
CONSERVATION GIS COORDINATOR

DEFINITION

Under general supervision, builds, maintains, and manages the Authority's geographic information system (GIS) databases; performs research and analyses, spatial modeling, cartography, remote sensing, and field surveys in support of open space planning, land acquisition, and land management programs and projects; coordinates special conservation projects; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the Assistant General Manager. Exercises no direct supervision over staff. May provide technical and functional training and direction to interns.

CLASS CHARACTERISTICS

This is a journey-level classification responsible for overseeing and administering the Authority's GIS databases, as well as providing support for conservation programs and projects. Successful performance of the work requires skill in defining, evaluating, and processing the needs and requirements of internal and external requests to meet program and project goals and objectives. Positions work independently, exercise judgment and initiative, receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the department.

EXAMPLES OF TYPICAL JOB FUNCTIONS *(Illustrative Only)*

Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the typical job functions.

- Performs a variety of research, mapping, and technical work in support of the Authority's open space planning, land acquisition, conservation, and land management programs.
- Evaluates property specific and regional conservation values.
- Builds, maintains, and manages the Authority's GIS databases; consults with other Authority staff regarding GIS needs and requirements, including identifying, designing, and developing GIS applications, strategies, and procedures for integrating GIS data and analyses to support Authority programs; develops and maintains GIS standards and protocols.
- Develops and standardizes procedures and methods to improve and continuously monitor the efficiency and effectiveness of assigned programs and projects; identifies opportunities for improvement and recommends to the Assistant General Manager.
- Participates in reviewing technical reports, research, and analyses to assess the quality, relevancy, and application to support Authority land protection and land management programs, projects, and initiatives.
- Develops partnerships and represents the Authority in inter-agency coordination activities related to GIS, regional planning, and conservation efforts.

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- Develops and maintains a comprehensive library of data layers related to Authority land holdings, natural and cultural resources, trails, and other recreational facilities, and other essential data sets.
- Performs GIS analysis, spatial modeling, cartography, and remote sensing in support of a wide variety of planning, conservation, land acquisition, and real property projects, as well as grant applications; recommends and develops solutions, standards, and procedures for applying GIS technology to program and project objectives.
- Creates and maintains a variety of maps and tabular data from a variety of sources; coordinates and conducts field surveys and integrates Global Positioning System (GPS) data into GIS format; explains technical information to non-technical system users, including assisting them in accessing and interpreting GIS information; develops quality control procedures.
- Provides graphic support for Authority staff, programs, and projects, including development of maps, exhibits, site plans, displays, presentations, and brochures; updates the Authority's wall map; creates and manages Authority map templates and styles.
- Prepares presentation-quality maps and exhibits for use in Board meetings, other public meetings and workshops, and for publication in newsletters.
- Identifies, acquires, and integrates data from other agencies and organizations into the Authority's data library; maintains and updates the Authority's information catalogue; creates and maintains government-compliant metadata; and develops procedures to share appropriate data.
- Reviews external projects and development proposals to identify potential issues and potential impact on Authority's interests and goals; prepares comment letters for review by the Assistant General Manager.
- Participates in the development and administration of and oversees GIS program budgets.
- Assists in the purchase and maintenance of equipment, software, and supplies used to support GIS services.
- Provides staff assistance to the Assistant General Manager and to other staff on assigned projects; develops and reviews staff reports related to assigned programs, projects, and services.
- Attends and participates in professional group meetings; stays abreast of new trends and innovations in GIS and conservation programs; researches emerging products and enhancements and their applicability to Authority needs.
- Monitors changes in regulations and technology that may affect operations; implements policy and procedural changes after approval.
- Performs other duties as assigned.

QUALIFICATIONS

Knowledge of:

- Principles and practices for developing and coordinating a broad-based GIS program with applications for Authority departments, external organizations, and the general public.
- Principles and techniques of cartography and publication-quality map production using GIS software.
- Advanced principles and techniques of spatial analysis and GIS database management.
- Principles and practices of urban, regional, environmental, and open space planning and resource management.
- Principles of research and data collection pertaining to property evaluation and familiarity with site plans, property descriptions, deeds, and survey data.
- Project management principles and practices, including goal setting, work plan development, implementation, and evaluation.

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- Applicable federal, state, and local laws, codes, and regulations concerning the operation of the assigned function.
- Practices of researching planning, land acquisition, and conservation issues, evaluating alternatives, making sound recommendations, and preparing and presenting effective staff reports.
- Principles of mathematics and statistics and their application to planning and GIS support work.
- Methods and techniques of effective technical report preparation and presentation.
- Recent developments, current literature, and sources of information related to assigned area of responsibility.
- Record keeping principles and procedures.
- Modern office practices, methods, and computer equipment and applications related to the work.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for effectively representing the Authority in contacts with governmental agencies, community groups, and various business, professional, educational, regulatory, and legislative organizations.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and Authority staff.

Ability to:

- Administer complex, technical, and sensitive GIS and conservation related projects in an independent and cooperative manner.
- Recommend and implement goals, objectives, and practices for providing effective and efficient services.
- Coordinate a broad-based GIS program that includes effective database development, management, and accessibility.
- Coordinate and perform field surveys and investigations; collect and integrate GPS data into GIS format.
- Perform complex modeling, mapping, database maintenance, and other GIS professional-level tasks.
- Compile and interpret data from topographical maps, aerial photos, legal descriptions, and development plans; understand and interpret various boundary descriptions, deed restrictions, and other related documents.
- Conduct statistical research and analyze data pertaining to a wide variety of conservation and other open space matters.
- Interpret and explain GIS and conservation projects and programs to the general public; identify and respond to issues and concerns from the public, Authority staff, Board of Directors, and other boards and commissions.
- Conduct complex research projects, evaluate alternatives, and make sound recommendations.
- Effectively represent the department and the Authority in meetings with governmental agencies, community groups, and various business, professional, and regulatory organizations and individuals.
- Coordinate assigned activities with other Authority departments and agencies as required.
- Prepare and present clear, concise, and logical written and oral reports, correspondence, policies, procedures, and other written materials.
- Establish and maintain a variety of filing, record keeping, and tracking systems.
- Perform mathematical and statistical computations with precision.
- Make sound, independent decisions within established policy and procedural guidelines.
- Operate modern office equipment including computer equipment and specialized software applications programs.

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- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
- Make sound, independent decisions within established policy and procedural guidelines.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:

Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

Equivalent to graduation from an accredited four-year college or university with major coursework in urban or regional planning, environmental planning, landscape architecture, architecture, natural resource management, or a related field and three (3) years of increasingly responsible experience in GIS database management as applied to open space, parks, natural resources, land use, or similar fields, including experience in research, mapping, graphic production, and/or report writing.

Licenses and Certifications:

- Possession of a valid California Driver's License.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer, to inspect Authority development sites, including traversing uneven terrain, to operate a motor vehicle, and to visit various Authority and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. This is primarily a sedentary office classification although standing and walking between work areas may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 25 pounds.

ENVIRONMENTAL ELEMENTS

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may work in the field and may occasionally be exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, mechanical and/or electrical hazards, and/or hazardous physical substances and fumes. Employees may interact with staff and/or public and private representatives on sensitive matters and in interpreting and enforcing Authority policies and procedures.

EFFECTIVE: September 2013

REVISED: N/A

FLSA: Non-Exempt