

Project: Waipa Hydro Scheme
Client: Hydro Energy Ltd
Location: Kaituna, Bay of Plenty
Date: 2003 – 2005

RILEY undertook preliminary investigations for a proposed high head hydro-electric power station on the upper Waipa River, in rugged bush country. The investigation included stream intakes, pump stations at 10-20MW, small storage areas, penstocks and a powerhouse in the Waipa Gorge.

The analysis and correlation of available hydrological records was undertaken to derive 'natural' and power station augmented flow records at the proposed power station discharge site.

A MIKE 11 hydraulic river model was developed for the Waipa River from the discharge site to the Otewa flow site some 16km downstream. The model was calibrated against recorded level and flow data at the Otewa gauge for the 1992 (dry) year.

A report was prepared summarising the methodology and presenting the results for inclusion in the consent application and AEE. Evidence was presented at the consent hearing and resource consents were obtained.

