



The
Adapting to Rising Tides
Program

Oakland/Alameda Resilience Study



Adapting to Rising Tides project
www.adaptingtorisingtides.org

Agenda

9:30 Welcome, review agenda, and introductions

9:40 PLAN step and Adaptation Responses

10:00 Adaptation Response Open House

10:45 Review draft key planning issues and participants

11:15 Wrap up and August meetings



Meeting Objectives

- Share and discuss/refine draft agency and asset adaptation responses
- Review refined Key Planning Issues
- Organize Key Planning Issue meetings for July and August



What have we been up to?

- Profile sheet edits
- Draft adaptation response development
- Contra Costa County ART Project
- ART Program Portfolio
- ART Program and ABAG Resilience Program Local Hazard Mitigation and Climate Adaption Planning



...What have you been up to?



Introductions and group updates

Where are we in Oakland/Alameda?



The Plan step is where we develop possible actions in adaptation responses, and evaluate & select the most relevant responses to move forward. Today we are focused on developing adaptation responses – we drafted responses based on what we learned during the assessment & what the ART program has learned overall – today is a chance for you to see them and give feedback to make them more relevant.

Outcomes of the Plan Step

1. Adaptation responses for individual assets and agencies
2. Cross-cutting adaptation responses for the key planning issues
3. Implementation options
4. Evaluation criteria based on resilience goals

In the PLAN step, we have begun developing adaptation responses for individual assets and agencies, as well as developing cross-cutting adaptation responses for the key planning issues. As part of these responses, we will identify implementation options and select evaluation criteria based on the resilience goals. You have been able to review your asset or sector profile sheets with draft agency- and asset-specific adaptation responses, which we will discuss today.

What is an adaptation response?

Actions to address governance, information, physical and functional vulnerabilities

An adaptation response identifies:

- A key vulnerability
- One or more actions tied to specific vulnerabilities and sequenced when necessary
- Implementation information including action leads, partners, possible funding sources, and ways to mainstream into existing processes

An adaptation response is an action or series of actions to address identified vulnerabilities (governance, information, physical, or functional) for individual or multiple assets.

A key vulnerability provides a direct link to the outcome of the assessment so that the most critical issues identified are addressed.

An adaptation response can include one or more actions to address vulnerabilities. Many actions can be taken at the same time, while others act as a series of sequential steps that incrementally build towards resilience (e.g., often need to address information vulnerabilities before selecting an appropriate physical vulnerability action).

Implementation options act as a guide for implementing each action, identifying possible actors that need to be at the table, whether actions could be incorporated into existing planning or collaborative processes, or if new initiatives will be needed.

Asset-Specific Adaptation Response



Vulnerability	Action	Process	Actors
<p>PHYS1: Although the Bay Trail is paved in MLK Shoreline, some of it is on top of poorly maintained levees that are vulnerable to erosion, which undercuts the trail.</p>	Prioritize resurfacing vulnerable trail segments with erosion-resistant materials	Capital Planning, Project Planning and Design	EBRPD
	Prioritize maintenance and repair of barrier-free access to the shoreline and recreation facilities in order to minimize re-routing or closure	Operations	EBRPD
	Stockpile materials to create ramps or pathways to maintain safe access for those with limited mobility during and after flooding events	Operations, Emergency and Hazard Planning	EBRPD
	Stockpile and use sandbags to minimize flood damage to vulnerable structures (e.g., boat house, meeting space)	Operations, Emergency and Hazard Planning	EBRPD
	Effectively communicate trail closures, e.g., establish specific notification practices	Long-range Planning, Operations, Emergency and Hazard Planning	EBRPD

This is an example of an adaptation response for the MLK Jr. Regional Shoreline. The adaptation responses identify actions to address a given vulnerability, as well as possibilities for processes and actors for each action. On your profile sheets, these adaptation responses also identify the scale at which each action could be taken (e.g. local, regional), and the potential timing or priority of action initiation.

Asset-Specific Adaptation Response



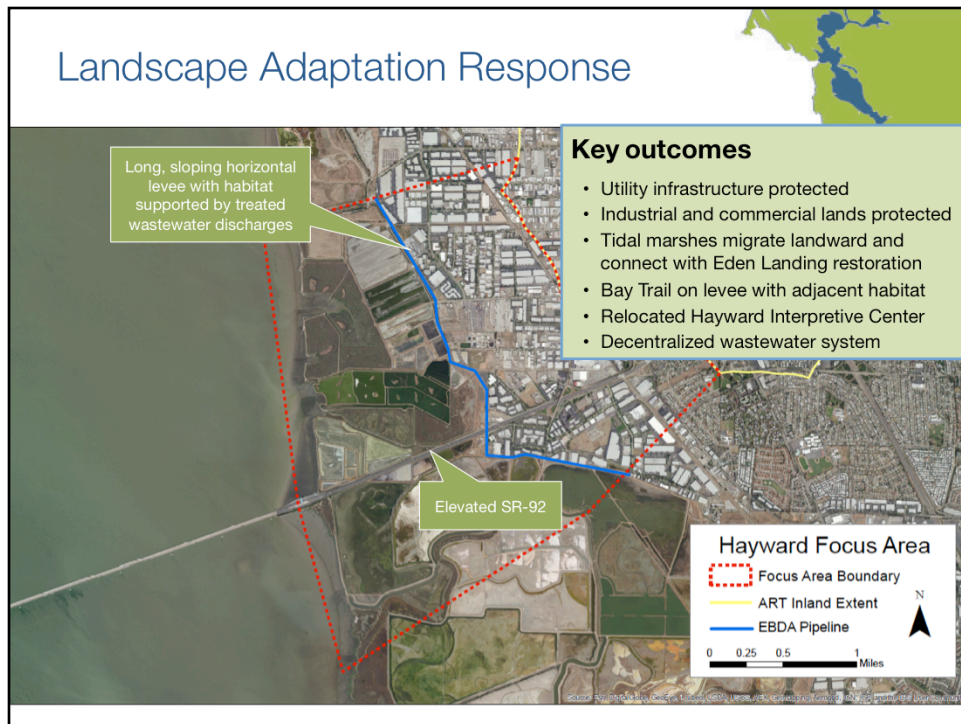
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- In this case, the physical vulnerability has five different actions that EBRPD could undertake or lead themselves. Often there are different types of actions that could address the same vulnerability – some are physical actions to take onsite, others are policy-related. These actions are a set of options – you don't have to pick just one, and you don't necessarily need to implement all of them; some actions are best undertaken together, or in sequence. E.g. EBRPD may decide that these two are the easiest place to start, because a shoreline park manager could initiate these without additional money or extensive coordination with headquarters.
- In general, the asset-specific adaptation responses are near term options to help protect what is there in its current location.



Photo 14 of 33
San Leandro Creek

Some vulnerabilities may not be able to be addressed by a single agency or manager – there may be multiple actors, and it may need to be addressed at a landscape scale. E.g. EBRPD doesn't own the levees that the trail is on, so would need to work with the flood control district to address major flooding or longer-term impacts; later on, if access to the shoreline was limited due to flooding on local roads, these broader transportation needs would require additional partnerships and solutions. These types of vulnerabilities will be addressed through adaptation responses related to our Key Planning Issues, at our upcoming meetings.



This is an example of what a landscape-scale adaptation response can look like. This would be the creation of a horizontal levee in Hayward, which addresses several of the resilience goals identified by the Hayward focus area working group and leads to key outcomes including new, resilient infrastructure and habitat protection. A landscape adaptation response like this requires many individual actions by individual landowners as well as significant coordination – one agency is not able to implement this broad of a response on their own.

This adaptation response requires major realignment of current land uses and may require land swaps and new management agreements between park districts, wastewater utilities, and the City of Hayward. There are information gathering, governance, financing, and physical actions associated with this response. This response will likely take decades to implement and may require changes in present day regulatory and financing mechanisms to implement. This response lays out a conceptual design and a pathway to implementation but is not at the project specifications and design stage.

Preview: this is what the July/August meetings will focus on, more info to come at the end of today.

Adaptation Response Open House



Posters around the room have draft adaptation responses for individual assets and agencies grouped into five key planning issue categories.

As you review the responses, consider:

- Are these the right DIY actions?
- Are the right actors listed?
- Is your agency implementing/planning to implement any of these actions?
- If not, why not? What are the hurdles?

Today, we will be having an Open House for the Draft Asset-Specific Adaptation Responses. We have posters around the room, grouped into the key planning issue categories, with draft responses listed; ART team members will be standing near the posters to answer questions and get your feedback:

OAK (Sara), Access (Maggie), Shorelines (Sarah), Community (Rebecca), Coliseum (Wendy) Overarching permitting and ownership issues not handled at this level

Please add actions, note desired changes, add people or questions. You can write on the posters! Everyone gets a post it note pad! Consider questions on slide as you look at each poster that is relevant to your asset or agency. We will reconvene in about 45 minutes, so please take your time.

Revised Key Planning Issues



1. Access on and off Bay Farm Island and to and from Oakland International Airport (OAK) is already limited due to the island's geography, is vulnerable to future flooding and seismic events, and will affect the economy, public health and safety, and community function if disrupted.

Doolittle Drive/State Road 61

-EBRPD, Caltrans, Port of Oakland, City of Alameda, FEMA, Bay Trail, MTC

Hegenberger Road, 98th Avenue, OAC, and Airport Drive

-EBRPD, Caltrans, MTC, BART, City of Oakland, Port of Oakland, City of Alameda

Revised Key Planning Issues

2) Housing, community members, and community facilities are vulnerable to current and future flooding as well as seismic events. Impacts to these facilities could result in major consequences for people where they live, work, and recreate.

-City of Oakland, City of Alameda, ABAG, Emergency Response, Community Based Organizations, PGE, EBMUD

----- Meeting Notes (7/7/14 14:31) -----

policy changes to HGPU

Clarify regulatory process connection to vuln 4

Revised Key Planning Issues

3) The Oakland Coliseum facilities, transportation assets, and neighborhood are vulnerable to both current and future flooding due to at-capacity flood control channels and rising Bay water levels.

-City of Oakland, Coliseum JPA, Capitol Corridor JPA, BART, AC Transit, ABAG, MTC,



Revised Key Planning Issues

4) Oakland International Airport (OAK) is vulnerable to future flooding and seismic events both within its facilities and through its dependence on other assets.

-Port of Oakland, ABAG, FEMA, MTC, Caltrans, EBRPD, PGE, City of Oakland, BART



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Revised Key Planning Issues

5) The Oakland/Alameda study area contains shoreline habitat, including habitat for the endangered California Ridgeway's Rail. However, much of this habitat exists in the form of fringing marshes, which are not predicted to persist given sea level rise, sediment projections and surrounding land uses.

-EBRPD, Bay Trail, Coastal Conservancy, City of Oakland, City of Alameda, Alameda County Flood Control and Water Conservation District

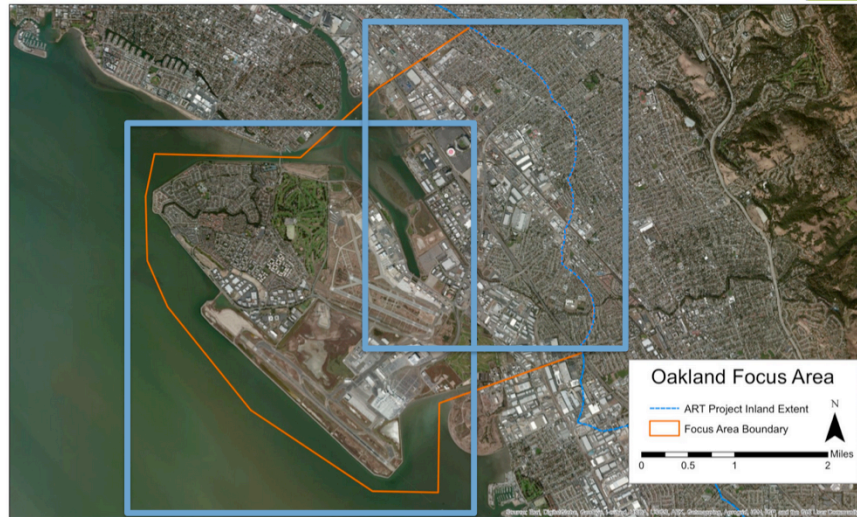


Revised Key Planning Issues

6) Overarching: Permitting and regulatory issues along shoreline and with multiple owners and jurisdictions may delay or impede adaptation.
-Everybody!



Geographic Areas



- 1) Grouping around the coliseum with a particular focus on transportation assets, community flood risk, and Damon Slough. Need participation from FEMA, AECOM, Caltrans, BART, CCJPA, Oakland, OES
- 2) BFI Group, focus on Airport and Island shoreline protection and access. Need FEMA, AECOM, EBRPD, Caltrans, OAK, City of Alameda

Overarching

1. Community facilities and emergency response
2. Habitat vulnerabilities and opportunities across the focus area
3. Permitting and funding challenges for adaptation actions



We will discuss these topics all together.

Key Planning Issue Responses

1. July/August meetings on key planning issue adaptation response
2. September meeting on evaluation criteria
3. Fall meeting to share study findings and develop next steps for agencies and the study area

1. Host us! Do you have a site where we could do a field trip and meeting? Who else needs to be involved?

Oakland/Alameda Resilience Study

For more information:

<http://www.adaptingtorisingtides.org/working-group/oakala/>

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Feel free to contact us with questions or input.