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 #7 – September 28, 2016

Objectives

- Learn about population and demographic analysis and outcomes
- Provide input on key planning issues adaptation responses
- Help test and refine evaluation criteria

Agenda

9:00	Welcome, Meeting Objectives, Announcements, and Updates
9:15	Population and Demographic Analysis and Outcomes
9:35	Brief Review of Key Planning Issues
9:45	Evaluation Criteria Presentation and Partner Exercise
10:30	Break
10:45	Open House: Key Planning Issues Adaptation Responses
11:45	Wrap Up and Next Steps

Project Timeline

ART Contra Costa Project

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 – Spring 2016

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

Working Group Meeting

Individual or small group meetings

ART Planning Process

ART Contra Costa Project

Working Group Meeting #6

ART Planning Process

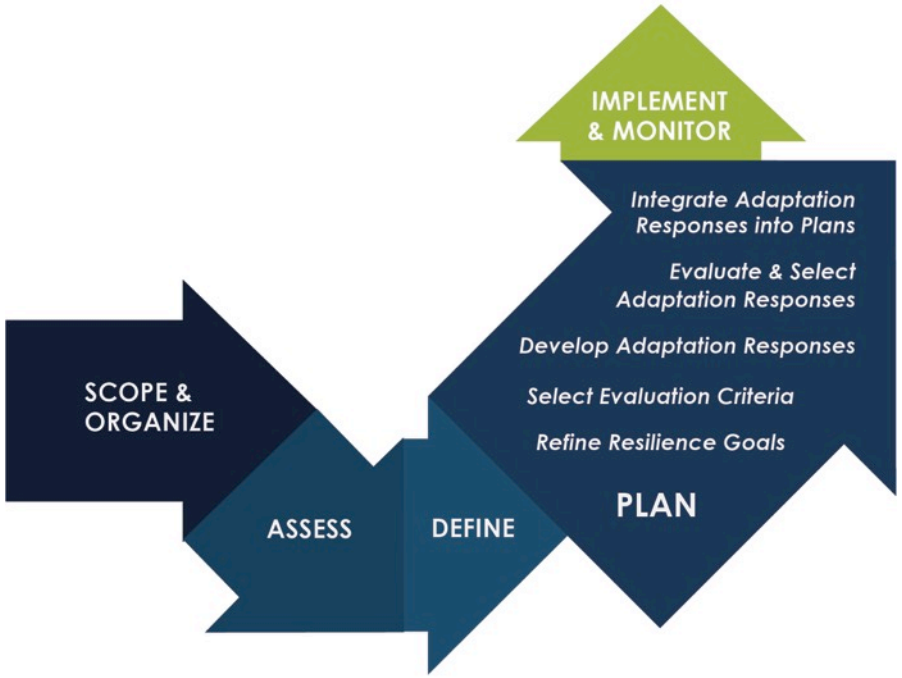
ART Contra Costa Project

Working Group Meeting #7

Plan Step Outcomes

ART Contra Costa Project

- Refined resilience goals
- Adaptation responses for all asset categories
- Adaptation responses for the project Key Planning Issues
- Criteria to help evaluate different actions



Project Updates

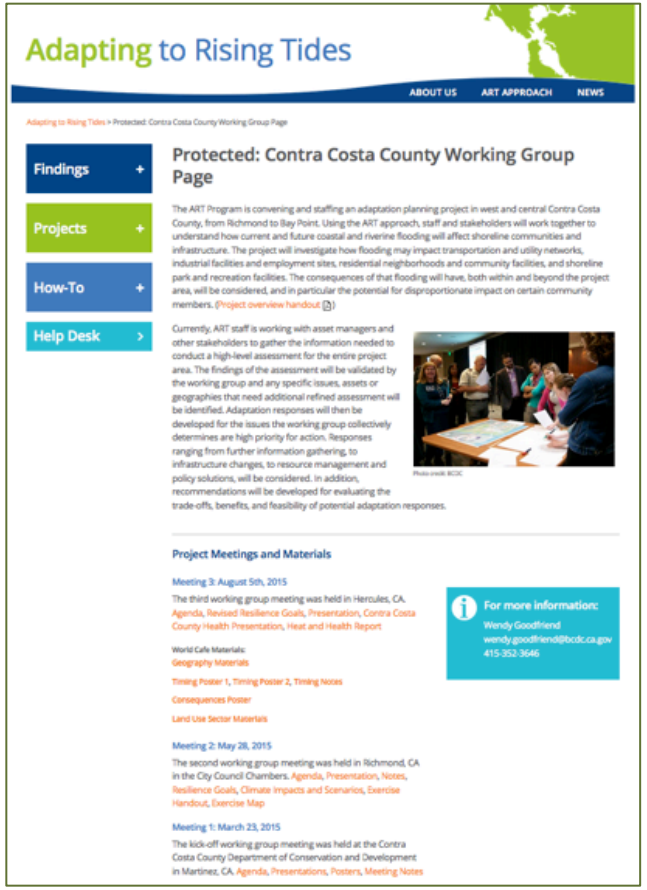
ART Contra Costa Project

New since last meeting:

- Community indicators mapbooks
- Updated Key Planning Issues
- Adaptation responses for the Key Planning Issues
- Reorganized and easier to use working group webpage!

Coming soon:

- Implementation Pathways
- Draft Project Report



www.adaptingtorisingtides.org/contra-costa-county-working-group-page

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Announcements

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- New ART staff!
- *Bay Area Sea Level Rise Analysis and Mapping Project* - regionally integrated sea level rise and shoreline overtopping maps in early 2017
- MTC, BCDC and BARC received a Caltrans grant to assess and develop strategies for:
  - ✓ Transportation assets
  - ✓ Priority Development Areas
  - ✓ Priority Conservation Areas
  - ✓ Communities with characteristics that make them more vulnerable to flooding
- Your news?

Community Indicators for Flood Risk

ART Contra Costa Project

Characteristics that reduce the ability to prepare for, respond to, and recover from a major hazard event

Community Indicators for Flood Risk

ART Contra Costa Project

Stronger Housing, Safer Communities Approach

- Researched and compiled information on community vulnerability and resilience indicators
- Worked with an advisory committee to select ten indicators based on data availability, feasibility and appropriateness for application at the regional scale
- Used threshold methodology based on MTC's Communities of Concern to flag census Block Groups
- Areas that have been flagged indicate a need for community-scale investigation

Community Indicators for Flood Risk

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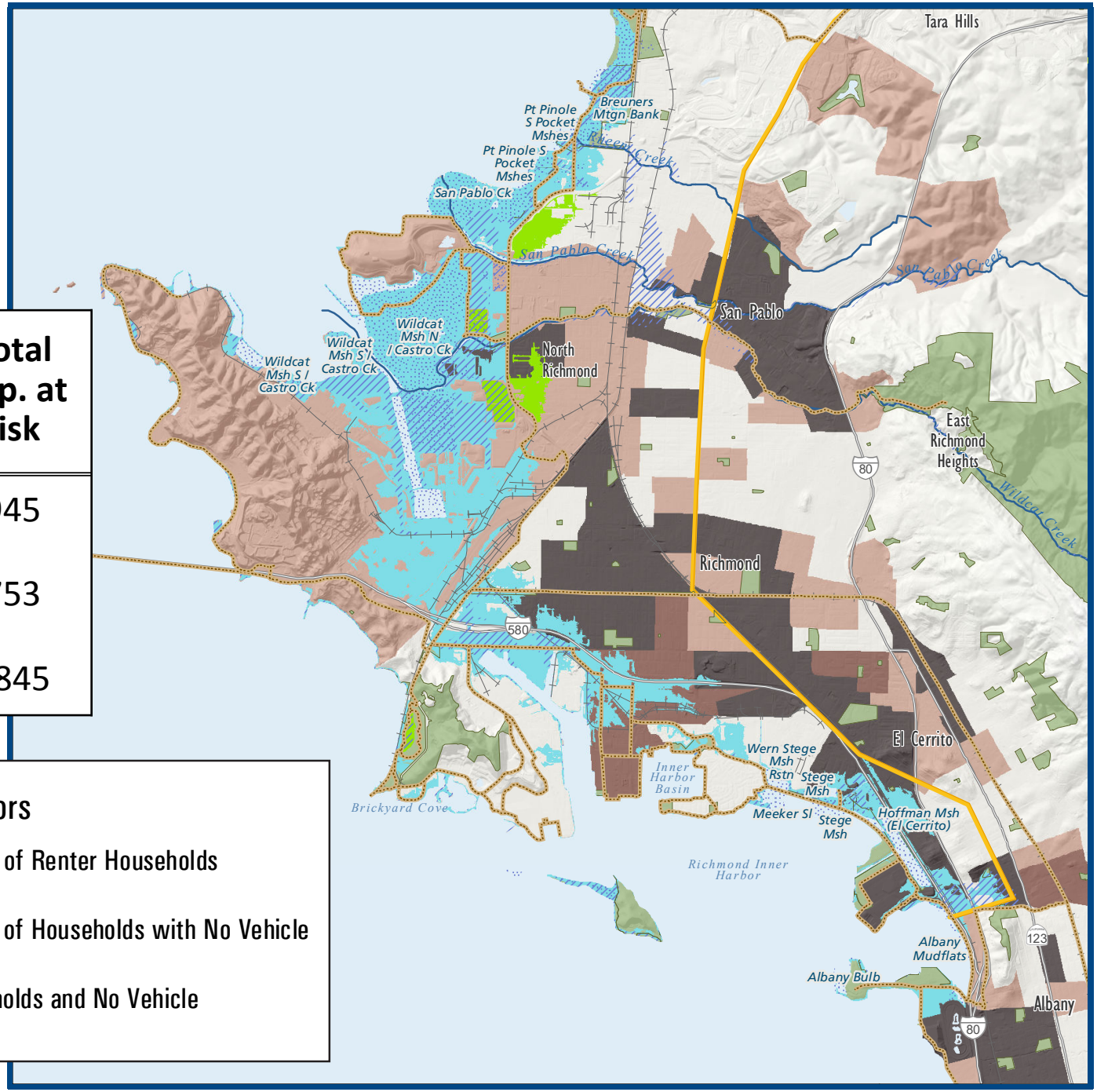
Indicator	Measure	Count
Language	% Households without a proficient English speaker 15 years and older	1
Access to a vehicle	% Households without a vehicle	1
Housing cost burden	% Households spending greater than 50% income on housing	1
Race and ethnicity	% Persons of Color	1
Education	% Persons 25 years and older without a high school degree	1
Housing tenure	% Not owner-occupied households	1
Transportation cost burden	% Households with high transportation costs	1
Income	% Households with income less than 50% of Area Median Income	1
Age	% Persons 75 and older	1
	% Persons under 5	1
Total		**10**

*Data from 2010-2014 American Community Survey and Center for Neighborhood Technology

Place	Total pop. at risk
El Cerrito	945
North Richmond	753
Richmond	1845



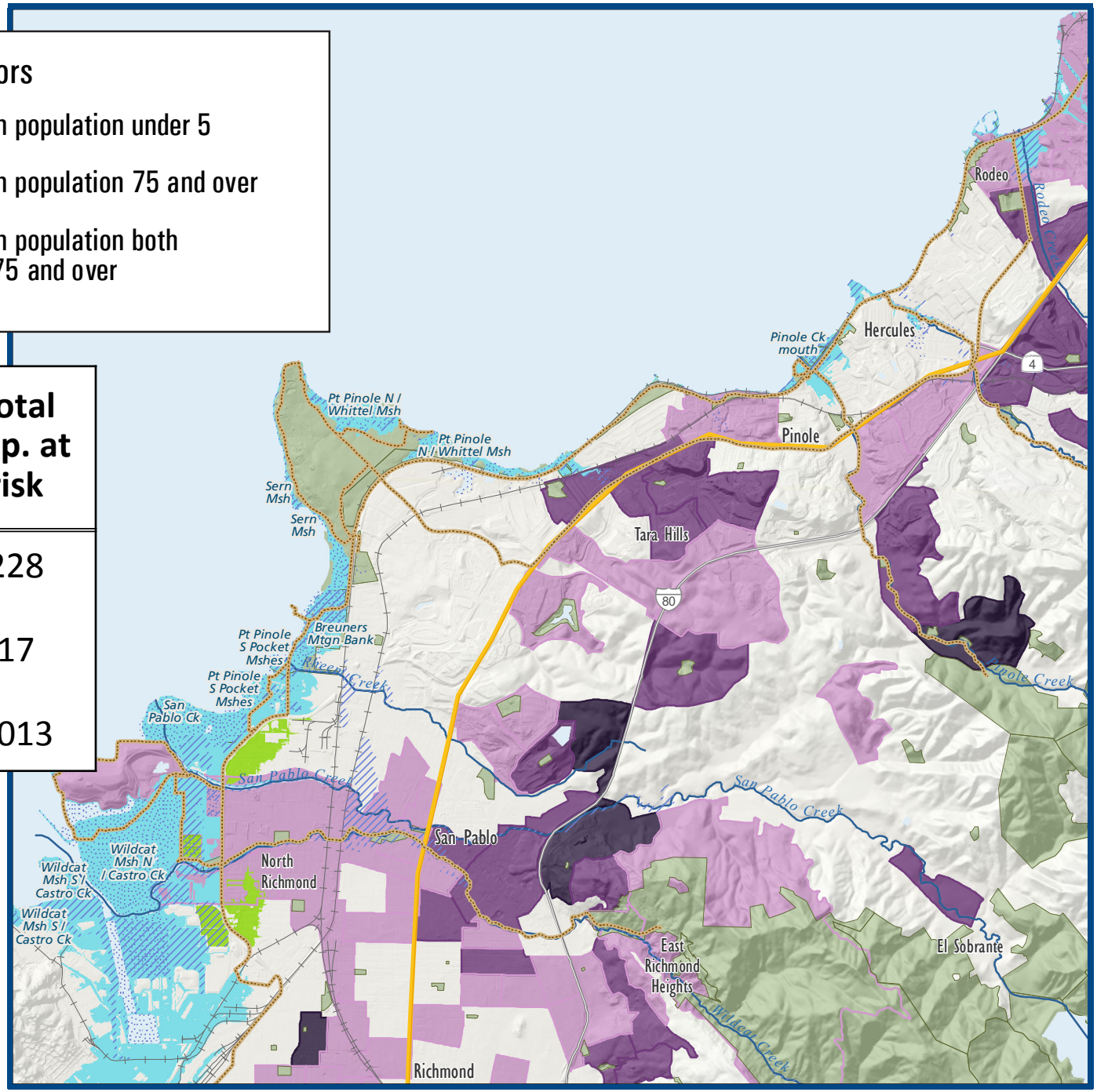
Community Indicators

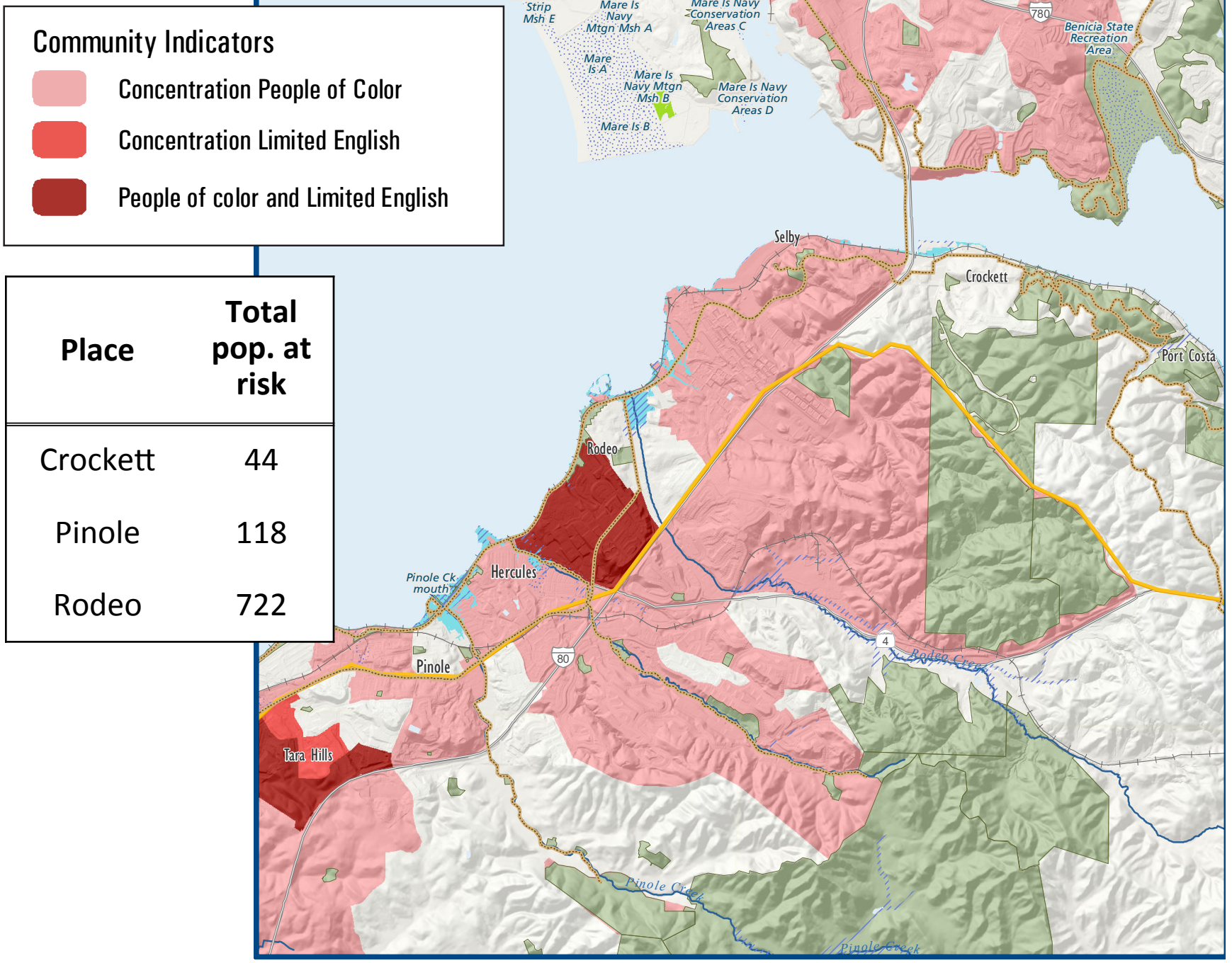
- Concentration of Renter Households
- Concentration of Households with No Vehicle
- Renter Households and No Vehicle

Community Indicators

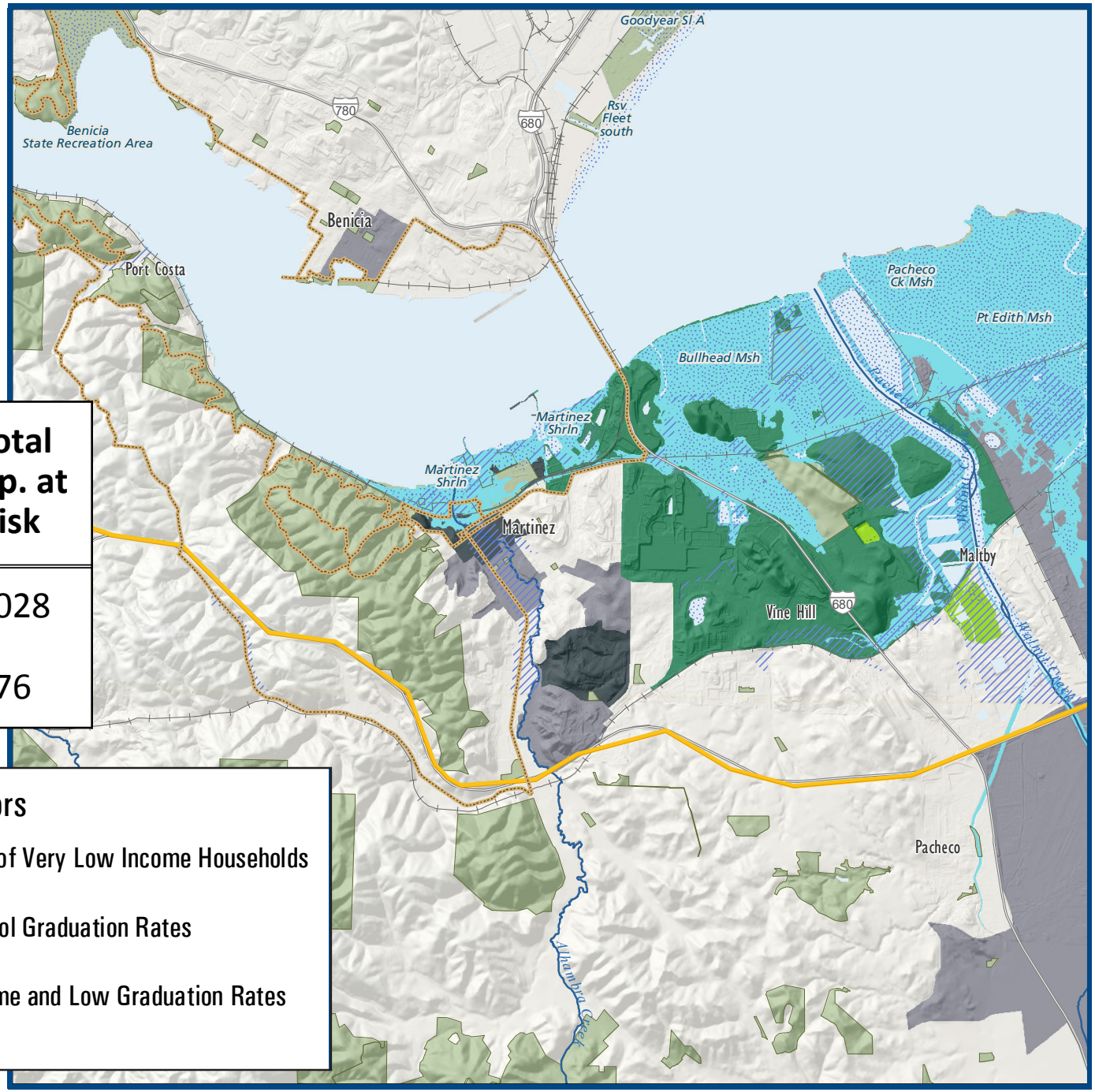
- Concentration population under 5
- Concentration population 75 and over
- Concentration population both under 5 and 75 and over

Place	Total pop. at risk
Hercules	228
Montalvin Manor	17
San Pablo	3013





Place	Total pop. at risk
Crockett	44
Pinole	118
Rodeo	722



Place	Total pop. at risk
Martinez	3028
Port Costa	76

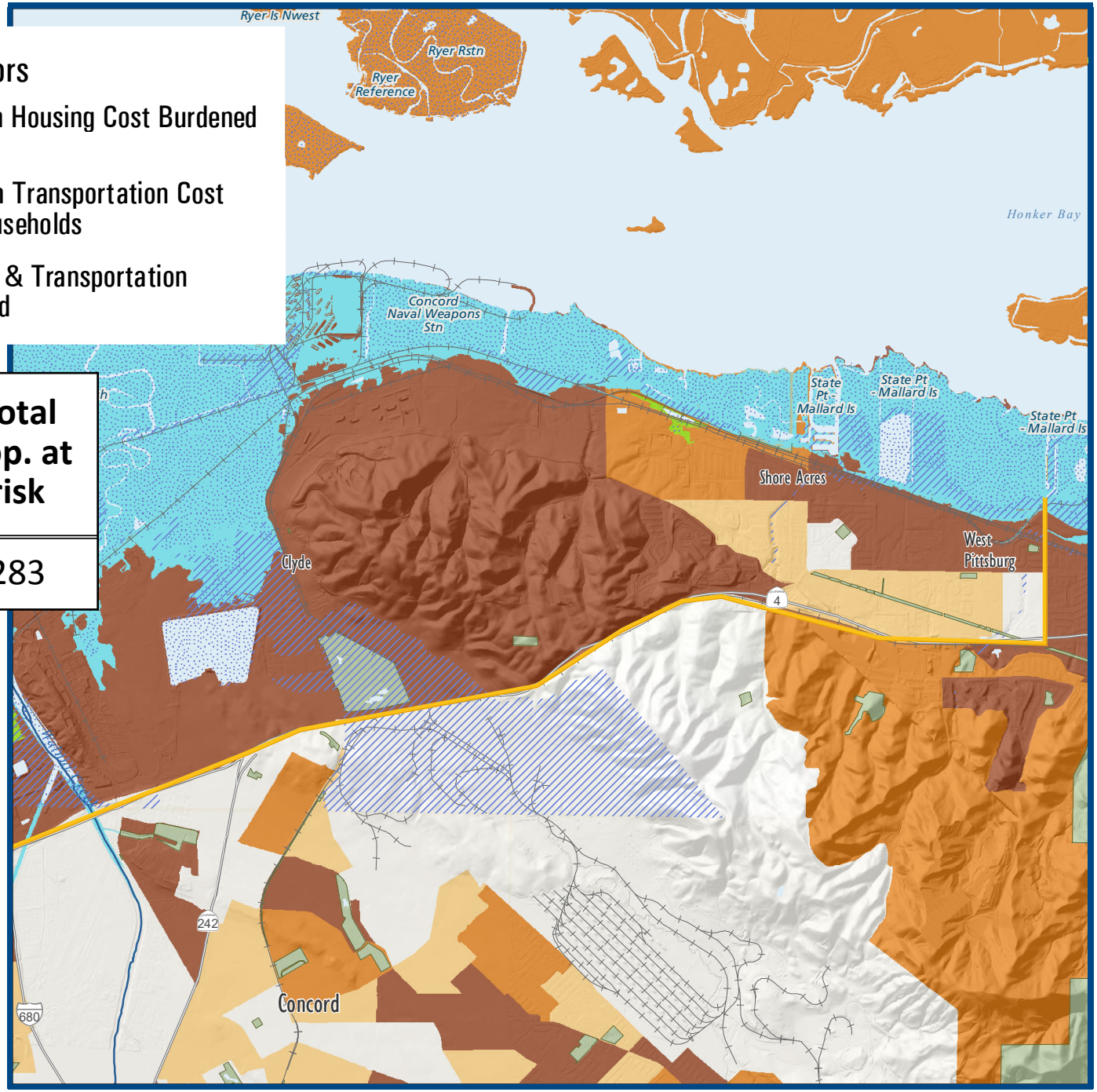
Community Indicators

- Concentration of Very Low Income Households
- Low High School Graduation Rates
- Very Low Income and Low Graduation Rates

Community Indicators

- Concentration Housing Cost Burdened Households
- Concentration Transportation Cost Burdened Households
- Both Housing & Transportation Cost Burdened

Place	Total pop. at risk
Bay Point	283



Community Indicators for Flood Risk

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Next steps for ART Program community research

- More accurate population mapping
- Applying community indicators within hazard zones
- Mapping and measuring the impacts to people and communities *not* within a hazard zone that are reliant on facilities, services and jobs that could be impacted
- Expanding beyond geospatial data analysis and mapping to help communities assess their strengths and social networks

Community Indicators for Flood Risk

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Questions?

Reminder: Key Planning Issues

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- Project-scale or cross-cutting issues
- Issues that require the collective focus of working group members and other stakeholders
- Underlying vulnerabilities that cannot (or should not) be solved by individual asset managers or owners

Contra Costa Key Planning Issues

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- Water-dependent Industries
- Employment Sites
- Creek-side Communities
- Access to Services
- Ad-hoc Flood Protection
- Parks and Open Spaces

Example Issue: Access to Services

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A lack of redundant transportation options and the limited number of public facilities in this part of the County may result in shoreline communities becoming isolated from emergency services, public and private healthcare providers, jobs, schools, and other critical services during flood events

This could have significant consequences on public health and safety, local economies and community function, and will be a particular challenge for communities with characteristics that place them at greater risk of flooding

Key Planning Issue Responses

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Key Planning Issue adaptation responses include:

- Actions that can be initiated in the near, mid, or long term
- Related asset category actions
- Potential implementation leads and partners

	Action			Implementation	
Timing	**Number**	**Description**	**Related Actions**	**Lead(s)**	**Support**
Near-term	3.1	Conduct locally refined analyses to determine the sources of, and potential solutions to resolve, flooding that could damage or disrupt local and regional routes and nodes that are critical for emergency response and for communities to access necessary services.	ER3.3	CCTA, CCFCWCD	County, Cities, CCTA, WCCTAC, Caltrans, MTC
	3.2	Form or expand existing partnerships among public agencies, private entities, nonprofit, community, and faith-based organizations to better understand, build and maintain individual and neighborhood social network strength to increase flood resilience.	P2.2	CCHS	County, Cities, ABAG, BCDC, FEMA, CalOES, Nonprofits and Community-based organizations, Private entities
	3.3	Require critical community facilities, including those providing emergency response and public heath services, update or expand operations and contingency plans to ensure they have water, power, food and other supplies necessary to maintain key community services during a flood event.	PH1.1, ER1.1	CCOES, CCHS	County, Cities, FEMA, CalOES

Action Types

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Near-term actions – Investigate, Educate and Maintain

Conduct locally refined analyses to determine the sources and potential solutions for flooding that could damage or disrupt local or regional routes and nodes

Mid-term actions – Coordinate, Partner and Plan

Develop and fund a county-wide plan to increasing the redundancy of the shoreline road system, including increasing the number and capacity of alternative routes

Long-term actions – Policy Changes and Shared Solutions

Evaluate the continued siting of critical public services, including schools, childcare centers, health services, wastewater, and waste transfer stations in areas at risk of current and future flooding

Key Planning Issue Responses

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You will have time to review and provide feedback on the Key Planning Issue adaptation responses during the Open House (after the break)

But 1st …

Evaluation criteria – what are they, how to use them, and which make sense for the Contra Costa ART Project

Key Planning Issue #6: Parks and Open Space

Shoreline parks and open spaces are not only the first line of defense against inland flooding, they are also themselves vulnerable to the early impacts of sea level rise and therefore are key early adaptation opportunity sites. Damage or loss of these parks and open spaces would have significant impacts on recreational uses and health of the communities in the project area, many of which could not be replaced. Reduction in access to parks and open spaces would affect some individuals and communities more adversely than others, depending on their unique needs and capacity.

Action				Implementation		
Timing	Number	Description	Related Actions	Lead(s)	Support	Is this action a priority for further evaluation and potential implementation?
Near-term	6.1	Identify, monitor and repair (as feasible) natural and recreational areas within parks that are experiencing erosion, bluff collapse, increased flooding and salinity intrusion.	RP2.1	EBRPD	EBRPD, County, Cities, SCC, SFEP, CA DFW, Bay Trail, BCDC, RWQCB, USACE	
	6.2	Develop guidance for regional shoreline park planning and project development activities that consider sea level rise to ensure impacts are factored into tidal wetland restoration and park management activities.	RP4.4	EBRPD	EBRPD, County, Cities, SCC, SFEP, CA DFW, Bay Trail, BCDC, RWQCB, USACE	
	6.3	Educate the public about the early risk to parks from sea level rise, the multiple benefits parks provide (flood protection, wildlife, educational and recreational values), and the opportunities for adaptation to protect these functions.	RP1.2	EBRPD	EBRPD, County, Cities, SCC, SFEP, CA DFW, Bay Trail, BCDC, Nonpofit and Community-based Organizations	
Mid-term	6.4	Form or expand existing partnerships among park districts, park and recreation departments, private entities, community-based organizations and community members to develop a shared vision for protecting the function of parks and open space in the project area.	RP1.1	EBRPD, County, Cities	EBRPD, County, Cities, SCC, SFEP, Bay Trail, BCDC, Nonpofit and Community-based Organizations	
	6.5	Develop a county-wide park enhancement and protection plan that identified opportunities for increasing the resilience of parks that are vulnerable to sea level rise and the capacity of park that are not at risk.	RP7.1, RP7.2, CP5.1	County	EBRPD, County, Cities, SCC, SFEP, Bay Trail, BCDC, Nonpofit and Community-based Organizations	
	6.6	Develop and implement a decision-making and funding framework to guide shoreline landowners in addressing Bay Trail vulnerabilities in a manner that protects connectivity and maintains the trail as a regional connector.	BT1.1, BT4.3	Bay Trail	EBRPD, County, Cities, SCC, SFEP, Bay Trail, BCDC, Nonpofit and Community-based Organizations	
Long-term	6.7	Develop a multi-agency permit review and authorization program to expedite the ongoing maintenance, minor repair, or upgrade of shorelines that are already experiencing erosion, for example within existing parks and along the Bay Trail.	BT3.3, RP 2.3	BCDC	EBRPD, County, Cities, SCC, SFEP, CA DFW, Bay Trail, BCDC, RWQCB, USACE, NOAA, BAFPA, IWRMP	
	6.8	Establish a new authority, or expand an existing authority, to plan, fund, manage and maintain shoreline solutions to protect existing parks, open space, and the Bay Trail		EBRPD, Bay Trail	EBRPD, County, Cities, SCC, SFEP, Bay Trail, BCDC, Nonpofit and Community-based Organizations	

What are Evaluation Criteria?

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An essential tool agencies, organizations and communities can use to:

- Gain perspective on how different actions may impact society and equity, economy, environment and governance
- Identify how to adjust or refine actions to best achieve community goals

Benefits of Evaluation

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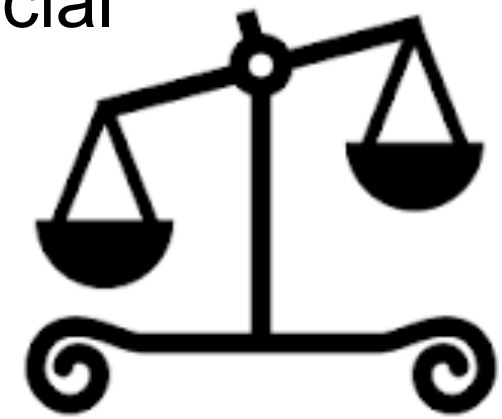
The evaluation process can help decision-makers and community members:

- Understand the benefits, trade-offs and consequences of different actions
- Select high priority actions for implementation
- Gain political, community, and financial support for action implementation



Project Evaluation Criteria

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Feasibility	**Administrative:** Can the action be accomplished with existing operations or procedures?
	Community support: Will the action action be supported by a strong advocate or local champion?
	Legal: Can the action be accomplished with existing authorities or policies?
Social Benefits	**Access:** Will the action protect car, transit, bike or pedestrian access to housing, jobs or services?
	Life safety: Will the action protect public health and safety?
	Vulnerable residents: Will the action protect especially vulnerable community members?
	Community: Will the action preserve community function, and/or advance other community objectives?
	Recreation: Will the action maintain recreational or educational opportunities?

Economic Benefits	**Jobs:** Will the action promote or retain jobs?
	Commuter movement: Will the action maintain commuter movement?
	Goods movement: Will the action maintain goods movement?
	Service and networks: Will the action reduce service or network disruptions?
Environmental Improvement	**Habitats and biodiversity:** Will the action create or maintain appropriate habitat and biodiversity?
	Water quality: Will the action maintain or improve water quality?
	Nature based: Will the action promote grey to green, nature-based solutions?
Governance	**Decision-making:** Will the action support or create collaborative, transparent decision-making?
	Partnerships: Will the action encourage broad public and/or private sector partnerships?
Disaster Lifecycle	**Preparedness:** Will the action build disaster preparedness?
	Response: Will the action improve disaster response?
	Recovery: Will the action encourage resilient recovery?

Scoring Guide

Y = Yes
N = No

NA = Not Relevant
0 = No Impact
? = I don't know

Based on Project Resilience Goals

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Partner Exercise: Evaluation Criteria

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Working in teams of two:

1st – review the handout

2nd – score your action using the criteria provided

3rd – if you have time you can score another action

Lightning round report back:
How did the evaluation process work (or not)?

Key Planning Issue #3: Access to Services	
A lack of redundant transportation options and the limited number of public facilities in this part of the County may result in shoreline communities becoming isolated from emergency services, public and private healthcare providers, jobs, schools, and other critical services during flood events. This could have significant consequences on public health and safety, local economies, and community function, and will be a particular challenge for communities with characteristics that place them at greater risk of flooding.	
Near-term Action	Form or expand existing partnerships among public agencies, private entities, nonprofit, community, and faith-based organizations to better understand, build and maintain individual and neighborhood **social network strength** to increase flood resilience.

Scoring Guide
"Y" Yes
"N" No
"NA" Not Relevent
"0" No Impact
"?" I don't know

Criteria Type	Description	Score	Notes
Feasibility	**Administrative:** Can the action be accomplished with existing operations or procedures?		
	Community support: Will the action action be supported by a strong advocate or local champion?		
	Legal: Can the action be accomplished with existing authorities or policies?		
Social Benefits	**Access:** Will the action protect car, transit, bike or pedestrian access to housing, jobs or services?		
	Life safety: Will the action protect public health and safety?		
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	Partnerships: Will the action encourage broad public and/or private sector partnerships?		
Disaster Lifecycle	**Preparedness:** Will the action build disaster preparedness?		
	Response: Will the action improve disaster response?		
	Recovery: Will the action encourage resilient recovery?		

Report Back: Evaluation Criteria

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- How did the evaluation work?
- Are there criteria you would change?
- What criteria (if any) were missing?
- Did the scoring scheme work?

break

Adaptation Response Open House

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Posters around the room with draft adaptation responses for the project's six key planning issues:

- Water-dependent Industries
- Employment Sites
- Creek-side Communities
- Access to Services
- Ad-hoc Flood Protection
- Parks and Open Spaces

Adaptation Response Open House

ART Contra Costa Project

As you review the responses, please provide your feedback on the following

- Are these the right actions? What actions (if any) are missing?
- Have we identified the most appropriate implementation leads and partners?
- Which actions are priority for implementation – sticker vote for your top three!

Grab a pen and make revision, add your comments, share your ideas …

Report Back: Open House

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Your reflections on today's Open House

- Were there actions missing? What about leads/partners?
- What actions did you select for implementation?

Next Steps

- ✓ Review and provide feedback on:
  - Key Planning Issue adaptation responses by October 21st
  - Community indicator mapbooks by October 14th
- ✓ Save the date for our next (and last) meeting - November 16th in Hercules
  - Evaluation of select actions
  - Developing action implementation pathways

Project web page:
www.adaptingtorisingtides.org/project/contra-costa-county-adapting-to-rising-tides-project//

Working Group Password:
cccwg