Stormwater management

June 2023



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What is stormwater

Protecting the lives and property of our citizens and natural environment

Infrastructures
(Road, supplying water, treatment plants, cable, Gas, all national infrastructures)

Te Ture Whaimana o Te Awa o Waikato
Te Mana o Te Wai

Stormwater management (Foundation)



What is stormwater

Asset types



Open drains:56km



Pipes (km)

Diameter 225mm - 2050mm: 154km



Manholes: 4,434

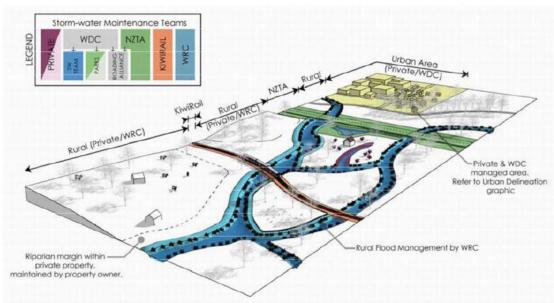


Pumpstations: 3



Discharge points: 759

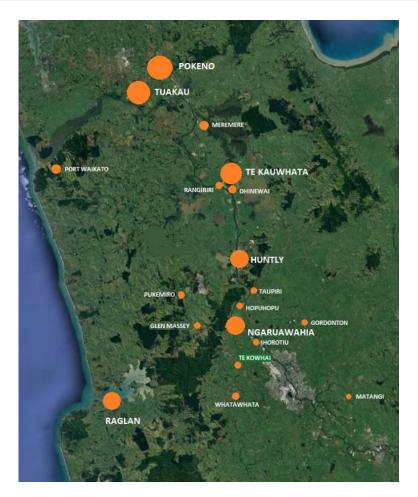
Asset Responsibilities



- Stormwater managements stakeholders : WRC/WDC and Watercare/KiwiRail/Waka Kotahi/Private
- Te Ture Whaimana o Te Awa o Waikato and Te Mana o Te Wai
- Rural flooding management: WRC
- Culverts and drainage system under Waka Kotahi and KiwiRail
- Urban Area: Private/WDC Park, Roading and Watercare (Three waters)



Overview of District council



No	Location	Consent Number	Expired
1	Glen Massy	105655	22-Sep-28
2	Gordonton	105658	22-Sep-28
3	Hopuhopu	105652	22-Sep-28
4	Horotiu	105653	22-Sep-28
5	Huntly	105644	22-Sep-28
6	Matangi	105659	22-Sep-28
7	Meremere	105648	22-Sep-28
8	Ngruawahia	105645	22-Sep-28
9	Ohinewai	105650	22-Sep-28
10	Pokeno	108592	14-Nov-28
11	Portwaikato	133727	30-Sep-49
12	Pukemiro	105654	22-Sep-28
13	Raglan	105646	22-Sep-28
14	Rangariri	105649	22-Sep-28
15	Taupiri	105651	22-Sep-28
16	Te Kawhata	105647	22-Sep-28
17	Te kowhai	105656	22-Sep-28
18	Tuakau	105051	14-Nov-28
19	Whatawhata	105657	22-Sep-28

- Total of 19 resource consents
- 6 large towns and 13 small villages
- Most consents expire in 2028
- A Stormwater management plan, every 5 years update.
- Consent Renewal required in 24/25 FY



What Watercare does

- Stormwater network investigation reactive faults
- Detention/wetland mowing and weeding
- Stormwater sampling and monitoring
- Open channel cleaning work(weed removal)
- Maintenance and repair of damaged asset
- Project management e.g.Hakanoa stream, Cambrae
 Rd
- Primary focus on urban areas(High density of stormwater asset and residential area)
- Catchment management plan
- Development growth enquires (Land development)
- Planning and Infrastructure delivery



Stormwater maintenance (Past and future)

Previous stormwater maintenance

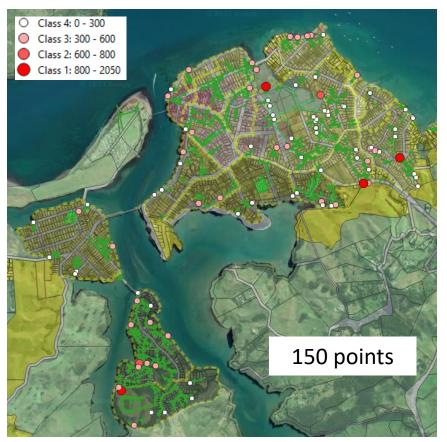
- Stormwater asset planning management has been neglected for years
- This has made it was difficult to make informed decisions for budget allocation
- Without a detailed maintenance programme achieving compliance for discharge consents is unrealistic
- Without proper monitoring and maintenance programme, capital budget allocation is difficult, what is the highest priority.

Future stormwater maintenance/management should be changed like below

- Creating a robust asset planning management
- This will support informed decision making in terms of budget allocation
- We can comply discharging consents based on proper maintenance programme
- We could identify CAPEX budget items through the maintenance/management programme



Stormwater outlet asset management



Class 3: 500 - 600 Class 2: 600 - 800 Class 1: 800 - 2050 16 points

Raglan(Before)

Raglan(After)



6. Case study-Te Kowhai(Rural zone) flooding





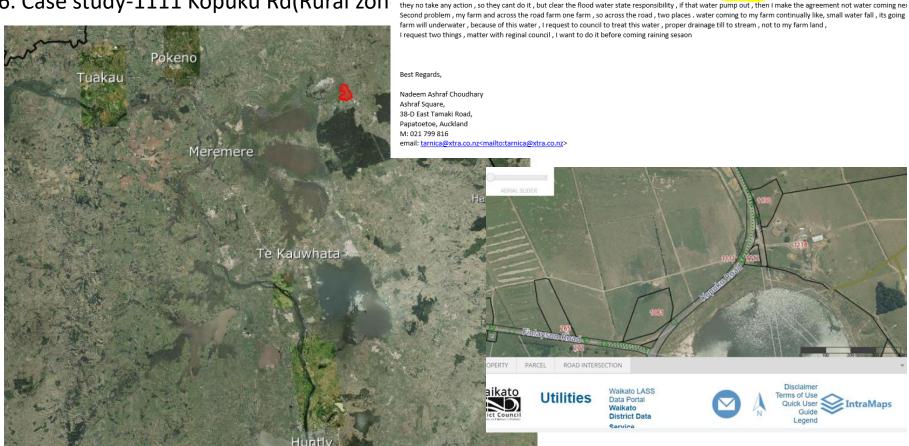
There is no WDC/Watercare stormwater pipe network asset -> Rural management by WRC



I write to you, because I need help, and it's your area,

I bought 96 hector land on kopuko road, maramura, last year, august last year lot of rain, and then stream overflow, and water flooded in my farm lower part, sin

6. Case study-1111 Kopuku Rd(Rural zon



There is no WDC/Watercare stormwater pipe network asset -> Rural management by WRC



6. Case study- Tamahere, (Rural zone)



Tamahere (Sporadic stormwater network)



Tamahere (Natural open channel)

- Sporadic stormwater network
- Most of house has septic tanks/detention tanks and soakage drainage- discharging to small ditch or road swale
- WDC responsibility except for pipe network, (stand-alone single and tiny line of pipe asset/culvert nothing to do with WSL)
- Natural open stream channel's are not within Watercare area of responsibility



6. Case study-Matangi (Rural zone)



Matangi(SW network)



Matangi(Open stream), small portion of network

- Sporadic stormwater network
- Most of house has septic tanks/detention tanks and soakage drainage- discharging to small ditch or road swale
- WDC responsibility except for pipe network, (stand-alone single and tiny line of pipe asset/culvert nothing to do with WSL)
- Natural open stream channel is out of Watercare business boundary

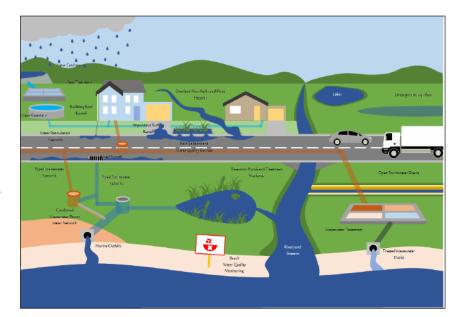


Affordable Waters reform

Stormwater transition programme for urban Stormwater networks- Key activities

Focus is on transition – the key areas to support transfer of responsibility for urban stormwater infrastructure services are:

- Transfer stormwater network infrastructure and function
 - Decision-support tool to support the identification of urban stormwater network assets and interests that would transfer to the water service entities
 - Support development of system of record, and allocation schedule (transfer) processes
- SW content Relationship and Service Level Agreements
 - Develop SW content, support process to negotiate and agree the future arrangements
- Support Councils to contract the water services entities to provide rural drainage services
- Enable development of Stormwater instruments for day 1
 - o Develop Transitional Stormwater Management Plans
 - Develop best practice Stormwater rules (based on Bylaws)
- Support the development of national guidance for urban stormwater modelling guidance
- Subject matter expertise to other workstreams (as required)







Thank you Any questions?

