



Shore Friendly Final Report

Prepared for: WA Department of Fish and Wildlife and WA State Department of Natural Resources

Prepared by: Colehour + Cohen, Applied Research Northwest, Social Marketing Services, Futurewise and Coastal Geologic Services

Prepared as part of the project: Social Marketing Strategy to Reduce Puget Sound Shoreline Armoring



Project Background

The Puget Sound Marine & Nearshore Grant Program, co-led by Washington Departments of Fish and Wildlife and Natural Resources, funded this project with the goal of reducing the total amount of traditional “hard” armor along Puget Sound marine shorelines. This can be accomplished by a combination of reducing new armor and removing existing armor. Hard armor refers to structures placed on the upper beach and at the toe of bluffs typically to reduce erosion, and is referred to using a variety of terms in the Puget Sound region, including the terms bulkhead, seawall, revetment, and rockery. Armor has been associated with numerous negative impacts the Puget Sound nearshore. The *Social Marketing Strategy to Reduce Puget Sound Shoreline Armoring* project describes how we can overcome barriers and motivate residential landowners to voluntarily choose alternatives to hard armor.

This project team has used social marketing principles to research and design a program that will help reduce the amount of hard armor along Puget Sound marine shorelines. It resulted in:

- A Sound-wide GIS database of residential marine shore properties, including audience segmentation based on shore characteristics, and prioritization based on high value shoreforms and habitats with documented ecological impacts from shore hardening
- Descriptions of priority segments in terms of size, demographics and additional parcel data
- Desired audience behaviors for each segment
- Prioritized list of barriers and motivations for each desired armoring behavior
- Social marketing strategies and interventions to encourage the desired behaviors
- Toolkit for stakeholders to use in implementing social marketing campaigns in Puget Sound
- Detailed evaluation plan and report that details all project findings

The goal for this project is to create a social marketing behavior change strategy designed to influence priority segments of residential shoreline landowners to make behavior changes related to shore armor in order to achieve grant program goals. The strategy focuses on realistic approaches that use research-based incentives to overcome the specific barriers to reducing shore armor among key target audience segments.

Funding statement: This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement PC 00J29801 to Washington Department of Fish and Wildlife. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

Project Tasks and Deliverables

Task 1: Project management

Task 2: Identify target audiences for social marketing and behavior change strategies

Tasks

- Gather and compile parcel data
- Gather GIS data on shoreform, armoring status and habitat
- Overlay demographic data
- Produce audience segmentation report
- Create an integrated Sound-wide database of residential shoreline properties

Deliverables

- Puget Sound Shoreline Parcel Database
- 2A: Puget Sound Shoreline Parcel Segmentation Report
- 2B: Puget Sound Shoreline Parcel Owner Characteristics

Task 3: Identify behaviors to target

Tasks

- Create a prioritized list of behaviors to target for target audience segments
- Identify key decision points

Deliverable

- Identifying Behaviors and Mapping Decisions to Reduce Shoreline Armor

Task 4: Evaluate barriers and motivations for target audiences

Tasks

- Review existing data on barriers and motivators
- Quantitative survey of shoreline property owners
- In-depth landowner and influencer interviews
- Synthesizing information

Deliverables

- Task 4A: Evaluating Barriers & Motivators for Shoreline Armor
- Task 4B: Influencer and Landowner Interviews
- Task 4C: Barriers and Motivations Literature Review
- Task 4D: Survey of Shoreline Property Owners
- Task 4E: Barriers and Motivators Prioritization
- Task 4F: Research Synthesis Audience Map

Task 5: Develop strategy and creative solutions

Tasks

- Strategy development
 - Defining the structure of the social marketing interventions
 - Creating message strategies for social marketing programs
 - Drafting creative concepts for the strategy implementation
 - Outlining the implementation strategies
- Testing strategies
- Final strategy and toolkit for implementation

Deliverables

- Task 5A: Social Marketing Approach and Campaign Implementation Tools for the Reduction of Puget Sound Shoreline Armor
- Task 5B: Shoreline Armor Focus Group Findings
- Task 5C: Influencer Survey Results
- Task 5D: Social Marketing How-To Guide
- Task 5E: Shore Friendly Sample Materials

Task 6: Performance evaluation plan

Tasks

- Develop tool for campaign implementers to evaluate the effectiveness of the outreach strategies

Deliverable

- Performance Evaluation Plan

Task 7: Final report

Tasks

- Produce a final report that summarizes all aspects of the project

Deliverable

- Final Report (this document)

Project Team

Colehour + Cohen

Julie Colehour, Partner

(206) 262-0363 x 102, jcolehour@colehourcohen.com

Carey Evenson, Director

(206) 262-0363 x 111, cevenson@colehourcohen.com

Wyatt Curtiss, Senior Account Executive

(206) 262-0363 x 112, wcurtiss@colehourcohen.com

Applied Research Northwest

Pamela Jull, President

(360) 647-6067, pamela.jull@arnorthwest.com

Rachel Williams, Research Analyst

(360) 647-6067, rachel.williams@arnorthwest.com

Social Marketing Services

Nancy Lee, President

(206) 232-8768, nancyrlee@msn.com

Futurewise

Hilary Franz, Executive Director

(206) 343-0681, hilary@futurewise.org

Heather Trim, Science & Policy Director

(206) 343-0681, heather@futurewise.org

Coastal Geologic Services

Jim Johannessen, MS and LEG, Principal Coastal Geomorphologist

(360) 647-1845, jim@coastalgeo.com

Tracie Johannessen, Program Design and Assessment Specialist

(360) 647-1845, tracie.johannessen@gmail.com

Andrea MacLennan, MS, Coastal Scientist/Geomorphologist

(360) 671-6654, andrea@coastalgeo.com

Puget Sound Marine & Nearshore Grant Program Team

Washington State Department of Natural Resources

Margaret McKeown, Grant Program Manager
(360) 902-1072, margaret.mckeown@dnr.wa.gov

Washington Department of Fish and Wildlife

Patricia Jatczak, Grant Program Manager
(360) 902-2597, patricia.jatczak@dfw.wa.gov

Maria Hunter, Grant Program Specialist
(360) 902-2540, maria.hunter@dfw.wa.gov

Social Marketing Overview

Social marketing is a process that uses marketing principles and techniques to influence behavioral change in target audiences that will benefit society as well as individuals. It uses communications activities and outreach techniques to influence behaviors for good. It is different from traditional marketing in that it focuses on changing behaviors rather than selling products and supports measurable behavioral change outcomes.

Many of the strategies and tactics deployed in social marketing campaigns are similar to those people have used for years in traditional marketing efforts. The difference is that social marketing focuses on changing a specific behavior by overcoming the barriers to that behavior, providing desired benefits and then measuring whether the social marketing efforts have made an impact.

Social marketing has been used for decades in the public health arena. More recently, it has started to be adopted for environmental issues.

In developing the Shore Friendly campaign, we have identified the key information, decision points, tools and incentives to help people overcome their barriers to changing their shoreline armor behaviors.

Key Insights

The body of work conducted for this project is a deep analysis of the state of armoring in Puget Sound, including current armoring behaviors, profiles of target audiences and values and beliefs associated with shoreline property ownership. Key insights from the data gathered are as follows:

Shoreline Parcel Characteristics

- 48% of residential parcels are armored
- Most parcels are entirely armored or unarmored
 - Parcels with armor are typically 80% or more armored
- Partial armor removal may be feasible on many parcels
- Smaller parcels (< 1 acre) are 50% more likely to be armored
- Transport zones are most commonly armored
- 26% of shoreline parcels are in forage fish spawning areas; of these 58% are armored
- About 6,000 parcels have armored feeder bluffs; of these, 2,000 parcels also include forage fish spawning; 843 of these parcels (representing 32 miles of shoreline) do not have a home present

High Potential Targets

- Armored parcels with high environmental impact potential and no home on the property:
 - 843 armored parcels (in segments 5 and 6) that have feeder bluffs and include forage and fish spawning areas.
- Armored parcels where primary barrier or concern with erosion can easily be overcome:
 - 222 armored parcels (segment 5) covering 6.4 miles of shoreline with no home and no erosion potential.

- Unarmored parcels:
 - Keeping these parcels unarmored should be a top priority. In most cases the barriers are low and motivations are high for the property owner to leave these parcels unarmored.
 - 52% of residential shoreline properties are unarmored (21,998 parcels, segments 1-4). Of these parcels, 27% of landowners have no concerns about erosion and only 2% are planning to install armor within the next 5 years.

Parcel Ownership Characteristics

- 20% of parcels are held in legal structures (trusts, living estates)
- About 46% of the parcels with homes on the property are owner-occupied
- 39% of parcels are owned by persons living outside the county
 - Highest number of owners from Seattle, California, East King County and Tacoma
- Value of land and improvements is \$100k-\$400K (37%) and \$700K to \$1 million (21%)

Audience Characteristics

Significant demographic trends compared to overall population in Puget Sound region:

- Homes on property tend to be older (45% built pre-1980)
- Owners tend to have lived on or owned property long-term
- Tend to have relatively high income (41% have annual income above \$125K)
- Generally college educated (81%)
- Primarily Age 65+ (58%) and many are retired (59%)
- Have strong voting habits

Psychographic trends (values and beliefs) among shoreline landowners:

- Think Puget Sound is in good health
- Have a personal/emotional connection to Puget Sound
- Strongly believe that the Shoreline should be protected/preserved for future generations
- Want to do the right thing but aren't sure what that is
- Are hungry for information about how to responsibly manage their shoreline and have a desire/capacity for detailed information

Attitudes and Beliefs Relative to Armor and Armor Removal

- Most shoreline property owners do not understand how armor impacts the health of Puget Sound.
- About 14-18% of shoreline property owners with armor are already receptive to the idea of removing it (about 3,000 parcels). While this number may seem small, it is a solid base to build from.
 - Less than 2% of shoreline property owners with armor have ever removed all or a portion of their armor.
 - 84% of armored property owners have never considered removing any of the armor.

- When prompted, 18% of shoreline property owners with armor reported they were somewhat or very likely to replace their hard armor with engineered soft shore protection and 14% said they were somewhat or very likely to remove their armor and let the beach naturalize.
- When discussed in focus groups, shoreline property owners generally agree that natural shorelines would be better for Puget Sound; however, they still believe that their own properties have unique characteristics that might require armor to protect their property.
- The primary issue to resolve with shoreline landowners is concern about erosion. People need assurance that behaviors won't damage their property. Once assurance is in place, other barriers including expense and the complexity of the permitting process can be addressed.
- Most people will need some level of financial incentive to remove armor. We believe that there are not adequate financial incentives currently in place to overcome the price/cost barrier to armor removal. We strongly recommend that the state and local jurisdictions work together to first create new financial incentives before a social marketing campaign around armor removal is launched.

Marketing and Outreach about Armor

- Changing shore armor behaviors will require face-to-face interaction with shoreline property owners. The call to action in marketing and outreach materials should be to get people into a face-to-face environment (site visit, workshop, etc.) where they can learn more about armor.
- Face-to-face education needs to come from a trusted source. People are suspicious about contractors or professionals that may be trying to sell them something. Landowners are also suspicious of government officials who they are concerned will regulate or punish them with information about their property.
- Landowners tend to make decisions about armor immediately after an erosion event (either on their property, a neighbor's property or even a regional event) or when they have recently purchased their shoreline property. Outreach activities should be timed around these decision points.
- All marketing and outreach efforts will benefit from a collective effort to change the social norm around how people feel about armor. Changing the social norm will create a more receptive audience for local organizations working to change armor behaviors.
- People want to see and hear about successes from other shoreline property owners in using alternatives to shoreline armor. Recognition and celebration of successful projects will help with outreach efforts and create the assurance people need to consider removing or forgoing armor.
- Shoreline property owners have a desire and capacity for detailed, scientific information about their shorelines. They want to learn more and do the right thing. A centralized education resource would be beneficial.

Shore Friendly

Through the research and analysis process, the team has developed a set of social marketing tools and incentives designed to help shoreline property owners to change their armoring behaviors under the umbrella concept of the “Shore Friendly” campaign. The Shore Friendly campaign will create a consistent Puget Sound-wide look and feel for shoreline armor reduction efforts and provide a rallying point for localized efforts.

The Shore Friendly campaign is designed to be implemented independently at the local level by jurisdictions and other influencer organizations throughout Puget Sound. By having consistent messages delivered to shoreline property owners, we will be able to more quickly change the social norm around armor behaviors. The Shore Friendly messaging framework is intended to be a flexible tool that can be adapted by local implementers working on efforts to reduce armor. The campaign can also be cobranded with existing efforts (e.g. Shore Friendly: Friends of the San Juans).

The Shore Friendly campaign plays off the environmental ethic of the Northwest and celebrates the shoreline lifestyle. While most shoreline landowners have strong environmental and conservation priorities, we know that these priorities can be trumped by concerns about the safety of the investments they have made in their property. The Shore Friendly campaign is designed to alleviate these concerns with messaging that will put landowner’s minds at ease and direct them to the tools they need to make smart choices for their property and the environment.

Shore Friendly shows landowners that there is a way to enjoy Puget Sound without having to worry about erosion risk. Sometimes being Shore Friendly means doing absolutely nothing and letting the shoreline remain natural, other times it means installing soft shore protection, while other times it may mean removing hard armor to allow for restoration of natural conditions.

All in all, the campaign helps shoreline landowners learn more about their property, the benefits of a natural shoreline, how their actions impact Puget Sound and what they need to do to become Shore Friendly.

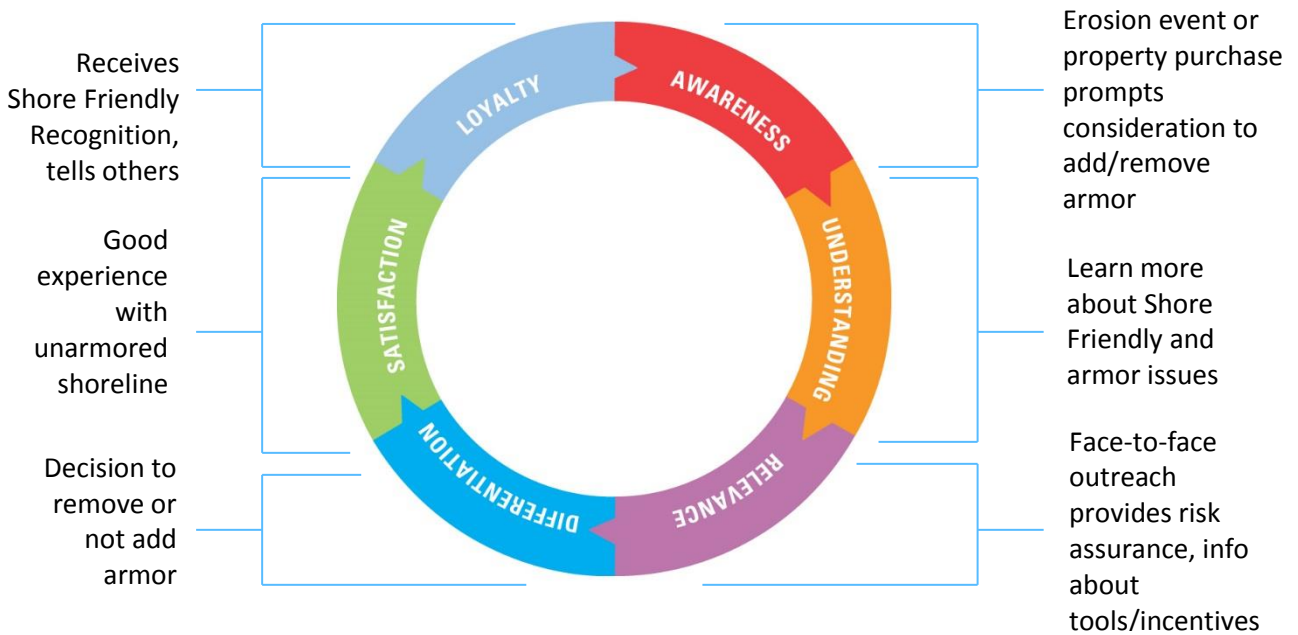
Social Norming

A key driver to the success of these efforts is to change the social norm about shoreline armor. Armor is currently seen by many as a desirable (or even crucial) element in protecting shoreline properties.

There is an opportunity to change this perception. Shoreline property owners desire a natural-looking beach, want access to their shoreline and see it as their personal responsibility to help protect the health of Puget Sound. By leveraging these aspects of landowners’ beliefs, educating them about the impacts of armor on Puget Sound and showing them how others are having success with Shore Friendly alternatives to armor, we can begin to change the social norm around armoring. By changing the social norm to be consistent with our desired behaviors, all outreach activities around armoring can become more efficient and effective.

The wheel below shows the process a shoreline property owner will go through when making a decision about armor removal or adding armor. As more people adopt the desired Shore Friendly behaviors, have success and tell others, the social norm will shift.

Building a New Social Norm



Social Marketing Framework

The chart on the following page maps recommended target audiences, desired behavior changes, barriers and motivations and social marketing tools for the Shore Friendly campaign. Based on the research conducted during this project, it is recommended that implementers start with Category 1 for social marketing outreach efforts. Category 1 represents the unarmored shoreline parcels on Puget Sound. This is a group that is already primed to follow through with the desired behavior of leaving their shoreline unarmored, since the barriers are low in relation to the motivations. In addition to the expense of adding armor, current regulations are making it increasingly difficult for property owners to get permits for armor projects. By initially focusing on this group, implementers can set the stage for Category 2 by beginning to change the social norm around shoreline armor. Outreach to Category 1 will also discourage unpermitted “do-it-yourself” armor projects.

Category 2 is made up of armored properties that have no-to-moderate erosion potential. The most important thing these property owners need in order to consider removing armor is assurance that their property will be safe from erosion. Additionally they need financial help to complete their armor removal projects. Because there are currently not adequate financial incentives in place for property owners, we recommend campaign implementers start by creating new financial incentives that will help overcome the expense barrier. At the same time as these incentives are being developed, it is also recommended that implementers work to streamline the permitting process for armor removal projects. Until these incentives are in place, it is not recommended that social marketing outreach focus on armor removal efforts.

Target Audience	Desired Behavior(s)	Barriers	Motivations	Social Marketing Tools
Category 1 (52% of residential shoreline parcels)	<ul style="list-style-type: none"> • Leave shore unarmored 	<ul style="list-style-type: none"> • Concern with erosion/ storms, waves, or tides might change shoreline 	<ul style="list-style-type: none"> • Being confident that their property would be protected or enhanced • Enjoying the natural look of it • Providing healthy habitat for fish and wildlife 	<ul style="list-style-type: none"> • Free Erosion Assessment • Shore Friendly Ambassador • Shore Friendly Certification Program • Shore Friendly Workshops • Shore Friendly New Homeowner Visits/Packets
Category 2 (46% of residential shoreline parcels)	<ul style="list-style-type: none"> • Remove all or a portion of their armor • Replace armor with soft shore protection (if needed) 	<ul style="list-style-type: none"> • Concern with erosion 	<ul style="list-style-type: none"> • Being confident that their property would be protected or enhanced 	<ul style="list-style-type: none"> • Free Erosion Assessment • Shore Friendly Ambassador • Shore Friendly Certification Program • Shore Friendly Workshops • Shore Friendly New Homeowner Visits/Packets
		<ul style="list-style-type: none"> • Expense of removing armor 	<ul style="list-style-type: none"> • Tax break or reduced fees • Loan or grant 	<ul style="list-style-type: none"> • Current PBRs (property tax break) • New Shore Friendly Property Tax Incentives • New Shore Friendly Grants • New Shore Friendly Loans • Group Rates for Neighborhoods
		<ul style="list-style-type: none"> • Complicated nature of regulatory and permitting process to remove armor 	<ul style="list-style-type: none"> • Streamlined permitting and processes 	<ul style="list-style-type: none"> • Streamlined Shore Friendly Permitting • ShoreFriendly.org • Shore Friendly Ambassador • Shore Friendly Workshops

Next Steps

We recommend that Shore Friendly initially be owned by the Puget Sound Marine & Nearshore Grant Program (as a partner with other agencies) with a plan for the brand to be transitioned to another statewide agency when the grant program sunsets. Roles of primary ownership include:

- Maintaining ShoreFriendly.org website (website built in 2014, maintained and updated in subsequent years)
- Creation of erosion assessment procedure (once created, and following troubleshooting, no maintenance needed)
- Protecting the brand from abuse (we recommend that the brand be trademarked so there is authority to react if someone is found to be abusing the Shore Friendly brand)
- Creation of the Shore Friendly Certification Program (once created it will need some oversight, but can be implemented locally)
- Centralized coordination of the Shore Friend movement (primarily implemented at local level)
- Creation of a plan for parcel database usage rules and updates

The Puget Sound Marine & Nearshore Grant Program can take a leadership role in developing these elements so that local grant recipients and others conducting outreach shoreline armor reduction can take full advantage of the Shore Friendly toolkit in their local work. Once Shore Friendly is developed, state-level program maintenance will be less demanding as the campaign will be implemented by grantees at the local level. We recommend that Puget Sound Marine & Nearshore Grant Program begin in 2015 to identify what state agency, program or non-profit might be the right fit to take over Shore Friendly when the grant program is concluded.