

ENVIRONMENTAL GIS SPECIALIST

DISTINGUISHING FEATURES OF THE CLASS: An employee in this class provides technical assistance in the development of geospatial technology practices, policies and standards for the Environmental Management Council (EMC). Geospatial technologies are interpreted as the use of GIS (Geographical Information Systems) and GPS (Ground Positioning Systems) technologies and disciplines for obtaining and utilizing measurements and data on land use status. The incumbent works with the EMC's Environmental Planner to coordinate Ulster County 's Open Space and Parks planning, storm water abatement and other land, air and water education programs. The incumbent is responsible for providing technical assistance in the design and management of the EMC geodatabase, as well as preparing geospatial data for the publication of maps. The work is performed under the general direction of the EMC Chairperson and the Executive Committee. Supervision is exercised over the work of EMC staff, interns and volunteers involved in the collection of environmental data gathered in the laboratory and in field collection operations. Does related work as required.

TYPICAL WORK ACTIVITIES: The typical work activities listed below, while providing representative examples of the variety of work assignments in the title, do not describe any individual position. Incumbents may perform some or all of the following, as well as other related activities not described.

Supervises EMC's geospatial laboratory, field operations and the efforts of employees, interns and volunteers as their work relates to geospatial technologies;

Plans, conducts, coordinates and supervises a broad range of environmental field research;

Supervises and is responsible for the collection, management and use of real-time weather, water quality, geospatial and other environmental data;

Designs and manages the EMC geodatabases, manipulating and analyzing data for the production, reproduction and publication of maps and other cartographic elements;

Develops and customizes computer programs used in geographic information systems (GIS);

Provides technical assistance to the EMC Chairperson in the development of geospatial technology practices and policy;

Works with the EMC Environmental Planner to coordinate Ulster County's open space, storm water system infrastructure and education programs;

Provides general and technical training in geospatial technologies to county employees, municipal officials, educators, volunteers and the general public;

Assists in developing budgets for geospatial-related projects;

Prepares and provides multimedia, written and oral reports with appropriate cartographic displays to the Ulster County Legislature, municipal officials and the public;

Utilizes GIS software, as well as global positioning equipment to compile, collect, organize and analyze geographic information relative to the focus and planning objectives of the EMC;

Utilizes GPS technology and equipment to collect, compile, organize and analyze geospatial information;

Works to generate funding for EMC's geospatial programs through grants or agreements with other agencies;

Advises EMC Chairperson on the focus and future of geospatial technologies.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS: Thorough knowledge of the principles, practices, techniques and procedures of Geographic Information Systems (GIS) as applicable to county, municipal and regional environmental management issues; good knowledge of current GIS software; good knowledge of the proper methods for field collection of diverse geospatial data; working knowledge of grant writing and management; skill in using a variety of GIS, global positioning (GPS), and scientific field sampling equipment; ability to prepare and present training courses in GIS and GPS technologies to a variety of constituents and/or governing bodies; ability to observe, identify, interpret and conceptualize the bio-diversity of target areas; ability to analyze data; ability to maintain effective working relationships with various groups and agencies; good judgement; tact; courtesy; physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS: Either

- A. Graduation from a regionally accredited or New York State registered college or university with a Master's Degree in Geography, Environmental Sciences, Planning or a closely related field specifically related to land use, urban or regional natural resource planning, and two (2) years of professional experience in land use, erosion control, urban or regional natural resource planning including program development; **OR**
- B. Graduation from a regionally accredited or New York State registered college or university with a Bachelor's Degree in Geography, Environmental Sciences, Planning or a closely related field specifically related to land use, urban or regional natural resource planning, and four (4) years of professional experience in land use, erosion control, urban or regional natural resource planning including program development; **OR**
- C. An equivalent combination of training and experience as designated in A and B above.

Note: Applicant must be eligible to participate in a training program for Red Cross First Aid Certification, and must possess such certification by the end of their probationary period.

ULSTER COUNTY
3016 ENV GIS SP
Classification: Competitive
Grade: 17
Union: CSEA

Adopted: July 15, 2004

