# Northern Virginia Soil and Water Conservation District Urban Conservation Engineer/Urban Conservation Specialist III

#### Overview:

The Urban Conservation Engineer/Urban Conservation Specialist III serves as the District's technical specialist in engineering-related matters and a variety of other technical matters related to conservation problems and solutions. This includes review of site plans for certain development projects for the Fairfax County Land Development Services. The Urban Conservation Engineer/Urban Conservation Specialist III provides advice to the County and development industry on erosion and sediment control, stormwater management, and the protection of streams and other natural resources. Provides advice on new and innovative techniques for better site design and stormwater management, streambank stabilization and riparian restoration. The responsibilities also include providing technical advice to individual property owners and homeowner associations on conservation problems such as drainage, erosion, soils, vegetation, streams and ponds. The Urban Conservation Engineer/Urban Conservation Specialist III provides soils and other natural resource information to consultants and the community, and leads or assists with developing and conducting seminars, workshops and tours to provide information, education on relevant natural resource conservation topics, and other duties as assigned. Performance of duties requires up-to-date technical knowledge related to these tasks, the ability to work independently and in a team setting, and make accurate technical and environmental assessments. Excellent oral and written communication skills are essential. The position reports to the Executive Director.

#### **Duties and Responsibilities:**

#### Technical Assistance (70%)

- Reviews site development plans for County public works projects, projects within the Pohick Creek Watershed, projects
  within three miles of the Potomac River, and other selected plans, as requested by the County, private industry, or the
  public. Prepare conservation reports with recommendations on the adequacy of erosion and sediment controls, water
  quality protection, and stormwater management.
- Reviews and comments on environmental assessments prepared by other state and federal agencies for projects within the NVSWCD.
- Provides advice and technical guidance on new and innovative site design and stormwater management techniques and other best management practices to County staff and the development industry.
- Responds to requests from the County Supervisors and staff for assistance on technical problems and other matters where the Conservation Engineer's knowledge and experience are helpful and useful.
- Provides technical assistance to County staff on matters of streambank stabilization, stream restoration, pond maintenance and modifications, and other stormwater management matters.
- Participates in judging the annual Fairfax County Land Conservation Awards Program.
- Participates with Fairfax County and the USDA-Natural Resources Conservation Services in the annual maintenance inspection of the Pohick Creek Watershed PL-566 dams and lakes.
- Provides technical advice to homeowners and homeowner associations on erosion, drainage, streambanks, riparian areas,
   wet basements, vegetation, and other problems related to natural resources and land management.
- Supports local and state Conservation Assistance Programs.
- Responds to citizen complaints and referrals from the County Supervisors and other officials regarding conservation problems.
- Provides natural resources information and advice to citizen-based watershed groups.
- Conducts reviews and analyses of technical materials and reports on environmental issues.
- Participates in County committees and studies to make recommendations on matter related to erosion and sediment controls, stormwater management, and other natural resource concerns.
- Participates in regional boards and committees related to nonpoint source pollution and multi-jurisdictional watersheds.
- In the absence of the Senior Conservation Specialist, prepares rezoning reports and carries out essential tasks pertaining to the Chesapeake Bay Local Assistance program.

#### Education and Engagement (15%)

- Participates in the planning and production of seminars on erosion and sediment control, stormwater management, and related issues for County planning, review and inspection staff; for construction industry consultants, developers, site superintendents and foreman, and for interested citizens.
- Participates in presentations and tours to inform and educate individuals and groups about nonpoint source pollution, green stormwater infrastructure practices, and other natural resource conservation issues and personal stewardship opportunities.
- Assists the County with presentations, public hearings, and other information and education programs about erosion and sediment control, stormwater management, and natural resource protection.
- Participates in NVSWCD outreach and engagement programs, including annual native seedling sale, tabling events and contributions to the *Conservation Currents* newsletter.

#### Training and Administration (15%)

- Participates in activities that provide training and experience in planning and application of soil and water conservation principles and practices.
- Keeps abreast of related technical information, including new developments. Reviews current literature, reference materials and manuals.
- Serves as a member of NVSWCD's Technical Review Committee
- Provides progress reports, as needed, to the NVSWCD Board, NRCS, DEQ, DCR, and Fairfax County.
- Participates in NVSWCD planning.
- Assists with District reports and input for other reports. Keeps accurate records for reportable items.
- Prepare project proposals.

#### Knowledge, Skills and Abilities:

- Knowledge of theories, principles, concepts and methodologies of soil and water conservation.
- Knowledge of principles and methodology of conservation engineering particularly as it relates to erosion and sediment control, stormwater management, and water quality.
- Knowledge of related biological and physical sciences which provide a foundation for performance of assignments.
- Skill in developing, referencing, and interpreting resources such as maps, statistical information, land use plans, soils information, and project valuations.
- Skill in effective oral and written communication.
- Ability to work independently and as an effective team member.
- Ability to be a good partner and coordinate programs among other agencies and localities.
- Ability to work accurately and responds to requests in a timely manner.

### **Education and Experience**

- Urban Conservation Engineer: Degree from a four-year accredited college or university in civil, agricultural, or environmental engineering, with 3-5 years of experience
- Urban Conservation Specialist III: Degree from a four-year accredited college or university in hydrology, soils, agronomy, natural resources, environmental science or related area, with 5-10 years of experience.
- Excellent customer service skills.
- A conservation ethos and/or an understanding and appreciation of environmental and conservation matters.

## **Preferred Qualifications**

- Masters or advanced graduate degree in related discipline
- Professional Engineers license

#### **About NVSWCD**

The NVSWCD is a public agency governed by a five-member board of directors, three of whom are elected in a general election every four years, and two of whom are appointed.

Our mission is to lessen the impact of urban/suburban activities on our land and water resources in Fairfax County – vital components of the Chesapeake Bay Watershed. We achieve this through effective leadership, technical assistance and outreach programs in collaboration with government, industry and the public.

Our work focuses on water quality and quantity, soils, land-use and land-development practices, innovative best management practices, agricultural best management practices, stream protection, stream restoration design and installation, research, analysis and implementation of special projects and demonstration projects, and education and outreach to a broad spectrum of stakeholders, including seminars, workshops and programs for professionals, youth and the general public, a volunteer stream monitoring program, a storm drain marking program, guidance manuals, newsletters and a website.

Our office environment is collaborative, supportive and flexible. Our small staff is forward-thinking, innovative, motivated and dedicated. They typically perform a variety of tasks to get the job done.

The Northern Virginia Soil and Water Conservation District is an equal opportunity/affirmative action employer. Its programs, activities and employment opportunities are available to all people regardless of race, color, religion, sex, age, national origin, or political affiliation.