

# Elevating Action-Oriented Strategies: The San Diego Region Coastal Resilience Roadmap

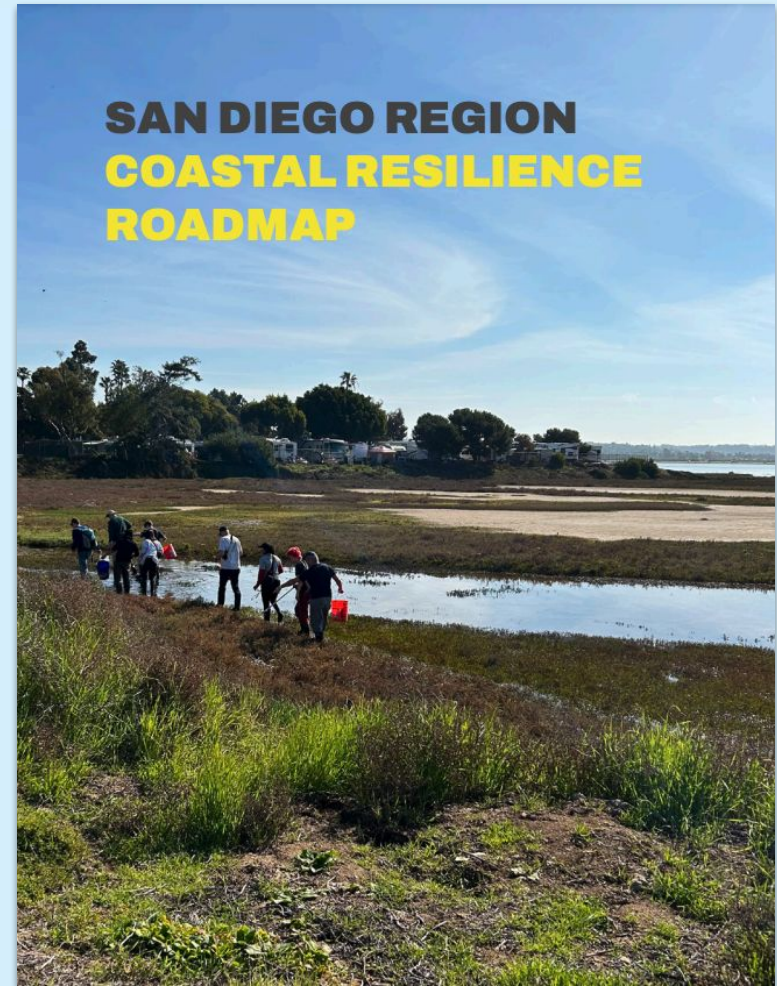


# SESSION AGENDA

- 1. Overview & Introduction to Roadmap *20 mins.***  
Darbi Berry | San Diego Regional Climate Collaborative
- 2. Regional Implications & Impact *10 mins.***  
Meagan Openshaw | City of Imperial Beach
- 3. Understanding Regional Readiness *10 mins.***  
Anna Friedman | Resilient Cities Catalyst
- 4. Audience Q&A *15 mins.***
- 5. Regional Readiness Worksheet Activity *15 mins.***
- 6. Group Share Out *10 mins.***
- 7. Closing Thoughts *10 mins.***

# INTRODUCING THE ROADMAP

“ By working collectively, and ensuring that coastal resilience projects are designed, financed, and built through our work together, we can continue to ensure a high quality of life for all San Diegans.



# ROADMAP DEVELOPMENT

2020

CONTEXTUALIZING



NETWORK ANALYSIS



FEEDBACK  
REGIONAL COASTAL RESILIENCE AMBASSADORS PROGRAM

2023

DEVELOPMENT



Cost Of Inaction Toolkit



REGIONAL ROADMAP

# REGIONAL ENGAGEMENT



**18** REGIONAL COASTAL  
RESILIENCE AMBASSADORS  
engaged throughout Roadmap development



**3** WORKSHOPS  
to support Roadmap development



**6** FOCUS GROUPS  
40 total participants



**10** ONE-ON-ONE INTERVIEWS  
with experts and partners

## ADDITIONAL ENGAGEMENT REACHED PRACTITIONERS THROUGH EXISTING CHANNELS



**ALLIANCE OF REGIONAL  
COLLABORATIVES FOR CLIMATE  
ADAPTATION (ARCCA) MEETING**  
engagement of ARCCA network partners



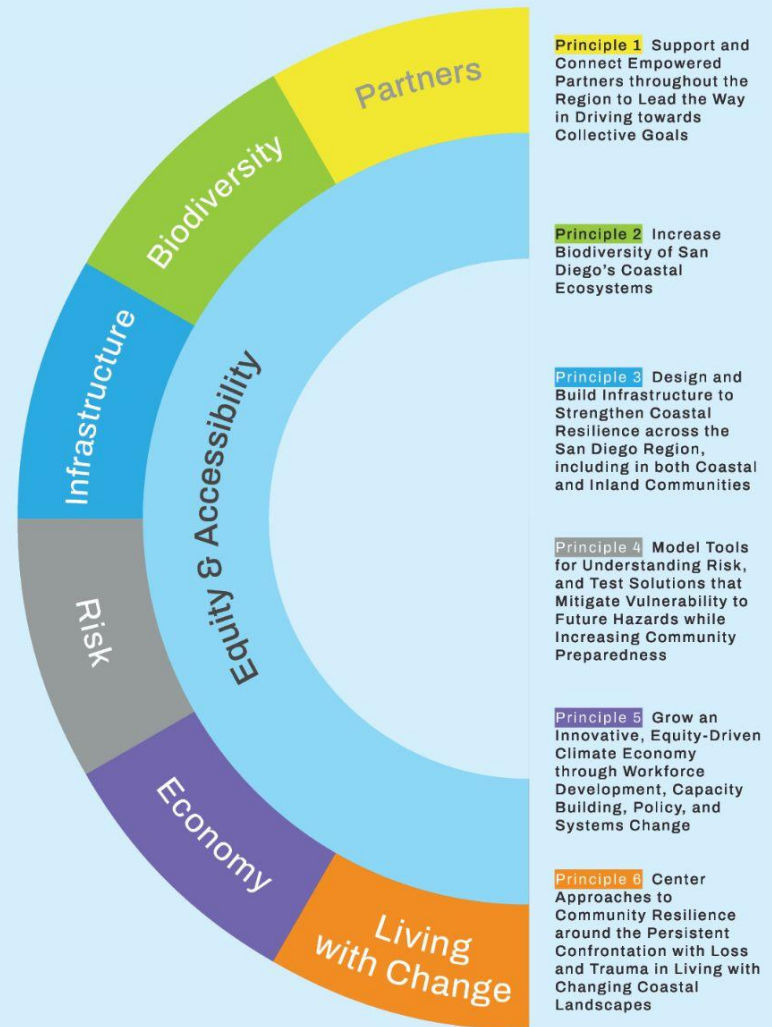
**SDRCC SEA LEVEL RISE  
WORKING GROUP**  
4 meetings held, with over 85 people engaged



**CONVENING OF PRACTITIONERS**  
working across the Oceanside Littoral Cell,  
reaching 22 participants

# ROADMAP STRUCTURE

The Roadmap features  
**76 Actions** to advance  
**30 Goals** organized across  
**6 Principles** with equity and  
accessibility as a cross-  
cutting theme.





## PRINCIPLE 1: **PARTNERS**

Support and Connect  
Empowered Partners  
throughout the Region to  
Lead the Way in Driving  
towards Collective Goals



# PRINCIPLE 1: **PARTNERS**

01

**Foster greater connectivity and cohesion among inland and coastal communities**

02

**Harness the region's vibrant philanthropies and institutions more effectively to meet shared community coastal resilience agenda**

03

**Support partners in navigating green tape and other regulatory hurdles to smooth the pathway in implementing prioritized projects**

04

**Ensure all communities have access to capacity-building, tools, and resources to develop coastal actions and advocate for their vision for the coastline**

05

**Clarify roles and ensure coordination among local, regional, state, and Tribal actors around projects, knowledge sharing, and funding**

06

**Increase access to funding and financing for promising pilot projects, including through blended and innovative funding models**





## PRINCIPLE 2: BIODIVERSITY

# Increase Biodiversity of San Diego's Coastal Ecosystems





## PRINCIPLE 2: **BIODIVERSITY**

01

Center conservation practices in tribal ecological knowledge

02

Strengthen understanding of project impacts on organisms and ecosystems to support decision making

03

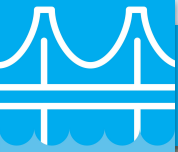
Foster multi-jurisdictional partnerships to enable the consideration of land and green spaces at the bioregion scale

04

Encourage new nature-based solutions through rapid development of pilot projects that integrate and share research

05

Restore estuarine, coastal, and inland ecosystems



## PRINCIPLE 3: INFRASTRUCTURE

**Design and Build Infrastructure to Strengthen Coastal Resilience across the San Diego Region, including in both Coastal and Inland Communities**



## PRINCIPLE 3: **INFRASTRUCTURE**

01

Increase equitable access to coastal open spaces including strategies to enhance multi-modal and public transportation

02

Accelerate implementation of multi-benefit infrastructure projects such as cooling, flood protection, and increased access to open space

03

Support integrated water management strategies that serve all communities across the region and are sustainable over the long term

04

Support increased coordination that leads to investments in coastal flood protection, adaptation, and managed retreat

05

Increase energy redundancy and reliability through grid resilience

06

Advance policies and projects that reduce exposure of critical infrastructure, including housing, in vulnerable coastal zones



## PRINCIPLE 4: **RISK**

**Model Tools for Understanding Risk, and Test Solutions that Mitigate Vulnerability to Future Hazards while Increasing Community Preparedness**



## PRINCIPLE 4: **RISK**

01

Use policy tools, innovative funding strategies, and incentives to channel development towards areas less vulnerable to climate hazards

02

Support more regular and granular risk and scenario modeling

03

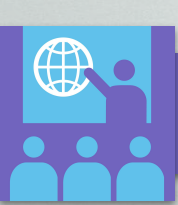
Develop models and communication tools to increase shared understanding of risks and opportunities

04

Pilot and test new financial mechanisms that transfer risk and more fully capture environmental, social, and other costs and benefits

05

Cultivate spaces for cross-sector dialogue and coordination



## PRINCIPLE 5: **ECONOMY**

Grow an Innovative,  
Equity-Driven Climate Economy  
through Workforce  
Development, Capacity Building,  
Policy, and Systems Change





# PRINCIPLE 5: **ECONOMY**

01

Increase economic mobility and wealth-building opportunities for all to reduce long-standing disparities

02

Build upon the strengths of the growing binational region to promote investments that support thriving, equitable communities

03

Nurture and promote diverse career pathways to high paying jobs in traditional and emerging climate-supportive sectors

04

Continue growing blue and green economy clusters to foster quality jobs across diverse sectors and economic activity, as well as climate benefits





## PRINCIPLE 6: LIVING WITH CHANGE

**Center Approaches to  
Community Resilience around  
the Persistent Confrontation with  
Loss and Trauma in Living with  
Changing Coastal Landscapes**



## PRINCIPLE 6: **LIVING WITH CHANGE**

01

Increase awareness of a pluralistic history of the region that re-centers the indigenous relationship to the coast

02

Foster a shared science-based understanding and recognition of both the threat of climate change and the range of alternatives for adaptation

03

Increase access to services, spaces for dialogue, and other resources that promote well being, including through an understanding of the role of the coast as a place for both healing and persistent confrontation with climate uncertainty

04

Mobilize San Diego's youth as continued future advocates and stewards for the coast

# HOW TO READ AN ACTION

The Roadmap features **76 Actions**, organized by Principle and Goal.

We invite residents, institutions, and organizations across the region to identify Actions that resonate with your work and explore how you can support, scale, or amplify these efforts.

## TAGLINE:

A brief summary of the Action.

**1.2 NATIVE PLANTING**  
Honor tribal ecological knowledge and increase native flora through strategic and intentional planting.

Due to increasing pressures of urbanization, globalization, and climate change, our local flora have been eradicated from their traditional habitats and often are out-competed for growing space in natural spaces by invasive species. Native plants provide critical habitat for flora and fauna and are more equipped to handle climate fluctuations, such as drought, than many invasive species that are not well adapted for the region. To support the restoration of native plant populations, public libraries in San Diego have opted to house seed libraries that are available to the public and help encourage age education about the benefits of native planting. Other approaches include the incorporation of traditional practices and centering tribal ecological knowledge by fostering efforts in collaboration with tribal nations. The Resilient Restoration program, supported by the Climate Science Alliance's Tribal Working Group, UC Riverside, and San Diego State University, is actively working to support actions that enhance the persistence of cultural practices while preserving ecosystems by planting culturally important species, improving education efforts and mainstreaming programs that prioritize native plants will ensure our region's biodiversity continues to be supported while also building resilience with climate-adapted habitats.

**Biodiversity**

**SHOCKS & STRESSES**

- Climate Change
- Drought
- Lack of or Disparities in Access to Open Space
- Loss of Biodiversity
- Structural Racism / Inequality

**SCALE**

- Ecosystem

**STATUS**

- Underway

**TIMEFRAME**

- Long 5+ years

**PROJECT OWNER**

- Our Children
- SD Communities
- Urban Greening
- Coastal Eddying Program
- Plant Native Plants
- Native Seed Library
- Climate Science Alliance

59



**SHOCKS AND STRESSES:**  
Which primary shocks and stresses the Action aims to address.



**SCALE:**  
The breadth of impact for who the Action will reach, from one specific community, to a local or regional jurisdiction, to an ecosystem, to the San Diego region, or beyond.



**ACTION STATUS:**  
Stage of implementation, ranging from planned to underway to piloted and ready to scale to proposed.



**TIMEFRAME:**  
Timeline for implementation, ranging from short (less than 1 year), to medium (1 to 5 years), to long (more than 5 years).



**PROJECT OWNER:**  
The entity or organization that is primarily responsible for leading the Action.

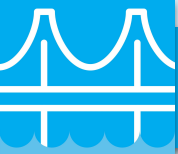
## ACTION DESCRIPTION:

Context that explains why the Action is needed to meet Roadmap goals along with additional details related to partners, key activities, and next steps.

REGIONAL

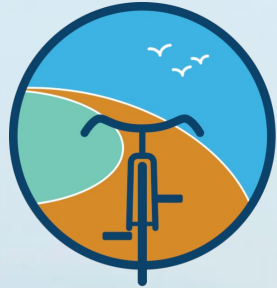
IMPLICATIONS & IMPACT

**Meagan Openshaw | City of Imperial Beach**



## PRINCIPLE 3: INFRASTRUCTURE

## ACTION 2.1



**bayshorebikeway**  
RESILIENCY PROJECT

**Transform an existing segment of coastal access bikeway into a flagship resilience corridor.**

# UNDERSTANDING REGIONAL READINESS

**Anna Friedman | Resilient Cities Catalyst**

# LESSONS LEARNED

## What should other regions consider in exploring similar processes?

### READINESS CONDITIONS

- ★ **Identify a project team with robust understanding of the region:**  
leadership of SDRCC given history, role, partnerships across the region
- ★ **Incorporate reciprocal relationships:** ability to collaborate across multiple touchpoints with partners drove an inclusive process
- ★ **Connect to past (and parallel) planning efforts:** building upon, and complementing, existing efforts builds momentum for action

# LESSONS LEARNED

## What should other regions consider in exploring similar processes?



### ROADMAP DEVELOPMENT

- ★ **Do your homework before engaging stakeholders:** analysis of documents and plans laid groundwork for respectful and productive workshops
- ★ **Focus on foundational principles to establish a shared vision:** developing this vision with RCRA cohort fostered co-ownership and laid early groundwork
- ★ **Elevate existing and planned projects:** a mix builds momentum, driving additional support for existing projects, & filling gaps with new actions



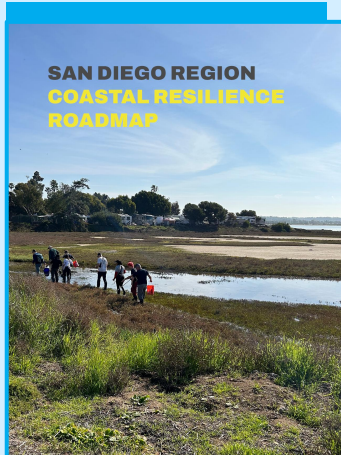
# LESSONS LEARNED

## What should other regions consider in exploring similar processes?

### TOWARDS OUTCOMES

- ★ **Maximize usability of the roadmap beyond the report itself:** not just a PDF, a dynamic tool can drive buy-in for priority projects and attract investments
- ★ **Repurpose findings to develop additional tools:** Actions Database emerged as a priority regional need so team pivoted to develop this resource
- ★ **Identify lead coordinator to advance next steps:** roles include accelerating implementation, tracking progress, fostering collaboration

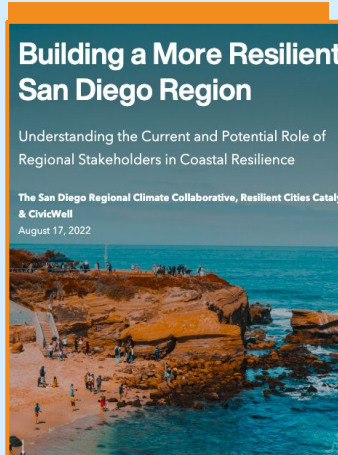
# ROADMAP RESOURCES



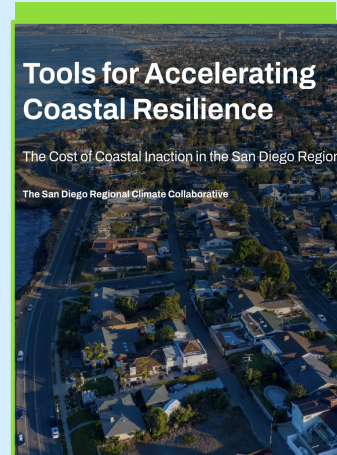
Regional Roadmap

Principle	Action Title
Partners & Governance	Working Group Collaboration
Partners & Governance	Equity-First Decision Making
Partners & Governance	Binational Resilience Initiative
Partners & Governance	Climate Funders' Collaborative
Partners & Governance	Catalyzing Philanthropy
Partners & Governance	Warehousing Shoreline Monitoring
Partners & Governance	Coastal Project Pre-Permitting
Partners & Governance	Regional Beach Sand Replenishment
Partners & Governance	Sea Level Rise Research
Partners & Governance	Regional Shoreline Monitoring Progre
Partners & Governance	Regional Resilience Framework
Partners & Governance	Comprehensive Vulnerability Assessm
Partners & Governance	Tribal Partnership
Partners & Governance	Prioritizing Inter-Agency Cooperation
Partners & Governance	Military Installation Resilience
Partners & Governance	Project and Pilot Mapping
Partners & Governance	Sub-Regional Collaboration
Biodiversity	Tribal Ecological Knowledge
Biodiversity	Native Planting
Biodiversity	Quantifying the value of biodiversity

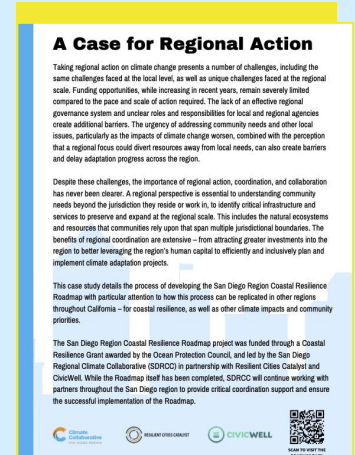
Actions Database



Network Analysis StoryMap



Cost of Inaction Toolkit

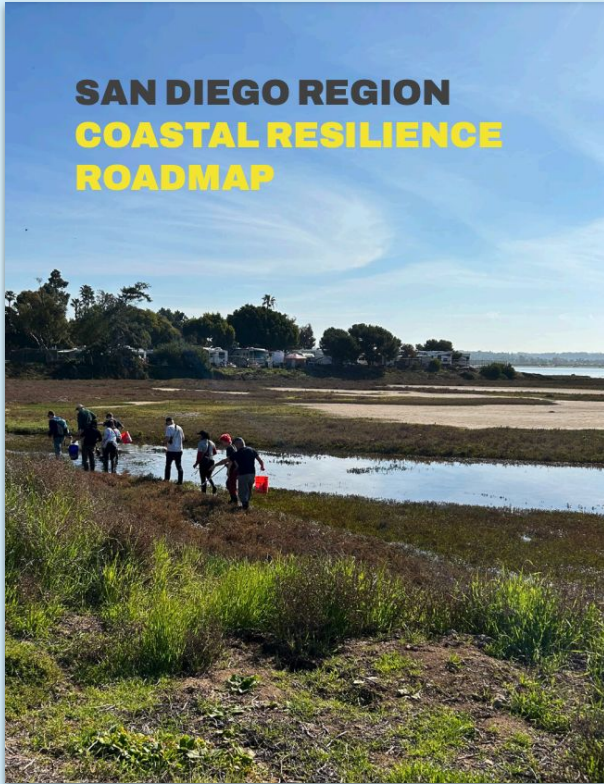


Case Study

QUESTIONS?

REGIONAL READINESS  
WORKSHEET ACTIVITY

# *Thank you!*



We invite you to dive into the Roadmap  
and our companion resources at:

[bit.ly/SD-Roadmap](https://bit.ly/SD-Roadmap)

