

TIMARU



DISTRICT COUNCIL
Te Kaunihera ā-Rohe
o Te Tihi o Maru



YOUR PLAN OUR FUTURE
TIMARU DISTRICT PLAN REVIEW

Drinking Water S.32

May 2022



YOUR PLAN OUR FUTURE
TIMARU DISTRICT PLAN REVIEW
LAND USE PLAN

Timaru District Council

Section 32 Report

Drinking Water Protection Overlay

May 2022

Contents

1	Drinking Water Protection	1
1.1	Introduction	1
1.2	Community / Stakeholder / Iwi Engagement	1
1.3	Strategic directions	1
1.4	Statutory and Planning Context	2
1.5	Problem definition	9
2	Approach to Evaluation	12
2.1	Scale and significance	12
2.2	Approach to Protecting Drinking Water	14
2.3	Quantification of Costs and Benefits	15
2.4	Choice of Evaluation Method(s)	15
3	Evaluation of Objective	15
3.1	Proposed objective	15
3.2	Evaluation of objective	15
4	Identification of Options	17
4.1	Option 1: Status Quo	17
4.2	Option 2: High level consideration approach	17
4.3	Option 3: Direct protection approach	18
5	Evaluation of Options	18
5.1	Evaluation tables	18
5.2	Risk of Acting or Not Acting	25
6	Preferred Option	25

1 Drinking Water Protection

1.1 Introduction

This report provides an assessment of the proposed provisions relating to the Drinking Water Protection Chapter of the proposed Timaru District Plan against section 32 of the RMA.

This report sets out an overview of the provisions in the Operative District Plan that relate to drinking water protection; the way in which other District Plans address this topic; the policy framework that relates to drinking water protection, and an evaluation of the proposed objectives and options against section 32 of the RMA.

1.2 Community / Stakeholder / Iwi Engagement

Internal Council departments, the Regional Council, and nga rūnanga were engaged via the District Plan review technical working group. An initial meeting was held to discuss the overall policy framework and approach, with a second meeting held to agree on the finer details of the provisions.

The community are given the opportunity to provide submissions on the proposed provisions through the publication of the Draft District Plan in October 2020. Very little feedback on the topic was received, with only four submitters raising 9 feedback points. The feedback can be summarised as follows:

- General support of the provisions from the South Canterbury District Health Board and the Canterbury Regional Council.
- There was support that the drinking water protection areas are mapped but that a formal plan change process should be used since the mapping of the areas will introduce additional restrictions on land use.
- DWP-P1 was opposed as it provides the policy position for inclusion of areas within drinking water protection areas, without providing clarity on the necessary process for doing so.
- Clarity is sought on the nature and type of activities that the rules affect, noting that the rules only appear to cover camping grounds and quarrying.
- It needs to be clear that the provisions do not duplicate existing controls under the Land and Water Regional Plan.

1.3 Strategic directions

The following strategic directions are particularly relevant to the Drinking Water Protection topic:

UFD-O1 Settlement Patterns

A consolidated and integrated settlement pattern that:

- i. efficiently accommodates future growth and capacity for commercial, industrial, community and residential activities, primarily within the urban areas of the Timaru township, and the existing townships of Temuka, Geraldine, and Pleasant Point;
- ii. is integrated with the efficient use of infrastructure;
- iii. reduces adverse effects on the environment, including energy consumption, carbon emissions and water use;
- iv. protects drinking water supplies from the adverse effects of subdivision, use and development;

- v. is well-designed, of a good quality, recognises existing character and amenity, and is attractive and functional to residents, business and visitors;
- vi. avoids areas with important natural, cultural and character values;
- vii. minimises the loss of versatile soils;
- viii. enables kāika nohoaka to occur on ancestral lands;
- ix. avoids locating new growth in areas where the impacts from natural hazards are unacceptable or which would require additional hazard mitigation; and
- x. controls the location of activities, primarily by zoning, to minimise conflicts between incompatible activities and avoid these where there may be significant adverse effects.

SD-O8 Infrastructure

Across the District:

- i.;
- ii. the provision of new network infrastructure is integrated and co-ordinated with the nature, timing and sequencing of new development;
- iii. drinking water supplies are protected from the adverse effects of subdivision, use and development;
- iv.

Controlling the location of activities to minimise conflicts between incompatible activities is relevant because there may be instances where particular activities are not appropriate in proximity to drinking water supplies as they may compromise the safety of the supply of drinking water.

1.4 Statutory and Planning Context

District plans are part of a hierarchy of RMA policy and planning instruments. The RMA prescribes how district plans are to align with other instruments, and this is summarised in the table below:

Statutory document	Alignment requirement for Proposed District Plan	Comment
NZCPS	Give effect to	Implement according to the applicable policy statement's intentions.
NPS/NES		
CRPS		
Regional Coastal Environment Plan	Not be inconsistent with	Are the provisions of the Proposed DP compatible with the provisions of these higher order documents? Do the provisions alter the essential nature or character of what the higher order documents allow or provide for?
Canterbury Land and Water Plan		

Specific management plans and strategies prepared under other legislation	Have regard to	Give genuine attention and thought to the matter As above.
Adjoining district plans: <ul style="list-style-type: none"> Ashburton District Plan Waimate District Plan Westland District Plan Mackenzie District Plan 	Have regard to the extent to which there is a need for consistency	
Iwi Management Plan of Kati Huirapa Te Whakatau Kaupapa Ngai Tahu Resource Management Strategy for the Canterbury Region Water Services Act 2021	Take into account Have regard to	Address the matter and record That has been done in our decision; but weight is a matter for judgment in light of the evidence. Drinking water supplies are registered under the Water Services Act. Any resource consent has to have regard to actual or potential effects and risks to a drinking water supply.

1.4.1 Resource Management Act

No Section 6 matters of national importance, to which territorial authorities must recognise and provide for in relation to managing the use, development and protection of natural and physical resources, are of particular relevance to the topic of Drinking Water Protection.

Section 7 includes other matters to which particular regard must be had and includes the efficient use and development of natural and physical resources, and the maintenance and enhancement of the quality of the environment.

Section 8 requires that the principles of Te Tiriti o Waitangi / the Treaty of Waitangi shall be taken into account when exercising functions and powers under the RMA. A high-level overview of the way in which these principles have been taken into account in the preparation of the proposed District Plan is set out in the section 32 introduction report.

When considering an application for a resource consent, section 104G of the RMA requires that a consent authority must have regard to:

- the actual or potential effect of the proposed activity on the source of a drinking water supply that is registered under section 55 of the Water Services Act 2021; and
- any risks that the proposed activity may pose to the source of a drinking water supply that are identified in a source water risk management plan prepared in accordance with the requirements of the Water Services Act 2021.

1.4.2 National Policy Statements

A territorial authority must prepare and change its district plan in accordance with national policy statements. The proposed District Plan must give effect to National Policy Statements. The following National Policy Statements are of relevance to the Drinking Water Protection chapter:

National Policy Statements	Relevance
National Policy Statement for Freshwater Management 2014	<p>The NPS-FW seeks to safeguard the health of people and communities, as affected by contact with fresh water. It also provides a management approach for particular national values, which as defined as <i>any value described in Appendix 1</i>.</p> <p>Appendix 1 of the NPS-FW identifies both compulsory and other national values. The 'other national values' category includes water supplies. This means water quality and quantity that would enable domestic water supply to be safe for drinking with, or in some areas without, treatment, and which meets people's potable water needs.</p>

1.4.3 National Environment Standards

A territorial authority must prepare and change its district plan in accordance with any regulations, including National Environmental Standards. The following National Environmental Standards are of relevance to the Drinking Water Protection chapter:

National environment standard	Relevance
Resource Management (National Environmental Standard for Sources of Human Drinking Water) Regulations 2007 (NES-HDW)	<p>The NES-HDW contains regulations that relate to sources of drinking water for community supply, where the supply types are differentiated and assigned different levels of protection based on the number of people they cater to and whether they are generally used for a temporary or permanent supply.</p> <p>The NES-HDW includes regulations that specify:</p> <ul style="list-style-type: none"> • Matters that must be considered when processing a resource consent application that may significantly adversely affect a registered drinking-water supply; • A condition that must be included in certain circumstances. <p>The NES-HDW also allows a consent authority to impose requirements more stringent than the requirements in the NES-HDW regulations.</p>
Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES-Contaminated Land)	<p>The NES-Contaminated Land sets out a series of regulations for a range of activities such as:</p> <ul style="list-style-type: none"> • Removal or replacement of a fuel storage system in or on a piece of land; • Sampling the soil of a piece of land to determine whether it is contaminated, and the extent of contamination; • Disturbing the soil of a piece of land;

National environment standard	Relevance
	<ul style="list-style-type: none"> • Subdividing land <p>Where that piece of land is described by one of the following:</p> <ul style="list-style-type: none"> • An activity or industry described in the Hazardous Industries and Activities List (HAIL) is being undertaken on it; • It is more likely than not that an activity or industry described in the HAIL is being or has been undertaken on it.

1.4.4 National Planning Standards

A territorial authority must prepare and change its district plan in accordance with any regulations. The National Planning Standards do not require District Plans to address drinking water protection. However, additional chapters to address other matters not required by the National Planning Standards may be included within Part 2: District Wide Matters.

As the Drinking Water Protection chapter is not required by the National Planning Standards and is also not identified as a specific optional chapter, there are no specific requirements as to what provisions it should contain.

There is a possibility to address Drinking Water Protection as a spatial layer, as outlined in the National Planning Standards, and this is the preferred approach because it would provide certainty to plan users and allow them to easily identify protected areas. However, it is also proposed to have catch-all rules applying to drinking water supply bores that are not within the overlay.

1.4.5 Canterbury Regional Policy Statement 2013 (CRPS)

A district plan must give effect to any regional policy statement. The provisions of Chapters 5, 7 and 18 are of particular relevance to the Drinking Water Protection topic.

The objectives and policies in Chapter 5 of the CRPS seek to:

- Enable development that avoids, remedies or mitigates adverse effects on sources of water for community supply;
- Enable development that avoids or mitigates reverse sensitivity effects and conflicts between incompatible activities;
- Ensure development is appropriately and efficiently served for the collection, treatment, disposal or re-use of sewage and stormwater, and the provision of potable water;
- Avoid development that constrains the ongoing ability of the potable water supply infrastructure to be used;

The objectives and policies in Chapter 7 of the CRPS seek to:

- Manage the region’s freshwater resources to enable people and communities to provide for their well-being, and for the actual and reasonably foreseeable requirements for community supplies.

The objectives and policies in Chapter 18 of the CRPS seek to:

- Avoid actual or potential adverse effects resulting from the use, storage or disposal of hazardous substances within a community drinking water protection zone, or within such a distance of a community drinking water protection zone that there is a risk of contaminating the drinking water.

The CRPS also states that Environment Canterbury will set objectives, policies, and rules in regional plans to control the adverse effects of development on water bodies, including their value as sources of drinking water. Environment Canterbury are also directed by the CRPS to enable the appropriate provision of drinking water and to collaborate with territorial authorities and papatipu rūnanga on this matter.

The CRPS provides directions for the Council that are relevant to the Drinking Water Protection chapter. The table below sets out the way in which the proposed District Plan has given effect to these directions.

CRPS Method	Manner addressed in proposed District Plan
<p>Consider access to and availability of fresh water in catchments for individual domestic or stock water supply, when setting provisions for subdivision in rural areas in district plans.</p>	<p>Availability of services was a matter considered during the identification of areas for rural-residential zoning. Furthermore, the proposed District Plan subdivision rule has a trigger that subdivision is not within the drinking water protection overlay or within 50m of a bore used for drinking water supply. Otherwise, the subdivision becomes restricted discretionary. This enables the access to, and safety of, water supply to be considered at the time of subdivision.</p>
<p>Seek and have regard to recommendations from the Regional Water Management Committee and Zone Water Management committees relating to:</p> <ol style="list-style-type: none"> Identifying and implementing actions to improve water quality in catchments with degraded water quality. Identifying freshwater bodies which require water quality standards to be reviewed in a regional plan. Establishing the current or reasonably foreseeable values or uses. 	<p>This method relates to local authorities rather than specifically territorial authorities, and points (a) and (b) relate to Regional Council functions.</p> <p>However, point (c) is relevant to the District Plan. In particular areas, safety for drinking is identified as a value of water, and the reasonable uses are dictated by what is necessary to preserve that value. The rules and standards restricting certain land uses in the drinking water protection overlay addresses this clause.</p>
<p>Work together to manage the adverse effects of land uses on freshwater quality including appropriate controls on land uses in district or regional plan. This may include adopting a holistic approach to the management of the impacts of development such as low-impact urban design and development principles, and riparian management.</p>	<p>While management of freshwater quality is primarily a Regional Council function, the protection of the safety of drinking water supplies is also a District Council responsibility. The proposed District Plan includes controls on land uses and subdivision to manage the adverse effects on freshwater quality as they relate to the safety of drinking water for community supplies and other drinking water bore supplies.</p>

CRPS Method	Manner addressed in proposed District Plan
<p>Set out objectives and policies, and may include methods in district plans, particular to each district:</p> <ul style="list-style-type: none"> a. that establish a comprehensive approach to the management of the location of urban and rural-residential development within the territorial authority area, including provisions requiring consideration as to how new land use will be appropriately serviced by transport and other infrastructure. 	<p>This method generally relates to the provision of services and infrastructure rather than the protection of drinking water supplies directly. However, drinking water is one of the services that must be provided to new development and has an infrastructure component. It is particularly important that the approach to rural-residential development be comprehensively planned to ensure onsite wastewater disposal does not compromise the ability of the development to obtain access to safe potable water. The proposed District Plan does this by controlling subdivision and high-risk activities within the drinking water protection overlay.</p>
<p>Set out objectives and policies, and may include methods in district plans which:</p> <ul style="list-style-type: none"> a. ensure, before any rezoning of land enabling more intensive development, the development provided for by the rezoning can be efficiently and effectively served for the collection, treatment and disposal of sewage and stormwater, and the provision of potable water, in order to avoid or mitigate adverse effects on the environment and human health. b. ensure that at the time of any rezoning of land enabling substantial developments which requires new public sewerage, stormwater and potable water infrastructure, an outline development plan is included within the district plan which provides sufficient space at appropriate locations for these to be provided. c. ensure, at the time of subdivision and/or development, the manner in which the subdivision and/or development is to occur provides for the collection, treatment and disposal of sewage and stormwater, and the provision of potable water, in order to avoid or mitigate adverse effects on the environment and human health. 	<p>In the subdivision chapter of the proposed District Plan, and the mapping section, work was carried out to ensure servicing would be possible. No new public infrastructure is proposed.</p> <p>The proposed District Plan addresses clause (c) in the subdivision chapter. Minimum lot sizes and activity statuses have been set to allow for wastewater and stormwater disposal, and the proposed trigger for subdivisions within the drinking water protection overlay and in proximity to drinking water supply bores allows the potential adverse effects on human health arising from effects on drinking water supplies to be addressed.</p>

1.4.6 Canterbury Land and Water Regional Plan (LWRP)

The Canterbury Land and Water Regional Plan (LWRP) provides protection for community drinking water supplies from discharges, activities within the beds of lakes and rivers, and to a certain extent, earthworks and use of hazardous substances.

Objective 3.8A is to ensure high quality fresh water is available to meet actual and reasonably foreseeable needs for community drinking water supplies. Policy 4.3 is to manage surface water bodies to ensure that toxin-producing cyanobacteria do not render rivers or lakes unsuitable for human drinking water. Policy 4.5 provides for community drinking water supplies as a first priority and for other purposes as a second priority.

Policies 4.23, 4.23A and 4.23B relate to the protection of sources of drinking water. These primarily require the quality of drinking water supplies to be protected from contaminants and to meet the drinking water standards.

The LWRP controls the following activities with respect to the protection of community drinking water supplies:

- Discharge of wastewater;
- Discharge of swimming pool water;
- Discharge of vertebrate toxic agents or agrichemicals;
- Offal pits;
- Refuse disposal pits;
- Discharge of solid animal waste;
- Stock holding areas;
- Collection, storage and treatment of animal effluent;
- Discharge of animal effluent;
- Silage pits;
- Use and disturbance of riverbed and banks by farmed cattle, deer or pigs;
- Discharge of drainage water;
- Cemeteries;
- Discharge from a community wastewater treatment system;
- Discharge of municipal solid waste;
- Discharge of industrial or trade waste;
- Discharge of stormwater;
- Water take for community supply;
- Water take for dewatering;
- Disturbance of riverbed to remove fine sediment;
- Storage of hazardous substances;
- Passive discharges of contaminants from contaminated land.

The proposed LWRP addressed small water supplies that supplied two or more households. However, throughout the notification and hearings process, this approach was determined to be too difficult to implement, so the approach in the operative LWRP is to specifically address supplies registered with the Ministry of Health, with broader reference to protection of other water supplies or private wells or intakes.

Timaru District 2045 Growth Management Strategy

The Growth Management Strategy outlines a vision for what is sought to be achieved in relation to managing land use growth within the Timaru District. The strategy is intended to inform Council's long-term planning, including the development of the proposed District Plan. The Strategy sets out the anticipated future development patterns within Timaru.

The Growth Management Strategy identifies the ability to adequately provide for roading, sewer and water supply as an issue associated with changes in the pattern and distribution of urban activities.

Iwi Management Plan of Kati Huirapa

The Iwi Management Plan of Kati Huirapa sets out a series of outcomes in relation to Mahika Kai, water quality and quantity, the protection and restoration of ecological biodiversity, indigenous vegetation removal, discharges to air, and place names. While the Iwi Management Plan has no provisions relating directly to the protection of community drinking water supplies, there is a clause that requires the use, storage or transport of hazardous substances to be controlled to ensure they do not put people at risk from contamination. Furthermore, a number of clauses relate to keeping discharge and waste out of waterbodies.

Te Whakatau Kaupapa Ngāi Tahu Resource Management Strategy for the Canterbury Region 1990

Te Whakatau Kaupapa Ngāi Tahu Resource Management Strategy is a statement of Ngāi Tahu beliefs and values and was prepared while the then Ngāi Tahu claim was before the Waitangi Tribunal, and prior to the RMA being enacted. It includes an overview of values and attitudes relating to natural resources, and policy statements concerning their future management. This includes a policy statement in relation to water, which addresses a range of matters including:

- discharges of contaminants to water;
- promoting the disposal of effluent to land, rather than water;
- encouraging more efficient uses of abstracted water.

1.5 Problem definition

Operative Plan Provisions

Part B – 9 Subdivision covers the provision of services to new subdivision developments. Specifically, Policy 1 seeks to *“To ensure that the means of providing water to a site is established at the time of subdivision.”*

The Rural 1, 4A, 4B and 5 Zones contain a performance standard for all residential units to provide evidence of access to potable water. The Residential 3 Zone also contains this performance standard.

Consent for a discretionary activity is required if any of the performance standards are not met.

Issues Identified

If water supplies are not adequately protected, they can become contaminated by pathogens or other contaminants and may be rendered unsafe for human consumption. In particular, if certain land uses or activities are located upstream of, or in the vicinity of, water supply bores or intakes, they can impact on the quality of underlying groundwater or nearby surface water and result in this contamination.

The Operative District Plan may not adequately protect drinking water supplies from subdivision and development and maintain their safety because there is currently no mechanism to consider effects on drinking water from unreticulated subdivision and other developments.

Issue 1: Need for adequate protection of drinking water supplies from land use activities, subdivision and development.

Land use activities and subdivision can cause problems in terms of the safety of drinking water. The Proposed District Plan identifies and targets particular uses and set limits and rules to ensure drinking water supplies are safeguarded.

Camping grounds are identified as a land use with the potential to impact upon drinking water supplies in that most rural camping grounds are not connected to a reticulated wastewater treatment system and are often not attended (e.g., a DoC camping ground). Therefore, there is potential for illegal tipping of effluent tanks used in caravans, campervans and small vehicles onto the ground. These tanks are generally small and therefore have to be emptied regularly. In less formal camping grounds these are often emptied on the ground therefore have potential to contaminate drinking water supplies.

Subdivision can result in new allotments on or near drinking water supplies. If allotments do not connect to a reticulated sewer and of insufficient size to accommodate on site discharges of effluent or stormwater, a drinking water supply could be affected.

Mining and quarrying alter geology and natural drainage patterns and also reduce ground cover and vegetation which often protect water supplies from pollutants and sediments.

Any pipeline can break or leak so pipelines that are used for the transport of hazardous substances can affect drinking water supplies, if the leak discharges to the ground. For obvious reasons, hazardous substances entering a drinking water supply is to be avoided.

Industrial activities including rural industry include a wide range of processes and activities. Many, have the potential to affect community drinking water supplies by hazardous substances associated with these activities entering groundwater. While most hazardous substances in sensitive environments are managed under the hazardous substances chapter of the Proposed District Plan, hazardous substances stored in vehicles and small engines are not. Industrial activities normally involve vehicles and engines and can include large amounts of the same (e.g., a transport yard). Leaks of hazardous substances associated with vehicles or engines is common and can include fuel and a range of other hazardous substances such as oil or engine coolant. Accidental spillages from refuelling vehicles are also common. While these spillage or leaks are generally small, overtime they can be significant.

There is also the risk that industrial activities will use hazardous substances without obtaining resource consent. This is common as not many people are aware of the need for resource consent. Accordingly, there are associated risks with leaks, accidental spillage and also intentional illegal discharge of hazardous substances to ground. Despite this situation being a low-moderate probability of occurring the risks to the water supply are potentially high.

To manage these risks, it is more effective to require consent for industrial activities as an activity rather than through the hazardous substances chapter.

Other District Plan Approaches

The table below sets out an overview of the way that a range of other District Plans in the Canterbury Region and wider New Zealand address matters relating to Drinking Water Protection.

Plan	Description of Approach
<p><i>Hurunui District Plan</i> Second generation plan Operative 2018 Hurunui District Council</p>	<p>The Hurunui District is located within the northern part of the Canterbury Region.</p> <p>The Hurunui District Plan does not have a specific chapter that deals with protection of drinking water. These matters are dealt with primarily within the subdivision chapter.</p> <p>The subdivision chapter contains a policy that requires a pattern of subdivision that protects environmental values and systems and the potential of resources to meet the reasonably foreseeable needs of future generations.</p> <p>A related rule makes the subdivision of land within a drinking water protection zone, as defined in the Canterbury Land and Water Regional Plan, that otherwise complies with controlled activity standards, a discretionary activity.</p> <p>The following matter is considered at the time of subdivision: The provision for disposal of sewage and stormwater without risk to public health or the environment, including whether any allotment is within a drinking water protection zone, as defined in the Canterbury Land and Water Regional Plan.</p>
<p><i>Mackenzie District Plan</i> First generation plan Operative 2004 Mackenzie District Council</p>	<p>The Mackenzie District adjoins Timaru District to the west.</p> <p>The Mackenzie District Plan does not have a specific chapter that deals with drinking water protection. These matters are incorporated into the Rural-Residential Zones policies and the Hocken Lane Rural-Residential Zone provisions.</p> <p>The policy framework allows subdivision and development in the Hocken Land Rural-Residential Zone where it is demonstrated that adverse effects on water quality and the Twizel Water Supply will be avoided.</p> <p>A related rule makes residential buildings erected within the Twizel Water Supply Protection Areas that do not connect to Council's reticulated sewage disposal system non-complying.</p> <p>There is also an activity standard that all residential units, visitor accommodation and homestays within the Twizel Water Supply Protection Area shall connect to the Council reticulated sewage disposal system.</p>
<p><i>Hamilton District Plan</i> Second generation plan Operative 2017 Hamilton District Council</p>	<p>The Hamilton District is located in the north island of New Zealand.</p> <p>The Hamilton District Plan does not have a specific chapter relating to the protection of drinking water. It has general objectives that require:</p> <ul style="list-style-type: none"> • The risk to people, the environment and property to not be exacerbated by subdivision; and

	<ul style="list-style-type: none"> Any development of land be carried out in a manner that reflects the physical constraints on its use and development and minimises any adverse effects on the environment. <p>The related policies require subdivision to minimise any adverse effects on water quality, and the development of land to avoid (wherever possible) or else mitigate any adverse effects on water quality and quantity.</p>
<p><i>Kaikoura District Plan</i> First generation plan Operative 2008 Kaikoura District Council</p>	<p>The Kaikoura District is located at the northern most part of Canterbury.</p> <p>The Kaikoura District Plan does not have a specific chapter that deals with drinking water protection. It has a policy to ensure that additional urban growth does not adversely impact on the ability of the drinking water supply and sewerage systems to protect public health.</p>

Within some of the more recent District Plans, such as New Plymouth, Selwyn and Porirua's Proposed District Plans, we could not locate any stand-alone chapters on drinking water protection, although often throughout the chapters on subdivision, infrastructure and settlement patterns, there were provisions relating to access to infrastructure including water supply.

2 Approach to Evaluation

2.1 Scale and significance

Section 32(1)(c) of the RMA requires the evaluation within this report to correspond to the scale and significance of the environmental, economic, social and cultural effects that are anticipated from the implementation of the proposed District Plan.

Issue: Protect community drinking water supplies		
Reasons for change in policy	<p>District Plan Review Give effect to RMA section 5, 7 and 8</p> <p>Giving effect to a higher-level RMA document (CRPS)</p>	Medium
Relevant Statutory Considerations / Drivers	<p>RMA section 5, 31 and 74</p> <p>RPS Chapters 5, 7 and 18</p> <p>National Policy Statement for Freshwater Management 2014</p> <p>Land and Water Regional Plan</p> <p>National Environmental Standards for Sources of Human Drinking Water 2007</p>	Low/medium

	<p>National Planning Standards 2019</p> <p>Iwi Management Plan of Kati Huirapa</p> <p>Te Whakatau Kaupapa Ngai Tahu Resource Management Strategy for the Canterbury Region</p>	
Degree of shift from status quo required	<p>A moderate shift is required as the current approach needs to be updated to reflect increased knowledge of threats to the safety of drinking water supplies, changes in best practice, potential consequences of adverse effects on these supplies, and changes in relevant higher order documents (including proposed changes).</p> <p>Elements are proposed to be introduced into the proposed District Plan which did not exist in the operative District Plan.</p>	Medium/high
Who and how many will be affected?	<p>There is a moderate degree of interest in this issue from stakeholders and the community, particularly:</p> <ul style="list-style-type: none"> • Environment Canterbury • Landowners with properties within the drinking water protection overlay • District Health Board 	Medium
Degree of impact on, or interest from iwi / Maori	<p>Te Rūnanga o Arowhenua may have an interest in this topic considering their marae at Arowhenua is serviced by a community drinking water supply which is proposed to be included in the overlay.</p>	Low/Medium
When will effects occur?	<p>Effects will occur on an ongoing basis into the future as development and subdivision occurs within the vicinity of drinking water supplies.</p>	Medium/High
Geographic scale of impacts / issue	<p>The drinking water supply overlay is distributed throughout the district, primarily in rural areas adjoining, or in the vicinity of, urban centers and townships.</p>	Low
Type of effect(s)	<p>Compromising the quality, and therefore safety, of drinking water supplies has the potential for acute and cumulative effects on human health and quality of life.</p>	High

	There is the potential for effects on social wellbeing, and on health and safety of communities.	
Degree of policy risk, implementation risk, or uncertainty	<p>There is a moderate level of understanding of the potential risks to drinking water protection. The policy approach has been tailored to this understanding.</p> <p>There is, however, a moderate level of uncertainty as this issue has not been widely addressed in District Plans. The approach is similar to that employed by another second-generation plan.</p>	Medium
Overall Assessment of Scale and Significance		Medium

2.2 Approach to Protecting Drinking Water

The objective and policy framework is intended to provide clear direction on the necessity of protecting drinking water supplies to provide for social wellbeing and health and safety as required by section 5 of the RMA and to clearly set out the approach to protection of drinking water.

The proposed approach is to map a drinking water protection overlay and then to apply rules and standards that focus on key activities that will or could adversely affect the safety and security of drinking water supplies (both within that overlay or outside but in proximity to other drinking water supplies). These primarily include subdivision, quarrying, and major hazardous facilities.

2.2.1 Changes Proposed

Operative Plan	Proposed Plan
Objective and policy framework that does not directly address the protection of drinking water.	Objective and policy framework that directly addresses and emphasises drinking water protection.
No rules or standards relating directly to the protection of drinking water.	Rules and standards relating to activities and development in proximity to drinking water supplies, regardless of zone, focussing on subdivision, quarrying, pipelines carrying hazardous substances and camping grounds. Major hazardous facilities within the drinking water protection overlay would also not achieve the Strategic Directions, and as such, provisions are included within the Hazardous Substances chapter which control the location of new Major Hazard Facilities..

2.3 Quantification of Costs and Benefits

A full quantification of financial costs and benefits has not been undertaken for this topic. Impacts on the protection of drinking water supplies and the resultant costs and benefits are difficult to value in monetary terms, but quantification has been attempted where possible, and qualitative assessment is used elsewhere.

2.4 Choice of Evaluation Method(s)

The approach to evaluation for this topic is a cost-benefit analysis as the issue is of medium/high significance. Qualitative assessment is used where quantitative information is not available.

3 Evaluation of Objective

3.1 Proposed objective

The proposed objective for the Drinking Water Protection chapter is:

DWP-O1 Protect Drinking Water Supplies
Drinking water supplies are protected from land use and subdivision activities that may limit their ability to provide safe drinking water.

3.2 Evaluation of objective

Category	Criteria	Comments
Relevance	Directed to addressing a resource management issue	Achieves. The objective seeks to safeguard community health and safety, and social wellbeing, which are within the scope of the purpose of the RMA.
	Focused on achieving the purpose of the Act	Achieves. The objective is directly linked to section 5 matters. It will achieve the purpose of the act as it will achieve the sustainable management of water, a natural resource, to enable people and communities to provide for their social wellbeing while safeguarding the future availability of the resource, safeguarding the life supporting capacity of water, and avoiding, remedying or mitigating effects on the environment. The objective is the most effective way to achieve the purpose of the act in terms of providing drinking water to the community because it would address issues at the source stage and avoid or mitigate the risk of effects

		<p>prior to those effects occurring. This is a more effective approach than remedying the issue by treating water once it was already been rendered unsuitable for consumption.</p> <p>Section 7 matters: Maintenance and enhancement of the quality of the environment.</p>
	Assists a council to carry out its statutory functions	<p>The objective sets out the outcome that is sought in relation to drinking water within Timaru District. This sets the framework for the policies and rules.</p> <p>As such, the provisions in the District Plan will manage the potential adverse effects of the use or development of land to achieve protection of natural resources.</p>
	Within scope of higher level documents	<p>The objective gives effect to the CRPS by ensuring that the District Plan includes provisions to preserve the ability of drinking water supplies to service appropriate development within the Timaru District, and to protect these supplies from inappropriate subdivision, use and development that may affect their safety and quality.</p>
Feasibility	Acceptable level of uncertainty and risk	<p>There is a moderate level of uncertainty and risk given that the objective does not directly reflect wording from a higher order RMA document and is a different approach to the provisions of the operative District Plan.</p>
	Realistically able to be achieved within council's powers, skills and resources	<p>The provisions will be able to be achieved within council's powers, skills and resources.</p> <p>In particular, it is within the District Council's ability to control subdivision and land use activities that may adversely affect natural resources and the environment, which includes people and communities.</p>
Acceptability	Consistent with identified iwi/Māori and community outcomes	<p>The proposed provisions are consistent with iwi and community outcomes.</p>

	<p>Will not result in unjustifiably high costs on the community or parts of the community</p>	<p>The proposed provisions will apply to localised areas, which are likely to be predominantly rural. Given this, the subdivision rules are not expected to be prohibitive in terms of the level of subdivision that might be expected in a rural zone.</p> <p>The provisions may restrict the intensification of land use in particular areas, but these areas are not generally large, and costs are not expected to be unjustifiably high on the community or parts of the community.</p>
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4 Identification of Options

The following sets out the reasonably practicable options for achieving the drinking water protection objective.

4.1 Option 1: Status Quo

This option involves a continuation of the Operative District Plan, which focuses on providing evidence of a water supply at the time of subdivision or development. It applies primarily in the rural and residential zones. Under the Option 1 framework, a discretionary resource consent would be required for subdivision or development that does not meet the performance standard requirement to provide evidence that a site has access to a drinking water supply. This is the existing approach. It does not restrict land development on the basis that activities may put the safety of drinking water supplies at risk and is more likely to require treatment of water in order to meet the New Zealand Drinking Water Standards 2005 than alternative options.

4.2 Option 2: High level consideration approach

This option would allow effects on the quality and safety of drinking water supplies to be considered during consent processes when a consent requirement is triggered for another reason, and when the matters for control or discretion are not limited (i.e. when an activity is discretionary or non-complying).

This approach would apply throughout the District, rather than just within certain protection areas, and would increase plan user awareness of the importance of protecting drinking water supplies.

No specific rule triggers or standards would be utilised under this approach, therefore there would be no additional consent requirements beyond the status quo. However, Option 2 may constrain what people are able to do with land beyond the status quo in that there may be additional limitations or mitigations imposed through consent conditions to protect drinking water supplies.

4.3 Option 3: Direct protection approach

This option would allow the District Council to take a more active hand in managing land use activities, subdivision and development to ensure the ongoing protection of drinking water quality. It would enable targeted provisions that restrict inappropriate land use, subdivision and development in the drinking water protection overlay by use of rules and standards to trigger the need for a consent process. The activity status, if triggered, would be restricted discretionary, allowing consent to be declined if the effects on drinking water supplies are deemed to be unacceptable, but limiting the scope if all other standards are complied with. Non-complying activity status for mining, pipelines carrying hazardous substances and industrial activities is proposed, in recognition of the undesirable effects such uses could have on a drinking water supply. This would result in an increased number of consent applications than what is currently processed.

The approach would include community drinking water supplies, of which, there are currently 32 such zones identified by the Canterbury Regional Council the Timaru District, a number of which overlap with each other. These would form the basis of the drinking water protection overlay.

Specified high risk activities within these areas would require resource consent under this proposed approach and not under the alternatives. This means there may be reduced capacity for people to develop the land within these areas, or constraints on the type of activity considered appropriate in these areas. These constraints may also apply to the same activities in proximity to drinking water supply bores.

This approach would apply within the overlay throughout the District and would also allow wider controls on activities in proximity to drinking water supply bores not within the overlay.

5 Evaluation of Options

5.1 Evaluation tables

OPTION 1 <i>Status-quo</i>			
Benefits			
Environmental	Economic	Social	Cultural
The existing provisions ensure that new developments within rural and residential areas have access to servicing, including drinking water supply. Activities that do not comply with the rules and standards require consent as a discretionary activity, which means that an assessment of effects will be required, and the	There may be savings in terms of time and cost for consenting and managing public queries as the Council and community are familiar with the provisions and no additional consents would be required above and beyond the Operative Plan. Furthermore, there would be fewer limitations on development of land than may be the	Continuation of the existing approach provides familiarity along with a level of certainty to the community in terms of what development is achievable. The outcomes achieved by the existing provisions may contribute to overall social wellbeing by ensuring infrastructure is put in place to provide water to new	There may be indirect cultural benefits created by the proposed provisions.

consent could be declined if environmental effects are significant.	case under Options 2 or 3.	developments or subdivisions.	
Costs			
Environmental	Economic	Social	Cultural
<p>The existing provisions only apply in the rural and residential zones, and only relate to providing evidence of access to a water supply rather than ensuring that supply is safe for consumption.</p> <p>The existing provisions do not manage land use activities or subdivision in proximity to drinking water supplies and may not be effective in ensuring an ongoing supply of safe water.</p> <p>Maintaining the status quo may result in inappropriate activities occurring near drinking water supplies and rendering them unsafe for use, except for non-potable purposes.</p>	<p>There are costs for developers associated with the implementation of the existing provisions as they need to provide a water supply to their site when undertaking development activities in certain rural or residential zones.</p> <p>There may be additional economic costs if the current approach does not protect the quality of drinking water supplies and their safety for consumption, because treatment systems may need to be installed or upgraded to ensure water is potable.</p> <p>Installation of an individual household treatment unit may cost approximately \$1500 plus approximately \$150 per year for filter maintenance and \$150 every three years for membrane replacement.</p> <p>Note that the Ministry of Health released a report estimating the economic cost of the Havelock North waterborne disease outbreak to be \$21 million, including</p>	<p>The community may be dissatisfied with the outcomes achieved by the existing provisions, and there may also be social costs in terms of illness if the safety or quality of drinking water supplies are compromised</p>	<p>The existing provisions do not specifically recognise or provide for cultural values in terms of the protection of drinking water</p>

	\$12.4 million in household inconvenience costs, \$4.1 million in local government costs, \$2.5 million in health-related costs and \$1.3 million in business costs. The estimated cost per household was \$2,440		
Efficiency	This option is not an efficient method of meeting the objective given the costs identified above (particularly the social and environmental costs), and the issues identified with the existing provisions.		
Effectiveness	It would be difficult to achieve the proposed objective with the existing provisions given the issues identified above. The supply of water to rural and residential sites may generally be achieved, but the costs associated with ensuring the safety of the supply may be high, and the outcomes inconsistent.		
Strategic Direction(s)	This option would not achieve strategic objective SD-01 fully as it does not control the location of activities to minimise conflicts between incompatible activities and avoid them where there may be significant adverse effects on the environment and the health and safety of people and communities.		
Overall Appropriateness of Option 1	This option is not an appropriate way to achieve the objective.		

OPTION 2

High level consideration approach

Benefits Environmental	Economic	Social	Cultural
This option will continue to include requirements to provide water supplies to sites, where necessary, as part of the subdivision chapter. However, it would also have a more directive policy framework and allow specific consideration of the safety of drinking water supplies during resource consent processes. Mitigation measures could then	There may be some savings in terms of time and cost as there would be no substantial change to the rule framework that the Council and community are generally familiar with. No additional consents would be required.	As this option is based on the existing approach with increased policy guidance and the ability to consider drinking water protection during discretionary and non-complying consent processes, there may be an ongoing level of familiarity along with a level of certainty to the community. The outcomes achieved by the provisions may	The proposed provisions in this option do not specifically recognise and provide for cultural values but may provide an additional layer of protection for the drinking water supply at marae.

<p>be put in place to protect these supplies. The explicit reference to protection of drinking water supplies in the objective and policy framework should act to increase plan user awareness of related issues.</p> <p>As it is proposed that the objective and policies would apply throughout the district, it would achieve more consistent outcomes than the operative provisions, which are more specific to rural and residential areas.</p> <p>Activities that do not comply with an unrelated rule trigger or standard that require consent as a discretionary or non-complying activity could potentially be declined on the basis of compliance (or lack thereof) with the policy framework.</p>		<p>contribute to overall social wellbeing and health and safety of individuals and communities by improving assessment of, and mitigation of, adverse effects on drinking water supplies via consent processes</p>	
<p>Costs Environmental</p>	<p>Economic</p>	<p>Social</p>	<p>Cultural</p>
<p>Using a policy framework with no rule support to consider drinking water protection may result in inconsistent outcomes, because relevant activities are not always going to require discretionary or non-complying resource consent, and some</p>	<p>This option proposes to introduce a policy framework that may result in additional conditions being placed on consents, or even potentially consents being declined on the basis of adverse effects on drinking water supplies being unacceptable. This could lead to costs in terms of lost opportunity for</p>	<p>This option proposes to introduce a policy framework that may result in additional conditions being placed on consents, or even potentially consents being declined on the basis of adverse effects on drinking water supplies being unacceptable. This could lead to costs in terms of lost</p>	<p>None identified</p>

<p>may slip through without effects being assessed or mitigation put in place.</p>	<p>developments that may economically benefit the District.</p> <p>There may also be increased costs associated additional assessment when preparing applications, additional processing costs, and additional costs arising from methods to mitigate effects on community drinking water supplies. These costs would be borne by consent applicants. Additional processing costs would most be in the range of hundreds of dollars. However, mitigation works may be more expensive, in the range of thousands (or tens of thousands depending on the scale and impact of the proposed activity or development).</p> <p>Some costs fall to the council to enforce the associated consent conditions.</p>	<p>opportunity for developments that may economically benefit the District.</p> <p>There may also be increased costs associated additional assessment when preparing applications, additional processing costs, and additional costs arising from methods to mitigate effects on community drinking water supplies. These costs would be borne by consent applicants. Additional processing costs would most be in the range of hundreds of dollars. However, mitigation works may be more expensive, in the range of thousands (or tens of thousands depending on the scale and impact of the proposed activity or development).</p> <p>Some costs fall to the council to enforce the associated consent conditions.</p>	
<p>Efficiency</p>	<p>This option is not an efficient method of meeting the objective given the costs identified above and the issues identified with the existing provisions. However, it is a more efficient method than Option 1.</p>		
<p>Effectiveness</p>	<p>It would be difficult for this approach to effectively achieve the proposed objective because some higher risk developments in the drinking water protection overlay may not be captured by a resource consent process and effects may not be able to be appropriately avoided, remedied or mitigated. However, it is likely to be more effective than Option 1 because it allows some consideration of effects on drinking water.</p>		
<p>Strategic Direction(s)</p>	<p>This option would not achieve strategic objective SD-01 completely as it only controls the location of relevant development where a consent requirement is already triggered for another reason.</p>		
<p>Overall Appropriateness of Option 2</p>	<p>This option is a more appropriate option than the status quo, however is not the preferred option given that the costs outweigh the benefits.</p>		

OPTION 3 <i>Direct protection approach</i>			
Benefits Environmental	Economic	Social	Cultural
<p>Adopting this option would likely result in a high level of environmental benefits given that the management regime would include rules and a supporting policy framework to directly protect community drinking water supplies. It is the option most likely to protect drinking water quality and safety</p>	<p>This proposed option is more likely to meet the requirements of any change in national direction with regard to the management of drinking water supplies, and therefore is likely to have a reduced cost related to implementing change in future.</p> <p>It also avoids the costs that may arise in terms of treatment if drinking water is not adequately protected at source as well as the potential costs of a health incident such as the one that occurred in Havelock North and cost an estimated total of \$21 million across a range of stakeholders.</p> <p>Individual treatment costs have been estimated at \$1500 for installation of a unit and annual \$150 maintenance costs.</p>	<p>This option could result in social wellbeing and health and safety benefits as it is most likely to ensure the ongoing provision of safe drinking water to communities.</p> <p>It also avoids the catastrophic human costs that may arise is not adequately protected at source such as the one that occurred in Havelock North, where several people died and thousands become ill after drinking contaminated water</p>	<p>Adopting this option could ensure the continued safe supply of drinking water to important cultural centres such as the Arowhenua marae</p>
Costs Environmental	Economic	Social	Cultural
<p>There are likely to be fewer environmental costs associated with this option given it allows for most control over the effects of relevant activities on the environment</p>	<p>There may be a cost in terms of time and money because of the lack of familiarity of the community and Council with this approach (i.e. staff may be required to spend time understanding the provisions and</p>	<p>This option will result in the most changes on the ground, compared to the alternatives, and plan users and Council will not be familiar with the approach.</p> <p>Landowners within the drinking water protection overlay</p>	<p>There are likely to be few cultural costs associated with this option</p>

	<p>relaying any relevant information to the community).</p> <p>This option would potentially result in fewer costs to the community in terms of future water treatment options because it protects the drinking water supply before it requires further treatment.</p> <p>However, there may be developmental opportunities lost because of restrictions imposed on activities such as subdivision and land use intensification in proximity to a drinking water supply.</p> <p>Certain activities would require consent that do not need one under the operative District Plan. The cost of a straightforward consent is generally in the range of \$600 to \$900 plus monitoring costs, which may include staff time charged to visit a site and ensure the consent conditions are being complied with. This charge would be borne by the consent applicant.</p> <p>While consent costs may be low, there is the potential for additional costs associated with implementing the consent conditions, such as undertaking mitigation of effects. This cost would likely depend on the scale of the activity or</p>	<p>may be dissatisfied because of the limitations imposed upon future use of their land.</p> <p>Landowners may experience stress because of limitations on their use of potentially productive land.</p>	
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	development and the level of risk it poses to the drinking water supply. The cost would be borne by the consent holder.		
Efficiency	This option would be the most efficient method of meeting the objective given the costs identified above, and the issues identified with the existing provisions. There will be some time and cost constraints involved in delivering this approach, but it is also the most likely option to achieve outcomes.		
Effectiveness	This option would be the most effective at implementing the objective as it would likely result in a targeted management approach that responds to known high-risk activities and locations.		
Strategic Direction(s)	This option would likely meet the Strategic Directions of the Plan, as it enables activities incompatible with the protection of drinking water supplies to be managed in relevant areas.		
Overall Appropriateness of Option 3	This option is a most appropriate option given that the costs outweigh the benefits.		

5.2 Risk of Acting or Not Acting

Where there is uncertain or insufficient information, an evaluation of the risk of acting or not acting is required. In this case, it is considered that there is little uncertainty in existence of an issue or the potential significance of the issue. It is considered that, although the approach proposed is quite different to the operative provisions, there is sufficient information to act. Even if there was not sufficient information to act, the risk of acting could still be significant as demonstrated in Havelock North, where drinking water supplies were not appropriately protected.

However, it should be noted that considering the differences between proposed provisions and operative provisions, there is a moderate risk of resistance from the community.

It is therefore concluded that there is a low to moderate risk of acting in the proposed manner to introduce updated and replacement provisions to appropriately manage drinking water protection. There is a high risk of not acting.

In contrast, there is uncertainty in terms of the appropriate extent of the drinking water protection overlay. The Canterbury Land and Water Regional Plan sets out a provisional method for determining the location and extent of community drinking water protection zones, but this is subject to change via regional resource consent processes. Furthermore, community drinking water supplies are created and shut down, which results in changes in the existence or appearance of protection zones. Therefore, basing the overlay on these protection zones may result in mapping becoming out of date in the future. However, it also provides more certainty to plan users than referring to an external GIS mapping system would.

It is concluded that there is a moderate risk of implementation issues arising if community drinking water protection zones are mapped directly in the District Plan as an overlay.

6 Preferred Option

This evaluation has been undertaken in accordance with Section 32 of the RMA in order to identify the benefits, costs and the appropriateness of the proposal having regard to its effectiveness and efficiency relative to other means in achieving the purpose of the RMA. The evaluation demonstrates that Option 3 is the most appropriate option as:

- The approach will apply throughout the District rather than only within rural and residential zones, better enabling the community to provide for its health and safety;
- Consistent management of protection areas is more likely to achieve consistent protection outcomes and better safeguard the life supporting capacity of drinking water supplies;
- The approach will manage activities and development types that specifically pose a risk to drinking water supplies within the drinking water protection overlay and in proximity to other drinking water supplies, enabling the development of resources in a way that enables communities to provide for their wellbeing;
- The approach provides more guidance in terms of which areas are to be protected, and a moderate degree of certainty as to the process to get approval for particular activities within protection areas;
- A list of specific definitions would be included in the PDP to ensure clarity on when and where the provisions apply.
- The approach is most likely to safeguard human health and wellbeing.

Overall, it is considered that the set of preferred provisions is the most appropriate given that the benefits outweigh the costs, and there are considerable efficiencies to be gained from adopting the preferred provisions. The risks of acting are also clearly identifiable and limited in their extent.