Western Water Supply Programme

15 October 2025



Karakia timatanga

Kia hora te marino
Kia whakapapa pounamu te moana
Hei huarahi mā tātou
i te rāngi nei
Aroha atu, aroha mai
Tātou i a tātou katoa
Hui ē! Tāiki ē!

May peace be widespread

May the sea be like greenstone

A pathway for us all this day

Let us show respect for each

other, for one another

Bind us all together



Why we are here today

- Presentation tonight on Western Water Supply with a focus on the Huia Raw Water pipeline.
- Followed by a drop-in session to get in-person answers from our project specialists.
- This session is being recorded and the recording along with all collateral presented tonight will be placed on our website.
- Event 1 of 3, with further drop-in sessions on Saturday 18 and next Wednesday 22 Oct.
- We want to hear from you on the raw water pipeline to help our next steps. Survey
 is on our website or we can help you complete it via iPad tonight.
- Questions during the presentation can be entered onto the online question app, and will be answered after the event, or speak with a project specialist at any of our drop-in sessions.

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Online Question App

Visit vevox.app and

enter Session ID

190500549









Programme Overview

The Western Water Supply Programme includes:

- Huia Water Treatment Plant Replacement
- Huia Raw Watermain
- Lower Nihotupu Raw Water Pump Station Upgrade
- Upper Nihotupu Raw Watermain
- Woodlands Park Reservoirs
- North Harbour 2 Watermain



Greenhithe

Programme Benefits



The existing Huia Water Treatment Plant and connecting infrastructure was built in the 1920s – now at the end of its life.

Provides approximately 20% of Auckland's water supply with water going to Auckland's west and north.

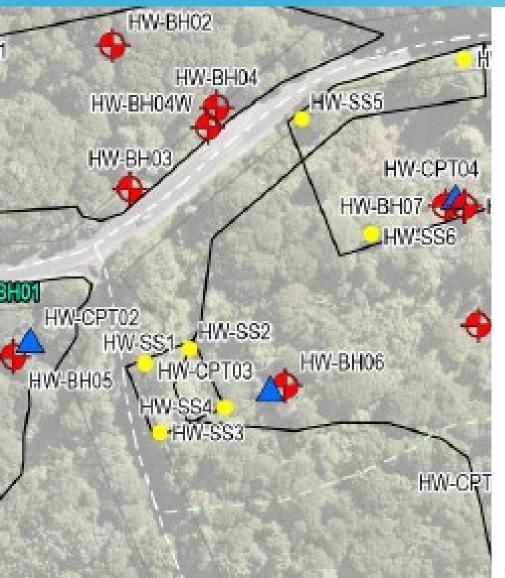
New infrastructure will:

- Futureproof for population growth
- Improve water security and supply reliability
- Provide resilience to natural hazards and extreme weather
- Improve water quality and environmental performance



Image: Huia Water Treatment Plant.

Programme Update



- Geotechnical investigations underway approximately 60% complete, aiming to finish late November 2025 to help inform next steps on decision making
- Working with Te Kawerau ā Maki
- Aiming for construction starting from 2027



Huia Raw Watermain



- Need to transfer water from Lower Nihotupu Dam to new Huia WTP
- Short-listed options have been developed from a long-list with options ruled out if not viable
- Assessment has been made using a multi criteria analysis (MCA) which rates options against a range of criteria
- Geotechnical investigations underway
- Following community feedback and on completion of the geotechnical investigations, the preferred option will be identified and further developed



Lower Nihotupu Raw Water Pump Station Upgrade

- Existing pump station has operational issues
- Geotechnical investigations underway
- The new pump station will be constructed near the existing pump station
- Construction starting approximately 2027/2028







Lower Nihotupu pump station – Site location



Upper Nihotupu Raw Watermain



- Approaching end of life and must be renewed to ensure it can continue to supply the Huia Water Treatment Plant
- In poor condition and at risk of further damage and deterioration due to frequent rockfalls and landslides impacting both the pipeline and its supporting structures

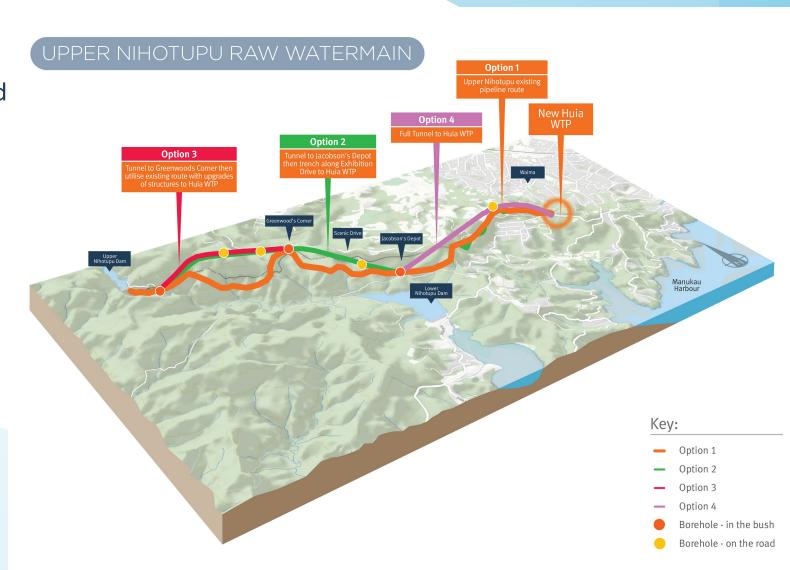


Eastern Portal of Wages Tunnel:
A large boulder, believed to
have fallen during heavy rainfall
on Tuesday 7 October, narrowly
missed damaging the
watermain.



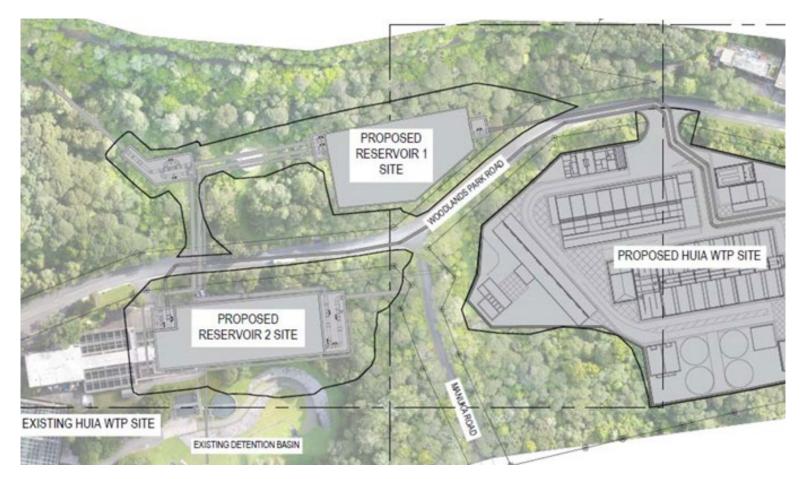
Upper Nihotupu Raw Watermain

- To enable the further development of the shortlist options, we have identified six locations where geotechnical investigations are required
- We are commencing investigations at the end of October
- Completion of the geotechnical investigations will enable us to define the short-list options for the replacement watermain



Woodlands Park Reservoirs

- Geotechnical investigations are currently underway
- Reservoir 1 will be built first, with Reservoir 2 then being built on the current water treatment plant site
- Current indicative timeframes for construction are from 2029





North Harbour 2 Watermain

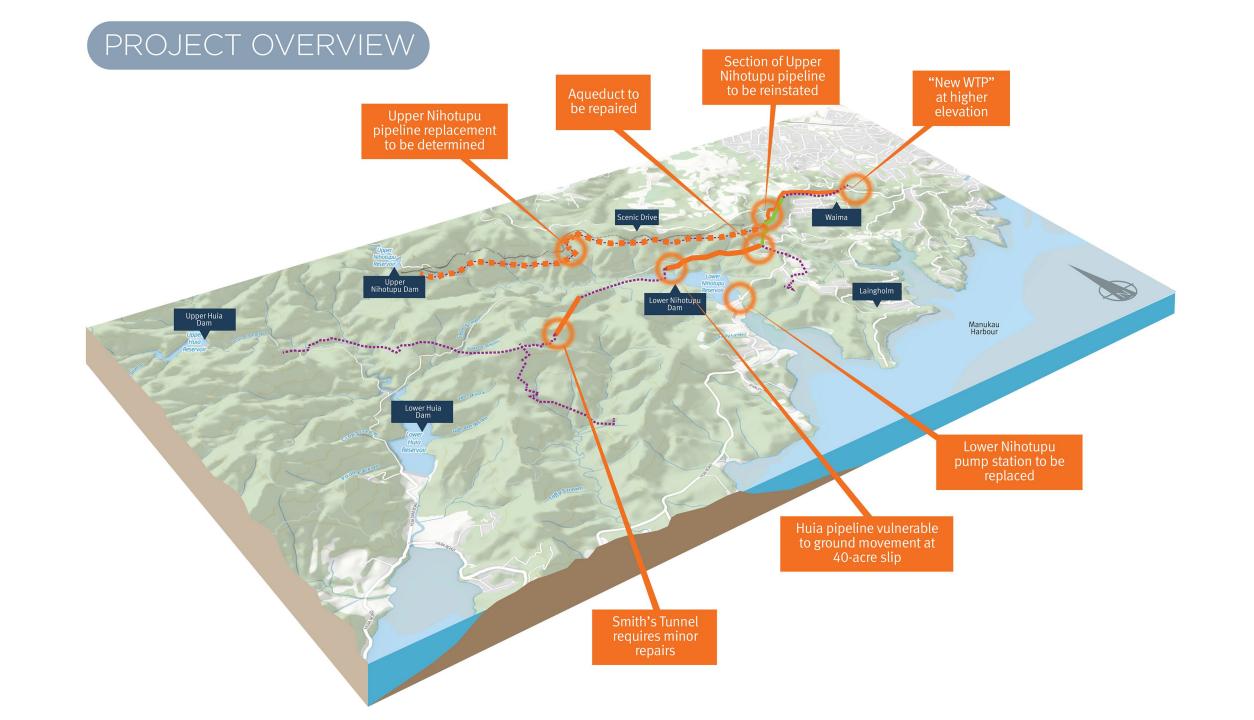


- A 33km long watermain from Titirangi to Albany
- It will service a population increase of 200,000 people in west and north Auckland
- Provides resilience by duplicating the existing North Harbour 1 watermain including a critical section at the Greenhithe Bridge crossing
- Currently there are early works on the Upper Harbour Eastbound (Greenhithe) Bridge to prepare for attaching the planned pipe to the structure
- Geotech is planned in 4 stages along the route, between Nov 2025- Aug 2026.
- Construction of the main pipeline is planned to commence in 2028

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Huia Raw Watermain - shortlist options





Two key solutions

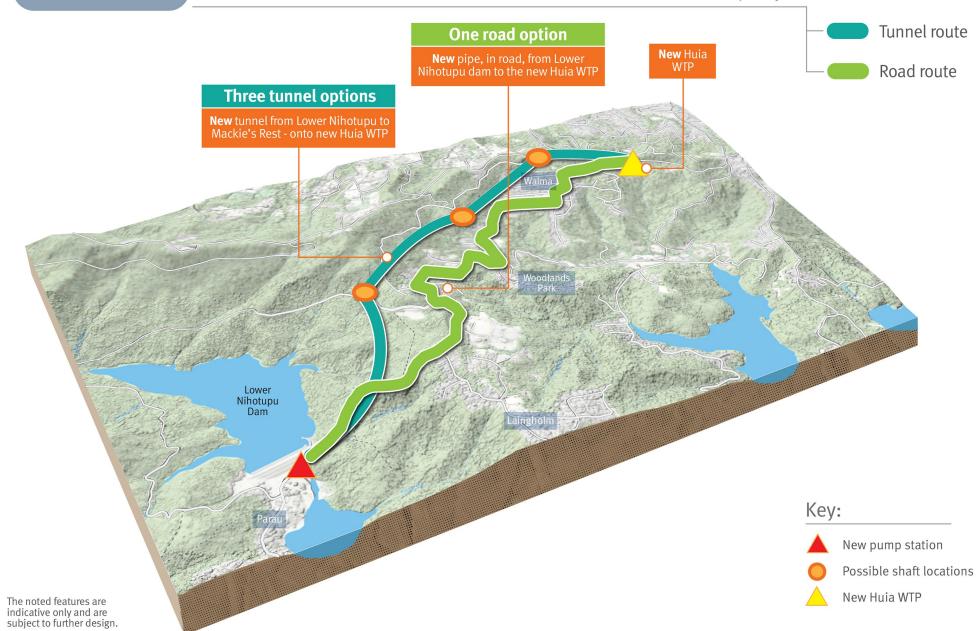
Tunnel and Road options

- The outcome of the shortlisting process is a total of 4 options.
- Of these, 3 are tunnelled and 1 is trenched in the road corridor
- The tunnelled options have minor differences from an engineering perspective.



OPTIONS

Key option decisions



Option A

A gravity tunnel from Mackies Rest to the new Huia WTP, including a new pump station at the WTP.

Key:

Pump station New Huia WTP

Shafts



Option B

A pressurised pipeline within a tunnel from Mackies Rest to the new Huia WTP.

Key:

Proposed route

Pump station

New Huia WTP

Shafts

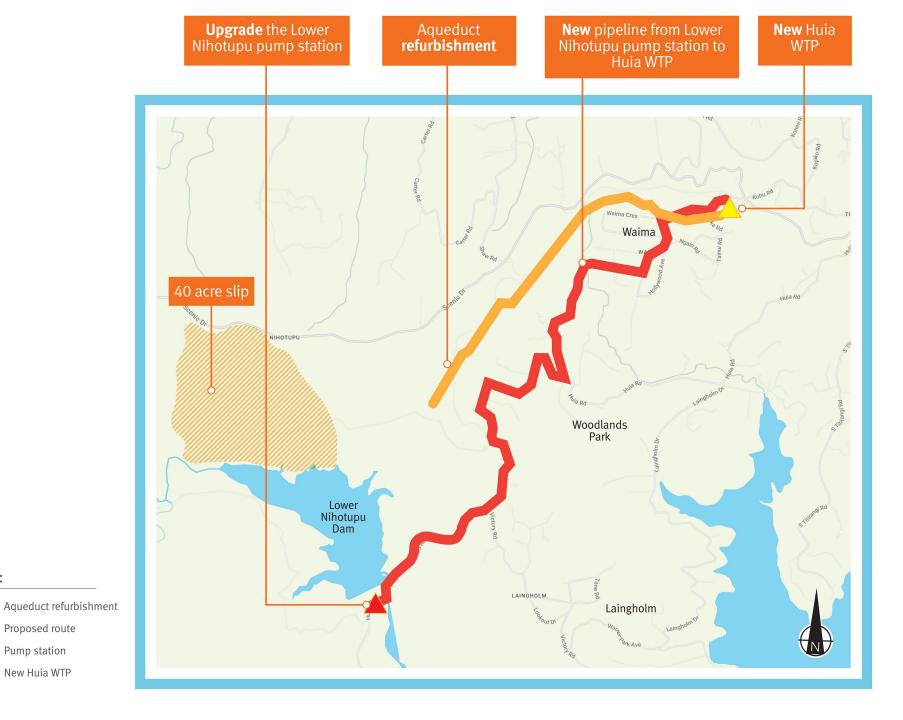


Option C

A pipeline along the road from Lower Nihotupu pump station to both Huia Water Treatment Plants.

Key:

Proposed route Pump station New Huia WTP



Option D

A tunnelled pipeline directly from Lower Nihotupu pump station to both Huia Water Treatment Plants.

Key:

Proposed route

Aqueduct route
Pump station

New Huia WTP

Shafts

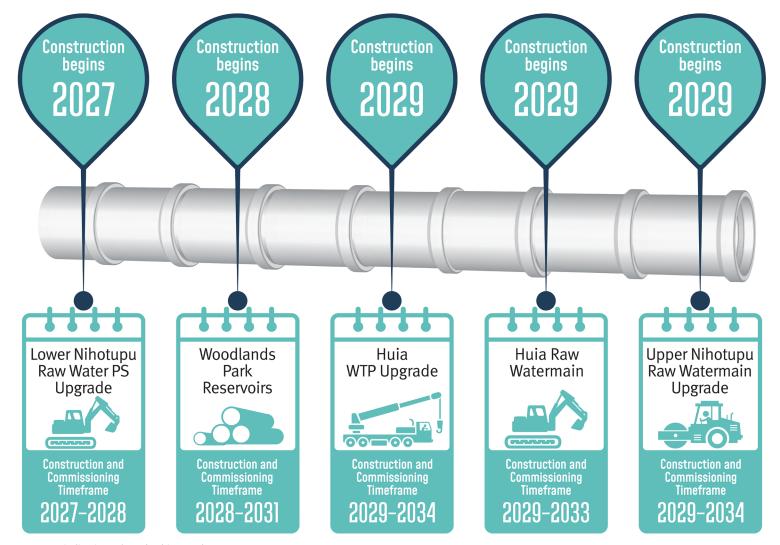


Multi Criteria Analysis (MCA)

- Cultural values, based on Rangatiratanga, Kaitiakitanga and Manaakitanga
- Heritage and archaeology
- Social impact
- Environmental effects (e.g. on Kauri trees, Kauri dieback, terrestrial and aquatic ecology)
- Landscape
- Sustainability
- Construction effects
- Operational considerations
- Statutory planning considerations
- Engineering considerations



Programme timeline





Opportunities for feedback

- Drop-in sessions
 - Waima (Saturday 18 Oct)
 - Laingholm (Wednesday 22 Oct)
- Survey for community to provide feedback on our website at <u>www.watercare.co.nz/westernwater</u> open until 7 November for Huia Raw Water options.
- Email at any time to <u>westernwatersupply@water.co.nz</u>
- Updates provided by email and website in late
 November with summary of feedback received.



Questions / Pātai?

- Visit vevox.app and enter Session ID 190500549
- Email Westernwatersupply@water.co.nz
- Visit us at a drop-in session to speak with a subject matter expert.





Karakia whakamutunga

Kia whakairihia te tapu

Kia wātea ai te ara

Kia turuki whakataha ai

Kia turuki whakataha ai

Haumi e, hui e, TĀIKI E!

Restrictions are moved aside

So the pathway is clear

to return to everyday activities

to return to everyday activities.

Join all, bind all – let it be done

