CITY OF BOULDER
invites applications for the position of:

GIS Analyst / Database Developer

An Equal Opportunity Employer

POSTING START DATE: 02/01/13 12:00 AM
POSTING END DATE: 02/15/13 11:59 PM
HIRING RANGE: $47,800-$56,140 Annually (DOQ)
SALARY: $47,800.00 - $72,800.00 Annually

POSITION END DATE:
WORK SCHEDULE: Full Time (40 Hours per Week)
JOB TYPE: Full-Time
LOCATION: Open Space & Mountain Parks Annex, 7315 Red Deer Drive, Boulder

OVERALL JOB OBJECTIVE:
Under general supervision, provide innovative technical solutions that aid in the management of the natural resources and recreational opportunities found within the Open Space and Mountain Parks (OSMP). Use spatial data collection, Geographic Information System (GIS), and complex data analysis techniques to inform management decisions. Assist with database development, using a Relational Database Management System (RDBMS). Support organizational information needs and provide a coordinated data storage, retrieval, analysis and archiving resource.

DUTIES & RESPONSIBILITIES:
1. Relational Database Management
   • Coordinate development and administration of customized OSMP natural resource data management systems.
   • Develop, implement, and maintain custom front-end database applications for desktop and web.
   • Assist with development, implementation and maintenance of databases within a RDBMS.
   • Design queries and reports as needed to assist the Department in summarizing collected data.
   • Coordinate with the Information Technology (IT) Department (and/or contractors) to ensure efficient and effective implementation and support of OSMP databases and information resources
   • Work with IT to help administer database related user rights, security, backup, maintenance, software updates, etc.

2. GIS Data/Geodatabase Management
   • Participate in developing GIS data standards and operational procedures for departmental GIS applications.
   • Design GIS data structures, both geospatial and within a relational database management system.
   • Input/update/create departmental GIS data including metadata. Directly edit GIS datasets, including attribution and linkage to external datasets. Ensure that departmental and City data standards are met for data sharing through City enterprise GIS implementation.
   • Manage departmental thematic GIS data: geodatabase feature datasets and feature classes, map files, map graphics, associated tables/spreadsheets.
3. Data Collection
- Develop data collection protocols and coordinate data collection efforts for the Department.
- Provide GIS and data management coordination and services for departmental field data collection efforts (e.g., IPM, wildlife, forest monitoring, rare plant monitoring, wetland delineation, and vegetation mapping).
- Develop mobile data collection applications.
- Assist in managing departmental GPS fleet, including user training, hardware/software updates, and data integration with GIS data structure.
- Collect natural resource, physical, visitor use, land ownership, land use, and related data through direct field data collection.

4. Training and Support
- Develop and provide customized Database/GIS/GPS and spatial analysis training for staff to ensure maximized utilization of spatial information and analysis systems.
- Provide ongoing GIS technical support for departmental GIS and Database applications.
- Serve as GIS liaison to assigned departmental division(s) to ensure a consistent conduit for information sharing for all departmental users.
- Provide technical assistance and support to project team(s) and departmental staff; attend meetings, participate in discussions, assist with developing project goals and objectives, recommend solutions, and perform related work items as necessary.

5. Cartography
- Design, develop, and distribute custom maps for workgroup and project needs.
- Communicate with diverse staff on complex projects to develop cartographic products that accurately depict spatial information while representing the communication needs of the project.
- Create publication map products. Work with professional printing organizations to print and distribute maps.

6. Employee Development
- Maintain current knowledge of cartography, GIS, remote sensing, computer information systems and strategies, project management, and natural resource management to assure competence for providing effective and efficient work group functions for the department and City.
- Research, develop, and advocate technical applications.
- Attend training, conferences, workshops, and seminars as appropriate.

7. Data Sharing
- Prepare and distribute data for public consumption
- Respond to GIS and information requests from the public, researchers, other government agencies, and conservation partners.
- Obtain signed City data sharing agreements, modifies/creates GIS information for project needs, distributes information, and tracks project information usage.
- Negotiate in-kind data exchanges.

8. Safety
- Take proper safety precautions to prevent accidents.
- Responsible for the safety of self, others, materials, and equipment.
- Use all required safety equipment and follows all safety regulations, policies and procedures.
- Report all accidents and damage to city property.

Responsible for knowing and complying with all city and department policies; participating in
professional trainings and development; and adhering to attendance and workplace attire policies.

Perform related duties as required by management to meet the needs of the City.

Generally duties are listed from most to least critical or time consuming.

The city of Boulder is committed to hiring employees who provide excellent customer service. Our employees act with a high level of integrity, and take responsibility for their words and actions.

City of Boulder employees strive to respect and appreciate each individual's differences, and to work effectively with all people and their diverse backgrounds. We support candid and honest interactions, which respect other points of view, and are sensitive to communication differences. We achieve organizational goals through inclusive problem solving, planning, and decision-making. Community partnerships are included in this effort.

QUALIFICATIONS:
REQUIRED MINIMUM QUALIFICATIONS:
Bachelor's Degree in Geography, Natural Resources, or related field, and a minimum of two years related work experience. Or an equivalent combination of education and experience. Demonstrated aptitude in project implementation involving database design and administration. Experience applying principles of geography, cartography, and natural resources management, including a thorough understanding of GPS, mapping coordinates, aerial photos, and land use data. Proven proficiency using the ArcGIS suite of software, and ability to connect or link databases in SQL Server, Access, and Oracle to ArcSDE datasets. Significant experience designing Microsoft Access databases front ends and using Microsoft SQL Server to develop relational databases. Demonstrated ability in exporting summarized data (in the form of views, queries and reports) from the RDBMS. In depth knowledge of the Windows Operating System and Microsoft Office. Excellent organizational skills. Detail-oriented. Effective verbal and written communication skills. Ability to establish and maintain effective working relationships with employees, departments, governmental agencies, and the public. Ability and willingness to do field work in a variety of weather conditions. Demonstrated ability to work cooperatively with individuals representing diverse interests. Willingness to learn computer applications and software packages.

DESIRED QUALIFICATIONS – In addition to the required minimum qualifications:
Experience with ArcGIS Model Builder, Python scripting experience, experience designing web front-ends for databases, Visual Basic and VBA programming skills, C# experience, Oracle database experience, graphic packages such as Adobe Photoshop and Illustrator.

SUPPLEMENTAL INFORMATION:
WORKING CONDITIONS - Required Physical and Mental Effort, and Environmental Conditions:
Physical and Mental Effort: Sufficient clarity of speech and hearing or other communication capabilities that permits the employee to communicate effectively on the telephone and in person. Sufficient vision or other powers of observation that permits the employee to review, evaluate and prepare a variety of written documents and materials. Sufficient manual dexterity that permits the employee to operate computer equipment and other office equipment. Sufficient personal mobility and physical reflexes, which permits the employee to work in an office setting. Work may include extended periods of time viewing a computer video monitor and/ or operating a keyboard. Ability to work under stress from demanding deadlines, public contact, and changing priorities and conditions.
Work Environment: Works primarily in a clean, comfortable environment. Works in a setting
subject to continuous interruptions and background noises. May be required to do field work in a variety of weather conditions while carrying a GPS unit, and could consist of hiking over rough terrain.

**Machines and equipment used include, but are not limited to the following:** Uses standard office equipment including personal computers, telephones, calculators and copy/fax machines, workgroup servers, workstations, GPS units, plotters/printers.

**ACCOMMODATIONS:** Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential functions of this position.

Note: The above description is illustrative only. It is not meant to be all-inclusive.

APPLICATIONS MAY BE FILED ONLINE AT:  
http://www.bouldercolorado.gov

OUR OFFICE IS LOCATED AT:  
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Boulder, CO 80302  
303-441-3070

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