



PAPAIOEA
PALMERSTON
NORTH
CITY

PALMERSTON NORTH CITY COUNCIL

AGENDA MINUTES ATTACHMENTS SUSTAINABILITY COMMITTEE

9:00 AM, WEDNESDAY 18 JUNE 2025

COUNCIL CHAMBER, FIRST FLOOR
CIVIC ADMINISTRATION BUILDING
32 THE SQUARE, PALMERSTON NORTH

SUSTAINABILITY COMMITTEE MEETING

18 June 2025

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MANAWATŪ RIVER
CATCHMENTS COLLECTIVE

mrcnz
mrccgram



FROM THE EAST TO THE WEST, FARMER-LED CATCHMENT GROUPS
HAVE JOINED FORCES AND ARE ON A MISSION TO ENHANCE AND
PROTECT OUR WATERWAYS

Visit www.mrcc.co.nz to find out more and connect with like-minded people
committed to caring for the land, water and wildlife ...for the future generations who
depend on it.

Committee Chair:
Shelley Dew-Hopkins

Collective coordinators:
Fiona Burke (western)
Gwyn Jones (eastern)

Manaaki whenua | Awa ora | Tāngata ora | Hapori ora
care of the land | healthy river | healthy people | thriving communities

Image by Anna Sward Photography



DAILY
MY

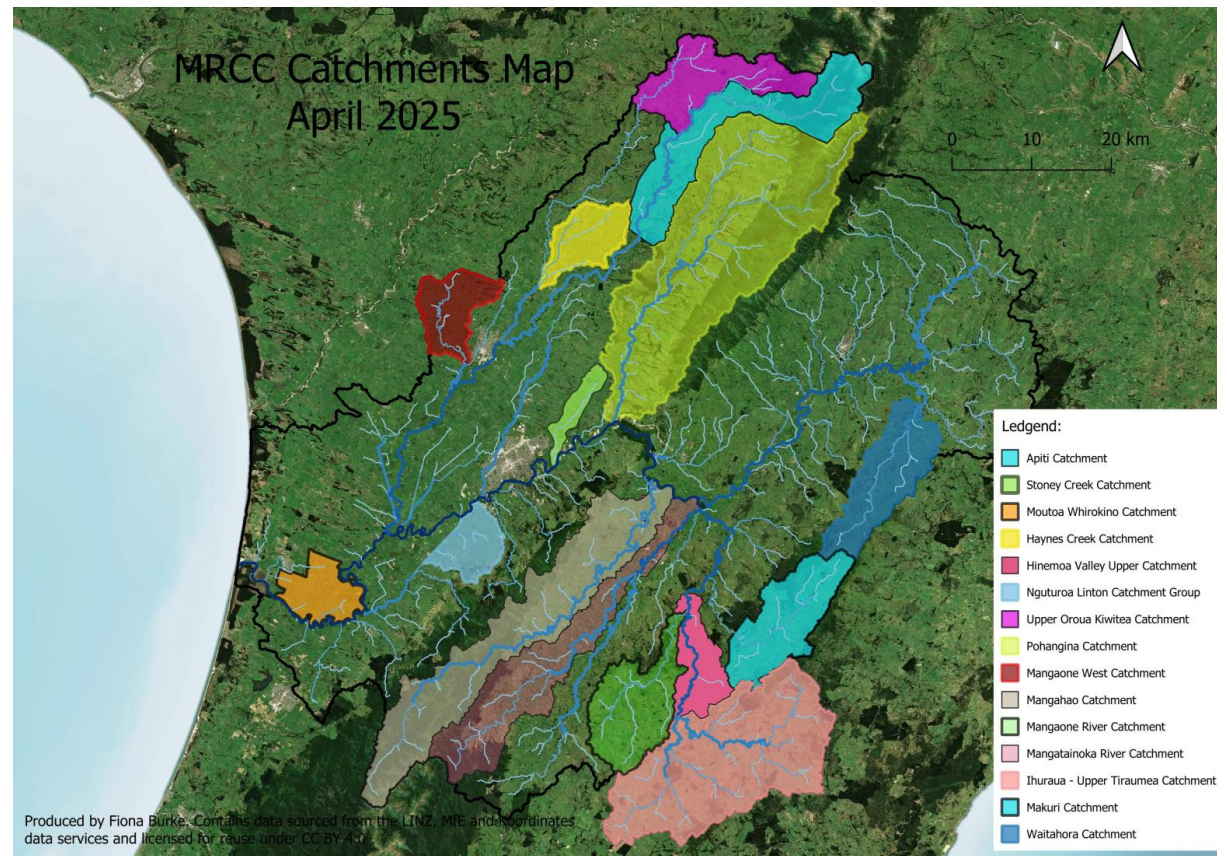
- 600,022Ha
- 15 catchment groups;
- 234,623 ha currently supported by the Manawatu River Catchments Collective
- Over 460 engaged members

- Incorporated Society

- Diverse land use:

Sheep & Beef, Deer, Dairy farming,

Forestry, Market gardening, Horticulture, Cropping



Catchment progress & achievements

- 76 water testing sites
- Water testing ranging from 5 years to a few months (except 1 catchment with water analysis data collected over 25 years!)
- 13 sub-catchment groups with strategic plans. Covering what everything from what they want to know about to what they already have in their catchment.
- Each catchment has an individual website page to give an overview and share what's happening in their catchment. Signs have been erected in catchments. Positive stories are being shared on social media, radio and online TV.
- 50 farms completed Overseer through MRCC. IFP workshops in progress.



Retrofitting of existing dams into detainment bunds

- ▶ A series of 3 dams in a flow pathway over 3 farms in the upper Mangaone West catchment were selected due to access and sizing to assist with flood control in the catchment. (The upper dam will be retrofitted later in summer due to deer management). There is a newly fenced and soon to be planted natural wetland below the selected dams. The dams will reduce sedimentation clogging the wetland.
- ▶ Existing dams (no longer required for stock water) were opened with a narrow cut into the dam wall then they had a culvert and riser fitted into place.
- ▶ Exact culvert dimensions and height measurements were calculated with a formula taking into account the catchment size and storage area. Thanks to the help from Detainment Bund Consultancy
- ▶ The dams will have a bung inserted following winter to allow for setting of the dam wall. The bung stays in place for 3 days to allow settlement of sediment and then removal of the bung provides a slow release of water. The 3 days minimizes pasture damage of the dam area.
- ▶ The dams will reduce downstream flooding, decrease sedimentation and phosphates increasing the water quality. In summer once dry the dams will be able to be cleaned out and landscaped with grass planted increasing the grazeable area of farmland.



Groundwater analysis and drain management project

► Moutoa - Whirokino catchment has drains installed throughout the catchment to remove the water in the catchment via a network of pumps. The catchment is protected by flood banks along the Manawatu River with a large river spillway through the center.

► The land was once a flax swamp. They had initial water analysis showing an interesting high level of ammonia. We are investigating this further to determine if this is possibly being affected by the soil's composition.

► 5 sites across the catchment were selected to insert piezometers to measure ground water levels and conduct chemical analysis along with additional drain water testing.

► Results show elevated levels of ammonium-nitrogen (N) levels in shallow groundwater under the areas with peat soils. Extensive drainage in the catchment lowers the water table, potentially exposing peat soils to accelerated decomposition (breakdown) of organic matter by soil microbes, potentially leading to elevated ammonium-nitrogen levels being produced in shallow groundwaters and surface drains.

► Next stage – July 25 - Massey FLRC scientist and the MRCC Collective are discussing further research for the potential of better controlled drainage and drainage treatment systems, balancing farm productivity with keeping controlled water table in the peat soil areas, potentially reducing the impact of ammonium produced as a by-product by microbes.



Citizen Science Project

- ▶ High up in the hills in a low intensive sheep farming area the water analysis from the upper spring showed high nitrogen levels.
- ▶ Following a discussion an additional spring site was selected in a greywacke area as the initial site was limestone. This to our surprise showed even higher levels.
- ▶ The Catchment is now conducting further, more intensive sampling to gather more information.
- ▶ The Horizons sampling area downstream is being used to determine freshwater levels for the area but if the springs are bringing in high levels from possible groundwater contamination from another catchment where does this leave the catchment?



Nguturoa Linton Catchment

- 30 active members
- 4,000Ha
- From the tributaries in the foothills of the Tararua Ranges and extends westwards on through rolling and flat country to become the Nguturoa Stream.
- The catchment has a vision to improve water quality, increase biodiversity and leave the catchment in a better place for their mokopuna.
- Pest trapping will continue aiming for zero pests and target the removal of all pest weeds in the catchment.

Nguturoa E.Coli Mitigation project with AgResearch and DairyNZ

5-year project 2023 -2028



Through monthly water testing the catchment since Nov 2020 they noticed they had an increased level of *E.coli* showing up in their results.



This has progressed into a project looking at the catchment to investigate further.



15 monitoring sites spanning from the headwaters to the SH57 bridge site have been selected and are being sampled every two weeks for *E.coli* and other water quality parameters. This intensive sampling began in Oct 23. It will assist to pinpoint areas of high concern to look at mitigation options and trials.

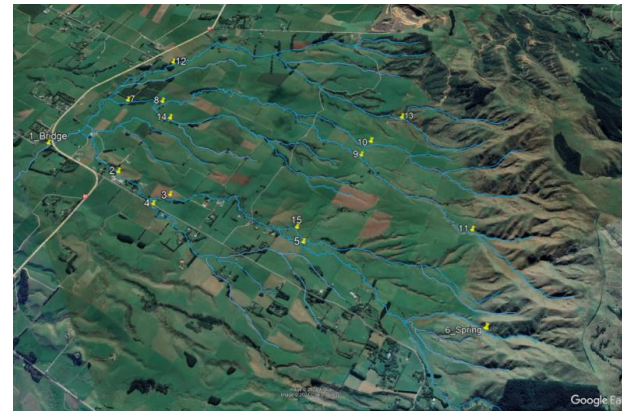
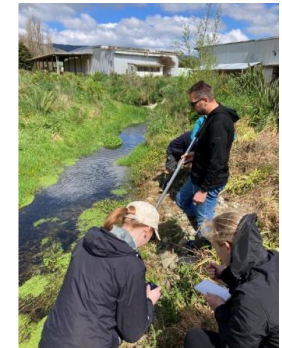


Figure 4: Sites 14 (small tributary) and 8 (larger stream).



DairyNZ conducted eDNA sampling over a two-day period between the 26th and 27th February 2025. Our preliminary data analysis has, however, shown that we found around 19 species of native freshwater fish – including giant kokopu, banded kokopu, red fin bullies, blue gill bully, lamprey and even the Australian speckled long-fin eel!

Earlier catchment eDNA sampling found kākahi. A survey conducted by Horizons freshwater team found good populations indicating native fish populations reaching the higher tributaries in the catchment.

eDNA sampling



Figure 1. The 25 stream sites sampled for eDNA along the true left of the Lower Manawatū from the Gorge down to almost Levin. The Lower Manawatū is in mint green. The yellow circles indicate the sample sites within the Nguturoa catchment.

Fencing and Planting

Fencing and planting of the catchment tributaries is high priority for the catchment group. Increasing water Quality and habitat diversification.

ENM Fencing Project - three catchment group members applied for this funding (ended in May 24). A total of 1,200m of fencing was completed with 50% funding coming from the ENM grant (\$6,000).

Catchment trap library and nursery



PNCC Stormwater Strategy 2025 - 2035

DRAFT to Sustainability Committee 18 June 2025

Stormwater Strategy

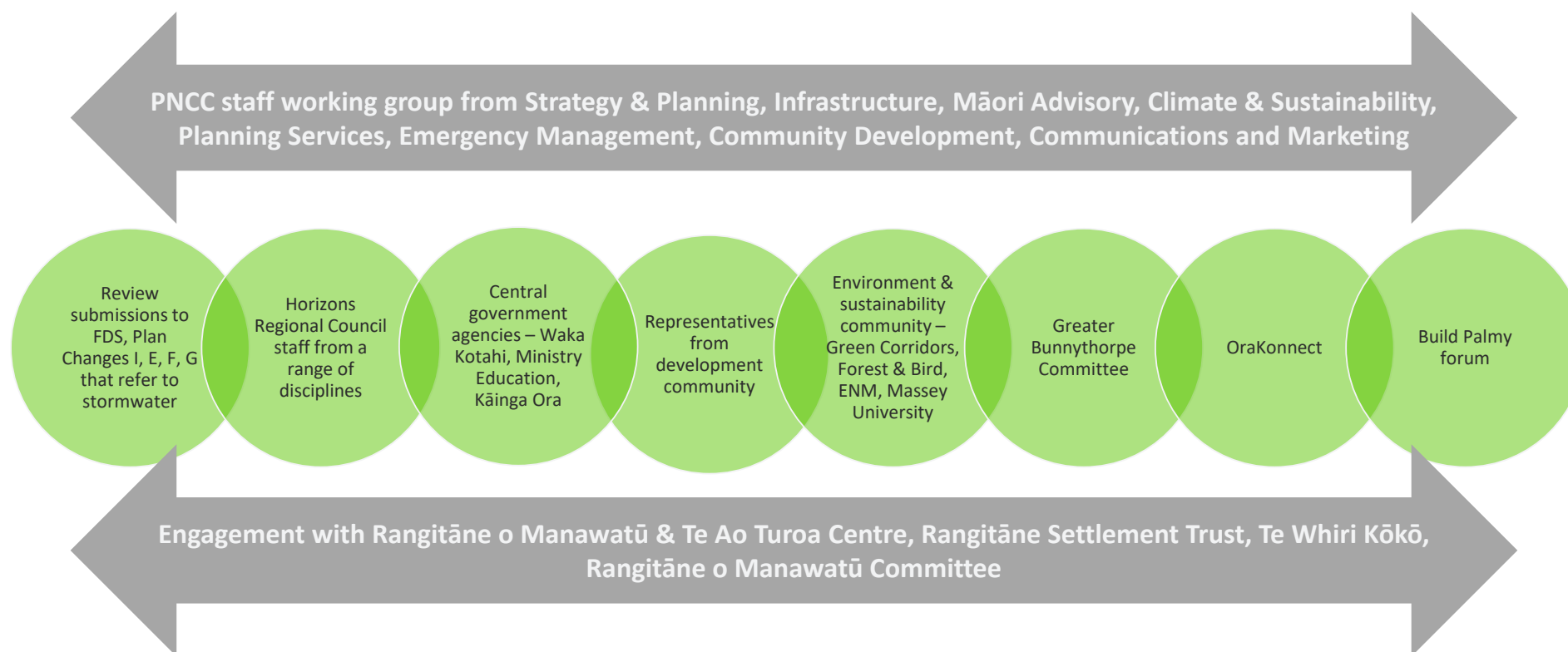
Where are we up to?



Draft for consultation:

- Graphics
- Glossary, kupu Māori
- Design work
- Typos
- Comms team ready to go

Process: January to April 2025



Challenges that stormwater presents for the city

- Stormwater flood risk
- Inequity of risk
- Changes to natural flows
- Loss of freshwater biodiversity
- Degradation of mauri
- Climate change
- Limited understanding
- Better collaboration & alignment
- Limited resources
- Access for maintenance
- Legislative change
- Constraints to growth



Aspirational outcomes – Whānau Ora framing

- Kotahitanga - collaborative action
- Rangatiratanga - leadership, in and through relationships
- Pāporitanga - protect communities
- Pūkenga Rawa - supporting and enabling prosperity
- Hauoratanga - healthy lifestyles
- Tuakiritanga - our identity, learning from the past, for the future
- Tiaki Taiao – protecting, responsibility for the natural world



Priorities for action

1. Investigations – increasing our knowledge
2. Building and resourcing our capability
3. Improving stormwater outcomes
4. Working together with key partners

Districtwide actions

Investigations – increasing our knowledge

- Update the stormwater model to better inform decision-making
- Use the updated model to review density against flow paths
- Collect & store & share monitoring data to support future stormwater models
- Assess Council's consenting obligations for the network
- Conduct a stormwater flood risk assessment that can inform future growth
- Undertake a gap analysis to understand levels of service in the Stormwater Asset Management Plan

Districtwide actions

Building and resourcing our capability

- Choose a stormwater champion within Council to drive & co-ordinate work
- Build a team to implement the Stormwater Strategy
- Careful consideration of resourcing as part of next LTP process & establishment of LWDW entity
- Rangitāne o Manawatū are represented in stormwater governance, management, and operations
- Annual monitoring, three-year review of Strategy to be current and relevant

Districtwide actions

Improving stormwater outcomes

- Produce stormwater plans for priority management units
Kawau & Taonui (3 yrs) Hokowhitu, Otangaki & Whakarongo (10 yrs)
- Utilise blue-green infrastructure for nature-based solutions where possible
- Restore ecosystems where possible and practicable
- Prioritise avoidance over mitigation for new development
- Levels of service in place for new subdivisions
- Secure a global stormwater consent
- Resourcing enforcement
- Make changes to the District Plan, based on investigations

Te Kaunihera o Papāioea | Palmerston North City Council



Districtwide actions

Working together with key partners

- Set up a working group of Rangitāne o Manawatū, PNCC, HRC
- Work with HRC, Manawatū District Council, and landowners in upper catchments to identify funding sources for riparian retirement
- Service agreements with private landowners
- Practical working service agreements with private owners for stormwater assets
- Education and communication campaign
- Work with Rangitāne o Manawatū to name un-named streams, tributaries, and stormwater reserves
- Help community groups and volunteers to share knowledge

Timeframes

Option 1

- report back to Council 3rd September, adoption 8th October

Option 2

- report back late 2025/early 2026, adoption early to mid-2026

Option 3

- n/a

Option 4

- report on engagement Tbc

Thank you 😊

Update on opportunities for native species re-introductions in the Turitea Reserve (2025)

Toutouwai Translocation



Increased predator control

Pest control measures were increased to include the installation of modern self-resetting 'AT220' traps, alongside the deployment of the rat bait strips each year.



Capture at Bushy Park

In the week of 14 April 2025, the Climate Change and Sustainability Team worked with Ngaa Rauru and conservation biologists to capture and band 30 toutouwai from Bushy Park Tarapuruhi.



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Checks on arrival

On 16 April they were welcomed by Rangitāne into the Turitea Reserve.

100% of the captive birds survived transportation.



Transport to the release site

To support the existing breeding population the new arrivals were transported to the location of the previous release in 2021.







