

## **WATER RESOURCES ANALYST I/II**

### **DEFINITION**

Under general direction, plans, organizes and performs professional planning and research work related to water demand and groundwater management, water supply planning, and other water resource planning tasks; analyzes data and prepares reports on water resources issues; and performs related work as required.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general direction from the Water Resources Manager. Exercises no direct supervision of staff.

### **CLASS CHARACTERISTICS**

#### **Water Resources Analyst I**

This is the entry-level class within the professional Water Resources Analyst series. Individuals in this class perform a wide range of water resources program duties, initially under close supervision. As experience and proficiency are gained, assignments become progressively more diversified while supervision gradually decreases. As experience is gained, assignments become more varied and are performed with greater independence. Assignments may vary with skill and training of the incumbent. This class is flexibly staffed with the Water Resources Analyst II and incumbents may advance to the higher level after gaining the knowledge, skills, and experience which meet the qualifications of the higher-level class and after demonstrating the ability to perform the work of the higher-level class. Advancement from the Water Resources Analyst I level to the Water Resources Analyst II level is in accordance with District policies and procedures, including receiving recommendation for advancement from the respective Department Manager or designee.

#### **Water Resources Analyst II**

This is the journey-level classification within the professional Water Resources Analyst series. This class is distinguished from the Water Resources Analyst I by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise. Individuals in this position typically have two years of experience in the field of water resources and have achieved proficiency in a wide range of professional water resources and conservation duties. Positions may be filled by advancement from the Water Resources Analyst I level, or by recruiting an outside candidate with substantial proficiency in a wide range of water resources duties. Adequate performance at this level requires the knowledge of departmental or office procedures and precedents and the ability to choose among alternatives in solving many problems. A Water Resources Analyst II is expected to work productively in the absence of a supervisor.

Work is normally reviewed upon completion and for overall results. This class is distinguished from the Water Resources Manager in that the latter is a management positions and has overall responsibility for the Water Resources Division's functions, programs, and activities.

**EXAMPLES OF DUTIES** (Illustrative Only):

- Using a variety of computer systems, databases and other tools, researches, collects, receives, compiles, integrates and analyzes information and data in support of water resources planning, water supply development, environmental planning, capital improvement projects, growth projections, environmental studies, demographic analyses, and other water management programs.
- Develops methods and procedures for data collection of water resources information related to water use, water billing, water rates, water management programs, water quality, and water conservation; maintains and develops computerized databases on water resources planning information requirements.
- Conducts economic, financial, water quality, and water use analyses and studies in the areas of groundwater development, surface water, recycled water, wastewater, conservation, water reclamation, conservation and demand forecasting, and other water-related data; interprets results and participates in the formulation of recommendations for actions and programs; coordinates and monitors the work of assigned project consultants and contractors; reviews, evaluates and critiques work products of consultants and contractors.
- Prepares comprehensive reports and technical research for presentation and/or publication; prepares maps, charts, graphs, diagrams and factsheets.
- Analyzes and tracks a variety of water resources programs; develops and maintains working relationships with staff of a variety of other local and regional agencies on water resource matters; keeps abreast of technologies and programs in water resource planning; recommends, develops, and coordinates implementation of such programs; serves as liaison between the District and other government agencies at the local, state and federal levels.
- Assists in the formulation of the District's Water Resources Plan and Urban Water Management Plan through data collection and analysis in the areas of demand forecasting, historical trends in water use and hydrology, water conditions and quality, water savings, rate structures, and water supply economics.
- Administers appropriate databases including spatial data; collects and compiles critical data in a variety of formats to generate and document alternatives for comparison.
- Analyzes availability and feasibility of grant funding for water resource planning programs and initiatives; completes grant applications to secure funding; ensures all reports and program budgets required by grant programs are completed as required.
- Develops and evaluates computer-generated statistical models of a variety of interdependent variables, using extrapolative and econometric methods to forecast water resource requirements in the District's service area; develops future water resource utilization scenarios and forecasting and explanatory models of water demand.
- Ensures that research and forecasting methodologies utilize optimum research techniques.

- Performs a wide range of professional level analyses in support of ongoing and ad-hoc reporting requirements, as assigned.
- Designs and develops report formats based on presentation style and to meet management information needs; works with Information Technology and other departments to develop or modify systems to analyze and develop required data.
- Coordinates with internal stakeholders, consultants, other agencies, and developers to communicate District policies and requirements for project initiations and development; partners with external agencies and businesses and collaborates on water quality and conservation issues; coordinates program administration with local and state agencies.
- Presents technical project and policy information to internal and external stakeholders and to the public.
- Maintains necessary records; prepares oral and written reports.
- Perform related duties as assigned.

## **QUALIFICATIONS**

### **Knowledge:**

- Principles, procedures, standards, practices, trends and information sources in the field of water resources planning and water conservation.
- Research and statistical methods and techniques, cost estimation, and budget administration.
- Application of ordinances, legislation, policies, standards, procedure and historical practices associated with water resources planning.
- Terminology, symbols and techniques used in water resource planning.
- Applicable federal, state and local laws and regulations.
- Applicable state and regional organizations.
- Current techniques, practices, and institutional processes related to water conservation.
- Practices, methods, and techniques of researching water quality issues, evaluating alternatives, making sound recommendations, and preparing and presenting effective staff and other reports.
- Principles and procedures of record-keeping, technical report writing, and preparation of correspondence and presentations.
- Principles and practices of public information services.
- Modern office practices, methods, and computer equipment and applications related to the work.
- Occupational hazards and standard safety practices and equipment related to the work, including safe driving rules and practices.
- English usage, spelling, vocabulary, grammar, and punctuation.
- Techniques for effectively representing the District in contacts with governmental agencies, community groups, and various business, professional, educational, regulatory, and legislative organizations.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.

**Ability to:**

- Accurately collect, assemble and interpret data from multiple sources applicable to water resources planning, prepare accurate cost estimates, plans, budgets, schedules, specifications, and reports.
- Participate in technical projects and studies.
- Identify relevant issues and problems, develop alternatives and make sound recommendations.
- Prepare clear, concise and accurate reports, correspondence and other written materials.
- Understand, interpret, apply, and explain District policies, regulations and programs, federal, state and local laws applicable to water resources planning.
- Participate in the selection of consultants, review work products and coordinate consultant work.
- Understand legal and statistical data in technical reports.
- Perform water resource management and water quality analyses using computer models, GIS, and multiple databases.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities and meet crucial time deadlines.
- Operate modern office equipment including computer equipment and specialized software applications and programs, including specific spreadsheet and database programs at an intermediate to advanced level.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy and legal guidelines.
- Establish and maintain effective working relationships with those contacted in the course of the work.

**Education/Experience**

Any combination of education, experience and training that would provide the required knowledge and abilities. A typical way to obtain the minimum knowledge and abilities would be:

**Education:**

Equivalent to a Bachelor's degree from an accredited college or university with major course work in natural or physical sciences, environmental or civil engineering, economics, natural resources management, urban or regional planning, public or business administration, or a related field.

**Experience:**

Water Resources Analyst I: One (1) year of experience in professional water resources programs.

Water Resources Analyst II: Three (3) years of professional experience in water resources programs or two (2) years of experience equivalent to Water Resources Analyst I at the District.

**License or Certificate:**

- Must possess and maintain a valid California class C driver's licenses and have a satisfactory driving record.

**PHYSICAL DEMANDS**

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to visit various District facilities and development sites; to operate a motor vehicle and to visit various District and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 25 pounds.

**ENVIRONMENTAL ELEMENTS**

Employees work predominantly in an office environment with moderate noise levels and controlled temperature conditions, and occasionally in the field and may be exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives and contractors in interpreting and enforcing departmental policies and procedures.

FLSA Status: Non-Exempt – Eligible for overtime

Bargaining Unit: Marina Coast Water District Employees Association