

WAIMAKARIRI DISTRICT COUNCIL

REPORT FOR DECISION

FILE NO and TRIM NO: EXT-01-35 /181217148924

REPORT TO: Council

DATE OF MEETING: 29 January 2019

FROM: Gerard Cleary – Manager Utilities and Roading

Chris Brown – Manager Community and Recreation

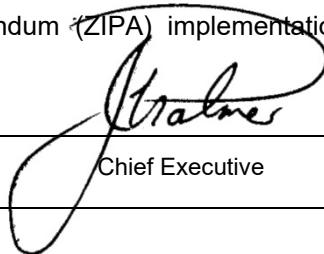
SUBJECT: Zone Implementation Programme Addendum (ZIPA) implementation – WDC role and funding options

SIGNED BY:

(for Reports to Council,
Committees or Boards)

Department Manager

Chief Executive



1. SUMMARY

- 1.1 This report outlines options for Waimakariri District Council (WDC) to fund and resource its contribution to the recently adopted Waimakariri Water Zone Implementation Plan Addendum (ZIPA) recommendations. The option of providing for a Biodiversity Officer is also included.
- 1.2 The Waimakariri District Council is identified as a contributing party in a number of the recommendations in the ZIPA. There are three options for roles that WDC could play outlined in this report as follows:
 - Option 1 is for a primary role of educator and advisor, with limited new projects coordinated and delivered by WDC. This is the option that is currently allowed for in the WDC Long Term Plan (LTP).
 - Option 2 is a coordination role, in addition to the role of educator and advisor. Leadership of the majority of ZIPA implementation would sit with Environment Canterbury, and/or other agencies. This option includes allowing funding to employ a Biodiversity Officer.
 - Option 3 is an expanded coordination role, with more staffing resourcing and project funding. Leadership of the majority of ZIPA implementation would still sit with the Environment Canterbury, and/or other agencies. A Memorandum of Understanding (MOU) for funding from Environment Canterbury is recommended if this option is pursued. This option includes funding for the Biodiversity Officer as well as an additional Water Environment Advisor.
- 1.3 The rating impact of each option is an increase of \$4.51, \$13.77 and \$32.27 per average rateable property per year for Options 1, 2, and 3 respectively.
- 1.4 The recommended option is Option 2, at a total cost of \$305,000 per annum, be funded for ZIPA Implementation, with a review after two years.
- 1.5 A budget of \$100,000 in 19/20 and \$100,000 in 20/21 was approved in May 2018, in the Long Term Plan (LTP), under the District Drainage account (previously referred to as the

Flood Response account) for minor capital works (TRIM 180514052798). Therefore an additional \$205,000 is requested in the 19/20 Annual Plan.

Attachments:

- i. Improving Council's approach to biodiversity- Report to District Planning and Regulation Committee, 11 December 2018. (Trim 181029126064)
- ii. Waimakariri ZIPA final recommendations WDC role and funding (Excel spreadsheet, Trim 181207145168)

2. RECOMMENDATION

THAT the Council:

- (a) **Receives** report No. 181217148924.
- (b) **Adopts** Option 2 presented in this report for consultation as part of the 19/20 Annual Plan. This is primarily for WDC to provide an education/advisor role, with a limited coordination role for ZIPA implementation. A primary leadership role in implementation is to be taken by Environment Canterbury and/or other agencies.
- (c) **Approves** the funding of Option 2: Implementation of the ZIPA at an additional cost of \$205,000 for 19/20 and 20/21 from the general rates, for inclusion in the Draft Annual Plan.
- (d) **Notes** \$100,000 per annum for 19/20 and 20/21 for ZIPA Implementation has already been approved from the District Drainage account in the Long Term Plan, which is funded from the general rates.
- (e) **Notes** Option 2 funding would bring the total ZIPA implementation funding to a total of \$305,000 per year for the 2019-21 financial years. Option 2 additional funding includes primarily creation of the role of a WDC Biodiversity Officer, who would have a dual role i.e. also implementation of biodiversity regulations under the WDC District Plan.
- (f) **Notes** that WDC will continue an existing leadership role for drainage maintenance, urban waterway education and monitoring, and stockwater race management (ZIPA Recommendations 1.4 (j), 1.14, 1.25 and 4.12.)
- (g) **Endorses** WDC approaching Environment Canterbury to discuss an agreement mechanism, which could include a Memorandum of Understanding, in which WDC would receive funding for ZIPA implementation, if a targeted rate for Waimakariri ZIPA implementation was under consideration, or levied, by Environment Canterbury.
- (h) **Endorses** a review within two years of the ZIPA funding allocation and resourcing, in line with Long Term Plan and Annual Budget processes, to reassess the role of the Council and whether ZIPA objectives are being met.
- (i) **Notes** that a report on the governance and operational structure for the on-going implementation of the ZIPA will be presented to Council before the end of this Financial Year.
- (j) **Circulates** this report to Community Boards and Waimakariri Water Zone Committee.

3. BACKGROUND

Role of WDC in freshwater management

- 3.1. The Resource Management Act (RMA, 1991) defines the roles of Regional Councils and Territorial Authorities in regards to freshwater management. Both authorities have a role, which could be argued to be overlapping in the legislation. A function of the Territorial

Authority is ‘the establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district’, as well as ‘the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of the maintenance of indigenous biological diversity’ (Section 31). The RMA states that it is the function of the Regional Authority ‘to control the use of land for the purpose of the maintenance and enhancement of ecosystems in water bodies’ (Section 30).

- 3.2. The National Policy Statement for Freshwater Management (NPS-FM, amended in 2017), states it is the role of Regional Councils to maintain or improve water quality within Freshwater Management Units (FMU). The NPS-FM is currently under review, with an amended version due in 2020. This latest amendment is examining the inclusion of urban contaminants management, such as copper and zinc, which could be potentially a role of Territorial Authorities as well as Regional Councils.
- 3.3. For this report, the 3 Waters has led internal WDC discussions with Policy and Strategy (Geoff Meadows and Veronica Spittal), Development Planning Unit (Shelley Milosavljevic), and Green Space (Chris Brown) regarding the role of WDC, and implementation of the ZIPA, particularly regarding the protection and enhancement of indigenous biodiversity.

ZIPA Development

- 3.4. The Canterbury Water Management Strategy (CWMS) Waimakariri Zone Committee developed a Zone Implementation Programme in 2011, and has now, after both extensive consideration of the best available science and extensive consultation with the public, developed an addendum (ZIPA). This ZIPA, or alternatively named the Waimakariri Land and Water Solutions Package, with both statutory and non-statutory recommendations for action, is aimed at setting water quantity and water quality limits to improve the condition of fresh water resources in the Zone.
- 3.5. The Waimakariri Water Zone Committee approved the final ZIPA on the 19 November 2018. WDC Council approved the ZIPA on the 4 December 2018, and Environment Canterbury (Canterbury Regional Council) approved the ZIPA on the 13 December 2018.
- 3.6. The ZIPA Recommendations are divided into five chapters:
 - 3.6.1. Improving Stream Health;
 - 3.6.2. Protecting and Enhancing Indigenous Biodiversity;
 - 3.6.3. Reducing Nitrates;
 - 3.6.4. Managing Surface water – Flows and Allocations;
 - 3.6.5. Managing Groundwater – Allocations.
- 3.7. The ZIPA chapters with the majority of Recommendations for WDC are ‘Improving Stream Health’ and ‘Protecting and Enhancing Indigenous Biodiversity’. For example, there is a specific Recommendation regarding increasing resourcing of WDC biodiversity capability and capacity (Recommendation 2.2).

Wider Biodiversity Considerations

- 3.8. The national policy context for indigenous biodiversity is under review, with the current development of a new national biodiversity strategy and a draft National Policy Statement on Indigenous Biodiversity (NPS-IB).

- 3.9. The Canterbury Biodiversity Strategy, released in 2008, established a strategic approach to biodiversity in the region, with a vision to protect, maintain and restore Canterbury's indigenous biodiversity. The 19 signatories include Environment Canterbury, eight district councils (including WDC), two central government departments, Te Rūnanga o Ngāi Tahu, and others. The Strategy sets out a series of goals and targets that aim to halt the decline of biodiversity across the region. This strategy is currently undergoing a refresh, with support sought for this from the Mayoral Forum.
- 3.10. The Development Planning Unit (Shelley Milosavljevic) reviewed the Council approach to biodiversity in a report to the District Planning and Regulation Committee on 11 December 2018 (TRIM 181029126064). There are wider considerations for biodiversity, under the current and draft District Plans, such as terrestrial biodiversity, that were addressed in that report. Tool 3 in the December biodiversity report identified the role for a Biodiversity Officer, which is allowed for in Options 2 and 3 of this ZIPA implementation funding report.

4. ISSUES AND OPTIONS

- 4.1. With adoption of the ZIPA by Council, the status quo role of the WDC and funding for freshwater management is required to be reviewed by WDC staff to ensure its successful implementation. Three options are presented here; Options 1, 2, and 3. Note that the Option 1 could be considered as the status quo, due to funding already allocated from the Drainage budget within the Long Term Plan process in 19/20 and 20/21.
- 4.2. No prioritisation or ranking is given between the ZIPA Recommendations. Therefore, the Recommendations that are funded in each Option is based on WDC staff assessment of relative priorities.
- 4.3. WDC will continue to lead for certain Recommendations that are currently led by WDC; namely 1.14: drainage maintenance in WDC areas, 1.4 (j) and 1.25: education and monitoring of urban stormwater, and 4.12 changes to the stockwater race network.

Option 1

- 4.4. Option 1: WDC would take on primarily an educator and advisor role, with existing staffing resources, and limited CAPEX projects. This option does not require additional funding as \$100,000 per annum for 19/20 and 20/21 for ZIPA Implementation has been approved from the District Drainage account in the Long Term Plan.
- 4.5. These proposed CAPEX projects are:
 - 4.5.1. Fish passage projects, such as possible weir remediation and trout barrier installation, \$20,000 (Recommendation 1.8).
 - 4.5.2. Drainage maintenance for instream and biodiversity values in particular, such as habitat creation of riffles and pools, \$20,000 (Recommendation 1.14).
 - 4.5.3. Fencing and amenity improvements along waterways on WDC land (e.g. walkway creation) and biodiversity works, \$40,000 (Recommendation 1.26).
 - 4.5.4. Tidal planting on the Kaiapoi River for earthquake effects mitigation, \$10,000 (Recommendation 1.27).
 - 4.5.5. Īnanga (whitebait) spawning area development, \$10,000 (Recommendation 2.11).

Option 2

- 4.6. Option 2: WDC would coordinate partial implementation of the ZIPA, however leadership would sit with Environment Canterbury and other agencies, at a total cost to WDC of

\$305,000 per annum. This comprises the existing \$100,000 allocation along with an additional \$205,000 of new funding.

- 4.7. Option 2 includes projects in Option 1, plus the additional projects listed below:
 - 4.7.1. A review report on drainage maintenance practices (both chemical and physical) and recommendations for improvements, \$10,000 (Recommendation 1.7).
 - 4.7.2. Urban waterway education and publication creation, \$20,000 (Recommendation 1.25).
 - 4.7.3. Fencing and amenity improvements along waterways on WDC land (e.g. walkway creation) and biodiversity works, an additional \$30,000 (Recommendation 1.26).
 - 4.7.4. Biodiversity Officer role creation and overheads, \$110,000 (Recommendation 2.2).
 - 4.7.5. Report on incorporating climate change impacts on indigenous biodiversity, \$10,000 (Recommendation 2.4).
 - 4.7.6. Ecological support for staff and contractors e.g. for survey work, \$10,000 (Recommendation 2.5).
 - 4.7.7. Water quality testing in private wells (i.e. for nitrate) – partial programme support only, and production of guidance information for well-owners, \$10,000 (Recommendation 3.16).
 - 4.7.8. Technical guidance of well depth and well head security to provide better water quality protection, \$5,000 (Recommendation 3.17).
- 4.8. Option 2 would provide a substantial commitment from the Waimakariri District Council to the implementation of the ZIPA. There would be increased benefits, including provision of biodiversity capability and capacity, through a Biodiversity Officer, that could be utilised across many departments, such as Greenspace, Utilities and Roading, Development Planning Unit and Plan Implementation Unit.
- 4.9. The Biodiversity Officer role would help to build relationships with landowners and public by providing advice and support. The Biodiversity Officer would be able to work across Council departments to support biodiversity initiatives, and also coordinate efforts with relevant agencies to raise the profile of Biodiversity. This would also have the potential to generate funding (for example via applications to Central Government), with the potential to fast track a number of already existing biodiversity initiatives on Council land and provide additional resource to implement new initiatives.
- 4.10. The WDC Biodiversity Officer role is intended to complement, not supersede current biodiversity resourcing, such as the Environment Canterbury Biodiversity Officer role for the Waimakariri Zone. With this intent, the functions to be carried out by the role on behalf of the WDC Council would be clearly defined.
- 4.11. Part of the Biodiversity Officer role would be active monitoring of Significant Natural Areas (SNAs). To date, without this monitoring, there has been a decline and loss in these areas as outlined in the December 2018 report (TRIM 181029126064) to the District Planning and Regulation Committee.

Option 3

- 4.12. Option 3 WDC would coordinate implementation of the ZIPA, however leadership would sit with Environment Canterbury and other agencies, at a total cost to WDC of \$705,000 per annum.

- 4.13. Option 3 includes projects in Options 1 and 2, plus the additional projects listed below:
- 4.13.1. Catchment management plan partial funding, \$50,000 (Recommendation 1.1).
 - 4.13.2. Enhanced urban stream monitoring, \$20,000 (Recommendation 1.4).
 - 4.13.3. Fish passage projects, such as possible weir remediation and trout barrier installation, an additional \$20,000 (Recommendation 1.8).
 - 4.13.4. Drainage maintenance for instream and biodiversity values, such as habitat creation of riffles and pools, \$20,000 (Recommendation 1.14).
 - 4.13.5. Education and guidance for landowners on riparian setbacks and planting on drains and waterways managed by WDC, \$10,000 (Recommendation 1.18).
 - 4.13.6. Support implementation, as required for Territorial Authorities, of the National Environmental Standard for Plantation Forestry, such as on WDC forestry land and working with the wider forestry sector to identify, and mitigate, high-risk periods for earthworks and harvesting, \$20,000 (Recommendation 1.19).
 - 4.13.7. Water quality and biodiversity projects in the Upper Ashley / Rakahuri catchment, including Lees Valley, for example of any Significant Natural Areas and wetland protection, \$20,000 (Recommendation 1.24).
 - 4.13.8. Urban waterway education and publication creation, an additional \$20,000 (Recommendation 1.25).
 - 4.13.9. Fencing and amenity improvements along waterways on WDC land (e.g. walkway creation) and biodiversity works, an additional \$60,000 (Recommendation 1.26).
 - 4.13.10. Water Environment Advisor role expansion (1 FTE role creation) and overheads \$130,000 (Recommendation 2.2).
 - 4.13.11. Waimakariri Biodiversity Action Plan (partial support for development), \$10,000 (Recommendation 2.3).
 - 4.13.12. Provision of support, such as administrative support, coordination with WDC and technical advice, to community groups, \$20,000 (Recommendation 2.8).
 - 4.13.13. Publication of education material for landowners regarding biodiversity, \$10,000 (Recommendation 2.9).
- 4.14. Option 3 would provide comprehensive support for the WDC toward the implementation of the Zone Committee recommendations. The benefits from the additional Option 3 funded items include those listed in Option 2 along with a number of other benefits. With a Biodiversity Officer and two Water Environment Advisors the WDC would have dedicated capacity and capability to carry out further initiatives.
- 4.15. The December 2018 biodiversity report to the District Planning and Regulation Committee (TRIM 181029126064) identified the need to take a strategic approach to the taking of esplanades and the management of them in order to provide for the opportunity ecological corridors and enhanced biodiversity values. Option 3 would provide significant resourcing (\$60,000 per annum) to enable this.
- 4.16. Option 3 would also provide partial support for implementation planning such as Catchment Management Plans and the Waimakariri Biodiversity Action Plan.

Additional funding considerations

- 4.17. Option 4, for the full implementation of the ZIPA recommendations relevant to WDC, is not presented in this report, however has been estimated at a cost of around \$1 million/year for WDC.

- 4.18. Options 2 and/or 3 could be progressed only on the condition of an enduring MOU with Environment Canterbury for funding, for example through an Environment Canterbury targeted rate for the District. The intention of this would be to minimise rate increases for ratepayers long-term. A funding MOU has not been explored as a possibility with Environment Canterbury to-date, and is recommended in this report for WDC to progress.

Staff resourcing

- 4.19. For Option 1, there are with current staff resources within 3 Waters, Planning, Policy and Greenspace. However, dedicated staff resourcing for implementation of ZIPA recommendations would only be available through the Water Environment Advisor role, within the 3 Waters team. Option 2 maintains current staff resources within 3 Waters, Planning, and Policy teams. Dedicated staff resourcing for implementation of ZIPA recommendations would continue to be through the Water Environment Advisor role, and with creation of a Biodiversity Officer role, recommended to sit within the Green Space team. The creation of this position is supported by ZIPA recommendation 2.2 (c). It is recommended for Green Space and 3 Waters teams to coordinate closely, to ensure clarity of roles and responsibilities.
- 4.20. The proposed Biodiversity Officer role would be a permanent full-time contract commencing after 1 July 2019. The funding for the Biodiversity Officer, requiring a qualified and experienced ecologist, with organisational overheads and costs would be in the order of approximately \$110,000 per annum. After discussion within WDC Departments, the Biodiversity Officer is recommended to sit within the Green Space team.
- 4.21. A Biodiversity Officer role has also been proposed by the Development Planning Team (TRIM 181029126064) for responsibilities under the District Plan, namely protection and monitoring of Significant Natural Areas, and coordination with other agencies, such as Environment Canterbury and the Department of Conservation. It is recommended that the Biodiversity Officer is a suitably trained ecologist, for capacity to be able to carry out monitoring of SNAs. These role functions align well with functions to implement the ZIPA. The apportionment of this role to District Plan functions and ZIPA implementation is recommended to be 50:50.
- 4.22. Option 3 proposes the extension of the Water Environment Advisor role from 1 full-time equivalent (FTE) to 2 FTE. This second FTE would be a permanent full-time contract commencing after 1 July 2019. The funding for the role, with organisational overheads and costs, would be in the order of approximately \$130,000 per annum. This additional Water Environment Advisor is recommended to sit within the 3 Waters team.
- 4.23. The Management Team have reviewed this report and support the recommendations. Noting that the Council has the discretion to decide what is the appropriate level of funding, and subsequently how much commitment WDC should provide to the ZIPA implementation.

5. COMMUNITY VIEWS

5.1. Groups and Organisations

- 5.1.1. The Waimakariri Water Zone Committee (WWZC) drafted the ZIPA through a collaborative process with appointed community members. Though there was not always agreement, a consensus viewpoint was reached, which was adopted as the final ZIPA by the WWZC.

5.2. Wider Community

- 5.2.1. The ZIPA version that was released for public feedback in September 2018 has been amended by the Zone Committee in relation to a range of matters raised in feedback from the public including minimum flows, target dates for achieving reduction in nitrates to groundwater, and improving stream health.
- 5.2.2. The community has shown strong support for protecting and enhancing biodiversity in the Waimakariri District via the District Development Strategy and District Plan Review ‘Issues and Options’ consultation feedback in 2017.

6. IMPLICATIONS AND RISKS

6.1. Financial Implications

- 6.1.1. \$100,000 per annum for two years (19/20 and 20/21) has already been allocated in the Long Term Plan process. Funding for each Option is per annum (to be adjusted for inflation) under the end of the Canterbury Water Management Strategy in 2040. See Table 1 for the rating impact for each Option.
- 6.1.2. Table 1: Rates impact of funding options 1-3

	Option 1 (default option already allowed for in the LTP)	Option 2 (recommended option)	Option 3
Cost per annum	\$100,000	\$305,000	\$715,000
Increase in rates for the average rateable property per annum (incl. GST)	\$4.51	\$13.77	\$32.27
Rates increase (based on FY19 rates)	No Change	0.35%	1.04%

6.2. Community Implications

- 6.2.1. Option 1 & 2: There will be more visible WDC restoration projects, such as īnanga spawning area improvement and for fish passage, which will improve ecosystem values, and increase awareness of biodiversity issues in the District.
- 6.2.2. Option 3: There will be significantly visible WDC restoration projects. There would be more support available from the Council, such as ZIPA implementation planning, educational materials and technical advice, particularly for indigenous biodiversity for landowners with water bodies on, or bordering, their properties.
- 6.2.3. There would be a sustained increase from 19/20 onwards in rates for the ratepayer, either through a targeted Environment Canterbury rate and/or a WDC general rate increase.

6.3. Risk Management

- 6.3.1. The legislative framework for freshwater management and biodiversity is in a transitional phase, with current drafting of a National Policy Statement for Indigenous Biodiversity, and also further amendments to the National Policy Statement for Freshwater Management. With this shifting environment, it is therefore recommended to plan for the implementation of the ZIPA only in the short term, with a review after two years.

- 6.3.2. There is a risk that increased funding by WDC for ZIPA implementation may lead to an unintentional consequence of decreased funding and resources allocation by other agencies. This risk has been mitigated, for example, by the adoption of the ZIPA by Environment Canterbury Council, however should continue to be actively mitigated with inter-agency discussions and clear definition of roles and responsibilities of each agency.
- 6.3.3. There is a risk, through lack of financial investment that the ZIPA will not be implemented sufficiently for freshwater outcomes to be met, after much planning investment by community members, Environment Canterbury and WDC staff. Example of objectives that might not be met include protection and enhancement of mahinga kai species and restoration of special places such as the Cam River.

6.4. **Health and Safety**

- 6.4.1. The creation of the new role of WDC Biodiversity Officer could raise health and safety considerations, such as fieldwork in remote areas, which are addressed by the existing WDC ‘Safe Working in the Field’ manual.

7. **CONTEXT**

7.1. **Policy**

- 7.1.1. This matter is not a matter of significance in terms of the Council’s Significance and Engagement Policy.

7.2. **Legislation**

- 7.2.1. Resource Management Act (1991, Sections 30 and 31). The RMA defines the roles of Regional Councils and Territorial Authorities in regards to freshwater management.
- 7.2.2. National Policy Statement for Freshwater Management (2011, with amendments in 2014 and 2017) outlines the process for setting community objectives for freshwater (i.e. the National Objectives Framework) and sets National Bottom Lines for water quality attributes.
- 7.2.3. New Zealand Biodiversity Strategy (2000, currently under review) and National Policy Statement for Indigenous Biodiversity (in draft) set the policy framework for biodiversity management in New Zealand.

7.3. **Community Outcomes**

There is a healthy and sustainable environment for all

- 7.3.1. Harm to the environment from the impacts of land use, use of water resources and air emissions is minimised.
- 7.3.2. Cultural values relating to water are acknowledged and respected.
- 7.3.3. The demand for water is kept to a sustainable level.
- 7.3.4. Harm to the environment from the spread of contaminants into ground water and surface water is minimised.

There are areas of significant indigenous vegetation and habitats for indigenous fauna

- 7.3.5. Conservation and restoration of significant areas of vegetation and/or habitats is encouraged.

Public spaces and facilities are plentiful, accessible and high quality

- 7.3.6. People enjoy clean water at our beaches, rivers and lakes.

7.3.7. There is a wide variety of public places and spaces to meet people's needs.

7.3.8. There are wide-ranging opportunities for people to enjoy the outdoors.

7.4. Delegations

7.4.1. The Council has delegation to include service level budget provision in the Draft Annual Plan.

WAIMAKARIRI DISTRICT COUNCIL

REPORT FOR DECISION

FILE NO and TRIM NO: DDS-06-10-02-05-17 / 181029126064

REPORT TO: District Planning and Regulation Committee

DATE OF MEETING: 11 December 2018

FROM: Shelley Milosavljevic

SUBJECT: Improving Council's approach to biodiversity

SIGNED BY:
(for Reports to
Council, Committees
or Boards)

Department Manager



Chief Executive

1. SUMMARY

- This report:
- (a) outlines options for how Council could improve its approach to maintaining the Waimakariri District's indigenous biodiversity. It sets out the context for this, the current approach taken by Council, and the various tools that could be used to improve this current approach (including benefits and costs of each) and form a Council biodiversity management programme.
 - (b) Provides background for the Committee to consider and give direction on the options it would like further investigated (and included in the budgetary considerations as part of the Annual Plan process) in order to improve the Council's approach to biodiversity.

2. RECOMMENDATION

THAT the Committee:

- (a) **Receives** report No. 181029126064.
- (b) **Endorses** the approach of continuing to protect Significant Natural Areas as part of the District Plan Review.
- (c) **Endorses** staff to further consider regulatory approaches to protecting and enhancing indigenous biodiversity (within and outside of Significant Natural areas) as part of the District Plan Review.
- (d) **Notes** that national and regional policy in relation to indigenous biodiversity is likely subject to significant change and the Council's role and resourcing in this area will likely be subject to external direction in coming years.
- (e) **Notes** that the full impact of the Waimakariri Water Zone Committee Zone Implementation Programme Addendum (ZIPA) has yet to be assessed and will require consideration beyond Draft 2019/20 Annual Plan preparation in January 2019.
- (f) **Notes** that subject to consideration and direction from the Committee on the non-regulatory tools it wishes to be investigated further, staff will bring another report in January 2019 for Annual Plan budgetary purposes.

3. BACKGROUND

- 3.1 A number of reports¹²³ have indicated that, similar to the rest of New Zealand, the District's indigenous vegetation and habitat for fauna has been significantly destroyed or modified over time and what is left is potentially threatened.
- 3.2 The community showed strong support for protecting and enhancing the Waimakariri District's biodiversity via during the draft District Development Strategy (DDS) and District Plan Review 'Issues and Options' consultation in 2017.
- 3.3 Section 6(c) of the Resource Management Act 1991 (RMA) requires the '*protection of significant indigenous vegetation and significant habitats of indigenous fauna*' as a matter of national importance. Section 31(1)(b)(iii) states a function of territorial authorities includes '*the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of the maintenance of indigenous biological diversity*'.
- 3.4 A proposed National Policy Statement on Indigenous Biodiversity² (NPS IB) was released in October 2018 and sets out a policy framework to significantly improve current approaches to maintaining indigenous biodiversity. Consultation is planned for mid to late 2019, with the NPS IB expected to come into effect in March 2020. District Plan's must give effect to national policy statements. The release of the proposed NPS IB indicates that indigenous biodiversity is a matter of national significance that must be addressed by Councils. The draft NPS IB contains relatively detailed objectives and policies that aim to maintain indigenous biodiversity while recognising the kaitiaki role of Māori with indigenous biodiversity management.
- 3.5 Environment Canterbury is gearing up as an organisation to improve biodiversity, making it one of its top priorities. The Canterbury Biodiversity Strategy (which WDC is a signatory to) is currently being reviewed, with particular focus on the implementation plan. An updated version is expected in late 2019. Throughout the Waimakariri District, Environment Canterbury has a number of biosecurity projects underway, along with the 'Immediate Steps' programme which involves a range of biodiversity projects. Relevant objectives of the Canterbury Regional Policy Statement 2013 (CRPS) include halting the decline of Canterbury's ecosystems and indigenous biodiversity, restoration or enhancement of ecosystems and indigenous biodiversity, and protection of significant indigenous vegetation and habitats. The Waimakariri District Plan must give effect to the CRPS.
- 3.6 The Waimakariri Water Zone Committee released the draft ZIPA in September 2018. Following consideration of public comments, a final version was released on 8 December 2018. A number of non-regulatory initiatives for protecting and enhancing indigenous biodiversity are included, which WDC will be involved in implementing. Note that this report does not outline the relevant biodiversity initiatives in the final version of the ZIPA as it was released after the agenda for this report was published.

¹ Our Land 2018 Report (April 2018), Prepared by Stats NZ & Ministry for the Environment (Ref: ME 1350). Available at: <http://www.mfe.govt.nz/publications/environmental-reporting/our-land-2018>

² Report of the Biodiversity Collaborative Group (October 2018), Prepared by New Zealand Biodiversity Collaborative Group. Available at: <https://www.biodiversitynz.org/> (Note: This report contains the draft National Policy Statement for Indigenous Biodiversity)

³ Current State Biodiversity Assessment for the Waimakariri Canterbury Water Management Strategy Zone (September 2016), Prepared by Environment Canterbury. Available at: <https://apps.canterburymaps.govt.nz/WaimakStoryMap/Waimak.html>

4. ISSUES AND OPTIONS

- 4.1. The Management Team have reviewed this report and support the recommendations.
- 4.2. There are a number of regulatory and non-regulatory mechanisms available to help achieve Council's function of maintaining indigenous biodiversity. Table 1 below outlines the various mechanisms that form Council's current approach to maintaining biodiversity.

Table 1: Council's current approach to biodiversity

Tool	Details
Waimakariri District Plan (Regulatory)	<p>There are currently 111 Significant Natural Areas (SNAs) listed in the operative District Plan (called 'Vegetation & Habitat Sites'). These areas were listed by landowners voluntarily. The District Plan has rules that restrict the reduction of vegetation cover, earthworks, planting, access tracks and the reduction of the health and abundance of certain rare plants within SNAs. There are also general rules regarding the clearance of indigenous vegetation anywhere in the district.</p>
	<p>A review of the District Plan's effectiveness in 2016 indicated that most monitoring relating to SNAs was not carried out, primarily due to resourcing constraints. As part of the District Plan Review process, aerial photos were reviewed in early 2018 to identify which SNAs were still present. This exercise showed that four sites had clearly disappeared. Site V117 which was cleared by Netherland Holdings Ltd; whom WDC prosecuted in the Environment Court. The three other sites (V103, V116 and V137) have been passed on to Council Compliance & Enforcement Team to investigate. A total of 62 sites were selected where it was unclear whether the site was still there in its entirety. These 62 sites are being reviewed by ecologists at present. The remaining 45 SNA sites, which aerial photos showed to clearly be still present, will be rolled over into the new District Plan.</p> <p>The District Plan also has rules allowing Council to take (if it wishes) esplanades strips or reserves during subdivision from land adjoining 'priority waterbodies' or from created lots less than 4ha adjoining rivers with a width of at least 3m wide. Esplanades can be taken for a range of purposes including the protection of conservation values. A strategic approach to the taking of esplanades and the management of them is needed in order to better provide for the opportunity of ecological corridors and enhanced biodiversity values.</p>
Northern Pegasus Bay Bylaw (Regulatory)	<p>Restricts certain activities (e.g. 4WD vehicles) thereby protecting biodiversity values.</p>
Contestable Fund (Non-regulatory)	<p>Contestable funding of \$15,500/year for District Plan listed 'Vegetation and Habitat' sites (SNAs), Heritage Items and Notable Plants (protected trees). Current balance of account is \$143,679. Changed to discretionary fund in June 2017. Not actively publicised however will be soon.</p>
Council-Community partnership planting	<ul style="list-style-type: none"> • Taranaki Reserve – native stream side plantings (\$2k per year). • Kaiapoi Lakes – minor additional native plantings. • Kaiapoi Regeneration area – Honda Forest will commence planting next autumn. Total of 15,400 native seedlings to be planted in Honda

Tool	Details
initiatives <i>(Non-regulatory)</i>	<p>Forest (additional to the retention basin plantings being undertaken by the Council 3 Waters team).</p> <ul style="list-style-type: none"> • Pegasus Bay dune plantings – minor areas planted to encourage dune stabilisation. • Te Kohaka o Tuhaitara Trust - plantings along Tuhaitara Trail including areas of pines recently harvested. • Silverstream - Matariki Tu Rakau (Te Uru Rakau Forestry NZ) 660 kanuka planted in 2018 to have enrichment plantings once established. Also Million Metres Streams Project raised \$20k for 1.5ha of riparian planting. • Whites Road (ex-quarry) – school planting project.
Enviro-schools <i>(Non-regulatory)</i>	Involves a sustainability education programme. There are 16 Enviroschools within the Waimakariri District. Council is a funding partner.
Drain management biodiversity considerations <i>(Non-regulatory)</i>	Incorporating stream/drain bank planting, along with methods for drain cleaning that reduce impact on instream fauna, into Council's lowland streams and drain maintenance work.

- 4.3. As shown in Table 1, there are a number of mechanisms in place at Council to maintain biodiversity however given the indications that biodiversity is declining, they are clearly not sufficient to address the biodiversity challenge. These current mechanisms form a good basis for maintaining biodiversity so should be continued, provided they are deemed to be working as effectively as possible. Additional regulatory and non-regulatory tools are recommended to enhance the effectiveness of Council's approach to maintaining biodiversity and better met statutory obligations.
- 4.4. Table 2 below outlines additional regulatory and non-regulatory tools for consideration, which could be used to improve Council's approach to maintaining and enhancing biodiversity.

Table 2: Additional regulatory and non-regulatory tools to improve biodiversity for consideration

Tool	Costs & Benefits
<p>1. District Plan incentives (Regulatory)</p> <p>Provide development bonus incentives such as a bonus lot of any size (so could be below the zone's minimum lot size for subdivision) with opportunity to build a dwelling on the created lot for the:</p> <ul style="list-style-type: none"> • Protection (legal and physical) of an SNA; • Enhancement and protection (legal and physical) of an SNA; or • Enhancement of an area within an 'Ecological Corridor Priority Area' or other such identified area. <p>Ecological management or enhancement plans would be required.</p>	<p><i>Benefits:</i></p> <ul style="list-style-type: none"> • Help to switch the perception of SNAs being a burden to being an asset. • Biodiversity gains. • Encourages protection of remnants which is a top priority. • Bonus lot provisions could help increase property values. <p><i>Costs:</i></p> <ul style="list-style-type: none"> • Potential for fragmentation of rural areas, and increased density (effects on character, servicing, transport, rural settlement patterns) however this would be on a very small scale. • Introduction of domestic pets that could predate on native fauna. • Monitoring requirements (regularised monitoring would be required e.g. by a Council Biodiversity Officer) and the fact that the biodiversity benefit needs ongoing monitoring while the bonus lot incentive is one-off. • Changes in land ownership can bring issues with ongoing management requirements.
<p>2. Require ecological protection or enhancement as resource consent conditions (Regulatory)</p> <p>Either via direct resource consent conditions, covenants, consent notices or bonds where possible to do so (conditions must relate to managing the effects of an activity).</p>	<p><i>Benefits:</i></p> <p>Applicant funded.</p> <p><i>Costs:</i></p> <p>Monitoring requirements.</p>
<p>3. Council Biodiversity Officer (Non-regulatory)</p> <p>Key functions would be:</p> <ul style="list-style-type: none"> • Working with landowners (particularly landowners of SNAs) to educate them on biodiversity values and management practices. • Coordinating efforts with other agencies (ECan, DoC, QEII, Forest & Bird etc) • Providing general support and advice to the public regarding protecting and enhancing biodiversity values. 	<p><i>Benefits:</i></p> <ul style="list-style-type: none"> • Build relationships with landowners and the public by providing advice and support. • Coordinated efforts with relevant agencies. • Raise profile of biodiversity. • Implement biodiversity initiatives on the ground. • Potential to generate more funding (via applications) for protection or enhancement works. • Active monitoring of SNAs.

Tool	Costs & Benefits
<ul style="list-style-type: none"> Monitoring SNAs (and any enhanced Ecological Corridor Priority Areas if present). Applying for funding for protection or enhancement works. Undertaking protection works (e.g. fencing) enhancement works (e.g. plantings). Running public biodiversity awareness campaigns. 	<p><i>Costs:</i></p> <ul style="list-style-type: none"> Full-time, permanent salaried employee.
<p>4. Funding (additional to contestable fund currently available) (Non-regulatory)</p> <p>Increasing the amount of funding available, and making it available for protection and enhancement works for both SNAs and non-SNAs would be valuable. Funding or subsidies for protection or enhancement works (e.g. fencing, pest control, buffers, indigenous plantings). Current funding available is \$15,500 per year however this is shared between heritage items, protected trees and SNAs. Any funding must be well publicised, with a clear criteria for eligibility, and easy to apply for.</p>	<p><i>Benefits:</i></p> <ul style="list-style-type: none"> Incentivises protection and enhancement works. Encourages good will in the community by rewarding biodiversity efforts. <p><i>Costs:</i></p> <ul style="list-style-type: none"> Cost of additional funding. Staff time to administer fund.
<p>5. Rates rebates for landowners with SNAs (Non-regulatory)</p> <p>Landowners with SNAs on their property could be eligible for rates rebates for the area of their property covered by an SNA in order to acknowledge the landowners restrictions on the use of that part of their land.</p>	<p><i>Benefits:</i></p> <ul style="list-style-type: none"> While the actual rebate may be minimal, it is an effective way of providing an ongoing incentive for protection that provides a more direct linkage. Acknowledges the restrictions landowners face on the use of their land covered by an SNA. <p><i>Costs:</i></p> <ul style="list-style-type: none"> Loss of rates on areas of land covered by SNAs.
<p>6. Biodiversity initiatives on Council land (Non-regulatory)</p> <p>Adopt an indigenous planting priority policy for Council reserves (E.g. Auckland Council has a 'Design Manual Guide for Parks' with the following motto: '<i>Plants are great, natives are better, eco-sourced is best</i>')</p> <p>E.g. The coastal strip (administered by Council) between Mean High Water Springs and the Te Kohaka O Tuhaitara Trust land could be actively enhanced with dune</p>	<p><i>Benefits:</i></p> <ul style="list-style-type: none"> Council takes the lead on showing the importance of indigenous biodiversity on its reserves. <p><i>Costs:</i></p> <ul style="list-style-type: none"> Some members of the public prefer exotic plantings (e.g. oak trees).

Tool	Costs & Benefits
plantings (currently Council only restricts 4WD use).	
<p>7. Council strategy on taking of esplanades in order to prioritise ecological corridor linkages (Non-regulatory)</p> <p>Establish a strategic, district-wide approach to riparian management and ecological linkages. Such a strategy would have the aim of closing gaps, and prioritising esplanades where Council should focus its land purchases when they become available via subdivision, or by working with landowners.</p>	<p><i>Benefits:</i></p> <ul style="list-style-type: none"> Establish a network of esplanade linkages along waterways available for enhancing biodiversity values and/or providing public access for recreation and cultural purposes. <p><i>Costs:</i></p> <ul style="list-style-type: none"> Cost of purchasing esplanade reserves (vested in Council). Cost of maintenance and enhancement of reserves.
<p>8. Council Urban Forest Strategy and/or District wide canopy cover % goal (Non-regulatory)</p>	<p><i>Benefits:</i></p> <ul style="list-style-type: none"> Encourages urban forests. Encourages enhancing canopy cover throughout the district. <p><i>Costs:</i></p> <ul style="list-style-type: none"> Staff time to prepare strategy / canopy cover goal.
<p>9. Council nursery with discounted indigenous plants of local provenance (Non-regulatory)</p>	<p><i>Benefits:</i></p> <ul style="list-style-type: none"> Encourages public to plant indigenous vegetation of local provenance. <p><i>Costs:</i></p> <ul style="list-style-type: none"> Cost of discounting plants. Cost of establishing and operating a Council nursery.
<p>10. Community biodiversity initiatives - increased involvement and financial contribution to community projects (Non-regulatory)</p>	<p><i>Benefits:</i></p> <ul style="list-style-type: none"> Encourages community initiatives. <p><i>Costs:</i></p> <ul style="list-style-type: none"> Cost of staff time or Council resources. Cost of any financial contribution.
<p>11. Provide free ecological assessments to landowners (Non-regulatory)</p>	<p><i>Benefits:</i></p> <ul style="list-style-type: none"> Encourages landowner interest and knowledge of biodiversity. <p><i>Costs:</i></p>

Tool	Costs & Benefits
	<ul style="list-style-type: none"> • Council staff time (if there is a Biodiversity Officer) or consultant ecologist's time to undertake ecological assessment.
12. Community 'Biodiversity Awards' (Non-regulatory) to celebrate successes	<p><i>Benefits:</i></p> <ul style="list-style-type: none"> • Celebrates successes. • Incentivises community initiatives. <p><i>Costs:</i></p> <ul style="list-style-type: none"> • Cost of awards and associated communications.

4.5. Recommended approach

Overall, this report recommends that Council improve its overall approach to maintaining indigenous biodiversity through a formal and coordinated biodiversity management programme. Utilising a combination of regulatory and non-regulatory tools is the best way to achieve this.

Improving the role of regulatory tools, such as the District Plan, is important, however this can come with its own set of challenges. Many other territorial authorities do not go this far, however this will likely change when the NPS IB comes into effect. There are broad range of non-regulatory tools available, as outlined in Table 2. If the recommendations of this report are adopted, staff will consider the relative merits of these tools in more detail in order to develop a recommended tool combination that can form a Council biodiversity management programme.

5. COMMUNITY VIEWS

5.1. Groups and Organisations

The potential role of a Biodiversity Officer at Council was discussed with Chris Brown, Manager Community & Recreation. It was determined that there would be a wide range of responsibilities for such a position. Possible biodiversity initiatives on Council reserves were also discussed.

The role of regulatory and non-regulatory tools for improving biodiversity was discussed with Chris Keeling, Team Leader Strategy & Planning at Environment Canterbury. Chris emphasised the importance of early engagement with key stakeholders such as Royal Forest and Bird Protection Society and Fish and Game.

5.2. Wider Community

As noted above, the community has shown strong support for protecting and enhancing the Waimakariri District's biodiversity via DDS and District Plan Review 'Issues and Options' consultation feedback in 2017.

6. IMPLICATIONS AND RISKS

6.1. Financial Implications

Once direction is given for what approaches the Committee would like to pursue, the budget implications can be estimated and outlined in a report for January 2019 in order to align with Annual Plan requirements.

It should also be noted that \$100,000 per annum for the next three years has been included in the Long Term Plan to assist implementation of the ZIPA.

6.2. Community Implications

The potential implications for the community would be a greater level of protection and enhancement of biodiversity values within the Waimakariri District. However there would potentially be rates increases associated with this. As noted above, the extent of any such increase can be estimated once direction is given on the various additional tools Council would like to pursue.

6.3. Risk Management

There are no risks associated with the recommendations of this report which do not in themselves bind the Council to a changed course of action.

6.4. Health and Safety

There are no health and safety implications associated with the recommendations of this report.

7. CONTEXT

7.1. Policy

This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

7.2. Legislation

As noted above, Section 6(c) & Section 31 of the Resource Management Act 1991 are relevant.

7.3. Community Outcomes

The following community outcomes are relevant to this matter:

- *There are areas of significant indigenous vegetation and habitats for indigenous fauna. Conservation and restoration of significant areas of vegetation and/or habitats is encouraged.*

7.4. Delegations

The District Planning and Regulation Committee has delegated authority for this matter as it relates to resource management.

Waimakariri ZIPA - Final version (26 November 2018)

Recommendation	Text	WDC role			WDC Funding					Notes
		Lead	Coordinate	Educate and advise	Option 1 Current LTP funding/ per annum (K) 19/20, 20/21	Option 2 Low WDC funding (K)	Option 3 Medium WDC funding (K)	Option 4 High WDC funding (K)	WDC Department	
1.1	That Environment Canterbury and the Waimakariri District Council support the Waimakariri Water Zone Committee to prioritise catchments and develop at least two Catchment Management Plans per year. These plans will provide specific catchment management goals and actions, priorities and monitoring programmes to support the implementation of ZIP Addendum recommendations.	N	Y	Y	0	0	50	100	All	Need to scope cost and scope of Catchment Management Plans first before funding
1.4	That Environment Canterbury implement a comprehensive waterway monitoring plan for the Waimakariri Water Zone, including: a. Monitoring water quality and ecological health of waterways. b. State of the Takiā monitoring, including the health and wellbeing of mahinga kai species. c. Measuring diversity and distributions of freshwater fish, invertebrates and aquatic vegetation throughout the zone. d. Identifying critical sources areas and measuring deposited sediment extent and character, particularly in spring-fed plains streams. e. Including important bathing sites in Schedule 6 of the Land and Water Regional Plan and assessing primary recreational water quality at: – Ashley River/Rakahuri at Gorge – Ashley River/Rakahuri at Rangiora-Loburn Bridge – Ashley River/Rakahuri at State Highway 1 – Kaiapoi River at Kaiapoi township – Pegasus Lake at Motu Quay – Cam River at Bramleys Rd f. Continuing to share information and integrating monitoring programmes between organisations, and promoting community-based monitoring of waterways (citizen science) and education initiatives g. Investigating the ecosystem health of hill country waterways to identify issues and catchment-specific management options as required. h. Supporting ongoing research into emerging contaminants, including endocrine disruptors, in the Waimakariri Water Zone. i. Investigating tidal waterbodies related to: I. Sediment deposition and salt water intrusion in: – Ashley River/Rakahuri – Saltwater Creek Estuary – Tidal reaches of Kaiapoi River, Saltwater Creek and Taranaki Creek II. Aquatic habitat shifts associated with climate change and sea level rise, including changes in īnanga spawning areas. j. Monitoring water quality and ecological health in urban streams and rivers in conjunction with Waimakariri District Council	Y - (j) only	Y	N	0	0	20	20	3 Waters	(J) only - Urban stream monitoring together with ECan. Covered under existing budgets?
1.5	That Environment Canterbury and Waimakariri District Council investigate the impact of commercial forestry practices and wilding pines on downstream freshwater ecosystems.	N	Y?	Y	0	0	0	0	3 Waters?	Required under the National Environmental Standard for Plantation Forestry?
1.6	That Environment Canterbury and the Waimakariri District Council support further research into factors that influence and/or control toxic cyanobacteria growth in the Ashley River/Rakahuri.	N	N	Y	0	0	0	0	3 Waters	Research would require substantial funding or a third party e.g. Cawthon Institute. It would be better to advocate for central government research
1.7	That Environment Canterbury, Waimakariri District Council, and Ngā Tūāhuriri review the waterway management and maintenance methods used in the Zone. The review which should be publicly reported, would include: a. Preparation of an inventory of the main methods, including chemicals and mechanical methods, used by public and private land and water managers in the Zone; b. The findings of recent work by EPA, MFE or other relevant New Zealand organisations reviewing the potential effects of the listed chemicals on waterway ecosystem health and of other methods; c. An assessment of the risk to soil biodiversity and waterway ecosystem health in the Zone from use of chemicals or other methods.	N	Y	Y	0	10	0	0	3 Waters	Could fund 140 hours by WDC Water Environment Advisor, or WDC contractor. ECan staff support/contractor funding required as well.

	That Environment Canterbury, Waimakariri District Council, Department of Conservation, Fish and Game, and Ngāi Tūāhuriri review the presence and effects of barriers to indigenous and introduced fish migration on waterways in the Zone in consultation with stakeholders and land owners. The review should: a. Identify locations where there are barriers to migrating indigenous fish and salmonids b. Consider the purpose of specific barriers (e.g. tidal control, flood management, drainage) c. Determine and prioritise options for removing or retrofitting barriers appropriate to different species at specific sites.	N	Y	Y	20	0	20	0	3 Waters	Fish passage projects e.g Trout barrier on North North Brook. Hunter River at Boundary Road weir
1.8	That Environment Canterbury and Waimakariri District Council ensure waterway management and maintenance activities minimise contaminant losses to downstream waterbodies and loss of aquatic life, while maintaining flood carrying capacity.	N	Y	Y	20	0	20	0	3 Waters	WDC under waterway consent. Funding for habitat creation, animal salvage works, erosion and sediment controls above BAU. ECan lead as the
1.14	That Environment Canterbury and the Waimakariri District Council support landowners with education and guidance on appropriate riparian set back distances and plantings for different situations.	N	N	Y	0	0	10	0	3 Waters	Publication material production and printing-provided by ECan. BAU with 70 hours Water Environment Advisor/ Biodiversity Officer
1.18	That Environment Canterbury and Waimakariri District Council work with the forestry sector and MPI to: a. Identify high risk periods over the next 5 years when earthworks and harvesting will take place within the Waimakariri Water Zone, so resources can be targeted to ensure potential environmental effects are mitigated or avoided. b. ensure that implementation of the NES is effective within the zone.	N	Y	Y	0	0	20	0	Planning?	With ECan / External Contractor and work with forestry industry?
1.19	That Ngāi Tūāhuriri, Te Rūnanga o Ngāi Tahu, Environment Canterbury, and Waimakariri District Council work together to identify areas and waterways of high cultural value and options for protecting those values including providing for mahinga kai and the protection of wāhi tapu and wāhi taonga within the Waimakariri Water Zone.	N	Y	Y	0	0	0	0	External	Already done? State of the Takiwa, Wahi Tapu and Wahi Taonga reports from MKT. If needing more, get MKT to scope price.
1.20	That Environment Canterbury and the Waimakariri District Council recognise the Ashley River/Rakahuri for its important natural landscape values, braided river characteristics, and braided river bird (nesting and feeding) habitat.	N	N	Y	0	0	0	0	Planning, External	through Biodiversity Officer role with 30 hours/year? Braided river work currently funded by ECan. WDC Bylaw through Policy and Planning to
1.24	That Environment Canterbury and the Waimakariri District Council recognise the Upper Ashley River/Rakahuri catchment, including Lees Valley, for its high natural landscape and ecosystem values, and protect its waterways from degradation by: • avoiding increased contaminant losses to waterways. • preventing the removal or degradation of any existing wetlands. • preventing the expansion of wilding pines.	N	Y	Y	0	0	20	0	Planning, Green Space, 3 Waters	Protect wetlands as SNAs in District Plan? BAU with 140 hours Water Environment Advisor/ Biodiversity Officer for compliance
1.25	That Environment Canterbury and the Waimakariri District Council initiate public education and awareness campaigns aimed at improving the water quality and health of urban waterways.	Y	Y	Y	0	20	20	20	3 Waters, External	Urban waterway education (stormwater incentives e.g. water tanks for industries maybe). With ECan Stormwater Superheros campaign/ Community
1.26	That Environment Canterbury and the Waimakariri District Council support projects that have enduring benefits for improved stream health, Ngāi Tūāhuriri values, and improved recreational amenity in the North Waimakariri River tributaries.	N	Y	Y	40	30	60	50	All	Fencing, walkways on WDC land. Biodiversity and stream health projects.
1.27	That Environment Canterbury and the Waimakariri District Council prioritise on-the-ground projects in the Cam River/Ruataniwha and Kaiapoi/Silverstream, including but not limited to: • Reducing and removing sources and legacies of deposited fine sediment. • Improving the quality of habitat for mahinga kai. • Removing barriers to native fish passage.	N	Y	Y	10	0	0	0	3 Waters	Kaiapoi river plantings. Supplemented by funding from Cam River Enhancement Fund possible. Linkage to Catchment Management Plans and Waimakariri Biodiversity Action Plan
1.28	That Environment Canterbury and Waimakariri District Council investigate options to fund plants for riparian or wetland planting on land managed in accordance with an FEP or a Management Plan. (see also Rec 2.9)	N	N	Y	0	0	0	10	External	Support Environment Canterbury to find funding-could be external funding.
2.1	The zone committee recommends that Environment Canterbury and the Waimakariri District Council work with Ngāi Tūāhuriri, landowners, agencies and stakeholders to integrate indigenous biodiversity in a whole of waterway, Ki Utaki Tai, approach to managing catchments in the Waimakariri Water Zone.	N	Y	Y	0	0	0	0	Planning	Captured in District Plan and Catchment Management Plans

	The Waimakariri Water Zone Committee endores and supports the implementation of the Canterbury Regional Biodiversity Strategy as it applies in the Waimakariri Water Zone. In particular: a. The zone committee endores the vision, goals, targets, and actions of Canterbury Regional Biodiversity Strategy; b. The zone committee recommends that Environment Canterbury support the appointment of a regional co-ordinator for the Canterbury Regional Biodiversity Strategy c. The zone committee recommends that Waimakariri District Council increase its biodiversity capability and capacity	Y (c) only	Y	Y	0	110	130	0	Green Space, 3 Waters	1 X Biodiversity Officer at 80k/yr plus 30K overheads, 1 X Water Environment Advisor (new role) at 90K plus 40K overheads
2.2										
2.3	The zone committee recommends implementing the Canterbury Biodiversity Strategy, at the water zone level, with a Waimakariri Biodiversity Action Plan to enable the following actions: <ul style="list-style-type: none">• Developing and illustrating a vision for indigenous biodiversity (and related values) across the zone• Mapping indigenous habitats, vegetation and, as appropriate, threatened plant and animal species in the zone• Identifying actions for protection and enhancement of indigenous habitats, vegetation types and plant and animal species• Identifying priority sites, waterways, springheads, wetlands, reaches or locations for protection• Identifying priority habitats and vegetation for management actions• Setting targets for biodiversity protection and enhancement in the zone• Working with willing landowners to action indigenous biodiversity protection and enhancement projects• Developing strategies and actions that incentivise indigenous biodiversity protection and enhancement on private land.	N	N	Y	0	0	10	0	External	No support for Waimakariri Biodiversity Action Plan until scoped further?
2.4	That Environment Canterbury and the Waimakariri District Council consider climate change and sea level rise impacts on indigenous biodiversity in the Waimakariri Water Zone.	N	N	Y	0	10	0	0	3 Waters	Budget for reporting. BAU with Water Environment Advisor/ Biodiversity Officer
2.5	That Environment Canterbury and the Waimakariri District Council integrate indigenous biodiversity and instream ecological values into councils' planning and operational activities, including in work carried out by consultants or contractors.	N	Y- biodiversity only?		0	10	0	0	3 Waters	Ecology surveys to assist planning and operational. Relates to rec. 1.7
2.6	That Environment Canterbury and Waimakariri District Council investigate further ways to protect braided river-bed breeding bird habitat and bird populations from the impacts of vehicles.	N	N	Y	0	0	0	0	Policy, Planning	BAU Planning tools e.g. a Bylaw
2.7	That Environment Canterbury, Waimakariri District Council and the Department of Conservation work with, and support, Ngā Tūāhuriri Fenton Reserve Trustees in the Land and Water Solutions Programme project to reconnect coastal ecosystems between the Lower Ashley River/Rakahuri, the estuary and Te Aka Aka Fenton Reserve to provide for mahinga kai benefits for Ngā Tūāhuriri Rūnanga.	N	N	Y	0	0	0	0		Support with scope for funding later
2.8	That Environment Canterbury and the Waimakariri District Council work with community groups to address indigenous biodiversity protection and enhancement by means such as: <ul style="list-style-type: none">• Provision of administrative support;• Provision of financial assistance;• Identification of funding sources;• Provision of technical advice; and• Endorsement of projects.	N	Y- fund	Y	0	0	20	20	Green Space, 3 Waters	Funded through Rec 1.26 partially already
2.9	That Environment Canterbury and the Waimakariri District Council work with Ngā Tūāhuriri, Department of Conservation and other agencies to assist landowners/land managers by: <ul style="list-style-type: none">• Establishing a biodiversity advisory service (e.g. advice on appropriate plant sources or riparian planting)• Advising on indigenous biodiversity management as part of farm management planning within catchment plans• Publicising positive biodiversity actions, events and news• Promoting and raising awareness of biodiversity values and protection or enhancement opportunities• Investigating the development of a system to ensure appropriate sources of plant material for revegetation and enhancement projects• Promoting and advising on appropriate wetland habitat and waterway protection	N	Y	Y	0	0	10	10	Green Space, 3 Waters	Funded through Rec 2.2 already. Publication materials 10K. 70 hours (10K) Water Environment Advisor/ Biodiversity Officer

	That Environment Canterbury and the Waimakariri District Council explore consenting options to enable landowners to undertake indigenous biodiversity initiatives including, but not restricted, to: • habitat protection and enhancement • wetland creation or restoration • predator control of high values sites • revegetation projects	N	Y	Y	0	0	0	50	Planning, ECan Planning	Planning tools (green consenting) e.g. permitted activities, and/or WDC provides access to global consent in partnership (50K)
2.10										
2.11	The zone committee recognises the importance of the tidal reaches of waterways as īnanga habitat and recommends that Environment Canterbury and the Waimakariri District Council support the development of habitat at īnanga spawning sites and riparian planting.	N	Y	Y	10	0	0	0	3 Waters	One site annually
2.12	The Waimakariri Water Zone Committee acknowledges the Ashley Estuary (Te Aka Aka) as a taonga within the Waimakariri Water Zone; and acknowledges the current project in relation to the Fenton Reserves (see Rec 2.7); and recommends the establishment of a working group comprising representatives of Ngāi Tūāhuriri, Environment Canterbury, Waimakariri District Council, Department of Conservation, Fish and Game and other agencies to develop a strategy and programme to protect and enhance Ngāi Tūāhuriri, biodiversity and recreational values in the face of current pressures, climate change and rising sea levels.	N	Y	Y	0	0	0	0	All, external	BAU Biodiversity Officer support of 70 hours/year. Could overlap with the existing Northern Pegasus Bay Bylaw Advisory Group - but this group does not have a strong biodiversity focus.
3.16	That Environment Canterbury, Waimakariri District Council and Canterbury District Health Board work together to: a. develop a programme for testing and reporting of water quality in private drinking water supply wells, and b. raise awareness of health impacts from high nitrates in drinking water	N	Y	Y	0	10	0	0	3 Waters	Funding could be provided to ECan to implement, or ECan gave funding to WDC to implement.
3.17	Environment Canterbury and Waimakariri District Council should consider provision of guidance and information regarding a minimum depth for new drinking water supply wells and well head security, to provide better water quality protection.	N	N	Y	0	5	0	0	3 Waters	BAU or 5K for Water Asset Manager and Comms to produce pamphlet and technical advice.
3.25	The Environment Canterbury and Waimakariri District Council explore a funding stream and management structure to deliver the significant improvements in stream health and biodiversity, and mahinga kai diversity and abundance for the Waimakariri Water Zone over the next 5-10 years. The option of Targeted Rating Districts should be explored by Environment Canterbury. Industry and government funding partners should also be sought.	N	Y	Y	0	0	0	0	Green Space, 3 Waters	Detailed in other Recs. BAU hours for Water Environment Advisor and Biodiversity Officer.
4.12	That any changes to the water race network (e.g. race closure or piping) in the Waimakariri Water Zone be subject to wider consideration by Environment Canterbury and Waimakariri District Council, given the existing benefits of race losses in diluting nitrate concentrations, and supporting groundwater levels and stream flows.	Y	Y	Y	0	0	0	0	3 Waters	U&R report - no changes to considerations and AEE for ecological
1.2	That Environment Canterbury and the Waimakariri Water Zone Committee support industry groups to provide sector, and catchment-specific support to landowners implementing Good Management Practice (GMP), including: a. sub-catchment groups working to reduce contaminant losses. b. increasing education and awareness of the Farm Environment Plan audit and accreditation process amongst wider community. c. educating and supporting landowners to protect catchment-specific ecological, biodiversity and Ngāi Tūāhuriri values by: – Preparing catchment management plans to implement on-the-ground waterway remediation projects at sites identified as priorities. – Providing workshops in vulnerable hotspots (i.e. high value or high contaminant loss) areas.	N	N	N	0	0	0	0		
1.3	That Environment Canterbury engages with small block owners to increase awareness and uptake of good management practices.	N	N	N	0	0	0	0		
1.9	That Environment Canterbury work with Ngāi Tūāhuriri and Department of Conservation to identify the types of activities and controls needed to protect the aquatic habitat of the threatened Canterbury mudfish and amend plan provisions to ensure protection at key sites in waterbodies including the following: • Tutaepatu Lagoon • Taranki Creek • Eyre River tributaries • Coopers Creek tributaries • Mounseys Stream tributaries	N	N	N	0	0	0	0		

	That Environment Canterbury work with Ngāi Tūāhuriri and Department of Conservation to identify the locations and types of activities and controls needed to protect the habitat of important indigenous species including but not limited to:								
1.10	• Freshwater crayfish/kōura • Freshwater mussels/kākahi • Lamprey/kanakana	N	N	N	0	0	0	0	
1.11	That Environment Canterbury support catchment management plans that implement on the ground projects targeted at rehabilitating the wetland, freshwater or estuarine habitats of threatened species or species of high value to Ngāi Tūāhuriri.	N	N	N	0	0	0	0	
1.12	That Environment Canterbury support further assessment of the issue of lost ecological and cultural values resulting from waterway realignments for consented and permitted activities.	N	N	N	0	0	0	0	
1.13	That Environment Canterbury promotes actions that improve bank stabilisation and reduce sediment inputs to spring-fed plains waterways.	N	N	N	0	0	0	0	
1.15	That Environment Canterbury strengthen the LWRP rules on stock exclusion to exclude intensively farmed stock from: • All springheads that permanently or intermittently contain water; and • All open drains and other artificial watercourses, (including but not restricted to irrigation canals and water races) with surface water in them that discharge into a stream, river or lake.	N	N	N	0	0	0	0	
1.16	That Environment Canterbury strengthen the LWRP rules on stock exclusion to exclude non-intensively farmed cattle and deer on the plains from: • All waterways and their tributaries, • All springheads that permanently or intermittently contain water; and • All open drains and other artificial watercourses, (including but not restricted to irrigation canals and water races) with surface water in them that discharge into a stream, river or lake.	N	N	N	0	0	0	0	
1.17	That Environment Canterbury educate horse owners to exclude grazing horses from access to waterways.	N	N	N	0	0	0	0	
1.21	That Environment Canterbury prioritise on the ground projects for Taranaki Creek, given its significant value to Ngāi Tūāhuriri and proximity to Kaiapoi Pā, particularly those related to: • reducing and removing sources and legacies of deposited fine sediment • improving the quality of habitat for mahinga kai species • removing barriers to native fish passage • removal of invasive fish species	N	N	N	0	0	0	0	
1.23	That Environment Canterbury investigate funding for projects to address key environmental issues in consultation with LINZ and Department of Conservation for the Ashley River/Rakahuri, particularly the removal of woody weeds above the confluence with the Okuku River.	N	N	N	0	0	0	0	
2.13	That Environment Canterbury undertake a programme of investigations and monitoring in the Ashley Estuary (Te Aka Aka) to provide information for the deliberations of the working group identified in Rec 2.12 and the group implementing Rec 2.7. The programme should include: • Determination of eutrophication susceptibility. This requires determining the flushing potential, the dilution potential, nutrient inputs and nutrient load susceptibility • Development and implementation of a programme to assess current trophic state and to monitor trophic state over time (important considerations are location of sites, parameters to be measured, frequency of sampling, seasonality of sampling) • Annual mid-summer broad-scale monitoring to assess the occurrence of macro-algae. • Monthly water quality monitoring for ecosystem health at the site near the estuary mouth. • Five-yearly monitoring of sediment quality at two sites – present site adjacent to Saltwater Creek and downstream from SH1 and a site in proximity to where Taranaki Creek flows into the Ashley Estuary (Te Aka Aka). • Monitoring of cockles and pipis from sites in the estuary to assess contaminant levels in shellfish flesh. • Establish stations at various locations in the estuary and begin to monitor sedimentation. • Annual monitoring of the sediments and macrobiota at one site within the estuary. • Baseline surveys of the fish and bird populations of this estuary.	N	N	N	0	0	0	0	

3.1	That Environment Canterbury reflect in the Waimakariri section of the Land and Water Regional Plan a staged approach to reduce nitrate losses over time in the Waimakariri Water Zone.	N	N	N	0	0	0	0		
3.2	Two water quality management areas are proposed; a Nitrate Priority Management Area and a Runoff Priority Management Area.	N	N	N	0	0	0	0		
3.3	The zone committee recommend that farmers in the Runoff Priority Management Area are not required to achieve beyond Baseline GMP reductions. The expectation is that landowners in this area will focus on minimizing overland flow of contaminants such as sediment, phosphate, nitrate and pathogens.	N	N	N	0	0	0	0		
3.4	The Waimakariri Water Zone Committee proposes Baseline GMP as the starting point for nitrate reductions from 1 July 2020 (at the onset of expiry of land use consents). Baseline GMP is the average nitrogen loss rate, estimated by the Farm Portal, for the farming activity carried out during the baseline period of 2009-2013, if operated at good management practice.	N	N	N	0	0	0	0		
3.5	Dairy in the Nitrate Priority Management Area should achieve a 15% beyond Baseline GMP reduction by 2030.	N	N	N	0	0	0	0		
3.6	All other consented farming activities in the Nutrient Priority Management Area should achieve a 5% beyond Baseline GMP reduction by 2030.	N	N	N	0	0	0	0		
3.7	The zone committee encourage industry and local authorities to provide incentives to achieve nutrient reductions greater than the recommended reductions in this ZIP Addendum.	N	N	N	0	0	0	0		
3.8	Unless amended in a Waimakariri plan review process, the nitrate loss reductions in recs 3.5 and 3.6 above should be repeated until: a. the nitrate reductions necessary to achieve the plan limits have been met, or b. the science information available shows the plan limit is likely to be met in the future without the need for further reductions.	N	N	N	0	0	0	0		
3.9	The zone committee recommends the plan change includes policy criteria that allow for and guides consideration of extensions to the 2030 target date for beyond baseline GMP reductions in exceptional circumstances.	N	N	N	0	0	0	0		
3.10	Investigate and implement a nitrate “floor” to exclude low nitrogen emitters from having to make further reductions in nitrogen loss beyond Baseline GMP within the Nitrate Priority Management Area.	N	N	N	0	0	0	0		
3.11	The Waimakariri Water Zone Permitted Activity winter grazing allowances should be reduced across the whole Waimakariri Water Zone to minimise the potential for further nitrate increases in streams and groundwater. The following winter grazing PA property size thresholds should be implemented: Property sizes: <ul style="list-style-type: none">• less than 5 ha do not require consent for winter grazing;• Between 5 ha and 100ha can use up to 5ha of property for winter grazing without triggering a consent requirement; and• Between 101ha and 1,000 ha can use up to 5% of property size for winter grazing without triggering a consent requirement; and• greater than 1,000 ha can use up to 50 ha for winter grazing without triggering a consent requirement.	N	N	N	0	0	0	0		
3.12	That Environment Canterbury runs an education campaign (including workshops) promoting good management practice, and proactively checks progress.	N	N	N	0	0	0	0		
3.13	The zone committee recommends that the Waimakariri sub-region plan boundary in Section 8 of Land and Water Regional Plan is amended to incorporate land bordering the Waimakariri River.	N	N	N	0	0	0	0		
3.14	That Plan Change 5 nutrient allocation zone rules for “red zones” are used as a foundation for managing nutrients across the whole Waimakariri Water Zone, combined with amendments to the permitted activity winter grazing consent thresholds, and additional nitrate loss reductions in the Nitrate Priority Management Area described in other recommendations.	N	N	N	0	0	0	0		
3.15	That Environment Canterbury reflect in the Waimakariri section of the Land and Water Regional Plan the nitrate limits in the drinking water supply wells of Waimakariri Water Zone as set out in the table below. 1. Private water supply well areas are shown in Map X5, appended.	N	N	N	0	0	0	0		
3.18	That Environment Canterbury reflect in the Waimakariri section of the Land and Water Regional Plan the nitrate limits in the streams and rivers of the Waimakariri Water Zone as set out in the tables below.	N	N	N	0	0	0	0		

	That Environment Canterbury makes sufficient resources available to enable significant improvements to continue to be made in the understanding of the Waimakariri Water Zone groundwater system and its connection with the Christchurch aquifer and spring-fed streams. The outcome of this work should be an updated assessment of the direction of travel and likely future nitrate concentrations provided to the committee, partners and stakeholders in 2025. The key areas for improvement of understanding include: a. Lag times between land use change and nitrate concentration changes in wells and spring-fed streams b. Past and present rates of nitrate discharge to ground within the zone and trends in nitrate concentrations c. Transport pathways between land and key receptors such as spring-fed streams, community water supply wells and the Christchurch aquifer system, so that recharge zones can be defined with more certainty d. Nitrate attenuation e. The effectiveness of actions (regulatory and non-regulatory) being taken. f. Nitrate discharges to Ashley Estuary (Te Aka Aka) g. Nitrate concentrations in private water supply wells	N	N	N	0	0	0	0	
3.19									
3.20	That Environment Canterbury commences a review of the Waimakariri section of the Land and Water Regional Plan in 2030 to incorporate new information and understanding of: how social, cultural, economic and environmental systems have responded; and whether we are on track to meet the plan nitrate limits.	N	N	N	0	0	0	0	
3.21	That farming land use consents are granted to have common expiry dates to align with plan review stages.	N	N	N	0	0	0	0	
3.22	That Environment Canterbury works with the Waimakariri community and Ngā Tūāhuriri Rūnanga, to respond accordingly to new information, emerging opportunities and technology, and review the Waimakariri section of the Land and Water Regional Plan at least once every 10 years.	N	N	N	0	0	0	0	
3.23	That Environment Canterbury continues to work with sector and research groups to encourage the further development and implementation of tools and techniques to reduce nitrate leaching.	N	N	N	0	0	0	0	
3.24	That the Zone Committee support the investigation and assessment of on-the-ground actions to address nitrate issues (for example, Managed Aquifer Recharge, targeted stream augmentation, woodchip bioreactors, wetland creation, and water storage), including: a. That Environment Canterbury undertake a zone-wide study to assess the feasibility, costs and measures required to implement appropriate actions (to be completed by the end of 2019) to inform the development of sub-catchment management plans. b. That the Waimakariri section of the Land and Water Regional Plan should be assessed to ensure that these activities are enabled where appropriate in the Waimakariri Zone.	N	N	N	0	0	0	0	
4.1	In over-allocated Surface Water Allocation Zones, that Environment Canterbury uses the methods set out in Rec 4.2 to reduce and where possible eliminate the over-allocation by 2032.	N	N	N	0	0	0	0	

	That Environment Canterbury use the following suite of options to recover over-allocation, prioritising those options which reduce paper allocation.							
4.2	a. Prohibit any abstraction, other than for community drinking water supplies, where a limit has, or would be, exceeded. b. Enable the substitution of existing surface water or stream depleting groundwater takes with deep groundwater in over-allocated catchments provided there is no increase in the rate of take or annual volume. c. In the case of site to site water transfers i. Prohibit the transfer of any unexercised water permit, and/or of any unused water from the previous 5 years, based on actual usage records. ii. For transfers of water within over-allocated catchments 50% of the transferred water (rate of take and/or annual volume) is to be surrendered unless the water is to be used for a community water supply. iii. Retain Land and Water Regional Plan Section 8 policy that there are no transfers of river water takes within the Ashley River/Rakahuri catchment above State Highway 1 d. That Environment Canterbury identifies water permits that have not been exercised in the past five years and works with consent holders to seek their surrender. e. Lapsed consents i. For any water permit that lapses, is surrendered, or expires and is not renewed, the rate of take and/or annual volume is not reallocated ii. Lapse dates on unexercised consents are prevented from being extended except where exceptional extenuating circumstances are demonstrated. f. Past water use i. The Plan Change includes policy direction that records of past water use are assessed and considered when determining an efficient allocation for replacement consents in accordance with Schedule 10 ii. That Environment Canterbury reports annually on how metered usage compares to consented allocation within the Waimakariri Water Zone. g. Region-wide policy in the Land and Water Regional Plan for reducing over allocation by adjusting the allocation on replacement consents applies throughout the whole of the Waimakariri Water Zone, not only within the Ashley River/Rakahuri catchment.	N	N	N	0	0	0	0
4.3	That Environment Canterbury applies LWRP requirements for partial restrictions and requires that pro-rata restrictions be applied to all surface water takes, and stream-depleting groundwater takes which require a minimum flow in the zone.	N	N	N	0	0	0	0
4.4	That Environment Canterbury adopt the methodology for classifying stream-depleting groundwater takes laid out in Schedule 9 of the Land and Water Regional Plan.	N	N	N	0	0	0	0
4.5	That Environment Canterbury remove B allocation blocks from all spring-fed rivers unless further investigations indicate that sustainable B blocks can be supported.	N	N	N	0	0	0	0
4.6	That Environment Canterbury extend existing SWAZ and/ or introduce new SWAZ to ensure that there are no gaps in the environmental flow regime framework which manages the Waimakariri Water Zone.	N	N	N	0	0	0	0
4.7	In currently under-allocated catchments, that Environment Canterbury cap the allocation at the currently allocated amount, so no further surface water can be allocated.	N	N	N	0	0	0	0
4.8	That Environment Canterbury support water users to set up water user groups such that the available water resource can be best managed, particularly in times of restriction	N	N	N	0	0	0	0
4.9	Environment Canterbury investigate how takes for community supplies (and, back-up supplies) are incorporated into the allocation block system, such that they do not unnecessarily impact on the reliability of takes by other users.	N	N	N	0	0	0	0
4.10	The zone committee will prioritise over-allocated catchments in its catchment management plan programme and actively promote the use of non-statutory mitigations to offset the effects of over-allocation.	N	N	N	0	0	0	0
4.11	That Environment Canterbury ensure: a. The Plan Change to section 8 of the Land and Water Regional Plan (Waimakariri) includes policies and rules that adequately provide for augmentation of water bodies, including the Cust River, for environmental benefit. b. Ngā Tūāhuriri Rūnanga are actively involved in any decision-making with other relevant stakeholders regarding water used in the zone for augmentation purposes.	N	N	N	0	0	0	0
4.13	The zone committee recommends that Environment Canterbury allocates resources to improve monitoring of permitted surface water irrigation takes for compliance with limits in the Land and Water Regional Plan.	N	N	N	0	0	0	0

	That in any year it chooses within the date range below, Environment Canterbury considers, prioritises and may undertake a review of water permits to align with any revised environmental flow and allocation regime following the Waimakariri plan change becoming operative: a. Ashley River/Rakahuri Catchment – between 2026 and 2027 b. Northern Waimakariri Tributaries – between 2028 and 2029	N	N	N	0	0	0	0		
4.14		N	N	N	0	0	0	0		
4.15	For the Ashley River/Rakahuri B and C blocks, that Environment Canterbury designate an allocation for mahinga kai enhancement purposes equal to 50% of the water available within the existing block system at plan notification. This allocation would be included in, and subject to, the prevailing management rules for that block (minimum flow and restriction regime).	N	N	N	0	0	0	0		
4.16	That Environment Canterbury adopt the minimum flow and allocation recommendations in Table 4.5	N	N	N	0	0	0	0		
4.17	For the Cam River/Ruataniwha A block, that Environment Canterbury designate an allocation for mahinga kai enhancement purposes equal to 50% of the water available within the existing block system at plan notification. This allocation would be included in, and subject to, the prevailing management rules for that block (minimum flow and restriction regime).	N	N	N	0	0	0	0		
4.18	That Environment Canterbury adopt the minimum flow and allocation recommendations in Table 4.6.	N	N	N	0	0	0	0		
4.19	In all zone committee proceedings and documentation, the local naming convention is to be adopted: a. The term 'Silverstream' will be used to define the section of watercourse from the springheads to the three streams confluence. b. The term 'Kaiapoi River' will be used to define the section of watercourse from the three streams confluence to the Waimakariri River confluence.	N	N	Y-acknowledged	0	0	0	0		
4.20	Environment Canterbury investigate further actions necessary to reverse the degraded features of the water quality and habitat of the 'Kaiapoi River' that detract from its vision of being 'New Zealand's best Rivertown'.	N	N	N	0	0	0	0		
4.21	That Environment Canterbury, along with Ngāi Tūāhuriri, Waimakariri Irrigation Limited and other stakeholders, investigate the potential to create an enduring flow regime for the Cust River. This is to be given effect in the upcoming Waimakariri sub-regional plan change, as part of the minimum flow and allocation recommendations, detailed in Table 4.6, under Rec 4.18. The regime would provide for improved stream health and habitat availability, noting that: a. 230 L/s of allocation from the Waimakariri River is already reserved for such purposes in the Waimakariri River Regional Plan and b. Such a flow regime may result in an increased minimum flow.	N	N	N	0	0	0	0		
4.22	That Environment Canterbury investigate a sustainable B allocation limit for the Cust River prior to plan notification.	N	N	N	0	0	0	0		
5.1	That the Waimakariri Water Zone Committee proposes within the Kowai Groundwater Allocation Zone to: a. cap the current allocation volume, b. allow an extra 10% (based on current allocation volume) for additional groundwater takes that are not stream-depleting and c. provide an allocation for the substitution of existing surface water and stream depleting groundwater takes for non-stream depleting groundwater, provided i. the existing take is surrendered and ii. the new groundwater take is abstracted from the same property as the surrendered surface water or stream depleting groundwater take, and there is no increase in the proposed rate of take or annual volume.	N	N	N	0	0	0	0		
5.2	That the Waimakariri Water Zone Committee proposes within the Ashley Groundwater Allocation Zone to: a. cap the current allocation volume, b. allow an extra 10% (based on current allocation volume) for additional groundwater takes that are not stream-depleting and c. provide an allocation for the substitution of existing surface water or stream depleting groundwater takes for non-stream depleting groundwater, provided i. the existing take is surrendered and ii. the new groundwater take is abstracted from the same property as the surrendered surface water or stream depleting groundwater take, and there is no increase in the proposed rate of take or annual volume.	N	N	N	0	0	0	0		

	That the Waimakariri Water Zone Committee proposes within the Loburn Groundwater Allocation Zone to: a. cap the current allocation volume, b. allow an extra 10% (based on current allocation volume) for additional groundwater takes that are not stream-depleting and c. provide an allocation for the substitution of existing surface water or stream depleting groundwater takes for non-stream depleting groundwater takes, provided i. the existing take is surrendered and ii. the new groundwater take is abstracted from the same property as the surrendered surface water or stream depleting groundwater take, and there is no increase in the proposed rate of take or annual volume.	N	N	N	0	0	0	0	
5.3	That the Waimakariri Water Zone Committee proposes within the Cust Groundwater Allocation Zone to: a. cap the current allocation volume, b. allow an extra 10% (based on current allocation volume) for additional groundwater takes that are not stream-depleting and c. provide an allocation for the substitution of existing surface water or stream depleting groundwater takes for non-stream depleting groundwater, provided i. the existing take is surrendered and ii. the new groundwater take is abstracted from the same property as the surrendered surface water or stream depleting groundwater take, and there is no increase in the proposed rate of take or annual volume.	N	N	N	0	0	0	0	
5.4	That the Waimakariri Water Zone Committee proposes within the Eyre Groundwater Allocation Zone to: a. cap the current allocation volume, and b. provide an allocation for the substitution of existing surface water or stream depleting groundwater takes for non-stream depleting groundwater, provided i. the existing take is surrendered and ii. the new groundwater take is abstracted from the same property as the surrendered surface water or stream depleting groundwater take, and there is no increase in the proposed rate of take or annual volume.	N	N	N	0	0	0	0	
5.5	That the Waimakariri Water Zone Committee propose to create a Lees Valley Groundwater Allocation Zone. Within the proposed Lees Valley Groundwater Allocation Zone: cap the current allocation volume, allow an extra 10% (based on current allocation volume) for additional groundwater takes that are not stream-depleting.	N	N	N	0	0	0	0	
5.6	That Environment Canterbury extend the Groundwater Allocation Zone boundaries further inland, to the edge of surface water catchment boundary.	N	N	N	0	0	0	0	
5.7	That Environment Canterbury allocates resources to improve monitoring of permitted groundwater irrigation takes for compliance with limits in the LWRP. The proposed GAZ boundaries are shown on Map X4.	N	N	N	0	0	0	0	
5.8					100	205	410	280	TOTAL (\$K per year)
					100	305	715	995	Accumulative TOTAL (\$K per year)
					\$ 4.51	\$ 13.77	\$ 32.27	\$ 44.91	Rating impact per average rateable property
					0.23%	0.70%	1.64%	2.29%	% of rates increase (based on 2019 Financial Year)