

Silverstream wastewater detention tank

Alan Bannatyne, Regional Water Services Group Leader, MWH NZ Ltd

Wet weather overflows from wastewater systems are an issue facing asset managers all around the country. Aging sewers and increasing public expectations have created a significant challenge to manage. The presenters from MWH and Beca will describe Hutt City Council's approach to dealing with the main overflow in the Hutt Valley wastewater system from the investigation of options through to site selection, planning, resource consent processes, design, procurement and construction for successful delivery of this \$8.3M project.

The project included construction of a 10,000 m³ off-line wastewater detention tank for storage and treatment of wet weather excess flows. The facility also required construction of a 1200 litre per second pumping station, break in to existing trunk sewers and integration with the network control system. Design aspects of particular interest included the tank self-cleaning system, complex flow diversion arrangements, odour management and provisions for future augmentation. A combination of innovative planning, a robust procurement approach and application of best design practise have made this project a leading example of infrastructure provision. The new facility has now been successfully integrated into the trunk wastewater network and is meeting the original project objectives.