

San Francisco Bay Conservation and Development Commission (BCDC)

# *Subregional Plan Essentials:* Understanding Elements A & B

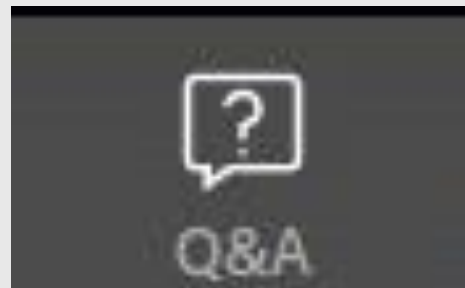
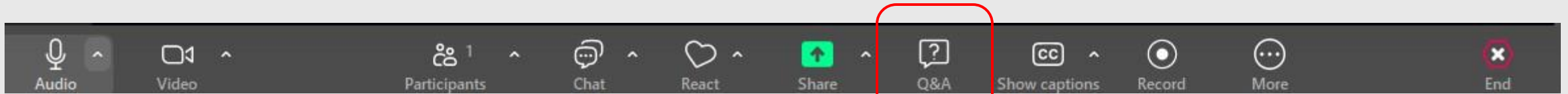
02.11.2026

Webinar

 Regional Shoreline  
Adaptation Plan  
An implementing project of BAY ADAPT



Please take a moment to locate the Q&A feature at the bottom of your screen.



# San Francisco Bay Conservation and Development Commission (BCDC)



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# Agenda

- **Introduction** – Goals
- **Part 1: Regional Shoreline Adaptation Plan (RSAP)** – Refresher
- **Part 2: Element A** – Planning Process
- **Part 3: Element B** – Existing Conditions
- **Takeaways**
- **Questions and Answers**

# Webinar goals

1. Refresh jurisdictions on the purpose and structure of the RSAP.
2. Highlight tools, resources, and strategies to support planning.
3. Clarify expectations and provide practical guidance for Subregional Plan Elements A: Planning Process and B: Existing Conditions.

# Part 1: Regional Shoreline Adaptation Plan refresher

How familiar are you with the  
Regional Shoreline Adaptation Plan?

*(very, somewhat, or not yet)*

Drop your answer in the chat.

# Senate Bill 272

## Sea Level Rise Planning and Adaptation (Laird, 2023)

### The Bill requires:

- Local governments to develop sea level rise adaptation plans by Jan 1, 2034.
- BCDC to create planning guidelines for San Francisco Bay jurisdictions.
- BCDC to review and approve or deny plans in the Bay.



**Adaptation projects in approved plans are prioritized for state funding!**

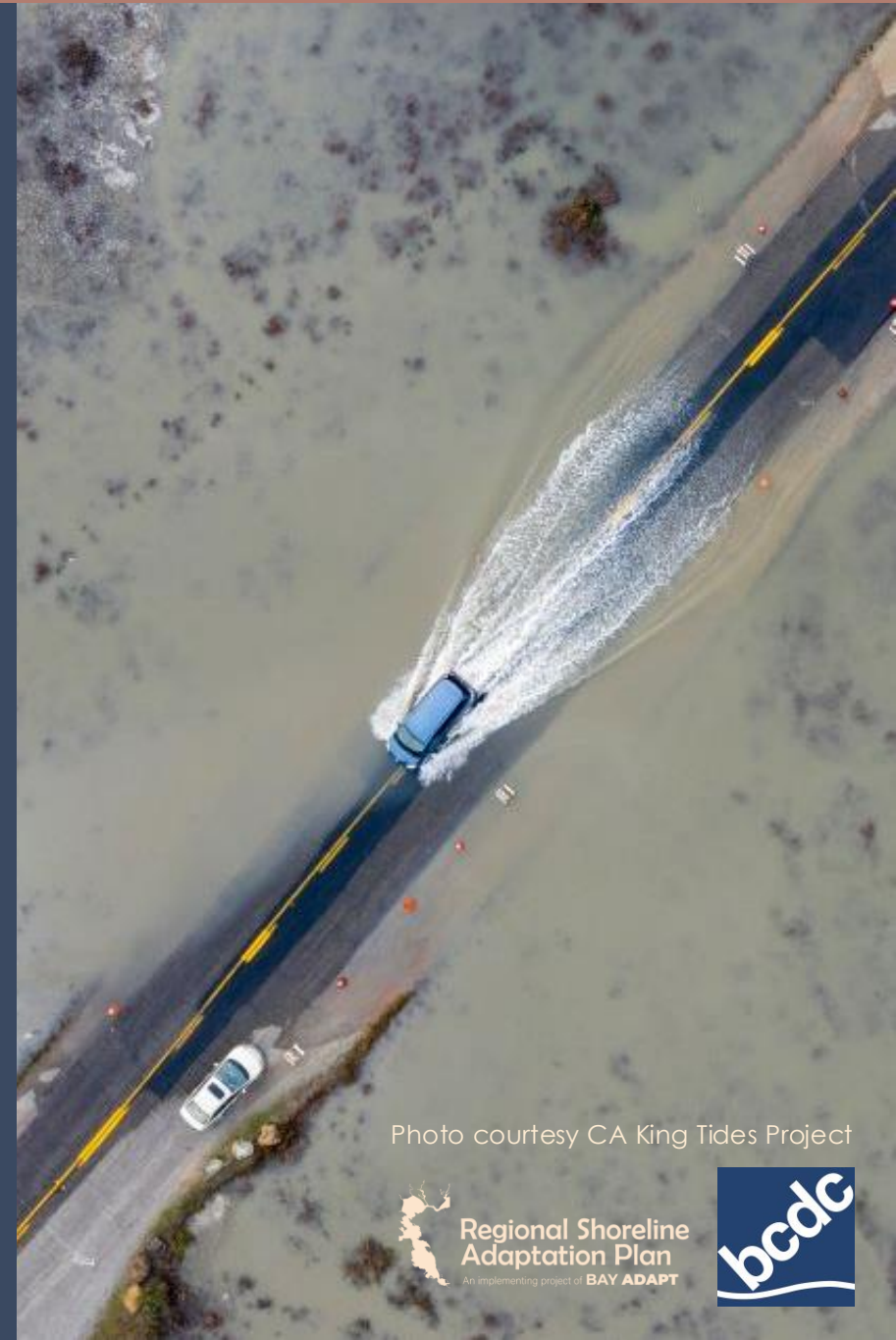


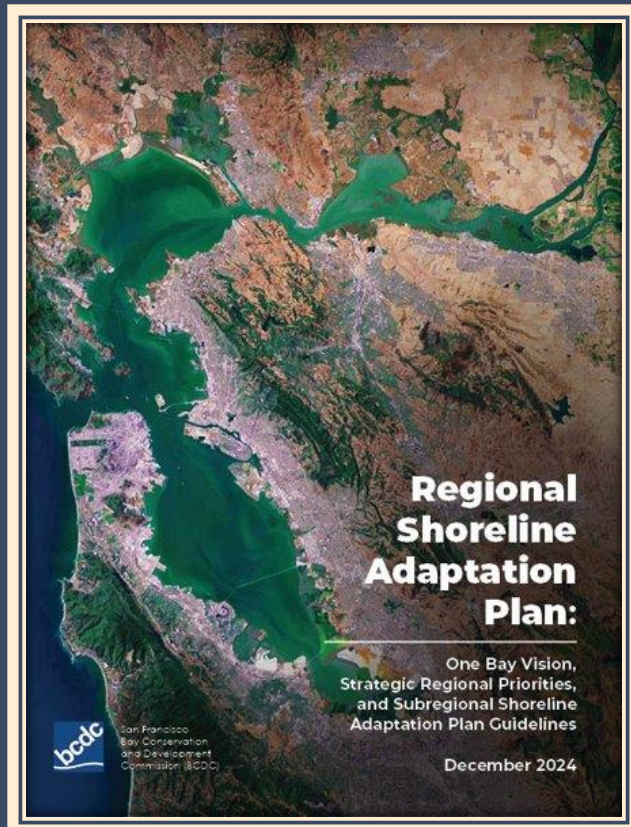
Photo courtesy CA King Tides Project

Regional Shoreline  
Adaptation Plan  
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# The Regional Shoreline Adaptation Plan (RSAP)

BCDC developed the RSAP in compliance with SB272 as a regional plan to address sea level rise and guide the creation of subregional plans.



The RSAP includes:

- ✓ **One Bay Vision**  
A community vision for the Bay.
- ✓ **Strategic Regional Priorities**  
8 regional issues to address in planning.
- ✓ **Subregional Plan Guidelines**  
Requirements for creating a subregional plan.

# The Subregional Plan Guidelines

Includes all the required components for the preparation of a subregional plan as mandated by SB 272 including:

## **Subregional Plan Elements:**

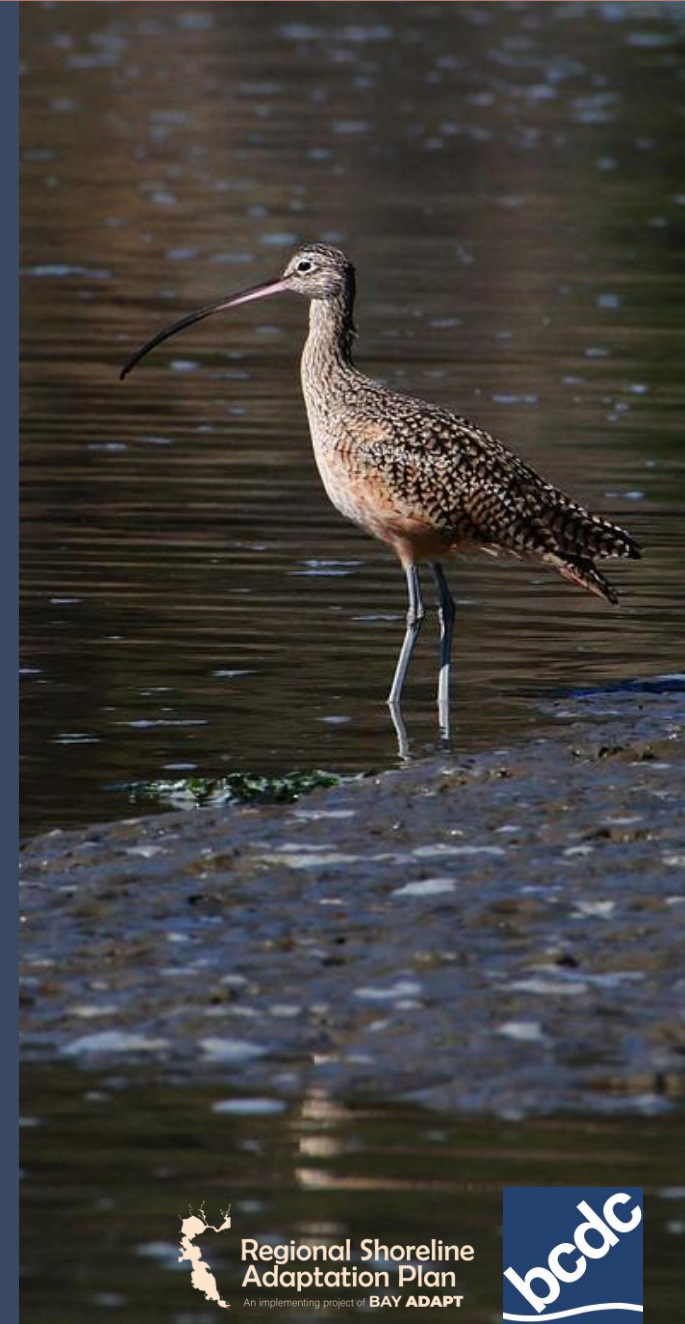
The main sections of a plan that each focus on a topic, follow specific guidelines, and build on one another to form a complete plan.

## **Minimum Standards:**

The minimum requirements across Elements that ensure credible plans and lead to consistency across the region.



The subregional plan checklist ensures plans meets all elements and standards, even if its structure differs.



# The why behind the Plan Guidelines

- ✓ **Follow a familiar structure**  
The Guidelines are organized like other planning processes for ease of use.
- ✓ **Build on existing work**  
Plans can use existing work to meet plan requirements.
- ✓ **Address local and regional risks**  
Plans respond to local needs while meeting consistent regional requirements.
- ✓ **Center communities**  
Decisions in plans reflect locally supported priorities, values, and input.



Photo courtesy California  
King Tides Project.

Regional Shoreline  
Adaptation Plan  
An environmental project of BAY ADAPT



# Plan Elements

## Element A: Planning Process

**Element B:**  
Existing Conditions

**Element C:**  
Vulnerability Assessment

**Element D:**  
Adaptation Strategies  
and Pathways

**Element E:**  
Land Use and  
Policy Plan

**Element F:**  
Implementation  
Plan

**Element G:**  
Project List

Document the planning process.

Understand the local  
context and conditions of  
vulnerability.

Select adaptation strategies and advance strategies.

# Minimum Standards



## Coastal Flood Hazards & Sea Level Rise Scenarios

Minimum hazards and scenarios that must be included.

### ➤ Coastal flood hazards:

- Storm surge (100-year)
- Shallow and emergent groundwater
- Tidal inundation (MHHW)

### ➤ Sea level rise scenarios:

- 0.8 ft (2050)
- 3.1 ft (2100 Intermediate)
- 4.9 ft (2100 Intermediate-High)
- 6.6 ft (2100 High)



## Minimum Categories & Assets

Aspects of physical, environmental, social, and economic issues that must be considered in adaptation planning.



## Equity Assessment

Equity considerations to address throughout the planning process.



## Adaptation Strategy Standards

Outcomes to be considered in strategy selection.

# Subregional plan process

The planning process can take several years.

**Start**

**Final Plan**

Plans must be updated at least every 10 years.

**Plan update**

- Submit notice of intent
- Preliminary BCDC consult
- Public notice
- Data validation
- Consultation #2
- Consultation #3
- Public comment
- Local adoption
- Submit Plan to BCDC
- Commission hearing & vote

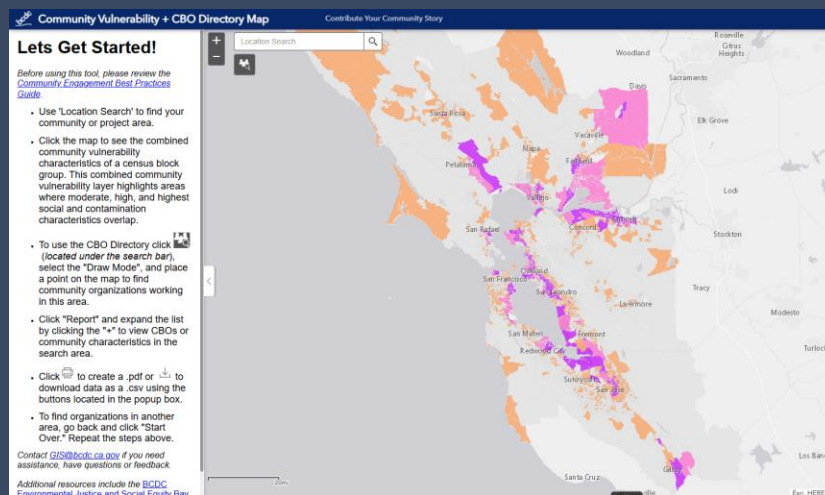
Interim status report

# Resources



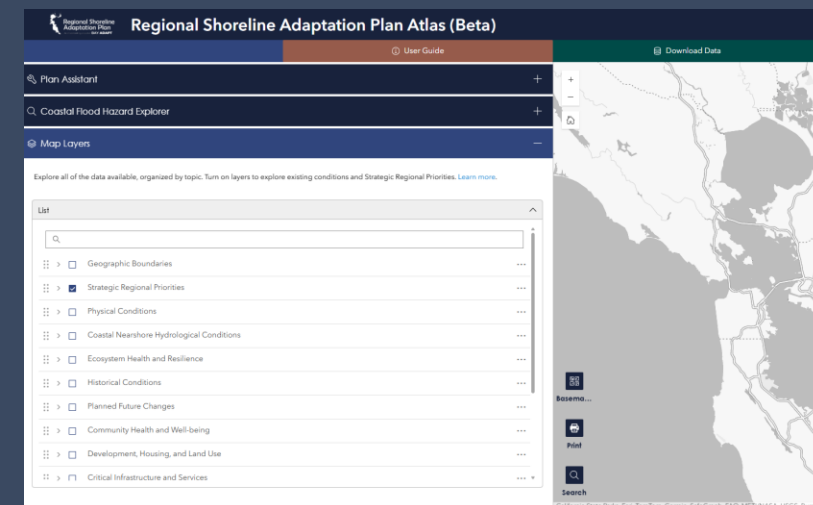
## Adaptation Roadmap

A practitioner's guide for understanding climate risks to implementing shoreline adaptation actions.



## Community Vulnerability & Community Based Organization Directory Map (CBO Directory)

An interactive map that highlights community vulnerability and identifies community-based organizations.



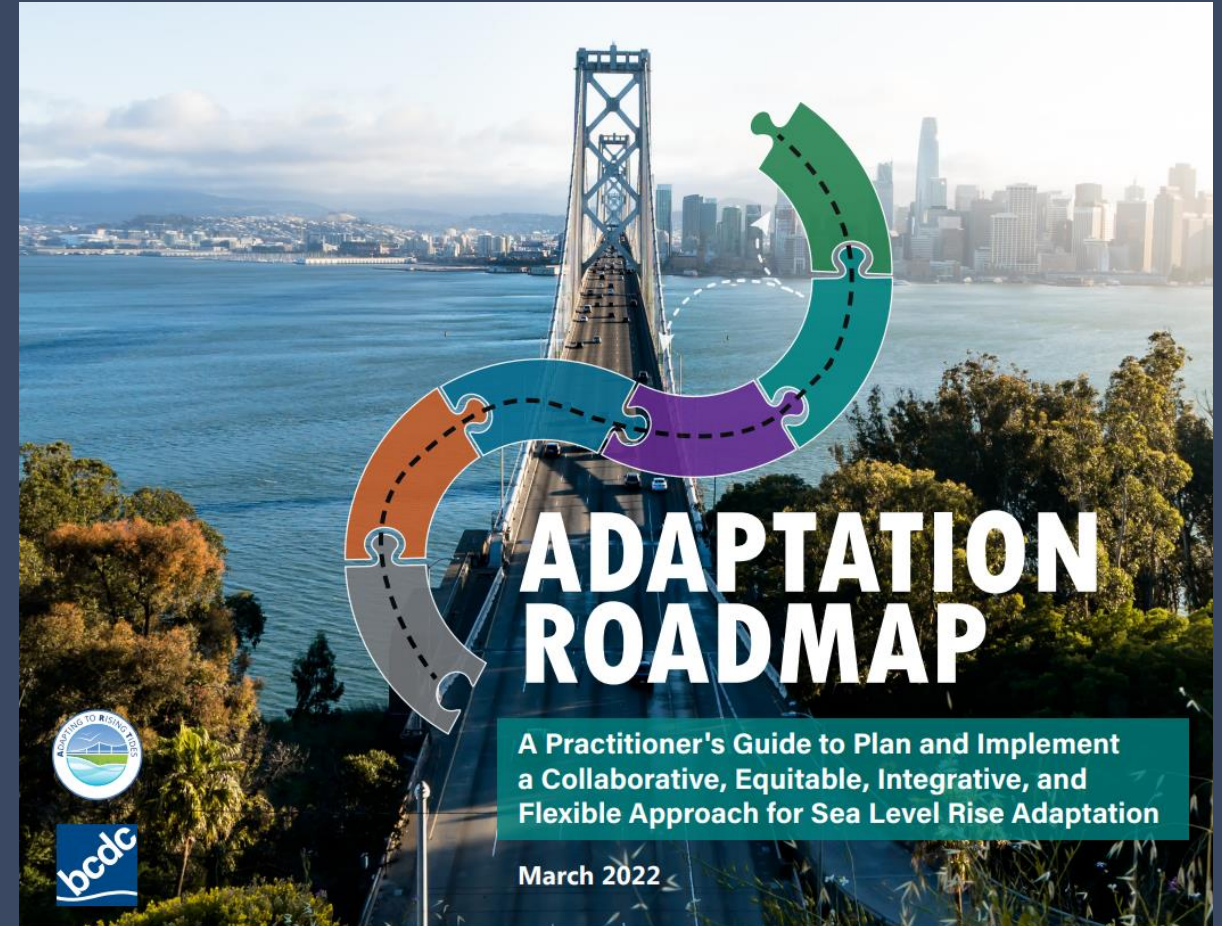
## RSAP Atlas

A regional mapping tool that includes 65% of the data required in a subregional plan.

# Adaptation Roadmap

## The Roadmap can help you:

- Navigate complex decisions under uncertainty and changing conditions.
- Approach collaborative, multi-jurisdictional planning and governance.
- Center equity and community engagement in adaptation decisions.
- Move from vulnerability assessment to actionable, implementable strategies.



# Plan Elements

## Element A: Planning Process

**Element B:**  
Existing Conditions

Document the planning process.

**Element C:**  
Vulnerability Assessment

**Element D:**  
Adaptation Strategies  
and Pathways

**Element E:**  
Land Use and  
Policy Plan

**Element F:**  
Implementation  
Plan

**Element G:**  
Project List

Understand the local  
context and conditions of  
vulnerability.

Select adaptation strategies and advance strategies.

How far along are you in the subregional plan process?

*(Not started, Element A, Element B, Element C, Element D)*

Drop your answer in the chat.

# Part 2: Element A: Planning Process

Photo courtesy CA King Tides Project

# Purpose

## Element A: Planning Process

*Element A cannot be completed until the end of the planning process!*

Documents how the planning process is designed, implemented, and carried out. **This section focuses on your process, not checking boxes.**

See **Chapter 2** of the [Adaptation Roadmap](#) to learn more about an equitable approach.

### Why it matters:

- A meaningful and robust planning process that engages a mix of partners and affected parties.
- Promotes inclusive decision-making and transparency and accountability in how the plan was developed.

Photo by Karl Nielson.



# Sections

## Element A: Planning Process

### A1. Subregional plan partners

List subregional plan partners, including jurisdictions, planning project team members and affected parties.

### A2. Planning area map

Include a map of the subregional shoreline adaptation plan area (“planning area”).



*Landward boundary must include at least the 6.6 ft (2 100 High) scenario*

### A3. Multi-jurisdictional coordination

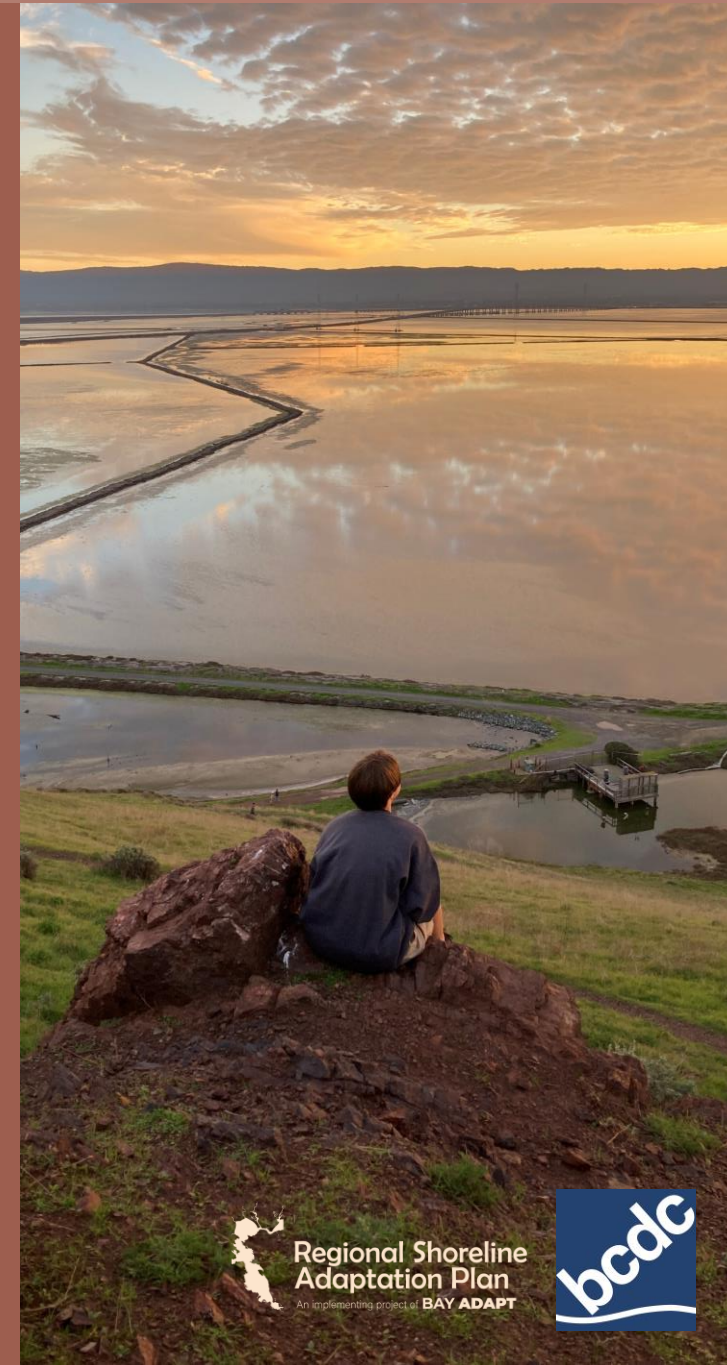
Describe the multi-jurisdictional coordination process.

### A4. Equitable engagement

Summarize equitable engagement efforts throughout the planning process.




*Must complete equity assessment*



# A1. Subregional plan partners



## What to include:

- **Plan type:**  
single jurisdiction or multi-jurisdictional
- **Project planning team**
  -  How the team included diverse perspectives and language services in planning.
- **Affected and interested parties**
- **Tribal consultation**

## How to approach it:

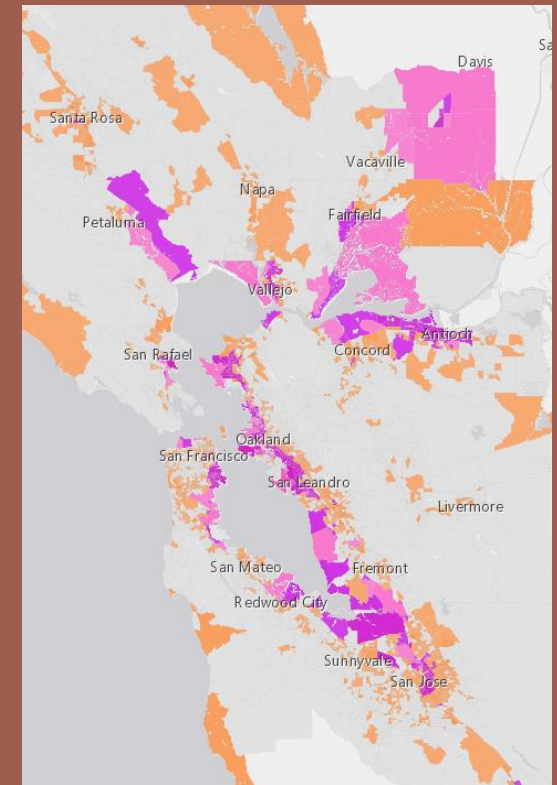
- Build a mix of experienced / emerging stakeholders that reflect the area demographics.
- Use the [CBO Directory](#) to view who is impacted, who has influence, and who has been underrepresented.
- Consult tribes early and continuously and include them on the planning team or TAC.

# Community Vulnerability & Community Based Organization Directory Map

A directory of Bay Area community-based organizations (CBOs) linked to community vulnerability data to highlight organizations serving socially vulnerable populations.

## How to use it:

- Search the Directory to find organizations by location, communities served, or focus areas
- Use as a starting point to reach out to partners for planning and engagement
- Integrate CBO input into planning decisions and TAC participation



# A2. Planning area map

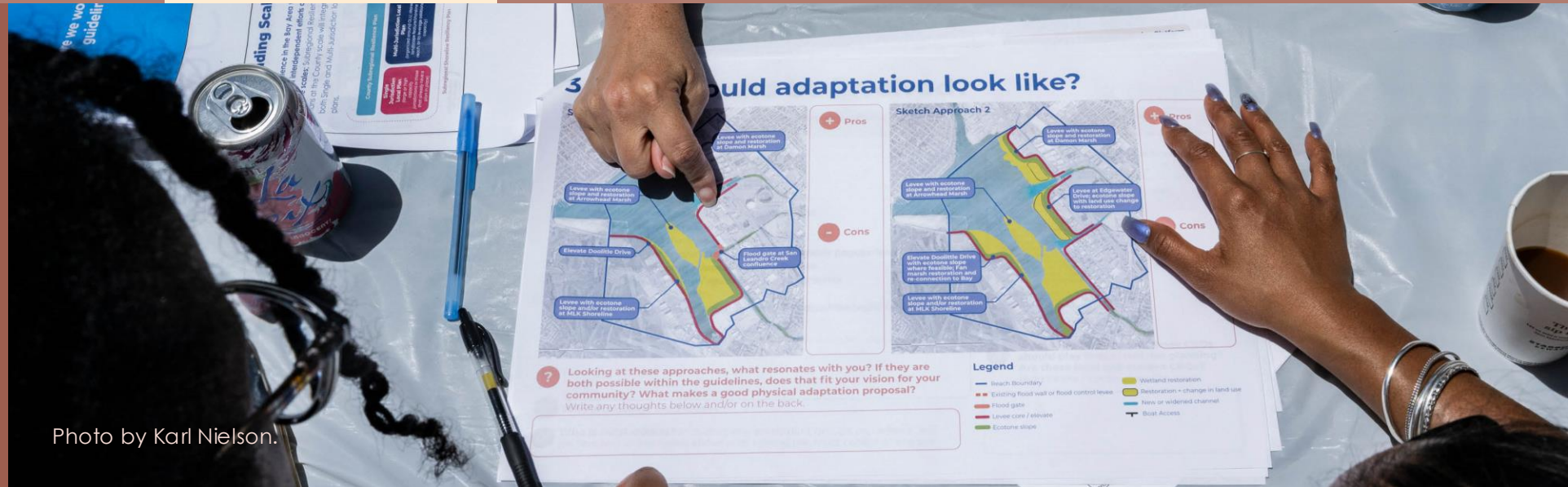



Photo by Karl Nielson.

## What to include:

A map of the planning with:

- Bayward boundary must include relevant subtidal areas.
-  Landward boundary must include at least the 6.6 ft (2100 High) scenario.
- All participating jurisdictions' boundaries

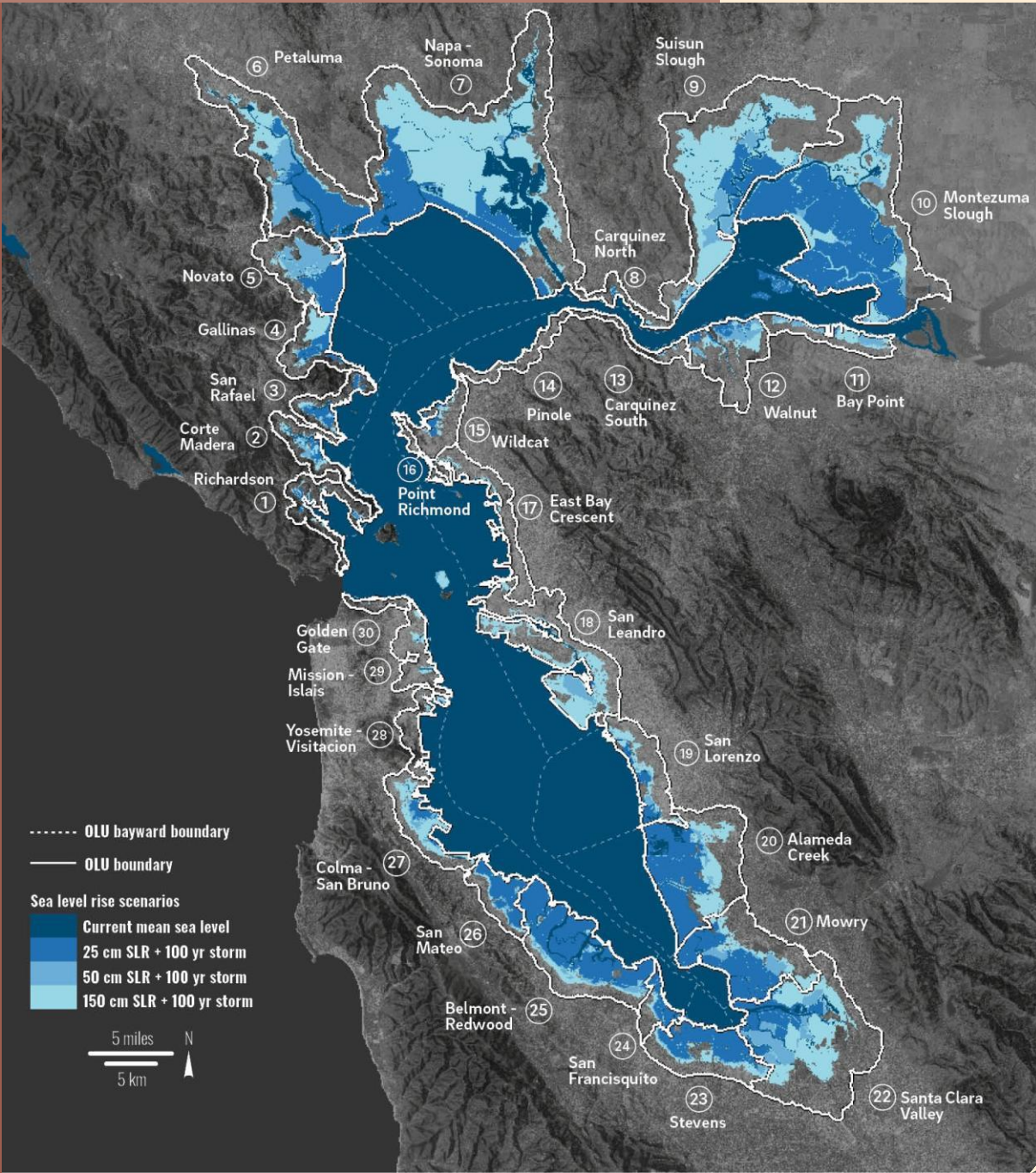
## How to approach it:

- The RSAP Atlas can be used to map the planning area.
- Consider the Operational Landscape Unit (OLU) as an alternative jurisdictional boundary.

# Operational Landscape Units (OLUs)

- Developed by San Francisco Estuary Institute (SFEI)
- OLU are areas that share similar landscapes and ecosystem functions.
- OLU can help communities plan for sea level rise in a coordinated, ecosystem-based way.

Learn more in SFEI's [S.F. Bay Shoreline Adaptation Atlas](#).



# A3. Multi-jurisdictional coordination



Photo by Karl Nielson.

## What to include:

Description of the multi-jurisdictional coordination process including:

- How points of coordination were addressed.
- How other jurisdictions were incorporated into the plan.

## How to approach it:



- Consider all groups that share landscapes or infrastructure to ensure early alignment.
- Include these groups on your TAC etc. to get input throughout the planning process.

# A4. Equitable engagement



Photo by Karl Nielson.

## What to include:

- Define and identify socially vulnerable populations including a map and description of community characteristics.
  - Summary of outreach and engagement efforts including:
    - Funding allocations
-  Engagement process with vulnerable communities
-  Engagement process with community groups and Tribes.

## How to approach it:

- Use the [CBO directory](#) or [RSAP Atlas](#) and reach out directly to CBOs, Tribes etc.
- Allocate budget and resources (*translation, stipends, childcare, etc.*)
- Use multiple engagement methods (*in-person, virtual, multilingual materials*)
- Utilize recent existing outreach and document throughout your process.

How prepared does your team feel  
to start Element A?

*(Not yet, ready to begin, underway)*

Drop your answer in the chat.

# Part 3: Element B: Existing Conditions

# Purpose

## Element B: Existing Conditions

- Defines baseline local conditions by identifying the physical, ecological, social, and policy contexts.
- Connects local conditions to the Strategic Regional Priorities, helping jurisdictions identify where regional goals intersect with local risks.

### Why this matters:

- Provides a shared understanding.
- Grounds planning with real conditions.
- Helps identify risks, opportunities, and constraints early.
- Supports realistic and equitable adaptation strategies.



# Sections

## Element B: Existing Conditions

### **B1. Plans, policies, and context**

List and describe existing plans, studies, and/or other information that may be relevant to addressing and responding to coastal flooding hazards.

### **B2. Physical & ecological conditions**

Map and describe physical and ecological characteristics of the landscape within the planning area.

### **B3. Communities, assets and systems**

Map and describe existing populations, assets, sectors, services, and land uses within the planning area.



*Must include all minimum categories and assets*



*Must complete equity assessment*



# Minimum Categories & Assets



Topic Area	Category	Asset/Service	
Community Health and Well-being	Strategic Regional Priority	Displacement risk	
	Populations	Population demographics	
		Vulnerable communities	
		Environmental Justice communities	
		Tribes	
	Community Services	Healthcare facilities	
		Historic and cultural resources	
		Tribal cultural resources	
	Ecosystem Health and Resilience	Strategic Regional Priority	See assets with an asterisk* below
		Existing Baylands Habitats	Adjacent uplands
Estuarine-upland transition zones*			
Beaches*			
Tidal marshes*			
Intertidal channels*			
Tidal ponds/pannes*			
Tidal flats*			
Subtidal habitats (shallow and deep)*			
Eelgrass beds*			
Rocky intertidal			
Creeks/channels connected to the Bay			
Endangered Species		State listed endangered species	
		Federal listed endangered species	
Baylands Resilience Characteristics and Ecosystem Services		Baylands resilience characteristics (qualitative)	
		Ecosystem services and functions (qualitative)	
Restoration and Connectivity Opportunities		Undeveloped migration space*	
		Other marsh (e.g., muted tidal, seasonal wetlands)*	
		Non-aquatic diked Baylands (e.g., agricultural fields)*	
		Other open water (e.g., salt ponds)*	
Nature-based Adaptation	Suitability (e.g., nearshore reefs, mudflat augmentation, ecotone levees, creek to Baylands re-connection, etc.)		

One Bay Vision Topic Area	Category	Asset/Service
Development, Housing, and Land Use	Strategic Regional Priority	Plan Bay Area Growth Geographies
	Current and Future Land Uses and Development	Residential land uses
		Affordable housing sites
		Housing element opportunity sites
		Commercial land uses
		Industrial land uses
		Parks and recreation land uses
		Open space land uses
		Agricultural land uses
		Job spaces
Tribal lands and sacred spaces		
Adaptation Projects	Existing and planned adaptation projects	
Critical Infrastructure and Services	Strategic Regional Priority	Water-Related Industry Priority Use Areas and assets with an asterisk* below
	Utilities Infrastructure	Power plants*
		Substations
		Natural gas stations
		Publicly-owned wastewater treatment works and wet weather facilities
		Wastewater lifting stations
		Water supply
		Communications infrastructure
		Oil refineries
		Stormwater and Flood Management Infrastructure
Stormwater systems		
Sewer systems		
Emergency Management	Emergency operations centers*	
	Fire stations	
Public Trust Lands	Police stations	
Public Trust Lands	Marinas, harbors, and other water-dependent infrastructure	

One Bay Vision Topic Area	Category	Asset/Service
Public Access and Recreation	Strategic Regional Priority	Waterfront Park, Beach Priority Use Area and assets with an asterisk* below
	Trails Networks	The San Francisco Bay Trail*
		Regional Active Transportation Network*
	Parks and Open Space	Parks and open space areas
	Water-Oriented Recreation	Public trust lands
Water-oriented recreation facilities		
Water-Oriented Recreation	San Francisco Bay Area Water Trail *	
Transportation and Transit	Strategic Regional Priority	See assets with an asterisk* below
	Land Transportation	Highways*
		Passenger rail*
		Freight rail*
		Bus terminals, routes, and service yards
		Transit stops
	Air Transportation	Airports*
	Water Transportation	Seaports*
		Ferry terminals*
	Emergency	Emergency access routes
Single points of entry		
Shoreline Contamination	Strategic Regional Priority	Contaminated sites in Environmental Justice communities
	Sites	Contaminated sites
		Landfills
Sites	Superfund sites	
Collaborative Governance, Flood Management, and Funding	Strategic Regional Priority	Hydraulically connected shorelines
	Boundaries	Jurisdiction boundary
		Operational Landscape Unit boundary
	Partnerships	Community-based organizations (CBO)
		Tribal government
Partnerships	Special districts	

# B1. Plans, policies, & context



## What to include:

- List existing plans, studies, regulatory codes and processes related coastal flooding hazard.
- Summarize how flooding and adaptation is currently referenced or addressed.

## How to approach it:

- View adaptation planning as ongoing and flexible.
- Make connections across plans, agencies, sectors, and processes to identify relevant completed work.
- Assess how this process can inform or update existing plans to avoid duplicate work.

See [Adaptation Roadmap Chapter 3.1](#) to learn more about aligning plans and processes.

## B2. Physical & ecological conditions



### What to include:

Map and describe:

- Physical conditions
- Coastal and nearshore hydrological conditions
- Ecosystem health and resilience conditions
- Historical conditions
- Planned future changes



### How to approach it:

- Use and reference existing reports in place of new reports.
- Use RSAP Atlas to map additional data
- Data can be submitted in combined maps with more than one condition and/or displayed in different categories.

# B3.

## Communities, assets, & systems



### What to include:

Map and describe the following conditions:

- Community health and well-being
- Development, housing, and land use
- Critical infrastructure and services
- Public access and recreation
- Transportation and transit
- Shoreline contamination
- Collaborative governance, flood management, and funding

### How to approach it:

- Use and reference existing conditions reports or information in other resources.
- Use RSAP Atlas to map additional data into combined maps with more than one condition.



Required conditions for each category are listed in the Minimum Categories and Assets.



Equity must be addressed for each condition.

# RSAP Atlas

A regional mapping tool supporting subregional plan development, covering 65% of required plan data. Use it to map sea level rise impacts, generate plan submittals, and download GIS data.

## Key Components:



**User Guides**



**Map Explorer**



**Data Downloads**

Data from over a dozen agency partners including NOAA, USGS, ABAG/MTC, and more.

**[rsap-atlas.bcdc.ca.gov](https://rsap-atlas.bcdc.ca.gov)**

User Guide

Download Data

Search for data needed in a Subregional Plan that may be used in Plan submittals. Learn more

jurisdiction are you planning for?

jurisdiction

jurisdiction are you planning for?

jurisdiction are you working on?

jurisdiction you interested in?



Regional Shoreline Adaptation Plan  
The Department of Water Resources - BAY ADAPT



## Regional Shoreline Adaptation Plan Atlas (Beta)

The Regional Shoreline Adaptation Plan (RSAP) is a regional plan to address rising sea levels in San Francisco Bay. Local governments in the Bay Area are required to develop Subregional Shoreline Adaptation Plans (Plans), per SB 272. The RSAP Atlas is a tool to help create Plans that comply with these requirements. It includes region wide data on coastal flood hazards, community vulnerability, existing conditions, Strategic Regional Priorities, and nature-based adaptation suitability.

The RSAP Atlas allows you to:

1. Map how sea level rise might affect your community
2. Generate Plan submittals
3. Download GIS data

This is the Beta Version of the RSAP Atlas. How is it working? **We want to hear from you!** Reach out to [GIS@bcdc.ca.gov](mailto:GIS@bcdc.ca.gov) with your questions or feedback.

Map layers may be slow to load. Viewing on a screen with a minimum resolution of 1000x800 is recommended.

User Guide

Explore Map

Download Data



Print



Search

Legend

No legend

Hazard Explorer



# Alternative or supplemental data approval process

- In a written format:
  - Describe the proposed alternative or supplemental data set and justification for its use.
  - Explain how the data meets the RSAP best available data criteria (Section 3.1.2).
- BCDC will review your request and provide a written response within **30 days**.
- Local governments may appeal if the request is denied.



BCDC provides an [info page](#) and [data request form](#) for supplemental data requests.



Photo courtesy California King Tides Project.

# The takeaways

# The takeaways

1. The RSAP and Plan Guidelines provide a consistent regional framework while letting jurisdictions build on local data, plans, and partnerships.
2. Elements A and B help capture the planning process and existing conditions, assets, and governance to understand current risks and community needs.
3. Documenting these conditions ensures your plan reflects real-world challenges and supports equitable decision-making.

# BCDC's resources



[BCDC website](#)



[RSAP Atlas](#)



[Plan resources](#)

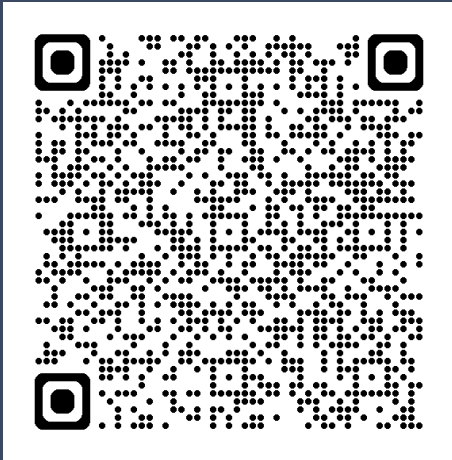


[Subregional liaisons](#)

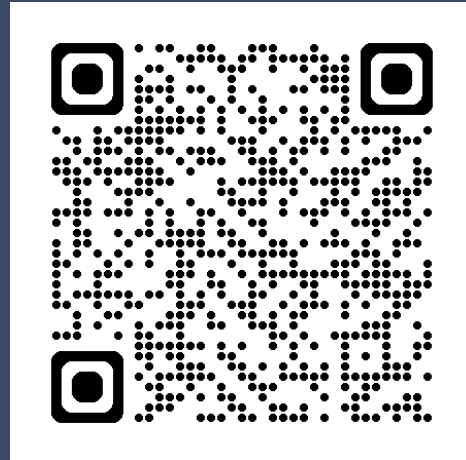


[Tracking Plan Progress](#)

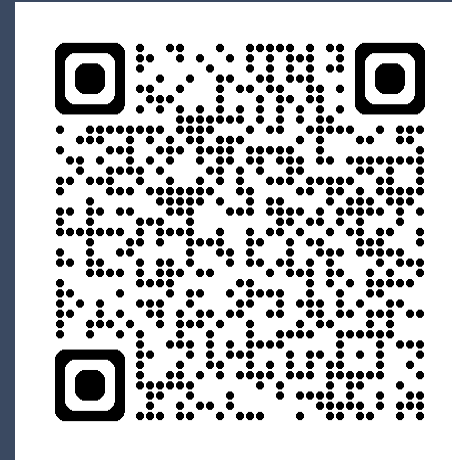
# Next Steps



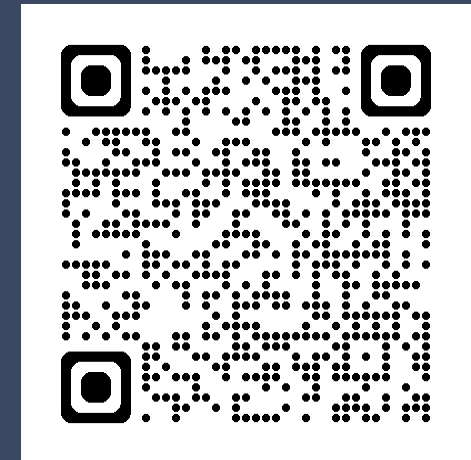
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# Thank you! Questions?



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