

Metropolitan Transportation Commission and the Association of Bay Area Governments
Joint MTC Planning Committee with the ABAG Administrative Committee

July 9, 2021

Agenda Item 5a

Regional Sea Level Rise Adaptation Initiatives and Actions

Subject: Presentation highlighting the ongoing regional sea level rise planning efforts and sea level rise roles for MTC/ABAG, including two proposed actions: 1) development of a Sea Level Rise Funding Strategy and 2) exploration of a resilience technical assistance effort.

Background: Sea level rise planning has taken place in the region for years, with MTC/ABAG having its own experience planning bridge corridors, as well as the flood-prone State Route 37. Recently, however, sea level rise planning is an even more active space in the San Francisco Bay Area, with dozens of different public agencies, non-profit entities, and key stakeholders engaged in discussions about how the region can adapt to rising tides. Notably, three key planning efforts integrate sea level rise in a central manner: MTC/ABAG's Plan Bay Area 2050, BCDC's Bay Adapt initiative, and SFEP's Estuary Blueprint. Furthermore, staff is closely monitoring state legislative proposals for climate adaptation planning and implementation, including AB 897 and AB 1500.

Plan Bay Area 2050, led by MTC/ABAG, integrates Strategy EN1 entitled "Adapt to Sea Level Rise" as part of a broader regional plan for transportation, housing, the economy, and the environment. This strategy is paired with a set of actions that MTC/ABAG anticipates leading over the next five years in the draft Implementation Plan. The Plan includes a needs and revenue assessment for sea level rise, illustrative adaptation strategies ringing the bay, and near-term actions to establish clear sea level rise roles and responsibilities and to craft more complete sea level rise funding strategy.

Bay Adapt, led by BCDC, is a collaborative initiative focused specifically on sea level rise adaptation that began in spring 2019. BCDC released a draft Joint Platform in spring 2021, which includes 20 wide-ranging actions to be collaboratively advanced by Bay Area government and non-government organizations. The effort is currently developing an implementation plan as well.

The **Estuary Blueprint**, led by SFEP, is a regional plan that identifies actions needed for a healthy, resilient San Francisco Estuary in 2050. The Estuary Blueprint advances many goals, including addressing sea level rise, which can then receive federal resources for implementation. It is currently updating the 2016 Estuary Blueprint, to align with current regional efforts including Plan Bay Area 2050 and Bay Adapt.

Two state bills on climate adaptation currently in the legislature— **AB 897** and **AB 1500**— would help implement the bold vision and actions delineated in each of these plans. AB 897 would enable the formation of regional climate adaptation networks and the development of regional adaptation plans. AB 1500 would place a \$7.1 billion bond on the 2022 ballot for climate adaptation (wildfire, drought, sea level rise), with over \$100 million in flexible funding to support Bay Area priorities identified in a regional adaptation plan, and hundreds of millions more for existing programs like the San Francisco Bay Restoration Authority.

Discussion:

As these planning efforts continue, MTC/ABAG can take two actions to advance sea level rise adaptation. First, staff have identified funding in the FY2021-22 agency budget to lead a Sea Level Rise Funding and Investment Strategy to answer key questions on how the region can pay for future adaptation needs. Second, staff recommend continued advocacy and tracking of the state and federal funding opportunities to enable funding for a potential regional Resilience Technical Assistance program.

Sea Level Rise Funding and Investment Strategy. In FY22, staff recommends the agency prioritize development of phase 1 of a Sea Level Rise Funding and Investment Strategy. This effort would build off the Plan Bay Area 2050 Needs and Revenue Assessment, which estimated a \$19 billion need to address two feet of adaptation and \$3 billion in anticipated revenue from a handful of local sources, state bonds, and federal programs. The Funding and Investment Strategy would have two focus areas: to improve these estimates with updated project costing, and to analyze the tradeoffs of different revenue generation sources. To do this, staff would collaborate with colleagues and partners, including SFEP, BCDC, and BARC to focus on regional priorities, answer shared funding questions, and improve data and assumptions. The effort would include the following elements:

- create a technical advisory committee that would bring together partners to guide analysis in a collaborative nature;
- integrate recently developed local strategies in lieu of regional assumptions;
- develop a long-term strategy for continuous tracking of local adaptation strategies and costing estimates;
- analyze possible revenue sources and study equity outcomes.

Depending on the findings of the phase 1 technical analysis, the Sea Level Rise Funding and Investment Strategy could continue forward in a phase 2 effort in FY2022-23, focused on engaging with communities and decision makers. In this phase, staff would share research findings and collect input on possible paths forward before taking items to MTC/ABAG committees and the BARC Board for discussion and possible action. The work would help prime the region to make equitable decisions about where, when, and how new revenues are raised to adapt the shoreline.

Resilience Technical Assistance. Stakeholders have suggested MTC/ABAG take a larger role in managing a sea level rise technical assistance initiative. The idea would be for MTC/ABAG to build on efforts like the Regional Housing Technical Assistance (RHTA) program that includes workshops, data development and visualization, consultant benches, and dispersal of funds, to work with regional partners to deliver similar assistance on sea level rise. Before accepting any lead role in managing a technical assistance effort, MTC/ABAG must first address funding constraints. Staff recommends continued advocacy in FY2021-22 on the state level to allocate funds for resilience technical assistance. If funding were made available, MTC/ABAG could build off the existing REAP funding platform to manage a resilience-focused technical assistance program. The program would coordinate with partners to develop and streamline technical assistance in the Bay Area, with a focus on developing adaptation strategies for at-risk areas of the region's shoreline. The resilience technical assistance program could initially focus on sea level rise, with an expansion to multi-hazard assistance as resources allowed.

Next Steps: MTC/ABAG staff will begin work on the Sea Level Rise Funding and Investment Strategy in late 2021. The first steps include forming a technical advisory committee with partners, pursuing consultant assistance, and beginning a cost assessment analysis. Staff also recommend continued advocacy with the legislature to allocate funds for resilience technical assistance.

Updates on the Sea Level Rise Funding and Investment Strategy and potential resilience technical assistance will be brought to the Joint MTC Planning and ABAG Administrative Committee and the BARC Governing Board throughout 2022.

Recommendation: Information

Attachments: Attachment A: Presentation


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Regional Sea Level Rise Adaptation Initiatives and Actions



Joint MTC Planning Committee with the ABAG Administrative Committee | July 9, 2021

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¹
Photo credit: Noah Berger, 2021

Today's Presentation

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Plan Bay Area
2050 Background

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Regional Sea
Level Rise
Efforts

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MTC/ABAG Sea
Level Rise
Implementation
Actions

Plan Bay Area 2050 Sea Level Rise Integration

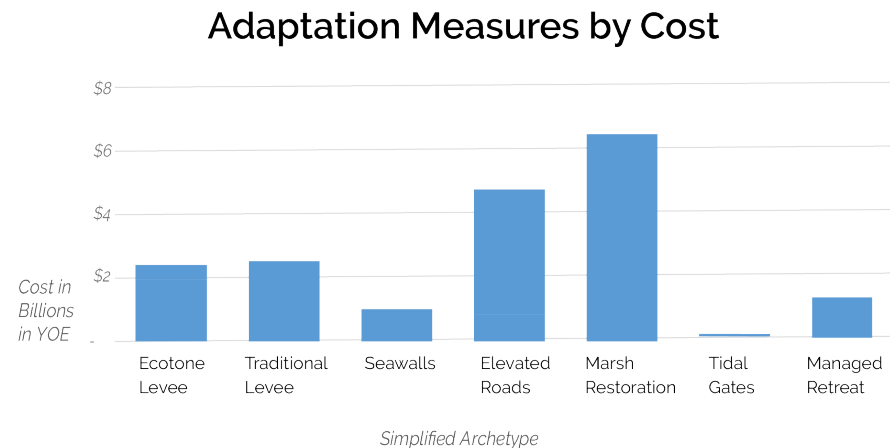
- The predecessor **Horizon** initiative explored a range of different sea level rise projections, depending on the global response to a changing climate, while identifying the types of sea level rise mitigations that could be pursued in different Futures.
- Plan Bay Area 2050 relies upon state scientific guidance from the Ocean Protection Council, which projects **up to two feet of sea level rise by the year 2050**.
- Rather than simply identifying risks in the environmental process, Plan Bay Area 2050 included a **brand-new Environment Element as part of the core plan**.
- Building upon the work from Horizon, a set of **\$19 billion in sea level rise adaptation investments** was integrated as part of **Strategy EN1, “Adapt to Sea Level Rise”**.

Steps to Integrating Sea Level Rise into Plan Bay Area 2050

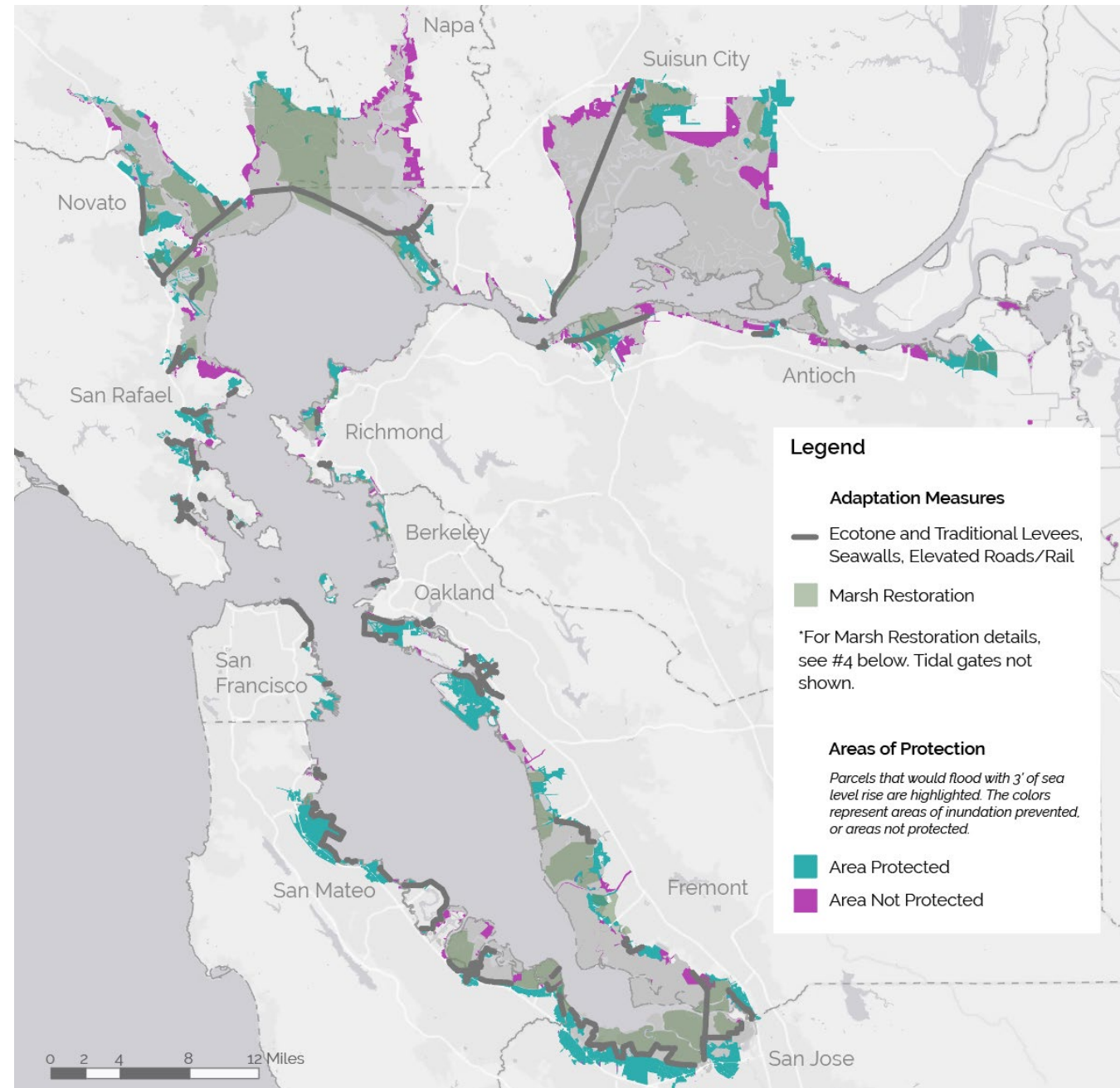


Plan Bay Area 2050 Needs and Revenue Assessment

Iterating with stakeholders during the Blueprint planning phase, the Adapt to Sea Level Rise strategy proposes to fully fund the \$19 billion estimated need to protect most communities from projected inundation by 2050 - but **new revenues would be required** to do so.



Illustrative Adaptation Measures in Strategy EN1



Plan Bay Area 2050 Strategy Outcomes



Housing

89,000

units protected

2,500

units still at risk



Jobs

166,000

jobs protected

12,000

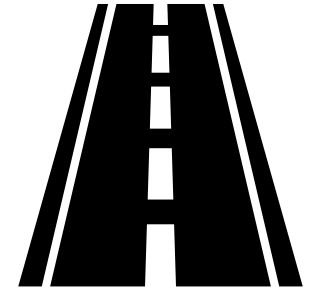
jobs still at risk



Environment

100,000

acres of marsh
adaptation and
restoration



Transportation

**All major highway
and rail corridors**
protected at 2 feet of
sea level rise

Today's Presentation

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Plan Bay Area
2050 Background

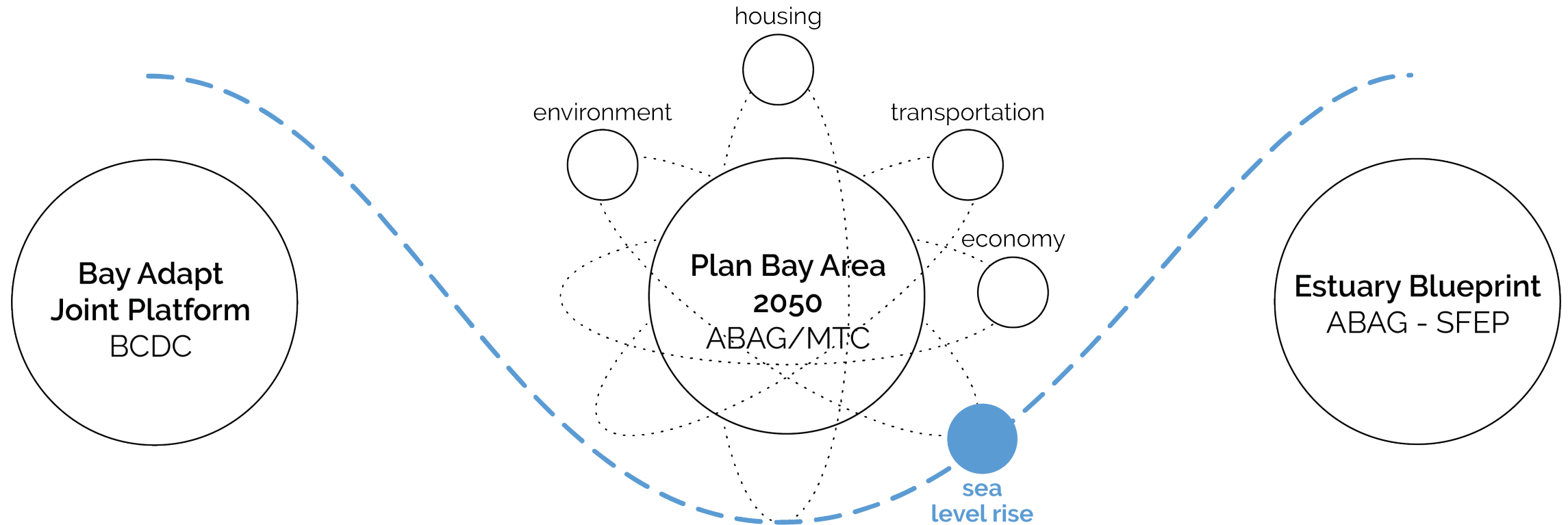
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Regional Sea
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Efforts

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Regional Sea Level Rise Efforts



BCDC led a two-year regional process to identify actions to advance adaptation efforts. The **Joint Platform**, recently released, organizes the 20 necessary actions. Bay Adapt now pivots to identifying roles to carry out the Joint Platform.

Plan Bay Area 2050 is a comprehensive regional plan that integrates sea level rise with other planning topics. The Draft Plan was released this spring with a Draft Implementation Plan that includes five sea level rise actions for MTC/ABAG to lead in the next five years.

SFEP is actively working on their five-year update to the 2016 **Estuary Blueprint**, a regional plan that identifies actions needed for a healthy and resilient San Francisco Estuary. The Blueprint seeks to align with regional efforts, such as the Bay Adapt Joint Platform and Plan Bay Area.

Regional Sea Level Rise Roles

There's a broad consensus in the region: sea level rise roles and responsibilities need to be assigned to specific entities for the Bay Area to make headway on this important issue.

BCDC

- The Bay Adapt Joint Platform process has pivoted from *what* actions are needed to advance shoreline adaptation to how and who will lead them?

MTC/ABAG

- Draft Plan Bay Area 2050 includes an implementation action to “advocate for legislative reforms to better address climate resilience goals and establish clear roles and responsibilities for sea level rise adaptation planning, funding, and implementation.”

State Legislature

- State bills are contemplating designation of regional adaptation networks and regional adaptation plans (AB 897), as well as possible funding to support regional adaptation priorities (AB 1500).

MTC/ABAG Roles and Responsibilities

The Draft Plan Bay Area 2050 Implementation Plan proposes a lead role for MTC/ABAG on funding, and a potential lead role - if funding is acquired - for managing technical assistance in the sea level rise space. Both roles would be led in a collaborative manner, working closely with our sea level rise partners.

Roles	Proposed Lead	Potential Lead	Collaborator Roles for MTC/ABAG & SFEP
Funding	MTC/ABAG	-	SFEP
Technical Assistance	-	MTC/ABAG	SFEP
Legislative Coordination	-	-	MTC/ABAG
Education	-	-	-
Science and Data	-	-	SFEP
Visioning	-	-	SFEP
Project Logistics	-	-	MTC/ABAG
Monitoring	-	-	SFEP

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Sea Level Rise Implementation Actions

FY
21/22

1. Seek new revenue for the full range of resilience needs

FY
21/22

2. Advocate for legislative reforms to better address climate adaptation and resilience goals and establish clear roles and responsibilities for sea level rise

3. Support multi-benefit, multi-jurisdictional shoreline adaptation efforts, working in partnership with cities, counties, and other key partners, with a goal of supporting up to five adaptation planning processes by 2025

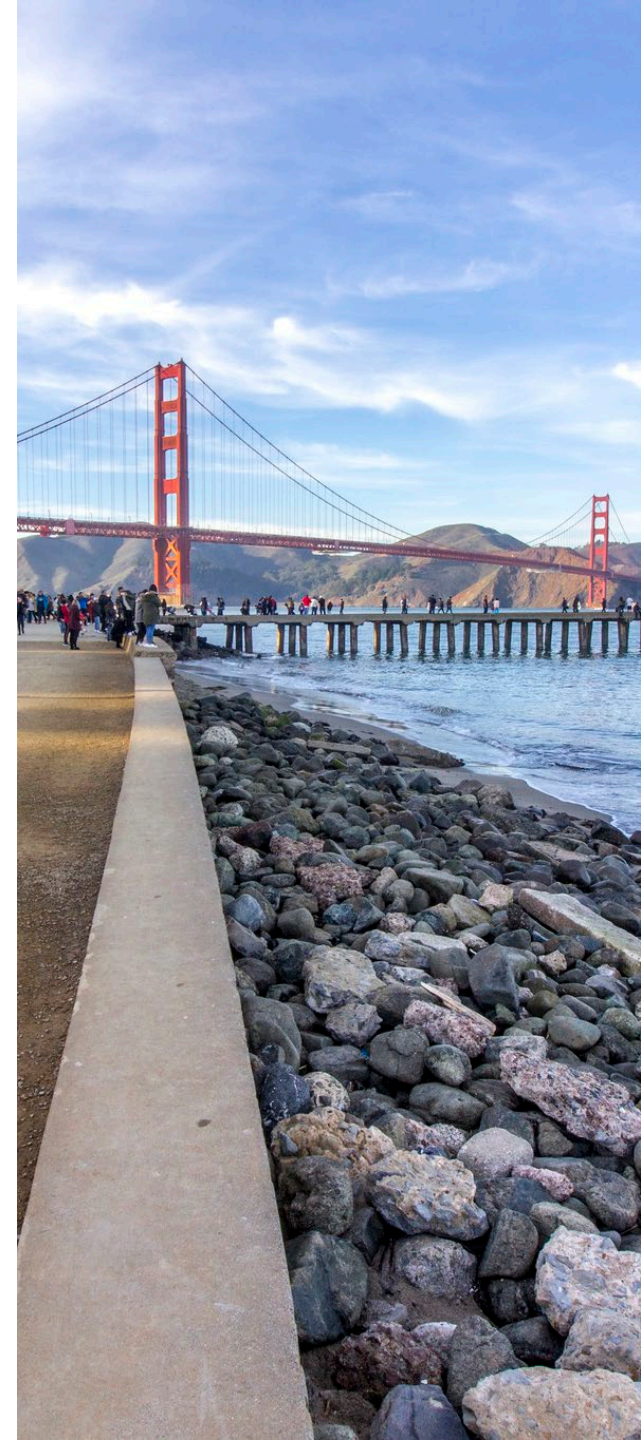
FY
21/22

4. Develop a sea level rise funding plan to support the implementation of projects that reduce sea level rise risks to communities, infrastructure, and ecology, prioritizing green infrastructure whenever possible

5. Study and identify Plan Bay Area 2050 Growth Geographies for resilience risks and opportunities, and reform Growth Geography planning guidance accordingly

Implementation Action #4: Sea Level Rise Funding and Investment Strategy

- **Improve adaptation strategy inputs** to better define regional need and **analyze tradeoffs between different revenues sources** to close the estimated \$16 billion gap
- Identified as a key priority by stakeholders during the Plan Bay Area 2050 Implementation Plan process
- The Funding and Investment Strategy will build off MTC/ABAG experience with:
 - Needs and revenue assessments
 - Federal, state, regional funding and grants
 - Project financing
 - Collaboration with agency partners with specialized expertise



Sea Level Rise Funding and Investment Strategy: Phase 1

Update and improve adaptation strategy inputs

Fall - Winter 2021

- Integrate locally developed strategies in lieu of regional assumptions and update cost assumptions to reflect the latest data
- Collaborate with colleagues, including the MTC/ABAG funding team and BCDC & SFEP, to better understand current project costs

Conduct funding analysis

Spring - Summer 2022

- Identify which funding measures applied at different scales raise funds most equitably
 - Possible funding types: assessment district, parcel taxes, or business taxes
 - Possible funding scales: neighborhood, city, county, region

Sea Level Rise Funding and Investment Strategy: Phase 2*

Conduct stakeholder outreach

Fall - Winter 2022

- Share analysis findings; discuss with vulnerable communities, elected officials, city staff, and subject matter experts

Finalize recommendations

Winter - Spring 2023

- Develop final recommendations and deliverables based on outreach, including potential funding actions that may inform legislation

Sea Level Rise Funding and Investment Strategy Next Steps

Phase 1 would kick off in late 2021:

- Form a technical advisory committee with partners
- Pursue consulting assistance
- Begin cost assessment analysis

In 2022 and beyond: bring forward updates on the Sea Level Rise Funding Strategy both to the **Joint MTC Planning and ABAG Administrative Committee** and the **BARC Governing Board**.

Implementation Action #1 & 2: Sea Level Rise Technical Assistance

MTC/ABAG can build on current efforts like the Regional Housing Technical Assistance (RHTA) program to manage sea level rise technical assistance, tapping the expertise of other organizations and institutions in the Bay Area. Prior to pursuing a lead role in Technical Assistance, MTC/ABAG and the region need to advocate for and secure sufficient funding.

Staff is actively following state and federal legislation and budgeting for climate resilience funding opportunities to advance sea level rise adaptation.



Questions and Discussion

What feedback do you have on the proposed FY22 funding & technical assistance implementation actions for MTC/ABAG?

More broadly, what roles do you see other regional agencies as needing to play in the sea level rise space, such as BCDC and BARC?