Irrigation Testing Facility
Know-the-Flow

The facility was established with a grant from the federal Department of Sustainability, Environment, Water, Population and Communities as part of the National Water Initiative. The facility has been designed to carry out pattern approval testing of irrigation water meters as described in the National Measurement Institute’s documents NMI M 10-2 and NMI M 11-2. Both open channel and closed conduit meters can be tested at flows up to over 100 ML/day and up to heads of 60 m. The new facility replaces an earlier irrigation testing facility developed at NSW Public Works MHL in 1998 as part of the Know-the-Flow project which has been to test irrigation flow meters in flow conditions as near as possible to those in the field.

The rig, which utilises water from Manly Dam, recirculated at all flow rates other than extremely low flow rates, allows testing of complete installations over a range of conditions. Complete flow measurement installations, including the common arrangement where the flow meter is installed in a short pipe from an open supply channel, can be tested, as well as flow meters in closed conduits. Testing can include evaluation of the accuracy of installations and their sensitivity to the various adverse flow conditions that occur in the field and head loss measurements over a range of flows.