

**SAN DIEGO**



**BAYSHORE BIKEWAY**

**RESILIENCY PROJECT**

# CREATION OF A MULTI-BENEFIT COASTAL RESILIENCE CORRIDOR IN THE SAN DIEGO REGION



City of Imperial Beach



Improve Coastal Access



Enhance flood protection for the Bayshore Bikeway corridor and adjacent vulnerable Bayside Neighborhood



Activate the bayfront through equitable placemaking for sustainable economic development and recreation



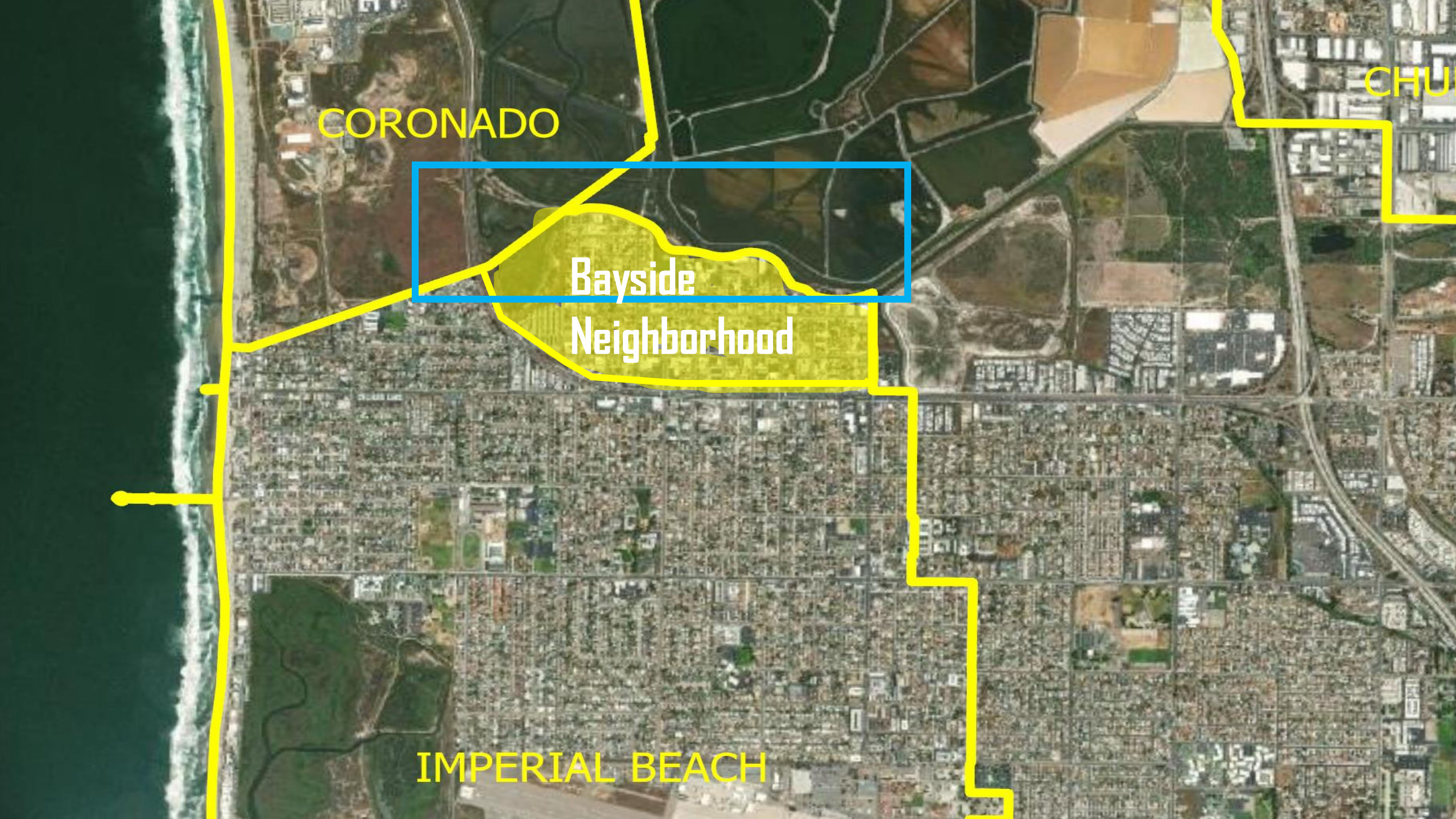
Strengthen ecosystem resilience by adding transitional habitat areas along the bay's edge

CORONADO

CHU

Bayside  
Neighborhood

IMPERIAL BEACH





# bayshore bikeway RESILIENCY PROJECT

Demo Existing Bikeway and Levee;  
Restore Habitat and Create  
New Tidal Connection

Pond 10

New Tidal C  
(proposed)

Pond 10

New Maximum Footprint Levee  
(approx. 100 foot width)

New Optimized Footprint Levee

New Minimum Footprint Levee  
(approx. 60 foot width)

Pond 23

A

Bikeway and Path  
along New Living  
Levee around Pond 10A

Pond 10A

Approx. Levee  
Footprint

City of Coronado  
City of Imperial Beach

B

Flamingo Trail

7th St

C

CHERRY AVE

DELAWARE ST

8th St

ST HILB

Bayside Elementary  
School

CYPRESS AVE

H ST

IMMORY ST

10TH ST

11TH ST



# INTERSECTION OF ADAPTATION AND EQUITY IN PROJECT PLANNING

LOCATION

COMMUNICATION &  
ENGAGEMENT

DESIGN



# LOCATION

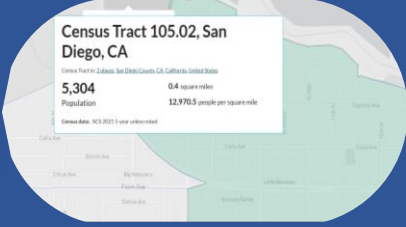
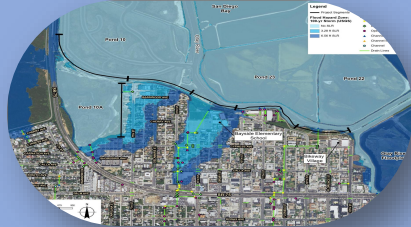
Where we focus investment is the beginning of the equitable planning process

Understanding the community's composition and needs guides the determination of the where

Some factors to consider are:

- What are the issues of today?
- What are the issues of tomorrow?
- Where will the issues of tomorrow be?
- Who is impacted? Who is the most impacted?





# COASTAL HAZARDS: FLOODING

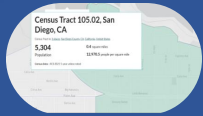




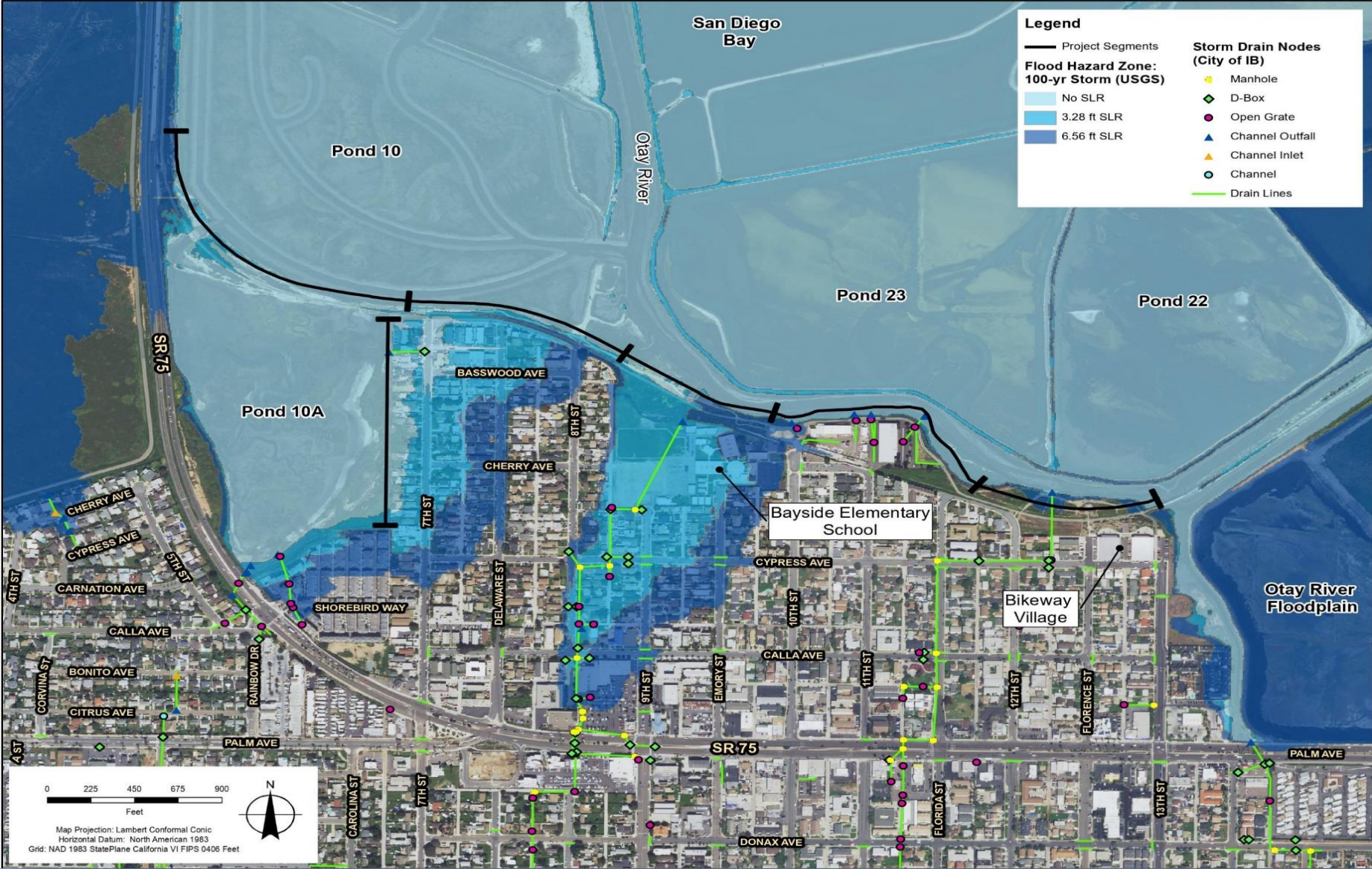
# COASTAL HAZARDS: FLOODING



# COASTAL HAZARDS: FLOODING



# COASTAL HAZARDS: PROJECTED SEA LEVEL RISE



# NEIGHBORHOOD & COMMUNITY DATA

## Census Tract 105.02, San Diego, CA

Census Tract in: [2 places, San Diego County, CA, California, United States](#)

**5,304**

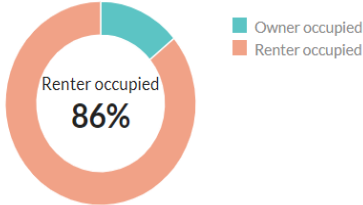
Population

0.4 square miles

**12,970.5** people per square mile

Census data: ACS 2021 5-year unless noted

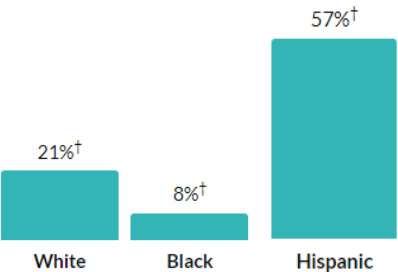
Ownership of occupied units



Poverty

**12.5%**

Persons below poverty line



# INTERSECTION OF ADAPTATION AND EQUITY IN PROJECT PLANNING

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# COMMUNICATION & ENGAGEMENT

Equitable engagement requires a thoughtful process that incorporates all voices into the decision-making process

- Meeting people where they are at
- Creating an inclusive platform where all voices can be heard
- Eliminating historical barriers that have precluded the participation of underrepresented voices



# Community Engagement

## MARKETING COLLATERAL

**bayshore bikeway RESILIENCY PROJECT**

**WELCOME PUBLIC WORKSHOPS PROVIDE AN OPPORTUNITY TO PROVIDE FEEDBACK**

**We want your feedback!**  
PLEASE ATTEND ONE OF THE PUBLIC WORKSHOPS ON:

**Tuesday, March 15th**  
6:00 pm - 7:00 pm  
Imperial Beach Public Library  
810 Imperial Beach Blvd.

**Saturday, March 19th**  
10:00 am - 12:00 pm  
Bikeway Village Plaza  
536 13th Street

**Topics of Discussion**

- Coastal Resiliency
- Enhancing public accessibility
- Activating the Bayside Neighborhood through recreation and commercial opportunities

For more information:  
+1 619-428-0858 or  
mpopenshaw@imperialbeach.gov

## DIRECT: EMAIL

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## DIGITAL CONTENT

**bayshore bikeway RESILIENCY PROJECT**

**BAYSHORE BIKEWAY RESILIENCY PROJECT VIRTUAL WORKSHOP VIDEO RECORDING AVAILABLE HERE**

October 7, 2021, 6:00 - 7:00 PM

**BAYSHORE BIKEWAY RESILIENCY PROJECT OPEN HOUSE VIDEO RECORDING AVAILABLE HERE**

October 9, 2021, 10:30 AM

## SOCIAL MEDIA

**facebook**

**City of Imperial Beach Government**

16 followers · 103 following

Intro

## DIRECT: DOOR-TO-DOOR

**bayshore bikeway RESILIENCY PROJECT**

**We want your input!**

**¡Queremos tu opinión!**

**Public Workshop**  
October 7th, 2021  
6:00 - 7:00 PM

**Public Open House**  
October 9th, 2021  
10:30 AM - 12:00 PM  
Bikeway Village

## PERSON-TO-PERSON

**bayshore bikeway RESILIENCY PROJECT**

www.IBBayshoreBikeway.com

## INTERCEPT SURVEYS

**CITY OF IMPERIAL BEACH**

www.imperialbeach.gov/community\_development

## EVENTS



## OUTDOOR



## BROADCAST: TELEVISION



## PROJECT SUPPORTERS



**LinkedIn**

**Kathryn Beheshi** (She/Her) • Tst

Assistant Researcher

Episode 9 on the #BayshoreBikeway #Prop68 project in #SanDiego is now out! This is an incredibly passionate team led by Chris Helmer out of the City of Imperial Beach. Also included (Meagan Openshaw with City of Imperic...see more



**IB News Center**  
Surf onto the know

**News**

**Bayshore Bikeway Workshop**

Help us plan for Imperial Beach's Bayshore Bikeway Resiliency Project by participating in our virtual workshop on Tuesday, October 7th, 2021 from 6:00 - 7:00 PM. Register in advance for this Zoom meeting here! After the meeting, a confirmation email containing information about joining the meeting, background the...

**Eagle & Times**

**Bayshore Bikeway Resiliency Project: Virtual Office Hours**

Help us plan for Imperial Beach's Bayshore Bikeway Resiliency Project by participating in our virtual office hours on Tuesday, October 7th, 2021 from 6:00 - 7:00 PM. Register in advance for this Zoom meeting here! After the meeting, a confirmation email containing information about joining the meeting, background the...

**nextdoor**

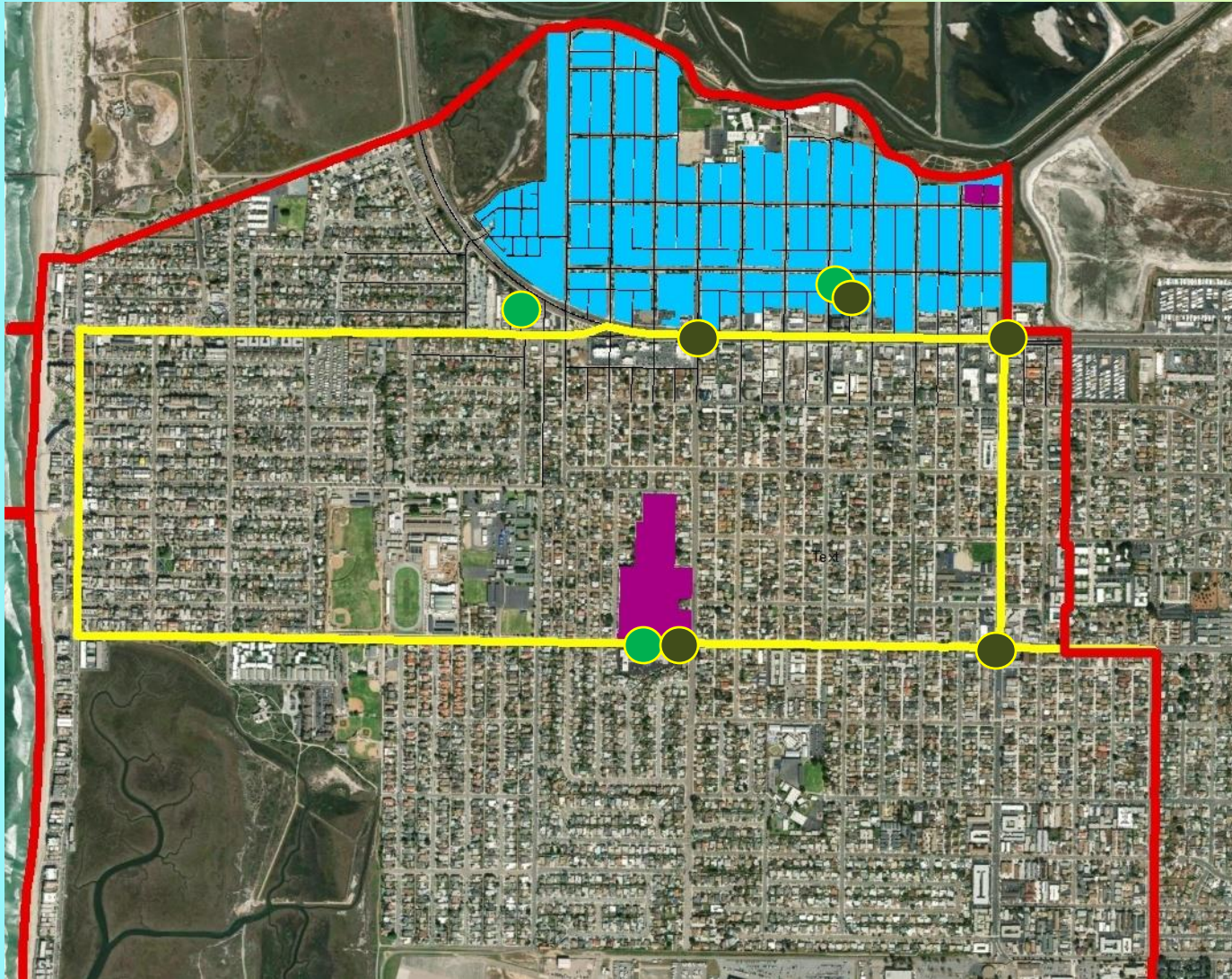
**Bayshore Bikeway Resiliency Project**

**PROP 68 SERIES**

Learn about the Bayshore Bikeway Resiliency Project. Learn about the Bayshore Bikeway Resiliency Project.

Visit [www.IBBayshoreBikeway.com](http://www.IBBayshoreBikeway.com) and watch the video to learn more.

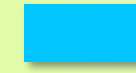
# Geography of Community Engagement



**Full City:** Project website, Nextdoor, Facebook, City website, Email Blasts, Community-Based Organization Members, Church Parishioners



**Major Streets:** Flyers at Commercial Businesses, Banners, Electronic Signage



**Bayside Neighborhood:** Door Hangers, Intercept Surveys, HOA, Commercial Businesses



**Event Focus Areas:** Bikeway Village, Library, Veterans Park (e.g., Workshops, National Night Out, Bike the Bay)



**Banners**

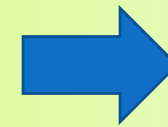


**Digital Message Boards**



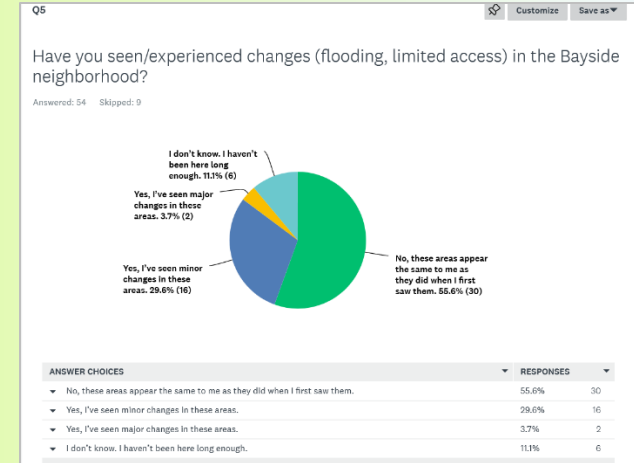
# Community and Stakeholder Input

## DATA COLLECTION



## DATA ANALYSES

Amenity	Flamingo Trail	Birding Trail	Public Works
Lighting	34	30	40
Shade	12	21	21
Play Areas	0	2	36
Fitness	3	6	18
Museum	0	0	20



Bayshore Bikeway Resiliency Project Survey #1

DESIGN SURVEY

**bayshore bikeway RESILIENCY PROJECT**

Bayshore Bikeway Resiliency Project Survey #1

The City of Imperial Beach is developing plans to repurpose a 1.2-mile segment of the Bayshore Bikeway corridor. The City has identified areas on the Bayshore Bikeway and/or in the adjacent Bayside neighborhood that are at risk from coastal hazards like sea-level rise, flooding, and erosion. The City is currently identifying potential solutions to reduce risks from coastal hazards, including:

- Use of the bikeway corridor to provide flood protection to the adjacent neighborhood and the bikeway itself,
- Improved access to and along the bikeway,
- Preserving the natural habitat around the bikeway, and
- Providing opportunities for future economic development and recreation.

Please fill out this survey to provide the City with your thoughts on how Imperial Beach should plan for coastal hazards on the Bayshore Bikeway and in the adjacent Bayside neighborhood.

1. What interest do you have in the City of Imperial Beach's portion of the Bayshore Bikeway and/or the adjacent Bayside neighborhood?

I live and/or own property in (or near) the Bayshore Bikeway and/or Bayside neighborhood.

I own a business in (or near) the Bayshore Bikeway and/or Bayside neighborhood.



# INTERSECTION OF ADAPTATION AND EQUITY IN PROJECT PLANNING

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# DESIGN

Equitable design and placemaking is intentional

Start with the approach and understanding that everyone has the right to accessible open spaces and recreational opportunities that fosters prosperity for all

Create a design that bridges the gap between spaces that historically have served a specific limited population and transform it into a space that serves all














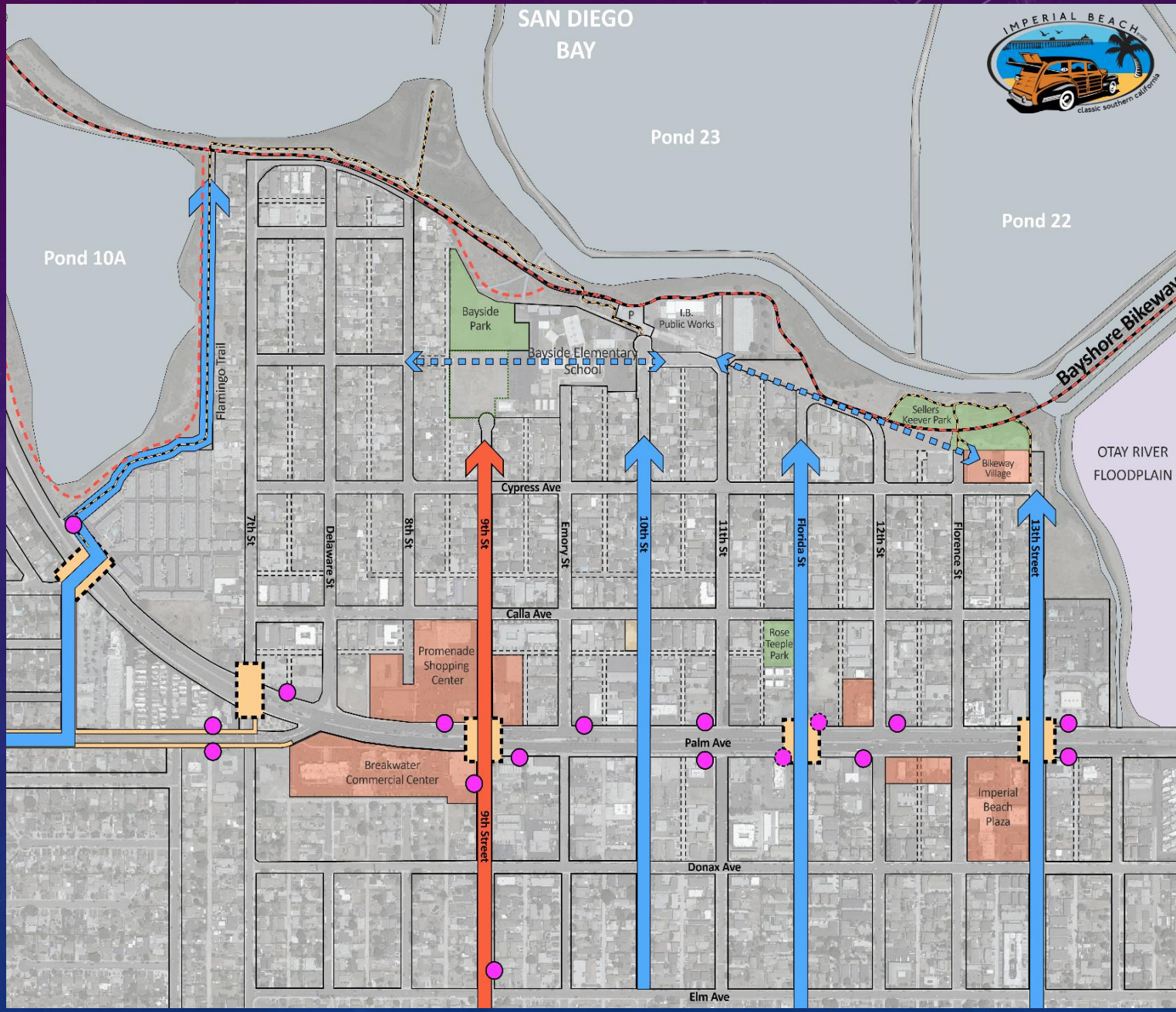
Public Access





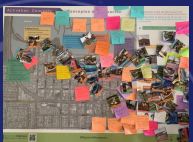
## Public Access

-  Schools/ Escuelas
-  Park, Recreation Area, Community Green / Parque, Área Recreacional, Espacio Verde
-  Commercial-Retail Center / Centro Comercial
-  Marked Pedestrian Crossing / Cruce Peatonal
-  Pedestrian Pathway - Trails / Vía Peatonal - Senderos
-  Bayshore Bikeway / Ciclovía Bayshore
-  Primary Access / Acceso Principal
-  East West Improved Connections / Conexiones Mejoradas Este Oeste
-  Main Downtown Access (City Hall & Library) / Acceso Centro Principal (Ayuntamiento y Biblioteca)
-  Existing Transit Stop / Parada de Tránsito Existente
-  Future Transit Stop / Parada de Tránsito Futura





# CREATE PUBLIC ACCESS NODES & RECREATIONAL OPEN SPACE





CREATE  
PUBLIC  
ACCESS  
NODES &  
RECREATIONAL  
OPEN SPACE



# Flamingo Trail Node Concept - Option 1c

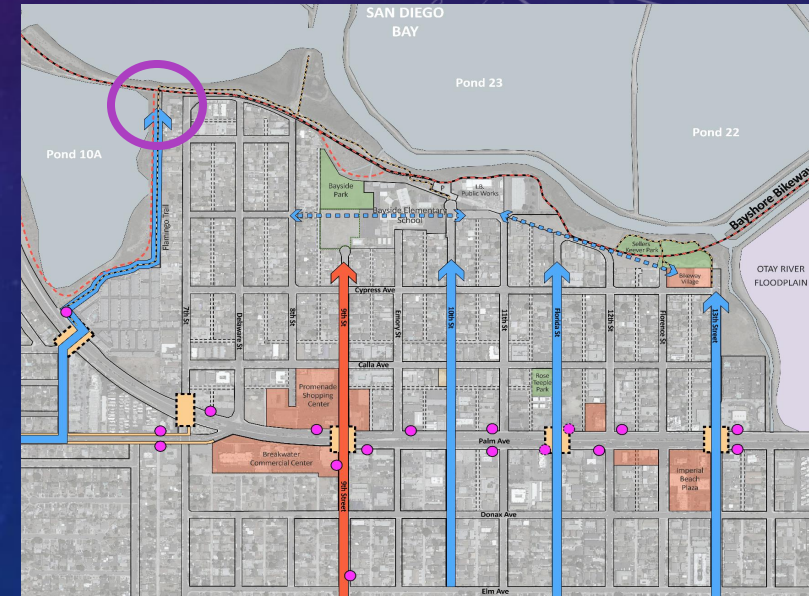
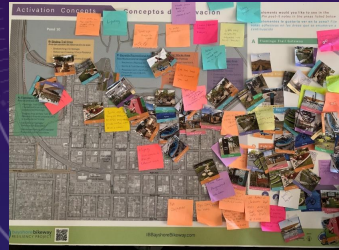


1. Grassy Mound/ Overlook
2. Sculptural Trellis
3. Staging Area/ Bench
4. Bike Path with Paving Markers
5. DG Pedestrian Trail
6. Gravel Shoulder
7. Boardwalk
8. Concrete Wall (3' to 5' tall)
9. Planted Berm

DRAFT - 8/2/2022 - For Discussion Only All Images are shown to illustrate planning concepts only and do not represent a design, project or development proposal



CREATE PUBLIC ACCESS NODES & RECREATIONAL OPEN SPACE





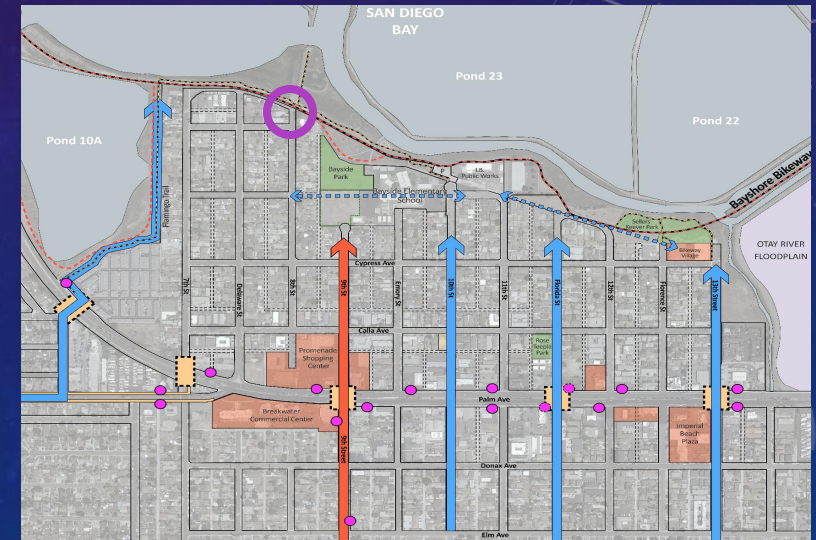
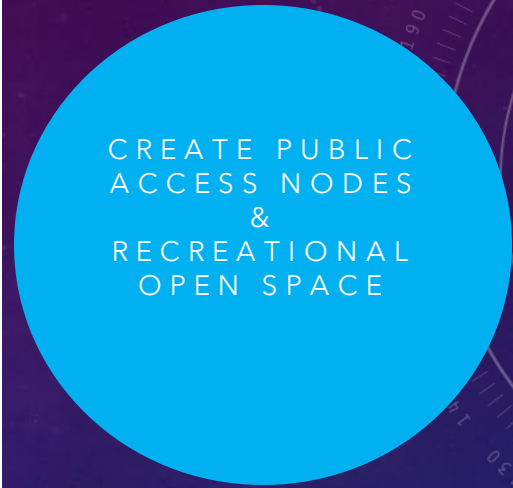
# 8th Street Node Concept



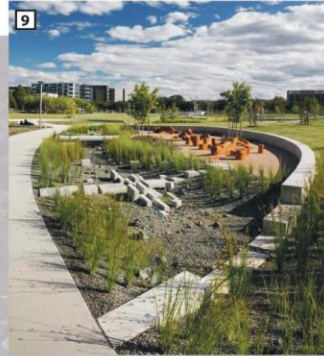
1. Curved Bench under Existing Tree
2. Concrete Stairs
3. Boardwalk Crosswalk
4. Bike Path with Paving Markers
5. DG Pedestrian Trail
6. Gravel Shoulder
7. ADA Ramp
8. Enhanced Paving
9. Concrete Wall (3' to 5' tall)



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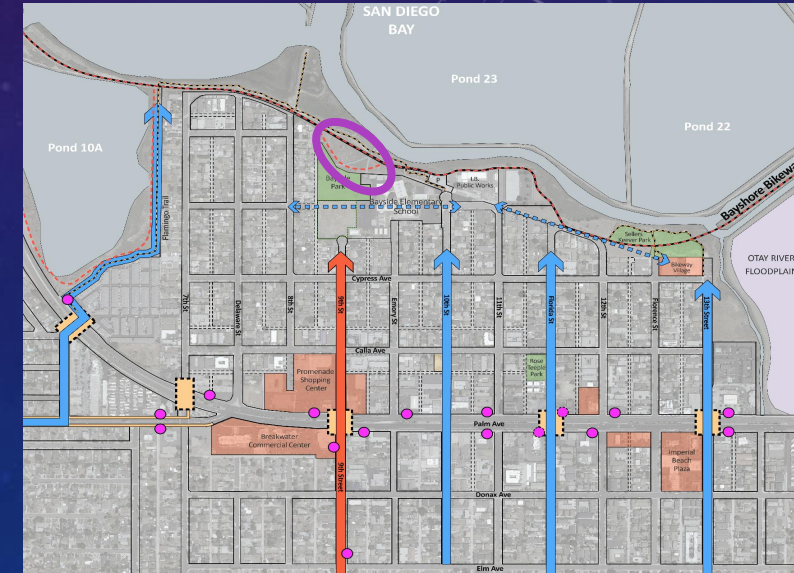
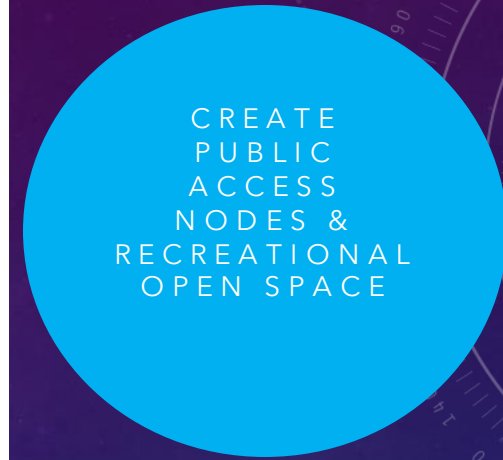
# Bayside Park Node

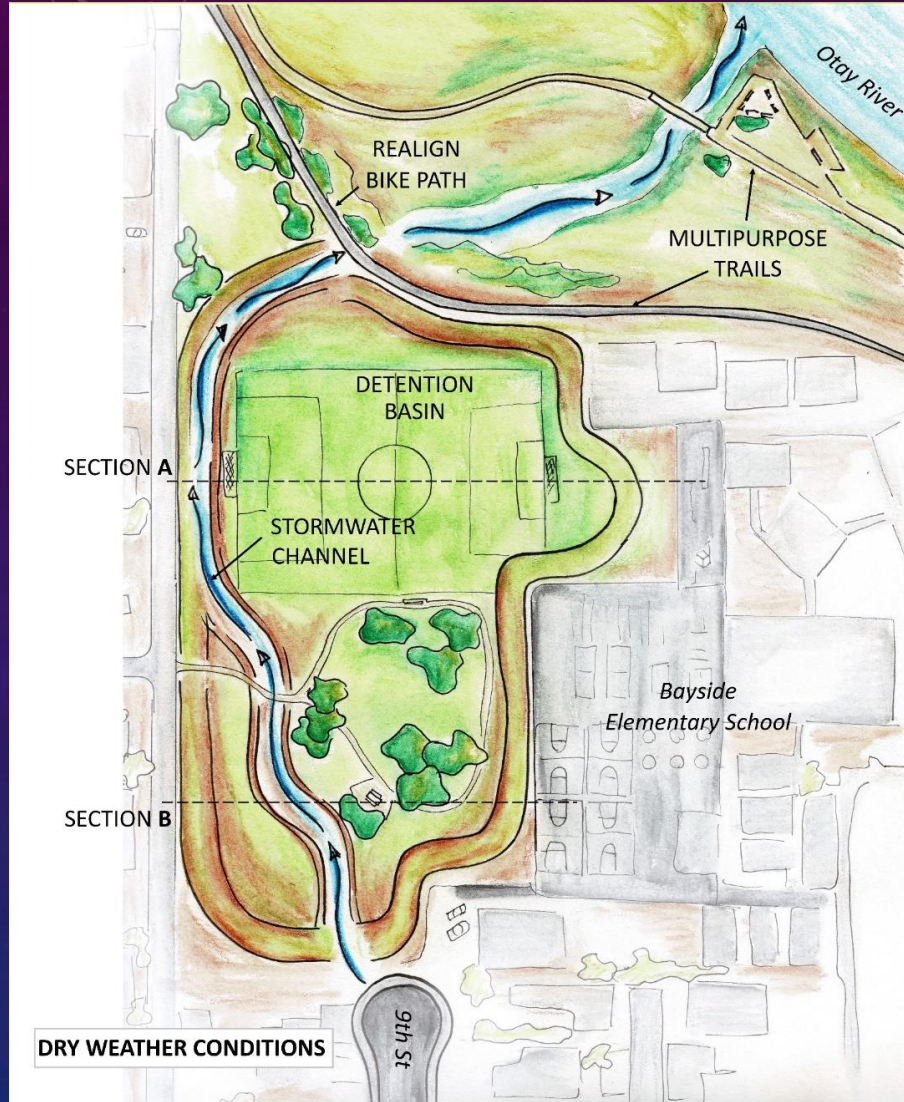


1. Fencing
2. Sculptural Trellis
3. Staging Area/ Bench
4. Bike Path with Paving Markers
5. DG Pedestrian Trail
6. Gravel Shoulder
7. Boardwalk
8. Concrete Wall (3' to 5' tall)
9. Planted Berm

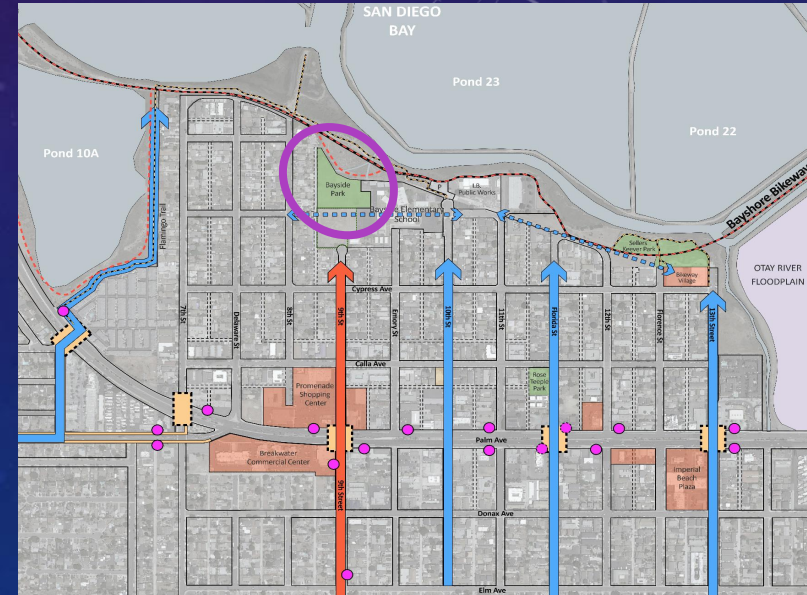
scale: 1" = 30'

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CREATE PUBLIC ACCESS NODES & RECREATIONAL OPEN SPACE



# SAN DIEGO BAYSHORE BIKEWAY RESILIENCY PROJECT



**bayshorebikeway**  
RESILIENCY PROJECT

Meagan Openshaw

[mopenshaw@imperialbeacha.gov](mailto:mopenshaw@imperialbeacha.gov)



# Sea-level Rise Adaptation in So. California and Opportunities to Focus on Equity

*Adamson House Case-Study*

**Barbara Tejada, California State Parks**  
**David Revell, Integral Consulting**



California Department of  
**Parks and Recreation**



# Resources at Risk

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# Adamson House

- Adamson Home on “Vaquero Hill”, with accessory structures and landscape, listed on the National Register of Historic Places since 1976
- Best example of Malibu Tile and representative of the Rindge Family ownership of the Malibu Rancho



Photo: Christian Estrada 2012, TCLF

# *Humaliwo (CA-LAN-264)*

- Chumash ethnohistoric village site of *humaliwo*, listed on National Register since 1976
- Represents at least 5,000 years of human history
- Considered to be the eastern capital of the Chumash





# Malibu Historic District (Surfrider Beach)

- First, Second and Third Points, along with Lagoon and extending to Malibu Pier listed on National Register since 2018
- World Surfing Reserve (1st designee)



# Project Background



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# Past Erosion and Armoring

➤ Seawall installed after 1983 El Nino



*Photos: CA State Parks*

# Past Erosion and Armoring

➤ Previously placed emergency riprap

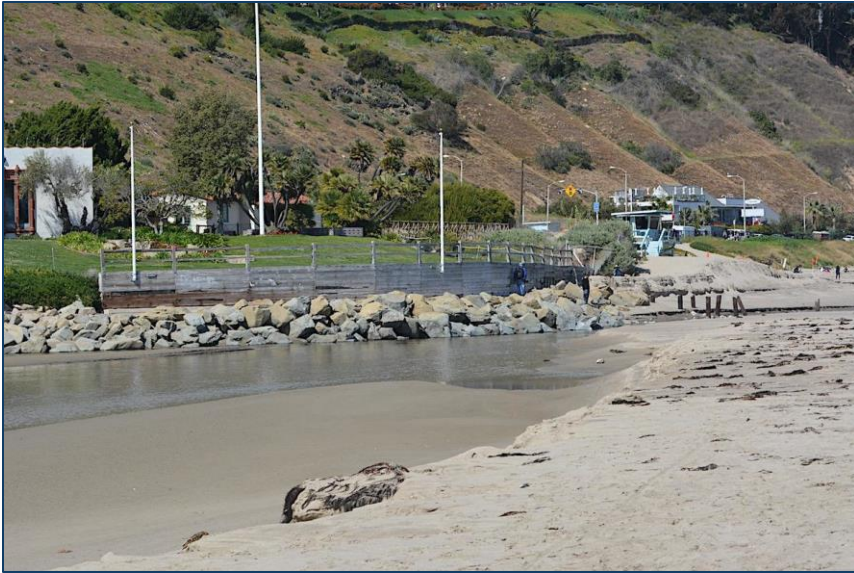


Photo: CA State Parks



Photo: LA County Beaches & Harbors

# Site Overview



# Site Erosion 2016 - 2019



2016. Bathhouse and vegetation present



March 2018. Palm and bathhouse scoured



April 2019. Bathhouse undermined.



November 2019. Bathhouse eroded

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# Site erosion

November 2019. Bathhouse removed, fallen palm tree, collapsed stone stairs.



*Photos: CA State Parks*

# Erosion in Action - April 2021





# Wave overtopping



January 2020



February 2022

*Photos: CA State Parks*

# Short-term Dynamic Conditions



# 2018 Downcoast Erosion and Rip Rap Response

Community disapproval about disruption of recreational beach use caused State Parks to want to take a different approach to address Adamson House erosion.



2018 Photo: Charles Lester

# Nature Based Protection Approach

- ◆ ~10 year life of project to buy time while Rindge Dam is removed and natural sediment processes are restored
- ◆ Use native materials from Santa Monica Mountains
- ◆ Address both causes of erosion
- ◆ Maintain recreation, habitat and cultural resources
- ◆ Build knowledge base



# Project Engagement Process

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# Public Engagement Surf Community

- World Surfing Reserve Local Stewardship Council
- Surfrider Foundation and Save the Waves
- Malibu Longboard Association
- Prominent local surfers - "neighborhood liaisons"
- Multiple historically underrepresented surf groups
- Black Girl Surf, Brown Girl Surf, others



# Tribal Engagement and Challenges

- ◆ Consultation initiation letters sent to 16 individuals/organizations April 2022
- ◆ No responses – highlights difficulty of tribes to handle the volume of requests, particularly non-federally recognized
- ◆ Familiarity with governance changes in communities
- ◆ Need alternate strategies and funding for engagement



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# Thank You!

