WATER RESOURCES TECHNICIAN

DEFINITION

Under general direction, collects, stores and maintains water resource data; conducts technical evaluations and analyses, and prepares a variety of technical reports related to water resources programs, projects and management; and performs other related work as is required.

DISTINGUISHING CHARACTERISTICS

Water Resources Technician is the technical level position. Incumbents perform difficult technical assignments involving data collection, analysis and interpretation; water conservation, water demand analysis and construction, resource management; and assist professional staff with database management and analysis. This class has significant public contact and requires the use of judgment and initiative.

This class is distinguished from the higher class of WRA Water Resources Engineer in that the latter is the full working level in the WRA Water Resources Engineer class series responsible for a variety of water resource engineering field and office work in the design, construction, modification and maintenance of flood control and water projects and related maintenance projects, and assists in the training and direction of entry level professional and technical support staff on a project and/or assigned basis.

This class is further distinguished from the higher class of Hydrologist in that the latter is the first professional level in the Hydrology career series responsible for performing professional level work in the collection, analysis, processing and interpretation of hydrological and geohydrologic data and tasks, and assists in the coordination and supervision of field data collection efforts.

EXAMPLES OF DUTIES

Nothing in this specification restricts management's right to assign or reassign duties and responsibilities to this job at any time.

1. Locates and registers wells and water systems; maintains water system registration data

2. Gathers, compiles and enters water system and agricultural water use data into computer programs; develops and implements a computer database for such data; maintains and updates files and records

3. Collects, analyzes and interprets hydraulic and hydrologic data, i.e. surface and ground water data; some positions may act as either a team leader or team member when group projects are undertaken

4. Interprets ordinances and standards for compliance in water resources matters; develops procedures and forms relating to water resources management

5. Reviews land development proposals and recommends conditions consistent with Federal, State and local regulations; reviews and comments on project proposals and environmental assessment documents

6. Provides information concerning development regulations and flood control measures, the National Flood Insurance Program and the Flood Plain Ordinances

7. Develops GPS-based Map Data Capture technologies and prepares maps displaying data

8. Performs field inspections and special technical studies

9. Assists water suppliers and users with conservation programs; compiles and prepares water use reports on water consumption

10. May make public information presentations regarding water resources, water conservation and water usage

11. Assists in the design and calculations of water resources engineering projects.

QUALIFICATIONS

A combination of experience, education, and/or training which substantially demonstrates the following knowledge, skills and abilities:

Knowledge and Skills:

Working knowledge of:

1. Personal computer database management and methods; computerized drawing techniques

2. Nomenclature, symbolism, methods and practices, techniques and instruments used in water resources engineering and management work

3. Advanced mathematics, including Algebra, Geometry, Trigonometry and Statistics; hydraulic engineering calculations

4. Water conservation methods related to agricultural, municipal and industrial water needs

5. Development services review and standard construction techniques and methods related to water resources, drainage and flood plain issues.

Some knowledge of:

1. California water codes and related laws and regulations.

Skill and Ability to:

1. Perform complex mathematical calculations, i.e. Algebra, Trigonometry, and Statistics.

2. Collect, analyze and organize information for input to computer models

3. Read and interpret maps, aerial photographs, photos, engineering and construction plans, regulations and ordinances

4. Use computerized drawing and analysis software

5. Communicate effectively, both orally and in writing, to prepare reports and technical documents, and speak before groups

6. Follow oral and written directions and instructions

7. Establish and maintain cooperative work relationships with those contacted in the course of work; provide excellent and courteous customer service.

REQUIRED CONDITIONS OF EMPLOYMENT

As a condition of employment, the incumbent will be required to:

1. Possess a valid Class C Driver's License, (or) the employee must be able to provide suitable transportation that is approved by the appointing authority.

2. Possess and maintain a satisfactory driving record.

3. Work under adverse conditions such as inclement weather, dust or silica dust, heat, fire or steam, wind, or environments subject to sudden changes and/or extremes in air temperature, pressure or humidity, work outdoors, on uneven and/or slippery and/or wet ground surfaces, at elevations above ground level, in confined or extremely small work spaces, come into contact with water, petroleum products, lubricants, cleaning solutions or solvents, toxic fumes, liquids or gases, allergens, chemical products requiring MSDS sheets, plant, animal or food material or waste, around moving machinery, vehicles, equipment, hand and/or power tools, electricity, vibration, and in extremely noisy environments.

4. Be available to work weekends, evenings, shifts, and holidays during storm monitoring duty, and during times of emergency and/or disaster situations.

5. Wear and use safety clothing and equipment as required, i.e. safety glasses, gloves, etc.

EXAMPLES OF EXPERIENCE/EDUCATION/TRAINING

Any combination of training, education and/or experience which provides the knowledge, skills and abilities and required conditions of employment listed above is qualifying. An example of a way these requirements might be acquired is:

EXPERIENCE

Three years of experience performing duties involving water supply projects, hydrology, water resource management, water-related development review, flood plain management, developing and maintaining databases, and interaction with the public.

OR

EDUCATION

Completion of all coursework leading to a Bachelor's degree in Engineering, Geology, Water Resources Management, Environmental Sciences, or a closely related field.

PHYSICAL AND SENSORY REQUIREMENTS

The physical and sensory abilities required for this classification include:

1. Ability to sit for up to approximately eight (8) hours time working at a personal computer terminal and performing other duties.

2. Ability to stand in one position without significant movement for up to 2 hours per workday performing duties.

3. Ability to walk approximately up to 6 hours per workday performing duties.

4. Some positions may require the ability to lift, pull and/or carry stream measuring equipment and materials weighing up to approximately 80 pounds.

5. Ability to see well enough to read standard text and data on electronic screen of a personal computer terminal, and apply visual color discrimination and depth perception.

6. Ability to hear in a typical office environment and/or in a noisy outdoors field site environment.
7. Ability to verbally communicate in a typical office environment or project voice that can be heard in a noisy outdoors field site environment.

8. Physical dexterity to function in a typical office environment, and some positions may require body mobility to walk on uneven, elevated, slippery or wet ground surfaces to reach stream worksites to conduct testing.

9. Eye and hand coordination to drive a vehicle to and from work and field test sites, and some positions may require manual dexterity to use weight apparatus and perform hydrologic water testing.

10. Sense of smell to detect and/or distinguish between normal odors and controlled substances.

CLASS HISTORY	**CLASS DATA**		
Class Code:	43B09	Job Group:	13
Established Date:	August 1999	EEO Category:	T
Revised Date:	May 2001; May 2004	Work Comp. Code:	8810
Revised Date:	October 2013	Bargaining/Employee Unit:	J
Former Title:	Hydrology Tech.	FLSA:	N
	Water Conversation Tech.		
	Water Quality Tech.		

Prepared by:

Approved by:

/s/ Kim Moore
Human Resources Department

6/27/2014
Date