

Adapting to Rising Tides

The goal of the ART project is to increase the preparedness and resilience of Bay Area communities to sea level rise and other climate change impacts while protecting ecosystem and community services.



San Francisco Bay Conservation and Development Commission

Adapting to Rising Tides

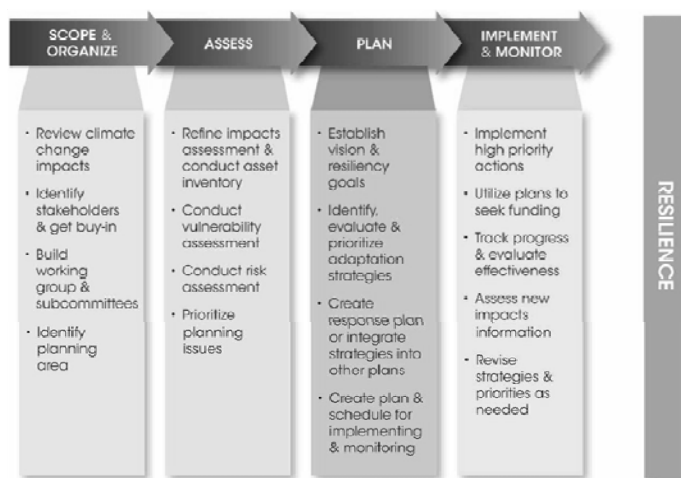
ART is a collaborative project to evaluate:



- How will sea level rise and storm events affect the future of Bay Area communities, infrastructure, ecosystems and economy?
- What approaches can we pursue, both locally and regionally, to assess these challenges, and reduce or manage these risks?

Adapting to Rising Tides

ART Adaptation Planning Process



Scope & Organize

ART Project Area

- Wide, regional interest \approx 40 submittals from seven of the nine Bay Area counties
- Three main selection criteria:
 - ✓ Capacity and interest
 - ✓ A diversity of shoreline types
 - ✓ Regionally significant transportation infrastructure
- Project area includes the shoreline of Alameda County, from Emeryville to Union City



Scope & Organize

ART Collaborative Project Management

- San Francisco Bay Conservation and Development Commission
- NOAA Coastal Services Center
- U.S. Department of Transportation Federal Highway Administration
- Metropolitan Transportation Commission
- California Department of Transportation
- ICLEI Local Governments for Sustainability



Scope & Organize

ART Subregional Working Group

ABAG
 Alameda County (AC) Public Works
 AC Community Development
 AC Public Health Department
 AC Transportation Commission
 Alameda CTC
 BART
 Bay Institute
 Bay Trail
 CA Coastal Conservancy
 Capitol Corridor JPA
 City of Alameda
 City of Emeryville
 City of Hayward
 City of Oakland
 City of San Leandro
 City of Union City

East Bay Dischargers Authority
 East Bay Municipal Utility District
 East Bay Regional Park District
 H.A.R.D.
 Oro Loma Sanitary District
 Pacific Institute
 PG&E
 Port of Oakland
 San Francisco Estuary Institute



Assess

ART Asset Categories:

- Airport
- Community land use, facilities and services
- Contaminated lands
- Energy, pipelines and telecom
- Hazardous material sites
- Ground transportation
- Parks and recreation
- Natural shorelines
- Seaport
- Stormwater
- Structural shorelines
- Wastewater



Assess

New, Refined Sea Level Rise and Storm Event Maps

Areas potentially exposed to:

- frequent or permanent inundation
- more frequent floods or floods that last longer
- overtopping of shoreline protection
- elevated groundwater and salinity intrusion



Assess

Impacts Assessment

- Local Climate Projections and Impact Statements
- Asset Inventory
- Asset-Specific Metrics
- Existing Conditions and Stressors Report

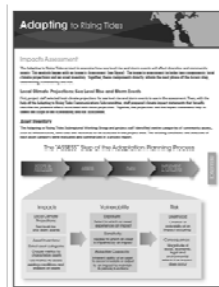
Climate Impacts
The planning is using a new subcommittee working group and impact management team are developing a preliminary and non-assessment of the climate change may affect the agricultural, infrastructure, economy and ecosystems along the Colorado River corridor from Glenwood to Silver City.

the project estimates the climate impacts related to changes in storm events and sea level rise.

ART Climate Impacts Statement (POT)

More frequent flood events
Extreme high sea water levels will occur more often due to changes in storm events and sea level rise. This will lead to more frequent flooding events in flood-prone areas.

CAUTION, RESIDENT FLOODING



Adapting to Rising Tides

DRAFT
EXISTING CONDITIONS AND STRESSORS REPORT

PREPARED BY:
BIOLOGICAL SERVICES CORPORATION
AND CONSULTING ENGINEERS

JANUARY 2012

Adapting to Rising Tides

ART Project Next Steps

- Work with project partners to complete vulnerability and risk assessment (Spring 2012)
- Research adaptation strategies and options, and develop evaluation framework (Summer 2012)
- Engage local and regional entities in identifying a broad suite of adaptation strategies and options (Fall 2013)

For More Information

[Home](#)
[About ART](#)
[Events](#)
[Resources](#)
[Contacts](#)

About ART

Building on its regional assessment of Bay Area impacts from mid- and end-of-century sea level rise, *Living With a Rising Bay*, the San Francisco Bay Conservation and Development Commission (BCDC) has partnered with the National Oceanic and Atmospheric Administration Coastal Services Center (NOAA CSC) to work with Bay Area communities in planning for sea level rise. The Adapting to Rising Tides (ART) project will be a collaborative effort involving community officials and stakeholders to address two specific questions:

How will sea level rise and other climate change impacts affect the future of Bay Area communities, ecosystems, infrastructure, and economy?
What strategies should we pursue, both locally and regionally, to address these challenges and reduce and manage these risks?

Please click on components of the image to learn more about specific aspects of the ART Project:

Project Components

- [Climate Impacts](#)
- [ART Tool sheet](#)
- [About ART](#)
- [Tomorrow's High Tide](#)
- [Vulnerability & Risk](#)
- [Mitigation & Adaptation](#)
- [Adaptation Strategy](#)

Fact sheets

- [ART Tool sheet](#)
- [About ART](#)
- [Tomorrow's High Tide](#)
- [Vulnerability & Risk](#)
- [Mitigation & Adaptation](#)
- [Adaptation Strategy](#)

Visit the ART project website at:

www.risingtides.csc.noaa.gov

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