

# Integrated catchment management

## **Resource sheet 11 (for teachers)**

### **What is integrated catchment management?**

Integrated catchment management (ICM) is the sustainable and balanced use of all land, water and biological resources in a catchment. ICM fosters cooperation and coordination between landholders, community groups, government agencies and other natural resource users and managers.

These groups come together to form what are known as catchment coordinating committees. These committees are responsible for representing the interests of all people in the catchment and coordinating and integrating the activities of these people. The committees produce catchment management plans, which identify important issues and problems with natural resources needing attention or preservation in the catchment.

Some of the main goals that ICM hopes to achieve are to:

- improve water quality
- maintain natural resources or replant vegetation to stabilise river banks and streambanks
- establish tree cover to reduce flooding and salinity while providing wildlife corridors
- adopt management practices that minimise the harmful effects of agricultural chemicals on the environment
- plan land use
- reduce the adverse effects of industrial activity on the environment
- encourage sustainable resource development
- retain the natural biodiversity of aquatic flora and fauna in rivers, wetlands and the sea.

### **Integrated catchment management: a case study**

#### ***Oxley Creek urban ICM project***

Oxley Creek Catchment has an area of 260 square kilometres. The creek is about 50 kilometres long and flows from the Flinders Peak Region to the Brisbane River. The upper catchment is steep, with pockets of forest and grazing land. Acreage development is increasing in this area. The middle section of the catchment contains the Willawong Liquid Waste Facility and extensive areas of sandmining. The lower catchment has residential and industrial uses.

Urban integrated catchment management pilot project  
In April 1996, a public forum was held to determine public interest in developing an ICM plan. As a result, the Oxley Creek Catchment Association was formed to devise a catchment management plan and create a forum where people could voice their concerns over catchment issues.

The association produced a report on the state of the catchment, and a water and land impact analysis, which identified the key environmental issues in the catchment. From these, a catchment management plan was developed. It highlighted that the main issues the catchment needed to address were:

- loss of habitat through progressive urbanisation
- altered flow patterns and water quality decline
- heavy industry and waste processing
- weed and feral animal invasion
- loss of recreation opportunities
- loss of vegetation.

Actions that have taken place include the following:

- Water quality monitoring - Waterwatch activities
- Bushcare groups established
- School education - *Kids, Companies and Creeks*
- Community education.

**References:**

Landcare Qld (1997) *Case-study Oxley Creek Environment Group*

**Oxley Creek catchment area**

