

CLASS SPECIFICATION
County of Fairfax, Virginia

CLASS CODE: 5127

TITLE: ECOLOGIST III

GRADE: S-27

DEFINITION:

Under direction, develops and manages various water quality and/or terrestrial resource monitoring and management programs such as the Stream Protection Strategy (SPS) program that are part of the County's Virginia Pollutant Discharge Elimination System (VPDES) or natural resource management plans; serves as principal contact/resource on questions, policies and procedures relating to the health and protection of the County's streams and stream valleys and/or terrestrial ecological resources; and performs related work as required.

DISTINGUISHING CHARACTERISTICS OF THE CLASS:

(The illustrative duties listed in this specification are representative of the class but are not an all-inclusive list. A complete list of position duties and unique physical requirements can be found in the position description.)

The Ecologist III differs from the Ecologist II in that the Ecologist III performs advanced, specialized water resources and biological science duties, and serves as team leader responsible for managing water quality monitoring and/or terrestrial resource management programs, whereas the Ecologist II conducts work which is considered full-performance level.

ILLUSTRATIVE DUTIES:

Plans, develops and manages water quality monitoring programs such as the Stream Protection Strategy program to ensure compliance with the VPDES permit for the County's Municipal Separate Storm Sewer System (MS4) and/or natural resource management plans for the monitoring, protection and restoration of terrestrial and aquatic ecosystems;

Establishes schedules and coordinates monitoring of stormwater infrastructure and streams in compliance with the VPDES and/or terrestrial ecosystems;

Develops stream, wetland and/or terrestrial ecosystem assessment protocols;

Develops monitoring plans and quality assurance project plans (QAPPs);

Develops data analysis procedures and prepares monitoring reports which summarize water quality conditions of streams and the impacts of development and stormwater management systems on the ecological health of County streams and stream valleys and/or the condition of ecosystems and impacts to them from human land disturbance, overabundant wildlife species, non-native invasive species and other factors;

Prepares VPDES permit reports;

Oversees and trains lower level staff in the field and on team projects;

Reviews and prepares updates to County code, ordinances, and policies related to the protection of streams and stream valleys and/or terrestrial and aquatic ecosystems;

Reviews and comments on proposed federal, state and local regulations, ordinances, and policies;

Serves as principal point of contact for responding to citizen and business community questions regarding the condition of streams and/or terrestrial or aquatic ecosystems;

Prepares, negotiates, and administers consultant water quality monitoring and/or resource assessment and management support contracts;
Reviews and comments on environmental impact statements prepared by outside agencies and consultants;
Assists with the preparation and monitoring of performance measures for the annual budgetary process;
Coordinates and reviews input for County website on watershed and stormwater and/or terrestrial communities or wildlife management related content.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:

(The knowledge, skills and abilities listed in this specification are representative of the class but are not an all-inclusive list. The knowledge, skills and abilities in the lower levels of the Ecologist class series are also required.)

Expert knowledge and experience in collection and field analysis of water chemistry and/or terrestrial community and species parameters;
Considerable knowledge and experience in performing bioassessments in accordance with standard protocols such as the Environmental Protection Agency's (EPA's) Rapid Bioassessment Protocol, National Vegetative Mapping Protocol, the Natural Communities of Virginia Classification of Ecological Community Groups;
Considerable knowledge of stream classification methodologies based upon measures of stream hydrologic, biota, soils, and geomorphologic characteristics and/or vegetative community/ecosystem classification;
Knowledge and experience in the development and implementation of water quality monitoring plans and quality assurance project plans (QAPPs) and/or natural resource management plans;
Knowledge of regional fish, plants and/or wildlife communities and experience in field identification to the species level;
Knowledge of regional benthic macro invertebrate communities and experience in laboratory identification to the genus level;
Knowledge of laboratory and field safety procedures, and the handling, storage and transfer of flammable and/or toxic chemicals;
Knowledge of Wetland Delineation techniques including the U.S. Corps of Engineers' Wetland Identification and Delineation Manual, and ability to perform field delineations;
Knowledge of wetland regulations and permitting requirements;
Knowledge of personal computers associated hardware and networked environments for the development, storage and dissemination of environmental data;
Ability to interpret County, Federal and State regulations, codes and ordinances related to the Federal Clean Water Act, State Chesapeake Bay Preservation Act and/or the National Environmental Policy Act;
Ability to develop stream assessment protocols and/or natural resource management plans to write County codes, ordinances and procedures;
Ability to analyze and manage environmental data using databases, spreadsheets, statistical programs and/or Geographic Information Systems (GIS);
Ability to lead, motivate and coordinate employees and volunteers to achieve water quality monitoring program goals and objectives;

Ability to communicate technical and semi-technical issues effectively, both orally and writing, to a wide range of audiences;

Ability to calibrate and maintain field equipment used in water quality and natural resource monitoring;

Ability to carry field equipment and hike long distances over rough terrain;

Ability to operate a motor vehicle.

EMPLOYMENT STANDARDS:

Any combination of education, experience, and training equivalent to the following: Graduation from an accredited college or university with a Bachelor's degree in aquatic ecology, ecology, biology, botany, zoology, geography, environmental science, limnology, natural resource management, or a related field; PLUS Five years of experience in the environmental science field at, or equivalent to, the Ecologist II level, to include experience in water quality monitoring, terrestrial ecosystem assessment and management, data analysis and reporting, bioassessments (fish, macroinvertebrates, vegetative communities, wildlife) using standard protocols, and assessments of associated habitat conditions.

CERTIFICATES AND LICENSES REQUIRED:

Possession of a valid motor vehicle driver's license.

Possession of a valid Storm Water Management Project Inspector certification within 18 months of appointment is required for certain positions as identified to the Department of Human Resources.

NECESSARY SPECIAL REQUIREMENTS:

None.

REVISED CERTS: December 19, 2013

REVISED: July 26, 2013

ESTABLISHED: February 17, 2004