

Infrastructure Acceleration Fund (IAF) Briefing Slides

Water Infrastructure for Growth

8 May 2024

Purpose

- To provide an opportunity to present the stormwater and wastewater options prior to Infrastructure and Regulatory Committee meeting on 9th May 2024.



Background to the Project

- March 2021 NZ Govt. announced the Infrastructure Acceleration Fund (IAF)
- IAF focus:
 1. Unlock housing developments in the short to medium term
 2. Enable meaningful contribution to housing outcomes in areas of need
- In 2021, Wellington Water looked at growth impacts on 3W infrastructure in central Lower Hutt and identified issues with Stormwater and Wastewater across the valley floor
- In October 2022, projects received partial IAF funding of \$98.9M with HCC expected to fund the remainder. The total IAF project budget as part of funding bid was \$174M.
- This scope includes Stormwater and Wastewater projects only. Eastern Hill Reservoir project is delivered via Wellington Water.

IAF Scope includes:

1. Stormwater Improvements (IAF co-funded)
2. Wastewater Improvements (IAF co-funded)
3. Eastern Hills Reservoir (HCC funding)

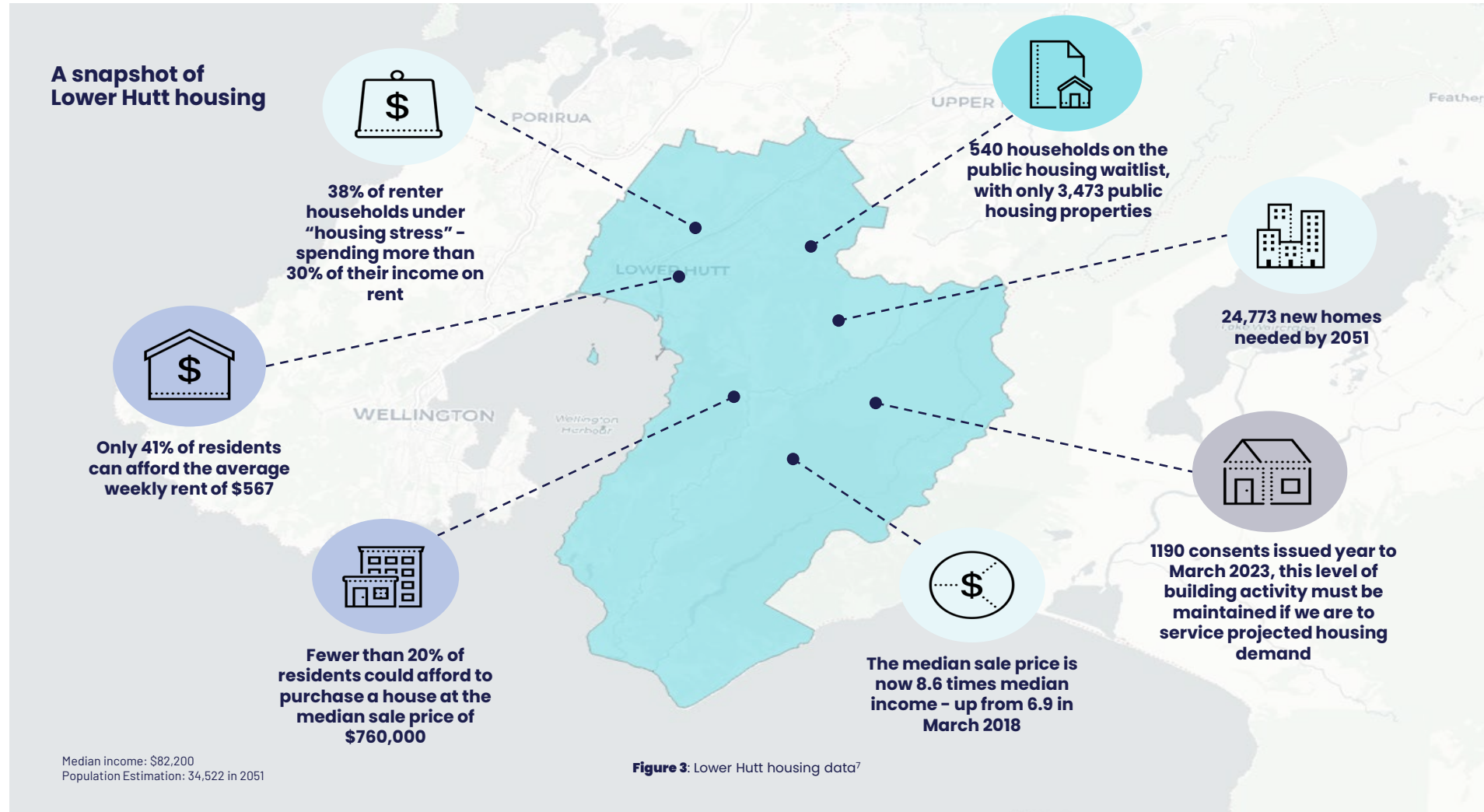


Project Objectives

- Support and facilitate the delivery of 3520 new dwellings within valley floor by 2035
- Predominantly medium density townhouses and high density apartments
- Walking distance from ECE, Primary, intermediate, secondary and WIT
- Proximate to Employment opportunities, Queensgate, Waiwhetu Marae, Te Mangangu marae, Sikh Template and Hutt Rec ground
- Taranaki Whānui and Ngati Toa Rangatira support required
- Development sites will be proximate to rapid transit, within 1km of Melling City Link bridge and relocated Melling station and most within 250m of a bus stop
- These objectives align with the development outcomes as part of Co-ordinated Urban Renewals Programme



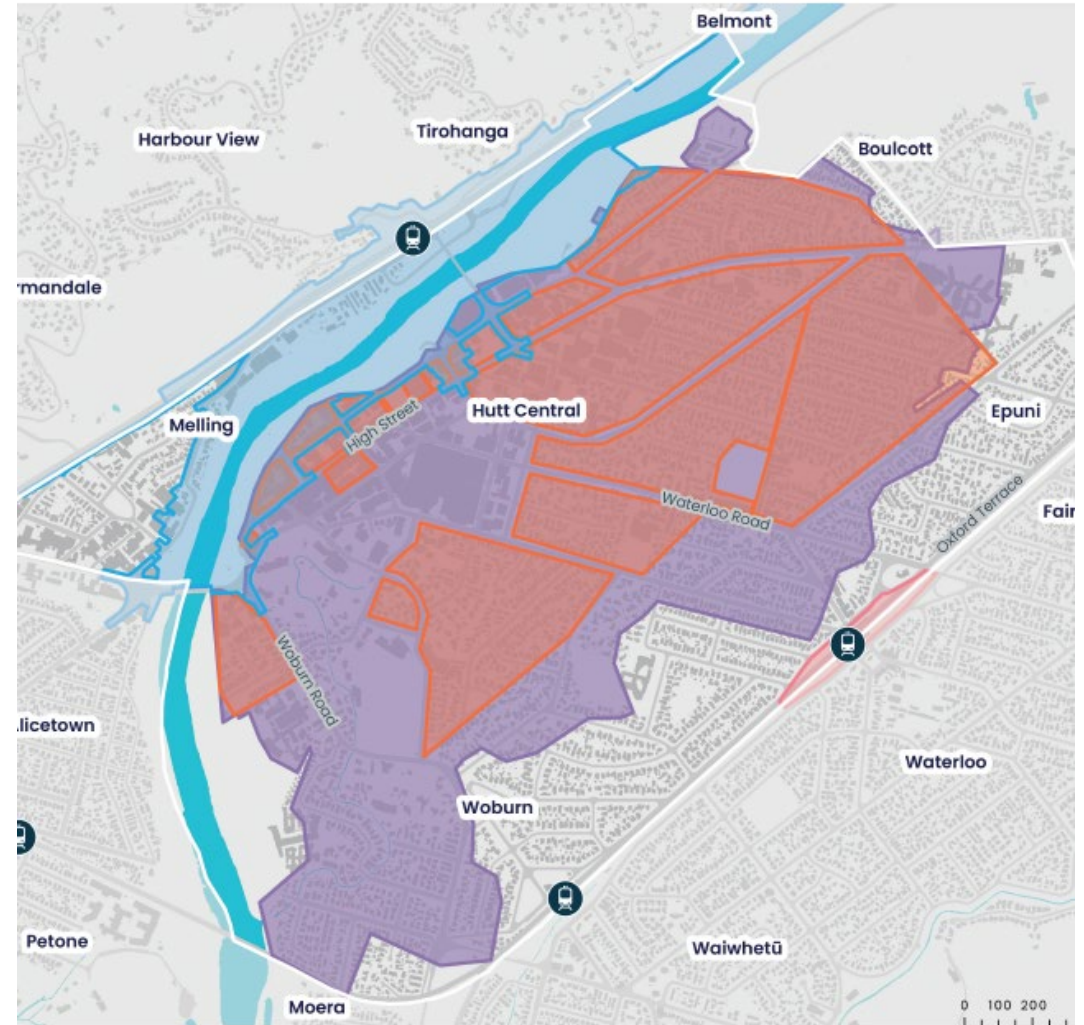
A snapshot of Lower Hutt Housing



What are the projects trying to solve?

Wastewater:

- Proposed infrastructure will support growth in the RiverLink redevelopment area and surrounding catchment



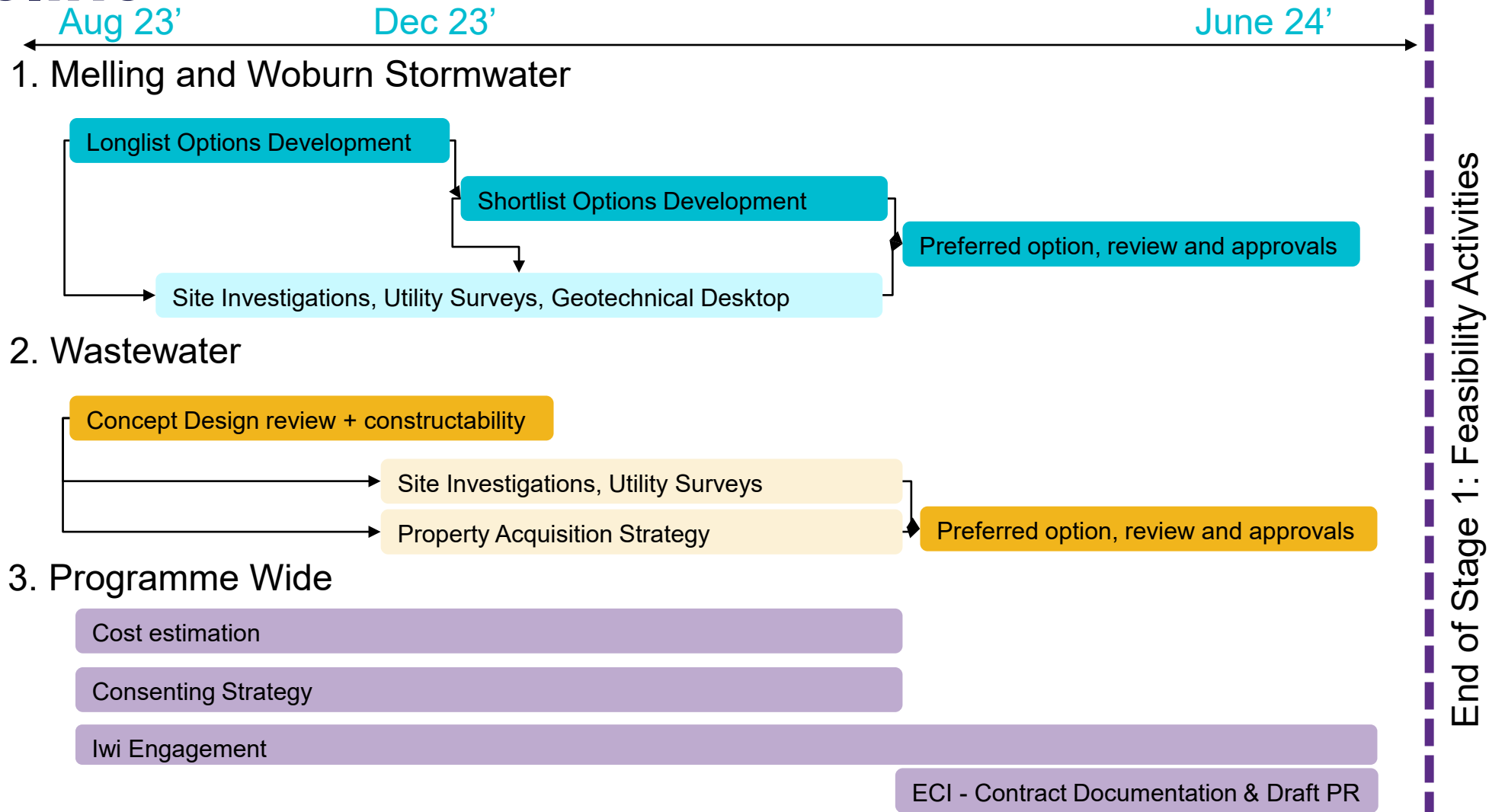
What are the projects trying to solve?

Stormwater:

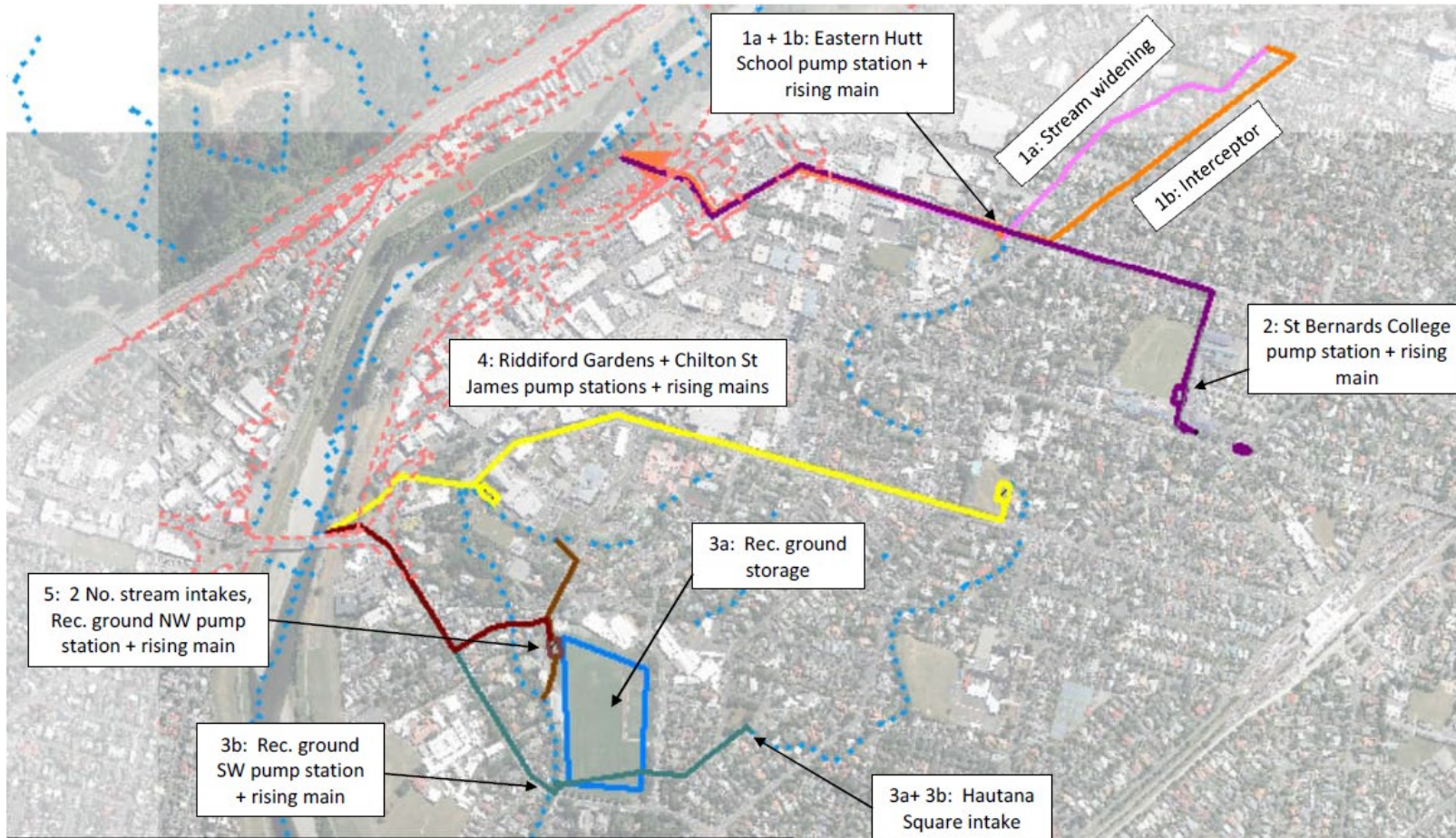
- Opahu stream is a key constraint and the cause of much flooding in Melling, Woburn, Waterloo West and some of Boulcott
- Opahu Stream is currently at capacity already and cannot support additional development
- Urban environment means capacity cannot be increased/upgraded easily
- This investment will provide capacity, improve resilience and support growth



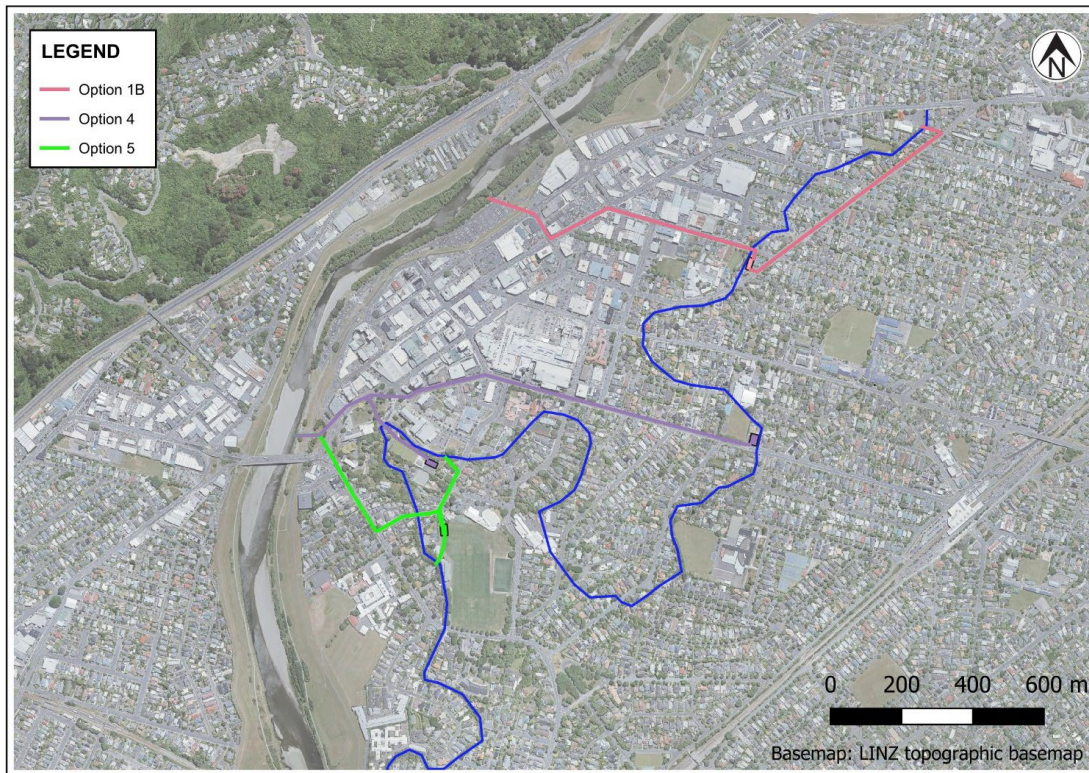
Stormwater and Wastewater Project Stage 1 Timeline



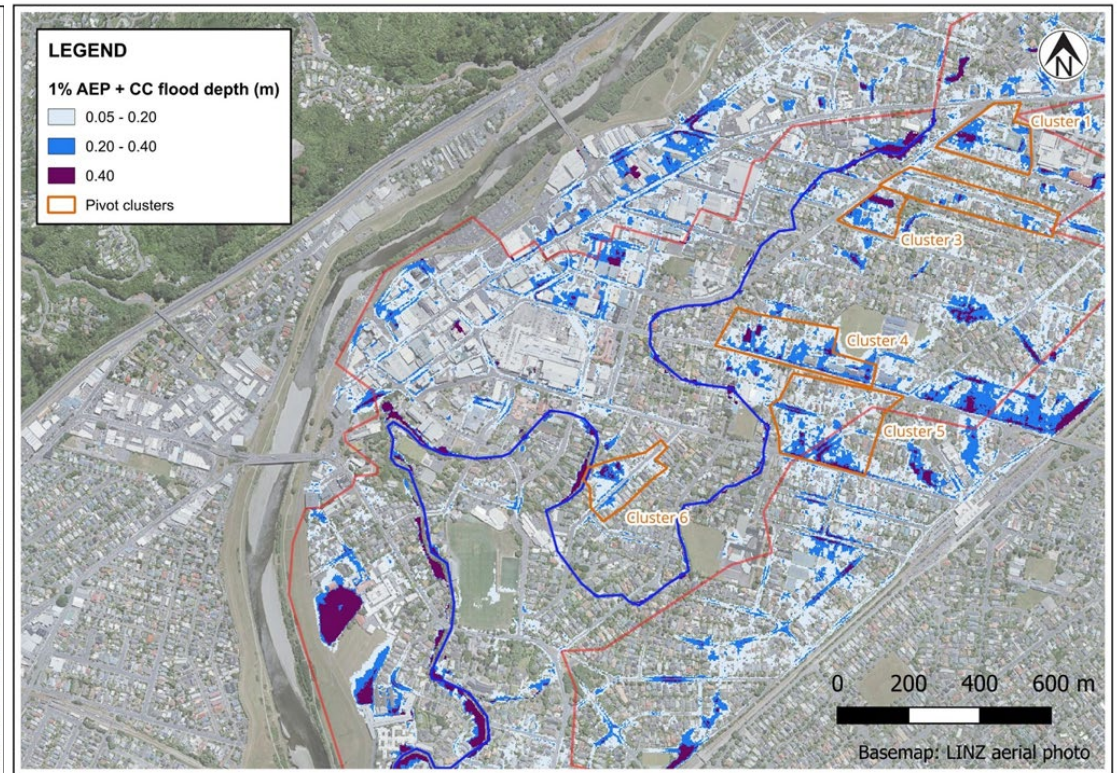
Long List of Options – Stormwater



Shortlisted Options – Stormwater



Shortlisted Options



Flood modelling

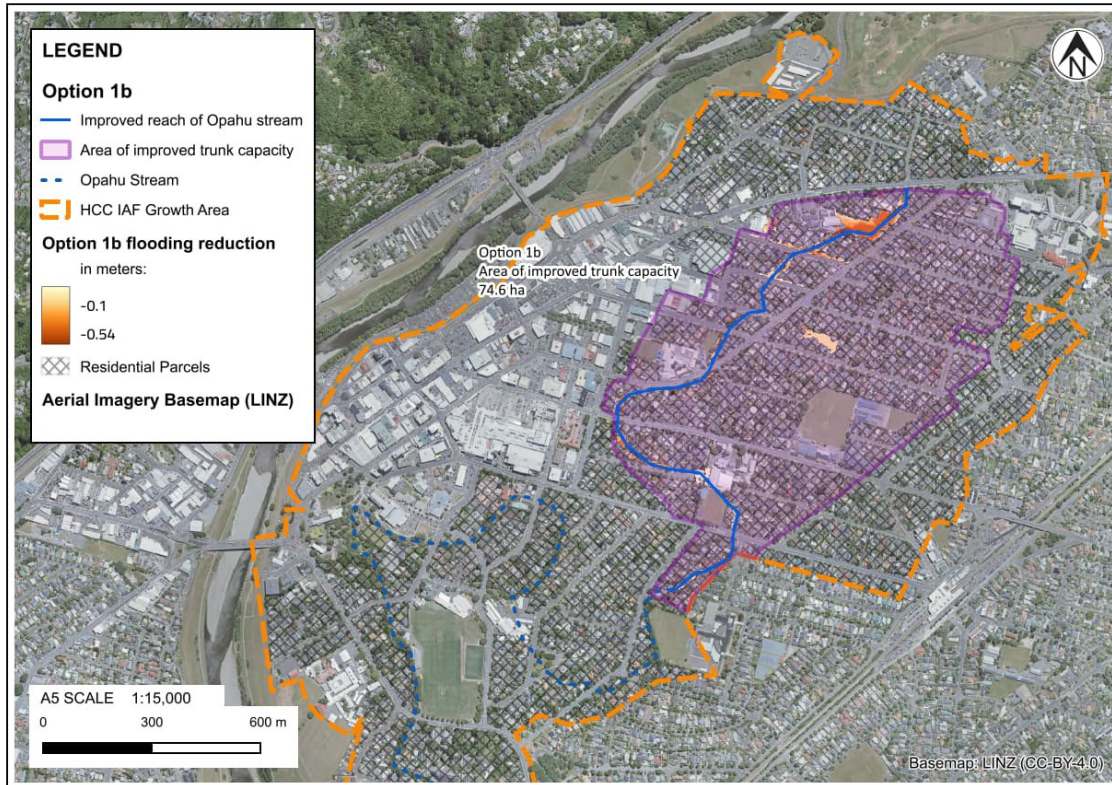


Multi Criteria Analysis to select preferred stormwater option

- Hydrogeology.
- Sustainability.
- Cultural impacts.
- Planning & consenting complexity.
- Property
- Ecology
- Effects on community.
- Constructability.
- Operation of infrastructure.
- Risk and resilience.
- Enablement of housing development.
- Cost.



Preferred Option (Option 1b) – Stormwater



- Area of improved trunk capacity
- Alignment on Pretoria Street
- Interface with RiverLink Works
- Private Property Impact

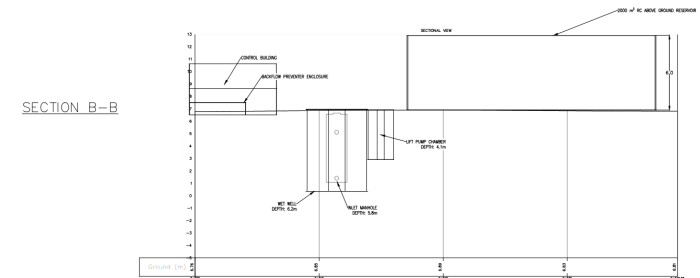
Stormwater Pump Station

- Project purpose is to remove water from Opahu Stream therefore pump station location near Opahu Stream
- Rising main pipe to river under road therefore pump station has to be close to where road crosses stream
- Looked at areas of available land close to Opahu Stream and road crossings. Two options investigated:
 - Options within Road reserve
 - If no option in road reserve, then options in adjacent properties
- Road reserve does not have enough space for pump station. It is too congested with services plus unworkable for operations and maintenance access.
- Therefore, the preferred option pump station will likely impact private property.



Wastewater Preferred Option

- Reviewed previous concept design, preferred option endorsed by Wellington Water
- Provide increased capacity in Hutt central, allowing for population and development growth
- Cost Savings option explored- Brought proposed storage tank above ground to reduce risk and cost
- Aligning rising main to cross on new Melling Bridge, connecting to Western Hills Sewer main



Next Steps

- Seek options endorsement from Investment and Revenue Committee
- Completion of Stage 1 by June 2024
 - Complete Concept Design
 - Complete Cost estimates
 - Completing consenting strategy
 - Complete Property Strategy
 - Plan for Stage 2
- Seek Council approval of Stage 1 in July 2024
- Seek Kainga Ora approval of Stage 1 in August/September 2024



Questions?

