

ARCCA
Alliance of Regional Collaboratives
for Climate Adaptation

San Diego Regional Coastal Resilience Roadmap

Learning Session Webinar

June 27, 2023 | 1:00-2:00 PM PDT



RESILIENT CITIES CATALYST

Webinar Logistics

Questions?

At any point during the webinar, you can submit a question through the Zoom control panel. All questions will be read aloud and answered during Q&A as long as time permits.

You can also use the 'hand raising' feature to be unmuted and ask a question during Q&A.



Webinar Presenters



**Darbi
Berry**

San Diego
Regional Climate
Collaborative



**Anna
Friedman**

Resilient Cities
Catalyst



**Yamilett
Carrillo**

San Diego
Foundation

Moderator

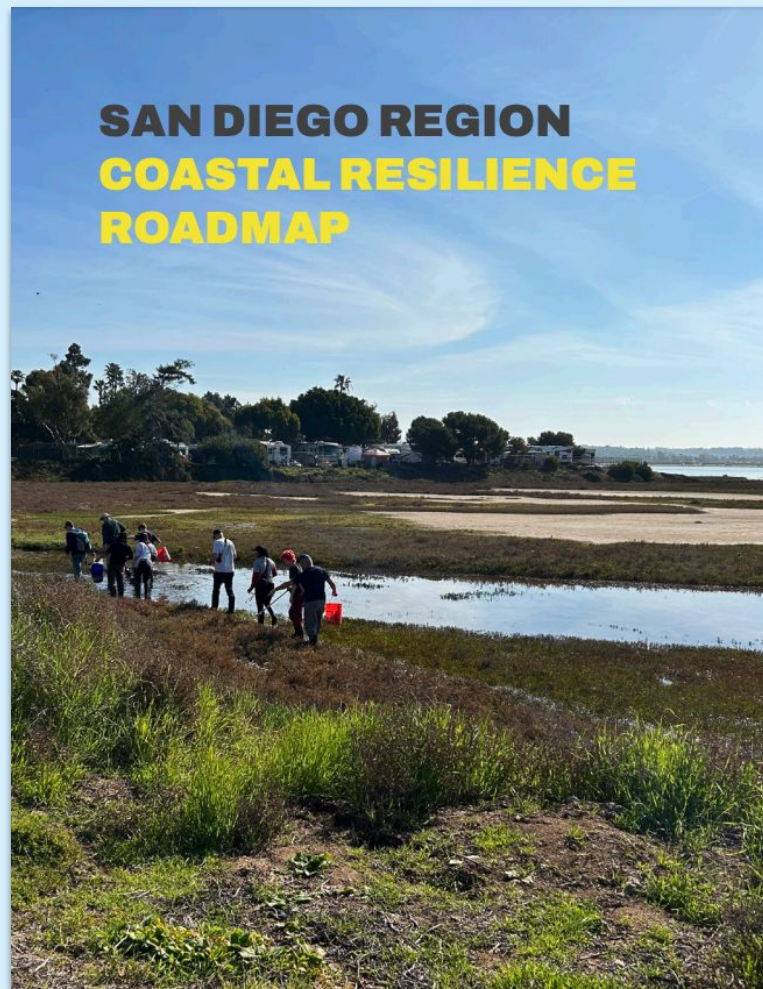


Julia Kim

CivicWell

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.





PRINCIPLE 1: **PARTNERS**

ACTION **2.1**

Deploy resources towards binational coastal resilience, including through broadened philanthropic commitment

BINATIONAL
RESILIENCE
INITIATIVE



INICIATIVA DE
RESILIENCIA
BINACIONAL

ROADMAP DEVELOPMENT

2020

CONTEXTUALIZING



Coastal
Resilience
Survey



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



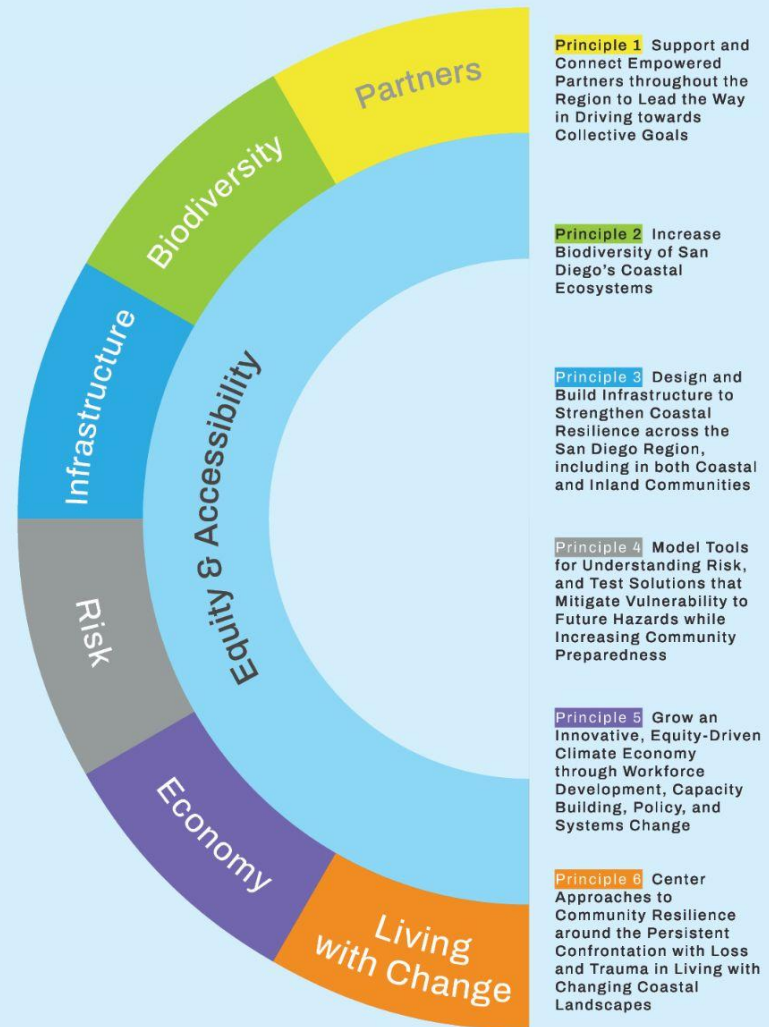
**SDRCC SEA LEVEL RISE
WORKING GROUP**
4 meetings held, with over 65 people engaged



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

ROADMAP STRUCTURE

This 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

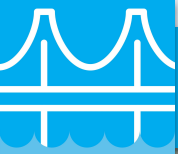
Foster multi-jurisdictional partnerships to enable the consideration of land and green spaces at the bioregion scale

04

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

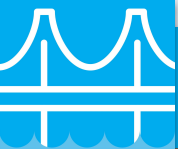
05

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

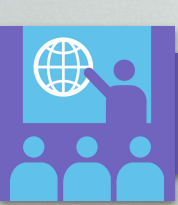
Develop models and communication tools to increase shared understanding of risks and opportunities

04

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

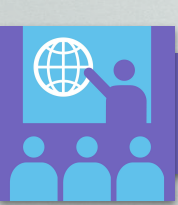
05

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 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 Community
- SD Greenways
- Urban Greening
- Canopy-Enhancing 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.

ROADMAP RESOURCES

SAN DIEGO REGION COASTAL RESILIENCE ROADMAP



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 Program
Partners & Governance	Regional Resilience Framework
Partners & Governance	Comprehensive Vulnerability Assessment
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

Building a More Resilient San Diego Region

Understanding the Current and Potential Role of
Regional Stakeholders in Coastal Resilience

The San Diego Regional Climate Collaborative, Resilient Cities Catalyst
& CivicWell
August 17, 2022



Network
Analysis
StoryMap

Tools for Accelerating Coastal Resilience

The Cost of Coastal Inaction in the San Diego Region

The San Diego Regional Climate Collaborative



Cost of
Inaction
Toolkit

LESSONS LEARNED

READINESS CONDITIONS

- ★ Robust understanding of the region
- ★ Reciprocal relationships already in place
- ★ Desktop literature review to build upon past/existing efforts to inform stakeholder engagement

ROADMAP DEVELOPMENT

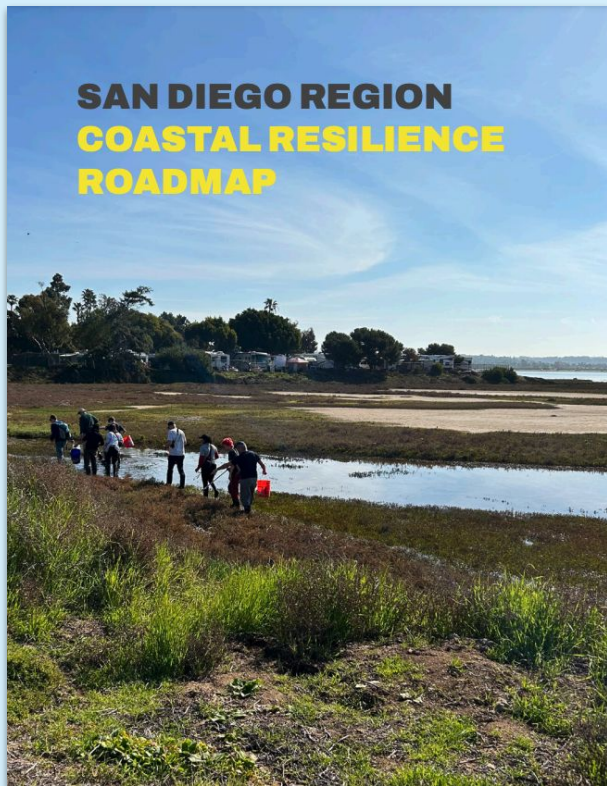
- ★ Consider the usability of the Roadmap beyond the creation of a report
- ★ Focus on foundational principles to establish a shared vision
- ★ Elevate existing and planned projects

TOWARDS OUTCOMES

- ★ Leverage the Roadmap to gain buy-in for priority projects and attract investments
- ★ Repurpose findings to develop additional tools
- ★ Identify a lead coordinator to shepherd forward next steps

Questions?

Thank you!



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

bit.ly/SD-Roadmap

Register for SDRCC's July Network Meeting
(July 27th in San Diego) for a deeper dive:

bit.ly/SDRCC-July2023



**Climate
Collaborative**
SAN DIEGO REGION