

Salish Sea Nearshore Programmatic (SSNP) Consultations Public Engagement

March 2022



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of Engineers®**



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Welcome

Webinar Host:

- **Tina Tong** – U.S. Army Corps of Engineers, Seattle District
 - USACE Regulatory Branch Chief
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Facilitator:

- **Stacie Smith** – National Marine Fisheries Service
 - NMFS Acting Central Puget Sound Branch Chief
 - stacie.smith@noaa.gov

Webinar Etiquette:

- Please keep yourself on mute to reduce feedback.
- Please turn off your camera as it often creates bandwidth issues unless speaking or presenting.
- Enter any questions into the chat.
 - We will answer questions for 10 minutes at the end of each 20 minute segment and will have 30 minutes at the end for questions.

Presenters

- **Kristin McDermott** – U.S. Army Corps of Engineers, Seattle District
 - USACE Technical lead for development of SSNP
 - Kristin.L.McDermott@usace.army.mil
- **Eric Murray** – National Marine Fisheries Service
 - Section 7 Coordinator, OWCO
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- **Stephanie Ehinger** – National Marine Fisheries Service
 - NMFS Technical lead for Conservation Calculator
 - Stephanie.Ehinger@noaa.gov
- **Curtis Tanner** – U.S. Fish and Wildlife Service
 - USFWS Assistant Field Supervisor
 - Curtis_Tanner@fws.gov

Purpose of Public Engagement

To provide the public with information on the Agencies' (USACE, NMFS, & USFWS) proposed programmatic consultations for the Salish Sea Nearshore

AND

To allow an opportunity for the public to engage and understand the scope of the proposed programmatic consultations

We want to acknowledge all of the indigenous people that historically and currently reside throughout the land we call the state of Washington. We are honored to live and work on these traditional and ancestral lands. We recognize that borders are artificial—many tribal nations from the North, the South, and the East of present-day Washington also have historical and current ties to these lands.

We express our gratitude as guests and thank the original and current stewards of this land. What we experience today is a product of these nations' ancestors' ability to be in relationship with the natural world. We would not be here without their guardianship and connection to the earth.

This acknowledgement is intended to promote ongoing conversations and relationships, and to work towards cooperative stewardship.

Meeting Overview

1. Programmatic Consultations Overview (30 min)
2. SSNP Proposed Action Overview (30 min)
3. Conservation Calculator and SSNP (30 min)
4. Questions and Answers (30 min)

A hand in a dark suit sleeve holds a black umbrella. The umbrella's canopy is open and contains the text. The background is white, and there is a teal bar at the bottom of the slide.

I. Programmatic Consultations

Overview

1. Need & Purpose of Consultations

2. What is a Programmatic ESA & EFH Consultation

3. The Benefits of a Programmatic Consultations

Need for Consultations: Endangered Species Act (ESA)

“to protect and recover imperiled species and the ecosystems upon which they depend.”

Federal agencies must consult with NMFS & USFWS on any action authorized, funded, or undertaken, to insure that action does not jeopardize the continued existence of listed species or adversely modify critical habitat.



Need for Consultations: Essential Fish Habitat (EFH)

“the identification and protection of important habitats for federally managed fisheries.”

Under the

Magnuson-Stevens Fisheries Conservation Act (MSA)

Federal agencies must consult with NMFS regarding any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken that may adversely affect Essential Fish Habitat (EFH)



U.S. Army Corps of Engineers Regulatory Program

- USACE reviews permit applications for work in waters of the U.S. under the authorities of the Rivers and Harbors Act and the Clean Water Act.
- For projects that may affect NMFS and USFWS ESA-listed species and/or their critical habitat, completion of Section 7 ESA consultation is required before a permit decision can be made.
- Under the Magnuson-Stevens Fishery Conservation and Management Act(MSA), impacts to Essential Fish Habitat (EFH) must also be assessed by NMFS before a permit decision can be made.

What is a Programmatic Consultation?

Programmatic consultation can address **multiple actions** on a program, region, or other basis.

1. Multiple similar, frequently occurring, or routine actions expected to be implemented in particular geographic areas; or
2. A proposed program, plan, policy, or regulation providing a framework for future proposed actions.



Collaboratively Working to Streamline Consultations through Programmatic

- To streamline the ESA and EFH consultation process, programmatic consultations for different activities in specific geographic regions have been developed.
- The Agencies (USACE, NMFS, & USFWS) are developing programmatic consultations for activities within the Salish Sea Nearshore.



Programmatic “Paint with a Broad Brush”

- Develop a “Proposed Action” for a larger suite of common activities within categories rather than specific projects
- Design Criteria limit the scope of actions that can be covered by programmatic consultation
- Actions must have predictable effects
 - Ensure proposed action activities are predictable
 - Avoid vague activity types
- Actions must occur within a specific defined geography

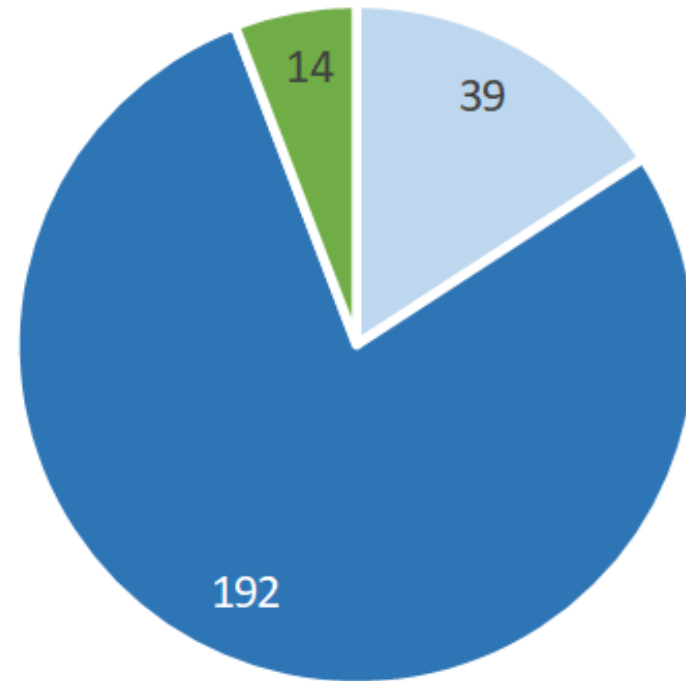


Benefits of Programmatic Consultations

- **Timeliness**
- Less paperwork
- Regulatory streamlining
- Regulatory certainty

Mean Days to Complete

NMFS West Coast Region 2014-2019



■ Informal ■ Formal ■ Implementation Record

Benefits of Programmatic Consultations

- Enhanced conservation
- Reduce project cost overruns by incorporating project design criteria early on in project development



Collaboratively Working to Streamline Consultations through Programmatic

- **Salish Sea Nearshore Programmatic (SSNP, “snap”)**
- a programmatic consultation being developed by **NMFS** and USACE for permitted actions in the Salish Sea nearshore
- USFWS is developing a separate, parallel programmatic consultation for USFWS species.
- Both to be completed in Summer 2022



QUESTIONS



II. Salish Sea Nearshore Programmatic (SSNP) Biological Opinion Proposed Action Overview



SSNP Proposed Action Overview

1. Where does SSNP apply?
2. Activities Covered by SSNP
3. General Construction Measures
4. Conservation Offsets
5. Examples of Activities and Design Criteria

Where does the SSNP apply?

- SSNP will be applicable to a broad range projects in the *Salish Sea*.
- Coverage will extend into estuaries and rivers up to the highest point of saltwater influence (salt wedge).



When does the programmatic apply?

- SSNP can be used as long as the project..
 - fits the design criteria
 - Includes conservation offsets (when applicable)
- Complex projects that do not fit the SSNP criteria will be evaluated in an individual consultation



Activities Covered by SSNP

SSNP action includes the following activities:

- Culvert and bridge repair or replacement resulting in improvements to fish passage
- Utilities
- Stormwater facilitates and outfalls
- Shoreline modification (bulkheads)
- Expand or install a new in-water or over-water structure
- Repair or replace an existing structure
- Maintain an existing structure



Activities Covered by SSNP

- Expand or install a new aid to navigation, scientific measuring device, or tideland marker
- Dredging for vessel access
- Dredging and debris removal to maintain functionality of culverts, water intakes, or outfalls
- Habitat enhancement
- Set back or removal of existing tidegates, berms, dikes, bulkhead, or levees
- Beach nourishment
- Sediment remediation



General Construction Measures for All Projects

Minimize Short Term Construction Impacts

- Follow WDFW in-water work windows
- Isolate concrete pouring
- Use fish screens whenever pumping or diverting water
- Drive piles with a vibratory hammer whenever possible

General Construction Measures for All Projects

Continued...

- Capture and dispose of site debris
- Stop work if a marine mammal enters the action area
- Wrapping or coating of treated wood piles
- Treatment of stormwater from impervious surfaces



Conservation Offsets

- Some activity categories will require conservation offsets
- To prevent enduring loss of nearshore habitat quality
- Scaled to habitat effects caused by the project



Conservation Offsets

NMFS Puget Sound Nearshore Habitat Conservation Calculator:

- Helpful tool for calculating offsets
- Robust and transparent tool based on the best available science
- Use of the Calculator will expedite projects under SSNP
- More on the Calculator in the next presentation

Up Next...

Common Project Activities that
will be covered by SSNP

Expand or install new in-water or overwater structure

- Residential and community overwater structure (OWS)
- Mooring buoy
- Mooring dolphin/pile
- Debris boom
- Fender pile(s)
- Staircase
- Marine rails
- Boat lift(s) (non-covered)
- Boat ramp



SSNP will replace RGP6

Does not include: Expansion of Commercial or Industrial Structures

***Conservation offsets are required for this category of actions**

New in-water or overwater structure

Project Design Criteria for this Action Include:

- Residential or community overwater structures
 - Fully Grated Decking: piers, gangway ramps, and stairs
 - 50% grating (60% open space): floats
 - Synthetic float material must be encapsulated
 - Floating structures should never “ground out”
- Piles
 - Pier support pilings must be spaced 20 feet apart
 - Smallest diameter and the least piles necessary

While the SSNP does not include limits on structure size, the agencies have a shared objective to minimize and avoid effects to listed resources and impacts to waters of the US.

Repair or replace an existing structure

- a. house boats
- b. boat houses, covered boat houses, boat garages,
- c. boat ramps (commercial, public or private),
- d. breakwaters,
- e. buoys and mooring structures,
- f. commercial, industrial, and residential piers or
- g. wharfs, port, industrial, and marina facilities
- h. docks, private boat docks,
- i. dolphins,
- j. float plane hangars,
- k. floating storage units,
- l. floating walkways,
- m. debris booms,
- n. groins, jetties

***Conservation offsets are required for
this category of actions**

The conservation offsets are proportional to the amount of the structure being repaired or replaced.



Repair or replace an existing structure

Project design criteria for this action include:

- Boat ramps should be elevated in sediment transport zones, to the maximum extent practicable.
- Residential and Public Recreational
 - Fully Grated Decking: piers, gangway ramps, and stairs
 - 50% grating (60% open space): floats
 - Synthetic float material must be encapsulated
 - Floating structures should never “ground out”
- Float pilings and mooring buoys must be fitted with devices to prevent perching by piscivorous birds.

***Conservation offsets are required for this category of actions**

Shoreline Modification

- The repair, replacement, and/or installation of new rock, concrete, untreated wood, and steel sheet pile bulkheads
- Installation of soft and hybrid shoreline techniques.
- Any shoreline modifications up to the Highest Astronomical Tide line

*Conservation offsets are required, **except** for the installation of **soft and hybrid shoreline treatments.**

- Bulkhead removals (including those above the High Tide Line) can be as a conservation activity to offset the impacts from a Corps permitted activity.

Shoreline Modification



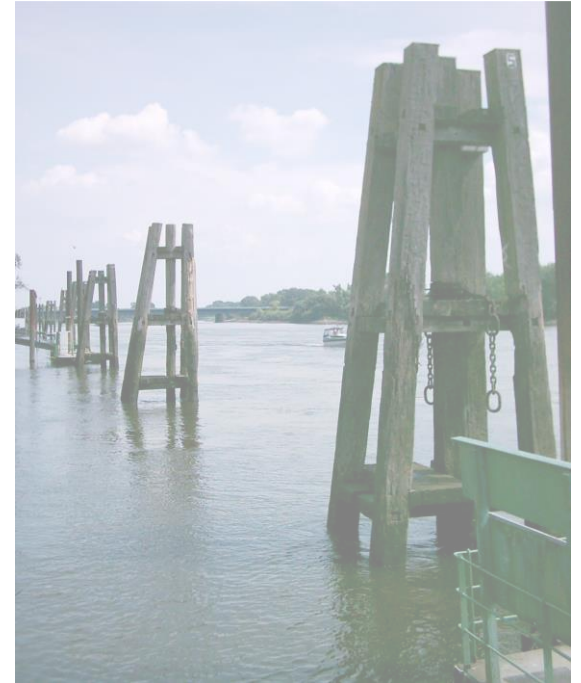
Project design criteria for this action include:

- Work will occur during low tide in the approved in-water work window and in phases to coordinate with tidal exposure.
- Concrete must have 7 days curing time before tidal inundation
- Prior to high tide, block nets should be set to prevent fish from accessing the area behind the new sheet pile installation

Minor Maintenance of an Existing Structure

Includes:

- Pile resets
- Capping of piles
- Replacement of rubber strips
- Replacement of float stops
- Encapsulation of flotation material
- Height extension of existing pilings



This category of activities will NOT require conservation offsets

Minor Maintenance of an Existing Structure

Project design criteria for this action include:

- The use and purpose of the structure (e.g., recreation, commercial, or industrial use) must not change.
- The structure must remain the same size and within its current footprint.

QUESTIONS



III. Puget Sound Nearshore Habitat Conservation Calculator for SSNP

A tool for quantifying nearshore habitat benefits & impacts

Stephanie Ehinger, NOAA
Paul Cereghino, NOAA RC
Lee Corum, USFWS
Jennifer Quan, former NOAA
Jeff Fisher, former NOAA
David Price, NOAA
Stacie Smith, NOAA

Elizabeth Babcock, NOAA
Lisa Abernathy, NOAA
Mary Bhuthimethee, NOAA
Nissa Rudh, NOAA contractor
Monette O'Connor, RAY fellow
Jason Lim, NOAA contractor
Paul Schlenger, ESA

March 2022

Agenda

I. The Conservation Calculator: What is it?

- What are the models supporting the Calculator?
- Where can I find the Conservation Calculator?

II. Use of Conservation Calculator

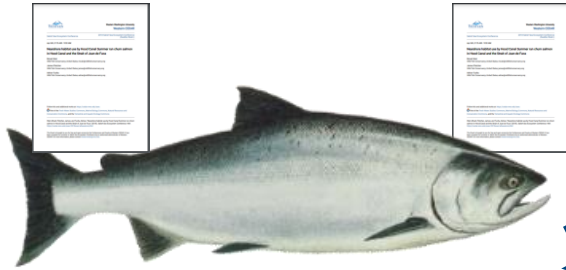
- Main Features
- Replacement vs. New Structure Impacts
- PS Nearshore Zones
- Credit Factors
- Submerged Aquatic Vegetation
- Hard Armoring and HAT

III. Sideboards

- What the Calculator Doesn't Quantify
- Continuous Improvement

IV. Questions & Answers

What is the Puget Sound Conservation Calculator?



Habitat Impacts or Improvements covered by SSNP

Puget Sound
Chinook
salmon



Hood-Canal
Summer-Run
Chum



Yellow cells indicate user entry fields.
Green cells contain additional explanations and resource links.
Maroon cells contain summary values.

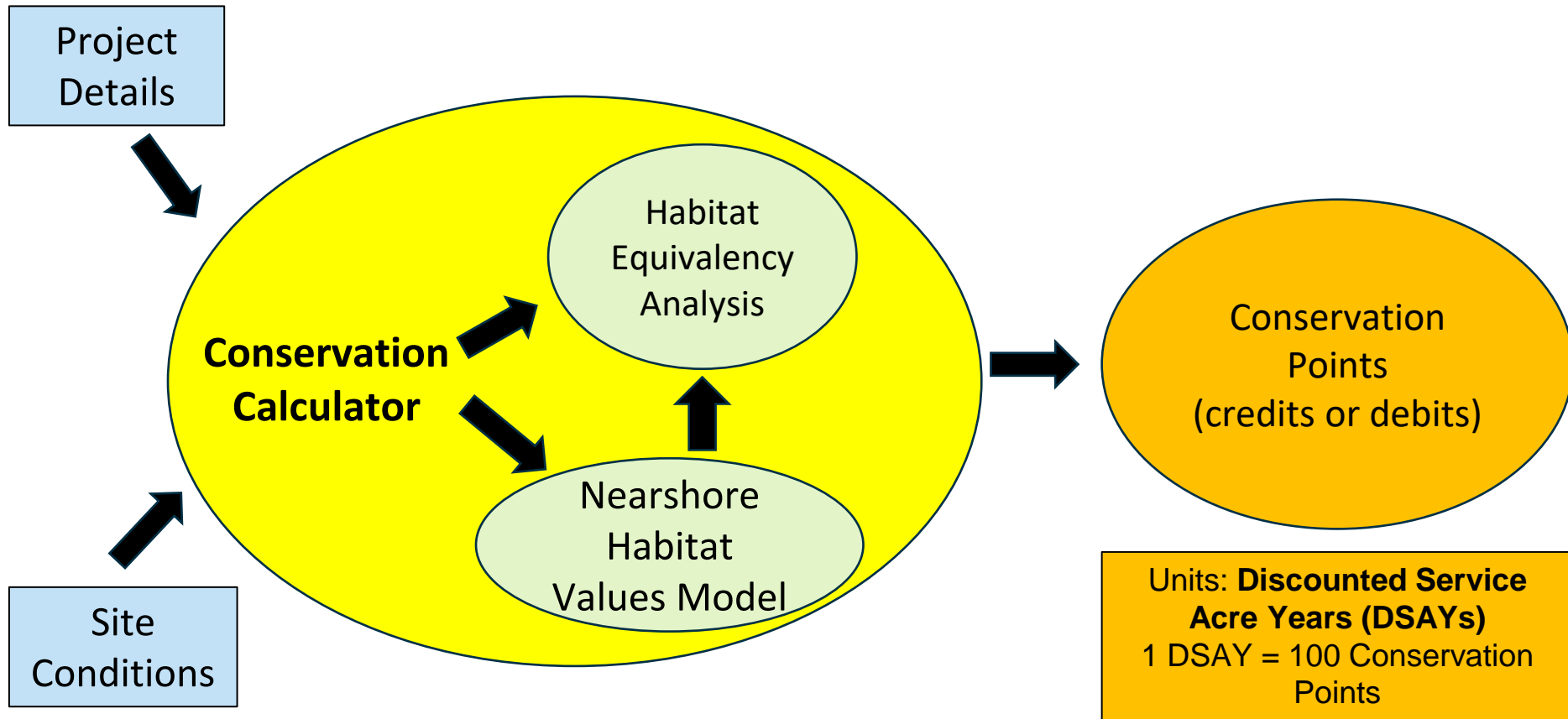
Author: Amyra Seligson #
EYS 011011 #
Revised: June
Prepared on or for:

Puget Sound Nearshore Conservation Calculator Version: 2/11/2022

This calculator estimates conservation points for the Puget Sound nearshore.

		Conservation Credits/Debits	DSAVs	Notes
Overwater Structures	Debit	0	0.00	
	Credit	0	0.00	Includes credits from oecose removal
	Balance	0	0.00	
Shoreline Armoring	Debit	0	0.00	
	Credit from Armoring Removal	0	0.00	
	Credit from Oecose Removal	0	0.00	
Balance	0	0.00		
Maintenance Dredging	Balance	0	0.00	
	Debit	0	0.00	
Boatramps, Jetties, Rubble	Credit	0	0.00	
	Balance	0	0.00	
	Debit	0	0.00	
Beach Nourishment	Conservation Credit	4	0.04	
Riparian Enhancement/Degradation	Conservation Points	0	0.00	
SAV Planting	Conservation Credit	0	0.00	
Total Points		4	0.04	

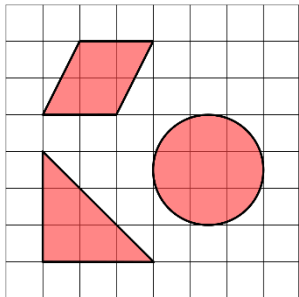
The **Conservation Calculator** organizes inputs for two models: Habitat Equivalency Analysis and the NHVM



Discounted Service Acre Years

- Acres: Affected area
- Service Value: Based on change to habitat conditions
- Years: How long does impact or benefit last
- Discounted: Economic discounting of future services: Habitat now is more valuable than in the future.

Acres



Service Value



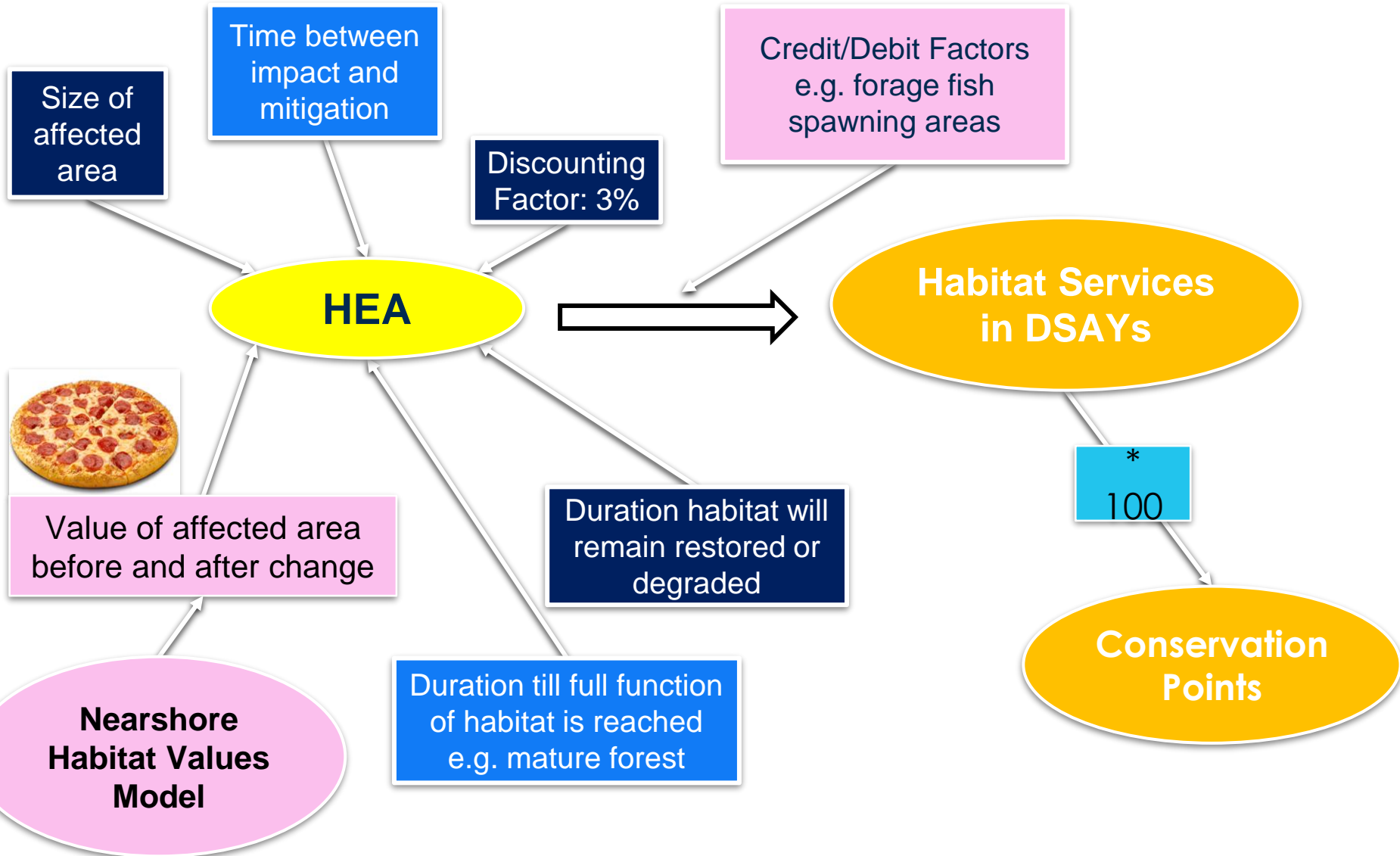
Years



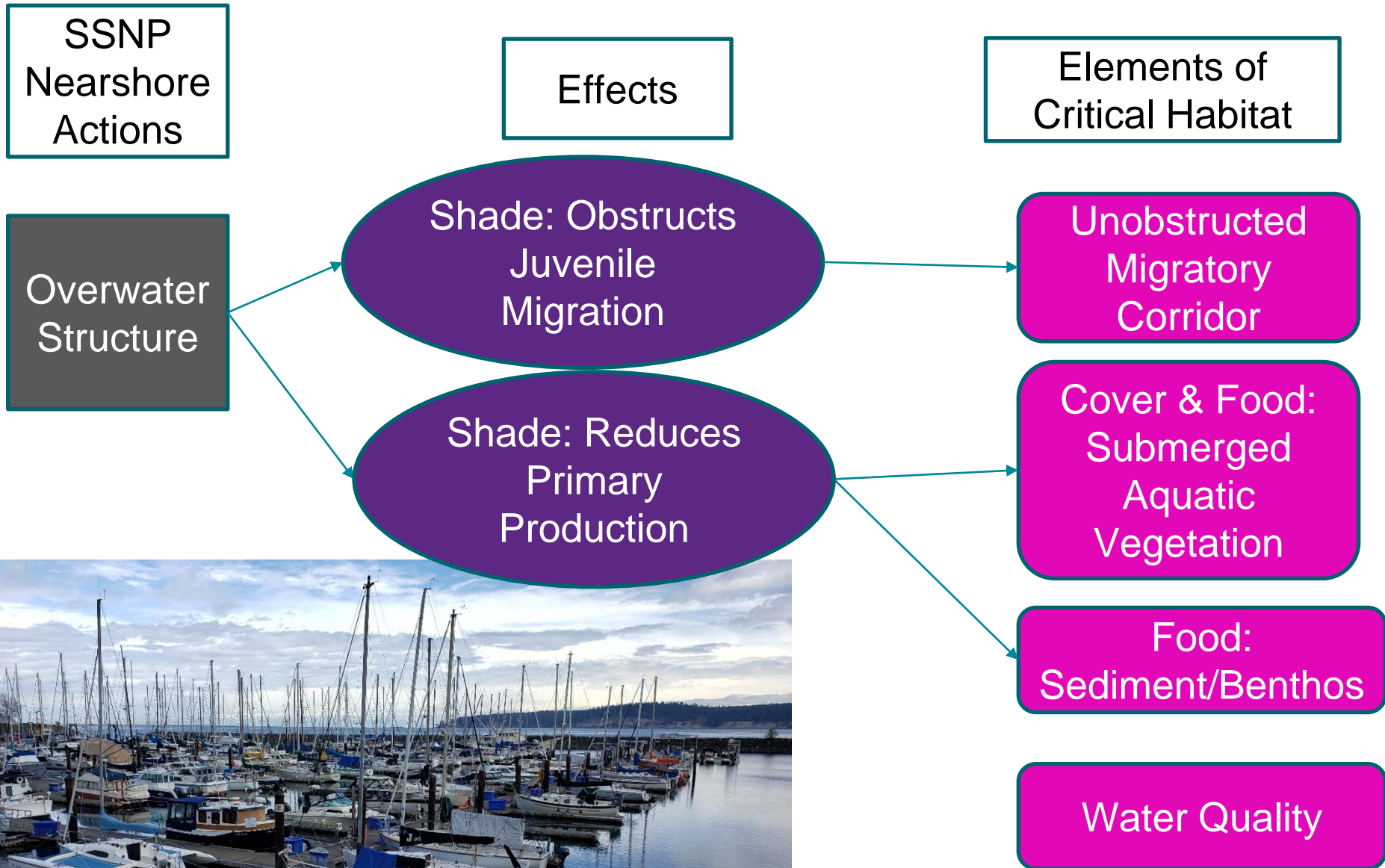
Appreciation
/Discount



Habitat Equivalency Analysis: The Basics



Concept of the Model Evaluating Effects on Critical Habitat



Where to Find the Calculator

<https://www.fisheries.noaa.gov/west-coast/habitat-conservation/puget-sound-nearshore-habitat-conservation-calculator>

The screenshot shows the NOAA Fisheries website. At the top, the browser address bar displays the URL: [fisheries.noaa.gov/west-coast/habitat-conservation/puget-sound-nearshore-habitat-conservation-calculator](https://www.fisheries.noaa.gov/west-coast/habitat-conservation/puget-sound-nearshore-habitat-conservation-calculator). Below the browser bar, the NOAA logo and the text "NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | U.S. DEPARTMENT OF COMMERCE" are visible. A search bar with the placeholder text "Search NOAA Fisheries" is located on the right. A dark blue navigation bar contains the following menu items: "Find A Species", "Fishing & Seafood", "Protecting Marine Life", "Environment", "Regions", "Resources & Services", and "About Us". Below the navigation bar, the page title "HABITAT CONSERVATION" is displayed in blue, followed by the main heading "Puget Sound Nearshore Habitat Conservation Calculator" in large black font. A sub-heading reads "Online tool draws on latest habitat research to help offset impacts on species." Below this, a "West Coast" tag is visible. On the left side, there is a vertical stack of social media sharing icons (Facebook, Twitter, LinkedIn, Reddit, and a plus sign for more). A "Table of Contents" section is partially visible, listing "Avoiding Further Loss" and "Calculator to Determine". At the bottom left, a blue button with a speech bubble icon says "Send Us Your Feedback". The main content area on the right contains text about habitat conservation in Puget Sound, mentioning salmon, steelhead, and endangered Southern Resident killer whales.

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HABITAT CONSERVATION

Puget Sound Nearshore Habitat Conservation Calculator

Online tool draws on latest habitat research to help offset impacts on species.

West Coast



Table of Contents

- Avoiding Further Loss
- Calculator to Determine

Send Us Your Feedback

A priority in Puget Sound is the conservation of nearshore habitat, including wetlands, estuaries, and tidal zones that make up some of the most valuable habitat for the region's salmon and steelhead. Endangered Southern Resident killer whales depend on these salmon for prey, making this habitat important for the whales also. Nearshore habitat is also a keystone of the regional economy, supporting fishing, shellfish farming, tourism, and more.

Unfortunately, most nearshore habitat in Puget Sound is gone, with more than 90 percent of tidal wetlands lost to development. That leaves salmon without essential nursery habitat they need to feed and grow strong

Tools Available on NOAA's Puget Sound Nearshore Website

1. Conservation Calculator – most recent version
2. User Guide for the Calculator
3. Calculator Workshop (recorded) with example projects
4. Link to Webinar Conservation Calculator presentation
5. Information on avoiding further loss of habitat functions
6. FAQs
7. Puget Sound Service Area Basin Map
8. Info about providers of Conservation Credits (outside of NMFS)



Agenda

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- Main Features
- Replacement vs. New Structure Impacts
- PS Nearshore Zones
- Credit Factors
- Submerged Aquatic Vegetation
- Hard Armoring and HAT

III. Sideboards

- What the Calculator Doesn't Quantify
- Continuous Improvement

IV. Questions & Answers

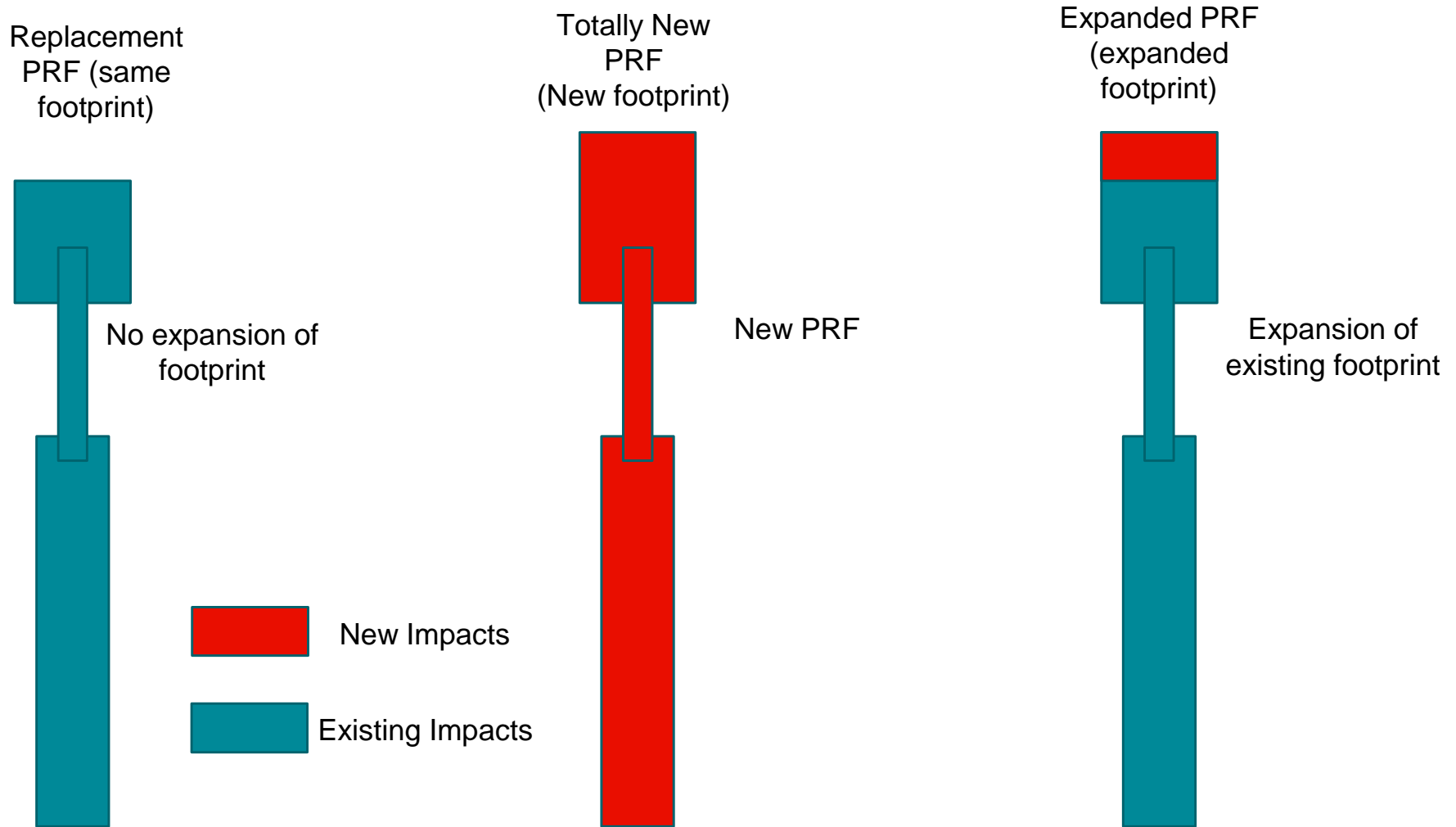
Conservation Calculator for SSNP

Main Features

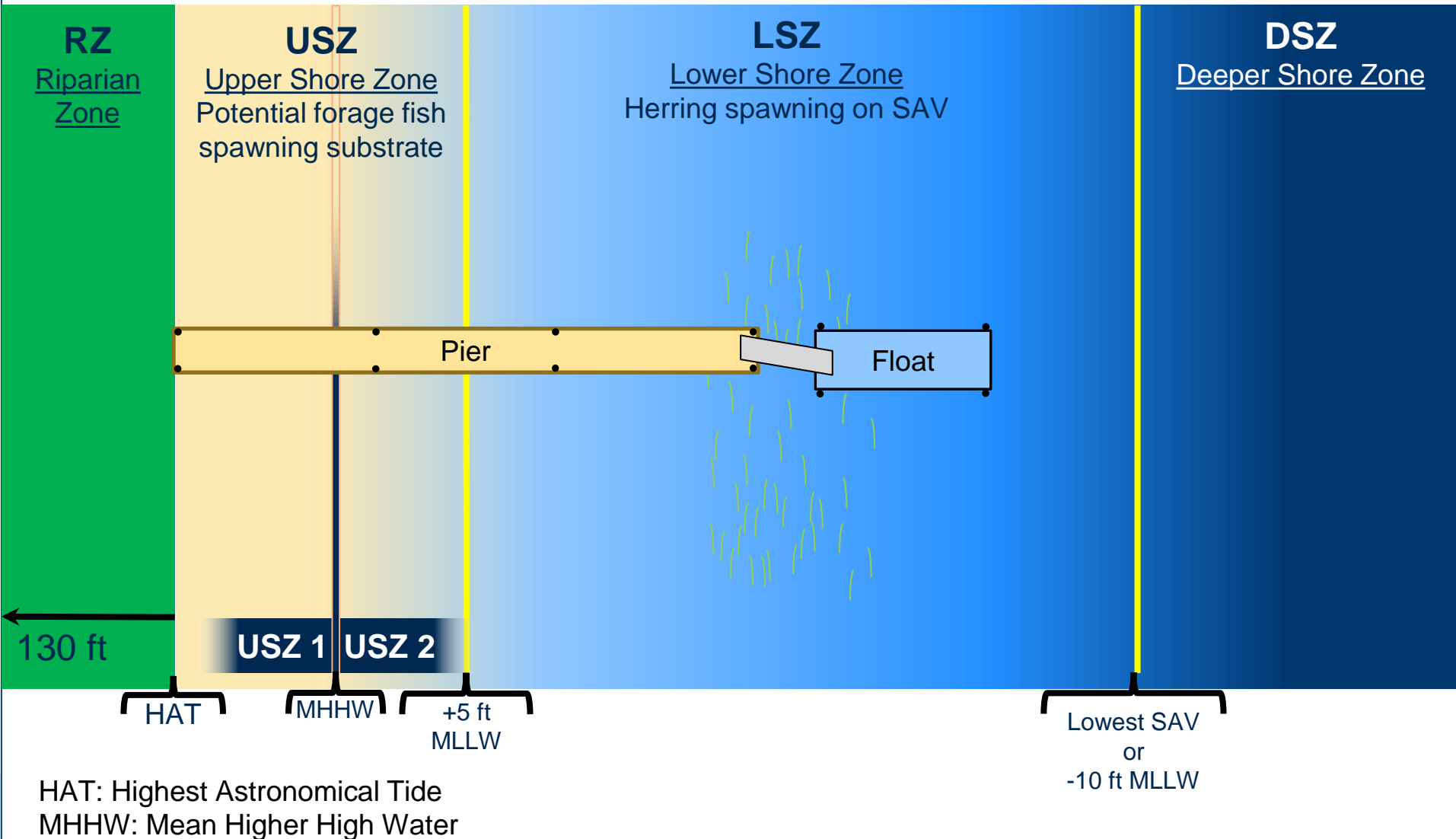
- I. Higher debits for new structures than replacements
- II. Credits for removal of existing structures
- III. Assessment of impacts/benefits by elevation zones
- IV. Site Specific factors for habitats of special value to listed species – Credit/Debit factors

Crediting/Debiting
Factors e.g. forage fish
spawning areas

Replacement vs. New Structure Impacts



Puget Sound Nearshore Zones



Maximum Habitat Values by Nearshore Zones



Maximum Habitat Value sets range for impact determination

Maximum Habitat Value **0.55** for trees

Riparian Zone above HAT

Maximum Habitat Value **0.6**

Upper Shore Zone 1

HAT

Maximum Habitat Value **0.9**

Upper Shore Zone 2

MHHW

Maximum Habitat Value **1** for eelgrass meadow

Lower Shore Zone

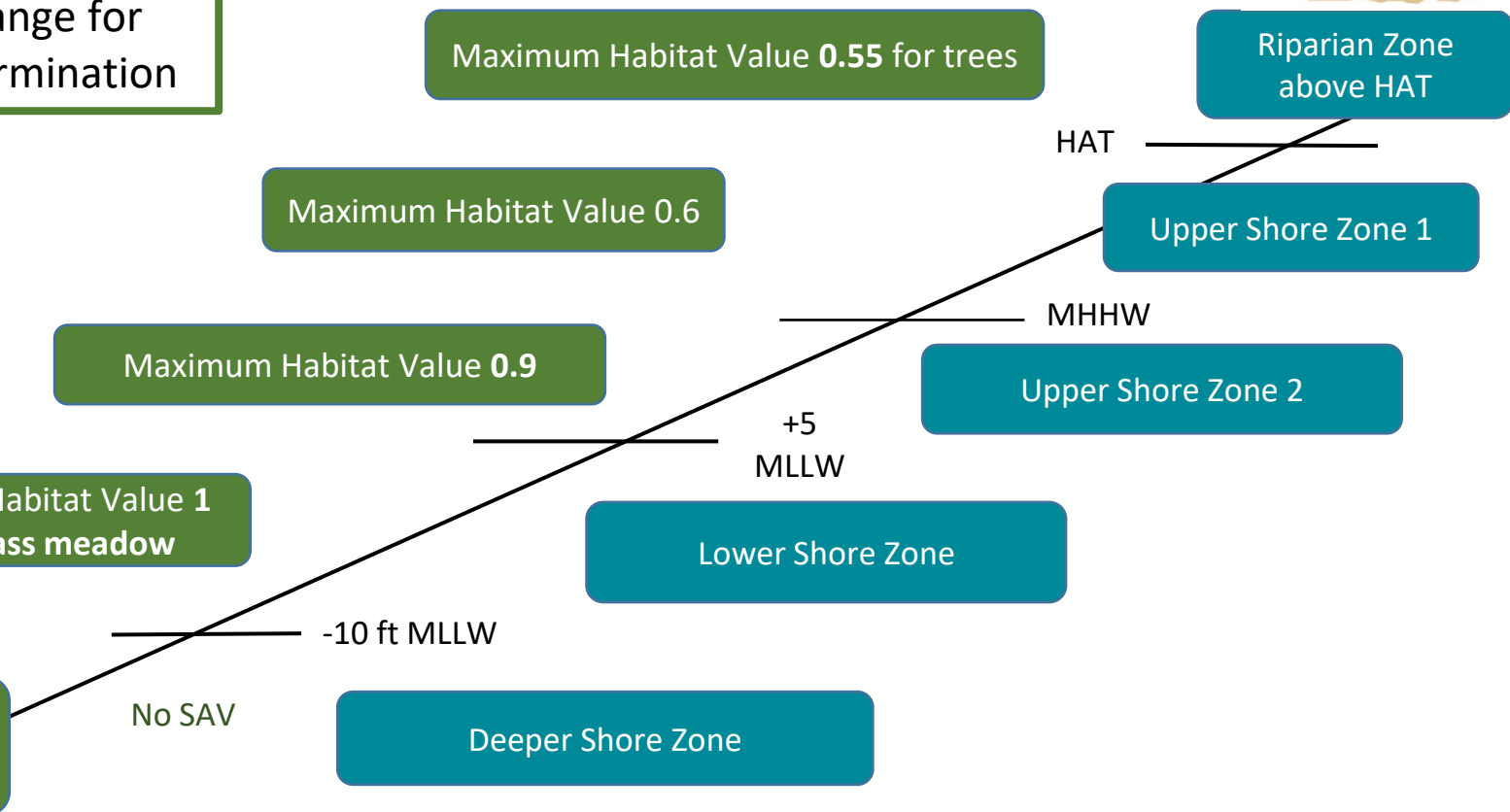
+5 MLLW

-10 ft MLLW

Maximum Habitat Value **0.4**

No SAV

Deeper Shore Zone



Example: A float in the Lower Shore Zone (LSZ) vs. Deeper Shore Zone (DSZ)

What	Where	Max HV in zone	How Much Impact
8 * 30 Float	LSZ	1	- 16
8 * 30 Float	DSZ	0.4	- 6

Credit/Debit Factors

Landscape-scale credit factors are applied to entire debit/credit:

- Affected area is within 5 miles of natal Chinook estuary, or within 1 mile of a Hood Canal summer-run chum estuary.
- Affected area is within an embayment/pocket estuary.

Site-scale credit factors applied ala cart limited to structural elements that impact them:

- Sand lance or surf smelt spawning (USZ)
- Herring spawning (LSZ)
- Affected areas are at bluff backed beach.



Credit/Debit Factors
e.g. forage fish
spawning areas

HEA

**Habitat Services
in DSAYs**

Project Specific Application of Credit Factors

	Landscape Scale Factors		Site Scale Factors			
SSNP Project Elements	Major Estuary Zone	Pocket Beach/ Embayments	Feeder Bluff	Sand lance or surf smelt spawning	Updrift of FF spawning within same drift cell	Herring spawning
Shoreline armoring	X	X	X	X	X	
Piers and ramps	X	X				
Piles depending on zone	X	X	X	X		X
Floats (USZ)	X	X		X		
Floats (LSZ)	X	X				X
Floats (DZ)	X	X				X

*See the User Guide for full table

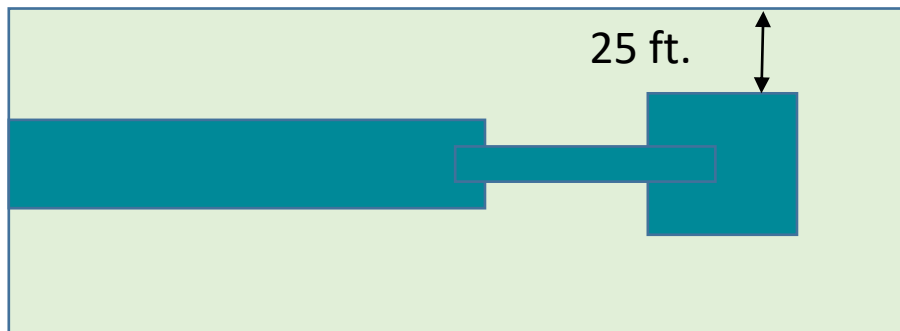
Submerged Aquatic Vegetation (SAV)

Table 1: Delineation of LSZ Submerged Aquatic Vegetation Scenarios

VEGETATION SCENARIO	<i>Native Eelgrass and/or Kelp occurs within 25 feet of project area</i>	<i>Other SAV occurs within 25 feet of project area (no native eelgrass or kelp present)</i>
Scenario 0	N/A	≤ 10%
Scenario 1	1-25% Combined SAV	11-25%
Scenario 2	26-69% Combined SAV	26-75%
Scenario 3	≥ 70% Combined SAV	> 75%

*SAV defined as rooted vascular plants and attached macroalgae. Drift algae and *Ulva spp.* Are not included when determining cover percentage except where *Ulva spp.* occurs in documented herring spawning areas.

EXAMPLE: Site has 25% Native eelgrass and 45% other SAV (total 70 % cover) within 25 feet of project area. Select Scenario 3 from Column 1 because native eelgrass is present.



SAV for Conservation Calculator:
Average within 25 feet of
project area



HAT ?

Shoreline Armoring: HAT

Home ▾ Beach Slope Reference Map

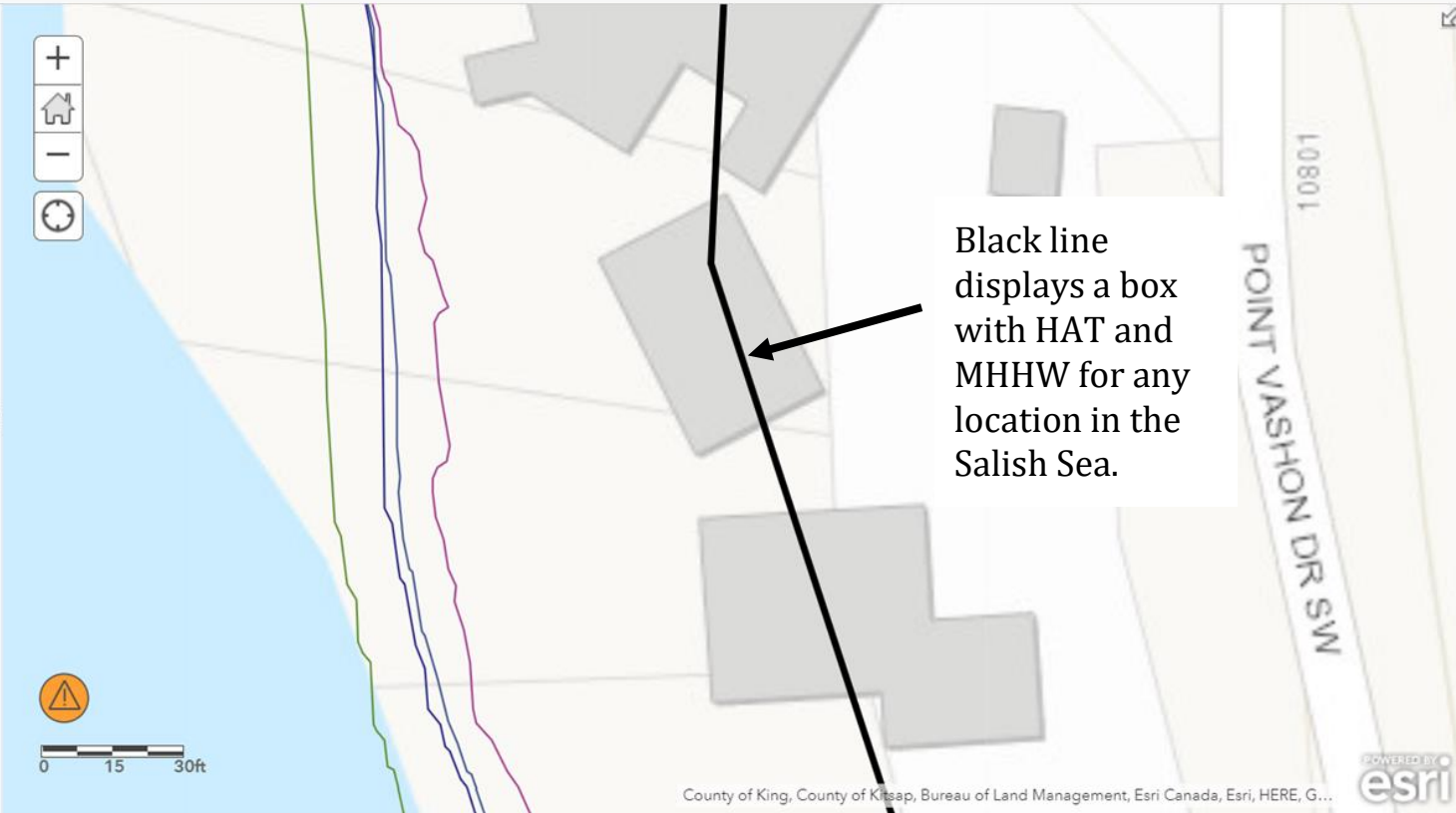
Open in new Map Viewer New Map ▾ nissa ▾

Details Add ▾ Basemap Save ▾ Share Print ▾ Directions Measure Bookmarks Find address or place

Legend

- Contour_MHW
- Contour_MHHW
- Contour_HAT
- Beach Slope Reference Line
- Contour_MLLW

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What the Calculator Currently Does NOT Quantify

- Short-term construction impacts
- Impacts from sound
- Water quality changes outside of improvement associated with the removal of creosote
- New dredging
- Large-scale estuary restoration - coming in 2023

Predictable Continuous Improvement

- Conservation Calculator & User Guide updates annually (February)
- Planned future updates:
 - Addition of crediting preservation
 - Addition/refinement of estuary restoration
 - Incorporating results from Science Sprints
- We welcome input for improvements. Please provide suggested improvements to:

psnearshoreconservation.wcr@noaa.gov



Questions &



Answers