# Muriwai Water Supply Update





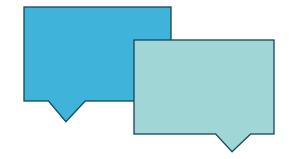
## Why are we here?

- Update on Muriwai Water supply.
- Highlight problems that we need to solve.
- Potential solutions.
- Discussion about next steps.



# **Opportunities for questions**

Any questions during our presentation –



Add questions and up vote questions you feel are important.

Visit vevox.app and use code 155-208-586

After our presentation tonight –

Speak to one of our planning team and/or add your question to the question board from which we will create a FAQ fact sheet and add to our website.

After tonight –

Email us at Muriwai@water.co.nz

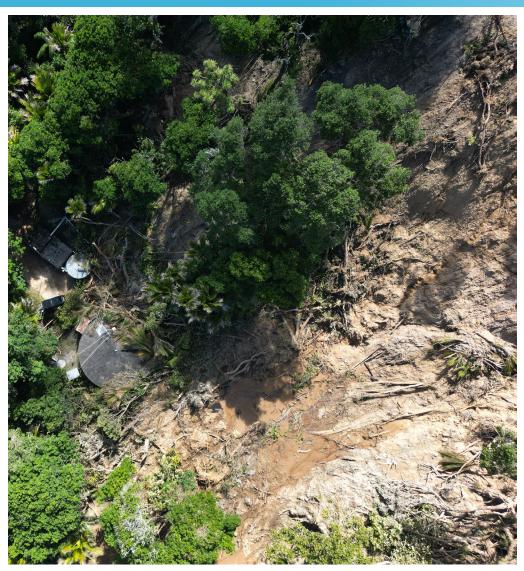


## **Background and Context**

- Muriwai has a legacy water supply network.
- Water is sourced from several natural springs, treated and then stored in a reservoir.
- From the reservoir water flows under gravity through the network.
- About one third of Muriwai is connected to this network.
- The largest customer is Auckland Council, through the campground.



#### **Current Issues**



The severe weather in 2023 caused significant damage to Muriwai's water infrastructure. Although the system is back in service, there are now several long-term issues:

1. Ground movements have affected the natural springs that supply water reducing the amount of available water.

2. The land where the springs, Water Treatment Plant and reservoir are located is in a landslide debris zone, making it vulnerable to future landslides.





# Water restored for recentlyreturned Muriwai customers





# Water treatment plant back in service for Muriwai



#### **Problems that need solutions**

#### **ISSUE 1:**

Supply does not meet peak demand



#### **ADDITIONAL CAPACITY**

Achieve adequate source water yield to meet peak demand & forecast demand.

#### **ISSUE 2:**

Supply could be damaged again in future landslides.



#### **SOURCE RESILIENCE**

Increase source water/supply resilience to an acceptable level for future weather events/landslides.

#### ISSUE 3:

Existing location is in landslide debris zone.



#### SITE SAFETY & RESILIENCE

A water treatment plant and site that is suitable for *long term* use from a health and safety persective

### Summary of identified possible solutions

- 7 high level solutions identified
- further investigations/business decisions needed to rule out

SOLUTION A
EXISTING SOURCE
EXISTING SITE

SOLUTION B

DOMESTIC SELFSUPPLY VIA PRIVATE
RAIN TANKS

SOLUTION C
CONNECTION TO
METRO NETWORK

SOLUTION D
EXISTING SOURCE
NEW SITE

SOLUTION E
NEW SOURCE(NIHOTUPU)
NEW SITE

SOLUTION F
NEW SOURCE (AWHITU)
EXISTING SITE

SOLUTION G
NEW SOURCE (AWHITU)
NEW SITE





# **SOLUTION C: Connection to the metro network – Not for further consideration**

#### Key considerations

- 18km pipeline from Riverhead
- Cost is expected to be very high
- Water quality issues e.g. water age, rechlorination
- Pressure to service other communities
- Not aligned with regional servicing strategy



## Map of possible solutions



**Supply area of service** 

Existing WTP site solutions A & F

Potential option for solutions D & G

**Council campground** 



# Problems solved by solution

	SOLUTION A  EXISTING SOURCE EXISTING SITE	SOLUTION B  Domestic self-supply via private rain tanks	SOLUTION C  Connect Muriwai to the metro network	SOLUTION D  EXISTING SOURCE NEW SITE	SOLUTION E  NEW SOURCE (NIHOTUPU) NEW SITE	SOLUTION F  NEW SOURCE (AWHITU) EXISTING SITE	SOLUTION G  NEW SOURCE (AWHITU) NEW SITE
Source Capacity	Yes*	Yes	Yes	Yes*	Yes	Yes	Yes
Source resilience	No	Yes	Yes	No	Yes	Yes*	Yes*
Site safety and resilience	No	Yes	Yes	Yes	Yes	No	Yes
Estimated Cost	<\$1M	\$1-3M	\$30M+	\$3-5M	\$10-20M+	\$1-3M	\$5M
Change for community/effect on community	Nil?	High/Very High?	Med?	Low?	Med?	Nil/Very Low?	Low?



### Next steps - engagement

#### What?

Community survey – important for us to get a better idea about how people use water and options for on-going water conservation. Link on the Watercare website.

Conversations with other key stakeholders to discuss specific usage requirements and situation.

Once we know more, we can evaluate any knowledge gaps and come back to the community and stakeholders.

#### Who?

- Elected members Rodney Local Board, Councillor Greg Sayers, MP Chris Penk.
- Broader Muriwai community
- Surf Life Saving Club
- Park ranger
- Campgrounds operators
- Auckland Council (as campgrounds owners)
- Fire & Emergency
- Muriwai Golf Course
- Mana Whenua



#### Timeline



\*The timeline is likely to change depending on what is identified to be the preferred solution and the results of investigations



