

# ARAPUNI DAM ENHANCEMENT PROJECT



## PROTECTING ARAPUNI HYDRO DAM FOR FUTURE GENERATIONS

### What is the Arapuni Hydro Dam?

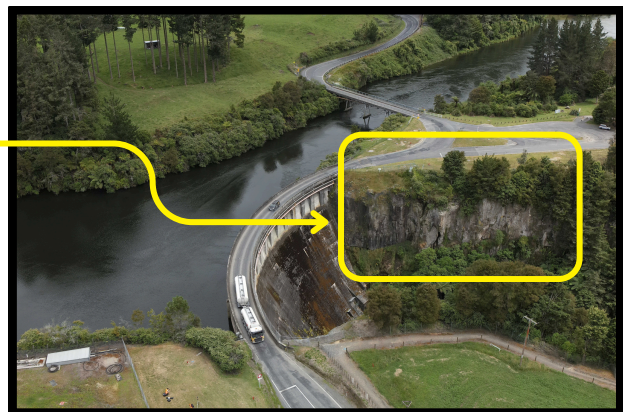
The Arapuni Hydro Dam has been operating since 1929 and is part of the Waikato Hydro System, which generates about 10% of Aotearoa New Zealand's electricity. The dam was constructed to help supply water to the nearby Arapuni Hydro Station, which generates enough renewable energy to power around 100,000 homes a year. The dam is also a listed historic heritage structure due to its engineering importance.



### Why does the dam need work?

Engineering studies show the dam is safe to operate, but extra protection is needed in one area called the left abutment (where the dam joins the valley wall) to protect it from water seepage. Small amounts of seepage is natural, but too much over time can weaken the dam.

Changes in seepage patterns were noticed after distant earthquakes in 2016, so Mercury is taking proactive action to improve the left abutment.



### What work is being done?

A technique called jet grouting will be used to form a row of pillars under ground, to protect a middle layer of sediments from seepage.

A series of overlapping concrete piles will then be drilled to form a cutoff wall about 70m-80m deep and 57m long.

Once cured, the jet grouting and cutoff wall will provide a barrier to limit ground water seepage in the left abutment.





### Working with iwi and the community

- Mercury is working closely with Ngaati Koroki Kahukura, Raukawa, Ngaati Hauaa.
- Iwi are involved in environmental monitoring, site management, and cultural guidance.
- Community drop-in sessions, newsletters, and school engagement are ongoing.



### When is the work happening?

- Early works: 2024–2025 (jet grouting trial and research to understand geology of the dam).
- Main construction: Starts July 2026, for about 24–36 months.
- The hydro station will keep generating electricity during the work.

### How does this affect the community?

Arapuni Road across the dam will be closed to vehicles from July 2026, for 24–36 months.

A detour via Powerhouse Road will be available for local, essential travel only. This includes:

- Daily commuting to and from work
- School travel
- Accessing essential services

Heavy vehicles will use state highway routes instead. Walking and cycling will remain accessible where possible, and local businesses such as Rhubarb Cafe will continue operating as usual.

### What vehicles can use the detour?

Allowed:

- Cars, light vehicles, motorcycles
- School buses
- Emergency services
- Rigid trucks up to 8m

Not allowed:

- HPMVs
- Trucks over 8m rigid sizing
- Oversized vehicles, and extended freight cannot use the detour.

### Why this project matters

- Protects a nationally significant engineering structure; the first Government-built hydro dam on the Waikato River.
- Ensures the dam's long-term safety, and the safety of the communities living nearby.
- Supports renewable electricity generation and long-term resilience of the Waikato Hydro System.
- Plans ahead to benefit future generations.



### HOW CAN I TALK TO THE PROJECT TEAM?

We will continue to engage with stakeholders and local community to let people know what is planned. If you would like to contact the project team, please email:

[project.arapuni@mercury.co.nz](mailto:project.arapuni@mercury.co.nz)

Scan the QR code or follow the link below to view our project webpage:

[www.mercury.co.nz/arapuni-dam-remediation-work](http://www.mercury.co.nz/arapuni-dam-remediation-work)

