



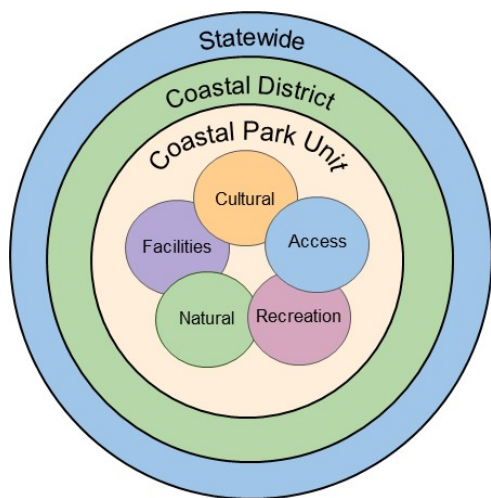
GIS Analyst and Coastal Data Coordinator

Organization: Coastal Quest
Organization Contact: info@coastal-quest.org
Position Type: Full-time 6-month term position with potential to extend
Location: San Diego County State Parks offices

Employer/Organization Description:

Coastal Quest is a 501(c)3 nonprofit organization whose mission is to create lasting solutions to protect, sustain, reduce threats to, and enhance the natural and cultural heritage of our coastal environments for present and future generations. Coastal Quest works with diverse parties to strengthen organizational capacity and bridge resource gaps to ensure communities have access to unique coastal ecosystems with good water quality and can better prepare for climate impacts. Coastal Quest’s approach is solution-oriented and strives to promote innovation, partnership, and the uptake of cutting-edge information and ideas to create vibrant and resilient coastal communities and ecosystems. Coastal Quest aims to protect and enhance coastal ecosystems and increase coastal resiliency for vulnerable communities and economies through the integration of three fundamental strategies: capacity building and knowledge sharing; building support and piloting and implementing solutions; and financing, regranting, and fiscal sponsorship.

Project Background: The California Department of Parks and Recreation (State Parks) manages nearly one quarter of the California coastline in 128 coastal park units. State Parks protects some of the State’s most valued natural and cultural resources while providing world-renowned opportunities for high-quality outdoor recreation to more than 50 million visitors



each year.¹ Many coastal park units are impacted by coastal erosion and flooding caused by waves and storms,. The San Diego Coast District (SDCD) of the State Park System already experiences these impacts, but a comprehensive assessment of park unit vulnerabilities to sea level rise (SLR) and adaptation planning has not yet occurred.

State Parks and Coastal Quest will pilot adaptation planning in the SDCCD by developing a template and guidance for the statewide preparation of sea level rise vulnerability assessments. Assessments must analyze the vulnerability of all types of State Park assets (public access, recreation, cultural and natural resources, and facilities) in a holistic approach. The first key step in this project will be to identify and map all assets in the SDCCD in

Figure 1. State Parks’ holistic approach for vulnerability assessments and adaptation



preparation for the preparation of vulnerability assessments for each park unit.

Position Description Coastal Quest is collaborating with State Parks to develop baseline GIS data layers and map for 9 coastal park units in the SDCD. These data will be used to inform sea level rise vulnerability and adaptation assessments to be conducted by a consulting firm. The GIS Analyst and Program Coordinator’s responsibilities include serving as a project manager and coordinating with Coastal Quest staff, the State Parks Project Management Team, State Parks District staff, and other key stakeholders. The GIS Analyst and Program Coordinator will inventory and acquire existing datasets of assets/resources (i.e. access, recreation, cultural and natural resources, and facilities) at all coastal park units in the SDCD. In addition to acquiring existing datasets, the GIS Analyst and Program Coordinator will physically go to sites and map data not covered by existing datasets by performing GIS field surveying, including, elevation and other data gaps. The GIS Analyst and Program Coordinator will develop GIS database/layers of all assets and write up methodology/how-to to develop baseline database for future use by other State Park Districts and inclusion in the vulnerability assessment guidance/template deliverable. Specific duties include:

- Identify and acquire data and be a “data detective” to find archived data
- Interview staff and other agencies to identify sources but also collect data, including underground infrastructure that may not yet be mapped or inventoried
- Collect data with GPS and field collection with ArcPad or ArcGIS Collector.
- Where needed collect or coordinate collection of survey grade elevation data for critical assets.
- Digitize, create, maintain, display and update GIS databases, coverages, and linkages to various GIS databases and ensure data quality and control, including quality metadata
- Integrate data from a variety and sources and scales into a usable database with meta data to explain variation in data quality.
- Produce accurate maps and other representations of data for public use and field work activity.
- Ensure data accuracy by going out in the field to resolve or “ground truth” conflicts
- Record and document details of map updates, additions or deletions as well as document overall approach

Requirements:

- Three years of experience in the use of ArcGIS Desktop and its related extensions and relational databases. Demonstrated experience designing custom applications with relevant programming languages.
- Proficient use of Microsoft Office Professional (Excel), Microsoft Windows, Internet, and computer networks.
- One year of project management experience must be included in the three years of



experience.

- Bachelor's degree in geography, planning, computer science, or related field.
- Ability to communicate effectively, orally and in writing, with other employees and the general public.
- Ability to work independently or in a team environment as needed.
- Ability to attend to details while fulfilling larger goals.
- Willingness to consistently adhere to strict Covid-19 health and safety protocols set by State Parks

Special Demands:

The GIS Analyst and Program Coordinator must be able to maintain a flexible schedule for the purpose of attending evening meetings. Coastal Quest makes an effort to plan and schedule meetings in a timely manner and inform the GIS Analyst and Program Coordinator of his/her meeting calendar in advance of all meetings.

Physical Requirements:

- Ability to communicate orally with other employees and the general public.
- Ability to sit, stand, stoop, and walk and survey sites; ability to use hand, finger, and wrist motion.
- Ability to descend and ascend sometimes steep trails and staircases on foot

Application Instructions: Please submit the following in 1 pdf to info@coastal-quest.org

- 1 page cover letter highlighting GIS experience, including field surveying
- Resume
- 1 writing sample
- 2 samples of GIS analysis/maps produced
- 3 references

Work Hours: Full-time

Salary: \$6000 - \$7000 monthly depending on qualifications and experience

Closing Date: March 12th, 2021

Coastal Quest is fully committed to attracting, retaining, developing and promoting the most qualified employees without regard to their race, gender, color, religion, sexual orientation, national origin, age, physical or mental disability, citizenship status, veteran status, or any other characteristic prohibited by state or local law. We are dedicated to providing a work environment free from discrimination and harassment and where employees are treated with respect and dignity.

ⁱ California Dept. of Parks and Recreation. *California State Park System Statistical Report: 2016/17 Fiscal Year*. 2019, <https://www.parks.ca.gov/pages/795/files/16-17%20Statistical%20Report%20FINAL%20for%20web.pdf>. Accessed 4 November, 2020.