

THE CITY OF LOS ANGELES



CIVIL SERVICE COMMISSION

**CLASS SPECIFICATION****HYDROGRAPHER 7263  
SENIOR HYDROGRAPHER 7264****01-15-93**

**Summary of Duties:** Gathers, records, and compiles hydrographic and meteorological data pertinent to municipal water supply and rights; or assigns, reviews and evaluates employees engaged in such work; applies sound supervisory principles and techniques in building and maintaining an effective work force; fulfills affirmative action responsibilities; and does related work.

**Distinguishing Features:** A **Hydrographer** is responsible for securing complete and accurate hydrographic and meteorological data. The work of an employee of this class usually follows established schedules, procedures, and practices. Supervision is limited to general direction and a review of records prepared. While an important portion of the work may be the maintenance of hydrographic and meteorological records and equipment in an office, a Hydrographer does considerable outdoor work in urban and isolated locations. At times, field work is performed under adverse weather and topographic conditions.

A **Senior Hydrographer** supervises hydrographic activities relevant to the municipal water supply and is responsible for assuring that complete and accurate records are secured. An employee of this class schedules, assigns, coordinates and reviews the work of subordinates and recommends improvements in procedures and equipment. A Senior Hydrographer's work is reviewed in general terms based upon results obtained. A Senior Hydrographer normally participates in the routine field collection of data and performs special or unusual field work.

Incumbents in the class of Senior Hydrographer, as bona fide supervisors, are distinguished from lead workers in that they are responsible for the performance of the full range of supervisory activities including: application of discipline, processing and resolution of grievances, evaluation of performance, and approval of time off requests.

**Examples of Duties:****A Hydrographer:**

- \* Measures water flow in surface streams, conduits, and pipelines by estimating and using current meters, hydrographic structures, and electronic and mechanical flow meters;
- \* Measures water level in public and private wells and test holes to determine ground water level and operating characteristics of wells;
- \* Measures water content of snowfalls;

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- \* Measures water stage in lakes, reservoirs, and tanks;
- \* Measures seepage from earth filled dams and reservoirs;
- \* Makes pressure surveys and assists in making flow tests;
- \* Reads meters, gauges, and water stage and flow recorders;
- \* Uses such equipment as barometers, thermometers, anemometers, precipitation gauges, and snow sampling equipment to collect such weather data as wind direction and velocity, temperature, rainfall, snowfall, and evaporation;
- \* May be required to use skis, snowmobiles, snow cats, and snowshoes;
- \* May be required to carry backpacks at high altitudes and act as a member of a snow survey team in adverse weather conditions and in isolated areas;
- \* Changes charts and adjusts automatic recorders;
- \* Acts as a member of a survey party to establish reference point elevations;
- \* Performs minor construction of hydrographic structures for measuring devices;
- \* Installs, sets, and adjusts water stage and flow recorders, meters, and other hydrographic devices; \*Repairs, calibrates, and maintains recorders and meters;
- \* Monitors flow of water during spreading operations;
- \* May replace, test, and maintain electronic real time hydrographic data acquisition system components such as: position analog transmitters , submersible transducers, temperature and solar radiation sensors, rain gauges, and master data acquisition computer and related software;
- \* Analyzes field notes and determines volumes of water discharged;
- \* Compiles and summarizes records of hydrographic and meteorological data in tabular or graphic form and hydrographs of various types using calculators and personal computers;
- \* Contacts other agencies and property holders concerning water use an exchange of data;
- \* May act as a lead person for a small group of other Hydrographers;
- \* Uses wide variety of hand and power tools, as well as voltage and oh meters

**A Senior Hydrographer:**

- \* Uses wide variety of hand and power tools, as well as voltage and oh meters;
- \* Assigns, reviews, and evaluates the work of a group of Hydrographer engaged in the above work;
- \* Makes work and location assignments;
- \* Inspects hydrographic stations and installations;
- \* Reviews reports and records prepared by Hydrographers;
- \* Prepares specifications and requests the purchase or construction o hydrographic and meteorological instruments and structures;
- \* Adapts instruments and structures for proper use;
- \* Selects sites for permanent or temporary installation of such devices;
- \* Supervises and performs research work related to field methods, record keeping and water supply;
- \* Plans, sets up and conducts flow tests.

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**Both Classes:** May be occasionally assigned other duties for training purposes or to meet technological changes or emergencies.

**Qualifications:** Incumbents must have the following knowledges and abilities:

<b>Knowledges of:</b>	<b><u>Hydrographer</u></b>	<b><u>Senior Hydrographer</u></b>
Principles and practices used to gather and compile hydrographic and meteorological data related to water supply use and rights;	Good	Good
Use, capabilities, maintenance, and minor repair of hydrographic and meteorological structures, instruments and equipment;	Good	Good
Methods of surface water, ground water and snow measurements;	Good	Good
Surveying as used to establish the location and elevation of hydrographic reference points and structures;	Good	Good
Electronic processing of data as it relates to the collection of hydrographical data;	Working	Working
Fundamentals of electricity including voltage, resistance, current flow, and wattage relationships, and the related use of electrical test equipment;	Working	Working
Avalanche areas and self-preservation during adverse weather conditions and of the operation of over-snow equipment;	Working	Working
Safety rules, principles and practices as related to the work of a Hydrographer;	Working	Working
Hydraulics as related to water flow in open channels and closed conduits, through orifices, and over weirs; and of the hydraulics of water flow from water wells;	Working	Working
Supervisory principles and practices;	General	Working
Principles of the United States public land subdivisions and of land descriptions;		Working
City personnel rules, policies and procedures;	General	General
Memoranda of understanding as they relate to subordinate personnel;		General
Laws and regulations relating to equal employment opportunities and affirmative action;		Good
<b>Ability to:</b> Understand the functioning of the electronic hydrographical data acquisition system by learning elementary principles of electric theory such as	X	X

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voltage, resistance, current flow, and wattage relationship;		
Use automated hydrographic equipment;	X	X
Work out-of-doors in a variety of adverse geographic and climatic conditions;	X	X
Work with a minimum of supervision;	X	X
Prepare hydrographic reports;		X
Deal tactfully and effectively with employees and the public;		X
Makes studies related to hydrographic methods, procedures, and equipment;		X
Assign, train, supervise, and review the work of employees engaged in the collection of hydrographic and meteorological data.		X

**Minimum Requirements:**

**Hydrographer:**

1. Two years of full-time paid experience in hydrography or field surveying.
2. One year of college education in engineering or physical sciences may be substituted for each year lacking.

Special Note: Because the class of Hydrographer has been designated safety sensitive in accordance with City policy, a drug and alcohol screening test may be required prior to appointment.

**Senior Hydrographer:** Two years of full-time paid experience as a Hydrographer.

**License: Both classes:** A valid Class A California driver's license and a good driving record may be required.

**Physical Requirements:**

**Hydrographer:** Strength to perform average lifting up to 35 pounds; body agility and equilibrium involved in activities such as climbing and balancing under precarious conditions; back and leg coordination involved in activities such as stooping, kneeling, crouching, and crawling to an unusual extent; stamina involved in such activities as making treks through snow at high elevation, and chopping ice; arm, hand, and finger dexterity with at least one hand involved in activities such as reaching, handling, and feeling; and good eyesight.

**Senior Hydrographer:** Strength to perform average lifting up to 15 pounds and occasionally over 25 pounds; good speaking and hearing ability; and good eyesight. Those with medical limitations may be able to perform the duties of some positions with reasonable accommodation. The decision to accommodate someone's limitations will be made on an individual basis and depends on the types of limitations, what the hiring

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department can reasonably do to accommodate them, and the specific qualifications for the job.

**Fair Labor Standards Act Status:**

**Hydrographer:** None of the positions in this class qualify for an exemption from the minimum wage and overtime requirements of the Fair Labor Standards Act.

**Senior Hydrographer:** All of the positions in this class qualify for an executive exemption from the minimum wage and overtime requirements of the Fair Labor Standards Act.

**As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory and not restrictive. It is not intended to declare what all of the duties and responsibilities of any position shall be.**