

SHORELINE BUFFERS

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Shoreline buffers overview

- ◆ Sensitive topic.
- ◆ Buffers and setbacks.
- ◆ SMP Guidelines.
- ◆ Benefits of buffers.
- ◆ Logical process.

Overview

- ◆ Tailor to local conditions.
- ◆ Examples.
- ◆ Pitfalls.
- ◆ SMP Handbook – guidance in progress.

Sensitive topic: Creating nonconforming structures



Bellevue, Lake Sammamish shoreline. (WA Coastal Atlas photo.)

- ◆ SSB 5451 changes SMA – existing residential structures can be conforming.

Sensitive topic: Restricting redevelopment and expansion

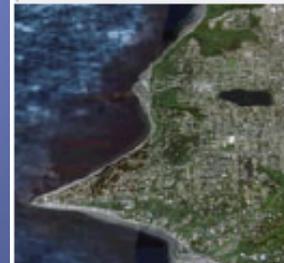
- ◆ SMP should address specifically.
- ◆ Water-dependent uses OK.
- ◆ Mitigation required.



Burien Homeowners, Ecology At Odds Over Shoreline Buffers At Hearing

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by Ralph Nichols

It didn't take long for homeowners along Burien's marine shoreline to have their concerns confirmed at a Dec. 8 public hearing by the Department of Ecology on the city's recently updated Shoreline Master Program (SMP).

Sensitive topic:

Changes required to existing uses and structures

- ◆ New regulations are not retroactive.
- ◆ Apply to new development.



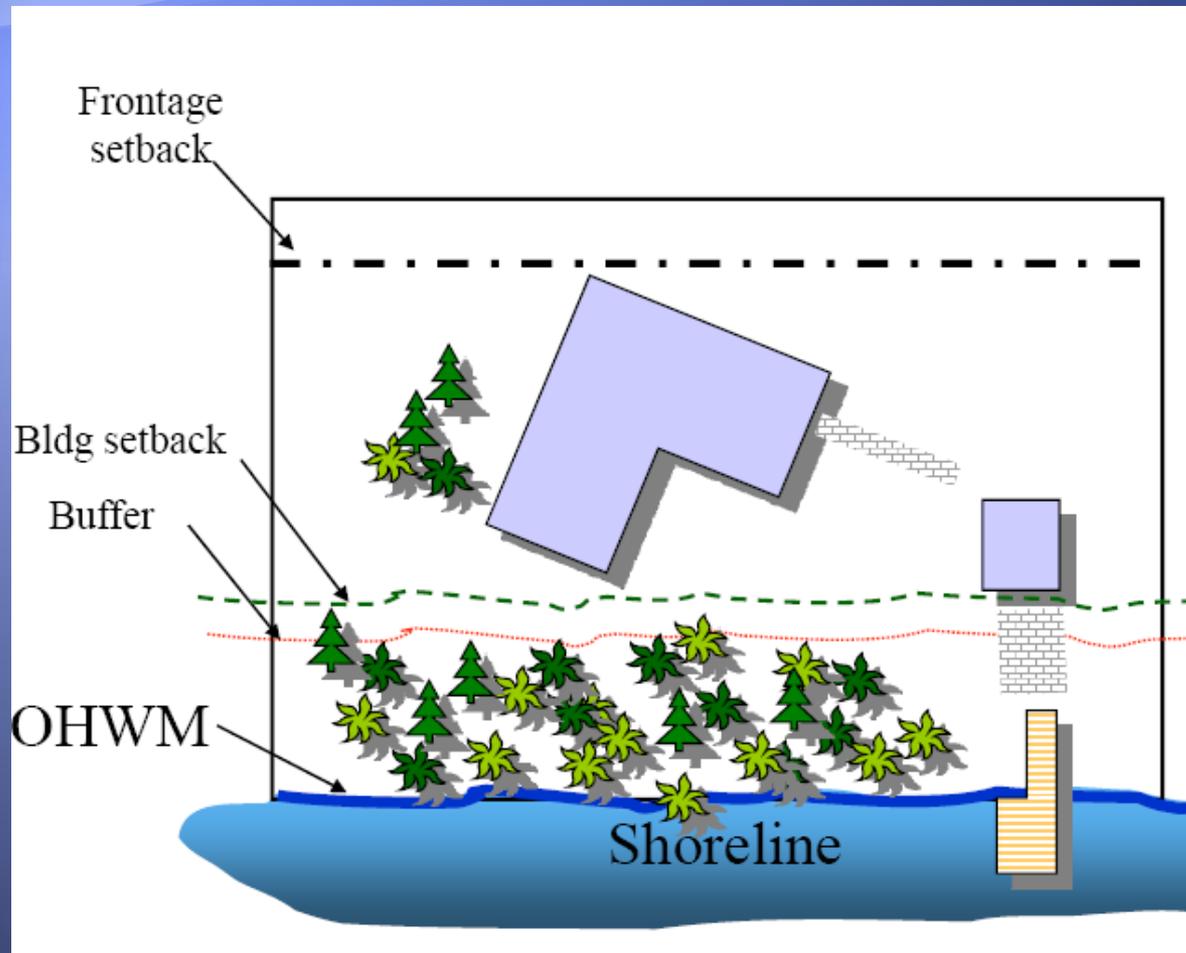
Buffers from OHWM

- ◆ From scientific literature:
- ◆ Typically naturally vegetated areas.
- ◆ Adjacent to water bodies.
- ◆ Protect ecological functions of shoreline.
- ◆ Transition zone between water and land use activity.
- ◆ Ideally, relatively undisturbed.
- ◆ Limited human use.

Setbacks

- ◆ Distance between water & structure.
- ◆ Distance between buffer & structure.
- ◆ Protects buffer functions from impacts related to structure use & maintenance.
- ◆ Provides safe distance from bluffs, river banks.

Buffers and setbacks

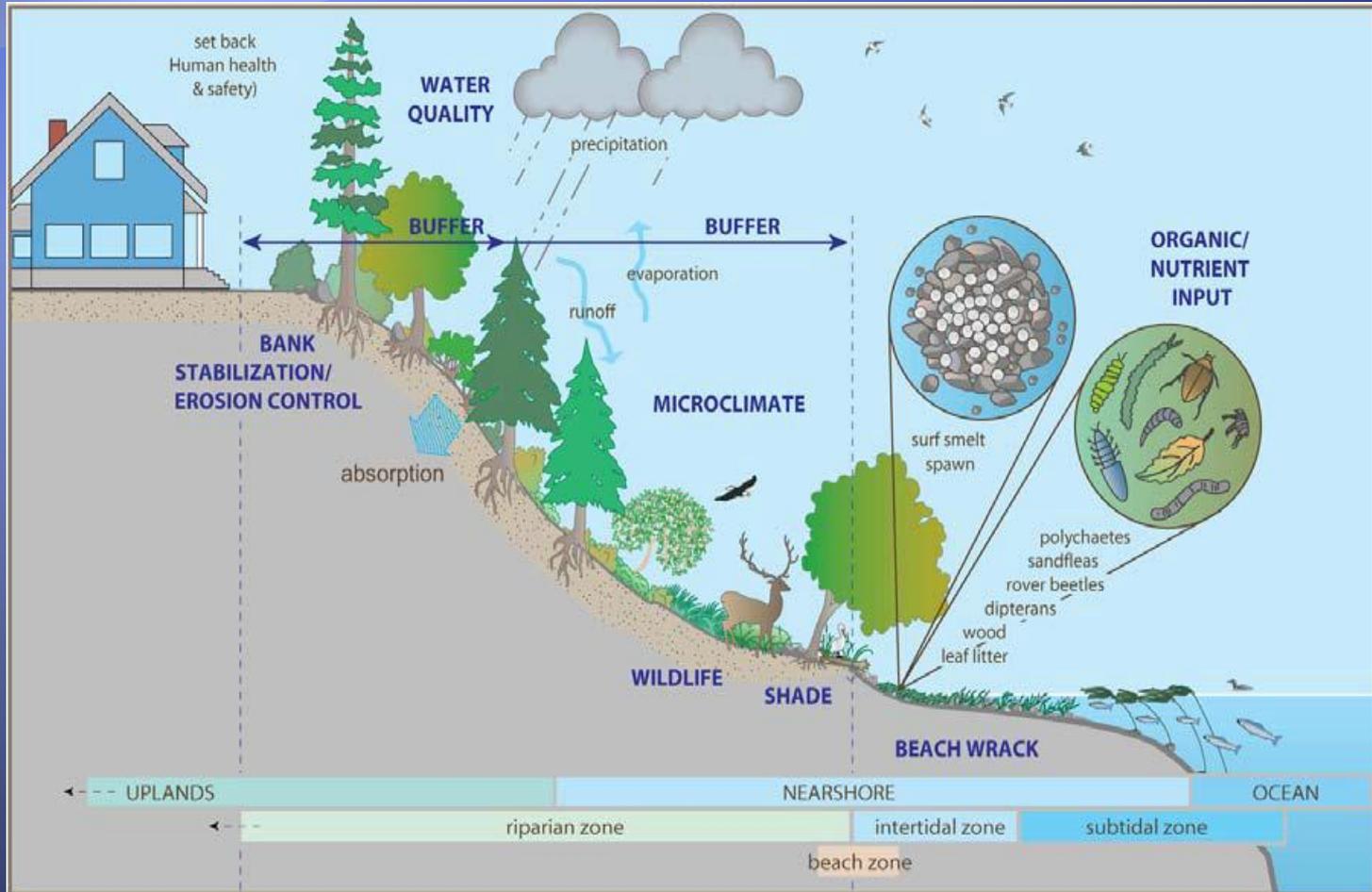


SMP Guidelines

WAC 173-26

- ◆ Inventory: 201(3)(c:)
- ◆ Ecosystem processes: 201(3)(d)(i)(C)
- ◆ Shoreline vegetation: 201(3)(d)(viii)
- ◆ Environment designations
 - ◆ High Intensity: 211(5)(d)
 - ◆ Shoreline Residential: 211(5)(f)
 - ◆ Natural: 211(5)(a)(G)
- ◆ Vegetation conservation: 221(5)
- ◆ Residential development: 241(3)(j)

Benefits of buffers



Conceptual model of marine riparian functions. (Brennan and Culverwell ,2004.)

Benefits of buffers

- ◆ Sources:
- ◆ *Protection of Marine Riparian Functions in Puget Sound, Washington.*
- ◆ *Protecting Nearshore Habitat and Functions in Puget Sound.*
- ◆ *Management Recommendations for Washington's Priority Habitats – Riparian*
- ◆ *White Paper - Ecological Issues in Floodplains and Riparian Corridors*
- ◆ SMP Guidelines

Benefits of buffers

- ◆ Provide shade.
- ◆ Stabilize banks, minimize erosion & landslides.
- ◆ Filter nutrients and pollutants.
- ◆ Provide large woody debris.
- ◆ Provide critical wildlife habitat.
- ◆ Reduce fine sediments in water body.
- ◆ Provide organic inputs & food for aquatic life.
- ◆ Regulate microclimates.

Benefits of buffers

- ◆ Provide ecological functions in freshwater & marine areas
- ◆ Some differences
 - ◆ Shade
 - ◆ Water quality
- ◆ 85% of terrestrial species use riparian habitat

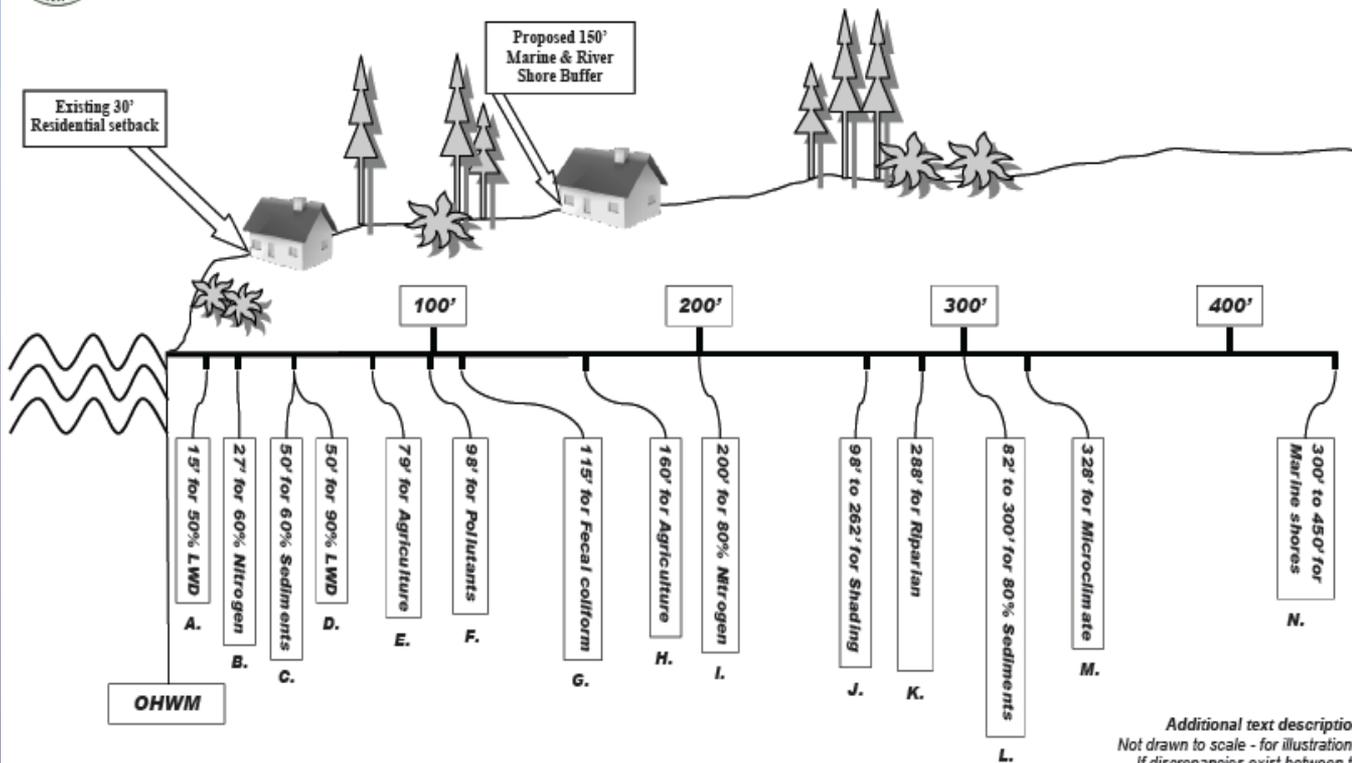
Buffer widths



Jefferson County Shoreline Master Program (SMP) Comprehensive Update

Buffer Science Summary

Source: Chapter 5.2 of the November 2008 Final Shoreline Inventory & Characterization Report



Additional text descriptions on reverse.
 Not drawn to scale - for illustration purposes only.
 If discrepancies exist between the text and this diagram, the text shall prevail.

Logical process

- ◆ Inventory and characterization.
- ◆ Scientific literature & local application.
- ◆ CAO - a starting point.
- ◆ Current development patterns and projected uses.
- ◆ Public comment.

Tailor to local conditions

- ◆ Not “one size fits all.”
- ◆ Existing shoreline ecological functions.
- ◆ Natural forms and soil conditions.
- ◆ Existing and planned land uses.
- ◆ Redevelopment potential.

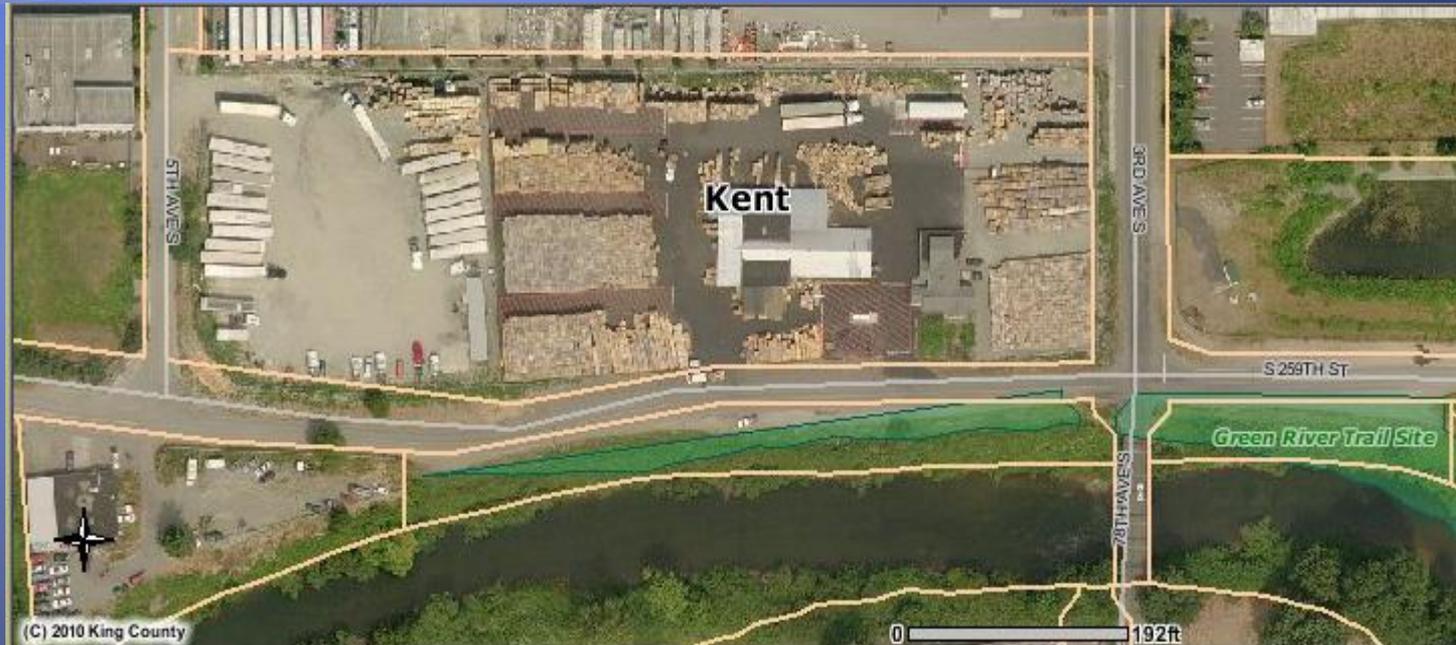
Tailor to local conditions

- ◆ Buffers for other jurisdictions may not be right for your shorelines.
- ◆ Buffers for parts of your shorelines may not be right for other parts of your shorelines.

Options

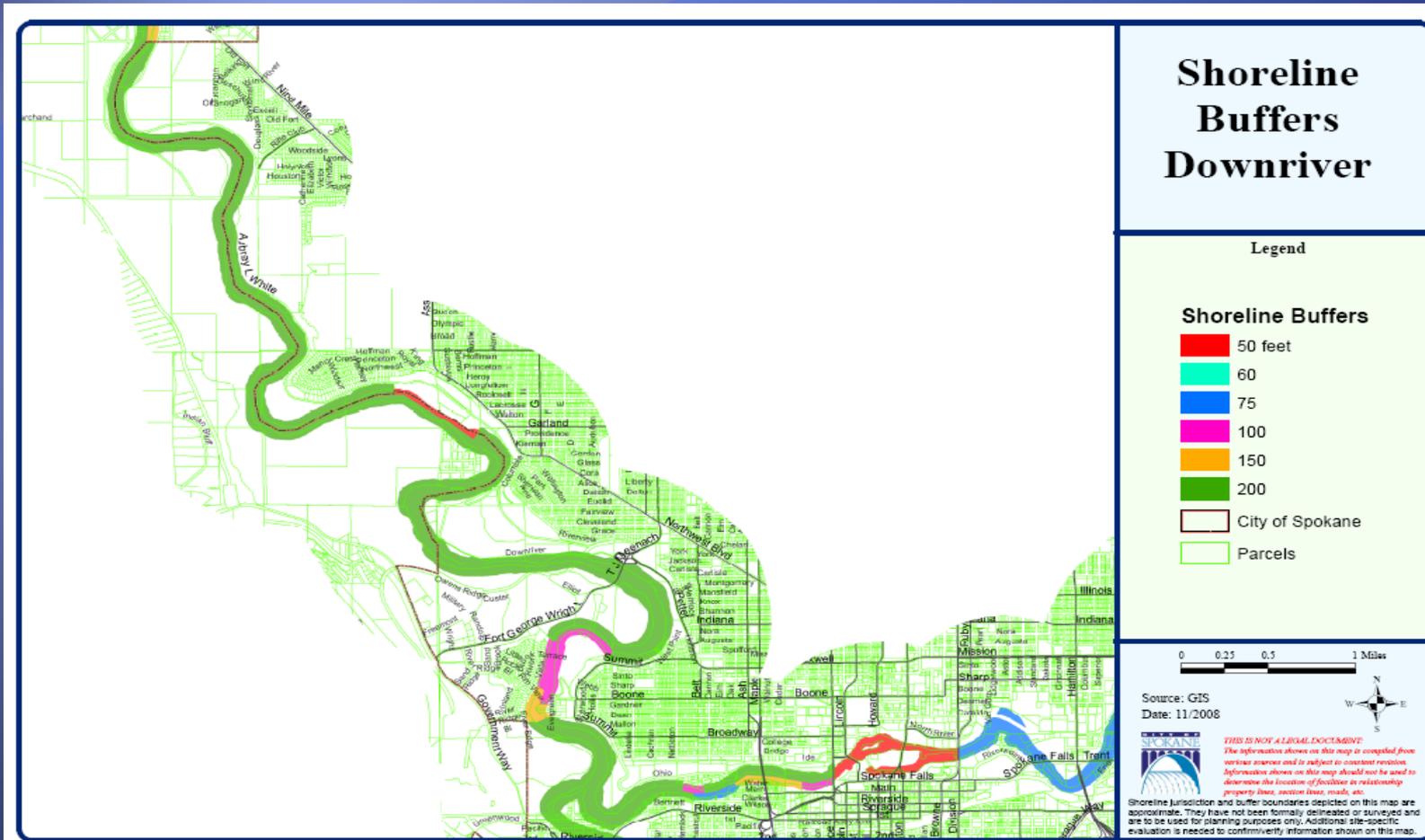
- ◆ Environment designations.
- ◆ Shoreline uses.
- ◆ Water bodies.
- ◆ Buffer management zones.

Example – environment designations & shoreline uses



- ◇ Kent High Intensity, Industrial - 100 foot setback
- ◇ If Commercial – 70 foot setback

Example - environment designations



City of Spokane, Spokane River. (City of Spokane map)

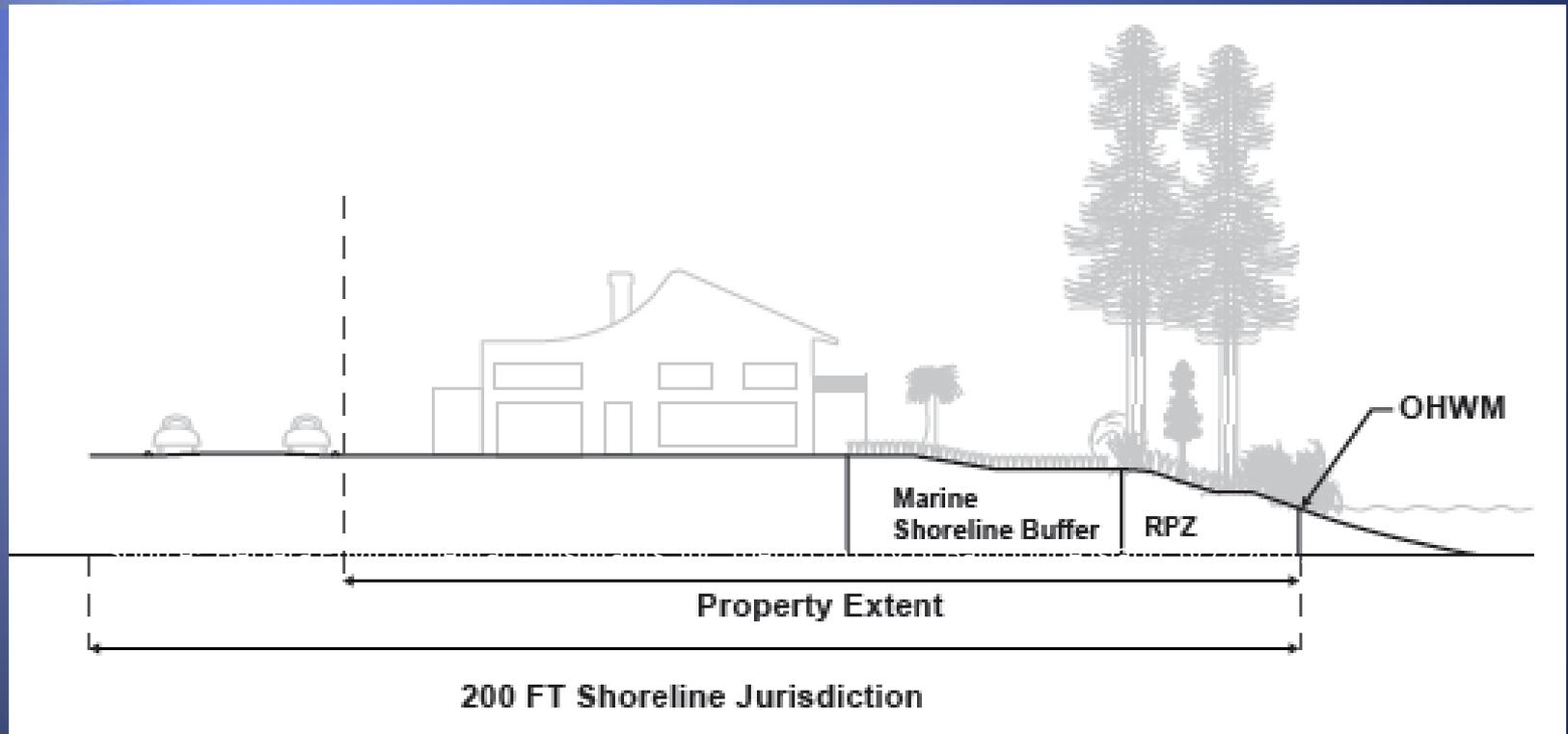
Example - shorelines

- ◆ Whatcom County
 - ◆ 150 - foot marine buffer
 - ◆ Streams - 150 feet
 - ◆ Lakes - 100 feet



Marine buffer – 150 feet with 10-foot setback.

Options



Not approved

- ◆ Ecology has not approved
 - ◆ Burien
 - ◆ Spokane County

Achieving no net loss

- ◆ Buffers and setbacks
- ◆ Environment designations scheme
- ◆ Regulations that prohibit intensive uses
- ◆ Permitted and conditional uses
- ◆ Vegetation conservation
- ◆ Mitigation
- ◆ Restoration

Legal issues

- ◆ RCW 82.02.020
 - ◆ Restricts cities, counties and towns from imposing fees.
 - ◆ Applicability to SMPs pending at WA Supreme Court.
- ◆ Nexus and proportionality
 - ◆ Courts have not ruled regarding buffers.

Pitfalls

- ◆ No rationale.
- ◆ Last minute changes by elected officials lacking support in record.
- ◆ Uniform buffers that ignore shoreline characterization.
- ◆ General info not specific to shoreline reaches.
- ◆ Lack of good records supporting decisions.

SMP Handbook

- ◆ SMP handbook chapter in the works.
- ◆ Tell us your issues.
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 - ◆ peter.skowlund@ecy.wa.gov