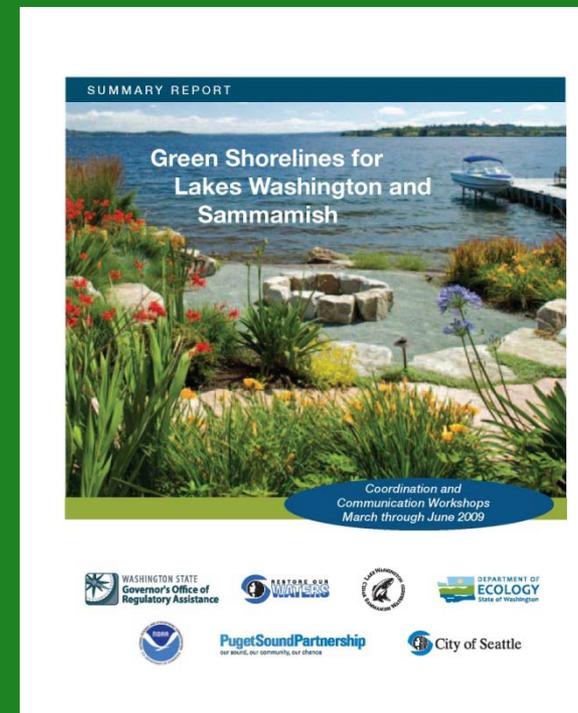


Green Shorelines for Lakes Washington and Sammamish

Coordination and Communication Workshops

March - June 2009



What are “green shorelines?”

- Synonyms:
 - Salmon friendly, eco-friendly, soft engineering, living shorelines.
- Term consistent with Seattle 2009 document: *Green Shorelines: Bulkhead Alternatives for a Healthier Lake Washington.*
- Definition: Development options that result in more ecologically friendly shorelines.

What Do Green Shorelines Look Like?

Private Lakeshore



Madrona Community Project



Martha Washington Park, Seattle



Building on Previous Efforts

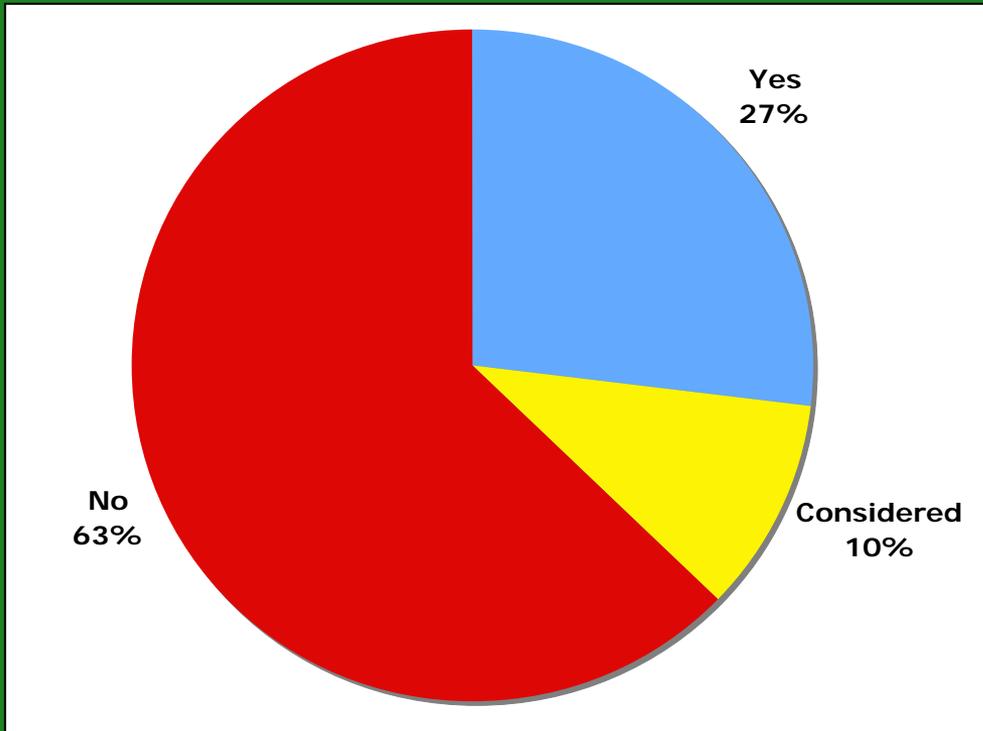
- Previous efforts by WRIA 8 and City of Seattle
 - Chinook Salmon Conservation Plan (2000).
 - Property owner workshops (2004).
 - City of Seattle shoreline owner survey.
- U of WA Keystone Environmental Management Program (2006 and 2007).
- Shoreline Master Program (SMP) updates.
- *2009 City of Seattle's Green Shorelines: Bulkhead Alternatives for a Healthier Lake Washington.*

WRIA 8's Interest in Green Shorelines

- Lake Washington and Lake Sammamish are high priority habitat areas.
- Refuge for outmigrating juvenile Chinook by:
 - Reducing bank hardening,
 - Restoring overhanging riparian vegetation,
 - Replacing bulkheads and rip-rap with sandy beaches with gentle slopes, and
 - Using grated dock surfaces or community docks.

Shoreline Modifications

Have you modified your shoreline in the past 10 years?

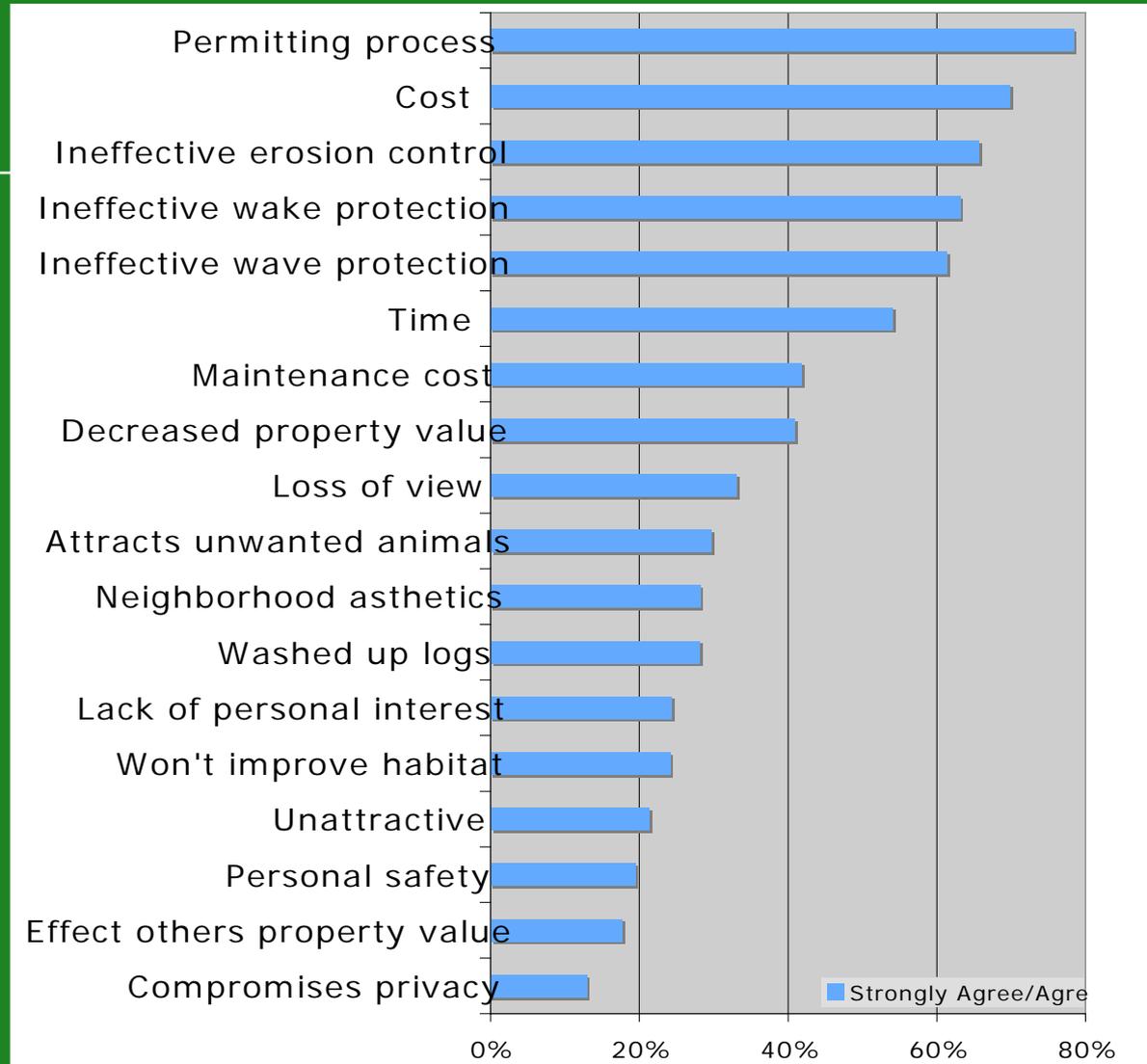


Alternatives considered:

- 42% who attempted or considered modification did not consider natural stabilization alternatives

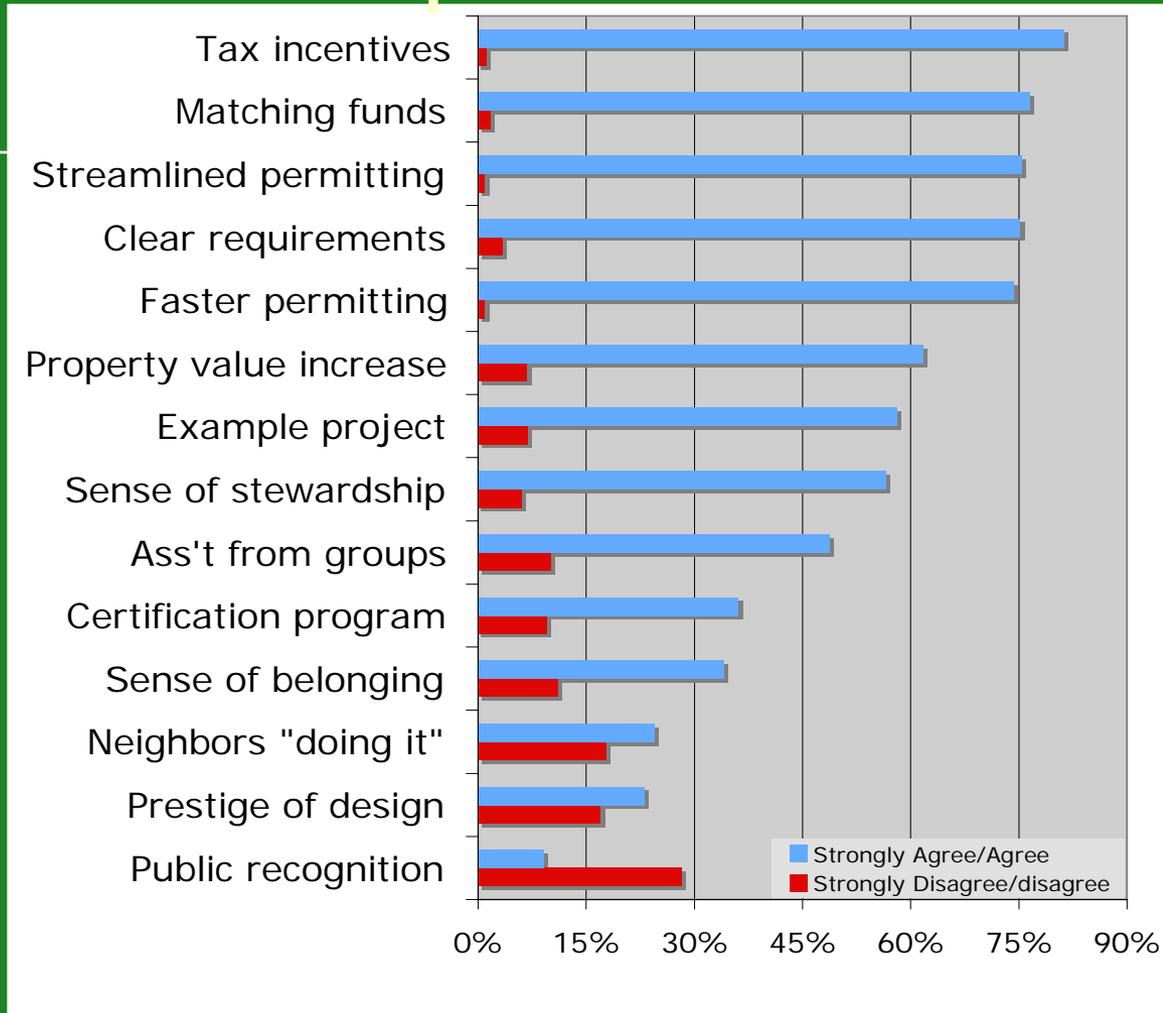
“I agree that these ‘man made’ natural shorelines are an improvement over the proliferation of concrete bulkheads. For my own concrete bulkhead, I softened the impact by adding rip rap against the bulkhead and a rock groin near the swimming beach.”

What are the perceived barriers?



“Haven’t pursued the improvements partly because my perception is that the regulatory process is a pain (and I am a land use attorney)!”

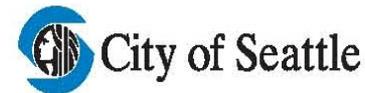
What are the perceived incentives?



“The best way to improve the Lake Washington Shoreline is to provide incentives and resources for property owners to improve their shoreline voluntarily. Mandating shoreline changes through the permit process or other government regulation is the wrong approach.”

Steering Committee

- Formed in December 2008.
- Collaborative effort between local, regional, state, and federal agency staff.



Workshop Logistics

- Scope: Lake Washington and Sammamish.
- Four Workshops in four months:
 - Defining Green Shorelines.
 - Permitting Process.
 - Incentives for Shoreline Restoration.
 - Greening your Shorelines – Voluntary Approaches to Improving Shoreline Habitat.

Acknowledgements

- Collaborative, team effort.
- Many agency staff, private citizens, and businesses donated their time and expertise.
- Learned from each other and the discussion. Honored all opinions and concerns.

Steering Committee Recommendations

- Ten recommendations proposed by Steering Committee.
- Some will be further investigated by the Steering Committee.
- Others are good ideas but are beyond our capacity.

Examples of Steering Committee Recommendations

- Outreach and Communication
- Technical Assistance to Homeowners
- Further Utilize Existing Financial Incentives
- Provide and Monitor Effectiveness of Demonstration Projects
- Continue Agency Communication and Coordination
- Ideas for Regulatory Improvement

What's in Store for 2010?

- Distribution strategy for Seattle's *Green Shorelines: Bulkhead Alternatives for a Healthier Lake Washington.*
- Website
- Resource to explain existing permitting incentives.



Salmon Conservation and Restoration

Lake Washington/Cedar/Sammamish Watershed

You're in: Salmon Conservation and Restoration > Lake Washington/Cedar/Sammamish Watershed > What You Can Do > Green Shorelines

Salmon Conservation and Restoration

Lake Washington/Cedar/Sammamish Watershed

What's New

Salmon Plan Implementation

Local Activities and Partners

Funding Opportunities

Plans, Studies and Maps

Committees

What You Can Do

Green Shorelines

Benefits of Green Shorelines

What Do Green Shorelines Look Like?

Shoreline Decision Tool

Getting Permits

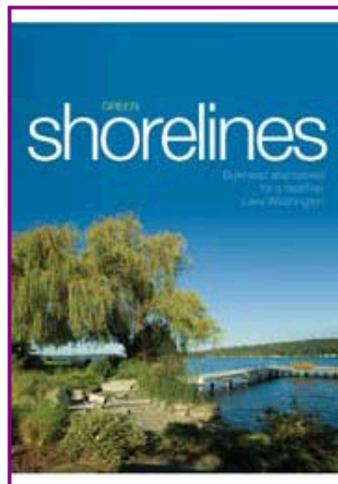
Contact Us

For help with the Lake Washington/Cedar/Sammamish Watershed Web site, please contact [Linda Grob](#).



Green Shorelines for Lake Washington and Lake Sammamish

A tool for lakeshore property owners on Lake Washington and Lake Sammamish to improve shorelines for people and salmon.



Green Shorelines: Bulkhead Alternatives for a Healthier Lake Washington offers lakeshore property owners a guide to understanding and implementing Green Shoreline practices and green dock designs, estimating costs and maintenance, and getting through the permitting process. The guidebook was produced by the City of Seattle, and the principles introduced in the guidebook apply to property owners on Lake Washington and Lake Sammamish.

[Email Us to Request a Free Copy of the Guidebook](#)

[View the Guidebook Online](#)

Benefits of Green Shorelines

Green shoreline designs incorporate natural features that offer several advantages over hard engineering approaches.

- Provide food and shelter for native fish and wildlife.

Related Information



- [Green Shorelines for Lakes Washington and Sammamish: Coordination and Communication Report](#)
- [2009 Green Shoreline Workshops](#)
- [Seattle's Green Shoreline Website](#)
- [University of Washington Fish Friendly Shorelines](#)
- [University of Washington Study of Lake Washington Shoreline Permitting](#)

What's in Store for 2010? (Cont.)

- Encourage refinement of concepts in Green Shorelines Guidebook.
 - Example: Kirkland Decision Tree.
- Continue to create opportunities for cross-agency communication.
 - Share information with jurisdictions working on SMP updates in our watershed and beyond.
 - Explore ways streamline the permitting process.

What We Hope to Address Next?

- Provide one-on-one technical assistance.
- Coordinate with existing industry standards.
- Promote new demonstration projects.
- Monitor effectiveness of green shoreline projects.

What We Will Encourage Others to Do

- Study effectiveness of new dock designs.
- Explore the possibility of a shoreline mitigation bank.
- Shoreline restoration sales tax exemption.

Green Shores for Homes

Developing and Piloting Freshwater and Marine Shoreline Projects

- EPA Grant - Seattle, WA Sea Grant, San Juan County and Stewardship Centre of British Columbia
- Focus on freshwater and marine shorelines
- Develop incentives that benefit home owners to improve shoreline ecological conditions



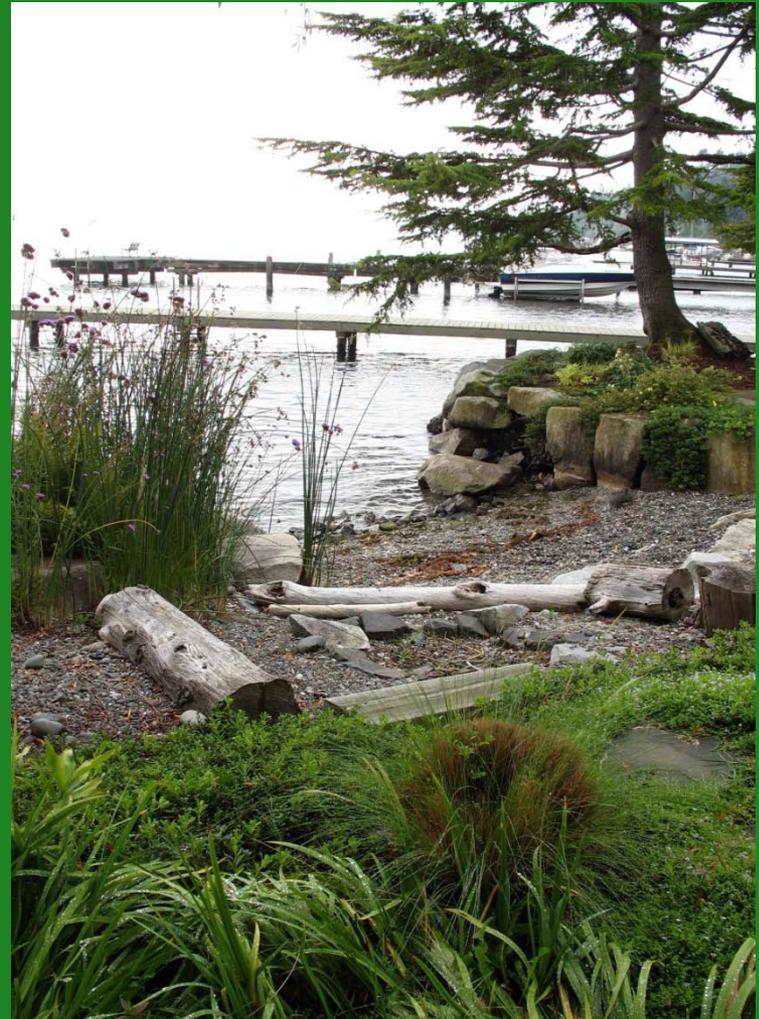
Green Shores for Homes

Developing and Piloting Freshwater and Marine Shoreline Projects

- Develop rating system to determine shoreline improvement type for each incentive

Additional work

- Use existing data – wind/wave energy, slope, structure set back, etc.
- Determine appropriate ecological improvements based on existing site conditions



Green Shorelines Website:

[http://www.govlink.org/watersheds/8/
action/greenshorelines/default.aspx](http://www.govlink.org/watersheds/8/action/greenshorelines/default.aspx)

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