Adapting to Rising Tides

Working together to increase the resilience of Bay Area communities to sea level rise and storm events





San Francisco Bay Conservation and Development Commission

Contra Costa ART Working Group

Working Group Meeting #3 – August 5, 2015

Objectives

- Discuss assessment outcomes and organization
- Learn about which communities are most vulnerable to climate change
- Confirm next steps for finalizing the assessment

Agenda

- 9:00 Welcome, Meeting Objectives, and Announcements
- 9:10 Presentation and Discussion: Assessment Outcomes
- 9:45 World Café: Assessment Outcomes and Organization
- 11:15 Wrap Up and Next Steps

Project Timeline

Project Initiation – Fall 2014

Project Scoping – Fall/Winter 2015

Conduct Assessment – Winter/Spring 2015



Determine Assessment Outcomes – Summer 2015

Transition to Adaptation – Fall 2015

Develop Adaptation Responses – Winter 2015



Evaluate and Select Adaptation Responses + Opportunities for Implementation – Spring 2016



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ART Planning Process



ART Contra Costa Project

Adapting to Rising Tides Planning Process

SCOPE & ORGANIZE

Convene Partners & Stakeholders Choose Project Area Identify Sectors, Services, Assets Select Climate Scenarios & Impacts

Set Resilience Goals

Society & Equity Environment Economy Governance

DEFINE

& Risks

Issues

Characterize

Identify Key Planning

Vulnerabilities

IMPLEMENT & MONITOR

Integrate Adaptation Responses into Plans

Evaluate & Select Adaptation Responses

Develop Adaptation Responses

Select Evaluation Criteria

Refine Resilience Goals

PLAN

ASSESS

Review Existing Conditions

Assess Vulnerability

Consider Risks

Working Group Meeting #2

Status of Project Resilience Goals

Draft project resilience goals were revised based on working group input and are available on the project webpage

Goals will be revisited before we start developing adaptation responses to ensure they align with the planning issues identified during the assessment

Adapting to Rising Tides Contra Costa Adapting to Rising Tides Project Resilience Goals August 2015

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Project Resilience Goals

The resilience goals for the Contra Costa County ART project should be read in context of the project area, assets included, climate scenarios and impacts, and the functions and values identified as important for the participating agencies, organizations and communities. The resilience goals will be revisited once the assessment is finalized to ensure they align with the identified planning issues and continue to reflect agency, organization and community values and visions.

Governance

Build resilience by improving the capacity of agencies, organizations, private entities, and communities in Contra Costa to work cooperatively to address climate change.

Society and Equity

Ensure all communities, and in particular those with characteristics that could make them more vulnerable, have what they rely on including safe and healthy housing, utilities and services, and transportation and transit access.

Protect the health, safety and welfare of those who live, work and recreate in Contra Costa County.

Economy

Maintain and improve local economic vitality and access to diverse employment opportunities by preserving the function of major employment centers, infrastructure and utilities.²

Recognizing Contra Costa County's regional role, ensure the energy and transportation sectors and the interconnected networks and systems they rely on are resilient.

Environment

Protect and enhance environmental value by preserving habitat, continuing to improve air and water quality, cleaning up contaminated lands, and ensuring safe water supplies.

Promote the use of natural and nature-based approaches wherever possible to improve community and economic resilience.

² Because of the geographic limitation to the East, the project falls short of addressing the economic goals of the Northern Waterfront Economic Development Initiative

The Assess Step



Reminder, the Contra Costa ART assessments includes:

- An exposure analysis that identifies exposure to current and future flooding
- Answers to assessment questions about existing conditions, types of vulnerabilities and potential consequences
- **Review** and **validation** of assessment outcomes by the working group, other stakeholders, asset managers, topical experts
- Outcomes that will support adaptation response selection and implementation

Status of the Assessment

Most assessment question answers have been reviewed by working group members or topical experts

Draft profile sheets were shared with working group members – please share them within your agency or organization – and provide comments by August 15th

Profile sheets will be available to the working group in September for review before they are finalized



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ART Planning Process



ART Contra Costa Project

Adapting to Rising Tides IMPLEMENT Planning Process & MONITOR Integrate Adaptation **Responses into Plans** Society & Equity Environment Evaluate & Select Adaptation Responses Economy **SCOPE & ORGANIZE Develop Adaptation Responses** Governance **Convene Partners & Stakeholders** Select Evaluation Criteria **Choose Project Area Refine Resilience Goals** Identify Sectors, Services, Assets **PLAN** Select Climate Scenarios & Impacts DEFINE Set Resilience Goals ASSES Characterize Review Existing **Vulnerabilities** & Risks Condi ons Assess Vulneral ility Identify Key Planning Consider **k**sks Issues

Working Group Meeting #3

What is the Define step?

The Define step is unique to ART and serves as the bridge between the Assess and Plan Steps.

The outcomes of the Define step are:

- Organized findings that help communicate the assessment outcomes and support adaptation response development
- A transparent process that avoids the challenge of ranking, scoring or numeric prioritization
- Confidence that important vulnerabilities are not left behind



Benefits of the Define step

A robust assessment can result in hundreds of vulnerabilities. Define helps determine which issues should be taken up by the working group, for example:

- Assets that share similar vulnerabilities that may need similar or shared solution
- Where vulnerabilities and consequences of different assets should be considered together based on their relationship or geographic location
- Vulnerabilities that cannot be solved without collective action, e.g., multiple vulnerabilities that together lead to high consequences



ulnerabilities





Two Components of Define

1. Summarize Findings

Develop outcome-oriented vulnerability and consequence statements that clearly and concisely summarize answers to the assessment questions for each asset or asset category assessed

Example: Single Family Residential

Governance vulnerability

Residential landowners are unlikely to own or have control over the shoreline that protects them against flooding, which in some cases is a road or railway embankment that provides only ad-hoc protection.

Environmental consequence

Floodwaters that pass through neighborhoods can pick up and carry debris that can impair water quality and habitats critical to biodiversity.

Two Components of Define

2. Shift to Adaption

Determine the key planning issues that will be advanced for adaptation response development

Key planning issues are often underpinned by vulnerabilities that:

- Cut across multiple assets, jurisdictions or geographies
- Have significant or early consequences
- Require collaborative decision-making or funding
- Require regulatory changes to solve

Working Group's Role

- Verify our understanding of vulnerability and consequences based on local knowledge, experience and expertise
- Confirm we have a solid enough understanding of vulnerabilities and consequences to identify the key planning issues
- If more assessment information is necessary help uncover additional data, reports, studies, etc.
- Help determine which key planning issues are advanced for further consideration by the working group



Understanding Community Vulnerabilities

Community resilience is strongly correlated with social equity, affecting both the ability of the individual and the community to cope with the impacts of earthquakes, economic down turns, and climate change.



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2015

Climate Change Vulnerability in Contra Costa County: A Focus on Heat

Equity is one of the sustainability frames integrated into each step of the ART planning process

SOCIETY & EQUITY

Effects on communities and services on which they rely, with specific attention to disproportionate impacts due to existing inequalities.

ENVIRONMENT

Environmental values that may be affected, including ecosystem functions and services, and species biodiversity.

ECONOMY

Economic values that may be affected such as costs of physical/infrastructure damages or lost revenues during periods of recovery.

GOVERNANCE

Factors such as organizational structure, ownership, management responsibilities, jurisdiction, mandates, and mechanisms of participation that affect vulnerability and risk.





Goal 1: Confirm the assessment findings are sufficient

Goal 2: Discuss how best to organize assessment findings to lead to the identification of key planning issues

Possible organizational themes based on your input and ongoing work of the ART team are:

Timing – to impact, to implement the response, to accrue the benefit

Sector - residential, commercial, industrial

Geography – people and neighborhoods

Consequences – goods and commuter movement, jobs and economy, fueling the region

World Café: Assessment Outcomes

Rotate through four small group discussions about specific assessment findings and the four organizational themes



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Break after 1st two rotations

World Café: Assessment Outcomes

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Report back:

- Q: Are assessment findings sufficient?
- Q: How do the organizational themes work?

Next Steps



- Based on your feedback we will finalize assessment outcomes and summarize the findings
- Asset owner, manager or topical experts – please provide comments on draft profile sheets by <u>August 15th</u>
- Profile sheets will be provided to all working group members in September
- Next meeting: confirm the summarized findings and start talking about key planning issues



Currently, ART staff is working with asset managers and other stakeholders to gather the information needed to conduct a high-level assessment for the entire project area. The findings of the assessment will be validated by the working group and any specific issues, assets or geographies that need additional refined assessment will be identified. Adaptation response will than be developed for the issues the working group collectively det

Adaptation responses will then be developed for the issues the working group collectively determines are high priority for action. Responses ranging from furti information gathering, to infrastructure changes, to resource management and policy solutions, will be considered. In addition, recommendations will be developed for evaluating the trade-dift, send feasibility of polerinal adaptation responses.

For more information on this project, please contact: Wendy Goodfriend wendy.goodfriend@bcdc.ca.gov 415-352-3646

Project web page: http://www.adaptingtorisingtides.org/ working-groups-overview/ contracosta/

> Project web map: http://arcg.is/1hgrtdC