



Tairāwhiti Regional Freshwater Planning Advisory Group – Hui 2

Date: 16 August 2023

Title of report: Activities in the beds of rivers and lakes

Report no: **1**

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Purpose of this report

This report provides information on the context, resource management issues and outcomes sought for planning provisions relating to **activities in the beds of rivers and lakes**.

Outcomes sought

1. Members of this Advisory Group understand the matters and issues relating to **activities in the beds of rivers and lakes**. Any issues not already described will be identified.
2. Members' practical experience and knowledge relating to **activities in the beds of rivers and lakes** helps to build a collective understanding of the issues.
3. Members will consider different policy options to inform how these activities should be managed within the proposed Regional Freshwater Plan.

Getting ready for the meeting

Please consider in advance of the hui the questions identified in this report. These questions will be discussed at the hui so if you haven't found answers for each of the questions prior to the meeting, we can capture them then.

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1 Executive summary

This report focuses on '**Activities in the beds of rivers and lakes**' which is managed in Part C6.3 of the Tairāwhiti Resource Management Plan (TRMP). It does not address any activities in and around riverbeds associated with forestry which will be discussed with the Advisory Group as a separate topic.

Activities covered by Part C6.3 of the TRMP include:

- works that disturb the riverbed or banks such as gravel extraction
- stock access
- structures such as bridges and culverts
- vegetation planting and clearance
- damming or diverting rivers and streams.

Many activities do not require a resource consent if they meet the standards set in the TRMP which protect things such as water quality and ecology.

Council must review the TRMP provisions against recent legislative changes relating to freshwater. Of most significance is the National Policy Statement for Freshwater Management (NPS-FM) 2020. This prioritises the health of waterbodies first, followed by the health needs of people and then social, cultural and economic wellbeing.

Staff have reviewed the TRMP provisions, assessing the effectiveness of the Plan in achieving the objectives of the TRMP, but also to identify changes necessary to give effect to the new national direction.

The review identified **four overarching issues** with the current plan framework:

1. The TRMP does not give effect to new legislative direction.
2. Water quality and ecosystem health are degraded or degrading in some parts of Tairāwhiti. While there are many influences on the current environmental state, activities in the beds of rivers are one of the contributing factors and the current plan provisions have not managed activities well enough.
3. Climate change is increasing the frequency and magnitude of natural hazard events. Current planning provisions do not effectively respond to this challenge.
4. There are gaps and limitations of the existing framework that do not align with current best planning practice. If these were addressed, it would result in better environmental outcomes.

This report summarises these four issues in more detail for each of the following sub-topics:

- structures, disturbance works, deposition of material, reclamation
- flood management and response
- gravel extraction
- stock and vehicle access
- vegetation clearance and planting
- damming, diversion and drainage.

The outcomes for the proposed Regional Freshwater Plan to address the issues are described and some examples of approaches adopted by other councils. Questions about each sub-topic are identified for members to record any thoughts prior to this hui taking place on 16 August 2023.

2 Background and context

2.1 Scope of 'Activities in the beds of rivers and lakes'

Tairāwhiti contains a diverse range of freshwater bodies. The beds and margins of these waterbodies provide habitat for flora, fauna and valued mahinga kai while also supporting a variety of uses including recreational activities, infrastructure, farming, navigation, gravel extraction, and flood mitigation.

This topic of the TRMP review covers the following activities:

- the establishment, placement, maintenance, operation and removal of structures (for example, pipelines, cables, bridges, culverts, irrigation intakes, flood protection works)
- bed disturbance, excavation, drilling, tunnelling (for example, during placement of culverts and bridges)
- vehicle and stock access to rivers and lakes
- introduction and removal of vegetation such as to install a structure, as erosion control or flood mitigation
- gravel extraction
- drain maintenance
- drainage or reclamation (for example realigning waterbodies, filling channels and stopping the flow of water)
- deposition of substances (such as excavated material, vegetation, any other materials)
- damming and diversion activities (for example to facilitate the abstraction of water).

This topic does not address:

- activities associated with forestry
- identification of outstanding waterbodies
- discharges of contaminants within the beds and margins of waterbodies, except where associated with the activities above
- wetlands¹.

2.2 Current approach in the TRMP

Part C6.3 of the TRMP sets out most provisions relating to activities in the beds of rivers and lakes. The objectives are included in the Regional Policy Statement (RPS) section (Part B6).

The TRMP aims to enable the activities in the beds of lakes and rivers while managing the potential impacts on water quality, ecosystem health, bed and bank stability, flood and debris carrying capacity, and existing structures.

Key points are:

- The TRMP allows certain activities to occur without requiring a resource consent by putting conditions in place to manage their effects.

¹ Wetlands are largely managed by the NES-F, and if any additional rules are required, they will be addressed in a separate topic for wetlands and riparian margins.

- Activities that cannot comply with permitted activities will require a resource consent which means they will be assessed case-by-case.
- Damming any part of the Mōtū River and its tributaries within the National Water Conservation Order is prohibited.

The TRMP rules rely on several schedules and appendices which list specific sites and values that need to be managed, as well as information requirements for conducting activities. These are:

- Schedule G15: Aquatic Ecosystem Waterbodies
- Schedule G17: Regionally Significant Wetlands
- Schedule G18: Outstanding Waterbodies
- Schedule G19: Significant Recreation Areas
- Schedule G20: Watercourses in Land Drainage Areas and Ecological Values
- Schedule G22: Marine Areas of Coastal Significance as Defined in the Coastal Environment Plan
- Appendix H19: Culvert Construction Guidelines for Council Administered Drainage Areas
- Appendix H20: Requirements of Farm Environment Plans.

Additionally, the TRMP includes non-regulatory methods for Council to complete to support the implementation of the plan. For example, creating design guidelines for installing culverts and providing educational material about breeding areas of New Zealand Banded Dotterel.

2.3 Reviewing the activities' provisions

State of the environment

To assess the effectiveness of the TRMP it is necessary to understand how the environment has changed since the provisions were introduced.

Council undertakes state of the environment monitoring and has been doing so since the RMA was introduced. The monitoring results over this time, and since the Regional Freshwater Plan was notified in 2015, has demonstrated limited improvement in water quality or ecosystem health and declining gravel supply in some locations. Council's water quality monitoring shows that water quality at a significant proportion of monitoring sites exceeds the national bottom lines (as set out in the NPS-FM).

Sediment discharges in Tairāwhiti are of concern, with 28 of 45 monitoring sites showing high levels of suspended fine sediment. While surrounding land uses are significant contributors to erosion and sediment, activities in and around waterbodies also pose a risk and must be managed for this issue as well.

The health of macroinvertebrates, which are important for ecosystems, is also showing no improvement. 44 out of 82 sites are below the national bottom line for Macroinvertebrate Community Index (MCI) and Quantitative Macroinvertebrate Index (QMCI).

Through bed level surveys² completed across Tairāwhiti, sediment or gravel is found to be

² Surveys of cross-sections of rivers to monitor changes in sediment being eroded or deposited

accumulating in some areas and declining in others. In areas where there are declining trends, extraction rates may be unsustainable.

Statutory requirements

Since the development of the Regional Freshwater Plan there have been several amendments to national direction and the introduction of new requirements. **Appendix 1** to this report summarises the key documents and what they require in further detail, but overall, the proposed Regional Freshwater Plan needs to:

- Give effect to Te Mana o te Wai by placing the health of waterbodies above other priorities such as economic interests. This includes managing water quality and quantity to achieve identified environmental outcomes which may involve improving water quality where it is degraded and reducing the allocation of resources.
- Protect natural character of rivers and lakes, significant indigenous vegetation and significant habitats of indigenous fauna. There is a specific requirement to maintain or improve fish passage.
- Avoid the loss of river extent and values to the extent practicable.

Effectiveness of current TRMP provisions

The TRMP provisions have been reviewed to assess the effectiveness of the policies, rules and other methods.

This review involved assessing the provisions to determine if:

- all policies in the Plan have been implemented
- the implemented policies and rules have resulted in the Plan's objectives being met
- the achievement of objectives is due to the implementation of policies and rules
- the policies are still appropriate and if anything has changed.

The review highlighted that the provisions have been implemented with moderate success, noting:

- Approximately 236 consents have been issued for activities in the beds of rivers and lakes (outside of the Waipaoa catchment) since the Plan was notified. A significant number of consents relate to forestry, 23 are for gravel extraction and the other consents authorise activities such as installing structures and placing erosion protection rockwork.
- Resource consents have addressed ecological effects on ecosystems, water quality and bed and bank stability.
- The other methods to be implemented to support the policies and rules have only been completed to a limited extent.
- The provisions do not effectively address public access, natural character, significant ecological sites and Māori freshwater values.
- A number of changes are needed to implement the higher order documents, particularly the NPS-FM 2020 and National Environmental Standard-Freshwater (NES-F).

3 Activity specific issues

This section of the report assesses particular activities, or groups of activities. It includes:

- a description of the sub-topic and how the TRMP manages it
- an explanation of how the four overarching issues is relevant to each sub-topic
- examples of management approaches by other councils

- the key outcomes sought for the proposed Regional Freshwater Plan
- questions for members to consider and discuss.

3.1 Sub-topic: structures, disturbance works, deposition of material, reclamation

Context

This sub-topic covers structures and the associated activities to install, operate and maintain them in the beds of lakes and rivers. Structures can include culverts, pipelines, cables, measuring devices and irrigation takes.

The TRMP currently sets out several policies which provide for new structures and associated activities where effects can be adequately managed. This includes addressing potential impacts on water quality, flora and fauna, the stability of the bed and banks of rivers and on other authorised activities.

The effects of these activities can vary greatly depending on their nature, scale and location. Examples of effects and values that may be impacted are identified in **Figure 1**.

Currently rules cover the installation, use, maintenance and removal of structures. They also deal with related activities like excavation, drilling, other disturbance, depositing materials and reclamation.



Figure 1: Effects and values arising from activities in the beds of rivers and lakes

The TRMP permits certain structures including:

- single span stock bridges
- existing lawfully established structures
- culverts
- surface water intake structures
- fords
- game shooting structures
- bridges, cables, lines, pipelines and suspended fences
- lines or cables owned by a network utility operator
- temporary bridges.

Resource consents are required where activities may have moderate or more significant effects.

Issues

The TRMP doesn't give effect to the NPS-FM and may not achieve Te Mana o te Wai. Some key points include:

- The NPS-FM requires the application of an effects management hierarchy which requires the effects of activities to be managed using a hierarchical approach from avoidance through to offsetting and compensation. This is missing in the TRMP and may result in the loss of river extent and values.
- The NPS-FM requires Māori freshwater values to be identified and provided for. The TRMP has limited direction to consider impacts on other values such as mauri and mahinga kai.
- The TRMP doesn't explicitly protect drinking water supplies from activities in the beds of rivers and lakes.

Under the RMA³, the natural character of rivers and lakes must be preserved and public access to rivers and lakes must be maintained or enhanced. The TRMP has minimal reference to these matters and not all activities recognised under the RMA are addressed.

The current provisions do not align well with the NES-F as the NES-F includes regulations on structures in the beds of rivers and lakes, but it is unclear to the community if these override the TRMP rules or if they are additional to them. The relationship between rules within the TRMP is also unclear, which creates confusion for plan users and can lead to greater processing costs.

Environmental monitoring results show a lack of improvement in turbidity (a measure of cloudiness in the water) across many monitoring sites. More than half of sites monitored for MCI/QMCI (macroinvertebrates) do not meet the national bottom lines for these measures. Activities in the beds of rivers are a contributing factor to the current state of the environment.

Outcomes sought in proposed Regional Freshwater Plan

From the issues identified, it is considered the proposed Regional Freshwater Plan should:

- Give effect to the NPS-FM and ensure it achieves Part 2 of the RMA (which includes Section 6 Matters of National Importance).
- Clarify the relationship between the proposed Regional Freshwater Plan and the NES-F.
- Simplify the plan drafting to improve clarity for plan users.

Questions for the Advisory Group

³ Section 6 of the RMA sets out matters of national importance which are to be recognised and provided for.

❖ For each of the structures or activities below, list out the key issues or benefits you see resulting from it

❖ Issues and/or benefits may relate to water quality, fish passage, mahinga kai, recreation, flooding, visual amenity, access, economic returns

❖ Tick if you think the structure or activity should be **enabled** or **restricted**

❖ Feel free to add any structures or activities not identified

Structure/Activity	Issues and/or benefits	Enable	Restrict
Existing structure			
Bridge			
Pipelines or cables			
Surface water intake			
Culvert			
Game shooting structure / whitebait stand			
Flood protection structures (i.e. stopbanks, groyne)			
General excavation /earthworks /disturbing the bed and banks			

Questions for the Advisory Group

Thinking about the structures and activities in the list above and their issues and benefits, list out the outcomes that should be achieved in the proposed Regional Freshwater Plan in the table below

Examples are provided

Category	Outcome
Environmental	<i>Example: Fish passage must be provided by any new structure</i>
Cultural	<i>Example: Mahinga kai sites should be protected</i>
Social	<i>Example: Water quality at important swimming sites should be protected</i>
Economic	<i>Example: Structures should be allowed to support economic uses</i>

3.2 Sub-topic: flood management and response

Context

This sub-topic addresses the management of flooding effects, either as flood mitigation or responses to flooding events in Tairāwhiti. Flooding is increasing due to climate change creating more severe weather events with greater frequency.

Flood mitigation activities in the beds of rivers and lakes include the construction of stop banks, erosion protection and vegetation planting designed to divert, control, restrict or regulate the flow, energy and spread of water. Responses to flood events may include removing built up sediment, gravel and woody debris to restore channel capacity.

These activities have benefits of reducing flood risks to communities but can affect ecosystems, water quality, sites of cultural significance and recreational values. Flood mitigation structures may also have unintended consequences including shifting points of erosion to new areas, leading to the need for more intervention and reducing the naturalness of waterbodies.

The TRMP provisions provide very little direction for activities to address flooding. Therefore, these activities are managed by the general policies and rules for structures.

Issues

The TRMP doesn't give effect to the NPS-FM, principally Te Mana o Te Wai and Policy 7 which requires the loss of river extent and values to be avoided (to the extent practicable).

For example, flood mitigation works which involve hard engineered structures such rockwork may impact the extent and values of rivers, but the TRMP does not include sufficient direction to manage these potentially significant effects. The provisions should apply the effects management hierarchy and direct plan users to other alternatives where they will achieve the necessary outcomes.

Similarly, Section 6 of the RMA requires preserving the natural character of lakes and rivers and protecting them from inappropriate development. The TRMP provides limited guidance on how to achieve this and could result in inappropriate activities occurring.

Other councils have been moving towards nature-based management approaches to address natural hazards. There is a growing recognition of the need to give rivers "room to roam" when addressing flood risks rather than continuing to constrain waterways by engineered structures to drain floodwaters as quickly as possible. Solutions include restoring wetlands, replanting cleared land, widening river flood plains and recreating meanders. Not only can nature-based solutions benefit flood management, but they often create multiple benefits for the community, biodiversity and water quality. While there is a growing shift towards this form of management, the TRMP does not sufficiently require consideration of this approach or encourage its use over more traditional techniques.

The lack of clear direction in the TRMP for flood mitigation makes it challenging to complete new flood protection projects. These challenges may potentially discourage such projects or increase the costs associated with their approval.

Recently, there has been a significant issue with flood events transporting woody debris downstream and the build-up of sediments. Following flood events, the removal of this material is important to restore the capacity of channels for future floods. The TRMP doesn't have any specific direction about this activity which may make it challenging to authorise and understand how it should be appropriately undertaken.

Example of an approach: flood mitigation

The Canterbury Land and Water Regional Plan provides rules specifically for flood management structures, or "defences against water". This includes erosion protection structures, groynes, flood protection vegetation or reservoirs. These structures (including all associated activities like diversion and discharges) are allowed if undertaken by or on behalf of a local authority in accordance with a Code of Practice. The Code ensures that the potential impacts of activities on the environment are appropriately controlled and adopt the necessary mitigation measures.

Example of an approach: flood response

The draft Whakamahere Whakatu Nelson Plan has been prepared to give effect to the NPS-FM 2020. The plan allows the removal of vegetation and woody debris where necessary to protect essential community infrastructure and maintain flood capacity. Essential community infrastructure means any assets owned and managed by the council for the maintenance of the transport network, public health and safety and environmental monitoring.

Outcomes sought in proposed Regional Freshwater Plan

From the issues identified, we consider that the proposed Regional Freshwater Plan should:

- give effect to the NPS-FM and Section 6 of the RMA
- provide greater guidance for flood management and flood response activities to clarify how these activities are to be encouraged and what types of activities are appropriate.

Questions for the Advisory Group

- ◇ Should there be specific provisions for flood management and response activities? If so, should this be direction only for council activities, or for all flood mitigation and responses (i.e by individuals or other entities like Waka Kotahi)?
- ◇ Do you support the proposed Regional Freshwater Plan promoting nature-based solutions as alternatives to hard engineering for flood mitigation?
- ◇ Are there any other issues with flood management or response activities that need to be addressed?

3.3 Sub-topic: gravel extraction

Context

This sub-topic covers gravel extraction by individuals and commercial entities. Gravel extraction involves the removal of gravel from the bed of a river or lake. At a very small scale this may be undertaken by hand (shovel) by an individual, but more commonly involves heavy machinery.

The potential effects of gravel extraction are set out in **Table 1** below.

Table 1: Potential effects of gravel extraction from rivers	
Potential beneficial effects	Potential adverse effects
Flood risk to communities reduces through increased channel capacity	Degradation of the riverbed if extraction is not managed within sustainable limits (over-extraction)
Improved meander pattern	Discharge of fuels and lubricants from machinery
Reduced concentration of flow against riverbanks, minimising erosion and scour	Disturbance of the natural meander pattern
More stable channel alignment and optimum bed level is maintained	Sediment discharge increasing turbidity and smothering habitat
Renewable gravel resource for local construction	Dust generation
Improved open gravel beaches can provide habitat for indigenous birds	Reduction recreational access and effects on visual amenity
Removal of invasive weeds and pest species	Mauri (life force) of the river affected
Removal of habitat for predators of indigenous birds	Disturbance of fish spawning sites
Improved recreational access	Disturbance of nesting birds

The TRMP encourages gravel extraction where it provides the most benefit for river management purposes. This includes reducing flood risk, maintaining or protecting existing

structures and protecting outstanding waterbodies. However, gravel extraction must be done carefully to minimise effects on significant habitats, maintain flood or debris carrying capacity, prevent changes to rates of erosion, avoid damage to significant sites and not reduce the cultural or recreational values of waterbodies.

Extracting sand, shingle or gravel up to 30m³ over a 12-month period from the dry bed of a river is permitted, but it is subject to conditions which manage effects on ecology, water quality and other structures. All other gravel extraction requires resource consent.

Issues

The TRMP may not fully achieve Te Mana o te Wai and give effect to the NPS-FM 2020. Examples include:

- There are no guidelines on sustainable extraction rates. This may lead to over-extraction in some areas, negatively affecting natural river processes.
- The protection of nesting birds, except dotterels, is unclear - which may lead to adverse effects.

Monitoring of the riverbed levels suggests there may be over-extraction occurring in some locations, and areas where gravel is building up. For example:

- Increasing trends (deposition) identified in:
 - Waiapu Upper Catchment
 - Mata River Upper Catchment
 - Makarika Stream
 - Paoaruku Stream
 - Mangaoporo River
 - Tapuaeroa River
 - Waiorongomai Stream
 - Poroporo River
 - Mangatu River.
- Decreasing trends (erosion) identified in:
 - Mata River Lower Catchment
 - Makatite Stream
 - Kopuaroa Stream
 - Raparapariki Stream
 - Manutahi Stream
 - Mangaharei Stream⁴.

The TRMP does not recognise the value of gravel extraction for construction and recovery

⁴ Murphy, P. (2018). *State of Gravel Resource in the District*. Gisborne District Council

activities such as road repairs.

The relationship of the gravel extraction provisions with other provisions in the plan that manage related activities such as discharges and temporary structures is unclear. This uncertainty makes it difficult to implement and may increase processing costs.

Examples of approaches

Similar to Gisborne, there is a high demand for gravel at certain locations and the accumulation of gravel in others in Canterbury. Gravel management in Canterbury is guided by two documents: a Regional Gravel Management Strategy developed under the Local Government Act⁵ and Environment Canterbury's Land and Water Regional Plan developed under the RMA.

The Regional Gravel Management Strategy outlines the role of Environment Canterbury in managing gravel extraction from rivers, the outcomes to be achieved, and the methods for extracting gravel.

The Canterbury Land and Water Regional Plan (CLWRP) complements the strategy. It seeks to ensure that gravel in riverbeds is extracted to maintain floodway capacity and provide resources while preserving the natural character of braided rivers and not adversely affecting water quality, ecosystems, access, mahinga kai, or exacerbating erosion.

Together, these two documents mean that the management of the gravel includes:

- An authorisation pathway where extractors do not need a resource consent if written permission of the council is obtained and extraction occurs in accordance with a 'Gravel Extraction Code of Practice'.
- Rules that permit low levels of extraction (5-20m³ every 12 months).
- Rules that address activities associated with extraction such as discharges or temporary diversion.
- A resource consent pathway for extractors but which is guided to limit consent duration to no more than 12 months and extraction volumes no greater than 60,000 cubic metres.
- Extractors being required to demonstrate a 'reasonable demand' for their requested extraction volumes.
- Direction that resource consents and written authorisations will not be granted where a deficit of gravel has been identified or where the proposed extraction may cause a deficit in gravel volumes.
- Gravel extractors are charged a gravel management fee which helps to fund all the survey and analysis work required to determine how much gravel is available for extraction and from where it should be taken to provide the most benefit.

Outcomes sought in proposed Regional Freshwater Plan

From the issues identified, it is considered that the proposed Regional Freshwater Plan should:

- Give effect to the NPS-FM.

⁵Environment Canterbury (2012) *Canterbury Regional River Gravel management Strategy*. Retrieved from: <https://www.ecan.govt.nz/your-region/plans-strategies-and-bylaws/canterbury-regional-river-gravel-management-strategy/>

- Recognise the value of gravel extraction to Tairāwhiti but regulate activities to achieve Te Mana o te Wai.
- Provide greater direction to extractors on how much gravel is available and direct extractors to take gravel from areas where it is building up to avoid over-extraction.

Questions for the Advisory Group

◇ Rate the following potential adverse effects of gravel extraction based on a rating of the most important = 1 to least important = 5

◇ Feel free to add any effects not identified

Potential effect	Rating (1 = most important, 5 = least important)
Over-extraction of gravel, erosion of the riverbed	
Discharge of fuel and lubricants from machinery	
Damage to heritage sites	
Impacts on cultural values such as mauri	
Removal of aquatic habitat	
Sediment discharges	
Reducing recreational access	
Reducing visual amenity	
Dust generation	
Disturbance of fish spawning sites	
Loss of mahinga kai	
Disrupting natural river patterns	

Questions for the Advisory Group

◇ Do you support allowing small-scale extraction for individuals?

- Yes / No
- Reason?

◇ Do you support commercial extraction of gravel?

- Yes / No
- Reason?

◇ Do you support the Council directing where gravel extraction should occur or should gravel operators be free to choose sites for Council to approve?

3.4 Sub-topic: stock and vehicle access

Context

This sub-topic addresses stock and vehicle access to rivers and lakes. Stock access may be intentional as part of a crossing between landholdings, or due to lack of fencing, allowing grazing and drinking water.

Livestock entering waterbodies can cause a range of environmental effects including contaminant losses (pathogens and nutrients) to water and physical damage to the bed and banks of waterbodies, particularly from heavy footed animals like cattle and deer.

Vehicle access to riverbeds may be required to undertake specific activities (machinery working), or simply to access land for farming, forestry, or recreational purposes. Vehicle access can affect water quality from sediment discharges, damage to the bed and banks and destruction of habitat or wildlife, such as birds nesting on the riverbed.

The TRMP manages stock access to the beds of rivers and lakes in several ways. It differentiates between intensive or extensive stock farming and waterbody types, with different provisions for access to rivers, lakes, riparian areas and wetlands⁶.

Part C6.2 includes an approach to managing intensively farmed stock and winter intensive grazing under the diffuse discharges rules. These rules require stock exclusion from waterbodies, and from 1 July 2019 (or when an activity establishes) all permanent and intermittent streams and rivers that are crossed by formed stock crossings are to be bridged or culverted. There's an exception for supervised crossing of cattle, deer and pigs less frequently than once per week.

Part C6.3 addresses all other stock and vehicle access to rivers and lakes, ensuring they are managed to protect ecosystems, water quality, and cultural and recreation activities. Rules allow access provided associated standards are met. These standards protect significant

⁶ Vehicle access is regulated in Parts C6.3.6 and C6.3.7 of the TRMP.

habitat, existing structures, water quality and bed and bank stability.

The TRMP seeks to reduce the level of stock access to wetlands, progressively excluding cattle and reducing access for other stock to avoid damage. Stock access to a wetland is allowed subject to standards managing disturbance and access to regionally significant wetlands.

Issues

The main issue is that the TRMP doesn't align with the Stock Exclusion Regulations 2020. These regulations provide national direction to manage stock access to lakes and wide rivers (greater than 1 metre wide). The TRMP provisions are more stringent than these regulations in terms of the waterbodies the exclusion requirements apply to but less stringent in the farming operations.

The TRMP doesn't fully give effect to the NPS-FM. For example:

- The policies and rules don't recognise significant sites or areas that will be identified through the catchment plans, such as threatened species habitat.
- Rules for stock crossings don't prioritise the health needs of people as they do not protect drinking water supplies or bathing sites.

Having rules in different sections of the TRMP makes it challenging to understand how stock and vehicle access is managed, which may lead to unregulated activities and increased costs to consent applicants due to uncertainty.

The policies and rules don't manage potential effects on culturally significant sites.

Outcomes sought in proposed Regional Freshwater Plan

From the issues identified, it is considered that the proposed Regional Freshwater Plan should:

- Ensure it is clear how any rules in the proposed Regional Freshwater Plan relate to the Stock Exclusion Regulations 2020.
- Give effect to the NPS-FM.
- Simplify the policy direction and rules for plan implementation.

Questions for the Advisory Group

❖ Which waterbodies should stock be excluded?

- Only wide rivers (1m in width)?
- Permanently and intermittently flowing?
- Ephemeral waterbodies?
- Waterbodies in the hill country?

❖ The Stock Exclusion Regulations apply to specific types of stock (for example dairy cattle, pigs, etc.) and certain areas (e.g. near drinking water sources, ecologically sensitive areas). Should there be any other stock or areas where stock should be excluded from rivers?

❖ When is vehicle access to and across the beds of rivers and lakes appropriate? Consider different types of users like individuals, farmers, gravel extractors, and foresters.

3.5 Sub-topic: vegetation clearance and planting

Context

This sub-topic covers vegetation clearance and disturbance, as well as planting vegetation in the beds of rivers and lakes. This topic does not address vegetation outside of the banks of rivers, which is dealt with in Part C6.4 Riparian Margins and Wetlands of the TRMP. Reasons for clearance may include maintaining flood carrying capacity, removing pest species and customary harvest. Planting vegetation may be to stabilise erosion-prone areas, enhancing habitat, or amenity purposes.

These activities can have both positive and negative effects. Positive effects include reducing flood and erosion risks, minimising the spread of invasive pest species, enhancing habitats and supporting cultural wellbeing. Negative effects may include reduced water quality from sediment discharged during clearance, habitat destruction, removal of shading promoting higher water temperatures, obstructing fish passage if debris is left within the river and changes to the flow of water causing erosion and scour.

The TRMP controls plants introduced into waterbodies and encourages the removal of inappropriate plants from the beds of rivers and lakes. It also minimises vegetation clearance and disturbance in outstanding waterbodies.

The rule framework is simple, with two permitted activity rules and a general catch-all discretionary activity rule. Clearing and introducing vegetation is allowed subject to conditions that restrict the purpose of clearance, limit the area, protect water quality and avoid bed and bank stability impacts. The introduction of vegetation is limited to non-pest species, a specific type of willow, or any unwanted organism under the Biosecurity Act.

General standards apply to all rules to manage effects relating to fish passage, aquatic and bird species, authorised structures and activities, sediment discharges and impacts associated with contaminants and equipment refuelling.

Issues

Overall, the TRMP effectively manages vegetation clearance and planting, but some minor amendments could ensure the proposed Regional Freshwater Plan gives effect to the NPS-FM and achieves positive outcomes. Examples of minor issues include:

- The policies don't encourage removal of inappropriate plants for environmental enhancement, focusing only on where there are adverse effects on water quality, flows, and bed and bank stability.
- The direction on avoiding or prohibiting the planting of pest species may not be strong enough to prevent it.
- Current provisions could lead to removal of vegetation planted for flood mitigation, increasing property risks from flooding and erosion.

Outcomes sought in proposed Regional Freshwater Plan

From the issues identified, it is considered that the proposed Regional Freshwater Plan should:

- Give effect to the NPS-FM and assist in achieving Te Mana o te Wai.

Questions for the Advisory Group

- ❖ What issues associated with vegetation clearance and planting need to be addressed in the proposed Regional Freshwater Plan?
- ❖ What outcomes should the proposed Regional Freshwater Plan achieve in relation to vegetation clearance and planting?

3.6 Sub-topic: damming, diversion and drainage

Context

This sub-topic addresses damming, diversion and drainage activities within the beds of rivers and lakes.

The focus in this sub-topic is about the effects of building and operating dam structures rather than the impacts of taking water and storing it on river flows, which will be covered in more detail in the hui on water quantity. The effects of damming, diversion and drainage activities are highlighted in **Table 2**.

Altered fish passage	Raised groundwater levels and impeded drainage
Loss of habitat	Impacts on landscape values
Modified channel form	Loss or damage to sites of significance (historic or cultural)
Modified flows and hydrology	Flooding and inundation
Damage to banks and erosion	Recreation impacts and opportunities
Reduced water quality (temperature, water clarity and nutrients)	Loss of natural character

The TRMP acknowledges the benefits of damming and diverting water, including encouraging water storage but:

- only provides for damming and diverting water where there is a functional need to do so and no other practical alternative is available
- requires the modification of natural channels is avoided where possible
- provides for domestic and community scale hydropower generation where appropriate
- requires fish passage, residual flows and flow variations
- prevents earthworks, reclamation, damming, diversion and drainage in Outstanding Waterbodies.

The TRMP allows damming and diversion of water by existing flood control structures and small-scale damming in streams which are not permanently flowing. The clearance and maintenance of drains is also permitted subject conditions that protect water quality and ecology.

Issues

One issue of importance is the relationship between the damming provisions and the new Dam Safety Regulations under the Building Act 2004 which come into force in 2024. These new regulations apply to dams that meet certain height and volume limits and manage their risk

by requiring safety plans and regular dam inspections. The TRMP currently does not recognise these regulations and adopts different thresholds for permitted dams.

Secondly, the NES-F applies to damming and diversion activities within 100 metre of wetlands. Again, the TRMP does not recognise these regulations, therefore the provisions are misaligned with national direction.

Outcomes sought in proposed Regional Freshwater Plan

From the issues identified, it is considered that the proposed Regional Freshwater Plan should:

- Ensure it is clear how any rules in the proposed Regional Freshwater Plan relate to the Dam Safety Regulations and NES-F.
- Give effect to the NPS-FM and assist in achieving Te Mana o te Wai.

Questions for the Advisory Group

- ◇ What issues associated with damming, diversion and drainage need to be addressed in the proposed Regional Freshwater Plan?
- ◇ What outcomes should the proposed Regional Freshwater Plan achieve in relation to damming, diversion and drainage?
- ◇ Do you support new dams in waterbodies? If so, should this be only for certain purposes?

4 Next steps

Following this hui, advice received from members will be used to develop and assess potential options for the proposed Regional Freshwater Plan. These options will be discussed with members at a future hui to confirm the preferred approach. Once the preferred approach is decided, drafting of policies, rules and schedules will commence.

Technical science work is also progressing to meet the NPS-FM requirements for fish passage and threatened species. Specifically, threatened species habitat, desirable and undesirable fish species are to be identified and fish barriers located to inform new provisions.

Appendix 1: Relevant statutory requirements

The key statutory direction in relation to the beds of rivers and lakes comes from the RMA, NPS-FM 2020, NES-F and Stock Exclusion Regulations. The relevant parts of these higher order documents are summarised below.

Resource Management Act 1991 (RMA)

The proposed Regional Freshwater Plan will need to achieve the purpose of the RMA which is to promote the sustainable management of natural and physical resources. This means that natural and physical resources are managed to provide for human needs within the envelope of a healthy functioning environment. To achieve this purpose, the RMA sets out matters of national importance and other matters to be addressed when making decisions. Of relevance to activities in the beds of rivers and lakes is:

1. the preservation of the natural character of lakes and rivers and their margins
2. the protection of significant indigenous vegetation and significant habitats of indigenous fauna
3. the maintenance and enhancement of public access to and long lakes and rivers,
4. the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga
5. the management of significant risks from natural hazards.
6. Kaitiakitanga
7. the efficient use and development of natural and physical resources
8. maintenance and enhancement of amenity values
9. maintenance and enhancement of the quality of the environment
10. the protection of the habitat of trout and salmon.

Additionally, decisions are required to take into account the principles of Te Tiriti.

National Policy Statement for Freshwater Management 2020 (NPS-FM)

The NPS-FM is highly relevant to this topic and many of its provisions will guide the preparation of provisions for the new Regional Freshwater Plan.

Most importantly, the NPS-FM applies the concept of Te Mana o te Wai which refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. Te Mana o te Wai is about restoring and preserving the balance between the water the wider environment, and the community.

The most relevant policies of the NPS-FM seek to avoid the loss of river extent and values to the extent practicable, protect significant values of outstanding waterbodies, habitats of indigenous freshwater species and habitat of trout and salmon (where appropriate).

To protect the extent and values of rivers, guidance is provided that directs activities should have a functional need to locate in a river and must apply the effects management hierarchy.

Clause 3.26 also sets out specific requirements in relation to fish passage. This requires councils to identify desirable and undesirable fish species and their habitats and include provisions to promote the remediation of structures and provide for fish passage, except where fish passage is to be impeded to protect desirable species.

National Environmental Standards for Freshwater Management 2020 (NES-F)

The National Environmental Standards for Freshwater (NES-F) contain a series of regulations

that include controls on the reclamation of rivers and structures that affect fish passage.

Subpart 2 sets out a discretionary activity for the reclamation of any river under regulation 57 of the NES-F.

Subpart 3 sets out rules in relation to structures in the beds of rivers that affect the passage of fish, specifically culverts, weirs, flap gates, dams and fords. Certain structures are exempt from the regulations, including structures that existed before 2 September 2020, and customary weirs.⁷

The NES-F also sets out the information requirements for consent applications and directions for required consent conditions.⁸

Rules in a regional or district plan, or a resource consent may be more stringent than the regulations except in relation to structures that are designed to prevent the passage of fish to protect particular fish species which can be more lenient.⁹

Resource Management (Stock Exclusion) Regulations 2020

The Stock Exclusion Regulations came into force on 3 September 2020 and prohibit the access of cattle, pigs and deer to specified natural wetlands, lakes and “wide rivers”¹⁰. The regulations specify that:

- Stock that are to be excluded from lakes and wide rivers must not be allowed closer than 3 metres to the edge of the bed of a lake or wide river unless access is needed to enter or exit a dedicated bridge or culvert; or are supervised and actively driven across the lake or wide river and stock do not cross more than twice in any month.

The regulations specify that a more stringent rule in a regional plan prevails over a provision in the regulations that relates to the same matter.

⁷ Regulation 60, NESF.

⁸ Regulations 61 to 68 set out the information required for listed structures, Regulation 69 requires monitoring and maintenance conditions be applied to resource consents for structures, and Regulations 70 to 74 set out requirements for activities relating to culverts, weirs and passive flap gates.

⁹ Regulation 6, NESF

¹⁰ means a river (as defined in the Act) with a bed that is wider than 1 metre anywhere in a land parcel.