



Photo: one of the Pakihi Valley scheme dams



# **RUAPEHU SCHEMES MEETING**

**8<sup>TH</sup> JULY 2025**

**VENUE: THE PEAKS, OHAKUNE**

# RUAPEHU SCHEMES

Ruapehu District Wide

Ohakune

Upper Whanganui

Pakahi

Whangaehu- Mangawhero

## PRESENTATION FORMAT

### Local schemes – combined summary

1. Local schemes current context and the year ahead
2. Scheme summaries and case studies:
  - a. Ruapehu District wide
    - a. Ohura road flooding near Matiere
    - b. Japanese walnut debris
    - c. Pungapunga
  - b. Upper Whanganui Scheme
    - a. Taumarunui/ Matapuna
  - c. Ohakune
  - d. Pakahi
3. Local schemes finance summary – rates, loans, reserves
4. Regional flood vulnerability assessment

### Further information slides

1. New maintenance programme results - regional & local
2. Capital works – regional summary
3. Asset Management – insurance, known asset defects
4. Regulatory matters – consenting and compliance

# RUAPEHU SCHEMES – CURRENT CONTEXT AND YEAR AHEAD

## Current context

- Ruapehu has a history of investigations etc and range of flooding type issues.
- A common theme from these is low level of uptake/implementation of the options identified.
- The four schemes have a history of under-expenditure. Long-term Plan increased the budgets.

## 2024-25 activity focused on

- The Matiere / Ōhura Road report.
- Aligning with District Council (met 26 June 2025).
- Scoping work programme for Ohakune.
- Inspections and some works (see slides).

## Staffing

- We have had a range of staffing changes recently and have added support working with the northern team to increase the amount of work being done.

## 2025-26 works priorities

- Ohakune
  - Vegetation clearance works under permitted rules.
  - Establishing consents for other activities e.g. culvert replacements.
- Maitere - Roadside drain clearance, willows directly in and around the bridge.
- Taumarunui - flood gate replacements.

## Other priorities

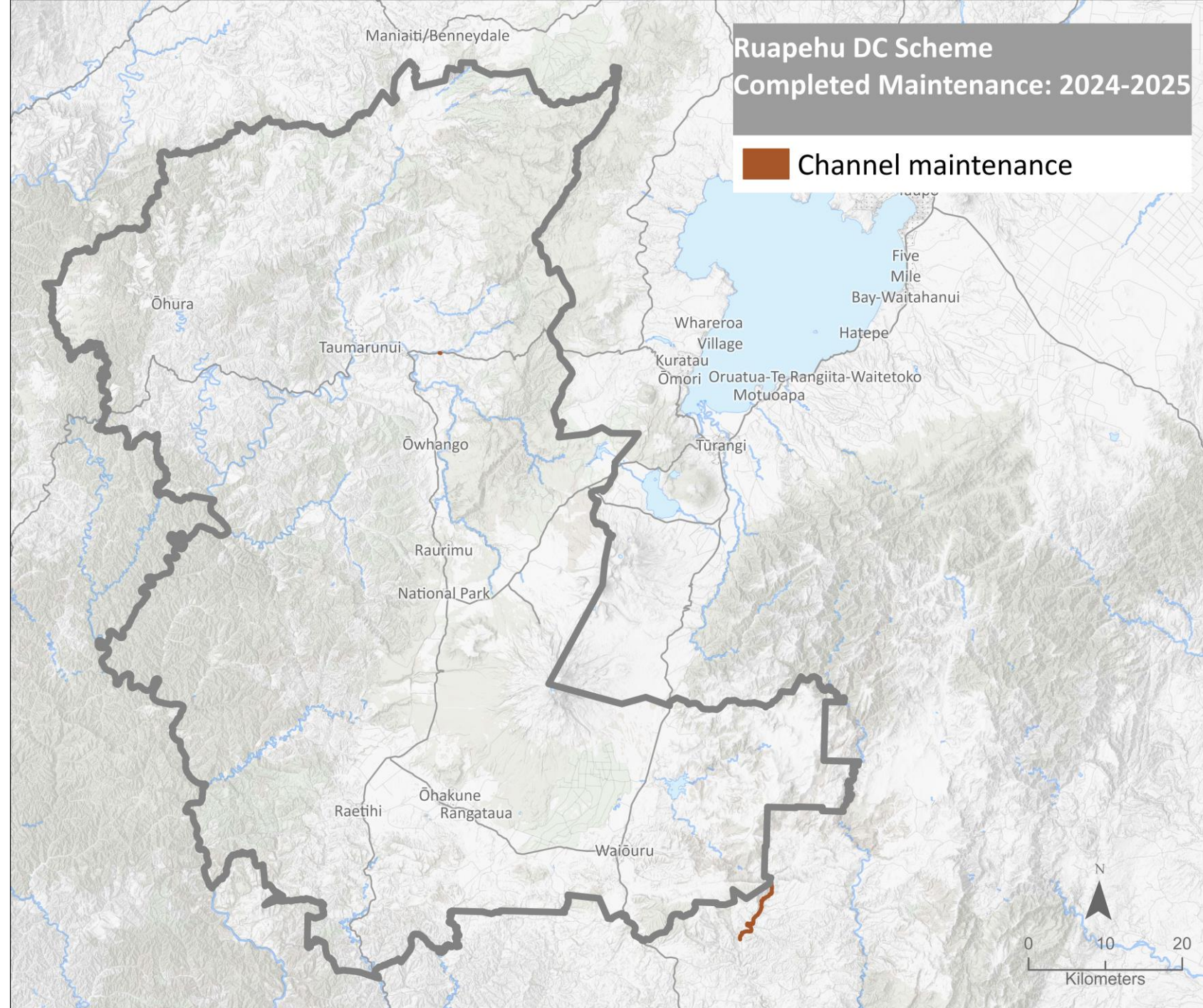
- Ohakune determine asset ownership & management.
- Decisions on scope of scheme works e.g. Taumarunui stormwater issues.
- Responding to any high flow events as they occur.
- Emergency management/ response training.
- Reviewing the findings of the flood vulnerability assessment and assessing next steps.

# SCHEME SUMMARIES



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# RUAPEHU DISTRICT WIDE SCHEME

- This scheme is a vegetation management scheme.
- There are no assets.
- The areas where vegetation clearance occurs are not shown on this map as they are not considered assets.
- 14.6 km of works completed in 2024-25. Some funded by Genesis.

Budget expenditure:

- Maintenance approx. 7%; and
- Repairs approx. 0%.



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# ŌHURA ROAD FLOODING NEAR MATIERE

Ruapehu District Wide Scheme

**Issue – road flooding, 2 locations, approx. 8 times per year**

- Request was to remove willows to address the issue
- Scheme funded a report, it found:
  - Flooding likely 80 – 90 times since 2015.
  - Depths of 0.3m annually, 0.8m in 10 year event.
  - Willow removal would be of limited benefit 0.02 to 0.08m
  - Road raising the best option, cost estimate up to \$0.98M.

## Next steps

- Horizons planning to clear roadside drain and willows etc. directly around the bridge.
- RDC will review road upgrade costs.

## Questions being raised include:

- Should the road be raised?, by who? & who will fund this?
- Are warnings, signage, road closures etc. adequate?
- What role does the Ruapehu District wide scheme have?
- How do decisions on this issue get made?



Flooding at Site 1 (28 August 2024)



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# JAPANESE WALNUT DEBRIS

**Issue – road flooding, 2 locations, approx. 8 times per year**

- Work to control the Japanese Walnut trees has resulted in dead trees and branches collecting downstream of the Whenuakura Road Bridge.
- The debris have the potential to accumulate and impact the flow within the channel resulting in localised flooding and erosion. It also has the potential to impact infrastructure over the stream.
- Removal and disposal has cost implications and may be an ongoing issue.

## Questions being raised include:

- Who has responsibility to remove these: the scheme; road bridge asset owner; those clearing the trees; someone else?
- Can the management of these trees reduce/avoid this issue?
- What role does the Ruapehu District Wide scheme have?
- How do decisions on this issue get made?



Trees in stream near a road bridge





# PUNGAPUNGA

## Issue – Structure installed by landowner without consents

- The structure was installed after the Pungapunga River started to erode into the paddock.
- Neighbouring landowners have raised concerns around downstream impacts.
- River Management team are working with the landowner to retrospectively consent the structure.

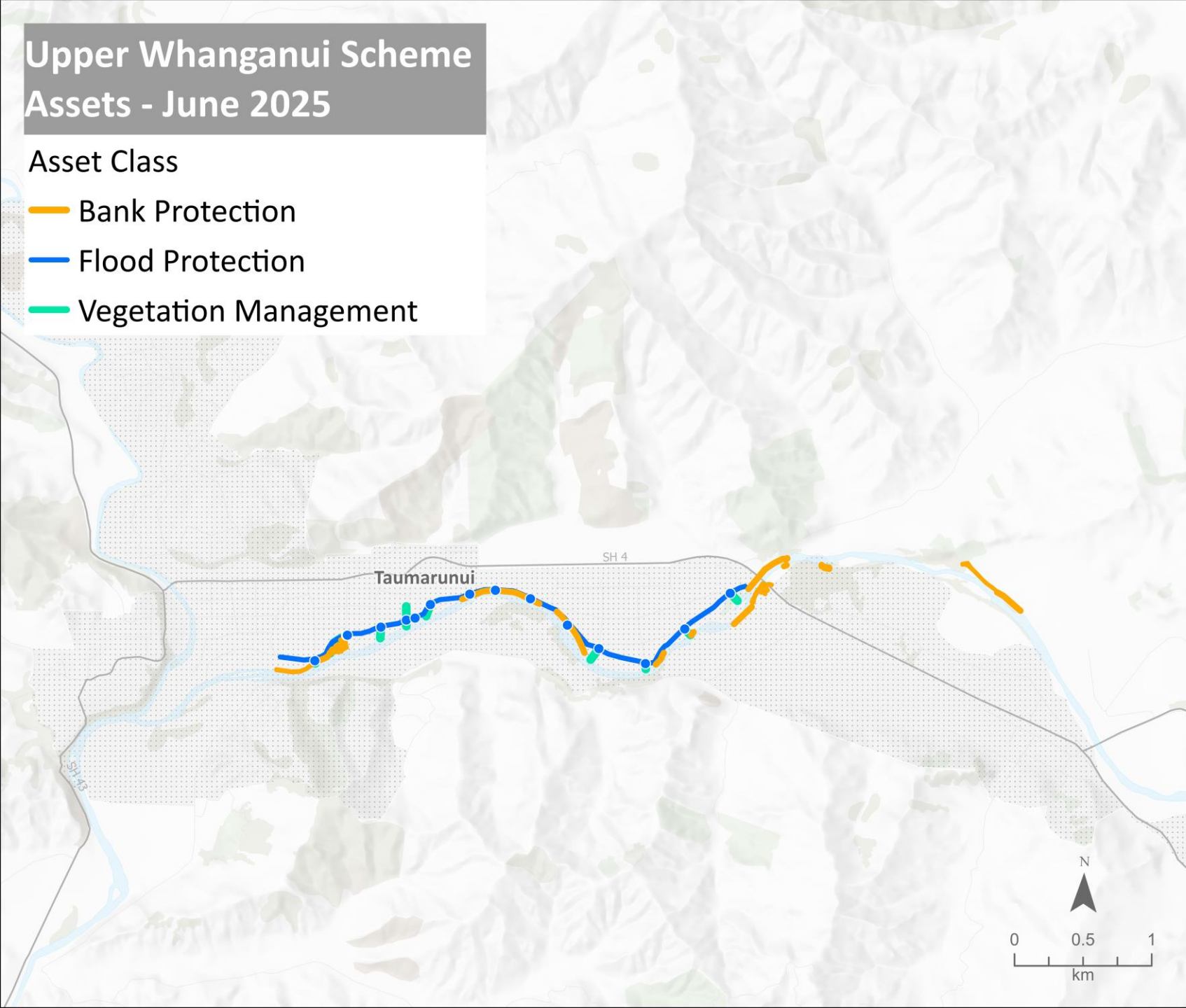




## Upper Whanganui Scheme Assets - June 2025

### Asset Class

- Bank Protection
- Flood Protection
- Vegetation Management



## UPPER WHANGANUI SCHEME ASSETS

Scheme assets include:

- 0.7 km of drains
- 16 floodgates
- 3.9 km of stopbanks
- 3.2 km of river edge protection

This scheme also completes channel maintenance and some areas where this occurs may not be shown on the map.



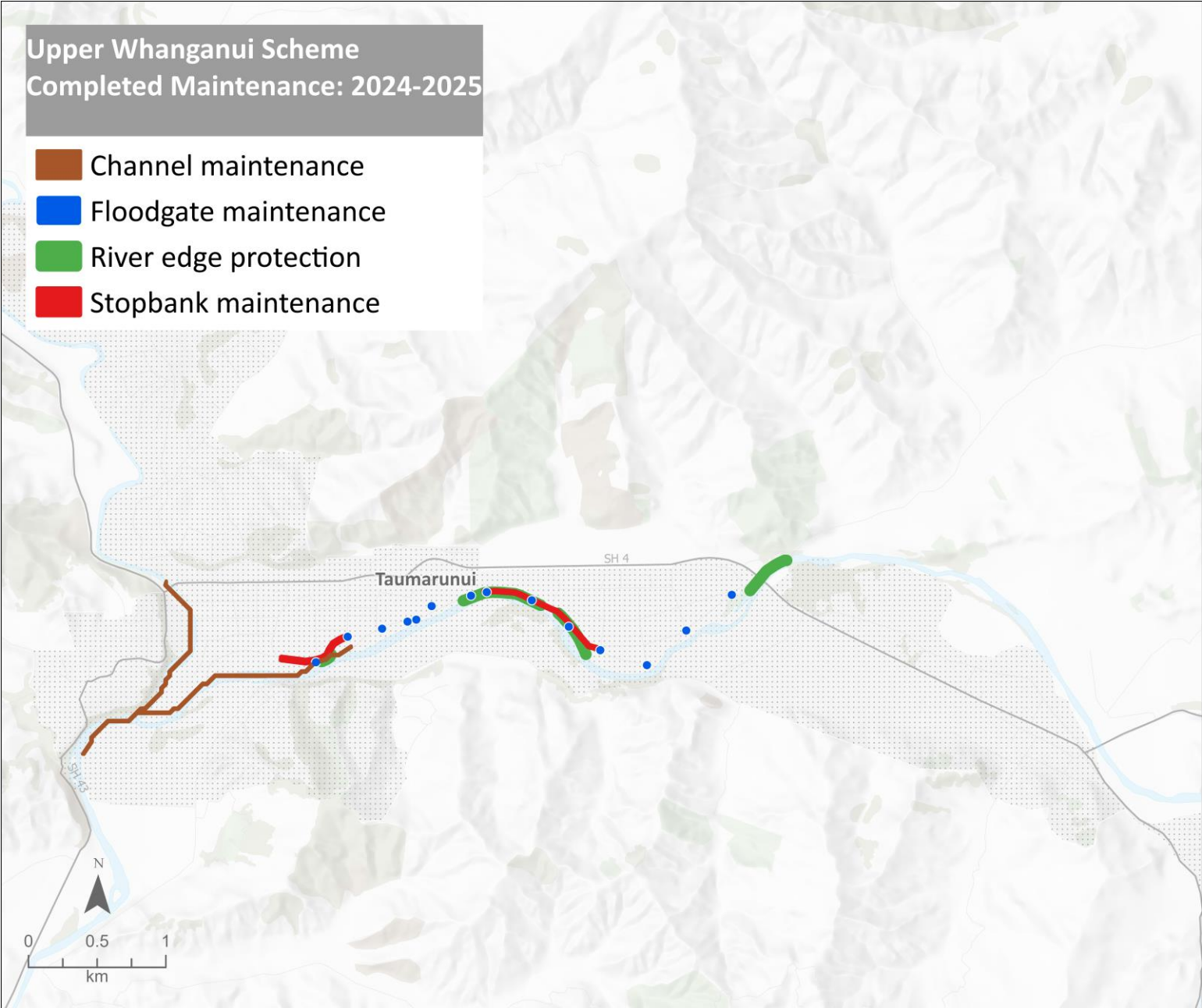
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# UPPER WHANGANUI SCHEME WORKS 2024-25

Budget expenditure:

- Maintenance approx. 83%; and
- Repairs approx. 0%.

Regional summary	Asset quantity	Works / checks	Percent
Drains (km)	0.7	0	0%
Floodgates (#)	16	154	962%
Stopbanks (km)	3.9	1.5	38%
River Channel (km)		2.4	
River edge protection (km)	3.2	1.7	53%
Dams (#)			
Pump stations (#)			
Weirs (#)			
Amenity (#)			
Flood barrier			





# TAUMARUNUI – MATAPUNA

## Issue – stormwater flooding around houses

- Stormwater and flooding issues in Taumarunui were the major issue discussed by RDC Councillors with Horizons Councillors at a meeting in March 2025.
- Issues relate to two flow points where stormwater drains receive water from an upstream rural catchment and transport water through town to the river where they discharge at scheme floodgates.
- Horizons RDC officers visited the area in June 2025.

## Ruapehu District 3 point plan (22 Jan 2024, see link below)

1. Installation of more robust baffles to slow water entering from the rural catchment.
2. Installing larger stormwater piping at the Tuku St crossing.
3. Clearing the drainage channel by the railway line.

<https://www.ruapehudc.govt.nz/our-council/news?item=id:2ovqxp0b51cxbyp0sb3l>

## Progress

1. Its unclear if the more robust baffles have been put in place. It is likely these would require consenting.
2. The potential new stormwater pipe has been scoped. RDC officers indicated costings were in the order of \$1M noting these costings were made some time ago.
3. Some drain clearance has been completed including alongside the railway line and other areas.

## What more could be done?

- Clarifying a plan, roles & resourcing.
- The installation of baffles could be investigated, consulted on, consented and undertaken.
- The proposed new stormwater pipe could be installed.
- Further work on drain clearing and capacity upgrades could be completed. Potential to include some culvert upgrades & in one location a chamber to direct flow.
- A stormwater consent may also be required (RDC).



# MATAPUNA



Inflow upstream of road



Culvert under road



Channel downstream of road, upstream of houses



# MATAPUNA



Channel behind house  
with makeshift stopbank



Channel between houses near the culvert/  
crossing shown on right.  
Note a sewer pipe crosses the drain in this  
location.



Culvert/ crossing a restriction point.  
Note there is at least one other  
vehicle crossing point.





Channel between houses  
downstream of culvert/crossing.

Note a sewer pipe crosses the  
drain in this location




Channel between houses  
upstream of culvert  
under road

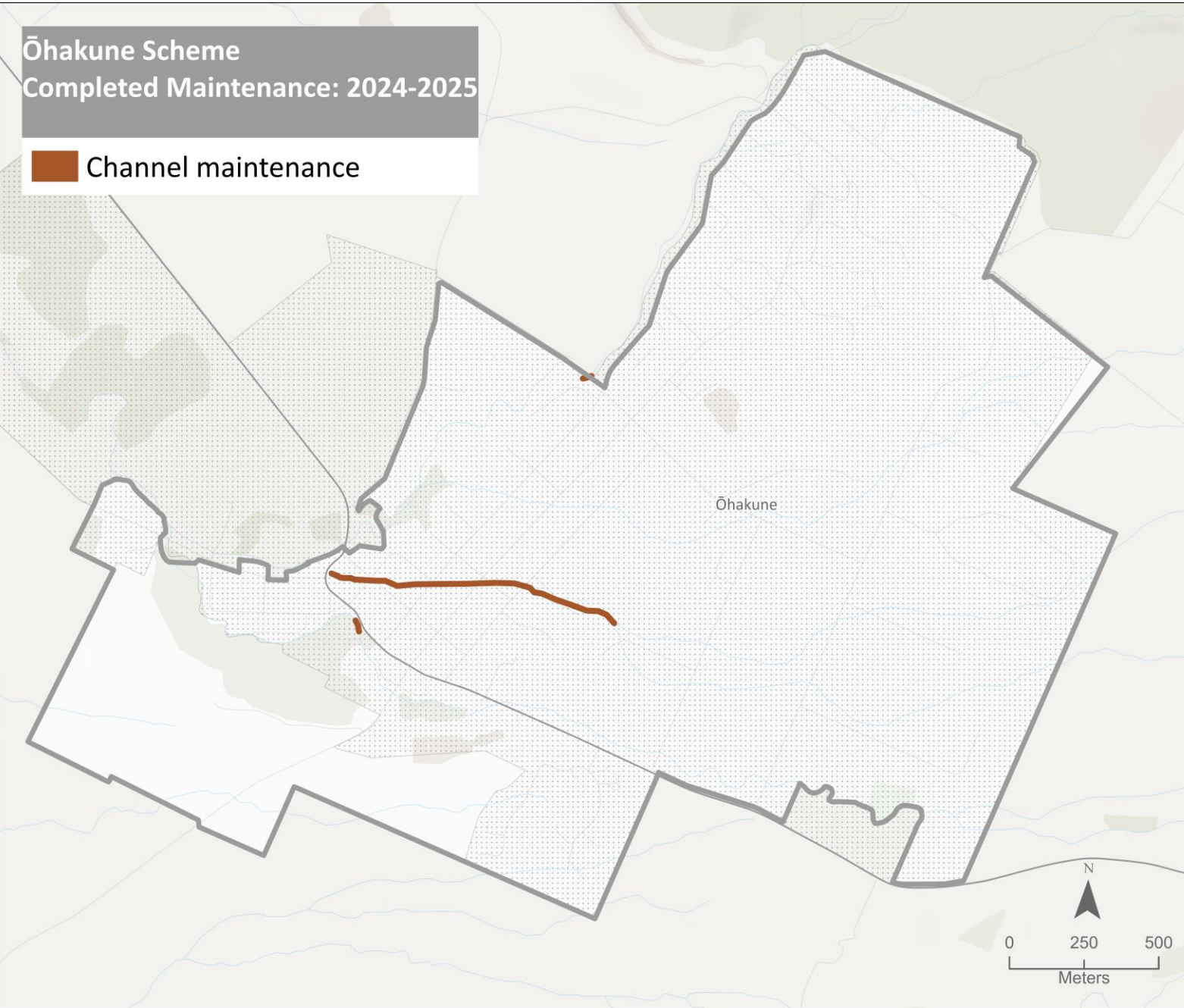


Floodgate to the river



## Ōhakune Scheme Completed Maintenance: 2024-2025

 Channel maintenance



# OHAKUNE SCHEME

- This scheme is a vegetation management scheme.
- There are currently no scheme assets. There are assets in Ohakune and some work to do to determine ownership/ongoing maintenance.
- Should the scheme take on assets and maintain them?
- Budget expenditure 2024-25:
  - Maintenance approx. 40%; &
  - No assets, so no repairs budget.
- Forecasting to spend the budget in 2024-25 works and consenting.

# OHAKUNE SCHEME

## Scheme context

- Approx. \$80K/year of rates & approx. \$150K reserves.
- There is a history of under expenditure.
- A flood protection plan was developed.
- The scheme does not have assets. There are assets and Horizons/RDC will work on identifying ownership.
- Not in the One Plan environmental code of practice, but other permitted activity rules provide for works.

## Works 2025-26

- Vegetation clearance works that can be undertaken under permitted activity rules have been identified, at least one years worth of work to progress.
- This is now getting underway and the scheme is likely to fully spend its budget.
- May do additional work via use of reserves.

## Enabling other works

A consent application is being drafted to enable:

- More extensive channel clearance and edge vegetation management (more extensive than what is allowed under One Plan permitted activity rules);
- Maintenance and installation of flood retention structures, such as stopbanks;
- Upgrade of culverts to improve flood carrying capacity; and
- Installation of hard rock structures to protect banks and align channel.

The consent is likely to include some areas outside of the Ohakune area (in the near vicinity).

Aiming for the consent to be lodged over 2025-26. As soon as practical.



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# PAKIHI

- The Pakihi scheme has two dams to protect approximately 100 ha of rural land from flooding.
- The dams provides a level of service between 4% to 2.5% (1 in 25 to 1 in 40 year flood protection).
- The dams are subject to the new dam legislation.
- They have both been classified as Low Potential Impact Classification (PIC) rating.
- The dam legislation work has added additional costs – approximately \$1,600 per year.
- The main activity is inspections which is completed 4 times per year.



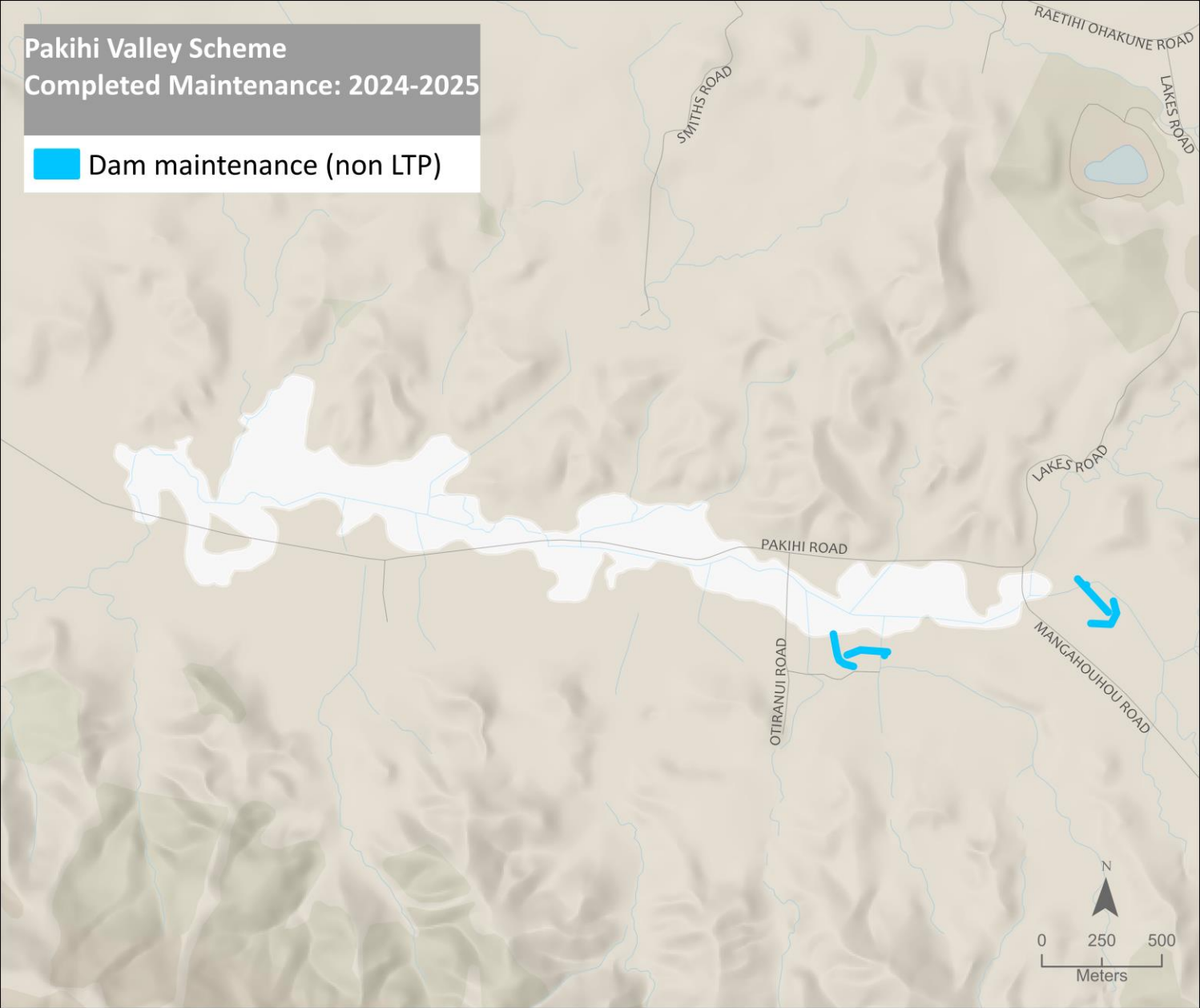
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# PAKIHI VALLEY SCHEME WORKS 2024-25

Budget expenditure:

- Maintenance approx. 169%; and
- Repairs approx. 24%.

Regional summary	Asset quantity	Works / checks	Percent
Drains (km)			
Floodgates (#)			
Stopbanks (km)			
River Channel (km)			
River edge protection (km)			
Dams (#)	2	8	400%
Pump stations (#)			
Weirs (#)			
Amenity (#)			
Flood barrier			



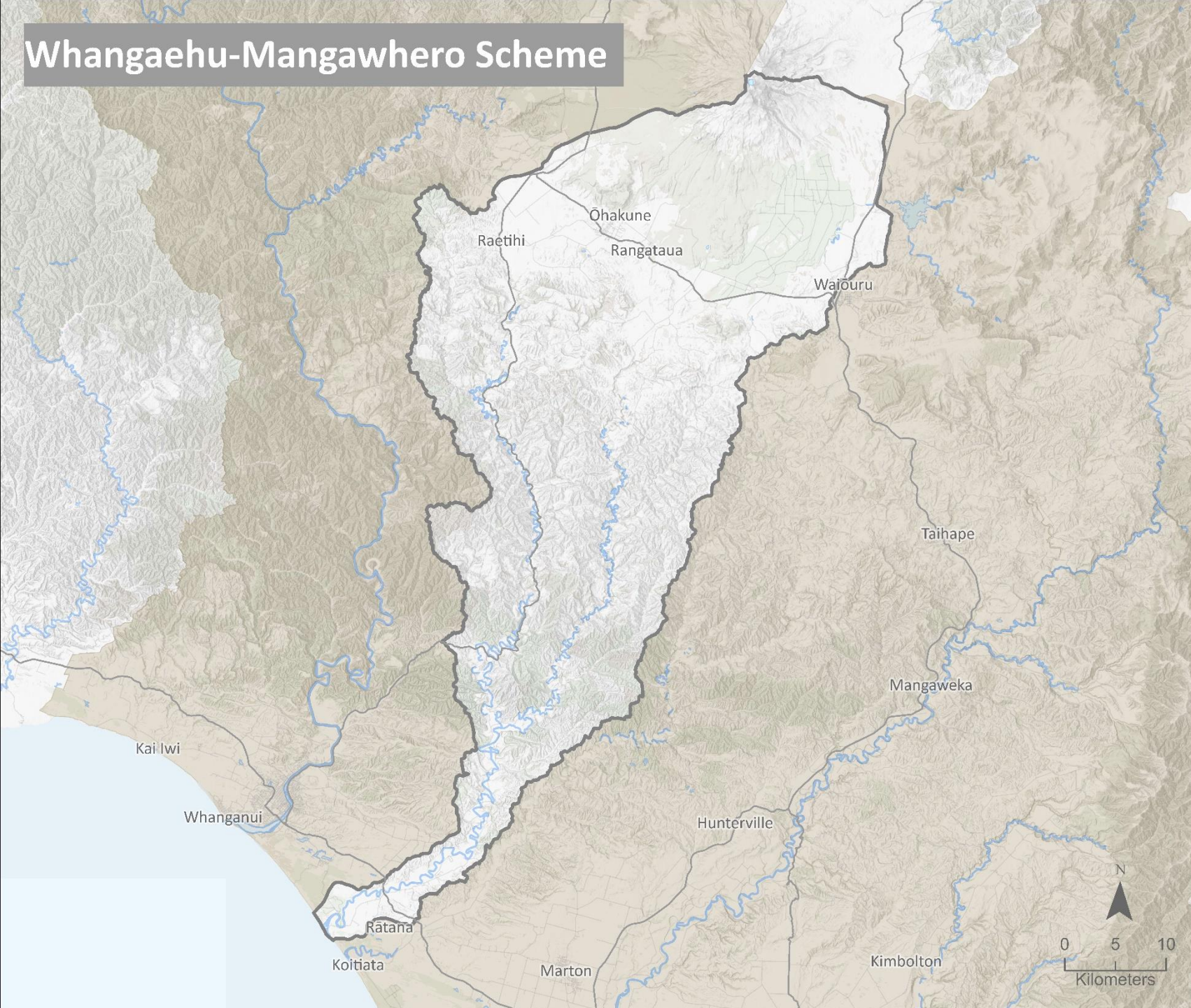


# Whangaehu-Mangawhero Scheme

## WHANGAEHU - MANGAWHERO

### SCHEME ASSETS

- This scheme is a vegetation management scheme.
- There are no assets.
- The areas where vegetation clearance occurs are not shown on this map as they are not considered assets.
- The next slide shows areas worked in 2024-25.



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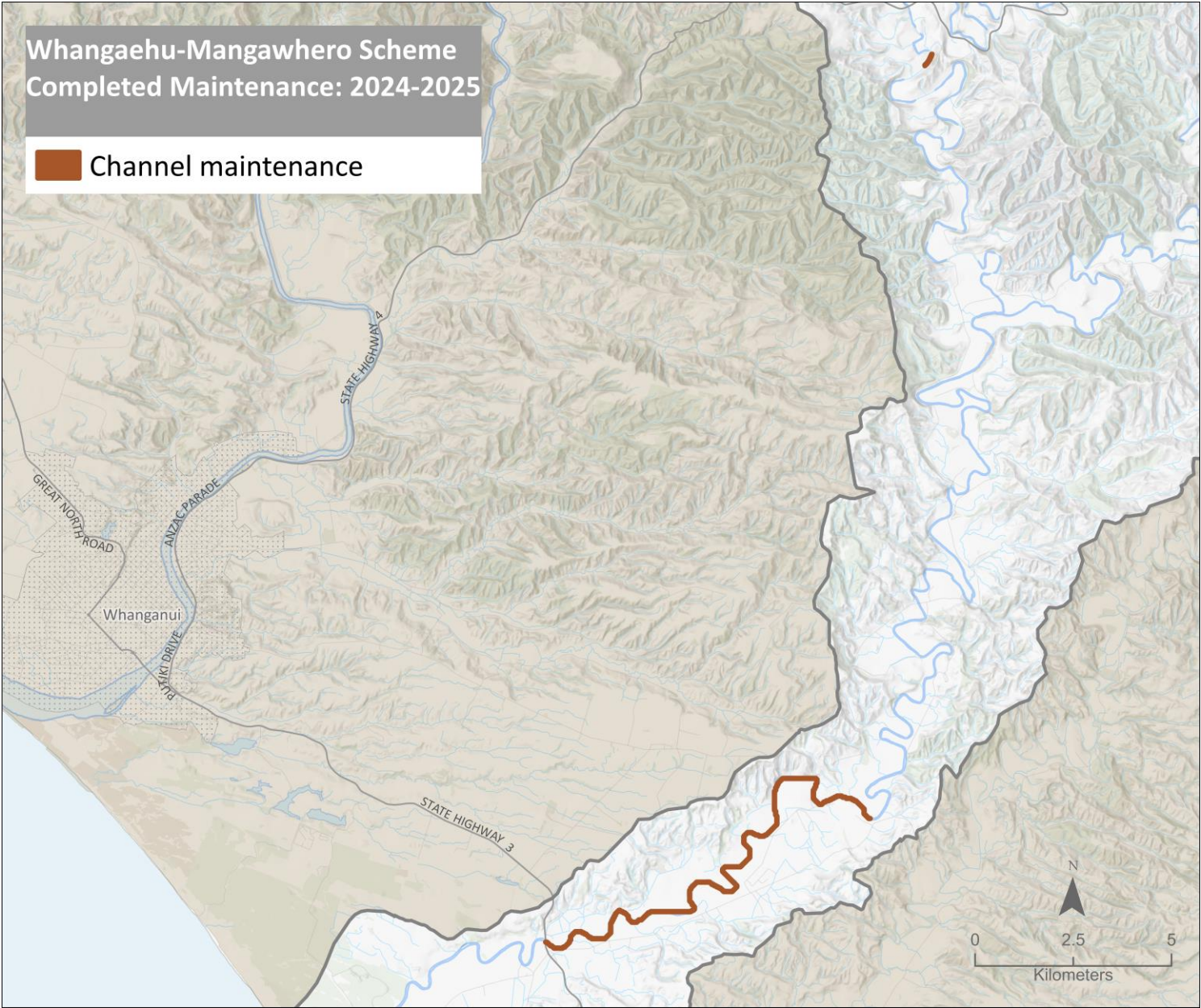


# WHANGAEHU-MANGAWHERO SCHEME WORKS 2024-25

Budget expenditure:

- Maintenance approx. 163%;
- Repairs approx. 3%; and
- Some repair budget reallocated to further maintenance.

Regional summary	Asset quantity	Works / checks	Percent
Drains (km)			
Floodgates (#)			
Stopbanks (km)			
River channel (km)		14.6	
River edge protection (km)			
Dams (#)			
Pump stations (#)			
Weirs (#)			
Amenity (#)			
Flood barrier (#)			





# LOCAL SCHEME FINANCES



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# RUAPEHU SCHEMES – FINANCIAL SUMMARY

- The 5 Ruapehu schemes are a mix of channel maintenance, flood protection and drainage.
- These schemes have approximately \$18M of assets, 1.5% of the regional total.
- Predicted year start for 2025-26: Annual rates budget \$0.6M, \$2k loans, \$0.8M reserves.

Scheme	Purpose	Total assets June 2024 (\$)	Rates Budget 2025-26 (\$)	Loans* (\$)	Emergency Reserves* (\$)	Renewal Reserves* (\$)
Ruapehu District Wide	Channel maintenance	no assets	313,150	--	201,560	--
Ohakune	Channel maintenance	no assets***	79,378		149,725	
Upper Whanganui	Limited flood protection	15,946,489	157,706	1,854	369,727	
Pakihi	Rural land flood protection	2,451,304	18,988		22,906	1,711
Whangaehu-Mangawhero**	Channel maintenance	no assets	72,534		102,492	
<b>Ruapehu Total**</b>		<b>18,397,793</b>	<b>641,756</b>	<b>1,854</b>	<b>846,410</b>	<b>1,711</b>
Regional total**		1,197,889,972	17,675,414	50,049,333	14,635,681	1,144,487
% of Regional total**		1.5%	3.6%	0.04%	5.8%	0.1%

\*Forecast value at 1 July 2025, \*\*Note part of the Whangaehu-Mangawhero Scheme is in the Ruapehu district.

\*\*\*There are assets in the Ohakune scheme of which ownership needs to be determined.



# RUAPEHU SCHEMES – RATE INCREASES

- Ruapehu rate increases range from -40% to 20.7%.
- Key drivers are inflation, changes in loans & additional funding for maintenance and repairs.

Scheme	Rates 2024-25 (\$)	Rates 2025-26 (\$)	Rates change (\$)	Rates change (%)	Notes
Ruapehu District Wide	259,473	313,150	53,677	20.7	Additional \$50K for works as per LTP
Ohakune	77,014	79,378	2,364	3.1	
Upper Whanganui	140,581	157,706	17,125	12.2	
Pakihi	18,259	18,988	729	4.0	
Whangaehu-Mangawhero*	120,563	72,534	-48,029	-39.8	Loan repaid last year reducing rates requirement
<b>Ruapehu Total*</b>	<b>615,889</b>	<b>641,756</b>	<b>25,866</b>	<b>4.2</b>	
Regional total*	16,574,577	17,675,414	1,100,837	6.6	Includes some transfer to operational funding of staff.
% of Regional total*	3.7%	3.6%	2.3%	--	

\*Note part of the Whangaehu-Mangawhero Scheme is in the Ruapehu district.



# FLOOD VULNERABILITY ASSESSMENT



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# FLOOD VULNERABILITY ASSESSMENT (FVA)

## Regional Overview

- Infrastructure strategy recommendation to define a strategic approach to future work programmes.
- Co-funded by Cyclone Recovery Unit funding as part of a larger project.
- The FVA work programme is shown to the right.
- Note work around assets and more detailed flood modelling for the lower Manawatū are also included.

## What will it mean for the Ruapehu

Project aims to inform/ prioritise work programmes for:

- Future flood modeling (may inform district planning);
- Emergency management planning/response; and
- Future flood protection design and works (e.g. how do Ohakune and other towns fit within priorities?).

## Work Programme

### 1. Review existing flood mapping

- Consolidate and review.
- Comment suitability for various purposes.

### 2. Develop a regional flood model

### 3. Produce flood maps for various size events

- With/without climate change & flood defences.

### 4. Produce a flood vulnerability assessment

- Regional level – 50 towns & settlements
- District summary
- Individual town/settlement summaries

**5. Provide a report** - including commentary on interpretation and recommendations for future flood modelling work .



# OTHER INFORMATION



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# REGIONAL MAINTENANCE AND REPAIRS SUMMARY – 34 SCHEMES

- New maintenance based programme introduced.
- Settled weather has assisted the years activity.
- Some of the repairs budget has been redirected to maintenance.
- Preliminary results show 103% of maintenance budget spent, 52% of repairs. budget.

Regional summary	Asset quantity	Works / checks	Percentage	Notes Some areas maintained more than once
Drains (km)	1,149	1,955	170%	Mostly spray, some mechanical
Floodgates (#)	755	1,114	148%	Maintenance and/or checks
Stopbanks (km)	506	982	194%	Mostly mowing
River channel (km)		454		Includes aerial spraying, gravel management
River edge protection (km)	614	118	19%	Willow maintenance
Dams (#)	54	291	539%	Maintenance and/or checks
Pump stations (#)	24	69	288%	Maintenance and/or checks
Weirs (#)	77	5	6%	Maintenance
Amenity (#)	20	2	10%	Maintenance
Flood barrier (#)	10	4	40%	Maintenance and/or checks



# RUAPEHU SCHEMES - MAINTENANCE AND REPAIRS SUMMARY 2024-25

- New maintenance based programme introduced. Settled weather has assisted the years activity.
- Across the 5 schemes
  - 24% of maintenance budget spent; and
  - 1% of repairs budget (as at early June).

Ruapehu schemes summary	Asset quantity	Works completed	Percentage completed	Notes
Drains (km)	1		-	
Floodgates (#)	16	154	963%	Maintenance and/or checks
Stopbanks (km)	3.9	1.5	38%	Maintenance
River channel (km)		35		Maintenance
River edge protection (km)	3	2		Tree maintenance
Dams (#)	2	8		Maintenance and/or checks
Pump stations (#)				
Weirs (#)				
Amenity (#)				
Flood barrier				

# CAPITAL PROGRAMME SUMMARY

## Regional overview

- Delivery tracking to approx. \$19M, nearly double previous year \$10.5M.
- Last year for most government co-funded projects.
- \$11M of government co-funding toward \$29M budget.
- Main underspend was Te Pūwaha (Whanganui) where construction is now underway and the budget carries forward into the new year.
- Next years budget \$7M. Te Pūwaha, Feilding and Palmerston North.
- Flood vulnerability assessment to inform the future work programme.

## Local examples

- There were no capital projects undertaken in the Ruapehu this year.
- There have been a range of investigations in the area including:
  - The Matiere / Ohura Road flooding issue (see case study);
  - Ohakune scheme works options and consenting; and
  - The regional flood vulnerability assessment (see case study).
- The regional flood vulnerability study will provide some direction for future priority capital projects. Developing projects in terms of design and consenting a key piece of work if there is a goal to undertake capital works.



Photo: Road flooding near Matiere



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# REGIONAL CAPITAL PROGRAMME 2024-25

Area	Whanganui	Rangitīkei	Palmerston North	Horowhenua
Project	Te Pūwaha	Climate resilience	Climate resilience	Climate resilience (lower Manawatū)
Supported by	PGF (Kanoa), WDC, HRC	Kanoa	Kanoa, HRC	Kanoa, HRC
Purpose	River Training	Room for river	Flood protection	Flood protection
Delivery 24-25	Construction started southern side	Vegetation and gravel management, room for river report, planting, track upgrade at Scotts Ferry.	Te Matai Road and Tremaine Avenue works completed. Belvedere Crescent works started, to finish in spring.	Upgrades to Moutoa sluice gates and wet gates, Tokomaru and Koputoroa stopbanks. Rangiotu gates design updated.
Area	Whanganui	Manawatū	Horowhenua	Foxton
Project	Pūtiki resilience	Feilding flood resilience	Pump Station upgrades	Climate Resilience (Foxton)
Supported by	HRC, Pūtiki community, WDC & Waka Kotahi	HRC with governance group, MDC, iwi and landowner rep.	Cyclone recovery unit, HRC.	Kanoa, HDC, HRC, governance group community and hapū reps.
Purpose	Investigations	Flood protection	Alternative power supply and comms.	Flood resilience
Delivery 24-25	Hydrology study and options assessment	Options assessment, further work on Reid Line spillway upgrade. Land Purchase.	Generators purchased, plugs installed.	Sheet piling Kings Canal Pumps purchase and set up for use.

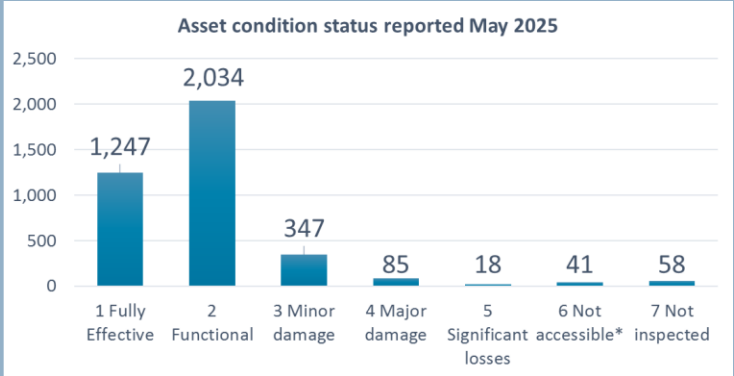
# ASSET MANAGEMENT – STATE OF THE NETWORK

## Regional Overview

- Over 3,800 assets valued at over \$1.2 Billion.
- Maximum insurance claim per event is up to \$0.1 Billion.
- Assets insured total \$0.811 Billion.
- Single asset management plan produced to replace 27 plans (more efficient, to be updated annually).

## Regional Asset Condition

- 103 (5%) of assets have major or significant damage.
- A further 347 (9%) have minor damage.



## Regional Asset Defects

- 477 assets at least one of the 1,104 known defects.
- Capacity and information systems are limiting defects management. The Annual Plan has prioritised this.

Defects reporting by area	Number of assets (total)	Number of assets with active defects <sup>1</sup>	Number of active defects
Eastern	812	70	105
Northern	562	42	77
Southern	1,244	92	197
Central	1,210	273	725
Total	3,828	477 <sup>2</sup>	1,104

## Ruapehu Schemes Asset Defects

- The Ruapehu schemes area in the northern area where:
  - There are 562 assets.
  - Of which 42 (7%) have at least one known defect.
  - There are 77 known defects.

\* May 2025 reporting. <https://www.horizons.govt.nz/HRC/media/Media/Agenda-Reports/Integrated-Catchment-Committee-Folder/Integrated-Catchment-Committee-2025-14-05/2559%20Catchment%20Operations%20Group%20Regional%20Summary%20Report.pdf> Pages 63 to 65



# REGULATORY MATTERS

## Regional Overview

- Obtaining and complying with approvals is essential to getting work done.
- Approvals take many forms - consents, landowners, treaty legislation, community buy-in, national legislation etc.
- Obtaining approvals and complying is increasingly complex.
- Most of the schemes have not budgeted for this.
- Restructuring has enabled more capacity for this work.
- Systems and processes have been improved.

## Local regulatory work over the year

- A lot of assessments have been completed prior to undertaking operational works.
- Have been prioritising capital programme consents over operational consents.
- Preparing a consent application for the Ohakune scheme.

## Consenting and compliance

- Schemes have over 200 consents and 4,000 conditions.
- New consents are required when consents expire and when new works are proposed.
- Over 30 consent processes this year. Some ongoing.
- No significant non-compliances in 2024-25. 20+ inspections
- A region wide abatement notice has been issued.
- One prosecution is being responded to, works in June 2024
- All significant works are now assessed via a panel.

## Local consenting work required

- Important that landowners and contractors do not do work that is outside the scope authorized.
- Ohakune scheme activity related consents are the current priority.

For more information please refer to May 2025 reporting.

<https://www.horizons.govt.nz/HRC/media/Media/Agenda-Reports/Integrated-Catchment-Committee-Folder/Integrated-Catchment-Committee-2025-14-05/2559%20Catchment%20Operations%20Group%20Regional%20Summary%20Report.pdf> Pages 81 to 88



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