Environmental flow response and socio-economic monitoring

Macquarie Valley - progress report 2009
The NSW Office of Water is a separate office within the Department of Environment, Climate Change and Water. The Office manages the policy and regulatory frameworks for the State’s surface water and groundwater resources to provide a secure and sustainable water supply for all users. The Office also supports water utilities in the provision of water and sewerage services throughout New South Wales.

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WHAT IS THE PURPOSE OF THIS REPORT?
This report provides an update on the monitoring and evaluation needs undertaken to assess the ecological and socio-economic performance of the water sharing plans adopted in the Macquarie Valley. It summarises activities undertaken in the 2008–09 water year and provides an interim assessment of outcomes from the investigations. It also identifies priority needs for future monitoring and evaluation activities in the Macquarie Valley.

WHY DO WE NEED TO MONITOR PLANS?
Water sharing plans provide water to meet environmental and socio-economic needs, and certainty to water users on the rules governing access to water. The Macquarie Valley contains a number of important environmental assets and supports a valuable irrigation industry. Important environmental assets include the Macquarie Marshes, a major breeding ground for wetland birds (Figure 1 page 5), and important riverine habitat for fish and other aquatic animals. It is important to know whether the water sharing plans are meeting their environmental objectives, so that their effectiveness can be reviewed at the end of their 10-year period of operation. This information will be used to make informed decisions on how the plans might be changed to improve their performance when they are renewed after the current 10-year plans end. To achieve this, ecological monitoring and evaluation activities undertaken by the NSW Office of Water focus on specific clauses and performance indicators within the plans.

WHAT WATER SHARING PLANS ARE CURRENTLY IN PLACE?
Three water sharing plans in the Macquarie Valley are currently gazetted (Figure 2 page 6):
- Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source 2004
- Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2004 (Unregulated River)

More details of these plans can be found on the NSW Office of Water’s website www.water.nsw.gov.au
FIGURE 2
Location of the current water sharing plans in the Macquarie Valley.

LEGEND
- Regulated monitoring site
- Unregulated monitoring site
- Gauging stations
- Castlereagh above Binnaway (unregulated WSPs)
- Macquarie/Cudgegong (regulated WSPs)
- Lower Macquarie groundwater WSPs
WHAT HAS INFLUENCED THE WATER SHARING PLANS’ OPERATIONS IN 2008-09?

Regulated rivers—water availability

Owing to the lack of sufficient rain and inflows, annual allocations for general security access licences for the Macquarie and Cudgegong Regulated Rivers Water Source were 0 per cent at the start of the 2008–09 water year and only 10 per cent in March 2009. Figures 4 to 7 shows the available water determinations for general security access licences for the Macquarie River since 1980 and 1999, and the Cudgegong River since 1985 and 1999.