

CLIENT: The North Central Catchment Management Authority (NCCMA)
PROJECT: Flood Recovery Programme
DATES: September 2011 – December 2013

Background

In January 2011, areas within the domain of the North Central Catchment of Victoria experienced the worst flooding on record, both in terms of rainfall – over 100 mm between the 12th and the 14th January – and of places affected. Charlton, Rochester, Creswick, Clunes, Carisbrook and Donald were the communities most heavily impacted. The NCCMA subsequently launched a Flood Recovery Program to repair damaged environmental assets in the area and to protect them from future hazards. The project has been financed in the most part by the Natural Disaster Relief and Recovery Arrangements (NDRRA).

Implementation

Platypus has been a major contributor to the programme, removing flood debris and undertaking a number of measures to help protect the area from future flooding.

February 2011 - Creswick Creek, Clunes

Only few weeks after the floods, Platypus engaged in the clearance of the creek's banks from woody weeds and overgrown vegetation to enhance the river's flow capacity and to prevent current-washed debris from causing obstructions at times of high discharge. Cut and paint methods were used on large trees to inhibit regrowth and were subsequently disposed of by means of a chipper.



Creswick Creek flooded and surrounded by woody weeds



Creswick Creek banks are cleared

February / March 2011 – Loddon River, Newstead

Blockages caused by debris deposited by floodwaters, which were impeding the flow of the Loddon River in and around Newstead, were cleared by Platypus within a period of two months.

July 2011 – Coliban River, Lauriston

Numerous willow trees affecting the flow of the Coliban River near Lauriston needed removal. Within just two weeks, a Platypus team of qualified arborists safely and expertly felled the willows by chainsaw. The resulting debris were stacked with the aid of excavators and subsequently burned.

August 2011 – Campbells Creek, Campbells Creek

As part of the regeneration process, selected woody weeds had to be removed along a section Campbells Creek. Smaller weeds were targeted by use of knapsack pressure sprayers, while larger trees were felled by chainsaw and disposed of on site.

September 2011 – Tullaroop Creek, Carisbrook

Platypus was also engaged to increase the flow capacity of Tullaroop Creek, which was achieved within a period of 10 days, adopting the same techniques that were put in place at Campbells Creek.

February 2012 – Heathcote

In February 2012, Platypus started developing flood control systems around Heathcote. In the space of two months, five state-of-the-art water and erosion control structures including levees, gullies and rock chutes were created using excavators.



Erosion structures created with precision

April 2012 – Little Coliban River, Tylden

Woody weeds were removed near a bridge over the Little Coliban River, to increase its flow capacity. Trees were felled by chainsaw and disposed of using the chipper.

November 2012 - Wedderburn, Charlton, Newbridge, Dunolly, St. Arnaud and Amphitheatre

As part of the second phase of the Erosion Control Program more rock chutes, levees and gullies were created within the aforementioned areas to protect a number of sensitive sites. This was perhaps the most challenging and laborious phase of the project, which was successfully completed in eight months.



Usage of geo-fabric layup as sediment cut-off within rock chute



Rock chute working perfectly after heavy rainfall