Tucson Audubon Society - Position Description

NPS Southwest Network Collaborative, Inventory & Monitoring Program

Position: Assistant Data Manager
Salary Rate: $18.29 – 22.51/hr depending on experience
Full time (40 hrs./week)
Position Term: 9-month position (additional time contingent on funding)
Benefits: Medical, Dental, and PTO (paid time off)
How to apply: Email your resume and cover letter to swnc_data_mgmt@nps.gov

Project Objectives: The Southwest Network Collaboration (SWNC) is a joint effort between 3 National Park Service inventory and monitoring programs: the Sonoran Desert Network, Chihuahuan Desert Network, and Southern Plains Network (https://www.nps.gov/im/index.htm). Through this collaboration, the programs share monitoring protocols and duties related to data collection and reporting. The goal of the SWNC is to improve effectiveness and efficiency across all three networks. Under the SWNC, the networks (in varying combinations) share protocols, training, data management, and reporting responsibilities for seven different protocols: air quality, climate, invasive exotic plants, groundwater, landbirds, surface water (streams and seeps/springs/tinajas), and terrestrial vegetation & soils. The SWNC collects monitoring data in 6 states and 29 parks.

The Tucson Audubon Society works in collaboration with the SWNC networks to implement several aspects of these monitoring protocols and supports several staff positions. This position would be a Tucson Audubon Society employee working full time for 9 months, with potential for extension beyond that dependent on funding availability. The chosen incumbent will serve as the Assistant Data Manager in support of the NPS collaboration through addressing the direct needs of the Sonoran Desert Network (SODN). SODN is undertaking development and implementation of systematic biological inventories and long-term vital signs monitoring. The success of SODN programs depends on a well-designed and maintained data management system that is easily accessible to all parks and is relevant to biological resource information needs. The incumbent applies knowledge of data management principles, an understanding of the data life cycle, database design, and programming to develop and support viable application programs and systems to meet SODN needs.

Duties of the Position:
- Ensuring proper management of all data in the local office.
- Working with the Data Manager leads to develop or maintain data management solutions for our protocols, throughout the data lifecycle.
- Designing normalized, relational databases that conform to NPS standards and "best practices".
- Developing, implementing, and maintaining data work flow procedures, including data quality assurance procedures.
- Writing standard operating procedures to document workflow procedures. Ensures compatibility of procedures with NPS guidelines and direction.
- Participating in professional meetings, workshops, conferences, and symposia dealing with data management, GIS, and related topics.
- The Incumbent will be asked to assist in the day to day activities and generally support all ongoing activities within the SODN office.

Anticipated Outputs: As a result of this position, the SWNC will have a well-designed and maintained data management system that is easily accessible to all parks and is relevant to biological resource information needs. This system will conform to NPS policy.
Map of Project Area:

Park Units of the Southwest Network Collaboration

Basic Qualifications:

- Available start date on or around November 16, 2020 (negotiable)
- Written and oral communication skills
- Detail oriented and well organized
- Skill in working in a team environment and building successful relationships with colleagues.
- Understanding of how to manage data through its life cycle (data entry to archiving).
- Knowledge of relational database design principles and experience in applying these principles to the design, development, and maintenance of complex relational tabular and spatial databases.
- Experience managing both tabular and spatial data; geodatabases, Access, SQL Server
- Use Structured Query Language (SQL) in relational databases to perform data management tasks, complex database queries (e.g. multiple joins, data summarization, nested queries) and export data out of databases in both tabular and spatial formats.
- Understand Object Oriented Programming principles and have the ability to program in VBA, Jscript, .NET, Python or JavaScript.
- Knowledge of ESRI software packages for GIS (e.g. ArcGIS Desktop/Pro, Collector, Survey123), and database management (e.g. ArcSDE, SQL Server) and the skill to apply these technologies to effectively accomplish data management goals.

Other Desired Skills

- Advanced SQL skills, including stored procedures and functions
- Report design skills
- Experience using SQL Server tools (e.g., SQL Server Management Studio, SQL Server Data Tools)
- Experience using version control software (e.g., Git, Subversion)
Physical Demands

Work is often sedentary. Office work demands mental discipline to work in an office environment that is open and occupied by other staff members. Field work may occasionally require some physical exertion such as long periods of standing, walking over uneven terrain.

Work Environment

A majority of the work is performed in an office setting with adequate light, heat, and ventilation. Occasional field visits may create exposure to a variety of physical settings including extreme climatic conditions and rugged terrain. The incumbent may sometimes be expected to work under stressful conditions that arise from heavy workloads and short deadlines.