



# POSITION DESCRIPTION

## Winter 2023

**NPS UNIT: Pacific West Region Office**

**Position #: 1246**

**Position Title:** GIS Assistant

**Number of positions available:** 1

**Primary natural resource discipline:** Physical Sciences

**Position Keywords:** GIS, Planning, Renewable Energy, Natural Resources, Cultural Resources

**Location:** San Francisco, California

**Can this position be fully remote:** Yes

### POSITION DESCRIPTION AND WORK PRODUCTS

**Project Description:** The External Energy & Minerals Program in Interior Regions 8, 9, 10 and 12 (legacy Pacific West Region, PWR) supports parks and programs by directly engaging with land managers and agencies to assess and protect NPS natural and cultural resources and values from nearby renewable energy and mineral activities. The region includes more than 65 national park sites across eight western states and protects unique natural and cultural diversity from remote coastlines to rugged deserts to soaring peaks. With a current administration goal to permit at least 25 gigawatts of new solar, wind and geothermal production on public lands no later than 2025, applications for large-scale solar development have sky-rocketed in many western states where land is relatively flat, and sun is plentiful. Solar energy development in certain areas may have a high potential to conflict with NPS resources and values that cross beyond park boundaries. For example, desert big horn sheep migrate in and out of several national parks including Death Valley National Park and Mojave National Preserve throughout the year. Large-scale solar energy facilities proposed in natural migration routes can severely affect park populations by reducing accessibility to food and other resources needed for survival, increasing mortality, and further fragmenting an already reduced population. It is critical to identify cross-boundary NPS-administered resources and values to protect them from the potential effects of landscape-scale and local-scale solar energy development. Understanding what and where the impacts are to our resources will enable the NPS to better advocate for its protection.

The purpose of this project is to update identified resource areas outside of NPS parks that are subject to the Bureau of Land Management Solar Energy Program. The Scientists-in-the-Park GIS Assistant (SIP) will work closely with the PWR and national External Energy & Minerals program team, as well as park and regional natural and cultural resource staff to perform geospatial analysis on landscape-level datasets to identify areas of resources that have a high potential for conflict. Datasets include, but are not limited to, soils, wetlands, upstream watersheds, critical habitat, and nighttime lights. This project will build on a previous strategy to address solar energy proposals in one consolidated effort by updating datasets and adding new parks into the analysis. The SIP will work in the latest ESRI GIS software, utilize both raster and vector datasets, develop python scripts to automate processes, create maps for and work with NPS parks to verify critical areas, and assist in creating SOPs on the methodology so that updates can be periodically made in the future. Results from the analysis, once reviewed by the External Energy & Minerals teams, will be provided to the BLM and other agencies for use in evaluating solar and potentially other renewable energy applications.

**Work Products:** At the completion of the internship, the SIP will have provided: (1) shapefile consisting of all NPS areas of high potential for resource conflict, (2) geodatabase of each resource dataset used to create areas of high potential for resources conflicts for each park, (3) python scripts to automate processes, and (4) detailed documentation on methodology including a summary of park input and modifications.

### NATURAL & PHYSICAL WORK ENVIRONMENT



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The work will be largely sedentary and will require use of a computer and the phone. If the internship occurs remotely, the intern may be located anywhere within the United States and would be working in Pacific Time. If the internship occurs in person, the intern would be required to report to Regional Office in San Francisco, CA or Santa Monica Mountains National Recreation Area Headquarters in Thousand Oaks, CA during working hours. Both locations are within densely populated urban/suburban areas. Weather is predominantly Mediterranean characteristic of California's coast, with moist, mild winters and dry summers. Occasional work trips to parks may occur as well, involving site visits which take place outside in varying conditions.

#### QUALIFICATIONS

GIS skills and experience with ESRI ArcGIS desktop and web software and applications are essential, whether gained through coursework or applied experience. Applicants must demonstrate proficiency in geospatial data management and analysis, including working with geodatabases, developing, and analyzing spatial information, editing data, and producing well-designed cartographic products. Experience using Python, and creating web maps and apps are pluses, as is coursework or experience in a resource-related field such as ecology, anthropology, archaeology, geography, or geology. Generally, the applicant should be detail-oriented and organized, technically inclined, and possess good collaboration and communication skills, including writing and presenting. A successful applicant will also be self-motivated and, after the initial training period, comfortable working independently.

The applicant must be a U.S. citizen or U.S. permanent legal resident ("green-card-holder"). Prior to starting this position, a government security background clearance will be required.

#### VEHICLE AND DRIVER LICENSE REQUIREMENTS

Applicant will not need to drive a government vehicle.

A personal vehicle is not required for this position.

If the SIP is required to drive a park vehicle for their position, Stewards will perform a driving records search, and the SIP's ability to drive a park vehicle during work hours will be contingent upon the results. SIPs will have to have had their license for 3 years or be over the age of 21 to be insured as drivers under Stewards insurance policy. Examples of things that will preclude a SIP from driving a park vehicle include: SIP under the age of 21 years old that has been licensed less than three years, DUIs, multiple moving vehicle violations, suspended or revoked license, or three or more accidents (regardless of fault) in the last 3 years. If the driver's search is favorable, Stewards will provide driver's liability insurance while the intern is driving a NPS vehicle for their SIP position. If the SIP is denied coverage by Stewards, they will not be permitted to drive during work hours.

#### HOUSING

**Park housing is NOT available. The intern will be responsible for finding housing in the nearby area.** This internship can occur remotely. If the internship occurs in person, the intern may choose to work in the Regional Office in San Francisco, CA or at Santa Monica Mountains National Recreation Area Headquarters in Thousand Oaks, CA. The San Francisco Regional Office is located in the Financial Center. Various public transportation options are available in the area. Housing options within San Francisco can be expensive, however, convenient public transportation can extend potential housing options beyond the city limits to surrounding areas. Thousand Oaks is a large suburban city 40 miles west of Los Angeles. Potential housing options include apartments, and rooms/houses for rent. The Park Headquarters is located just north of the park boundary.

#### INTERNSHIP DATES

**Start Date:** 10/03/2022

**Number of Weeks:** 52

**Flexible Start Date:** Yes

#### LIVING ALLOWANCE

52 Weeks (\$580.00/week = \$30160.00)



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### RELOCATION ALLOWANCE

350.00

### AMERICORPS PROGRAM



**AmeriCorps**

AmeriCorps is a program that engages individuals in intensive community service work with the goal of “helping others and meeting critical needs in the community”. The SIP Program is supported through AmeriCorps by providing a Segal Education Award in addition to the SIP’s living stipend and relocation allowance.

Upon successful completion of the SIP position, the SIPs (AmeriCorps members) are eligible for a \$1,638 - \$6,195 pre-tax education award that can be used for paying back student loans or for continuing their education. The amount of the education award is based on the length of the position.

AmeriCorps limits the number of terms an individual can serve to 4 terms. If an applicant has previously completed 4 SIP or other AmeriCorps positions, they will not be eligible to apply for an additional SIP position.

### Partners

This position is offered through the National Park Service's Scientists in Parks (SIP) Program in partnership with various organizations.

