

AMERICORPS SERVICE POSITION ANNOUNCEMENT 2016-17

2016-2017 National Park Service AmeriCorps Opportunity

Service Position Title: Enterprise GIS and Data Technician AmeriCorps Member

Immediate Supervisor: Thomas Colson, Park Ranger Service

Service Position Summary:

The AmeriCorps recruit will work 40 hours per week on a Monday through Thursday schedule (4/10). Primary duties include researching, developing, presenting, and evaluating Geographic Information Systems (GIS) and Global Positioning System (GPS) data used for planning and natural resource management in Great Smoky Mountains National Park. The park engages in numerous infrastructure development and maintenance activities which require diligent review of impacts to sensitive resources as well as comprehensive application of civil planning and construction practices. Use of GIS and other design systems and software assist managers in making resource decisions that affect the park. The member will assist planners and resource managers in creating and evaluating data used by the park to ensure National Environmental Policy Act (NEPA) compliance as well as effective use and management of spatial and non-spatial data in support of park facility management operations.

The member will also assist park staff in integrating planning and maintenance GIS data in other aspects of park operations, particularly law enforcement, public safety, Wildlife and Fisheries Management, Fire Effects, and Hydrology. This includes collection, development and deployment of data which supports visitor services such as campground facilities, Emergency Action Plans (EAP), trail maintenance, emergency spill response, real-time wildlife tracking, Search and Rescue, Cultural Resource Preservation, Environmental Impact Statements, and transportation planning. The goal of this project is to provide the park with a comprehensive Standard Operating Procedure (SOP) for the use of GIS data in park planning that compliments servicewide facility planning and resource conservation initiatives such as "Foundation" and "NPAtlas".

Primary Functions of Position:

- 1) Develop and Deploy GIS data in support of NEPA compliance
- 2) Collect, Develop, and Deploy GPS data associated with the location of park critical assets such as bears, feral hogs, elk, trail and road improvements, discovery of new hydrologic resources
- 3) Train planners and designers in use of, and integration of, GIS data with other planning systems and software
- 4) Provide Tier-1 GIS and data technical support to Resource Management and Emergency Operations

5) Serve as members of the Search and Rescue Team

Position Seasonal Breakdown:

Fall 2016:

- Initial training will include use of NPS GIS software and Systems, park project planning, and use of surveying and drafting equipment and software

Winter 2016-2017:

- Member will coordinate collection and development of GIS data to support facility planning operations
- Member will collect GPS data of park critical assets.

Spring-Summer 2017:

- Member will integrate GIS data into web-based mapping applications
- Member will perform data mining and analysis of non-GIS data
- Member will assist park staff in use of GIS data for maintenance and construction planning

Required Knowledge, Skills and Abilities:

- Must have own transportation & a valid driving license (*no moving violations allowed)
- Paid or unpaid experience with GIS and/or GPS and/or Databases
- Paid or unpaid experience in the natural resource or environmental field
- Strong interest in environmental natural resource conservation and civil planning or engineering
- Must be able to work as a member of a diverse and complex team
- Able to work independently and take leadership on goal accomplishment
- Capable of working with people from diverse backgrounds
- Solid organizational and leadership skills
- Commitment to honesty, excellence and professionalism
- Comfortable making presentations to large groups (5 to 20+ people)
- Able to grasp complex data relationships
- Ability to quickly assimilate new technology
- Strong technical writing skills
- Well-above-average computer skills
- Ability to hike long distances in adverse weather
- Ability to stand for long periods of time while performing surveying operations
- Strong attention to detail and accuracy.

Optional Knowledge, Skills and Abilities:

- State or higher-recognized emergency medical training such as EMT, Medic, WFR
- State or higher-recognized emergency response training such as “Red Card”, FEMA, Aviation
- Ability to safely navigate very steep and rocky terrain, verifiable climbing experience

Desired Knowledge, Skills and Abilities

- Experience and training with Word, Access Databases, ArcGIS
- Optional experience with HTML, Google Sites, Google Maps, Java, C#

Education or experience in any of the following:

- Natural Resource Management
- Civil Engineering
- Planning
- Spatial Information Systems
- Surveying

Service Conditions:

AmeriCorps member will work outdoors in a mountainous and ever-changing environment, as well as indoors in a climate-controlled environment. Outdoor work and exposure to all weather conditions (sun, rain, heat, cold, etc.) will be required. Occasional evening/weekend hours may be necessary.

Physical Demands:

Sitting; standing; walking; lifting, pushing, pulling and carrying (up to 40 lbs.); kneeling; stooping; bending; squatting; close vision; use of hands to finger, handle, or feel objects, tools or controls; exposure to various colognes/perfumes, fumes from printing cartridges and dust from stored supplies, wrist/arm discomfort due to prolonged use of office computer equipment;