

NEVADA IRRIGATION DISTRICT

Job Description

Job Title:	Hydrographer I/II	Reports To:	Senior Hydrographer
Salary Range:	B54 / B74	Approved by Board of Directors:	07/25/2018
FLSA Status:	Non-Exempt	Unit:	Field
<p><i>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.</i></p>			

Definition

To perform professional and technical duties pertaining to the District's water measurement activities, and snow surveys; to install, operate and maintain water measurement, meteorological and telemetry devices; to develop and maintain databases; and to prepare and distribute reports pertaining to water flow.

Distinguishing Characteristics

Hydrographer I: This is the entry level class in the Hydrographer series. Positions in this class typically have little or no directly related work experience. The Hydrographer I class is distinguished from the II level by the performance of less than the full range of duties assigned to the II level. Incumbents work under general supervision while learning job tasks, progressing to direction as procedures and processes of assigned area of responsibility are learned.

Hydrographer II: This is the journey level class in the Hydrographer series and is distinguished from the I level by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the I level.

Supervision Received and Exercised

Hydrographer I

Receives immediate supervision from assigned supervisory personnel. Receives technical and functional supervision from a Senior Hydrographer.

Hydrographer II

Receives general supervision from assigned supervisory personnel. Receives technical and functional supervision from a Senior Hydrographer.

Essential Functions Statements

Essential and other important responsibilities and duties may include, but are not limited to, the following:

1. Maintain stream, canal, and reservoir measuring gages and devices; maintain the proper calibration of equipment; make and pull data measurements through direct field visits.
2. Collect and process data to US Geological Survey (USGS) standards. Develop and maintain station analysis and descriptions; maintain a variety of records and reports related to water measurement.
3. Conduct snow surveys; collect and enter data as a result of survey.

4. Conduct surveys of staff gages and monuments to USGS standards to ensure the correct datum is in use.
5. Ensure hydrographic record is complete for streams, canals and reservoirs to assist with regulatory compliance including the Federal Energy Regulatory Commission (FERC), and the State Water Resources Control Board.
6. Maintain, calibrate and process meteorological data.
7. Install, operate and maintain telemetry instrumentation.
8. Install, calibrate and maintain stream, reservoir, canal, and penstock flow measurement equipment.
9. Participate in special hydrological studies, as assigned.
10. Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.
11. Perform related duties as assigned.

Qualifications

Hydrographer I

Knowledge of:

- Basic principles and practices of hydrographic procedures for the determination of water storage elevations, water flows and snow pack run-off.
- Electronic communications equipment and related components.
- Basic methods, techniques and instruments used in the collection of hydrographic and meteorological data.
- Math, algebra and trigonometry.
- Principles and practices of effective customer service.
- Modern office equipment including use of applicable computer applications.
- Surveying techniques to ensure the proper datum is in use.

Ability to:

- Learn to accurately collect and analyze hydrographic data.
- Learn to generate technical reports in accordance with Federal and State standards.
- Learn to operate, maintain and repair stream gaging equipment.
- Learn to properly use a variety of hydrography equipment.
- Operate and use modern office equipment including a computer and applicable software.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Communicate clearly and concisely, both orally and in writing.

Responsibility to:

- Obey safe work practices, procedures, and regulations including wearing protective equipment and safety devices.
- Operate equipment in a careful and safe manner.
- Acknowledge the use of safeguards by other employees.

- Report any removal, displacement, damage, destruction, or tampering of safety devices, safeguards, notices or warnings.
- Report any safety risks or hazards to your supervisor or other management personnel.
- Report to your supervisor or other management personnel any work assignment that you feel would require you to perform the work in an unsafe manner.

Hydrographer II

In addition to the qualifications for the Hydrographer I:

Knowledge of:

- Construction of gage houses and appropriate control structure designs.
- Basic electronics and field troubleshooting practices.
- Terminology, methods, practices and techniques used in the collection and compilation of technical data and preparation and publication of reports.
- Methods, techniques, maintenance and installation of instrumentation used for collecting and transmitting hydrographic and meteorological data.
- Principles and practices of conducting snow surveys and forecasting runoff.
- Pertinent Federal, State and local laws, codes and regulations.

Ability to:

- Perform technical duties involving the collection, tracking and publication of data and the installation, maintenance and operation of water measurement devices.
- Accurately collect, compile and report technical hydrological and meteorological data.
- Develop and maintain databases.
- Survey to ensure the proper datum is in use.

Experience and Education Guidelines

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Hydrographer I: Previous experience collecting hydrographic data is desirable.

Hydrographer II: Two years of responsible experience similar to a Hydrographer I with the Nevada Irrigation District.

Education:

Hydrographer I: Certification by the American Institute of Hydrology Level I, or possession of a Bachelor's degree from an accredited college with major course work in hydrography, hydrology, or a related field.

Hydrographer II: Certification by the American Institute of Hydrology Level II, or possession of a Bachelor's degree from an accredited college with major course work in hydrography, hydrology, or a related field.

License and Certificate:

Possession of a valid California driver's license.

Working Conditions

Environmental Conditions:

Work is either performed in a temperature controlled office environment subject to typical office noise or outdoors with exposure to traffic, outdoor weather conditions including extreme heat and cold and wet, and humid conditions.

Physical Conditions:

Essential functions may require maintaining physical condition necessary to sit while studying or preparing reports; bend, squat, climb, kneel and twist when performing installation/repair of equipment; perform simple and power grasping, pushing, pulling, and fine manipulation; lift or carry weight of 75 pounds or less; and must be able to walk long distances, possibly in snowshoes.

Mental Conditions:

Essential functions may require maintaining mental condition necessary to know and understand maintenance activities, and observe safety rules; intermittently analyze problem equipment; identify and locate equipment; interpret work orders; remember equipment location; and explain jobs to others; handle conflict.