



## Arkansas Game and Fish Commission Employment Job Posting

GIS ANALYST - AGFC GIS ANALYST

POSITION NO: 22159195

### **POSTING INFORMATION:**

Advertisement Opens: Sept. 28, 2020

Advertisement Closes: Oct. 5, 2020

Full Time: Yes

Salary: \$57,755.00 - \$57,755.00 Annually

### **POSTING REQUIREMENTS:**

#### Minimum Education and/or Experience:

The formal education equivalent of a bachelor's degree in mathematics, information technology or related field; plus two years of geographic information data collection and compilation experience.

OTHER JOB RELATED EDUCATION AND/OR EXPERIENCE MAY BE SUBSTITUTED FOR ALL OR PART OF THESE BASIC REQUIREMENTS, EXCEPT FOR CERTIFICATION OR LICENSURE REQUIREMENTS, UPON APPROVAL OF THE HUMAN RESOURCES CHIEF.

#### Preferred Education and/or Experience:

The formal education equivalent of a bachelor's degree in geographic information systems, geography, criminal justice, environmental science, zoology, biology, geology or related field; plus work-related experience using geospatial systems in support of wildlife management, environmental science or natural resources conservation.

#### Knowledge, Abilities, and Skills:

Knowledge of principles and methods for describing the features of land, sea, and air masses, including their physical characteristics, locations, interrelationships, and distribution of plant, animal, and human life. Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models. Knowledge of global positioning technology, graphics, and photo imaging software. Ability to analyze information and evaluate results to choose the best solution and solve problems. Ability to read and interpret maps, charts, aerial photographs, and statistics.

### Preferred Knowledge, Abilities, and Skills:

Knowledge and experience utilizing GIS principles and methods for collecting, analyzing and describing features of the environment; their physical characteristics, locations, inter-relationships and distribution. Knowledge of multiple platform local and cloud GIS RDBMS (ESRI SDE, PostgreSQL) design techniques, tools, and principles involved in production of geospatial products and models. Knowledge of GPS technology and Remote Sensed Data Types. Knowledge of the principles of biology, ecology, related environmental sciences and of state game and fish management programs. Knowledge of state and federal geospatial policies and standards. Ability to exercise independent judgement to analyze information, evaluate results and apply or recommend best solutions. Experience performing difficult technical work requiring extended professional, scientific or technical training and often going beyond clear precedents by adaptive methods for solving complex problems. Ability to read and interpret maps, charts, aerial photographs, and statistics. Ability to identify coordinate systems, scales, geodesy, elevations, and topographic features. Ability to utilize standard mathematical formulas in GIS software applications. Ability to identify and validate essential information for project completion. Proficiency working in all applications of G Suite, MS Office and ArcGIS suite of tools including ArcGIS online required; including experience collecting and compiling geospatial information using survey notes, graphs, global positioning systems, aerial photography and other digital remote sensing techniques and from other diverse sources. Skilled at utilizing geospatial databases and other information sources for map or report preparation. Experience determining map content, layout, scale, size, projection, colors. Experience with population modeling and statistical analysis of wildlife and fisheries population data preferred. Excellent written and oral communication skills and the ability to convey geospatial information and concepts to non-technical audiences. Proficiency with GeoStor and scripting in ArcGIS environment using Arcade, Python or similar query languages required. Familiarity with R, QGIS, Adobe Suite desirable.

### **POSTING DETAILS:**

#### Position Location:

City: Little Rock, Arkansas

Office: Little Rock Office Complex

Division: GIS

#### Job Summary:

The Geographic Information System (GIS) Analyst is responsible for collecting, analyzing and interpreting geographic information utilizing geodetic surveys, aerial photographs, and satellite data. This position is governed by state and federal laws and agency policy.

#### Typical Functions:

Identifies, scales, and orients geodetic points, elevations, and other topographic features, applying standard mathematical formulas. Collects information about specific features of the Earth using aerial photography and other digital remote sensing techniques. Compiles data and utilizes databases required for map preparation, including aerial photographs, survey notes, records, reports, and original maps. Determines map content and layout, as well as production specifications, such as scale, size, projection, colors, and direct production to ensure that specifications are followed. Examines and analyzes data from ground surveys, reports, aerial photographs, and satellite images to prepare topographic maps, aerial-photograph mosaics, and related charts. Performs other duties as assigned.

#### Specific Duties and Responsibilities:

The Geographic Information System (GIS) Analyst is responsible for collecting, analyzing and interpreting geographic information utilizing geodetic surveys, aerial photographs, and satellite data and will work with the GIS Team to identify alignment opportunities with AGFC business processes. GIS Analyst will provide GIS project support to AGFC programs personnel. The GIS Analyst will: Meet with users to define and identify data needs, project requirements, required outputs, or to develop applications. Create maps and graphs, using GIS software and related equipment. Conduct research to locate and obtain existing databases. Gather, analyze, and integrate spatial data from scientific staff and determine how best the information can be displayed using GIS. Compile geographic data from a variety of sources including federal data sources, state spatial data clearinghouse, census information, field observation, sociological surveys, satellite imagery, aerial photographs, and existing maps. Analyze species data for geographic statistics, distribution mapping and trend visualization to incorporate into documents and reports. Design and update relational geospatial databases; applying additional knowledge of spatial feature representations. Enter new map data through use of digitizing or by direct input of coordinate information using the principles of cartography including coordinate systems, longitude, latitude, elevation, topography, and map scales. Analyze geographic and temporal relationships among varying types of data. Operate and maintain GIS systems hardware, software, plotters, digitizers, color printers, cameras and GPS units. Move, copy, delete, and add files, drawings, and maps to output reports in hard copy or electronic transfer. Communicate regularly through in person meetings, web meeting software, and conference calls. Prepare and present information to non-technical users and answer technical questions. Retrieve stored maps and projects and follow section project reporting and archive procedures. Will work with multiple format databases and will coordinate with other staff to complete data processing, data entry, and work with programmers to improve data automation. Will be responsible for metadata development when required and adhering to any internal documentation and standards. Will participate in spatial technology training events for staff. Will provide technical assistance and training for other users and peers on all aspects of spatial databases and interfaces, including writing technical instruction manuals for clients. Will research technical geospatial software problems and fix errors when necessary. Will be responsible for assisting with data maintenance and updates to schema. Will work directly with field and office staff to collect and reconcile geospatial data. Will generate reports on game and fish scientific game and fish surveys and studies. Occasional travel to field offices and remote locations and some overnight travel is expected.

The working title for this position will be GIS Analyst and will be supervised by the AGFC GIS Lead. This position will provide GIS field support and coordination to biologists, program coordinators and other GIS users statewide. Will perform daily project work with GIS team on statewide projects. An extensive GIS, biological and technical understanding is critical to this position. Existing employees are encouraged to apply.

#### Certificates, Licenses, or Registrations:

N/A

#### Special Job Dimensions:

This position may require occasional travel of up to 40%. The working title for this position will be GIS Analyst and will be supervised by the AGFC GIS Lead. The work associated with this position may be performed in a hybrid capacity: partial telework, partial work in our Little Rock Headquarters or regional office.

Other Specific Information:

All applicants subject to a criminal background check.

Applications must include complete work history and references.

As an equal opportunity employer, the Commission will make any reasonable accommodations necessary to ensure equal employment opportunities.