Mokoan -Return to Wetlands -Update May 2010

In June 2004, as part of its ' Our Water Our Future ' White Paper, the Victorian Government announced its plan to save in-excess of 44,000ML of water annually by returning Lake Mokoan to a natural wetland. The following works are underway to meet water supply commitments made at the time of the decommissioning announcement and to decommission assets which are no longer required for water supply purposes.

Rain Rejection Storage Works at Broken Weir

A rain rejection storage is being provided to allow small flows, surplus to requirements downstream, to be harvested and then re-released back into the system a short time later. The storage will make use of the capacity of a 7km long section of the existing Mokoan Inlet Channel located between the Broken River and Hollands Creek.

Several existing flow regulating structures on the channel are being upgraded and a new regulating structure constructed to allow close control of future flow harvesting and releases to meet water use demands and diversion requirements downstream.

Fig 1: Broken River Bypass structure remodelling works

Remote Control and Monitoring Project

The remote control and monitoring project is another set of works being undertaken to support water supply reliability following the decommissioning of Lake Mokoan.

The site that monitors and controls releases from the Lake Nillahcootie Outlet has been completed and operational since late in 2008. New and upgraded stream gauging stations have been completed at the Broken River at Orrvale, Holland's Creek at Kilfeera, Samaria Creek and Lima Creek. Further works at Casey 's Weir and a new gauging station on Baddaginne Creek are in progress.

Transfer to Winton Wetlands Committee of Management

The 8,000 ha of land forming the current Lake Mokoan site is land either owned or managed by Goulburn-Murray Water. Following decommissioning, all 8,000 ha will be surrendered to the Crown by Goulburn Murray Water. Arrangements for the transfer of land to the DSE, for management by the Winton Wetlands Committee of Management are well advanced and expected to be completed within the next few weeks.

Works Decommissioning

Decommissioning of the works associated with the old Lake Mokoan dam, including excavation of the embankment breach, and demolition of the existing outlet tower and access bridge have been completed by Terry Plant Hire of Wangaratta.

The breach consists of a 10m wide cut in the existing embankment at the location of the Outlet Channel. The base of the cut is set at the high watermark level of the future Winton Wetland. This new breach will enable flows above the high watermark to run, without creating any erosion, into the existing Outlet Channel. These flows will then pass downstream to the Broken River at Casey' s Weir.

Construction of a concrete lining of the base of the breach, so as to control the rate of flow from the wetlands and to avoid future build up of debris and other material, together with the construction of an access culvert across the breach banks, are under way.

Works to convert the twelve kilometre long Mokoan Inlet Channel from Holland 's Creek through to Winton Wetlands, into a drainage depression, have commenced. Contractors Max Bright and Sons have a large fleet of plant working along the length of the channel, flattening the channel side slopes and reshaping banks. They are also treating the reshaped soil surfaces by the application of gypsum and fertiliser to minimise the risk of future erosion and to promote grass and tree growth. As well as being functional by providing a continuation of local drainage services, these works have a goal of adding to the physical appearance of the area, to improve the experience for users of a cycle and walking track which is under consideration to link Benalla with future developments at the Winton Wetlands.

Fig 2: Embankment breach and pump station (foreground) with Winton Wetlands in background

A contract has been awarded to local firm, Exton 's of Benalla, to undertake further decommissioning works, at Holland' s Weir. The natural flow path of Holland' s Creek and natural fish passage will be reinstated by the removal of a flow regulating structure. The weir itself will not be removed.