

SURFACE WATER



MARKET SECTORS



Defence



Government



Construction



Waste Management



Resource



Industrial

WHAT CAN EPIC DO?

Epic Environmental offers a broad range of experience in undertaking surface water assessments to support environmental studies and regulatory requirements. Our team of environmental specialists can provide desktop based and field-based services including hydrological and water quality monitoring, pollution impact assessments, waterway condition/physical habitat assessments, and catchment planning.

SURFACE WATER SERVICES

Epic offers a range of surface water services to support our clients in assessing and managing surface water resources. Our expert team have experience in undertaking field and desktop services to support a wide range of projects and sectors including infrastructure, mining, oil and gas, construction, defence, and agriculture. Our team have a highly respected track record of successful delivery on environmental projects and extensive experience in interacting with regulatory authorities and key stakeholders to support our clients.

REGULATORY MONITORING

Regulatory monitoring is often a requirement that accompanies the construction and operational stages of a project. Epic offers desktop and field-based services to support regulatory monitoring activities including design of regulatory monitoring programs, hydrological monitoring, water quality monitoring, conditions assessments, and compliance reporting. Our team of specialists keep abreast of emerging technology and methods to ensure that monitoring can be undertaken accurately and efficiently. We are experienced in providing support with engagement of government regulators and stakeholders to ensure that monitoring programs meet the desired outcomes.



BASELINE ASSESSMENT

Baseline assessments are an essential component in establishing the initial conditions of a site and identifying potential risks that may exist. Epic's staff are experienced in assessing site baseline conditions for surface water including hydrology, water quality, flood risk, aquatic ecology, geomorphology, physical habitat and waterway conditions.

We can provide targeted baseline assessments tailored to suit your needs.

POLLUTION IMPACT AND MANAGEMENT STUDIES

Land use and land use activities can result in the pollution of waterways by physical, chemical, and biological factors. The assessment and management of pollution impacts from land use and land use activities on receiving waterways is essential in mitigating environmental degradation and is often included as environmental conditions for site development and operation. At Epic we can provide professional advice and services to support the assessment and management of potential impacts to receiving surface waters. Our team are experienced in assessing the impacts from site/land use activities and engaging with regulators and stakeholders to monitor and manage potential environmental effects. We can offer a suite of desktop and field-based services including baseline characterisation, flow and water quality monitoring, mixing zone modelling, and management options assessments to support your needs.

CATCHMENT AND RESOURCE MANAGEMENT

Many large projects require the assessment of hydrology and water quality at a catchment scale to determine potential impacts and cumulative impacts from the planned activities. At Epic, we can provide expert knowledge to support the assessment and management of projects at the catchment scale including hydrological and water quality monitoring, nutrient flux modelling, environmental flow assessments, drought management and response, development impact assessments, and catchment scale water quality/water resource assessments.

CONDITION SURVEYS

Assessments of waterway conditions are needed to guide all aspects of waterway management. The condition of a waterway and desired outcomes provide a basis for setting management targets and approaches to protecting or restoring healthy environmental conditions. At Epic we have experience in undertaking waterway conditions assessments, geomorphic assessments, and physical habitat surveys to support the assessment and management of urbanised and natural waterways.

ENVIRONMENTAL MANAGEMENT PLANS

The construction and operation of projects can often require environmental management plans for surface water. At Epic, we have experience in advising on and preparing surface water management plans to support a range of projects across a variety of industries. Our team of environmental specialists and planners can help to navigate and prepare an efficient solution tailored to your needs.

OUR SERVICES INCLUDE

Advisory Services:

- Independent review
- Baseline assessments
- Catchment management plans
- Surface water monitoring plans
- Surface water management plans
- Surface water impact assessments
- Ecological assessments
- Geomorphology assessments
- Surface water resource and water supply assessments
- Contaminant and nutrient mass flux
- Water treatment and remediation
- Discharge impact assessments
- Mixing zone modelling
- Regulator and stakeholder engagement
- Third party compliance and environmental performance auditing

Field Services:

- Hydrological monitoring
- Surface water sampling and monitoring
- River habitat surveys
- Ecological surveys
- Waterway condition assessments
- Tracer studies
- Pollution monitoring

OUR EXPERIENCE

- **Burdekin Falls Dam Wall Raising Project** – Ecological survey and assessment to support raising of the Burdekin Falls Dam (BFD) wall, the largest reservoir in Queensland. Works included terrestrial ecological survey including desktop assessment and targeted flora/ fauna field surveys. After the field surveys were completed, Epic prepared an Ecological Assessment Report (EAR) to present the survey results and provide a baseline assessment of flora and fauna within the inundation area.
- **Kinchant Dam Approvals** – Provision of strategic advice on environmental approvals; external review of environmental risk assessment methodology and water quality sampling procedure; environmental site assessment for installation of a subsurface interception drain.
- **Environmental Assessment at Spoonbill Lake** – Completion of an Environmental Assessment under Part 5 of the Environmental Planning and Assessment Act (1979), including desktop review of environmental data, rehabilitation methodology assessment.
- **Regulatory Assessment and Mine Water Management Croydon** – Review of statutory requirements; development of a mine water management strategy to support approvals; engagement with regulatory agencies to gain acceptance of mine water management strategy.
- **Sand mine water management** – Mine water balance and water supply management plan for life of mine in a dredge-mining operation in a seemingly simple yet highly complex hydrogeological environment using analytical modelling solutions.

