



WHANGANUI SCHEMES

7TH JULY 2025

VENUE: COOKS GARDENS, WHANGANUI

LOWER WHANGANUI SCHEMES

Lower Whanganui

Matarawa

Whangaehu - Mangawhero

PRESENTATION FORMAT

Regional overview

1. New maintenance programme results
2. Works reporting – Regional, district and local examples
3. Capital works – local examples
4. Capital works – regional overview
5. Asset Management – insurance, known asset defects
6. Regional flood vulnerability assessment
7. Regulatory matters – consenting and compliance

Local Schemes – combined summary

8. Local schemes finance summary – rates, loans, reserves
9. Rates increases
10. Local schemes current context and the year ahead
11. Case studies
 - Te Pūwaha
 - Pūtiki
 - Turoa Road
 - Dam Safety Legislation
12. Summary and individual schemes discussion

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	71	296%	Maintenance and/or checks
Weirs (#)	77	3	4%	Maintenance
Amenity (#)	20	2	10%	Maintenance
Flood barrier (#)	10	4	40%	Maintenance and/or checks

WHANGANUI SCHEMES - WORKS SUMMARY 2024-25

- New maintenance based programme introduced. Settled weather has also assisted the years activity.
- Across the 3 schemes:
 - 70% of the maintenance budget spent;
 - 11% of the repairs budget (as at early June). Note some reallocation to maintenance.
- Individual scheme results, including maintenance and repair budget expenditure provided in later slides.

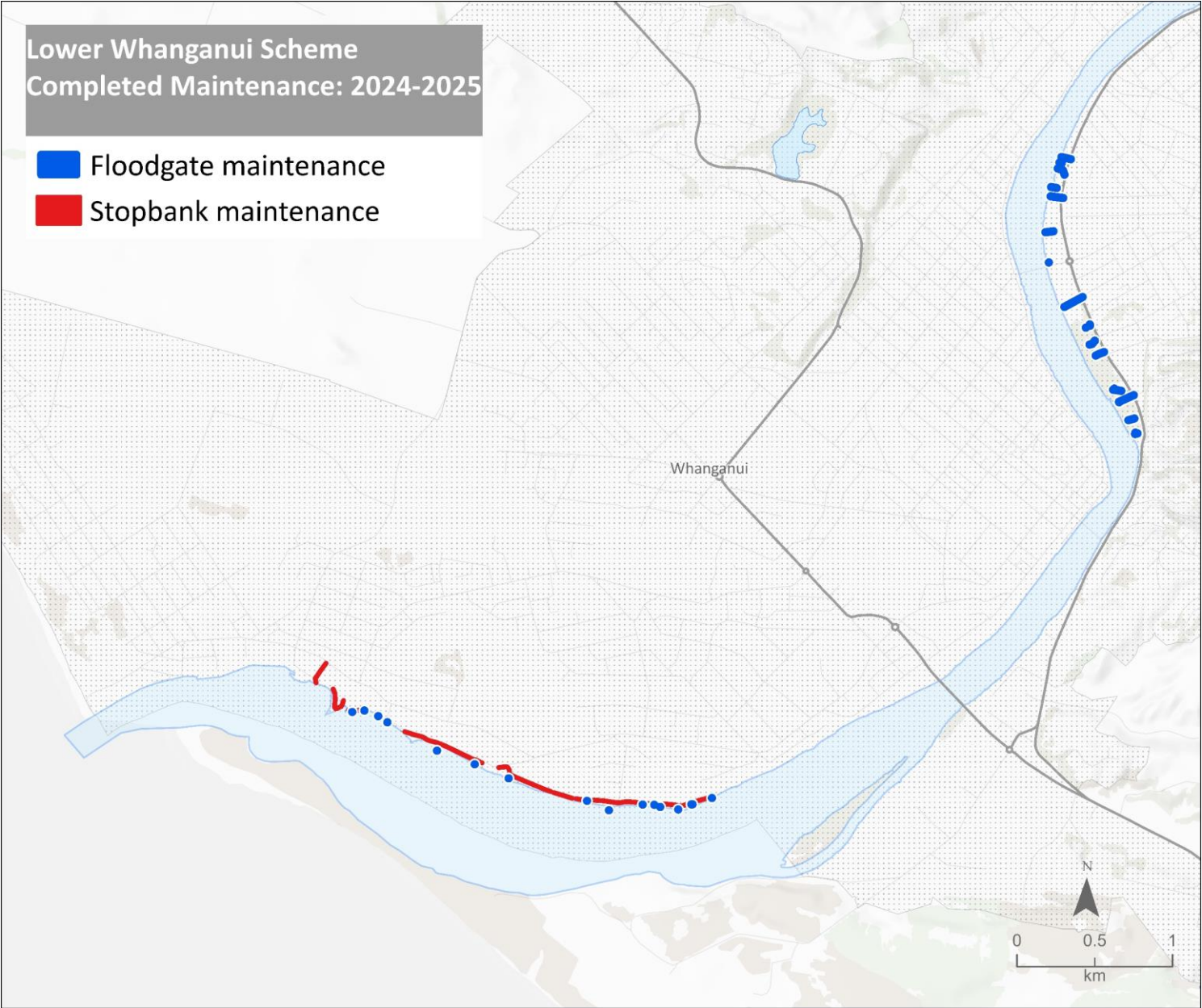
Local schemes summary	Asset quantity	Works / checks	Percentage	Notes
Drains (km)	7	8	105%	Mostly spray, some mechanical
Floodgates (#)	53	388	732%	Maintenance and/or checks
Stopbanks (km)	9	22	250%	Mostly mowing
River Channel (km)		15		Aerial spraying and gravel management
River edge protection (km)	0	0	NA	
Dams (#)	5	16	320%	Maintenance and/or checks
Pump stations (#)				-
Weirs (#)				-
Amenity (#)	11	0	0%	-
Flood barrier (#)	5	0	0%	-

LOWER WHANGANUI SCHEME WORKS 2024-25

Budget expenditure:

- Maintenance approx. 47%; and
- Repairs approx. 16%.

Regional summary	Asset quantity	Works / checks	Percent
Drains (km)			
Floodgates (#)	35	340	971%
Stopbanks (km)	4.3	21.6	502%
River channel (km)	1.2	0	0%
River edge protection (km)			
Dams (#)			
Pump stations (#)			
Weirs (#)			
Amenity (#)	9	0	0%
Flood barrier (#)	5	0	0%

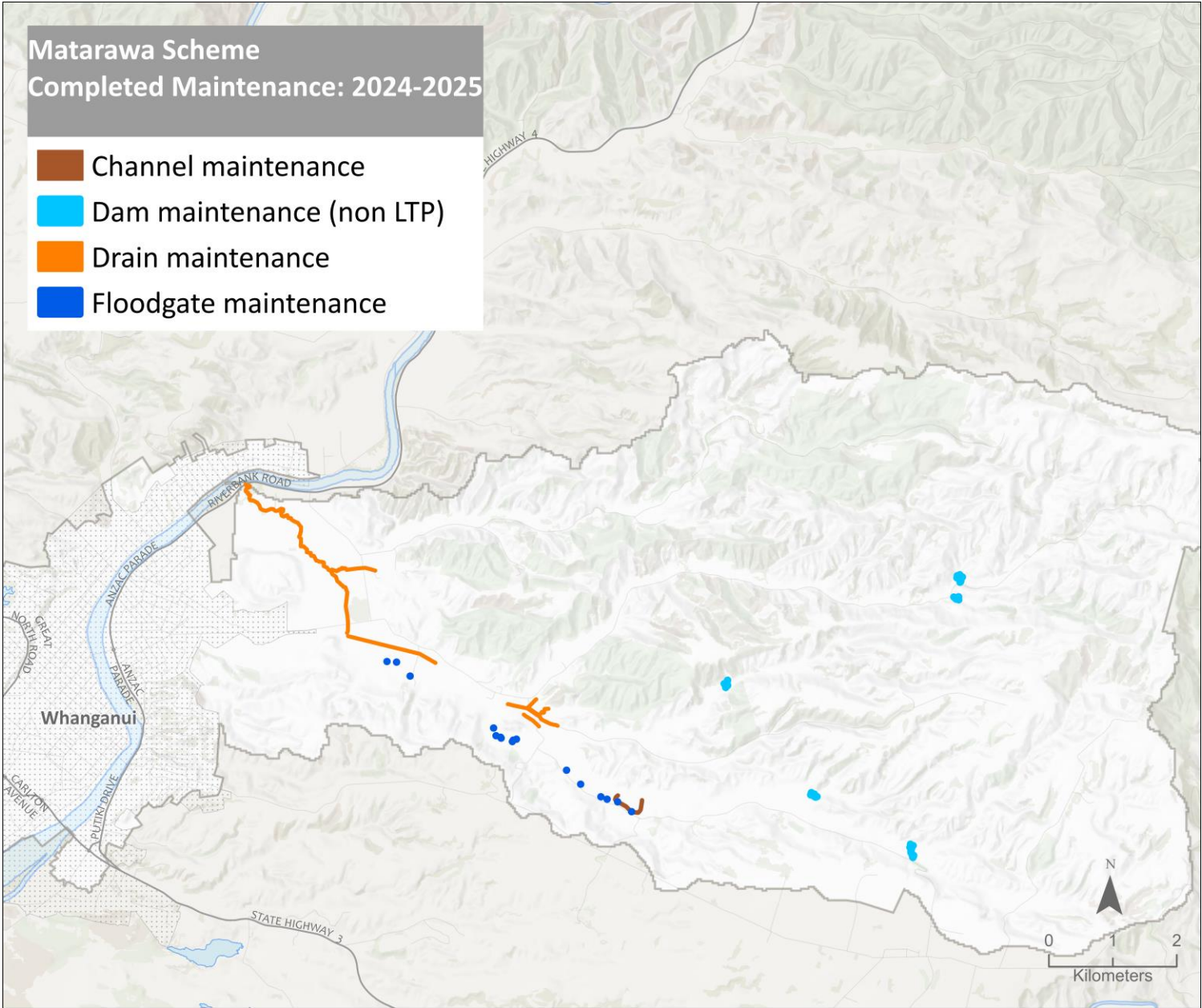


MATARAWA SCHEME WORKS 2024-25

Budget expenditure:

- Maintenance approx. 696%;
- Repairs approx. 7%;
- The ratio of maintenance to repairs budget was an administrative issue; and
- Overall approx. \$2k over \$35k budget including dams work.

Regional summary	Asset quantity	Works / checks	Percent
Drains (km)	7.5	7.9	105%
Floodgates (#)	18	48	266%
Stopbanks (km)	4.3	0	0%
River channel (km)		0.7	
River edge protection (km)			
Dams (#)	5	16	302%
Pump stations (#)			
Weirs (#)			
Amenity (#)	2	0	0%
Flood barrier (#)			

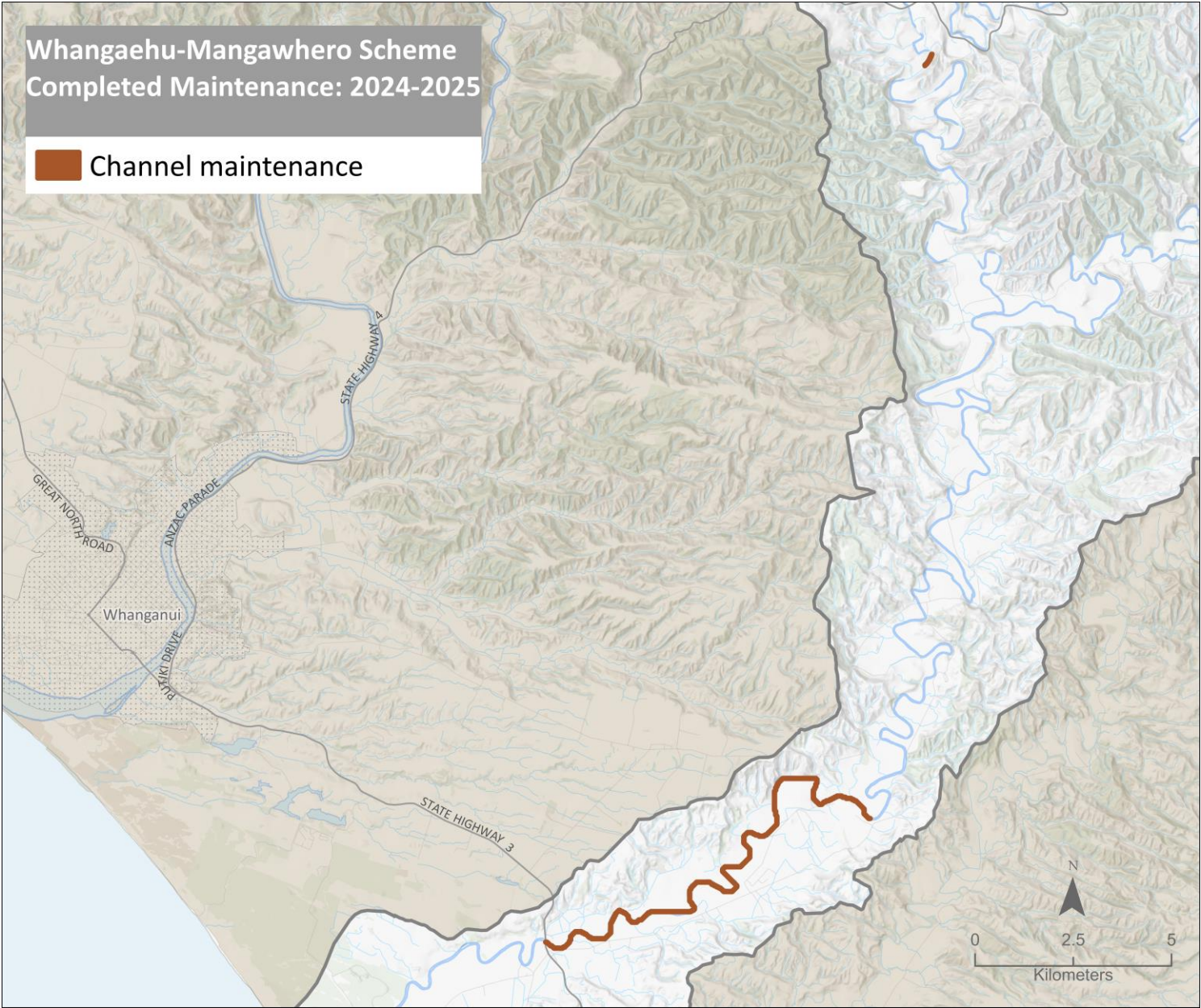


WHANGAEHU-MANGAWHERO SCHEME WORKS 2024-25

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 (#)			



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 Example: Te Pūwaha – Whanganui River Training Structures

- This Provincial Growth Fund project has been underway since 2020
- The governance group is lead by iwi/hapū and includes Horizons and Whanganui Councils, Port representatives, Q-west
- Project delivery is a partnership model with hapū at place
- Prior to 2024-25 the project focused on the North Mole upgrades
- In 2024-25, design, consenting and procurement for southern side upgrades Tanea Groyne (50m), interface wall & part of the South Mole.
- A Regional Infrastructure Fund Bid has been made for further work



Photo: South Spit, Whanganui



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REGIONAL CAPITAL PROGRAMME OVERVIEW 2024-25

Area	Whanganui	Rangitīkei	Palmerston North	Horowhenua
Project	Te Pūwaha	Climate resilience	Climate resilience	Climate resilience (lower Manawatū)
Supported by	Hapū at place, PGF (Kanoa), WDC, HRC.	Kanoa, HRC	Kanoa, HRC	Kanoa, HRC
Purpose	River Training	Room for river	Flood protection	Flood protection
Delivery 24-25	Consenting & design. Construction underway. Project delivery is in partnership with hapū at place.	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.

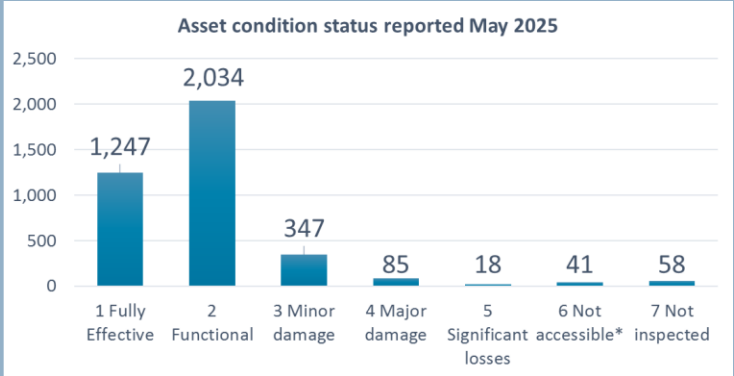
ASSET MANAGEMENT

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 ¹	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 ²	1,104

Whanganui Schemes Asset Defects

- The Whanganui 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

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 Whanganui

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 Pūtiki, Turoa Road and others 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.

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.
- Te Pūwaha consents and compliance are a focus.
- Matarawa Dam Safety assessments (see case study).

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

- Te Pūwaha consents, South spit, Tanea Groyne extension.
- Ongoing dam safety work Matarawa.
- Lower Whanganui scheme requires consents if works other than permitted activity are to be completed.

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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LOCAL SCHEMES – FINANCE SUMMARY

- The 3 Whanganui area schemes are a mix of channel maintenance and flood protection (rural & urban).
- These schemes have approximately \$19.3M of assets, 2% of the regional total.
- Predicted year start for 2025-26: Annual rates budget \$1.2M, \$6.6M loans, \$1.3M reserves.
- Whanganui Scheme has additional approved loan funding for the current Te Pūwaha project \$1.9M in 202-26 & \$5.25M for the new funding application. Annually the scheme is not fully spending its operational budget.

Scheme	Purpose	Total assets (\$M, June 2024)	Rates Budget 2025-26 (\$)	Loans* (\$)	Emergency Reserves* (\$)	Renewal Reserves* (\$)
Lower Whanganui	Protect urban areas	13,346,086	989,891	6,634,593	1,431,272	-7,365
Matarawa	Protect rural land	5,948,612	125,006	0	74,973	39,824
Whangaehu - Mangawhero	Channel Maintenance	n/a	72,534	0	102,492	--
Whanganui all		19,294,698	1,187,431	6,634,593	1,267,012	32,459
Regional Total		1,197,889,972	17,675,414	50,049,333	14,635,681	1,144,487
Percentage		2%	7%	13%	11%	3%

* Forecast value at 1 July 2025

LOWER WHANGANUI SCHEMES – RATE INCREASES

- Lower Whanganui rate increases range from -39.8% to 8.8%.
- Key drivers are inflation, additional funding for maintenance and repairs, loan impacts from additional capital work.

Scheme	Rates (\$) 2024-25	Rates (\$) 2025-26	Rates (\$) change	Rates % change	Notes
Lower Whanganui	910,051	989,891	79,840	8.8%	Increase in loan funding and management cost.
Matarawa	140,565	125,006	-15,559	-11.1%	Loan funding no longer required.
Whangaehu - Mangawhero	120,563	72,534	-48,029	-39.8%	Loan funding no longer required.
Whanganui all	1,171,179	1,187,431	16,252	1.4%	
Regional Total	16,574,577	17,675,414	1,100,837	6.6%	
% of Regional Total	7.1%	6.7%	1.5%		

LOWER WHANGANUI SCHEMES – CURRENT CONTEXT AND YEAR AHEAD

Current context

Lower Whanganui Scheme

- The Te Pūwaha project is the main project in the scheme.
- Under the leadership and guidance of Hapū at place the work has progressed through permissions processes to getting further construction underway.
- Additional design and consenting work are underway.
- The scheme is not fully spending its operational budgets. There are options to seek further permissions for other works to be completed and/or continue current level of activity and use savings on operational programmes to pay debt for the capital projects.
- There are multiple locations seeking additional works e.g. Pūtiki, Turoa Road. Investigation work is progressing well and decisions will be required around next steps for these.

Matarawa and Whangaehu

- Matarawa and Whangaehu loans have been fully paid and as a result there is a rates reduction this year.

Priorities for the year ahead:

Lower Whanganui Scheme

- Completing the Te Pūwaha current project including construction and consenting (Tanea Groyne 120m and South Spit).
- Awaiting government decisions on the Regional Infrastructure Fund project and undertaking works if the application is successful.
- Enabling the He Aru Tuku Rau commitments and the ongoing funding commitments to this.
- Continuing discussions around Pūtiki and Turoa Road to get locally led decisions on preferred options.

All schemes

- Operating within regulatory frameworks.
- Further year of the maintenance based programme.
- Responding to any high flow events as they occur.
- Emergency management/ response training.

CASE STUDIES



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CASE STUDY: TE PŪWAHA

Overview

- The Provincial Growth Fund project was announced in July 2020 and has multiple project partners and deliverables.
- A Governance Group and Te Mata Pūau (a collaboration of hapū at place) have been established to lead the collaborative project guided by Tupua te Kawa, the innate values of Te Awa Tupua (Whanganui River Claims Settlement Act 2017).
- Horizons and Te Mata Pūau are delivering the River Training Structures component of the overall project.
- Co-funding is via Central govt. Horizons and WDC.

Project delivery 2020 to June 2024

- River training structures upgrades on the Northern side of the river including the North Mole have been delivered.
- Additional works have included a new stopbank to provide flood protection in Castlecliff and amenity upgrades.

For more information please refer to [https://www.horizons.govt.nz/HRC/media/Media/Agenda-Reports/Horizons-Regional-Council-\(2\)/Regional-Council-Meeting-2024-17-12/24167%20Lower%20Whanganui%20Scheme%20%20Te%20Pwaha%20project.pdf](https://www.horizons.govt.nz/HRC/media/Media/Agenda-Reports/Horizons-Regional-Council-(2)/Regional-Council-Meeting-2024-17-12/24167%20Lower%20Whanganui%20Scheme%20%20Te%20Pwaha%20project.pdf)

Current contracted work

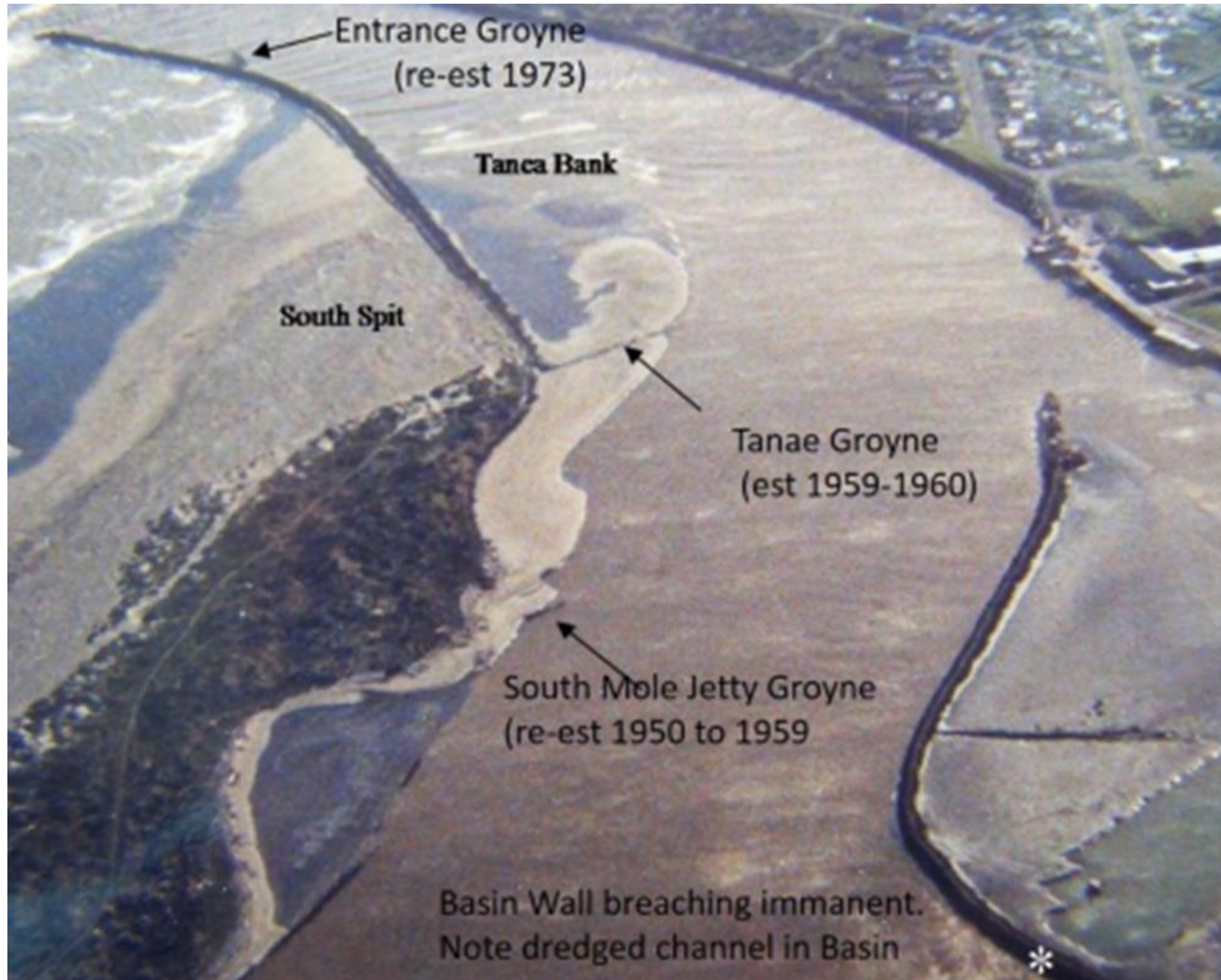
- The PGF project has been extended to Dec. 2025.
- A final construction project is underway to build:
 - The Tanea Groyne (50 m);
 - An interface wall downstream of that;
 - Part of the South Mole; and
 - A revetment upstream of the Tanea Groyne to the large embayment.
- Kanoa contract deliverables also include consents and procurement documents for completing South Spit works & the remainder of the South Mole.

Regional Infrastructure Fund (RIF) Application

- An application has been made for further works including:
 - The remainder of the South Mole;
 - Extending the Tanea Groyne to 120 m; and
 - Potentially South Spit resilience works.
- Council has confirmed \$5.25M toward a \$13.125M project with a loan term of 35 years.
- RIF funding decisions are expected later in 2025.

LOWER WHANGANUI RIVER – 1994

(SOURCE SHAND 2016)



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INDEPENDENT ADVICE PRIORITIES FOR SOUTHERN SIDE

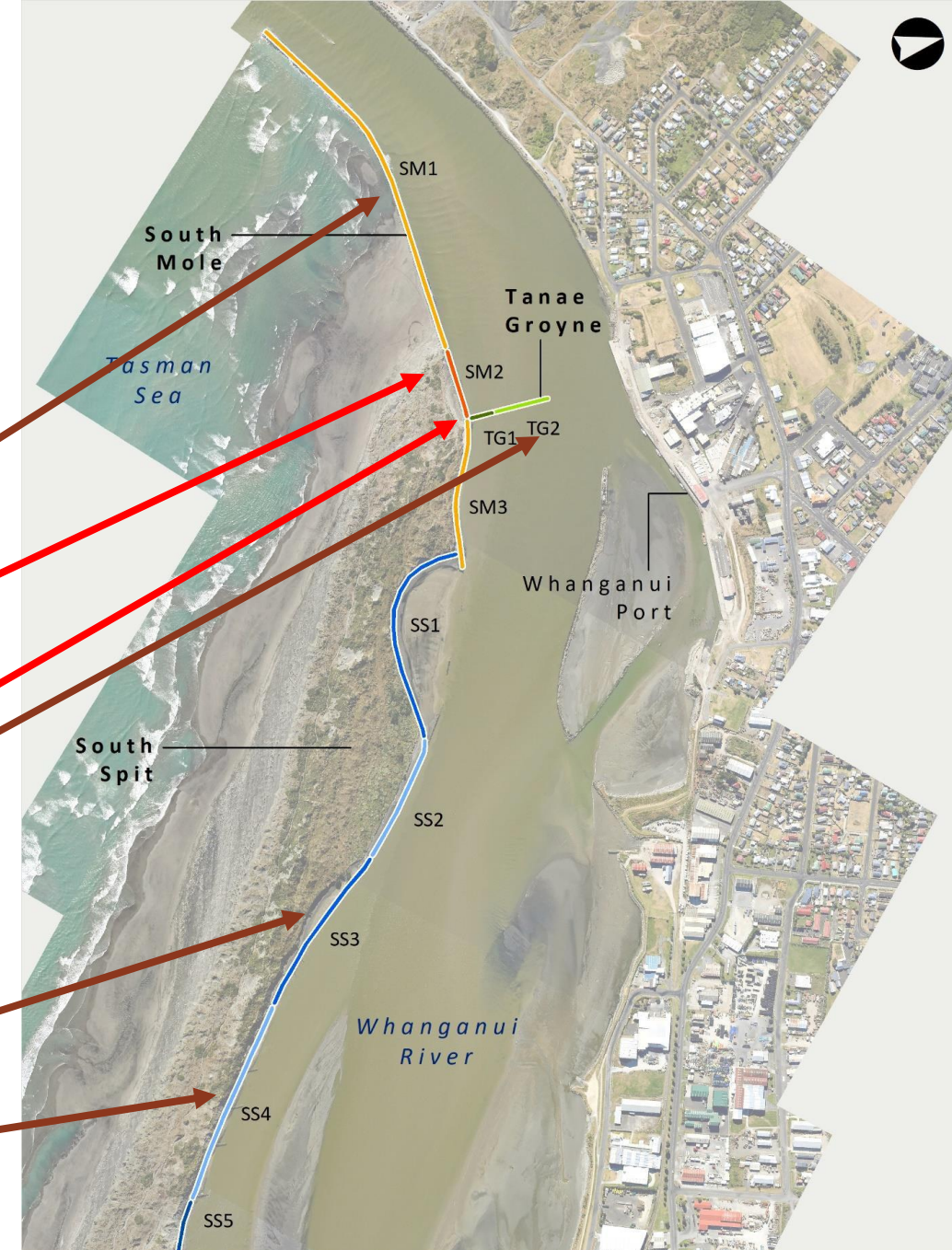


Table 5.3: Structure risk matrix used to assign construction priority

		Importance of structure		
		1 (Low)	2 (Medium)	3 (High)
Condition of structure	1 (Good)	Very Low	Low	Moderate
	2 (Fair)	Low	Moderate	High
	3 (Poor)	Moderate	High	Very high

Table 5.4: Structure risk and priority for construction

Map ID	Importance	Condition	Risk	Priority
South Mole				
SM1	2	3	6	3
SM2	3	3	9	1
SM3	2	2	4	7
Tanae Groyne				
TG1	3	3	9	2
TG2	2 ⁵	3	6	6
South Spit				
SS1	1	3	3	8
SS2	1	3	3	9
SS3	2	3	6	5
SS4	3	2	6	4
SS5	1	3	3	10



0 100 200 300 400 m



Aerial photograph 2016

CASE STUDY: PUTIKI

Overview

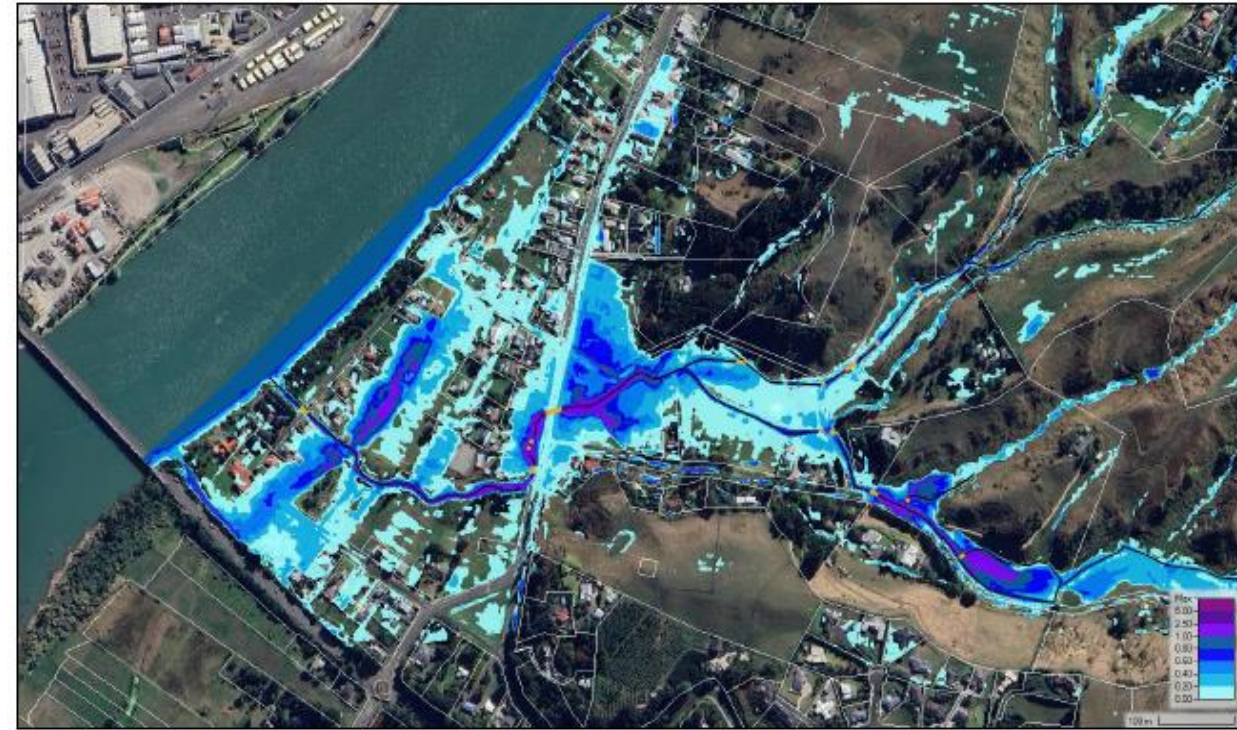
- Lead by Pūtiki community representatives a steering group involving hapū representatives, Horizons, WDC and Waka Kotahi have undertaken two studies this year.
- This is a Lower Whanganui Scheme project (capital funded).
- The aim is to provide supporting information for discussion.

Project 1: Flood Risk Assessment – completed Feb 2025

- This established a ‘joined up’ understanding of flood risk from the Whanganui River and the Ngatarua Stream.
- It considered a range of scenarios of combined local flooding, flooding from the river and climate change.

Project 2: Mitigations options assessment

- An investigation of infrastructure options that are technically feasible to mitigate the baseline flood risk in the short, medium and long-term.
- Scenarios being considered have coincident probabilities between 1 in 10 year and 1 in 200 year ARI events, all including the predicted impacts of climate change.



Example flood scenario map from the risk assessment.

CASE STUDY: TUROA ROAD

Overview

- WDC & Horizons have worked together to respond to ongoing flooding/stormwater issues at Turoa Road.
- The houses are in a location where a multiple upstream catchments drain through a single valley.
- There are regular issues of flooding of properties including under houses and blocking of access to houses.
- Iwi/hapū input has been limited to date, Nga Tangata Tiaki have been contacted regarding being involved in the work.

Options assessment

- A broad options assessment was completed in August 2024, including high level costings.
- Key findings included low drain capacity due to deferred maintenance of the private drain & drain constrictions (natural and man-made).
- The main risk is ponding within properties and non-habitable ancillary buildings. This is relatively frequent.
- No risks were identified to dwelling floor levels based on the June 2015 event that was a 1 in 130 year event.



Next steps

- Options included detainment dams, increasing drain capacity and maintenance as well as several options for new drainage infrastructure.
- The options identified were investigated and costed at a high level. There is an opportunity to do further work on a narrower set of options.
- The report has been followed up with a residents meeting in June 2025 and the aim is inform the Councils decision making processes via the Long-term Plan.

CASE STUDY: DAM SAFETY REGULATIONS

Regional Overview

- The first task was to complete classifications.
- 54 dams (5 schemes) required potential impact classifications (PIC). Of these:
 - 36 were low
 - 3 medium (1 each Porewa, Tutaenui & Matarawa)
 - 8 were high (4 each Tutaenui and Porewa)
- Initial classifications were:
 - Submitted in August 2024; and
 - Certificates were received in September 2024.

Key findings

- Key contributors to issues at this location are low drain capacity, deferred maintenance, and drain constrictions (natural & man-made).
- The resulting risk is ponding within properties and non-habitable ancillary buildings in relatively frequent storm events.
- However, no risks were identified to dwelling floor levels (based on observations of June 2015 storm which was a 1 in 130 year ARI event in this catchment).
- A range of options, short to long-term, have been identified that could improve levels of service.

Impact on local schemes - additional costs

- The additional costs for the dam safety regulations are impacting scheme budgets.
- Costs are being allocated to schemes based on the requirements for individual dams.
- This has required some reserve draw downs and may require some loan funding in the Tutaenui and Porewa schemes.
- Some operational work is not being completed to offset this expenditure.

INDIVIDUAL SCHEME SUMMARIES

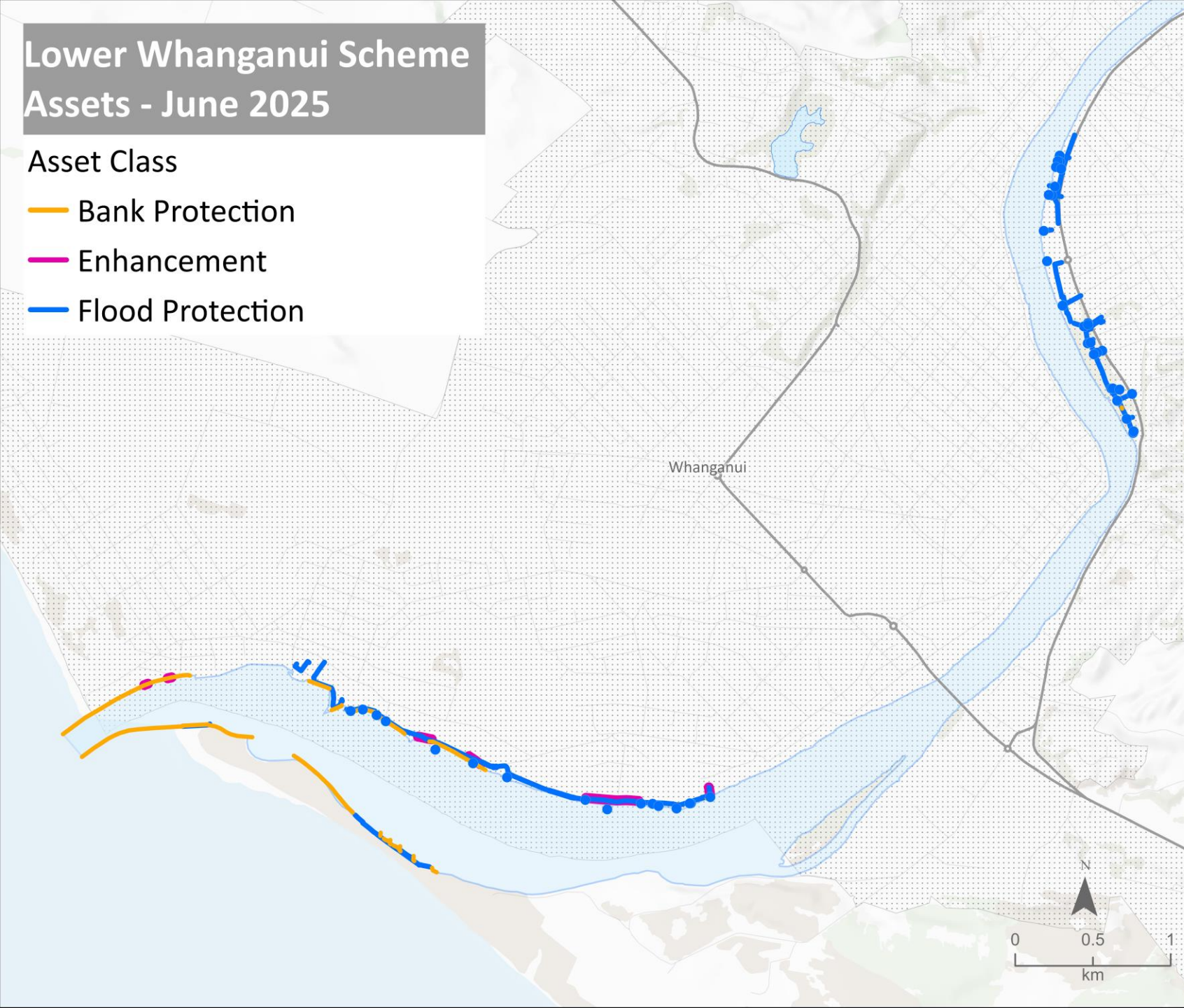


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Lower Whanganui Scheme Assets - June 2025

Asset Class

- Bank Protection
- Enhancement
- Flood Protection



LOWER WHANGANUI

SCHEME ASSETS

Scheme assets include:

- 35 floodgates
- 4.3 km of stopbanks
- 9 amenity enhancements
- 5 flood barriers

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

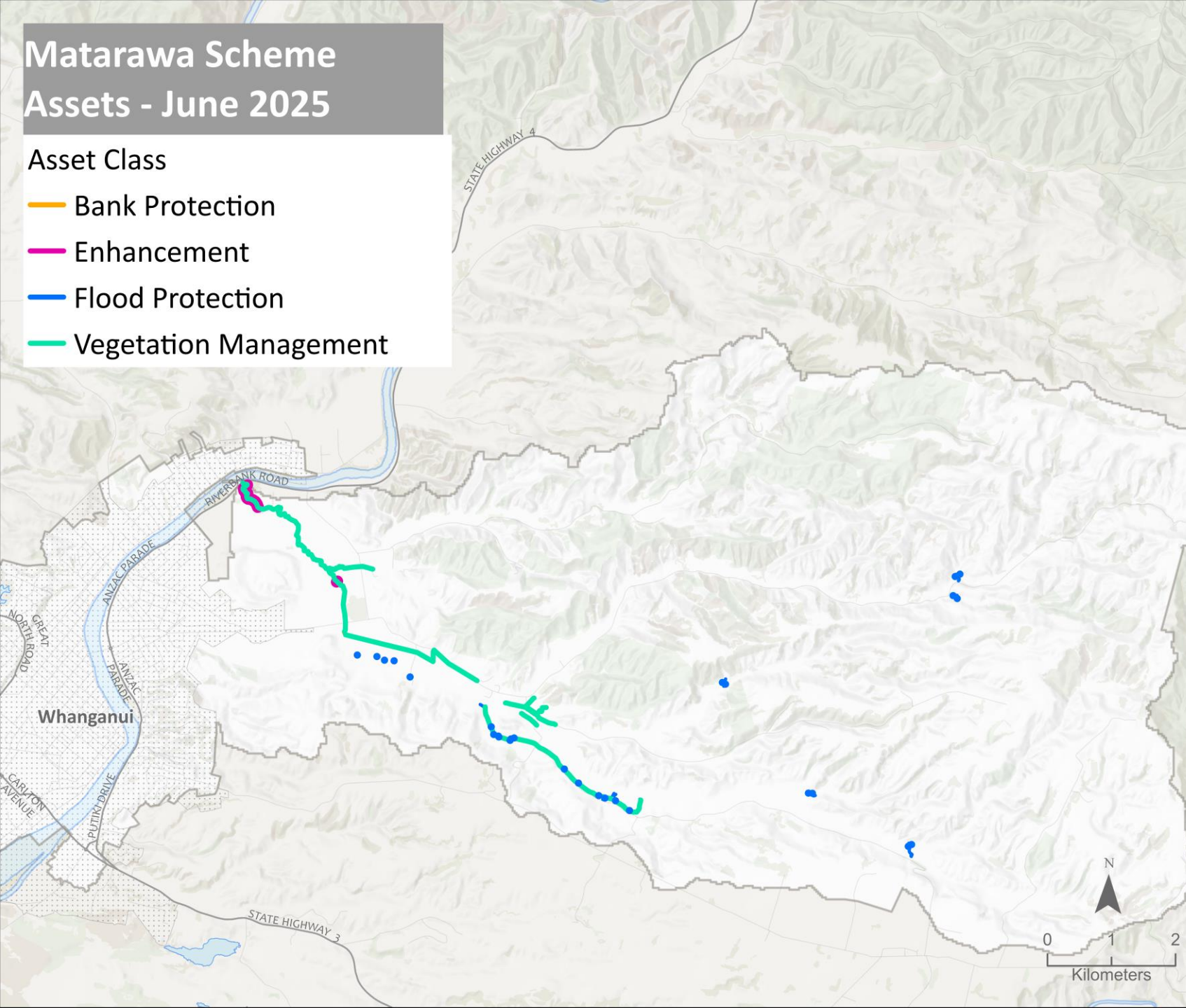


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Matarawa Scheme Assets - June 2025

Asset Class

- Bank Protection
- Enhancement
- Flood Protection
- Vegetation Management



MATARAWA

SCHEME ASSETS

Scheme assets include:

- 7.5 km of drains
- 18 floodgates
- 4.3 km of stopbanks
- 2 amenity enhancements
- 5 Dams



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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.



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REGIONAL COUNCIL



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