



Liam Spurr MSc. BSc.

Hydrogeologist



Location

Darwin, Northern Territory, Australia

Experience

5 years

Qualifications/Accreditations

- Master of Science (Earth Science), 2016
- Bachelor of Science (Geology), 2014

Key technical skills

- Hydrogeology, Geotechnical Engineering, Geology, Contamination Assessment and Remediation

Memberships

- IAH, ALGA, ACLCA, AusIMM

Relevant experience summary

Liam consistently achieves positive outcomes for his clients by finding innovative solutions to common problems. Utilising his diverse skillset, Liam is able to deliver on multidisciplinary projects with the bigger picture in mind. Liam is able to think through projects and tasks from many perspectives, making him a powerful member to have in any project team.

Liam's dedication to client service has fostered and developed many strong relationships with key stakeholders, who are often the key to success on many projects. Liam's easy-going nature combined with his attention to detail give clients and team members the confidence required to consistently complete work to the highest standards

Project experience – Contamination Assessment and Remediation

Bungowannah Hydrogeological Assessment

Role: Environmental Geochemist

Client: Rivalea Australia

Location: Albury, NSW Australia

Project value: \$500k

Date(s): Jan 2018 – Dec 2018

Contamination mapping and liability assessment

Liam coordinated the installation, sampling and aquifer testing of a new groundwater monitoring network associated with an agribusiness client. Liam's work aimed to determine the nature and source of nitrate contamination in soil and groundwater.

Liam conducted field investigations including drilling, well installation, permeability testing, water level logging and environmental soil and groundwater sampling. In his assessment of contamination at the site, Liam utilised nitrogen-isotope signatures to determine the source of the nitrate contamination. conducted the subsequent assessment to disclaim liability for the client.

Wagait Tip Remediation Project

Role: Site Supervisor

Client: NT Department of Infrastructure Planning and Logistics

Location: Mandorah, NT Australia

Project value: \$2 million

Date(s): Feb 2020 – Jun 2021

Remediating land to hand back to Traditional Owners
Liam supervised the remediation of a former unlicensed landfill in a remote area of the NT. Liam's client-facing role involved contractor supervision, stakeholder management, field investigations and data interrogation. Liam completed these tasks to a high standard while under the time pressures of the remediation program, day-to-day challenges of Covid-19, and to the satisfaction of the external Environmental Site Auditor.

Unique challenges in sampling, data management and compliance with multiple guidance documents were met by Liam's willingness to implement tailored solutions.

Wonarah Repeater Station Remediation Project

Role: Project Manager
Client: Kennelly Constructions
Location: Costello, NT Australia
Project value: \$50k
Date(s): Mar 2021 – Jun 2021

Asbestos remediation program management
In collaboration with an indigenous-owned Remediation Contractor, Liam provided ongoing technical advice and project management for the duration of the program.

Upon attending the remediation site, extensive asbestos was found outside of the original remediation scope of work. In consultation with the Contractor, Liam successfully leveraged a substantial variation to ensure that the project fully completed the remediation of the site to the client's high expectations.

DCARM RCIP (NT Region) 2017-2021

Role: Region Field Lead
Client: Department of Defence
Location: Darwin, NT Australia
Project value: \$3 million
Date(s): Jul 2019 – Jun 2021

Defence Contamination Assessments

Liam has coordinated several intensive, seasonal environmental sampling programs associated with contamination assessment across the NT Defence estate. Liam managed the team's access to sites, permits to work, mentored junior staff in sampling techniques and completed desktop tasks including data management and reporting for this large dataset.

Liam adhered to the Defence Contamination Management Manual, providing a compliant, succinct report for the client.

Confidential Contamination Audit Project

Role: Region lead
Client: Department of Defence
Location: All states, Australia
Project value: \$5 million
Date(s): Jul 2018 – Feb 2019

Contamination inventory site inspections

This confidential project assessed the amount of potential contamination that remained on the Defence estate following a series of divestments and equipment changeovers made by Defence. Liam's role involved visiting Defence sites across VIC, NSW, QLD, SA and NT to inspect them for residual PFAS-containing materials and substances. As Region Lead, Liam also coordinated other staff in the completion of these site audits.

North East Link Project

Role: Contamination Lead
Client: North East Link Project
Location: Melbourne, VIC Australia
Project value: >\$300 million
Date(s): Jul 2017 - Present

Contamination assessment ahead of construction

Liam worked within a large, multidisciplinary team to determine the extent of contamination across a 30km proposed construction footprint associated with a new section of freeway and tunnels.

Liam conducted drilling supervision, field sampling of groundwater and soil, acid sulfate soil assessments, asbestos sampling and managed the immense dataset produced by these works. Liam also worked as part of a team to facilitate the smooth running of the staged contamination investigation program.

Project experience – Geotechnical Engineering and Geology

RTA Gove Liquefaction and Foundation Assessment

Role: Geotechnical Engineer
Client: Rio Tinto Alcan Gove
Location: Nhulunbuy, NT Australia
Project value: \$1.5 million
Date(s): Dec 2019 – Jul 2020

Tailings dam investigations and Geotech sampling
GHD provides regular, ongoing service to the Gove RDA tailings storage facility in East Arnhem Land, NT. Liam was involved in an investigative program designed to understand the structures and stability of the tailings dam embankments at the site. Liam completed the geotechnical drilling and field sampling of contractive materials and identified layers of potentially caustic material within the embankments.

RTA Gove Telemetry VWP Installation Program

Role: Hydrogeologist
Client: Rio Tinto Alcan Gove
Location: Nhulunbuy, NT Australia
Project value: \$1.5 million
Date(s): Mar 2021 – Sep 2021

Team management and leadership

Liam facilitated and led a 6-month long drilling and installation program in a remote mine site in the NT. Acting as field lead, project manager and mentor to junior staff, Liam exhibited his skills as both a technical professional and a leader on this geotechnical mining project.

RAAF Darwin NAVFAC P-700 Geotechnical and Environmental Assessment

Role: Engineering Geologist
Client: Department of Defence
Location: Darwin, NT Australia
Project value: \$50k
Date(s): Aug 2019 – Oct 2019

Managing international client relationships
Liam was able to facilitate an urgent project conducted by an international client through the Department of Defence at late notice, showing his willingness to serve clients. Although technically simple, this project featured nuances that Liam navigated through to achieve the expedited completion of the client's project.

North East Link Project

Role: Geotech Engineer
Client: North East Link Project
Location: Melbourne, VIC Australia
Project value: >\$300 million
Date(s): Jul 2017 - Present

In-depth hydrogeology & Geotech testing
Prior to moving to the NT, Liam was heavily involved in many aspects of this large, multidisciplinary project including the geotechnical delivery. Liam conducted regular geotechnical drilling investigations, non-destructive digging and managed the rock core shed, library and core showroom for the project. Liam's in-depth understanding of geological processes and features of rock core were consolidated on this project over a number of years.

Project experience – Hydrogeology

Lombrum Infrastructure Project – Borefield design and hydrogeological investigation

Role: Hydrogeologist
Client: Department of Defence
Location: Lombrum, Papua New Guinea
Project value: \$150k
Date(s): Nov 2019 – Feb 2020

Remote coordination of local pump test contractors
Due to the location of the project, Liam was unable to attend the project site directly. This challenge was overcome through the use of digital solutions, including cloud software, video calls and real-time data sharing software.

Liam was able to coordinate and direct local pump test contractors in PNG to complete four aquifer tests, install and read dataloggers and conduct the desktop data interrogation in Australia. Liam's responsiveness and communication with the contractor led to the project running without incident, despite the distance between supervisor and contractor team.

Level Crossing Removal Project

Role: Hydrogeology Field Lead
Client: Level Crossing Removal Authority
Location: Melbourne, VIC Australia
Project value: >\$100 million
Date(s): Jan 2017 – Oct 2019

Rail infrastructure project - Technical Advisor
Liam facilitated hydrogeological investigations across a wide variety of environmental and urban settings associated with the LXP. Rail engineers required these investigations to determine the most appropriate design solution, that was environmentally and hydrogeologically responsible.

Highlights on this project for Liam included the program management and field supervision of a 6-month long multidisciplinary investigation (geotech, hydrogeology, contamination) on a highly scrutinised part of the project. This also involved contributions to an EIS, to determine the impact rail infrastructure and excavations may have upon nearby protected wetlands.

North East Link Project

Role: Hydrogeologist / Geotech Engineer
Client: North East Link Project
Location: Melbourne, VIC Australia
Project value: >\$300 million
Date(s): Jul 2017 - Present

Largest infrastructure project in Victoria's history
Liam wore many hats on the North East Link Project, taking on the role of geotechnical engineer, environmental scientist and hydrogeologist at different stages of this immense, multidisciplinary infrastructure project. A highlight of Liam's work on this project was his ability to manage and engage with key stakeholders on this high profile and politically sensitive project.

Liam was exposed to packer testing and aquifer pump testing on this project, and managed the maintenance and interpretation of this enormous dataset produced by these tests.

AirServices Water Balance Audit

Role: Hydrogeologist
Client: AirServices
Location: Darwin NT, Australia
Project value: \$30k
Date(s): Dec 2020 – May 2021

Audit of water balance calculations
Liam solely performed a routine audit of the client's water balance spreadsheets to ensure their compliance with water accounting on their site. The client controls a PFAS-impacted site, and actively discharges runoff water to a nearby creek. As part of their compliance monitoring, Liam provided a detailed interrogation of their water balance dataset, including recommendations for improving their data capture methodology.

Loy Yang Water Quality Monitoring

Role: Hydrogeologist
Client: AGL Loy Yang
Location: Traralgon VIC, Australia
Project value: \$50k
Date(s): Dec 2017 – June 2018

Regional water quality impact assessment
As part of routine license requirements, Liam conducted the regional water monitoring across the areas near Loy Yang coal mine. Liam prepared a report detailing the findings of the groundwater and surface water sampling, and reported on fluctuations in groundwater levels across the region.

Loy Yang Water Pressure Monitoring

Role: Hydrogeologist
Client: AGL Loy Yang
Location: Traralgon VIC, Australia
Project value: \$250k
Date(s): Dec 2016 – May 2019

Water pressure checks for open cut coal mine
As part of ongoing mine operations, the largest open cut coal mine in Victoria conducts routine water level and water pressure checks across their groundwater bore and VWP network.
Liam was entrusted with conducting the regular monitoring, data entry and subsequent trigger level assessment to continuously provide security to the client that water levels were being managed appropriately. Liam was seconded to AGL's Loy Yang mine site regularly for several years completing this work, building and maintaining a trusted relationship with the client.

Water Treatment Plant Monitoring Program

Role: Hydrogeologist
Client: Parks Victoria
Location: Tidal River, VIC Australia
Project value: \$100k
Date(s): Jun 2018 – Dec 2019

Monitoring bore network services
Liam designed and supervised the installation of a groundwater bore network. The network catered to the client's needs to achieve monitoring requirements as part of their operation of a water treatment plant.
Part of this project scope included training the client to become independently capable of sampling their own bores, due to the regional location of the site. This led to the client becoming independently able to comply with their monitoring requirements.

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Career history [delete if not required]

2016 - present	GHD, Hydrogeologist
2014 - 2019	University of Melbourne, Research Assistant
