

# Waikato Water Intake - Sedimentation Assessment

## Client

Watercare Services Limited.

## Project

Tonkin & Taylor was engaged to undertake monitoring and analysis of the river bed levels around the water intake screens at Watercare's Tuakau Water Treatment plant on the lower Waikato River. The project included coordinating two bathymetric surveys extending 2 km either side of the Watercare intake structure, with depths recorded to +/- 0.1 m. Other available river data was obtained for the study reach including river bed information, flow data and dredging returns for the Waikato River. We provided a review of the relevant available information to assess trends in sediment movement around the Waikato intake since its establishment.

## Services provided

- Coordination of two bathymetric surveys extending 2 km either side of the Waikato Intake
- Production of a model to show the sedimentation differential between the bathymetric surveys
- Obtained available flow data, bed level data and dredging returns information from Environmental Waikato to analyse historic and current bed levels and flow trends in the Waikato River near the Watercare intake structure
- Assessed the likelihood of the presence of the intake screens being the cause of localised sedimentation in their vicinity.



T&T have also been engaged since 2003 to carry out consent-related monitoring at the Tuakau Water Treatment plant including monitoring to determine if there are any adverse effects on native fish species from operation of the intake screens.

[www.tonkin.co.nz](http://www.tonkin.co.nz)