

# Lake Tutaeinanga

## INFOSHEET 14, DECEMBER 2017

*This information sheet has been prepared for Te Arawa whānau to summarise information about:*

- *research and monitoring occurring on Lake Tutaeinanga.*
- *projects occurring on, and adjacent to Lake Tutaeinanga, particularly efforts to reduce the impacts of land use on lake water quality.*

*It will be reviewed and updated annually.*

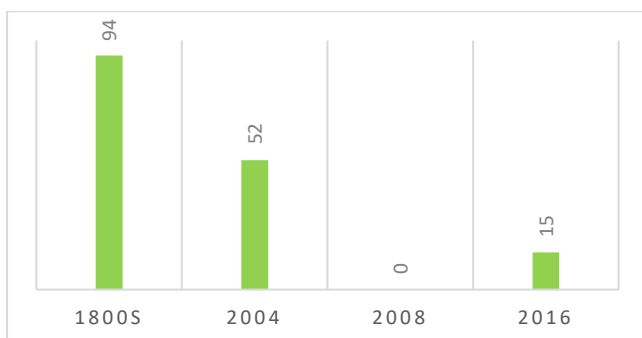
Lake Tutaeinanga is a 3ha volcanic lake located in Waikite Valley, west of the Waitapu Thermal Area. It is a tributary of Lake Ngāpōuri, Opōuri Stream, Waitapu River and Waikato River.

### WATER QUALITY MONITORING

The condition of the three Te Arawa Lakes within the Waikato Region, including Lake Ngāpōuri, are assessed using the Submerged Plant Indicator or SPI. This looks at the amount of native and invasive plants and assigns a score – the higher the SPI, the better the water quality.

### WATER QUALITY TREND

The water quality in Lake Tutaeinanga indicated high ecological health in 2004. The LakeSPI score was 0 in 2008 - significantly degraded lake environment for plant growth. Since then, the LakeSPI has increased but still indicates poor ecological health (2016).



### 3 LAKES ACTION PLAN

The 3 Lakes Action Plan seeks to protect, enhance and restore Lakes Ngāpōuri, Tutaeinanga and Ngāpōuri. It involves an interagency approach, is led by Ngāti Tahu-Ngāti Whaoa Runanga Trust and funded by the Waikato River Authority.

### ACTION PLAN PROJECTS

Includes, but is not limited to:

Project	Status
Lakes Tutaeinanga and Ngāpōuri Riparian Restoration - led by Ngāti Tahu-Ngāti Whaoa Runanga Trust and funded by the Waikato River Authority.	In Progress

### RESEARCH

Research	Findings
NIWA Taonga Fish species, 2007	<ul style="list-style-type: none"> <li>• Kākahi were present.</li> <li>• Kōura were not present.</li> <li>• As a tributary of the Waikato River, Lake Ngāpōuri may be most suitable for stocking of elvers (tuna restoration).</li> </ul>
Tau kōura Monitoring 2017	<ul style="list-style-type: none"> <li>• No kōura captured in this survey.</li> <li>• Common bullies were abundant.</li> </ul>