

# **MASON CONSERVATION DISTRICT**

District Engineer – Natural Resource Conservation

SALARY RANGE: \$6,609 - \$9,338 per month

TYPE OF POSITION: Regular, Full-time.

LOCATION: Primarily Office, Periodic Field

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## **Job Summary**

The primary responsibility of the District Engineer is to provide natural resource engineering services to landowners, District staff, and partner organizations as necessary. This position involves multi-faceted duties that require both office and field work; a high level of motivation, versatility, independence, and collaboration; and establishment and maintenance of partnerships with a wide range of landowners and conservation professionals to implement natural resource management practices on private and public property. The position reports to the District Manager.

The successful candidate will provide program coordination, administration and technical services through the District's Engineering Program. This position coordinates all aspects of the Engineering Program, including but not limited to providing engineering support to several District programs, such as the Agricultural Program, Conservation Projects Program, Marine Shoreline Landowner Assistance Program, and Low Impact Design Stormwater Program; and provide engineering support to District partners.

The position will use WDFW habitat engineering guidelines to design salmon habitat restoration projects such as stream crossing replacements (culverts, bridges), wood placement, and erosion control.

The position supports the Missions of the Conservation District Cluster members and serves as a senior member of a team of conservation professionals in developing, region-wide, natural resource management programs. Through the Conservation District Cluster, it also serves a broad geographic area of primarily Southern Puget Sound, Hood Canal, and the Chehalis Basin watershed. In this capacity, the position may respond to information/assistance requests or advice to support individual landowner objectives across a large geographic area.

## **Essential Functions**

- Serve as the principal in managing engineering aspects of projects to include survey and design of projects; preparing and managing budgets; securing applicable regulatory permits; overseeing project implementation; evaluating and assessing the outcome/results of the projects; and preparing final reports, final as-builts or technical reports, and documenting project outcomes.
- Operate as project manager, including preparing, advertising and securing contracted services, overseeing construction operations to ensure project specifications are met and construction is in accordance with regulatory requirements and completed timely, managing budgets effectively, and ensuring proper completion of paperwork.

- Apply public contracting procedures; prepare and advertise appropriate bid solicitations, technical specifications and construction drawings.
- Perform field assessments, topographical surveys, responds to and evaluates natural resource management problems, develops plans for landowner technical assistance in resolving identified problems. Such as: agricultural best management practices; fish and wildlife habitat enhancement projects; drainage management project; and structural projects, such as livestock waste storage facilities, sub-surface drains, livestock crossings, and water diversion and dispersion.
- Responsible for designing and implementing freshwater and marine aquatic area enhancement projects and fish passage projects; designing agricultural practices such as composting facilities, confinement areas, roof water runoff collection and diversion systems, sub-surface drains, livestock crossings, and manure lagoons; assisting urban, rural and agricultural landowners with drainage management projects to manage storm water runoff while protecting fisheries and water quality resources. Evaluates and develops project alternatives and performs necessary analysis develop projects to conserve natural resources and contribute to improving overall natural resource conditions.
- Conducts construction layout and inspections.
- Knowledge of engineering principles, practices, and methods; efficient use of construction equipment; arithmetic, geometry, calculus and engineering formulas; surveying and mapping, hydraulics and hydraulic structures, pipelines, soil engineering, USDA Natural Resources Conservation Service Field Office Technical Guide <http://www.nrcs.usda.gov/technical/efotg/>, statutes, court decisions and Attorney General's Opinions covering wide variety of engineering functions provided or regulated by Washington State.
- The position performs construction administration and inspection, and prepares detailed reports for public works contracts. Provides administrative support for projects by collecting data, providing project documentation, prepare and update project files, mentoring other staff, and performing other administrative duties.
- Provide landowners with technical assistance in applying planned engineering systems, which may include construction layout, and construction inspection to determine conformance with design and adherence to plans and specifications.
- Conduct field investigations, hydrologic studies, field surveys, and assemble data needed in the development of conservation practices for structural solutions to problems with fish habitat, water quality, erosion, drainage, and irrigation directly related to conservation district operations.
- Lead and direct the progress of District engineering projects to achieve District standards and goals, secure and manage the work of subcontracted engineers and other contractors as necessary, and coordinate the use of the area cluster engineer. • May supervise planning and design staff and others to insure that all work is performed in a technically competent manner, assist with surveying tasks, such as execute moderately difficult triangulation or traverse surveys.
- Prepare final construction drawings and specifications for engineering practices such as: fish habitat improvement, stream bank protection measures, grade stabilization structures, stream

crossings, agriculture Best Management Practices, and channel modifications (including culvert replacements).

- Develop and revise engineering technical material such as standard detail drawings, specifications, design aids, and training materials. All designs will meet established NRCS engineering specifications or alternative practice designs approved by a professional engineer.
- Ability to exercise sound independent professional judgment in making decisions on difficult engineering problems; analyze and prepare engineering plans and reports, and complete complicated mathematical computations; plan, supervise, coordinate engineering work, and confer with agency officials on design requirements for permits.
- Maintain knowledge of and apply the best management practices as detailed in the NRCS eFOTG and local professional standards.
- Secure, develop, manage and close grant billed projects.
- Develop and maintain partnerships with other industry related organizations, governmental entities, and regulatory officials.
- Represent the District and serve on regional technical committees, inter-agency negotiations with user groups and other meetings as directed.

### **Other Job Duties**

Participates in training, professional development, and continuing education programs.

The District is a small employer with a limited number of employees available to complete work. This requires the position duties to adapt to shifting and overlapping needs.

### **Required Qualifications**

- Knowledge or understanding of forest health and land management principles.
- Knowledge or understanding of a broad range of soil and water conservation principles, techniques, methods and practices to apply and install conservation systems, which involve complex and diverse agricultural and other land uses.
- Knowledge or understanding of green stormwater infrastructure or low impact development stormwater management principles and design concepts.
- Knowledge or understanding of cultural resources assessments.
- Currently hold or can obtain a valid Washington State Drivers License.
- Working knowledge of local, state and federal environmental regulatory programs and applying that knowledge to the design and permitting of water management, fish and wildlife habitat enhancement, steep slope management, shorelines management, forest\health management, and freshwater and marine enhancement projects.

### **Education, Experience, Competencies, Key Knowledge, and Skills**

- Bachelor's Degree in Engineering and professional engineering license, with specific knowledge and experience in natural resources, agricultural, hydrological, GSI/LID, and/or

geological engineering is preferred. Minimum of eight years of experience engineering projects specific to natural resource management, agricultural practices, forestry practices, and/or fisheries habitat enhancement. Alternative combinations of education and experience will be considered.

- Use computers to write reports, track work products, prepare and record field and technical data. Proficient with computer programs such as Auto CAD, Arc GIS, and Microsoft Office Suite; knowledgeable of land survey practices; and have experience interpreting maps and aerial photography.
- Experience performing hydrological analyses using WWHM 4 or newer and familiar with SWMMWW and/or KC SWDM. Experience performing hydraulic analysis using HEC-RAS for the design or analysis of existing or new water crossing structures, open channel design, fish passage design and flood encroachment studies. Working knowledge of physical stream processes, e.g. hydraulics, channel configuration, geomorphology, etc.
- Knowledge or understanding of the biology of local fish species.
- Knowledge or understanding of Puget Sound watersheds, hydrology, geology, and planning and implementing aquatic area enhancement projects.
- Extensive experience working collaboratively with stakeholders reflective of a very diverse population and a demonstrated ability to work as a part of a team.
- Knowledge or understanding of agricultural land use practices, common rural and urban land use practices, and the resource management issues and challenges facing the region.
  - Excellent verbal and written communication skills.
  - Ability to work with diverse communities and cultures.
- Excellent organizational skills and attention to detail.
- Proactive, dependable, accountable and approachable.
- Proven problem-solving skills.
- Must be able to work under tight deadlines and manage conflicting demands while successfully operating in an ever-changing work environment.
- Shares a vision and passion for natural resource management and conservation practices.
- Strong interpersonal, collaborative, and analytical skills with a customer focus; must be able to foster and maintain sound working relationships.
- Demonstrated ability to work cooperatively and effectively with other agencies and organizations.
- Strong work ethic and accountability; Excellent attention to detail; Willingness to learn new skills.
- Demonstrated ability to work independently with little direct supervision.
- Working in the woods and driving on primitive logging roads.

## **Other Desired Competencies**

- Two years managing public works contracts and in-house projects.
  - Experience working closely with aquatic area habitat enhancement projects.
- Working knowledge of local, state and federal environmental regulatory programs and applying that knowledge to the design and permitting of water management, fish and wildlife habitat enhancement, steep slope management, shoreline management, and stream and wetland enhancement projects.
- Demonstrated knowledge and understanding of surveying principles and skill in the use of surveying laser and total station equipment, using electronic field data collection and GPS, and instructions to perform data collection, and construction staking.
- Previous experience working with small landowners.
- Valid First Aid and CPR certification.

## **Working Conditions**

This position normally works from 8:00am – 4:30pm, Monday through Friday., however, periodic evening and weekend work may be required and the incumbent may occasionally be required to work in excess of 40 hours per week, or on weekends to meet deadlines. Work is performed in a combination of office, field, and classroom settings. Ability to walk over steep, uneven, forested terrain under a variety of weather conditions year-round is required. This position is expected to be in the field between 20% and 30% of the time.

Funding for this position is subject to availability of federal, state and local government grants and contracts. Permanence of the job is dependent upon continued grant funding.

## **Benefits**

The District offers a comprehensive benefits package which includes paid leave, medical, dental, life insurance policy with the option to increase coverage at employee's expense, access to long term disability coverage at the employee's expense, and participation in the State of Washington's Retirement System (PERS).

## **To Apply**

Submit a resume and a letter of interest outlining your job skills and qualifications for this position to [accounting@masoncd.org](mailto:accounting@masoncd.org) using the subject line District Engineer.

**This position will remain open until filled**