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POSITION ANNOUNCEMENT

File Reference: 2021-4

Position Title: Geospatial Data and Analysis Program Manager, Science and Data Division, Colorado State Forest Service

Location: State Office – Fort Collins, Colorado

Salary: \$62,000 - \$65,000, commensurate with experience

Employment Status: This full-time, regular appointment will be a Colorado State University Administrative Professional employee.

Closing Date: Applications will be accepted until the position is filled; however, applicants should submit all application materials by 11:59pm (MT), March 8, 2021 for full consideration.

Position Summary:

Under the direct supervision of the Associate Director of Science and Data, this position is responsible for the oversight and administration of the Geospatial Data Management and Analysis program for the Colorado State Forest Service. They will coordinate the conversion of geospatial information, remote sensing imagery, and other science based data sources into GIS databases. They are responsible for the organization and maintenance of resource information, facilitating analysis across multiple science based disciplines including but not limited to silviculture, water, wildlife, and wildland fire. In this role, they will also serve as the professional, science based point of contact and liaison for Federal, State, and local governments and other partners concerned with GIS, GPS, remote sensing and mapping.

The Geospatial Data and Analysis Program Manager will be responsible for administration of a budget ranging from \$750,000 to \$1 million (spanning multiple years of funding) and managing contracts that support the Science and Data Division. The position will maintain and develop data management protocols for multi-disciplinary information and geospatial applications of the Colorado Forest Atlas, a web mapping tool developed and hosted by CSFS.

Program leadership responsibilities include making recommendations and providing expert advice on the development and application of geospatial analysis processes, protocols and solutions to mission critical resource management issues. They will be asked to develop new and integrate already existing reporting systems to meet agency enterprise needs and local/state/federal requirements. They will manipulate and analyze geospatial data to support resource management decisions for multiple resource, jurisdictional, and ownership units spanning large geographical regions. They will compile natural resource, topographic, and cartographic data for the creation of thematic map products and presentation materials for forest resource management planning, the Forest Action Plan, and other projects supporting natural resource management decision making.

The Geospatial Data and Analysis Program Manager will be expected to provide formal and informal training and support to CSFS GIS software users in the development, storage, retrieval and analysis of data, providing advice and recommendations on sources, standards, integrity, compatibility, and cost efficiency of natural resource and socio-economic information.

The Manager is a member of the CSFS Management Team. The Management Team coordinates work effort across all program areas for efficiency, effectiveness and cohesiveness of program delivery and outcomes. The Management Team's role is to allocate and manage resources to ensure agency goals and objectives are achieved on time and within budget, address operational and program issues, and ensure that policies and practices are implemented consistently. The Management Team carries out agency priorities established by the Leadership Team.

The Manager is also responsible for the supervision of their assigned staff, including, but not limited to, regular performance evaluation, team building and team meetings, professional development, and conflict resolution. The Manager must be self-directed and innovative.

Purpose of the Department/Work Unit. The Science and Data Division of the Colorado State Forest Service provides leadership, oversight, coordination, and administration of statewide science and data programs, policies, and procedures that contribute directly to the delivery of agency core services. Division staff advise field personnel, agency leadership, and management on current and emerging issues in Geospatial Data Management and Analysis, Forest Inventory Analysis and Monitoring, Forest Insect and Disease Monitoring, and Science Delivery program areas. Division staff work collaboratively with CSFS customers and partners to meet these program delivery needs. Division staff support Colorado State University Warner College of Natural Resources and College of Agriculture, and Front Range Community College academic programs and connect CSFS with research and resources from these programs.

Decision Making: The Geospatial Data and Analysis Program Manager is responsible for day-to-day decisions regarding the programmatic oversight of the planning and execution of geospatial applications and programs under the jurisdiction of the CSFS and the assignment

of work to other program staff. Higher level policy decisions may need to be elevated to the Associate Director of the Science and Data Division or the State Forester for resolution.

Position Supervises: This position supervises one GIS Analyst and one GIS Technician (RAI), and can supervise permanent, term, and hourly staff.

Applicants are expected to possess demonstrated knowledge of and relevant ability with culturally diverse communities among potential target and constituent populations.

Conditions of Employment:

- Irregular work hours and periodic long days, evening and weekend service, occasional off-site and field project program review, and periodic overnight travel.
- Successful applicants must have a valid driver's license or the ability to obtain a driver's license or access to a licensed driver by the employment start date.

Required Job Qualifications:

- A Bachelor's degree (or greater) in geospatial technology (e.g., geographic information systems; remote sensing; web, mobile and global positioning systems), geography, natural resources, or related biological or physical sciences.
- Four years of experience that includes application of geospatial technology in the management of natural resources and development of enterprise geodatabase systems.
- Experience in program and budget management that demonstrates successful project planning and accomplishment.
- Experience with supervising temporary and/or permanent staff.

Desired Job Qualifications:

- Masters (or greater) and/or additional certifications in geospatial technology (e.g., geographic information systems; remote sensing; web, mobile and global positioning systems), geography, natural resources, or related biological or physical sciences.
- Professional knowledge and experience with theories, principles, concepts, practices, standards, and methods of geography and related social sciences; natural resources and ecosystem management and related biological sciences; or related physical sciences to analyze the relationships between various natural resources and develop geospatial analysis processes, protocols and solutions in support of natural resource management decision making. This includes knowledge of human uses and values of the forests, local communities and populations, and methods for linking natural resource use and values with socio-economic characteristics of local communities and stakeholders.
- Experience serving as a professional, expert authority evaluating advances in geospatial technology for applicability to specific and/or novel situations; developing new methods and procedures for incorporation into local and regional geospatial programs; knowledge of geospatial technology (e.g., ESRI ArcGIS software including ArcPro and ArcOnline, enterprise geographic information systems, remote sensing, web, mobile and global positioning systems); knowledge of cartographic principles and conventions sufficient to create maps for internal use that display natural resource and socioeconomic information and highlight particular analysis results.

- Experience with field level natural resource and land management operations sufficient to advise staff in project planning and management.
- Experience with geospatial modeling (Model Builder), process automation, and programming languages (e.g. Python, C++, Java, SQL, R).
- Experience with spatial and related data (vector, raster, imagery) sufficient to support multi-scale and/or multi-resource planning, assessments, and monitoring. Knowledge of data and data management sufficient to create, transform and integrate data in a variety of resolutions and formats.
- Knowledge of University, State and/or Federal information management policies and processes and social, economic, and environmental geospatial databases.
- Knowledge of local, regional, and national interests, concerns, issues, and goals related to natural resources management.
- Ability to communicate effectively in writing and verbally with diverse groups and individuals including professional experts, managers and resource staff at all levels of the agency to advise on and promote geospatial data and analysis program goals and objectives.
- Ability to develop and maintain effective work relationships with individuals both within and outside the CSFS to facilitate accomplishment of program goals.
- Experience with group facilitation and problem solving techniques to plan and conduct workshops, meetings, and training for resource and technical professionals.
- Experience with supervision and human resources practices and procedures in order to carry out responsibilities and to plan/integrate work schedules to meet unit needs.
- Experience with management principles and practices related to program and workforce planning, supervision and training of employees to promote a well-trained and qualified workforce.
- Demonstrated ability to work cooperatively and effectively in teams, advancing outcomes with internal staff, external partners, and cooperators.
- Demonstrated ability to manage and oversee programs, projects, operations and staff.
- Demonstrated ability to work independently and at a high level of proficiency.

Essential Responsibilities and Duties:

Program Planning and Development

45%

Applies professional expertise to planning and developing geospatial/information management programs, policies, and procedures, and advises the CSFS Leadership Team on current and emerging issues in the following areas:

- **Program and budget management:** The position will be responsible for administration of a budget of \$750,000 to \$1 million (spanning multiple years of funding), grant reporting, and assisting the Associate Director of the Science and Data Division in grant funding applications to sustain and develop the program. The position will provide leadership in the development, management and use of spatial and other data and advanced geospatial technological applications, and serves as principal expert advisor on Geographic Information Systems (GIS) at CSFS. They will develop and implement geospatial program goals in conjunction with resource management objectives and organizational business requirements. They will advise, counsel and assist CSFS staff regarding GIS project planning including, but not limited to timelines, data analysis capabilities, use of budget, and appropriate use and selection of contracts.

- **Data Management:** Oversees data life cycle management and evaluates emerging data management needs and strategizes the use of new technologies to facilitate the ease of data management and use within the CSFS. Manages CSFS geodatabases and reporting systems. They will analyze current agency enterprise systems to determine maintenance/enhancement needs, and will be asked to develop new and integrate already existing reporting systems to meet agency needs and local/state/federal requirements. They will develop and administer contracts for maintenance, enhancements, and updates to geospatial systems. They oversee and coordinate input from CSFS managers and staff to determine type, amount and level of information required to develop and analyze ecosystem management alternatives. They will be asked to assess quality, compatibility, and limitations of various data used in a wide array of land management and planning efforts. They will develop data dictionaries, data models, and metadata for multi-disciplinary information and geospatial applications. They will coordinate conversion of geospatial information and remote sensing imagery into GIS databases, and are responsible for the organization and maintenance of resource information and data to facilitate analysis across multiple disciplines including but not limited to silviculture, water, wildlife, and wildland fire.
- **Program Partnership Lead:** Serves as professional, expert point of contact and maintains liaison with Federal, State, local governments and other partners. They are responsible for partnering with other agencies through sharing of geospatial data and will be a liaison for planning and program coordination with other government entities including federal and state partners.

Program Administration

35%

Formulates, coordinates, and implements broad policies for administration of the geospatial/information management programs in the following areas:

- **Geospatial Analysis:** Provides expertise and makes recommendations on the development and application of geospatial analysis processes, protocols and solutions to mission critical resource management issues. Applies geospatial tools and solutions to address to new situations and resolves novel or obscure problems. They develop and interpret conceptual, mathematical and computer models for geospatial applications. They apply advanced principles to facilitate geospatial model design and analysis procedures related to ecological, natural resource and relevant socio-economic data and products. They also use spatial statistical tools for modeling geospatial data to simulate, estimate, interpolate, and predict natural processes and the linkages with human uses and values. They manipulate and analyze geospatial data to support resource management decisions for multiple resource, jurisdictional, and ownership units or a large geographical region, performing multi-scale and/or multi-resource analysis in support of planning, analysis, and monitoring activities.
- **Cartography and Map Design/Production:** When needed, they will be asked to compile data for creation of thematic map products and presentation materials for forest resource management planning and other projects supporting natural resource management decision making. They will be responsible for applying geographic and

cartographic principles to the resolution of natural resource issues in geospatial database construction and map creation.

- **Training and Support:** Provides advice on the implementation, management, analysis, and use of geospatial information. They will be responsible for providing professional, science based advice and recommendations on sources, standards, integrity, compatibility, and cost efficiency of natural resource and socio-economic information. They conduct formal and informal training and provides professional, science based expert assistance to CSFS GIS software users in the development, storage, retrieval, analysis, and security of data.

CSFS Management Team

10%

- The Manager serves as a member of the CSFS Management Team guiding and coordinating work efforts across all program areas to ensure efficiency, effectiveness, and cohesiveness of program delivery. They work with the CSFS Management Team on problem solving, budgeting, operating procedures, work planning, and other management issues, making recommendations for prioritizing and allocating resources. The Manager coordinates with and provide input to CSFS Management Team on program policy and guidelines. Additionally, they ensure annual work planning and fiscal planning efforts between area staff and CSFS Management Team are completed.

Supervision

10%

- Plans the work to be accomplished by staff, assigns work to employees, and establishes production or quality standards for the staff's work. Other responsibilities include establishing and communicating guidelines and performance requirements to employees; conducting formal performance reviews; and identifying and providing for the developmental and training needs of employees. The position performs administrative and human resources management functions for the staff; providing advice, counsel or instruction on both administrative and work matters. They also assure full compliance with safety and security policies.

Appointment and Benefit Information about Position. This is an Administrative Professional position at Colorado State University. Insurance benefits are provided, and administrative professionals may select from several options for medical, dental, life, and personal disability insurance, as well as retirement plans.

Full-time administrative professionals earn a full 24 days of vacation and another 15 days of sick leave annually, and have access to additional benefits, such as free employee study privileges of up to 9 credits per year at Colorado State University, and/or a 50-percent reduction of tuition costs for Spouse/Partner and children. CSU does offer Domestic Partner benefits.

General Information about Fort Collins: The CSFS State Office, located in Fort Collins, Colo., offers award-winning schools, a globally focused university, thriving arts scenes, and eclectic shops and restaurants. The City offers a plethora of outdoor activities at its 600 acres

of parks, 40,000 acres of natural areas, 20 miles of off-street hike/ bike trails, four golf courses, a racquet center, three swimming pools, an ice rink and a community center. Fort Collins also supports multiple transportation options, including 21 bus routes, more than 280 miles of bike lanes, and 30 miles of paved trails for pedestrians and bicycles.

General Information about the Colorado State Forest Service: The Colorado State Forest Service is an agency of Colorado State University, Colorado's land grant institution of higher education, and is housed, organizationally, in the Warner College of Natural Resources. The CSFS has 19 field offices throughout the state, with a State Office located in Fort Collins on one of the foothills campuses of CSU.

Colorado's elevations range from 3,500 feet to over 14,000 feet. Colorado's ecosystems vary from short-grass prairie to alpine tundra, with many forest ecosystems between these treeless extremes. State forestry in Colorado covers a wide diversity of natural environments and human communities. State forestry personnel work with landowners, community representatives, youth, cooperators, and other agencies and disciplines to establish, manage, protect, and restore tree and forest resources. The CSFS utilizes an educational, incentives-based, and customer-service oriented approach with landowners, cooperators, and partners to implement CSFS programs.

Application Information. When applying with the Colorado State Forest Service, applicants are requested to submit the materials listed below through an online process at <http://csfs.colostate.edu/employment/>.

Search Contact: For questions about this position or the application process, please contact Amanda Fordham at Amanda.West@colostate.edu or 970-491-8443.

Required Application Materials: 1) Cover Letter which addresses the minimum and preferred qualifications, 2) The résumé, 3) Professional References, 4) Unofficial College transcripts of your geospatial technology, geography, natural resources, or related biological or physical sciences degree.

All of these materials must be received for applications to be considered complete by closing date.

Please allow at least two to three weeks after the closing date for us to review your application materials and determine those candidates we plan to invite to interview. If you are not selected for an interview, we will send you notification when the process is complete. Should you be invited to an in-person interview, the Colorado State Forest Service will cover all reasonable travel expenses per candidate. At the time of on-campus interviews, application materials of finalist candidates will be made available to Forest Service and other relevant constituents.

Background Investigations: Colorado State University (CSU) strives to provide a safe study, work, and living environment for its faculty, staff, volunteers and students. To support this environment and comply with applicable laws and regulations, CSU conducts background

checks. The type of background check conducted varies by position and can include, but is not limited to, criminal (felony and misdemeanor) history, sex offender registry, motor vehicle history, financial history, and/or education verification. Background checks will be conducted when required by law or contract and when, in the discretion of the university, it is reasonable and prudent to do so.

Colorado State University is committed to providing an environment that is free from discrimination and harassment based on race, age, creed, color, religion, national origin or ancestry, sex, gender, disability, veteran status, genetic information, sexual orientation, gender identity or expression, or pregnancy. Colorado State University is an equal opportunity/equal access/affirmative action employer fully committed to achieving a diverse workforce and complies with all Federal and Colorado State laws, regulations, and executive orders regarding non-discrimination and affirmative action. The Office of Equal Opportunity is located in 101 Student Services.

The Title IX Coordinator is the Executive Director of the Office of Support and Safety Assessment, 123 Student Services Building, Fort Collins, CO 80523 -2026, (970) 491-7407.

The Section 504 and ADA Coordinator is the Executive Director of Human Resources and Equal Opportunity, Office of Equal Opportunity, 101 Student Services Building, Fort Collins, CO 80523-0160, (970) 491-5836.