

OIR: 2324/692

26 October 2023

Tēnā koe

# Request for Information under the Local Government Official Information and Meetings Act 1987 (the Act) (the LGOIMA)

Thank you for your email of **4 October 2023** requesting the following information:

#### 1. How the reservoir will improve the firefighting capability for Ōtaki

The current ability to provide fire-fighting flow is based on the maximum output from the water supply bores in Otaki. The reservoir provides additional water flow over and above what can be provided from the bores. This will increase the fire flow from 60 l/sec to 100-150 l/sec. This means that in the event of a significant fire emergency sufficient water is available for firefighting without reducing water for town supply.

#### 2. How it will be more energy efficient and by what measures

A reservoir provides improved energy management as a larger proportion of water can be pumped at a more constant rate to fill the reservoir. This mean that we will not need to continuously adjust pumping flows to meet demand. The reservoir provides a significant supply buffer and pumping can be set to take advantage of cheaper electricity rates.

### 3. How the reservoir will support the significant housing growth planned for Ōtaki if the storage is also to provide 24 hours of water in case of emergency

Water modelling incorporates both peak demand and fire-fighting flows when determining the desired capacity for the reservoir, and this was modelled for both the current and future (2051) scenarios. The reservoir will typically operate between 80% and 100% full (4.4ML to 5.5ML). This volume of water will provide 24 hours of storage capacity in the event of an emergency, which will be sufficient to service Otaki including when factoring in planned housing growth.

Please note that any information provided in response to your request may be published on the Council website, with your personal details removed.

## 4. Please can the council explain why the potential preferred site (section 14) mentioned in above OIR was not considered?

The area of the subdivision identified as section 14 was never a potential preferred site as it is not at the right elevation and would require significant earthworks in close proximity to a wetland.

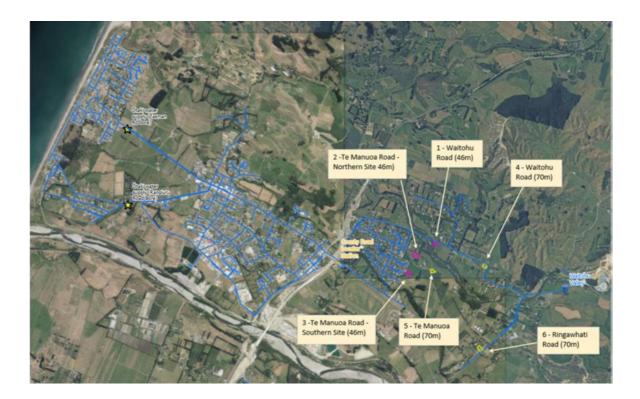
5. Can council please explain and provide evidence as to whether any other sites around Ōtaki, other than from the Te Manuao Road property development, were considered for the reservoir? If not, why not?

The marked up aerial photograph below shows six sites considered for the proposed reservoir. The aerial also shows the water supply network in blue, and the existing bore locations identified by yellow stars.

Three sites at the 70m contour level were excluded as the preferred elevation was 46m above sea level, with a top water level at 52m. The three sites remaining, marked with pink squares on the attached plan, were all at the appropriate elevation.

The Waitohu Road site was excluded as it was in a flood hazard area, and the pipework to and from the Reservoir would need to cross the Waitohu Stream, putting the water supply at significant risk in a flood event.

The Northern site on Te Manuao Road is closer to the water network, however the site is steeper and immediately adjacent to a wetland area which would be significantly impacted by required earthworks.



If you require any further information or clarification of the information provided, please feel free to contact the Project Manager, Ōtaki Growth Infrastructure, Peter Bollmann. He can be reached on his mobile: or by email:

Ngā mihi,

role

Sean Mallon Group Manager Infrastructure Services Te Kaihautū Ratonga Pakiaka