

Waterway Management

Our streams, rivers, estuaries and marine waterways are highly valued community assets. Unfortunately they are also often highly stressed, over utilised and degraded. In order to manage these waterways, we need to firstly understand the factors controlling their behaviour.

Our team of highly skilled engineers and scientists have the necessary experience and knowledge to enable such an understanding to be developed.

They are experienced in translating such an understanding into practical and effective management actions.

We specialise in

- Catchment studies
- Environmental flow and geomorphological investigations
- Riparian condition / habitat studies
- In-stream fauna investigations
- Estuary and river management plan formulation

Catchment, Stormwater and Urban Water Management

To meet the needs of the environment and community it is essential that catchments are managed as a total system. The key is integrating the practices of flood management, water sensitive urban design, stormwater quality control, community needs and preservation of the natural environment.

Such integration requires the holistic assessment of water quantity and water quality issues in a whole of catchment context. Consideration and detailed understanding is required of how water behaves in such a context, including all paths whereby water passes through a catchment, encompassing surface runoff, ground water, potable water storage / treatment / delivery and wastewater collection / treatment / disposal.

From a contemporary sustainability perspective, it is crucial that these water pathways are all properly identified and where possible linked to facilitate optimum resource utilisation and protection.

We offer an integrated approach, developed by specialists in these fields, which is crucial if total solutions to urban and catchment systems are to be designed.

We specialise in

- Catchment rainfall/runoff analysis
- Hydrologic assessments of changes to catchment land use
- Hydraulic flood model calibration, verification and design application
- Hydraulic impact analysis of flood management options and floodplain developments
- Urbanisation water quality impact assessments
- Design of water quality and hydraulic control structures
- Stormwater BMP assessments
- Water Sensitive Urban Design
- Integrated Urban Water Management planning

