

POSITION TITLE:	Senior Surface Water Scientist		
GROUP:	Integrated Catchment Management	SECTION:	Environmental Science
REPORTS TO:	Team Leader- Hydrology and Groundwater Science		
RESPONSIBLE FOR:	n/a		
FAMILY:	TP2	GRADE:	18
DATE REVIEWED:	January 2023	JOB NUMBER:	22-697

HBRC STRATEGY

Our Vision:

We want a healthy environment and a resilient and prosperous community.

Our Purpose:

We work with our community to protect and manage the region's precious taonga of rivers, lakes, soils, air, coast and biodiversity for health, wellbeing and connectivity.

Our Values:

- **Partnership and Collaboration:** We work with our community in everything we do
- **Accountability:** We hold ourselves to account to deliver results, be responsive to community expectations, and the best use of ratepayers' funds and assets
- **Transparency:** We report on what we do and the value this delivers for our community
- **Excellence:** We set our sights and expectations high, and never stop striving to do better

Our Focus:

- **Water quality, safety and climate-resilient security** ~ *Te kounga o te wai, te haumarutanga me te mārohirohi ā-āhuarangi o te whakamarutanga.*
- **Climate-smart and sustainable land use** ~ *Kia koi, kia toitū hoki te whakamahinga o te whenua.*
- **Healthy, functioning and climate-smart biodiversity** ~ *kio ora, kia āhe, kia mārohirohi ā-āhuarangi hoki te rerenga rauropi.*
- **Sustainable and climate-resilient services and infrastructure** ~ *kia toitū, kia mārohirohi ā-āhuarangi hoki ngā ratonga me ngā hanganga ā-whare.*

POSITION SUMMARY

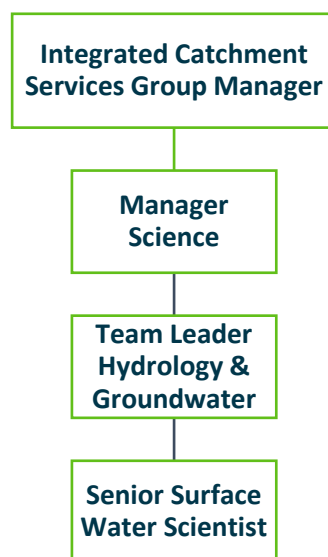
The position of Senior Surface Water Hydrology contributes to the activities and functions outlined below to help the Environmental Science Section achieve its objectives. These requirements will make use of technical skills gained through education and experience. This position focuses on the providing the technical evidential basis that will assist with the management of surface water resources in the region, specifically surface water quantity, to deliver information that helps manage regional natural resources. The role is a technical expert, managing complex projects and providing information to other section in Council to support sustainable resource management. Expectations will be regularly discussed – these will be fair and reasonable and within the framework outlined in this job description.

GROUP AND TEAM GOALS:

The Environmental Science section provides the following role and functions as part of the Integrated Catchment Management Group:

- Provides the scientific expertise required to meet the goals and objectives of Hawke's Bay Regional Council's (HBRC) Annual and Long Term Plan in an efficient manner
- Designs and conducts a variety of scientific and environmental investigations into environmental processes and drivers in an effective and efficient manner
- Analyses data and interprets results to provide verbal advice and a range of written reports, including State of the Environment reports
- Provides effective and high quality input to HBRC's policy development, planning and regulatory activities
- Maintains effective working relationships with other sections in HBRC
- Maintains quality standards, including ISO9001:2015 accreditation for all activities undertaken by the Science Section.

ORGANISATIONAL CONTEXT



JOB SPECIFIC ACCOUNTABILITES

The role of Senior Surface Water Scientist is to provide relevant, professional input into the roles and functions as outlined above in order to ensure the Environmental Science section achieves the above aims. The Senior Surface Water Scientist is a technical expert who specializes in one or more of the following functions:

- Hydrology data scientist – the manipulation of large data sets for use in specialised modelling software
- Hydrology in water policy – focus on providing strategic direction to water quantity management in Hawke's Bay
- Hydrology and thermodynamics – specific implications of climate change for water resource management

This will be achieved by:

- Providing technical input during the development of HBRC's scientific research and investigation programmes.
- Ensuring that scientific analysis is accurate and timely and is presented appropriately for the target audience.
- Ensuring that all reporting and technical report writing is completed within agreed timeframes and to an excellent standard.
- Ensuring a collaborative approach to engagement with stakeholders and community groups, demonstrating enthusiasm and respect.
- Providing input to HBRC's policy development, planning and regulatory activities.

- Building and maintain relationships with other sections of HBRC, prioritising cooperation and collaboration.
- Ensuring that appropriate services are provided to external customers as required.
- Ensuring that communications on science and science-related topics are delivered effectively to both technical and non-expert audiences.

These functions add value to HBRC’s hydrological monitoring network. The role will also include activities that extend and provide for individual professional development. Expectations will be regularly discussed with you and expectations will be fair and reasonable and within the broad requirements outlined above.

FUNCTIONAL RELATIONSHIPS

Internal

- Group Managers
- Executive Team
- Elected members
- Team members

External

- Consultants and contractors
- Government agencies and departments
- Local authorities
- Technical and legal professionals
- Iwi and other community groups
- Members of our community

COMMUNITY RELATIONSHIPS

Fostering good working relationships is fundamental to the successful achievement of strategic goals for HBRC. We know we can’t achieve change without the people (our community) outside our business. As expressed under our purpose statement, “working with our community” is at the heart of everything we do. This is particularly relevant to our relations with Tāngata Whenua in terms of co-governance and co-management. Successful relationships involve building trust. Which in turn enables us to support each other to respond to new challenges as they arise.

This means:

- Professional attitude is projected at all times in dealing with external contacts.
- Information is accurate and is provided in a timely manner.
- Outcomes that are fair and clearly understood by both parties are achieved
- Customers are satisfied with responses to written or verbal requests for information.

CONTINUOUS IMPROVEMENT

All Hawke’s Bay Regional Council (HBRC) staff are expected to actively and enthusiastically promote the concept of continuous improvement in their work for HBRC. This means:

- Maintaining a positive overall attitude in the workplace, including promoting HBRC in a positive manner, as assessed by your peers and Manager
- Taking part in training opportunities provided by HBRC with an open mind, as assessed by pre and post training meetings with your Manager.
- Practicing the skills provided in training offered by HBRC, as assessed by regular feedback meetings with your Manager.
- Showing a strong team commitment, as indicated by peer feedback and your Manager’s assessment.
- Practicing the concept of continuous improvement by showing initiative with new ideas and positively acknowledging other ideas.
- Giving honest and open feedback as and when required, aiming to constructively deal with all issues, as assessed by regular feedback meetings with your Manager.
- Deliver on project outcomes: on time and on budget.
- Displaying sound judgment and making responsible decisions.
- Working to high quality standards and where applicable contributes to maintenance of ISO 9001:2015 accreditation of the Quality Management System.

HEALTH AND SAFETY

All staff are expected to follow established health and safety procedures while working for HBRC, and in accordance with policies developed by HBRC. This means:

- Complying with and adhering to HBRC's accepted standards and procedures.
- Where appropriate, taking responsibility for workplace hazards/risks you identify and communicated to management.
- Undertaking regular reviews of workplace risks/hazards that are present in your work.
- When, and if, necessary, participate in the investigation of accidents/incidents according to HBRC procedures.
- Undertaking appropriate and effective staff training when required or necessary.
- Promoting a healthy and safe workplace.
- Actively supporting health and safety initiatives.
- Comply with any rehabilitation plan designed with you for a return to work after an accident.

EMERGENCY MANAGEMENT

When a Civil Defence event happens, you may be required to assist with carrying out the Council's Civil Defence responsibilities after providing required support for your family and dependants. All HBRC staff are expected to undertake such Emergency Management functions as are determined appropriate to meet HBRC's role and function in this area. This means:

- Undertaking such a role as is allocated for emergency management requirements.
- Participating in such exercises as are required to maintain a state of preparedness in HBRC.
- Responding to such requests to assume an emergency management role as are required by events.
- Understanding the contents of the relevant section of the Business Continuity Plan (BCP) and its implications for your role.
- Where the requirements of the role require it, review the relevance of the BCP for your team, section or Group on a regular basis.

PERSON SPECIFICATION

Minimum Qualifications and Experience required

- Recognised tertiary qualification in an environmental science or engineering discipline, with a specific hydrogeology post-graduate qualification.
- At least five years relevant experience, that demonstrates:
- Familiarity with methods for determining surface water flows and environmental and minimum flow statistics,
- Experience with hydrological and hydrogeological modelling.
- A thorough understanding of surface water hydrology field practices and techniques.
- An ability to design and manage routine monitoring programmes.
- An ability to design, implement and/or manage the development of numeric models required for assessment and management of water resources, with emphasis on managing the quantity and allocation of surface water
- Previous experience effectively managing complex (multi-disciplinary, multi-agency and multi-objective) technical projects.

Knowledge

- Specific knowledge in surface water modelling and allocation
- Recognised tertiary qualification in an environmental science or engineering discipline, with a post-graduate qualification specialising in hydrology, hydraulics, eco-hydrology, data science, or related fields.
- Knowledge of nonstationary / shifting baselines and implications of global change for water resource management.

- Specific knowledge of the translation of fine-scale physical processes to regional-scale water management.
- Understanding of the Resource Management Act, with an understanding of implementation of this legislation through Regional Council policies, plans and rules and their relationship to resource monitoring, research and investigations.
- Understanding of tangata whenua values and their interaction with instream flow values.
- Knowledge of recent developments in New Zealand water resource management, including the National Policy Statement for Freshwater Management and the limit-setting process, the National Objectives Framework and the National Environmental Monitoring Standards.

Skills

- At least 5 years relevant experience, including a subset of the following:
 - Design and management of routine hydrology monitoring programmes, including the ability to clearly and logically define information and data requirements ("what", "where", "when" and "how").
 - Methods and techniques for measuring river flows and surveying physical habitat.
 - Semi-distributed or distributed rainfall-runoff modelling, along with modelling of constituent fate and transport in surface water bodies.
 - Analysis and modelling of spatial and time-series river-flow data.
 - Manipulating big data sets (temporal and/or spatial environmental datasets) for use in specialised modelling software using scripted languages.
 - Thermodynamics of aquatic systems, including groundwater and rivers, to inform management of water resources under a changing climate.
 - Communicating science, including interpretation of complex analyses for technical and non-expert audiences. Engaging stakeholders on resource management matters.
 - Science informing policy to help communities resolve conflicts between instream and abstractive water use
 - Managing complex, multi-disciplinary technical projects.
 - Contract management.

Advanced computer skills are essential, including a subset of the following:

- Intermediate skills in at least one specialized software package that is relevant to the role, such as modelling hydraulic habitat, oxygen reaeration, sediment transport, surface water-groundwater interaction, catchment runoff or nutrient pathways.
- Competency with the Hilltop Hydrological software suite or similar for data management and time-series analysis.
- Competency with at least one statistical software package.
- Intermediate to advanced skills with the Microsoft Office software suite.
- Competency with the ESRI GIS software suite.
- Experience with scripted languages (e.g. R software, Python) and high performance computing.

Excellent report writing with significant experience and ability in:

- Preparation and delivery of reports that meet a diverse range of client requirements.
- State of the Environment reporting.
- Preparing and delivering scientific evidence for regulatory panels.
- Good presentation skills to diverse audiences.

Personal Attributes

- Ability to work in the field assisting and directing team members as required.
- Current driver's licence.
- Confident working in and around water.
- Accountability and professionalism is clearly evident.
- All work is completed in an effective and timely manner.

Awareness

- Demonstrated awareness of Te Tiriti o Waitangi and including Te Reo Māori in relevant and practical ways in interaction and engagement to demonstrate respect and value of Tikanga Māori in appropriate settings.

CHANGES TO JOB DESCRIPTION

From time to time it may be necessary to consider changes in the job description in response to the changing nature of our work environment. Such changes, including technological requirements or statutory changes, may be initiated by the manager of this job with due consultation with the position holder. This job description should be reviewed as part of the preparation for performance planning for the annual performance cycle.

ACKNOWLEDGEMENT

I have read this job description and fully understand the requirements set forth therein. I understand that this is to be used as a guide and that I will be responsible for performing other duties as assigned. I further understand that this job description does not constitute an employment contract with Hawke's Bay Regional Council.

Employee Signature

Date

Printed Name