



San Francisco Bay Conservation and Development Commission 2019 State Fellowship Opportunity Adapting to Rising Tides Program Fellow

1. Host location and contact information:

San Francisco Bay Conservation and Development Commission 455 Golden Gate Ave, Suite 10600 San Francisco, CA 94102

2. Fellowship Supervisor:

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4. Position Description:

General Overview:

San Francisco Bay Conservation and Development Commission: The San Francisco Bay Conservation and Development Commission (BCDC) is a California state planning and regulatory agency with regional authority over the San Francisco Bay, the Bay's shoreline band, and the Suisun Marsh. BCDC was created in 1965 and is the nation's oldest coastal zone agency. Its mission is to protect and enhance San Francisco Bay and to encourage the Bay's responsible and productive use for this and future generations. The Commission leads the Bay Area's ongoing multi-agency regional effort to address the impacts of rising sea level on shoreline communities and assets. Its authority is found in the McAteer-Petris Act, the San Francisco Bay Plan, and other special area plans and laws and policies.

The Planning Division is responsible for conducting major planning studies, specialized research and policy development, and keeping the Commission's policy plans current, including the San Francisco Bay Plan. Planning division staff work collaboratively with other agencies and organizations on issues of regional importance including marsh conservation, sea level rise adaptation, recreation planning and oil spill prevention and response.

Adapting to Rising Tides Program: In 2010, BCDC and NOAA's Office for Coastal Management brought together local, regional, state and federal agencies and organizations, as well as non-profit and private associations for a collaborative planning project along the Alameda County shoreline to identify how current and future flooding will affect communities, infrastructure, ecosystems and economy. Since then, the ART Program has continued to both lead and support multi-sector, cross-jurisdictional projects that build local and regional capacity in the San Francisco Bay Area to plan for and implement adaptation responses. These efforts have enabled the ART Program to test and refine adaptation planning methods to integrate sustainability and transparent decision-making from start to finish, and foster robust collaborations that lead to action on adaptation.

Adapting to Rising Tides Program Fellow:

One fellow will be placed in BCDC's planning division to help support two current projects within the Adapting to Rising Tides Program:

Adapting to Rising Tides, Bay Area is the Bay Area's first 9-county Bay Area regional scale assessment. The project
will conduct a climate assessment to evaluate the vulnerabilities and consequences of, and develop adaptation
strategies for, the Bay Area transportation network including four key asset categories as defined through the ART

process. The project seeks to illustrate the interconnected nature of regional vulnerabilities and identify the need for a range of adaptation strategies, including physical interventions, governance approaches and funding and financing options.

• Adapting to Rising Tides, Eastern Contra Costa County will develop modeling and analyses needed to understand the sea level rise vulnerability in Eastern Contra Costa County, which is uniquely influenced by both the Bay and the Delta. Using the ART adaptation planning process, tools, and data, ART staff will work with local jurisdictions, agencies, and organizations in Contra Costa County, as well as regional, state and federal agencies, to understand the vulnerabilities and consequences communities may face, including: the disproportionate impacts among community members, the disruption of transportation and utility infrastructure, the loss of employment sites, and limitations on access to goods and services. The project will work towards identifying shared and individual actions that will help improve resilience to rising sea levels and other climate change impacts.

The fellow will have the opportunity to participate in a highly collaborative, regional scale planning process while developing and applying geospatial, analytic, and communication skills to aid in the execution of ART process. The fellow will:

- Build GIS expertise and capacity using desktop and web-based tools to analyze exposure to current and future flooding.
- Gain familiarity with vulnerability assessments utilizing the ART Assessment Questions to collect data and
 information that will inform characterization of vulnerability and consequences for the assets, systems of assets,
 sectors and services addressed in the projects.
- Develop communication skills participating in large collaborative processes to address the specific challenges of building climate resilience across different communities, assets and services, and jurisdictions and owners
 Coordinate and provide staff support for meetings of the various stakeholder groups including regional working group and public meetings.
- Gain experience developing data and functions for web mapping applications used by BCDC staff and the public.

Although the Adapting to Rising Tides projects will be the fellow's primary tasks, additional opportunities will likely include supporting the agency's internal GIS data and web mapping applications, in house training opportunities including robust exposure to regulatory and enforcement processes, and potential assistance in San Francisco Bay Plan amendment processes. BCDC is dedicated to accommodating and developing the fellow's professional goals, ensuring exposure to a wide range of tasks and agency partners, and will tailor the suite of tasks accordingly. BCDC has a long history of hosting fellows and interns and staff is used to welcoming and engaging fellows in meetings, challenging and topical work assignments. Fellows have universally found the experience enriching and rewarding and have continued their career with BCDC or moved to partner organizations, such as the San Francisco Estuary Partnership, San Francisco Planning Department and the Coastal Commission. Our Dredging & Sediment Management Team is currently hosting a NOAA Coastal Management Fellow, our GIS Team is hosting a GIS intern, and our planning team is hosting a master's student in marine science. These three fellows and interns are leading projects that will be instrumental to the agency moving forward.