



# Aurere Catchment Investigation

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# Project objective

- Determine impact of waste water treatment plant
- Determine impact of quarries
- Provide information, advice and support

# Location

- The Aurere catchment covers 94km<sup>2</sup> and comprises two main streams:
- the Aurere Stream draining the western half of the catchment and
- the Parapara Stream draining the eastern half

# Historical sampling

- Heavy metals in shellfish tested 2002
- Water quality and sediment around quarries tested 2003
- Joint water quality and shellfish tested 2011/2012
- Elevated bacteria and heavy metals

# Further sampling

- More data is required in order to identify and/or confirm source(s) of bacterial and heavy metal contaminations occurring in the catchment.
- Eight sites were selected that have the potential to isolate the source(s) of contamination within the catchment.





INLAND RD

Otengi Bay

Lake Ohia

Aurere

STATE HIGHWAY 10

Pekerau

Rakapara

PEKERAU TO HOUSHAM RD

TAHIMATA TO RAKAPAU RD

TAHIMATA RD

CHURTON RD

DUNCAN RD

Teatea

PETER RIVER RD

CHURTON RD

SAUNDERS RD

PARANUI TO MOA RD

ELUE GONG

Sampling sites with corresponding GPS coordinates and associated analyses.  
 (*E. coli*: *Escherichia coli*, *Ent.*: *Enterococci*, NH<sub>4</sub>: ammonia, FC: faecal coliform,  
 FST: faecal source tracking analyses)

Site No.	Site name	Easting	Northing	Analysis
3045 99	Parapara Stream @ Parapara Toatoa Rd/Paranui Toatoa Rd intersection	1639905	6119265	E. coli, NH <sub>4</sub>
3045 97	Parapara Stream @ Taumata Rd Bridge	1638075	6125035	E. coli, NH <sub>4</sub> , FST
3045 93	Parapara Stream Trib @ Parapara Rd Bridge (FDE257 + Taipa WWTP discharge)	1639049	6125873	E. coli, NH <sub>4</sub> , FST
1103 24	Parapara Stream @ SH10 Bridge	1637083	6128587	Metals, E. coli, Ent., FC, FST
3045 87	Aurere Stream @ Pekerau Rd (U/S of SH10 Bridge)	1633654	6127865	Metals, E. coli, NH <sub>4</sub> , FST
3045 83	Aurere Stream @ U/S of Blacks Quarry Discharge	1636691	6128780	Metals
3045 79	Aurere Stream @ D/S of Blacks Quarry Discharge	1636718	6128764	Metals, E. coli, Ent., FC, FST
3045 91	Aurere Estuary @ End of Estuary	1639097	6128474	Metals, Ent., FC, FST

# Project components

- Event based water sampling at eight sites
- Sampling scenarios
- Sampling parameters
- Results assessed against MfE Guidelines
- Report on results