Hydrogeologist (fixed term)

This position is responsible for conducting groundwater-related research and consultancy, with a focus on the mapping of groundwater systems in GIS and 3D software, the investigation of pressures on groundwater (e.g., climate change, land use), and undertake field work (e.g., groundwater drilling, aquifer testing). Specifically, this position is responsible for helping the Aquifer Mapping Team to develop consistent, nationwide groundwater maps and models for New Zealand, contribute to the assessment and modelling of the impact of pressures on New Zealand's groundwater resources, and to assist with drilling and aquifer testing in a commercial project.

Reports to:	Hydrogeology and Geophysics Team Leader
Department:	Surface Geosciences
Group:	Science
Tenure:	Fixed Term 12 months
Location:	Wairakei
Direct reports:	Nil
Budget:	Nil
Career Path:	Research
Job Family:	Research
Career Step:	Scientist 1 / Scientist 2
Date:	March 2022

Position priorities and responsibilities

Scientific Research

- Developing groundwater maps and 3D models in consultation with senior staff
- Assessing/modelling the impact of pressures on groundwater (e.g., climate change, land-use)
- Assisting with planning, execution and reporting of fieldwork projects
- Working alongside senior scientists

Commercial

- Undertake commercial projects under the guidance of senior staff
- Commercial projects work will comprise at least 0.3 FTE

Communication

- Communicating scientific research through authorship or co-authorship of scientific publications (papers or reports)
- Making presentations at conferences and seminars

Projects

- Undertake projects for your manager as and when required

Responsibilities of all staff

- Comply with all GNS Science policies and procedures.
- Contribute to making GNS Science a healthy and safe place to work by complying with the responsibilities and accountabilities outlined in the GNS Science Health and Safety Management System Framework.

The responsibilities of this position will change over time to respond to changing needs. The incumbent will need the flexibility to adapt and develop as the company and its environment evolves.

Key working relationships

Internal:

- Work with hydrogeologists, geologists, and modellers in the Department of Surface Geosciences on collaborative projects such as: aquifer mapping and characterisation and groundwater resource assessments and impacts on groundwater.

External:

- Interaction with commercial clients and collaborators may be required.

Person specification

Skills, knowledge and attributes

Essential:

- Apply geology and hydrogeologic concepts to groundwater research and commercial consultancy problems, in particular in relation to the mapping and characterisation of groundwater systems.
- GIS and coding skills, with aptitude and committed willingness to expand and grow these skills.
- The ability and availability to undertake field work.
- The ability to interpret and clearly communicate (written and oral) scientific concepts.

Experience

Essential:

- A proactive and motivated approach to problem solving, teamwork, and the desire to achieve the project objectives

Desirable:

- Assessing/modelling the impacts of pressures (e.g., climate change, land use) on groundwater resources
- Experience in aquifer testing, geologic and hydrogeologic field work and proven ability to operate hydrogeologic field equipment
- 3D geological modelling experience

- Aquifer characterisation by remote sensing approaches
- A track-record of contribution to hydrogeological reports and publications.

Qualifications

Essential:

- MSc in hydrogeology, geology, geoscience or related topic.

Other requirements

Essential:

- Valid New Zealand work visa, residency or citizenship.
- Good computer skills.
- A valid full driver's licence.

Desirable:

- First aid certificate.

Performance Dimensions

At a high level, GNS Science recognises six **Performance Dimensions**: three relate to technical capability, one relates to leadership (if applicable) and two relate to the *way* we work. Below are the general expectations that are the minimum standards expected of all staff. There are also expectations that specifically relate to the career step associated with the role; you can find these on GNS Online.

Technical capabilities

Scope, complexity and innovation

- Enduring commitment to maintaining and developing skills and knowledge in area of expertise.
- Both the ability and desire to apply appropriate rigour, principles and practices to deliver quality work in a cost-effective manner.
- Acts in a manner that conveys high personal and professional standards.
- Open to coaching and feedback – incorporates suggestions to find better ways of doing things (to improve own and GNS Science performance).

Contribution to GNS Science / profession

- Establishes and maintains effective and collaborative working relationships – with colleagues and external individuals and groups.
- Both the ability and commitment to work in a culturally responsive and inclusive manner; respecting and valuing the diverse perspectives of individuals and groups.
- Takes an interest in early career colleagues, graduates and students – provides coaching and/or mentoring as appropriate. Supports initiatives to promote science careers.
- Prevents harm to self and others by carrying out duties safely and responsibly.

Delivery of work

- The ability and commitment to deliver pieces of work and projects on time to required quality, cost and benefit parameters.
- The application of appropriate project management rigour, principles and practices to delivering quality projects in a cost-effective manner.

Behavioural expectations

Manaakitanga – we do the right thing

Champions a positive working culture. Works and interacts with colleagues, external partners, stakeholders and customers in a way that is consistent with our values:

- We are **CONNECTED** in our purpose; with each other, with partners and stakeholders and with our communities.
- We are **INSPIRED** by our work to explore, challenge, innovate and aim higher.
- We are **EMPOWERED** to be our best – valued for our differences, encouraged to contribute and enabled to grow and develop.

Bicultural commitment

- As a Crown Research Institute, GNS Science is committed to partnering with iwi/hapū and Māori communities and agencies to achieve their science aspirations.
- We do this in a way that is culturally appropriate (**tikanga**) and honours Māori and non-Māori worldviews (**te ao**).

These expectations are intended to support and guide the development of individual staff.