



POSITION NOW CLOSED – FOR REFERENCE ONLY

Position Title: GIS Data Science Steward – AmeriCorps

Conservation Legacy Program: Stewards Individual Placements

Site Location: San Francisco Area Network, Fort Cronkhite, Building 1063, Sausalito, CA 94965

Application Due: Friday, July 3rd

Terms of Service:

- **Start Date:** 10/05/2026
- **End Date:** 2/19/2027
- **AmeriCorps Slot Classification:** 675-Hour Slot

Purpose:

Stewards Individual Placements (Stewards), a program of Conservation Legacy, provides individuals with AmeriCorps service and career internship opportunities to strengthen communities and preserve our natural resources. Participants serve with federal agencies, tribal governments, and nonprofits to provide institutional capacity, develop community relationships, and support ecosystem health. Stewards in partnership with the NPS GIS office is hosting a cohort of GIS stewards.

The San Francisco Bay Area Network (SFAN) is one of 32 National Park Service Inventory and Monitoring (I&M) Networks across the country established to facilitate collaboration, information sharing, and economies of scale in natural resource monitoring. SFAN consists of eight national park units located along the central California coast. These parks contain some of the most significant examples of terrestrial Mediterranean-type ecosystems and coastal marine environments anywhere in the world.

The GIS Data Science Steward will build streamflow models from which output GIS products will be used to support data informed Salmonids monitoring at Golden Gate National Recreation Area and Point Reyes National Seashore. The streamflow model will use USGS stream gage data on the Olema and Redwood creeks for model training. Developed streamflow models will be spatially and temporally applied to upstream stream segments and Salmonids monitoring locations to allow for estimation of streamflow metrics across time (e.g., seasonal, at monitoring events, etc.). Resulting

metrics will be used in Salmonids analyses. There will be opportunity to apply the streamflow model and metrics to future projections.

Description of Duties:

Under direction and guidance from the SFAN Data Scientist and Salmonids monitoring team the Steward will perform data analysis and data-workflow processes including the following:

- Implement streamflow model on select streams.
- Create a GIS hydrological model (based on DEMs via ArcGIS or via Python/R Library) to derive upstream contributing areas for stream segments.
- Publish the GIS hydrologic model with metadata to the SFAN GIS repository.
- Develop workflow to calculate streamflow metrics by event and across time periods (e.g., peak flows, low flows by season, year, etc.) to be used in Salmonids monitoring analyses.
- Create integrated data-pipeline workflow to facilitate running the streamflow model annually along with accompanying streamflow metrics.
- Create database table schema for output products (e.g., upstream contributing area, streamflow metrics,

Requirements:

- United States citizen, United States national, or a lawful permanent resident alien
- Applicants must be between ages of 18-30 years old, or up to 35 for veteran, based on Public Land Corps Act of 1993 authorizing this AmeriCorps opportunity.
- Has received a high school diploma or equivalency certificate; or has not dropped out of elementary or secondary school to enroll as an AmeriCorps participant, and agrees to obtain a high school diploma or its equivalent prior to using the education award
- Agrees to provide information to establish eligibility and to complete a National Service Criminal History Check.

Preferred Qualifications

The successful candidate will have a strong foundation in GIS and experience performing geospatial analyses and data analyses. Desired experience and skills include the following:

- Knowledge of GIS hydrological analysis and hydrological modeling
- Strong analytical skills, including experience developing and applying statistical models.
- The applicant must have strong scripting skills in Python and or R (ideally both) - required2
- Experience with Git and GitHub for collaborative, multi-user code development would be a plus.
- An understanding of data management, open data and open science data principles and best practices.

- Experience in using and managing relational databases (Access, SQL Server) would be beneficial.

In addition to technical skills the applicant must have strong interpersonal skills including:

- Ability to serve collaboratively with an interdisciplinary team of scientists and data professionals.
- Demonstrated verbal and written communication skills to communicate and document workflow status and process with program staff.
- An interest in natural resource management and ecological sciences would be beneficial.
- Must be self-motivated and have a high attention to detail

Applicants who have obtained or are pursuing a GIS degree or certificate and/or with GIS experience are preferred. Prior to starting this position, a federal government security background clearance will be required.

Our Commitment:

Conservation Legacy is committed to the full consideration of all qualified individuals and will ensure that persons with disabilities are provided reasonable accommodations to perform essential job functions. Physical requirements may include periodic overnight travel, non-traditional work hours, ability to move across varied terrain, use program-specific tools and a range of technology on an infrequent or frequent basis. Exerting up to 25 pounds of force occasionally to lift, carry, push, pull, or otherwise move objects. The ability to safely drive an organizational vehicle may also be required for some positions. If you need assistance and/or reasonable accommodation due to a disability during the application or recruiting process, please send a request to the hiring manager.

Time Requirements:

- Typically, this position is expected to serve 40 hours per week, but exact service schedules may vary. A half hour lunch break will not be counted towards AmeriCorps service
- Member may be required to participate in national, state, or local service projects or events as part of their service term.

Orientation and Training:

- Member will receive an orientation that includes training on AmeriCorps prohibited and unallowable activities.

Benefits:

- Segal AmeriCorps Education Award of \$2,817.14
- Living Allowance of \$600 per week.
- Additional Benefit of \$200 per week.

Evaluation and Reporting:

As an AmeriCorps member, performance will be evaluated on whether the member has completed the required number of hours, the member has satisfactorily completed assignments, and if the member has met other performance criteria that were clearly communicated at the beginning of the term of service.

Reporting requirements include, but are not limited to, bi-weekly timesheets and accomplishment tracking.

Supervisor Name and Contact Information:

Program Contact information: James Gasaway, jgasaway@conservationlegacy.org

Service Site Contact Information: Kirk Sherrill, Kirk_Sherrill@nps.gov

Conservation Legacy is an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, pregnancy, age, national origin, disability status, genetic information, protected veteran status, or any other characteristic protected by law.

We also consider qualified applicants regardless of criminal histories, consistent with legal requirements. If you need assistance and/or reasonable accommodations due to a disability during the application or recruiting process, please send a request to the hiring manager.