Infrastructure and Environment Solutions Group Kāhui Tūānuku Tūārangi

Year in reflection 2021

State Highway Networks Improvements Programme

Current investment in progress \$80 million + \$30 million





Eastern Corridor Stage 1

Sala Street to Isles Road





Eastern Corridor Stage 1

- Sala Street to Isles Road
- Tarawera Intersection





Ngongotahā Roundabout

- Completing safety platforms to slow traffic
- Opened on 1 Nov Western Road detour removed





WWTP Improvements to prepare for the full upgrade expected in 2022/2025

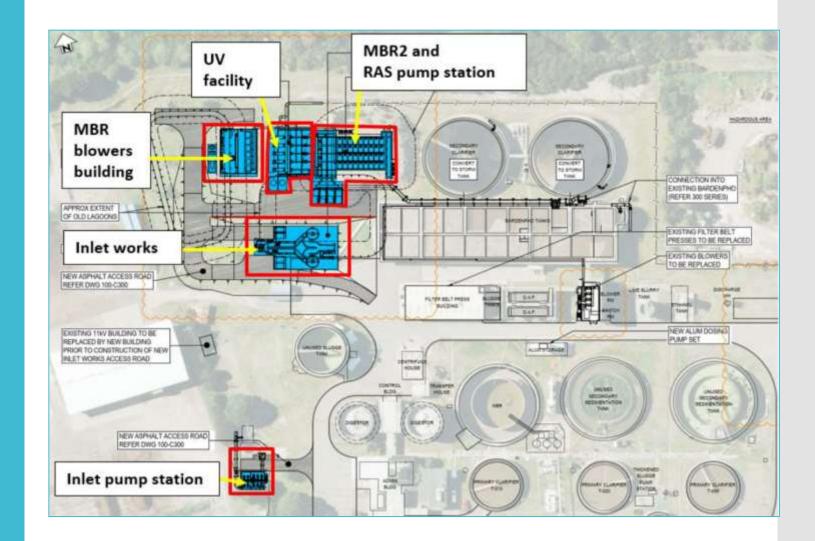


Rotorua Wastewater Treatment Plant now



WWTP Improvements

Location of proposed new structures and buildings in WWTP upgrade







WWTP Improvements made: Dewatering



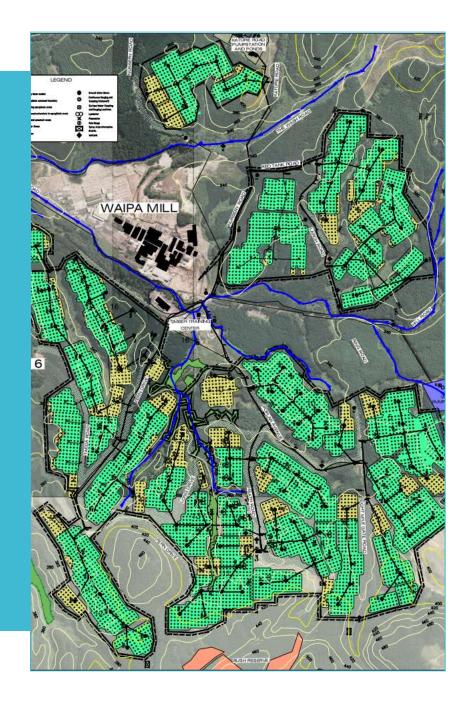


WWTP Improvements made: Blower

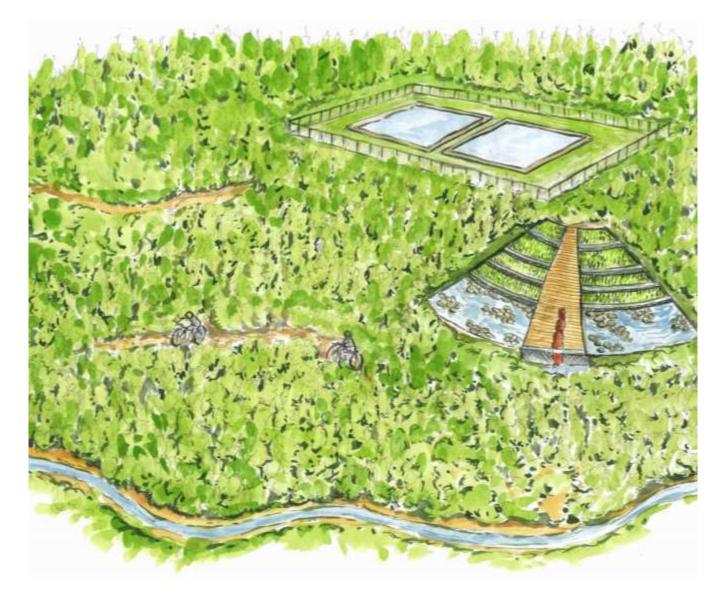


WWTP Improvements made: Permeate Water

Current Irrigation area: 400ha to 40ha



Conceptual Land Contact in the SFA approach 10% of current used area in forest





Victoria Street Wastewater Trunk Main Sulphur Effects/Capacity





System Demands

All wastewater from western side of city

Currently operating at capacity

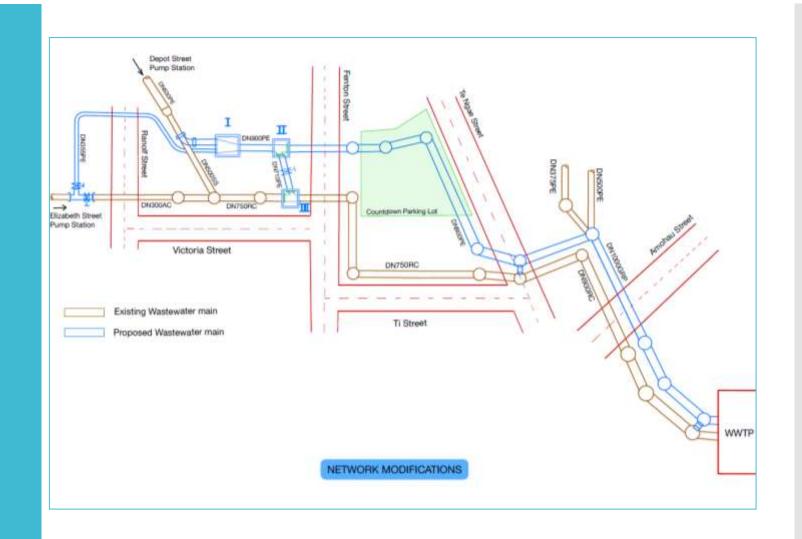
Future growth in catchment significant

2130 design horizon requires doubling of capacity

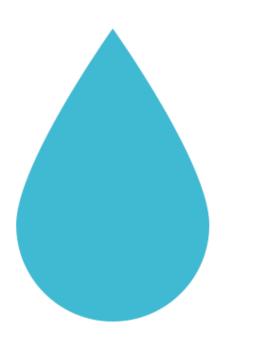




Proposed Upgrade







Water main renewals essential to maintain stable condition and reliable service



Water mains

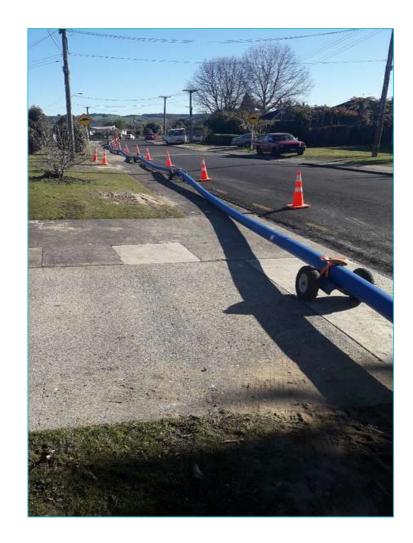
- Based on age and actual condition
- Significant amount of asbestos cement pipes outdated
- Essential for long term reliable performance of network





Main types

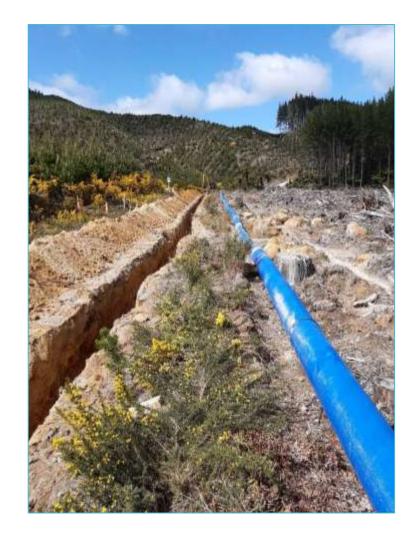
- Distribution mains budgeted at around \$1.5m p.a.
- Trunk Mains based on specific condition and demand assessments
- Overall renewals \$3.0m p.a.





Current Programme

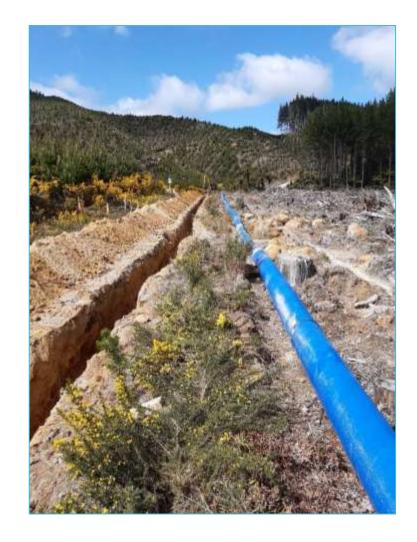
- Umukaria Rd
- Malfroy Rd
- Island View Rd
- Miller St
- Peace St
- Hilda St
- Galbraith St
- La Trobe Pl
- Sala St





Duplication of the Waipa water main to increase supply resilience and service reliability is planned for the 2021/22 year

• Replacement of a trunk main in Ranolf Street is programmed for the current year



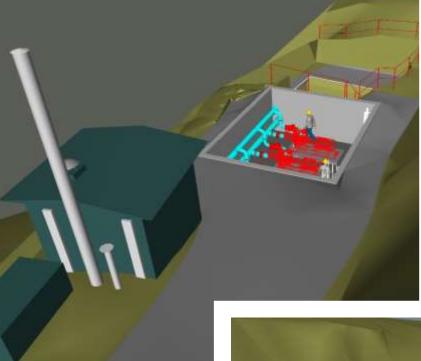




Taniwha Springs – Iwi collaboration

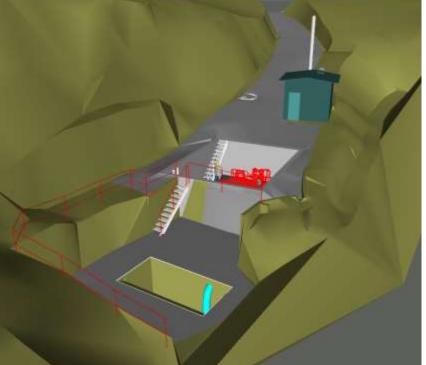


Concept of Proposed Restoration Work



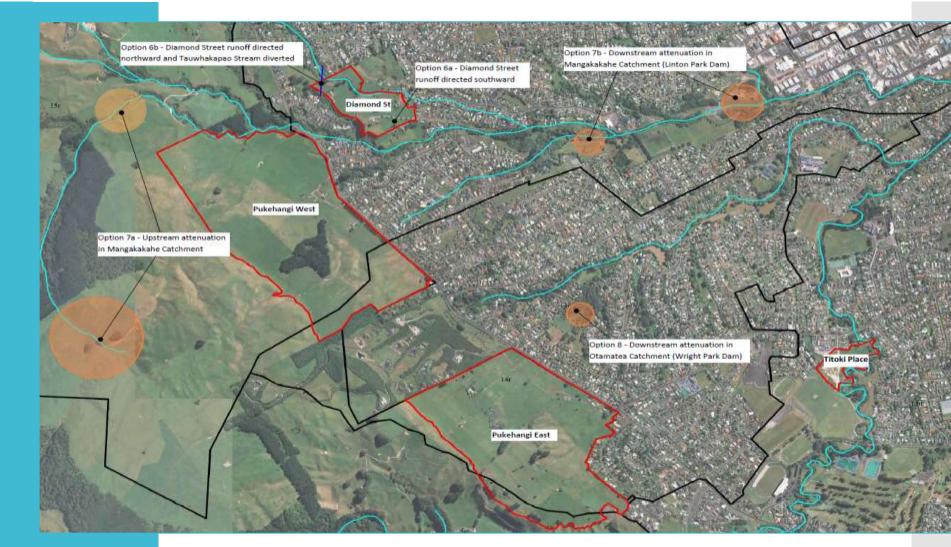
< Looking down the access road

Looking from beyond the puna >



Linton Park Stormwater Detention Dam Western Land Development

Western Stormwater Management Master Plan





Attenuation Improvements





Existing Structure

- Earth Embankment
- Low Flow culvert
- Operates in about 5yr return period event
- Does not meet current Dam Safety Guidelines
- Determined to be "Dangerous Dam" and may fail in 10 to 20 year return period event
- To be rebuilt and strengthened under emergency provisions of RMA
- Part funded under Water Reform Program bringing infrastructure up to current standards and future demand



Dam Layout Works commenced November 2021





Wharenui Road Development 1000 Houses

