can now support our proposal
to close this length of race.

Regards

Ian Lowery.

I am now away for some time
so Aaron Lill ph 0274766871
will help with any questions.

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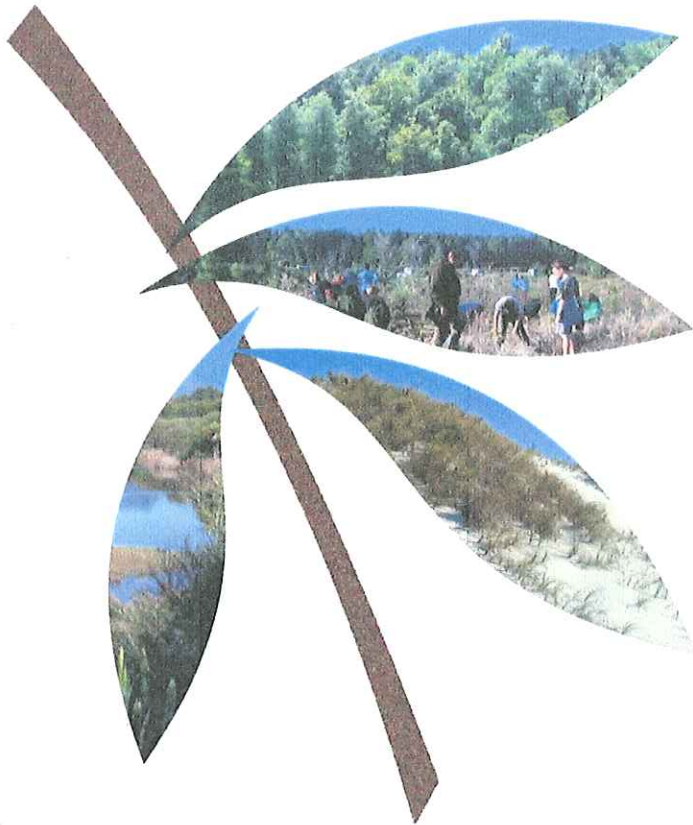
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INVESTIGATION OF A SECTION OF WATER RACE PROPOSED FOR CLOSURE IN SELWYN DISTRICT



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outstanding
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services to
sustain
and improve our
environments



R4698

INVESTIGATION OF A SECTION OF WATER RACE PROPOSED FOR CLOSURE IN SELWYN DISTRICT

Contract Report No. 4698

June 2018

Project Team:

Helen McCaughan - Field work, report author

Kelly Meikle - GIS, mapping

William Shaw - Peer review

Prepared for:

Mr Ian Lowery

Southbridge

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Reviewed and approved for release by:



W.B. Shaw
Director/Principal Ecologist
Wildland Consultants Ltd

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1. INTRODUCTION

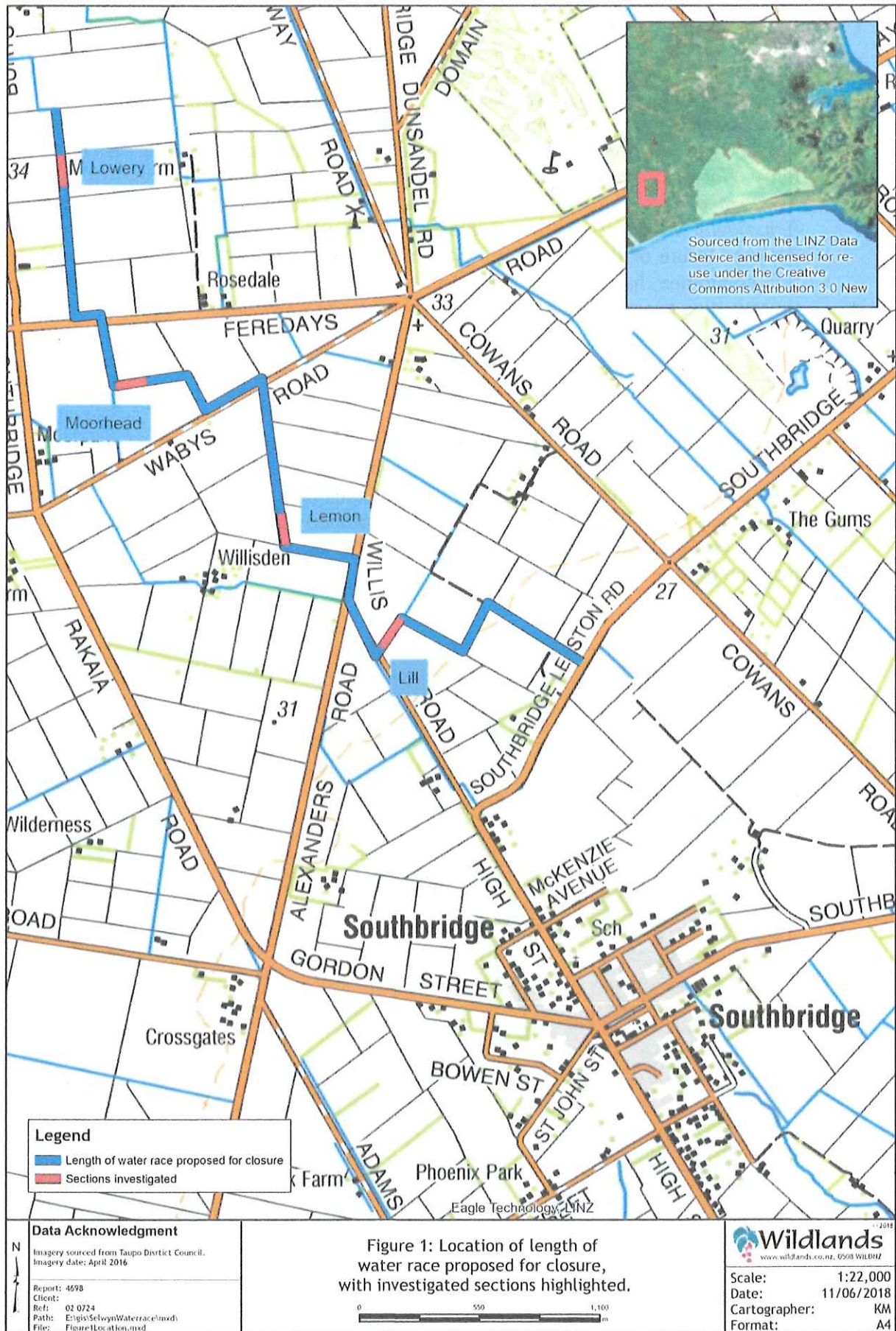
Landowners Ian Lowery, Aaron Lill, Stuart Lemon, and David Moorhead are requesting that the Selwyn District Council close a section of water race, approximately five kilometres long, that traverses their land north-west of Southbridge (Figure 1). This section potentially contains indigenous fish (such as bully, *Gobiomorphus* spp.; eel/tuna, *Anguilla* spp.; and Canterbury mudfish/kowaro, *Neochanna burrowsius*) and macroinvertebrates (such as freshwater mussel/kākahi, *Echyridella menziesii*). To better inform the Council's decision to either approve or decline closure of this section of water race, Selwyn District Council's Water Race Sub-committee has recommended that the landowners carry out an ecological investigation to assess freshwater fauna values in the water race.

2. METHODS

On 6 to 8 June 2018, unbaited fyke nets and Gee minnow traps were set overnight to sample sections of the water race (Plate 1), following the New Zealand freshwater fish sampling protocol for wadeable rivers and streams (Joy *et al.* 2013). One 150 metre section was investigated on each landowner's property (Figure 1), using six fyke nets and 12 Gee minnow traps. GPS coordinates of the sections sampled and details of the nets and traps used are provided in Appendix 1.



Plate 1: Fyke nets and Gee minnow traps set in the water race, Lowery section.



On the afternoon of 6 June, nets and traps were set in sections on the Lill and Lemon properties. These were left overnight and then removed the following morning.

On 7 June nets and traps were set in sections on the Moorhead and Lowery properties, left overnight and removed the following morning.

All fish captured were identified to species, counted and measured. Length measurements were taken from tip of nose to end of tail and recorded to the nearest millimetre (total length, mmTL).

Searches for freshwater mussels/kākahi were made by shallow exploratory digging in the substrate of the inner banks and base of each section of water race, below the water surface. Three sites were selected within each 150 metre section, at 0 metres, 75 metres, and 150 metres. Visual observations were made for other macroinvertebrates, and those that were caught in the nets/traps were recorded.

Instream and riparian habitat was assessed visually, and water temperature was measured at the downstream end of each section sampled whilst the nets/traps were being set, using a standard mercurial thermometer.

3. BACKGROUND

The length of water race that is proposed for closure is part of the Ellesmere scheme that takes water from the Rakaia River and flows approximately south-east across the Canterbury Plains towards Southbridge. Sections investigated for this report flow through the Lowery, Moorhead, Lemon, and Lill properties, from east of Burts Road to where the water race currently terminates at Southbridge Leeston Road. The more downstream sections of the water race - Lill, Lemon, and part of Moorhead - lose water during summer and were recently dry from December through into April, Plates 2 and 3 (Ian Lowery and Aaron Lill, pers. comm.). Water is retained in the Lowery section and upper Moorhead section year-round, although flow generally reduces to a residual muddy trickle in summer (Ian Lowery, pers. comm.). The water race is also subject to regular instream vegetation and sediment removal by an excavator, as required by the District Council (Ian Lowery, pers. comm.).

There are no recorded populations of freshwater fish in this water race, from its source at the Rakaia River to its terminus in a ground soak pit (New Zealand freshwater fish database, accessed 5 June 2018). In 2011 EOS Ecology carried out an ecological survey of sections of this water race, and others in the Selwyn District, to assess them for relative ecological value. A section downstream of the Lill property (on Southbridge Sedgemere Road, southwest of Cowans Road) was assessed by EOS Ecology as having high ecological value, mainly due to indigenous invertebrate diversity, including the presence of freshwater mussels (EOS Ecology 2011). Although EOS Ecology recommended that the section of water race, and its supply branch, remain open it was closed about two years ago (Ian Lowery, pers. comm.) and the water race currently terminates at Southbridge Leeston Road.



Plate 2: Lill section, 6 December 2017
(photograph by Aaron Lill).



Plate 3: Moorhead section, 31 March 2018
(photograph by David Moorhead).

4. FIELD RESULTS

4.1 Habitat

The water race investigated was straight and fairly homogeneous, with changes in direction made by right-angled corners and some sections passing beneath roads via culverts (e.g. Wabys Road). Upper banks immediately alongside the water race, comprising the riparian zone, ranged from bare soil to long pasture grass, thistles, and small patches of introduced gorse (*Ulex europaeus*), with the Lill and Moorhead sections having the most riparian vegetation. The banks were generally quite stable, and only a few small areas showed partial collapse. The inner sides of the water race banks were fairly steep, straight and smooth, and consisted predominantly of mud. The base of the water race was also fairly smooth and predominantly mud. The smooth, consistent nature of the channel is likely to be affected by the periodic excavations of vegetation and sediment.

Density of instream vegetation growing within the sections of water race was variable, with the most densely vegetated sections being on the Lill and Moorhead properties. Plants observed in the sections of water race included: watercress (*Nasturtium* sp.), water forget-me-not (*Myosotis laxa*), Canadian pondweed (*Elodea canadensis*), water buttercup (*Ranunculus* sp.), duckweed (*Lemna minor*), and floating water fern (*Azolla rubra*). Apart from duckweed and floating water fern, all of these species are introduced. Filamentous green algae was present in the less vegetated sections on the Lemon and Lowery properties.

Plates 4 to 7 show a view along each investigated section of water race, in the downstream direction.



Plate 4: Lill section, 6 June 2018.



Plate 5: Lemon section, 6 June 2018.



Plate 6: Moorhead section, 7 June 2018.



Plate 7: Lowery section, 7 June 2018.

Wetted width of the water race was 1.2 metres, and the water was generally shallow (0.12 metres to 0.25 metres deep) and slow flowing. There was no riffle-run-pool sequence established.

Water temperature ranged from 4.0 to 6.0 degrees Celsius, refer Table 1, with the slightly warmer temperatures recorded in the more open Lemon and Lowery sections.

Table 1: Water temperatures recorded in the water race.

Section Name	Water Temperature (°C)	Date and Time of Measurement
Lill	4.5	6 June, 14:00
Lemon	5.0	6 June, 15:15
Moorhead	4.0	7 June, 10:50
Lowery	6.0	7 June, 11:55

4.2 Fish

No fish were caught in either the Lill or Lemon sections.

One indigenous fish species, upland bully (Plate 8), was caught in low numbers in both the Moorhead and Lowery sections.

Table 2 lists the number and size range of fish caught, along with their conservation status.



Plate 8: Upland bully on measuring board, with fragments of duckweed.

Table 2: Fish species caught on 6 to 8 June 2018, with their size range and conservation status.

Section Name	Fish Species Caught	Scientific Name	Conservation Status*	Number Caught	Length Range	
					Minimum (mmTL [#])	Maximum (mmTL [#])
Lill	-	-	-	0	-	-
Lemon	-	-	-	0	-	-
Moorhead	Upland bully	<i>Gobiomorphus breviceps</i>	Not Threatened	26	31	82
Lowery	Upland bully	<i>Gobiomorphus breviceps</i>	Not Threatened	5	42	62

* Source: Goodman *et al.* (2014).

mmTL = total length from tip of nose to end of tail.

4.3 Macroinvertebrates

The indigenous snail *Potamopyrgus* sp. was found in all four sections, and the introduced snail *Physa* sp. was found in the Moorhead section only. The indigenous waterboatman (*Sigara* sp.) was seen at the Lowery site. No freshwater mussels/kākahi were found.

5. DISCUSSION

This water race is very straight and smooth-channelled, with no riffle-run-pool sequence, substrate particle variation, undercut banks, or other physical heterogeneity, and therefore does not provide good quality habitat for freshwater fauna (c.f. Harding *et al.* 2009). Water depth was shallow, with no substantial deep areas for fish refuge during periods of low flow. Water temperature was relatively consistent between each site measured but, due to the open-ness of the water race and lack of riparian vegetation to provide shading, would be expected to fluctuate widely in response to changes in ambient temperature (c.f. McDowall 1990; Parkyn 2004).

Instream plants were patchily distributed in the water race. Plant species present are generally widespread in the Selwyn District and commonly found in these types of open, slow-flowing waterway with mud substrates, often where there are increased nutrient levels (Coffey and Clayton 1988; Dr Peter Heenan, Wildland Consultants pers. comm.).

Upland bully was the only fish species caught, and this Not Threatened species is distributed throughout the Selwyn District and the South Island (New Zealand freshwater fish database 2018, McDowall 1990 and 2000). Other fish species may use these areas of water race at various times during the year, when water is present, but the habitat is not optimal and so high diversity and abundance would not be expected. Macroinvertebrates found during this work are widespread in the Selwyn District and are commonly found in these types of slow flowing waterway, particularly those that have nutrient enrichment and lower water quality (Otago Regional Council 2008).

Freshwater fauna detected in these sections of water race were low in both abundance and diversity, and this reflects the poor quality physical habitat, lack of instream and riparian vegetation, and possible nutrient enrichment of the water. Clearing of vegetation and sediment from waterways, using an excavator, is also known to have detrimental effects on fish populations (Greer *et al.* 2012) and could be contributing to the low diversity and abundance at these sites, as could the seasonal drying of sections of the water race.

6. CONCLUSIONS

Closure of water races within Selwyn District is contributing to loss of habitat within a part of the region that has already lost a great deal of its natural freshwater habitat. The sections investigated for this report, however, exhibit relatively poor quality habitat with low abundance and diversity of indigenous freshwater fauna. No Threatened or At Risk species were detected during this investigation, with all species found being common to these types of waterway and well distributed within the Selwyn District and South Island. Water depth in these sections was shallow during this investigation, and during dry seasons most of these sections lose water and can remain dry for several months of the year. For these reasons, the length of water race proposed for closure would not be considered of high priority to be kept open.

ACKNOWLEDGEMENTS

The landowners are thanked for providing access to their land and the water races. Ian, Aaron, and Johnny are particularly thanked for their excellent field assistance and information sharing.

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GPS COORDINATES OF SAMPLE SECTIONS AND DETAILS OF FISHING EQUIPMENT USED

GPS locations of water race sections sampled.

Section Name	Location	Easting (NZTM)	Northing (NZTM)
Lill	Upstream end of section	1538871	5150478
Lill	Downstream end of section	1538951	5150610
Lemon	Upstream end of section	1538388	5151100
Lemon	Downstream end of section	1538409	5150951
Moorhead	Upstream end of section	1537630	5151680
Moorhead	Downstream end of section	1537776	5151703
Lowery	Upstream end of section	1537380	5152734
Lowery	Downstream end of section	1537396	5152587

Mesh sizes and specifications of fish capture equipment used.

Type	Mesh Size	Length	Depth	Other Details
Fyke net	4 mm	2 m trap, 2.5 m leader	0.5 m leader	D-ring 0.5 m wide; 6 hoops decreasing in diameter; 3 compartments with 1st and 2nd separated by 200 mm throat, 2nd and 3rd separated by 25 mm plastic separation grill.
Gee minnow trap	3 mm	0.44 m	0.23 m	Cylindrical steel cage with one inverted cone entrance at each end. Diameter of opening 25 mm.



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