

## **MARYLAND ENVIRONMENTAL SERVICE JOB DESCRIPTION**

**Job Title:** Geographic Information System  
(GIS) Specialist Trainee

**FLSA Status:** Non-exempt / 2

**Group:** Technical and Environmental Services

### **POSITION SUMMARY**

Works at introductory performance level, conducting and applying geographic information system (GIS) skills and knowledge to environmental and utility projects.

### **ESSENTIAL FUNCTIONS**

Utilizes GIS and Global Positioning System (GPS) hardware and software to develop, design, and maintain spatial databases and thematic data (e.g. storm water sampling points, groundwater monitoring wells, utilities, wetlands, etc.).

Creates, adjusts, corrects, manages, converts and distributes various forms of geospatial data, namely reports, charts, tables, maps in hardcopy and electronic formats.

Employees are expected to produce reports, charts, tables, and maps according to customer specifications.

Assists in the design, development and maintenance of geospatial databases of information; documents procedures, validates data for accuracy and completeness, completes approved metadata forms and produces maps of the resulting information.

Uses ArcReader, ArcPublisher, ArcView, ArcInfo desktop GIS software, ArcPAD mobile software and Personal Digital Assistance (PDA) technology.

Evaluates information and data from outside sources to determine the quality of the data. Translates data from outside sources and converts data for use in completing the objectives of clients for their GIS projects.

Obtains field data using GPS software and hardware.

Imports, creates, reformats and processes data to produce spatial maps for various studies.

Facilitates spatial analysis, data manipulation; calculates distances and area of features and other needed analysis.

## **OTHER RESPONSIBILITIES**

Performs other work-related duties as assigned.

Participates in advanced training; attends seminars and conferences to attain greater expertise and skills in geospatial database structures and design, spatial analysis, programming languages, and computer skills.

Works with local, state, federal government agencies and private entities to provide geospatial services.

Persons appointed to this position are required to obtain security clearance for BWI Airport.

## **EDUCATION AND EXPERIENCE**

Bachelor's degree from an accredited college or university in Geography, Environmental Science, or Computer Science with a GIS emphasis.

## **KNOWLEDGE, SKILLS AND ABILITIES**

Proficiency with Windows 2000/NT/SP/CE and Mobile Operating Systems, Microsoft Access, Visual Basic Applications and familiarity with at least one or more of the following: SQL, C++, Java Script or HTML.

Ability to understand methods and techniques in developing maps and developing, designing, and maintaining geodatabases and presenting strong attention to detail.

Ability to understand the fundamentals of Cartography.

Ability to communicate effectively, both orally and in writing as well as possession of good listening skills and note taking ability.

## **LICENSES AND CERTIFICATIONS**

Possession of a valid driver's license with less than six points under Maryland law may be required.

## **PHYSICAL DEMANDS**

While performing the duties of this job, the employee is regularly required to talk, hear, stand, walk, sit and use hands and fingers to handle or feel. The employee is regularly required to reach with hands and arms, climb or balance, stoop, kneel, crouch or crawl.

Specific vision abilities required by this job include close vision, distance vision, depth perception and the ability to focus.

## **WORK ENVIRONMENT**

The noise level while working indoors at the assigned facility is usually quiet, however the employee may occasionally be exposed to work in outdoor weather conditions and to work near moving aircraft and moving mechanical parts. The employee may occasionally be exposed to hydrated lime, airborne particles, and vibration. The employee may be required to work in severe weather elements, enter confined spaces and work in loud environments. In these instances, the noise level is usually moderate to loud.