# PROJECT DESCRIPTION
## 2020 FALL/WINTER

<table>
<thead>
<tr>
<th>NPS UNIT: SAN FRANCISCO BAY AREA NETWORK INVENTORY AND MONITORING</th>
<th>PD #: 2020477</th>
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<tbody>
<tr>
<td><strong>Position Title:</strong> Hydrology Assistant (1)</td>
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<td><strong>Position Type:</strong> GIP Intern</td>
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<td><strong>Primary natural resource discipline:</strong> Water resources</td>
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<tr>
<td><strong>Project keywords:</strong> water quality, physical sciences, monitoring, ecology</td>
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<tr>
<td><strong>Location:</strong> Sausalito, California; Fort Cronkhite, California</td>
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## COVID-19 NOTICE
This project description was developed prior to the onset of the COVID-19 outbreak. Therefore, 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 GIP Team will work with the park and project mentors to assess the situation and determine the best course of action at that time.

## PROJECT DESCRIPTION AND WORK PRODUCTS

**Position Description:** Working with the San Francisco Bay Area Network’s Inventory and Monitoring program’s staff, the intern will obtain knowledge of field operations for collecting water quality data from freshwater streams in San Francisco Bay Area national parks. The intern will gain knowledge of water quality instrumentation, quality control procedures, laws and policies related to water quality data security, data management, field operations logistics and planning, and risk management. In addition, the intern will gain experience in turning field observations into shareable information for managers and the interested public by participating in the development of reports, web content, and outreach materials. These experiences will provide the intern with real world field experiences to help her or him in career development. In a concurrent project, the intern will reach out to subject matter experts in interpretation and hydrogeology in multiple Pacific West Region parks to gather information and craft a project proposal for interpretive displays about local water cycles at places where park visitors obtain drinking water. The proposal for the interpretive initiative will focus on providing visitors with information about the origin and quality of potable water dispensed at park visitor centers.

This project supports an intern to help gather water quality data in San Francisco Bay Area parks and helps to communicate the importance of clean drinking water availability at parks throughout the network and region.

Water quality is key to the persistence and well-being of endangered salmonids and freshwater shrimp, as well as many other life forms that play key roles in ecosystems. Water quality is also vital to human health and recreations. Assembling monitoring data on water quality is key to informing park managers in order to make well designed conservation measures.

This position is offered through the National Park Service’s Geoscientists-in-the-Parks (GIP) Internship Program in partnership with Stewards Individual Placement Program (Stewards) and The Geological Society of America (GSA).
Work Products:
1) Water quality data for freshwater streams in San Francisco Bay Area national parks
2) A template for production of interpretive displays describing the origin and hydrogeology of water dispensed at filling stations at visitor centers in a set of Pacific West Region parks

QUALIFICATIONS
1) Lucid writing – ability to assemble ideas into engaging and accurate text.
2) Effective communication – consideration, patience, openness.
3) Grounding in scientific principles – basic knowledge of geology and hydrology.
4) Basic design skills – ability to draft ideas for interpretive displays.

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 veteran 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 license and a good driving record. Intern will need to drive a park vehicle on occasion.

A personal vehicle is RECOMMENDED but not required for this position. Park housing is in Fort Cronkhite, which is several miles from urban services. It would be possible to live at the site without a car and coordinate with other residents on trips into town for groceries, etc. But many individuals find having a car helpful for getting to appointments, etc.

If the GIP is required to drive a park vehicle for their position, Stewards will perform a driving records search, and the GIP’s ability to drive a park vehicle during work hours will be contingent upon the results. GIPs 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 GIP from driving a park vehicle include: GIP 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 GIP position. If the GIP is denied coverage by Stewards, they will not be permitted to drive during work hours.

HOUSING
Park housing is available and will be provided at no cost to the participant. Private room in a dorm style setting with shared kitchen and living room. Housing is within a five minute walk of the office. GIP intern would need to bring bedding, towels, toiletries. There are shared kitchenware available for cooking and dining.

INTERNSHIP DATES
Start Date: 9/20/2020
Number of weeks: 20 weeks
Flexible start date: Yes

LIVING ALLOWANCE
20 weeks ($350/week = $7,000)

RELOCATION ALLOWANCE
$250

PROFESSIONAL DEVELOPMENT ALLOWANCE
$800
**AMERICORPS PROGRAM**

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 GIP Program is supported through AmeriCorps by providing a Segal Education Award in addition to the GIP’s living stipend and relocation allowance.

Upon successful completion of the GIP position, the GIPs (AmeriCorps members) are eligible for a $1,612 - $6,095 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 GIP or other AmeriCorps positions, they will not be eligible to apply for an additional GIP position.

**NATURAL AND PHYSICAL WORK ENVIRONMENT**

**Natural Environment:** The host park is located in central California near the Marin County coast. In Golden Gate National Recreation Area, coastal mountains meet beaches and the Bay around the city of San Francisco. Work will also be done in the redwood forests of Muir Woods National Monument, among the arid rocky slopes at Pinnacles National Park, and along the foggy coast in Point Reyes National Seashore. Weather is mild year-round. Grocery stores and fuel are available within the local communities about 20-30 minutes from the duty station.

**Physical Work Environment:** 75% field work, 25% office work. Hikes may involve off-trail work navigating through riparian habitat in order to reach streams where water quality samples are taken. Most hikes to field sampling locations are less than one mile. The field technician will need to carry packs typically around 25 pounds to field sites, including: water sampling containers, data clipboards, sampling probes, and provisions adequate for a safe day in the field (first aid, water, food, clothing layers). Winter work involves additional gear, including rain protection, high boots, and possibly waders at times. Although most work is on trails, some is off-trail and candidates should have good orienteering skills.

**MENTORING AND LEARNING GOALS**

**Mentoring:** Through immersion in the 2020-2021 winter field season at San Francisco Bay Area national parks, the intern will be provided in-depth learning opportunities with National Park Service scientists and interpreters. Orientation and day-to-day supervision and planning will be provided by pairing the intern with an Aquatic Ecologist for the interpretive component of the internship and the network Hydrology Technician for field work. The intern will have the chance to work with field scientists at the park and interpretive specialists in the network and region. The intern will also be provided opportunities to work with other Inventory and Monitoring Program and Golden Gate National Recreation Area crews. These include a salmonid monitoring team, vegetation monitoring group, and wildlife biologists and technicians, in order to broaden the intern’s view of the range of careers in the NPS.

**Learning Goals:**

1) Core principles and knowledge of California coastal hydrology and water quality.
2) Methods for gathering water quality data in the field, data management, and turning those observations into information for managers and the interested public.
3) Experience in gathering and assembling information to create a template for producing interpretive displays about water quality in Western parks.
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<thead>
<tr>
<th>SUPERVISORS/MENTORS</th>
<th>Secondary:</th>
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<tbody>
<tr>
<td><strong>Primary:</strong></td>
<td><strong>Marie Denn</strong></td>
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<tr>
<td>Daniel George</td>
<td>Aquatic Ecologist</td>
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<tr>
<td>San Francisco Bay Area</td>
<td>1 Bear Valley Road</td>
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<tr>
<td>Network Inventory and</td>
<td>Point Reyes CA 94956</td>
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<tr>
<td>Monitoring Program</td>
<td>(415) 464-5222</td>
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<tr>
<td>Manager</td>
<td><a href="https://www.nps.gov/ril/pacificcoast/index.htm">https://www.nps.gov/ril/pacificcoast/index.htm</a></td>
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<tr>
<td>Fort Cronkite, Bldg. 1063</td>
<td>(415) 289-1850</td>
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<tr>
<td>Sausalito, CA 94965</td>
<td><a href="https://www.nps.gov/im/sfan/index.htm">https://www.nps.gov/im/sfan/index.htm</a></td>
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