

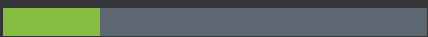


SKILLSETS

Environmental Impact Assessment



Groundwater



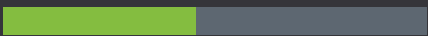
Ecology



Water / Sediment Quality



Ecotoxicology



MARKET SECTORS



Resource



Industrial



Government



Waste Management



Agriculture



Electricity & Renewables

CONTACT

Email

enquiries@epicenvironmental.com.au

Phone

1800 779 363

Dare Lawrence

Project Environmental Scientist

Dare's field of expertise includes aquatic ecology, water/sediment quality and environmental impact assessments and as a result has experience in collecting baseline data on a broad range of environmental components. Dare is experienced in assessing habitat condition and ecological health. His substantial field experience includes much of Australia, south East Asia and South America.

Dare has been involved in a broad range of ecological assessments, ranging from urbanised systems, engineered mining landscapes to pristine coasts. For these projects, Dare has gained a working understanding of potential impacts to ecosystems and the legislation that supports them.

QUALIFICATIONS

2016 James Cook University / Bachelor of Science (Honors)

2013 SKEMA (France) / Bachelor of Oceanography

MAJOR PROJECTS

- Environmental/Social Impact Assessment, BHP, MG/ES/BA Brazil
- Receiving Environment Monitoring Program, Glencore Coal Assets, Emerald QLD
- Environmental Impact Assessment, QGC Shell, Surat Basin QLD
- Receiving Environment Monitoring Program, RIO Tinto, Weipa QLD
- EIS, EA, EPBC, PRCP, Multicom, QLD

AFFILIATIONS

- Environmental Institute of Australia New Zealand
- Queensland Environmental Law Association
- Institute of Environmental Sciences and Technology

EXPERIENCE

WATER QUALITY / AQUATIC ECOLOGY

- **Aquatic Ecology Assessment, Stockland, North Lakes (2020).** Assessing the potential for a waterway running through the project area to support aquatic life with the ability to magnify contaminants.
- **Ecology Assessment, Mcllwain, Brisbane (2020).** Conducted flora and fauna (terrestrial and aquatic) surveys determining potential impacts from the upgrade of Teese Bridge.
- **Ecology Assessment, Wasco-IOR, Brisbane (2020).** Conducted flora and fauna (terrestrial and aquatic) surveys determining potential impacts from the construction of a new pipeline at Brisbane Port that is both above and below ground.
- **Water Quality Objective Development, Sunwater, Dawson (2018).** GBUS (Glebe) and CBUS (Chinchilla) receiving environment water quality objective development. Water quality and aquatic ecological impact assessment of proposed RO permeate discharge amendments.
- **Environmental Flows Development, Sunwater, Burdekin (2018).** Analysis of potential risks to the proposed Burdekin Falls Dam Pulsed Hydropower Project. Analyse fish connectivity and gene pool upstream and downstream of the dam walls.
- **Aquatic Ecological Assessment, Brisbane City Council, Brisbane (2018).** Assess water quality and current state of contaminants in dams and how potential effect on fish assemblages along with recommendations to minimise harm. Identify potential hazards from further development.
- **Fishway monitoring, Econcern, South Embley (2018).** Assessment of the utility of recently constructed fishway at Rio Tinto bauxite mine. Determining if potential transient species can navigate the fishway.
- **Contaminant Investigation, Riviera Marine, Gold Coast (2018).** Investigation into historically high levels of Zn, Cu, Al, and E. coli in wastewater from the marine construction facility.
- **Aquatic Ecological Investigation, Oil Search, PNG (2019).** Aquatic ecological investigations including the assessment of habitat, macroinvertebrates and fish relevant to potential impacts from river extractions for OSL operations.
- **Aquatic Ecosystem Assessment, Redland City Council, Brisbane (2019).** Bioassessments, reporting of water quality, biological indicators (macroinvertebrates, macrocrustacean, fish) and riparian assemblages in waterways across the council area to assess health of waterways.
- **Hyporheic fauna sampling, Carpentaria Gold, Ravenswood (2020).** Undertake an assessment of stygofauna within hyporheic waters during wet seasonal condition. Update the current Subterranean Fauna Monitoring and Management Plan (SFMMP).
- **Six Mile Creek Dam upgrade, Seqwater, Lake McDonald (2020).** Undertake a listed species search and habitat assessment with a goal to determining ideal future ecological monitoring locations to monitor potential impact of Dam wall upgrade.

ENVIRONMENTAL/SOCIAL IMPACT ASSESSMENTS

- **Environmental Impact Assessment, QGC Shell, North Surat Basin (2019, 2020).** Desktop assessment of potential GDEs and environmental impact assessment for the expansion of coal seam gas fields. Detail impacted and mitigation assessment concerning state and federal legislation for the protection of relevant environmental values.
- **Human Health Environmental Risk Assessment, Cleanaway, Brisbane (2020).** Assessing the potential risk for PFAS and other contaminants to biomagnify up the aquatic food chain in species targeted for human consumption.
- **Environmental Impact Statement, Glencore, Valeria (2020).** Assessing the potential impacts to flora and fauna from the proposed development of a new coal mine, transport corridor and processing plant.
- **Environmental/Social Impact Assessment, Cardno, PNG (2019).** Social impact and potential benefits of proposed hydropower facility. Environmental impact assessment of potential impacts to flora/fauna and river morphology.
- **Environmental Impact Assessment, Intrawater, Kilkooy (2020).** Environmental impact assessment for a proposed sewage treatment plant.
- **Dredging Environmental Impact Assessment, The Yard, Brisbane (2019).** Assessment of potential acid sulfate soils and historical contamination levels to determine treatment required for dredged sediment.
- **Aquatic Impact Assessment, Idemitsu, Ensham (2019).** Aquatic impact assessment relevant to increase in Salinity level of release waters.

- **Environmental - Social Impact Assessment, Lane Xang Minerals, Laos (2019).** Environmental and social impact assessment with a focus on aquatic biota for the development of a sulphide gold mine and expand existing gold oxide pits.
- **Freshwater Environmental Impact Assessment, BHP, Brazil (2018, 2019, 2020).** Assessing potential impacts from flooding of iron ore tailings as result of the Samarco dam failure. Analysis of fish tissue metal contamination to assess potential risks to human health. Assisted BHP and Fundação Renova in documenting the environmental impact of the tailings dam rupture. Developed management plans, critiqued monitoring programs ranging from the upper catchment freshwater systems, the lower estuary, nearshore coastal environment, and distant coral reef platforms. Designed and implemented field surveys to enable the capture of robust data to inform remediation and recovery efforts.
- **Environmental Impact Statement, Department of Primary Industry & Resources (NT Gov), Rum Jungle (2018, 2019).** Bioassessments, reporting of water quality, sediment quality, biological indicators (macroinvertebrates, macrocrustacean, fish and zooplanton) and riparian assemblages in receiving environments and surrounding riparian vegetation of former Rum Jungle mine, assess potential impacts from new access road and potential rehabilitation project of closed uranium mine.
- **Stygofauna Impact Assessment, Senex, Dawson (2018).** Sampling of stygofauna in Dawson to assess potential impacts to groundwater from nearby natural gas operations.
- **Seagrass Impact Assessment, Riviera Marine, Airlie Beach (2018).** Mapping of seagrass and potentially endangered species to determine suitability of construction of a dock extension.
- **Mercury Investigation, BHP, Brazil (2019).** Investigation into high levels of mercury found in fish downstream of dam failure with sampling of sediment and water.
- **Marine Environmental Impact Assessment, BHP, Brazil (2018, 2019).** Assessment of potential tailings contamination via the analysis of fish and penaeid tissue in the Atlantic Ocean.
- **Aquatic Ecology Impact Statement, Met Serve, Dawson (2018).** Assessment of biological indicators (macroinvertebrates, fish, diatoms) as well as riparian vegetation to determine potential impacts of a prospective coal mine and its feasibility.

COMPLIANCE MONITORING

- **Receiving Environment Monitoring Program, Rio Tinto, Weipa (2018, 2020).** Rapid bioassessments, reporting of water quality, sediment quality and biological indicators (macroinvertebrates, macrocrustacean, fish and zooplanton) in freshwater and marine receiving environments of Ely, North Embley and Lorim Point, assessing potential impacts from mining and sewage treatment activities.
- **Receiving Environment Monitoring Program, AngloAmerican, Dawson (2019).** Rapid bioassessments, reporting of water quality, sediment quality and biological indicators (macroinvertebrates, macrocrustacean, fish and zooplanton) in freshwater receiving environments of Dawson Creek, assess potential impacts from mining activities.
- **Uncontrolled release assessment, Glencore, Dawson (2020).** Assessment of water, sediment and habitat variables to determine extent of impacts associated with an uncontrolled release from the Dawson Mine (construction of a creek diversion).
- **PFAS analysis, Cleanaway Landfill, Ipswich (2019).** Development of sample quality plan and its implementation involving fish tissue collection for the assessment of PFAS contamination in the receiving environment of landfill sites.
- **Receiving Environment Monitoring Program & Riparian Vegetation Assessment, Glencore Coal Assets, Emerald (2018, 2019, 2020).** Rapid bioassessments, reporting of water quality, sediment quality, biological indicators (macroinvertebrates, macrocrustacean, fish and zooplanton) and riparian assemblages in freshwater receiving environments and surrounding riparian vegetation of Oaky Creek, assess potential impacts from coal mining activities.
- **Receiving Environment Monitoring Program, BMA, Bowen Basin (2019).** The project included the preparation, analysis and incorporation of technical data and study findings into individual report for all of eight BMA coal operations in the Bowen Basin. The project included the preparation, analysis and incorporation of technical data and study findings into individual report for all of eight BMA coal operations in the Bowen Basin.
- **Water Quality Assessment, Redland City Council, Brisbane (2019, 2020).** Assessment of water quality in recreationally used waterways with a focus on potential human health impacts. Assessing the effectiveness of sea-pots in increasing microcrustacean diversity.

APPROVALS

- **EIS, EA, EPBC, PRCP, Multicom, Richmond (2020, 2021).** Assessment of water quality (surface water and groundwater) and sediment quality to inform the development of baseline conditions to assist in application for an EA amendment, EPBC approval and PRCP development.
- **EA Amendment, Sunwater, Paradise Dam (2020, 2021).** Environmental impact assessment completed on the potential raising or lowering of dam wall. A rehabilitation plan was prepared to support the application of an EA amendment.
- **EA Amendment, Wilson Minerals, Croydon (2020, 2021).** Assessment of water quality (surface water and groundwater) and sediment quality to inform the development of baseline conditions to assist in application for an EA amendment.

POSITION SUMMARY

● 2020 – Present	Project Environmental Scientist	Epic Environmental Pty Ltd
● 2018 – 2020	Aquatic Scientist	Hydrobiology QLD Pty Ltd
● 2018 – 2019	Scientific Associate	University of Technology Sydney
● 2017 - 2017	Natural Area Specialist	Dragonfly Environmental
● 2015- 2015	Tutor	James Cook University
● 2014 -2014	Aquaculture Technician	Mainstream Aquaculture