

# SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT

BCDC DRB  
1.6.2025





ALCATRAZ

GOLDEN GATE BRIDGE

SAN FRANCISCO BAY

CRISSY FIELD

THE TUNNEL TOPS

SF MARINA

FORT MASON

AQUATIC PARK COVE

FISHERMAN'S WHARF

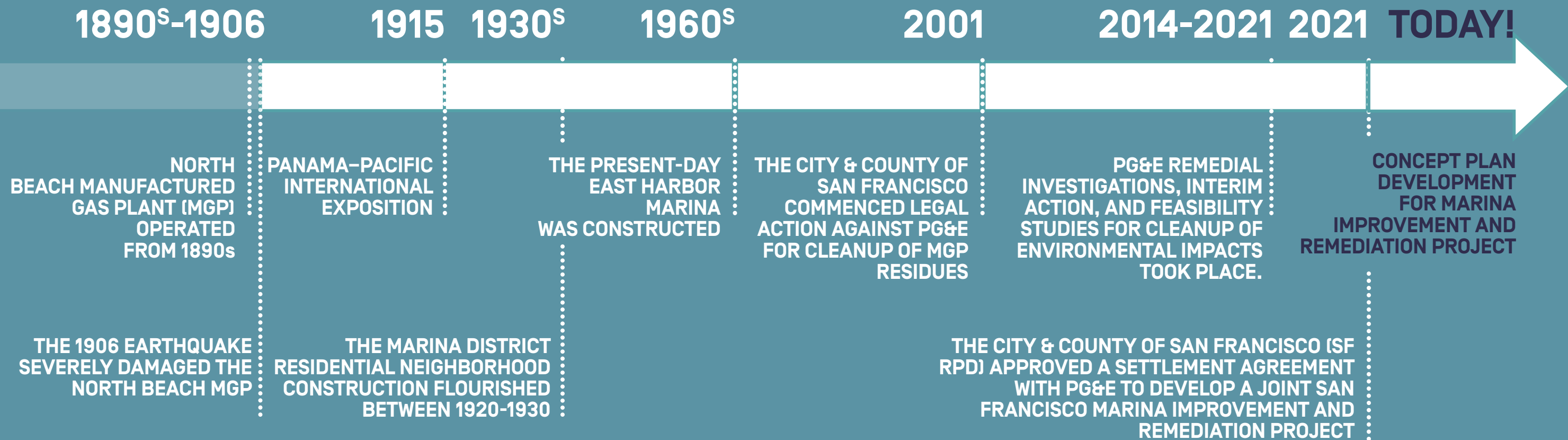
NORTH BEACH

MARINA DISTRICT

THE PRESIDIO

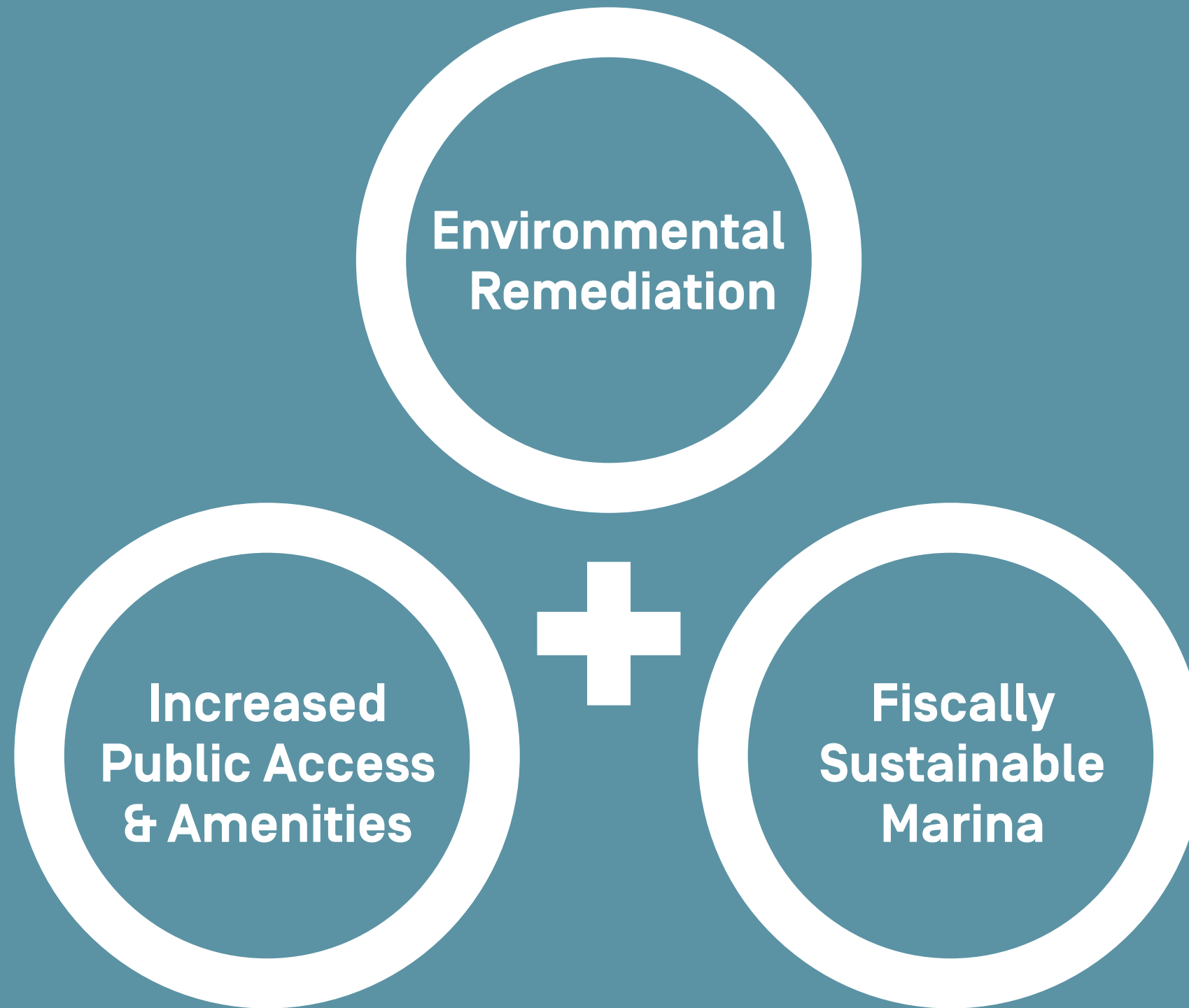
SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT  
SITE





SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT

**SITE HISTORY**



SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT  
**PROJECT GOALS**



## WHAT TYPE OF REMEDIATION IS TAKING PLACE & WHY?

PG&E developed feasibility studies evaluating different remediation alternatives. The "Renovation Remediation Plan" introduces the least amount of environmental and community disruption while protecting human health and the environment and supporting development of new community benefits for the public.

SAN FRANCISCO BAY

On and offshore monitoring during/after project and institutional controls to protect site integrity

Dredge and cap below marina operational depth

BAY TRAIL

MARINA GREEN

EAST HARBOR

Targeted deeper dredge

Reactive barrier installed as extra layer of protection against MGP residue migration

MARINA BLVD.

Southern portion of east harbor will not be dredged, leaving a natural sediment cover over MGP residues

- Reactive barrier
- Cap
- Targeted Deeper Dredge
- Dredge with Cap Placement
- Preserve Existing Sediment Cover

## SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT REMEDICATION DETAILS



# REMEDIAL INVESTIGATION AND RISK ASSESSMENT

## Studies generally found that MGP residue in sediment is:

- Not migrating from original deposited location (100+ years ago)
- Buried under accumulated sediment cover
- Not entering surface water or groundwater

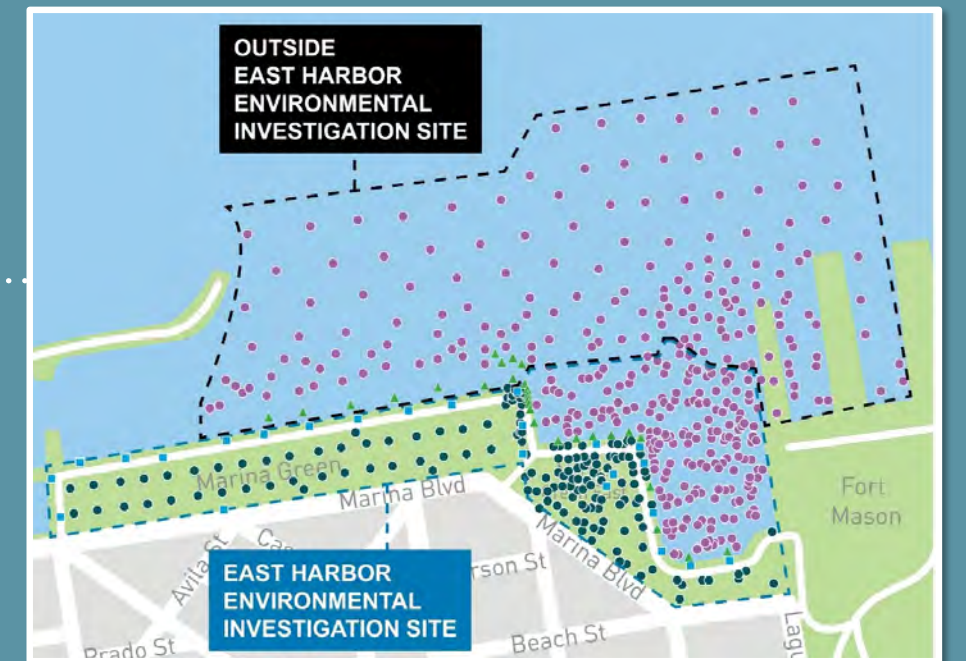
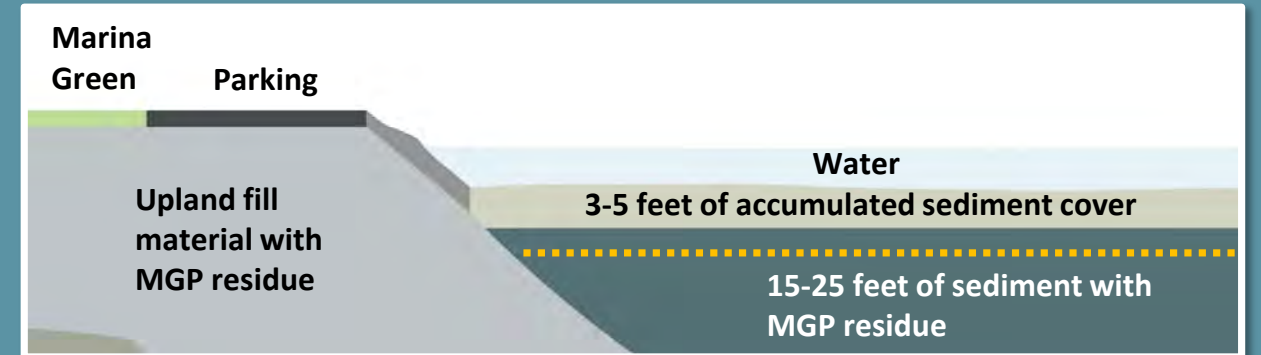
## Risk assessment found:

- Sediment cover generally isolates MGP residue, preventing it from interacting with people and wildlife
- Dredging to return East Harbor to RPD's desired marina operational depths may uncover the MGP residue

## Recommended Remedy:

### Dredging to Accommodate Marina Improvements and Capping

- Sustainably addresses 100% of the risks presented by the MGP residue
- Compatible with RPD's renovation of the marina
- Transfers the least contamination through neighborhoods to dewatering and disposal facilities



#### EAST HARBOR

- 290 Sediment sample stations
- ▲ 21 Shoreline surface water samples
- 63 Groundwater monitoring wells
- 220 Soil borings

#### OUTSIDE EAST HARBOR

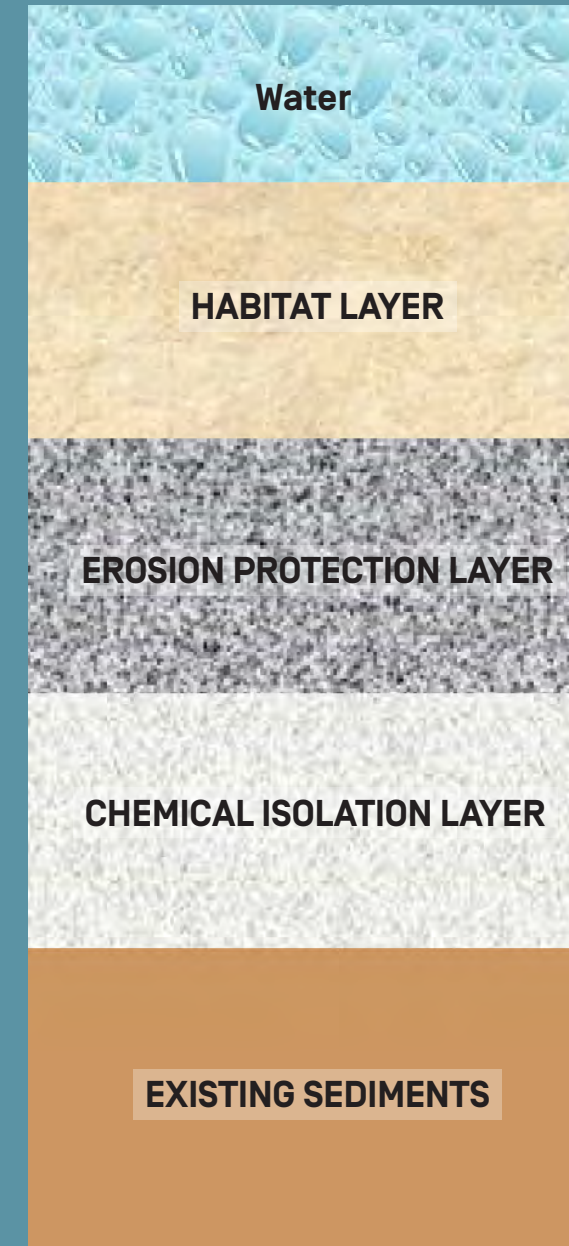
- 163 Sediment sample stations
- ▲ 11 Shoreline surface water samples



# CAPPING SEDIMENT REMEDIATION TECHNOLOGY

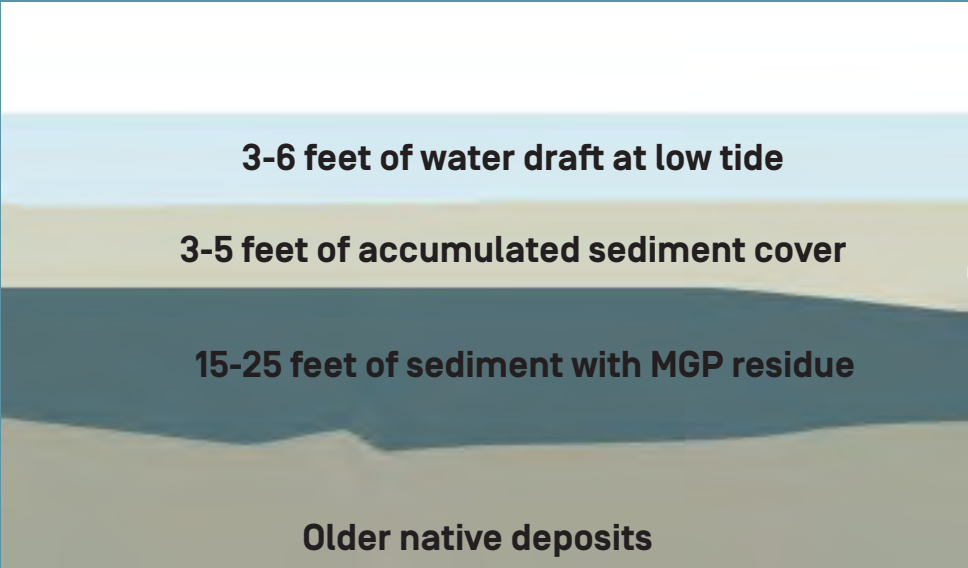
- Capping is often the best practice remediation technology for deep, non-mobile legacy contamination, like the conditions at the site
- Cleanup technology approved by EPA and used for decades at more than 100 sites throughout the US, including in the Bay Area [e.g., Potrero, India Basin, Oyster Point]
- Existing sediment cover can effectively work as a cap to chemically and physically isolate contamination

## CONCEPTUAL CAP LAYERS

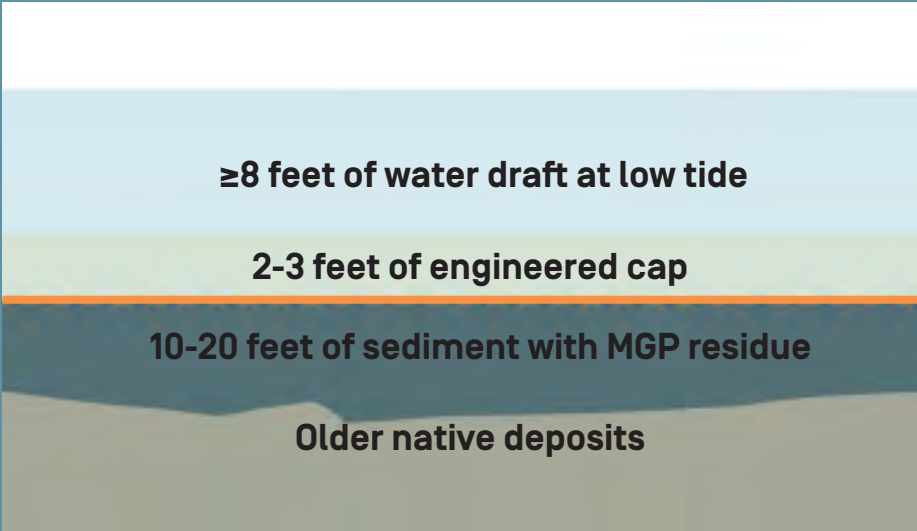


# BEFORE AND AFTER REMEDIATION CONDITIONS

EXISTING CONDITIONS  
(EAST HARBOR MARINA)

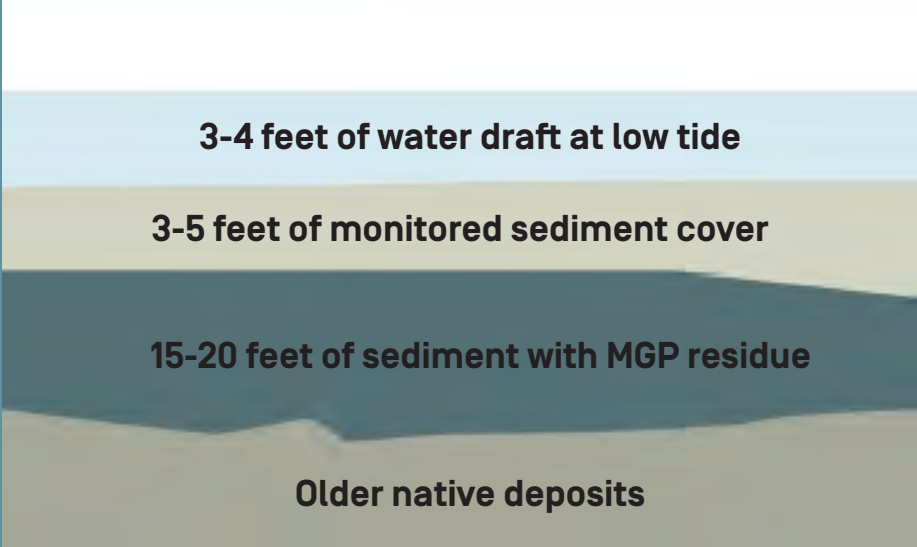


NORTHERN MARINA AREA: ENGINEERED CA



Dredging depth

SOUTHERN RECREATION AREA:  
MONITORED SEDIMENT COVER







WAVE ORGAN

SAN FRANCISCO BAY

WEST HARBOR

BAY TRAIL

EAST HARBOR

MARINA GREEN

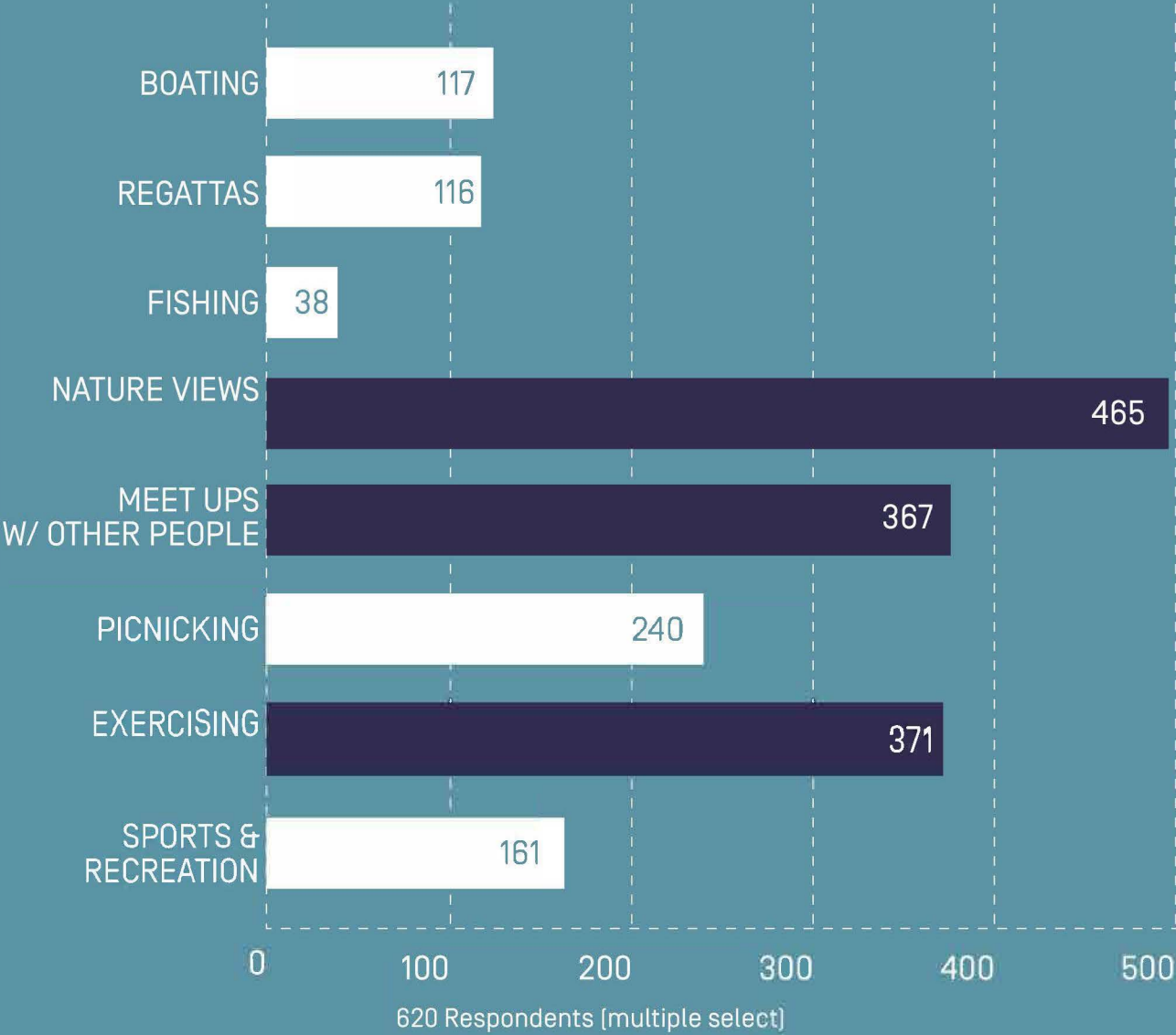
MARINA BLVD.

MARINA TRIANGLE

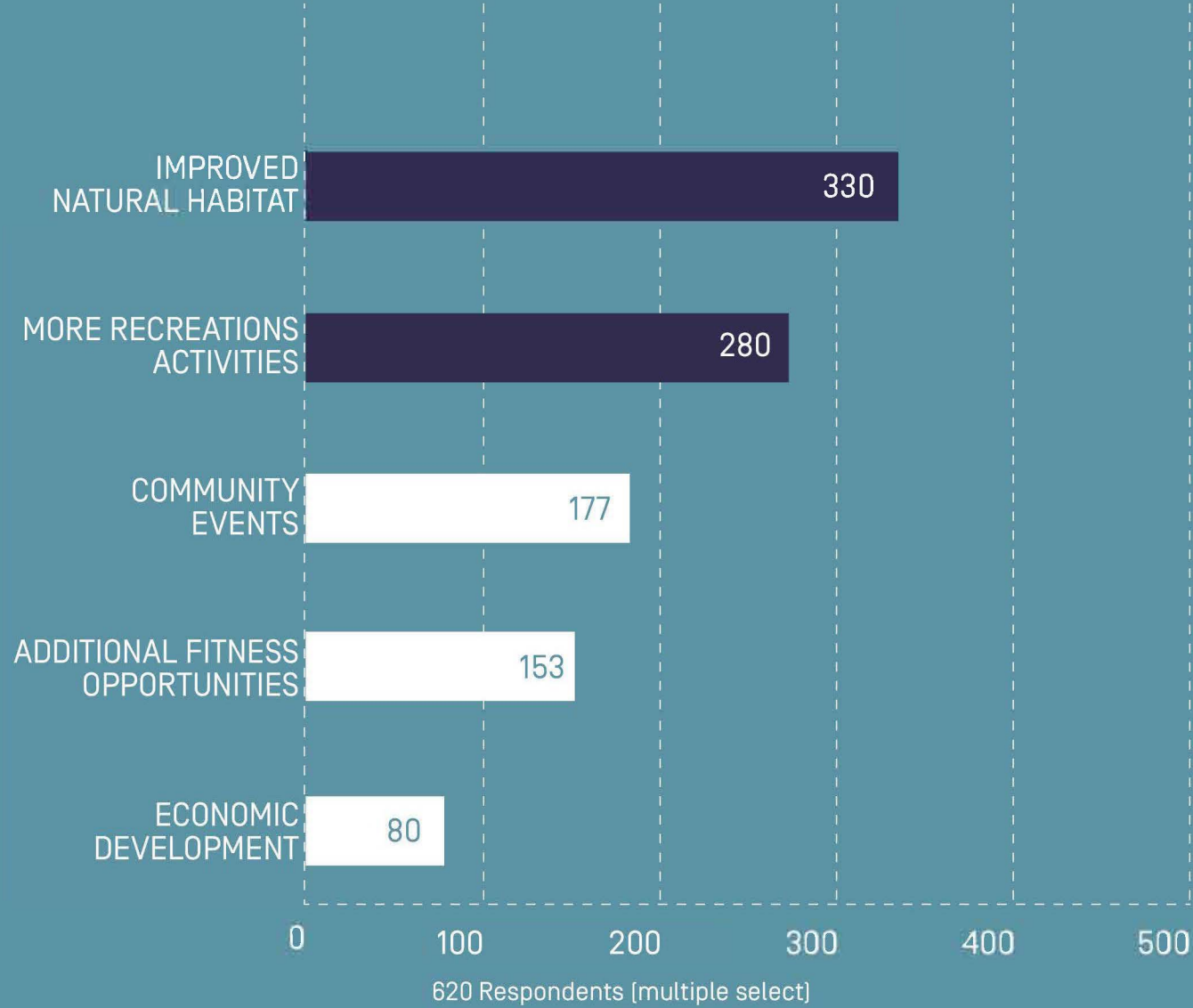
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**EXISTING SITE PLAN**



What type of activities do you currently enjoy in the Marina?



Which of the following excite you about the Marina?



SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT  
**SURVEY DATA**



- **1 PROJECT WEBSITE**
- **16 SOCIAL MEDIA POSTINGS**
- **5 COMMUNITY MEETINGS**
- **436 ATTENDEES**
- **2 ONLINE SURVEYS**
- **825 SURVEY RESPONSES**
- **1,000' RADIUS PHYSICAL MAILING LIST**
- **900+ DIGITAL MAILING LIST**
- **1 WATER BOARD PUBLIC MEETING**





# SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT COMMUNITY ENGAGEMENT







# PUT THE PARK IN MARINA PARK!

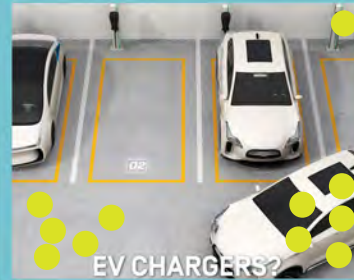
WHAT AMENITIES DOES THE SAN FRANCISCO MARINA NEED?

¿QUÉ AMENIDADES NECESITA LA MARINA DE SAN FRANCISCO?

三藩市馬利納 (MARINA) 需要什麼設施?

ANO-ANONG MGA KATANGIAN ANG KAILANGAN NG SAN FRANCISCO MARINA?

SAN FRANCISCO MARINA PARK



Beach Volleyball Courts!!!

Proper depth / annual dredge

CONNECTION TO PERRY TO IMPROVE CONNECTIVITY & TRANSPORTATION OPTIONS WITHIN GATEWAY TO HEALTH & EAST BAY

STRAIGHT Entry therefore for boats

LESS PARKING AND PARKING RELATED PROGRAM

LET'S MAINTAIN THE PEDESTRIAN EXPERIENCE & IMPROVE IT!

Boater restrooms w/ showers for Marina Tenants

Focus on nature / birds / plants / trees / water / landscape

address Dredging

Make a promenade / walkway out for the breakwater

LESS MARINA

BETTER SECURITY 1100 'NO BAD BOYS'

6 Man OCC 1 Man OCC

OUTRIGGER STORAGE

→ HANDBOOK →

→ NATIVE AMERICAN →

OCC = Outrigger Canoes

rowing shell storage

BOATUS DOCK EMERGENCY RESCUE

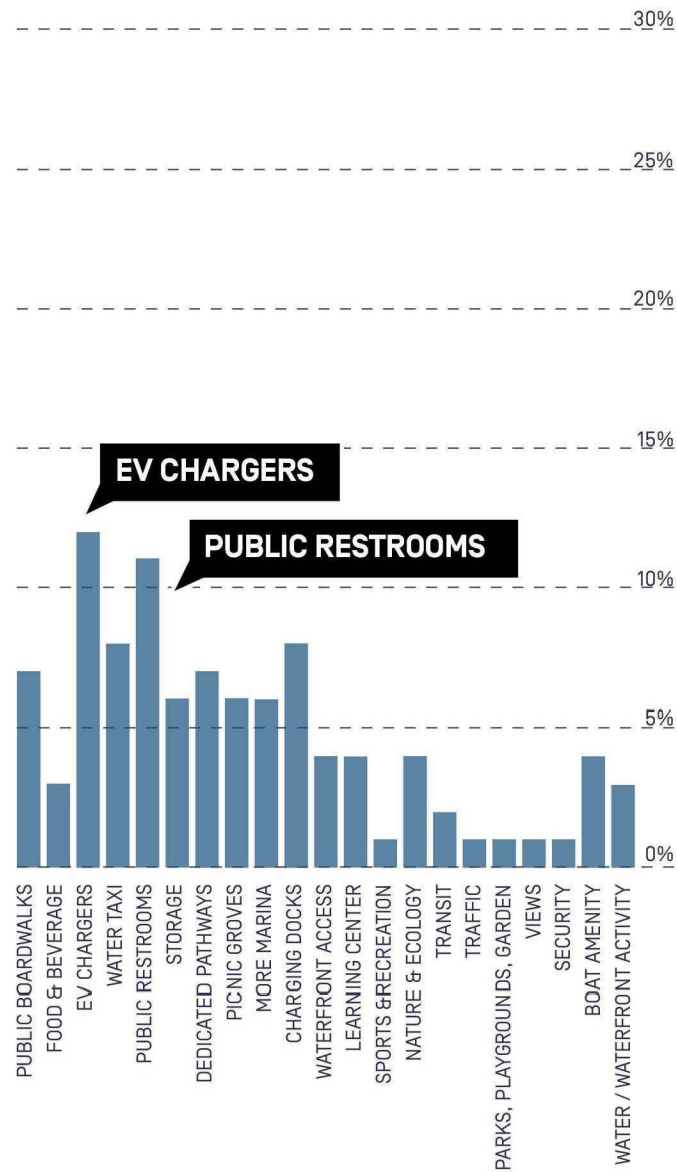
Softly railings

MORE WATERFRONT TRASH CANS RECYCLING

## MORE IDEAS?

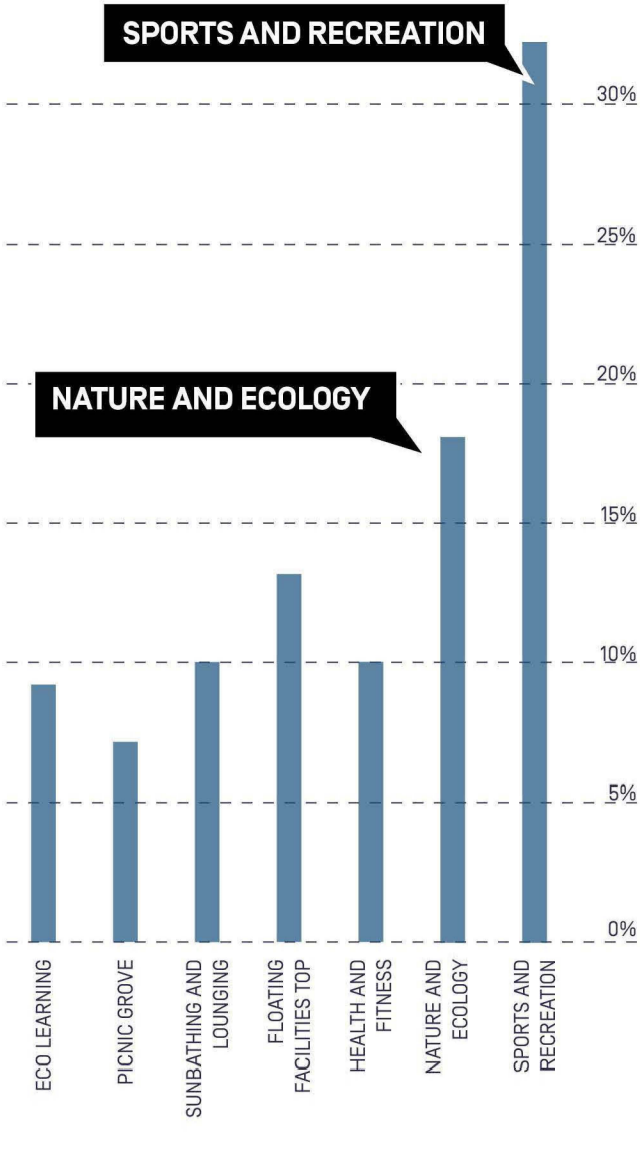
## SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT COMMUNITY ENGAGEMENT





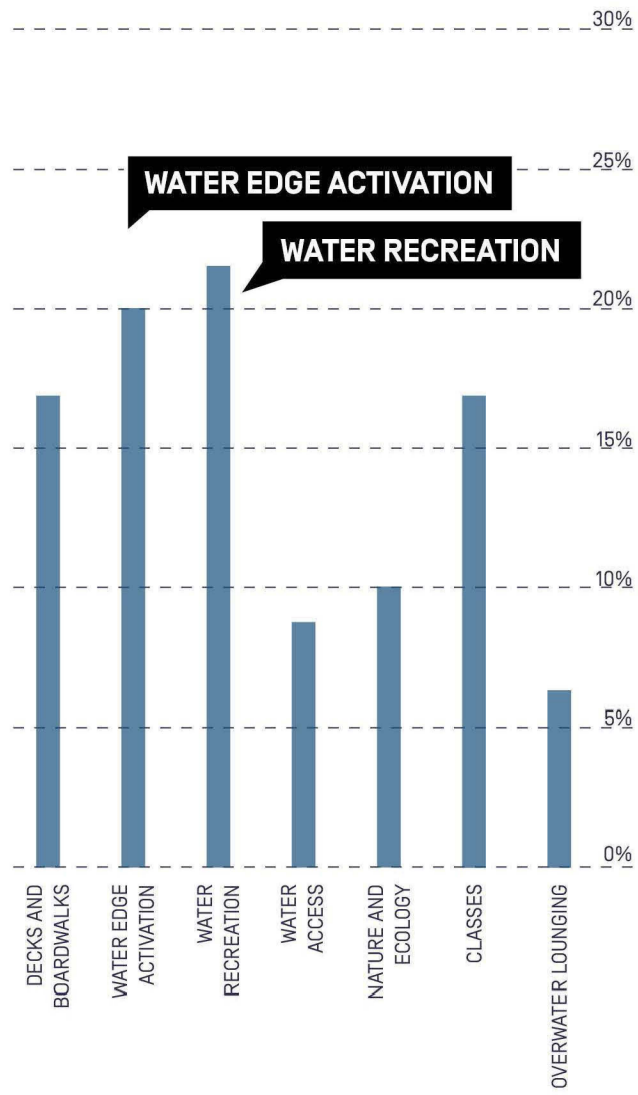
AMENITIES

WHAT AMENITIES DOES THE SAN FRANCISCO MARINA NEED?



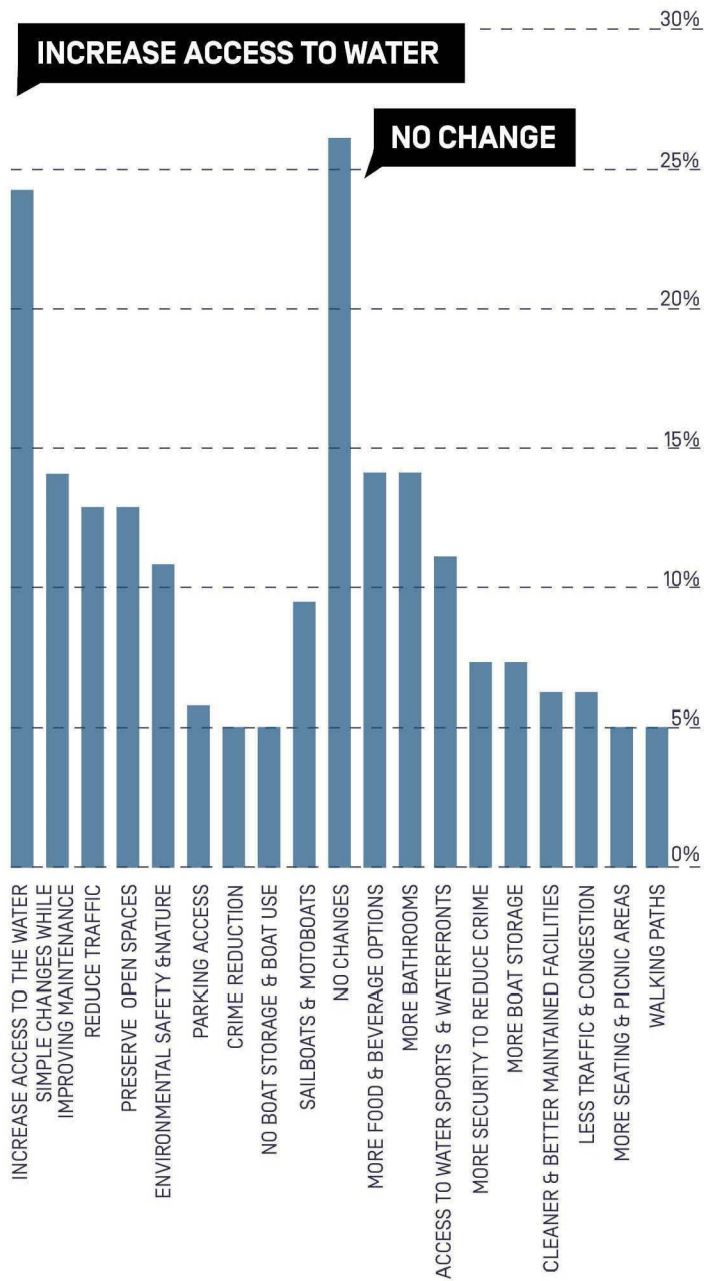
MARINA PARK  
ATTRACTIONS

WHAT WOULD ATTRACT YOU MOST TO THE MARINA PARK?



WATERFRONT  
ATTRACTIONS

WHAT WOULD ATTRACT YOU MOST TO THE MARINA WATERFRONT?



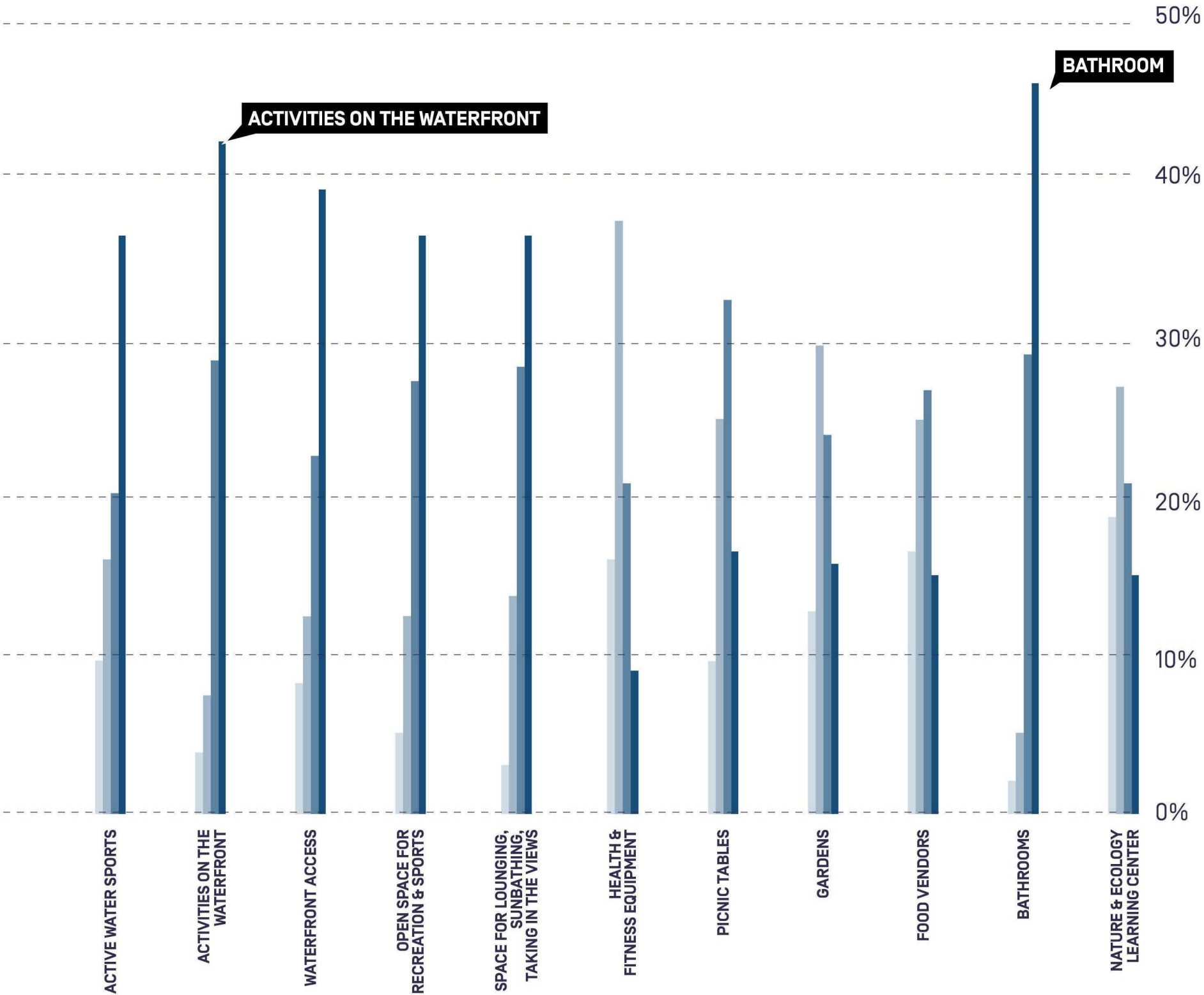
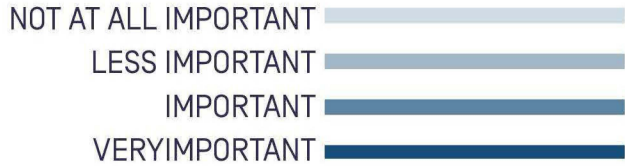
MORE IDEAS

ANY OTHER IDEAS & QUESTIONS FOR A NEW MARINA PARK?



# AMENITY IMPORTANCE

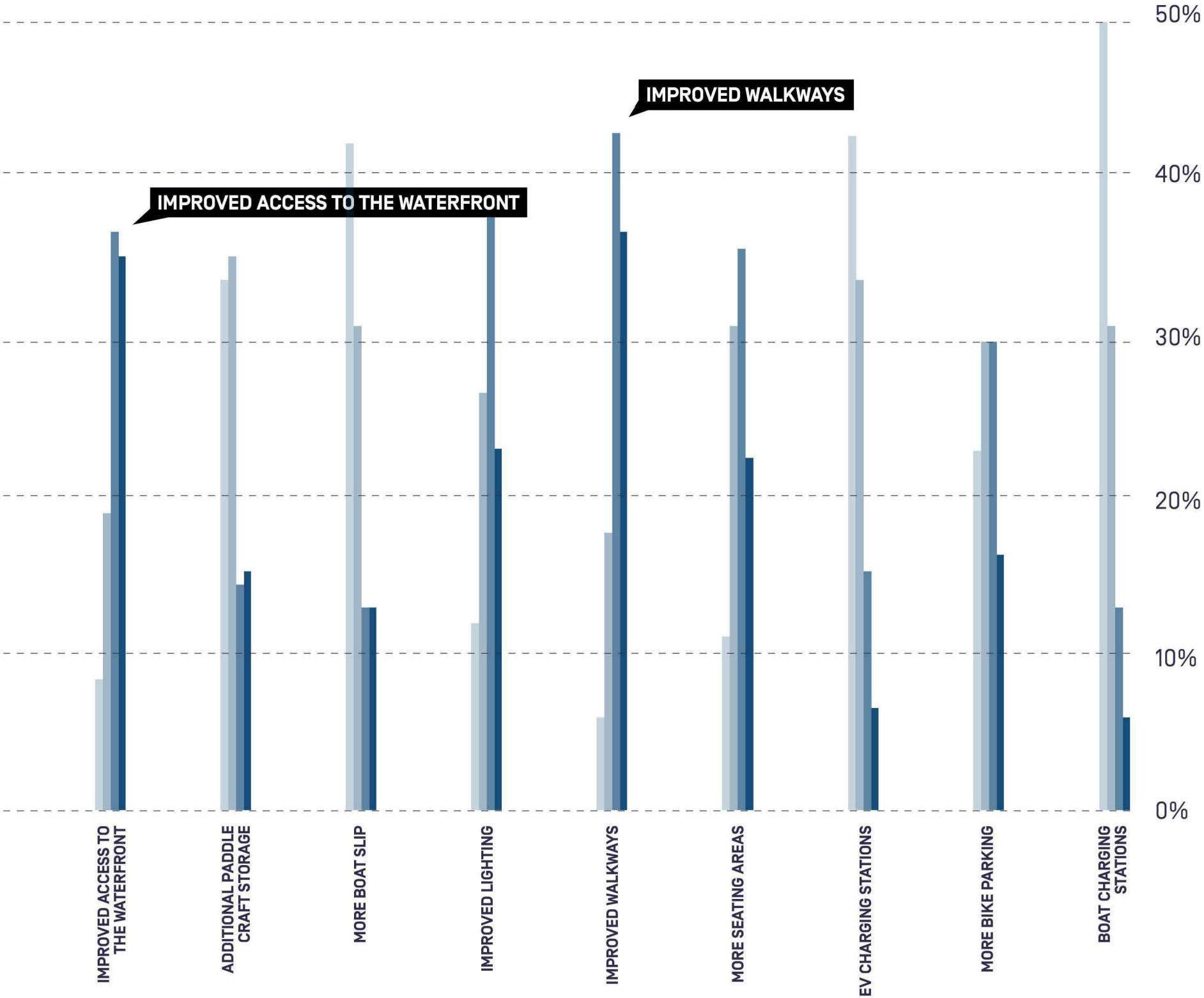
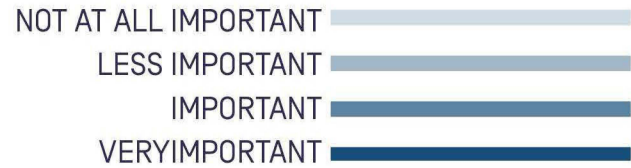
HOW IMPORTANT ARE THE AMENITIES AT A FUTURE MARINA PARK?





# INFRASTRUCTURE IMPORTANCE

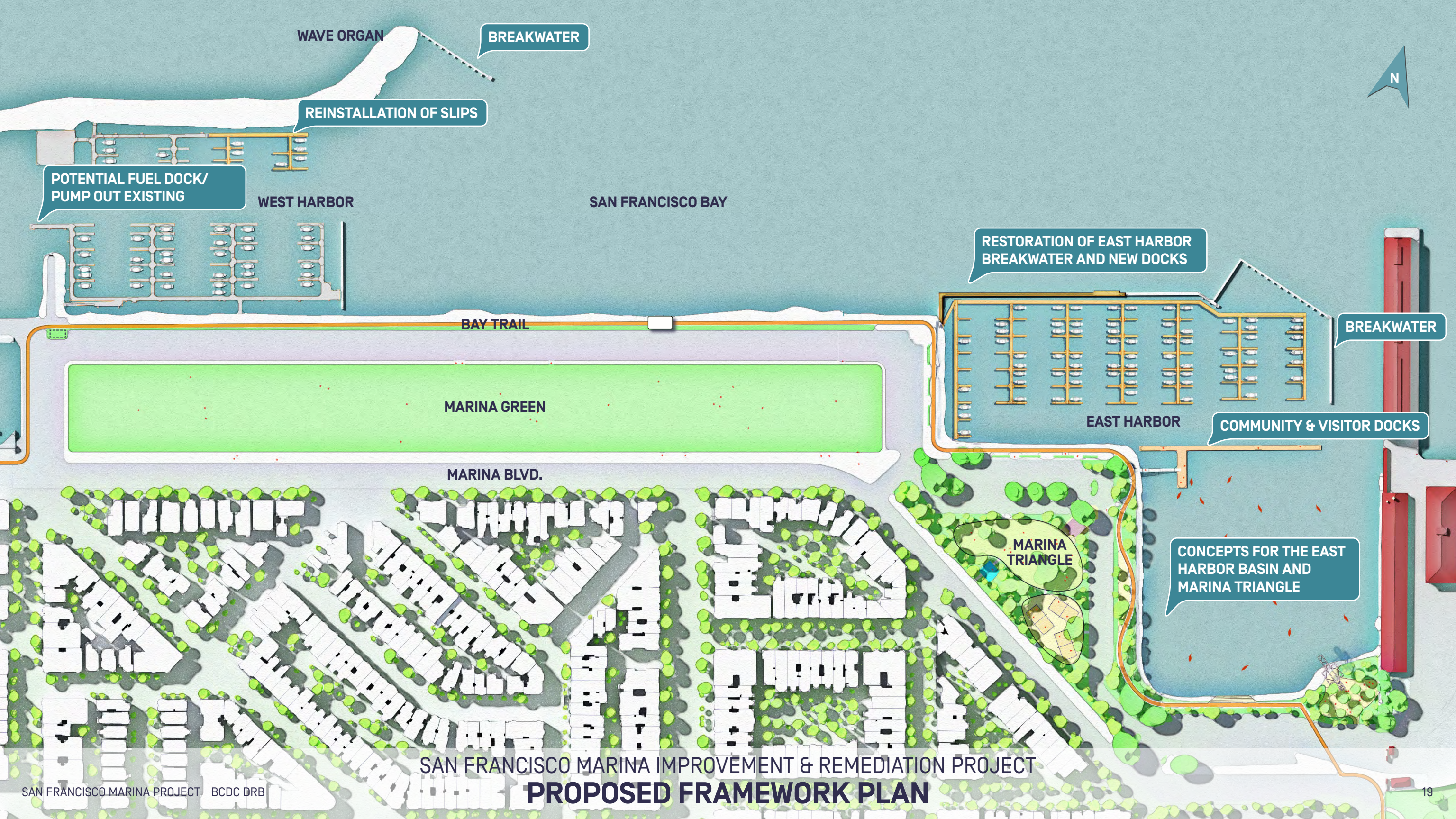
HOW IMPORTANT ARE THE INFRASTRUCTURE IMPROVEMENT WOULD YOU LIKE TO SEE AT THE MARINA?











WAVE ORGAN

BREAKWATER

REINSTALLATION OF SLIPS

POTENTIAL FUEL DOCK/  
PUMP OUT EXISTING

WEST HARBOR

SAN FRANCISCO BAY

BAY TRAIL

MARINA GREEN

MARINA BLVD.

RESTORATION OF EAST HARBOR  
BREAKWATER AND NEW DOCKS

EAST HARBOR

BREAKWATER

COMMUNITY & VISITOR DOCKS

MARINA  
TRIANGLE

CONCEPTS FOR THE EAST  
HARBOR BASIN AND  
MARINA TRIANGLE

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**PROPOSED FRAMEWORK PLAN**





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**EXISTING MARINA WATERFRONT**











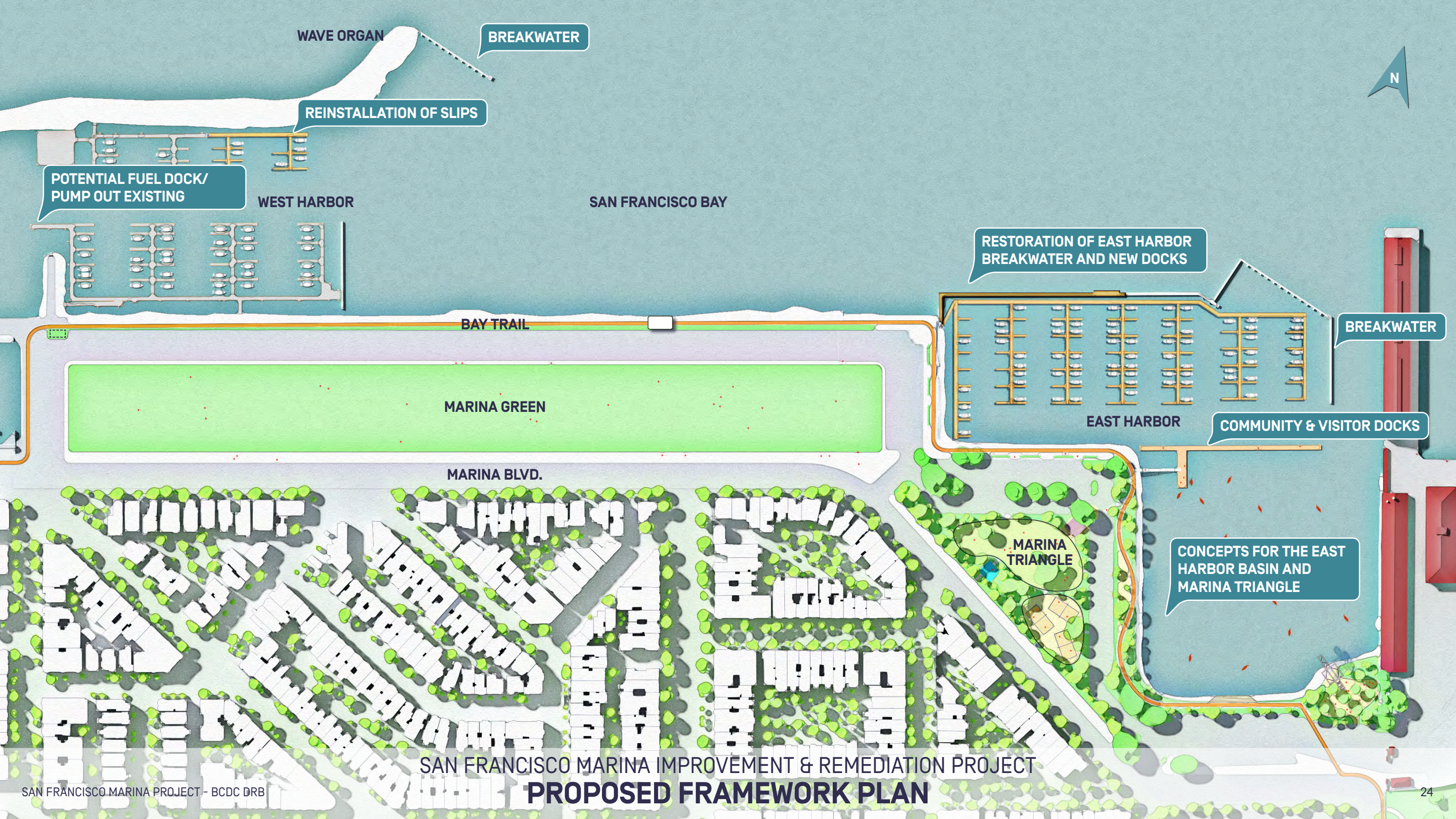


REINSTALLATION OF SLIPS

BREAKWATER

SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT  
**PROPOSED MARINA WATERFRONT**







MARINA GREEN

N

EXISTING FITNESS PLAZA

EXISTING MARINA BLVD BIKE/PED PATH

MARINA BLVD

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**EXISTING SITE PLAN**



MARINA GREEN

IMPROVED PUBLIC RESTROOMS

GUEST DOCK

ACCESSIBLE COMMUNITY DOCK

12' BAY TRAIL

SHALLOW  
WATER BASIN

GOLDEN GATE BRIDGE LAWN

EXISTING FITNESS PLAZA

SHORELINE BAND

MHWL

NATURE EXPLORATION TERRACE

WIDENED SHORELINE  
AND DECREASED PAVING

VOLLEYBALL COURTS

EXISTING MARINA BLVD BIKE/PED PATH

MARINA GROVE

VIEWING TERRACE

SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT

PROPOSED SITE PLAN





IMPROVED PUBLIC RESTROOMS

GUEST DOCK

ACCESSIBLE COMMUNITY DOCK

12' BAY TRAIL

SHALLOW  
WATER BASIN

NATURE EXPLORATION TERRACE

WIDENED SHORELINE  
AND DECREASED PAVING

MARINA GROVE

VIEWING TERRACE

BLUFF  
PLANTING

WATER  
ACCESS

NATURE  
EXPLORATION

VIEWING  
TERRACE

MARINA  
GROVE

GOLDEN GATE BRIDGE LAWN

EXISTING FITNESS PLAZA

MARINA BLVD.

VOLLEYBALL COURTS

EXISTING MARINA BLVD BIKE/PED PATH

LAWN

FITNESS

VOLLEYBALL

SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT

**PROPOSED SITE PLAN**





SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT  
**EXISTING CIRCULATION & ACCESS**



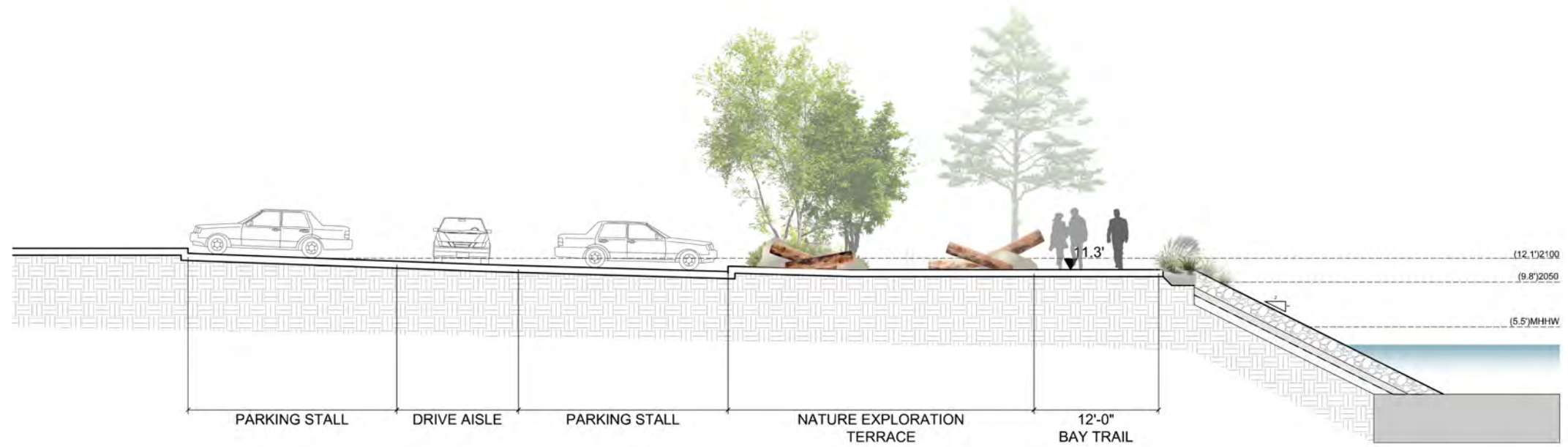




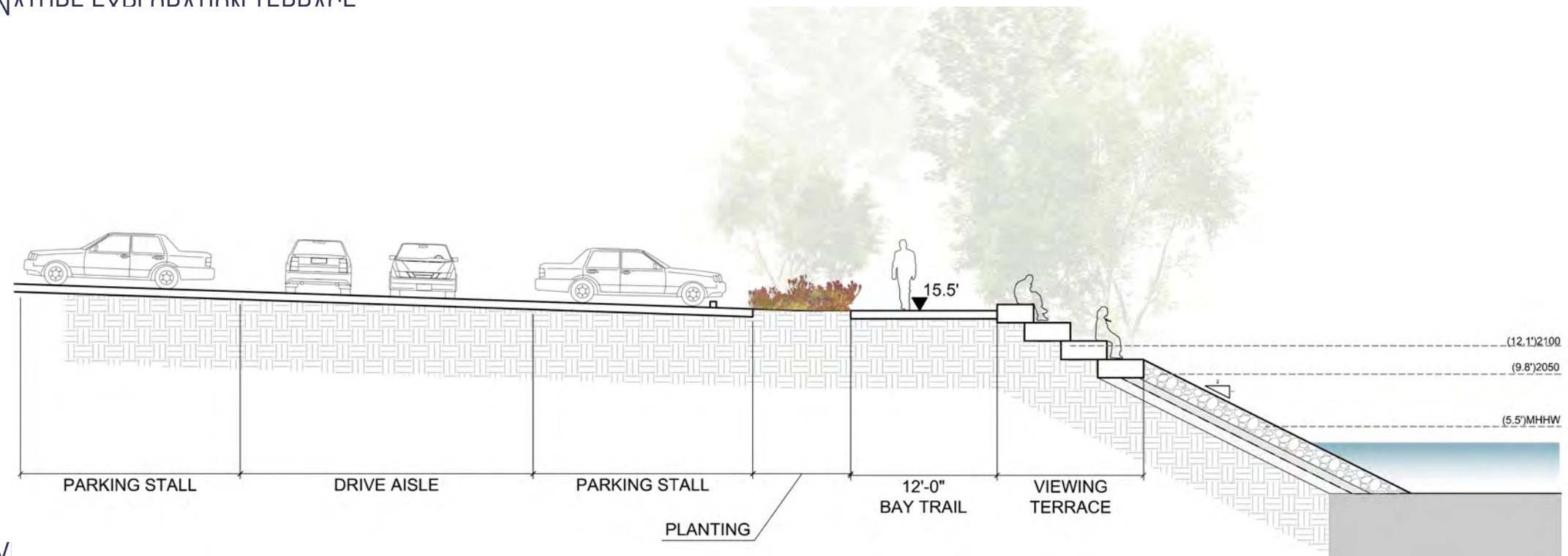


SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT  
**PROPOSED CIRCULATION & ACCESS**





SECTION A: NATURE EXPLORATION TERRACE



SECTION B: VIEWING TERRACE

## SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT

# CONCEPT SECTIONS





SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT  
**NATURE EXPLORATION TERRACE**





SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT  
**EXISTING CONDITION**





SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT  
**GOLDEN GATE BRIDGE LAWN**





SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT  
**EXISTING CONDITION**





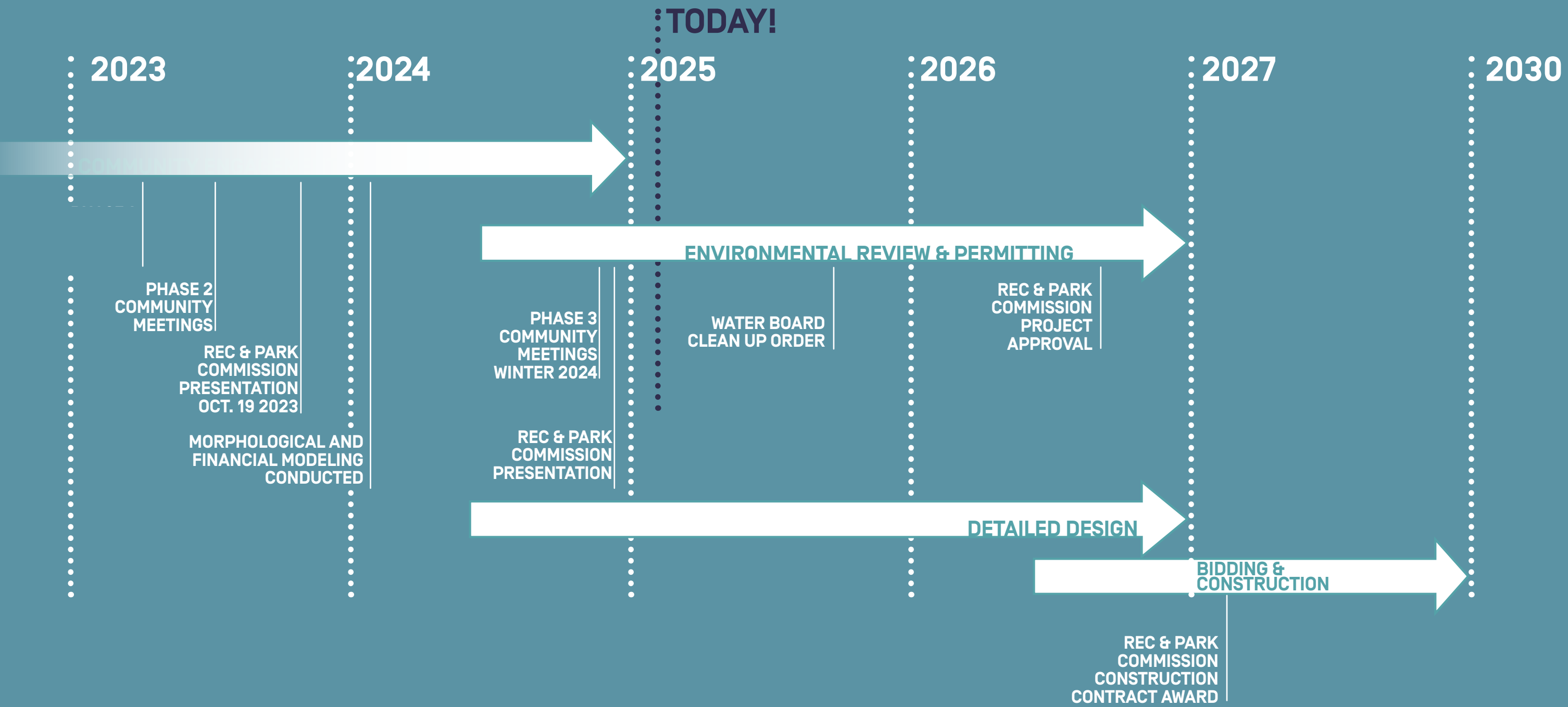
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**COMMUNITY DOCK**





SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT  
**ANGEL ISLAND OVERLOOK**





SAN FRANCISCO MARINA IMPROVEMENT & REMEDIATION PROJECT

**PROJECT SCEDULE**





# SAN FRANCISCO MARINA PARK

# THANK YOU!

