

CALIFORNIA MARINE AFFAIRS AND NAVIGATION CONFERENCE

Mitigation: From ESA Enduring Effects to Eelgrass

Michelle Havey, Principal Fisheries Biologist



ESA Enduring Effects

An aerial photograph of a city harbor. In the foreground, a large white ship with a green funnel is moving through the water, leaving a white wake. To its right, there are several large, flat, industrial piers or barges. The water is dark blue. In the background, a dense urban landscape with many tall buildings and skyscrapers is visible. A highway or bridge runs across the middle ground, separating the harbor from the city. The overall scene depicts a busy port area in a major city.

Regulatory Drivers for Nearshore ESA Mitigation

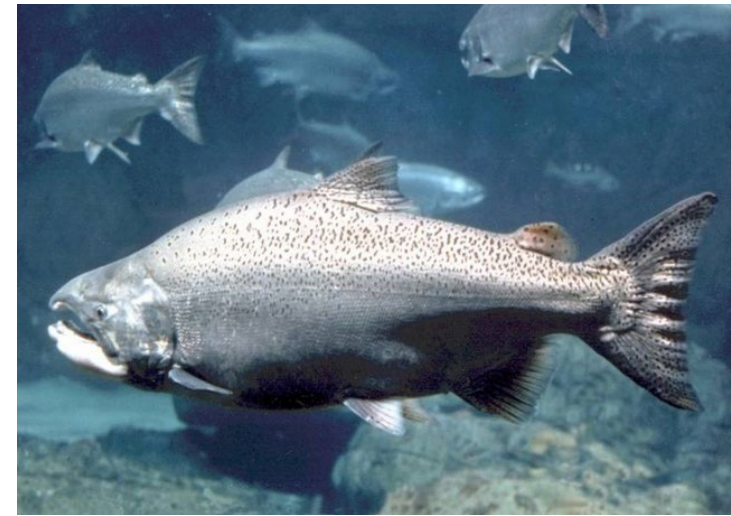
UNCERTAINTY

- Definition of “harm”
- “Passback memo”
- Enduring effects policy



Port of Seattle

Critical Habitat Impacts Drive Nearshore Mitigation



BACKGROUND

Consultation Approach

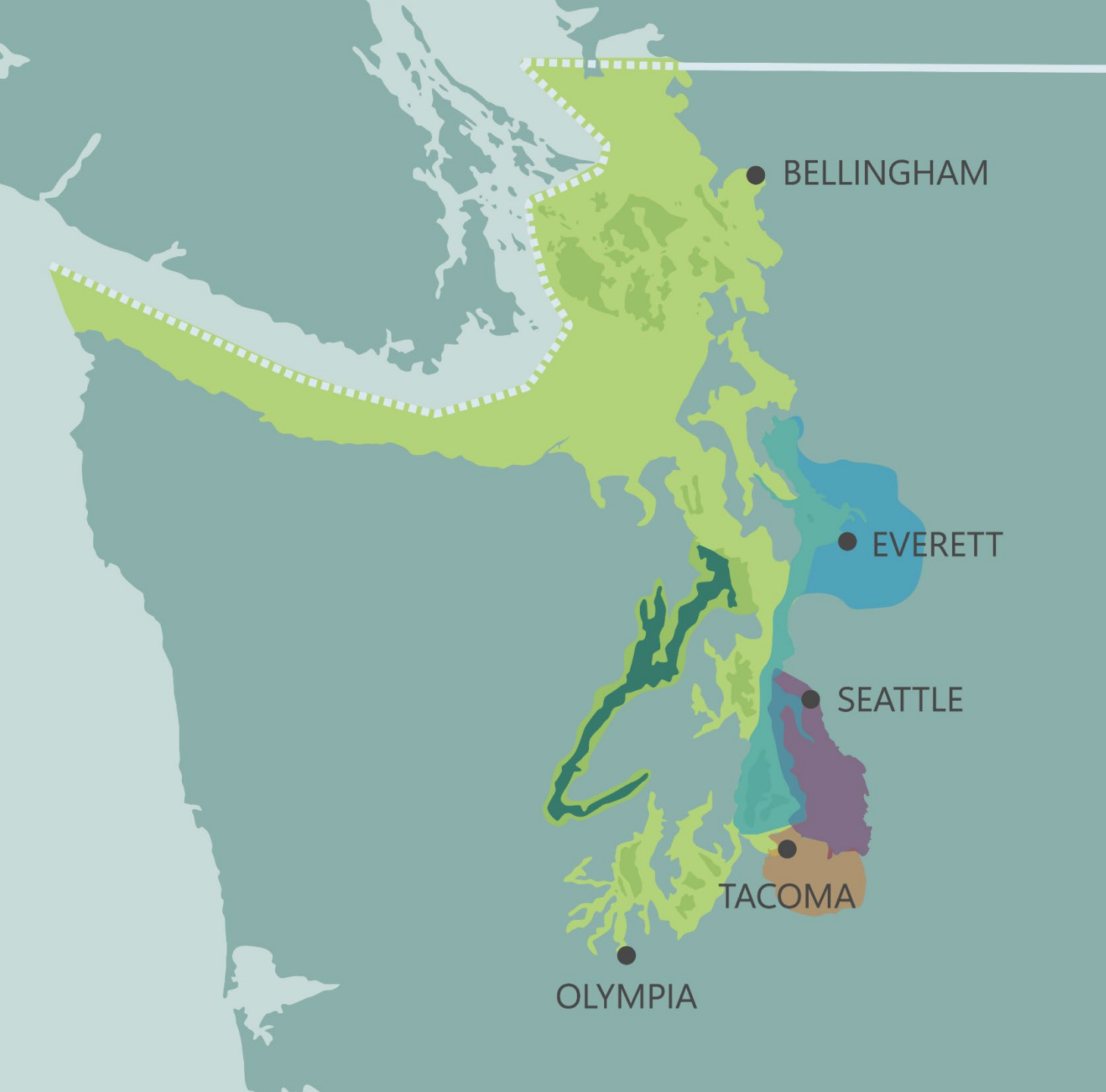
- Nearshore habitat calculator
- Maintenance projects 1:1
- New projects 2:1

Mitigation Options


- In-lieu fee credit purchase
- Permittee-responsible mitigation






Port of Seattle



IN LIEU FEE PROGRAMS

-  Puget Sound Partnership
-  Hood Canal Coordinating Council

MITIGATION BANKS

-  Blue Heron Slough
-  Port of Seattle Proposed Umbrella Bank
-  Port of Tacoma Upper Clear Creek

RECENT IMPACTS

Port of Bellingham

- \$872K pile wrapping (paid)

Port of Everett

- \$800K maintenance dredging (pending)

Port of Seattle

- Estimated >\$20M to repair/replace Terminal 5 under nearshore calculator



Bellingham Cruise Terminal

COMPREHENSIVE MITIGATED MAINTENANCE PERMITS

Ports of Seattle and Tacoma

- Applicable habitat: highly developed port environments

Actions Covered

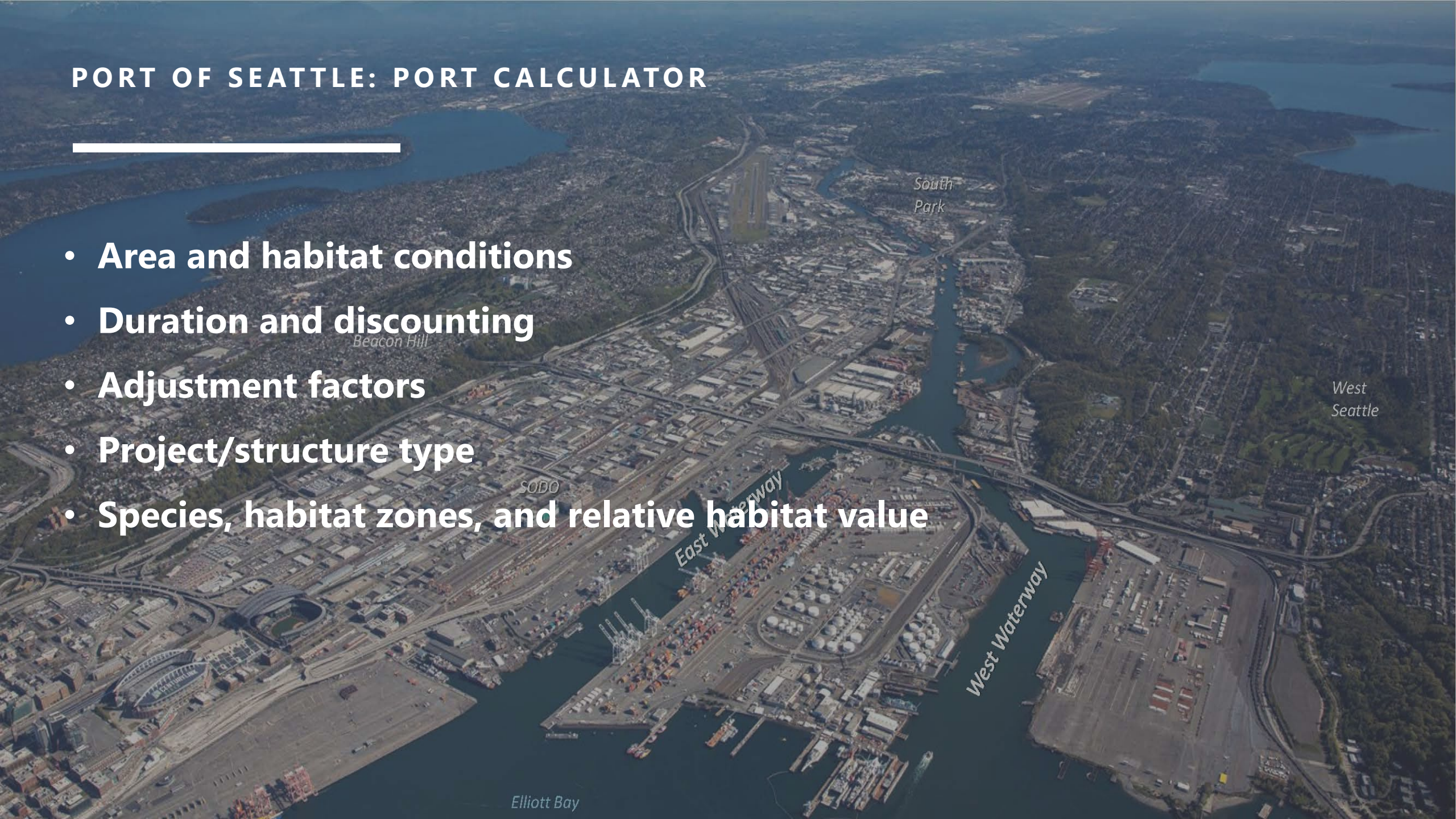
- Structure maintenance and replacement
- Dredging
- Creosote removal
- Restoration



Port of Tacoma

PORT OF SEATTLE: PORT CALCULATOR

- Area and habitat conditions
- Duration and discounting
- Adjustment factors
- Project/structure type
- Species, habitat zones, and relative habitat value



SOLUTIONS

- Early communication
- Collaboration
- Relationships
- Investment



Port of Seattle

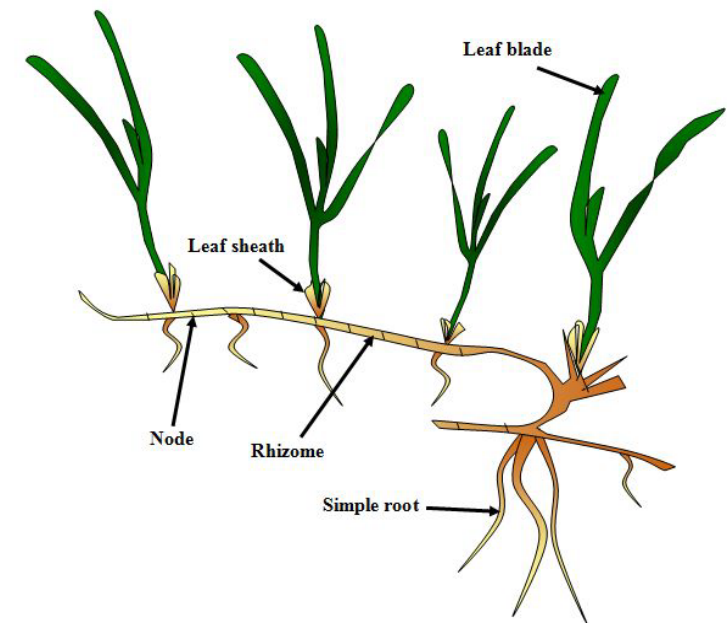
Eelgrass

HABITAT REQUIREMENTS

- Lots of light
- Moderate wave disturbance and good tidal flushing
- Firm sand to soft mud
- Depths ranging from -1 ft to -20 ft mean lower low water (MLLW) up to 100 ft deep in very clear water
- Cool and clear waters
- Ideally between 50 and 68° F

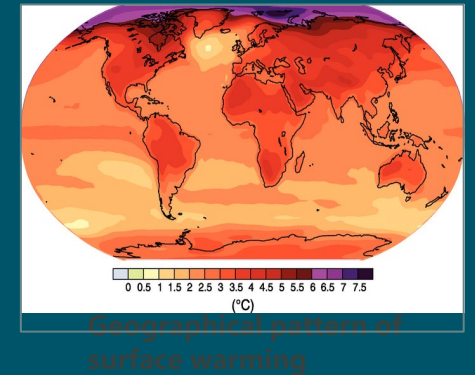
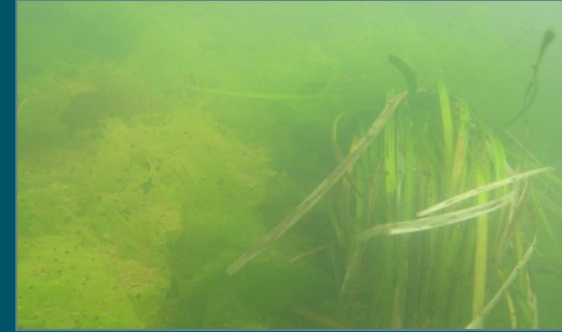


Zostera marina



REGULATORY REQUIREMENTS

- Eelgrass considered a sensitive resource by state and federal agencies
- All proposed actions that could adversely affect eelgrass require federal agencies to consult with the National Marine Fisheries Service
- Project-specific mitigation required at a 1.38:1 ratio, per the California Eelgrass Mitigation Plan (CEMP) mitigation requirements



LOWER NEWPORT BAY

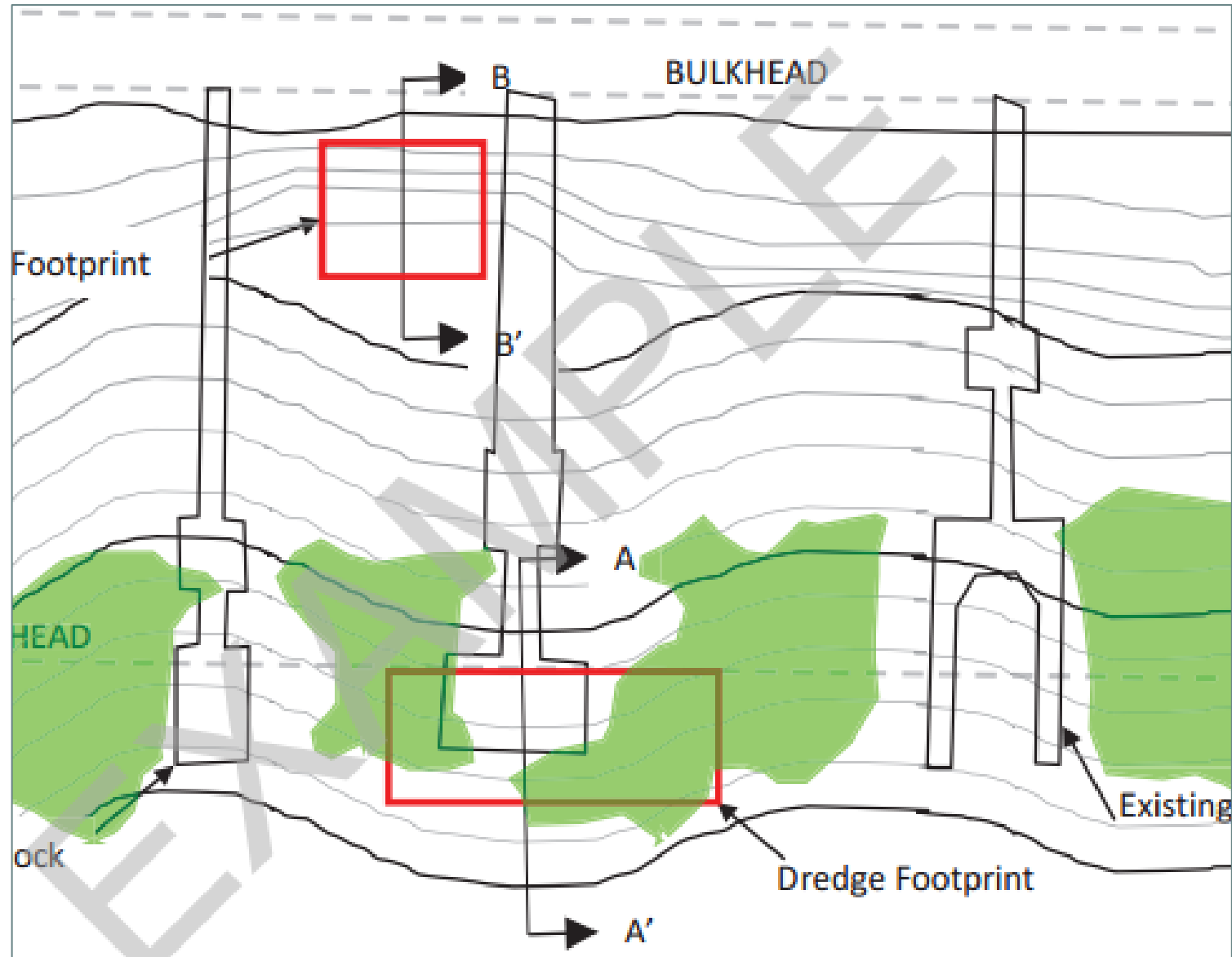


RGP 54 KEY ACTIVITIES

- Cumulative annual dredging limit up to 75,000 cy
- Maximum 8,000 cy per project limit
- Maintenance dredging to -10 feet MLLW (plus 2 feet of overdepth allowance)
- Temporary impacts to eelgrass as a percentage of current population in the harbor



MAINTENANCE DREDGING



Dredging can result in temporary impacts to eelgrass

NEWPORT-SPECIFIC EELGRASS PLAN

- Protect and promote eelgrass habitat on a harbor-wide basis
- Establish thresholds for total eelgrass population (based on biennial surveys)
- Allow temporary impacts to eelgrass from maintenance dredging
- Reduce burden for individual mitigation



Photo credits:
Virginia Institute of Marine Science,
Whatcom County Water Resources,
Southern Fried Science, and WildCare

EELGRASS MANAGEMENT ZONES



CITY'S ORIGINAL ROADMAP

- Educate property owners/public outreach
- Conduct biennial surveys of plan area and harbor-wide surveys every 4 years
- Provide applicant-responsible measures
- Contribute to Coastkeeper



Buoy-deployed seed bags



Transplanting eelgrass restoration frames

TOOLS FOR SUCCESS

- Application templates
- Dredging and Disposal Operations Plan templates
- Completed application example
- City tracking workbook
- Cumulative dredge volume, eelgrass impact, etc.

The screenshot displays the 'GOVERNMENT' section of the City of Newport Harbor Resources website. The left sidebar lists various resources, including 'Harbor Resources' and 'Dredging Permits & Information'. The main content area is titled 'MAINTENANCE DREDGING PERMITS' and features a 'Project Update' section dated March 30, 2016, which states that the city has reached its annual allowable limit for temporary impacts to eelgrass under the new RGP 54. Below this is an 'Overview' section explaining the dredging process and the RGP 54 Application Steps. A detailed 'Step 3. Application' section is highlighted, providing instructions on how to submit an application, including required documents and fees. The page also includes a search bar and navigation links for 'I AM A...', 'HOW DO I...', and 'TRENDING'.

GOVERNMENT I AM A... HOW DO I... TRENDING Search...

Government » DEPARTMENTS » Public Works » Harbor Resources

MAINTENANCE DREDGING PERMITS

Font Size: Share & Bookmark Feedback Print

Project Update

March 30, 2016

At this point, the City has reached the annual allowable limit for temporary impacts to eelgrass under the new RGP 54, and is no longer accepting pre-screening applications if your project will result in temporary impacts to eelgrass. Please check back regularly for additional information as to when the City will be accepting additional project proposals that include temporary impacts to eelgrass.

Overview

All dredging projects, even the simplest in nature, require permits issued by multiple federal and state agencies before dredging can proceed. To make the process easier for applicants, the City (Harbor Resources) manages the permitting responsibility for the new Regional General Permit program (RGP 54) to allow small maintenance dredging projects within designated areas of Newport Harbor. Because the permit conditions from the federal and state agencies are complex, we have outlined key steps, and have also provided helpful information for you on this page. Our goal is to simplify the process so we can ensure a successful and efficient program. If you have any questions, please contact Harbor Resources at 949-644-3044 or dredging@newportbeachca.gov.

RGP 54 Application Steps

Step 1. Pre-application screening – Submit the following to Harbor Resources to initiate the process:

Step 3. Application – Submit a completed **application** to Harbor Resources electronically. Please be sure to submit the application form and the required attachments as separate files - do not combine into a single PDF. Submit a signed RWQCB Certification statement and applicable fees to Harbor Resources at 100 Civic Center Drive, Newport Beach, CA 92660. Applicable fees include the following:

- \$1,674 check payable to City of Newport Beach; and
- \$200 check for Clean Water Act Section 401 Certification, payable to State Water Resources Control Board.

RWQCB Certification Statement Template

Example completed RGP 54 application package

Step 4. Harbor Resources will contact you if additional information is required. Once the application is complete, we will forward your application to the regulatory agencies (Coastal Commission, Corps of Engineers, and Water Board) for consideration.

Step 5. Approximately 60 to 90 days after your application is submitted to the agencies, Harbor Resources will notify you if your project was approved.

Step 6. Submit a signed **Applicant Agreement** to Harbor Resources, perform any pre-project requirements (as listed in the application), and start the project!

Step 7. After your dredging project is complete, submit post-construction reports and perform eelgrass mitigation (if required).

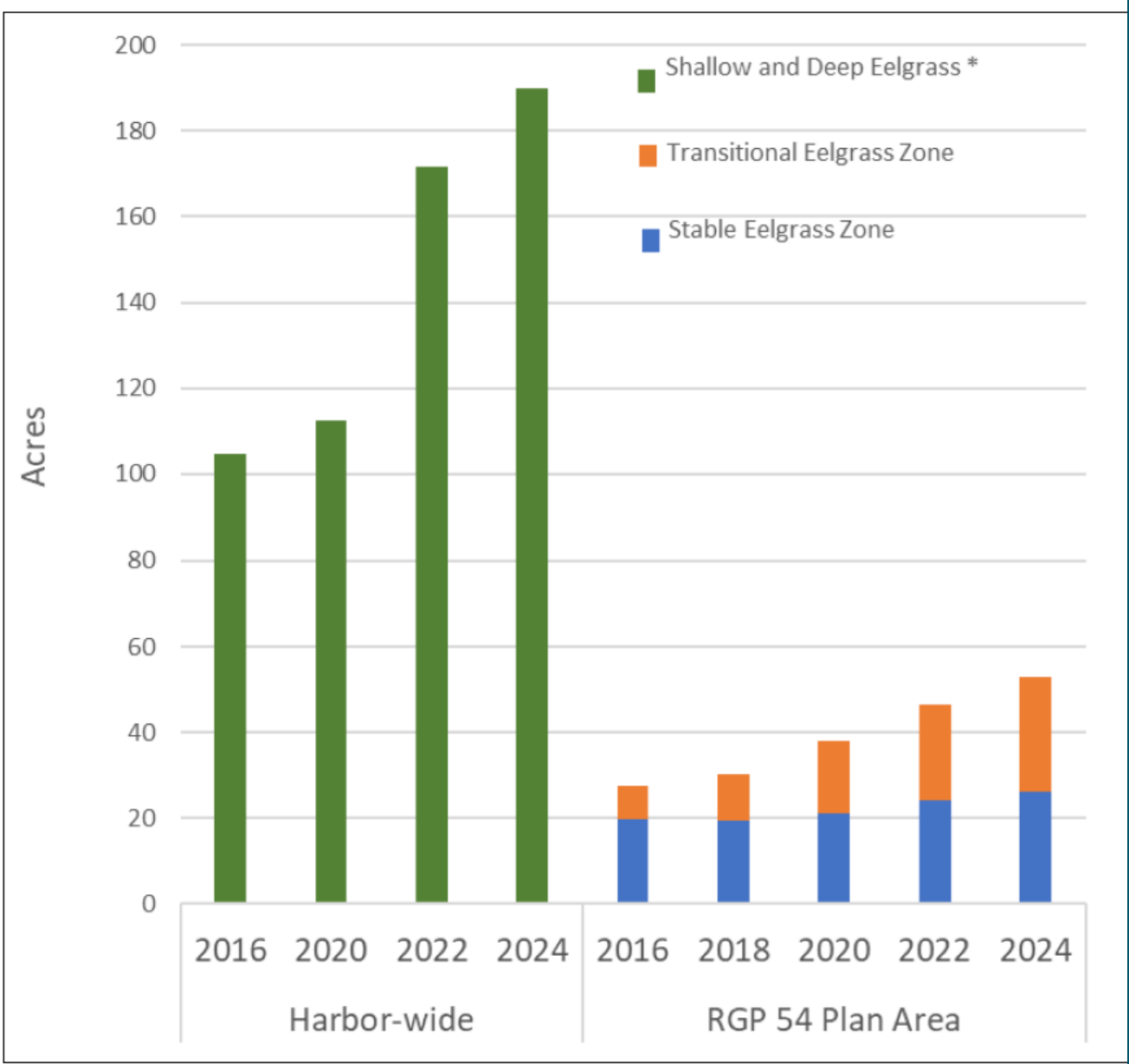
Helpful information for planning a maintenance dredging project

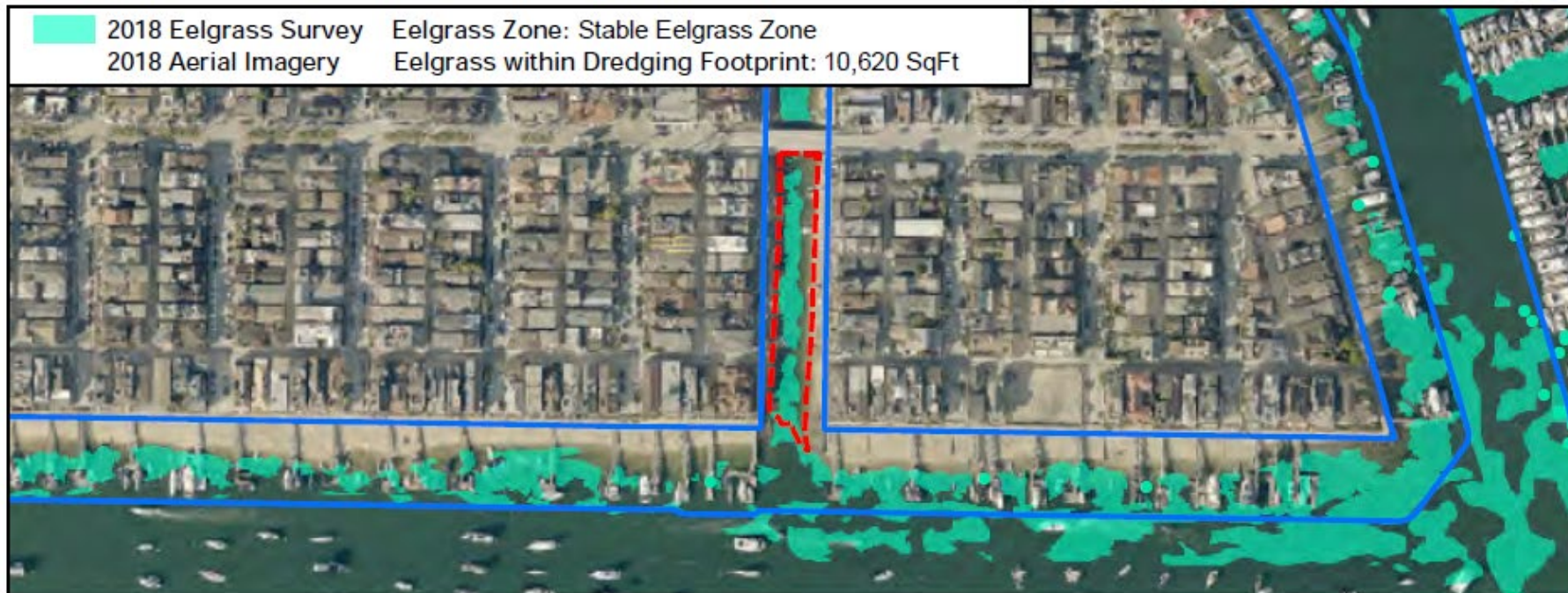
- Interactive map
- Sediment characterization map
- Timeline and Process for a Project under RGP 54
- Eelgrass and Caulerpa information
- Eelgrass Protection and Mitigation Plan
- Applicant Agreement
- Determination of Project Types under RGP 54 and Corresponding Requirements

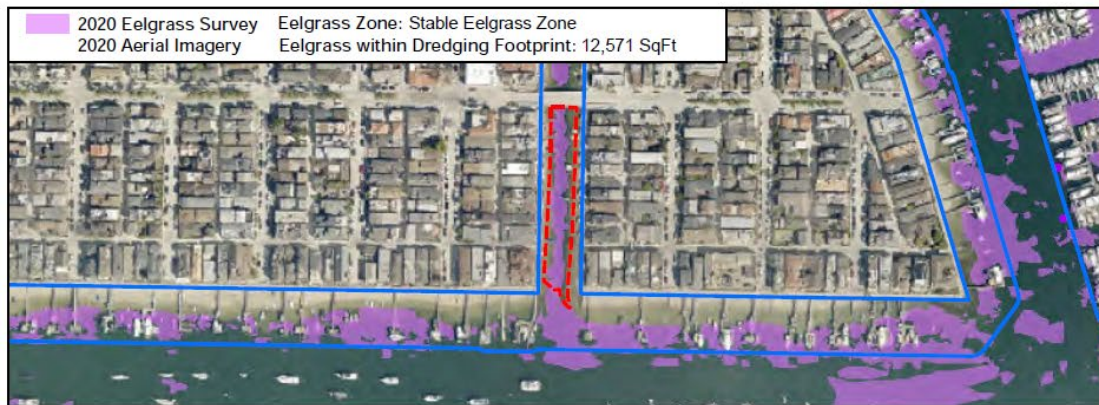
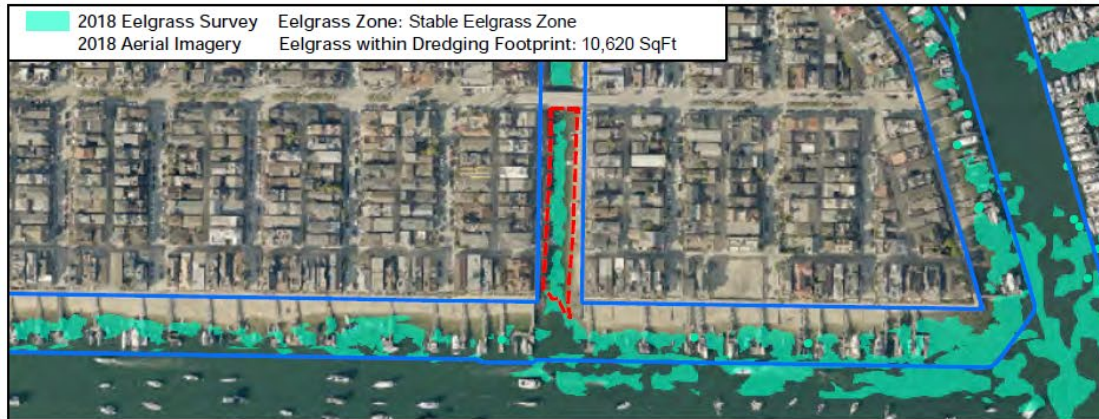
Templates for maintenance dredging projects

- Dredging Application for RGP 54. Application form should be filled out electronically and submitted to Harbor Resources. Note if multiple adjacent properties are applying under a single application, the limitations for a single project will apply.
- Template for Dredging, Transport, and Discharge Operations Plan for Beach Replenishment ONLY
- Template for Dredging, Transport, and Discharge Operations Plan for Open Ocean Disposal ONLY
- Template for Post-Dredging and Disposal Completion Report

RGP 54 PROGRAM TO DATE







Grand Canal and South Bay Front

Project Number: DRG2016_1051

Dredging Completion: 01/11/2017

USACE File No: SPL-2016-00520-SME

Dredging Footprint

RGP 54 Plan Area



City of Newport Beach
GIS Division
January 16, 2025

BENEFITS OF EELGRASS

- Under the City's RGP 54 and Eelgrass Plan, temporary impacts to eelgrass are permitted based on the total amount of eelgrass in the harbor.
- So, the more eelgrass the better!



Photo credits:
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Whatcom County Water Resources,
Southern Fried Science, and WildCare



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Duwamish River People's Park



Questions/
Discussion

[Video](#)