



**STATE OF OREGON
POSITION DESCRIPTION**

Position Revised Date:
5/1/2025

Agency: Water Resources Department

Facility: North Mall Office Building

☐ New ☒ Revised

This position is:

- ☒ Classified
☐ Unclassified
☐ Executive Service
☐ Mgmt Svc – Supervisory
☐ Mgmt Svc – Managerial
☐ Mgmt Svc - Confidential

SECTION 1. POSITION INFORMATION

a. Classification Title: <u>Natural Resource Specialist 4</u>	b. Classification No: <u>C8504</u>
c. Effective Date: _____	d. Position No: <u>3000033</u>
e. Working Title: <u>Senior Hydrographer</u>	f. Agency No: <u>690</u>
g. Section Title: <u>Tech Serv/Surface Water</u>	h. Budget Auth No: _____
i. Employee Name: _____	j. Repr. Code: <u>OAD</u>
k. Work Location (City – County): <u>Salem-Marion</u>	
l. Supervisor Name (Optional): _____	

m. Position: <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Seasonal <input type="checkbox"/> Limited Duration <input type="checkbox"/> Academic Year
<input checked="" type="checkbox"/> Full-Time <input type="checkbox"/> Part-Time <input type="checkbox"/> Intermittent <input type="checkbox"/> Job Share
n. FLSA: <input checked="" type="checkbox"/> Exempt <input type="checkbox"/> Non-Exempt
If Exempt: <input type="checkbox"/> Executive <input checked="" type="checkbox"/> Professional <input type="checkbox"/> Administrative
o. Eligible for Overtime: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SECTION 2. PROGRAM AND POSITION INFORMATION

a. Describe the program in which this position exists. Include program purpose, who's affected, size, and scope. Include relationship to agency mission.

This position is in the Hydrographics Program within the Surface Water Hydrology Section of the Technical Services Division. The Surface Water Hydrology Section provides technical expertise regarding surface water and water use data, including the analysis and interpretation, to the Department and the public. Through coordination with others in the agency, the section provides data and analysis critical for responsible water management.

The Hydrographics Program collects streamflow, water temperature, and other hydrologic data from sites statewide, in partnership with Field Services staff, and processes and publishes this data. The data are used for planning, scientific, and management activities within the Department as well as by planners, researchers and scientists working for other state and federal agencies. Much of the data are used as a basis for planning, regulation, hydrologic investigations, and water usage assessments for irrigators and other water users. Hydrographic data are basic to nearly every activity in the Department.

Staff in the Hydrographics Program are also responsible for quality control, training, and setting program standards related to measuring/estimating streamflow, operating stream gages, and producing streamflow

records. Additionally, program staff are responsible for analysis of hydrographic data, including development of streamflow statistics and other summary information used to characterize streamflow data. Finally, staff establish and maintain the appropriate databases, software, and technological assets required to produce streamflow data.

b. Describe the primary purpose of this position, and how it functions within this program. Complete this statement. The primary purpose of this position is to:

- **Compute and assess hydrologic records (research and program operations).** Work with other similar positions in the Hydrographics program to oversee the generation of streamflow data through directing and reviewing the work of processing, computing, interpreting, and publishing highly technical measurement data and instrumentation output.
- **Develop and apply quality control standards for the review and publication of streamflow and ancillary data (analysis/evaluation).** Work with similar positions in the Hydrographics Program to develop quality control standards for the review of measurements, review of stream gage and miscellaneous measurement sites, and computation and publication of streamflow data.
- **Develop, become expert in, apply, and train others in quality assurance standards for the collection of streamflow, water temperature, and specific conductance data (technical assistance/consultation).**
- **Plan, lead, and implement hydrographic program special projects (project management).**
- **Serve as an expert and external point of contact for information regarding streamflow data (agency representation).**

SECTION 3. DESCRIPTION OF DUTIES

List the major duties of the position. State the percentage of time for each duty. Mark “N” for new duties, “R” for revised duties or “NC” for no change in duties. Indicate whether the duty is an “Essential” (E) or “Non-Essential” (NE) function.

% of Time	N/R/NC	E/NE	DUTIES
30%	NC	E	<u>Quality Control Standards</u> Develop, implement, and oversee a system for peer review of all data sets under the control of the Hydrographics program. Develop and document quality control standards for review and publication of streamflow measurements (and associated data sets) and interpreted streamflow record to ensure a high quality of published data. Provide recommendations to the Surface Water Section Manager regarding the need for additional sites, discontinuation of existing

Note: If additional rows of the below table are needed, place cursor at end of a row (outside table) and hit “Enter”.

			<p>sites, and/or modification of existing sites in collaboration with other staff in the Surface Water Section, as well as staff in the Technical Services Division and Field Services Division as necessary.</p> <p>Determine locations for streamflow measurements in consultation with other staff in the Surface Water Section, as well as staff in the Technical Services Division and Field Services Division as necessary, using quality control criteria to assess the effectiveness and accuracy of streamflow measurement activities.</p>
20%	NC	E	<p><u>Program Operations</u></p> <p>Prioritize and direct the daily operations of the Hydrographics program in collaboration with other Senior Hydrographer.</p> <p>Identify priorities for programmatic development and work with manager to develop plans for implementation.</p> <p>Coordinate and direct the scoping of the hydrographic equipment inventory (statewide).</p> <p>Work with Fiscal staff to develop appropriate contractual documents.</p>
15%	NC	E	<p><u>Hydrologic Records Production</u></p> <p>Operate, develop, and maintain the near real-time surface water stream flow, temperature, and crest stage data collection programs through the setting of standards.</p> <p>Review and interpret streamflow measurement data, including the development of stream gage ratings to produce stream gage records.</p> <p>Publish streamflow data and present these data in graphic and tabular forms on the Department's website, in collaboration with the Information Technology section, using computer programs to provide access to the Department's streamflow data.</p> <p>Maintain the Department's surface water measurement databases to comply with records retention requirements.</p> <p>Perform streamflow data analysis, including record comparisons between sites, flood frequency analysis, and common summary statistics (e.g. annual statistical summaries).</p> <p>Perform fieldwork, including the collection of streamflow measurements and maintenance of hydrographic equipment in support of program needs.</p> <p>Maintain expertise with regards to the selection, evaluation, calibration, and use of hydro-acoustic devices used in measuring stream flow.</p>

			<p>Maintain expertise with regards to satellite transmission of data in all state-operated gages.</p> <p>Maintain neat, organized, and professional files, such that public records requests are readily fulfilled, and records retention schedules are easily tracked and implemented.</p> <p>Process and review level data at streamgages. Use data to maintain gage datums and to assess changes to stream channels and ratings with time</p>
15%	NC	E	<p><u>Quality Assurance Standards & Training</u></p> <p>Develop and maintain a high degree of expertise in subjects related to the collection and publication of streamflow data, including streamflow measurement instrumentation, indirect methods for estimating streamflow, streamgage instrumentation, streamgage equipment selection and installation, interpretation of associated streamgage data sets to produce continuous streamflow, related software and device communication platforms, and standard statistical analysis of streamflow data to serve as an agency technical expert on the collection and publication of streamflow data.</p> <p>Develop quality assurance standards and protocols on the collection and publication of streamflow data, including selection, evaluation, calibration, and use of hydrographic instrumentation. to produce hydrologic records and interpretation and publication of associated streamflow data sets to inform Department procedures.</p> <p>Coordinate purchase of hydrographic equipment with field and hydrographics staff, including development of pertinent contractual documentation.</p> <p>Design, develop, and maintain written guidance on the proper methods for installation and operation of streamgages, collection of streamflow measurements, and production of streamflow and streamgage record for watermasters and other field staff.</p> <p>Provide regular training on the proper methods for installation and operation of streamgages, collection of streamflow measurements, and production of streamgage record for watermasters and other field staff to ensures that staff maintain skills and are kept informed of current developments in the field that affect their methods and work.</p> <p>Design, develop, and provide training for Hydrographics staff on official methods for processing of streamflow record.</p>
15 %	NC	E	<p><u>Project Management</u></p> <p>Manage projects involving the collection and production of streamflow record to support hydrologic investigations or other projects as assigned.</p>

			<p>Ensure associated project contracts or cooperative agreements are following State and Federal laws, regulations, policies, and procedures.</p> <p>Delegate discrete elements of projects to lower level staff within the program to accomplish project goals.</p>
5%	NC	NE	<p><u>Agency Representation</u></p> <p>Provide occasional testimony regarding the products of the hydrographic program to inform deliberations of planning commissions and other committees or legal proceedings.</p> <p>Provide technical support to outside stakeholders such as consultants as well as other state and federal agencies to ensure transparent access to the Department data.</p> <p>Serve as an agency representative in review of technical studies utilizing or summarizing surface water data in Oregon.</p>
100%			

SECTION 4. WORKING CONDITIONS

Describe any on-going working conditions. Include any physical, sensory, and environmental demands. State the frequency of exposure to these conditions.

Extended periods using computer to process and reduce Hydrographic data; frequently up to eight hours per day. The person in this position must have the ability to work under demanding conditions with short timelines. The employee in this position must maintain a high degree of accuracy when performing quality assurance tasks. Occasional overnight statewide travel is required. Exposure to all types of weather generally experienced in Oregon year-round. The position involves walking over rough terrain, through fields and streams, and along stream banks..

SECTION 5. GUIDELINES

a. List any established guidelines used in this position, such as state or federal laws or regulations, policies, manuals, or desk procedures.

USGS manuals on computation of streamflow records, measurement, and computation of streamflow, sections of FSD Field Operations Manual. In-house documentation on computer operation and miscellaneous procedures. Accepted hydrologic/statistical analysis methods developed by USGS and by WRD.

b. How are these guidelines used?

Serve as a reference for the proper procedures to follow in making streamflow measurements, computing records, and doing hydrologic analyses.

SECTION 6. WORK CONTACTS

With whom, outside of co-workers in this work unit, must the employee in this position regularly come in contact?

Who Contacted	How	Purpose	How Often?
Note: If additional rows of the below table are needed, place cursor at end of a row (outside table) and hit "Enter".			
Field Services Staff	Email/Phone/Person	Information Exchange/Assistance and Collaborative Decision Making	Daily
Division Staff	Email/Phone/Person	Information Exchange/Assistance	As Needed
Other Agencies	Email/Phone/Person	Information Exchange/Assistance	As Needed

SECTION 7. POSITION RELATED DECISION MAKING

Describe the typical decisions of this position. Explain the direct effect of these decisions.

Make decisions, set standards and procedures on the use of stream flow measuring equipment. Directly affects the effectiveness and accuracy of the surface water measurement and real-time data.

Set priorities for record computation and review. Affects the ability of the program to meet the data needs of anyone making data requests.

Sets procedures to use in computing hydrologic records. Affects quality and accuracy of record, and quality and accuracy of all subsequent uses of the data.

Determines when and where to make streamflow measurements in support of projects. Affects quality of record, and quality and accuracy of all future uses of the data.

Determines maintenance procedures needed and site selection criteria for or relocation of stream gaging stations. Affects quality of record, and quality and accuracy of all future uses of the data.

SECTION 8. REVIEW OF WORK

Who reviews the work of the position?

Classification Title	Position Number	How	How Often	Purpose of Review
Note: If additional rows of the below table are needed, place cursor at end of a row (outside table) and hit "Enter".				
Surface Water Section Manager	1000031	Inspection, review of finished or partially completed work.	Performed as work is completed or need for review is determined.	Ensure proper procedures are followed in computing/analyzing hydrologic data and ensuring quality control.

SECTION 9. OVERSIGHT FUNCTIONS**THIS SECTION IS FOR SUPERVISORY POSITIONS ONLY**

a. How many employees are directly supervised by this position? 0

How many employees are supervised through a subordinate supervisor? 0

b. Which of the following activities does this position do?

☐ Plan work☐ Coordinates schedules☐ Assigns work☐ Hires and discharges☐ Approves work☐ Recommends hiring☐ Responds to grievances☐ Gives input for performance evaluations☐ Disciplines and rewards☐ Prepares & signs performance evaluations**SECTION 10. ADDITIONAL POSITION-RELATED INFORMATION**

ADDITIONAL REQUIREMENTS: List any knowledge and skills needed at time of hire that are not already required in the classification specification:

The person in this position must have a strong understanding of the factors affecting the stage-discharge relationship for the surface water gaging stations. It is required that the person in this position must maintain a high degree of accuracy when performing quality assurance for agency staff. This position requires a strong ability to organize and meet priorities for a large and diverse group of customers. This position requires the ability to work with complex computer applications for up to eight hours per day; and the ability to work under demanding conditions with short timelines.

The Department's core values are integrity, service, forward-looking, technical excellence, and teamwork. This position will perform work with these core values in mind. The person in this position performs duties in a manner which promotes customer service and harmonious working relationships, including treating all persons courteously and respectfully; engages in effective team participation through a willingness to assist and support co-workers, supervisors, and other work related associations; develops good working relationships with division and agency staff through active participation in accomplishing the agency mission and resolving problems in a constructive manner; demonstrates openness to constructive feedback in an effort to strengthen work performance; and contributes to a positive, respectful, and productive work environment.

BUDGET AUTHORITY: If this position has authority to commit agency operating money, indicate the following:

Operating Area	Biennial Amount (\$00000.00)	Fund Type
Note: If additional rows of the below table are needed, place cursor at end of a row (outside table) and hit "Enter".		

SECTION 11. ORGANIZATIONAL CHART

Attach a current organizational chart. Be sure the following information is shown on the chart for each position: classification title, classification number, salary range, employee name and position number.

SECTION 12. SIGNATURES

Employee Signature

Date

Supervisor Signature

Date

Appointing Authority Signature

Date