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

YOUR PLAN OUR FUTURE
TIMARU DISTRICT PLAN REVIEW

Stormwater S.32

May 2022

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LAND USE PLAN

Timaru District Council

Section 32 Report

Stormwater Chapter

May 2022

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1 Stormwater

1.1 Introduction

This report contains a section 32 evaluation of the objectives, policies, and methods relating to the Stormwater chapter in the Proposed Timaru District Plan.

Stormwater infrastructure is commonplace and expected throughout the district to support existing and proposed settlements and enable people and communities to meet their social, economic and cultural needs.

Whilst the Infrastructure and Energy Chapter covers the network utility infrastructure associated with stormwater dispersal, it does not manage the creation of stormwater itself from developments and private management. This is covered by the proposed Stormwater Chapter as a standalone chapter for legibility for plan users.

1.2 Community / Stakeholder / Iwi Engagement

Engagement with various groups and parties was undertaken as part of preliminary work carried out to inform the District Plan review. This included scoping with various parties such as Government Agencies and Te Rūnanga o Arowhenua. Drop-in sessions were held with the public. A draft discussion document was released, and public open days were held. Feedback from the public and stakeholders on the discussion documents was summarised and workshopped with the Council's Environmental Services Committee.

A summary document named Community Feedback and Initial Committee Direction on Discussion Documents was then prepared. This document summarised the feedback received and the Committee's initial direction. The summary document was published in September 2017. This document was publicised by way of public notices, and by sending letters to those who had made feedback on the discussion documents.

The Community Feedback document provides a good basis for the section 32 analysis. Topic 9 in the discussion document summarise matters for utilities & infrastructure.

With regard to strategies that inform the Proposed District Plan, there is the Timaru District 2045 Growth Management Strategy [1], Timaru District Stormwater Strategy 2018-2048[2] and the Timaru District Council 50 Year Infrastructure Strategy 2018 – 2068 (adopted in June 2018)[3], all of which have been through significant consultation in themselves.

More detailed descriptions of consultation undertaken is included in the Overview Section 32 report. High level community consultation was undertaken on stormwater management generally which supported onsite management.

Draft District Plan Consultation

The Council issued a draft district plan for consultation, with feedback open from 7 October to 31 December 2020. Feedback on the draft plan were received from a range of stakeholders, including

[1] https://www.timaru.govt.nz/services/planning/district-plan/district-plan-review/growth-management-strategy

[2] https://www.timaru.govt.nz/__data/assets/pdf_file/0010/124957/1078874-Timaru-District-Stormwater-Strategy-2018-2048-Published-Version-June-2017.pdf

[3] https://www.timaru.govt.nz/__data/assets/pdf_file/0008/183644/LTP-2018-28-Draft-Infrastructure-Strategy-2018-69.pdf

agencies, the agricultural / horticultural sector and the development community. Feedback was worked through by Council staff and provided helpful context, information, suggestions and discussion points to be considered in drafting the PDP. In relation to Stormwater, the feedback included:

- There was both support and opposition for the intent of the provisions;
- Some submitters sought to exclude the provisions from applying to areas where there was no Council reticulated stormwater networks;
- There was some opposition to the proposed restrictions on the use of specified building materials that can cause pollution in waterways and estuaries;
- Clarity was sought regarding the relationship of the prosed provisions with regional council consents, with the avoidance of duplication sought;
- A number of matters of detail were raised regarding the application of the proposed standards.

1.3 Strategic directions

The Strategic Directions chapter of the Proposed District Plan sets out the overarching directions for the sustainable management of growth, land use and development of the Timaru District. These provisions have been informed by the Canterbury Regional Policy Statement 2013 and the Timaru District 2045 Growth Management Strategy which addresses growth and development in the district and sets out a spatial framework for its management. They support achieving a district that has a sustainable lifestyle, a thriving and innovative economy and a strong identity.
Relevant strategic directions are as follows:

SD-O2 The Natural and Historic Environment

The district's natural and historic environment is managed so that:

i. the health and wellbeing of the community are recognised as being linked to the natural environment;
ii. an integrated management approach is adopted that recognises that all parts of the environment are interdependent;
iii. the natural character of the coastal environment, wetlands and waterbodies is preserved and protected from inappropriate subdivision, use, and development;
iv. important landscapes and features are protected from inappropriate subdivision, use, and development;
v. significant indigenous vegetation and significant habitats of indigenous fauna are identified and their values recognised, protected and where appropriate, enhanced;
vi. the life-supporting capacity of ecosystems and resources is safeguarded for future generations;
vii. the important contribution of historic heritage to the district's character and identity is recognised, and significant heritage and its values are protected from inappropriate subdivision, use, and development.

SD-O3 Climate Change

The effects of climate change are recognised, and an integrated management approach is adopted, including through:

i. taking climate change into account in natural hazards management;
ii. enabling the community to adapt to climate change;
iii. encouraging efficiency in urban form and settlement patterns.

SD-O4 Natural Hazards

Natural hazards risks are addressed so that:

i. areas subject to natural hazards and risk are identified;
ii. development is avoided in areas where the risks of natural hazards to people, property and infrastructure are assessed as being unacceptable; and
iii. for other areas, natural hazards risks are appropriately mitigated.

SD-O5 Mana Whenua

The mana whenua status of Kāti Huirapa is recognised and their historic and contemporary relationship with the district's land, water bodies and wetlands, coastal environment, and indigenous species is recognised and provided for by ensuring:

1. mahika kai resources and habitats of indigenous species are sustained and opportunities for their enhancement or restoration are encouraged.
2. the health of water body and wetland environments is protected from adverse effects of land use and development.
3. the values of identified sites and areas of significance to Kāti Huirapa are recognised and protected;
4. Kāti Huirapa retains, and where appropriate is able to enhance access to their sites and areas of significance;
5. Māori reserve lands are able to be used by Kāti Huirapa for their intended purposes;
6. Kāti Huirapa are able to carry out customary activities in accordance with tikanga;
7. Kati Huirapa is actively involved in decision making that affects their values and interests in these matters and are able to exercise their kaitiakitaka responsibilities.

SD-O8 Infrastructure

Across the District:

i. improved accessibility and multimodal connectivity are provided through a safe and efficient transportation network that is able to adapt to technological changes;
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. the benefits of regionally significant infrastructure and lifeline utilities are recognised and their safe, efficient and effective establishment, operation, maintenance, renewal and upgrading and development is enabled while managing adverse effects appropriately.

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 kaika 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.

1.4 Problem definition

The 2016 Energy, and Utilities and Infrastructure Discussion documents, Community Feedback and Initial Committee Direction on Discussion Documents include resource management issues that need to be addressed as part of the district plan. These are:

- The need for the strategic integration of infrastructure and land use; and
- Should the District Plan encourage water conservation and water efficiency through collection, use and reuse of water and retention and treatment of stormwater?

In addition to the matters identified in the discussion documents, Council staff have also identified a number of other issues with respect to stormwater management as identified in Table 1 below, which summarises the issues associated with stormwater management, including its impact on flood hazards.

Table 1 - Key stormwater and flood hazard management issues for the District Plan Review identified by Council staff

Key Issue	Brief Summary
Asset management	The capacity of the existing network may not meet the current (and future) level of service for providing protection to property. Further development and re-development will put additional pressure onto the existing network. Many existing stormwater systems do not meet current treatment and attenuation standards as required under the NPS for Freshwater Management and the Council's global resource consent from ECan. The renewal of aged assets is necessary. Additional development may result in adverse effects on existing capacity.
Urban flood risk and Regulatory framework (Stormwater Strategy S1.5.1)	Insufficient understanding of urban flood risk and lack of regulatory framework mechanisms to adequately address stormwater issues related to land use and development (e.g., more complete hazard zoning including overland flow paths, control of runoff, infill development, redevelopment opportunities). Stormwater Management Plans (SMPs) and further baseline studies will assist in developing required understanding.
The Stormwater system (present and future) not meeting required level of service for quantity and quality (Stormwater Strategy S1.5.2)	Need for improved regulation of stormwater runoff volumes, flow peaks and contaminants (to meet the NPSFM and global consent conditions), through application of Water Sensitive Urban Design (WSUD) principles to new/infill developments. This will need to anticipate the effects of climate change and sea level rise, where possible and desirable also looking to recover network capacity and improve water quality (to meet Land and Water Regional Plan (LWRP)) targets and global resource consent conditions through the management of redevelopment. SMPs and further baseline studies will assist in developing site-specific requirements.
Impacts on cultural, amenity, ecological, heritage, landscape (Stormwater Strategy S1.5.3)	Management of stormwater runoff and watercourses (e.g., WSUD, watercourse enhancement and consideration of the protection and enhancement of aquatic habitat and biodiversity (note this is an ECan function), building up the local cultural health and heritage value. Greater community and stakeholder involvement, integrating WSUD with urban design and

	community spaces (with education and engagement processes), to improve understanding of flood risk management and lead to amenity, landscape and environmental mitigation/improvements.
Understanding of flood hazards (Stormwater Strategy S1.5.4)	Community and stakeholder understanding of flood hazards and risk mitigation. WSUD, in particular onsite controls, allowing community to have a personal role in stormwater management.
Jurisdictional issues	Stormwater crosses local authority boundaries, requiring integrated management between the district and regional council to better achieve desired outcomes. This can be achieved under both RMA and LGA tools.
Limited use of development and financial contributions	The Council has historically used financial contributions towards Council management of stormwater where the infrastructure exists i.e., Gleniti ODP, however it is unclear if financial contributions will continue to be used. In addition, in infill areas there is likely to be limited scope for Council to install network management options within existing road reserves, parks etc, necessitating other solutions.
Understanding of stormwater impacts	There is lack of specific information on stormwater characteristics (quantity and quality) entering the Council's stormwater network. There is also a lack of specific information on the actual current receiving environment conditions.
Cost	The affordability of improvements and the high cost of compliance.

1.4.1 Issue Summary

Water Quantity

Overall, the Council has determined that stormwater runoff is a significant issue in regard to flood management in the district. The capacity of the existing network may not meet the current (and future) level of service for providing protection to properties during heavy rain events and further development and re-development will put additional pressure onto the existing network. Overall, the Council has determined that stormwater runoff is a significant issue for urban water quality in the district, affecting the quality of the region's fresh and coastal water (from contaminants ad sedimentation), and therefore affecting aquatic habitats. Water quality impacts from discharges and the consequential effects on aquatic life are regional Council functions. However, the District Council is required to achieve integrated management and can consider water quality effects arising from the use of land. In addition, the Council needs to meet the requirements of its global stormwater resource consent from ECan.

The 2005 Operative District Plan's focus has been on mitigating the effects of large developments (driven by Regional Planning requirements), rather than addressing existing issues or small-scale infill development. Since the District Plan became operative there has been a gradual evolution in the stormwater management industry from an initial focus on end-of-pipe treatment to a more holistic approach incorporating reduction at source, on-site management/treatment, and use of ponds, wetlands and other natural devices and systems to minimise contaminant levels in stormwater runoff. As such, the Council has determined that the baseline provisions in the Operative Plan are now substantially out of date in relation to current industry thinking and recent 2nd Generation plans. Overall, the broad objectives and policies remain relevant, but the Plan lacks rules to implement them. Relevant documents to consider when assessing the above issues are set out in Table 2.

Table 2 – Relevant Policy Statements, Plans, Strategies and Reports

Title	Author	Date	Brief Synopsis	Link
Effectiveness and Efficiency review documents	TDC	2015	This review assesses the efficiency and effectiveness of the Operative District Plan, identifying potential issues. The review identified shortcomings with stormwater management in relation to both water quantity and water quality.	NA
New Zealand Coastal Policy Statement	Department of Conservation	2010	The New Zealand Coastal Policy Statement 2010 has policy recognition for the presence of infrastructure in the coastal environment and the importance it plays in providing for the social, cultural and wellbeing of people and communities. A more detailed description is included at section 1.5 of this assessment.	https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/coastal-management/nz-coastal-policy-statement-2010.pdf
The National Policy Statement for Freshwater Management	New Zealand Government	2014	Requires the overall quality of fresh water within a freshwater management unit to be maintained or improved and improved integrated management of fresh water and the use and development of land. The methods are entirely focused on regional councils. A more detailed description is included at section 1.5 of this assessment. *Note:* *The National Policy Statement for Freshwater Management 2020 comes into effect on 3 September 2020 and replaces the National Policy Statement for Freshwater Management 2014 (amended 2017).*	https://www.mfe.govt.nz/fresh-water/freshwater-acts-and-regulations/national-policy-statement-freshwater-management
The Timaru District Stormwater Strategy 2018-2048	TDC		Sets an integrated approach to urban stormwater management and includes a vision, goals, objectives, directives and methods. The strategy states that the current level of service that TDC has adopted is to provide a primary stormwater network to accommodate rain events up to a 1 in 5-year return period for urban residential areas, and a 1 in 10-year return period for industrial and commercial areas, without the inundation of habitable floor spaces. The strategy states that this level of service will result in stormwater ponding in roads, parks and private properties for these rain events. Increasing intensity of rain events is predicted by climate change studies.	https://www.timaru.govt.nz/__data/assets/pdf_file/0010/124957/1078874-Timaru-District-Stormwater-Strategy-2018-2048-Published-Version-June-2017.pdf

			The design of upgrades and renewals of the primary stormwater network endeavours to provide a network with sufficient capacity to contain the stormwater up to the design rain events without overflows. However, the existing stormwater infrastructure is generally aged and the capacity of some parts of the network may not meet that design standard. TDC's approach is to upgrade pipe capacity at the time of renewal. To address quantity and quality issues, the strategy states it is necessary to provide treatment for the removal of contaminants and the attenuation of stormwater flows to better match the natural predevelopment flows. The use of low impact options, such as first flush retention dams, swales and rain gardens provide appropriate solutions, and these are being built into new residential zones. The District Plan Review presents an opportunity for the community and stakeholders to influence policy and rules on how stormwater associated with land use and development is managed.	
The Timaru Infrastructure Strategy 2015-2045	TDC		Includes an overriding direction of 'Responsible Stewardship' - "ensuring responsible stewardship of our key infrastructure assets to meet the needs of tomorrow's community". It aims to ensure the district's infrastructure is meeting the community's needs aligned with the Council's Strategic Direction. It considers potential future factors that will affect the Council's infrastructure, particularly the ageing of infrastructure, societal change and resilience.	https://www.timaru.govt.nz/__data/assets/pdf_file/0005/36554/LTP-2015-25-Infrastructure-Strategy-draft.pdf
The Timaru District 2045 Growth Management Strategy	TDC		Identifies that the provision of infrastructure is critical to the development of communities. New infrastructure is needed to integrate with and support future growth. Infrastructure is also required to be maintained and upgraded to support existing communities.	https://www.timaru.govt.nz/__data/assets/pdf_file/0013/200614/Growth-Management-Strategy-High-Resolution-Final-Revised-to-Reflect-Decision-08052018.pdf
The Timaru District Council Consolidated Bylaw 2018 (Chapter 15 Water Services)	TDC		Applies to the Council's reticulated stormwater network. Under the bylaw, no person can connect to the network without the Council's approval (1511.1). There are also restrictions on what can enter the network and on hazardous substances.	https://www.timaru.govt.nz/council/publications/bylaws/bylaw-chapters

			The Council may require the provision and maintenance of any pre-treatment works as necessary to regulate the quality, quantity and rate of stormwater discharge, or other constituents or characteristics of the stormwater discharges, prior to the point of discharge. No person shall allow, cause or permit the discharge either directly or indirectly into any part of the stormwater network infrastructure contaminants, sewage or trade wastes in breach or contravention of an approval to discharge stormwater.	
National Policy Statement Urban Development	New Zealand Government	August 2020	The NPS-UD sets out the objectives and policies for planning for well-functioning urban environments under the Resource Management Act 1991. It contains requirements for the provision of infrastructure to service urban environments. A more detailed description is included at section 1.5 of this assessment.	https://www.mfe.govt.nz/publications/towns-and-cities/national-policy-statement-urban-development-2020
National Planning Standards	Minister for the Environment	April 2019	The National Planning Standards seek to assist with planning systems by providing a nationally consistent structure, format, definitions, noise and vibration metrics and electronic functionality and accessibility for regional policy statements, regional plans, district plans and combined plans under the Resource Management Act 1991 ("RMA"). The planning standards do not alter the effect or outcomes of policy statements or plans. A more detailed description is included at section 1.5 of this assessment.	https://www.mfe.govt.nz/sites/default/files/media/RMA/national-planning-standards.pdf
Canterbury Regional Policy Statement 2013	Canterbury Regional Council	15 January 2013	District Plans must give effect to the Regional Policy Statement. The Canterbury Regional Policy Statement provides an overview of the resource management issues in the Canterbury region, and the objectives, policies and methods to achieve integrated management of natural and physical resources. These methods include directions for provisions in district and regional plans. The Canterbury Regional Policy Statement includes Chapter 5 which specifies provisions for Land-Use and Infrastructure and includes a chapter on energy. A more detailed description is included at section 1.5 of this assessment.	https://ecan.govt.nz/your-region/plans-strategies-and-bylaws/canterbury-regional-policy-statement/
Iwi Management Plan of Kāti Huirapa	Te Rūnanga o Arowhenua	July 1992	The Iwi Management Plan is a living document that includes identification of Iwi values and outcomes sought.	https://api.ecan.govt.nz/TrimPublicAPI/documents/download/2738399

1.4.2 Other District Plans

In developing an understanding of the approaches taken to address key resource management issues (as described above), an examination of other District Plans has been undertaken as set out in the table below. The Mackenzie District Plan has not been assessed given its age (2004).

Plan	Local Authority	Description of Approach
Ashburton District Plan The District Plan became fully operative on 25 August 2014. https://www.ashburtondc.govt.nz/our-services/planning-guidance-and-resource-consents/district-plan/Pages/default.aspx	Ashburton District Council	The zone chapters contain site coverage maximums, and in business zones (but not residential zones) the assessment matters consider the effect of increased building coverage, or reduction in permeable surfaces on stormwater treatment and discharge and the ability to meet any conditions of consent imposed on the Council's stormwater consents from the Canterbury Regional Council (these matters are not assessed in residential zones). Stormwater management is also addressed in the subdivision chapter, in ODPs and through assessment matters for consents (section 9.10.10).
Waimate District Plan The District Plan became fully operative on 28 February 2014. https://www.waimatedc.govt.nz/property-rates/planning-and-resource-consents	Waimate District Council	The District Plan includes stormwater management requirements in the subdivision chapter. While there are maximum site coverage requirements in the zone chapters there are no assessment matters that consider stormwater management where site coverage is breached.
Christchurch District Plan	Christchurch District Council	This Plan requires consideration of stormwater management at the time of subdivision. Where there is no subdivision, the Council requires approval for connection to the Council's stormwater network. The Council may require stormwater attenuation and treatment before it can be accepted into the network.

1.5 Statutory and Planning Context

The previous section included the identification of various documents of relevance to the drafting of the Proposed District Plan. Many of these documents fall under the umbrella of the Resource Management Act 1991, and the combination of the Act and other documents place requirements on those provisions to be included in the Proposed District Plan. These requirements are outlined below.

The RMA prescribes how district plans are to align with other instruments, and this is summarised in Table 3 below.

Table 3: RMA Hierarchy

Statutory document	Alignment requirement for Proposed District Plan	Comment
NZCPS NPS/NES CRPS	Give effect to	Implement according to the applicable policy statement's intentions.
Regional Coastal Environment Plan Canterbury Land and Water Regional 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?
Specific management plans and strategies prepared under other legislation	Have regard to	Give genuine attention and thought to the matter. As above.
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	Take into account	Address the matter and record

1.5.1 Resource Management Act 1991

The RMA sets out in Section 31 the functions of territorial authorities. The key function for the district council is the integrated management of the use, development, or protection of land and associated natural and physical resources of the district. When referring to "natural and physical resources" it is important to recognise that the RMA includes land, water, air, soil, minerals, and energy, all forms of plants and animals (whether indigenous to New Zealand or introduced), and all structures.

Section 5 sets out the purpose of the RMA, which is to promote sustainable management of natural and physical resources, and is explained more in Section 5(2):

In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety.

Section 6 of the RMA specifically requires that the Council recognise and provide for matters of national importance. Section 6(e) identifies the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga as a matter of national importance.

Stormwater systems historically have discharged into the nearest waterbody, which ends up in the coastal marine environment. Compounding this is that the wastewater network is at capacity in parts of the district, with some overflow ending up in coastal water bodies, impacting on values of significance to Māori.

Section 6(h) identifies the management of significant risks from natural hazards as a matter of national importance. As new development occurs, the rate of stormwater discharge from a site increases due to increased levels of impervious surfaces. Increased stormwater discharge rates have the potential to increase flooding downstream from a site. The management of risks from natural hazards (s6(h)) is therefore of relevance to the management of stormwater.

Section 7 of the Act requires the Council to have particular regard to the following matters:

(b) The efficient use and development of natural and physical resources.
(f) Maintenance and enhancement of the quality of the environment.
(g) Any finite characteristics of natural and physical resources:

When developing land, it is important to consider the efficient use and development of the natural and physical resources (s7(b)). The management of stormwater is inherently done through recognising the finite characteristics of natural (water quality) and physical resources (capacity of stormwater infrastructure) (s7(g)), and when stormwater is managed badly adverse effects can occur on the maintenance and enhancement of the quality of the environment (s7(f)), in particular downstream receiving environments.

Section 8 of the RMA requires the district council to take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi). Takata whenua, through iwi authorities have been consulted as part of the District Plan review process. This feedback has informed the section 32 evaluation, and the obligation to make informed decisions based on that consultation is noted.

All of the above matters are relevant when considering network utilities and ensuring their safe, efficient, and sustainable development, operation, maintenance, and upgrading, while also managing potential adverse effects on the environment.

1.5.2 Section 31 of the Resource Management Act

Section 31 lists the functions of territorial authorities, which include (of relevance to this chapter):

Section	Relevant Matter
Section 31(1) (aa)	*The establishment, implementation, and review of objectives, policies, and methods to ensure that there is sufficient development capacity in respect of housing and business land to meet the expected demands of the district.*
Section 31(1)(b)(i)	*The control of any actual or potential effects of the use, development, or protection of land, including for the purpose of avoiding or mitigating natural hazards.*

Stormwater infrastructure is included in the definition of development infrastructure under the RMA. Development infrastructure and the provision thereof to support the development of land (in this case, urban development only) is key to achieving development capacity, a function of territorial authorities under s31(1) (aa).

Stormwater infrastructure is essential in most uses of land and is therefore an important consideration during the subdivision and development of land. The current stormwater network capacity is overstretched and as a result the network can exacerbate existing natural hazards (flooding) risks. Furthermore, their overflows into downstream environments, without treatment as is historically the case, can result in impacts on the natural environment.

Stormwater can therefore be controlled by territorial authorities as part of exercising their function under the Act, in relation to their actual or potential effects on land and natural hazards.

For completeness and to avoid duplication of regulation the relevant functions of regional councils in respect to discharges of stormwater as contained in Section 30 of the RMA are outlined below. The discharge of contaminants onto land or into waterbodies that would affect water quality and aquatic biodiversity are covered by these functions and are therefore regional council matters.

Section	Relevant Matter
Section 30(1)(a)	*The establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the natural and physical resources of the region*
Section 30(1)(b)	*The preparation of objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are of regional significance*
Section 30(1)(c)	*The control of the use of land for the purpose of—* *(i) soil conservation:* *(ii) the maintenance and enhancement of the quality of water in waterbodies and coastal water:* *(iiia) the maintenance and enhancement of ecosystems in water bodies and coastal water:* *(iv) the avoidance or mitigation of natural hazards*
Section 30(1)(f)	*The control of discharges of contaminants into or onto land, air, or water and discharges of water into water*

Also of relevance is section 15 of the RMA:

Section	Relevant Matter
Section 15 Discharge of contaminants into environment	*(1) No person may discharge any—* *(a) contaminant or water into water; or* *(b) contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water; or* *(c) contaminant from any industrial or trade premises into air; or* *(d contaminant from any industrial or trade premises onto or into land—* *unless the discharge is expressly allowed by a national environmental standard or other regulations, a rule in a regional plan as well as a rule in a proposed regional plan for the same region (if there is one), or a resource consent.* *(2) No person may discharge a contaminant into the air, or into or onto land, from a place or any other source, whether moveable or not, in a manner that contravenes a national environmental standard unless the discharge—* *(a) is expressly allowed by other regulations; or* *(b) is expressly allowed by a resource consent; or* *(c) is an activity allowed by section 20A.* *(2A) No person may discharge a contaminant into the air, or into or onto land, from a place or any other source, whether moveable or not, in a manner that contravenes a regional rule unless the discharge—* *(a) is expressly allowed by a national environmental standard or other regulations; or* *(b) is expressly allowed by a resource consent; or* *(c) is an activity allowed by section 20A.* *(3) This section shall not apply to anything to which section 15A or section 15B applies.*

1.5.3 National Instruments – National Policy Statement for Freshwater Management

The National Policy Statement for Freshwater Management 2014 (NPSFWM) sets out the objectives and policies for freshwater management under the Resource Management Act 1991. It came into effect on 1 August 2014 and amendments made in August 2017 took effect on 7 September 2017.

The NPSFWM directs regional councils, in consultation with their communities, to set objectives for the state of freshwater bodies in their regions and to set limits on resource use to meet these objectives. This objective is relevant for consideration for the district plan in regard to integrated management of land use and freshwater particularly considering the effects of development and land use activities on the natural environment (which can include impacts of the quality of freshwater and coastal water).

Some of the key requirements of the NPSFWM are to:

- consider and recognise Te Mana o te Wai in freshwater management
- safeguard fresh water's life-supporting capacity, ecosystem processes, and indigenous species
- safeguard the health of people who come into contact with the water
- maintain or improve the overall quality of fresh water within a freshwater management unit
- improve water quality so that it is suitable for primary contact more often
- protect the significant values of wetlands and outstanding freshwater bodies
- follow a specific process (the national objectives framework) for identifying the values that tāngata whenua and communities have for water, and using a specified set of water quality measures (called attributes) to set objectives
- set limits on resource use (e.g., how much water can be taken or how much of a contaminant can be discharged) to meet limits over time and ensure they continue to be met
- determine the appropriate set of methods to meet the objectives and limits
- take an integrated approach to managing land use, fresh water and coastal water
- involve iwi and hapū in decision-making and management of fresh water.

The National Policy Statement for Freshwater Management 2020 comes into effect on 3 September 2020 and replaces the NPSFWM 2014 (amended 2017). This updated document will be assessed in place of the 2014 document once it comes into force.

1.5.4 National Coastal Policy Statement

The New Zealand Coastal Policy Statement 2010 (NZCPS) has policy recognition for the presence of infrastructure in the coastal environment and the importance it plays in providing for the social, cultural and wellbeing of people and communities. It requires the overall quality of fresh water within a freshwater management unit to be maintained or improved and improved integrated management of fresh water and the use and development of land.

While the methods are entirely focused on regional councils, District Councils have a role to play to achieve integrated management and also to achieve the requirements of any discharge consents for the Council's stormwater network authorised by Regional Council's under their regional plans. Discharges from stormwater (and wastewater) is one of a number of activities that can affect water quality.

1.5.5 National Policy Statement Urban Development

The NPS-UD is relevant to the stormwater chapter as it influences the provision of stormwater infrastructure and development density. It directs local councils to assess the capacity and demand for urban development (both residential and business) and to respond to that in order to achieve short-, medium- and long-term feasible development capacity.

In the short term this means land that is serviced with development infrastructure (three waters). This ensures urban environments enable communities to provide for their social, economic, cultural and environmental wellbeing. If the assessment indicates that the capacity is lacking, the Council is required to then provide capacity in an integrated way that achieves an efficient use of land and infrastructure.

1.5.6National Planning Standards

Released in April 2019, the purpose of the National Planning Standards (planning standards) is to improve consistency in plan and policy statement structure, format and content.

The planning standards were introduced as part of the 2017 amendments to the Resource Management Act 1991 (RMA). Their development is enabled by sections 58B–58J of the RMA. They support implementation of other national direction such as national policy statements and help people to comply with the procedural principles of the RMA.

For energy, infrastructure and transport, guidance is located in Section 7 of the standards which states:

5. Provisions relating to energy, infrastructure and transport that are not specific to the Special purpose zones chapter or sections must be located in one or more chapters under the Energy, infrastructure and transport heading. These provisions may include:

a. statement about the status of transport corridors e.g., the adjoining zoning applies to the centre line of mapped roads

b. noise-related metrics and noise measurement methods relating to energy, infrastructure and transport, which must be consistent with the 15. Noise and vibration metrics Standard

c. the management of reverse sensitivity effects between infrastructure and other activities.

6. The chapters under the Energy, infrastructure and transport heading must include cross-references to any energy, infrastructure and transport provisions in a Special purpose zones chapter or sections.

7. Zone chapters must include cross-references to relevant provisions under the Energy, infrastructure and transport heading.

8. All chapters must be included alphabetically.

1.5.7 Canterbury Regional Policy Statement

The key provisions of the Canterbury Regional Policy Statement (CRPS) of direct relevance to stormwater are set out in Table 4 below.

Table 4 – Relevant CRPS provisions

CHAPTER 5 - LAND-USE AND INFRASTRUCTURE	
Objective 5.2.1	***Location, design and function of development (Entire Region)*** *Development is located and designed so that it functions in a way that:* *1. achieves consolidated, well designed and sustainable growth in and around existing urban areas as the primary focus for accommodating the region's growth; and* *2. enables people and communities, including future generations, to provide for their social, economic and cultural well-being and health and safety; and which:* *a. maintains, and where appropriate, enhances the overall quality of the natural environment of the Canterbury region, including its coastal environment, outstanding natural features and landscapes, and natural values;* *b. provides sufficient housing choice to meet the region's housing needs;* *c. encourages sustainable economic development by enabling business activities in appropriate locations;* *d. minimises energy use and/or improves energy efficiency;* *e. enables rural activities that support the rural environment including primary production;*

	f. is compatible with, and will result in the continued safe, efficient and effective use of regionally significant infrastructure; *g. avoids adverse effects on significant natural and physical resources including regionally significant infrastructure, and where avoidance is impracticable, remedies or mitigates those effects on those resources and infrastructure;* *h. facilitates the establishment of papakāinga and marae; and* *i. avoids conflicts between incompatible activities.*
Objective 5.2.2	***Integration of land-use and regionally significant infrastructure (Wider Region)*** *In relation to the integration of land use and regionally significant infrastructure:* *1. To recognise the benefits of enabling people and communities to provide for their social, economic and cultural well-being and health and safety and to provide for infrastructure that is regionally significant to the extent that it promotes sustainable management in accordance with the RMA.* *2. To achieve patterns and sequencing of land-use with regionally significant infrastructure in the wider region so that:* *a. development does not result in adverse effects on the operation, use and development of regionally significant infrastructure* *b. adverse effects resulting from the development or operation of regionally significant infrastructure are avoided, remedied or mitigated as fully as practicable.* *c. there is increased sustainability, efficiency and liveability.*
Policy 5.3.1	***Regional growth (Wider Region)*** *To provide, as the primary focus for meeting the wider region's growth needs, sustainable development patterns that:* *1. ensure that any* *a. urban growth; and* *b. limited rural residential development* *occur in a form that concentrates, or is attached to, existing urban areas and promotes a coordinated pattern of development;* *2. encourage within urban areas, housing choice, recreation and community facilities, and business opportunities of a character and form that supports urban consolidation;* *3. promote energy efficiency in urban forms, transport patterns, site location and subdivision layout;* *4. maintain and enhance the sense of identity and character of the region's urban areas; and* *5. encourage high quality urban design, including the maintenance and enhancement of amenity values.*
Policy 5.3.2	***Development conditions (Wider Region)*** *To enable development including regionally significant infrastructure which:* *1. ensure that adverse effects are avoided, remedied or mitigated, including where these would compromise or foreclose:* *a. existing or consented regionally significant infrastructure;* *b. options for accommodating the consolidated growth and development of existing urban areas;* *c. the productivity of the region's soil resources, without regard to the need to make appropriate use of soil which is valued for*

	existing or foreseeable future primary production, or through further fragmentation of rural land; *d. the protection of sources of water for community supplies;* *e. significant natural and physical resources;* *2. avoid or mitigate:* *a. natural and other hazards, or land uses that would likely result in increases in the frequency and/or severity of hazards;* *b. reverse sensitivity effects and conflicts between incompatible activities, including identified mineral extraction areas, and;* *3. integrate with:* *a. the efficient and effective provision, maintenance or upgrade of infrastructure; and* *b. transport networks, connections and modes so as to provide for the sustainable and efficient movement of people, goods and services, and a logical, permeable and safe transport system.*
Policy 5.3.5	***Servicing development for potable water, and sewage and stormwater disposal (Wider Region)*** *Within the wider region, 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, by:* *1. avoiding development which will not be served in a timely manner to avoid or mitigate adverse effects on the environment and human health; and* *2. requiring these services to be designed, built, managed or upgraded to maximise their on-going effectiveness.* Regarding methods, it is worth noting that Territorial Authorities are required to: *3. Set out objectives and policies, and may include methods in district plans which:* *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. ensures 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. ensures, 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.*

Policy 5.3.6	***Sewerage, stormwater and potable water infrastructure (Wider Region)*** *Within the wider region:* *1. Avoid development which constrains the on-going ability of the existing sewerage, stormwater and potable water supply infrastructure to be developed and used.* *2. Enable sewerage, stormwater and potable water infrastructure to be developed and used, provided that, as a result of its location and design:* *a. the adverse effects on significant natural and physical resources are avoided, or where this is not practicable, mitigated; and* *b. other adverse effects on the environment are appropriately controlled.* *3. Discourage sewerage, stormwater and potable water supply infrastructure which will promote development in locations which do not meet Policy 5.3.1.* Regarding methods, it is worth noting that Territorial Authorities will: *3. Set out objectives and policies, and may include methods in district plans which:* *a. control the location of development sensitive to the effects of existing sewerage and stormwater infrastructure.* *b. provides for the upgrading of existing, and establishment of new sewerage and stormwater infrastructure while controlling adverse effects.* *c. restricts the upgrading or establishment of new sewerage and stormwater infrastructure that may facilitate development in locations which do not meet Policy 5.3.1.* *d. ensures that when any land is rezoned to enable a substantial development which requires significant new public sewerage, stormwater and potable water infrastructure, an outline development plan is included within the district plan.*
Policy 5.3.9	***Regionally significant infrastructure (Wider Region)*** *In relation to regionally significant infrastructure (including transport hubs):* *1. avoid development which constrains the ability of this infrastructure to be developed and used without time or other operational constraints that may arise from adverse effects relating to reverse sensitivity or safety;* *2. provide for the continuation of existing infrastructure, including its maintenance and operation, without prejudice to any future decision that may be required for the ongoing operation or expansion of that infrastructure; and* *3. provide for the expansion of existing infrastructure and development of new infrastructure, while:* *a. recognising the logistical, technical or operational constraints of this infrastructure and any need to locate activities where a natural or physical resource base exists;* *b. avoiding any adverse effects on significant natural and physical resources and cultural values and where this is not practicable, remedying or mitigating them, and appropriately controlling other adverse effects on the environment; and* ***c.*** *when determining any proposal within a sensitive environment (including any environment the subject of section 6 of the RMA), requiring that alternative sites, routes, methods and design of all*

	components and associated structures are considered so that the proposal satisfies sections 5(2)(a) – (c) as fully as is practicable.
CHAPTER 7 - FRESH WATER	
Objective 7.2.1	***Sustainable management of fresh water*** *The region's freshwater resources are sustainably managed to enable people and communities to provide for their economic and social well-being through abstracting and/or using water for irrigation, hydro-electricity generation and other economic activities, and for recreational and amenity values, and any economic and social activities associated with those values, providing:* *1. the life-supporting capacity ecosystem processes, and indigenous species and their associated freshwater ecosystems and mauri of the fresh water is safe-guarded;* *2. the natural character values of wetlands, lakes and rivers and their margins are preserved, and these areas are protected from inappropriate subdivision, use and development and where appropriate restored or enhanced; and* ***3.*** *any actual or reasonably foreseeable requirements for community and stock water supplies and customary uses, are provided for.*
Objective 7.2.3	***Protection of intrinsic value of waterbodies and their riparian zones*** *The overall quality of freshwater in the region is maintained or improved, and the life supporting capacity, ecosystem processes and indigenous species and their associated freshwater ecosystems are safeguarded.*
Objective 7.2.4	***Integrated management of freshwater resources*** *Fresh water is sustainably managed in an integrated way within and across catchments, between activities, and between agencies and people with interests in water management in the community, considering:* *1. the Ngāi Tahu ethic of Ki Uta Ki Tai (from the mountains to the sea);* *2. the interconnectivity of surface water and groundwater;* *3. the effect of land uses, and intensification of land uses on demand for water and on water quality; and* *4. kaitiakitanga and the ethic of stewardship; and* ***5.*** *any net benefits of using water, and water infrastructure, and the significance of those benefits to the Canterbury region.*

Policy 7.3.3	***Enhancing freshwater environments and biodiversity*** *To promote, and where appropriate require the protection, restoration and improvement of lakes, rivers, wetlands and their riparian zones and associated Ngāi Tahu values, and to:* *1. identify and protect areas of significant indigenous vegetation and significant habitats, sites of significant cultural value, wetlands, lakes and lagoons/Hapūa, and other outstanding water bodies; and* *2. require the maintenance and promote the enhancement of indigenous biodiversity, inland basin ecosystems and riparian zones; and* *3. promote, facilitate or undertake pest control.* With regards to methods, it is worth noting that Local Authorities will: *In regional and district plans as appropriate to the functions of each council, include:* *a. Methods to identify and protect sites and areas with threatened indigenous flora or fauna species, significant cultural values, wetlands, and lakes and lagoons/Hapūa, in accordance with the provisions of Sections 6(a), (c), (e), (f) and (g) of the RMA; and* *b. Provisions to manage land uses and vegetation removal within riparian margins. c. Include standards in a district plan that remove the requirement for resource consent from the territorial authority, if resource consent is granted by the Canterbury Regional Council for the same purpose.*
Policy 7.3.5	***Water quantity and land uses*** *To avoid, remedy or mitigate adverse effects of land uses on the flow of water in surface water bodies or the recharge of groundwater by:* *1. controlling the diversion of rainfall run-off over land, and changes in land uses, site coverage or land drainage patterns that will, either singularly or cumulatively, adversely affect the quantity or rate of water flowing into surface water bodies or the rate of groundwater recharge; and* *2. managing the planting or spread of exotic vegetation species in catchments where, either singularly or cumulatively, those species are or are likely to have significant adverse effects on flows in surface water bodies.* In terms of methods, it is worth noting that Local Authorities will: *4. Consider, jointly, the effects of changes in land uses on land drainage patterns and stormwater disposal requirements, as part of the zoning of land for residential, commercial or industrial uses.*
Policy 7.3.7	***Water quality and land uses*** *To avoid, remedy or mitigate adverse effects of changes in land uses on the quality of fresh water (surface or ground) by:* *1. identifying catchments where water quality may be adversely affected, either singularly or cumulatively, by increases in the application of nutrients to land or other changes in land use; and* *2. controlling changes in land uses to ensure water quality standards are maintained or where water quality is already below the minimum standard for the water body, it is improved to the minimum standard within an appropriate timeframe.*

	In terms of methods, it is worth noting that Local Authorities will: *2. Work together to manage the adverse effects of land uses on freshwater quality including appropriate controls on land uses in district or regional plans. 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.*

Chapter 9 – Ecosystems and Indigenous Biodiversity	
Objective 9.2.2	***Restoration or enhancement of ecosystems and indigenous biodiversity*** *Restoration or enhancement of ecosystem functioning and indigenous biodiversity, in appropriate locations, particularly where it can contribute to Canterbury's distinctive natural character and identity and to the social, cultural, environmental and economic well-being of its people and communities.*
Policy 9.3.4	***Promote ecological enhancement and restoration*** *To promote the enhancement and restoration of Canterbury's ecosystems and indigenous biodiversity, in appropriate locations, where this will improve the functioning and long-term sustainability of these ecosystems.*
Chapter 11 – Natural Hazards	
Objective 11.2.1	***Avoid new subdivision, use and development of land that increases risks associated with natural hazards*** *New subdivision, use and development of land which increases the risk of natural hazards to people, property and infrastructure is avoided or, where avoidance is not possible, mitigation measures minimise such risks.*
Objective 11.2.3	***Climate change and natural hazards*** *The effects of climate change, and its influence on sea levels and the frequency and severity of natural hazards, are recognised and provided for.*
Policy 11.3.8	***Climate change*** *When considering natural hazards, and in determining if new subdivision, use or development is appropriate and sustainable in relation to the potential risks from natural hazard events, local authorities shall have particular regard to the effects of climate change.*

1.5.8 Other Documents

Other relevant documents for the drafting of the District Plan include:

Document	Description	Relevance
Canterbury Regional Coastal Environment Plan 2005	The Regional Coastal Environment Plan 2005 recognises the need to protect existing network utility infrastructure, where such infrastructure is located adjacent to or within the	Relevant to infrastructure in the coastal environment.

	coastal marine area. The Plan also recognises the importance of enabling the Ports of Lyttleton and Timaru to operate efficiently and effectively. In particular, the Plan features a number of exceptions from rules where works in the coastal marine area are being undertaking to protect a network utility.	
Land and Water Regional Plan	Sets objectives, policies and rules for how land and water is managed in Canterbury region.	Relevant to all parts of the District Plan for the purposes of achieving integrated management and directly relevant for stormwater management. It requires consent for stormwater and other discharges that enter water, including a reticulated stormwater system. The LWRP also requires consent for developments if written permission of the owner of the reticulated stormwater system (i.e., the Council) has not been obtained.
Long Term Plan 2018-28	Identifies spending commitments by Timaru District Council for ten years.	General relevance this chapter as it sets out the Council's approach to stormwater infrastructure. It includes a reliance on onsite stormwater management.
NZS 4404:2010 Land development and subdivision infrastructure	This standard provides criteria for design and construction of land development addressing a range of topics including requirements for roads, stormwater, wastewater, water supply, landscaping and network utilities.	Relevance to the subdivision chapter and others related to infrastructure.
Building Act 2004	The Building Consent process manages potential effects resulting from the building activities for both new and existing buildings. Building consent applications must include provisions for disposing of stormwater and	Relevance to land development involving buildings.

	wastewater or identifying where they are if existing.	
Local Government Act 2002	The Local Government Act sets out the purpose of local government and the roles and powers of local authorities to meet their purpose (s10(1)(b) – to meet current and future needs of communities for good-quality infrastructure and services…in a cost-effective way). Stormwater collection and management are defined as part of network infrastructure. S11A states the network infrastructure is a core service as part of the role of local authorities. Thus, the provision of good quality (effective and efficient and appropriate for demand) stormwater networks is a required function of local authorities. Subpart 5 of Part 8 provides the territorial authorities may require development contributions to contribute towards the cost of upgrading existing and providing new infrastructure required for growth.	Relevance to the provision of Council infrastructure services.
Health Act 1956	The Health Act set out the duties and functions of the Ministry of Health and other agencies under the act, including Local Authorities. It is the duty of every local authority to improve, promote and protect public health within its district (s23), including the provision of sanitary works (which includes drainage works). Therefore, the provision of effective stormwater networks is a requirement for the Council under the Health Act.	Relevance to the provision of Council infrastructure services.

Land Drainage Act 1908	The Land Drainage Act sets out when Board may drain land, in public or private ownership, as well as the requirements of Local Authorities in regard to land drainage – required to maintain all watercourses and drains vested in or under their management to be kept free of nuisances or risk to health and maintained in proper order.	Relevance to the provision of Council infrastructure services.

2 Approach to Evaluation

An assessment of the scale and significance of a proposal at a high level is required at the start of the planning process. Section 32 of the Act requires that this report contain a level of detail that corresponds with the scale and significance of the environmental, economic, social and cultural effects that are anticipated from the implementation of this proposal.

This section of the RMA requires that:

- New proposals must be examined for their appropriateness in achieving the purpose of the RMA.
- The benefits and costs, and risks of new policies and rules on the community, the economy and the environment need to be clearly identified and assessed.
- All advice received from iwi authorities and the response to the advice needs to be summarised.
- The analysis must be documented, so stakeholders and decision-makers can understand the rationale for policy choices.

Criteria have been developed for determining scale and significance as part of the evaluation framework, and the proposal has been screened against these criteria. A ranking approach has been applied from low to medium and high to indicate where on the continuum of scale and significance the proposal falls.

For a full plan review, scale and significance should be assessed for different parts of a proposed plan as well as for the plan as a whole. This is because some parts of a proposed plan may result in different impacts and therefore differing levels of analysis. The outcome of the below assessment assists in determining the extent to which matters are relevant and what is required. For example, if Scale and Significance is low, then quantification is less likely to be required, and detail of options and evaluation can be brief.

2.1 Scale and significance

As per above the below tables assess the implications of the potential provisions of the Proposed District Plan:

Issue: Increased requirements to manage stormwater quantity and quality onsite		
Degree of change from the Operative Plan	The operative district plan does not contain a specific chapter or section on stormwater, or infrastructure. However, these requirements are located in different sections.	Medium

	Chapter 5 (Solid Waste, Liquid Waste and Hazardous Substances Management) and Chapter 9 (Services and Infrastructure) in Part B of the District Plan, provide the policy framework for services and infrastructure. The rules applying to services and infrastructure are addressed on a zone-by-zone basis, with some additional matters dealt with in Part D of the District Plan by General Rules 6.5.3.3, 6.6 and 6.11 and the subdivision chapter. An approach where specific chapters on stormwater management will be a substantial change in the format and application of provisions. In addition, the requirements to manage stormwater quantity and quality onsite as part of infill / intensification development and roading represents a departure from the current plan provisions. However, it should be noted that the Council is requiring stormwater management already (in addition to subdivision) as part of service agreements when connections are sought to the Council's network.	
Effects on matters of national importance	The proposed provisions more closely align with the NZCPS and NPSFWM, noting these are more directed at Regional Councils. In addition, the integration of infrastructure and land use is an important component of achieving the NPSUDC. However, it should be noted that the Council is requiring stormwater management already (in addition to subdivision) as part of service agreements when connections are sought to the Council's network.	Low
Scale of effects – geographically (local, district wide, regional, national).	The requirement to manage stormwater is spread throughout the district, however the provisions largely target urban development where Council reticulated services are available.	Medium
Scale of effects on people (how many will be	Stormwater provisions will have an impact on all urban dwellers if they	Medium

affected – single landowners, multiple landowners, neighbourhoods, the public generally, future generations?).	breach specified thresholds as part of development.	
Scale of effects on those with specific interests, e.g., Tangata Whenua	The measures are being introduced to better manage stormwater quantity and quality, consistent with the specific interests of Tangata Whenua. It is not considered organisations will be significantly affected as the additional provisions target small-scale infill development and intensification. New roads which will also be subject to the stormwater provisions are the responsibility of the Council.	Low
Degree of policy risk – does it involve effects that have been considered implicitly or explicitly by higher order documents? Does it involve effects addressed by other standards/commonly accepted best practice?	The proposed provisions will better align with national policy direction and best practice. Alternative methods exist to achieve stormwater management, such as service agreements when developers wish to connect to Council reticulated services, and bylaws. In addition, there are requirements under regional council plans. The proposed certification pathway is untested in the Timaru District, and the rest of the Country for stormwater management.	Medium
Likelihood of increased costs or restrictions on individuals, communities or businesses.	The proposed provisions continue to include subdivision requirements but introduce additional quantity and quality requirements affecting infill / intensification and roading developments. These could add increased costs on developments or shift the costs from the general ratepayer to developers, depending on the collection of financial contributions or development contributions.	Medium
Overall Assessment of Scale and Significance		**Medium**

Issue: Requiring consent for specified building products in external cladding		
Degree of change from the Operative Plan	There are no comparable rules in the operative district plan.	High
Effects on matters of national importance	The proposed provisions more closely align with the NZCPS and NPSFWM. In addition, the integration of infrastructure and land use is an important component of achieving the NPSUDC. However, it should be noted that the Council is requiring stormwater management already (in addition to subdivision) as part of service agreements when connections are sought to the Council's network. The changes will only bring about small environmental changes due to the scale of the use of these materials.	Low
Scale of effects – geographically (local, district wide, regional, national).	The provisions will apply district wide to the external cladding of new buildings involving the specified materials.	Medium
Scale of effects on people (how many will be affected – single landowners, multiple landowners, neighbourhoods, the public generally, future generations?).	The proposed provisions will impact on all developers if they breach specified thresholds as part of development.	Medium
Scale of effects on those with specific interests, e.g., Tangata Whenua	The measures are being introduced to better manage stormwater quantity and quality, consistent with the specific interests of Tangata Whenua. It is not considered organisations will be significantly affected as the additional provisions target small-scale infill / intensification development.	Low
Degree of policy risk – does it involve effects that have been considered implicitly or explicitly by higher order documents? Does it involve effects addressed by other standards/commonly accepted best practice?	The proposed provisions will better align with national policy direction in so far as they improve water fresh and marine water environments through requiring stormwater quality improvements before it enters the stormwater network.	Medium

	However, these are new standards for the Timaru District and will rely on evidence of contamination effects.	
Likelihood of increased costs or restrictions on individuals, communities or businesses.	Alternative building products are available.	Low
Overall Assessment of Scale and Significance		**Medium**

2.2 Approach to managing stormwater

The current approach to managing stormwater in the Timaru District is typically through discharge consents (currently via the Regional Council), or utility connection requests (usually during the building consent process under the Timaru District Council Consolidated Bylaw 2018 (Chapter 15 Water Services). Stormwater treatment and/or attenuation is applied at the network scale (stormwater management facility associated with new development to be adopted by the Council) and site scale for private development that discharges into the public network (via the bylaw).

There is an industry shift towards greater emphasis on management of stormwater flows and contaminants at source using land use controls for both development and redevelopment. This is based on experience that preventing adverse effects from occurring (as far as possible) at the land use design and planning stage is more effective and less costly than subsequently mitigating or remedying effects after they have been generated.

The Council has stated that its current Council practices do not meet LWRP water quality standards as its continued focus on network or sub-catchment scale management still results in cumulative effects over time and will not address existing adverse effects. Using the District Plan to facilitate and encourage Water Sensitive Urban Design (WSUD), including onsite water quantity/quality controls and management of redevelopment to reduce existing impacts, will support the achievement of the LWRP targets (as will more stringent reliance on the bylaw).

On-site management is a critical component to implementing WSUD principles. The five key principles of WSUD are listed in Table 5, along with comments regarding how these principles may be addressed in the District Plan.

Table 5 - Principles of Water Sensitive Urban Design (WWSUD)

Key Principles of WSUD	Addressing WSUD principles in the District Plan
Achieve multiple objectives	Utilise stormwater management areas for multiple uses such as recreation, amenity and ecological benefits. Look for opportunities for stormwater facilities to address needs of multiple parties (e.g., developers, Council, other network utilities, community groups, etc.)
Integrate stormwater design early in the process	Provide the conceptual framework of stormwater infrastructure ahead of development. Require integrated catchment management plans or water impact assessments where a development is not covered by a comprehensive Stormwater Management Plan.
Avoid rather than mitigate	Protect and enhance the values and functions of natural ecosystems. Avoid/minimise alterations to natural landforms and ecosystems. Minimise earthworks and land disturbance.

Address stormwater effects as close to source as possible	Onsite management as the preference, sub-catchment scale facilities where necessary. Aligns with the proposed hierarchy for stormwater management: retention for reuse, soakage, then detention and gradual release.
Mimic natural systems and processes for stormwater management.	Stormwater retention and volume reduction. Preference for green infrastructure over pipes or hard structures.

2.2.1 Infill development

In an infill situation, on-site management is the only way to address the effects of development, without requiring unsustainable network upgrades or putting the performance of the downstream network at risk. A change in approach is proposed, from the traditional management of peak flows to one focused on volume reduction. The primary reason is that the traditional flow control approach does not reduce the volume of water but rather reduces the peaks and spreads the flows out over a longer period of time. While this reduces peak flow effects such as flooding, it increases the time over which the smaller erosive flows occur and can lead to increased stream erosion. Minimising both peak and erosive flows requires that volume of stormwater runoff be reduced. The retention of stormwater on site will contribute towards water resilience within the community.

The hierarchy of stormwater management is retention for reuse, soakage, then detention and gradual release. The aim for volume reduction is to retain (for re-use) at least the site's pre-development initial abstraction from all impervious areas. Given infill development is a significant component of the growth strategy for the district, volume reduction targets should apply to all new urban development, including single dwellings (the impact of 10 infill dwellings in a catchment has a similar downstream impact as the addition of a 10-allotment subdivision). Further to this, applying flow/ volume controls to redevelopment that increases the impermeable surface coverage will capture gradual increase which cumulatively have a negative effect on the existing network.

2.2.2 Industrial and Commercial areas

Commercial and industrial development is often characterised by large buildings and hardstand areas that capture stormwater runoff prior to discharging to a reticulated network. Many of the District's commercial and industrial areas already contain extensive built form and impervious surface coverage. It is appreciated that there is limited scope within existing commercial areas to provide for rainwater storage or stormwater neutrality devices.

The proposal to achieve neutrality for specified rainfall events takes into account the built nature of commercial and industrial areas. In the town centre it is proposed to exempt the first 50m^2 of an impervious surface increase. Within the Timaru Town Centre context, the Council expects that there would be very few sites that would trigger this standard, as there is scope for small increases, with the remainder of the sites likely able to rely on existing use rights.

For industrial areas, the proposed approach is already the practice within the Washdyke Industrial Expansion Zone (WIEZ) and can be extended to cover all industrial and commercial zoned land. These sites are largely based within the lower reaches of catchments and are subject to flooding during rain events and subsequent failure of networks. Council will be seeking to provide a 1 in 50-year level of surface moving forward with steps already taken to achieve this (i.e., Washdyke Flat Road upgrades have been designed to 1 in 50-year event). It is noted that it may be challenging to achieve the required stormwater attenuation on existing industrial sites. However, existing use rights will apply and only the increase in impervious surfaces over the specified threshold will be able to be considered.

In instances where compliance cannot be achieved consent can be applied for and the Drainage and Water Unit can consider options and the rationale provided for not complying. Industrial Zoned land is

within areas that experience network failures, and the desire of Council is to improve the level of service. This means that going forward private landowners will have to do the same.

2.2.3 Zincalume and copper controls

Zincalume and copper release contaminants into the reticulated stormwater network. There are no commercially available treatment devices for these contaminants for small residential-sized sections. The ability to reduce the associated effects within a residential environment therefore seems to be low. Accordingly, the Council proposes that the use of these materials be treated as restricted discretionary activities.

2.2.4 Carparking areas

Non-residential car parking areas generate high pollutant levels which end up in Council's reticulated stormwater network. The scale of the development will necessitate different considerations, with larger areas likely requiring a different treatment methodology to a smaller area. Industrial areas will predominantly have heavier vehicles transporting a mixture of materials that will increase the risk of contaminants entering the stormwater system. The WIEZ provides an example of where the stormwater network enters a sensitive environment, and such measures are needed and has been addressed via a specific design guideline under the recently obtained ECan Consent. Requiring stormwater treatment over a specified threshold of car parks for non-residential activities as a standard will allow the Council to ensure compliance.

2.2.5 Roads

The proposed approach includes standards that require stormwater neutrality/ treatment to occur where an increase in impervious area occurs (not including footpaths and vehicle crossings) over a specified threshold. This option provides certainty in relation to the provision of stormwater neutrality/ treatment devices when increases in impervious areas occur above a less than minor threshold.

There will be instances where the required level of stormwater neutrality cannot be achieved due to physical constraints. This will result in a resource consent process, which will have some additional costs associated with preparing and lodging the application (this approach is the same as that taken under the Operative Plan on all privately owned sites). There will be inevitable costs associated with the physical construction of stormwater management within road reserves, however, this will not be an issue confined to road corridors and reflects the management approach required district wide when stormwater is being discharged to the reticulated network.

This proposed approach is primarily driven by the need to ensure stormwater outcomes (e.g., discharge volumes/neutrality and water quality) are being met where Council has reticulated stormwater networks that will need to adhere to the pending global Stormwater Management Plan(s) as per ECan consent conditions.

2.2.6 Bylaws and service agreements

Some Councils take the approach of managing stormwater through a bylaw and/or service consent process. The Council considers that the District Plan is the most appropriate place to manage these issues. Stormwater quantity and quality should be managed by the same document to create certainty for the users along with ensuring effects generated by proposed land use activities are being mitigated with well-considered outcomes being achieved. Bylaws and service consents are not often the first documents to be considered when planning for a development, solely relying on these documents and/or leaving stormwater to the back end of development considerations has resulted in suboptimal outcomes in the past and will likely continue to do so.

Overall, the Council considers that:

- the proposed approach will achieve reductions in peak flows into the stormwater network, thereby reducing potential downstream flooding;
- the proposed approach will achieve contaminant reductions in the stormwater discharge to waterways;
- the proposed approach will increase community resilience for non-potable water supply;
- the proposed quality requirements are based on the best practicable option and will enable new and redevelopment to contribute to the stormwater management; and
- with the proposed requirements, the Council will be positioned to, at a minimum, maintain existing contaminant levels or reduce contaminants from new developments and redevelopment.

2.3 Changes proposed

Operative Plan	Proposed Plan
Stormwater is addressed at a policy level in section 5(b) which identifies and responds to the adverse effects of liquid waste, including stormwater, on the environment and the threatened contamination of coastal and freshwater systems in the district. Objective 1: Avoid, remedy or mitigate the adverse effects of liquid waste (e.g., sewage, stormwater or agricultural) on aquatic and land ecosystems. Objective 2: Achieve hydrological neutrality in respect of the quantity of stormwater generated as a result of future urban development and maintain the quality of any receiving waters as a result of stormwater generated from future urban development. Various policies seek to manage the adverse effects of liquid waste (e.g., sewage, stormwater or agricultural) on aquatic and land ecosystems. For example: Policy 10: To manage the flow of stormwater throughout urban catchments by maximising opportunities to prevent or mitigate the generation of stormwater through the application of low impact design principles such as: • Integrate stormwater management and design early in the site planning process. • Manage stormwater as close to the point of origin as possible; minimise collection and conveyance. • Rely on natural processes within the soil mantle and the plant community. Policy 14: To promote alternative design layouts for subdivision and building	Stormwater quantity and quality management is addressed in a separate standalone Stormwater chapter. The proposed provision seeks to similarly manage the adverse effects of stormwater quantity and quality and achieve hydraulic neutrality. Stormwater management is also addressed in the proposed Subdivision Chapter.

development that integrate development with natural water systems, enhance the quality of urban stormwater before discharge and minimise the amount of stormwater discharged from sites	
Part D General Rule 6.5 specifies rules for water, sewer, stormwater and open space and recreation contributions. General Rules 6.5.3 covers stormwater systems for urban areas, principally requiring financial contributions and networks to comply with specified network conveyance requirements. Specific rules addressing impervious surfaces and water quality do not exist	The proposed provisions target the creation of stormwater, its attenuation and management through impervious surface thresholds that trigger certification requirements covering storage and attenuation and quality treatment to ensure acceptable stormwater management.
The zone rules also each contain relevant provisions for infrastructure including stormwater, such as the Residential Zone permitting utility services (Rule 2.6.1.1.1.7)	These utilities are provided for in the Infrastructure and Energy Chapter which enables stormwater conveyance infrastructure.
Part 6 6.3 subdivision requires the consideration of stormwater matters generally as part of subdivision consent and also includes standards on stormwater infrastructure.	The proposed provisions include subdivision requirements for stormwater management.

2.4 Quantification of Costs and Benefits

Quantification of costs and benefits has not been specifically undertaken for this topic. The costs and benefits of the proposed provisions will apply across the whole district but will vary depending on the development proposed, methods used to manage adverse effects and the capacity of the Council's stormwater infrastructure within a specific area.

2.5 Choice of Evaluation Method(s)

The approach to evaluation for this topic is a qualitative cost-benefit analysis as the issue is of medium significance and because it is difficult to monetise the benefits and costs.

2.6 Proposed Objectives

This section of the report evaluates the proposed objectives as to whether they are the most appropriate to achieve the purpose of the Act.

Option 1: Include the following proposed objective:

SW-O1	**Stormwater management**

Subdivision, use and development within areas serviced by the Council's reticulated stormwater network do not increase peak demand on stormwater management systems or reduce water quality in the reticulated stormwater network.

Option 2: Status quo which includes the following objectives:

Objective 1: Avoid, remedy or mitigate the adverse effects of liquid waste (e.g., sewage, stormwater or agricultural) on aquatic and land ecosystems.

Objective 2: Achieve hydrological neutrality in respect of the quantity of stormwater generated as a result of future urban development, and maintain the quality of any receiving waters as a result of stormwater generated from future urban development

3 Evaluation of Objectives

Category	Criteria	Comments
Relevance	Directed to addressing a resource management issue	**Option 1:** Achieves Objective is aimed at addressing adverse effects that stormwater can have on the stormwater network and environment.
		Option 2: Achieves Objectives are aimed at addressing adverse effects that stormwater can have on the stormwater network and environment. However, the rules do not fully deliver the objectives.
	Focused on achieving the purpose of the Act	**Option 1:** Achieves Stormwater is comprehensively managed through the district plan, reflecting the requirements in section 5 to manage resources to enable people and communities to provide for their wellbeing and health and safety while managing adverse effects of activities on the environment.
		Option 2: Partly achieves Objectives are aimed at addressing adverse effects that stormwater can have on the stormwater network and environment. However, the rules do not fully deliver the objectives. Stormwater is managed through subdivisions, but infill development and increased impervious surfaces including roads, which can create adverse effects is not addressed.
	Assists a council to carry out its statutory functions	**Option 1:** Achieves Directly achieves section 31(1)(b)(i) for controlling the use of land to manage adverse effects. However, it

		duplicates s30 functions of regional councils.
		Option 2: Partly achieves Partly achieves section 31(1)(b)(i) for controlling the use of land to manage adverse effects.
	Within scope of higher-level documents	**Option 1:** Achieves This option achieves the objectives of the NPSFM, NZCPS and CRPS around stormwater management.
		Option 2: Partly achieves This option goes some way to achieving the objectives of the NPSFM, NZCPS and CRPS but does not fully achieve these given the absence of coverage on and increased impervious surfaces including roads.
Feasibility	Acceptable level of uncertainty and risk	**Option 1:** Achieves There is risk with the novel certification process proposed. However, this approach has ostensibly occurred through service agreements outside of the Operative District Plan where the Council provides advice on acceptable solutions. This approach is consistent with the LWRP.
		Option 2: Achieves The existing operative provisions are well understood and applied.
	Realistically able to be achieved within council's powers, skills and resources	**Option 1:** Achieves The objective relates to powers the Council has under the RMA to manage stormwater. The Council already administers stormwater quantity and has an identified responsibility for stormwater quality as part of integrated management and achieving regional consent requirements (it is noted however that regional councils have the primary water quality responsibilities).

		Option 2: Achieves The objectives relate to powers the Council has under the RMA to manage stormwater. The Council already administers water quantity and quality requirements.
Acceptability	Consistent with identified iwi/Māori and community outcomes	**Option 1:** Achieves Community consultation on the Issues & Options paper identified general support for encouraging water conservation as it can mitigate adverse effects on the environment. Meets strategic objectives for water quality in relation to mana whenua.
		Option 2: Partly achieves The status quo does not fully address the identified issues with stormwater management.
	Will not result in unjustifiably high costs on the community or parts of the community	**Option 1:** Partly achieves Stormwater must be managed. The proposed objective and approach may apportion costs differently (e.g., greater cost on developers as opposed to the wider community) however the total cost likely remains comparable.
		Option 2: Partly achieves Costs have been accepted to date for stormwater management by developers through financial contributions and the general community through their rates.

4 Identification of Options

Option 1: Status Quo
This option involves a continuation of the operative Plan provisions including the current policies and rules. It relies on a functioning Council stormwater network and service level agreements and the stormwater provisions in the subdivision chapter.

Option 2: Additional stormwater provisions
Main0tain the subdivision provisions and add impervious surface thresholds to manage additional stormwater generation from infill / intensification development and roads. The option will involve the use of a certification pathway, whereby the Council certifies stormwater management proposals on the basis of required quantity and quality outcomes.

5 Evaluation of Options

5.1 Evaluation table

OPTION 1 *Status Quo*			
Benefits **Environmental**	**Economic**	**Social**	**Cultural**
• Stormwater outcomes achieved via subdivision provisions which require consent for subdivision and include assessment of stormwater management as part of consent applications and ODPs which identify stormwater management areas. • Enables applications to be declined thus avoiding adverse effects on the stormwater network.	Provides for the continuation of current practice which is accepted and demonstrated to be economic.	Provides for the continuation of current practice which is accepted and generally understood by the community.	Manages stormwater from new subdivisions
Costs **Environmental**	**Economic**	**Social**	**Cultural**
Does not cover roads, infill development or intensification outside of subdivision. Does not cover specified building materials which cause contamination.	Apportions costs through subdivision requirements, financial contributions and general rate. It is unclear if the current approach is more or less efficient than Option 2. Excluding infill / intensification stormwater management will require costly Council network upgrades to meet the requirements of higher order documents.	None identified.	Does not manage stormwater from infill / intensification development.

Efficiency	It is unclear if the current approach is more or less efficient than Option 2 at meeting the objectives. Excluding infill / intensification stormwater management will require costly Council network upgrades to meet the requirements of higher order documents.
Effectiveness	The provisions only partly achieve the objectives as not all stormwater effects are managed.
Strategic Direction(s)	This option would not fully achieve strategic objectives relating to consolidated development and further intensification, the integration of land use and infrastructure, climate change, mana whenua values and water quality without these matters being addressed outside the District Plan by other methods.
Overall Appropriateness of Option 1	This option is not an appropriate way to achieve the objectives.

OPTION 2
Additional stormwater provisions

Benefits Environmental	**Economic**	**Social**	**Cultural**
• Stormwater outcomes achieved via subdivision provisions which require consent for subdivision and include assessment of stormwater management as part of consent applications and ODPs which identify stormwater management areas. • Stormwater management also required for changes in impervious surface areas as part of infill / intensification developments and new roads. • Enables applications to be declined thus avoiding adverse effects on the stormwater network. • Discharge to the Council's network	Overall costs may be similar to status quo option but is not certain. Currently costs are apportioned through subdivision requirements, financial contributions and general rate. Including infill / intensification stormwater management may shift the cost for providing stormwater infrastructure from the general rate payer to the developer	Provides for the continuation of current practice which is accepted and generally understood by the community	• Manages stormwater from new subdivisions. • Manages stormwater from increased impervious surfaces as a result of infill / intensification changes in use and new roads

must be in alignment with the Catchment Area Stormwater Management Plans (SMPs) and Stormwater Discharge Resource Consent under the LWRP: • All SMPs will be developed within the life of the DP and will provide specific details for catchment area stormwater quantity and quality requirements • One of the main objectives of SMPs and consents are to achieve contaminant reductions in the discharge to waterways. Hence the proposed quality requirements are based on the best practicable option and will enable new and redevelopment to contribute to the stormwater management. • With the proposed requirements, the Council will be positioned to, at a minimum, maintain existing contaminant levels or reduce contaminants from new and redevelopment.			
Costs Environmental	**Economic**	**Social**	**Cultural**
More comprehensively manages adverse effects from stormwater, resulting in less cost to the environment than the status quo option.	• Overall costs may be similar to status quo option but is not certain. Currently costs are apportioned through	None identified	None identified

	subdivision requirements, financial contributions and general rate. Including infill / intensification stormwater management requirements may shift the cost for providing stormwater infrastructure from the general ratepayer to the developer. • The individual costs of rainwater tanks are not seen as being prohibitive to development. For example, a 250-litre tank can be purchased for $198.50 at Bunnings; whilst a 5,000-litre tank can be purchased for $1,529 at Bunnings.		

Efficiency	It is unclear if the current approach is more or less efficient than Option 1 at meeting the objectives. Including infill / intensification and roading stormwater management required should reduce the need for costly Council network upgrades to meet the requirements of higher order documents but may increase development costs, which were often off set by financial contributions. The impacts of this on economic growth and employment are unclear
Effectiveness	The provisions achieve the objective.
Strategic Direction(s)	This option would achieve strategic objectives relating to consolidated development and further intensification, the integration of land use and infrastructure, climate change, mana whenua values and water quality.
Overall Appropriateness of Option 2	This option is an appropriate way to achieve the objective

5.2 Risk of Acting or Not Acting

Where there is uncertain or insufficient information an evaluation of risk of acting or not acting is required. Key areas of uncertainty identified relate to:

- the economic costs associated with the options; and
- the use of a novel certification pathway.

There is therefore a risk associated with Option 2. While the economic cost is not quantified, it is noted that costs for stormwater management would still accrue with Option 1, however they may be apportioned differently. The risks associated with the proposed certification pathway can be tested through the submission process.

6 Preferred Option

This evaluation has been undertaken in accordance with Section 32 of the RMA in order to identify the need, benefits and 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 2 is the most appropriate option as:

- The approach will better achieve the higher order planning requirements and proposed strategic directions;
- The provisions are consistent with the Council's stated approach to managing stormwater in the Stormwater Strategy;
- The approach will be effective in managing the adverse effects of stormwater; and
- The benefits outweigh the costs.

Overall, it is considered that the set of preferred provisions is the most appropriate.