



ENVIRONMENTAL SERVICES  
CITY OF PORTLAND  
working for clean rivers

## ***2016 BES Summer Student Intern Program***

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### **Engineering Services – Program Management and Controls**

**Position type:** Student Intern

**Position Description:** The BES Program Management and Controls section has an opening for a student intern in its support services section.

The intern will learn:

- Administrative procedures
- Records management
- Document routing

### **Pollution Prevention - Investigations & Monitoring**

**Position type:** Student Intern

**Position Description:** The BES Environmental Investigations Section of Pollution Prevention Services has an opening for a student intern. The position includes assisting staff to perform preventative maintenance and calibrations on 42 rain gauges and 80 sewer monitors for the HYDRA system. Duties will include taking electronic measurement, recording data, cleaning interior of enclosure, adjusting set points, and replacing equipment.

There is also an opportunity for the intern to work directly with Electronic Systems Technicians to participate in upgrading remote sites.

### **Pollution Prevention - Permitting**

**Position type:** Student Intern

**Position Description:** The Permitting Section administers the Industrial Pretreatment, Alternative Discharge Control Mechanism, and Sub-Meter Programs. Federal regulations as well as permits require the City to locate and identify industrial users subject to the Industrial Pretreatment Program and characterize the pollutants they discharged to the CBWTP. The Sub-meter Program ensures customers that discharge sewer with volumes that differ from their incoming water volumes are properly charged for sewer.

The intern position duties will assist with meeting regulatory obligations and billings. Duties will include:

- Mail and process environmental surveys
- Research Site Records
- Data entry
- Assist with sub-meter billing

## Pollution Prevention - Environmental Compliance

**Position type:** Student Intern

**Position Description:** The BES Compliance Division of Pollution Prevention Services has an opening for a Student Intern to assist with the following job duties:

- Support staff by performing research on properties, documenting findings, and creating files
- Support field inspection staff by downloading plans, running reports, and entering data; may perform noncomplex inspections as needed
- Perform plan review for non-complex plan reviews
- Update TRACS database with Environmental Contamination data provided to the City from DEQ;
- Update BES P3 GIS layer
- Duties also include a variety of general office duties including filing, data input, copy, sort and scan documents

## Pollution Prevention - Environmental Compliance Division

**Position type:** Student Intern

**Position Description:** The BES Environmental Compliance Division of Pollution Prevention Services has an opening for a student intern. The Stormwater Source Control Section is comprised of the Industrial Stormwater Program (ISW) and the Maintenance Inspection Program (MIP). The ISW administrates NPDES Industrial Stormwater General Permits issued to facilities in the City of Portland. The program also conducts source investigations in support of the Portland Harbor and Columbia Slough contaminated sediment programs. The MIP manages the inspections of stormwater management facilities built in accordance with the Stormwater Management Manual to ensure they are maintained and operated properly. Both of these programs have specific requirements under the City's NPDES MS4 permit.

The duties of this position include, but are not limited to:

- Performing data analysis and entry of analytical monitoring results from lab reports and site information using standard operating procedures into established data bases;
- Researching site records (such as building plans and plumbing connection records) and assembling other documentation regarding property contamination, development permits and other site-specific environmental information;
- Utilizing Geographic Information Systems (GIS) mapping to modify existing data layers and accurately depict private stormwater management systems and other regulatory information.
- Assist Permit Managers during inspections or investigations of facilities and sites to identify environmental concerns or non-compliance issues. An understanding of how environmental systems work is essential in accomplishing this task.

To qualify for this intern position, the student:

- Must be able to read and interpret reports from analytical laboratories;
- Must have skills in conducting record searches and the ability to read and interpret plumbing and building records including blueprints;
- Have skills or experience in the utilization of GIS

## Wastewater Group - Operations Division

**Position type:** Student Intern (2 positions available)

**Position Description:** This position will assist Operations and Maintenance staff with seasonal maintenance and a variety of special projects best performed during the dry weather months at the Columbia Boulevard Wastewater Treatment Plant. The position also involves hands on operational procedures in real time as they relate to the various process areas.

Typical duties include but are not limited to:

- Assist in the cleaning and repairs of dry weather, wet weather and secondary clarifiers that are taken out of service for annual inspections and maintenance
- Using hoses and hose monitors and hand tools
- Assists with the replacement of aeration basin diffuser membranes
- Assist in performance of general grounds and facilities cleaning using brooms, shovels and other appropriate hand tools

## Wastewater Group - Support Services

**Position type:** Student Intern

**Position Description:** The BES Division of Support Services in the Wastewater Services Group has an opening for a Student Intern.

**Work assignments would include:**

- Data acquisition and population (example of data: asset systems, asset expected useful life) in the bureau's Synergen database application
- Data quality standards review & documentation (examples of data: asset attribution, work order finishing, asset failure tracking) using the bureau's Synergy database application
- Business process review and maintenance (examples of business processes: project records, backlog clean-up, direct stock demand, catalog record creation and maintenance) using Synergen
- Data clean-up (examples of data: catalog standardization, bill of materials consolidation) using Synergen

## Wastewater Group - Watershed Revegetation Program

**Position type:** Student Intern

**Position Description:** The Wastewater Group's Watershed Revegetation section has an opening for a summer student intern to support seasonal work during the summer months.

Job duties:

- Working in the field, collecting seed from native groundcovers
- Assisting with vegetation monitoring in wetlands, streams and riparian areas
- Assisting with data collection for reports for various local, state and federal permit requirements

## Wastewater Group - Collection System Division

**Position type:** Student Intern (2 full-year positions available)

**Position Description:** The BES Division of Collection System in the Wastewater Services Group has an opening for a Student Intern. Job duties include:

- Working with engineering staff in the field assisting with measurements and recording data
- Participating in rudimentary surveys and condition assessments
- Working with the Hansen® database and different digital technologies that store inspection data
- Field work assisting Stormwater O&M staff in evaluating the condition of stormwater facilities to determine the level of maintenance needed
- Assisting with office work including review of CCTV inspections for accuracy of data entry as well as assembling documentation for asset engineering evaluations of structurally and/or operationally deficient assets as part of Bureau's capital improvement program.

## Wastewater Group - Support Services

**Position type:** Student Intern

**Position Description:** The BES Support Services Division has an opening for a summer student intern in the Wastewater group for Support Services.

The job duties are as follows:

- Assist with Stock Code relabeling project including developing and implementing a plan to replace existing stock code labels with newly designed stock code labels
- Correcting existing catalog descriptions to meet Stores' item description standards  
Stock item reorganization efforts
- Work with Stores staff on inventory bin location moves, including an assessment of available warehouse bin location space and plan development for maximizing use of bin locations and shelving
- Assessment of office supply inventory items and effort to reduce amount of office supply items we carry to minimum standards
- Conduct cycle counting on stock codes tied to high criticality assets
- Develop / create labels and signs for specific Stores areas
- Recycling, surplus storage areas, flammable storage building

## Watershed Services

**Position type:** Student Intern

**Position Description:** The Watershed team has an opening for a Student Intern. The position includes the following job duties:

- Assist with natural resource monitoring for PAWMAP (Portland Area Watershed Monitoring Assessment Program) and Johnson Creek Restoration Project Effectiveness monitoring to document improvements and changes in watershed health and restoration projects. Requires ability and knowledge to work outdoors safely, traversing uneven terrain, and use standard monitoring equipment. Requires knowledge of basic monitoring practices and protocols, and ability to record and enter data accurately.
- Conduct fish surveys and physical habitat surveys
- Assist with hydrology research and documentation e.g. USGS data analysis and flood event documentation
- Research property information such as floodplain location, zoning, proximity to other properties. Requires ability to use or learn a variety of search tools (electronic and hard copy)
- Photo documentation of code violations in the field, including erosion control violations and floodplain fill violations
- Background research of sites where suspected illegal use/activity is occurring. Research methods include use of historical archives, historical fly-over photos, and agency databases
- Assist with property management activities including site monitoring and developing work scopes
- Design, layout and produce visual displays such as mounted aerial photos and maps using ArcMap
- Additional duties may include data entry, filing, copying, and ordering supplies for program administration

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- Conduct fish surveys, including electro-shocking and physical habitat surveys
- Assist with hydrology research and documentation e.g. USGS data analysis and flood event documentation
- Research property information such as floodplain location, zoning, proximity to other properties.
- Requires ability to use or learn a variety of search tools (electronic and hard copy)
- Photo documentation of code violations in the field, including erosion control violations and floodplain fill violations
- Background research of sites where suspected illegal use/activity is occurring. Research methods include use of historical archives, historical fly-over photos, and agency databases
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## Watershed Services

**Position type:** Student Intern

**Position Description:** The Watershed team has an opening for a Student Intern. The position includes the following job duties:

- Support Columbia watersheds planning efforts, including data collection, map analysis and report compilation
- Compile and analyze mitigation acreage for development impacts in the Slough watershed
- Design, layout and produce visual displays such as mounted aerial photos and maps using ArcMap
- Assist at public events for watershed, stormwater and Fish Advisory outreach
- Maintain Slough press clippings files
- Additional duties may include data entry, filing, copying, and ordering supplies for program administration

## Watershed Services

**Position type:** Student Intern

**Position Description:** The Watershed team has an opening for a Student Intern. The position includes the following job duties:

- Assist in implementation of early detection and rapid response program to manage invasive plant species
- Assist in inventory of target invasive species
- Respond to incoming reports to confirm species identification, site location, and patch size and assist in securing landowner permission for treatments
- Enter reports into GIS system and other data management tasks
- Assist in outreach and education related to native and invasive plants

## Watershed Services

**Position type:** Student Intern

**Position Description:** The Watershed team has an opening for a Student Intern. The position will assist with a variety of research projects including:

- Flow-through (lined) planter improvements
- Stormwater facility flow testing; conducting design test evaluations on city facilities to ensure they protect city assets to the intended level
- Sediment accumulation monitoring on stormwater facilities
- Ecoroof design evaluations
- Evaluation of the habitat benefit of ecoroofs to conventional roofs in an effort to optimize benefits to the urban ecosystem

## Watershed Services

**Position type:** Student Intern

**Position Description:** The intern position will help provide technical support to the West Watershed section in project planning, permitting, file-research, field work/conditions assessment, macro-invertebrate and water quality sampling, data-analysis, report writing, community outreach and office support.

The duties of the intern position include but are not limited to:

- West Watershed Capital Improvement Program, operating, Watershed Investment Fund, 1% for Green Streets and other project support – scheduling/attending meetings and taking notes, conducting field work, document control, etc.
- Information gathering and support in watershed characterization and strategy development, project planning, implementation and monitoring
- Administrative tasks/support in TMDL compliance and implementation
- Research support and assistance with project proposals, budget and permitting

## Business Services

**Supervisor:** Lynne Casey

**Position type:** Student Intern

**Position Description:** The BES Business Services section of Facilities and Administrative Services has an Internship opening at the Bureau of Environmental Services in Downtown Portland.

**The duties of the Student Intern will include:**

- Assisting the administrative staff with support activities;
- Special project assistance including Portland Building Move Change Management;
- Keeping track of Bureau property inventory, site visits and homeless camp tracking;
- Data entry in various spreadsheets and databases;
- Document proofing, review and reconciliation;
- General filing and file maintenance;
- Tracking Supply inventory.