CLEAN ENERGY AND WATER INSTITUTE



ENVIRONMENTAL WATER MANAGEMENT

Anthropogenic impacts to waterways as a result of new or existing developments can have significant environmental and social consequences. Effective environmental water management requires understanding of the issues and associated risk, potential management measures and monitoring requirements. The impacts that may occur can vary depending on the waterway and its location, project stage and existing catchment management.

Our extensive water management experience has led to the accumulation of expert knowledge that we now offer to our clients.

This course will provide participants with an understanding of:

- the types of impacts associated with human intervention in waterways and potential management measures
- impacts associated with infrastructure development, including those associated with construction, operation and decommissioning
- how to design a monitoring program to assess impacts

The practical aspects will draw on Entura's working knowledge and expertise, which is backed up by almost 100 years of experience in developing and operating power and water infrastructure as part of Hydro Tasmania, Australia's largest water manager.

COURSE CONTENT

Physical environment

- Hydrology/flows
- Lake levels
- Geomorphology sediment types, channel form, erosion/sedimentation
- Water quality physico-chem, nutrients, metals, spot vs continuous data

Ecological environment

- Habitat types and river health
- Aquatic biota
- Threatened and migratory species
- Relationship to physical environment

Social environment

- Cultural significance
- Local communities and resource usage
- Commercial and recreational users
- Visual/aesthetic amenity

Management

- Impact assessment
- Planning and regulatory requirements
- Environmental flows
- Fish passage/barriers
- Water quality
- Sediment/erosion control
- Reservoir management
- Habitat and threatened species management
- Construction versus operational issues

Monitoring program

Design and reporting

PARTICIPANT PROFILE

Paragraph heading

- Waterway managers
- Developers, project managers
- Resource managers

LEARNING OBJECTIVES

To provide participants with an understanding of environmental water management issues and risks, potential management measures and recommended monitoring.

LEARNING METHODS

- Lectures
- Case studies
- Discussions/workshops

COURSE PROVIDERS

Entura's lecturers include:

- Accredited training professionals
- Technical specialists and professionals with extensive experience and qualifications

CUSTOMISATION

This course can be customised to suit participants' skill level or role.