

CLASS SPECIFICATION
County of Fairfax, Virginia

CLASS CODE: 5126

TITLE: ECOLOGIST II

GRADE: S-24

DEFINITION:

Under general supervision, performs full-performance level water and/or terrestrial resources and biological science duties including water quality monitoring, habitat evaluations, stream assessments, wetland delineation, terrestrial resource assessment and management, data management and public outreach for stormwater and/or natural resource management and watershed planning programs; and performs related work as required.

DISTINGUISHING CHARACTERISTICS OF THE CLASS:

The Ecologist II differs from the Ecologist III in that the Ecologist II conducts work which is considered full-performance level, whereas 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 natural resource management programs. The Ecologist II differs from the Ecologist I in that the Ecologist II conducts work which is considered full-performance level, whereas the Ecologist I either performs work which is, and will continue to be, more routine, less complex and narrower in scope than work at the Ecologist II level, or serves in a trainee capacity with noncompetitive promotional progression to the full performance Ecologist II level.

ILLUSTRATIVE DUTIES:

(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.)

Monitors physical, chemical, and biological conditions of the County's streams, lakes, ponds and other water bodies and/or terrestrial ecosystems and wildlife;

Participates in the development of monitoring plans, quality assurance project plans, and/or natural resource management plans;

Analyzes data and prepares monitoring reports which summarize water quality conditions of streams and/or the conditions of ecosystems;

Assesses the impacts of development and stormwater management systems on the ecological health of County streams and stream valleys and/or the impacts from human land disturbance, overabundant wildlife species, non-native invasive species and other factors on natural communities/ecosystems;

Performs monitoring of stormwater infrastructure and streams in compliance with the Virginia Pollutant Discharge Elimination System (VPDES) Permit for the County's Municipal Separate Storm Sewer System (MS4);

Assists in the development of VPDES permit reports and/or summary reports in support of natural resource management plans or for regulatory compliance;

Conducts and reviews Resource Protection Area (RPA) and wetland delineation studies in accordance with state regulations and the County's Chesapeake Bay Preservation Ordinance;

Manages watershed and stream or terrestrial resource monitoring data;

Assists in development of stormwater, watershed and/or natural resource management plans;
Assists in the selection, design and implementation of stream, wetland and/or terrestrial community, ecosystem or population restoration projects;
Responds to citizen and business community questions regarding the condition of streams and/or terrestrial or aquatic ecosystems;
Performs public outreach activities including the development of brochures, reports and web pages;
Participates in public meetings and educational programs;
Maintains contact databases;
Trains and coordinates volunteers in water quality monitoring to support countywide monitoring efforts.

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.)

Knowledge of stream ecology, terrestrial ecology, botany, bioassessments protocols, and stream habitats;
Knowledge of local, federal and state regulations, codes, and ordinances related to the Federal Clean Water Act and/or the National Environmental Policy Act;
Knowledge of wetland regulations and permitting requirements;
Knowledge of fish, plants and/or wildlife communities and field identification to the species level;
Knowledge of benthic macro invertebrate communities and laboratory identification to the genus level;
Knowledge of laboratory and field safety procedures, and the handling, storage and transfer and/or application of flammable and/or toxic chemicals;
Knowledge of stream and/or vegetative community classification methodologies;
Knowledge of Wetland Delineation techniques including the U.S. Corps of Engineers' Wetland Identification and Delineation Manual;
Knowledge of personal computers, associated hardware, and networked environments for the development, storage and dissemination of environmental data;
Ability to collect samples and perform field analysis of water chemistry parameters;
Ability to calibrate and maintain field equipment used in water quality and natural resource monitoring;
Ability to analyze and manage complex environmental datasets using databases, spreadsheets, and statistical programs;
Ability to communicate technical and semi-technical issues effectively, both orally and in writing, to a wide range of audiences;
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 related field; PLUS Two years of 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 stream and/or terrestrial 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 CERT:	December 19, 2013
REVISED:	July 26, 2013
ESTABLISHED:	February 17, 2004