

EL DORADO IRRIGATION DISTRICT
Class Specification

CLASS TITLE: Assistant Hydrographer/Hydrographer

DEFINITION

Under supervision performs field and office duties that involve the collection and analysis of data for forecasting water use for power generation, recreation and consumptive use; ensures lake operations meet Federal Energy Regulatory Commission (FERC) license requirements; produces a variety of reports for internal, State and Federal use; and ensures the proper operation of monitoring, recording and reporting instruments. Supports District staff responsible for the District's Dam Safety program and water conveyance systems.

DISTINGUISHING CHARACTERISTICS

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

Hydrographer – This is the journey level class in the Hydrographer series and is distinguished from the Assistant 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 Assistant level.

SUPERVISION RECEIVED AND EXERCISED

Assistant Hydrographer

Receives supervision from assigned management personnel; may receive technical and functional supervision from the hydrographer.

Hydrographer

Receives supervision from assigned management personnel. May exercise technical and functional supervision over assigned technical and administrative support personnel.

EXAMPLES OF ESSENTIAL DUTIES: *the duties specified below are representative of the range of duties assigned to this class and are not intended to be an inclusive list.*

Assures District's hydroelectric project is in compliance with Federal Energy Regulatory Commission (FERC) requirements for stream maintenance, lake, and reservoir operations, through water measurements.

CLASS TITLE: Assistant Hydrographer/Hydrographer

Collects and analyzes water use data and provides projections on water availability for hydroelectric power generation and recreation and consumptive use; determines amount of water to be released.

Oversees and/or performs snowpack and runoff surveys; compiles and analyzes data. Provides survey data, report findings, field observations, trend and or projections to District staff, including staff responsible for Dam safety programs and hydrology.

Installs, repairs and maintains water control measurement equipment, water quality sampling equipment and water level recorders. Performs inspection, light maintenance, and collection of seepage and piezometer data in support of Dam safety and conveyance and reservoir infrastructure safety.

Coordinates and corresponds with appropriate personnel from the California Department of Water Resources, United States Geological Survey (U.S.G.S), Division of Dam Safety (D.O.D.S.) and other local, State and Federal agencies.

Performs discharge measurements at gauging stations; calibrates the accuracy of rating tables used for water releases. Regulates outlet and spillway releases from District Dams consistent with Dam Safety and FERC license requirements; monitors and adjusts SCADA as needed or as required due to hydrological demands.

Prepares technical reports for submission to State and Federal agencies. Coordinates, and reports conditions that could affect the efficient operation of, or compliance with safety and regulatory requirements related to District Dams, conveyance and reservoir infrastructure.

Builds and maintains positive working relationships with co-workers, other District employees and the public using principles of good customer service.

Performs related duties as assigned.

QUALIFICATIONS

Assistant Hydrographer

Knowledge of:

Basic principles and practices of hydrographic/hydraulic procedures for 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 data. Math, algebra and trigonometry. Modern office procedures, methods, and computer equipment. Principles and procedures of financial record keeping and reporting.

Skill/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. Establish and maintain

CLASS TITLE: Assistant Hydrographer/Hydrographer

effective working relationships with those contacted in the course of work. Communicate clearly and concisely, both orally and in writing. On a continuous basis, know and understand all aspects of the job; intermittently analyze work papers, reports and special projects; identify and interpret technical and numerical information; observe and problem solve operational and technical policy and procedures. Ability to maintain regular and predictable attendance, subject to applicable medical and disability leave laws. On a continuous basis, sit at desk, or walk or hike for extended periods of time indoors and out. Ability to access remote monitoring locations and infrastructure. Intermittently twist to reach surrounding equipment; perform simple grasping and fine manipulation; use telephone, and write or use a keyboard to communicate through written means; and lift or carry weight of 50 pounds or less.

Experience and Education:

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

Experience:

Previous experience collecting hydrographic data is desirable.

Education:

Equivalent to a Bachelor's degree from an accredited college or university in engineering, water resources, hydrography or a related field.

SPECIAL QUALIFICATIONS

License and Certificate:

Possession of, or ability to obtain, a valid California driver's license at the time of appointment. Individuals who do not meet this requirement due to physical disability will be reviewed on a case-by-case basis.

Hydrographer

Knowledge of:

Principles and practices of hydrographic/hydraulic procedures for determination of water storage elevations, water flows and snow pack run-off. Federal Energy Regulatory Commission (FERC) and United States Geological Service (U.S.G.S.) record keeping and reporting requirements. FERC and Department of Fish and Game requirements for stream, lake and reservoir operations. Modern hydrographic technology. Electronic communications equipment and related components. Methods, techniques and instruments used in the collection of hydrographic data. U.S.G.S. stream gaging techniques. Math, algebra and trigonometry. Mechanical principles of irrigation canals, water canals, flumes, headgates, diversions, pipelines and related facilities. Microsoft Word, Excel, computer modeling, CAD, and SCADA programs.

Skill/Ability to:

Independently collect and analyze hydrographic data. Independently generate a variety of technical reports in accordance with Federal and State standards. Operate, maintain and repair stream gaging equipment. Independently use a variety of hydrography equipment. Accurately assess snow pack.

CLASS TITLE: Assistant Hydrographer/Hydrographer

Experience and Education:

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

Experience:

Three years of responsible hydrographic experience similar to Assistant Hydrographer with El Dorado Irrigation District.


Education:

Equivalent to a Bachelor's degree from an accredited college or university in engineering, water resources, hydrography or a related field.

SPECIAL QUALIFICATIONS

License and Certificate:

Possession of, or ability to obtain, a valid California driver's license at the time of appointment. Individuals who do not meet this requirement due to physical disability will be reviewed on a case-by-case basis.

 _____ Director of Human Resources	<u>04/18/2023</u> Date
Established: 08/18/2009 Revised: 09/08/2011, 04/18/2023 FLSA: Non-Exempt Unit: Safety	