



## JOB DESCRIPTION FORM

Department of Water

### 1. POSITION DETAILS

<b>POSITION:</b>	<b>Senior Scientific Officer</b>	<b>POSITION NUMBER:</b>	11622
<b>DIRECTORATE:</b> <b>DIVISION:</b> <b>BRANCH/REGION:</b> <b>SECTION:</b>	Science and Planning Water Allocation and Assessment Water Resource Assessment	<b>CLASSIFICATION:</b>	Specified Calling Level 3
<b>DATE CLASSIFIED</b> <b>DATE REVIEWED</b>	August 2015	<b>LOCATION:</b>	Perth CBD
<b>INDUSTRIAL AGREEMENT/ AWARD:</b>	Public Service and Government Officer General Agreement 2014 Public Service Award 1992		
	<b>Position: PN11185 Senior Hydrogeologist</b>	←	<b>Other officers accountable to:</b>
	↑ <i>accountable to</i>		Various
	<b>THIS POSITION</b>		
	↓ <i>accountable for</i>		
	<b>Direct Subordinates</b>	<b>Level</b>	<b>No of Subordinates</b>

### 2. KEY WORK DESCRIPTION

The Water Resource Assessment Branch work program includes investigation and assessment of the quality, quantity, reliability and sustainability of all aspects of groundwater resources to support groundwater management and the effective and efficient delivery of the department's priority business.

Senior Scientific Officer – Groundwater Modelling is responsible for developing and maintaining groundwater models including the analysis and review of these models. Activities in this office include but are not limited to:

- Applying valid scientific techniques using extensive data sets to the conceptualisation, design, implementation and maintenance of numerical groundwater models. Including contributing to the business case, model specification and contract management of groundwater modelling projects.
- Providing clear and concise analysis of data through modelling, working closely with management to ensure the delivery of quality solutions to meet stakeholder needs and reporting accuracy.
- Understanding and applying the principles of the Australian groundwater modelling guidelines (Barnett et al., 2012).

### **3. ORGANISATIONAL CONTEXT**

The Department of Water (DoW) is a dynamic agency and is committed to the management of the State's water resources for sustainable and productive use. We support Western Australia's growth and development by managing the availability and quality of water – now and for the future.

Our goals are:

- Water needs for population and economic growth are met now and for the future;
- Western Australia has contemporary and adaptive water management; and
- Western Australia meets national standards in water efficiency and demand management.

### **4. WORK DESCRIPTION**

In the Department, Scientific or Environmental Officers perform a range of water related tasks including field and survey work, laboratory analysis, interpreting results and preparing technical and scientific reports. Scientific Officers manage the decision making process in determining water availability for ground and surface water areas, including synthesis of information to inform decisions and the establishment of management frameworks to implement decisions.

Scientific (Environmental) Officers study, assess and develop methods to assess, protect or recover water and waterways to best meet social, economic and environmental needs. They conduct research into the environmental processes related to water, and play an important role in assessing the potential impact of water development on environmental, social and cultural values. Scientific Officers assess, monitor and provide professional and technical advice on the link between water and the environment in a changing climate.

SCL3 Officers are referred to as senior officers. They have considerable experience and knowledge. SCL3 Officers are often team leaders supervising and managing the work of others. They ensure that resources are available, that work follows approved procedures, and contribute to the review and development of operational policy and process. SCL3 Officers also contribute to strategic planning processes but mostly are responsible for operational outcomes usually within a specific area, project or specialisation. SCL3 Officers have a combined management and professional role. They undertake complex and specialised tasks within their profession and mentor and manage the work of other less experienced or knowledgeable staff.

#### **General Features/Activities**

- Carries out investigation, research, analysis and evaluations under limited direction.
- Provides detailed consultation and advises on policy matters.
- Devises and documents procedures for complex investigations.
- Negotiates on behalf of Directors and senior officers.
- Reviews and recommends policy changes.
- Interprets the results of research/analysis carried out by junior officers.
- Coordinates and instructs professional and support staff.
- Reviews and prepares reports, research and/or technical papers for use by management and/or publication on more complex investigations.
- Coordinates and instructs professional and support staff as a project leader.
- Advises on planning major projects and equipment purchase programs.
- Liaises at a high professional level with officers of other Divisions and Departments.
- Liaises with outside bodies, including making public presentations of results of investigations.

### **Governance and Accountabilities**

Complies with public sector legislative requirements and departmental policies, procedures, including exercising given delegations.

In this regard particular attention is given to the application of:

- The guidelines and principles of the *Western Australian Public Sector Code of Ethics* and the Department's Code of Conduct within a framework of high ethical standards and behaviours.
- Appropriate Occupational Safety and Health and Equal Opportunity legislation and plans, policies, standards and practices.

## **5. WORK RELATED REQUIREMENTS**

*This section outlines a mix of pre-employment requirements and competencies or criteria required of an individual in this position. The following is to be read in the context of the preceding sections of this document.*

### **ESSENTIAL CRITERIA**

#### **Qualifications**

- A Bachelor of Science Degree, in a scientific discipline appropriate for the role/responsibilities described in this Job Description Form, or an approved equivalent.

**Candidates possessing international qualifications must provide assessment by the Overseas Qualification Assessment Unit (OQU) from the Department of Workforce Development and Training WA or QQU assessment from another state as comparable to the educational level of an Australian Bachelor degree.**

*Approved equivalent qualifications' require the approval of the Executive Director Labour Relations, Department of Commerce as equivalent qualifications to the Bachelor of Science.*

#### **Role Specific Knowledge**

- A strong background in numerical modelling with substantial experience in modelling groundwater resources.
- Demonstrated technical experience in the development and operation of numerical groundwater models.
- Computer proficiency in using the standard MS Office suite, GIS and specialist modelling software such as MODFLOW, FEFLOW, PMWIN and PEST.

#### **Builds productive relationships**

- Demonstrated ability to work constructively as a member of a team to achieve objectives
- Demonstrated ability to work with a wide range of stakeholders including government agencies, community groups and private enterprise.

#### **Shapes and Manages Strategy**

- Demonstrated ability to plan and manage the work and outcomes of others, including the management of resources.

- Demonstrated ability to monitor and manage individual and project performance
- Oversees, teaches, and coaches others on methodologies and best practices for numerical groundwater modelling.
- An ability to implement strategies to meet priorities, deadlines and departmental objectives.
- Demonstrated experience in developing, reviewing and implement policy, process and procedure.
- Contributes proactively to advancing and improving numerical groundwater modelling, data provision, and ways of working internally and externally.
- Acquires new knowledge and skills in groundwater data analysis and modelling. Including keeping abreast of new developments and future trends in the areas of software technology and tests and recommend new groundwater modelling directions.

#### **Achieves Results**

- Demonstrated ability to plan and manage field/research and related project work with limited direction

#### **Communicates and influences effectively**

- Communicates effectively and provides senior level of representation and negotiation.
- Describes the purpose and limitations of groundwater models to technical and non-technical audiences.
- Provides expert groundwater modelling advice to hydrogeologists within the Water Resource Assessment Branch.
- Speaks effectively in public, interacting with water industry stakeholders and other senior officers across a wide variety of organisations.

#### ***DESIRABLE CRITERIA***

- Degree or equivalent experience in Statistics, Mathematics, Physics, Geology, Geophysics, Hydrogeology, Environmental Science/Engineering or related quantitative field of study or equivalent combination of education and experience.
- Experience in hydrogeology or geology, would be beneficial but not required.

## **6. SPECIAL EQUIPMENT/REQUIREMENTS**

#### **Drivers License**

- Current driver's licence, accepted in Western Australia, to enable the undertaking of field work.

## **7. POSITION CERTIFICATION**

The details contained in this document have been reviewed and conform to the Department's guidelines for the creation and classification of positions.

### **SIGNATURE**

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**MANAGER HUMAN RESOURCE SERVICES**

**DATE**

The details contained in this document are an accurate statement of the position's responsibilities and requirements.

### **SIGNATURE**

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**EXECUTIVE DIRECTOR**

**DATE**