

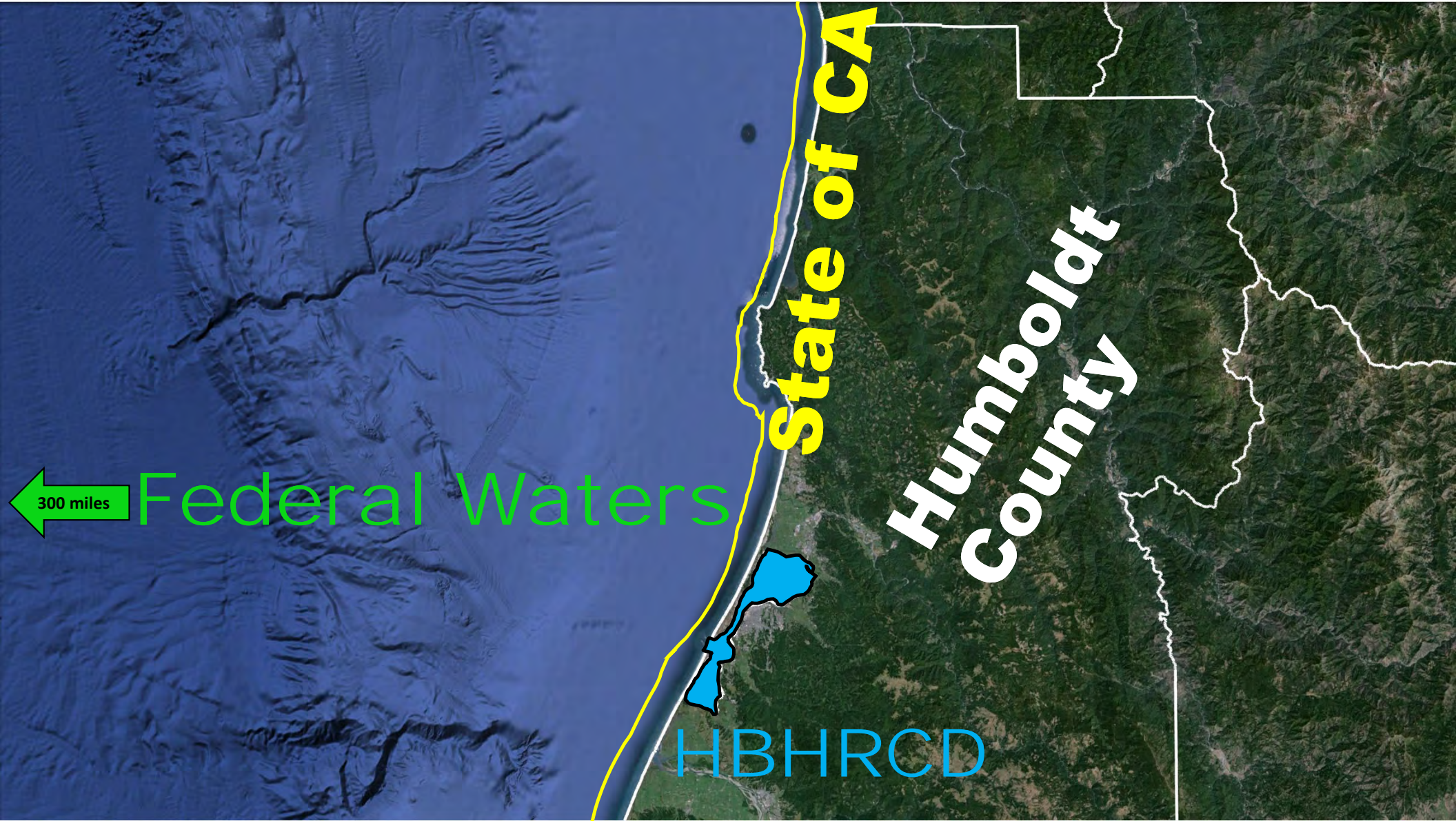


Humboldt Bay: California's First Offshore Wind Port



California Fish and Game Commission
12/11/24

Rob Holmlund, Development Director, HBHRCD



State of CA

Humboldt County

HBHRCD

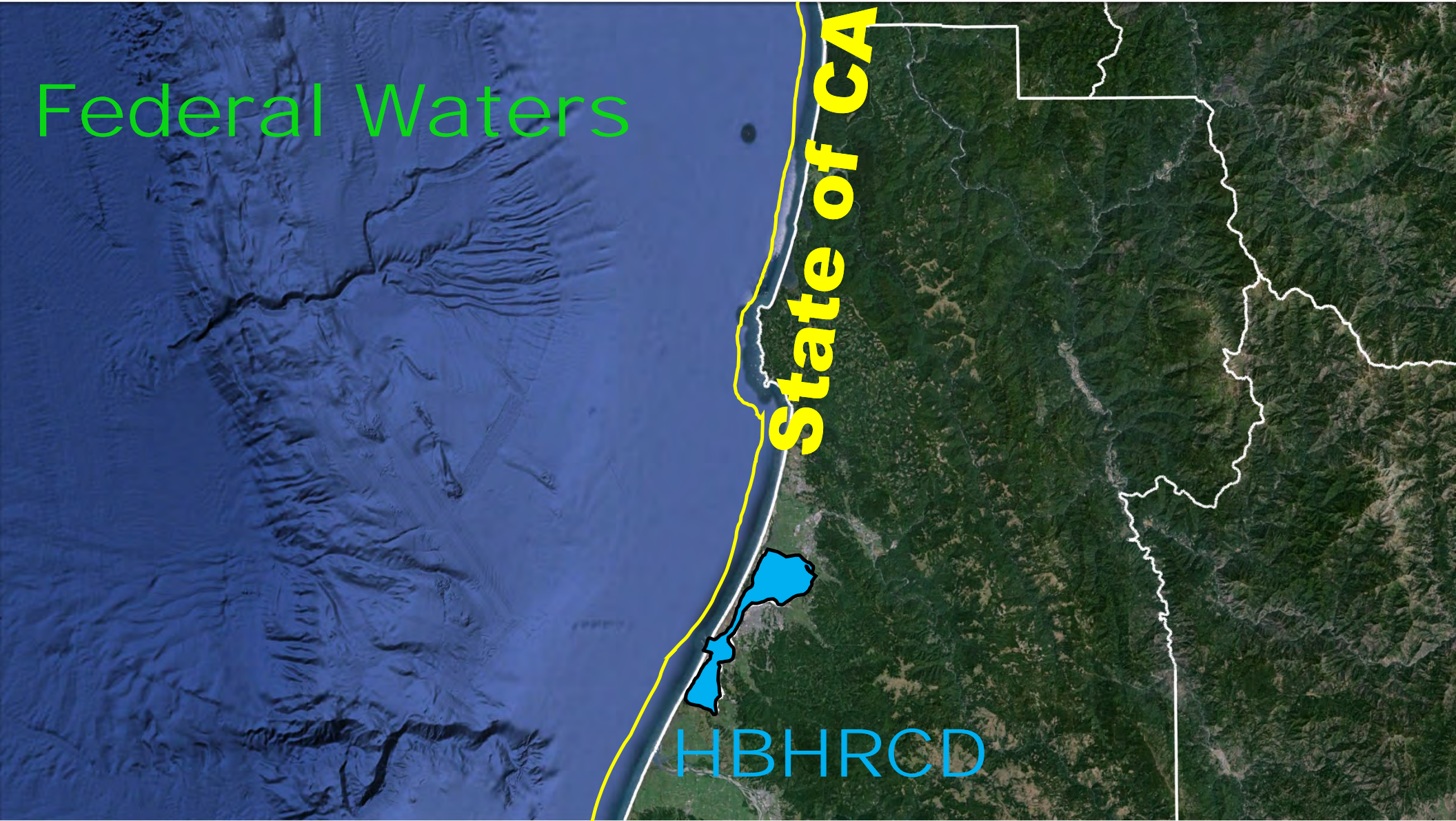
300 miles

Federal Waters

Federal Waters

State of CA

HBHRCD



Federal Waters



Humboldt

OSW
Lease
Area



State of CA

In-port Assembly of
OSW Turbines

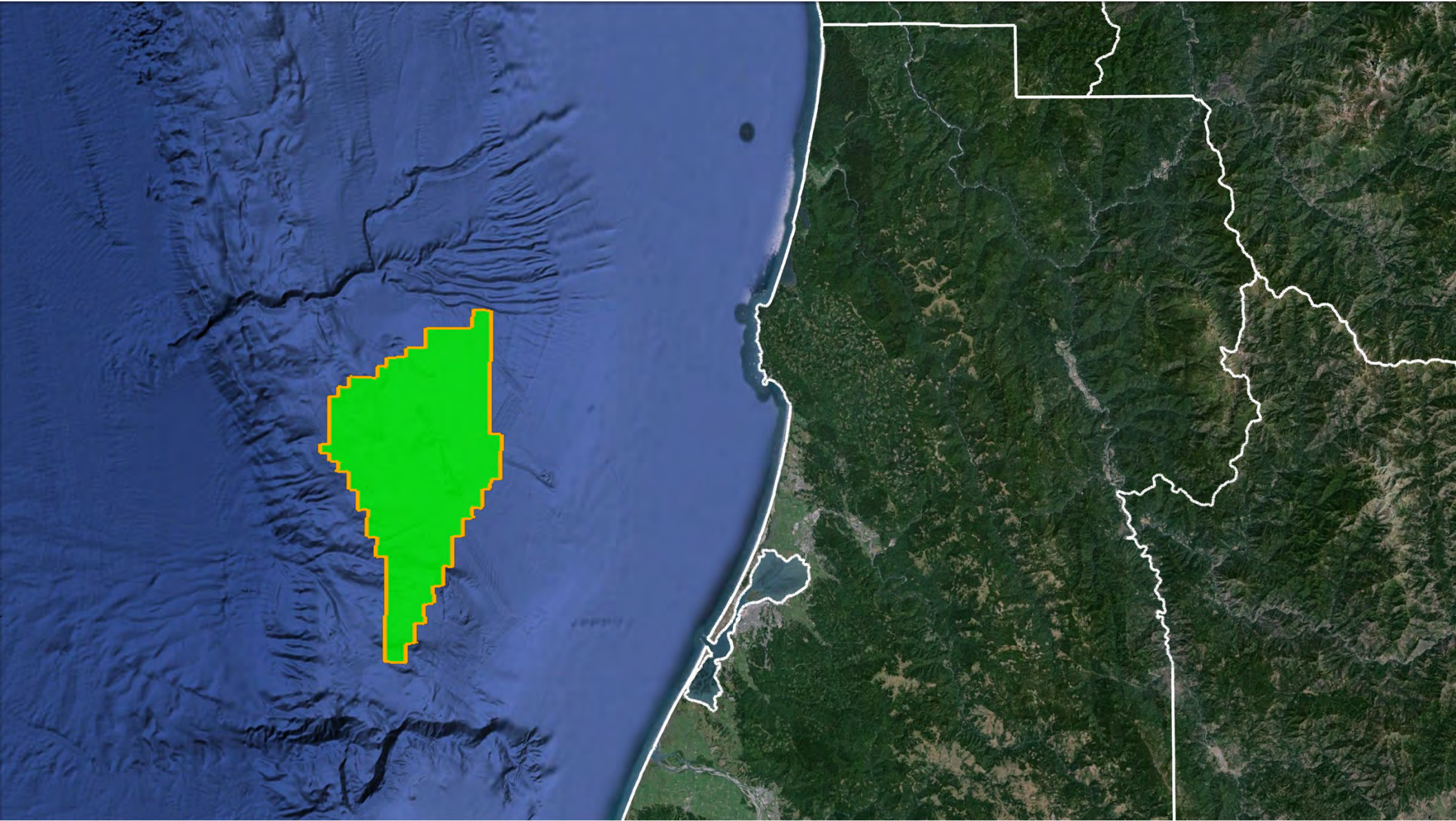


HBHRCD



In-port Assembly of OSW Turbines

HBHRCO



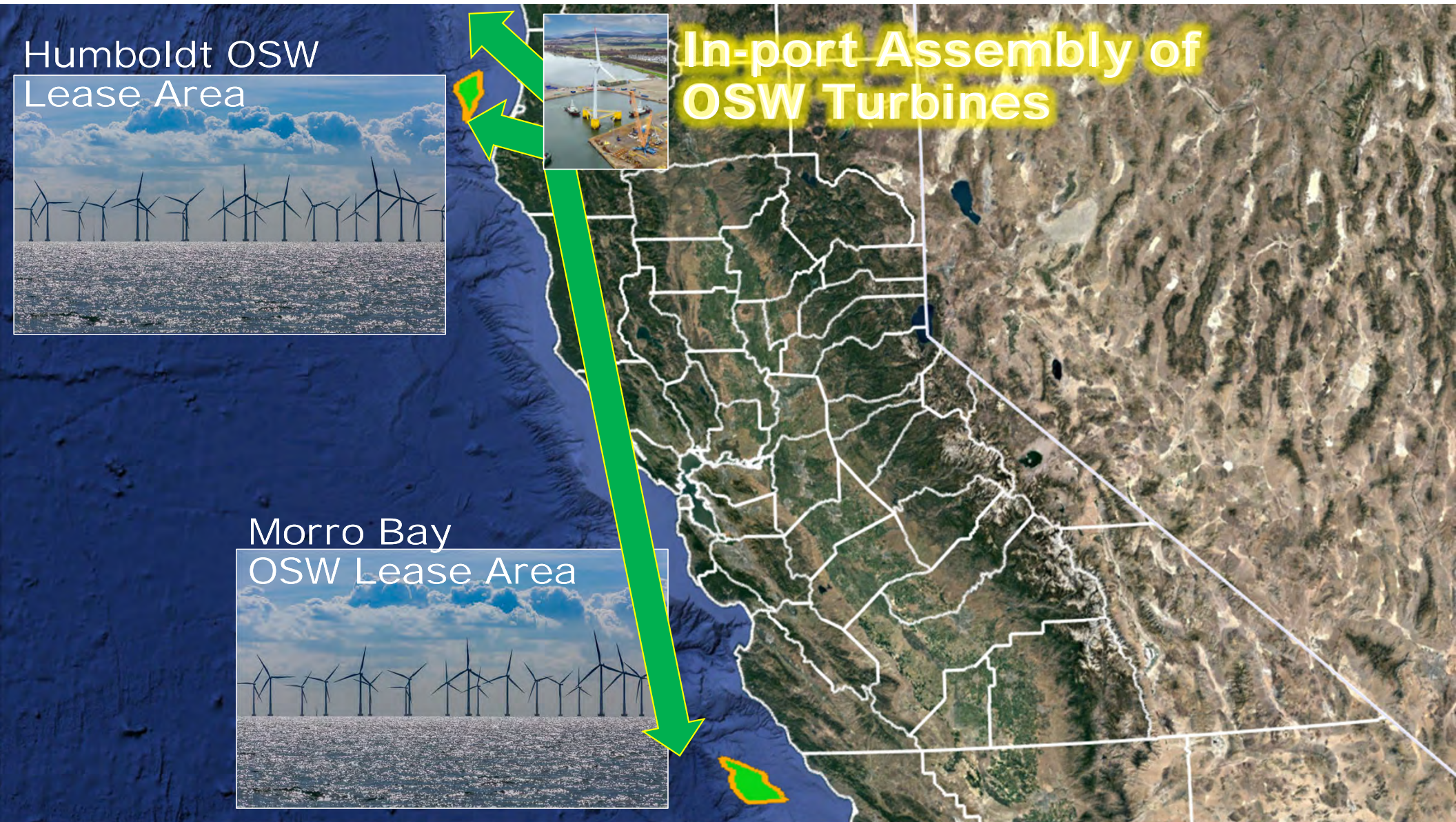
Humboldt OSW
Lease Area



**In-port Assembly of
OSW Turbines**



Morro Bay
OSW Lease Area





BACKGROUND

OFFSHORE WIND GOALS





2021 SB 100 Joint Agency Report Summary

Achieving 100% Clean Electricity in California

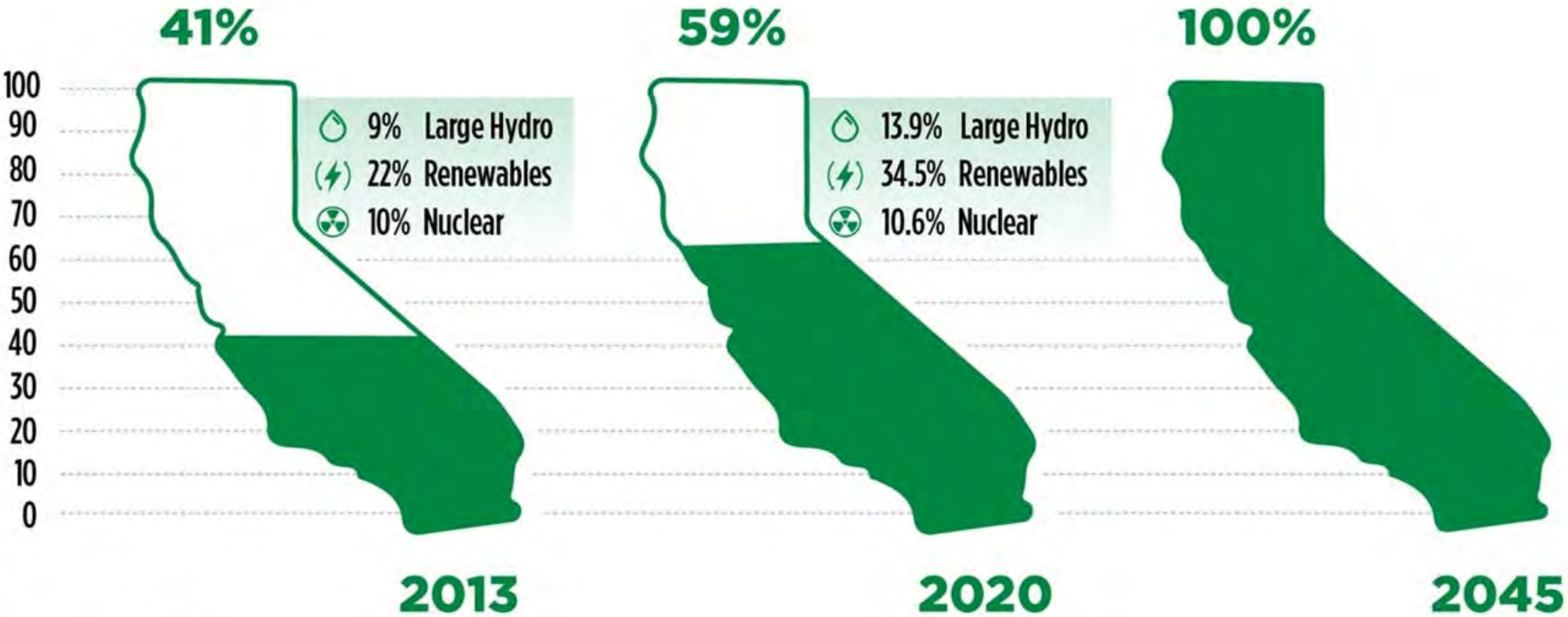
An Initial Assessment



March 2021













Progress to 100% Clean Electricity

Percent renewable and zero-carbon electricity serving CA



California

Clean Electricity Resources

	Existing Resources	Projected New Resources	
	2019*	2030**	2045**
 Solar (Utility-Scale)	12.5 GW	16.9 GW	69.4 GW
 Solar (Customer)	8.0 GW	12.5 GW	28.2 GW
 Storage (Battery)	0.2 GW	9.5 GW	48.8 GW
 Storage (Long Duration)	3.7 GW	0.9 GW	4.0 GW
 Wind (Onshore)	6.0 GW	8.2 GW	12.6 GW
 Wind (Offshore)	0 GW	0 GW	10.0 GW
 Geothermal	2.7 GW	0 GW	0.1 GW
 Biomass	1.3 GW	0 GW	0 GW
 Hydrogen Fuel Cells	0 GW	0 GW	0 GW
 Hydro (Large)	12.3 GW	N/A†	N/A†
 Hydro (Small)	1.8 GW	N/A†	N/A†
 Nuclear	2.4 GW	N/A†	N/A†

Where will offshore wind turbines
be manufactured?





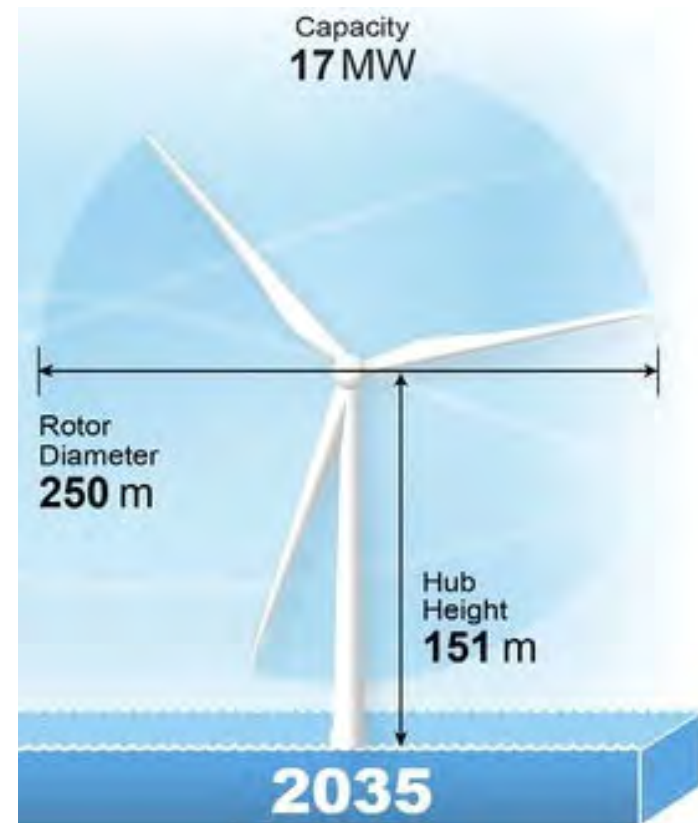


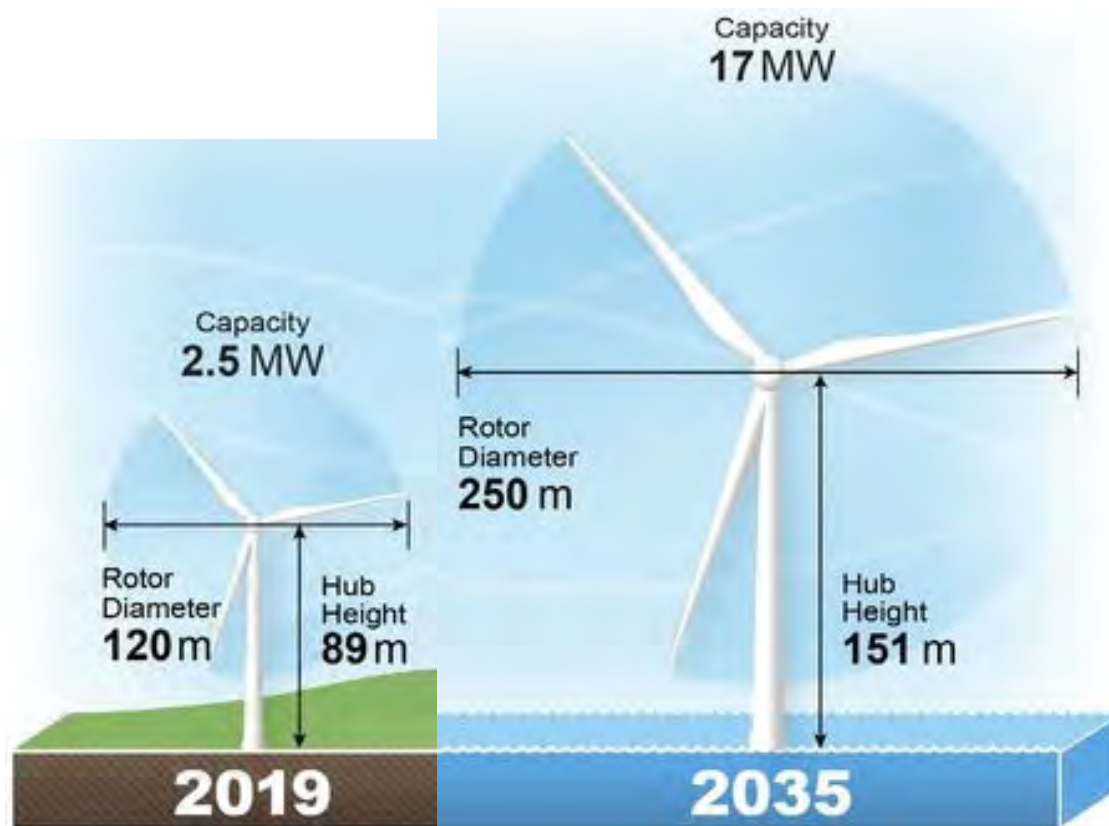
Onshore Wind Turbines



Offshore Wind Turbines















Where will offshore wind turbines
be manufactured?



Component manufacturing in various ports



Ship manufactured components from various ports



Staging and Integration : Staging



Staging and Integration : Integration



Staging and Integration : Towing



Wind Farm



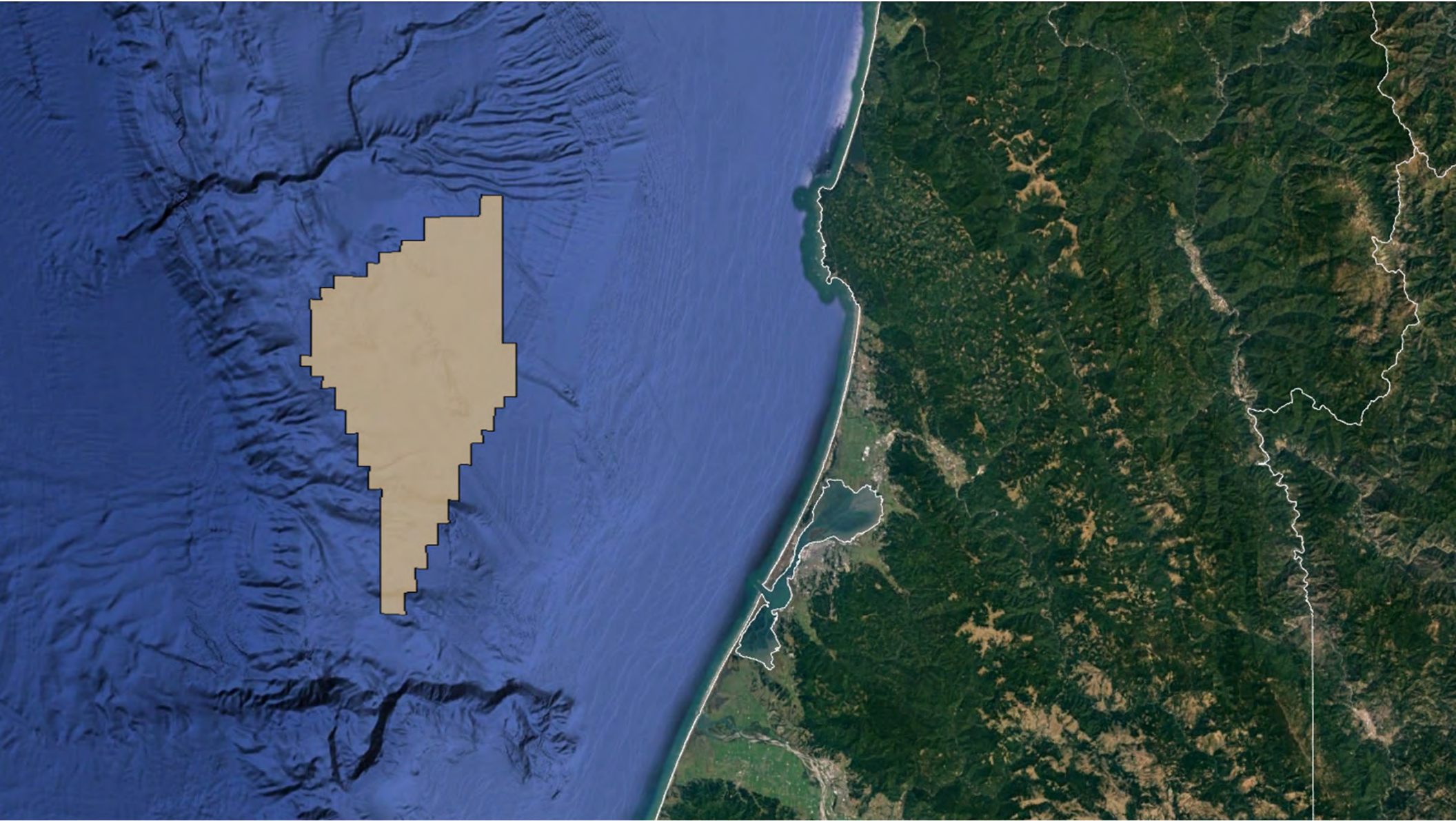
OVERVIEW OF HUMBOLDT BAY AND THE PROPOSED PROJECT



Humboldt Lease Area

Morro Bay Lease Area







Arcata & CalPolyHumboldt

Eureka

Wiyot Tribe

College of the Redwoods

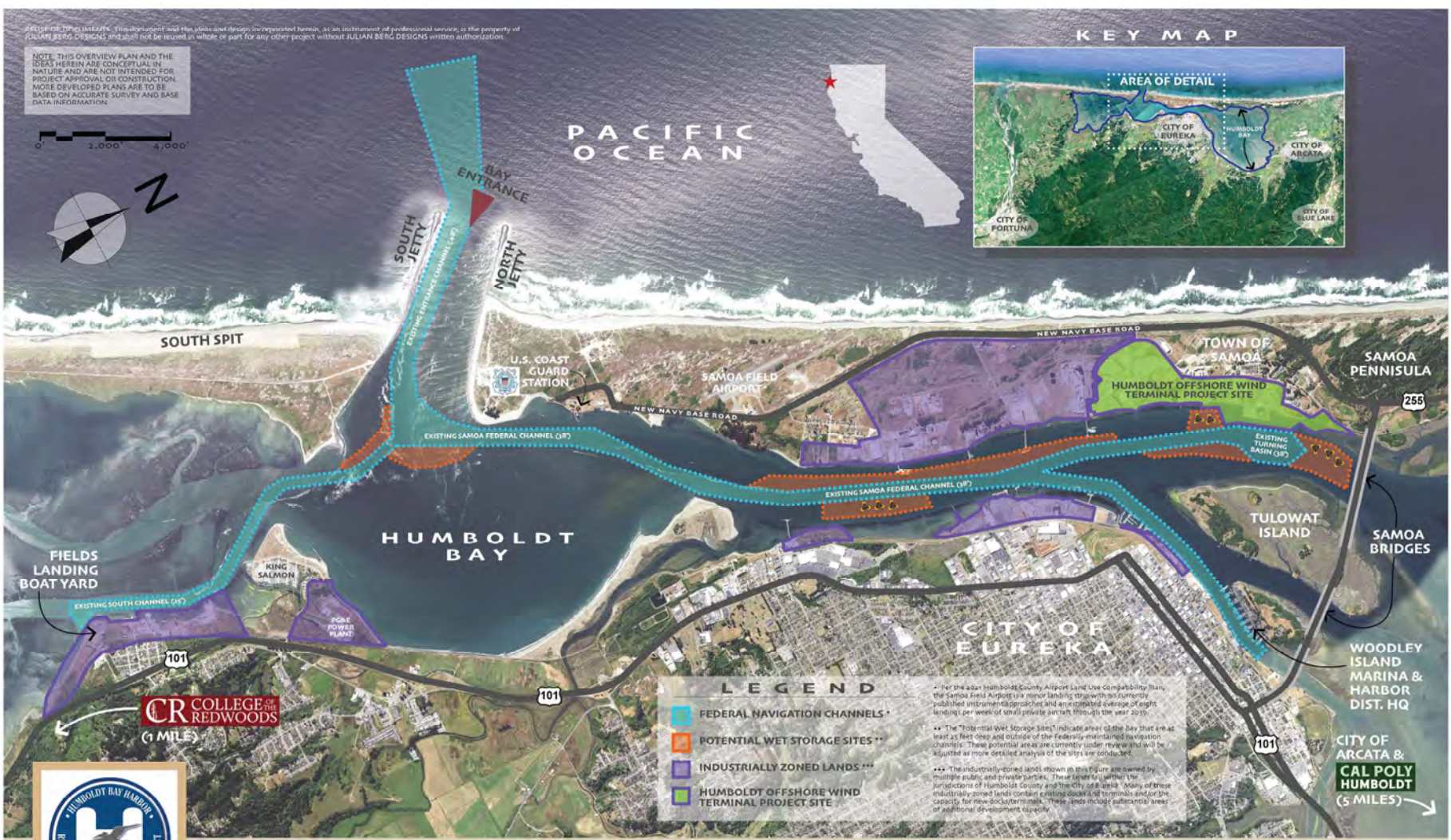
BASED ON THE CLIMATEZEA. This document and the plans and designs incorporated herein, as an instrument of professional service, is the property of JULIAN BERG DESIGNS and shall not be reused in whole or part for any other project without JULIAN BERG DESIGNS written authorization.

NOTE: THIS OVERVIEW PLAN AND THE IDEAS HEREIN ARE CONCEPTUAL IN NATURE AND ARE NOT INTENDED FOR PROJECT APPROVAL OR CONSTRUCTION. MORE DEVELOPED PLANS ARE TO BE BASED ON ACCURATE SURVEY AND BASE DATA INFORMATION.

0' 2,000' 4,000'



KEY MAP



LEGEND

- FEDERAL NAVIGATION CHANNELS
- POTENTIAL WET STORAGE SITES
- INDUSTRIALLY ZONED LANDS
- HUMBOLDT OFFSHORE WIND TERMINAL PROJECT SITE

** For the last Humboldt County Airport Land Use Compatibility Study, the Samoa Field Airport has a minor landing strip with no currently published instrument approaches and an estimated average of eight landings per week of small private aircraft through the year 2030.

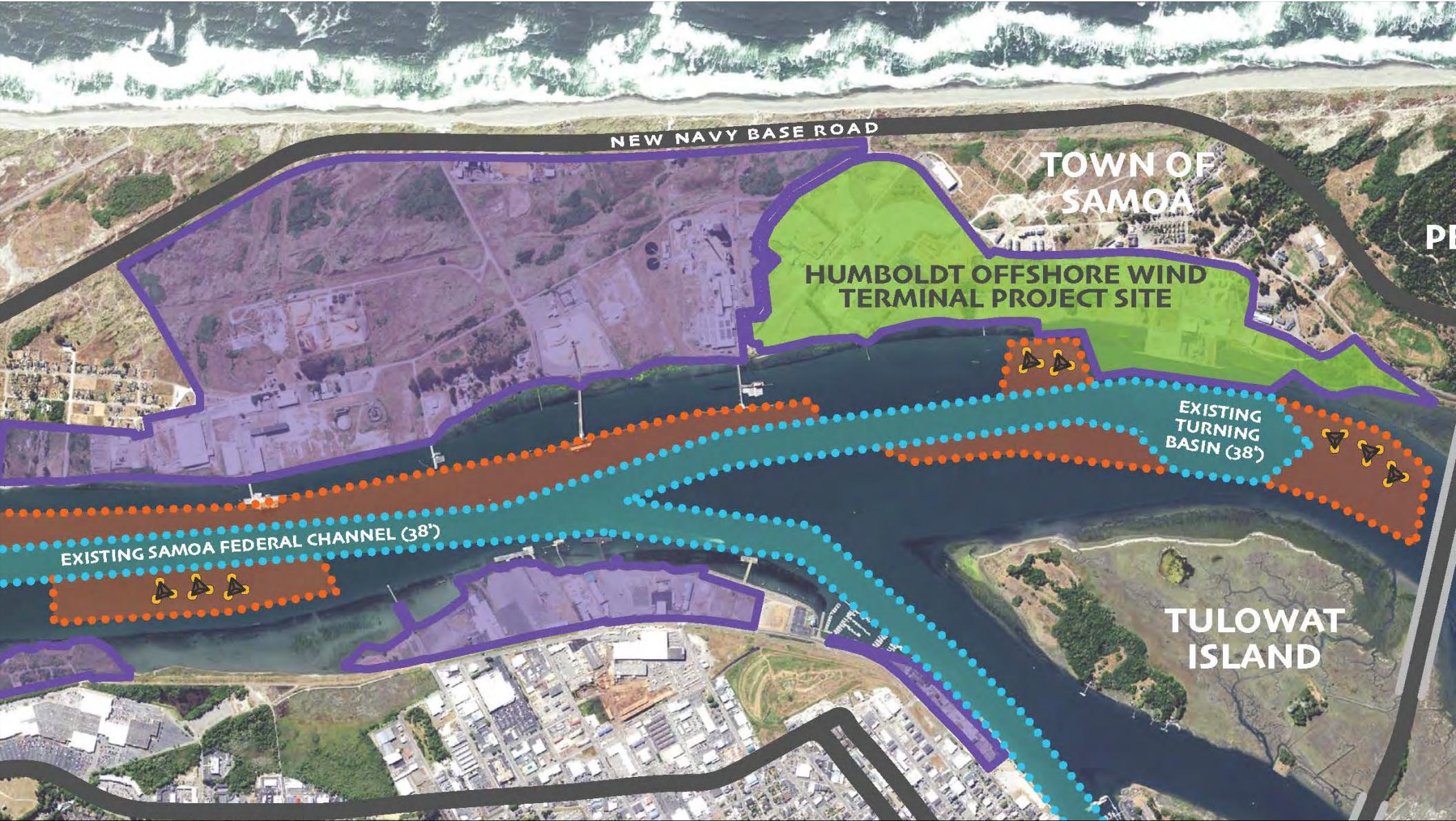
*** The "Potential Wet Storage Sites" indicate areas of the Bay that are at least 20 feet deep and outside of the federally-maintained navigation channels. These potential areas are currently under review and will be adjusted as more detailed analysis of the sites are conducted.

**** The industrially-zoned lands shown in this figure are owned by multiple public and private parties. These lands, within the jurisdictions of Humboldt County and the City of Eureka, many of these industrially-zoned lands contain existing docks and terminals and/or the capacity for new docks/terminals. These lands include substantial areas of additional development capacity.



HUMBOLDT BAY OFFSHORE WIND & HEAVY LIFT MULTIPURPOSE MARINE TERMINAL OVERALL BAY VIEW

JULIAN BERG DESIGNS
ARCHITECTURE & PLANNING
julianbergdesigns.com
707 • 407 • 8870
6.5.22



NEW NAVY BASE ROAD

TOWN OF SAMOA

HUMBOLDT OFFSHORE WIND TERMINAL PROJECT SITE

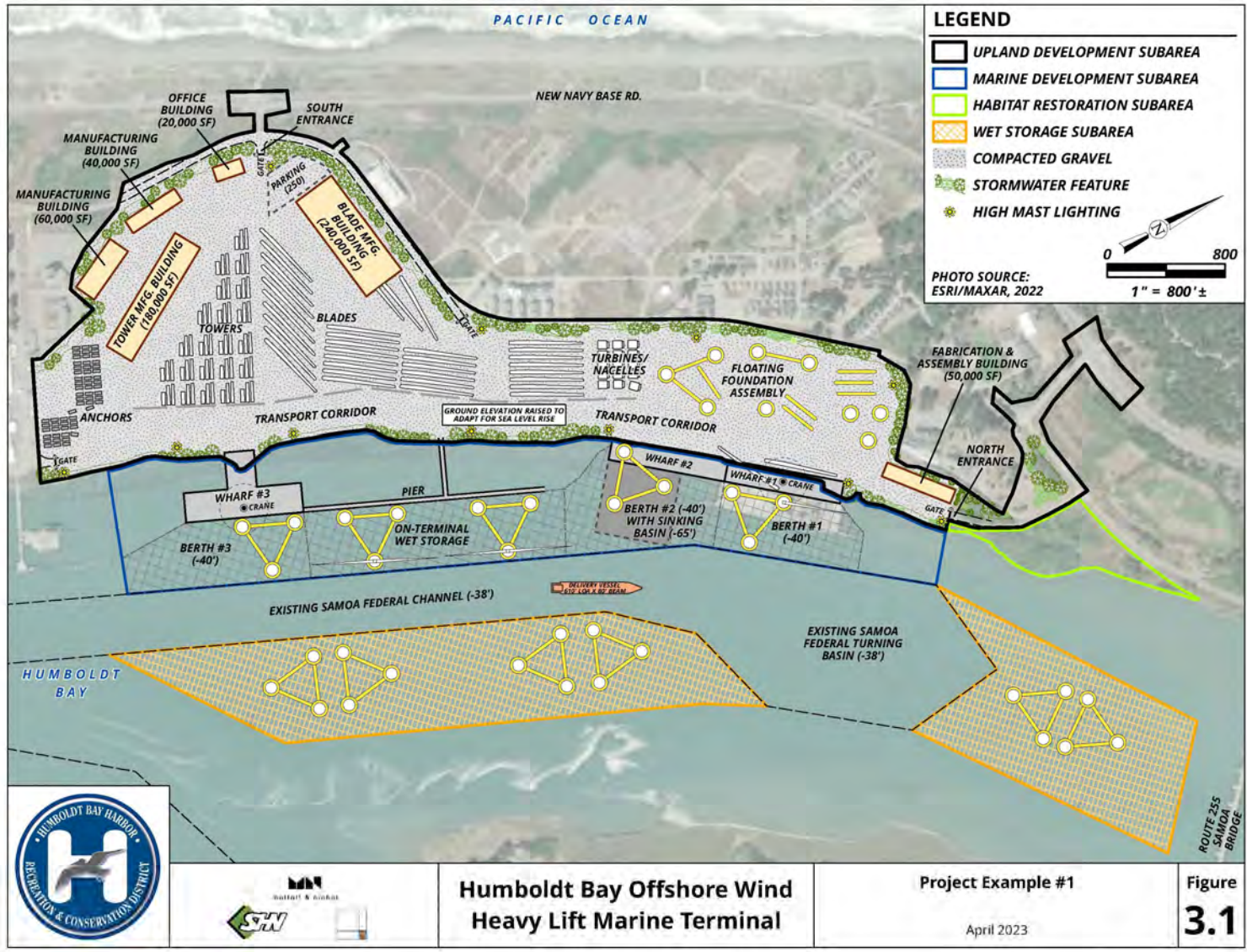
EXISTING SAMOA FEDERAL CHANNEL (38')

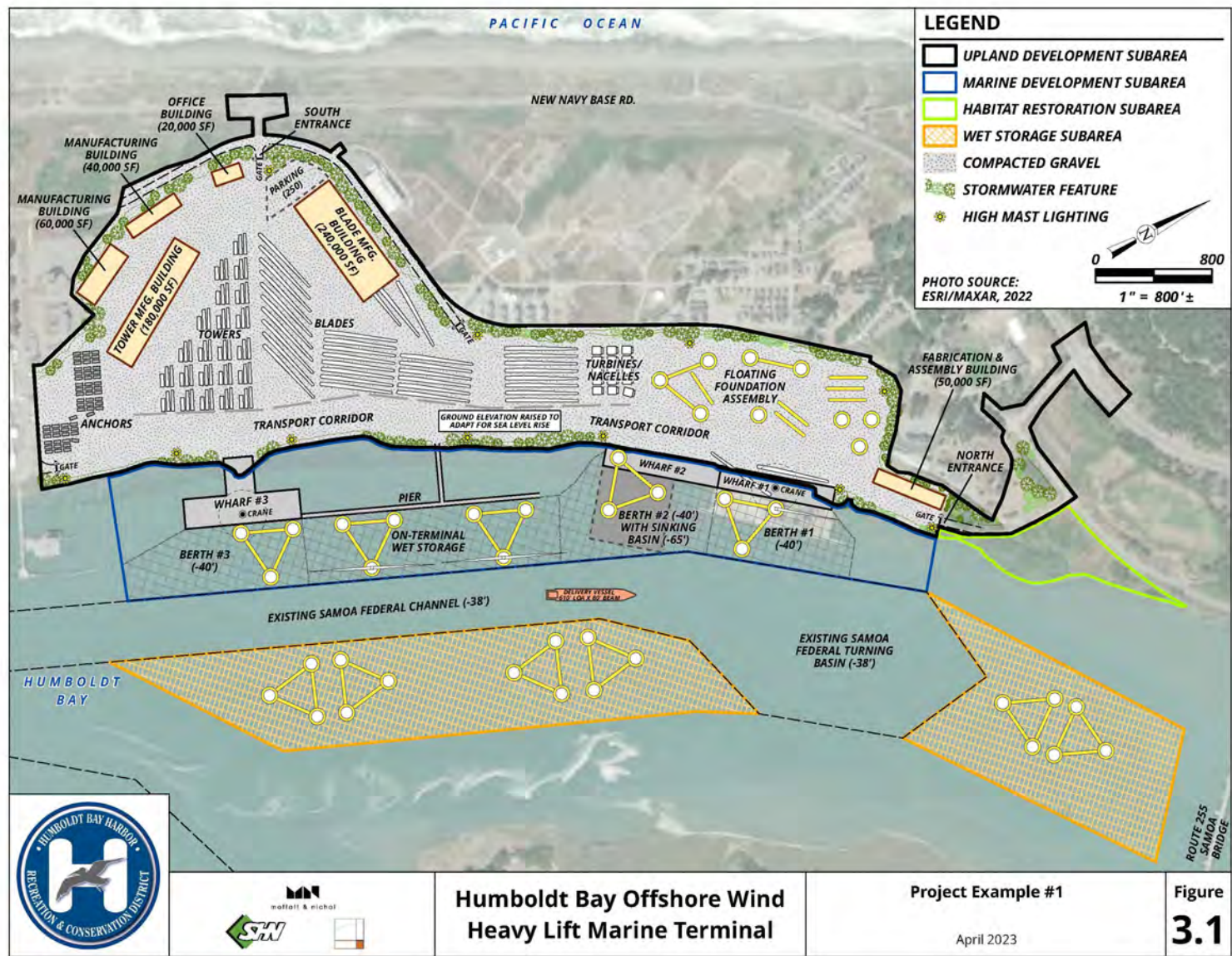
EXISTING TURNING BASIN (38')

TULOWAT ISLAND



NEW NAVY





Humboldt Bay Offshore Wind Heavy Lift Marine Terminal

Project Example #1

April 2023

Figure **3.1**

History of Project Site



LOG IN / CREATE ACCOUNT



HUMBOLDT COUNTY, CALIFORNIA Home Support NCJ Preview Video Best of Humboldt Canni
this week ncj daily calendar music eat + drink arts + s

Like 0 Share Tweet SAVE FAVORITE MAIL PRINT SHARE

news november 06, 2008

Without the Mill

Pulp workers adjust to a world that might not need their work

BY HEIDI WALTERS

SLIDESHOW



7 slides

Without the Mill
The Humboldt Mill has worked at its peak since 1932. Photo by Heidi Walters

2 / 7

Without the Mill

Pulp workers adjust to a world that might not need their work

BY HEIDI WALTERS

SLIDESHOW



7 slides



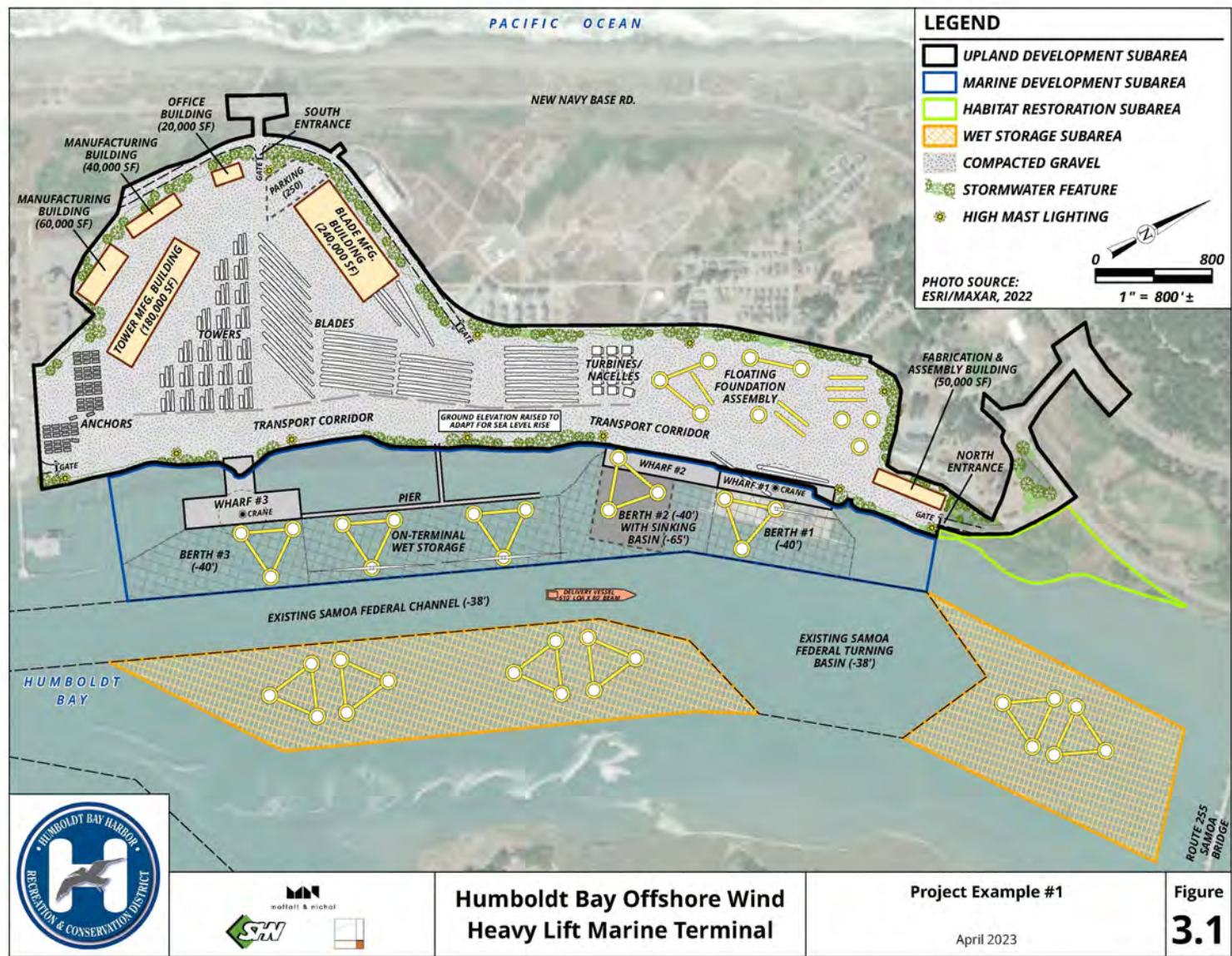








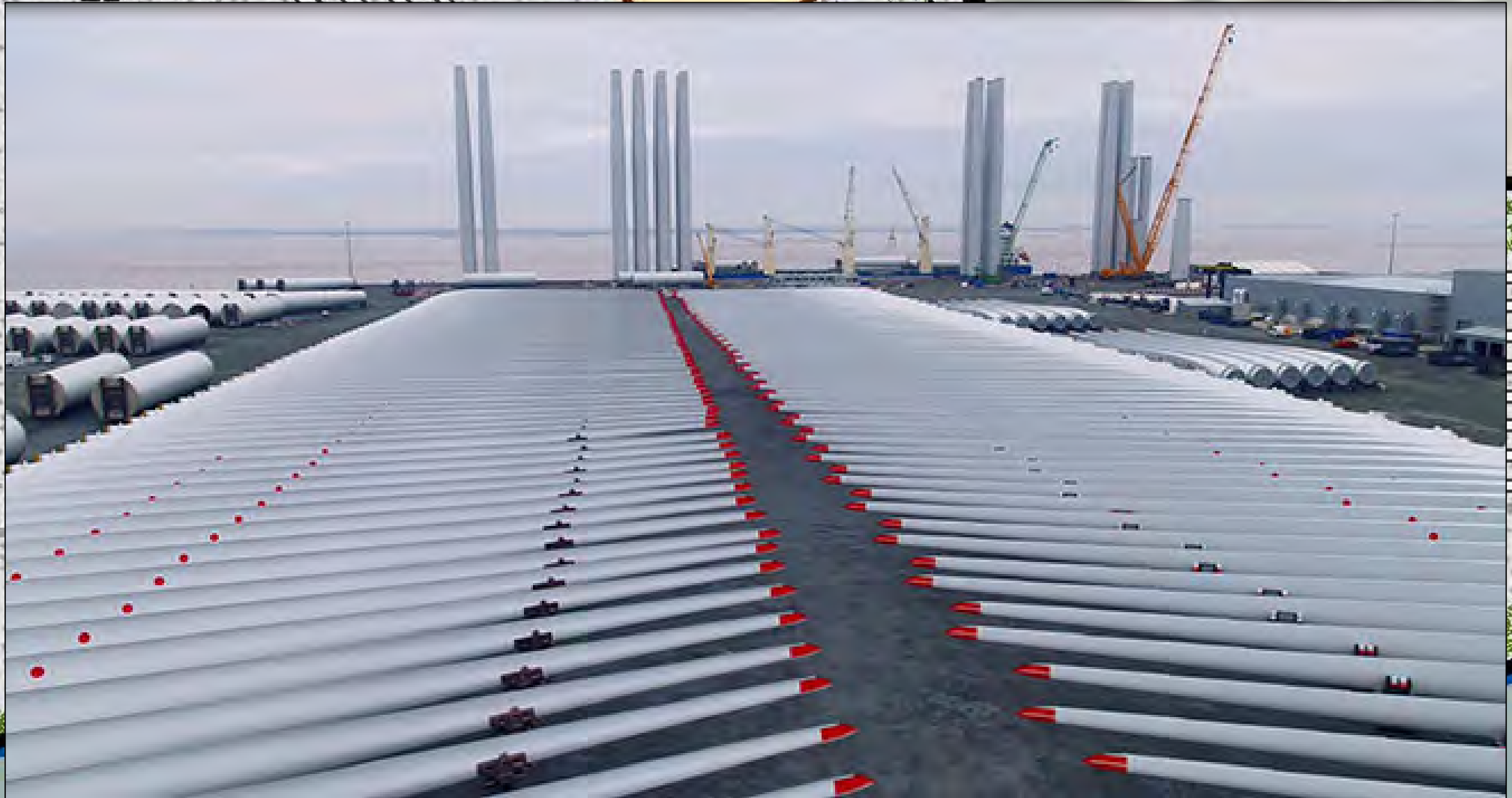
Site cleanup

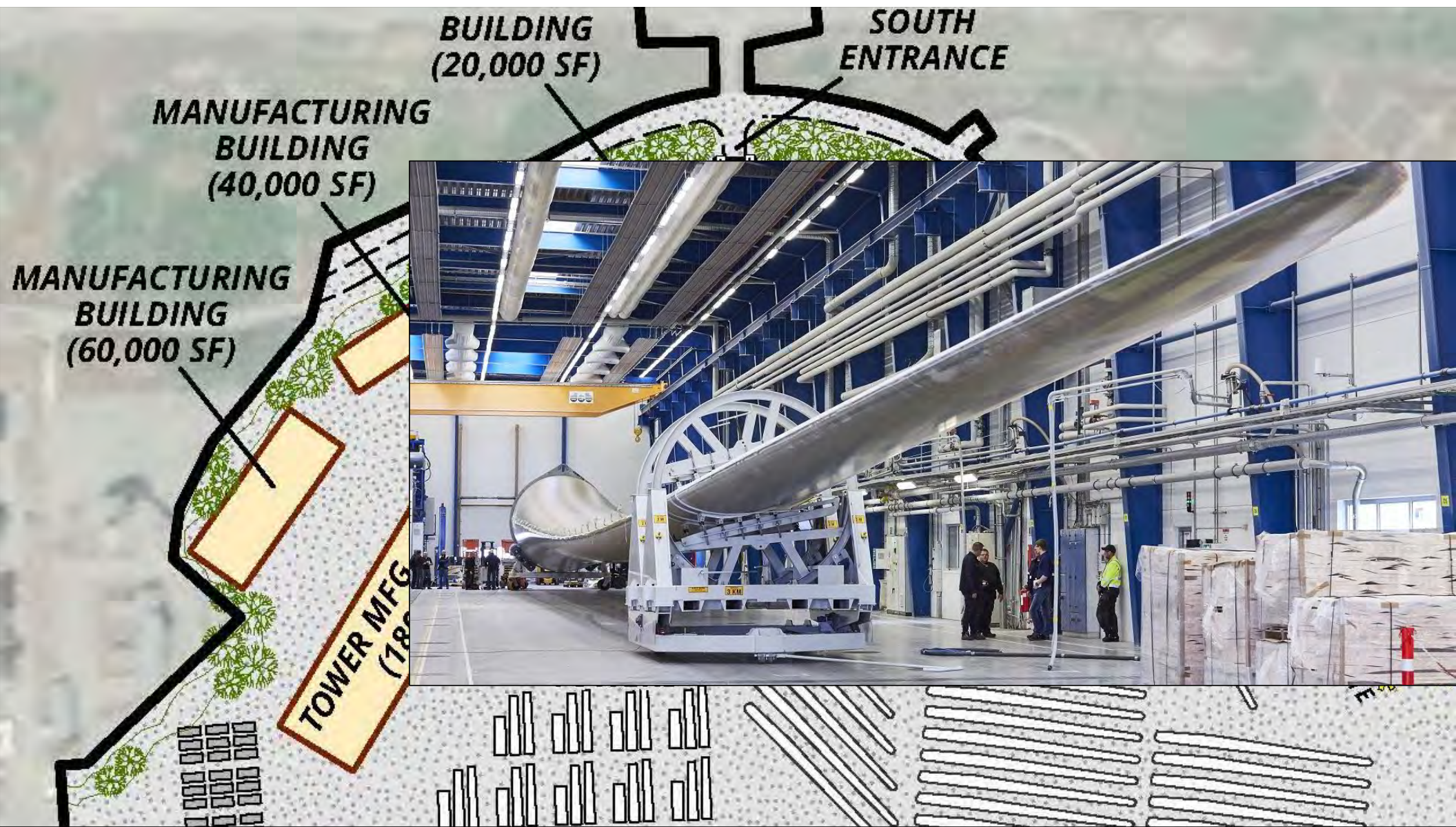


Humboldt Bay Offshore Wind Heavy Lift Marine Terminal

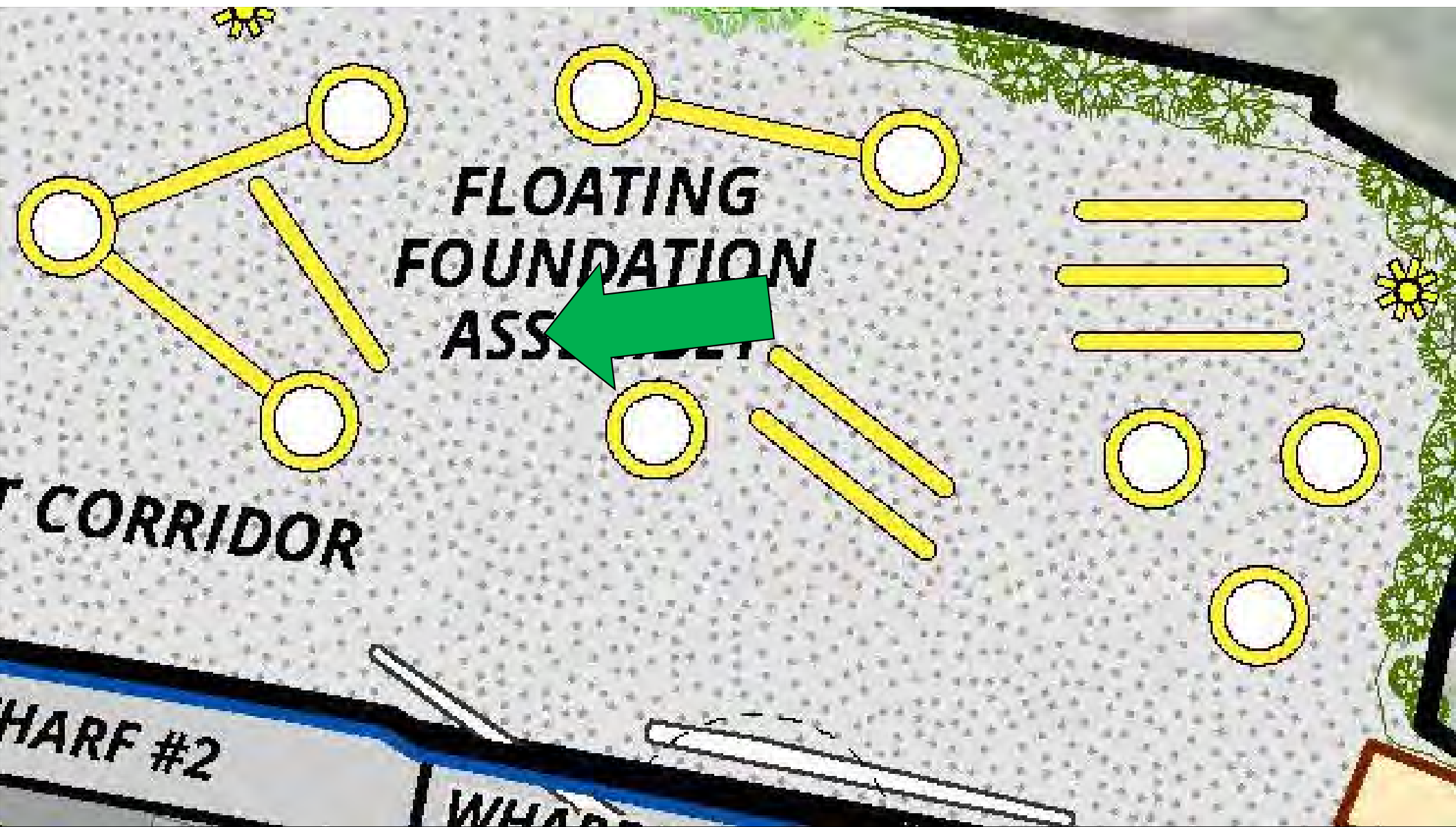
Project Example #1
April 2023

Figure
3.1

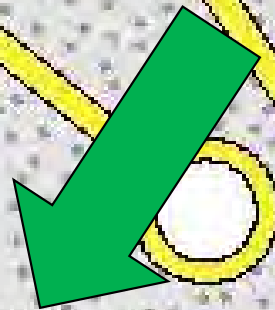








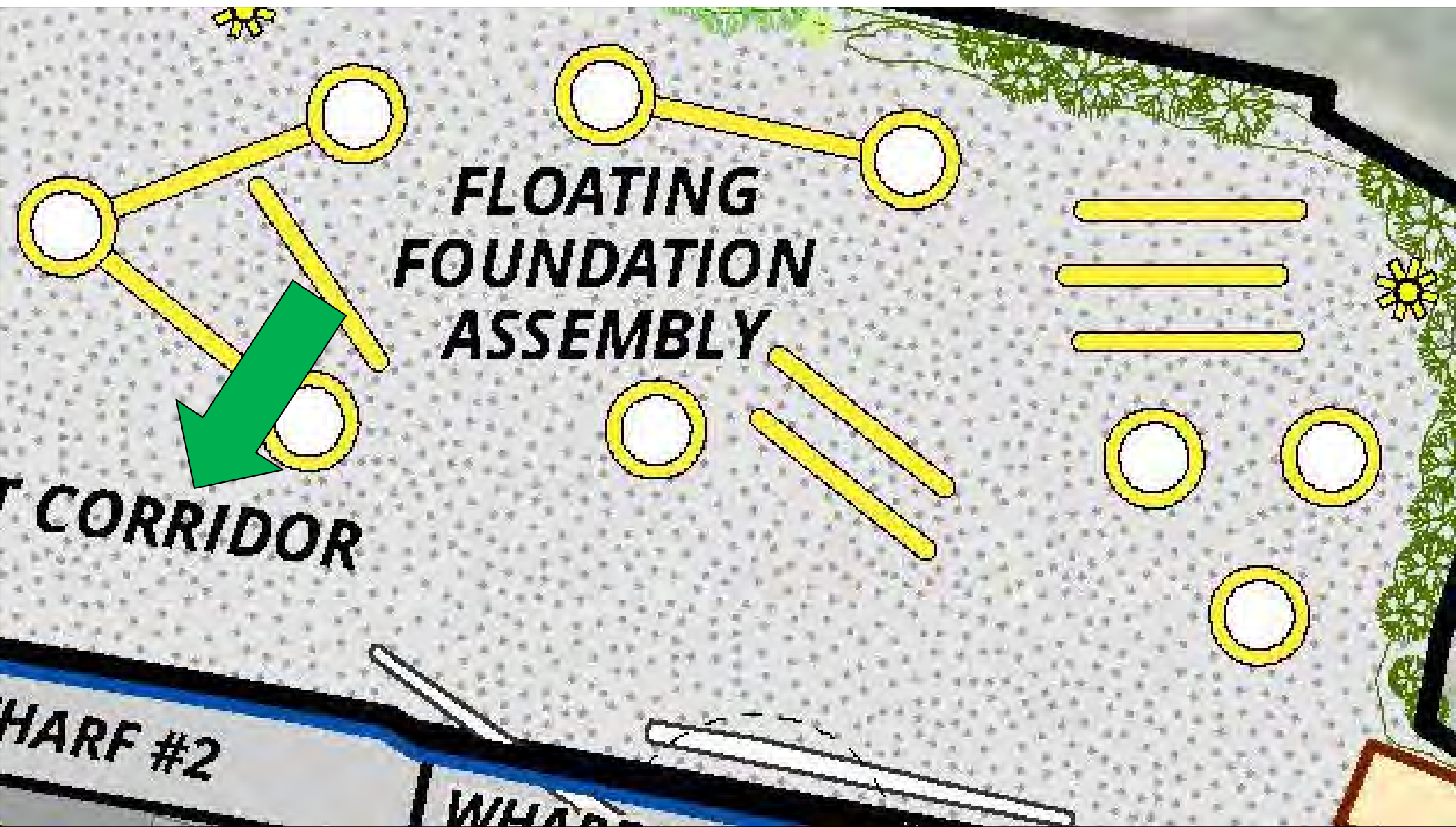
**FLOATING
FOUNDATION
ASSEMBLY**

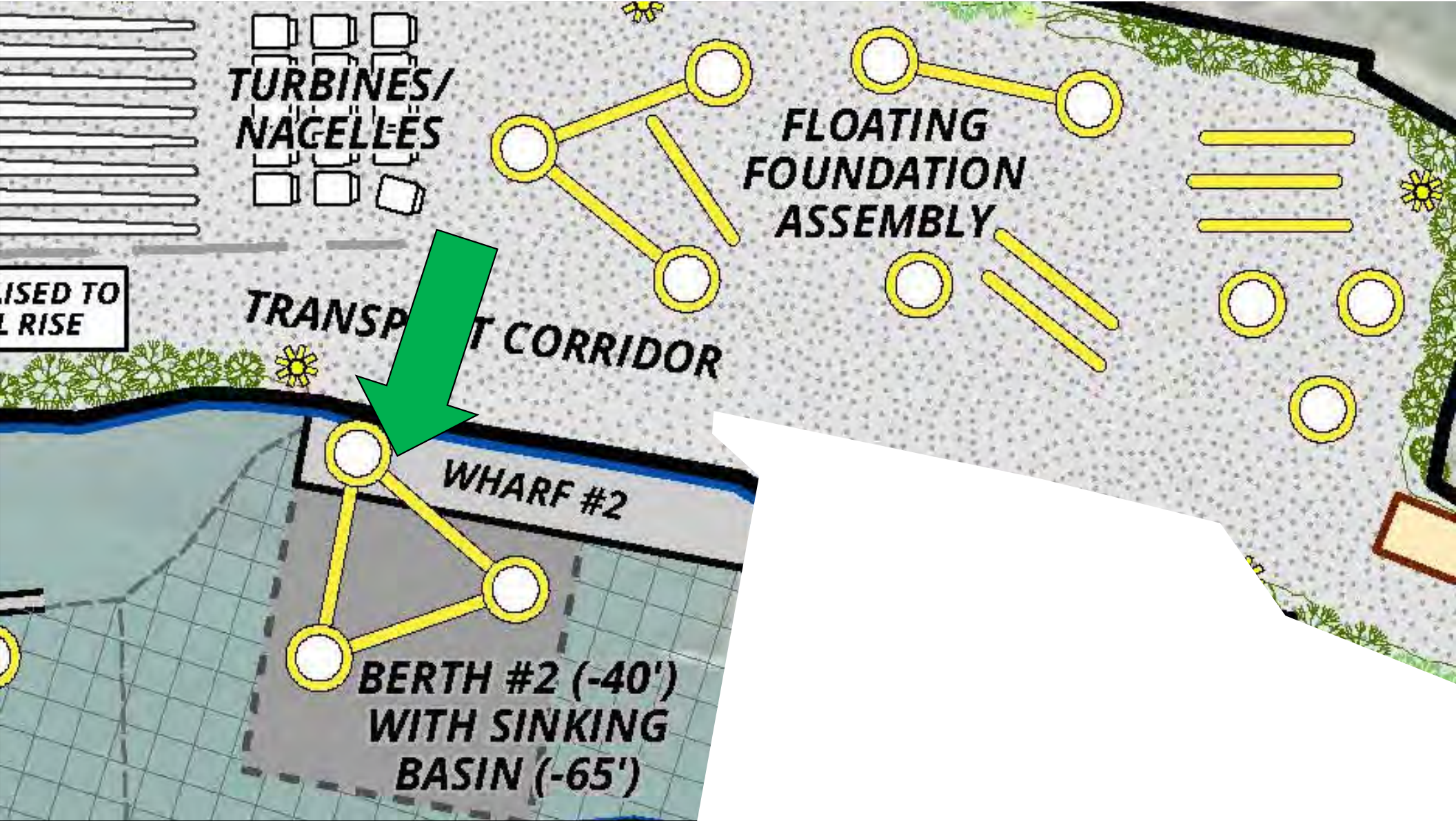


CORRIDOR

WHARF #2

WHARF

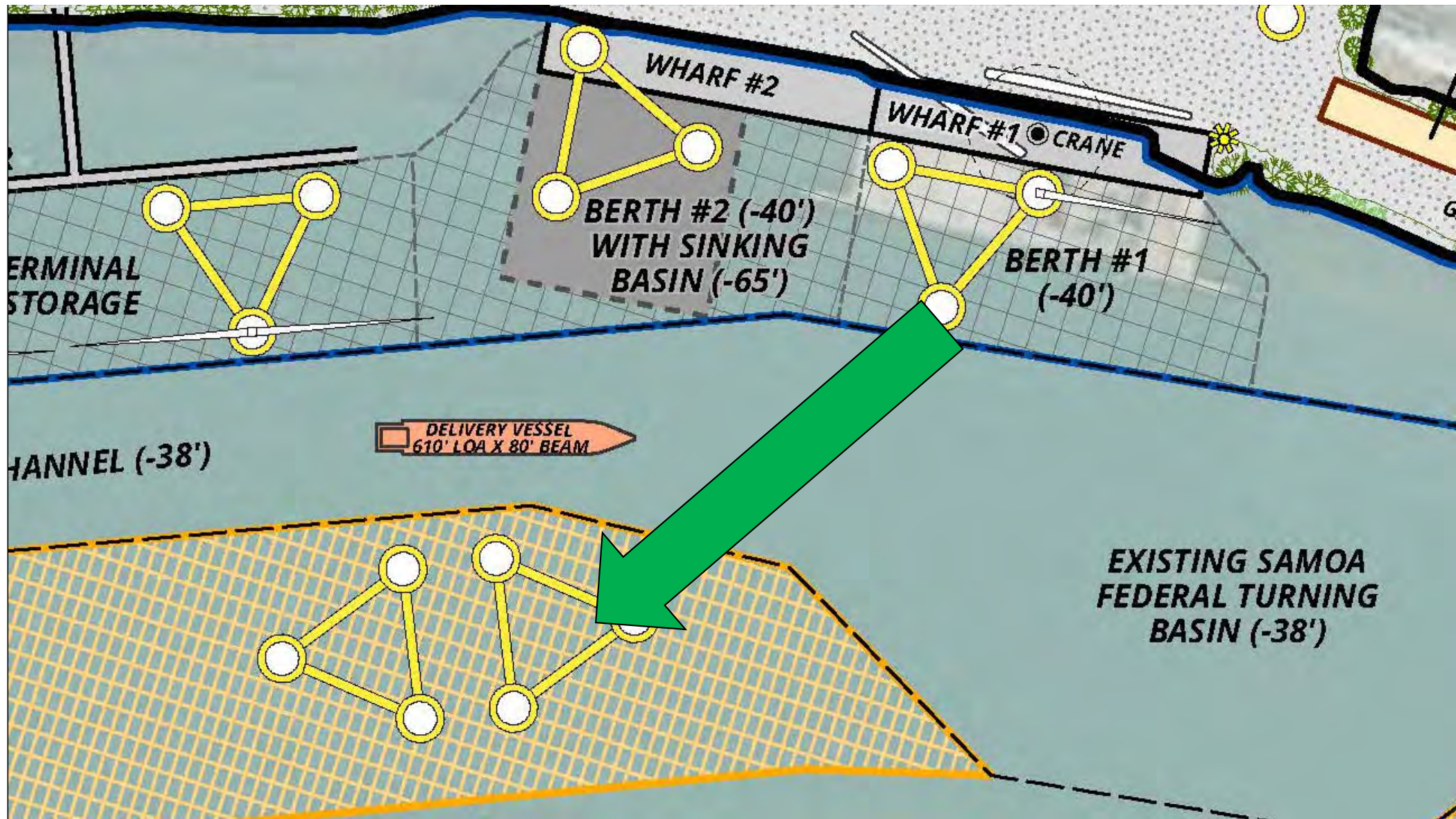




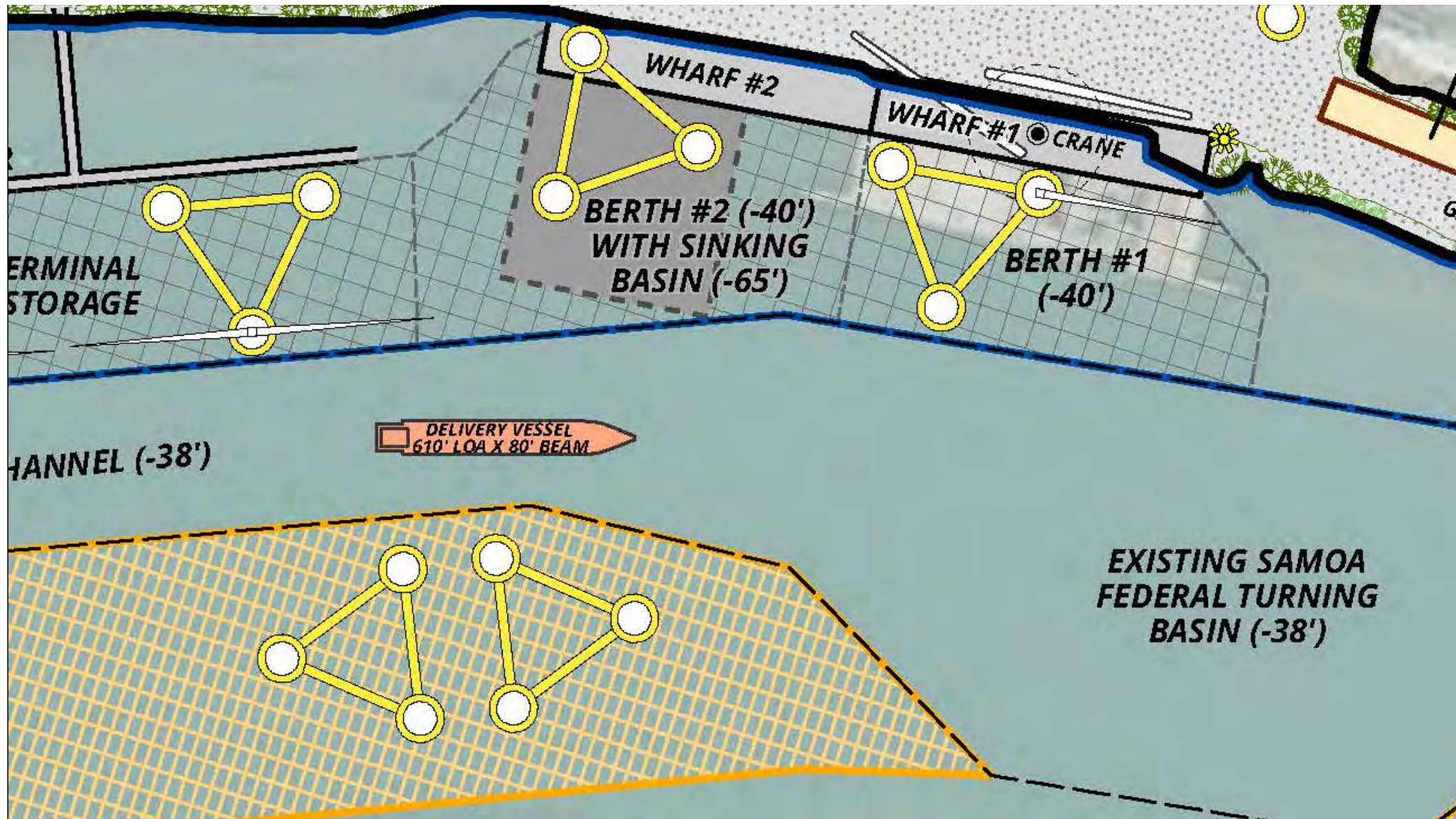


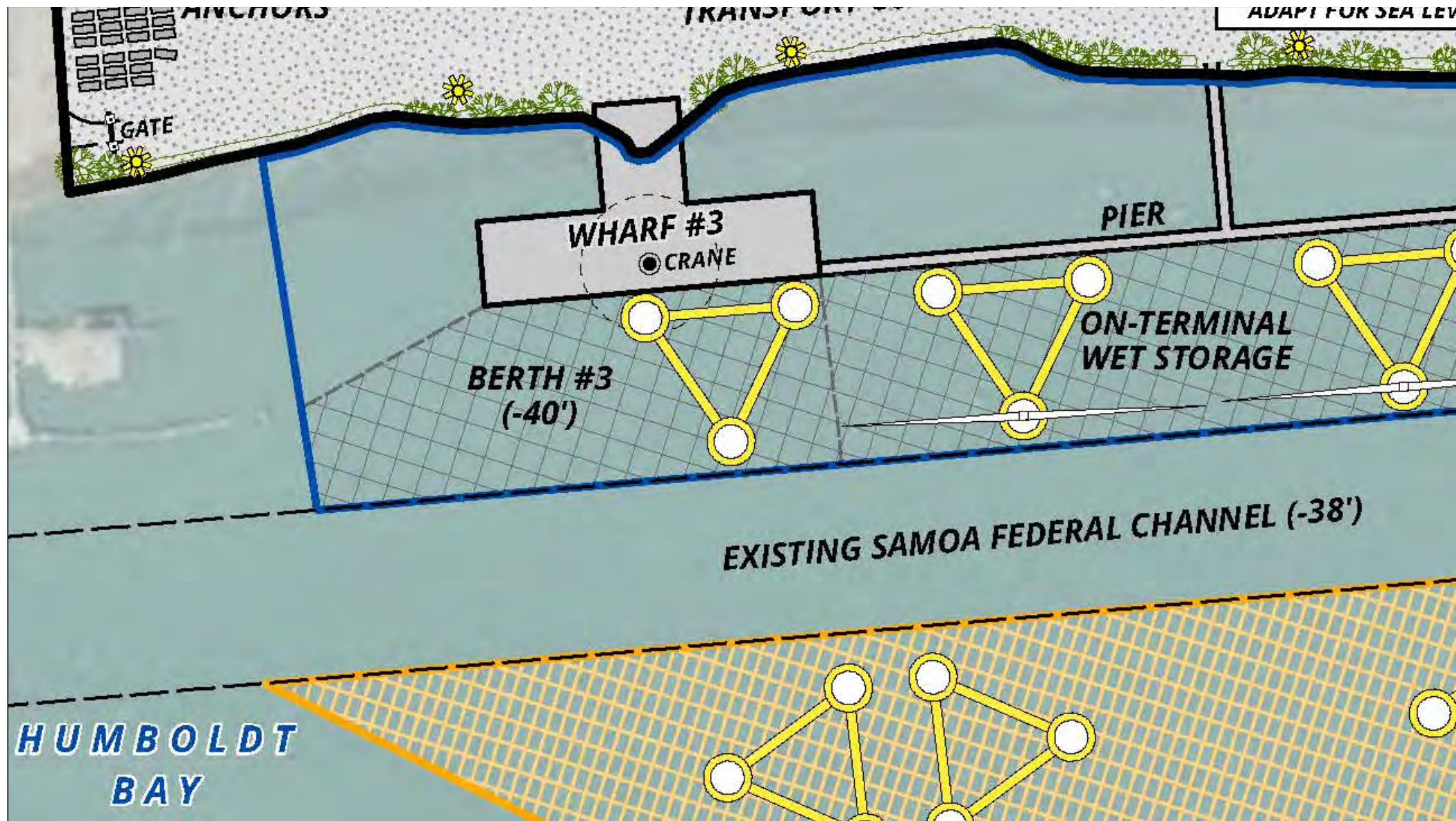












ANCHORS

TRANSFER

ADAPT FOR SEA LEVEL

GATE

WHARF #3

● CRANE

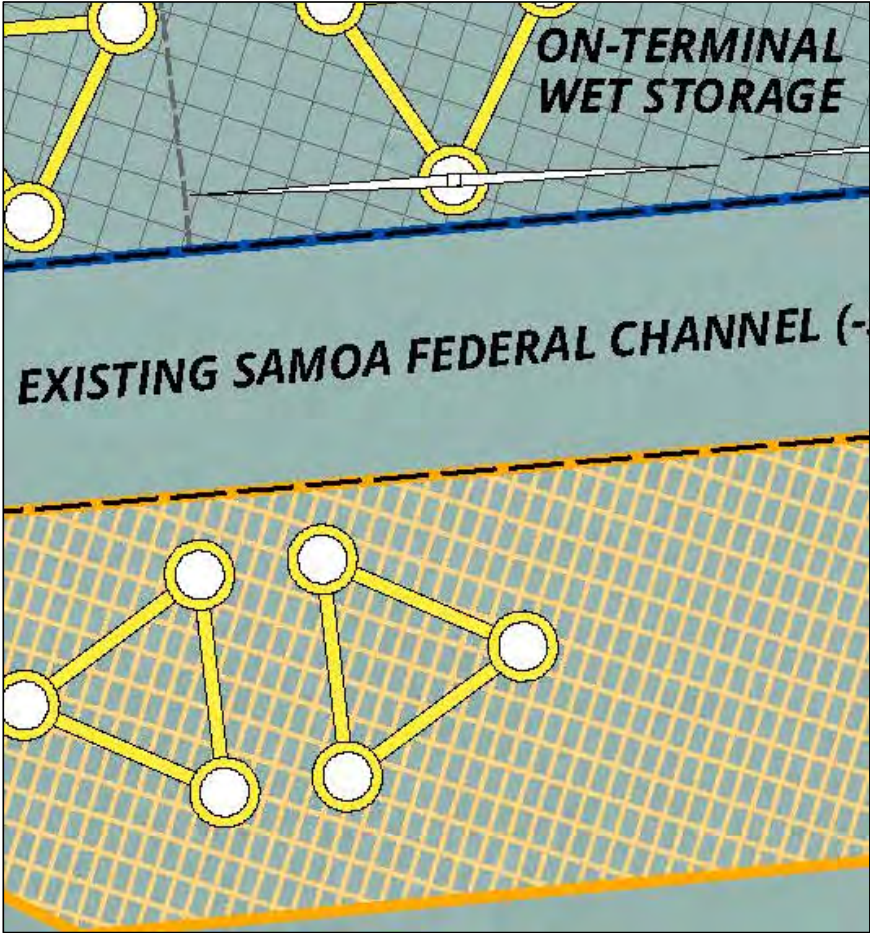
PIER

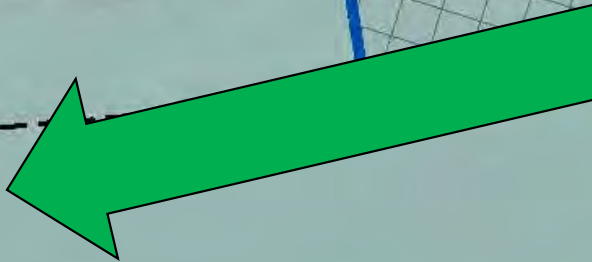
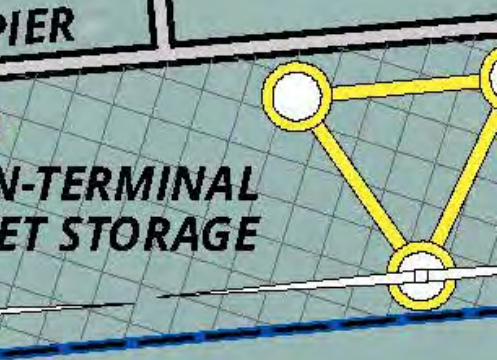
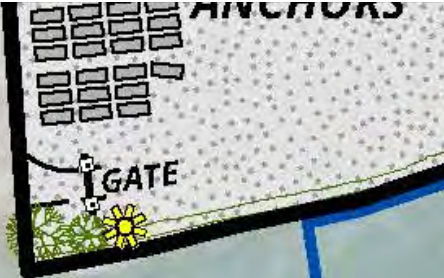
BERTH #3
(-40')

ON-TERMINAL
WET STORAGE

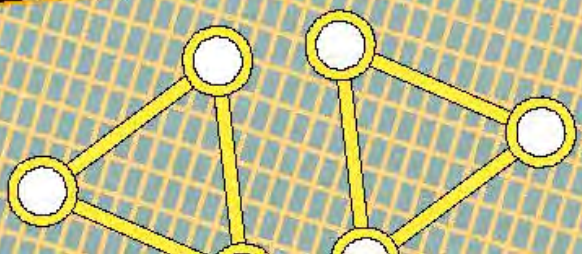
EXISTING SAMOA FEDERAL CHANNEL (-38')

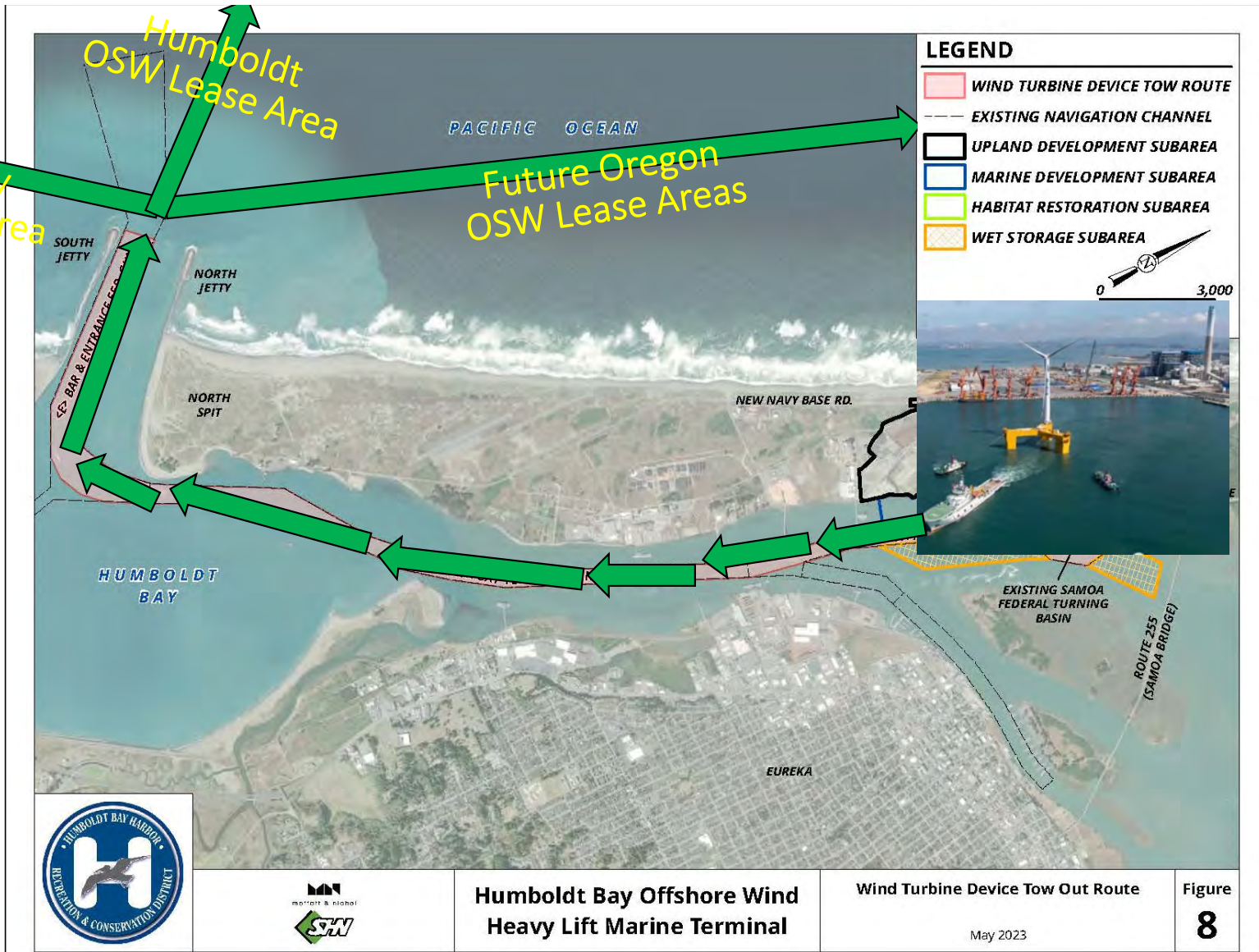
HUMBOLDT
BAY





HUMBOLDT
BAY





Humboldt Bay Offshore Wind Heavy Lift Marine Terminal

Wind Turbine Device Tow Out Route

May 2023

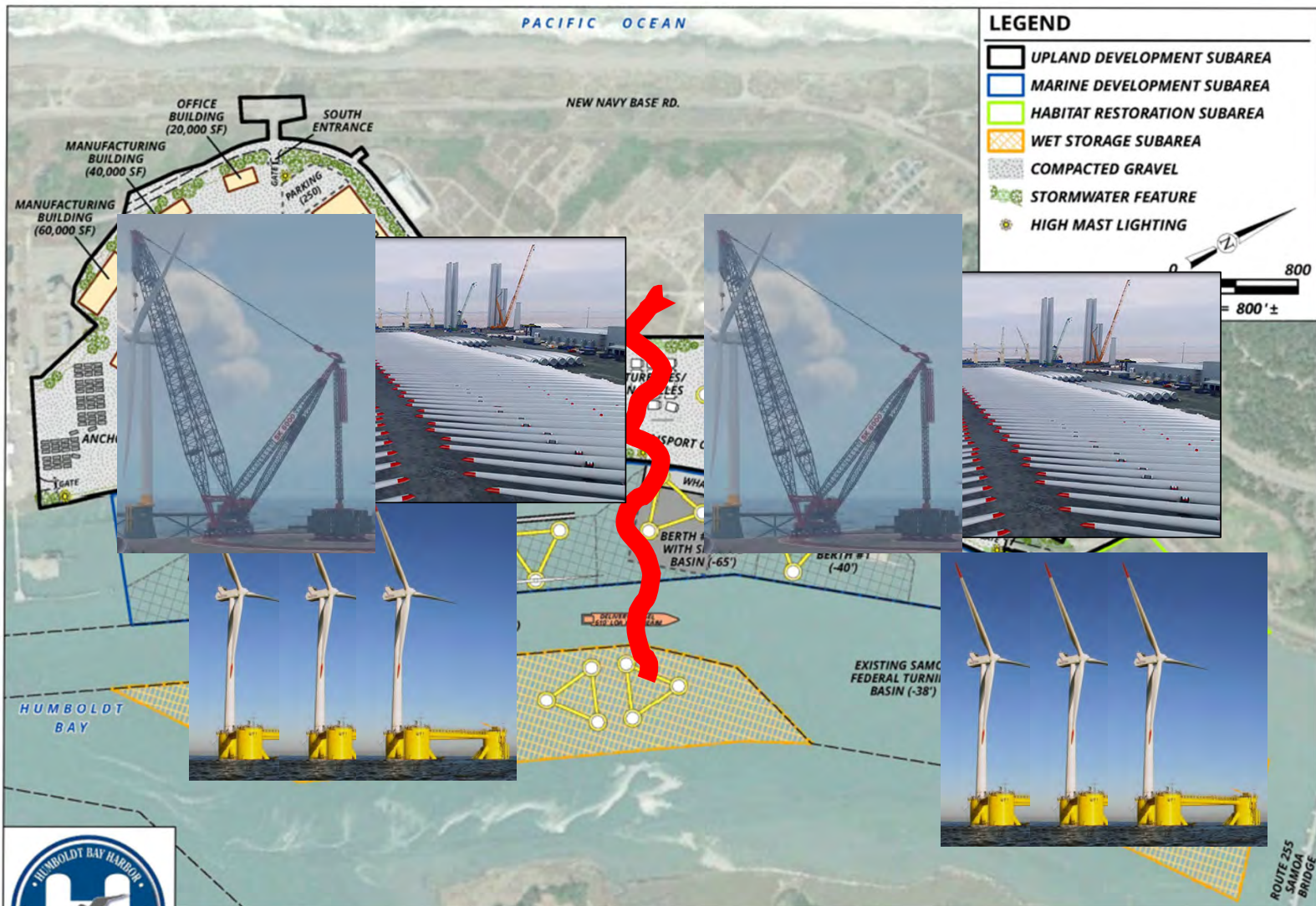
Figure

8

Project Phasing

A landscape photograph of a sunset over a large body of water. The sun is a bright orange circle on the horizon, with its light reflecting on the water's surface. The sky transitions from a deep orange near the horizon to a pale blue at the top. In the foreground, there are dark silhouettes of reeds and a wooden fence. The text 'Project Phasing' is centered in the upper half of the image in a white, sans-serif font.

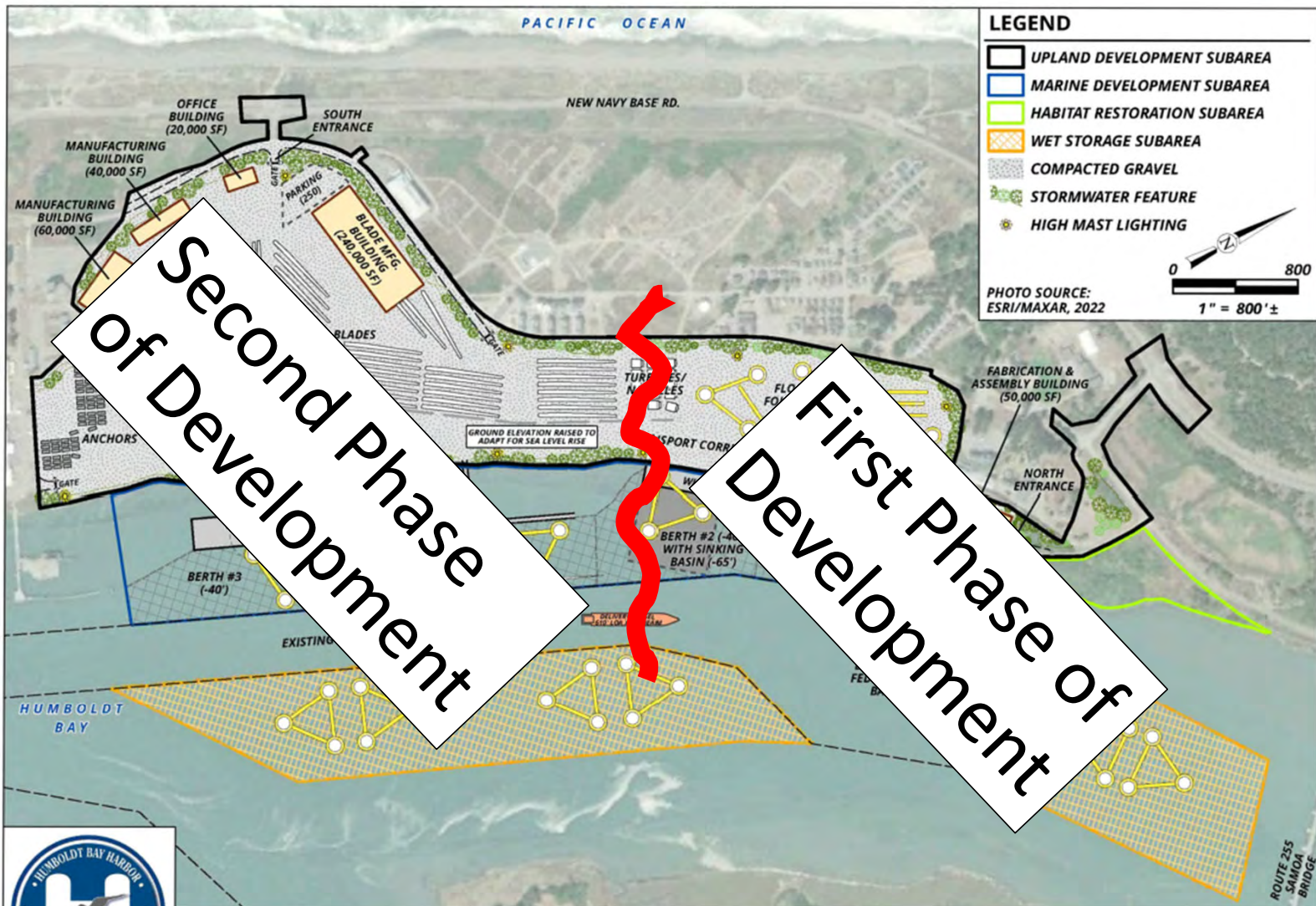




Humboldt Bay Offshore Wind

Project Example #1

Figure



LEGEND

- UPLAND DEVELOPMENT SUBAREA
- MARINE DEVELOPMENT SUBAREA
- HABITAT RESTORATION SUBAREA
- WET STORAGE SUBAREA
- COMPACTED GRAVEL
- STORMWATER FEATURE
- HIGH MAST LIGHTING

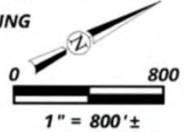


PHOTO SOURCE:
ESRI/MAXAR, 2022

Second Phase
of Development

First Phase of
Development

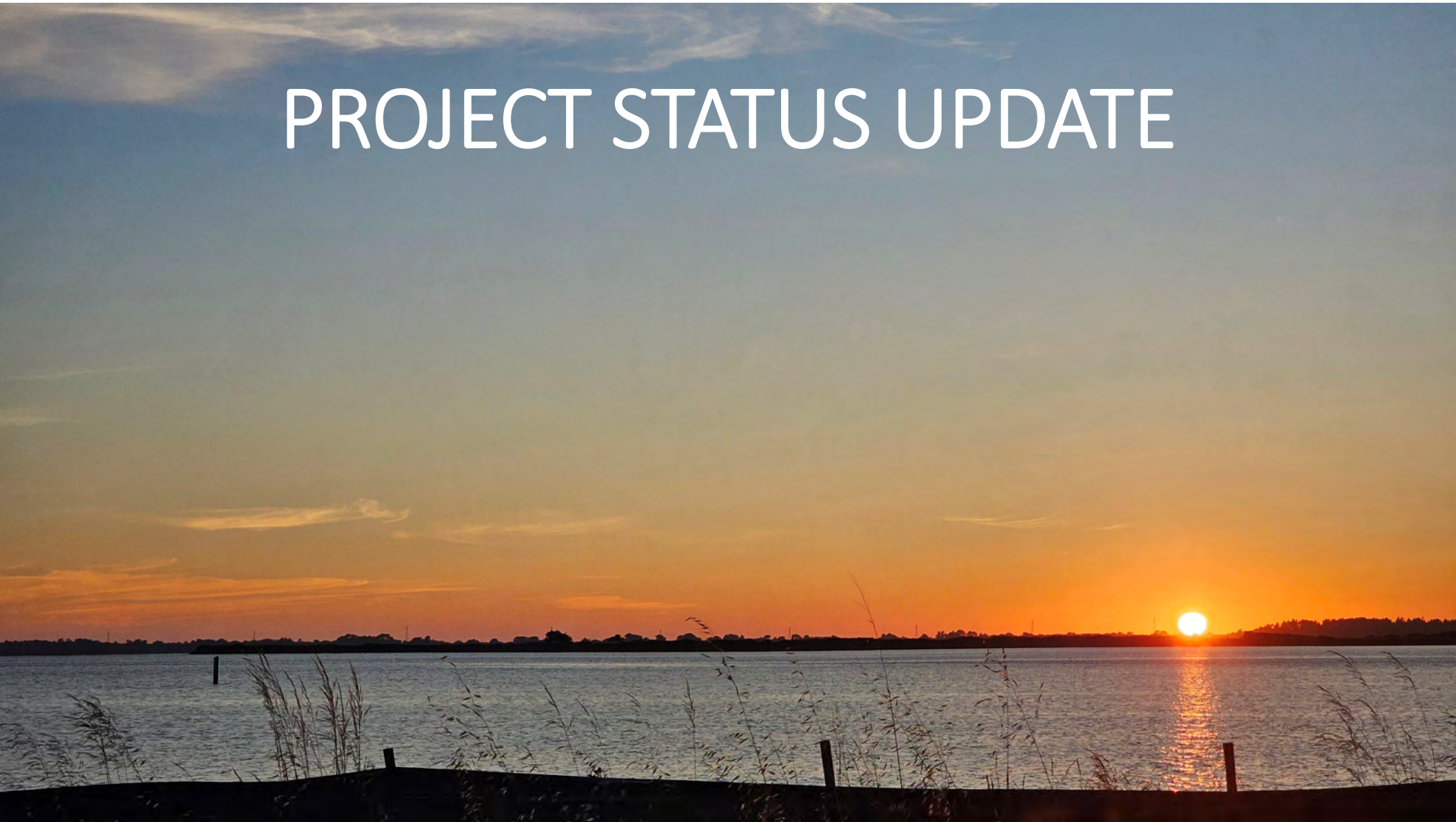


Humboldt Bay Offshore Wind

Project Example #1

Figure

PROJECT STATUS UPDATE



PROJECT LABOR AGREEMENT

BY AND BETWEEN

THE HUMBOLDT BAY HARBOR, RECREATION, AND CONSERVATION DISTRICT

AND

STATE BUILDING AND CONSTRUCTION TRADES COUNCIL OF CALIFORNIA,

BUILDING AND CONSTRUCTION TRADES COUNCIL

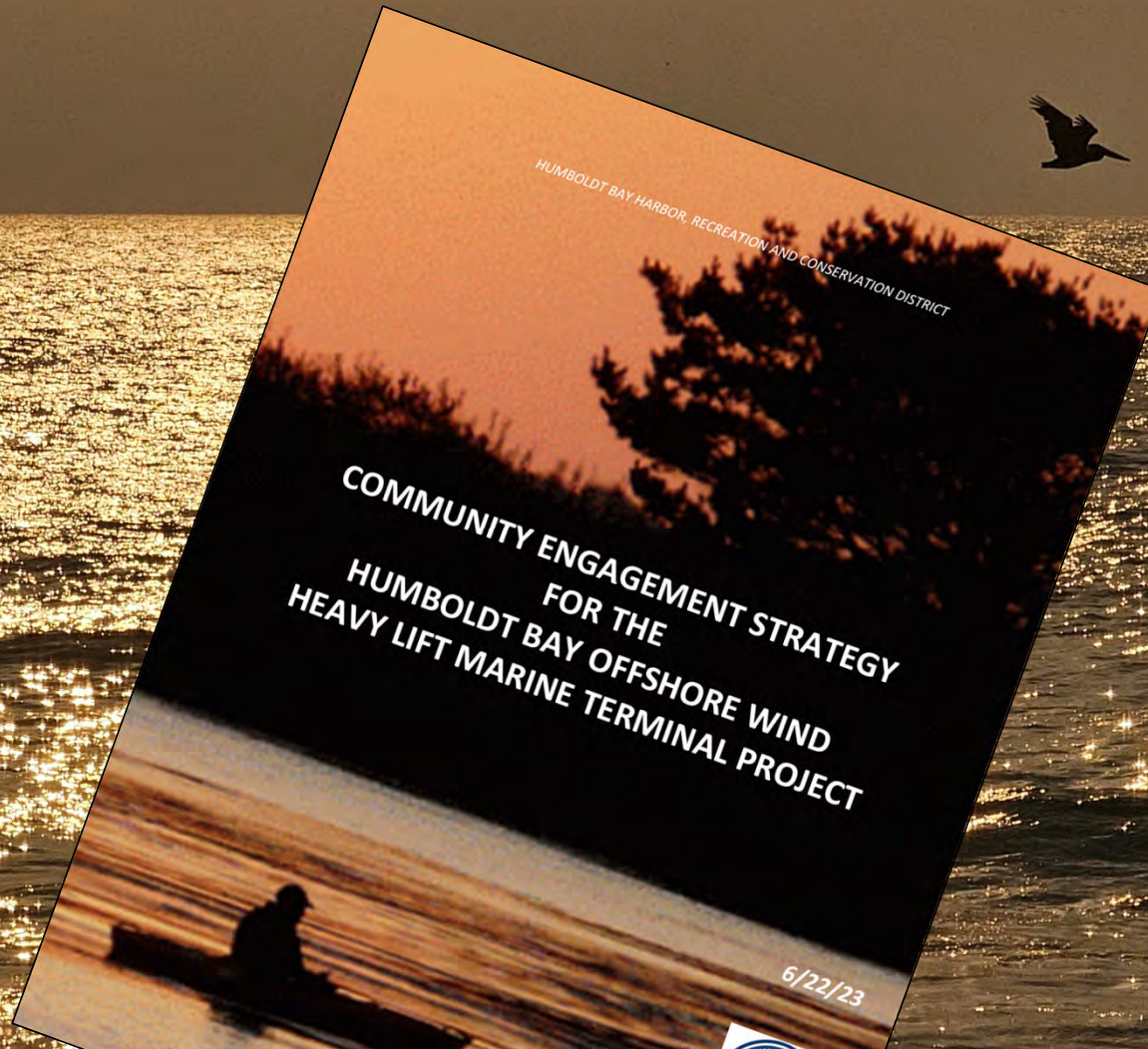
OF HUMBOLDT AND DEL NORTE COUNTIES

AND THE SIGNATORY CRAFT COUNCILS AND UNIONS

Tribal Engagement



COMMUNITY ENGAGEMENT STRATEGY



AQUACULTURE COMMITTEE



FISHERMEN COMMITTEE



REGULATORY AGENCY COMMITTEES (x3)



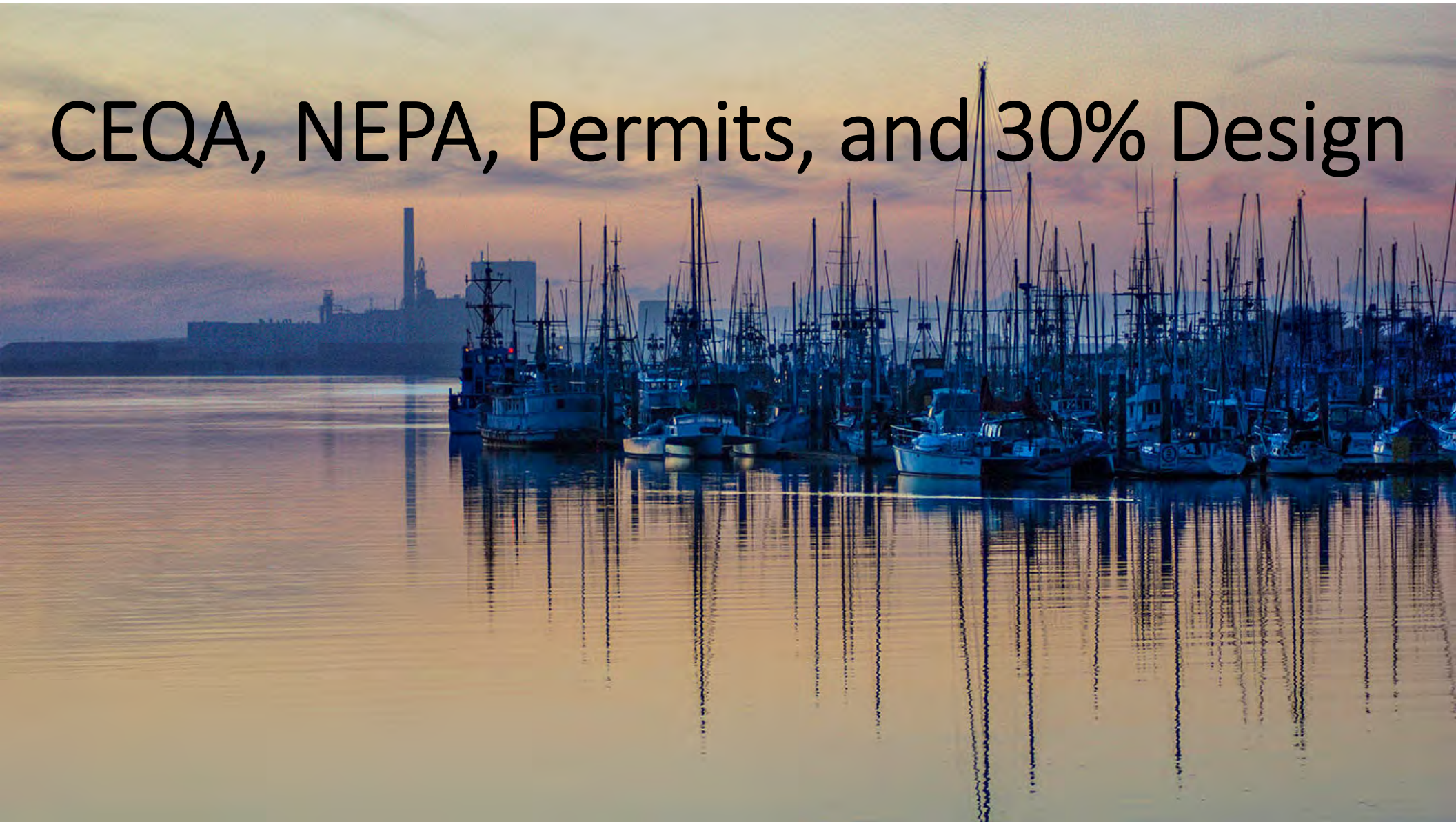
COMMUNITY ADVISORY COMMITTEE



WORKFORCE STRATEGY



CEQA, NEPA, Permits, and 30% Design



Green Terminal Planning



Community Benefit Program



GRANTS AS STEPPING STONES

- 2020: Humboldt County Headwaters Fund: \$65,000
- 2021: State Lands Commission: \$576,191
- 2022: California Energy Commission: \$10,450,000
- 2023: MARAD PIDP grant: \$8,672,986
- 2024: US DOT MPDG: \$426,719,810
- Future: Additional investments!



\$426,719,810

- **Construction:** Access roads, onsite utilities;
- **Construction:** 40-acre upland staging site;
- **Construction:** 1,200 linear foot wharf;
- **Construction:** Berth;



\$426,719,810



- **Construction of the heavy lift marine terminal**
 - \$51,000,000 for environmental restoration;
 - \$ 1,100,000 for a paved multipurpose trail adjacent to the site;
 - \$ 2,300,000 for an eco-shoreline transition from the bay to the upland site;
 - \$10,000,000 for an on-site solar array to provide renewable energy to the project operations
 - \$ 1,200,000 for public recreation access (fishing pier, kayak launch, or other);
 - \$ 3,000,000 for a dredge material dewatering area;
 - \$ 6,000,000 for a Community Benefit Program for Tribes, fisherman, and nearby residents;
 - \$ 2,000,000 for fishermen storage relocation to Woodley Island; and
 - \$ 1,000,000 for relocation of existing aquaculture tenants.
- \$77,600,000 focused on benefiting Humboldt Bay and our community**

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- Shorts
- Subscriptions
- Library
- History
- Your videos
- Watch later
- Offshore Wind
- Liked videos



Humboldt Bay Harbor District

@humboltdbayharbordistrict 13 subscribers 1 video

Customize channel Manage videos

Welcome to the Port of Humboldt Bay YouTube Channel. To learn more, go... >

- HOME
- VIDEOS
- PLAYLISTS
- CHANNELS
- ABOUT

Videos



Intro to Offshore Wind_ Why, Who, How, Where, & When (long version)

250 views · 4 days ago

Introduction to offshore wind and a proposed project by the Humboldt Port Authority. Provides general background regarding floating offshore wind, the BOEM lease areas, wind turbines, shipping,...

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HUMBOLDT BAY HARBOR, RECREATION, & CONSERVATION DISTRICT

A Special District of the State of California



- About
- Meetings & Notices
- Recreation
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- Harbor/Port
- Conditions
- Contact

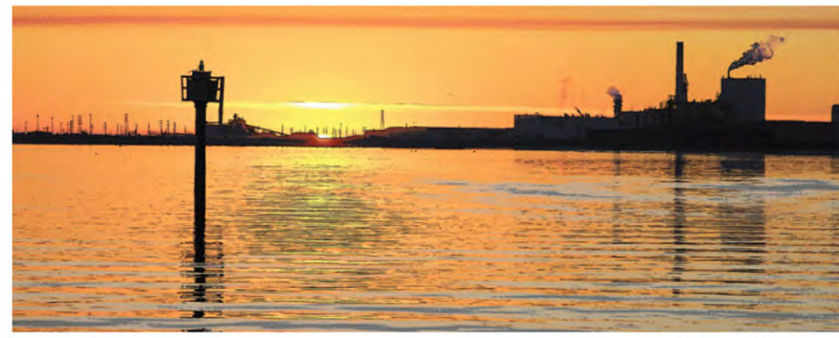
Pay Your Bill Online

Meetings & Agendas

- March 9, 2023 Development Association Special Meeting Agenda
- March 9, 2023 Regular Board Meeting Agenda
- February 9, 2023 Regular Board Meeting Agenda
- January 18, 2023 Humboldt Bay Development Association Agenda
- January 12, 2023 Amended Regular Board Meeting Agenda
- January 12, 2023 Regular Board Meeting Agenda
- January 7, 2023 Special Board Meeting Agenda
- December 21, 2022 Humboldt Bay Development Association Agenda
- July 20th 2022 HBDA-Agenda Packet
- July 14th 2022 Agenda
- July 14th 2022 Agenda Packet
- April 27, 2022 Special Board Meeting Agenda
- April 14, 2022 Regular Board Meeting Agenda
- March 10, 2022 Regular Board Meeting Agenda
- February 10, 2022 Regular Board Meeting Agenda
- January 13, 2022 Regular Board Meeting Agenda
- December 9, 2021 Regular Board Meeting Agenda
- November 4, 2021 Special Board Meeting Agenda
- October 14, 2021 Regular Board Meeting

[Subscribe to Our Email Noticing List](#)

Current Items



Public Comment Period for offshore Wind Energy in Humboldt Bay

Please find attached a link to the Federal Register seeking public comment on the Pacific Coast Port Access Route Study, PAC-PARS. There are specific inquires within the Federal Register pertaining to the BOEM Wind Energy Call Area offshore of Humboldt Bay. **Comment period closes May 26, 2022.**

Request for Qualifications:

[Redwood Marine Multipurpose Terminal Replacement Project - Design and Permitting](#)

Access
Me

Several upcoming opportunities for public engagement, input, and feedback



If you want to know more,
or if you want to participate,
please reach out to us directly.



THANK YOU

