

LACHLAN COMMUNITY MONITORING PROGRAM

overview of the project

This project established a community monitoring program so people living around the Lachlan River could collect data on a range of environmental parameters relating to the river. In 1998 the New South Wales Government introduced changes in the management of river systems. These regulations were developed to improve the overall health of rivers and wetlands. The community wanted to ensure that the best possible monitoring system was available to confirm that the Lachlan River was being managed at an appropriate level. This scheme complemented an established government monitoring program. The new program added greater coverage and gradually increased the level of knowledge of river ecology in the community. The data collected by the community is valuable and credible and can assist government monitoring to detect any changes in the river system brought about by changes in flow. In addition to establishing an effective monitoring system the group developed a handbook to assist community groups with similar projects.

how the project was carried out

The program was developed as a partnership between Lachlan River Management Committee, Lachlan Valley Water and the Department of Natural Resources. The group appointed a Community Monitoring Officer to coordinate activities, liaise with participants and analyse data. Volunteers who signed up with the program nominated preferred sites for collecting data, and monitoring equipment was installed at these sites.

The group chose five components to monitor as indicators of riverine health. Wetlands were monitored at water flow event times such as filling or emptying. Team members also surveyed frog and waterbird species, and wetland vegetation. Water quality was tested for clarity and salinity. The community was concerned about riverbank stability, a feature not being monitored by existing programs. Volunteers



Monitoring water levels

monitored the river bank for erosion and deposition. Native fish were of particular interest because of concern about the effects of the introduced carp. They assessed how changes to environmental flow were affecting fish breeding and gained a detailed overall picture of fish numbers. Original plans included counting waterbird numbers during breeding times, but this was not done as there were safety concerns in surveying large flocks. All of these parameters together begin to build a picture of the health of the waterway.

outcomes now and in the future

The group established an effective monitoring program, collecting data that was valid and robust enough to complement existing government programs but not so complex as to discourage participation by volunteers. Forty two families volunteered to participate in the program. To gather meaningful long term data, the partners sought support for continuation of the program. This was provided by the Lachlan Catchment Management Group, who will adopt the program to ensure it continues. There are plans to carry out more extensive monitoring in the future, collecting data all year instead of at flow event times such as filling or emptying. This will reflect changes in the river system more accurately.

The project also developed a handbook to guide future community groups thinking of conducting environmental monitoring. The manual uses the Lachlan Community Monitoring Program as a model to outline processes and issues in establishing such extensive monitoring programs.

benefits, challenges & lessons learned

In the development of a successful monitoring program, the team met several challenges that will contribute to future planning. The most significant was the extended drought. As monitoring was originally linked to environmental events, this caused an unpredicted gap of three years in some of the data. Year round monitoring will provide a more comprehensive and reflective picture of the river system's health. The group underestimated the complexity of developing a suitable database for the project and a compromise was reached by using a simple spreadsheet. The group felt that future programs should include professional expertise to develop an optimum data handling system.