



San Francisco Bay Conservation
and Development Commission

The Adapting to Rising Tides Program

Sonoma County Transportation Authority
Sonoma County Regional Climate Protection Authority
Board of Directors Briefing
November 14, 2016

The Adapting to Rising Tides Program

- Leads, guides and supports adaptation at local, sector and regional scales
- Continues to develop and refine approaches that lead to action
- Leverage best available data, information and research
- Identifies challenging issues and priorities that need regional investigation and assessment



The screenshot shows the website for the Adapting to Rising Tides Program. The header includes the title 'Adapting to Rising Tides' and navigation links for 'ABOUT US', 'ART APPROACH', and 'NEWS'. Below the header is a large image of a coastal landscape with a banner for an 'ART Workshop in Napa County'. A welcome message reads: 'Welcome to the ART Portfolio, a place to find planning guidance, tools and information that have been developed, tested and refined by the Adapting to Rising Tides Program to address the specific challenges of climate change.' The main content area features three columns: 'Findings' (ART Program outcomes summarized by sectors and adaptation planning issues), 'Projects' (Latest information about current and past projects of the ART Program), and 'How-To' (Background information, step-by-step guidance and 'supplies' for leading an adaptation planning project). Each column has a list of links: Findings by Sector, Findings by Issue, Regional Scale Projects, Local Scale Projects, Sector Specific Projects, The ART Approach, Design Your Project, and ART Supplies. At the bottom, there is a 'Help Desk' link with the text: 'Find answers to frequently asked questions and connect with knowledgeable ART Program staff.'

The ART Approach to Adaptation



Sustainable from
Start to Finish

Considers the relevance and implications of all aspects of sustainability – society & equity, economy, environment and governance - in each step of the planning process

Collaborative
by Design

Develops trust among stakeholders, shared understanding of the issues, buy-in for collaborative problem solving, and improved capacity to address issues

Transparent
Process

Maintains transparency throughout and provides tools to ensure clear communication about decisions and outcomes

ART Program Projects

Regional

Bay Area Sea Level Rise Analysis and Mapping



Local Hazard Mitigation and Climate Adaptation Plans



Regional Resilience Partnerships



Stronger Housing, Safer Communities



Local

Alameda County ART Project



Contra Costa County ART Project



Hayward Shoreline Resilience Study



Oakland/Alameda Resilience Study



Sector

Bay Area Transportation Climate Resilience



Tidal Creeks and Flood Control Channels



Corte Madera Baylands



East Bay Regional Park District



ART Supported Projects

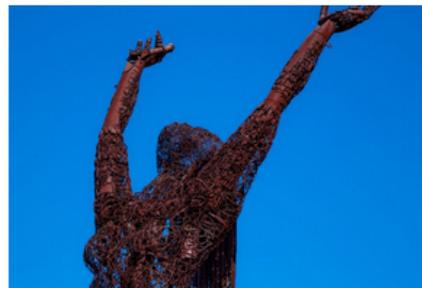
SEA CHANGE
SAN MATEO COUNTY

HOME | CURRENT EFFORTS | ABOUT | EVENTS | RESOURCES

CURRENT EFFORTS » SEA LEVEL RISE VULNERABILITY ASSESSMENT



THE COUNTY OF SAN MATEO HAS INITIATED A SEA LEVEL RISE VULNERABILITY ASSESSMENT. The Assessment is part of a long-term resilience strategy to ensure our communities, ecosystems, and economy are prepared for climate change. The effort, which is spearheaded by Supervisor Pine, is funded by the California State Coastal Conservancy and conducted through a collaborative, multi-stakeholder



Oct 10, 2016, 6:24:10 PM

City of Oakland Unveils Innovative Resilience Playbook To Tackle City's Toughest Long-Term Challenges

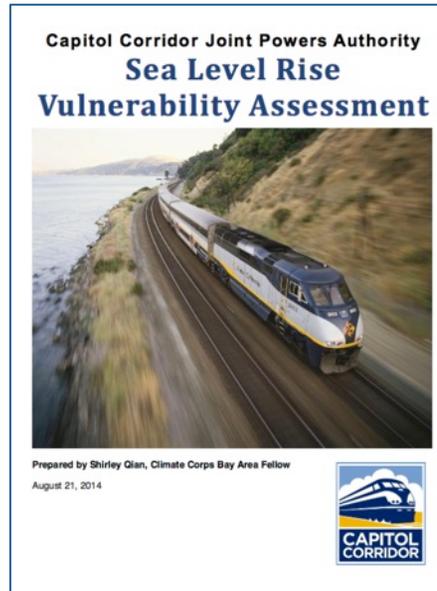
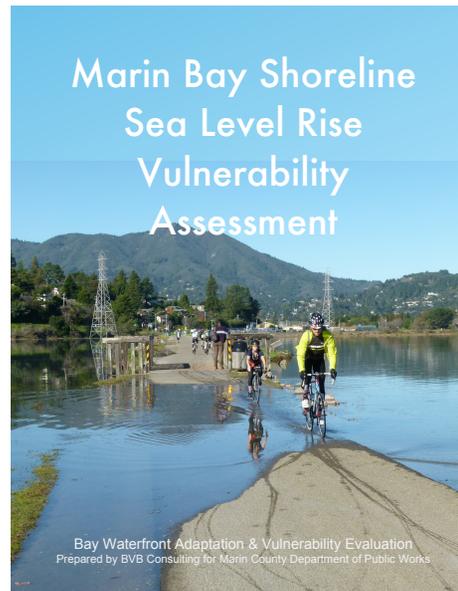
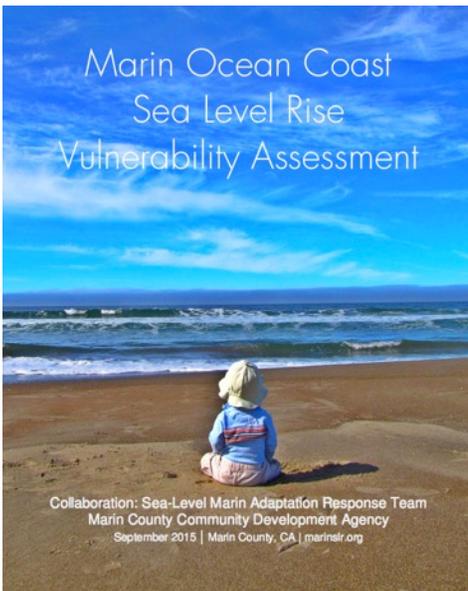
Climate Change Adaptation Plan
Preparing Benicia for a Resilient Future

Prepared for:



Prepared by:

ICF International
PlaceWorks
Moffat & Nichol
Michael Baker International



Multi-Agency Partnerships



Climate Change and Extreme Weather Adaptation Options

for Transportation Assets in the Bay Area Pilot Project

Technical Report • December 2014



STRONGER HOUSING, SAFER COMMUNITIES

STRATEGIES FOR SEISMIC & FLOOD RISKS

SUMMARY REPORT March 2015

ART Program Technical Assistance

ART Portfolio

On-line tool with resources and information to help address the challenges of building climate resilience across different assets, jurisdictions and owners

ART Help Desk

Direct assistance and support for those working on climate adaptation and hazard mitigation planning

Adapting to Rising Tides

ABOUT ART SUPPLIES ART APPROACH

The Adapting to Rising Tides (ART) Program is an initiative led by the San Francisco Bay Conservation and Development Commission. ART provides staff support and other resources to help agencies and organizations collaboratively plan for sea level rise and storm impacts.

Welcome to the **ART Portfolio**, a place to find planning guidance, tools and information that have been developed, tested and refined by the Adapting to Rising Tides Program to address the specific challenges of climate change.

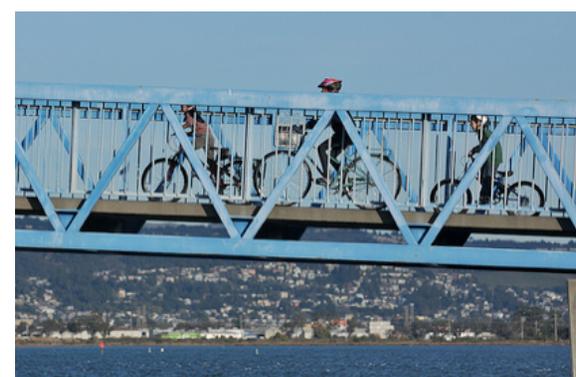
Findings	Projects	How-to
ART Program outcomes summarized by sectors and adaptation planning issues	Latest information about current and past projects of the ART Program	Background information, step-by-step guidance and "supplies" for leading an adaptation planning project
Findings by sector >	Regional scale projects >	ART approach to adaptation >
Findings by issue >	Local scale projects >	Design your own project >
	Sector specific projects >	ART supplies >

Help Desk >
Answers to frequently asked questions. How to contact us for additional help.

Regional Resilience and Adaptation

New project to assess and develop adaptation strategies for:

- Regional transportation assets of all kinds – from highways to trails
- Priority Development Areas
- Priority Conservation Areas
- Communities with characteristics that make them more vulnerable to flooding



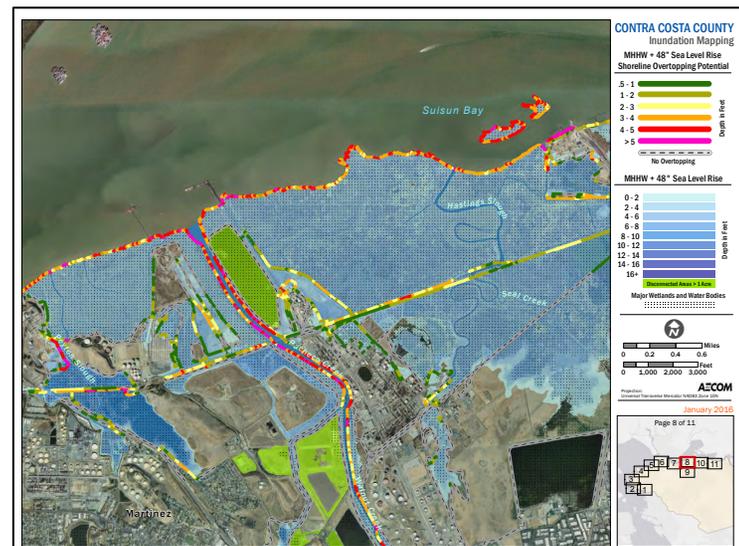
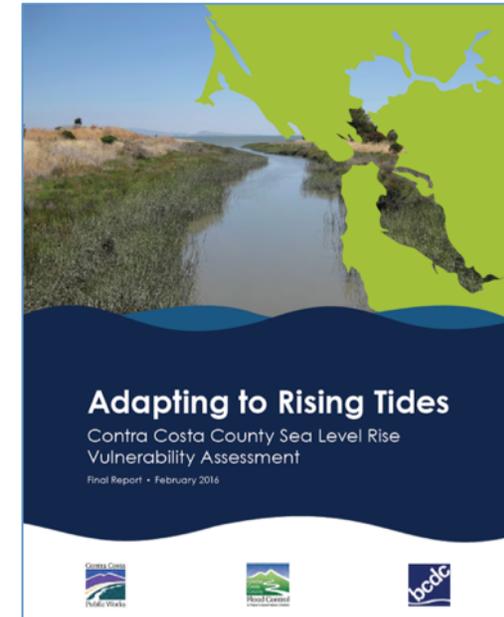
Regional Resilience and Adaptation

- Led by BCDC, MTC and BARC
- Regional scale assessment using the proven ART Approach
- Regional Working Group
- Five public engagement meetings
- Outcomes will inform the 2021 Sustainable Communities Strategy, Plan Bay Area

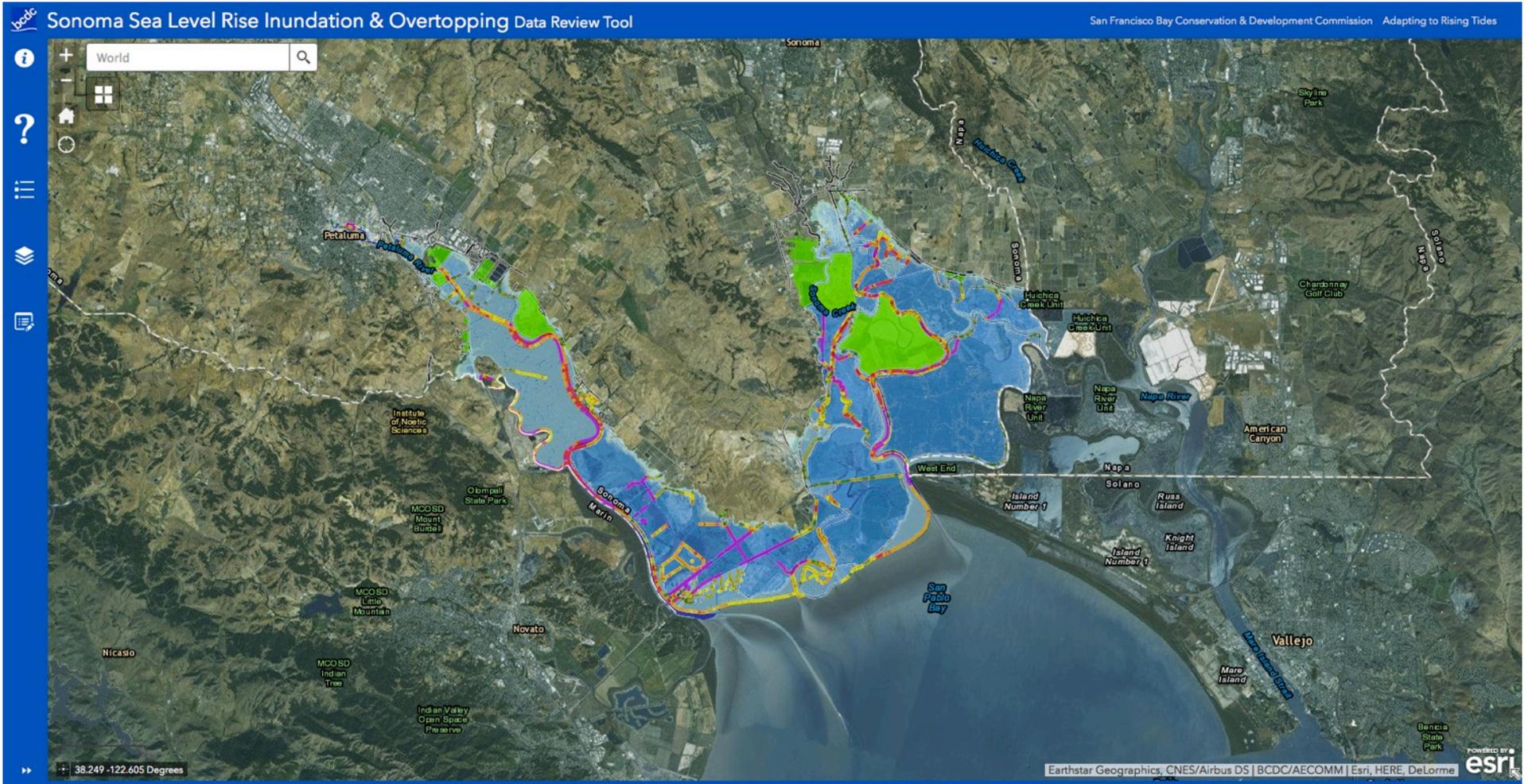


Regional Sea Level Rise Maps

- ART maps for all nine counties
- Local stakeholder review and input
- Ten maps that reflect many different combinations of sea level rise and storms (*One Map = Many Futures*)
- Shoreline overtopping depths
- Online map viewer
- PDF mapbooks
- Geospatial data



Draft Maps Ready for Local Review



Webviewer access: <http://goo.gl/XicMtU>

Feedback due: Nov 25th

Questions?

Adapting to Rising Tides

ABOUT US ART APPROACH NEWS

Adapting to Rising Tides > Regional > Bay Area Sea Level Rise Analysis and Mapping

Findings +

Maps and Data Products >

Projects -

Regional -

Overview >

Bay Area Sea Level Rise Analysis and Mapping

Local Hazard Mitigation and Climate Adaptation Plans >

Regional Resilience Partnerships >

Stronger Housing, Safer Communities >

Local +

Sector +

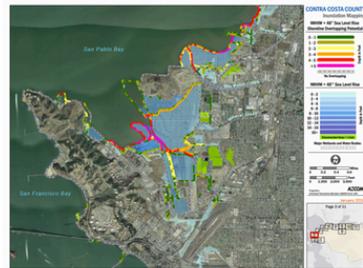
Bay Area Sea Level Rise Analysis and Mapping

The Adapting to Rising Tides Program is partnering with the Metropolitan Transportation Commission to spearhead the development of integrated regional shoreline mapping and analysis products needed to support consistent sea level rise assessment and adaptation

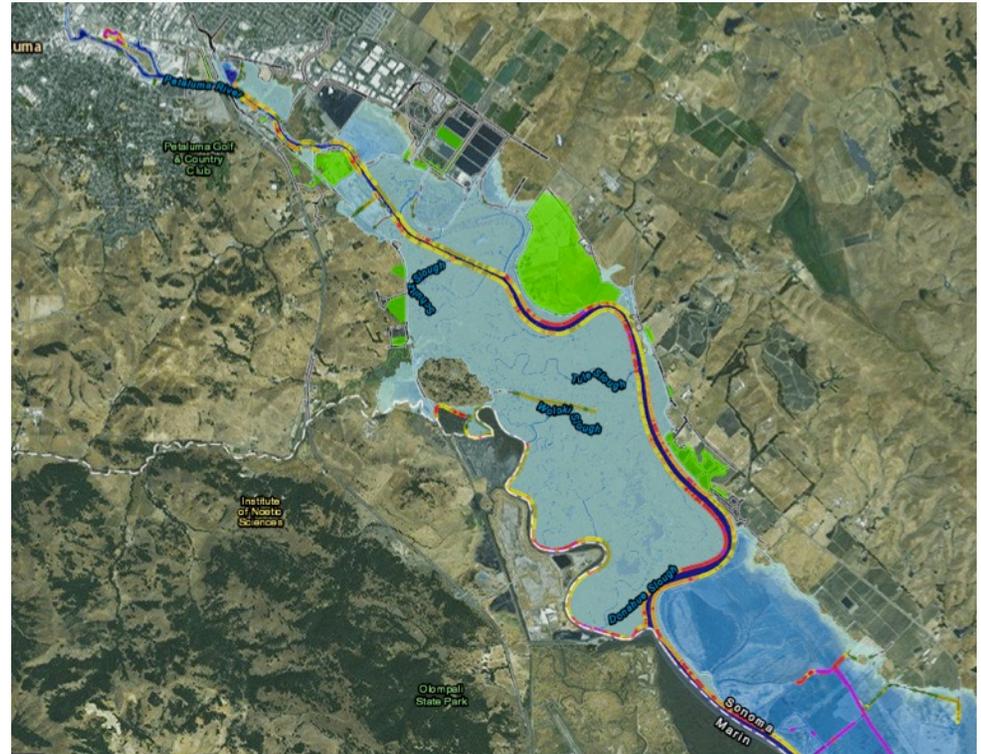
The integrated regional shoreline mapping and analysis will result in robust and accurate mapping products that leverage the latest LIDAR topographic data sets, the FEMA San Francisco Bay Area Coastal Study and San Francisco Tidal Datums Study, and the regional shoreline delineation developed by the San Francisco Estuary Institute.

Regional products to be created and shared include:

- County specific *sea level rise and extreme tide matrices* that depict locally-relevant water levels and illustrate the "One Map, Many Futures" concept.
- Inundation mapping for ten scenarios that capture over 90 combinations of future sea levels and extreme tide conditions.
- Overtopping potential maps for all ten scenarios that depict where the Bay may overtop the shoreline. Coupled with the inundation maps, the overtopping potential maps help in identifying the shoreline locations



The ART regional mapping and shoreline analysis products depict areas at risk of temporary or permanent flooding due to sea level rise and extreme tides. They also show the shoreline locations and footpaths that may contribute to the flooding.



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www.adaptingtorisingtides.org