

Storm no match for flood system

N.T. MIDWEEK 01/07/15

AN EXTENSIVE flood protection system proved its worth when New Plymouth's CBD escaped serious flooding during the June 20/21 storm.

The city's three flood detention dams and the Bonithon Avenue diversion tunnel were built after floods in the 1970s saw businesses awash and goods floating down the roads.

When Huatoki Plaza and Puke Ariki Landing were built, they were designed to flood in a managed way to take the pressure off Huatoki Stream during exceptionally high flows.

"Without those systems in place, the central city would certainly have flooded between Currie and Brougham streets during that storm," says Manager Water and Wastes Mark Hall.

The three dams were up to half full during the storm and the diversion tunnel at Bonithon Avenue – which diverted stormwater straight to the Tasman Sea –

was "roaring" with flood water, says Mark.

In Waitara, a stormwater pump that forces water from the town's streets into the river was operating for the first time in 10 years. It ensured that stormwater was removed from the streets even when the stormwater outlet was below the waterline as the river ran high.

At one point during the storm, the New Plymouth Wastewater Treatment Plant was receiving a flow of more than 1,180L/s – much higher than the average 300L/s, or even the typical wet weather peaks of up to 700L/s.

Some of the inflow had to be diverted away from the bioreactors so that the bioreactors' bugs, which treat the wastewater, would not be washed away.

"It meant no swimming or shellfish collection in the discharge area for a few days but we avoided the bigger problem of the plant not operating properly for a month," he says.



The "roaring" water at the Bonithon Avenue diversion tunnel during the storm.