



# Shore Friendly: A Developmental Evaluation

Karin Swarbrick

A capstone submitted in partial fulfillment of the requirements for the degree of  
Master of Professional Science in Fisheries and Wildlife Administration

Department of Fisheries, Wildlife, and Conservation Sciences  
Oregon State University

April 2023



## ACKNOWLEDGMENTS

---

I would like to express my very great appreciation to Dr. Susie Dunham for her guidance, ongoing support, and for keeping my progress on schedule. I would also like to thank Dr. Megan Jones for her clarity, objectivity, and insight. I am particularly grateful to Dr. David Trimbach who cheered me on for the duration of the project, providing much needed continuity and moral support.

Special thanks to Jenna Jewett, Shore Friendly Coordinator for the Washington Department of Fish and Wildlife Estuary and Salmon Restoration Program, for her assistance with project logistics, and also to the dedicated program leads who donated their time to participate in interviews.

Finally, I would like to thank Beihua Page, Adaptive Systems Lead at the Puget Sound Partnership, for her ongoing commitment to effective monitoring and evaluation, and acknowledge that funding for this project was generously arranged by her and provided by the Puget Sound Partnership.



## EXECUTIVE SUMMARY

---

Shoreline modification is pervasive in the Puget Sound region and the use of physical structures to curtail erosion, known as armoring, degrades ecosystems and reduces salmonid forage opportunities. Shore Friendly, a program of the Washington Department of Fish and Wildlife, supports waterfront stewardship on private lands through technical assistance and financial incentive programs that promote the reduction of shoreline armor.

Complex policy environments and diverse target audiences can create uncertainty about program tactics. Program implementation is not always linear, and what appear to be discreet stages often feed-back on themselves, providing opportunities for continuous improvement. Multiple approaches can be used to assess the value and effectiveness of public programs. A developmental evaluation approach prioritizes organizational reflexivity and adaptability by assessing the dynamics of program environments where:

*(1) the context has changed (which comes with the territory in a complex dynamic environment); (2) the clientele have changed significantly; (3) learning leads to a significant change; or (4) a creative, innovative alternative to a persistent issue or challenge has emerged. (Patton, 2016, p. 5)*

### Methods

This project report describes a developmental evaluation that explored opportunities for improving monitoring and evaluation within the Shore Friendly program. To accomplish this, semi-structured interviews were conducted with program leads, the individuals that coordinate technical assistance activities and financial incentive programs at eight local program units. Respondents were asked about: factors influencing landowner adoption of soft shore strategies; their perceptions of human resource capacity; indicators of program success; and evaluation and monitoring practices. Interview transcripts were analyzed, coded and organized into hierarchical models that provided insight into which parameters are being measured, how program tracking, monitoring and evaluation are being accomplished, and also revealed areas where more information is needed to support continuous improvement.

## Summary of Findings and Recommendations

Models of interview response data were constructed and organized into five themes: (a) *barriers to landowner implementation*; (b) *opportunities for landowner implementation*; (c) *program needs*; (d) *desired program outcomes*; and (e) *program evaluation*. Recommendations are based directly on the reported experiences, ideas and opinions of program staff and were conceived to make monitoring and evaluation iterative and integrated within the Shore Friendly program, and also shareable with program partners and stakeholders (Table 1).

Table 1. Summary of Recommendations (pp. 30-35)

<b>Build an Evaluative Culture</b>	<ul style="list-style-type: none"> <li>• Support ongoing learning among program staff.</li> <li>• Improve access to past assessments and emphasize how they fit into the larger monitoring and evaluation framework.</li> </ul>
<b>Consistently Track Program Outcomes</b>	<ul style="list-style-type: none"> <li>• Enhance user experience (UX) and streamline user interfaces (UI) to simplify program tracking and data management.</li> <li>• Improve data usability through uniform metrics tracking across program units.</li> </ul>
<b>Measure Unintended Outcomes</b>	<ul style="list-style-type: none"> <li>• Identify unintended program outcomes (e.g., attitudes and changing perceptions).</li> <li>• Identify and implement metrics for tracking unintended outcomes.</li> </ul>
<b>Decouple prospecting from project tracking</b>	<ul style="list-style-type: none"> <li>• Maintain separate databases for program <i>prospects</i> and active <i>projects</i>.</li> <li>• Investigate opportunities for lost prospect analysis (i.e., those landowners that fail to implement recommendations).</li> </ul>
<b>Obtain Feedback Directly from Program Participants</b>	<ul style="list-style-type: none"> <li>• Make exit interviews a contingency of program incentives.</li> <li>• Leverage customer experience data in marketing materials (i.e., reviews, testimonials, and case studies).</li> </ul>
<b>Evaluate Shore Friendly's Role in Market Development</b>	<ul style="list-style-type: none"> <li>• Document the relative costs of soft shore compared with hard armor.</li> <li>• Investigate the feasibility of a contractor certification program.</li> <li>• Evaluate effectiveness of capacity building workshops.</li> </ul>

## TABLE OF CONTENTS

---

<b>INTRODUCTION</b>	<b>1</b>
<b>BACKGROUND</b>	<b>2</b>
Biogeography, Ecology and Habitat,	2
Shore Friendly – Program Oversight and Outreach,	2
Shore Friendly – Prior Research,	3
<b>SHORE FRIENDLY STAFF INTERVIEWS</b>	<b>5</b>
Methods,	6
Results,	8
Theme 1. Barriers to Landowner Implementation	<b>9</b>
Feasibility,	10
Mainstreaming,	10
Permitting,	11
Public Perceptions,	13
Theme 2. Opportunities for Landowner Implementation	<b>15</b>
Shifting Awareness and Aesthetics,	15
Reality of Sea Level Rise,	16
Theme 3. Shore Friendly Program Needs	<b>17</b>
Staffing,	17
Regional Support,	19
Local Support,	19
Skills and Abilities,	20
Marketing Collateral,	21
Theme 4. Desired Program Outcomes	<b>23</b>
Tangible Benefits,	24
Intangible Benefits,	24
No Tangible Benefits,	25
No Intangible Benefits,	25
Theme 5. Program Evaluation	<b>27</b>
Outcomes,	28
Process,	28
Survey Planning,	29

<b>DISCUSSION</b>	<b>31</b>
Embed Evaluation into Program Implementation,	31
Conclusion,	36
<b>REFERENCES</b>	<b>37</b>
<b>APPENDICES</b>	<b>41</b>
Appendix A. Interview Information Sheet,	41
Appendix B. Interview Guide,	42
Appendix C. Interview Transcripts,	46
Appendix D. Coded Interview Segments,	89

## LIST OF FIGURES

<b>Figure 1.</b> Counties in Washington covered by Shore Friendly program services.	<b>3</b>
<b>Figure 2.</b> Assessments, workplans and proceedings focused on Puget Sound shoreline management.	<b>4</b>
<b>Figure 3.</b> <i>Open, axial and selective</i> coding: a three-step coding process.	<b>8</b>
<b>Figure 4.</b> Code structure: Barriers	<b>9</b>
<b>Figure 5.</b> Code structure: Opportunities	<b>15</b>
<b>Figure 6.</b> Code structure: Needs	<b>17</b>
<b>Figure 7.</b> Code structure: Outcomes	<b>23</b>
<b>Figure 8.</b> Code structure: Evaluation	<b>27</b>
<b>Figure 9.</b> The iterative stages of program evaluation.	<b>32</b>

## INTRODUCTION

---

The West Coast human population is increasing, with significant growth around the Puget Sound region of Washington state (U.S. Census Bureau, 2020). Shoreline modification is pervasive and the use of physical structures to prevent coastal erosion, known as armoring, degrades ecosystems. Nearshore areas provide essential habitat for juvenile salmonids and their prey. Hard armor erected to stabilize shorelines for human developments results in reduced forage opportunities for salmonid species and has substantial cascading effects (Llansó, et al., 2000; Heerhartz & Toft, 2015). For example, iconic Southern Resident killer whales (*Orcinus orca*) rely on endangered Chinook salmon (*Oncorhynchus tshawytscha*) which comprise more than seventy percent of the whale's diet (Ford, et al., 2016).

It is predicted that global climate change will profoundly impact coastlines over the next 25 years. Our homes are not only centers of value, they also represent security. Natural shorelines are dynamic, and hard boundaries represent the perceived risk of living near the land-water interface. As adaption to sea-level rise becomes increasingly necessary, coastal residents will need to choose between *protection*, *accommodation*, or *retreat* if they wish to preserve the structures that support their lives and livelihoods (Dronkers et al., 1990). Shoreline armoring protects property from erosion, but there are other strategies that better accommodate natural processes or that involve retreating from risk (National Research Council, 2007).

Residents of Puget Sound have strong connections to the area and this heightened sense-of-place should be considered in policy and program decisions (Trimbach, 2021). Within their limited domains, shoreline property owners determine what occurs at the interface between land and sea. The looming question is whether individual property rights will translate into hard boundaries between land and sea, or if landowners will evolve new ways of balancing human developments with protecting biodiversity. The Shore Friendly program is a response to the information needs of shoreline land owners and a resource for Puget Sound residents to better understand the options available to them.

## BACKGROUND

---

### **Biogeography, Ecology and Habitat**

The Puget Sound shoreline is characterized by coastal bluffs and mixed sand and gravel beaches. Sediments are largely fed by bluff erosion (Shipman, 2010) and, due to varying wave exposure, Puget Sound beaches have diverse sediment types. Marine shorelines with cobbles and sand support biodiversity by providing substrate for native eelgrass (*Zostera marina*), a highly productive species that stabilizes substrate and provides habitat and feeding grounds for juvenile salmon (Mumford, 2007; Dethier, et al., 2016). Unmodified shorelines with native vegetation also provide natural buffers that protect water quality by slowing runoff and sequestering nutrients (Coyle & Dethier, 2010). Scyphers, et al. (2016) compared ecosystem services and habitat provisioning along shorelines with and without armoring and determined that shorelines with armor supported 23 percent lower biodiversity and 45 percent fewer organisms than natural shorelines.

Many Puget Sound residents are drawn to the region because of the dynamic nature of the shoreline. However, it is estimated that hard armoring occurs along 27 percent of the Puget Sound waterfront (Dethier et al., 2006; Myers, 2010), preventing the natural fluctuation of sediments that nourish beaches and minimize erosion (Coyle & Dethier, 2010), and also detracting from the character and appeal of waterfront property. A 'shore friendly' approach to erosion control combines a variety of strategies that support ecosystem health while enhancing the beauty of the natural shoreline.

### **Shore Friendly – Program Oversight and Outreach**

There are currently eight Shore Friendly program units providing services to Puget Sound shoreline residents. To counteract development trends that center on hard engineering (e.g., seawalls, bulkheads and revetments), Shore Friendly promotes soft engineering through program marketing, technical assistance and financial incentive programs (<https://wdfw.wa.gov/species-habitats/habitat-recovery/puget-sound/shore-friendly>).

Shore Friendly is a component of the Estuary and Salmon Restoration Program (ESRP), established in 2006 under the Washington Department of Fish and Wildlife (WDFW). The

program is administered at the regional level and program activities are undertaken at the local level. Initiated as a pilot program in 2014, Shore Friendly covered two counties, Mason and Kitsap. Coverage was expanded in 2019 to include Swinomish tribal lands and the other ten counties in the Puget Sound watershed (Clallam, Island, Jefferson, King, Pierce, San Juan, Skagit, Snohomish, Thurston and Whatcom, Figure 1)

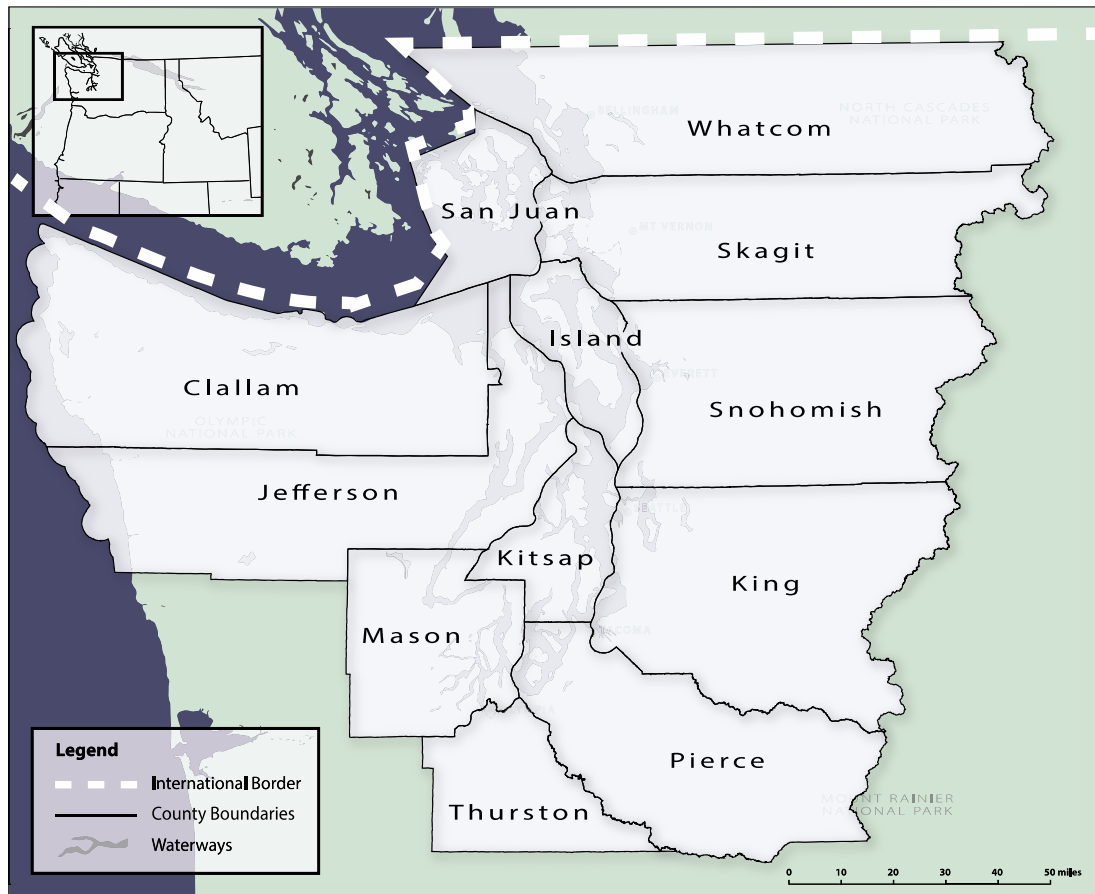


Figure 1. Counties in Washington covered by Shore Friendly program services.

### Shore Friendly – Prior Research

Multiple assessments have been conducted at the regional and local level to advance Shore Friendly program goals (Figure 2). In their most recent effort to improve program services, Shore Friendly administrators identified program priorities that emphasize the need for program monitoring and evaluation activities that are *iterative, integrated, and shareable* between local program units (Shore Friendly, 2022).

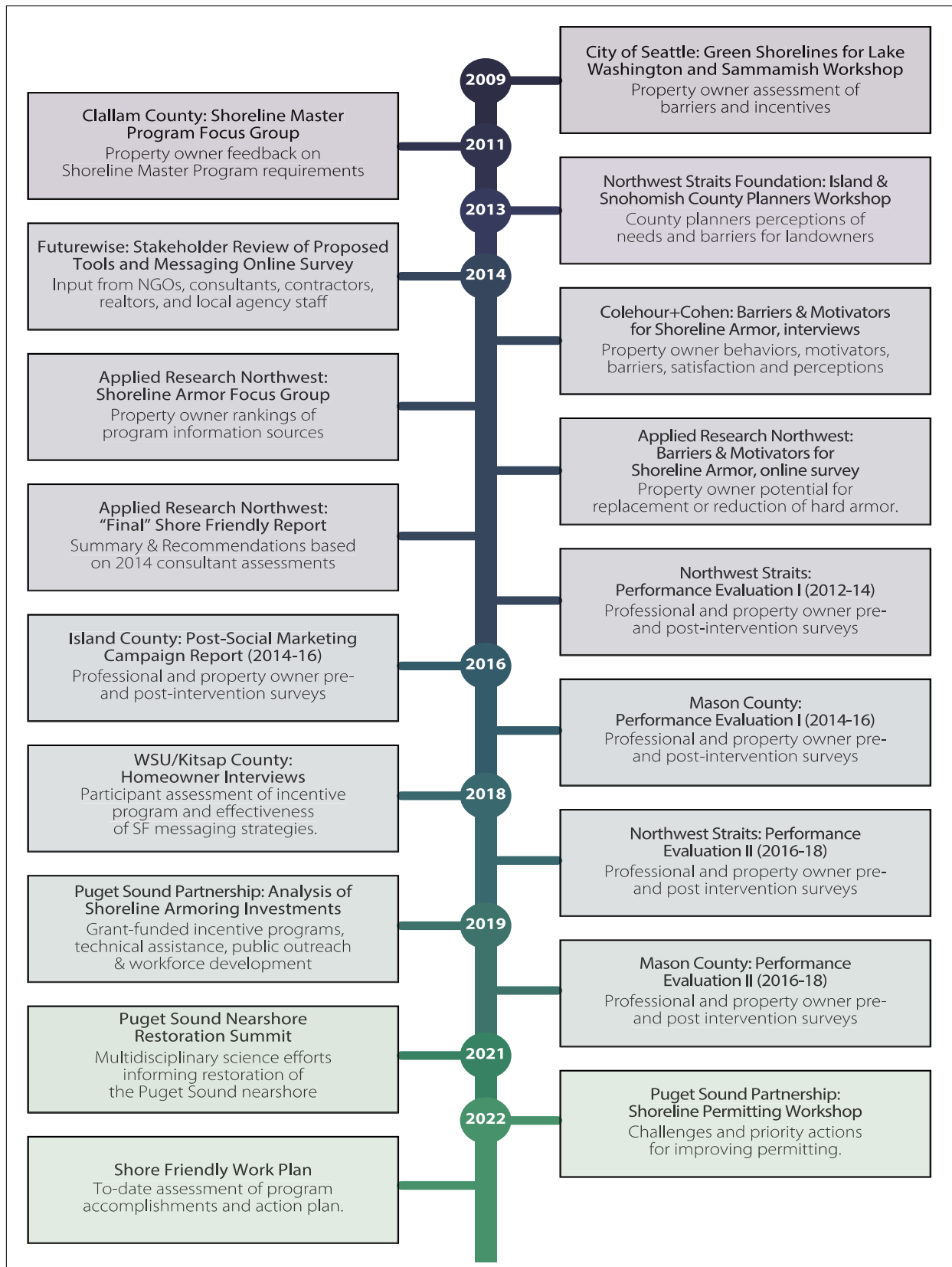


Figure 2. Assessments, workplans and proceedings focused on Puget Sound shoreline management.

## SHORE FRIENDLY STAFF INTERVIEWS

---

Traditional program evaluation focuses on outcomes in order to find out whether a program has led to positive change. This type of evaluation prioritizes accountability by defining *inputs*, *activities* and *outputs*, and measuring *impacts*. Developmental evaluation, by contrast, focuses on adaptation in order to provide feedback on program development. This focus prioritizes organizational *learning* and *reflexivity* to determine whether new or additional program inputs, activities and outputs should be considered.

The research described here employed a developmental evaluation approach that used staff interviews to identify ways of improving program monitoring and evaluation. The expectation was that feedback from Shore Friendly program leads— those individuals that coordinate and implement technical assistance and financial incentive programs — would provide insight into program operations and perhaps inspire new ideas. Eight program leads participated, representing the twelve Puget Sound counties and Swinomish Reservation.

I conducted interviews using a semi-structured format, which offers multiple advantages when surveying a small study population (N=8). The conversational format of informal interviews supports an exchange of information between the interviewer and their subjects, and also allows for clarification of responses when necessary. In this type of interview responses are theme-driven, unlike survey questionnaires which allow for little context. The benefit of open-ended questions is that interview subjects are able to elaborate their responses. The Shore Friendly program leads were articulate, motivated to share information, and used the interview space either to provide context or to connect to related concepts that were not specifically asked about. Disadvantages of semi-structured interviews are that they tend to be time-consuming and can generate large volumes of content for analysis.

The qualitative data analysis process described here involved analyzing transcribed content generated from interview recordings. First, I used the initial concept-driven interview prompts to organize and collate the dataset. I then employed *grounded theory*, a three-step coding process that revealed experience patterns through repeated comparison and emerging themes (Strauss & Corbin, 2008). Thus, I was able to use the shared knowledge of interview subjects to re-organize response data, create concept maps and visualize related themes.

## Methods

Between March 16 and April 21, 2022 eight Interviews were conducted with Shore Friendly program leads.<sup>1</sup> Contact with interview subjects was initiated by the WDFW Shore Friendly program administrator. Each program lead was provided with an information sheet that described research objectives (Appendix A) and was invited to schedule an interview using an online appointment scheduling tool ([calendly.com](https://calendly.com)). Interviews were conducted over an online video-conferencing platform ([zoom.com](https://zoom.com)). Although I allocated 30 minutes for each interview, all but two interviews went over 45 minutes, with one interview going 1 hour and 30 minutes.

During interviews, multiple validity checks were employed to ensure complete answers and response candidness. Response *quality* and *completeness* was achieved by using predefined prompts to encourage elaboration (Appendix B). Response *saturation* was adequate across all interviews; this was reflected by multiple common emergent themes (e.g., how information is being shared in the community; the need to improve technical guidance materials/collateral; gaps in the availability of contractors; and operational differences between county and conservation districts). Response *candidness* was assessed using an anonymous follow-on poll ([mentimeter.com](https://mentimeter.com)) where interview subjects rated their perceptions of barriers to program effectiveness on a ten-point scale.<sup>2</sup>

Interviews were recorded and real-time transcriptions were produced using computer assisted speech-to-text ([www.otter.ai](https://www.otter.ai)). These were then re-transcribed using an intelligent verbatim approach to fix mistranscriptions and edit out false starts and filler words (i.e., *um*, *like*, *sort of*). The resulting transcripts, totaling 42 single-spaced pages (Appendix C) were then collated and coded as follows.

---

1 In the case of the Swinomish Reservation, the interview was conducted with two staff, as one was transitioning out of the position.

2 Poll data was aggregated, and had minimal usefulness for evaluation purposes. However, it was useful in that it either supported or countered interview responses.

I entered transcribed text into a spreadsheet (Microsoft Excel, v. 16.6) and separated responses into columns based on interview prompts. This divided content into *five broad categories*: (a) methods being used for tracking program participation; (b) numbers of participants engaged; (c) program leads' willingness to help facilitate participant interviews; (d) program leads' capacity to do their job effectively; and (e) program leads' perceptions of program success. Each interview subject (case) was associated with *four variables*: (a) agency type; (b) demographic served (rural or urban); (c) number of years informant has worked with the program; and (d) number of years the program unit has been active.

I then imported this dataset into qualitative data analysis software (MaxQDA Analytics Pro, v 22.4.1). Following the three-step grounded theory methodology (Strauss & Corbin, 2008), I first used *open-coding* to identify and categorize distinct concepts and apply labels (codes) to text segments within each of the individual case narratives. Codes were created both for sub-topics of the original five question categories, and also tangential or unanticipated responses that were relevant, insightful or represented repetitive or emergent themes. This resulted in 424 coded segments, broken into 16 parent codes with 94 sub-codes.

In step two, I used *axial-coding* to reorganize, create subsets, and identify connections between open codes. After multiple rounds of *open-* and *axial-coding*, step three applied *selective-coding* to subjectively eliminate some codes and re-group remaining codes by theme (Figure 3). I identified exemplar quotes and sorted out narratives that did not relate to identified group themes. This process resulted in a revised code system with 330 coded segments broken into five themes, 18 parent codes and 41 sub-codes ([Appendix D](#)).

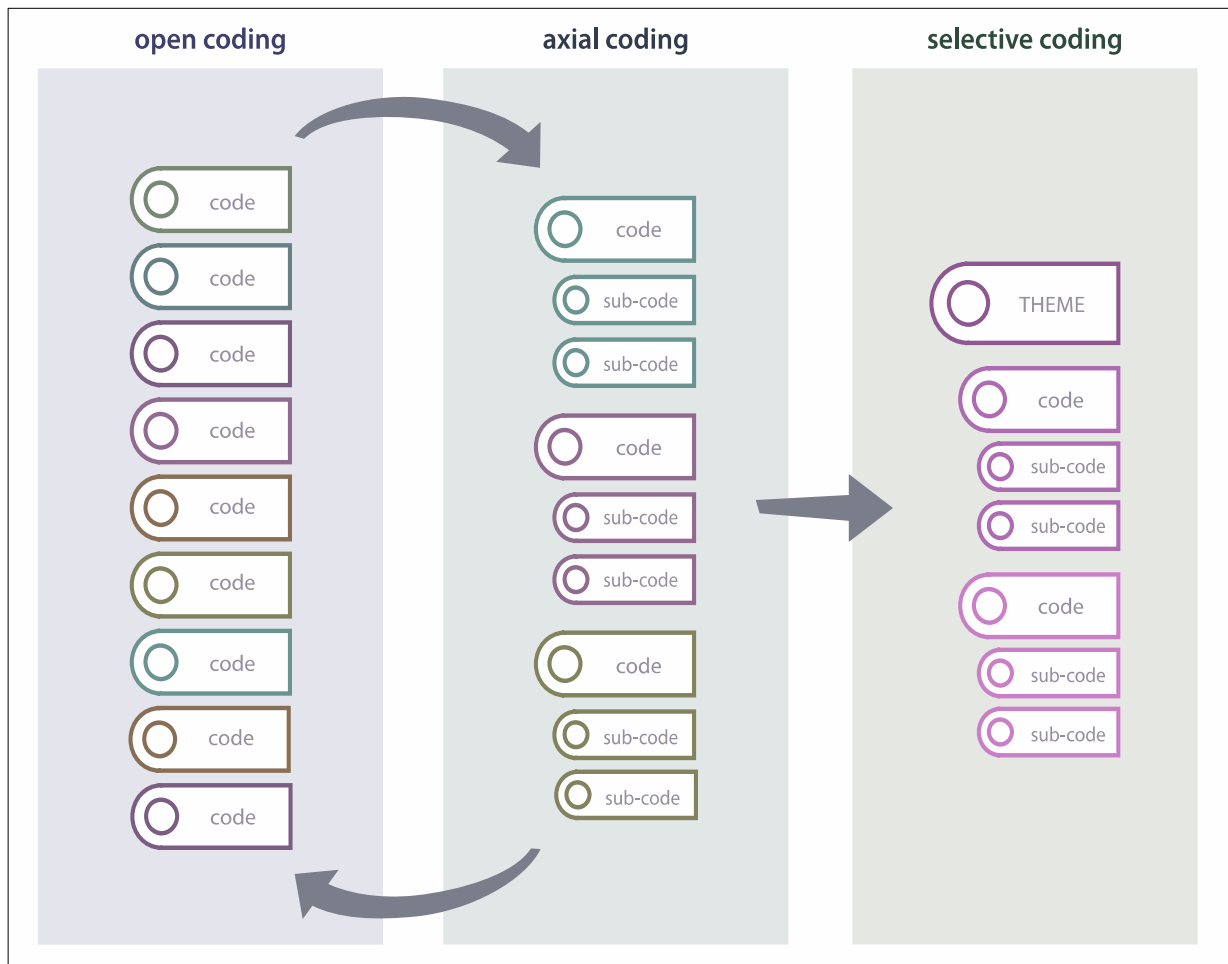


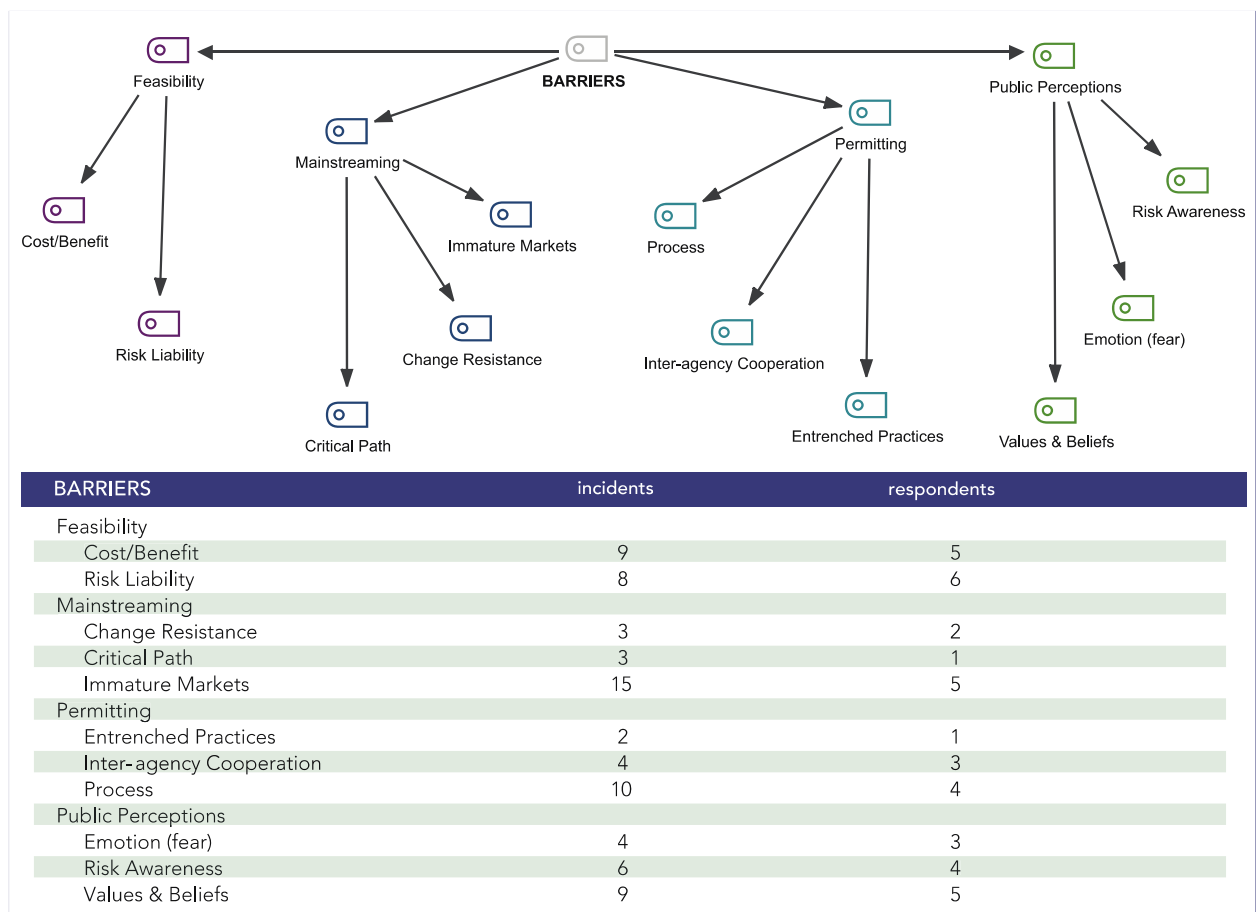
Figure 3. *Open, axial and selective coding: a three-step coding process used in grounded theory (Strauss & Corbin, 2008).*

## RESULTS

The interview responses presented below are organized based on the five themes: *barriers to landowner implementation, opportunities enabling landowner implementation, Shore Friendly program needs, desired program outcomes and program evaluation*. These results include a map of the code structure for each theme with links to codes, sub-codes and a table of incident and respondent frequencies. These are followed by exemplar text segments with paraphrasing for each code.

## Theme 1. Barriers to Landowner Implementation

Throughout each interview, subjects discussed several challenges that they believed discourage shoreline property owners from implementing soft engineering strategies. These comments were assigned one of four sub-codes under the theme "Barriers": (a) *feasibility*: perceived concerns about the risks and relative cost-benefits of soft shore management; (b) *mainstreaming*: landowner resistance to change and lack of established markets and pathways to implement soft shore construction projects; (c) *permitting*: excessive or complicated requirements, entrenched practices and lack of interagency cooperation; and (d) *public perceptions*: ideations based on emotion, risk awareness or values and beliefs that hinder landowner action or acquisition of new information (Figure 4).



**Figure 4.** Code structure with total number coded segments (incidents) and total number of program leads (respondents) referring to 'barriers.'

## Feasibility

I assigned the code *feasibility* to 16 text segments across 7 respondents. In some instances, removing armor is cost prohibitive and in others, perceived impacts to resale value can sway property owner decisions. In some cases, usable land is reduced as hard boundaries between land and sea are allowed to revert to transition zones, and this may impact property values.

*"When it comes to doing a full slope, invasive removal and replanting project... it's expensive. Especially now in this competitive environment for contractors, they're looking at \$15-30k to do a shoreline planting project."*

*"They're saying, 'you're taking my land from me? How dare you. What made my property worth more was this bulkhead, because it gave me 10 more feet of livable space.' "*

There are properties where developments will be at risk if hard armor is removed. High bluff sites are subject to geologic hazards where drainage could become a critical concern if winter precipitation levels increase with climate change. Some respondents suggested that removing armor may pose a higher risk in urban or densely populated areas where the majority of adjacent properties have hard armor.

*"It carries a] lot of risk, because if we're advocating [for bulkhead removal] and it goes and starts washing their property, or it starts hitting structures, then whose fault is it?"*

*"There are places where people just can't remove their bulkhead, it'll completely wipe out their property, especially if they're surrounded by bulkheads. In that case, it takes a community effort and it potentially takes moving your house and a lot of things that are really overwhelming for people to hear."*

## Mainstreaming

I assigned the code *mainstreaming* to 19 text segments across 5 respondents. Most people engaging with Shore Friendly want to do the right thing, but for a variety of reasons private landowners may be slow to adopt new technologies. Change can be a hard-sell, particularly among those that have experienced a landslide or are seeing significant erosion. In some instances, property owners requesting a site visit are looking at Shore Friendly technical staff to affirm their decision to replace a bulkhead and are not receptive to recommendations proposing an alternative solution.

*"The ones that are the most resistant are the folks who've experienced something like a severe landslide, and they just want to be able to replace their bulkhead and*

*not change anything about the way they manage their property... Their intention is genuine, but they don't like hearing that [there are] other options that might be more beneficial. That would involve some significant change on their part."*

Soft engineering brings significant ecological benefits, but shoreline restoration technologies need to become more broadly available and affordable for property owners to overcome hesitation. In addition to public acceptance, Shore Friendly projects require multiple design, process, product, and labor innovations. Because of this, program success relies not only on stimulating demand but also on developing the supply chain.

*"I think there are a lack of people trained to provide that specific service of managing stormwater from a Shore Friendly perspective and with a comprehensive understanding of shoreline processes that make those needs for drainage control very unique and high risk."*

Some program leads also expressed the challenge of promoting change in areas where hard armor is ubiquitous and markets for soft armor specialty trades and engineering services are not well established. In some cases, a property owner may be willing to make a change, but there is a lack of qualified contractors.

*"There's definitely a dearth of consulting folks and engineers that have specific experience on the shoreline to be able to help folks implement things. It's not a skill that I have as program staff to be able to provide folks with stormwater drainage plans and things like that."*

*"Obviously, some of that stuff is beyond the scope of what the Shore Friendly program is intended to be. But what becomes the challenge is that we have a hard time finding professionals in the region to be able to direct folks to fill that gap."*

Another challenge is project sequencing. Because armor remediation and structure relocation projects are still relatively rare, there is no established critical path to project management planning. This creates significant difficulties with logistical planning, predicting project timelines and allocating resources.

*"I started out thinking that there was this program framework: here's how you do a site visit, and here's when you call an expert in, and here's how you do a veg project... So now we're trying to build it as we go and create those systems."*

## **Permitting**

I assigned the code *permitting* to 18 text segments across 5 respondents. Property owners can become overwhelmed when multiple agencies are involved in project planning and approval.

*"The obstacles or the barriers that I'm having, in the broader context, lie a lot more within the realm of things I can't control. [This] includes homeowner confusion about what is and isn't allowed from a regulatory perspective in the county in terms of shoreline management, and [the] challenge in getting that information from the county."*

This is further complicated on Swinomish tribal lands, where leaseholder responsibilities are part of the equation.

*"It can be very challenging for people to understand the lease terms, their responsibility, and then balancing that with what they're actually allowed to do. And it comes down to protection of a habitable structure or protection of critical public infrastructure—They want to do the right thing, but it's very challenging for them to understand."*

In some jurisdictions, planning departments support the Shore Friendly program through unofficial alliances. However, getting a heads-up while bulkheads are still in the planning stages may depend on project scale, and in the absence of an official interagency policy, smaller projects can slip through the cracks.

*"We'll get word from planning or people who are in the regulatory field... and they'll usually let my supervisor know, and sometimes I can get the contact information... But that's for big, huge things where my manager is already being made aware of it and she lets me know that there's things like that happening."*

In the search for balance between what is enforceable and what makes sense, planning departments often employ a one-size-fits-all approach. Unfortunately, this can mean that properties with unique conditions or circumstances do not receive the appropriate level of scrutiny. The following two responses illustrate both extremes:

*"I think development along the marine shorelines involves building in highly geologically unstable locations. And unfortunately, people don't want to wrap their heads around the risks involved and we set these generic standards for how far back or above you need to be from ordinary high water, or how big of a buffer you need, that doesn't look at the larger context of these sites. So, it's difficult because this is a much more dynamic and geologically unstable context compared to anywhere else I've done technical assistance work."*

*"There's a lot of drones in the government right now that are trying to implement rules that don't make any sense—but that's the rule. Like, I need to have grates on my pier because sunlight needs to get through for eel grass. But maybe there's no eel grass beds around because that's not the grass bed area. So, we have to make it easy so for enforcement, that usually ends up setting the rules, because what can you enforce or not enforce? So then they just become ridiculous rules."*

Because bulkheads are established practice for shoreline protection, there are few disincentives to permitting hard armor projects.

*"It's easier to find the information about, say a bulkhead replacement, or how you go about [getting] a variance and much less information about why you shouldn't be pursuing a variance from the perspective of human health and safety, and how your property will perform in the face of sea level rise, and what that does as an ecological impact."*

## **Public Perceptions**

I assigned the code *public perceptions* to 18 text segments across 5 respondents. In some instances, comments indicated that awareness of risk is either low or overshadowed by unrealistic optimism. One program lead described a situation where they were consulting with a property owner whose close neighbor had recently experienced a landslide, and yet they felt immune to a similar threat.

*"It's fascinating to me, [this perception that] somebody down the road was having a landslide, but 'It can't happen to me.' It's like, 'well, you're actually part of the same geologic form and all of it is at risk.' "*

*"Their perception may be skewed, like when people perceive minor erosion as being a really big thing, sometimes they equate that to feet, when it's maybe only inches."*

Other comments suggested that fear can trigger an overreaction:

*"I think people make a lot of emotional decisions when it comes to their home and I absolutely understand that impulse to build a seawall."*

*"Everybody is fearing erosion, fearing change, fearing the impacts of sea level rise and rain. And that's probably the thing—Fear is the biggest barrier right now."*

Several program leads expressed concerns that program participants had with perceived equity, sovereignty, and property rights. In some cases, although sentiment sides with the environment, the desire for self-determination outweighs ecological concerns.

*" 'Well, my neighbors all have these things, so why can't I have them?' "*

*" 'You can't tell me what to do on my own property.' "*

*"It's a very minimalist belief system that the government shouldn't be controlling [anything]. That's what drives their value system. They shouldn't be permitted, regardless."*

There were indications that polarized belief systems prevent program engagement within some demographics. It was also suggested that a lack of risk awareness coupled with a distrust of government can lead to negligence or willful misconduct, such as building or expanding unpermitted armor.

*"Not so much flat-out anti-government sentiment, I think the people who have that sentiment aren't calling us."*

*"I can see people starting to build on top. I mean, their response [to sea-level rise] is to build [the bulkhead] taller. I'm not telling anybody I'm building it taller, I'm just gonna do it."*

## Theme 2. Opportunities for Landowner Implementation

Throughout each interview, subjects discussed opportunities that they believed favorably influenced consideration of soft engineering strategies. These comments were assigned one of three codes under the theme "Opportunities": (a) *shifting awareness*: heightened consciousness of shoreline ecology; (b) *shifting aesthetics*: heightened sensory appreciation of natural processes; and (c) *reality of sea-level rise*: acknowledgement of the need for sea level rise adaptation (Figure 5).

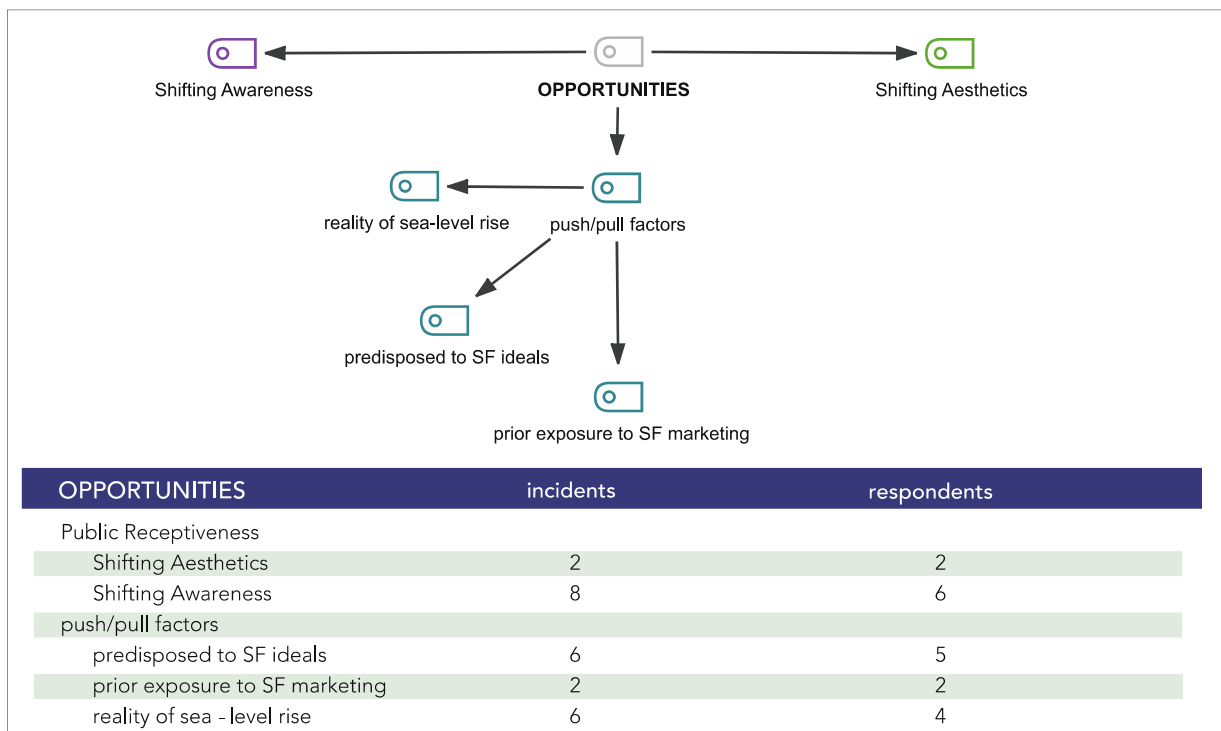


Figure 5. Code structure with total number coded segments (*incidents*) and total number of program leads (*respondents*) referring to 'opportunities.'

### Shifting Awareness and Aesthetics

I assigned the codes *shifting awareness* and *shifting aesthetics* to 13 text segments across 6 respondents. Gaining public acceptance of soft shore technologies depends not only on increased awareness of potential benefits but also on aesthetic appeal. Program participation is voluntary and informant interviews indicate that a significant portion of prospects who initiate contact are pre-disposed to environmentally-preferable alternatives.

*"I feel like we've seen a change since we started in terms of just how many people are willing to consider something different and think out of the box and not get not just want a bulkhead. I think that's really where we are. And that's reflected in people reaching out to us and the amount of site visits that we've done recently, and people are willing to hear what options they can consider."*

Program leads provided examples where prior awareness was the result of exposure to Shore Friendly marketing & outreach efforts.

*"I'm getting people who typically are here because they understand... they've watched a short webinar that put on [by SF staff], or something like that."*

In other examples, future participation may represent a general shift in aesthetics, where a more subtle land-to-sea transition is now preferable to hard armor.<sup>3</sup>

*"They have a structure that's falling apart and it's not very pretty, and they feel like they need to do something and they're wondering if building a wall again is really the best option for their property. Right? You know, not from an environmental perspective, but also from just their use and enjoyment and beauty as well."*

### **Reality of Sea Level Rise**

I assigned the code *reality of sea level rise* to 6 text segments across 4 respondents. A growing awareness of natural hazards is impetus for program participants requesting a site visit. Public awareness of the reality of sea level rise is increasing and, even if most people are not ready to relocate a structure, they are looking for solutions.

*"There's nobody that we've met doing hundreds of these site visits, in this region, that is a climate change and sea level rise denier, okay. It's happening, they all see it and they feel it, and we never get into the reasons why it is or isn't happening, but it's happening. And they are fully aware that it's happening, they see it.."*

Some comments indicate that a significant shift in public awareness may not be occurring in rural areas.

*"Right now, the only people that are participating are those that already have a fairly strong environmental acuity, or at least concern and want to participate. I mean, this program is not going to be successful unless they're starting to turn belief systems around. And I don't think what we're doing right now is turning anybody who's middle to farther away from an environmental management perspective."*

---

<sup>3</sup> Although aesthetics were mentioned only twice, it bears consideration because it is a significant aspect of mainstreaming public perceptions necessary to support widespread change (Brady, et al., 2018).

### Theme 3. Shore Friendly Program Needs

Program leads were explicitly asked whether they had the tools, technologies and skills needed to do their jobs effectively. Subjects identified their competencies and also indicated areas where they felt additional support would be beneficial. These comments were assigned one of five codes under the theme "Needs": (a) *staffing*: excessive workloads and stressors; (b) *regional support*: resources provided through the Shore Friendly organizational network; (c) *local support*: resources provided through the local Shore Friendly host organization; (d) *skills & abilities*: sufficient knowledge to meet job requirements; and (e) *marketing collateral*: digital or print materials used to promote program services (Figure 6)

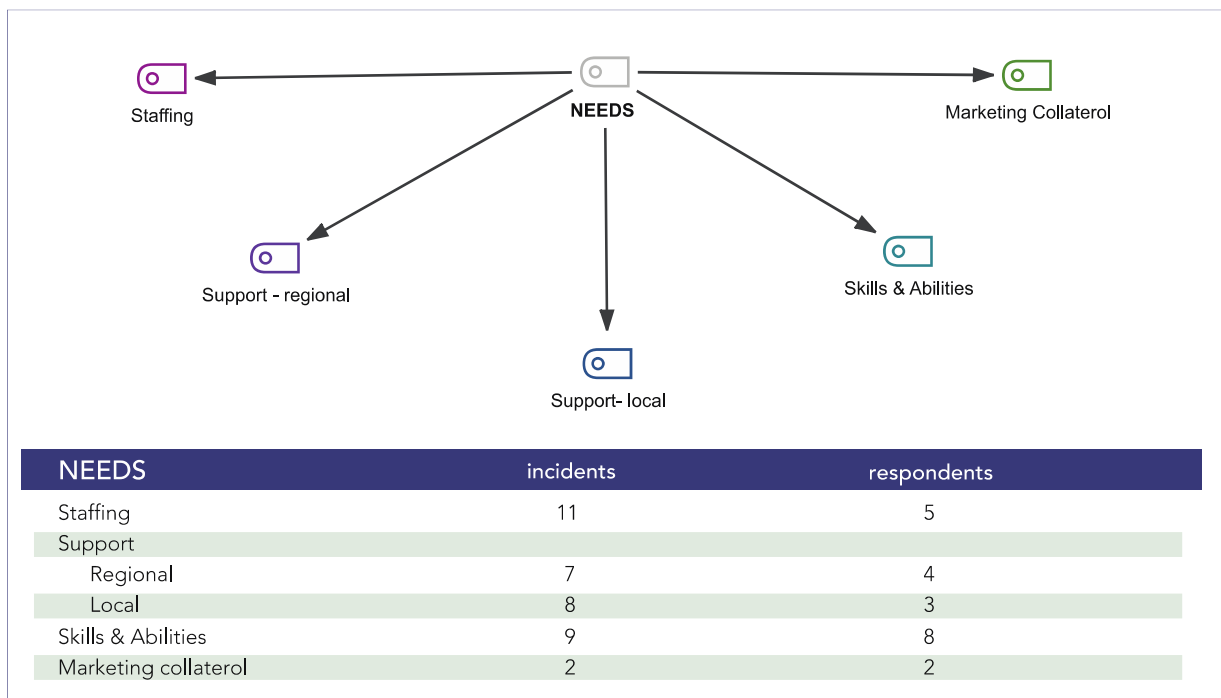


Figure 6. Code structure with total number coded segments (*incidents*) and total number of program leads (*respondents*) referring to 'needs.'

#### Staffing

I assigned the code *staffing* to 11 text segments across 4 respondents. Several interviews revealed staffing challenges, whether that means expanding the program lead position from part- to full-time, or adding additional support staff. There are eight Shore Friendly program units that serve the collective Puget Sound region. The program lead position is full-time at four

units (Island County, Kitsap County, Northwest Straits Foundation, and Pierce Conservation District) and a part-time at the other four (Mason Conservation District, Thurston Conservation District, King County collaborative, and the Swinomish Native Sovereign Nation).

*"The Shore Friendly position is funded as a part time position, and I'm fairly certain we could keep a full position going on all this."*

*"I do definitely need a staff member if I had the budget to do that, to have a full-time staff member."*

In regions where the staff position is part time, responses indicated that expanding the position to full time would enable a faster response to inquiries.

*"The biggest obstacles that I've had are literally capacity, the time I have to dedicate to this. That's a staffing challenge in my particular office. So, that's probably the largest obstacle I have for program effectiveness."*

In some cases, continuity suffers when there is no overlap as one program lead leaves and another takes over.

*"I was the manager for the individual doing the Shore Friendly, who moved on after about six months of my tenure. And so I am now filling in the holes by doing the Shore Friendly program while we're hiring...I've been just touching enough to keep it rolling, but not able to engage it fully."*

There were concerns that demand may exceed supply. Lack of consistent, full-time support can result in delays and risk waning interest.

*"We don't want more coming through the door than we can manage. And so even if we thought we could get more people through the door, the outreach is not as aggressive as it could be, because we can't handle the backlog that will be created."*

In some cases, periods of high demand were dealt with by adding an additional step in the process.

*"For instance, I sent out postcards in February and I thought about trying to tier them so that I wouldn't have all these inquiries at one time. But it was more cost effective to send the mailing in one batch instead of two. So, now I'm a little bit slow and going through them, but I don't feel like it's an issue because I made that initial contact and asked people to be patient."*

## Regional Support

I assigned the code *regional support* to 7 text segments across 4 respondents. Perceptions of the support provided by the Shore Friendly program were positive, with specific references to opportunities to network with other program leads (professional learning community).

*"We have monthly [meetings with the other] Shore Friendly program leads. And those are really great for hearing what other people are doing and also being able to troubleshoot together and work through and kind of realize what are the things that we're all struggling with."*

There was a sense that those program leads who were involved in the pilot program had a more comprehensive understanding of where the program had been and where it was headed. This translated into a greater sense of security contrasted with the perspectives of newer program leads.

*"Time I think is one factor for us just because we're among the newer Shore Friendly programs. So, just trying to get our feet under us and get some projects off the ground."*

*"I think that I could have used some more mentorship, like how to bring a project along through that process, especially when it came to the funding side."*

## Local Support

I assigned the code *local support* to 8 text segments across 3 respondents. The eight Shore Friendly program units are administered by different agency/organization types with varying levels of support and funding provided by the host agency. Two are under County government: (Island County, Kitsap County), three are under Conservation Districts (Pierce, Mason, Thurston), two are overseen by non-profit organizations (Northwest Straits Foundation, King County), and one is under tribal governance (Swinomish).

Some units have unique organizational structures. For example, the Swinomish unit is part of a Native Sovereign Nation (NSN) and the King County unit is a joint collaboration with multiple program partners:

*NSN: "[We] have to be much more mindful than other programs because we work for a tribal government, and the state does not have jurisdiction on the reservation" and "Being part of tribal governments, there's a lot of complexity, maybe more so than in counties. And especially because a number of the properties that we deal with are actually folks that don't actually own the land, they lease the land from the tribe and they own their home, and they own any*

*built improvements. So all of the drainage, the shoreline structure, that's literally theirs, they own it, so they're responsible for it."*

*Collaborative: "Shore Friendly King County, is a little different than the other Shore Friendly programs in that we are run as a collaborative. So we work with King Conservation District and then we have the King County Vashon and Maury Basin Steward, the Salmon Recovery managers from the Water Resource Inventory Areas (WRIA) 8 and 9, and then a natural resources biologist from King County are all part of our collaborative. So the primaries are Mid-Sound, the Vashon Basin Steward and the Riparian Program Manager from the Conservation District, we're the ones that do most of the site visits. But we evaluate projects and also work on our outreach strategies with the whole collaborative."*

Program leads compared the advantages of working at program units administered through non-governmental organizations with those housed under county agencies. Conservation districts have the perceived advantage of having no regulatory authority.

*"I definitely think being able to work well with the community, being in a non-regulatory role is fantastic, but what I've observed for some of the Shore Friendly programs that are housed at the county, is they have an inside track to what is coming through for permitting."*

However, Shore Friendly units that are housed within local governments may have other advantages, including greater access to contact information, which supports outreach efforts:

*Non-profit: "We're sending out 1000s of postcards, and we want to know the majority of those postcards are coming to the right place. And getting access to that information is time consuming, and the county assessors are not usually willing to just give us a list."*

*County: "We have actual addresses. We used county assessor data and did a GIS query to find all the waterfront parcels, and then have one mailing go to each property where the tax bill is sent. Because we do have a lot of homeowners who this could be their second residence and they don't live full time at the water."*

## **Skills and Abilities**

I assigned the code *skills and abilities* to 11 text segments across 8 respondents. The program lead position requires a broad skill set, and the consensus opinion among those interviewed was that they are prepared to accomplish program objectives.

*"In terms of contacting people and doing our site visits and providing recommendations, I do feel like I have what I need."*

Although all of the subjects were confident in their qualifications and ability to do the job, some expressed a desire for further skills and knowledge development.

*"I'm looking for more educational opportunities so that I can feel comfortable delivering more of the technical advice as well. I rely really heavily on the technical advisors that we contract with, and I'd love to be able to do some of that myself."*

*"I don't have formal education or training in outreach or education. And I think some training in that could be helpful, from my personal perspective. For instance, giving effective workshops and that kind of thing. Because there's two avenues for the program, there's this outreach and education lane and then there's the project coordination lane, and they're pretty different."*

### **Marketing Collateral**

I assigned the code *marketing collateral* to 2 text segments across 2 respondents. Some program leads shared their ideas for educational materials to promote the program.

*"I think it'd be nice to have a little booklet or something that is really small and contained in my pocket on site visits with examples of a bluff restoration we did, look at all the beautiful plantings... [maybe] before and after of several different types of shorelines that I can bring to site visits as an example of someone in a similar situation."*

*"It would be helpful if we could show some sort of math that would [demonstrate that] the cost of putting in a new bulkhead could be comparable to the cost of moving your house back and reconnecting the infrastructure. If we can make those connections, I think it would be more palatable to people."*



## Theme 4. Desired Program Outcomes

Program leads were asked to describe what constitutes successful and unsuccessful program outcomes. Subjects provided examples of potential quantitative and qualitative program outcomes. These comments were assigned one of four codes under the theme "Outcomes": (a) *tangible benefits*: quantifiable benefits to the ecosystem and/or property owners; (b) *intangible benefits*: prevention of new armor and increased awareness; (c) *no tangible benefits*: no quantifiable benefits to the ecosystem and/or property owners; and (d) *no intangible benefits*: resists information about hard armor prevention and soft shore alternatives (Figure 7).

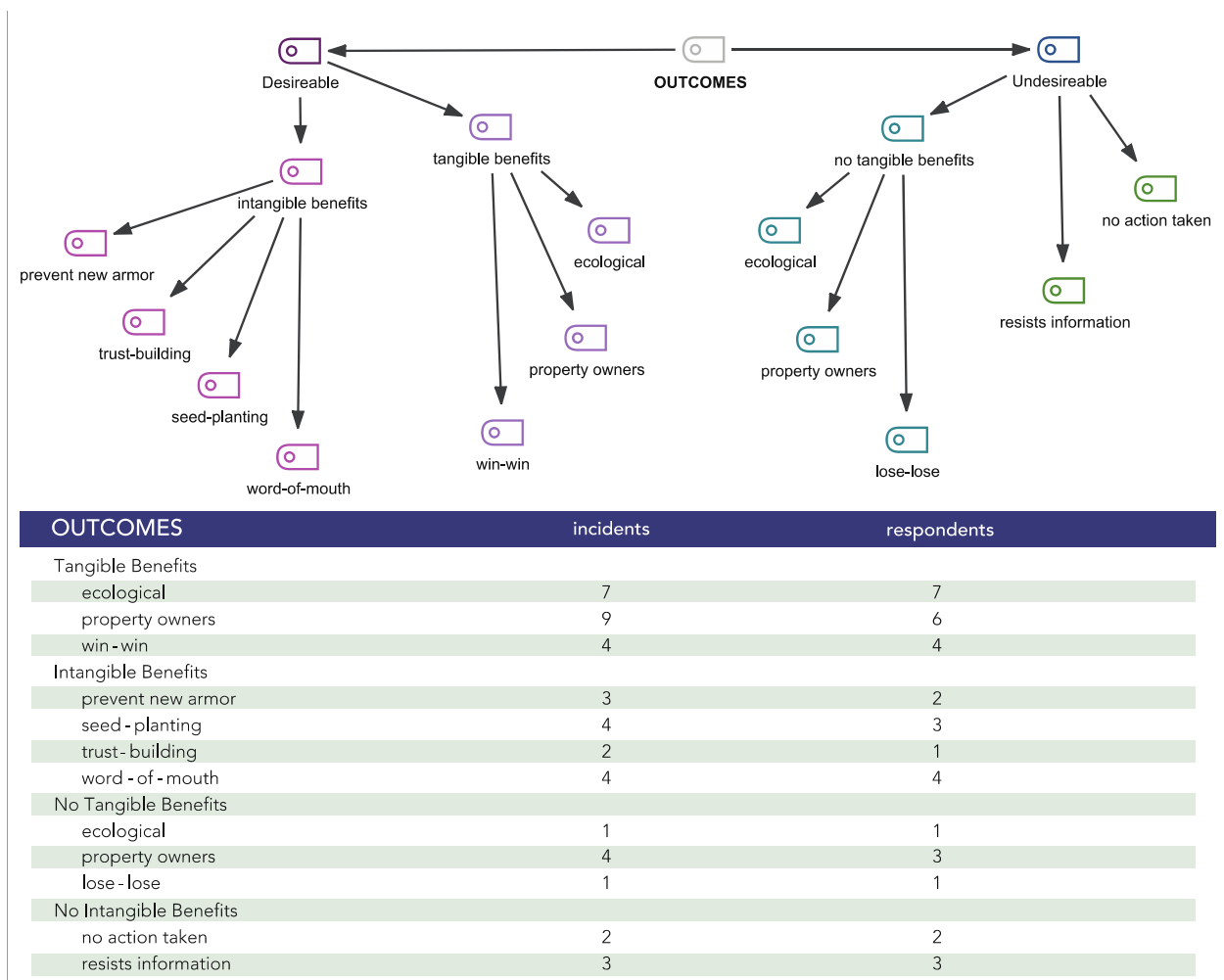


Figure 7. Code structure with total number coded segments (*incidents*) and total number of program leads (*respondents*) referring to 'outcomes.'

## Tangible Benefits

I assigned the code *tangible benefits* to 12 text segments across 8 respondents. Potential tangible outcomes were described as those that provide ecological benefits, property owner benefits, or both (win-win).

*"I would love to see every shorefront that we visit turn into some restoration project that we help them with. That includes re-vegetation or removing some sort of marine or some other kind of structure—I'd love to see that."*

*"I want people to feel good about what they did, and feel okay about all money that they spent, to say, 'Yes, it was an investment that was worth it and has value.'"*

*"One where we met some ecological benefit, the landowners come away from the process feeling it was beneficial, and that we are able to demonstrate that we benefited both the ecology and the shoreline owners in some way."*

## Intangible Benefits

I assigned the code *intangible benefits* to 13 text segments across 5 respondents. Potential intangible outcomes were described as program activities that contribute to the prevention of new armor, or those that raise community awareness of the benefits of soft engineering strategies.

*"Sometimes landowners taking no action is the desired result. You know, when I have someone reach out to me and say, 'I just had a landslide and I think that I need a bulkhead...can you talk to me?' And we have a conversation and a site visit, and at the end they say, 'Wow, I feel a lot better now, and I think I'm gonna plant plants instead of building a bulkhead.'"*

Raising community awareness was discussed in terms of *seed-planting*, *trust-building* and *word-of-mouth* knowledge transfer to neighbors and friends.

*"I think we have to look at success as more than just getting restoration projects done because sometimes all you can do is just slowly shape hearts and minds."*

*"As we move into the future, what success would look like is that some of these people that we have built this relationship and trust with would then be interested in and willing to remove the armor on their property."*

*"They're happy with the changes, and they're out there talking to their friends and neighbors about it, and encouraging other people to try these similar things, if it's possible. That would probably be the ultimate success."*

## No Tangible Benefits

I assigned the code *no tangible benefits* to 8 text segments across 6 respondents. A lack of tangible beneficial outcomes was described as interactions that *would not* result in ecological benefits, property owner benefits, or both (lose-lose).

*"Okay, so unhappy landowner because he didn't get what they sold him, poorly engineered whatever we did. And we don't get the ecological benefit that we thought we were going to get, because we can't understand the system well enough."*

There may be reasons a homeowner cannot act on technical assistance, even when they would like to. Sometimes no tangible benefits occurred because action was recommended but not taken, perhaps due to lack of finances or available contractors.

*"People who want to do the right thing and they themselves physically can't do it, or financially can't do it, and so then nothing happens. And that happens a lot of the time."*

*"You make recommendations and they're willing to take the action but they can't. [And this might be] because of various challenges, one of the biggest being lack of labor to do the work that they themselves can't do, for example, or inability to find a contractor or a consultant who could put in a proper drainage system."*

Poor project performance was also mentioned as an undesired outcome.

*"If a project has to do major repairs within one to two years of it being constructed, I don't want to be harsh and say that that's an unsuccessful project—because these types of projects are all pretty novel, we're kind of in new territory—but I do feel like that's a setback for these types of projects when a homeowner has to spend money, one to two years after they've made such a large investment."*

## No Intangible Benefits

I assigned the code *no intangible benefits* to 3 text segments across 3 respondents. A failure to convey the level of risk or larger ecological considerations contributes to unsatisfactory outcomes. In such cases, action may not be taken because information is rejected outright.

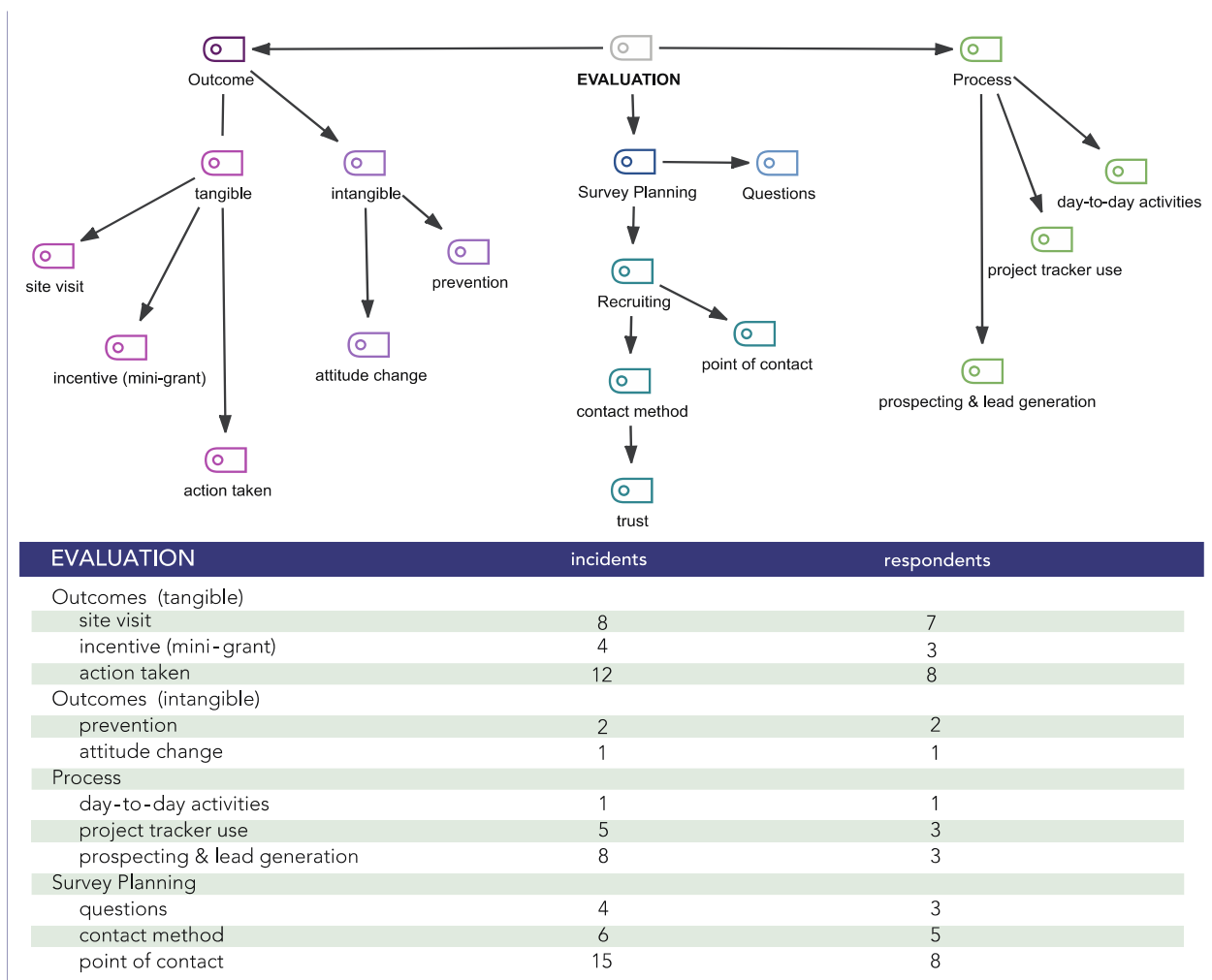
*"Someone saying either 'I don't believe what you're telling me about the importance of these processes,' or 'whatever, I'm going to choose to do the thing that I now know is more harmful to the environment.' ...when someone says, 'I'm rejecting this information you're giving me.' either about the level of risk in a particular situation or whether a bulkhead is needed, or 'I reject that these processes are important at all, and I'm going to choose to ignore those recommendations and take the more harmful route.' I think that's unsuccessful."*

Interview subjects also stressed participant satisfaction as being critical to program success. This outcome is two-fold, because the Shore Friendly program aims not only to meet expectations and create value for participants, but also to increase the likelihood that they will recommend the program to others.

*"If their dissatisfaction about their completed project was enough that they wouldn't recommend the program to other people, or recommend that type of action. Like if they would say, 'Oh, I would never do this type of armor removal or software project ever again, if I could go back in time, I wouldn't do that.'"*

## Theme 5. Program Evaluation

Program leads were explicitly asked to describe program tracking procedures and participation levels. They were also asked their opinions about how best to facilitate contact with program participants and questions they would like included on a future program participant survey. These comments were assigned one of three codes under the theme "Program Evaluation": (a) *outcomes*: program tracking and measurement; (b) *process*: descriptions of prospecting and project tracking activities; and (c) *survey planning*: suggestions for recruitment and questions for a program participant survey (Figure 8).



**Figure 8.** Code structure with total number coded segments (*incidents*) and total number of program leads (*respondents*) referring to 'evaluation.'

## Outcomes

I assigned the code outcomes to 27 text segments across 8 respondents. Interview subjects were asked to provide the total number of program participants from their 'project tracker,' a spreadsheet used by program leads to document program activities. Although each informant indicated that they use the tracker, there was no unified, single number across all program units that represented total program participation. In some cases, program leads provided an estimate of the number of site visits, others provided an estimate of the percentage of participants acting on technical assistance, and others reported the total number of financial incentives awarded.

*"Since July 2021, we've done over 75 segments already. But [if we] look back to how many years ago we've been doing this, 300 or more site visits."*

*"In this most recent round of 46 or 47, I would say probably about 30... so, I would say two-thirds probably are acting on the advice that they get in one way or another. Some of them are acting on multiple things as well."*

*"We only have confirmation from folks who have received financial assistance through the Shore Friendly grant program. We certainly track, and of course we have contracts with those landowners which track the actual project details as well."*

Tracking procedures, such as they are, do not account for some of the previously identified intangible outcomes, and program leads indicated that some important accomplishments are difficult to measure. A common sentiment expressed by several subjects is that project 'completion' does not always equate with accomplishment.

*"If we focus entirely on how much armor are we taking out, that can feel like a really low number, but we are an important part of preventing new armor."*

*"Just the amount of times neighbors share information with each other — I think our reach is actually larger than simply measuring the number of site visits."*

## Process

I assigned the code *process* to 14 text segments across 5 respondents. Some program leads use the tracker as a required aspect of regular reporting activities, while others use it to guide program activities and drive day-to-day tasks.

*"We have a tracking sheet that, honestly, the only reason I am using is to report. I think that it's something that could be so much more, but it's really not a tool for me, it's part of the reporting mechanism."*

*"Basically, anybody who applies goes into my tracking sheet. Once they're in there, I reach out and the goal is to schedule a site visit with them. I change the colors of the entry based on the process: if they're ready to schedule a site visit, or if they've had a site visit, and then once I deliver the technical report to them, my goal is to reach out in a couple of months."*

In addition to documenting outcomes, the tracker is being used as a prospect development tool.

One of the program leads described a somewhat detailed procedure for lead development:

*"Once somebody applies, I call them or reach out in whatever way they indicate is best, so usually a phone call, and then if I don't hear back from a voicemail or they don't return my call, I'll email them, between one and two months later. And then if I don't hear back from them after that, I'll gray them out. So, I still have a record of their application, but I don't follow up with them again. Because I figure there's probably other things going on in their life, but I can still easily refer to them if in a year they're like, 'Oh, hey, I forgot about this.'"*

## **Survey Planning**

I assigned the code *survey planning* to 29 text segments across 8 respondents. Trust is a factor in gaining feedback from program participants. Program leads indicated that any communication with program participants for the purpose of gaining feedback should be initiated through Shore Friendly. In some cases, there was concern that any direct outreach should come only from local program staff.

*"I don't want to be giving out personal information or emails or phone numbers randomly and have them think that we don't honor their information. We have an agreement not to share their information externally without permission."*

*"I've already worked to build that trust and there are some people who I think would be very uncomfortable with being reached out to by a state agency through this program, because they've participated in it. I think that a lot of people would be very confused and feel like they lost some trust in the program."*

*"Particularly for those of us who are programs at conservation districts, we are careful about our sharing landowner information of any kind with agencies that have any sort of regulatory arm and so I don't think conservation districts would be able to just give you our participants contact information. So, I don't think it could come directly from WDFW."*

Most program leads suggested email as the preferred method of contact. Though the postal service and phone were suggested for some areas.

*"Initially, it would be beneficial for me or our program to reach out to all the various people, maybe by email, that we have worked with, to request permission for somebody else to contact them."*

*"Probably phone or email. For a lot of our [more remote] residents a phone call is better than email."*

Based on their responses, program leads would like a greater understanding of how well Shore Friendly goals align with those of shoreline property owners, what influence the program has had on participant action or non-action, and what prevents participants from implementing the guidance provided. Interview subjects offered several suggestions for questions they would like to see included in future program assessments:

*"What do you want this to look like? What would you like to see here? I'm trying to ask people that because I think that gets at your social science piece as well: what do people perceive as healthy shoreline?"*

*"One of the questions I would want to answer: what would it take for you to move your house and your infrastructure out of the risk hazard zones?"*

*"What I would love to really be able to hone in on: what things they learned, that we told them, or they gained from us that made them change their mind."*

*"What are we missing? What information do they want, that we could give them, that would help them to make a change on their property?"*

*"Did the services that we provided to them—be it the site visit and/or additional funding—help them move ahead with something? Did that accelerate the timeline in which they would make a change?"*

*"I'd love to know more about whether people decided to not make a change because of the information we provided to them."*

*"Our mini grant is six-thousand dollars, which is up a little bit from when we started. And I'm just curious if people feel like that's enough financial assistance to really move these projects..."*

## DISCUSSION

---

Developmental evaluation is an approach that emphasizes organizational learning, decision-making, and supports continuous improvement (Patton, 2011). This is particularly important when managing dynamic programs designed to address complex problems. This project report describes a developmental evaluation of the Shore Friendly program that documented the knowledge, experience and insights of program staff. Results are a reflection of what was shared during interviews with program leads and the following recommendations are based on their insights.

### **Embed Evaluation into Program Implementation**

Effective evaluation is ongoing and can be used to improve programs throughout their duration. *Embedded evaluation* is focused on continuous improvement where ongoing tracking and periodic assessments provide the impetus for program adaptations (Giancola, 2021). Rather than being a stand-alone activity, an iterative monitoring and evaluation framework is comprised of multiple components that identify, track and measure program processes, outcomes and impact. This can be visualized as interacting cycles that provide opportunities for continuous improvement (Figure 9).

***Build an Evaluative Culture.*** An evaluative culture supports embedded evaluation. Evaluation capacity building (ECB) is the process of improving an organization's ability to use evaluation to learn from its work and improve results (Giancola, 2021). As part of onboarding, new program staff should be exposed to the collective results of past assessments. Prior assessments conducted by Shore Friendly include: *needs assessment, pilot program evaluations, homeowner surveys, participant interviews, focus groups and workshop feedback.*

Looking at these separate activities as part of a larger monitoring and evaluation structure can help provide context for future monitoring and evaluation. Reference and learning materials that include the prior research conducted by Shore Friendly should be curated and easy to access. A timeline, such as the one included in the introduction of this report, or an abstract library can provide context and make it easier to access information when and as needed.

The Shore Friendly program is coordinated through local program units, and each local host agency or organization provides varying levels of support. Regional support is strong and Shore Friendly administrators recognize the need for ongoing learning and program staff support. Interview subjects described regular meetings with other program leads that provide a professional learning community where they can discuss strategies and share successes. An

extended onboarding protocol coordinated at the regional level can help to compensate for inadequacies at the local level.

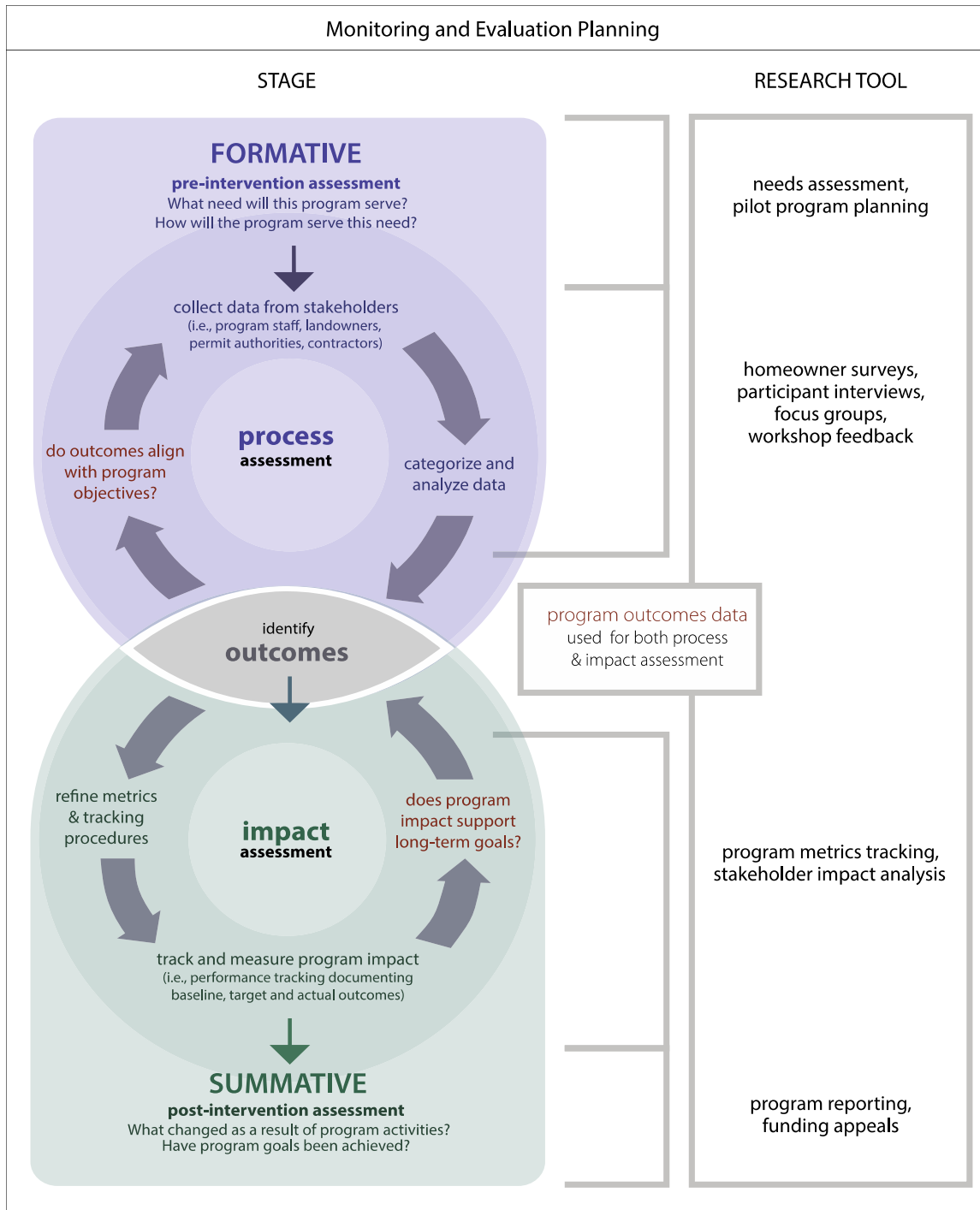


Figure 9. The iterative stages of program evaluation.

***Consistently Track Program Outcomes.*** Program metrics tracking is necessary for ongoing monitoring and evaluation. Interview responses provided insight into program outcomes and how these are being documented. Some tangible outcomes are being tracked. Intangible outcomes that are more challenging to quantify, such as raising awareness, trust-building and informal information sharing (word-of-mouth) are recognized as being important program outcomes, but are not currently being measured.

Some interview subjects expressed frustration or uncertainty about whether current methods sufficiently document and communicate their accomplishments. When asked how many participants had started and completed the process, some interviewees were unable to provide actual numbers, or indeed, what indicators they were measuring. In most cases tracking is adequate for internal purposes and for providing a sense of the number of inquiries and ongoing projects. However, consistent tracking on the same indicators is important for a unified assessment of regional program outcomes and impact.

One way to increase reliability, consistency and shareability of program metrics tracking would be to enhance the user experience (UX) and database user interface (UI). An up-front investment in UX and UI can provide intuitive data collection forms for *getting data in*, while facilitating regional data collection and custom reporting for *presenting data out*.

***Measure Unintended Outcomes.*** The majority of interview responses suggest that the program is having a positive impact on multiple levels, but the challenge lies in finding creative ways to document that success. Tracking procedures are set up to measure tangible metrics, however, Shore Friendly outcomes also include participant engagement and actions. In their review of 105 environmental education studies, Ardoin, et al. (2020) classified indirect indicators of program outcomes as: (a) *behavioral antecedents*, such as awareness, attitudes, intention, and skills; (b) *behavior*, self-reported or observed changes in habitual patterns; and (c) *actions*, proactive efforts undertaken to improve ecological conditions or build collaborative partnerships.

Moreover, the process of identifying desired program outcomes often results in poorly defined objectives and has potential for bias. Program evaluation should be iterative and explore actual outcomes. In a goal-free evaluation both intended and unintended outcomes are measured (Scriven, 1991, 2013). Based on the contributions of several interview subjects, a goal-free approach allowed the research reported herein to document several positive program outcomes including changing attitudes and evolving perceptions of soft shore alternatives.

***Decouple program prospecting from project tracking.*** Different interview subjects provided different accounts of the methods, purpose and benefits of program tracking. Several subjects made reference to a project tracker, and others described a process that could better be described as prospect development. If a significant fraction of applicants fail to advance to the project stage, it may be more efficient to document *prospects* separately from active *projects*. Eliminating them from the project tracker will allow for a more streamlined interface and they can be added later if they transition into some type of project commitment (i.e., site visit, technical assistance report, mini-grant).

Keeping prospect data separate from active project data also supports a separate activity pathway that is focused on lead development. There is current interest in learning why some landowners, after an initial site visit, did not complete the Shore Friendly process. This type of feedback can be referred to as win/loss or lost prospect analysis. A dedicated prospect database can be used to identify what constitutes a lost prospect (i.e., those landowners that fail to take advantage of incentives or implement recommendations) and at what point further outreach is triggered. As indicated above, one way to support and simplify data management is to improve the UX and UI of applications that are used for documenting program activities.

***Obtain Feedback Directly from Program Participants.*** Participant feedback should be a contingency of receiving a program incentive. Large scale surveys are useful, but they provide incomplete information. While a homeowner survey collects information from *potential prospects*, there is a need for feedback that comes directly from *program participants*. Customer experience data (i.e., reviews, testimonials, and case studies) can be used for improving program services and also leveraged in marketing materials.

Interviewees expressed an interest in discovering more information about participant motivations, actions and satisfaction, and emphasized trust as a factor when making contact with program participants. Participant feedback surveys offer an affordable option for collecting participant feedback and can be implemented anonymously, either electronically or via mail. To minimize the sharing of personal identifying information, local program staff should be directly involved in obtaining participant feedback whenever feasible. Another benefit of obtaining feedback at the local level is that it can account for unique organizational characteristics or population demographics (e.g., conservation district vs. county, or rural vs. urban).

When more detailed or nuanced information is desired, an informal interview may be necessary to explore context and reveal unexpected or unanticipated information. People often have incorrect perceptions about why they engage in conservation behaviors and tend to underestimate the influence of social factors (Nolan, 2008). Engaging in a dialogue with participants can solidify the linkage between program activities and behavior change by exploring: (a) how ideas and beliefs are being shared with other members of the community; (b) how participant beliefs and knowledge regarding soft shore alternatives have changed; (c) whether participants would engage in further stewardship activities; and (d) how likely actions would have been in the absence of incentives.

***Evaluate Shore Friendly's Role in Market Development.*** To a significant degree program success depends on certain contextual conditions being met. A key concern that was brought up by program leads several times during interviews is the lack of developed markets to provide engineering, construction and labor services for soft shore projects. Shore Friendly (2022) priorities for expanding program services through 2026 will rely on an increase in the number of available, qualified, and affordable contractors.

Past outreach to contractors, consultants and real estate professionals has involved informational workshops. Feedback from these events indicates that contractors need more information on the relative costs of soft shore erosion protection compared with conventional hard armor (Island County Department of Natural Resources, 2016). Echoing this, one interview subject suggested that it would be helpful to have information demonstrating that "*the cost of putting in a new bulkhead could be comparable to the cost of moving your house back and reconnecting the infrastructure.*"

Reporting from contractor workshops also indicates support for a contractor certification program (Colehour+Cohen et.al., 2014). *Green Shores for Homes* is a Canadian program that is having success with a third party-certification program that provides professional development opportunities to contractors. To create their certification program, they conducted a Triple bottom line (TBL) analysis that measured social and environmental factors alongside financial considerations to demonstrate the value of the Green Shores approach to shoreline development (Eyzaguirre, et al., 2020).

Green Shores hopes to stimulate market development by combining capacity building with best practice standards for planning and design of alternatives to hard armor. Based on the

Leadership in Energy and Environmental Design (LEED) green building certification program, the Green Shores program outlines guidelines for achieving multiple levels of project certification (i.e., *bronze*, *silver* and *gold*). Green Shores maintains a list of approved professionals that include botanists, landscape architects, engineers and geoscientists.

## **Conclusion**

Having a clear understanding of what came before can make it easier to plan next steps. The results of this research reflect what is occurring within the Shore Friendly program from the perspective of those individuals that work with participants on a daily basis. Shore Friendly priorities include improving program evaluation, and this capstone project involved a developmental evaluation that explored opportunities for updating monitoring and evaluation activities to make them iterative, integrated, and shareable.

Developmental evaluation offers an alternative to more traditional program evaluation methods that focus solely on process and outcomes by emphasizing adaptive program development. This simply means that in order for a program to improve, it must consider changes in the external environment and demographics served, and actively acquire and implement new information, knowledge and innovations. Presented here are a few examples of how Shore Friendly can respond to changing circumstances by embedding evaluation into ongoing activities and updating program monitoring procedures.

Each of these recommendations will need to be considered in light of the current constraints on available resources, and will likely require: (1) expanding human resources; (2) identifying additional sources of funding to support market research, outreach and capacity building activities; or (3) identifying and contracting with outside vendors to develop new tools to support tracking and monitoring (i.e., dedicated database software that uses custom interfaces or packaged database solutions).

## REFERENCES

---

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50/2: 179-211.
- Ardoin, N.M., Bowers, A.W. & Estelle Gaillard, E. (2020). Environmental education outcomes for conservation: A systematic review. *Biological Conservation*, Volume 241, 108224,ISSN 0006-3207.
- Brady, E., Brook, I. & Prior, J. (2018). *Between Nature and Culture: The Aesthetics of Modified Environments*. Rowman & Littlefield International.
- Bradt, G. (2010). Onboarding: an act of transformational leadership. *People & Strategy: Journal of the Human Resource Planning Society*, 33(2), 4+.
- Broadhurst, G., (1998). *Puget Sound Nearshore Habitat Regulatory Perspective—A review of issues and obstacles*. Seattle, Wash., and Vancouver, Canada, Puget Sound Georgia Basin International Task Force.
- Carman, R., Taylor, K., and Skowlund, P. (2010). Regulating shoreline armoring in Puget Sound. U.S. Geological Survey Scientific Investigations Report 2010-5254.
- Colehour+Cohen, Applied Research Northwest, Social Marketing Services, Futurewise, & Coastal Geologic Services (2014). Shore Friendly: Influencer Survey Results. Prepared for: Washington Department of Fish and Wildlife as part of the project: *Social Marketing Strategy to Reduce Puget Sound Shoreline Armoring*.
- Coyle, J.M., & Dethier, M.N. (2010). Review of Shoreline Armoring Literature. In Shipman, et al. eds. *Puget Sound Shorelines and the Impacts of Armoring—Proceedings of a State of the Science Workshop*, U.S. Geological Survey Scientific Investigations Report 2010-5254.
- Dethier, M., Raymond, W. W., McBride, A. N., Toft, J. D., Cordell, J. R., Ogston, A. S., Heerhartz, S. M., & Berry, H. D. (2016). Multiscale impacts of armoring on Salish Sea shorelines: Evidence for cumulative and threshold effects. *Estuarine, Coastal and Shelf Science*, 175, 106–117. <https://doi.org/10.1016/j.ecss.2016.03.033>
- Dethier, M. Fresh, K., Goetz, F., van Heeswijk, M., Leschine, T.M., Logsdon, M., Myers, D., Newton, J., Shipman, H., Simenstad, C.A., Tanner, C. & Woodson, D. (2006). Coastal Habitats in Puget Sound: A research plan in support of the Puget Sound Nearshore Partnership. *Puget Sound Nearshore Partnership Report No. 2006-1*. Published by the U.S. Geological Survey, Seattle, Washington.
- Dronkers, J., Gilbert, J.T.E., Butler, L.W., Carey, J.J., Campbell, J., James, E., McKenzie, C., Misdorp, R., Quin, N., Ries, K.L., Schroder, P.C., Spradley, J.R., Titus, J.G., Vallianos, L. & von Dadelszen, J. (1990). Strategies for Adaptation to Sea Level Rise. Report of the IPCC Coastal Zone Management Subgroup: Intergovernmental Panel on Climate Change, Geneva.

- Eyzaguirre, J., Boyd, R., Prescott, S., Morton, C., Nelitz, M. and Litt, A. (2020). Green Shores 2020: Impact, Value and Lessons Learned, Final Project Report. Prepared by ESSA Technologies Ltd. Prepared for the Stewardship Centre for British Columbia.
- Ford, M.J., Hempelmann, J., Hanson, M.B., Ayres, K.L., Baird, R.W., Emmons, C.K., & Linda K Park. (2016). Estimation of a Killer Whale (*Orcinus orca*) Population's Diet Using Sequencing Analysis of DNA from Feces. *PLoS ONE*, *11*(1), E0144956.
- Gittman, R.K., Scyphers, S. B., Smith, C. S., Neylan, I. P., & Grabowski, J. H. (2016). Ecological Consequences of Shoreline Hardening: A Meta-Analysis. *Bioscience*, *66*(9), 763–773. <https://doi.org/10.1093/biosci/biw091>
- Heerhartz, S. & Toft, J. (2015). Movement patterns and feeding behavior of juvenile salmon (*Oncorhynchus* spp.) along armored and unarmored estuarine shorelines. *Environmental Biology of Fishes*. *98*. 10.1007/s10641-015-0377-5.
- Island County Department of Natural Resources (2016). Island County Shore Friendly Post-Social Marketing Campaign Report. Prepared for: Washington Department of Fish and Wildlife.
- Manfredo, M.J. (2008). Who Cares about Wildlife?: Social science concepts for exploring human-wildlife relationships and conservation issues. Springer.
- Mumford, T.M. (2007). Kelp and eelgrass in Puget Sound Seattle, Washington. U.S. Army Corps of Engineers, Puget Sound Nearshore Partnership Report No. 2007-05.
- Myers, D. (2010) Shoreline development on Puget Sound. In Shipman, et al. eds. *Puget Sound Shorelines and the Impacts of Armoring—Proceedings of a State of the Science Workshop*, U.S. Geological Survey Scientific Investigations Report 2010-5254.
- National Research Council (2007). *Mitigating Shore Erosion along Sheltered Coasts*. Report: U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers, and the Cooperative Institute for Coastal and Estuarine Environmental Technology.
- Nolan, J.M., Schultz, P. W., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2008). Normative Social Influence is Underdetected. *Personality & Social Psychology Bulletin*, *34*(7), 913–923. <https://doi.org/10.1177/0146167208316691>
- Patton, M. Q. (2011). *Developmental evaluation: Applying complexity concepts to enhance innovation and use*. New York: The Guildford Press.
- Patton, M.Q. (2016). State of the Art and Practice of Developmental Evaluation. In Patton, M.Q., McKegg, K., & Wehipeihana, N. (Eds.) *Developmental Evaluation Exemplars: Principles in Practice* (pp. 1-24). New York: The Guildford Press.
- Puget Sound Partnership (2006). *Sound Health, Sound Future: Protecting and Restoring Puget Sound*. Report: Distributed by Puget Sound Action Team; Olympia, WA.
- Scriven, M. (1991). Pros and cons about goal-free evaluation. *Evaluation Practice*, *12*(1), 55-63.

- Scriven, M. (2013). Conceptual revolutions in evaluation: Past, present, and future. In M. C. Aikin (Ed.), *Evaluation roots: A wider perspective of theorists' views and influences* (2nd ed., pp. 167-179). Thousand Oaks, CA: Sage.
- Shipman, H. (2010). The geomorphic setting of Puget Sound—Implications for shoreline erosion and the impacts of erosion control structures. In Shipman, et al. eds. *Puget Sound Shorelines and the Impacts of Armoring—Proceedings of a State of the Science Workshop*, U.S. Geological Survey Scientific Investigations Report 2010-5254.
- Strauss, A., & Corbin, J.M. (2008). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (3<sup>rd</sup> ed.). United States: SAGE Publications.
- Trimbach, D.J. (2021). Sensing liminal landscapes in Puget Sound. *GeoJournal* 87, 2031–2049. <https://doi.org/10.1007/s10708-020-10350-w>
- U.S. Census Bureau (2020). State Profiles: Washington West Population and Housing. 2020 Census, United State Census Bureau. Retrieved from: <https://www.census.gov/library/stories/state-by-state/washington-population-change-between-census-decade.html>
- U.S. Census Bureau (2021). QuickFacts: Thurston County, Washington; Snohomish County, Washington; Mason County, Washington; Kitsap County, Washington; Island County, Washington; King County. 2020 Census, United State Census Bureau. Retrieved from: <https://www.census.gov/quickfacts>.
- Vaske, J.J., & Manfredi, M.J. (2012). Social psychological considerations in wildlife management. In: *Human dimensions of wildlife management* (Eds: D. J. Decker, S. Riley, W. F. Siemer), Johns Hopkins University Press Baltimore, MD.
- Washington State Department of Ecology (n.d.). Shoreline Management Act. Retrieved from: <https://ecology.wa.gov/Water-Shorelines/Shoreline-coastal-management/Shoreline-coastal-planning/Shoreline-Management-Act-SMA>
- Washington Department of Fish and Wildlife (n.d.). *Species and Habitats: Shore Friendly Grant Program*. [website] U.S. Fish and Wildlife Service, Department of the Interior. <https://wdfw.wa.gov/species-habitats/habitat-recovery/puget-sound/shore-friendly>
- WSU Kitsap Extension (2018). *Homeowner Interview Report*. Shore Friendly, Kitsap County, WA.



Appendix A. Interview Information Sheet

**Shore Friendly: A Developmental Evaluation of Waterfront Stewardship on Private Lands**

**PROGRAM LEAD INFORMATION SHEET**

March, 2022

You are being invited to participate in a developmental evaluation study on the impacts of the Shore Friendly program. Your experiences and insights will be used to gauge the effectiveness of the Shore Friendly program and to inform subsequent interviews with program participants. Findings will be used to strengthen program services, and information about participant experiences will be developed into outreach materials that share Shore Friendly success stories.

Program evaluation interviews will be conducted with three stakeholder groups:

1. Program leads who are involved in program operations
2. Private landowners who have gone through the Shore Friendly process, received program incentives, and have taken actions on their properties to restore or protect their shoreline.
3. Private landowners who received either an initial or technical site visit, but chose not to move forward with program incentives or restoration/protection actions.

***As program leads, you are being asked to participate in the first groups of interviews.***

During the interview, you will be asked questions about Shore Friendly program participation, including: (a) the type and number of participants; (b) best methods for contacting program participants; and (c) your ability to assist with recruiting past participants to take part in a program evaluation interview. You will also be asked to provide ideas for questions to be included during *program participant* interviews.

**Important Information for Interview Subjects:**

- The interview will take place via ZOOM
- The interview will take a total of 30 minutes.
- Interview audio will be recorded and transcribed.
- No direct benefit or compensation will be provided to you.
- Your participation is completely voluntary.

**If you have questions about the study, contact:**

Jenna Jewett      Washington Department of Fish and Wildlife      [Jenna.Jewett@dfw.wa.gov](mailto:Jenna.Jewett@dfw.wa.gov)  
David Trimbach      Oregon State University      [David.Trimbach@oregonstate.edu](mailto:David.Trimbach@oregonstate.edu)

## Appendix B. Interview Guide

### Shore Friendly: A Developmental Evaluation of Waterfront Stewardship on Private Lands

#### PROGRAM LEAD INTERVIEW GUIDE

March, 2022

#### I. Sign-Up / Pre-Questions (Calendly):

Name

Contact

Counties Covered

#### II. Semi-Structured Interview (Zoom):

##### A. Opening Statement:

*My name is Karin Swarbrick. I am a graduate student at Oregon State University in the Department of Fisheries, Wildlife & Conservation Sciences. I am working with the Washington State Department of Fish and Wildlife to conduct an evaluation of the Shore Friendly program. Today I will be asking you about your perceptions and experiences working with Shore Friendly in a professional capacity. I expect to conduct only one interview; however, follow-ups may be needed for clarification. If so, I will contact you by email. Additionally, at the conclusion of this interview you will be provided a link where you may participate in a brief, anonymous follow-on poll.*

*Before we begin, I would like to inform you that: (A) The audio portion of this interview will be recorded and transcribed and recordings will be erased once transcriptions are checked for accuracy. (B) Transcripts of your interview may be reproduced in whole or in part for use in presentations or written products that result from this research. (C) Your name or association with a particular unit may be used in presentations or written products that result from this research. (D) Other personal identifiable information (such as your voice or image) will not be used in presentations or in written products resulting from this research. [underlined text to be included in ZOOM custom disclaimer]*

*Finally, you can decline to answer any questions and are free to end this interview at any time. Do you have any questions or do you require any clarification about these conditions? May I have your permission to record your responses?*

[ Begin Recording ]

B. Willingness to Assist:

*During the next phase of this project, we will be interviewing SF program participants who have either: (a) gone through the Shore Friendly process, received program incentives, and have taken actions on their properties to restore or protect their shoreline; **OR** (b) those who have received either an initial or technical site visit, and have not yet moved forward with program incentives or restoration/protection actions; **OR** (c) those who made the decision **not** to move forward with program incentives or restoration/protection actions*

- How many participants in your unit... [from tracking worksheet]
  - a) have started the SF process?
  - b) have completed the SF process?
- What is the best method for contacting program participants? (*phone, email, letter*)
- Should contact be initiated by Shore Friendly staff?
- Are you able to assist with contacting/recruiting program participants?
- If not, are you able to provide a list of potential recruits with contact information?

C. Needs

- Do you have the tools, technologies and skills you need to do your job effectively? *[expand]*
  
- Do you feel that the Shore Friendly program is meeting its stated goals?  
*[to reduce shoreline armor and restore shoreline habitat across the Sound for fish, wildlife, and communities.]*
  
- How would you describe a successful SF Project? *[process vs. outcomes]*
  
- How would you describe an unsuccessful SF Project? *[process vs. outcomes]*
  
- What specific questions would you include on a SF participant survey?
  
- Optional Prompts (if interview stalls)  
Have you encountered participants with specific concerns regarding:
  - potential for increased erosion and/or property damage if armor is removed?
  - effectiveness of soft shore protection?
  - cost of removing armor?
  - impacts to property values?
  - difficulties with the permitting process?

D. Closing Statement

- Do you have any questions that I can answer?
- Is there any other information that you would like to share?
- Follow-up Instructions

*Please refer to the CHAT panel for links to:*

- Anonymous Follow-on poll (Mentimeter: <https://www.menti.com/ueitp2ei8i>)
- Repository for additional materials that you would like to provide (i.e., reports, lists, reference material, images video or audio files) (BOX: <https://wdfw-secure.box.com/s/y599hyll7w1yvraiku56qzb1q2ouscew>)

**III. Anon Follow-up Poll (Mentimeter)**

- Barriers to achieving program goals (multiple choice – up to 10)
  - Insufficient time to complete the Shore Friendly process
  - Insufficient staff capacity or turnover
  - Lack of local program recognition
  - Lack of organizational support at the local level
  - Lack of regional support
  - Lack of interest from landowners
  - Lack of resources (funding, technical expertise, consultants etc.)
  - Need for increased collaboration
- Other barriers
- Ideas/Comments

## Appendix C. Interview Transcripts

### Interview O1 - Shore Friendly Coordinator, Island County Department of Natural Resources

March 16 2022

Q. How Long have you been in your position?

I'm relatively new to the Shore Friendly program. I started coordinating in January [2022].

Q. How many participants in your unit...

- a) have started the SF process?
- b) have completed the SF process?
- c) plan to complete the SF process?

We've had 37 site visits so far from our records.

It's kind of hard to say [how many have completed the process] I'm actually in the process of following up with everybody right now. But it's it's hard to know who's actually implemented and it's a little hard to say because, you know, some people were implementing things before we came out to visit them.

We have had six people begin the mini grants process. We anticipate them receiving the mini grant, as soon as all the work is completed. To our understanding, their intentions are to complete the work, but they are still in the process. It looks like we've had two people who have completely closed out, they've done the whole process, received the mini grant, and their reimbursement.

A lot of this was completed before I was involved in the program. But basically, if they want to work in the mini grant program and go through that process, they have to meet some requirements and it goes through a review committee. Once that's reviewed and completed we [approve the grant] and reimburse them once they've successfully implemented everything that was recommended or agreed upon beforehand.

Once somebody applies, I call them or reach out in whatever way they indicate is best, so usually a phone call, and then if I don't hear back from a voicemail or they don't return my call, I'll email them, between one and two months later. And then if I don't hear back from them after that, I'll gray them out. So I still have a record of their application, but I don't follow up with them again. Because I figure there's probably other things going on in their life, but I can still easily refer to them if in a year they're like, "Oh, hey, I forgot about this."

Basically anybody who applies goes into my tracking sheet. Once they're in there, I reach out and the goal is to schedule a site visit with them. I change the colors of the entry based on the process: if they're ready to schedule a site visit, or if they've had a site visit, and then once I deliver the technical report to them, my goal is to reach out in a couple of months. If they don't reach out to me first, I just check in and see if they need help with implementation. I'm doing that now for all the program participants who were given a site visit before I took on the coordinator role. I'm reaching out to everyone who's had a site visit and hasn't indicated that they want to move forward, just to make sure that they're still aware we're here. I think the

really valuable thing we provide is the technical advice in that first round of site visits.

Q. How do you contact potential participants?

My first outreach to them [comes after] they've applied, [made a] site visit request, and that's their first indication. Either that will come to me through a survey form that they fill out, or it will come through [another program lead] with Northwest Straits. When I receive that, put them into our database, my master tracking sheet, with all the all the people who've ever applied. Then I give them a call within a few days and just talk to them. I'll leave a message or ask them if it's a good time, that sort of thing. And then I have a little follow up note on each one that I highlight and it tells me my next steps for following up.

So for example, if someone calls or puts in an application, and I give them a call. If I don't hear back from them for a few weeks, I have a note in here to email them. If I don't hear back from them between two weeks and maybe a month, I'll email them too, because some people just prefer to communicate by email and might miss a voicemail.

Q. Do you have their street address? Are you able to send mail?

I [have addresses] and that might be another good way to do outreach. I adjust with time and resources. I don't know that mail is maybe the best tool, but I could be also biased because I never open it. So, it might be worth mailing them and saying we had this indication here. But I typically do two attempts at contact.

Q. What is the best method for contacting program participants?

Who should initiate contact?

Are you able to assist with contacting/recruiting program participants?

If not, are you able to provide a list of potential recruits with contact information?

In my opinion, I think I've worked really hard to build trust with these landowners and I do occasionally encounter people who are already hesitant because I'm with the county and they see me as a regulatory person. I have to do a great deal [to reassure them] we're not regulatory, we don't... and I just I think a lot of people get overwhelmed with all of the agencies involved and don't understand where the delegations [sic] are and how the programs split. They understand that I'm grant funded through the state, but I think that because there's so many layers, I'd almost rather contact them to see if they're willing, because I've already worked to build that trust and there are some people who I think would be very uncomfortable with being reached out to by a state agency through this program, because they've participated in it.

I think that a lot of people would be very confused and feel like they lost some trust in the program. In my opinion, I'm also in a more, a pretty, rural area, and I think I've already had to do that work to convince them that I'm not going to regulate anything for them. And I think some would be very, very open to it, but I think that we would, you know, scare off a few people to be to be perfectly honest.

Q. Do you have the tools, technologies and skills you need to do your job effectively?

Do you feel that the Shore Friendly program is meeting its stated goals?

I feel like I do have the tools. I have a very supportive work environment and [the program coordinator] and [local supervisor] are wonderful. I can always reach out to them with any

questions. I feel like there's a really good network of people, [other program leads] included, who are doing similar jobs, but in a different way.

I'm looking for more educational opportunities so that I could feel comfortable delivering more of the technical advice as well. I rely really heavily on the technical advisors that we contract with, and I'd love to be able to do some of that myself. So I am looking for, open to, educational opportunities and that sort of thing. But yeah, I feel extremely supported. I feel like we definitely have the tools we need and we have that relationship with the technical consultants who can really deliver those reports to the landowners.

Q. When you say educational, just to clarify, what you're saying is, you would like more technical knowledge, not necessarily to do what's in your job description, but so that you feel, for example, that you are informed about the subject of remediation, you're informed about the subject of hydrology, are informed about the subject of native plantings, that kind of stuff?

[YOU WOULD LIKE MORE TECHNICAL KNOWLEDGE?][More like] pointing resources to me, too. But I'd love to develop some skills to be [able to] help, so I can be the person who makes your planting plan, that sort of thing. Oh, yeah, I'd love that choice. But I think that they're talking to people, that they they're really good at pointing each of those resources and allowing that time for me to guide to other resources.

Q. Do you feel that you act as a liaison between the technical people and the property owner or do you feel like you just make the introduction and then you're out of the picture?

[LEVEL OF INVOLVEMENT] I feel like I'm really involved in every step of the process. I liaise with the technical advisor but all the homeowners, they speak with me, they set everything up through me. I help them with a lot of the aspects... I'm the one talking to them at the site visit because the technical advisors are often taking taking notes and getting the data they need. So I'm getting a lot of face time and communication with them. So, I feel like I'm very involved every step of the way.

Q. How would you describe a successful SF Project?

A successful project is one where a landowner gets technical advice from us and takes that advice, honestly—whether or not they do the mini grant and whether or not they need help with the implement implementation phase—if we give them a technical report, and they do some of the things on a technical report, I consider that a success. I'd also consider it a success when they spread the word about Shore Friendly as well. So, when they refer other people to this program, or to me or [another program lead], when that's done, I also consider that successful. But, basically, when people implement the things we say they should implement, I think that's success.

And honestly, I would also consider it a success when we just go out and talk to someone even if they don't, you know, implement our actions... I wouldn't even see that as a negative. That they come out, they're interested, we talked to them, we give them their assessment for their home. I still think that there's success there, even if it's a very long time before they implement things. Because they're at least then thinking about the nearshore, and they're they're talking about it, and they're maybe looking at their property a little bit different.

Q. How would you describe an unsuccessful SF Project?

To me, an unsuccessful project, I would say, would be one where the landowner, I guess, maybe one that never gets off the ground or when a landowner implements something that would be the opposite of what we recommend.

Q. What specific questions would you include on a SF participant survey?

Addendum

Q. I've always been curious about the culture in the [Puget] Sound region and whether there's a heightened awareness of the Shore Friendly goals and the need for "friendly" erosion control versus revetments. Is there an assumption or some type of opposing pressure [to prepare for] sea-level rise? One where the attitude might be, "I keep hearing about climate change, I better build a seawall," and that might represent two opposing ideas that they're struggling with?

Yeah, I think people make a lot of emotional decisions when it comes to their their home and I absolutely understand that impulse to build a seawall. But I think more and more people are starting to understand that when you're part of a bigger process, and you do something like build a seawall or a bulkhead, you're impacting your neighbors too. You're making everything unsafe for everybody else, and that ultimately it's safer for you to be more in line with natural processes and give the beach some room to move and, you know, be a little less rigid.

I do also think that, because building bulkheads is becoming more difficult, people are more open to those alternatives and to being able to feel safe and protect their property using natural beach processes to their advantage to protect their properties. But I do absolutely see where that fear is coming from.

Q. Regarding your sense that people are becoming more aware, what level would you say that people are already knowledgeable about this subject? And at what level would you say people know absolutely nothing? Is it fairly common for people to come to you with a little bit of knowledge already?

[GENERAL AWARENESS?] I think I have a really skewed sample, because I'm getting people who typically are here because they understand... they've watched a short webinar that [another program lead] put on, or something like that. And they already kind of have that understanding. So in general, I think that there is a lot of general fear and wanting to protect property. But I encounter less of that than I would if I was regulatory staff or someone in the Planning Department. It's hard for me to say because I have a pretty skewed sample of people who are already applying to my program.

I think they already start to get it a little or they're just terrified of their bluff erosion, which a seawall isn't going to help with. If you're on top of a bluff you're not worried about a seawall, you're worried about protecting your bluff. So I think a lot of the people we get who are panicking come to us in that situation, more than a 'we're right on the beach' situation, right?

Yeah, I encounter [situations where people believe a sea wall is necessary], but I don't encounter it as much for program participants because they're asking me, [someone] who they know is a scientist, for other scientists to come to their property to assess it. They're asking for that scientific expert to come to their property. So I would say someone who's interested in keeping a bulkhead—which which we do get folks who are interested in that and occasionally you know,

they'll be like, "No, we're not we're not changing this" —but we can at least say "You know, if you ever needed to repair your bulkhead, or if something comes up where you need to redo part of it, please come to us and help you find an alternative when you're ready to do that." So, I like to plant seeds, because there are places where people just can't remove their bulkhead, it'll completely wipe out their property, especially if they're surrounded by bulkheads. In that case, it takes a community effort and it potentially takes moving your house and a lot of things that are really overwhelming for people to hear.

Q. Your program seems to be driven by willingness, not to say it's not science driven. So, in other words, you can't pick the most crucial parcel of land and say, this is a really critical parcel, and we'd like to remediate here. You work with whoever's willing, so the program is driven by program participants. Is there the potential to strategically recruit those people that have built out parcels that are located in critically areas?

[PRIORITIZATION] I would love to be able to target people that we know, first of all, that we can help and provide assistance for, and people who have areas where there's a lot of room for potential for restoring beach processes. And we'll get word from planning or people who are in the regulatory field, "Oh, they're trying to install a seawall here," and they'll usually let my supervisor know, and sometimes I can get the contact information and say, "here's a Shore friendly Program, you've been in contact with these folks, so we'd love to talk about options." So, there is some room to do things like that. But that's for big, huge things where my manager is already being made aware of it and she lets me know that there's things like that happening. But it's limited, because again, [Shore Friendly] is purely voluntary. People still have to apply and put in the site visit request, and do a little bit of work before having anyone come out. They have to ask for it.

Q. That's an interesting pathway that you just described, and I'm wondering if that's formalized. I.e., the planning department gets an application for a giant seawall and that triggers contact with someone at Fish and Wildlife. Is that an automatic thing?

So, I'm with the county DNR, so [I meant] my DNR supervisor. If she gets worried about something, I see what I can do to help, but my hands are pretty tied with [regards to] outreach. So I have to be pretty careful... I can't, you know, host a webinar or something.

I think I'm building a really good relationship regulatory planning staff and it would be awesome if it triggered [a head's up], but at least they're aware of my program and they're aware of Shore Friendly, and they know that they can send us information. Then I can send those landowners my information, but ultimately, it's that landowners choice. So if something is happening, the permittees know me now and, if they're worried about something, will share my program information. But yeah, it's hard to do that direct outreach, but I think I think if maybe we did like a reach scale assessment or just identified communities that are having issues with bulkheads, sea walls, I think that'd be a much bigger program.

Q. Do you have any other thoughts you'd like to share at this point, or do you have any questions I can answer?

I think bluff erosion is a huge one, so when a home and property is at the top of a bluff, that's a big one we get here on Whidbey. I love that Shore Friendly is not regulatory, and we're able to come out and just give people good advice. I think that's that's a huge benefit that we provide.

I'm really glad that you're doing this. Is the goal to determine future needs for the program, like beyond this low hanging fruit and outreach needs and that sort of thing?

I think it'd be nice to have a little booklet or something that is really small and contained in my pocket on site visits with examples of a bluff restoration we did, look at all the beautiful plantings... [maybe] before and after of several different types of shorelines that I can bring to site visits [to share] an example of someone in a similar situation, and [say] here's what they did... And we helped! I think that would be really valuable for more visual [information] so people can see what their property could be and how it could be beautiful with a few trees on it, even though it's a little less view showing. That would be so valuable.

## Interview 02 – Shore Friendly Coordinator, Pierce County Conservation District

March 23, 2022

Q. How Long have you been in your position?

Since late-2019 (just over 2 years)

Q. How many participants in your unit...

- a) have started the SF process?
- b) have completed the SF process?
- c) plan to complete the SF process?

I'm the first person to be doing this work in Pierce County, and the first year was a lot of outreach. The first year, or I guess the entire time [was limited by] COVID. During that first year, we were unable to do site visits for a while. So when I say I don't have any projects yet, it doesn't feel great, but I have I've been doing a lot of work and have provided around 60 site visits in those two years, of which 6 have taken actions on [some sort of] projects where I was helping the landowner actually plan or implement a project. But there are plenty where folks have just taken our recommendations and done planting and stuff like that. So that's where we are right now.

[We] just started to get into armor removal opportunities this year, so I can tell you we have implemented one Shore Friendly mini grant project and we have two more that are under contract this year for planting and drainage improvement projects. So okay, that's the number. [Tracking people who fail to follow through] is not something that we [currently do].

On the question of whether people have implemented our recommendations (on their own), after we provide them is not one that we have found a very good way of answering. We only have confirmation from folks who have received financial assistance through the Shore Friendly grant program. We certainly track, and of course we have contracts with those landowners which track the actual project details as well. So that's the number I can give you. But I don't think it captures everybody who's taken some of the actions that we recommend. During the first couple years of getting the Pierce County program started we did a lot of initial outreach to landowners with natural shorelines.

Q. What is the best method for contacting program participants?

Who should initiate contact?

Are you able to assist with contacting/recruiting program participants?

If not, are you able to provide a list of potential recruits with contact information?

My inclination would be to have it come from Shore Friendly staff, particularly for those of us who are programs at conservation districts. We are careful about our sharing landowner information of any kind with agencies that have any sort of regulatory arm and so I don't think conservation districts would be able to just give you our participants contact information. So I don't think it could come directly from WDFW. And we're pretty clear when we provide site visits to folks that we're not going to share any of the information that we gather during that site visit with anybody other than them. So we when we submit our tracking documents, even to [the program coordinator] we remove our landowners names and even the addresses, we just

provide the drift cells in which we're working. So that would probably need to come directly from Shore Friendly program staff, at least at the conservation districts.

[Contact with participants] could be the conservation district folks reach out initially and say, "who would be willing to participate?" Then connect you and pass them on.

Q. Do you have the tools, technologies and skills you need to do your job effectively?

That's a big question. For the most part, yes. I do think there are some specific needs for landowners that are beyond what we as Shore Friendly staff can provide, [in terms of] getting them from *what a best management practice is* to actually being able to implement those things on the ground. There's definitely a dearth of consulting folks and engineers that have specific experience on the shoreline to be able to help folks implement things. It's not a skill that I have as program staff to be able to provide folks with stormwater drainage plans and things like that.

Q. So, are you saying that you feel comfortable in your position, contacting people and engaging with people but that you're limited in being able to offer technical assistance on the ground, in the form of an actual person who could come out and provide planning documents or implement a plan?

Obviously, some of that stuff is beyond the scope of what the Shore Friendly program is intended to be. But what becomes the challenge is that we have a hard time finding professionals in the region to be able to direct folks to fill that gap. But yeah, in terms of contacting people and doing our site visits and providing recommendations, I do feel like I have what I need.

Q. It sounds like, you feel comfortable in your position, but you care enough to want to expand your resources to be able to refer professionals that can assist Shore Friendly participants to complete the process, independent of your responsibilities. This might mean having more people available that can be part of an extended team that can be shared as a list of references, possibly a list of local people, who can be hired by the participant to complete the process.

Partially. We do have some of local lists that we have generated from various Shore Friendly programs holding workshops oriented towards different professional groups. So, for example, we have a contractor and consultant list, folks who participated in a Shore Friendly training at one point that we can provide to folks. We also have a landscaper and arborist list of folks that have participated in a Shore Friendly training. So we can provide those things to landowners, but especially when it comes to drainage management, and this is something that our folks at Washington Sea Grant are helping to figure out how to tackle, but I think that it's more a workforce development issue.

I think there are a lack of people trained to provide that specific service of managing stormwater from a Shore Friendly perspective and with a comprehensive understanding of shoreline processes that make those needs for drainage control very unique and high risk. So it's more of a work workforce thing. So in terms of getting folks through the Shore Friendly flow chart, we're good at recruiting folks to talk to us, and talking with them about what those best management practices are. But then getting them to the end result of having a property that they can feel comfortable is being managed in a way that is going to not increase risk to their property in any

way and is shore friendly in terms of maintaining natural processes and habitats, there's kind of a gap in the middle [that needs to be filled by] those professional services that have specific shoreline perspectives and experience.

[This] is something that the Shore Friendly regional group and [the program coordinator] is aware of, talking about, thinking about how we can approach from a regional standpoint, because it's a little beyond us. We do understand and we want to be sure that, as much as we can, we're helping people to navigate that gap: between us telling them what is the best thing they can do, and understanding the barriers of actually implementing those things, how can we help bridge those barriers? Also, drainage stuff can get expensive. We're talking about high bluffs landowners where drainage is kind of the biggest concern because folks are dealing with landslides as our winters get wetter.

Q. Do you feel that the Shore Friendly program is meeting its stated goals?

I do. I think a lot of the work that I do, and that many of my peers do, is still rooted in the origins of the project. You know, changing people's minds and getting information out there, that social marketing mindset we came from, and a lot of that is tied up in preventing new armor. I think if we focus entirely on how much armor are we taking out, that can feel like a really low number, but we are an important part of preventing new armor. Just the amount of times neighbors share information with each other— I think our reach is actually larger than simply measuring the number of site visits. So I do think that we are making progress toward those program goals.

Q. How would you describe a successful SF Project?

It's a great question. For me, I really think of it more on the interaction level and so sometimes landowners taking no action is the desired result. You know, when I have someone reach out to me and say, I just had a landslide and I think that I need a bulkhead and you're the first person that popped up on Google, can you talk to me? And we have a conversation and a site visit and at the end, they say wow, I feel a lot better now. And I think I'm gonna plant plants instead of building a bulkhead. That's a success to me, but isn't a project necessarily. So I think it's more difficult to measure success in those prevention interactions.

If we're talking about armor removal, I think it's usually a lot easier to measure. If armor is reduced or removed, or converted to more of a soft shore protection, that's much easier to see and to measure. So yeah, I think there are lots of ways to define success in the program. I also think that something that I have had to learn in this position is that it often takes more than one touch for folks to make those shifts just because it could feel like they're getting conflicting information, especially when we're talking about climate change and protecting shorelines and all that sort of stuff.

So if someone is at least open to the ideas that are provided to them on their first site visit, I feel like that's still a success. Because maybe the next time they have something happen they're going to get in touch again. And yeah, it just it takes more than one touch to get folks all the way shifted in their attitude or shifted and then taking a desired action. Like planting a seed, yeah, right. Letting people come to it. You know, I think an important service that we do provide is we can help people understand, especially when they come to us like, I want a new bulkhead, I think I need a new bulkhead. We can talk to them about the permitting steps and the reality of how likely they are to even get permitted. Being able to have that conversation with a third party

who's not a bulkhead consultant, or a permitting consultant, is gonna save time and money, and [with reliable guidance] we can get through anything. I think its a valuable perspective, we can actually address why these regulations are in place and offer a different opinion. It's almost like an intervention and, in my particular county, the permitting office is willing to redirect people to the conservation district when they come to ask about bulkheads. And so it really is like an intervention.

Q. How would you describe an unsuccessful SF Project?

I think an unsuccessful project would be someone saying either "I don't believe what you're telling me about the importance of these processes," or "whatever, I'm going to choose to do the thing that I now know is more harmful to the environment." Obviously, we're not going to tell people to *not* repair a bulkhead in a situation where they need a bulkhead to protect their house because of its particular location or whatever. But when someone says, "I'm rejecting this information you're giving me," either about the level of risk in a particular situation or whether a bulkhead is needed, or "I reject that these processes are important at all, and I'm going to choose to ignore those recommendations and take the more harmful route." I think that's unsuccessful.

Q. Has that happened?

I have had a couple of times where that has happened. Not a whole ton of them. Because people do come to us voluntarily to participate in this program. And I do let folks know upfront what we're about so they can kind of make that choice before we get out onto their properties. [This might be interpreted as] anti government sentiment, i.e., "you can't tell me what to do on my own property." And that might be just my own biased read on those interactions and there is also the attitude of "well, my neighbors all have these things. So why can't I have them?" So a perceived unfairness [regarding situations where] structures have been grandfathered in. I think it's also a values thing. When we're advocating for natural resource conservation or habitat protection or enhancement, those come from a values position that might be different than the folks that we're talking to. They might value their property rights or their property value more than those things.

Q. What specific questions would you include on a SF participant survey?

Q. Do you have any other thoughts you'd like to share at this point, or do you have any questions I can answer?

I realize I failed to fully answer your first question... I am working with 3 landowners on our armor removal projects, they haven't been implemented yet and are in the planning and seeking funding phase.

From the tracking perspective, as I'm sure [the program coordinator] has communicated to you, we really focus on numbers of site visits that's how we track and measure success because that's something that's very trackable across all people and all programs. Measuring everything from attitude change to things on the ground, that is a very good question that we have talked about as a regional group, but haven't necessarily found the answer to.

Q. Do you have many HOAs in your area? Would that be a potential outreach focus?

I have had some HOAs get in touch about bulkheads and planting and high bluffs folks who are encountering or experiencing landslides. So, yeah, I do interact with with HOAs, and I've helped some folks just kind of given them advise about getting their, HOA rules to be more in compliance with county codes in terms of vegetation management. HOAs do get in touch. We, (the larger South Sound Shore Friendly group who works out of conservation districts) have offered workshops through HOAs, or just worked directly with someone from [a particular] HOA board who was in charge and looking for information. I know throughout the region, the Shore Friendly programs have had different experiences with HOAs. Sometimes having an HOA can make it easier to reach everybody and other times you get called into be the backup for one person and everybody else in the HOA has a different idea. Having HOA rules align with not only best practices, but with county regulations is an interesting thing some of us have run into because they may have rules like we can't have vegetation over six feet, right? And then we're saying, well, in order to get grant funding from us, you have to include trees in your planting plan between your building and your crest of your bluff. so I actually had that scenario and they backed out of the mini grant program because we were requiring trees.

## Interview 03 - Shore Friendly Coordinator, Mason Conservation District

March 23, 2022

Q. How Long have you been in your position?

9 months/half time

Q. How many participants in your unit...

- a) have started the SF process?
- b) have completed the SF process?
- c) plan to complete the SF process?

Let me tell you my situation, I've been with Mason Conservation District about nine months now. When I came in, I was the manager for the individual doing the Shore Friendly, who moved on after about six months of my tenure. And so I am now filling in the holes by doing the Shore Friendly program while we're hiring. And so I've been just touching enough to keep it rolling, but not able to engage it fully. So my answers are partial.

When the [prior] individual left he basically had done a concentration of TAs and then submitted a report that said, ok, I'm gone. I've had some interactions with people beyond that, but a lot of new individuals have been coming to me that I'm just trying to figure out how to get TAs for. So, I have a tracker, I can go back and try to figure out what where things were so that I can give you better answers. [see tracker]

Q. What is the best method for contacting program participants?

Who should initiate contact?

Are you able to assist with contacting/recruiting program participants?

If not, are you able to provide a list of potential recruits with contact information?

I believe it should come from the district who started to create the relationships, so that you don't have a third party and confusing, an already somewhat confused situation doing these projects. Most landowners are still at loss to get through all this stuff they [have to] do to try to fix a problem.

I would rather not [have to assist], it's not that I don't like to help. I agree with the work you're doing and I'm not trying to be disagreeable, just trying to survive the workload I have right now.

Q. Would it help if I created a brief description that you could relay to participants, or possibly participants could be contacted by WDFW?

In Mason County, they've just updated their Shoreline Management Master Plan and it's become much more restrictive and people are really frustrated with that. The Department of Fish and Wildlife has a horrible brand and image within the state. I mean, so I understand they're in the habitat program, and people don't like it, they're not just like this or that, their fish management is significantly disliked, or viewed as incompetent.

Q. Okay. So, Mason's fairly rural... do you feel like the permitting processes is particularly onerous, or would you attribute resistance to ANTI-GOVERNMENT SENTIMENT or sovereign citizen perspectives?

Well, yeah... they're \*\* [part of a conservative-leaning demographic that prefer smaller

government]. In Shelton it's less expensive land and so there's a large number of people on the shoreline. It's not heavily governed, so they used to get away with whatever they felt like.

Q. Do you have the tools, technologies and skills you need to do your job effectively?

Well, we're limited, staff wise, not just because of my situation. The Shore Friendly position is funded as a part time position, and I'm fairly certain we could keep a full position going on all this. So that actually creates a bit of a self-fulfilling prophecy because we don't want more coming through the door than we can manage. And so even if we thought we could get more people through the door, the outreach is not as aggressive as it could be, because we can't handle the backlog that will be created. So that's a conundrum. For example, we had a king tide in January with really significant rainfall and a flooding event, and had seven people within a two to three day time-frame. And because of the situation I'm in, it's taken us up till now [late-March] to start planning meetings and begin helping them through the process.

Q. If I could restate that: You feel like you have enough organic occurrences of demand that you don't put effort into creating demand. Even though you could probably recruit more, you don't, because you don't have the capacity to manage more.

Correct.

Q. Do you feel that the Shore Friendly program is meeting its stated goals, those goals being to reduce shoreline armor and to restore shoreline habitat across the sound?

Yes, and I preface with what is the tipping point? We're really being the demonstration projects, and how many communities do we have to touch before they start to tip the scale on belief systems, value systems and ultimate behaviors?

Q. Are you concerned, given the likelihood of sea level rise, that there's going to come a point where the Shore Friendly program becomes inundated with applicants?

Maybe not from that perspective, but I can see people starting to build on top. I mean, their response [to sea-level rise] is to build [the bulkhead] taller. I'm not telling anybody I'm building it taller, I'm just gonna do it. [Also, it carries a] lot of risk, because if we're advocating [for bulkhead removal] and it goes and starts washing their property, or it starts hitting structures, then whose fault is it?

Q. How would you describe a successful SF Project?

One where we met some ecological benefit. The landowners come away from the process feeling it was beneficial. And that we are able to demonstrate that we benefited both the ecology and the shoreline owners in some way.

Q. How would you describe an unsuccessful SF Project?

Okay, so unhappy landowner because he didn't get what they sold him... poorly engineered whatever we did... we don't get the ecological benefit that we thought we were going to get, because we can't understand the system well enough. And a third piece would be ineffective communication of the benefits that were created; if we did the project but never figured out how to document the [satisfaction level or ecological benefits].

Q. What specific questions would you include on a SF participant survey?

That is a loaded question. Well, because a lot of times the pointed questions are, get to the heart of the matter. They need to be more.

So if you don't understand the mindset of the individual, how do you understand, how do you interpret it whatever their answers are to yours, your empirical questions. That's a great conundrum. So I've done surveys for a lot of years, and that's really got me into hole now, I better pull myself out.

Q. Do you have any other thoughts you'd like to share at this point, or do you have any questions I can answer?

Yes, I'm still trying to figure out what the ultimate goal, what the work you're seeing. Okay. Where are you trying to get to?

Q. Well, 1) I have a capstone project that I have to complete. That's my personal goal. And 2) we had looked at replicating an earlier survey which was just not in the budget, so the idea of doing a developmental evaluation addressed some goals of the Puget Sound Partnership, as well as the Department of Fish and Wildlife. I conceived this evaluation as a mid-step, inductive process that will hopefully generate some spark back from project leads and program participants, and lead to better questions for a more comprehensive survey that can happen later. So in other words, this is a free project that I'm doing to meet a capstone, but I'd like it to be as useful as possible.

That's very helpful. Thanks. Because it's made me think... right now, the only people that are participating are those that already have a fairly strong environmental acuity, or at least concern and want to participate. I mean, this program is not going to be successful unless they're starting to turn belief systems around. And I don't think what we're doing right now is turning anybody who's middle to farther away from an environmental management perspective. Otherwise they're just saying, you're taking my land from me? How dare you. What made my property worth more was this bulkhead, because it gave me 10 more feet of livable space.

Just one further comment, I spent 10 years as the Natural Resource Manager of Common Power, which was a power utility, they have many lit reservoirs, and so we managed all the shorelines, and it was my job to try to figure out how to permit structures on our land, because we owned up to the flood mark. And man trying to find the value system in the system, trying to get people to even understand why they need to get a permit from us, quite an interesting conundrum.

[On the one hand] there's a lot of drones in the government right now that are trying to implement rules that don't make any sense—but that's the rule. Like, I need to have grates on my pier because sunlight needs to get through for eel grass. But maybe there's no eel grass beds around because that's not the grass bed area. So, we have to make it easy so for enforcement, that usually ends up setting the rules, because what can you enforce or not enforce? So then they just become ridiculous rules. So people on the ground that want to believe in this stuff say, this doesn't make sense. I can tell you right now, why am I doing this, you know, just added 30% of the cost of my project?

I think for Mason County, right now, it's a very minimalist belief system that the government shouldn't be controlling [anything], that's what drives their value system. They shouldn't be permitted regardless, kind of thought process, right? And very few believe in government [to

provide useful information]. So it has to come from a group like us, it has to come from somewhere else. We've got a little bit of clout with the community. There, even there, they're challenging us all the time. But because we have a long history with the farming community, we can [point to that] and say "Hey, look at the farming communities and what we've done. Now we're replicating some of those kinds of benefits for the shoreline."

## Interview 04 - Shore Friendly Coordinator, Thurston Conservation District

March 24, 2022

Q. How Long have you been in your position?

I worked at Mason Conservation District and established the Shore Friendly program there. Oh boy, I want to say 2014, 2015 (the first round of funding), I established that program there and then when I moved to Thurston, we at that point had applied for funding before my move, that would expand the Mason program to cover Thurston and Pierce Conservation Districts. So we created the South Sound Group and new people were hired in to fill those positions at Pierce and Mason.

Q. How many participants in your unit...

- a) have started the SF process?
- b) have completed the SF process?
- c) plan to complete the SF process?

I'll speak specifically about the Thurston program, which has been active for a couple of years (since June/July of 2019). Or I could speak about the South Sound collective. I no longer have information specific to Mason [only info from earlier] before we started the collective effort. So [since] July 2019, we've had, according to my numbers, at least 145 participants across the three groups. It's likely going to be more than that because we're just updating our reporting for April 1. So, but it at a minimum, it's at least 145 participants. And I would say, of the ones that I've worked with at Thurston, that that would be in this most recent round, like 46 or 47? So I would say, you know, probably about 30. I would say like to two-thirds probably are acting on the advice that they get in one way or another. Some of them are acting on multiple things as well.

Q. What is the best method for contacting program participants?

Who should initiate contact?

Are you able to assist with contacting/recruiting program participants?

If not, are you able to provide a list of potential recruits with contact information?

I think in the case of the Conservation Districts, and certainly in my case, I would say I would prefer to be the point of contact. We're really particular about [protecting] personal information from people or about people that we work with [basically we don't share info, at all].

The other the other way it could happen is I could send out a blanket email to all the people that we've worked with and say, "Would you be interested in participating in this? Then contact X person," you know, contact you and see if you get a response that way.

I would [be able to assist] to a limited degree. My time is definitely pretty packed. As long as I have a little bit of heads up, I can send out emails and try to encourage participation.

Q. Do you have the tools, technologies and skills you need to do your job effectively?

Do you feel that the Shore Friendly program is meeting its stated goals?

Okay, so you want me to identify gaps? I think at this point I feel strongly that the current model is quite effective. From the perspective of being able to go out and meet people where they're at and address questions, that type of thing. The biggest obstacles that I've had are literally capacity, the time I have to dedicate to this. That's a staffing challenge in my particular office. So,

that's probably the largest obstacle I have for program effectiveness. When I was in my prior position at Mason, I was able to spend a good half of my time dedicated to the program and providing that technical assistance directly. So I was doing a better job, quite frankly. But that's just the nature of the beast.

I've got some other folks I've trained to help work on it in Thurston. So in terms of that piece, I feel good. I think the obstacles or the barriers that I'm having, in the broader context, lie a lot more within the realm of things I can't control. [This] includes homeowner confusion about what is and isn't allowed from a regulatory perspective in the county in terms of shoreline management, and [the] challenge in getting that information from the county. Although the SMP program is currently being updated, and there is a new [website section available], there's sort of a story map and some online tools that make it a bit more helpful for homeowners who are trying to get answers to do so.

From an ecological and restoration angle, I also think one of the big obstacles is it's not easy to find information about rules and regulations without a little bit of a deep dive, but once they do, it's a lot easier to find the information about, say a bulkhead replacement, or how you go about [getting] a variance and much less information about why you shouldn't be pursuing a variance from the perspective of human health and safety, and how your property will perform in the face of sea level rise, and what that does as an ecological impact. So it's easier to find guidance and information on how to do the things that are highly impactful and [it's not so easy] for people to understand the thinking behind why those things might not be good. And that's a really big challenge.

I was reviewing the SMP update and looking at how the buffer sizes are being proposed for reduction on residential marine shorelines in certain scenarios. And to me, that's one of the biggest obstacles that we're facing: permitting the ongoing damage that the Shore Friendly programs are trying to address. And we don't have, and we don't want to have, regulatory authority. We don't want to be regulators. We want to help people do the right thing, but I feel like we're losing ground. We can't keep up with the scale of the impact and the minimal amount of repercussion there is for shoreline clearing and building things too close to the water. And we get called in and we're trying to help people understand why bulkheads aren't a good idea, but they were permitted to build so close to the shoreline with a variance [stating] that a bulkhead might become a necessity, and so we can't fix that problem. Right?

Does this make sense? I'm concerned about the disconnect between what we're asking Shore Friendly to be able to do compared to the context in which we're having to do it. There's not enough regulatory oversight and the planners and the permittees who are working in the county offices don't have enough specific nearshore science understanding or backup to push back against homeowners who are trying to push the boundaries [to develop properties] in the way that they want. As long as they've got the stamped geotechnical report or the engineering report that's required by the permitting process, then the permitting folks don't have a way to [question] that.

And so, the challenge is that a consulting geotech or consulting engineer will provide the product that the client is asking for, they're not going to provide a product that says it doesn't make sense to build here, that this is actually a somewhat risky location. They kind of obfuscate the

level of risk and it's very frustrating. And then you have these Shore Friendly folks who are coming out and trying to change their behavior in that context. And the other part that's very disturbing to me is that as I talk to these residential homeowners, they have complete faith that the county would not permit something that wasn't safe. That the geotech isn't going to say it's okay to build somewhere if it isn't, even if it's halfway down a deep-seated landslide, which I've seen multiple geotech reports that allow that.

Q. I'd like to clarify. When you say they believe that it's safe are you saying that, independent of habitat impacts, that these types of structures may be unsafe?

It's very much similar if you were to look at how Oso [a glacial deep-seated landslide which started 600 feet below the surface] happened. I think development along the marine shorelines involves building in highly geologically unstable locations. And unfortunately, people don't want to wrap their heads around the risks involved and we set these generic standards for how far back or above you need to be from ordinary high water, or how big of a buffer you need, that doesn't look at the larger context of these sites. So, it's difficult because this is a much more dynamic and geologically unstable context compared to anywhere else I've done technical assistance work. It's kind of like if you were just only working with people who build their houses in the floodplain, and there's a river that's moving around.

I think the important thing we need to understand is that Shore Friendly is this really powerful tool that we have to help people manage their shorelines in a way that really does balance human goals and ecological goals. But we can only do so much in a context where the impacts are so permissible and so unenforced against. So I'm worried about that piece because you just can't safely talk about a bulkhead removal on a site that's been permitted to build the house too close to the shoreline. And that's the case in so many situations.

So, if our overarching goal is to reduce the amount of shoreline armor, it means that we have to be out there trying—and we sort of switched gears—to look at proactive work. Trying to work with everybody we can that isn't armored to keep them from wanting to armor. Because it's so hard to find those sites, with a willing landowner, that are safe and where you can pull the armor out. It's just a very, very complex situation, and I wish I could feel more confidence in the larger system that is supposed to be keeping track of no net loss (NNL) goals and keeping track of the repercussions if people completely clear cut their shoreline. Because that ancient big tree that's blocking the view was holding that slope in place and helping manage water, and now suddenly it's gone. Not to mention the habitat impact from a whole other level, it just exacerbates these really tricky sites and then we have to try to convince homeowners to work with us, to try to do the right thing, to take a desired action.

Q. I tend to look at two things in public education, social norms and science denial or anti-government sentiment. So, the people who may need a nudge or more information and those that have the position, "I'm not going to do anything because I don't trust or my level of trust is very low." Do you feel like you're fighting against one or the other group?

I think that pretty much if people are responding to our program, they are looking for some sort of input and they're already trying to think about things slightly differently. So they're open to hearing options. The idea of what they're actually able to do is a different thing. But they're reaching out for that guidance. So I think they are open to that [input] for the most part. I would

say of the sites I've gone out to see, the ones that are the most resistant are the folks who've experienced something like a severe landslide, and they just want to be able to replace their bulkhead and not change anything about the way they manage their property. And there's a portion of those (of the 45 or 46 people that I've actually been out to see their sites in Thurston most recently), maybe 15 or so, who would be the ones that want me to affirm their thinking.

Q. When you say affirm "their thinking," you're referring to the thinking that "my bulkhead needs to be higher," or "I don't need to move my house back, I need to reinforce my bluff."

Right. Yeah. I think that idea of moving a house back, I brought that up many times, and people are overwhelmed by that concept. It's a difficult concept for people to understand, even if we could. I think it would be helpful if we could show some sort of math that would [demonstrate that] the cost of putting in a new bulkhead could be comparable to the cost of moving your house back and reconnecting the infrastructure. If we can make those connections, I think it would be more palatable to people. But it's more like, "this bulkhead is, in fact, necessary, it's doing a job that's needed..." and "I shouldn't have to change my [site] management" or, "lawn is actually the right choice," that kind of thing. It's sort of like they want to hear, that their intention is, that they want to know that they're doing a good job. They do want that affirmation. Their intention is genuine, but they don't like hearing that [there are] other options that might be more beneficial. That would involve some significant change on their part.

Q. There's obviously tons of barriers to making those changes, but I think attitude is a necessary first step. And I suppose, when collapses actually do happen, it's really motivating.

It's fascinating to me, you know, [this perception that] somebody down the road was having a landslide [but people very nearby still feel immune to the risk e.g., "...it can't happen to me"]. It's like, well, you're actually part of the same geologic form and all of it is at risk. Working in this area, specifically for the past few years, it's been fascinating to see how people think about risk— how risk applies to them in their own life and their own decisions— and just how uncomfortable they are [living] with the dynamic nature of a shoreline. I mean, shorelines are inherently a place of dramatic change because you're at the interface between water and land. And that very visible change happens no matter what. And people are frightened by that change, even though it's just natural to the shoreline context. That's why bulkheads are so popular because they sort of temporarily stop the change. They make it seem like change isn't happening. It's not as visible. You don't see the erosion. You don't see the tree fall necessarily, because you've removed them all.

And so there's this very difficult piece... [but also,] there are old timers that we work with sometimes who've been out on the shoreline for a very long time that totally get that concept of the changing nature of the shoreline. Whereas, there's a lot of demographic change happening, there's a lot of money out there, and right now a lot of shoreline property that's being purchased by people who haven't lived in this type of context before because it's a great investment and you have these gorgeous views. So their tolerance for change is different. They're coming from suburbia, they're coming from these very controlled and neat and different landscapes that are easier to manage, that don't have obvious dramatic changes that lead them to want to take dramatic actions. So it's an interesting dynamic.

Q. Having worked in both Mason and Thurston, would you say public sentiment differs from county to county? For example, would you classify some counties as more troublesome than others?

I would say Mason is a more conservative county. [redacted] Mason County definitely does have a 'self sufficiency and independence' kind of population, but you could say the same about much of Thurston County as well. Part of the reason that the Conservation District model or the nonprofit model is really helpful is that we're not regulatory. So the folks that I have encountered when I go out on the shoreline, when we go out there and we're able to talk to people, the impression that I've had in both counties is more like confusion about what is and isn't allowed. A lot of it is people wanting to do the right thing. [For example] they want to know, can they remove trees for a view and, if not, what do they do? And they can't get a straight answer. Or do they need to get a permit to do invasive weed control on their shoreline, or can they just go ahead and do that? That's a desirable action, right? It's to address invasives. So, a lot of it has to do with confusion and frustration about the lack of clarity, and then the slow timing of getting information back from the governmental level. That's been my impression, not so much flat out anti-government sentiment, I think the people who have that sentiment aren't calling us.

Q. And, as a conservation district, you're not really seen as the government. So they may be more open to [working with you] than regulatory agencies.

So yeah, we can be like the night in white armor kind of thing, [where we are there to] help them address regulatory problems. And we do that a lot. We act in this intermediate role to say, "Hey, here are the regulations, here's what you're not supposed to do, and this is why—and we can help you come up with some alternative ways to manage your site."

I will say this though, [there is] an interesting contrast. I definitely think being able to work well with the community, being in a non-regulatory role is fantastic, but what I've observed for some of the Shore Friendly programs that are housed at the county, is they have an inside track to what is coming through for permitting. So they can actually intervene early with those people who are who are putting in permits to do projects that maybe don't need to happen. They can offer them an alternative route and that's a really interesting advantage compared to those of us who try to catch them if we can before they go to permitting. But, we don't always do that, so both approaches have their effective aspects.

Q. And is that an unofficial back channel? Where Planning might give [the program coordinator] a heads-up, but it's completely informal?

I don't know how it works exactly. Kitsap County is a good example of a county that has had a Shore Friendly program in place and has internally worked really well with the public face of that program, and to become a resource for folks. They've drummed up so many projects, and I'm assuming that they work collaboratively with their internal office to be able to do that. I would suspect that if Thurston County or Mason County were the face of the Shore Friendly program, rather than the conservation districts, we would have way lower participation. Unless it was just informal workshops. But I don't know. They have great, great folks working with them. But I think it's really hard to come up with a perfect formula.

Q. How would you describe a successful SF Project?

I think a successful Shore Friendly project depends on the scale you're talking. But I think any site visit to a marine shoreline homeowner that results in them taking an action that is going to be beneficial, both for them and for the environment, I consider that successful. So if that's addressing an invasive weed problem, if it's planting vegetation that's going to benefit the near shore, if it's improving how they're managing their drainage so that it doesn't impact the beach or destabilize their own property. Those are all wins from my perspective. Certainly, a bulkhead removal is really fantastic. That's the golden apple that we're all trying to try to get to, to help people who don't need that armor get rid of it. But it's very expensive and very slow. So that's a big, big challenge.

Q. How would you describe an unsuccessful SF Project?

Unsuccessful projects, from my perspective, are not so much those site visits where the folks listened to you and they don't necessarily adopt the recommendations, but when you go to those sites, you make recommendations and they're willing to take the action but they can't. [And this might be] because of various challenges, one of the biggest being lack of labor to do the work that they themselves can't do, for example, or inability to find a contractor or a consultant who could put in a proper drainage system. People who want to do the right thing and they themselves physically can't do it, or financially can't do it, and so then nothing happens. And that happens a lot of the time.

Q. And how would you gauge what percentage of people end up in that bucket? Where they would like to do it but don't have the resources or logistically can't make it happen?

So you asked me before, how many people are acting on what we're recommending. So it comes down to scale. I would say probably three quarters of people are doing something. They might be checking their drain system for leaks, where they didn't before, or they might replace a pipe, or they might plant a few plants. But when it comes to doing a full slope, invasive removal and replanting project, now we're down to 10%, because it's expensive. Especially now in this competitive environment for contractors, they're looking at \$15-30k to do a shoreline planting project. So, whether it's cost or other challenges, like the lack of labor, that becomes an issue and it gets harder and harder. So they do these smaller things, and they understand the benefits, and I think they work towards things over time. But I think the big obstacle is the scale of change.

I do just want to briefly say one more thing on that front, which is we're actively trying to figure these things out. There's a lot of work with our collaborative to figure this out. Like, if we had more capacity, maybe more staff could fill some of the gaps that the consulting world can't fill right now. Or maybe we can hold these trainings to get more contractors aware of the need for proper shoreline drainage, and we can train them up so they know the best practices. So we're working on some of these pieces, and those are exactly the pieces I think that do need to help address that obstacle. I think it's not so much the lack of will, it's more the lack of a way.

Q. [Another respondent] mentioned something about the economics of demand, and how you don't want to create demand for services if you can't meet that demand, not without the potential for a bottleneck which may ultimately end up harming your brand.

Yeah. Capacity is a limiting factor for all of us. Because especially when it comes to projects, like a bulkhead removal, those are incredibly complex and time intensive and expensive and any single person can't manage more than two or three of those at a time. Most of these organizations that

are doing this work, you're wearing a million hats, and that's a really, really big challenge.

Q. HOW IS SOUTH SOUND [PIERCE, MASON, THURSTON] STAFFING CONFIGURED? Are you alone responsible for technical assistance or are there other team members that can assist with that?

Well, I have a team. Unless her position has changed, Mary is full time, nothing but Shore Friendly, which is so incredible to me, just awesome. And Keith and I are parallel a little bit where we manage other staff. So I'm the technical lead for our staff at Thurston. But I still do probably 75% of the Technical Assistance visits. We have an engineer who will go out sometimes and we have another person who has experience in nearshore, and she'll go out and provide technical assistance. And we draw on other people with more technical background as needed, depending on the situation at the site. But I'm drowning right now, it's so difficult because [it's been] very slow in providing the follow up, because of literally a lack of physical hours in the day to be able to do it.

But I just want to say that [the prior] point is a very important one. A lot of the programs are using consultants to do the technical assistance, so they have somebody else that comes out and is writing reports for them or things like that. In the Conservation District model we have consultants we utilize as supplements, to bring in a particular type of expertise, geotech technical expertise, for example. But the staff are the frontline, they have the environmental management expertise and they bring that to the site visits as the first face, and I think that's very helpful. But because of our strain and our limited capacity, I have been slow to do advertising. At our office we provide a lot of different types of technical assistance and we have a waitlist of 80 to 100 people at any time, and it's six months minimum to a year that people are waiting for our assistance. The shoreline is in that mix too, so there's a lot of interest out there, there's just not enough capacity.

Q. What strikes me in voluntary programs like these, it's usually willingness that drives participation. When capacity is strained, do you rank projects on priority factors, for example, target some and put others on a waiting list?

Absolutely. I can tell from a remote assessment of a property in almost every case whether or not I would even begin to think about a bulkhead removal in that property. Unfortunately, there's many more unfeasible sites than there are feasible ones. And it goes back to the original thing that we were talking about, which was the the fact that they've been permitted to build so close that you just can't risk taking it out.

**Interview 05 – Shore Friendly Coordinator, Northwest Straits Foundation (covering Whatcom, Skagit, San Juan, Snohomish, Jefferson, Clallam, and parts of Island counties)**

March 24, 2022

Q. How Long have you been in your position?

Since 2014

Q. How many participants in your unit...

- a) have started the SF process?
- b) have completed the SF process?
- c) plan to complete the SF process?

In this fiscal cycle, since July 2021, we've done over 75 segments already. But [if we] look back to how many years ago we've been doing this, 300 or more site visits. It's hard to say what point people are in [the process]. People approach us for some kind of assistance at the site visit and, and there are delays in us getting to them, and we don't know on a lot of them whether they're going to take action or not. We provide them with a report and then try and come back to them. So I'm not quite sure how to answer your question.

Q. What is the best method for contacting program participants?

Who should initiate contact?

Are you able to assist with contacting/recruiting program participants?

If not, are you able to provide a list of potential recruits with contact information?

I think there's maybe two different steps to that. Initially, it would be beneficial for me or our program to reach out to all the various people, maybe by email, that we have worked with, to request permission for somebody else to contact them. You know, because I don't want to be giving out personal information or emails or phone numbers randomly and have them think that we don't honor their information. We have an agreement not to share their information externally without permission. So I think initially will be better if I sent an email to all of our participants saying you know, please let us know if you are willing to be contacted by x group.

Q. Do you have the tools, technologies and skills you need to do your job effectively?

Do you feel that the Shore Friendly program is meeting its stated goals?

Mostly. Yes, I have most of what I need. The challenges I have, mostly because we work in such a diverse area or large area, having updated landowner contact information, updated assessors information with not just the address of their property, but the add to their mailing addresses is hard to acquire. And we also have a need up in the north sound for quite a bit more data collection to identify opportunities, those most feasible parcels. More data collection for looking at house setbacks on bluffs and, remapping all the armor, looking at some change analysis in the amount of armor that's present. We can make it make do with what we have, but it would be good to have additional data and additional contact information.

The database that we currently have of shoreline landowners is only their actual parcel information for their property, but a good majority of property owners don't live at that location. We're sending out 1000s of postcards, we want to know the majority of those postcards are coming to the right place. And getting access to that information is time consuming, and the

county assessors are not usually willing to just give us a list. Another list it would be good to have access to would be the MLS lists for real estate, so that we could keep up with new property owners.

Q. Some other comments have focused on strained capacity. Is that something you feel like you're having difficulties with and do you have a staff to support you?

I have somebody we work with Friends of the San Juans, so they kind of manage some of it, but it's me filtering information to them. But the main issue isn't just me needing, although yes, I do definitely need a staff member if I had the budget to do that to have a full time staff member, but the demand and also is in having qualified professionals available to do the site visits. There are really only three different consulting groups out there that really have the range of expertise and are willing to work with private property owners. There's plenty of coastal engineers and coastal firms in this region, but there's only a handful that are willing to work with private property owners. [It's possible that the] scale of the project is a constraint, maybe it's not economically viable for them, but it's also the demands of private property owners and the liability of working with private property owners.

Pretty much all seven or Shore Friendly groups right now are all working with three consulting firms. So everybody's working with the same three. I've actually worked with all three. There are probably some of the others who only work with one of those three. Since everybody doesn't have the same level of expertise in house, everybody's using them for a coastal processes assessment which includes looking at vegetation, drainage and that kind of information. And someone like the conservation districts may be doing their own planting plans. We do some of our own planting plans and we use experts for some of them as well. Depending on the type of site.

Region-wide we also are lacking expertise and appropriate contacts for drainage information. We know people who can go to a property and identify that there's a need to manage drainage better. But we don't necessarily have to have the resources available or the knowledge of who to recommend to landowners of who to contact to do the work, to do the design. Depending on some cases, in some situations it might be pretty simple, but it takes a lot of knowledge know about the geology of a site, especially if we're talking about bluffs sites, what it really entails and what's the appropriate mechanism for dealing with drainage on some of these complex bluff sites.

We don't know who is out there doing that kind of work and whether they're actually qualified to do that work. We have people that could probably do plans, but who can do the work and really, it'd be better to have somebody that's an expert in drainage, tied together with stormwater management, but drainage on a bluff in particular is a tricky thing and we need to we need to find those people that can do that. So people that are doing the installations don't have the knowledge of the physical processes that are at play on the shorelines and the geology of the bluffs. Like you know, they can put a pipeline down a bluff, but is it being installed correctly? Is it the right application for that site? Are they using the right materials? Because if you do it wrong, you can create a problem that's maybe not even there yet.

Q. How would you describe a successful SF Project?

Yeah, I mean, each project or effort is a little different. If we're defining a project as one where

maybe there's a bulkhead, a successful project would be that we're able to assist the landowner all the way through implementation of the work. And they're happy with the changes, and they're out there talking to their friends and neighbors about it, and encouraging other people to try these similar things, if it's possible. That would probably be the ultimate success.

Q. How would you describe an unsuccessful SF Project?

An unsuccessful project, we don't normally engage in unsuccessful projects... We've definitely had some challenges getting through where, especially when you're dealing with HOAs or community owned parcels, I've definitely had some problems trying to get the entire community on board, to agree that it's a good thing. So that there doesn't end up being infighting amongst the community. And I've had some of that certainly, you know, we're like the board has basically had to just kind of take charge and say we're doing the project, and you still have some disgruntled landowners within the community that just don't think it's a necessary activity. So it's really you know, it's a differing opinions on what's needed. But I wouldn't call it unsuccessful because the project still went forward, but it certainly was challenging to get through it.

Q. What specific questions would you include on a SF participant survey?

You know, we're always trying to figure out what it is that they've learned that's changed their minds, or change their perspectives, because this is all really based on a social marketing principle. You know, so what information did they receive from us, or did they gain from somebody else, their neighbors or somebody, that made them move forward with what we would consider to be doing the right thing?

To make a change that benefits the habitat and themselves. Because our goal ultimately is about the habitat. That's why we're doing this, it's about habitat and species protection and conservation. Do it through a lens of assisting landowners to reduce their risks, in a sense when it comes to erosion, so what I would love to really be able to hone in on what what things are, they learned that we told them or they gained from us that made them change their mind.

What else would I want to ask them... I guess if there's something else that we [could do], what are we missing? What information do they want, that we could give them, that would help them to make a change on their property?

Q. [Another respondent] described an unsuccessful project as one where a person really wanted to make changes, but couldn't because of certain barriers. If you had to guess, which barriers are most likely to prevent action?

I wouldn't consider it an unsuccessful project if somebody can't do the project, that's just means that they're not capable. But yeah, everybody is fearing erosion, fearing change, fearing the impacts of sea level rise and rain. And that's probably the thing—Fear is the biggest barrier right now. There's nobody that we've met doing hundreds of these site visits, in this region, that is a climate change and sea level rise denier, okay. It's happening, they all see it and they feel it, and we never get it for the reasons why it is or isn't happening, but it's happening. And they are fully aware that it's happening, they see it. And their perception may be skewed, like when people perceive minor erosion as being a really big thing, sometimes they equate that to feet, when it's maybe only inches.

So, fear is definitely the one thing I think that keeps people from making the changes. Definitely

the cost implications. But the one thing that I think that we need to move towards is really encouraging more managed retreat. People need to start to understand that the land use planning that has gone on is not going to work for them into the future. And so you know, moving your house back, moving your infrastructure back away from the shoreline, is going to be the solution in the long run. And knowing that, I think we need to find a way to make people understand that they're better off doing that sooner or later.

So that would be one of those questions I would want to answer: what would it take for you to move your house and your infrastructure out of the risk hazard zones?

I guess if you want to talk about a failed project, and the misunderstandings of some of the processes that happen, I had a planting project that just got stopped. We were giving funding to a landowner to put plants on the top of their bluff. And in the time it took us to get to the point where they could do the work, and I purchased all of these plants because they had had a slide during these last storms in the winter, and they were so concerned that if they put any big trees or things that are going to become big trees near the bluff or on their property that when they fall, they're going to take large amounts of land with them. Without realizing that trees we're putting in right now are like a foot tall, and they're not going to take any large amount of soil with them. And there's also a lot of benefit, and I'd explained so many times the benefits of putting these trees and these shrubs and putting something more than just small stuff in. And they're going to be dead by the time these trees are ever big enough to take any amount of soil with them. So sometimes the notions of what's really happening on the shorelines are so varied among the property owners that we talk to.

Q. It makes me also think that there's always going to be a certain level of DEFERRED MAINTENANCE, and disasters can happen in that gap while you're waiting to maintain, or not maintaining, a property.

Yes, that brings me to another answer for you, as far as what I'd like to know: Did the services that we provided to them—be it the site visit and/or additional funding—help them move ahead with something? Did that accelerate the timeline in which they would make a change? And that could be a two-parter because: one, we give them the information, so would they make a change more quickly because of the information; and second, if they got funding from us or some kind of additional support, would they move to do that project more quickly, because of the services and support that was available?

I think another big question, too, we do a lot of site visits for people that don't have shoreline armor, because we're trying to prevent any new armor from getting put in. But that's one of the hardest things to track, you know, is the no-action alternative, I'd love to know more about whether people decided to not make a change because of the information we provided to them. They no longer feel like they need a bulkhead and therefore they haven't moved ahead with trying to get one because of the information we provided. And we prevented something from happening.

## Interview 06 - Shore Friendly Coordinator, Kitsap County

March 24, 2022

Q. How Long have you been in your position?

Shore friendly began as a pilot program, so there were some counties that were selected to be part of that initial pilot program that began in 2015, and Kitsap County was one of them. That's why we have maybe a bigger past project portfolio than the other programs. We're actually quite a large team comprised of different organizations and now Kitsap County is the lead for the county. When we began we also had, Washington State University Extension as a partner, Washington Sea Grant was another partner and Future Wise. So we were actually quite a collaborative but now, Kitsap County has taken the lead and we cover both unincorporated and incorporated areas, includes the four cities.

Q. How many participants in your unit...

- a) have started the SF process?
- b) have completed the SF process?
- c) plan to complete the SF process?

I looked at my my tracking [Excel] sheet where I'm tracking all the site visits and potential projects, and there are 57 site visits that we've done since 2020. And then I was looking through how many folks have actually started the process, and I define starting the process those that have had a site visit and then decided to take like an incentive. So from that group, we've got two people that have signed up for a mini grant, like a cost share, and one of those is working on their designs. They haven't actually been reimbursed yet for the design. Another one did some geotechnical investigation and they were reimbursed, and then another set of people, actually three landowners working together, they've had a permitting meeting with the county and with me. So I would also count that as taking an incentive. And then another landowner who's identified through Shore Friendly, but [is part of a] different grant running alongside Shore Friendly that has to do with providing additional design assistance. And so now they're in that lane.

So it's diverse, but I wanted to give you an idea of those starting the process. And there are other folks that have received a technical site visit by our contracted coastal geologist, that's a private professional that we contract with. They've gotten a site visit and a memo, like a short summary of the site visit and recommendations. But, there's quite a big group of those who haven't moved forward yet with recommendations. So I don't know if that's helpful at all.

Q. [Another respondent] mentioned that you work with three different outside consultants, is that what you mean when you say contacted a coastal geologist?

We actually have a contract with one company and we coordinate. After I do a general site visit that's like a get-to-know the program, I give some general recommendations. [This is to] see what's going on and get an idea if there is project potential here, given what I know about characterizing sites, and then also talk about general stewardship, best management practices for shore properties. And then I can also kind of gauge the homeowners interest, some people we don't want to pressure them into a project just visiting the first time. So at that point, we can get a sense as to whether they would benefit for more in depth technical visit from a contracted

geologist. I work with one company, and I think other programs, I don't know how... I work with Coastal Geologic Services. And there's also Blue Coast, but the county doesn't have a contract with them. So there's nuances to each of our local programs and we don't all work exactly in the same way.

Q. What is the best method for contacting program participants?

Who should initiate contact?

Are you able to assist with contacting/recruiting program participants?

If not, are you able to provide a list of potential recruits with contact information?

I think it would make most sense for me to make the initial contact and kind of introduce you and what your role is and what your project is about. And then, once I help you make that initial contact, after that, kind of step away. I think email would probably be the best way to first reach out, and then maybe after the initial email, follow up with a phone call. And I can help with that initial contact.

Q. Do you have the tools, technologies and skills you need to do your job effectively?

Do you feel that the Shore Friendly program is meeting its stated goals?

Yeah, generally. Yes. I think that I have the tools, skills and knowledge to perform the needs for the program. And I think the fact that I have a pretty general, well-rounded background in natural resource management helps. And, I think too, now I appreciate that we have regional programs support from ESRP and our collaboration with our local programs, I think it's been really beneficial to be able to learn from each other and our experiences and share and all that.

And then I guess personally thinking about what could be extra tools that could help? I guess for me personally, like the outreach piece of it, I don't have formal education or training in outreach or education. And I think some training in that could be helpful, from my personal perspective. For instance, giving effective workshops and that kind of thing. Because there's two avenues for the program, there's this outreach and education lane and then there's the project coordination lane, and they're pretty different. I guess from a program perspective, I was thinking about this, that some extra resources and tools would be helpful. It would be great if we had a larger pool of experienced consultants, that design projects and we could give those options to landowners, because sometimes I feel like we're pretty restricted and, the list of people that do this work, they're also very busy, so it's challenging for homeowners, and that goes for contractors as well. I think it's because it's such a niche field. It's really making projects logistically challenging. Cost wise, I think it's driving the cost up and also just time wise as well, if it takes five months for a geotechnical engineer to get back to you with a design it really makes it an arduous process.

Q. Do you feel like you have such significant response that you may not be able to meet demand? Or do you anticipate that happening in the future?

Personally I'm not really worried about that at this point. I feel like that'd be a great problem to have to deal with. And I also think, just from my experience in the last four or five years, projects take a long time to develop and to move along. So even if you're swamped with site visits, like for instance, I sent out postcards in February and I thought about trying to tier them so that I wouldn't have all these inquiries at one time. But it was more cost effective to send the mailing in one batch instead of two. So, now I'm a little bit slow and going through them, but I don't feel like it's an issue because I made that initial contact and asked people to be patient and we're

going through them and doing all these first site visits. And really from that pool, how many potential projects do you actually get out of the initial batch of interest? I would imagine it's probably going to be 5% or less, or something like that, 10% or less. So even if those go forward they will all go on their own trajectory, some of them a lot slower or faster than others, because the way our Shore Friendly Kitsap model is we have the homeowners be their own project managers and we're just the resource to help them move their own project along. We have different incentives to help them further their project, but we don't take the project and bid out the design and bid out the construction. We let the homeowner be in charge of that. And then just you know, we provide as much hand holding as each homeowner needs. So I guess I'm not too worried that we can't provide the services and to be honest, since COVID, last two years, we haven't had a project go to construction. So at this moment we have a healthy budget for our mini grants and you know, all those incentives.

Q. You said you do mailings, do you use [USPS] Every Door Direct, where you identify routes, or do you have actual addresses?

We have actual addresses. We used county assessor data and did a GIS query to find all the waterfront parcels, and then have one mailing go to each property where the tax bill is sent. Because we do have a lot of homeowners who this could be their second residence and they don't live full time at the water.

Q. That's not an opportunity that the conservation districts have. [Other leads may be] looking for potential secondary databases, so I might share that with the other groups to see if they can collaborate with their counties to get that parcel data, because [some of them] can get parcel data but not addresses.

Q. How would you describe a successful SF Project?

There's a number of factors: one that needs the restoration goals for restoring shoreline processes and maximizing that armor removal, but at the same time still meeting landowners goals. I don't think we can forget that it's a private property, that they mostly live on. And those goals, they can kind of range from access, to aesthetics and also stabilization, like property safety or that helps safety in terms of how much erosion that soft shore project could lead to. And then another thing I was thinking about was also for me, or for our program, I feel that a successful project is one that is completed with the Shore Friendly incentives that are given, and those incentives are the assistance that we give: the cost share (like the mini grant) that goes towards the homeowners' financial costs of a project and [also] the permitting assistance. So, for me, for it to be successful I really feel like we have to give enough help to be able to move that project to completion. So that's kind of my ideal of what a successful project is.

Q. How would you describe an unsuccessful SF Project?

Yeah, I think it centers around the landowner. So I was thinking that basically an unsuccessful project would be one that didn't meet their expectations and the outcome, the completed construction and how that project functions after they build it. I guess if their dissatisfaction about their completed project was enough that they wouldn't recommend the program to other people, or recommend that type of action. Like if they would say, "Oh, I would never do this type of armor removal or software project ever again, if I could go back in time, I wouldn't do that," I would consider that to be a pretty big failure, or [if not a complete failure], unsuccessful. And I

was also looking into a little bit about setbacks. And I think if a project has to do major repairs within one to two years of it being constructed, I don't want to be harsh and say that that's an unsuccessful project—because these types of projects are all pretty novel, we're kind of in new territory—but I do feel like that's a setback for these types of projects when a homeowner has to spend money, one to two years after they've done such a large investment. I guess personally I want people to feel good about what they did, and feel okay about all money that they spent, to [be able to] say, “Yes, it was an investment that was worth it and has value.”

Q. Are there any particular [homeowner] concerns that stand out as more important or more relevant, like impact to property values or the potential for increased erosion [if they remove a bulkhead]?

I'd say [property values are] the least of their concerns, or we don't talk about that as much as everything else. Definitely people want to know how much erosion to expect afterwards. And we talk about [how] soft shore protection slows erosion, but it doesn't stop it. So, yeah, all these things come up, and sea level rise too, and to be honest sometimes we don't have a hard and fast answer for them either. So that also makes the sell sometimes hard as well, right? Because you're acknowledging that these are very real concerns and real results of a project and just trying to set the expectations appropriately. And the projects that we have to show them, you know there's a good handful across Puget Sound, but it's not a humongous list.

Q. Do you have any other thoughts you'd like to share at this point, or do you have any questions I can answer?

I guess what's the commitment from the landowner or the participant? In terms of... they'll be interviewed by you right? Is it half an hour, or...?

Q. I'll probably limit it to 20 minutes, because there's no incentive, there's no budget for that. I hope that they'll [want to] share their story and that will bring some value to outreach that you do in the future. I'm also hoping that by talking to you guys first and then talking to the homeowner a second, what I'll get back will be new insights that we might be missing. So I did put a link in the chat to a Box folder. If you have additional information if you'd like to share or if you have particular questions you would like to see us ask participants then you can write that out and put that in there.

Did [the program coordinator] pass on to you an evaluation that we did for our program in 2018 where we had some folks interview past participants? I just wanted to say that I thought a lot of those questions are still relevant. I was also thinking about the types of questions... I was just thinking [that] legacy seems to be a motivating factor in Kitsap County. There's a segment of the population that the property has been in their family for generations, it's been passed down. I'm just curious. I find that kind of intriguing. If that comes up, or to have a question that gets at those motivating factors for why people want to do these projects. And then I guess for our program, our mini grant is \$6,000 which is up a little bit from when we started. And I'm just curious if people feel like that's enough financial assistance to really move these projects because they can be any \$80k, you know. I'm [also curious] about since project completion, if folks have continuing concerns or fears about erosion, and if those fears have gotten worse, stay the same or better. So I'm just wondering about that.

Q. You mentioned the [\$6k] mini grant, is that a sliding scale? Or does everybody just get [the full

amount]?

It's the same [for everyone]. Except we're trying to incentivize people, like adjacent property owners, to work together. So if you work together with another neighbor or someone next to you, it's \$7,000 each. And there's the economies [of scale], when you do a design together [there's savings there].

Q. And you want people talking. You want people saying, erosion control is all about *removing* the seawall and for that to be the prevailing thought, right? So in terms of success, if you get people talking about it, that's a potential success.

And I feel like we've seen a change since we started in terms of just how many people are willing to consider something different and think out of the box and not get not just want a bulkhead. I think that's really where we are. And that's reflected in people reaching out to us and the amount of site visits that we've done done recently, and people are willing to hear what options they can consider.

Q. And are they coming to you with existing knowledge [about soft shore armoring]?

Yeah, they are coming to us with a small amount of existing knowledge. It's definitely not a totally new thing. They've read a little bit, there's an interest, or they're really worried about Puget Sound Health, or they have a structure that's falling apart and it's not very pretty, and they feel like they need to do something and they're wondering if building a wall again is really the best option for their property. Right? You know, not from an environmental perspective, but also from just their use and enjoyment and beauty as well.

Q. How many people are actually like, "I'm really worried about those salmon fry" or "I'm really worried about the nearshore habitat"?

Where that's the main part of the conversation? Yeah, like less than 5%. Not the majority. But then there are people who have experience or who grew up [on the Sound] and they remember fishing in the 80s, in the 70s. And there's a memory, there's a collective memory of better times and yeah, folks are definitely concerned.

## Interview 07 - Shore Friendly Coordinator, King County

April 1, 2022

Q. How Long have you been in your position?

Mid-Sound Fisheries took over as the lead for Shore Friendly King County in August 2021. I started working with the program when I was hired on at Mid-Sound, and that was December 2020, is when I started working with the Shore Friendly King County program.

Q. How many participants in your unit...

- a) have started the SF process?
- b) have completed the SF process?
- c) plan to complete the SF process?

Well, that's a little bit of a tricky question to answer because we had some restructuring with Shore Friendly King County this past year. So previously, King Conservation District had been the lead for Shore Friendly King County. The Conservation District also has their own landowner incentive program, as well as 'Where the Water Begins' program, and so separating out what's Shore Friendly and what's those other programs in the past? I only have from when mid-Sound took over, moving forward. So that's one piece that's a little bit hard to answer, but in terms of getting all the way to having restored their shoreline, we don't have any yet. And we have completed... it looks like we've done about 40 initial site visits. And then we have right now four properties that have had a second site visit. And we also have 10 that are in the process of having a consultant come out and do further feasibility assessment to see if armor removal would be a possibility. And there are a couple of past projects from that King Conservation District leadership time that have moved forward a little further with design, but those were more through the landowner incentive program. And so those ones aren't exactly Shore Friendly King County projects.

Q. So Mid-Sound Fisheries is a nonprofit?

Yeah, we're a nonprofit and the King Conservation District is still the partner, so Shore Friendly King County, is a little different than the other Shore Friendly programs in that we are run as a collaborative. So we work with King Conservation District and then we have the King County Vashon and Maury Basin Steward, the Salmon Recovery managers from the Water Resource Inventory Areas (WRIA) 8 and 9, and then a natural resources biologist from King County are all part of our collaborative. So the primaries are Mid-Sound, the Vashon Basin Steward and the Riparian Program Manager from the Conservation District, we're the ones that do most of the site visits. But we evaluate projects and also work on our outreach strategies with the whole collaborative.

Q. So then there's more than just you doing [initial] site visits?

Yeah.

Q. Okay. And does someone else go out for technical site visits or do you do the technical assistance as well?

It depends on how technical it is. We do a lot of the simpler technical assistance on our own, especially if it's a riparian project or if it's a very clear low bulkhead and the property is very far

setback, then if we feel confident making a recommendation to the landowners. We will also review sites ahead of time and if it's something like a high bluff where the person is interested in armor removal or if they need assistance with drainage, or maybe they would like to remove their bulkhead but their house is really close, then one of us plus a consultant would go out on the first site visit, like either a geotech consultant or an engineer would go out together on the first site visit. So it depends a little bit on the nature of the project.

Q. What is the best method for contacting program participants?

Who should initiate contact?

Are you able to assist with contacting/recruiting program participants?

If not, are you able to provide a list of potential recruits with contact information?

Oh, probably for our program, it would be whoever is the project manager assigned to their project. So it's either right now me for Mid-Sound, Debbie [unintelligible] from the Conservation District or Greg Rayburn from King County. We use smart sheets to track our site visits and when people sign up to request assistance on our website, that webform is linked to our smart sheets, I mean, it's a smart sheets form. Then we get notified when there's a new entry in the smart sheet and then one of us will go in and assign that person to either me or Greg, depending on where they are located right now, is how we're doing it. And so different landowners' main point of contact will be different people depending on where they are. So, for ours, it's probably whoever the project manager they've been working with.

Q. And do you think that should happen via phone or email or letter?

Probably phone or email. For a lot of our Vashon residents a phone call is better than email. Yeah, and I think we could, I could, help facilitate that.

Q. Do you have the tools, technologies and skills you need to do your job effectively?

Do you feel that the Shore Friendly program is meeting its stated goals?

Yes. I personally, my background is in nearshore restoration and salmon ecology. So I feel like my own technical background is pretty solid. And all of our partners in the collaborative are really knowledgeable and experienced with other elements of shoreline restoration, so the vegetation management side of things, and also just the best ways to engage with local homeowners in different areas within our region. Having the support from the local Salmon Recovery lead entities is really valuable as well to prioritize our target areas because a lot of the King County shoreline is armored, just like all around the sound, but especially King County. It's a very urban area. So being able to prioritize where we start has been really helpful.

Yeah, I think that since we had some changes at Shore Friendly King County, it's also been really helpful for us to be able to follow the example of other Shore Friendly programs. And I think [the program coordinator] is working on getting the regional support for Shore Friendly established a little bit more, which is going to be really beneficial because right now we have monthly Shore Friendly program leads. And those are really great for just hearing what other people are doing and also being able to kind of troubleshoot together and work through and kind of realize what are the things that we're all struggling with, for example, and how can we work together to improve those. And I think that [the program coordinator] has been really receptive and also has proposed some different ways that the Shore Friendly regional program can support the local programs.

Q. What would you consider the biggest barriers to accomplishing a preferred outcome?

In our case, I think it's just really just time. We haven't had a lot of time yet. So, like I mentioned before, the way that King Conservation District was managing the Shore Friendly program is a little different from the way that Mid-Sound is trying to do it now. And so I think during this biennium (between now and the end of June of next year) we're going to have a lot more progress on sites moving forward towards being able to be restored. And being able to attribute those to Shore Friendly King County specifically. So time I think is one factor for us just because we're among the newer Shore Friendly programs. So just trying to get our feet under us and get some projects off the ground.

The other piece for King County specifically is the cost of armor removal projects, and also the technical complexity in a lot of cases is a challenge. And so something that we haven't really done yet but might be part of our need in the future is to be able to provide assistance for transitioning hard armor to soft shore, where the property might still need the protection, either for the benefit of that property owner or to protect their neighbors. And so being able to help make that transition to at least softer techniques. We haven't had any of those projects yet, but I imagine that being something that might be more common with the Shore Friendly King County. And then just how much incentive we offer to property owners. So right now the way we're doing it is we are providing that technical assistance, a recommendation and then we have funding right now to move at least 12 projects through feasibility and conceptual design, at no cost to the homeowner, and then preliminary through final design for 4 projects, and hopefully implementation for those 4 at least in the next year and a half. But thinking about how can we incentivize more property owners in this urban area where everything seems to be more expensive, and providing enough assistance and incentive to really help move the needle. And the mainland King County shoreline is even a bit different from the Vashon shoreline. So we have some differences there too, and most of our projects right now are on Vashon.

Q. And financial incentives, you have a mini grant program, is that first just first-come, first-served, or is it competitive?

It's not competitive, it's based on if the project is within our priority areas. We don't have enough funding to develop designs for all the projects. So kind of prioritizing as a group which ones we want to move forward that our program will sponsor. If there's a project where we did the initial assessment and the landowner wanted to move forward on their own, we can still provide permitting assistance and help them through the process, but in terms of the mini grants, that would be the collaborative deciding together, which ones were the highest priority, based on where the site is. King County led the effort on developing a very thorough system prioritization for the entire shoreline of King County. Tier one areas are the highest priority and those are often high priority drift cells, where we want to restore sediment transport either for salmon habitat or for forage fish. And then there's three different tiers of how important these different parts of the shoreline are, and then within the tiers, there's different categories that describe: is it unarmored; is it armored and likely that removal is possible; is it armored and unlikely that removal is possible. So we kind of categorize and prioritize projects that way.

Q. [Assuming you conduct outreach] do you prioritize outreach to those priority properties or zones as well?

Yeah, since Mid-Sound took over the leadership role, we've done one round of mailing only to the tier one properties and we just have our next set of mailing for tier two and tier three ready to go out. So we did the first round of mailing and we got some interest from the tier one property owners, but we'll send out mailing to the other tiers as well here soon. In terms of prioritizing other types of outreach, we haven't done that yet. But that's part of our plan for this year, to try to focus on [whether there] are certain neighborhoods we want to work in. We do have a couple. Vashon is where most of our interest is coming from right now. And we also have a couple property owners in Normandy Park who were interested in Shore Friendly and initially reached out through the Shore Friendly program before Mid-Sound took over. They both got initial site visits and then it was decided not to move forward with those ones in Shore Friendly, but Mid-Sound is helping those property owners with other grant funding right now. So Normandy Park might be an area of focus for us that would make sense since we're already working down there.

Q. How do you source mailing addresses?

We are using the mailing address that King County put together. We're lucky to have the county as a partner and they've provided a lot of GIS support for us, including mapping out all of our prioritization and then helping us get the mailing addresses.

Q. Would you say that there was anything demographically or politically unique about your county?

I mean, we definitely have the most urban area okay, there are certainly parts of our, I would say large part of our, area where we definitely can't do shoreline restoration. For instance, a lot of Seattle shoreline, like the downtown Seattle shoreline.

Q. Do you feel like you may have a more receptive population to the message, if not, the actual action on the message?

That could be. It is really variable depending on even within our region where you are. But yeah, I do think we have overall a pretty receptive base and people are interested in learning about what we're doing.

Q. How would you describe a successful SF Project?

Well, let's see, I guess, a successful Shore Friendly project is one where the property owners have been able to take an action to provide ecological uplift on their property, and it's something that they are happy with also. And maybe something where they would recommend us to their neighbors and just spread the good word about shoreline restoration.

Q. How would you describe an unsuccessful SF Project?

I think an unsuccessful Shore Friendly project really would be one where the landowner is not happy with whatever the outcome was. Right. Yeah, I mean, sometimes there might be a technical assistance site visit and it turns out that No, there's no way we could do an armor removal here, but maybe we can provide the property owner with some other recommendations or other resources for them to follow up on. But I would hope that whatever

the outcome from the restoration side, that we are leaving with a happy landowner.

Q. Do you have any other thoughts you'd like to share at this point, or do you have any questions I can answer?

Do you already have a sense of how you'll be using this information? Do you have a plan of how you're gonna evaluate?

Q. I think that this process for me has been really inductive. Because they've had surveys previously that were more structured, but I'm trying to use less questions that, hopefully, get to more broad responses. I'm very interested in the concept of social trust and how to evolve social norms and perceptions to try to purge the politics out of [conservation].

## **Interview 08 - Shore Friendly Coordinator, Swinomish Tribal Reservation**

*Note: There were two interviewees speaking during this session: lead 1, transitioning out of position; and lead 2, newly hired*

April 21, 2022

Q. How Long have you been in your position?

[lead 2] Swinomish has had the Shore Friendly program for two years. [lead 1] started it and has been the lead up until two months ago and now it's [lead 2]. So although I'm the lead, I asked [lead 1] to be here because after two months, I don't really know enough about the program to fully evaluate it as much as you would like me to.

Q. Are you part of a government agency, part of a separate Conservation District, or are you outside the government apparatus altogether?

[lead 2] We are both full time employees of the Swinomish Tribal government

Q. How many participants in your unit...

- a) have started the SF process?
- b) have completed the SF process?
- c) plan to complete the SF process?

[lead 1] Right now we have a tracking sheet that, honestly, the only reason I am using is to report. I think that it's something that could be so much more, but it's really not a tool for me, It's part of the reporting mechanism. And even the consultants who we use mostly, they have the (ArcGIS) Survey123 abilities (because they do visits for other other Shore Friendly programs that ask them to use that) and they don't even use it because what they type in gets rolled up into that tracking sheet and sent off as part of their figure reporting. But they actually find it a little bit cumbersome, and they ended up just using an Excel spreadsheet and sending it to us in the end. And so we track it, but are not using it as a way to look at people through the process. Part of that is because we're a small program too. We don't have nearly... we have essentially one long stretch of shoreline.

Q. Maybe I can just ask, how do you know how many people have engaged you, and how many are moving forward with some type of action, or [are likely] to at some point?

[lead 1] On the tracking sheet, my last entries were towards the end of October. There [were] 35 and we've probably gotten another 10 since. [Of those] no one has actually implemented anything or taken further steps, but there have been people that we've had more than one visit with, and we are in conversation with about vegetation improvements, drainage improvements, and then one person has a house moving project [on a bluff].

Q. What is the best method for contacting program participants?

Who should initiate contact?

Are you able to assist with contacting/recruiting program participants?

If not, are you able to provide a list of potential recruits with contact information?

[lead 1] So, you would be reaching out to homeowners who we have engaged, who are wanting to move to the next phase? Yeah, I would do that through through us. And, the reason why is because I think that being part of tribal governments, there's a lot of complexity, maybe more so

than in counties. And especially because a number of the properties that we deal with are actually folks that don't actually own the land, they lease the land from the tribe and they own their home, and they own any built improvements. So all of the drainage, the shoreline structure, that's literally theirs, they own it, so they're responsible for it. But it can be a little bit of a balance.

Q. I'm hoping every unit could recommend two or three people that would be willing to participate in interviews. Do you think that that's something that you can assist with in the month of May?

[lead 1] I think that there are some people who would be willing to have conversations. So much of what we've been doing has really been armor prevention. People have reached out to us about an erosion concern and feel like they might need armor. And most of our visits have been to basically show to them that they don't need it. So I think it'd be fine for you to chat with them about their experience. But I'll just be honest, that we haven't actually put rubber to the road. We haven't actually done any projects yet.

Q. That's fine. I would also like to know where they are in terms of understanding [soft shore alternatives] and whether they're receptive, whether norms are shifting in that direction.

[lead 1] [With regard to] the perception thing and comfort with normal [reference to Krista Tippet's interview with Colette Pichon Battle about people's resilience in the face of constant change in the natural environment]: They're used to natural disaster. They're used to tornadoes. They're used to fires. They're used to floods. And I actually think that we're going to get to where people understand that they're used to bluffs eroding. [And they're thinking] "Oh, heck no, I don't want to buy a house that's perched on the edge, I want a house that's way back." You know what I mean. But that's not happening now...not just yet. Maybe a little bit.

Q. You said that most of these properties are leased tribal lands. Do you have a sense of whether people are likely to engage in improvements on leased land?

[lead 1] It's all within what they call the Executive Order boundary of the reservation. And within that, there is land that is owned by the tribe and there is land that's owned by various tribal families [in the form of] allotments. Those allotments are the leased lands. Back in the 50s, 60s, maybe even earlier, there were certain tribal members who actually sold off their allotments. So what we have is property that is owned in fee [fee-simple landowners] but is still on the reservation. So that's one framework to remember. I will say people definitely do come to us and don't necessarily understand the terms of their lease. All the leases are slightly different, but they all dictate that the structure itself is owned by the homeowner and not the responsibility of the tribe.

At the same time, tribal shoreline code is quite restrictive when it comes to the ability to build new or repair existing. The state is now catching up, I would say. But on the marine feeder bluffs you can't build new hard armoring, and if you have armor that is 50 percent degraded or more, it has to be removed. You can't repair it. So, it can be very challenging for people I think, to understand the lease terms, their responsibility and then balancing that with what they're actually allowed to do. And it comes down to protection of a habitable structure or protection of critical public infrastructure. I'm also gonna say that I think that people want to do the right thing. They want to do the right thing, but it's very challenging for them to understand. So it can

be sort of a hard conversation sometimes to try to say, “Okay, well, your house is actually fine. We've brought an engineer out to say to your house is set back far enough.” And it's more [about] understanding, of having comfort with a natural process.

Q. Do you have the tools, technologies and skills you need to do your job effectively?  
Do you feel that the Shore Friendly program is meeting its stated goals?

[lead 1] In some ways, yes. Like having accessibility to consultants who have taught us. We had some background, some education obviously, but this one-on-one time and the ability to bring in engineers... So, I have the authority of knowing when it's appropriate and when it's not, and nobody's saying you have to meet these certain criteria to bring out an engineer. That's awfully nice because it's given us a chance to really understand our shoreline better and be able to learn ourselves, so that we were able to do a lot of these site visits on our own. So that's been really wonderful.

One tool that I think has been lacking for us is there's no one at the tribe, like a mentor, when it comes to how you actually get a project done—from a funding perspective in particular. I worked for the Skagit River System Cooperative before this, and I've worked in project management before this, and I know how to engage consultants and the procurement process and things like that, but I think that understanding, “Hey, if you have a small project, like a planting project, that you want to get done, here are the funding sources you could possibly fit that into, and here is the timeline of when those funding sources come available.” Even with the small grants, I understood [what they are], but I didn't have anybody here saying, “Okay, Katie, every year the small grants happen at this time, so you need to have brought these projects to this level, in order to flip it into an actual grant proposal.” You know what I'm saying? So, I think that I could have used some more mentorship, like how to bring a project along through that process, especially when it came to the funding side.

Right now we're working with our Shore Friendly budget, the cost share program, and we're just now connecting with people where we've had an initial visit. So, we've had some follow up conversations, and now we're talking about actually providing assistance to them. We're new (I came on in August 2020 and then I was out for some period, and then back in) so we haven't had a lot of time to build this, but we're now at the point where we'd like to, we really need to, be making some work happen on the ground. But knowing the pathway for making it happen, like asking about house moving: We asked the larger group, “Hey, has anyone worked on a house moving project and what were the steps?” and “Did you go in and make all the calls for the homeowner, and get all of the house moving consultants in there?” and “When did you actually sign the landowner agreements?” And, you know, some of the logistics of moving a project through, I think we could use help with that.

Q. Is anybody engaging with you just for technical assistance? Or are they just utilizing the technical assistance as a step into the mini grants program?

[lead 1] This is the typical thing that happens. Almost everybody is worried about erosion, desperately trying to find someone at the tribe that they can connect with about it, particularly if they're on leased property. They're trying to understand, “what do I do? Is this me, is this the tribe?” And then we come out and help them: we provide technical assistance, sometimes it's technical assistance with Blue Coast Engineering, our engineering firm. We try to answer all of

their questions at that site visit, and the [follow up] report sort of solidifies it.

Then, I think people really want help with vegetation. That's one thing that they can really use help with. But, we're sort of stuck there because we have to pay prevailing wage. We have a tribal consortium called the Skagit River System Cooperative and they help implement environmental restoration. [For example] I'm working on three projects on the tribe that are larger scale restorations, and because they have a restoration botanist, I wanted to engage them and bring them on as a consultant. They have a crew of their own, but they also sub out to some vegetation management and planting folks. But the prevailing wage piece, nobody can handle that. You have these small companies and the idea of providing certified payroll is kind of a non starter sometimes. Yeah. Yeah, people are worried about erosion and they want that technical assistance,

Q. So, there's this need and there's this agreed upon outcome, but there's no established pathway.

[lead 1] I will say that I started out thinking that there was this program framework: here's how you do a site visit, and here's when you call an expert in, and here's how you do a veg project. But everybody's got their own thing going. And that's not necessarily a bad thing, but I do think that mentorship, I think would have been helpful for me. So now we're trying to build it as we go and create those systems. And that's not bad. I just feel that anxiety of not having gotten much work done on the ground.

Q. How would you describe a successful SF Project?

[lead 1] I will frame it the way the program has been operating for us: I consider Shore Friendly to have both programmatic elements and project elements. From a programmatic standpoint, we are now doing a lot of what I call armor prevention-type work. Homeowner education and relationship building with owners, so that over time there can be room for more projects, actual projects, to happen. So when I think of a successful project it's like: a homeowner reaches out to us with a concern; we go to the site and we're able to answer all of their questions (like, whether there's reason for concern or no reason for concern). We provide them with some actual tools, and that would include how to check and maintain their drainage and how they can improve vegetation conditions on their property (the drainage piece and the vegetation piece, I think we're still falling short).

Q. How would you describe an unsuccessful SF Project?

[lead 1] So when I think about what's unsuccessful, I think that that our programmatic element gets us to a certain place and then we kind of fall short. I've had a lot of visits where there's an owner who has minor [invasive] ivy problem or even a major ivy problem, and I've been able to calm their fears that their house isn't going to fall into the water. I've been able to tell them how they could modify their drainage. But I haven't been able to say—we can't endorse any of these folks—but here's a list of contractors who've done a training on working on steep slopes, and here's a list of contractors who can help you fix your drainage. That's where I think we're falling short.

But I feel like it has been quite successful. The program/projects that we have done so far have really been in that armor prevention category. I also think that, as we move into the future, what

success would look like is that some of these people that we have built this relationship and trust with would then be interested in and willing to remove the armor on their property. I don't think that there are too many people we've encountered that would want to do that willingly, even paying only half of it.

Q. So you feel that this relationship building sets a foundation where, going forward, there may be improved potential for removal (compared with a repair or rebuild)?

[lead 1] Yes, you'd be more likely to have that commitment. They do have to get something out of it, though, maybe it's going to improve an aesthetic, and they have the finances to do that. Or maybe they have a failing bulkhead that gets replaced with soft armor. One way we're different is that the Swinomish people have one rock and it's called the Swinomish reservation. And that's the only rock they're ever going to have, right? That's their reservation. So what [lead 2] and I are doing, is trying to bring it to its fullest environmental potential, which in some cases might be hard armor replaced with soft armor. Whereas other programs where they're working across multiple counties and hundreds of miles of shoreline, might not put too much energy on a property where they don't think they could fully pull out that armor and walk away. You know what I'm saying? The ecological lift for us is different, because our scope is different.

Q. *Reducing shoreline armor and restoring shoreline habitat* are explicit SF goals, but what you're saying is that you have additional long- and short-term goals [within the context of the sustainability of limited tribal lands].

[lead 1] Yeah. For us at least. Our name is in the hat, we're in the game. We're the people that they call with their concerns, we're building relationships... I'll say this one thing, they're basically running out of properties to do all these restorations. There's tons of places to do salmon restoration projects, but at some point you get through all the low hanging fruit. With publicly owned land it's easy to come in and make the change through the public process, but when you start talking about doing stuff on private land, that's a multi-year effort that requires an investment in a community, and participation in a community. And it [involves] armchair diplomacy, you got to actually see these folks face-to-face. Nobody's gonna just willy-nilly decide they want to do this, especially if they're going to spend their own money.

Q. What specific questions would you include on a SF participant survey?

[lead 1] I think that if I was to ask a background question, [it would be something like] what would success look like to you? Or success is maybe not the right word... what do you want this to look like? What would you like to see here? I'm trying to ask people that because I think that gets at your social science piece as well: what do people perceive as healthy shoreline?

Q. Do you have any other thoughts you'd like to share at this point, or do you have any questions I can answer?

[lead 2] Oh I don't know. I've been here for such a short time. I don't really have anything to add that [lead 1] hasn't already said with quite a bit more detail.

Q. Do you have any ideas about what makes a successful project, or do you have personal goals you'd like to share?

[lead 2] I see two pieces of success here. One of them is homeowner education, and

sometimes even just having a conversation with the homeowner about the issues on their property. And even if there is no restoration that comes out of it, just educating them about the importance of proper drainage. And the reality of erosion, and that if you see some minor erosion over several years, it doesn't mean that your house is about to slide into the ocean. You don't have to build a bulkhead, focusing on plants that are not just a wall of ivy, things like that. Just having those conversations and educating people, there is a measure of success even if you don't see a huge change in five years. If it's changing the way they're thinking and the the way that they live on that land, there is some success there. Of course, I would love to see every shorefront that we visit turn into some restoration project that we help them with. That includes re-vegetation or removing some sort of marine or some other kind of structure—I'd love to see that. But for the many reasons that [lead 1] just touched on, people are very hesitant, especially since we can't just say, "Let's tear up that bulkhead, and we're going to foot the bill!" And, "We're going to come up with a vegetation process designed for you, and pay for everything, and you can just sit back and enjoy your Mojito while we do everything." That not the reality and I think we have to look at success as more than just getting restoration projects done because sometimes all you can do is just slowly shape hearts and minds.

Q. Sounds like you guys have an ivy problem. Is that a widespread invasive in your area?

[lead 1] On the shoreline, I think it's probably the biggest. Blackberries too. But ivy is the biggest problem when it's on a steep bluff next to a house. So we're going to be doing a vegetation workshop with [another program lead] and Northwest Straits and Marine Resource Council and Ben Alexander. We're going to do as Beach walk with homeowners and hopefully get some good insights. So I think that will be extremely helpful.

[lead 1] One question I want to ask, or request. I think that working for the tribe, and it being a sovereign nation, it would probably be important for us to see the questions that you're going to ask the homeowners. Only because we're working hard to try to build this program as helpers, you know, I was telling [lead 2], "You get to be the hero. You're not regulatory." So I just want to make sure that it doesn't inadvertently bring something up for people, because there's people who definitely have challenges with the fact that they are the ones who are in charge of the bulkheads on leased property. [lead 2] and I have to be much more mindful than other programs because we work for a tribal government, and the state does not have jurisdiction on the reservation, [including] reservation uplands and tribal tide lands. So, I have to tread lightly and be really mindful of the fact that that's who in the driver's seat here. So, I appreciate that.



## Appendix D. Coded Interview Segments

Barriers		
Feasibility		
Mason	Cost/Benefit	they're just saying, you're taking my land from me? How dare you. What made my property worth more was this bulkhead, because it gave me 10 more feet of livable space.
Thurston	Cost/Benefit	it's very expensive and very slow. So that's a big, big challenge.
Thurston	Cost/Benefit	People who want to do the right thing and they themselves physically can't do it, or financially can't do it, and so then nothing happens. And that happens a lot of the time.
Thurston	Cost/Benefit	that idea of moving a house back, I brought that up many times, and people are overwhelmed by that concept. It's a difficult concept for people to understand, even if we could. I think it would helpful if we could show some sort of math that would [demonstrate that] the cost of putting in a new bulkhead could be comparable to the cost of moving your house back and reconnecting the infrastructure. If we can make those connections, I think it would be more palatable to people.
Thurston	Cost/Benefit	when it comes to doing a full slope, invasive removal and replanting project, now we're down to 10%, because it's expensive. Especially now in this competitive environment for contractors, they're looking at \$15-30k to do a shoreline planting project.
NW Region	Cost/Benefit	Definitely the cost implications.
Kitsap	Cost/Benefit	[property values are] the least of their concerns, or we don't talk about that as much as everything else.
King	Cost/Benefit	The other piece for King County specifically is the cost of armor removal projects,
King	Cost/Benefit	how much incentive we offer to property owners. So right now the way we're doing it is we are providing that technical assistance, a recommendation and then we have funding right now to move at least 12 projects through feasibility and conceptual design, at no cost to the homeowner, and then preliminary through final design for 4 projects, and hopefully implementation for those 4 at least in the next year and a half. But thinking about how can we incentivize more property owners in this urban area where everything seems to be more expensive, and providing enough assistance and incentive to really help move the needle.
Island	Risk Liability	there are places where people just can't remove their bulkhead, it'll completely wipe out their property, especially if they're surrounded by bulkheads. In that case, it takes a community effort and it potentially takes moving your house and a lot of things that are really overwhelming for people to hear.
Pierce	Risk Liability	We're talking about high bluffs landowners where drainage is kind of the biggest concern because folks are dealing with landslides as our winters get wetter.
Mason	Risk Liability	it carries a lot of risk, because if we're advocating [for bulkhead removal] and it goes and starts washing their property, or it starts hitting structures, then whose fault is it?

Thurston	Risk Liability	it's difficult because this is a much more dynamic and geologically unstable context compared to anywhere else I've done technical assistance work. It's kind of like if you were just only working with people who build their houses in the floodplain, and there's a river that's moving around.
Thurston	Risk Liability	I can tell from a remote assessment of a property in almost every case whether or not I would even begin to think about a bulkhead removal in that property. Unfortunately, there's many more unfeasible sites than there are feasible ones. And it goes back to the original thing that we were talking about, which was the the fact that they've been permitted to build so close that you just can't risk taking it out.
NW Region	Risk Liability	[It's possible that the] scale of the project is a constraint, maybe it's not economically viable for them, but it's also the demands of private property owners and the liability of working with private property owners.
King	Risk Liability	also the technical complexity in a lot of cases is a challenge. And so something that we haven't really done yet but might be part of our need in the future is to be able to provide assistance for transitioning hard armor to soft shore, where the property might still need the protection, either for the benefit of that property owner or to protect their neighbors. And so being able to help make that transition to at least softer techniques.
Thurston	Risk Liability	We can only do so much in a context where the impacts are so permissible and so unenforced against. So I'm worried about that piece because you just can't safely talk about a bulkhead removal on a site that's been permitted to build the house too close to the shoreline.
Mainstreaming		
Thurston	Change Resistance	the ones that are the most resistant are the folks who've experienced something like a severe landslide, and they just want to be able to replace their bulkhead and not change anything about the way they manage their property. And there's a portion of those (of the 45 or 46 people that I've actually been out to see their sites in Thurston most recently), maybe 15 or so, who would be the ones that want me to affirm their thinking.
Thurston	Change Resistance	"I shouldn't have to change my [site] management" or, "lawn is actually the right choice," that kind of thing. It's sort of like they want to hear, that their intention is, that they want to know that they're doing a good job. They do want that affirmation. Their intention is genuine, but they don't like hearing that [there are] other options that might be more beneficial. That would involve some significant change on their part.
Kitsap	Change Resistance	people want to know how much erosion to expect afterwards. And we talk about [how] soft shore protection slows erosion, but it doesn't stop it. So, yeah, all these things come up, and sea level rise too, and to be honest sometimes we don't have a hard and fast answer for them either. So that also makes the sell sometimes hard as well, right? Because you're acknowledging that these are very real concerns and real results of a project and just trying to set the expectations appropriately. And the projects that we have to show them, you know there's a good handful across Puget Sound, but it's not a humongous list.

Swinomish	Critical Path	[Q. So, there's this need and there's this agreed upon outcome, but there's no established pathway.] [Catey] I will say that I started out thinking that there was this program framework: here's how you do a site visit, and here's when you call an expert in, and here's how you do a veg project. But everybody's got their own thing going. And that's not necessarily a bad thing, but I do think that mentorship, I think would have been helpful for me. So now we're trying to build it as we go and create those systems. And that's not bad. I just feel that anxiety of not having gotten much work done on the ground.
Swinomish	Critical Path	knowing the pathway for making it happen, like asking about house moving: We asked the larger group, "Hey, has anyone worked on a house moving project and what were the steps?" and "Did you go in and make all the calls for the homeowner, and get all of the house moving consultants in there?" and "When did you actually sign the landowner agreements?" And, you know, some of the logistics of moving a project through, I think we could use help with that.
Swinomish	Critical Path	Even with the small grants, I understood [what they are], but I didn't have anybody here saying, "Okay, Katie, every year the small grants happen at this time, so you need to have brought these projects to this level, in order to flip it into an actual grant proposal." You know what I'm saying? So, I think that I could have used some more mentorship, like how to bring a project along through that process, especially when it came to the funding side.
Pierce	Immature Markets	there are some specific needs for landowners that are beyond what we as Shore Friendly staff can provide, [in terms of] getting them from what a best management practice is to actually being able to implement those things on the ground. There's definitely a dearth of consulting folks and engineers that have specific experience on the shoreline to be able to help folks implement things. It's not a skill that I have as program staff to be able to provide folks with stormwater drainage plans and things like that. Obviously, some of that stuff is beyond the scope of what the Shore Friendly program is intended to be. But what becomes the challenge is that we have a hard time finding professionals in the region to be able to direct folks to fill that gap.
Pierce	Immature Markets	We do have some of local lists that we have generated from various Shore Friendly programs holding workshops oriented towards different professional groups. So, for example, we have a contractor and consultant list, folks who participated in a Shore Friendly training at one point that we can provide to folks. We also have a landscaper and arborist list of folks that have participated in a Shore Friendly training. So we can provide those things to landowners, but especially when it comes to drainage management, and this is something that our folks at Washington Sea Grant are helping to figure out how to tackle, but I think that it's more a workforce development issue. I think there are a lack of people trained to provide that specific service of managing stormwater from a Shore Friendly perspective and with a comprehensive understanding of shoreline processes that make those needs for drainage control very unique and high risk.
Pierce	Immature Markets	getting them to the end result of having a property that they can feel comfortable is being managed in a way that is going to not increase risk to their property in any way and is shore friendly in terms of maintaining natural processes and habitats, there's kind of a gap in the middle [that needs to be filled by] those professional services that have specific shoreline perspectives and experience.

Pierce	Immature Markets	[This] is something that the Shore Friendly regional group and Jenna is aware of, talking about, thinking about how we can approach from a regional standpoint, because it's a little beyond us. We do understand and we want to be sure that, as much as we can, we're helping people to navigate that gap: between us telling them what is the best thing they can do, and understanding the barriers of actually implementing those things, how can we help bridge those barriers?
Thurston	Immature Markets	From an ecological and restoration angle, I also think one of the big obstacles is it's not easy to find information about rules and regulations without a little bit of a deep dive, but once they do, it's a lot easier to find the information about, say a bulkhead replacement, or how you go about [getting] a variance and much less information about why you shouldn't be pursuing a variance from the perspective of human health and safety, and how your property will perform in the face of sea level rise, and what that does as an ecological impact. So it's easier to find guidance and information on how to do the things that are highly impactful and [it's not so easy] for people to understand the thinking behind why those things might not be good. And that's a really big challenge.
Thurston	Immature Markets	they're willing to take the action but they can't. [And this might be] because of various challenges, one of the biggest being lack of labor to do the work that they themselves can't do, for example, or inability to find a contractor or a consultant who could put in a proper drainage system.
Thurston	Immature Markets	in this competitive environment for contractors, they're looking at \$15-30k to do a shoreline planting project. So, whether it's cost or other challenges, like the lack of labor, that becomes an issue and it gets harder and harder. So they do these smaller things, and they understand the benefits, and I think they work towards things over time. But I think the big obstacle is the scale of change.
Thurston	Immature Markets	we're actively trying to figure these things out. There's a lot of work with our collaborative to figure this out. Like, if we had more capacity, maybe more staff could fill some of the gaps that the consulting world can't fill right now. Or maybe we can hold these trainings to get more contractors aware of the need for proper shoreline drainage, and we can train them up so they know the best practices. So we're working on some of these pieces, and those are exactly the pieces I think that do need to help address that obstacle. I think it's not so much the lack of will, it's more the lack of a way.
NW Region	Immature Markets	the demand and also is in having qualified professionals available to do the site visits. There are really only three different consulting groups out there that really have the range of expertise and are willing to work with private property owners. There's plenty of coastal engineers and coastal firms in this region, but there's only a handful that are willing to work with private property owners. [It's possible that the] scale of the project is a constraint, maybe it's not economically viable for them, but it's also the demands of private property owners and the liability of working with private property owners. Pretty much all seven or Shore Friendly groups right now are all working with three consulting firms.
NW Region	Immature Markets	Region-wide we also are lacking expertise and appropriate contacts for drainage information. We know people who can go to a property and identify that there's a need to manage drainage better. But we don't necessarily have the resources available or the knowledge of who to recommend to landowners or who to contact to do the work, to do the design. Depending on some cases, in some situations it might be pretty simple, but it takes a lot of knowledge know about the geology of a site, especially if we're talking about bluffs sites, what it really entails and what's the appropriate mechanism for dealing with drainage on some of these complex bluff sites.

NW Region	Immature Markets	it'd be better to have somebody that's an expert in drainage, tied together with stormwater management, but drainage on a bluff in particular is a tricky thing and we need to find those people that can do that. So people that are doing the installations don't have the knowledge of the physical processes that are at play on the shorelines and the geology of the bluffs. Like you know, they can put a pipeline down a bluff, but is it being installed correctly? Is it the right application for that site? Are they using the right materials? Because if you do it wrong, you can create a problem that's maybe not even there yet.
Kitsap	Immature Markets	It would be great if we had a larger pool of experienced consultants, that design projects and we could give those options to landowners, because sometimes I feel like we're pretty restricted and, the list of people that do this work, they're also very busy, so it's challenging for homeowners, and that goes for contractors as well. I think it's because it's such a niche field. It's really making projects logistically challenging. Cost wise, I think it's driving the cost up and also just time wise as well, if it takes five months for a geotechnical engineer to get back to you with a design it really makes it an arduous process.
Swinomish	Immature Markets	our programmatic element gets us to a certain place and then we kind of fall short. I've had a lot of visits where there's an owner who has minor [invasive] ivy problem or even a major ivy problem, and I've been able to calm their fears that their house isn't going to fall into the water. I've been able to tell them how they could modify their drainage. But I haven't been able to say—we can't endorse any of these folks—but here's a list of contractors who've done a training on working on steep slopes, and here's a list of contractors who can help you fix your drainage. That's where I think we're falling short.
Swinomish	Immature Markets	I think people really want help with vegetation. That's one thing that they can really use help with. But, we're sort of stuck there because we have to pay prevailing wage.
Swinomish	Immature Markets	[For example] I'm working on three projects ... that are larger scale restorations, and because they have a restoration botanist, I wanted to engage them and bring them on as a consultant. They have a crew of their own, but they also sub out to some vegetation management and planting folks. But the prevailing wage piece, nobody can handle that. You have these small companies and the idea of providing certified payroll is kind of a non starter sometimes.
<b>Permitting</b>		
Thurston	Entrenched Practices	the challenge is that a consulting geotech or consulting engineer will provide the product that the client is asking for, they're not going to provide a product that says it doesn't make sense to build here, that this is actually a somewhat risky location. They kind of obfuscate the level of risk and it's very frustrating. And then you have these Shore Friendly folks who are coming out and trying to change their behavior in that context. And the other part that's very disturbing to me is that as I talk to these residential homeowners, they have complete faith that the county would not permit something that wasn't safe. That the geotech isn't going to say it's okay to build somewhere if it isn't, even if it's halfway down a deep-seated landslide, which I've seen multiple geotech reports that allow that.
Thurston	Entrenched Practices	We can't keep up with the scale of the impact and the minimal amount of repercussion there is for shoreline clearing and building things too close to the water. And we get called in and we're trying to help people understand why bulkheads aren't a good idea, but they were permitted to build so close to the shoreline with a variance [stating] that a bulkhead might become a necessity, and so we can't fix that problem. Right?

Island	Inter-agency Cooperation	we'll get word from planning or people who are in the regulatory field, "Oh, they're trying to install a seawall here," and they'll usually let my supervisor know, and sometimes I can get the contact information and say, "here's a Shore friendly Program, you've been in contact with these folks, so we'd love to talk about options." So, there is some room to do things like that. But that's for big, huge things where my manager is already being made aware of it and she lets me know that there's things like that happening.
Island	Inter-agency Cooperation	I think I'm building a really good relationship regulatory planning staff and it would be awesome if it triggered [a head's up], but at least they're aware of my program and they're aware of Shore Friendly, and they know that they can send us information. Then I can send those landowners my information, but ultimately, it's that landowners choice. So if something is happening, the permitters know me now and, if they're worried about something, will share my program information.
Pierce	Inter-agency Cooperation	in my particular county, the permitting office is willing to redirect people to the conservation district when they come to ask about bulkheads. And so it really is like an intervention.
Thurston	Inter-agency Cooperation	[BACK CHANNEL TO PERMITTING] I don't know how it works exactly. Kitsap County is a good example of a county that has had a Shore Friendly program in place and has internally worked really well with the public face of that program, and to become a resource for folks. They've drummed up so many projects, and I'm assuming that they work collaboratively with their internal office to be able to do that.
Thurston	Process	I think the obstacles or the barriers that I'm having, in the broader context, lie a lot more within the realm of things I can't control. [This] includes homeowner confusion about what is and isn't allowed from a regulatory perspective in the county in terms of shoreline management, and [the] challenge in getting that information from the county. Although the SMP program is currently being updated, and there is a new [website section available], there's sort of a story map and some online tools that make it a bit more helpful for homeowners who are trying to get answers to do so.
Thurston	Process	I think the important thing we need to understand is that Shore Friendly is this really powerful tool that we have to help people manage their shorelines in a way that really does balance human goals and ecological goals.
Thurston	Process	It's just a very, very complex situation, and I wish I could feel more confidence in the larger system that is supposed to be keeping track of no net loss (NNL) goals and keeping track of the repercussions if people completely clear cut their shoreline. Because that ancient big tree that's blocking the view was holding that slope in place and helping manage water, and now suddenly it's gone.
Thurston	Process	easier to find the information about, say a bulkhead replacement, or how you go about [getting] a variance and much less information about why you shouldn't be pursuing a variance from the perspective of human health and safety, and how your property will perform in the face of sea level rise, and what that does as an ecological impact.
Swinomish	Process	it can be very challenging for people I think, to understand the lease terms, their responsibility and then balancing that with what they're actually allowed to do. And it comes down to protection of a habitable structure or protection of critical public infrastructure. I'm also gonna say that I think that people want to do the right thing. They want to do the right thing, but it's very challenging for them to understand.

Island	Process	a lot of people get overwhelmed with all of the agencies involved and don't understand where the delegations [sic] are and how the programs split.
Mason	Process	it should come from the district who started to create the relationships, so that you don't have a third party and confusing, an already somewhat confused situation doing these projects. Most landowners are still at loss to get through all this stuff they [have to] do to try to fix a problem.
Thurston	Process	we set these generic standards for how far back or above you need to be from ordinary high water, or how big of a buffer you need, that doesn't look at the larger context of these sites.
Thurston	Process	The impression that I've had in both counties is more like confusion about what is and isn't allowed. A lot of it is people wanting to do the right thing. [For example] they want to know, can they remove trees for a view and, if not, what do they do? And they can't get a straight answer. Or do they need to get a permit to do invasive weed control on their shoreline, or can they just go ahead and do that? That's a desirable action, right? It's to address invasives. So, a lot of it has to do with confusion and frustration about the lack of clarity, and then the slow timing of getting information back from the governmental level.
Mason	Process	there's a lot of drones in the government right now that are trying to implement rules that don't make any sense—but that's the rule. Like, I need to have grates on my pier because sunlight needs to get through for eel grass. But maybe there's no eel grass beds around because that's not the grass bed area. So, we have to make it easy so for enforcement, that usually ends up setting the rules, because what can you enforce or not enforce? So then they just become ridiculous rules. So people on the ground that want to believe in this stuff say, this doesn't make sense. I can tell you right now, why am I doing this, you know, just added 30% of the cost of my project?
Public Perceptions		
Island	Emotion (fear)	I think people make a lot of emotional decisions when it comes to their their home and I absolutely understand that impulse to build a seawall.
Thurston	Emotion (fear)	the ones that are the most resistant are the folks who've experienced something like a severe landslide, and they just want to be able to replace their bulkhead and not change anything about the way they manage their property. And there's a portion of those (of the 45 or 46 people that I've actually been out to see their sites in Thurston most recently), maybe 15 or so, who would be the ones that want me to affirm their thinking.
NW Region	Emotion (fear)	everybody is fearing erosion, fearing change, fearing the impacts of sea level rise and rain. And that's probably the thing—Fear is the biggest barrier right now.
NW Region	Emotion (fear)	fear is definitely the one thing I think that keeps people from making the changes.
Pierce	Risk Awareness	it often takes more than one touch for folks to make those shifts just because it could feel like they're getting conflicting information, especially when we're talking about climate change and protecting shorelines
Mason	Risk Awareness	I can see people starting to build on top. I mean, their response [to sea-level rise] is to build [the bulkhead] taller. I'm not telling anybody I'm building it taller, I'm just gonna do it.

Thurston	Risk Awareness	there are old timers that we work with sometimes who've been out on the shoreline for a very long time that totally get that concept of the changing nature of the shoreline. Whereas, there's a lot of demographic change happening, there's a lot of money out there, and right now a lot of shoreline property that's being purchased by people who haven't lived in this type of context before because it's a great investment and you have these gorgeous views. So their tolerance for change is different. They're coming from suburbia, they're coming from these very controlled and neat and different landscapes that are easier to manage, that don't have obvious dramatic changes that lead them to want to take dramatic actions. So it's an interesting dynamic.
Thurston	Risk Awareness	development along the marine shorelines involves building in highly geologically unstable locations. And unfortunately, people don't want to wrap their heads around the risks involved
Thurston	Risk Awareness	It's fascinating to me, you know, [this perception that] somebody down the road was having a landslide [but people very nearby still feel immune to the risk e.g., "...it can't happen to me"]. It's like, well, you're actually part of the same geologic form and all of it is at risk. Working in this area, specifically for the past few years, it's been fascinating to see how people think about risk— how risk applies to them in their own life and their own decisions— and just how uncomfortable they are [living] with the dynamic nature of a shoreline. I mean, shorelines are inherently a place of dramatic change because you're at the interface between water and land. And that very visible change happens no matter what. And people are frightened by that change, even though it's just natural to the shoreline context. That's why bulkheads are so popular because they sort of temporarily stop the change. They make it seem like change isn't happening. It's not as visible. You don't see the erosion. You don't see the tree fall necessarily, because you've removed them all.
NW Region	Risk Awareness	their perception may be skewed, like when people perceive minor erosion as being a really big thing, sometimes they equate that to feet, when it's maybe only inches.
Thurston	Values & Beliefs	not so much flat out anti-government sentiment, I think the people who have that sentiment aren't calling us.
Island	Values & Beliefs	someone who's interested in keeping a bulkhead—which which we do get folks who are interested in that and occasionally you know, they'll be like, "No, we're not changing this"
Pierce	Values & Beliefs	the attitude of "well, my neighbors all have these things. So why can't I have them?" So a perceived unfairness [regarding situations where] structures have been grandfathered in.
Pierce	Values & Beliefs	anti government sentiment, i.e., "you can't tell me what to do on my own property."
Pierce	Values & Beliefs	a values thing. When we're advocating for natural resource conservation or habitat protection or enhancement, those come from a values position that might be different than the folks that we're talking to. They might value their property rights or their property value more than those things.

Mason	Values & Beliefs	<p>In Mason County, they've just updated their Shoreline Management Master Plan and its become much more restrictive and people are really frustrated with that. The Department of Fish and Wildlife has a horrible brand and image within the state. I mean, so I understand they're in the habitat program, and people don't like it, they're not just like this or that, their fish management is significantly disliked, or viewed as incompetent.</p> <p>[DO YOU ATTRIBUTE THIS TO ANTI-GOVERNMENT SENTIMENT?]</p> <p>Well, yeah... they're ** [part of a conservative-leaning demographic that prefer smaller government]. In Shelton it's less expensive land and so there's a large number of people on the shoreline. It's not heavily governed, so they used to getting away with whatever they felt like.</p>
Mason	Values & Beliefs	<p>this program is not going to be successful unless they're starting to turn belief systems around. And I don't think what we're doing right now is turning anybody who's middle to farther away from an environmental management perspective.</p>
Thurston	Values & Beliefs	<p>"this bulkhead is, in fact, necessary, it's doing a job that's needed..." and "I shouldn't have to change my [site] management" or, "lawn is actually the right choice," that kind of thing. It's sort of like they want to hear, that their intention is, that they want to know that they're doing a good job. They do want that affirmation. Their intention is genuine, but they don't like hearing that [there are] other options that might be more beneficial. That would involve some significant change on their part.</p>
Mason	Values & Beliefs	<p>I think for Mason County, right now, it's a very minimalist belief system that the government shouldn't be controlling [anything], that's what drives their value system. They shouldn't be permitted regardless, kind of thought process, right? And very few believe in government [to provide useful information]. So it has to come from a group like us, it has to come from somewhere else. We've got a little bit of clout with the community. There, even there, they're challenging us all the time. But because we have a long history with the farming community, we can [point to that] and say "Hey, look at the farming communities and what we've done. Now we're replicating some of those kinds of benefits for the shoreline."</p>

Opportunities		
Public Receptiveness		
Kitsap	Shifting Aesthetics	they have a structure that's falling apart and it's not very pretty, and they feel like they need to do something and they're wondering if building a wall again is really the best option for their property. Right? You know, not from an environmental perspective, but also from just their use and enjoyment and beauty as well.
Swinomish	Shifting Aesthetics	They do have to get something out of it, though, maybe it's going to improve an aesthetic, and they have the finances to do that.
Island	Shifting Awareness	I think more and more people are starting to understand that when you're part of a bigger process, and you do something like build a seawall or a bulkhead, you're impacting your neighbors too. You're making everything unsafe for everybody else, and that ultimately it's safer for you to be more in line with natural processes and give the beach some room to move and, you know, be a little less rigid.
Island	Shifting Awareness	because building bulkheads is becoming more difficult, people are more open to those alternatives and to being able to feel safe and protect their property using natural beach processes to their advantage to protect their properties.
Pierce	Shifting Awareness	I think a lot of the work that I do, and that many of my peers do, is still rooted in the origins of the project. You know, changing people's minds and getting information out there, that social marketing mindset we came from, and a lot of that is tied up in preventing new armor.
Pierce	Shifting Awareness	the amount of times neighbors share information with each other— I think our reach is actually larger than simply measuring the number of site visits. So I do think that we are making progress toward those program goals.
Mason	Shifting Awareness	right now, the only people that are participating are those that already have a fairly strong environmental acuity, or at least concern and want to participate. I mean, this program is not going to be successful unless they're starting to turn belief systems around. And I don't think what we're doing right now is turning anybody who's middle to farther away from an environmental management perspective.
Thurston	Shifting Awareness	there are old timers that we work with sometimes who've been out on the shoreline for a very long time that totally get that concept of the changing nature of the shoreline. Whereas, there's a lot of demographic change happening, there's a lot of money out there, and right now a lot of shoreline property that's being purchased by people who haven't lived in this type of context before because it's a great investment and you have these gorgeous views. So their tolerance for change is different.

Kitsap	Shifting Awareness	<p>And I feel like we've seen a change since we started in terms of just how many people are willing to consider something different and think out of the box and not get not just want a bulkhead. I think that's really where we are. And that's reflected in people reaching out to us and the amount of site visits that we've done done recently, and people are willing to hear what options they can consider.</p> <p>Yeah, they are coming to us with a small amount of existing knowledge. It's definitely not a totally new thing. They've read a little bit, there's an interest, or they're really worried about Puget Sound Health, or they have a structure that's falling apart and it's not very pretty, and they feel like they need to do something and they're wondering if building a wall again is really the best option for their property. Right? You know, not from an environmental perspective, but also from just their use and enjoyment and beauty as well.</p> <p>[CONSERVATION MOTIVATED?] Where that's the main part of the conversation? Yeah, like less than 5%. Not the majority. But then there are people who have experience or who grew up [on the Sound] and they remember fishing in the 80s, in the 70s. And there's a memory, there's a collective memory of better times and yeah, folks are definitely concerned.</p>
Swinomish	Shifting Awareness	<p>[With regard to] the perception thing and comfort with normal [reference to Krista Tippett's interview with Colette Pichon Battle about people's resilience in the face of constant change in the natural environment]: They're used to natural disaster. They're used to tornadoes. They're used to fires. They're used to floods. And I actually think that we're going to get to where people understand that they're used to bluffs eroding. [And they're thinking] "Oh, heck no, I don't want to buy a house that's perched on the edge, I want a house that's way back." You know what I mean. But that's not happening now...not just yet. Maybe a little bit.</p>
push/pull factors		
Island	predisposed to SF ideals	<p>Yeah, I encounter [situations where people believe a sea wall is necessary], but I don't encounter it as much for program participants because they're asking me, [someone] who they know is a scientist, for other scientists to come to their property to assess it. They're asking for that scientific expert to come to their property.</p>
Mason	predisposed to SF ideals	<p>right now, the only people that are participating are those that already have a fairly strong environmental acuity, or at least concern and want to participate.</p>
Thurston	predisposed to SF ideals	<p>I think that pretty much if people are responding to our program, they are looking for some sort of input and they're already trying to think about things slightly differently. So they're open to hearing options. The idea of what they're actually able to do is a different thing. But they're reaching out for that guidance. So I think they are open to that [input] for the most part.</p>
King	predisposed to SF ideals	<p>It is really variable depending on even within our region where you are. But I do think we have overall a pretty receptive base and people are interested in learning about what we're doing.</p>
Kitsap	predisposed to SF ideals	<p>[CONSERVATION MOTIVATED?] Where that's the main part of the conversation? Yeah, like less than 5%. Not the majority. But then there are people who have experience or who grew up [on the Sound] and they remember fishing in the 80s, in the 70s. And there's a memory, there's a collective memory of better times and yeah, folks are definitely concerned.</p>
Kitsap	predisposed to SF ideals	<p>Yeah, they are coming to us with a small amount of existing knowledge. It's definitely not a totally new thing. They've read a little bit, there's an interest, or they're really worried about Puget Sound Health (Kitsap, Pos. 12)</p>

Island	prior exposure to SF marketing	I think I have a really skewed sample, because I'm getting people who typically are here because they understand... they've watched a short webinar that [program staff] put on, or something like that. And they already kind of have that understanding.
Swinomish	prior exposure to SF marketing	Q. So you feel that this relationship building sets a foundation where, going forward, there may be improved potential for removal (compared with a repair or rebuild)? Yes, you'd be more likely to have that commitment. They do have to get something out of it, though, maybe it's going to improve an aesthetic, and they have the finances to do that.
Island	reality of sea-level rise	I think bluff erosion is a huge one, so when a home and property is at the top of a bluff, that's a big one we get here on Whidbey.
Thurston	reality of sea-level rise	that idea of moving a house back, I brought that up many times, and people are overwhelmed by that concept. It's a difficult concept for people to understand, even if we could. I think it would helpful if we could show some sort of math that would [demonstrate that] the cost of putting in a new bulkhead could be comparable to the cost of moving your house back and reconnecting the infrastructure. If we can make those connections, I think it would be more palatable to people.
NW Region	reality of sea-level rise	There's nobody that we've met doing hundreds of these site visits, in this region, that is a climate change and sea level rise denier, okay. It's happening, they all see it and they feel it, and we never get into the reasons why it is or isn't happening, but it's happening. And they are fully aware that it's happening, they see it.
NW Region	reality of sea-level rise	the one thing that I think that we need to move towards is really encouraging more managed retreat. People need to start to understand that the land use planning that has gone on is not going to work for them into the future. And so you know, moving your house back, moving your infrastructure back away from the shoreline, is going to be the solution in the long run. And knowing that, I think we need to find a way to make people understand that they're better off doing that sooner or later.
Swinomish	reality of sea-level rise	[With regard to] the perception thing and comfort with normal [reference to Krista Tippett's interview with Colette Pichon Battle about people's resilience in the face of constant change in the natural environment]: They're used to natural disaster. They're used to tornadoes. They're used to fires. They're used to floods. And I actually think that we're going to get to where people understand that they're used to bluffs eroding. [And they're thinking] "Oh, heck no, I don't want to buy a house that's perched on the edge, I want a house that's way back." You know what I mean. But that's not happening now...not just yet. Maybe a little bit.
Swinomish	reality of sea-level rise	it can be sort of a hard conversation sometimes to try to say, "Okay, well, your house is actually fine. We've brought an engineer out to say to your house is set back far enough." And it's more [about] understanding, of having comfort with a natural process.

Needs		
Knowledge, Skills & Abilities		
Thurston	marketing collateral	I think it would helpful if we could show some sort of math that would [demonstrate that] the cost of putting in a new bulkhead could be comparable to the cost of moving your house back and reconnecting the infrastructure. If we can make those connections, I think it would be more palatable to people.
Island	marketing collateral	I think it'd be nice to have a little booklet or something that is really small and contained in my pocket on site visits with examples of a bluff restoration we did, look at all the beautiful plantings... [maybe] before and after of several different types of shorelines that I can bring to site visits [to share] an example of someone in a similar situation, and [say] here's what they did... And we helped! I think that would be really valuable for more visual [information] so people can see what their property could be and how it could be beautiful with a few trees on it, even though it's a little less view showing. That would be so valuable.
King	Skills & Abilities	my background is in nearshore restoration and salmon ecology. So I feel like my own technical background is pretty solid.
Island	Skills & Abilities	I do have the tools.
Island	Skills & Abilities	looking for more educational opportunities so that I could feel comfortable delivering more of the technical advice as well. I rely really heavily on the technical advisors that we contract with, and I'd love to be able to do some of that myself. So I am looking for, open to, educational opportunities and that sort of thing.
NW Region	Skills & Abilities	Yes, I have most of what I need.
Kitsap	Skills & Abilities	Yes. I think that I have the tools, skills and knowledge to to perform the needs for the program. And I think the fact that I have a pretty general, well-rounded background in natural resource management helps.
Pierce	Skills & Abilities	in terms of contacting people and doing our site visits and providing recommendations, I do feel like I have what I need.
Swinomish	Skills & Abilities	having accessibility to consultants who have taught us. We had some background, some education obviously, but this one-on-one time and the ability to bring in engineers... So, I have the authority of knowing when it's appropriate and when it's not, and nobody's saying you have to meet these certain criteria to bring out an engineer. That's awfully nice because it's given us a chance to really understand our shoreline better and be able to learn ourselves, so that we were able to do a lot of these site visits on our own. So that's been really wonderful.
Kitsap	Skills & Abilities	I don't have formal education or training in outreach or education. And I think some training in that could be helpful, from my personal perspective. For instance, giving effective workshops and that kind of thing. Because there's two avenues for the program, there's this outreach and education lane and then there's the project coordination lane, and they're pretty different.
Thurston	Skills & Abilities	Capacity is a limiting factor for all of us. Because especially when it comes to projects, like a bulkhead removal, those are incredibly complex and time intensive and expensive and any single person can't manage more than two or three of those at a time. Most of these organizations that are doing this work, you're wearing a million hats, and that's a really, really big challenge. (Thurston, Pos. 7)

Human Resources		
Mason	Staffing	we had a king tide in January with really significant rainfall and a flooding event, and had seven people within a two to three day time-frame. And because of the situation I'm in, it's taken us up till now [late-March] to start planning meetings and begin helping them through the process.
Thurston	Staffing	I would [be able to assist] to a limited degree. My time is definitely pretty packed. As long as I have a little bit of heads up, I can send out emails and try to encourage participation.
Thurston	Staffing	I'm drowning right now, it's so difficult because [it's been] very slow in providing the follow up, because of literally a lack of physical hours in the day to be able to do it.
Mason	Staffing	with Mason Conservation District about nine months now. When I came in, I was the manager for the individual doing the Shore Friendly, who moved on after about six months of my tenure. And so I am now filling in the holes by doing the Shore Friendly program while we're hiring. And so I've been just touching enough to keep it rolling, but not able to engage it fully. So my answers are partial.
Thurston	Staffing	Capacity is a limiting factor for all of us. Because especially when it comes to projects, like a bulkhead removal, those are incredibly complex and time intensive and expensive and any single person can't manage more than two or three of those at a time. Most of these organizations that are doing this work, you're wearing a million hats, and that's a really, really big challenge.
Thurston	Staffing	But because of our strain and our limited capacity, I have been slow to do advertising. At our office we provide a lot of different types of technical assistance and we have a waitlist of 80 to 100 people at any time, and it's six months minimum to a year that people are waiting for our assistance. The shoreline is in that mix too, so there's a lot of interest out there, there's just not enough capacity.
Thurston	Staffing	From the perspective of being able to go out and meet people where they're at and address questions, that type of thing. The biggest obstacles that I've had are literally capacity, the time I have to dedicate to this. That's a staffing challenge in my particular office. So, that's probably the largest obstacle I have for program effectiveness. When I was in my prior position at Mason, I was able to spend a good half of my time dedicated to the program and providing that technical assistance directly. So I was doing a better job, quite frankly.
Mason	Staffing	I would rather not [have to assist], it's not that I don't like to help. I agree with the work you're doing and I'm not trying to be disagreeable, just trying to survive the workload I have right now.
Mason	Staffing	we're limited, staff wise, not just because of my situation. The Shore Friendly position is funded as a part time position, and I'm fairly certain we could keep a full position going on all this. So that actually creates a bit of a self-fulfilling prophecy because we don't want more coming through the door than we can manage. And so even if we thought we could get more people through the door, the outreach is not as aggressive as it could be, because we can't handle the backlog that will be created. So that's a conundrum.
King	Staffing	time I think is one factor for us just because we're among the newer Shore Friendly programs. So just trying to get our feet under us and get some projects off the ground.
NW Region	Staffing	I do definitely need a staff member if I had the budget to do that to have a full time staff member,

Local & Regional Support		
King	Regional	it's also been really helpful for us to be able to follow the example of other Shore Friendly programs. And I think [regional administrative staff] is working on getting the regional support for Shore Friendly established a little bit more, which is going to be really beneficial because right now we have monthly Shore Friendly program leads. And those are really great for just hearing what other people are doing and also being able to kind of troubleshoot together and work through and kind of realize what are the things that we're all struggling with, for example, and how can we work together to improve those. And I think that Jenna has been really receptive and also has proposed some different ways that the Shore Friendly regional program can support the local programs.
Island	Regional	I have a very supportive work environment and [the people directing the work] are wonderful. I can always reach out to them with any questions.
Island	Regional	I feel like there's a really good network of people, Lisa included, who are doing similar jobs, but in a different way.
Kitsap	Regional	I appreciate that we have regional programs support from ESRP and our collaboration with our local programs, I think it's been really beneficial to be able to learn from each other and our experiences and share and all that.
Island	Regional	we have that relationship with the technical consultants who can really deliver those reports to the landowners.
Swinomish	Regional	knowing the pathway for making it happen, like asking about house moving: We asked the larger group, "Hey, has anyone worked on a house moving project and what were the steps?" and "Did you go in and make all the calls for the homeowner, and get all of the house moving consultants in there?" and "When did you actually sign the landowner agreements?" And, you know, some of the logistics of moving a project through, I think we could use help with that.
Swinomish	Regional	we're going to be doing a vegetation workshop with [another program unit and consultant]. We're going to do a Beach walk with homeowners and hopefully get some good insights. So I think that will be extremely helpful.
King	Local	all of our partners in the collaborative are really knowledgeable and experienced with other elements of shoreline restoration, so the vegetation management side of things, and also just the best ways to engage with local homeowners in different areas within our region. Having the support from the local Salmon Recovery lead entities is really valuable as well to prioritize our target areas because a lot of the King County shoreline is armored, just like all around the sound, but especially King County. It's a very urban area. So being able to prioritize where we start has been really helpful.
Swinomish	Local	having accessibility to consultants who have taught us. We had some background, some education obviously, but this one-on-one time and the ability to bring in engineers... So, I have the authority of knowing when it's appropriate and when it's not, and nobody's saying you have to meet these certain criteria to bring out an engineer. That's awfully nice because it's given us a chance to really understand our shoreline better and be able to learn ourselves, so that we were able to do a lot of these site visits on our own. So that's been really wonderful.
Swinomish	Local	One tool that I think has been lacking for us is there's no one at the tribe, like a mentor, when it comes to how you actually get a project done—from a funding perspective in particular.

Swinomish	Local	I know how to engage consultants and the procurement process and things like that, but I think that understanding, “Hey, if you have a small project, like a planting project, that you want to get done, here are the funding sources you could possibly fit that into, and here is the timeline of when those funding sources come available.” Even with the small grants, I understood [what they are], but I didn't have anybody here saying, “Okay, every year the small grants happen at this time, so you need to have brought these projects to this level, in order to flip it into an actual grant proposal.”
Swinomish	Local	I think that I could have used some more mentorship, like how to bring a project along through that process, especially when it came to the funding side.
NW Region	Local	We can make it make do with what we have, but it would be good to have additional data and additional contact information.
NW Region	Local	The challenges I have, mostly because we work in such a diverse area or large area, having updated landowner contact information, updated assessors information with not just the address of their property, but the add to their mailing addresses is hard to acquire.
NW Region	Local	And we also have a need up in the north sound for quite a bit more data collection to identify opportunities, those most feasible parcels. More data collection for looking at house setbacks on bluffs and, remapping all the armor, looking at some change analysis in the amount of armor that's present.

Outcomes		
Desireable - Awareness		
Pierce	prevent new armor	on the interaction level and so sometimes landowners taking no action is the desired result. You know, when I have someone reach out to me and say, I just had a landslide and I think that I need a bulkhead and you're the first person that popped up on Google, can you talk to me? And we have a conversation and a site visit and at the end, they say wow, I feel a lot better now. And I think I'm gonna plant plants instead of building a bulkhead. That's a success to me, but isn't a project necessarily. So I think it's more difficult to measure success in those prevention interactions.
Pierce	prevent new armor	if we focus entirely on how much armor are we taking out, that can feel like a really low number, but we are an important part of preventing new armor.
Swinomish	prevent new armor	I feel like it has been quite successful. The program/projects that we have done so far have really been in that armor prevention category.
Swinomish	seed-planting	I think we have to look at success as more than just getting restoration projects done because sometimes all you can do is just slowly shape hearts and minds.
Swinomish	seed-planting	homeowner education, and sometimes even just having a conversation with the homeowner about the issues on their property. And even if there is no restoration that comes out of it, just educating them about the importance of proper drainage. And the reality of erosion, and that if you see some minor erosion over several years, it doesn't mean that your house is about to slide into the ocean. You don't have to build a bulkhead, focusing on plants that are not just a wall of ivy, things like that. Just having those conversations and educating people, there is a measure of success even if you don't see a huge change in five years. If it's changing the way they're thinking and the the way that they live on that land, there is some success there.
Island	seed-planting	I would also consider it a success when we just go out and talk to someone even if they don't, you know, implement our actions... I wouldn't even see that as a negative. That they come out, they're interested, we talked to them, we give them their assessment for their home. I still think that there's success there, even if it's a very long time before they implement things. Because they're at least then thinking about the nearshore, and they're talking about it, and they're maybe looking at their property a little bit different.
Pierce	seed-planting	if someone is at least open to the ideas that are provided to them on their first site visit, I feel like that's still a success. Because maybe the next time they have something happen they're going to get in touch again. And yeah, it just it takes more than one touch to to get folks all the way shifted in their attitude or shifted and then taking a desired action. Like planting a seed, yeah, right. Letting people come to it.
Swinomish	trust-building	as we move into the future, what success would look like is that some of these people that we have built this relationship and trust with would then be interested in and willing to remove the armor on their property.
Swinomish	trust-building	I think we have to look at success as more than just getting restoration projects done because sometimes all you can do is just slowly shape hearts and minds.
Island	word-of-mouth	I'd also consider it a success when they spread the word about Shore Friendly as well. So when they refer other people to this program, or to me or Lisa, when that's done, I also consider that successful.

NW Region	word-of-mouth	we're able to assist the landowner all the way through implementation of the work. And they're happy with the changes, and they're out there talking to their friends and neighbors about it, and encouraging other people to try these similar things, if it's possible. That would probably be the ultimate success.
King	word-of-mouth	And maybe something where they would recommend us to their neighbors and just spread the good word about shoreline restoration.
Pierce	word-of-mouth	Just the amount of times neighbors share information with each other — I think our reach is actually larger than simply measuring the number of site visits.
Desireable - Tangible		
Pierce	ecological	If we're talking about armor removal, I think it's usually a lot easier to measure. If armor is reduced or removed, or converted to more of a soft shore protection, that's much easier to see and to measure.
Mason	ecological	One where we met some ecological benefit. The landowners come away from the process feeling it was beneficial. And that we are able to demonstrate that we benefited both the ecology and the shoreline owners in some way.
Thurston	ecological	I think any site visit to a marine shoreline homeowner that results in them taking an action that is going to be beneficial, both for them and for the environment, I consider that successful. So if that's addressing an invasive weed problem, if it's planting vegetation that's going to benefit the near shore, if it's improving how they're managing their drainage so that it doesn't impact the beach or destabilize their own property. Those are all wins from my perspective. Certainly, a bulkhead removal is really fantastic. That's the golden apple that we're all trying to try to get to, to help people who don't need that armor get rid of it.
NW Region	ecological	If we're defining a project as one where maybe there's a bulkhead, a successful project would be that we're able to assist the landowner all the way through implementation of the work. And they're happy with the changes,
Kitsap	ecological	one that meets the restoration goals for restoring shoreline processes and maximizing that armor removal, but at the same time still meeting landowners goals.
King	ecological	a successful Shore Friendly project is one where the property owners have been able to take an action to provide ecological uplift on their property, and it's something that they are happy with also.
Swinomish	ecological	I would love to see every shorefront that we visit turn into some restoration project that we help them with. That includes re-vegetation or removing some sort of marine or some other kind of structure — I'd love to see that.
Island	property owners	A successful project is one where a landowner gets technical advice from us and takes that advice, honestly—whether or not they do the mini grant and whether or not they need help with the implement implementation phase—if we give them a technical report, and they do some of the things on a technical report, I consider that a success.
Island	property owners	But, basically, when people implement the things we say they should implement, I think that's success.
Mason	property owners	One where we met some ecological benefit. The landowners come away from the process feeling it was beneficial. And that we are able to demonstrate that we benefited both the ecology and the shoreline owners in some way.

Thurston	property owners	I think any site visit to a marine shoreline homeowner that results in them taking an action that is going to be beneficial, both for them and for the environment, I consider that successful. So if that's addressing an invasive weed problem, if it's planting vegetation that's going to benefit the near shore, if it's improving how they're managing their drainage so that it doesn't impact the beach or destabilize their own property. Those are all wins from my perspective. Certainly, a bulkhead removal is really fantastic. That's the golden apple that we're all trying to try to get to, to help people who don't need that armor get rid of it.
Kitsap	property owners	one that meets the restoration goals for restoring shoreline processes and maximizing that armor removal, but at the same time still meeting landowners goals.
Kitsap	property owners	I feel that a successful project is one that is completed with the Shore Friendly incentives that are given, and those incentives are the assistance that we give: the cost share (like the mini grant) that goes towards the homeowners' financial costs of a project and [also] the permitting assistance. So, for me, for it to be successful I really feel like we have to give enough help to be able to move that project to completion.
Kitsap	property owners	I want people to feel good about what they did, and feel okay about all money that they spent, to [be able to] say, "Yes, it was an investment that was worth it and has value."
King	property owners	a successful Shore Friendly project is one where the property owners have been able to take an action to provide ecological uplift on their property, and it's something that they are happy with also.
Swinomish	property owners	when I think of a successful project it's like: a homeowner reaches out to us with a concern; we go to the site and we're able to answer all of their questions (like, whether there's reason for concern or no reason for concern). We provide them with some actual tools, and that would include how to check and maintain their drainage and how they can improve vegetation conditions on their property (the drainage piece and the vegetation piece, I think we're still falling short).
Kitsap	win-win	one that meets the restoration goals for restoring shoreline processes and maximizing that armor removal, but at the same time still meeting landowners goals.
King	win-win	a successful Shore Friendly project is one where the property owners have been able to take an action to provide ecological uplift on their property, and it's something that they are happy with also.
Mason	win-win	One where we met some ecological benefit. The landowners come away from the process feeling it was beneficial. And that we are able to demonstrate that we benefited both the ecology and the shoreline owners in some way.
Thurston	win-win	I think any site visit to a marine shoreline homeowner that results in them taking an action that is going to be beneficial, both for them and for the environment, I consider that successful. So if that's addressing an invasive weed problem, if it's planting vegetation that's going to benefit the near shore, if it's improving how they're managing their drainage so that it doesn't impact the beach or destabilize their own property. Those are all wins from my perspective. Certainly, a bulkhead removal is really fantastic. That's the golden apple that we're all trying to try to get to, to help people who don't need that armor get rid of it.

Not Desirable - Tangible		
Island	no action taken	To me, an unsuccessful project, I would say, would be one where the landowner, I guess, maybe one that never gets off the ground or when a landowner implements something that would be the opposite of what we recommend.
Thurston	no action taken	Unsuccessful projects, from my perspective, are not so much those site visits where the folks listened to you and they don't necessarily adopt the recommendations, but when you go to those sites, you make recommendations and they're willing to take the action but they can't.
Swinomish	no tangible benefits > ecological	when I think about what's unsuccessful, I think that our programmatic element gets us to a certain place and then we kind of fall short.
Mason	no tangible benefits > lose-lose	Okay, so unhappy landowner because he didn't get what they sold him... poorly engineered whatever we did... we don't get the ecological benefit that we thought we were going to get, because we can't understand the system well enough.
Kitsap	no tangible benefits > property owners	if their dissatisfaction about their completed project was enough that they wouldn't recommend the program to other people, or recommend that type of action. Like if they would say, "Oh, I would never do this type of armor removal or software project ever again, if I could go back in time, I wouldn't do that,"
Kitsap	no tangible benefits > property owners	I think if a project has to do major repairs within one to two years of it being constructed, I don't want to be harsh and say that that's an unsuccessful project—because these types of projects are all pretty novel, we're kind of in new territory—but I do feel like that's a setback for these types of projects when a homeowner has to spend money, one to two years after they've done such a large investment.
Thurston	no tangible benefits > property owners	Unsuccessful projects, from my perspective, are not so much those site visits where the folks listened to you and they don't necessarily adopt the recommendations, but when you go to those sites, you make recommendations and they're willing to take the action but they can't. [And this might be] because of various challenges, one of the biggest being lack of labor to do the work that they themselves can't do, for example, or inability to find a contractor or a consultant who could put in a proper drainage system. People who want to do the right thing and they themselves physically can't do it, or financially can't do it, and so then nothing happens. And that happens a lot of the time.
King	no tangible benefits > property owners	I think an unsuccessful Shore Friendly project really would be one where the landowner is not happy with whatever the outcome was. Right. Yeah, I mean, sometimes there might be a technical assistance site visit and it turns out that No, there's no way we could do an armor removal here, but maybe we can provide the property owner with some other recommendations or other resources for them to follow up on. But I would hope that whatever the outcome from the restoration side, that we are leaving with a happy landowner.

Not Desirable - Awareness		
NW Region	resists information	<p>An unsuccessful project, we don't normally engage in unsuccessful projects... We've definitely had some challenges getting through where, especially when you're dealing with HOAs or community owned parcels, I've definitely had some problems trying to get the entire community on board, to agree that it's a good thing. So that there doesn't end up being infighting amongst the community. And I've had some of that certainly, you know, where the board has basically had to just kind of take charge and say we're doing the project, and you still have some disgruntled landowners within the community that just don't think it's a necessary activity. So it's really you know, it's a differing opinions on what's needed. But I wouldn't call it unsuccessful because the project still went forward, but it certainly was challenging to get through it.</p> <p>I guess if you want to talk about a failed project, and the misunderstandings of some of the processes that happen, I had a planting project that just got stopped. We were giving funding to a landowner to put plants on the top of their bluff. And in the time it took us to get to the point where they could do the work, and I purchased all of these plants because they had had a slide during these last storms in the winter, and they were so concerned that if they put any big trees or things that are going to become big trees near the bluff or on their property that when they fall, they're going to take large amounts of land with them. Without realizing that trees we're putting in right now are like a foot tall, and they're not going to take any large amount of soil with them. And there's also a lot of benefit, and I'd explained so many times the benefits of putting these trees and these shrubs and putting something more than just small stuff in. And they're going to be dead by the time these trees are ever big enough to take any amount of soil with them. So sometimes the notions of what's really happening on the shorelines are so varied among the property owners that we talk to.</p>
Island	resists information	when a landowner implements something that would be the opposite of what we recommend.
Pierce	resists information	<p>I think an unsuccessful project would be someone saying either "I don't believe what you're telling me about the importance of these processes," or "whatever, I'm going to choose to do the thing that I now know is more harmful to the environment." Obviously, we're not going to tell people to not repair a bulkhead in a situation where they need a bulkhead to protect their house because of its particular location or whatever. But when someone says, "I'm rejecting this information you're giving me," either about the level of risk in a particular situation or whether a bulkhead is needed, or "I reject that these processes are important at all, and I'm going to choose to ignore those recommendations and take the more harmful route." I think that's unsuccessful.</p> <p>[HAS THAT HAPPENED?] I have had a couple of times where that has happened. Not a whole ton of them. Because people do come to us voluntarily to participate in this program. And I do let folks know upfront what we're about so they can kind of make that choice before we get out onto their properties. [This might be interpreted as] anti government sentiment, i.e., "you can't tell me what to do on my own property." And that might be just my own biased read on those interactions and there is also the attitude of "well, my neighbors all have these things. So why can't I have them?" So a perceived unfairness [regarding situations where] structures have been grandfathered in. I think it's also a values thing. When we're advocating for natural resource conservation or habitat protection or enhancement, those come from a values position that might be different than the folks that we're talking to. They might value their property rights or their property value more than those things.</p>

PROGRAM EVALUATION		
intangible impacts		
Pierce	attitude change	Measuring everything from attitude change to things on the ground, that is a very good question that we have talked about as a regional group, but haven't necessarily found the answer to.
Swinomish	prevention	So much of what we've been doing has really been armor prevention. People have reached out to us about an erosion concern and feel like they might need armor. And most of our visits have been to basically show to them that they don't need it.
NW Region	prevention	I'd love to know more about whether people decided to not make a change because of the information we provided to them. They no longer feel like they need a bulkhead and therefore they haven't moved ahead with trying to get one because of the information we provided. And we prevented something from happening.
tangible impacts		
Pierce	action taken	6 have taken actions on [some sort of] projects where I was helping the landowner actually plan or implement a project. But there are plenty where folks have just taken our recommendations and done planting and stuff like that.
Pierce	action taken	whether people have implemented our recommendations (on their own), after we provide them is not one that we have found a very good way of answering.
Pierce	action taken	I don't think it captures everybody who's taken some of the actions that we recommend.
Kitsap	action taken	there are other folks that have received a technical site visit by our contracted coastal geologist, that's a private professional that we contract with. They've gotten a site visit and a memo, like a short summary of the site visit and recommendations.
King	action taken	in terms of getting all the way to having restored their shoreline, we don't have any yet.
Swinomish	action taken	[Of those] no one has actually implemented anything or taken further steps, but there have been people that we've had more than one visit with, and we are in conversation with about vegetation improvements, drainage improvements, and then one person has a house moving project [on a bluff].
Island	action taken	hard to know who's actually implemented and it's a little hard to say because, you know, some people were implementing things before we came out to visit them.
King	action taken	we have right now four properties that have had a second site visit. And we also have 10 that are in the process of having a consultant come out and do further feasibility assessment to see if armor removal would be a possibility. And there are a couple of past projects from that King Conservation District leadership time that have moved forward a little further with design, but those were more through the landowner incentive program. And so those ones aren't exactly Shore Friendly King County projects.
Swinomish	action taken	we haven't actually put rubber to the road. We haven't actually done any projects yet.
Island	action taken	two people who have completely closed out, they've done the whole process, received the mini grant, and their reimbursement.

Thurston	action taken	I would say like to two-thirds probably are acting on the advice that they get in one way or another.
Mason	action taken	a third piece would be ineffective communication of the benefits that were created; if we did the project but never figured out how to document the [satisfaction level or ecological benefits].
Pierce	incentive (mini-grant)	we have implemented one Shore Friendly mini grant project and we have two more that are under contract this year for planting and drainage improvement projects.
Pierce	incentive (mini-grant)	We only have confirmation from folks who have received financial assistance through the Shore Friendly grant program. We certainly track, and of course we have contracts with those landowners which track the actual project details as well.
Kitsap	incentive (mini-grant)	we've got two people that have signed up for a mini grant, like a cost share, and one of those is working on their designs. They haven't actually been reimbursed yet for the design. Another one did some geotechnical investigation and they were reimbursed, and then another set of people, actually three landowners working together, they've had a permitting meeting with the county and with me. So I would also count that as taking an incentive. And then another landowner who's identified through Shore Friendly, but [is part of a] different grant running alongside Shore Friendly that has to do with providing additional design assistance. And so now they're in that lane.
Island	incentive (mini-grant)	We have had six people begin the mini grants process.
Pierce	site visit	around 60 site visits
Pierce	site visit	we really focus on numbers of site visits that's how we track and measure success because that's something that's very trackable across all people and all programs.
King	site visit	we've done about 40 initial site visits.
Swinomish	site visit	my last entries were towards the end of October. There [were] 35 and we've probably gotten another 10 since.
Island	site visit	We've had 37 site visits
Thurston	site visit	So [since] July 2019, we've had, according to my numbers, at least 145 participants across the three groups. It's likely going to be more than that because we're just updating our reporting for April 1. So, but it at a minimum, it's at least 145 participants. And I would say, of the ones that I've worked with at Thurston, that that would be in this most recent round, like 46 or 47? So I would say, you know, probably about 30. I would say like to two-thirds probably are acting on the advice that they get in one way or another. Some of them are acting on multiple things as well.
NW Region	site visit	since July 2021, we've done over 75 segments already. But [if we] look back to how many years ago we've been doing this, 300 or more site visits. It's hard to say what point people are in [the process]. People approach us for some kind of assistance at the site visit and, and there are delays in us getting to them, and we don't know on a lot of them whether they're going to take action or not. We provide them with a report and then try and come back to them. So I'm not quite sure how to answer your question.
Kitsap	site visit	there are 57 site visits that we've done since 2020.

Tracking Process		
Island	day-to-day activities	I feel like I'm really involved in every step of the process. I liaise with the technical advisor but all the homeowners, they speak with me, they set everything up through me. I help them with a lot of the aspects... I'm the one talking to them at the site visit because the technical advisors are often taking taking notes and getting the data they need. So I'm getting a lot of face time and communication with them. So I feel like I'm very involved every step of the way.
Swinomish	project tracker use	we have a tracking sheet that, honestly, the only reason I am using is to report. I think that it's something that could be so much more, but it's really not a tool for me, It's part of the reporting mechanism.
Swinomish	project tracker use	the consultants who we use mostly, they have the (ArcGIS) Survey123 abilities (because they do visits for other other Shore Friendly programs that ask them to use that) and they don't even use it because what they type in gets rolled up into that tracking sheet and sent off as part of their figure reporting. But they actually find it a little bit cumbersome, and they ended up just using an Excel spreadsheet and sending it to us in the end.
Swinomish	project tracker use	so we track it, but are not using it as a way to look at people through the process. Part of that is because we're a small program too.
Mason	project tracker use	I have a tracker, I can go back and try to figure out what where things were so that I can give you better answers. [see tracker]
Kitsap	project tracker use	my tracking [Excel] sheet where I'm tracking all the site visits and potential projects, and there are 57 site visits that we've done since 2020. And then I was looking through how many folks have actually started the process, and I define starting the process those that have had a site visit and then decided to take like an incentive. So from that group, we've got two people that have signed up for a mini grant, like a cost share, and one of those is working on their designs. They haven't actually been reimbursed yet for the design. Another one did some geotechnical investigation and they were reimbursed, and then another set of people, actually three landowners working together, they've had a permitting meeting with the county and with me. So I would also count that as taking an incentive. And then another landowner who's identified through Shore Friendly, but [is part of a] different grant running alongside Shore Friendly that has to do with providing additional design assistance. And so now they're in that lane. So it's diverse, but I wanted to give you an idea of those starting the process. And there are other folks that have received a technical site visit by our contracted coastal geologist, that's a private professional that we contract with. They've gotten a site visit and a memo, like a short summary of the site visit and recommendations. But, there's quite a big group of those who haven't moved forward yet with recommendations. So I don't know if that's helpful at all.
Pierce	prospecting & lead generation	I'm the first person to be doing this work in Pierce County, and the first year was a lot of outreach. The first year, or I guess the entire time [was limited by] COVID. During that first year, we were unable to do site visits for a while.
Pierce	prospecting & lead generation	[Tracking people who fail to follow through] is not something that we [currently do].

Island	prospecting & lead generation	Once somebody applies, I call them or reach out in whatever way they indicate is best, so usually a phone call, and then if I don't hear back from a voicemail or they don't return my call, I'll email them, between one and two months later. And then if I don't hear back from them after that, I'll gray them out. So I still have a record of their application, but I don't follow up with them again. Because I figure there's probably other things going on in their life, but I can still easily refer to them if in a year they're like, "Oh, hey, I forgot about this."
Island	prospecting & lead generation	Basically anybody who applies goes into my tracking sheet. Once they're in there, I reach out and the goal is to schedule a site visit with them. I change the colors of the entry based on the process: if they're ready to schedule a site visit, or if they've had a site visit, and then once I deliver the technical report to them, my goal is to reach out in a couple of months. If they don't reach out to me first, I just check in and see if they need help with implementation. I'm doing that now for all the program participants who were given a site visit before I took on the coordinator role. I'm reaching out to everyone who's had a site visit and hasn't indicated that they want to move forward, just to make sure that they're still aware we're here.
Island	prospecting & lead generation	My first outreach to them [comes after] they've applied, [made a] site visit request, and that's their their first indication. Either that will come to me through a survey form that they fill out, or it will come through Lisa Kaufman with Northwest Straits. When I receive that, put them into our database, my master tracking sheet, with all the all the people who've ever applied. Then I give them a call within a few days and just talk to them. I'll leave a message or ask them if it's a good time, that sort of thing. And then I have a little follow up note on each one that I highlight and it tells me my next steps for following up.
Island	prospecting & lead generation	So for example, if someone calls or puts in an application, and I give them a call. If I don't hear back from them for a few weeks, I have a note in here to email them. If I don't hear back from them between two weeks and maybe a month, I'll email them too, because some people just prefer to communicate by email and might miss a voicemail.
Island	prospecting & lead generation	I typically do two attempts at contact.
Kitsap	prospecting & lead generation	from my experience in the last four or five years, projects take a long time to develop and to move along. So even if you're swamped with site visits, like for instance, I sent out postcards in February and I thought about trying to tier them so that I wouldn't have all these inquiries at one time. But it was more cost effective to send the mailing in one batch instead of two. So, now I'm a little bit slow and going through them, but I don't feel like it's an issue because I made that initial contact and asked people to be patient and we're going through them and doing all these first site visits. And really from that pool, how many potential projects do you actually get out of the initial batch of interest? I would imagine it's probably going to be 5% or less, or something like that, 10% or less. So even if those go forward they will all go on their own trajectory, some of them a lot slower or faster than others, because the way our Shore Friendly Kitsap model is we have the homeowners be their own project managers and we're just the resource to help them move their own project along. We have different incentives to help them further their project, but we don't take the project and bid out the design and bid out the construction. We let the homeowner be in charge of that. And then just you know, we provide as much hand holding as each homeowner needs.

Survey Planning		
NW Region	questions	<p>You know, we're always trying to figure out what it is that they've learned that's changed their minds, or change their perspectives, because this is all really based on a social marketing principle. You know, so what information did they did they receive from us, or did they gain from somebody else, their neighbors or somebody, that made them move forward with what we would consider to be doing the right thing?</p> <p>To make a change that benefits the habitat and themselves. Because our goal ultimately is about the habitat. That's why we're doing this, it's about habitat and species protection and conservation. Do it through a lens of assisting landowners to reduce their risks, in a sense when it comes to erosion, so what I would love to really be able to hone in on what what things are, they learned that we told them or they gained from us that made them change their mind.</p> <p>What else would I want to ask them... I guess if there's something else that we [could do], what are we missing? What information do they want, that we could give them, that would help them to make a change on their property?</p> <p>[DEFERRED MAINTENANCE?] Yes, that brings me to another answer for you, as far as what I'd like to know: Did the services that we provided to them—be it the site visit and/or additional funding—help them move ahead with something? Did that accelerate the timeline in which they would make a change? And that could be a two-parter because: one, we give them the information, so would they make a change more quickly because of the information; and second, if they got funding from us or some kind of additional support, would they move to do that project more quickly, because of the services and support that was available?</p> <p>I think another big question, too, we do a lot of site visits for people that don't have shoreline armor, because we're trying to prevent any new armor from getting put in. But that's one of the hardest things to track, you know, is the no-action alternative, I'd love to know more about whether people decided to not make a change because of the information we provided to them. They no longer feel like they need a bulkhead and therefore they haven't moved ahead with trying to get one because of the information we provided. And we prevented something from happening.</p>
Kitsap	questions	<p>[RE: 2018 program evaluation w/ interviews of past participants] I just wanted to say that I thought a lot of those questions are still relevant. I was also thinking about the types of questions... I was just thinking [that] legacy seems to be a motivating factor in Kitsap County. There's a segment of the population that the property has been in their family for generations, it's been passed down. I'm just curious. I find that kind of intriguing. If that comes up, or to have a question that gets at those motivating factors for why people want to do these projects. And then I guess for our program, our mini grant is \$6,000 which is up a little bit from when we started. And I'm just curious if people feel like that's enough financial assistance to really move these projects because they can be any \$80k, you know. I'm [also curious] about since project completion, if folks have continuing concerns or fears about erosion, and if those fears have gotten worse, stay the same or better. So I'm just wondering about that.</p>
Swinomish	questions	<p>I think that if I was to ask a background question, [it would be something like] what would success look like to you? Or success is maybe not the right word... what do you want this to look Like? What would you like to see here? I'm trying to ask people that because I think that gets at your social science piece as well: what do people perceive as healthy shoreline?</p>

NW Region	questions	one of those questions I would want to answer: what would it take for you to move your house and your infrastructure out of the risk hazard zones?
Island	contact method	I [have addresses] and that might be another good way to do outreach. I adjust with time and resources. I don't know that mail is maybe the best tool, but I could be also biased because I never open it. So it might be worth mailing them
Thurston	contact method	The other the other way it could happen is I could send out a blanket email to all the people that we've worked with and say, "Would you be interested in participating in this? Then contact X person," you know, contact you and see if you get a response that way.
NW Region	contact method	Initially, it would be beneficial for me or our program to reach out to all the various people, maybe by email, that we have worked with, to request permission for somebody else to contact them. You know, because I don't want to be giving out personal information or emails or phone numbers randomly and have them think that we don't honor their information. We have an agreement not to share their information externally without permission. So I think initially will be better if I sent an email to all of our participants saying you know, please let us know if you are willing to be contacted by x group.
NW Region	contact method	The database that we currently have of shoreline landowners is only their actual parcel information for their property, but a good majority of property owners don't live at that location. We're sending out 1000s of postcards, we want to know the majority of those postcards are coming to the right place. And getting access to that information is time consuming, and the county assessors are not usually willing to just give us a list. Another list it would be good to have access to would be the MLS lists for real estate, so that we could keep up with new property owners.
Kitsap	contact method	I think email would probably the the best way to first reach out, and then maybe after the initial email, follow up with a phone call. And I can I can help with that initial contact.
King	contact method	Probably phone or email. For a lot of our Vashon residents a phone call is better than email.
Island	point of contact	I've worked really hard to build trust with these landowners and I do occasionally encounter people who are already hesitant because I'm with the county and they see me as a regulatory person. I have to do a great deal [to reassure them] we're not regulatory, we don't...
Island	point of contact	because there's so many layers, I'd almost rather contact them
Island	point of contact	I've already worked to build that trust and there are some people who I think would be very uncomfortable with being reached out to by a state agency through this program, because they've participated in it. I think that a lot of people would be very confused and feel like they lost some trust in the program.
Pierce	point of contact	My inclination would be to have it come from Shore Friendly staff, particularly for those of us who are programs at conservation districts. We are careful about our sharing landowner information of any kind with agencies that have any sort of regulatory arm and so I don't think conservation districts would be able to just give you our participants contact information. So I don't think it could come directly from WDFW. And we're pretty clear when we provide site visits to folks that we're not going to share any of the information that we gather during that site visit with anybody other than them.

Pierce	point of contact	when we submit our tracking documents, even to Jenna we remove our landowners names and and even the addresses, we just provide the drift cells in which we're working.
Mason	point of contact	I believe it should come from the district who started to create the relationships, so that you don't have a third party and confusing, an already somewhat confused situation doing these projects.
Mason	point of contact	I would rather not [have to assist], it's not that I don't like to help. I agree with the work you're doing and I'm not trying to be disagreeable, just trying to survive the workload I have right now.
Mason	point of contact	[COULD IT COME FROM WDFW?] In Mason County, they've just updated their Shoreline Management Master Plan and its become much more restrictive and people are really frustrated with that. The Department of Fish and Wildlife has a horrible brand and image within the state.
Thurston	point of contact	I think in the case of the Conservation Districts, and certainly in my case, I would say I would prefer to be the point of contact. We're really particular about [protecting] personal information from people or about people that we work with [basically we don't share info, at all]. The other the other way it could happen is I could send out a blanket email to all the people that we've worked with and say, "Would you be interested in participating in this? Then contact X person," you know, contact you and see if you get a response that way. I would [be able to assist] to a limited degree. My time is definitely pretty packed. As long as I have a little bit of heads up, I can send out emails and try to encourage participation.
NW Region	point of contact	I think there's maybe two different steps to that. Initially, it would be beneficial for me or our program to reach out to all the various people, maybe by email, that we have worked with, to request permission for somebody else to contact them. You know, because I don't want to be giving out personal information or emails or phone numbers randomly and have them think that we don't honor their information. We have an agreement not to share their information externally without permission. So I think initially will be better if I sent an email to all of our participants saying you know, please let us know if you are willing to be contacted by x group.
Kitsap	point of contact	I think it would make most sense for me to make the initial contact and kind of introduce you and what your role is and what your project is about. And then, once I help you make that initial contact, after that, kind of step away. I think email would probably be the the best way to first reach out, and then maybe after the initial email, follow up with a phone call. And I can I can help with that initial contact.
King	point of contact	Oh, probably for our program, it would be whoever is the project manager assigned to their project. So it's either right now me for Mid-Sound, Debbie [unintelligible] from the Conservation District or Greg Rayburn from King County. We use smart sheets to track our site visits and when people sign up to request assistance on our website, that webform is linked to our smart sheets, I mean, it's a smart sheets form. Then we get notified when there's a new entry in the smart sheet and then one of us will go in and assign that person to either me or Greg, depending on where they are located right now, is how we're doing it. And so different landowners' main point of contact will be different people depending on where they are. So, for ours, it's probably whoever the project manager they've been working with. [BEST METHOD?] Probably phone or email. For a lot of our Vashon residents a phone call is better than email. Yeah, and I think we could, I could, help facilitate that.

Swinomish	point of contact	So, you would be reaching out to homeowners who we have engaged, who are wanting to move to the next phase? Yeah, I would do that through through us. And, the reason why is because I think that being part of tribal governments, there's a lot of complexity, maybe more so than in counties. And especially because a number of the properties that we deal with are actually folks that don't actually own the land, they lease the land from the tribe and they own their home, and they own any built improvements. So all of the drainage, the shoreline structure, that's literally theirs, they own it, so they're responsible for it. But it can be a little bit of a balance.
Swinomish	point of contact	I think that there are some people who would be willing to have conversations. So much of what we've been doing has really been armor prevention. People have reached out to us about an erosion concern and feel like they might need armor. And most of our visits have been to basically show to them that they don't need it. So I think it'd be fine for you to chat with them about their experience. But I'll just be honest, that we haven't actually put rubber to the road. We haven't actually done any projects yet.
Swinomish	point of contact	I think that working for the tribe, and it being a sovereign nation, it would probably be important for us to see the questions that you're going to ask the homeowners. Only because we're working hard to try to build this program as helpers, you know, I was telling Jason, "You get to be the hero. You're not regulatory."