



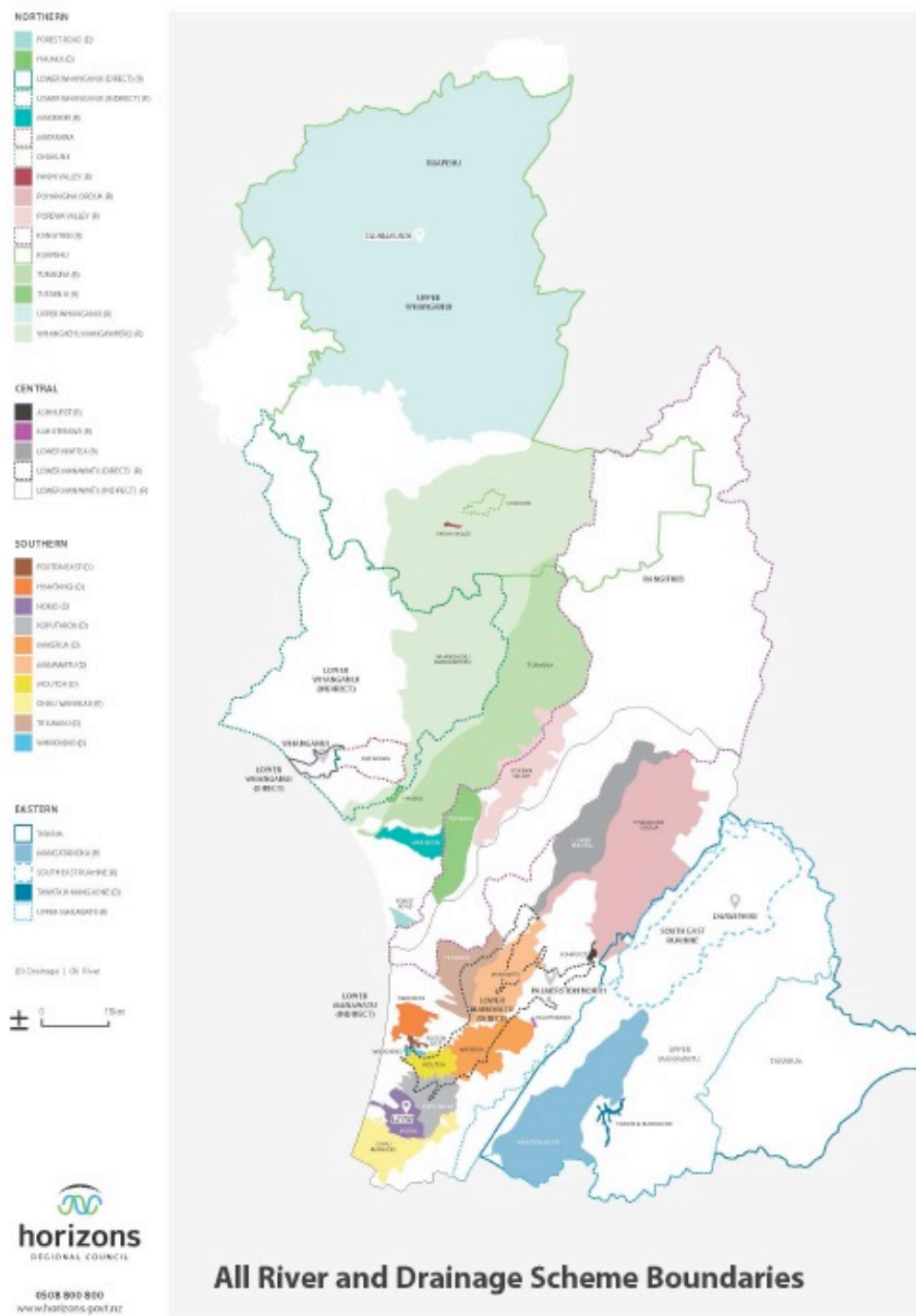
# 2021 SCHEME MEETINGS

Lower Whanganui Scheme

# HORIZONS RIVER MANAGEMENT

Provision of flood protection, land drainage and river control across the region.

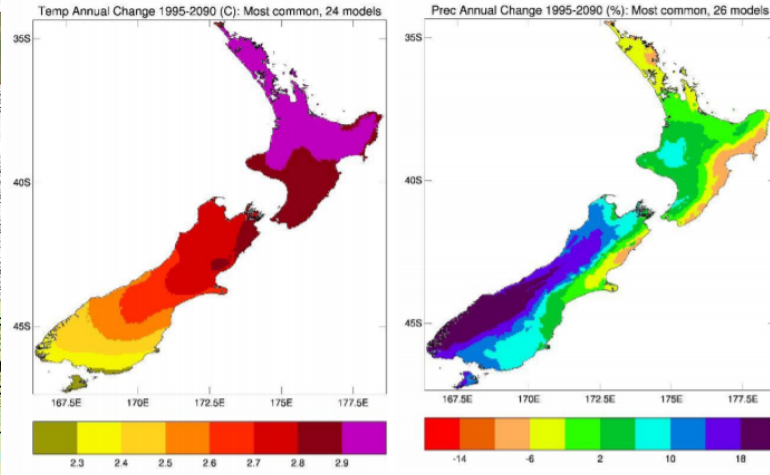
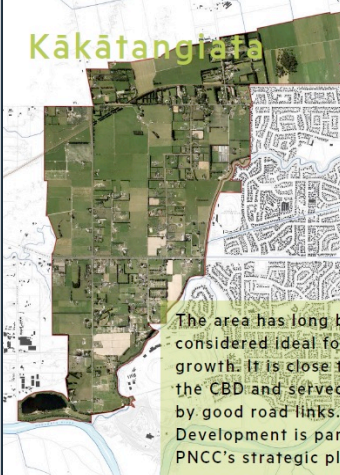
- Current operating budget \$14.3M
- 40 Staff
- 34 Schemes provide protection from flooding and erosion to:
  - 11 urban areas
  - 75,00ha rural land





\$650M of assets

- 1,270km of river channel
- 1,100km of drain
- 23 pump stations with a total discharge capacity of 43m<sup>3</sup>/s
- 54 detention dams that can store 4.3M cubic metres of floodwater
- 500km of stopbanks



# SIGNIFICANT RIVER MANAGEMENT ISSUES



- Accelerating land use change
- Unsustainable land use
- Climate change
- Asset reliability
- Evolving community expectations



# SCHEME UPDATE SUMMARY

LOWER WHANGANUI SCHEME

# LOWER WHANGANUI RIVER SCHEME

## Strategic Direction

The focus of the Scheme over the next 3 years is to continue to maintain existing infrastructure and to review the respective responsibilities of the Whanganui District Council and Horizons for the provision and maintenance of flood protection assets as well as extending the scheme to include the Whanganui Port area.

## Aim

To provide flood protection to selected Whanganui urban areas and bank protection to erosion areas primarily through the use of vegetation management through the urban river reaches.

## Scheme Level of Service

To ensure that the assets are managed in a consistent, efficient and sustainable manner.

To ensure the long-term performance of the assets and ensure cost-effective delivery of service to the standard agreed with the ratepayers.

To maintain a clear and stable channel that provides an equitable level of flood protection to land in the Lower Whanganui River Scheme.

To manage Scheme assets, vegetation and general channel condition within the Lower Whanganui River Scheme in order to maintain desired flood protection and channel alignment, and to minimise lateral erosion.



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# Scheme Funding

## Funding Policy

The Schemes funding comes from four revenue sources:

Targeted Rates – differential targeted rates levied on properties directly benefiting from or causing the need for the work.

General Rates – uniformed rate levied over all properties in the Horizons Region.

Contribution from Whanganui District Council

Contribution from Central Government

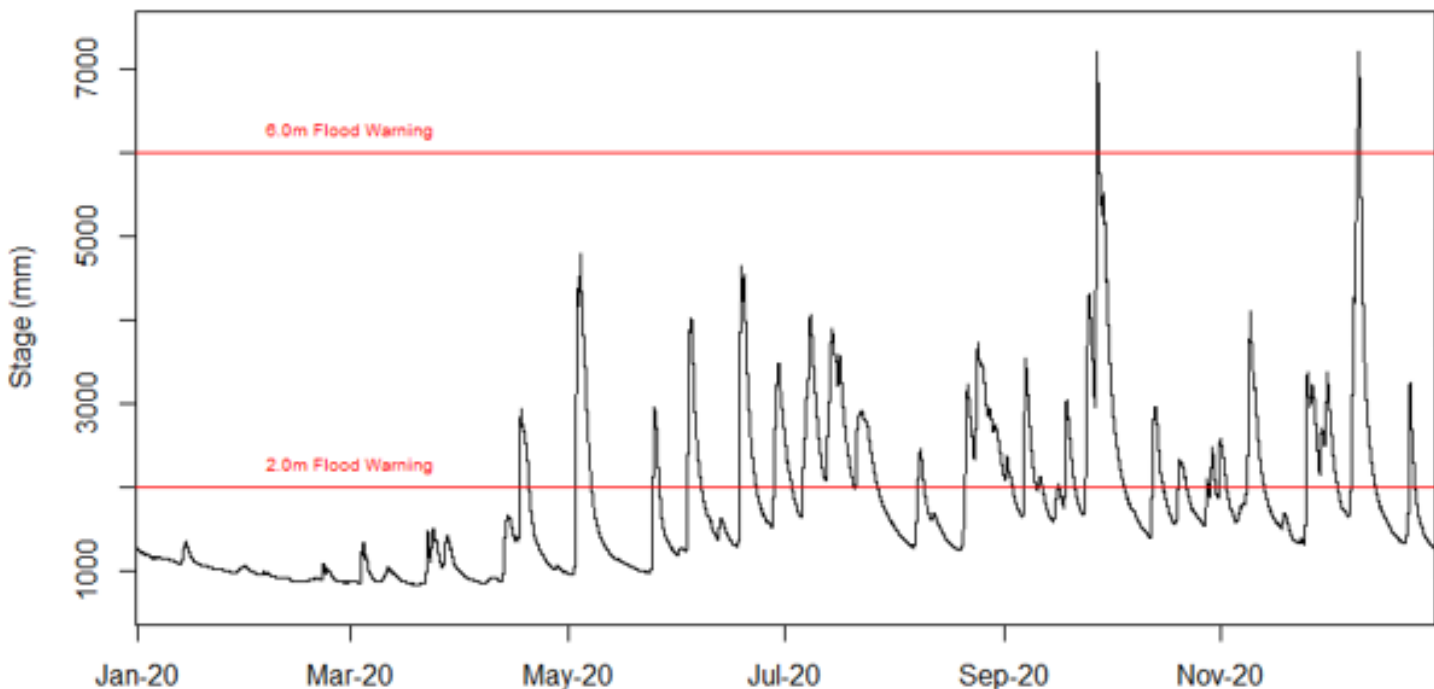


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## WHANGANUI AT PIPIRIKI

*Annual maximum stage for the past decade*

Whanganui at Pipiriki



Year	Stage	Flow	Date
2010	8.814	2026.446	2010-09-07 04:45:00
2011	10.388	2536.519	2011-01-24 02:00:00
2012	10.458	2559.553	2012-07-16 21:15:00
2013	14.711	3939.739	2013-10-15 16:45:00
2014	8.596	2002.406	2014-08-03 14:00:00
2015	15.697	4258.378	2015-06-20 22:30:00
2016	7.572	1688.771	2016-07-24 08:30:00
2017	9.735	2359.465	2017-04-05 14:45:00
2018	10.728	2673.316	2018-03-08 14:15:00
2019	6.889	1471.462	2019-07-15 00:05:00
2020	7.217	1580.265	2020-09-27 15:05:00



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# Lower Whanganui River Scheme Assets

## Scheme Facts

### Scheme Assets.

- 14 floodwalls
- 4km of stopbanks
- 9500 tons rock lining
- 7000 tons concrete riprap
- 16 floodgated culverts
- 4 portable flood barriers

Total Asset Replacement Value:  
\$ 6,928,009.73 (July 2020)  
Excl. North Mole and South Spit Structures

Catchment Area 25,400 sq km.

2% AEP Standard



## LOWER WHANGANUI SCHEME

Asset Map 2020



0 0.5 1 2 km

A3 1:30,000

Prepared by: River Management - Northern  
Drawn by: Melissa Churchouse  
Date: March 2020  
Contains Crown Copyright Data

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# Key Activities and Issues: 2020-21

## Scheme Expenditure

Expenditure is on track to finish year within budget.

## Works Activity

Maintain Plantings.

Anzac Parade Retreat – advance study on retreat/resilience options.

Monthly floodgate inspections.

Stopbank Maintenance.

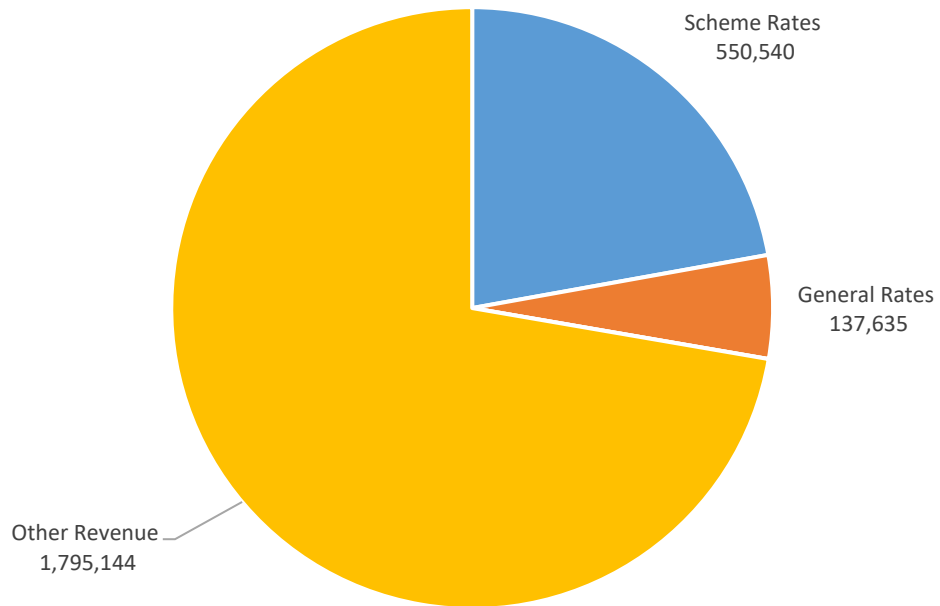
Flood response training.

Consent application process.

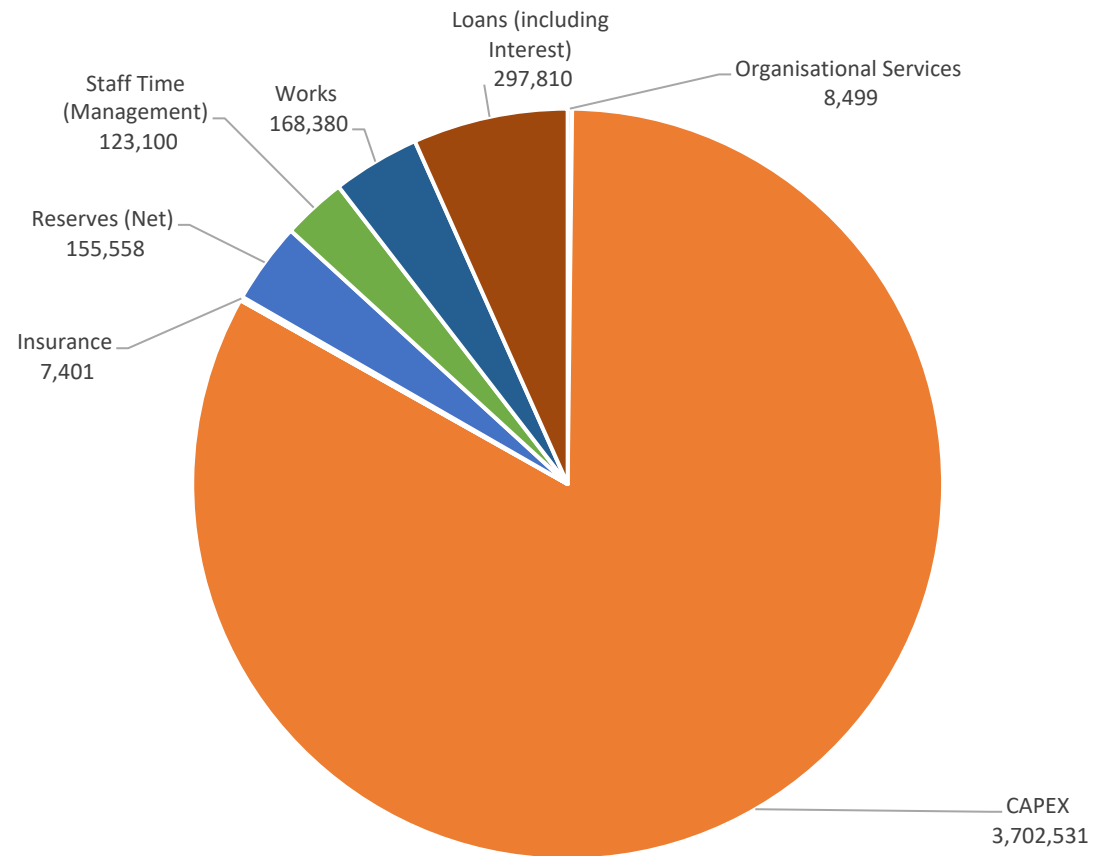
Design, consenting and planning of the North Mole strengthening

# Income and Expenditure 2020-21

## Scheme Revenue - Current Year



## Scheme Expenditure - Current Year



# Photos



# Photos



# Key Activities and Issues: 2021-22

## Scheme Budget

The Lower Whanganui scheme is entering an exciting and busy period with the commencement of the river management input to the Port Revitalisation Project. This will see capex expenditure increase from \$3,702,531 to \$6,296,530. Funding for this work is being sourced between Central Government, Whanganui District Council and Horizon rates. The operational works budget for the scheme remains very similar for the two years with the budget increase shown being an accountancy change that brings the Anzac Parade Retreat budget of \$40,000 out of capex and into the operational arena plus a change in staff costs. We are now experiencing a time of increasing insurance costs and this is reflected in the cost increase from \$7,401 to \$9,000.

The funding requirement to maintain our existing workload and to undertake the Port Revitalisation Project is resulting in a 14.16% rate increase.

## Works Activity

Routine maintenance work undertaken.

Priority is being given to securing resource consent.

Progressing Anzac Parade retreat policy

Commencement of the North Mole Strengthening

Investigating CBD flood risk mitigation

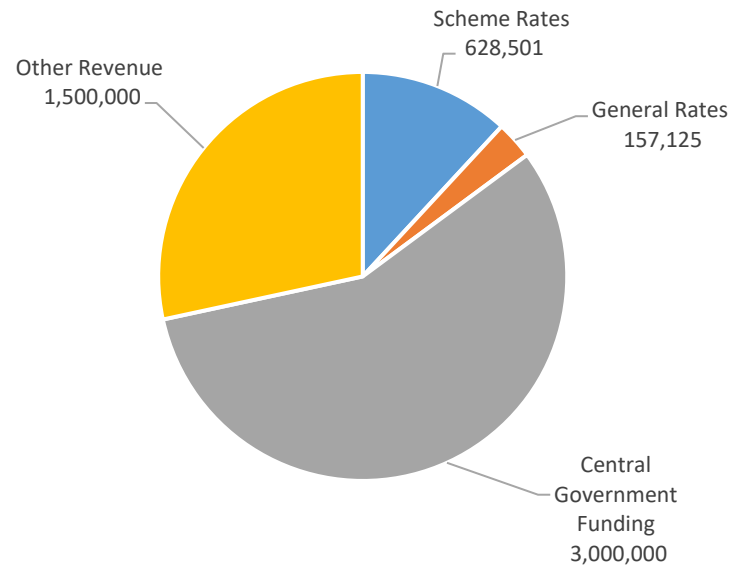
Replacing the need for WIPPs



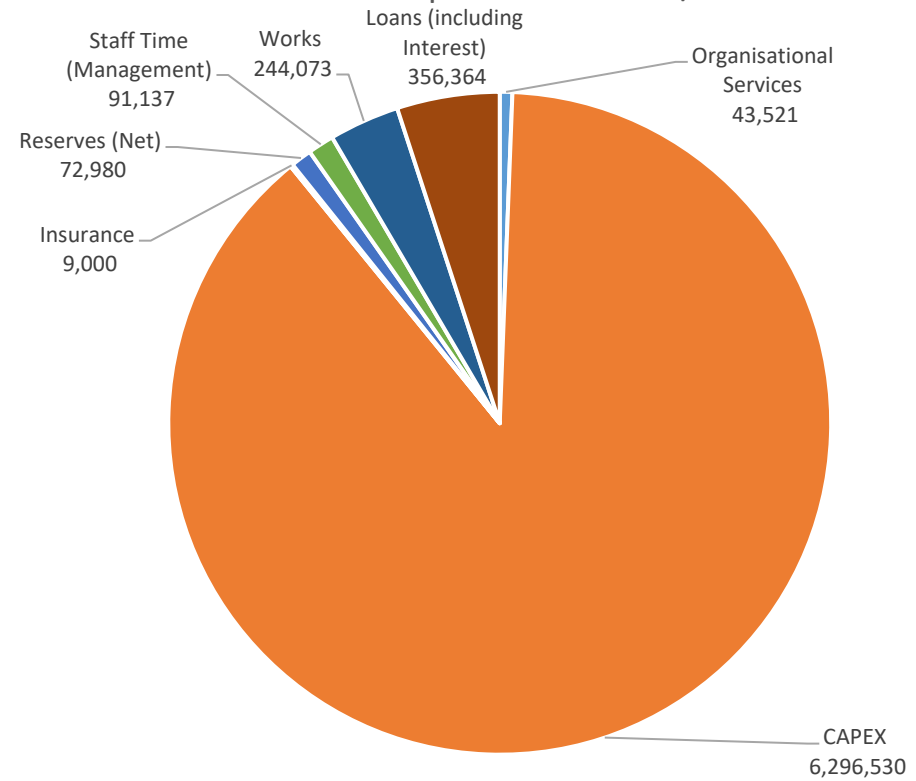
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# Income and Expenditure: 2021-22

Scheme Revenue - 2021/22

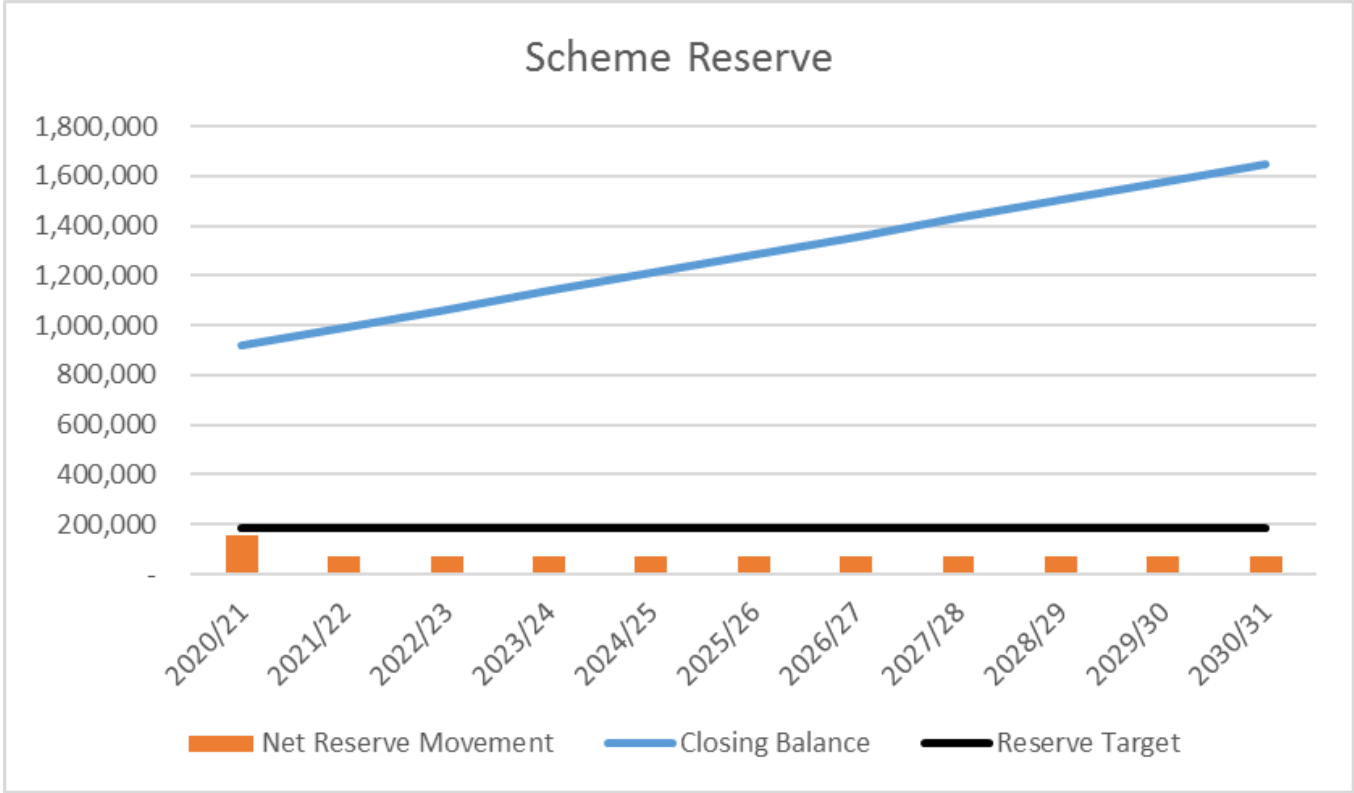


Scheme Expenditure - 2021/22

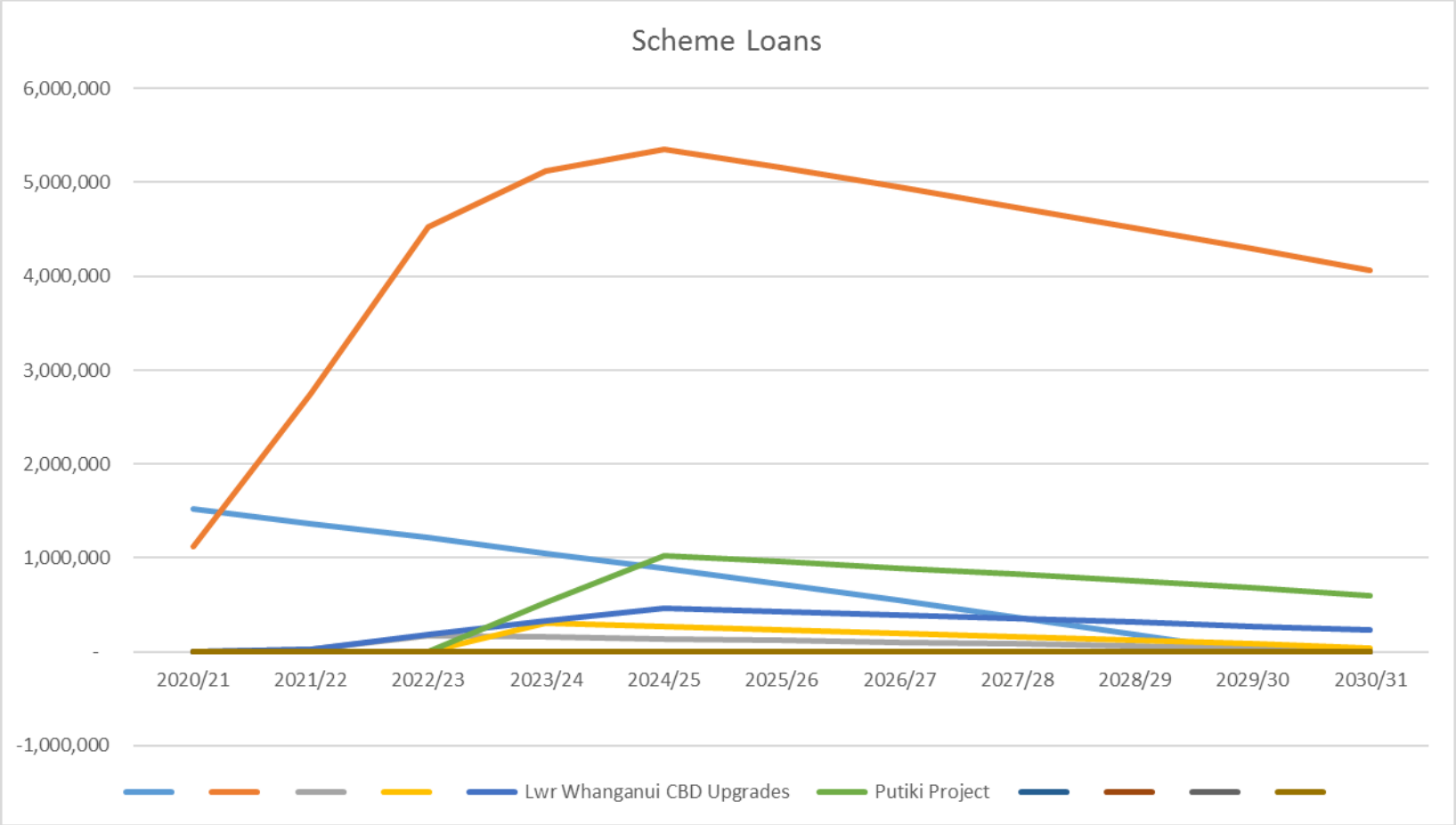




# Emergency Reserve Balance



# Loan Account Balances





# TE PŪWAHA PROJECT

Overview

# Te Pūwaha Project – HRC Component

- Te Pūwaha is a collaborative project involving community, hapū, WDC, HRC, Q-West and the Employment Training Trust – combined PGF funding of \$25 million
- Horizons funding of \$7.5 million will see three stages of work:
  - North Mole & Revetment Strengthening
  - South Mole Strengthening
  - South Spit Infrastructure Upgrades
- Work to Date
  - Structural Design of North Mole
  - Community Engagement
  - Aquatic, Terrestrial, Archaeological, Cultural Assessments (Draft RCA Completed)
- Next Steps
  - Further Community Engagement for input into non-structural design
  - Construction of a rock stockpile site off Morgan Street
  - Procurement of rock
  - Construction of North Mole anticipated October 2021 – December 2022



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# ORANGA WAI - OUR FRESHWATER FUTURE

Implementing Government's 'Essential Freshwater' package

# OVERVIEW

Government has introduced new requirements for managing the health of freshwater in New Zealand, including:

- Changes to the Resource Management Act 1991 (RMA)
- An updated National Policy Statement for Freshwater Management 2020 (NPS-FM)
- New National Environmental Standards for Freshwater (NES-FW)
- Additional new regulations under s360 of the RMA for:
  - Measuring and Reporting of Water Takes; and
  - Stock exclusion

Some of these changes come into effect immediately (from gazettal 3 August 2020), while others are phased in over time.



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# NATIONAL ENVIRONMENTAL STANDARDS FOR FRESHWATER & REGULATIONS



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# THE TASK AHEAD

Regional councils are required to:

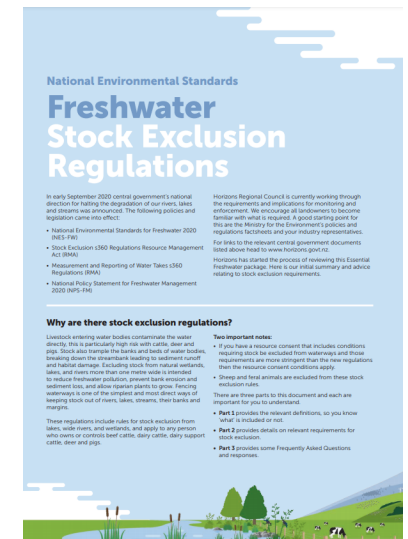
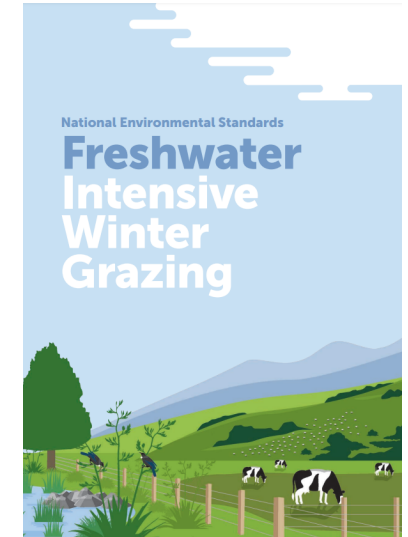
- Issue and monitor consents relating to intensification of land use (until the end of 2024), intensive winter grazing\*, stock holding areas and feedlots – all come into effect from mid-2021, and activities that have more than a minor impact on wetlands and streams (effective from 3 Sep 2020).

\*Land owners seeking consent for intensive winter grazing need to work directly with iwi/hapū.

- Collect data and monitor levels of synthetic nitrogen fertiliser use
- Stock exclusion (dairy and beef cattle, pigs and deer) from wetlands, streams and their margins (>1m wide); requirements for bridges and culverts, phased in over time
- Real time monitoring and reporting of water takes >5 l/s

Also coming:

- Mandatory freshwater modules in farm plans (currently in draft)

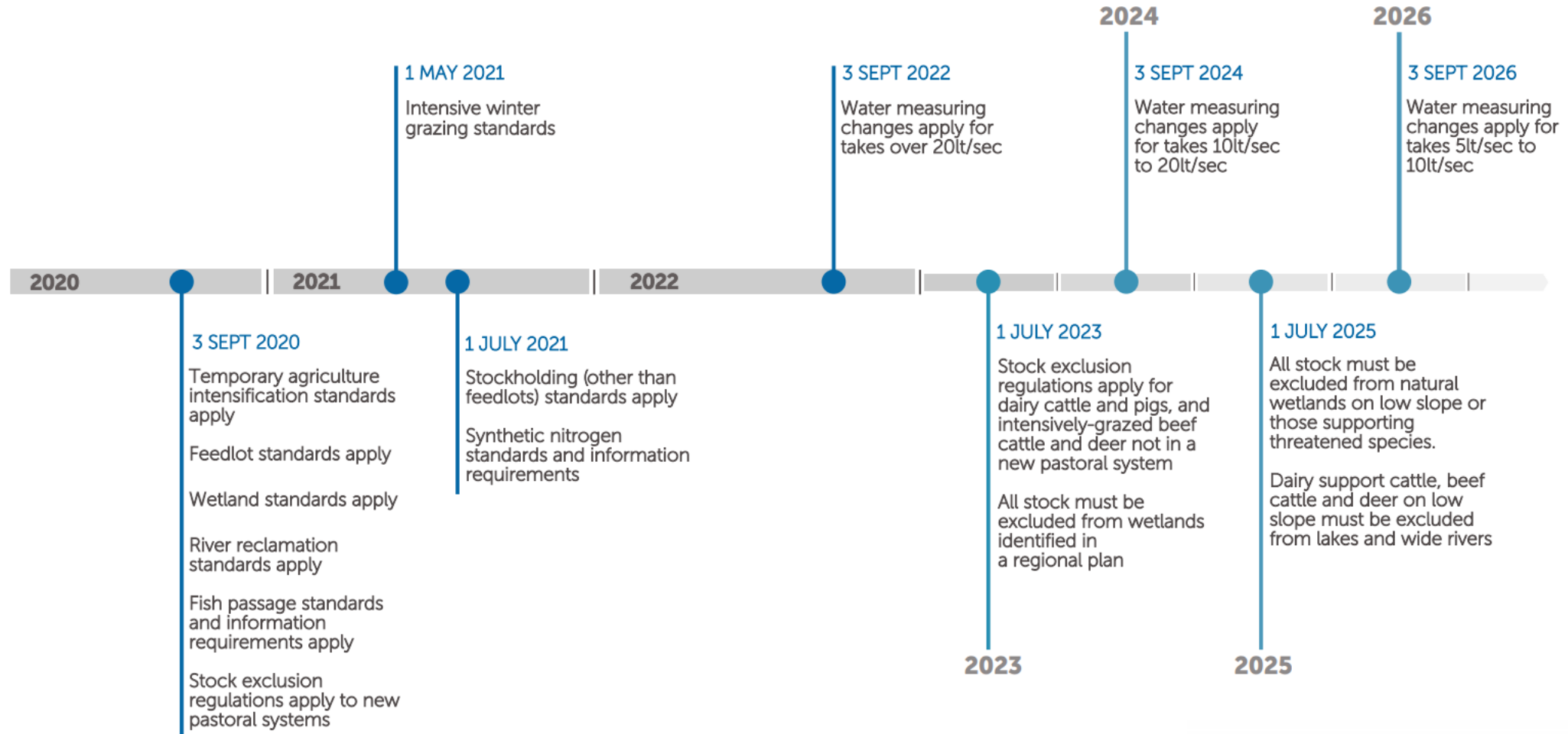


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# New National Freshwater Rules



# NATIONAL POLICY STATEMENT FOR FRESHWATER MANAGEMENT (NPS-FM)



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# NATIONAL POLICY DIRECTION

Aim is to halt waterway degradation within 5 years and improve water quality within a generation

NPS-FM introduces new (or updated) requirements including:

- Managing freshwater in a way that 'gives effect' to Te Mana o te Wai.
- Improving degraded water bodies, and maintaining or improving all others applying 'national bottom lines'.
- Compulsory values: ecosystem health, human contact, threatened species and mahinga kai, plus other values we must consider
- We must use the best information available including, where practicable, complete and scientifically robust data, but not refrain from decision making on the basis of uncertainty.
- Monitor and report annually on freshwater (including the data used); publish a synthesis report every five years containing a single ecosystem health score and respond to any deterioration.

## What is a National Policy Statement?

In essence, national policy statements prescribe objectives and policies for local authorities for matters of national significance.

In some cases they provide direction as to how local authorities give effect to those policies and objectives.

This includes the NPS-FW and will likely include the NPS for Indigenous Biodiversity to be released in 2021.



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# TE MANA O TE WAI

6 principals:

- Mana whakahaere
- Kaitiakitanga
- Manaakitanga
- Governance
- Stewardship
- Care and respect

Hierarchy of obligations:

1. The health and well-being of water bodies and freshwater ecosystems
2. The health needs of people (such as drinking water)
3. The ability of people and communities to provide for their social, economic and cultural well-being, now and in the future

Read MfE's [Te Mana o te Wai factsheet](#) or watch their [brief explainer videos](#)



Figure 1: How regional councils must give effect to Te Mana o te Wai

# THE TASK AHEAD

Regional councils are required to:

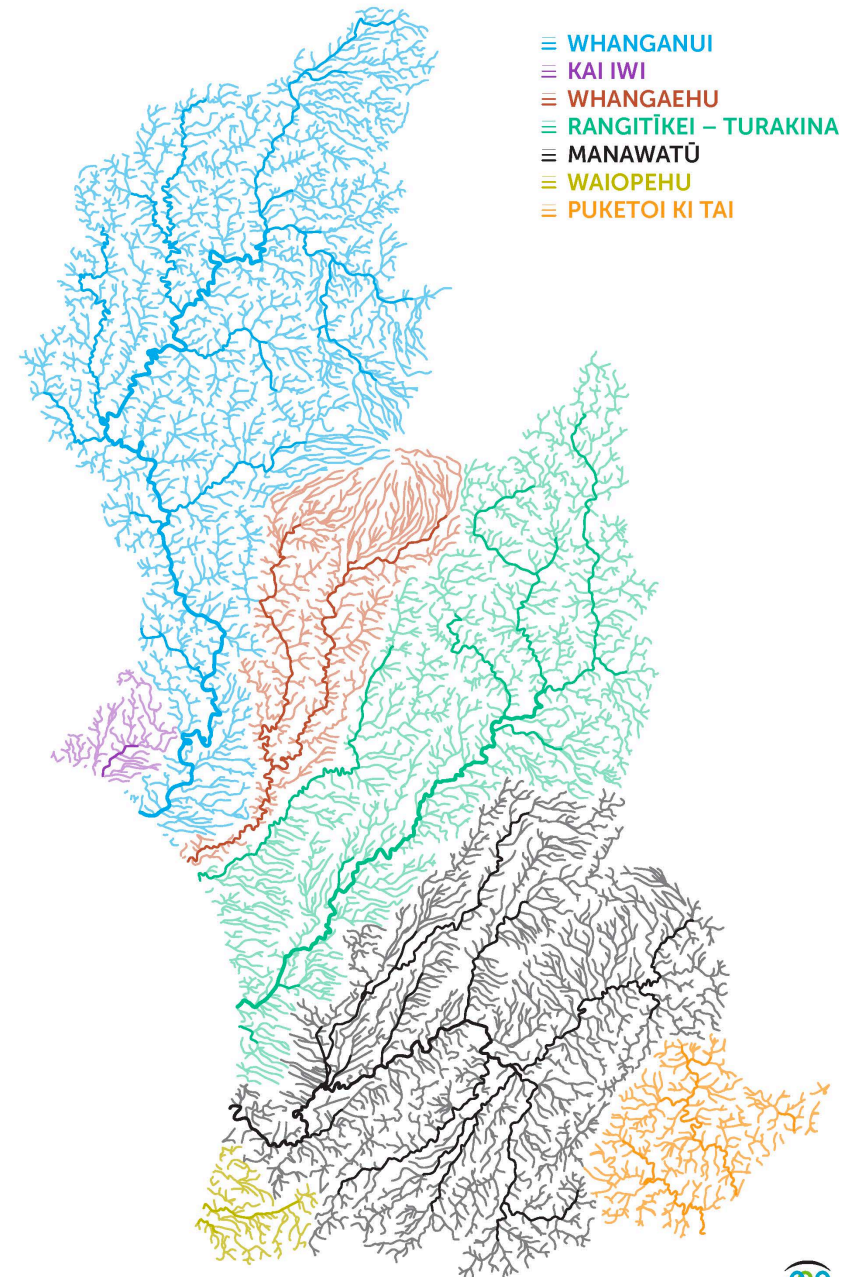
- engage with communities and tangata whenua to:
  - set our long-term vision (30 years and beyond);
  - implement the National Objectives Framework (NOF); and
  - report on progress towards this vision.
- map existing wetlands and encourage their restoration; address in-stream fish barriers

For each Freshwater Management Unit (FMU) we must identify:

- our values and vision for freshwater
- environmental outcomes (for each value), attributes (and their baseline and target states); and
- set limits and/or prepare action plans to achieve environmental outcomes.

We must use the best information available including, where practicable complete and scientifically robust data, but not refrain from decision making on the basis of uncertainty.

Monitor and report annually on freshwater (including the data used); pull a synthesis report every five years containing a single ecosystem health score and respond to any deterioration.



# NATIONAL OBJECTIVES FRAMEWORK (NOF)

**Table 5 – Ammonia (toxicity)**

Value (and component)	Ecosystem health (Water quality)	
Freshwater body type	Rivers and lakes	
Attribute unit	mg NH <sub>4</sub> -N/L (milligrams ammoniacal-nitrogen per litre)	
Attribute band and description	Numeric attribute state	
	Annual median	Annual maximum
<b>A</b> 99% species protection level: No observed effect on any species tested.	≤0.03	≤0.05
<b>B</b> 95% species protection level: Starts impacting occasionally on the 5% most sensitive species.	>0.03 and ≤0.24	>0.05 and ≤0.40
<b>National bottom line</b>	<b>0.24</b>	<b>0.40</b>
<b>C</b> 80% species protection level: Starts impacting regularly on the 20% most sensitive species (reduced survival of most sensitive species).	>0.24 and ≤1.30	>0.40 and ≤2.20
<b>D</b> Starts approaching acute impact level (that is, risk of death) for sensitive species.	>1.30	>2.20

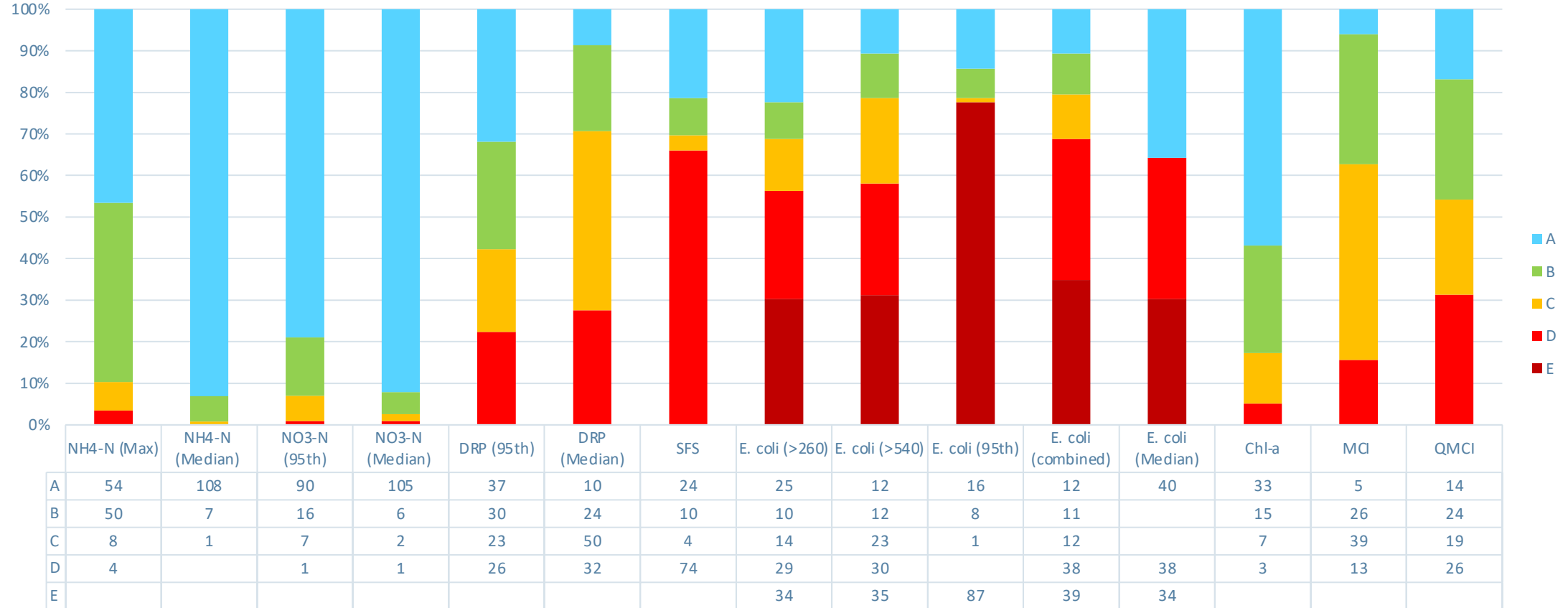
Numeric attribute state is based on pH 8 and temperature of 20°C. Compliance with the numeric attribute states should be undertaken after pH adjustment.

- 22 attributes that provide for identified values (compulsory and non-compulsory)
- Some require limits to be set, others require action plans to address issues.
- Most have a 'national bottom line' set above the 'C' or 'D' band.



# CURRENT STATE – SOE SITES

State of Environment Sites - NOF Assessment



# LOTS OF WORK TO DO...

- Lots of new regulations
- More consultation and collaboration with tangata whenua, communities and industry
- Greater demand on iwi, Horizons, primary sector and industry, to provide guidance, and much more consent and compliance work
- New and expanded monitoring and reporting requirements (particularly for DO, fish, deposited sediment etc,)
- More data and information collection and sharing
- Establish limits and/or action plans to address water quality issues
- Ready ourselves to notify a plan change by Dec 2024
- Lots of work to do yet to meet with central and local government, iwi/hapū, primary sector reps, stakeholders to work through the details and interpretations, and communicate these with the wider community and write them into policy
- Further changes to come – NPS for indigenous biodiversity, implementing National Planning Standards, RM reform...



# HORIZONS HELP AND GUIDANCE

## Events and information:

Hui-a-iwi (twice a year) + three-weekly freshwater hui from late Feb 2021

[e-newsletters](#), guidance documents and brochures, social media,

Events: Manawatu River Improvement Festival – Sat 27 February, Rural Games – Fri 12-Sun 14 March, Central Districts Field Days – Thu 18-Sat 20 March, Community and scheme meetings

Check out our website: <https://www.horizons.govt.nz/managing-natural-resources/our-freshwater-future>

Please direct enquiries to [info@ourfreshwaterfuture.nz](mailto:info@ourfreshwaterfuture.nz)



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