

# Adaptation Roadmap

*Using Adaptation  
Pathways to Explore  
Opportunities for Future  
Generations*

May 2022





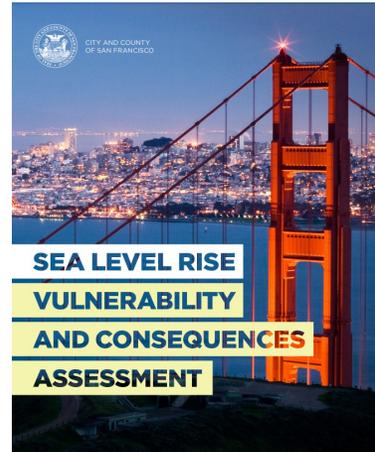
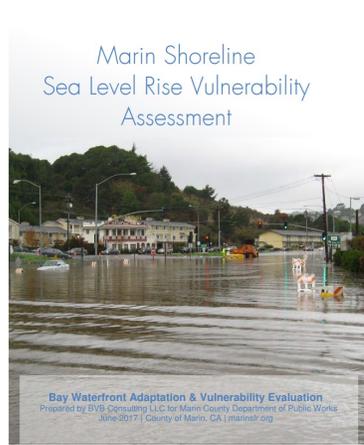
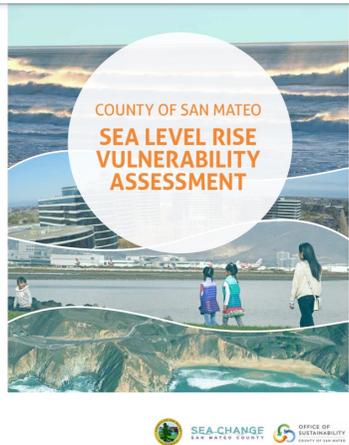
# BCDC

## State regulatory and planning agency

Protect and enhance the San Francisco Bay and encourage the Bay's responsible and productive use for this and future generations



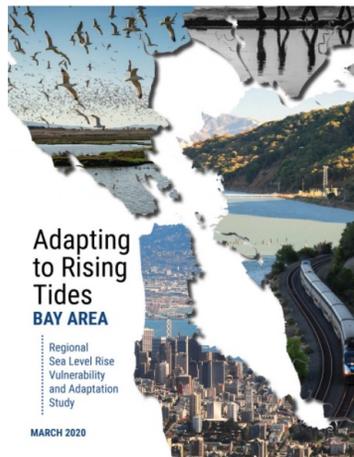
# Moving beyond sea level rise vulnerability



**81 percent** of cities and counties *surveyed* said they have information about their jurisdiction's vulnerability

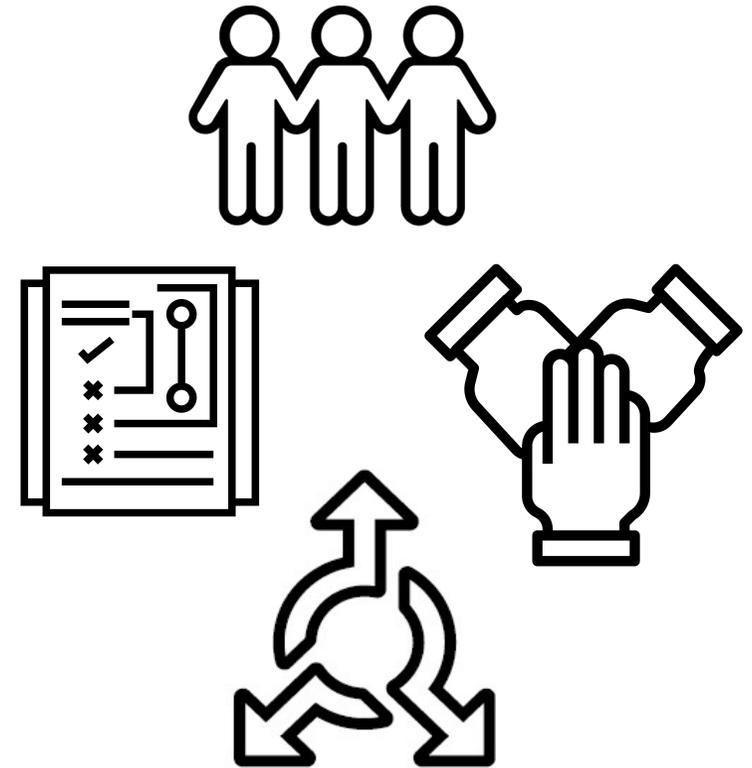
Of those, **almost half** (45%) said they *have not yet started adaptation planning*

**We know we must start making local decisions *now* to address the risks we face**



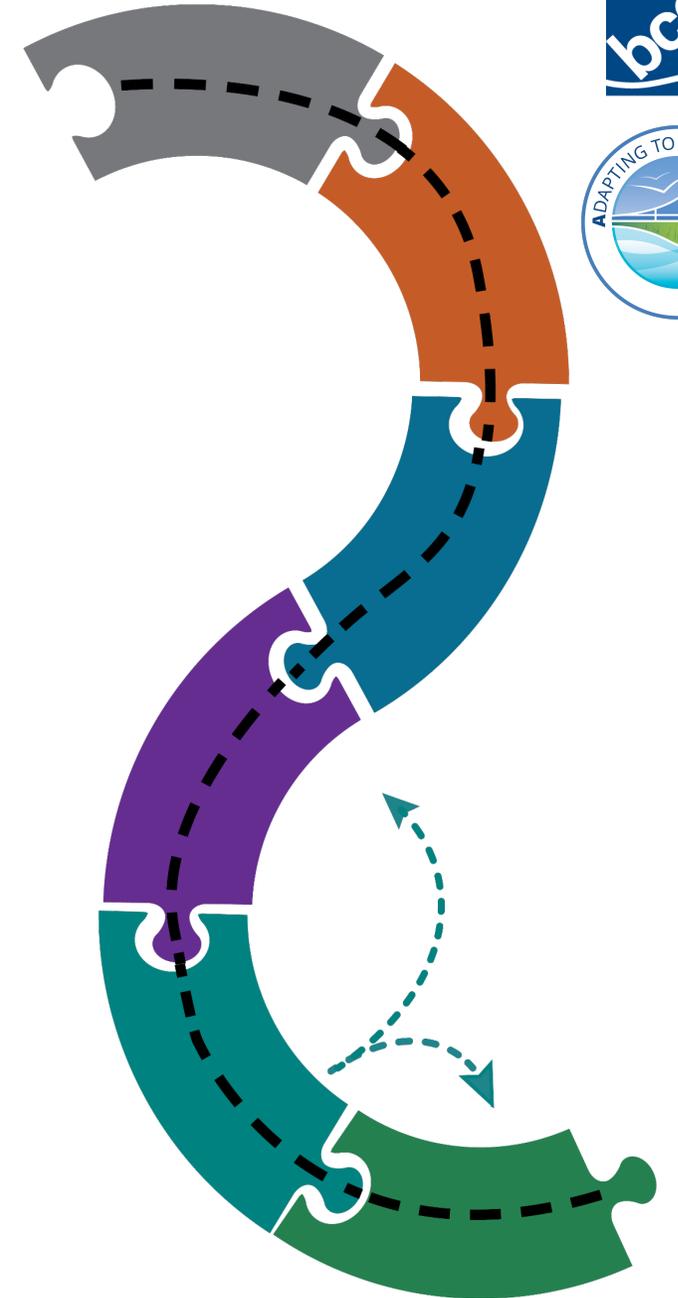
# Why is adaptation so challenging?

- Involvement of large numbers of **diverse stakeholders, communities, and sectors**
- Complex **decision-making landscape**
- Addressing **historic injustices, equity**, and the need for **community-led solutions**
- **Non-traditional timelines** for sea level rise adaptation and making decisions under uncertainty
- Prioritizing and **preserving habitats** over time
- Intergenerational challenge and lack of compelling **shared story of resilience**



# What is the Adaptation Roadmap?

The Adaptation Roadmap is a handbook for practitioners to move beyond vulnerability assessments to **collaboratively and equitably co-create sustainable outcomes** that respond to *change over time*.



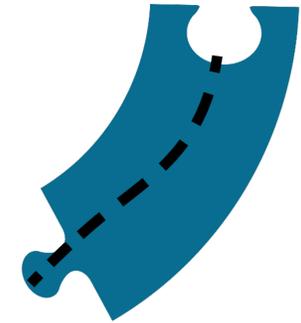
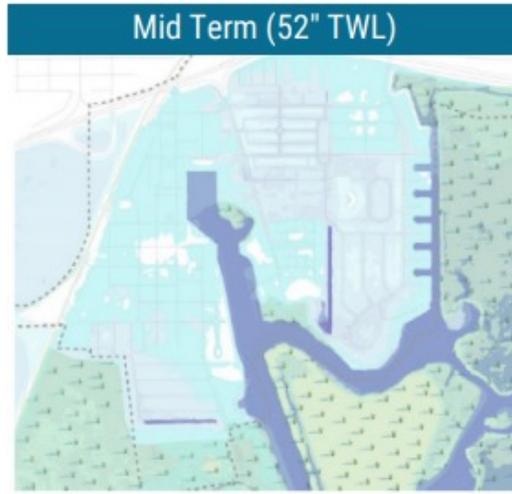
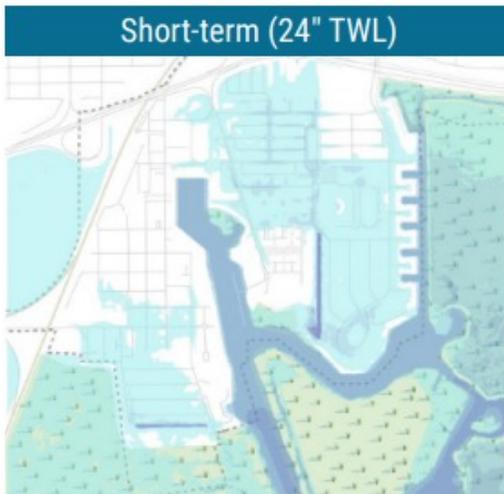
# Key topics in the Adaptation Roadmap

- Building upon **existing efforts**
- Embedding **equity in every step** of the process and outcomes
- Understanding of **environmental landscape** and **framing time horizons** for adaptation pathways (i.e., short, medium, and long-term)
- Exploring **future outcomes** in scenario planning (i.e., social and environmental)
- Considering a **suite of adaptation outcomes** (protect, accommodate, retreat, avoid, and prepare)
- Ensuring **decisions are made locally** – by and for communities with social and environmental health considered over time

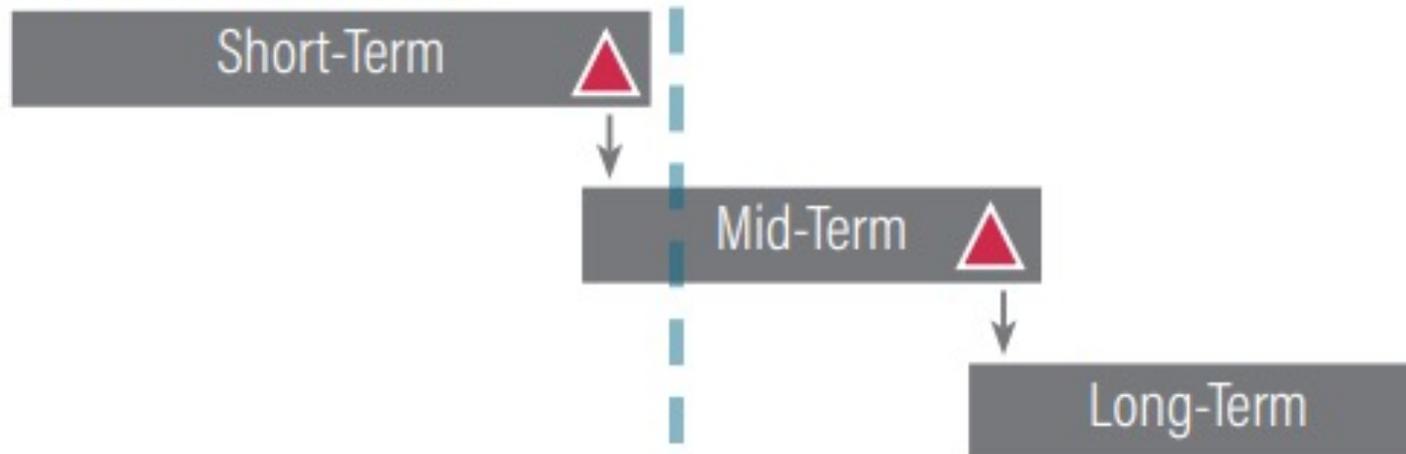
1. Build Your Adaptation Roadmap
2. Center People in Decision-Making
3. Set Local Context and Sense of Place
4. Shape a Shared Vision of the Future
5. Bring Together Shared Solutions
6. Pathways Approach to Implementation



# Defining future time horizons

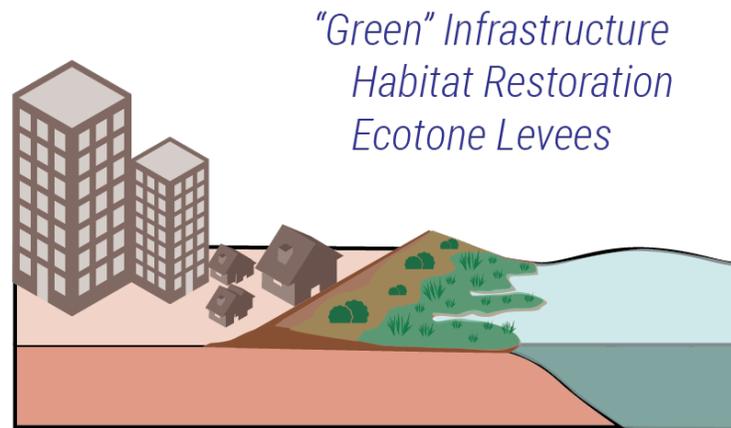
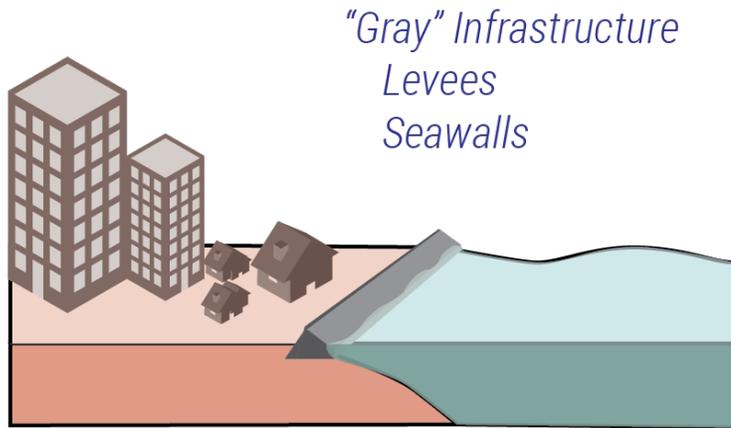


Adaptation pathway concept



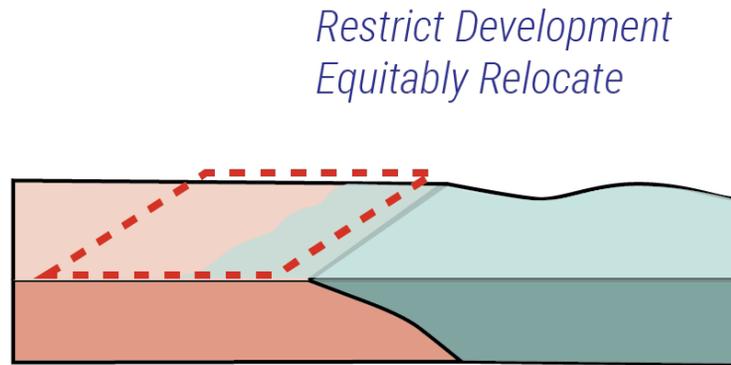
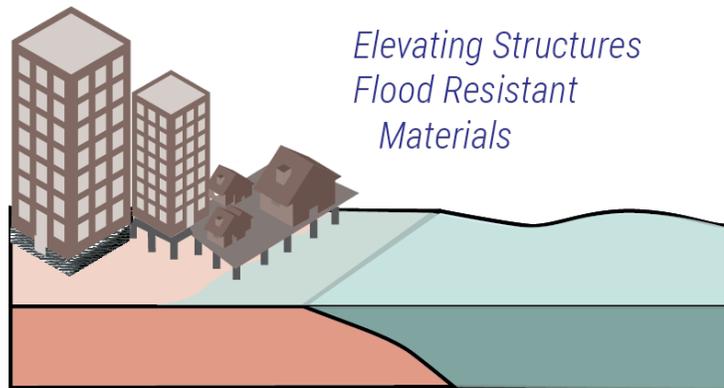
**Adaptation Roadmap**

*Hypothetical case study in Suisun City, CA. This is an illustrative example of how time horizons may be applied locally.*



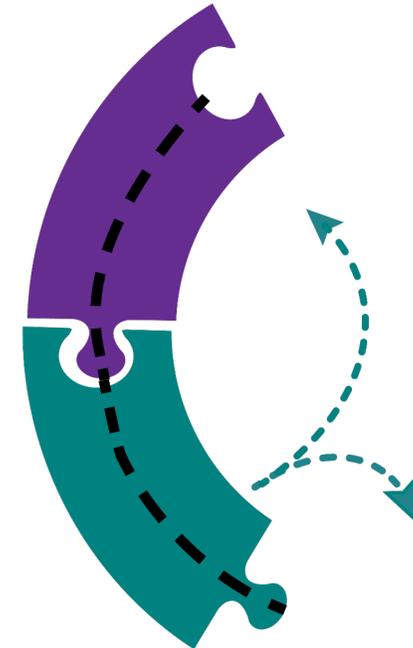
# What are adaptation outcomes?

## **Protect Shorelines**

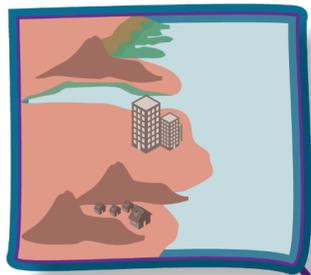


## **Accommodate the Water**

## **Avoid or Retreat Developed Areas**



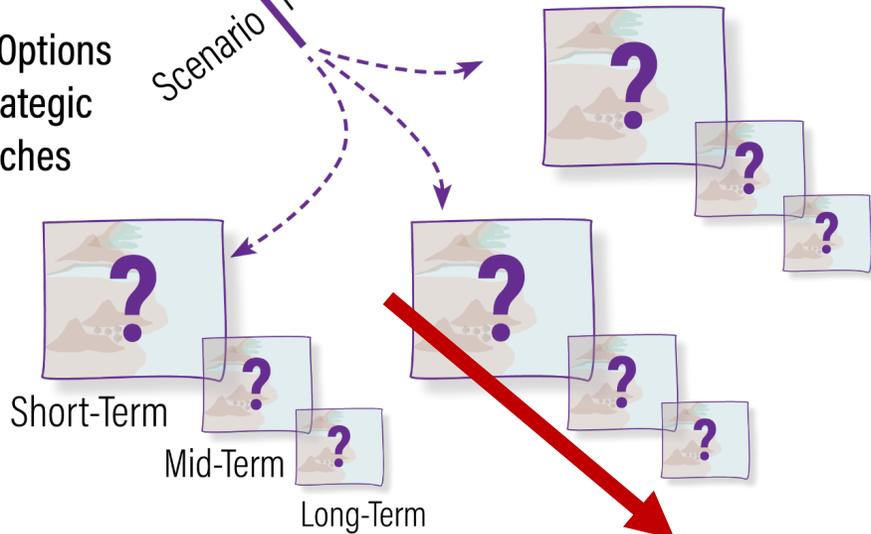
# How do outcomes change over time?



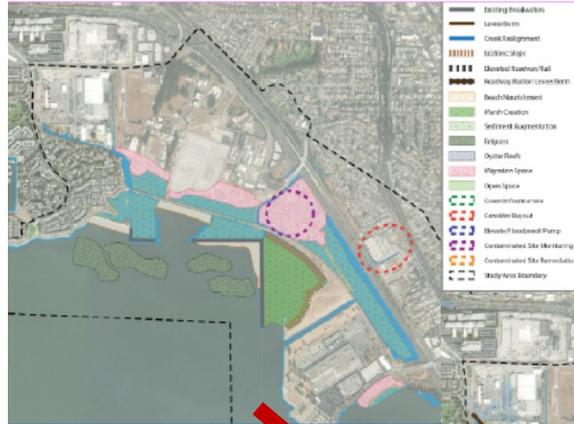
Conditions Today (Built from Chapter 3)

Future Options and Strategic Approaches

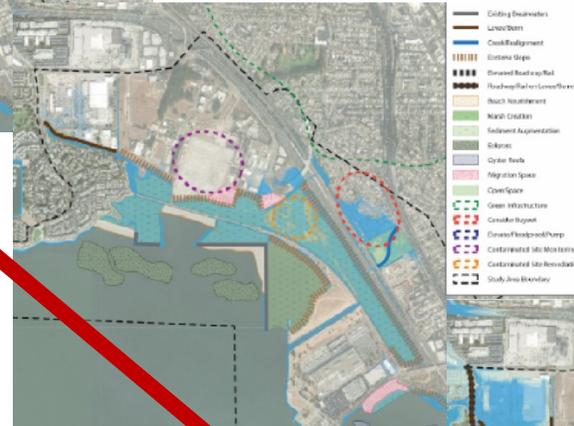
Scenario Parameters



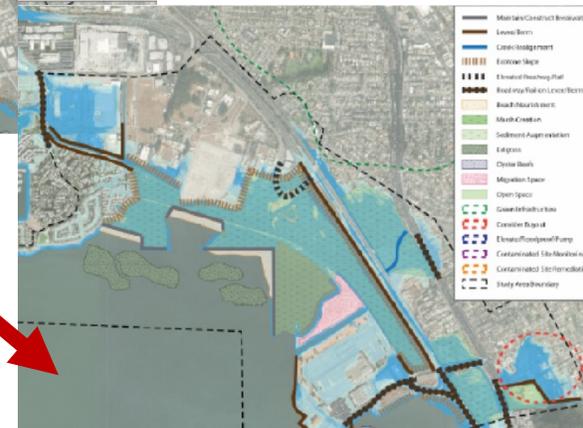
Short-term



Medium-term

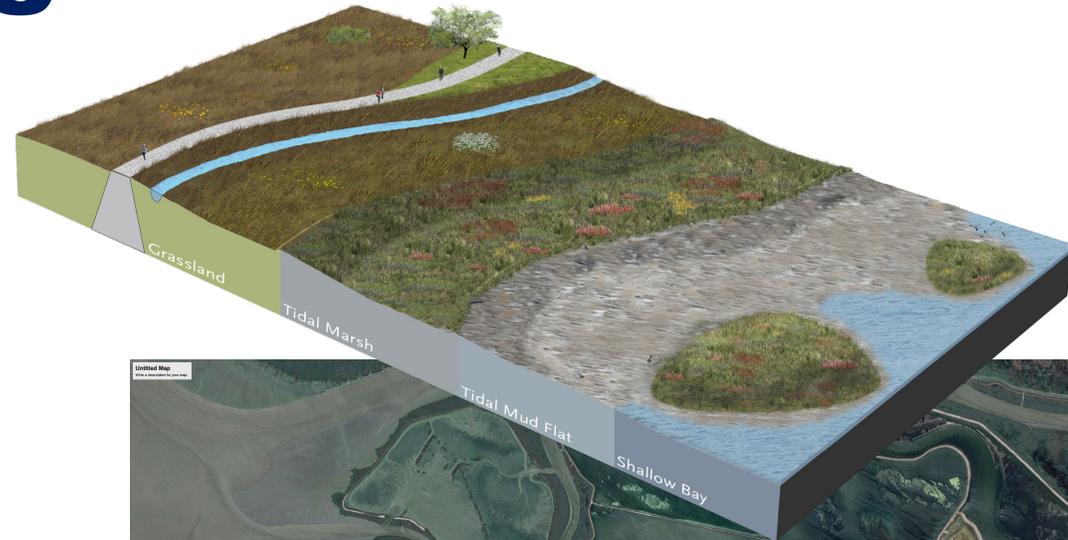


Long-term



Hypothetical case study in Richmond, CA. This scenario explored how to maximize habitat.

# Value of thinking ahead



2

...sheds insight on what actions in the short and mid-terms can enable future options...



Short-term

Mid-term

Long-term

3

..and supports which decisions can be made today to protect people and habitats that also keep future options open.



1

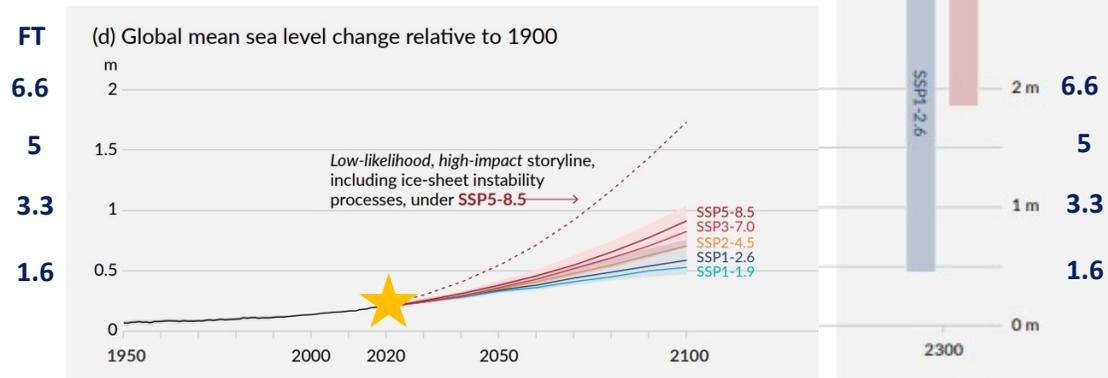
Providing space to brainstorm long-term potential outcomes...

# Keeping adaptation options open for the future

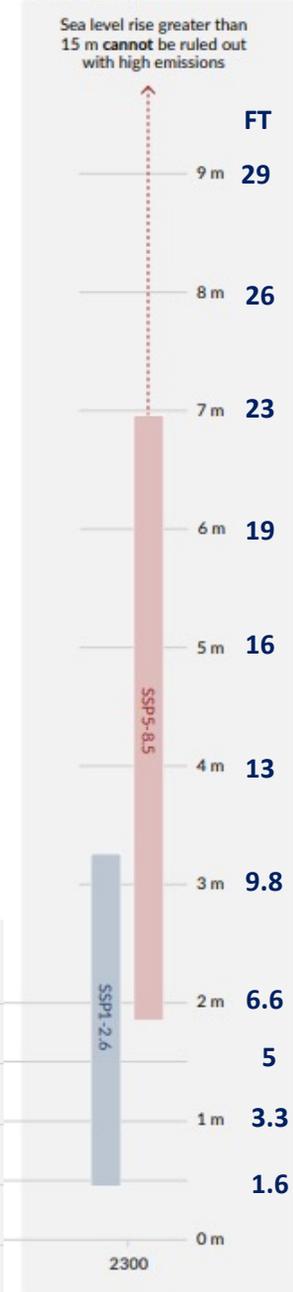


San Francisco Embarcadero. Photo from California King Tides Project.

We are living in a snapshot in time on a changing, dynamic, mobile shoreline.



(e) Global mean sea level change in 2300 relative to 1900

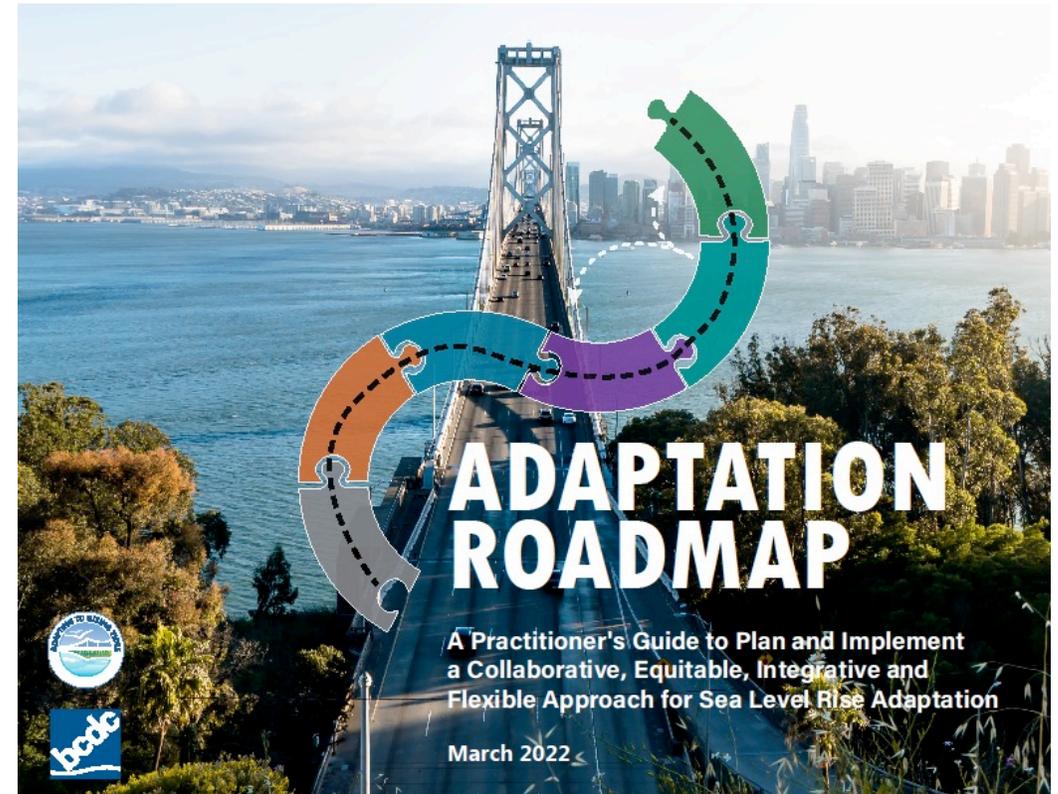


# Adaptation Roadmap: a practitioner's guide



- Six-chapter organizational framework
- Six corresponding Workbooks to help users reach desired outcomes
- Can be used in part or in whole
- View the Adaptation Roadmap at:

[www.adaptingtorisingtides.org/projects/adaptation-roadmap](http://www.adaptingtorisingtides.org/projects/adaptation-roadmap)



# Thank you!



## *Contact*

### **Jaclyn Mandoske**

Coastal Scientist

Adapting to Rising Tides (ART Program)

Bay Conservation and Development  
Commission

[Jaclyn.Mandoske@bcdc.ca.gov](mailto:Jaclyn.Mandoske@bcdc.ca.gov)

