



POSITION DESCRIPTION

Summer 2022

NPS UNIT: Fort Point National Historic Site, Golden Gate National Recreation Area, Muir Woods National Monument

Position #: 188

Position Title: Biology Assistant

Position Type: Mosaics PLC

Primary natural resource discipline: Biological Sciences

Position Keywords: Salmon, fisheries, stream, invertebrates, water quality

Location: Sausalito, California

COVID-19 NOTICE

As the COVID-19 pandemic continues to change and evolve, project timelines and structure remain flexible and it may be necessary to postpone start dates, begin work remotely, or reformulate the project's description. Should any development in the COVID-19 outbreak impair a project's timeline or results, the SIP Team will work with the park and project mentors to assess the situation and determine the best course of action at that time.

POSITION DESCRIPTION AND WORK PRODUCTS

Project Description: The intern position would help support the field, lab, and data management activities with the Park's Wetland and Aquatics programs. There would be 3 core projects. The largest component of the intern's duties would be a two-year fish diet study at Redwood Creek that is focused on the food preferences of two federally listed fish: coho salmon and steelhead trout. The intern would be responsible for the final year of non-lethal fish sampling which involves flushing the stomachs of collected fish and then looking at the gut contents under a microscope to identify and count food items. The intern would learn how to capture fish using standard fishery techniques, collect standard fish morphometrics (e.g., length and weight), and develop skills in the use of dichotomous keys to identify invertebrate food items. The second intern project would be dependent on the water year. If we have another dry water year, the intern would be responsible for conducting a water quality profile along the length of Redwood Creek focusing on isolated pools to help evaluate whether physical differences between pools (e.g., substrate characteristics) and location (e.g., steep headwater versus low gradient stream sections) correlate with water quality differences. Collected data includes dissolved oxygen, water temperature and substrate size classes. The final project would be conducting an inventory for the non-native New Zealand mudsnail in the park. Our first park inventory was done in 2019. The intern would assist in resurveying aquatic sites to determine if there are new locations and to determine if there are any changes in distribution where New Zealand mudsnail are currently present. For these three projects, the intern will have primary responsibility for data entry of collected data, conducting QA/QC checks of entered data, and creating simple tabular and graphic summaries. The intern would also be able to participate in other monitoring and restoration projects as their interest dictates. The park will be initiating a wetland restoration project to convert a gully into a sheetflow wetland and assistance will be needed to assist in biomonitoring, installation of erosion control, and photo monitoring. There will also be opportunities for marine monitoring of rocky intertidal sites in the summer.

- Work Products:**
1. Completion of fish diet study and a data report summarizing results.
 2. Entry of field data into project databases
 3. Map, tabular and graphic summaries of field data which convey findings from field investigations in a clear and succinct manner. (e.g., New Zealand mud snail distribution map)
 4. Photographs of work activities and highlights for use in park social media posts
 5. Written summaries of field work activities for the monthly digital Natural Resources and Science monthly update



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(blog) for San Francisco Bay Area parks newsletter (<https://www.nps.gov/rlc/pacificcoast/blog.htm>)
6. Final presentation of data and internship experience at a monthly NR staff meeting

NATURAL & PHYSICAL WORK ENVIRONMENT

The field office is located in the Marin Headlands within walking distance of the dorm housing. Other than the natural environment, there are no amenities such as grocery stores. The closest town would be Sausalito which is about 7 miles away. The summer weather is dry (no rain jacket required!) but variable with foggy conditions often along the coast and warmer, sunny weather inland. The park is situated in an urban area (e.g., no backcountry) with high visitation. Because of the park's relatively recent origins, park lands are fragmented with chunks in 3 San Francisco Bay Area counties. Field work for the position is expected to be 50% with the remainder of the time balanced between office and lab work. The intern should be in good physical condition and comfortable working outdoors. Field work will require walking in creek environment with slippery rocks carrying gear (up to 30 lbs). The intern would be expected to follow all safety procedures provided by the mentors and includes wearing appropriate PPE for the work environment. Currently, masks are required for any indoor work in government facilities.

QUALIFICATIONS

The ideal candidate for this position would be an energetic, organized and self-motivated individual that is excited to work in the park both in the field and in the office and with diverse groups of people. The candidate should have some background either through work or volunteer experiences or academically in the area of physical science (e.g. hydrology) or biological science especially fisheries, wildlife, or similar discipline. The candidate should be in good physical condition and willing and able to conduct field, office, and lab work.

The applicant must be a U.S. citizen or U.S. permanent legal resident ("green-card-holder") between the ages of 18 and 30 years old, inclusive, or veterans up to age 35. Prior to starting this position, a government security background clearance will be required.

VEHICLE AND DRIVER LICENSE REQUIREMENTS

Applicant must have a valid driver's license to drive a government vehicle.

A personal vehicle is recommended for this position.

HOUSING

Park housing is available and will be provided at no cost to the participant. Park housing is located at Fort Cronkhite in the Marin Headlands. It is a lovely area and feels very rural even though we are only about 15 minutes from the city of San Francisco. Rodeo Beach, which is popular with surfers, families and dog walkers is a short walk down the hill from the dorm. The dorm is a two story, white frame, barracks style building. The rooms all contain a twin bed with XL mattress, a clothing locker, desk, chair, side table and bureau. There are two large common areas on the first floor: a dining room and a TV room with bike storage at the back. There is also a smaller common room upstairs with lots of sofas and a TV. Each floor has a laundry room with three washers and three dryers. Laundry is free. Each floor also has two shared bathrooms and there is a large, single shared kitchen with all the typical gear and dishes. The SIP participant would just need to bring personal clothing items, transportation (bike/car), and toys. There is no public transportation. Cell reception is spotty at the dorms but a landline is available for free local calls and wireless internet is provided.

INTERNSHIP DATES

Start Date: 06/13/2022



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End Date: 10/31/2022

Eleven weeks of the internship will be in the park. A mandatory Professional Development Workshop will be held in Washington, D.C. from August 1 - 4, 2022.

LIVING ALLOWANCE

12 weeks (\$600/week=\$7,200)

Partners

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



PLEASE DIRECT ANY QUESTIONS TO ENVIRONMENT FOR THE AMERICAS

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