



## Riley Johnson

B.Eng (Hons.)

Civil and Environmental Engineer



# SEEC

Strategic Environmental and Engineering Consulting

Riley is a civil engineer with skills in flooding, stormwater drainage, water quality management, erosion and sediment control.

Riley has worked on a wide range of projects, preparing erosion and sediment control plans, discharge impact assessments, stormwater drainage plans, flood assessments and water cycle management studies.

Riley is a Civil Engineer and an integral part of the SEEC team. He has experience in Flooding, Erosion and Sediment Control and Stormwater Management.

### Qualifications

- Bachelor of Engineering (Honours) (Civil and Environmental), University of Queensland, 2022.
- Member of the International Erosion Control Association (IECA)
- Member of Floodplain Management Australia (FMA)

### Areas of Expertise

- 1D Hydrology Modelling (using DRAINS)
- 2D Hydraulic Modelling (using TUFLOW)
- Preparation of Erosion and Sediment Control Plans
- Preparation of Discharge Impact Assessments
- Preparation of Water Cycle Management Studies
- Preparation of Stormwater Management Plans
- Water Balance modelling using GoldSim.
- Proficient in the use of AutoCAD drafting, QGIS mapping, DRAINS and MUSIC modelling.

### Short Courses

- Erosion and Sediment Control (Four-day workshop); Centre of Environmental Training, 2019
- Prepare To Work Safely in The Construction Industry; Blue Dog Training, 2021

### Recent Projects

#### **Kowanyama Drainage and Flood Studies (2025-2026).** KASC.

Undertook a drainage study of the township of Kowanyama with conceptual design to improve existing flood prone areas. Flood study of main access roads in and out of town with conceptual crossing upgrades to improve immunity.

#### **Wilson Drive Marulan (2024).** Citywest Corp Pty Ltd.

Developed a 2D TUFLOW flood model of the existing site and then updated the model to determine the impact of the proposed industrial subdivision. The model included a 1D underground stormwater network and several detention and water quality basins. Included the assessment of frequent to extreme (Probable Maximum Flood) storm events.

#### **South Keswick Quarry (2024).** Regional Hardrock Pty Ltd.

Developed a 2D TUFLOW flood model to determine the extent of flooding of the existing site to allow development to occur in non flooding areas. A water balance was also conducted using GoldSim to identify water usage and determine required groundwater bore supplementation.

#### **Braidwood Road Tarago (2024).** Laterals Planning.

Developed a 2D TUFLOW flood model of the existing site to determine the extent of flooding to inform planning. The model included a 1D underground stormwater network and a bridge structure.

**Marrangaroo Quarry (2024-2026).** Metromix Pty Ltd. Updated the site water management system to account for the extended areas of disturbance and demonstrate a neutral or beneficial effect on water quality. Included a hydraulic assessment of the final landform.

**Monaro Roack Quarry (2024-2026).** Monaro Rock Pty Ltd. Erosion and sediment control plan for the proposed rock quarry. Included erosion hazard assessment and sizing of sediment basins. A water balance was completed in Goldsim to minimise spill events and maximise reuse of on-site water.

**Central Coast Highway, Construction Discharge Impact Assessment (2023).** WSP.

Undertook the assessment of impacts of proposed highway construction-phase sediment basin discharges to the adjacent waterways. Impacts were estimated and compared against regional objectives to confirm impacts were acceptable at this location.

**Warringah Freeway Discharge Impact Assessment (2023).** CPB Downer Joint Venture (CPBDJV). Undertook the assessment of impacts of proposed construction-phase sediment sump discharge limits against the NSW Water Quality Objectives (WQOs) at this location.

**Bruce Highway Smart Motorways Project, Erosion and Sediment Control Plans (2023).** Seymour Whyte.

Development of erosion and sediment control plans for the upgrade of the existing road including design of sediment basins, and temporary culvert diversion.

**Beams Road Upgrade (2024).** Doval. Development of erosion and sediment control plans. Undertook the site environmental officer role, including frequent erosion and sediment control inspections and ensuring compliance with EMPs, associated procedures and records on environmental management.

**Stormwater management plans** for various residential and commercial developments.

**Harley Road Crookwell (2024-2026).** Laterals Planning.

Developed a 2D TUFLOW flood model of the existing site and then updated the model to determine the impact of the proposed residential subdivision. The model included a 1D underground stormwater network and a detention basin. Included the assessment of frequent to extreme (Probable Maximum Flood) storm events.

**Yass Concrete Batching Plant (2023).** Lentro Earthworks Pty Ltd. Undertook a water balance using GoldSim to identify water yields for a concrete batching plant. Included an assessment of required storages to minimise offsite spills and the need to purchase potable water.

**M12 Motorway, Construction Discharge Impact Assessment (2023).** WSP.

Undertook the assessment of impacts of proposed highway construction-phase sediment basin discharges to the adjacent waterways for the M12 project. The project included the intersection with the M7 highway and Elizabeth Drive requiring multiple staging and discharge to numerous waterways. Discharge pump rates and water quality were adjusted until estimated impacts were within acceptable levels and met the regional objectives for this location.

**Duck Creek Erosion and Sediment Control Plan (2019).**

Bundaberg Regional Council. Development of an erosion and sediment control plan for the upgrade of Duck Creek including associated drainage/culvert works.

**Mackay Ring Road (2024).** Golding Contractors. On site audit of erosion and sediment control works for the Mackay Ring Road. Included reporting of findings and recommendations for meeting best practice.

**Water Cycle Management Studies** for various residential developments.

## Contact Details

- [rjohnson@seec.com.au](mailto:rjohnson@seec.com.au)
- [www.seec.com.au](http://www.seec.com.au)

- Tel. 07 3203 8726
- Mob. 0438 379 133