

## **EXHIBIT 4-B**

### **MONTEREY PENINSULA WATER MANAGEMENT DISTRICT**

#### **HYDROGRAPHY PROGRAMS COORDINATOR (PROPOSED)**

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

#### **DEFINITION**

To oversee surface water related programs and services; to perform the most difficult technical hydrographic activities required for the collection and processing of hydrologic data used for water management programs, with emphasis on the District's streamflow monitoring program; to design, install and maintain streamflow gaging stations; to provide hydrologic and weather information to the public, government agencies, and other organizations; to develop the annual budget for all surface water data collection programs; and to perform a variety of technical tasks relative to assigned areas of responsibility.

#### **DISTINGUISHING CHARACTERISTICS**

This is one the two most technically advanced classes in the job families related to hydrology. Positions at this level are distinguished from other hydrology classes by the performance of the most technically advanced professional-level research studies and/or managing the more complex District projects. It is distinguished from the Senior Hydrologist class by its responsibility as coordinator of the District's hydrologic and surface water measurement and data measurement program and associated hydrographic measurement and analysis.

#### **SUPERVISION RECEIVED AND EXERCISED**

Receives direction from the Senior Hydrogeologist.

May exercise functional and technical supervision over lower level staff as project leader.

#### **ESSENTIAL AND MARGINAL FUNCTION STATEMENTS**

*The following duties are typical for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:*

#### **Essential Functions:**

1. Plan, schedule, and perform all work related to the District's hydrologic and surface water measurement and data measurement programs. Programs and activities include: perform facility maintenance and improvement projects; diagnose problems and estimate labor and materials; collect, review, analyze, and manage various data, including precipitation, streamflow, reservoir, lagoon, high-flow measurement, and station rating curves.
2. As project leader, train, motivate, and counsel assigned staff; inspect the work of staff to determine the most effective training action; instruct staff in work methods and procedures; prepare annual work plans.
3. Serve as database administrator for the hydrologic database; operate and maintain specialized data processing equipment and software; serve as technical expert on open channel surface flow measurement; provide final review and technical guidance for annual surface water records computation.

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4. Serve as District liaison on hydrologic systems issues; make recommendations regarding work to be done, gaging stations to be discontinued, and purchase of equipment and materials; conduct cost analyses; monitor and comply with state and other laws and regulations regarding program activities.
5. Design, install and maintain streamflow gaging stations; perform streamflow measuring and analysis; calibrate, troubleshoot and maintain ALERT streamflow monitoring base stations.
6. Develop low flow release schedules to maintain reliable dry season Carmel River flows.
7. Maintain the spreadsheet calculating and tracking unimpaired flows at the San Clemente Dam site.
8. Perform streamflow recession forecasting at all locations along the Carmel River.
9. Review surface water information developed by District staff and external entities.
10. Design, install and maintain automated telecommunications systems capable of transmitting real-time hydrologic data from gaging stations to District computer servers.
11. Develop and maintain automated processes that upload real-time hydrologic information to the District Website.
12. Oversee and participate in various program activities including preparation of reports; assist with budget preparation and monitoring; present hydrologic data to staff, Board, and public.
13. Respond to requests for information from the public, government agencies, consultants, and other organizations; provide hydrologic and weather information and forecasts to staff, as requested.
14. Attend and participate in professional group meetings, stay abreast of new trends and innovations in the field of surface and ground water resource management and streamflow monitoring.
15. Hike into remote areas to make inspections, measurements and observations and to conduct studies.
16. Collect, analyze, and prepare groundwater resource monitoring data, as directed.
17. Perform related duties and responsibilities as required.

**QUALIFICATIONS**

**Knowledge of:**

Operations, services and activities of a streamflow monitoring program.

Advanced principles and practices of hydrologic, climatic and geologic science.

Advanced field hydrologic, climatologic and biologic data collection techniques.

Stream sedimentation and erosion processes.

Methods and techniques of land surveying.

Computer equipment and software including ALERT instrumentation, software and data collection platforms.

Basic construction skills including carpentry and cement work.

Intermediate mathematics and statistics.

Basic electronics.

Operational characteristics of power and hand tools.

Water quality sampling protocols.

Global positioning satellite systems for mapping.

Chain of custody forms.

Occupational hazards and standard safety practices.

**Ability to:**

Perform professional-level hydrologic and environmental work studies.

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Accurately quantify surface water resources.  
Design, locate, install, operate and maintain streamflow gaging stations.  
Measure all ranges of streamflow and compute continuous streamflow records.  
Independently perform the most difficult streamflow calculations.  
Conduct meetings and serve as District representative.  
Compile and analyze difficult technical and statistical information and data.  
Utilize a computer terminal for data management, data processing and word processing.  
Interpret, explain and enforce District policies and procedures.  
Operate a vehicle and equipment in a safe and effective manner.  
Perform instrument calibration.  
Use proper techniques to acquire water quality samples.  
Complete chain of custody forms for water quality and biological samples.  
Operate GPS equipment to locate wells and other monitoring sites.  
Work independently in the absence of supervision.  
Understand and follow oral and written instructions.  
Communicate clearly and concisely, both orally and in writing.  
Establish and maintain effective working relationships with those contacted in the course of work.  
Maintain physical condition appropriate to the performance of assigned duties and responsibilities.

**Experience and Training Guidelines** — Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

**Experience**

Five years of increasingly responsible surface water resource management experience.

**Training**

Equivalent to a Bachelor's degree from an accredited college or university with major course work in hydrology, geology, environmental sciences, engineering or a related field.

**License or Certificate:**

Possession of, or ability to obtain, an appropriate, valid driver's license.

**WORKING CONDITIONS**

*The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.*

**Environmental Conditions:**

Office and field environment with some travel to attend meetings; work in and around water; exposure to all types of weather and temperature conditions; exposure to poisonous plants, animals, and/or insects; work closely with others and work alone; irregular work hours; exposure to computer screens, atmospheric conditions, and slippery and uneven conditions; working with machinery.

**Physical Conditions:**

Essential and marginal functions may require maintaining physical condition necessary for moderate to heavy lifting and carrying; walking, standing and sitting for prolonged periods of time; bending, climbing and reaching; operating motorized vehicles and equipment.

**Vision:**

See in the normal visual range with or without correction; specific vision abilities required by this job

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include close and distance vision, color perception and depth perception.

**Hearing:**

Hear in the normal audio range with or without correction.

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