

Effectiveness of Nearshore Regulation: What's Working?

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March 31, 2016

Shoreline & Coastal Planners Group Forum

Edmonds, Washington



1. Puget Sound Partnership

- Introduction
- Effectiveness assessment

2. Vital Sign: Shoreline armoring

- Target and Progress

3. Are permits working?

- Why do we care?
- Effectiveness Fact Sheet Review



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Puget Sound Partnership: Roadmap to Puget Sound recovery



Puget Sound Partnership:

Effectiveness Assessment

What's working?

Did our actions achieve the intended outcomes?

How do we know which actions are most effective?

Which variables are most responsive?

Puget Sound Partnership:

Effectiveness Assessment

Share what's working to restore Puget Sound

- *Highlight success stories*
- *Identify effective actions*
- *Accelerate communication*

- Encourage successful approaches
- Inform decision-making
- Adapt recovery efforts

Shoreline Armoring: Vital Sign Indicator

2020 target goal:
Net loss of shoreline armoring

Sub-targets:

- Feeder bluff protection - armoring removal and avoidance
- Use of soft shore techniques



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Shoreline Regulation:

Why do we need permits?

Permits execute regulatory intent and provide regulation for both:

1. Property protection
2. Environmental impact



Shoreline Regulation:

Why do we need permits?

We need permits to measure compliance with the law.

- Are permits being used?
- How is habitat is being protected under permits?
- How well are permits being carried out?
- Do we have the data needed to gauge long term goals?



Effectiveness Fact Sheets

Summarize key actions, outcomes, challenges

→ *Inform decision making*

→ *Adapt recovery efforts*

Key audience:

Decision makers, program sponsors, funders

Objective:

Communicate scientific information to advance recovery work and reinforce effective actions

Products:

2-page Fact Sheet & Background Summary

Effectiveness Fact Sheets

HABITAT PROTECTION: KING, SAN JUAN, AND KITSAP COUNTIES

IMPROVING THE PERMIT PROCESS TO PROTECT NEARSHORE PROPERTY AND FISH HABITAT

Protecting and Restoring Puget Sound
EFFECTIVE ACTION

A LOOK AT SUCCESSES AND LESSONS LEARNED



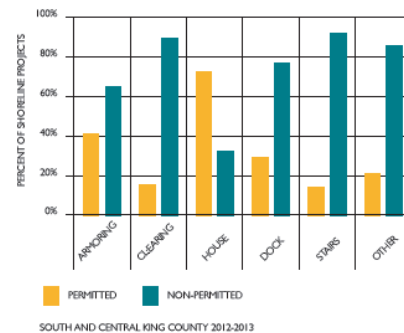
Forage fish use beaches to spawn and incubate eggs, and are food for salmon, marine birds and mammals. Shoreline armoring made from concrete and rock is built to protect property from erosion. Armoring can change natural beach processes, reduce food available to fish and wildlife, and eliminate habitat forage fish need to lay their eggs. Regulations specify how to protect shoreline property while also reducing the impact of construction on the salmon, forage fish, shellfish and other species that live there. To build armoring, docks, stairs, or walls near the beach, property owners may be required to obtain a permit.

WHAT WORKED

- ▶ State permits issued for new shoreline armoring across Puget Sound declined by 61% between 2013 and 2014.
- ▶ Landowners were more likely to follow recommended design guidelines when informed about erosion risk, permitting process, and the importance of nearshore habitat.
- ▶ Adding gravel and sand on beaches where forage fish spawn was required in 71% of projects on documented Surf Smelt beaches in San Juan and Kitsap Counties.

The permit process is designed to protect nearshore habitat and property.

MANY MARINE SHORELINE CHANGES WERE NOT PERMITTED



DRAFT: Updated: 3.23.16 (12:23)



MORE INFORMATION IS AVAILABLE AT: WWW.PSP.WA.GOV/EFFECTIVEACTION.PHP

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Effectiveness Fact Sheets



A LOOK AT SUCCESSES AND LESSONS



Forage fish use beaches for nesting and protection from birds and mammals. Shoreline armor can protect property from erosion, but it can also be unavailable to fish and wildlife. Regulations specify how to build armor on the beach, and how to obtain a permit.

WHAT WORKED

- ▶ State permits issued for new shoreline armor in 2014.
- ▶ Landowners were more likely to follow recommendations for erosion risk, permitting process, and the importance of forage fish.
- ▶ Adding gravel and sand on beaches where forage fish were documented on Surf Smelt beaches in San Juan and Kitsap.

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Protecting and Restoring Puget Sound

EFFECTIVE ACTION

OVERVIEW OF NEARSHORE REGULATORY ACTIONS TO PROTECT PROPERTY AND HABITAT

GOAL	ACTIONS	RESULTS	CHALLENGES
Protect both property and habitat	Permit or permit exemption is required before a project is started	King County (Green-Duwamish Watershed)*: 32% of changes had local shoreline permits Across Puget Sound, 80% of projects had state permits before work was done Bainbridge Island projects*: 88% had state permits San Juan projects*: 50% had state permits; 80% with state permits were matched with local permits	<ul style="list-style-type: none">• Many projects were constructed without all the needed permits• Permit information is difficult to connect across state and local databases
Protect shoreline habitat and forage fish beaches	Require additional protection for forage fish habitat	46% of State permits omitted conditions to protect forage fish San Juan projects*: 3% on Surf Smelt beaches; 28% adjacent to Pacific Herring beaches Kitsap projects*: 25% on Surf Smelt beaches; 13% on Sand Lance beaches; 17% adjacent to Pacific Herring beaches	<ul style="list-style-type: none">• 58% of documented Puget Sound forage fish beaches are armored• Information about forage fish beaches is incomplete
Use guidelines to design projects	Encourage the use of State marine shoreline design guidelines	San Juan & Kitsap projects*: 28% were consistent with design guidelines For projects inconsistent with design guidelines, 95% used harder armoring than recommended.	<ul style="list-style-type: none">• State recommended design guidelines published in 2014
Build shoreline projects as specified	Evaluate whether projects were built to permit specifications	San Juan & Kitsap projects*: half were built larger than specified in permit- 26% were longer 26% were taller 13% more waterward	<ul style="list-style-type: none">• 55% of permits reviewed did not provide adequate location information• Older shoreline changes are harder to track

*For permitted projects reviewed.

Regulation to protect nearshore habitat advances Action Agenda sub-strategies B1.2 and B1.3.

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INSIGHTS FROM THE PUGET SOUND NEARSHORE REGULATION REVIEW:

- Additional administrative capacity is needed throughout the permit process to make existing regulations more effective and interpretable to landowners.
- For unarmored shorelines, work with landowners to determine if hard armoring is necessary or if soft shore approaches are feasible.
- A standard approach to reporting the data in permits is needed to evaluate how current regulations are working to protect nearshore habitat.
- Use boat surveys to report shoreline changes and evaluate whether regulations are effective.

Effectiveness Fact Sheets:

Insights from the nearshore regulatory review

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- Additional administrative capacity is needed throughout the permit process to make existing regulations more effective and understandable to landowners.
- A standard approach to reporting the data in permits is needed to evaluate how current regulations are working to protect nearshore habitat.
- Use boat surveys to document new and changed shoreline development to evaluate whether regulations are effective.

Effectiveness Fact Sheets:

Insights from the nearshore regulatory review

- Additional administrative capacity is needed throughout the permit process to make existing regulations more effective and understandable to landowners.
- A standard approach to reporting the data in permits is needed to evaluate how current regulations are working to protect nearshore habitat.
- Use boat surveys to document new and changed shoreline development to evaluate whether regulations are effective.
- Work with permit applicants of unarmored shorelines to determine if hard armoring is necessary or if soft shore approaches are feasible.

Effectiveness Fact Sheets:

Insights from the nearshore regulatory review

Did we achieve the intended outcomes?

Thank you to our reviewers and experts:

Aimee Kinney & Tessa Francis (PSI)

Phillip Dionne & Randi Thurston (WDFW)

Kollin Higgins (King County)

Nicole Faghin (WA Sea Grant)

Jeffery Rice (PSI)



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