Watershed Company

GREEN SHORES FOR HOMES
PILOT PROJECT SUMMARY REPORT

MODUS
from insight to impact

STEWARDSHIP CENTRE
FOR BRITISH COLUMBIA

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EXECUTIVE SUMMARY

Green Shores™ for Homes (GSH) is a new voluntary, incentive-based program of the Stewardship Centre for BC (SCBC) that helps waterfront homeowners restore natural shorelines and enjoy the many recreational, scenic, environmental, and shoreline-protection benefits they bring. In 2014, the SCBC launched the Green Shores for Homes BC Pilot Program to engage homeowners in four pilot communities[1] to identify key barriers and solutions for adopting shore-friendly practices and to determine strategies for successfully implementing the GSH project province-wide. The project was overseen by an Advisory Committee which included representatives from the pilot communities as well as representatives from the provincial government and NGOs. This report provides an overview of the findings from GSH workshops, an analysis of primary actors, challenges and opportunities related to shoreline alterations, strategies and opportunities for local governments, and key recommendations for successfully implementing the GSH program across BC.

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Workshops. The series of "barriers and breakthroughs" workshops were hosted by the SCBC with support from the pilot communities. With the exception of the initial Thetis Island Scenarios Workshop, homeowner workshops were open to the public but targeted towards waterfront homeowners in each of the test communities. Professional workshops targeted participants who worked in industries related to shoreline development/protection including local government staff/politicians, realtors, engineers, architects, developers, landscape architects, general contractors, and landscape contractors. Workshop participants learned about the GSH program and discussed key motivators and barriers for homeowners to adopt shore-friendly practices. Groups then discussed key interventions, such as financial incentives, education, streamlined approval processes, and technical support from GSH professionals, which could help homeowners adopt GSH practices.

Islands Trust

[1] Thetis Island, Powell River Regional District, Cowichan Valley Regional District, and West Vancouver

Situational Analysis. The primary actors involved in shoreline restoration generally include property owners and professionals such as developers, building contractors, engineers, architects, landscape architects, biologists and landscape contractors. Local governments also play a key role in facilitating shore-friendly practices and protecting the integrity and health of shorelines in their communities. The top five barriers identified in workshops, in order of importance, were: 1) Strong perception of high costs 2) Cost of removal of existing hard armouring and/or adjusting or replacing existing docks 3) Concern over government involvement in private lives, lack of trust that it will not "over-step" and impose requirements 4) Lack of awareness of Green Shores approaches and 5) Lack of knowledge of and belief that they will function well and look good, and that they will provide lasting protection. The main motivators were improving ecosystem health, cost-effectiveness, reducing risk of erosion and flooding, and maintenance of aesthetics and views.

Challenges for Homeowners. Homeowners often face the greatest risks from shoreline erosion and/or flooding, whether the root of the problem occurs on their property or other adjacent or uphill properties. One of the greatest challenges homeowners face are the costs or perceived costs associated with shoreline protection infrastructure and maintenance. Another key challenge that homeowners face is a general lack of knowledge about shore-friendly practices, including a general lack of awareness/information on Green Shores.

If homeowners haven't experienced the downside to hard armouring they may not feel GSH is relevant for them. These factors combined with a lack of government support and incentives, complex permitting processes and regulations, and lack of qualified/certified professionals can make it challenging for homeowners to adopt GSH practices. Finally, and significantly, participants in each of the workshops made it clear that they do not trust local government, and that this would be a barrier to their participation if GSH were led solely by government.

Opportunities for Homeowners The most significant motivator reported by homeowners in the workshops was to protect and enhance ecosystem health and biodiversity by preserving important habitats, minimizing pollutants and reducing cumulative negative effects. Another key motivator for homeowners is reducing the risk of property damage and preserving their assets,

including land values associated with the usable parts of the property. A key benefit of GSH practices is that they provide cost-effective solutions for homeowners while supporting the long-term health and well-being of shoreline ecosystems[2]. Other motivators for homeowners include shoreline aesthetics, views, and privacy screens between public and private spaces (for example, vegetated berms/banks to separate private property from public beach).

Challenges for Professionals. Professionals involved in shoreline restoration or in developing waterfront homes and properties face many of the same challenges as homeowners when it comes to adopting shore-friendly practices. These include: a general lack of knowledge about GSH practices or the value they can provide; scepticism about the long-term durability of soft armouring approaches, and desire to minimize costs and maximize profit. Other factors, such as complex permitting processes and regulations, lack of government support, and lack of incentives and financial support, and lack of certification or recognition for professionals can make it challenging to develop shore-friendly homes.

Opportunities for Professionals With the right support systems in place, GSH could create many opportunities for professionals. Local government support and incentives (i.e., streamlined approvals, density bonusing, etc.) could make it more profitable and desirable for professionals to develop shore-friendly homes and properties. Creating naturally beautiful and functional shorelines and waterfront properties could raise the profile of GSH professionals and help to bring credibility and confidence to their work. And widespread recognition of the program would make certification valuable and could even create new markets for GSH professionals.

Challenges and Opportunities for Local Governments Homeowners and professionals often look to local governments to take the lead in guiding the general form and location of development – however, local governments have limited capacity and multiple demands on their fiscal and human resources. However, GSH practices can greatly benefit local governments and help to achieve their long-term goals. GSH practices can provide opportunities for local governments to protect their local assets, support local fishing industries (by protecting aquatic and shellfish habitats), support outdoor recreation and tourism, and preserve the beauty and identity of their waterfront communities. Local stewardship through GSH may save local governments money in the long run.

Recommended Strategies Based on the public and stakeholder workshop results, the most important strategies that the Stewardship Centre for BC needs to implement through the GSH program are:

1. Develop an educational and promotional initiative targeting homeowners and professionals. Include information about legal concerns, permitting and approvals, and joint homeowner agreements. This first step will provide a basis for professional certification, broaden awareness of the program, and address the most important set of barriers.

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[2] See *Greening Shorelines to Enhance Resilience, An Evaluation of Approaches for Adaptation to Sea Level Rise;* guide prepared by SNC-Lavalin Inc. for the Stewardship Centre for B.C.

2. Develop a professional certification program. This is a prerequisite to providing recognition or awards of any kind, and will increase the credibility and exposure of the program, creating a built-in incentive for private professionals to promote Green Shores. In developing the program, consider potential liability associated with certification.
3. Work with others to streamline approvals for Green Shores, leveling the playing field vs. hard armouring or providing an incentive for Green Shores approaches.
4. Explore and then develop carefully targeted incentives. The most important target would be accelerating retrofits of hard armouring to Green Shores, rather than rewarding soft shores approaches on new sites or where a retrofit will already happen (where they already cost less so have a built-in incentive). An alternative leverage point is an incentive for the first Green Shores project done by a professional. It is recognized that non-financial incentives are an important part of this strategy that overlaps with the other strategies (e.g. expedited approvals for GSH compliant applications).

Conclusions and Next Steps The workshops done as part of the pilot led to deeper understanding of the most important barriers and solutions relevant to BC communities large and small, in both freshwater and marine contexts. Drawing on that understanding, the Stewardship Centre for BC now has a strong outline of the four primary strategies it needs to employ to implement the Green Shores for Homes program, along with associated work plans for delivering on these strategies through a sequence of interrelated tasks. The implementation strategies and work programs are a strong starting point for the next steps of work, but require thoughtful review and considered refinement.

INTRODUCTION

PROJECT CONTEXT AND PURPOSE

Green Shores for Homes (GSH) is a voluntary, incentive-based program of the Stewardship Centre for BC (SCBC) that helps waterfront homeowners restore natural shorelines and enjoy the many recreational, scenic, environmental, and shoreline-protection benefits they bring. The benefits of Green Shores approaches are:

- Protection and enhancement of natural shoreline environments;
- Improved accessibility to shorelines, eliminating drop-offs and walls;
- Improved opportunities for strolling, kayaking, foraging, and other beach recreation;
- Lower cost shoreline protection from erosion and flooding.

Currently, most homeowners protect their properties from erosion and flooding with hard armouring such as retaining walls. These traditional practices are costly, can create further erosion problems, and contribute little to ecological shoreline functions. The purpose of the GSH program is to encourage homeowners to adopt Green Shores practices that realize broader benefits from their waterfront property.

The Green Shores initiative has been underway in both Washington state and British Columbia for some years, beginning with the development and piloting of a rating system for large developments. In the US, substantial research and development in recent years has led to a Green Shores for Homes program there, with targeted marketing and partnerships with local governments. The Washington and BC organizations share information and expertise in order to maintain momentum and alignment on both sides of the border.

In 2014, the SCBC launched the Green Shores for Homes (GSH) BC Pilot Program. The purpose of the pilot is to engage homeowners in four pilot communities – Thetis Island, Powell River Regional District, Cowichan Valley Regional District, and the District of West Vancouver – to identify key barriers and solutions for adopting shore-friendly practices, and to determine strategies for successfully implementing the GSH project province-wide.

Stewardship Centre for BC

The project kicked off with a Shorelines Scenarios Workshop on Thetis Island in June 2014. GSH technical professionals led groups of participants to three sites, each dealing with different forms of shoreline erosion. Groups assessed each site, explored possible solutions, and discussed potential incentives for promoting shore-friendly practices. This was followed by a series of workshops in Powell River Regional District, the Cowichan Valley Regional District, and West Vancouver. To gain a deeper understanding of issues and opportunities that homeowners face with regard to GSH, two workshops were hosted in each of these three communities; one for homeowners, and one for professionals involved in shoreline building, protection, and/or restoration.

This report provides an overview of the findings from GSH workshops, an analysis of primary actors, challenges and opportunities related to shoreline alterations, strategies and opportunities for local governments, and key recommendations for successfully implementing the GSH program across BC.

OBJECTIVES

Key objectives of the pilot program include:

- Raising awareness and strengthening understanding of the GSH program
- Identifying key motivators that would encourage homeowners to adopt GSH practices
- Identifying key barriers that would prevent homeowners from adopting GSH practices
- Identifying key interventions that would increase adoption of GSH practices
- Understanding different types of issues associated with different shoreline communities (i.e., lakeshore versus coastal communities).

ACKNOWLEDGEMENTS

The consulting team, consisting of Modus Planning Design and Engagement and Lees + Associates, wish to acknowledge the essential contributions of the following people:

- DG Blair, Executive Director of the Stewardship Centre for BC, who has ably quarterbacked this project;
- the participants in the workshops, upon whose time and interest this work depended;
- local government staff at the Islands Trust, Powell River Regional District, District of West Vancouver, and Cowichan Valley Regional District, who helped organize, advertise, and run the workshops; and
- the Green Shores for Homes Advisory Committee, who have lent invaluable guidance to this work.

ACRONYMS

Acronyms are used throughout this document. A glossary of common acronyms is included in Appendix A.

SUMMARY OF ENGAGEMENT ACTIVITIES

ADVISORY COMMITTEE

To oversee and support the GSH Pilot Program, the SCBC formed a BC Pilot Advisory Committee including representatives from Powell River Regional District, Cowichan Valley Regional District, District of West Vancouver, Islands Trust, BC Lake Stewardship Society, Washington Sea Grant, West Coast Environmental Law, Climate Action Secretariat, and members of the SCBC & Green Shores Technical Advisory Committee. The Committee met on a generally monthly basis leading up to and during the project, and participated in a workshop to scope and sequence GSH program implementation activities.

WORKSHOPS

The series of "barriers and breakthroughs" workshops were advertised through local government websites, local newspapers, community posters, and email invitations to network mailing lists with support from Advisory Committee members. Workshops were hosted by the SCBC with support from the Islands Trust, Powell River Regional District, Cowichan Valley Regional District, and District of West Vancouver.

With the exception of the initial Thetis Island Scenarios Workshop, homeowner workshops were open to the public but targeted towards waterfront home-owners in each of the test communities. Professional workshops targeted participants who worked in industries related to shoreline development/protection including local government staff/politicians, realtors, engineers, architects, developers, landscape architects, general contractors, and landscape contractors.

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The following provides a summary of workshop participants in each of the four pilot communities:

- **Thetis Island Shoreline Scenarios Workshop (June, 2014):** 35 participants including a mix of property owners and professionals.
- **Powell River Homeowner Workshop (November, 2014):** approx. 25 participants
- **Powell River Professionals Workshop (November 2014):** approx. 20 participants
- **Cowichan Valley Professionals Workshop (November 2014):** 16 participants
- **Cowichan Valley Homeowner Workshop (November 2014):** 18 participants
- **West Vancouver Professionals Workshop (November, 2014):** 18 participants
- **West Vancouver Homeowner Workshop (January 2015):** 27 participants

Workshop participants learned about shore-friendly practices and the GSH program and discussed key motivators and barriers for homeowners to adopt shore-friendly practices. Groups then discussed key interventions, such as financial incentives, education, streamlined approval processes, and technical support from GSH professionals, which could help homeowners adopt GSH practices.

An overview of workshop results is provided as an Appendix.

SITUATIONAL ANALYSIS

OVERVIEW

The primary actors involved in shoreline restoration generally include property owners and professionals such as developers, building contractors, engineers, architects, landscape architects and landscape contractors. Local governments also play a key role in facilitating shore-friendly practices and protecting the integrity and health of shorelines in their communities.

The following describes some of the most important results from each of the pilot communities:

- **West Vancouver** is unique because they have a head lease on the water lots along their shoreline. This lease allows them much more control and flexibility in working on the shoreline, and reduces the permitting required of them from senior governments. The District also has a dedicated 0.5 FTE position for shoreline improvements, and works with landowners to jointly soften the shoreline, with the landowner responsible for work on their property, and the District responsible for work beyond it. While West Vancouver's waterfront property is some of the most valuable in Canada, making the cost of improvements relatively less significant for homeowners, they are also the most concerned about costs, and about the distribution of costs and benefits between private landowners and the municipality.
- **Cowichan Valley Regional District** discussions focused on Cowichan Lake, distinguished by active landowner associations, a lack of concern over sea level rise, and a lack of confidence in the ability and/or commitment of the local government to support an initiative like Green Shores.
- **Powell River Regional District** is an example of a jurisdiction without Building Permits, meaning that government control over development is looser and some regulatory interventions are not available. In that context, the Regional District has adopted an education and community outreach approach to influence development in the coastal zone.
- **Thetis Island** is part of the Islands Trust, and has a different regulatory regime, with narrower powers relying heavily on zoning to protect the sensitive natural environment. While certain financial opportunities exist, such as tax exemption covenants, the Islands Trust cannot hold land or offer direct financial incentives. Despite the differences, interventions identified in the Thetis Island workshop (which used a less formal structure) overlap with those identified in the other three workshops. These interventions are included in this report, with those identified in other workshops.

Results showed remarkable consistency and support a clear direction for interventions to enable adoption of Green Shores practices by homeowners and the professionals who assist them or regulate their activities.

In particular, the motivators were consistent across both homeowners and professionals, and among the different sites. The top motivators were:

- **Improving ecosystem health:** people recognize their dependence on the ecosystem, are seeing improvements, and want to see further progress
- **Reducing risk of property damage:** primary concern related to land value and retention of usable parts of the property, especially if you include sea level rise as part of this motivator
- **Cost-effective infrastructure and maintenance:** a good return on investment is important, especially for developers and builders
- **Maintenance of aesthetics and views**

Sea level rise was, of course, not a motivator for communities concerned with freshwater shorelines. Otherwise, the main differences between locations were among the barriers – and these differences were relatively minor.

The top barriers, in order of importance, were:

1. Strong perception of high costs
2. Cost of removal of existing hard armouring and/or adjusting or replacing existing docks
3. Concern over government involvement in private lives, lack of trust that it will not "over-step" and impose requirements
4. Lack of awareness of Green Shores approaches
5. Lack of knowledge of and belief that they will function well and look good, and that they will provide lasting protection
6. Belief that you can engineer or manage the environment to do as you like
7. Complex, opaque permitting process that is oriented better to hard armouring, coupled with complex regulations
8. Need for coordination among neighbours, with concerns that an unusual approach that will look different from neighbours and may put you at risk if neighbours don't also use it
9. Lack of qualified / certified professionals

The following provides an overview of the key challenges and opportunities each of these actors face in terms of shoreline protection and restoration, based on results from the homeowner and professional workshops.

HOMEOWNERS

Challenges

Homeowners or property owners often face the greatest risks from shoreline erosion and/or flooding, whether the root of the problem occurs on their property or other adjacent or uphill properties. One of the greatest challenges homeowners face are the costs or perceived costs associated with shoreline protection infrastructure and maintenance.

- For property owners with existing "hard armouring," such as seawalls or dykes, it is expensive to remove the existing infrastructure and replace it with "soft armouring" before the end of the life of the hard armouring.
- The fact that studies have shown that soft armouring techniques provide a significant cost advantage over hard armouring (in all different types of coastal environments) and provide effective long-term protection against flooding and erosion[3] is not well-known: there is a common perception that hard armouring is more cost-effective or durable over the long-term.

Another key challenge that homeowners face is a general lack of knowledge about shore-friendly practices. This can include

- a general lack of awareness/information,
- belief that they can engineer or manage the environment to do as they like,
- lack of understanding that no infrastructure or hard armouring options may cause or increase issues over time,
- lack of awareness or appreciation for the implications of sea level rise,
- fear that erosion assessment may affect their insurance rates,
- concern over loss of use to the property line, or
- fear of using a new approach that will look and function differently from neighbouring properties.

If homeowners haven't experienced the downside to hard armouring they may not feel GSH is relevant for them. These factors combined with a lack of government support and incentives, complex permitting processes and regulations, and lack of qualified/certified professionals can make it challenging for homeowners to adopt GSH practices. Finally, and significantly, participants in each of the workshops made it clear that they do not trust local government, and that this would be a barrier to their participation if GSH were led by government.

Opportunities

There are, however, good reasons for homeowners to take action. The most significant motivator reported by homeowners in the workshops was to protect and enhance ecosystem health and biodiversity by preserving important habitats, minimizing pollutants and reducing cumulative negative effects. There is a strong recognition among waterfront homeowners of the symbiotic relationship between humans and nature, and the benefits of preserving and

[3] SNC Lavalin. 2014. Greening Shorelines to Enhance Resilience: An evaluation of approaches for adaptation to sea level rise. Available at http://www.stewardshipcentrebc.ca/PDF_docs/reports/Greening_Shorelines_to_Enhance_Resilience.pdf (Accessed January 27, 2015)

promoting healthy shorelines. By working in tune with nature, people feel more connected to the shore environment and are able to take advantage of the natural beauty and amenities available to them.

Another key motivator for homeowners is reducing the risk of property damage and preserving their assets, including land values associated with the usable parts of the property. Damage can be caused by sudden events such as storm surges or flooding, or by cumulative effects over time, such as slope or beach erosion. A key benefit of GSH practices is that they provide cost-effective solutions for homeowners while supporting the long-term health and well-being of shoreline ecosystems.

Other motivators for homeowners include shoreline aesthetics, views, and privacy screens between public and private spaces (for example, vegetated berms/banks to separate private property from public beach).

PROFESSIONALS

Challenges

Professionals involved in shoreline restoration or in developing waterfront homes and properties face many of the same challenges as homeowners when it comes to adopting shore-friendly practices. These include

- a general lack of knowledge about GSH practices or the value they can provide,
- scepticism about the long-term durability of soft armouring approaches, and
- desire to minimize costs and maximize profit.

For example, larger building setbacks can protect homeowners from significant property damage in the long run; however, it is generally more desirable for homes to be located as close to the waterfront as possible.

Other factors, such as complex permitting processes and regulations, lack of government support, and lack of incentives and financial support, and lack of certification or recognition for professionals can make it challenging to develop shore-friendly homes.

Opportunities

With the right support systems in place, GSH could create many opportunities for professionals. Local government support and incentives (i.e., streamlined approvals, density bonusing, etc.) could make it more profitable and desirable for professionals to develop shore-friendly homes and properties. Creating naturally beautiful and functional shorelines and waterfront properties could raise the profile of GSH professionals and help to bring credibility and confidence to their work. And widespread recognition of the program would make certification valuable and could even create new markets for GSH professionals.

LOCAL GOVERNMENTS

Challenges

Homeowners and professionals often look to local government to take the lead in guiding the general form and location of development. While there are always "early adopters," the majority of people will stick with the status quo, particularly if it is the easiest option. Local governments face pressure from the public to protect the environment, provide great public spaces and infrastructure, serve the interests of the community, and provide timely service and approvals, and lower taxes, all with a limited budget and resources. It can be challenging to change existing regulations or processes and to decide where to spend valuable resources. However, supporting GSH practices can greatly benefit local governments and help to achieve their long-term goals.

Opportunities

While there are provincial and federal laws to help conserve and protect rare, endangered, threatened, or priority species on the waterfront, local governments also have a role to play in improving the shoreline environment. GSH practices can help local governments to protect their local assets, support local fishing industries (by protecting aquatic and shellfish habitats), support outdoor recreation and tourism, and preserve the beauty and identity of their waterfront communities. Local stewardship saves governments money in the long run. Whether it is mitigating damage to public infrastructure and properties adjacent to shore-friendly homes, or preserving the community's natural assets, GSH practices can bring broader benefits to communities. Close collaboration among homeowners, professionals and local governments can help to bring GSH practices into the mainstream.

FROM ANALYSIS TO STRATEGY

This analysis provides a strong, simple basis for thinking about how to encourage adoption of Green Shores practices. Encouraging adoption of practices that are not widely used involves intervening to align with motivators, and to reduce barriers to change. A cost-effective strategy can focus on the most important motivators and barriers.

For the Green Shores for Homes program, this means emphasising the ability of Green Shores approaches to cost-effectively reduce risk of erosion and improve ecosystem health while being able to maintain views and attractive landscaping. It also means reducing regulatory barriers, simplifying permitting, and increasing the knowledge of both homeowners and professional/industry representatives. Incentives of various kinds may also be helpful to accelerate action.

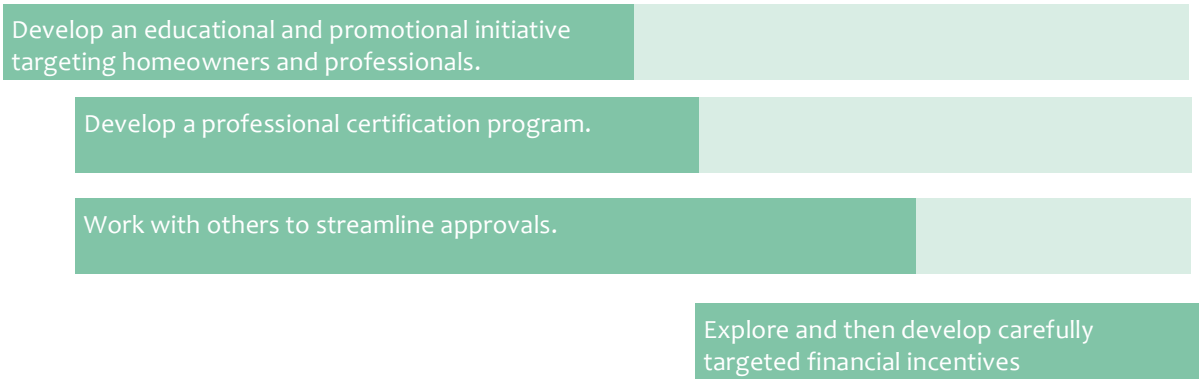
The next section outlines the proposed strategy, which also sequences the strategies so that they build on one another over time, reducing the most important barriers first.

STRATEGY OVERVIEW

Based on the public and stakeholder workshop results, the most important strategies that the Stewardship Centre for BC needs to implement through the GSH program are:

1. **Develop an educational and promotional initiative** targeting homeowners and professionals. Include information about legal concerns, permitting and approvals, and joint homeowner agreements. This first step will provide a basis for professional certification, broaden awareness of the program, and address the most important set of barriers.
2. **Develop a professional certification program**. This is a prerequisite to providing recognition or awards of any kind, and will increase the credibility and exposure of the program, creating a built-in incentive for private professionals to promote Green Shores. In developing the program, consider potential liability associated with certification.
3. **Work with others to streamline approvals** for Green Shores, leveling the playing field vs. hard armouring or providing an incentive for Green Shores approaches.
4. **Explore and then develop carefully targeted incentives**. The most important target would be accelerating retrofits of hard armouring to Green Shores, rather than rewarding soft shores approaches on new sites or where a retrofit will already happen (where they already cost less so have a built-in incentive). An alternative leverage point is an incentive for the first Green Shores project done by a professional. It is recognized that non-financial incentives are an important part of this strategy that overlaps with the other strategies (e.g. expedited approvals for GSH compliant applications).

Through a workshop with Advisory Committee members, an initial implementation plan was developed for each of the strategies identified through the pilot project. The general sequence recommended for the strategies is shown below. Dark shading indicates timing of primary development efforts. Light shading indicates ongoing refinements and implementation of each strategy.



The rationale for this sequencing is:

1. The educational program is important to lay the groundwork for the others, so it is first, with the professional certification building on the broader educational program.
2. Streamlining approvals is an important incentive, and early tasks to map the current approvals processes feed into education and then professional certification materials, so this work needs to overlap those streams of work to some degree.
3. Exploring and developing financial incentives is only important for a sub-set of properties, and does not need to be reflected in initial education. However, financial incentives may be built into streamlined approvals processes, so the two strategies should overlap.

The content of each strategy is described in more detail below, followed in the next section by action plans describing the steps required to implement each strategy.

STRATEGY DETAILS

STRATEGY 1: DEVELOP AN EDUCATIONAL AND PROMOTIONAL INITIATIVE

Develop an educational and promotional initiative targeting homeowners and professionals. Include information about legal concerns, permitting and approvals, and joint homeowner agreements. This first step will provide a basis for professional certification, broaden awareness of the program, and address the most important set of barriers. Key components include:

Shift the nature of local government – homeowner interactions over shoreline changes

- "Think as a local government, act like a neighbour" is an intervention, described by West Vancouver staff, that can go a long way to building relationships with homeowners whatever their initial attitude.
- The intervention requires significant face-to-face time, e.g. on-site as part of a project; a listening, responsive attitude; and a friendly demeanour on the part of staff. Staff need to respond actively to input, and demonstrate how they have responded, to build trust.
- The intervention works with guidelines that leave flexibility, but not with inflexible regulations.
- As part of any education and communication materials, be very clear about roles, relationships, jurisdiction, and be clear about the intent of the program and the program's owners. A program "owned" by the local government may get much less traction with some homeowners than one "owned" by the SCBC, or even promoted as a partnership

Increase public awareness, understanding, and appreciation of Green Shores approaches

- Educational programs mentioned are primarily directed at homeowners. The majority of interventions mentioned address barriers related to knowledge and beliefs affecting homeowner behaviour. These were identified consistently as the primary barriers to Green Shores practices, especially given the fact that Green Shores practices are typically less expensive than hard armouring.
- Promote homeowner education through municipal and professional champions, and build a network of champions that also includes retailers.
- In keeping with the message of cost-effectiveness, promote (where appropriate) retention of damaged or end-of-life hard walls and integration into a Green Shores design, as lower-cost approach than removing and replacing the hard armouring.
- Separate educational packages should be prepared for freshwater and marine regions, because of the regulatory and environmental differences between them.
- Educational initiatives should emphasise the top four motivators for homeowners:
    - Improving ecosystem health
    - Reducing risk of property damage
    - Cost-effectiveness
    - Maintenance of aesthetics and views
- Case studies, demonstration projects, tours and testimonials should be used to establish credibility of claims of cost efficiency and should show how concerns over aesthetics and views can be addressed.
- Sample signage should be prepared for homeowners using Green Shores approaches, to promote the program and practices, and use peer pressure to encourage neighbours to participate. Signage should capture the main benefits of the program (the top motivators, above).
- Joint action among homeowners should be discussed and encouraged in educational materials – this may include sample joint agreements. Materials should encourage homeowners to work together or to at least consult with one another, reducing the potential for conflict among neighbours with different perceptions of aesthetic quality and risk.
- Design guidance should target key issues for homeowners: accommodating various aesthetics within a Green Shores approach; maintenance and improvement of viewscapes; protection of privacy and definition of public/private edges.
- Communicate expectations clearly, including limits of what shoreline work can do

Provide sample agreements for joint homeowner Green Shores projects

- Sample joint agreements could be prepared in conjunction with related educational material (see above) to encourage homeowners to initiate Green Shores treatments jointly, and to simplify that process.
- A supporting component could be a model bylaw that enables a system similar to laneway improvements, in which homeowners vote on an improvement, and if the vote succeeds, they all are committed to paying for them through taxes or a similar mechanism, even if they voted against the improvement. However, this should be

considered in the context of distrust of government and should perhaps be a later addition to the program.

STRATEGY 2: DEVELOP A PROFESSIONAL CERTIFICATION PROGRAM

Provide professional education and certification

- While these interventions were lower ranked by workshop participants, they are linked with education and should be delivered in tandem with educational and promotional initiatives.
- Education of professionals increases the amount of credible support for the program in the community, and increases the level of professional competence in Green Shores approaches, decreasing the risk of poorly executed projects that make the program less credible.
- Educated and certified professionals can act as champions for the program. Where interested homeowners may access the program and target certified professionals, other homeowners may not know of the program until they contact a professional who can promote it to them.
- Certification of professionals provides a measure of credibility to the educational information which will help increase confidence of homeowners.
- Professional certification also increases the credibility of the professionals, creating an incentive for them to participate in the Green Shores program in order to extend their customer base.

STRATEGY 3: STREAMLINE APPROVALS PROCESSES

Adjust regulations and enforcement to enable GSH approaches, but be very careful about putting new regulations in place: these practices are new to the market, and there is substantial distrust of government from people across the pilot communities.

Simplify and streamline approvals processes

- Development of a homeowners' guide to the permitting and approvals needed for shoreline alterations, especially Green Shores approaches, would help homeowners cope with the complex system. This intervention is within the influence of the Stewardship Centre.
- Explicitly link local government approvals for shoreline projects to GSH credits/ practices proposed
- Development of a more streamlined process through inter-agency coordination is a broader initiative that would benefit a broader set of stakeholders. Identifying other organizations interested in such an initiative and advocating jointly for it is recommended if resources are available.
- Documenting and promoting West Vancouver's head lease as a model to other jurisdictions may make progress on Green Shores practices easier for local governments

able to dedicate resources to shoreline rehabilitation. A partnership with West Vancouver, West Coast Environmental Law and/or the Provincial or Federal Ministries responsible is suggested as a way to expedite this tool.

STRATEGY 4: DEVELOP INCENTIVES

Financial incentives

- Financial incentives are recommended only for those practices that are more expensive than standard practice. This would be focused on removal of hard armouring before the end of its life, although it could be applied to certain stormwater runoff management practices.
- In the Gulf Islands, NAPTEP covenants could be used as a financial incentive; however, they apply only to the private property portion of Green Shores practices, typically restrict landowners from making any further alterations, and (if they are like most conservation covenants) are not effectively enforced.
- Hard armouring removals could be done as a feebate or rebate program (e.g. like low-flow toilet replacement). They are expensive and would draw significant funding, so incentives should be:
    - tied to and funded partly by other initiatives, like sea level rise adaptation;
    - targeted at high risk properties, so as to focus funding where the risk is highest; and
    - delayed to a later part of the program roll-out once broader program components are in place and "low-hanging fruit" are addressed

  Grants are preferred to loans when encouraging hard armouring replacement before end-of-life: for homeowners for whom the cost is relatively significant, a grant is a lower risk incentive.

Other incentives

Other incentives may be equally or more important than direct financial ones. Other related incentives or program elements could include:

- Shorter approvals for Green Shores (see Streamlined Approvals, above)
- Cultural changes (associated with Education and Professional Certification, above)
- Reduced costs for Green Shores construction, e.g. through access to low-cost materials
- More local government staff encouraging and supporting homeowners and contractors to do Green Shores (associated with Education and Professional Certification, above)
- Providing services that are mutually beneficial ("bake cookies" e.g. providing rock, equipment) in support of Green Shores projects

OTHER POSSIBLE STRATEGIES

Other strategies were raised as possibilities either from our review of the literature or from workshop input. These strategies are not recommended as part of the core GSH implementation

strategy because they were not strongly supported in input or because they are not appropriate at this stage of GSH implementation. They should be considered once other stages of implementation are complete.

Put regulations in place and enforce them; build recognition and awards

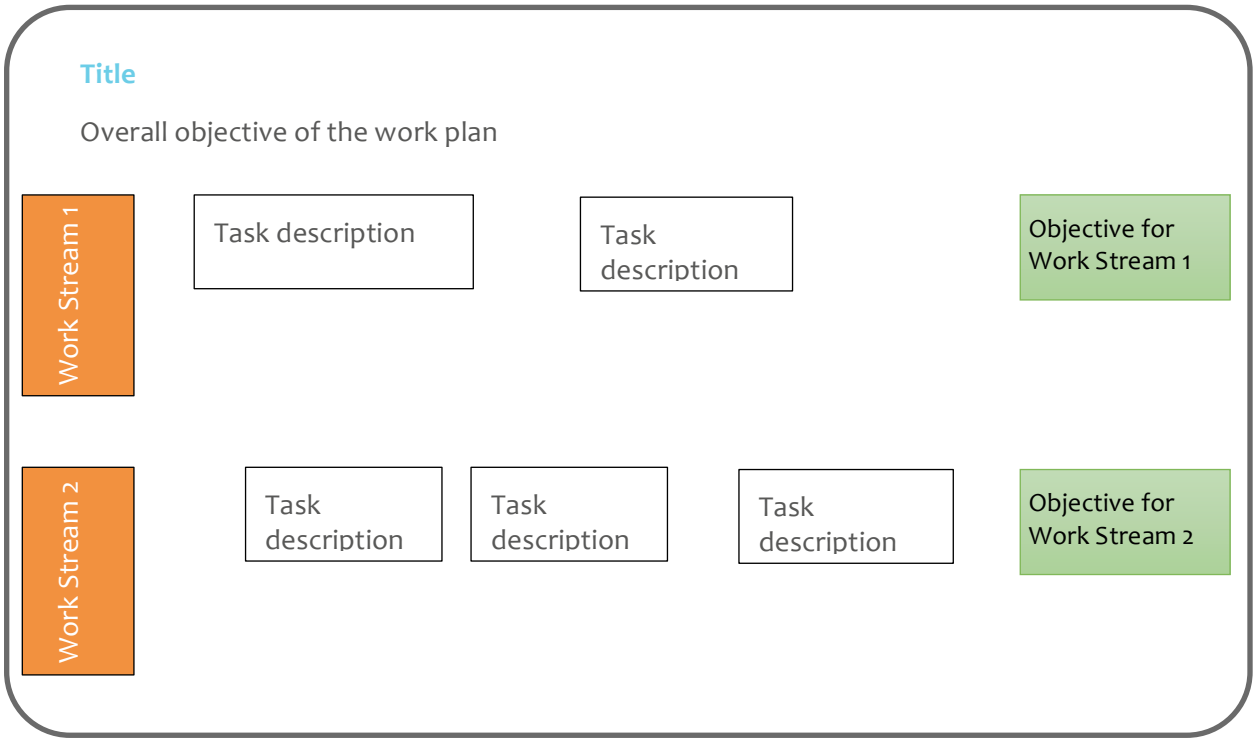
- Regulations and enforcement are typically used at the latter stages of market transformation, to make widespread practices ubiquitous. As Green Shores practices are little-known and not commonly practiced, they are not suited to regulation and enforcement at this time and are not recommended as part of the Green Shores program. Adjustments to regulations to enable Green Shores approaches (mentioned above) would be appropriate to remove any regulatory barriers.
- Formal recognition and awards were not strongly supported by participants. Some people thought a recognition program could work, but noted it is a double-edged sword: if recognition raises property value, it also raises taxes. A simple form of certification and recognition may be appropriate, e.g. a "Green Shores" shoreline project would have to be delivered by a certified professional and meet requirements set out in a checklist. Such a program, if adopted, would have to follow development of a professional certification program and a practice checklist simple enough to be suited for homeowner use before the system was in place.

IMPLEMENTATION ACTION PLAN

Action plans developed through the Advisory Committee workshop are described on the following pages. These will need to be further refined and will evolve as implementation steps are carefully considered. In particular, Advisory Committee members noted that the sequence of activities as presented is an ideal vision; in reality, the sequence of activities may be shaped as much by organizational capacity, funding criteria and willing partners as by this ideal sequence.

Below is a key to the action plan diagrams on the following pages. Each diagram includes an overall objective at the top. The diagram then breaks the work down into a series of work streams, titled in an orange box on the left. The work streams consist of a series of tasks sequenced over a general timeline of 5-10 years that aim to achieve a more specific objective, shown in the green box at right. Tasks are arranged in order within each work stream, and in general, if a task in one stream needs to precede a task in another work stream, it is shown earlier (further to the left) in the overall sequence. Thus the diagrams show a series of discrete but linked sets of tasks build towards discrete objectives as well as the overall objective.

Further Advisory Committee comments follow the diagrams.



EDUCATIONAL PROGRAM

Objective: Establish and maintain a program to engage and educate homeowners, organizations, professionals, and all levels of government (and the public) on Green Shores for Homes to increase use of Green Shores techniques

TIME (year 1-5)

Funding

- Identify potential funding
- ID funding priorities
- Obtain funding
- Develop model for revenue generation from education
- ID other on-going funding sources as needed

Educational Content

- Design information framework using knowledge management methods
- Prioritize audiences and modules
- Develop educational modules
  - Who what why when how
  - Videos
  - For different audiences (volunteers, homeowners, professionals, etc.)
- Pilot modules
- Refine modules

Marketing

- Define and understand key audiences
- Develop
  - key messages
  - CBSM strategies
  - Priority channels to audiences
- Develop marketing materials
- Market education programs including at good outreach locations

Partners, volunteers

- Explore partnerships
  - NGO's
  - Organizations in charge of good outreach locations (Farm markets, community centres, garden centres, etc.)
- Build agreement / support from First Nations & LG on shoreline practices
- Formalize agreements with key partners to support marketing and possibly education

Demonstration project

- Identify potential properties
- Confirm property owner involvement
- Get design and construction funding
- Do project(s)
- Communicate results

OBJECTIVES

- Initial funding secured and on-going funding model successful
- Well-structured education program for all key audiences
- Clear marketing suited to the primary audiences
- Strong partnerships with other NGO's, local ambassadors, and organizations with good community access
- Well-implemented, documented, and accessible pilot projects communicated to key audiences

PROFESSIONAL CERTIFICATION -

Objective: Establish and maintain a certification program that trains and qualifies profesionals to implement and verify Green Shores for Homes projects

TIME (1-5 years) –

Funding

- Identify sources of potential funding for certification, program development
- Prioritize funding
- Apply for and obtain funding
- Develop financial model for on-going program

Mgmt.

- Set up governance structure for management of certified professionals
- Establish guidelines for certification standards
- Develop database to track certified professionals
- Establish structure and process to ensure ongoing quality of work:
  - Audits
  - Professional development
  - Maintenance of certification

Partnership

- Explore options of standalone certification or professional development integration, and identify potential partners for either one
- Establish founding partners for standardized certification
- Develop partnerships with training providers (UVic, BCIT, etc.)
- Climate Action Secretariat/ SCBC/ WCEL convene group

Curriculum

- Form curriculum advisory committee
- Develop partnership with FN and archaeologists
- Develop curriculum
  - Contractors
  - Biologists
  - Engineers
  - Land Use Designers
- Run pilot training to test curriculum
- Refine / finalize curriculum

Promotion

- Design marketing to reach professionals
  - Market segment identification
  - Incentives
  - Messaging
  - Medium

Pro-D

- Explore integrating GSH into existing certification or PD programs (QEP? BCSLA etc.)
- Establish process for identifying professional development content and engagement of certified professionals
- Link GSH learning objectives to professional development requirements
- Confirm GSH training is eligible for Professional Learning Units with professional organizations

OBJECTIVES

- Secure (on-going) funding for certification program
- Strong governance and management of program
- Professionals are skilled and knowledgeable; this can be recognized by the market
- Clear, useful, relevant curriculum for the full range of professionals and contractors involved in GSH
- Professionals are aware of and highly interested in GSH education certification
- There is a clear link to existing professional development programs

STREAMLINED APPROVALS

Objective: Approvals for Green Shores are as easy or easier than for hard armouring, for work both above and below the natural boundary.

TIME (1-5 years)

OBJECTIVES

Approvals Process Template

Clearly understand and map out process steps, roles, responsibilities

Show differences between municipalities, regional districts, and freshwater and marine contexts

Create preliminary template approvals process for local governments to adapt

- prelim w/out MOU and standing approvals
- humanize process – LG's get credibility by working with (e.g.) stewardship groups to educate landowners about the process

Single pilot project in each jurisdiction

- Learn how GS guide can help you?
- Identify and resolve issues

Develop model bylaws and DPA guidelines

Training / outreach / marketing to local governments to support adaptation of template to their circumstances

- Include guidance to RD's to identify GS as a new service and secure funding to support it

Clear process, info, and 1-stop sho combined with sales information, adapted to different local government types, marine and freshwater, and all levels of government

Memorandum of Understanding

Approach the province e.g. through Develop With Care program, FNLRO, DFO, MOE, MCD

- RAR template as example of what to aim for

Develop example MOU template for use with local governments. Include:

- guiding principles for roles and responsibilities and actions among regulators
- decision tree for different shoreline types

Develop supporting training / education material for local governments

Completed memoranda of understanding between local, provincial, federal governments t establish roles, responsibilities, and a smoother process

INCENTIVE PROGRAM

Objective: Effective incentives are in place to support Green Shores for Homes (GSH)

TIME (1-5 years)

OBJECTIVES

Incentives

Build on extensive US work to create a guide for local governments about incentives that make sense in BC

- Financial (grants, feebates, loans, etc.)
- Faster approvals for Green Shores for Homes
- Cost savings, e.g. providing low-cost materials, equipment
- Provide results of research and analysis to homeowners to make it easy for them to do GSH

Identify possible funding sources and/or arrangements for incentives (e.g. sea level rise reserve fund dedicated to supporting projects that reduce vulnerability to SLR)

Include foundations, all levels of gov't

Develop recognition program / methods for professionals, contractors

→ link to marketing stream

Develop shoreline assessment to define appropriate treatment options for many properties, e.g. inventory current conditions and shifts to as to be able to inform owners of risks / benefits, e.g. using archival photos or family photos

Incorporate incentives information into educational material to local governments and other audiences

➔ Link to education stream

A clear, useful guide on GSH incentives in various contexts is readily accessible to local governments

Cultural change

Develop strong cultural change approach for all messaging

- Adapt West Vancouver sales pitch to promote / educate about benefits
- Communicate as an investment not expense
- It's about natural environment enhancement not just shoreline protection
- Build on sense of public / community ownership of waterfront, i.e. waterfront as public asset.

Use messaging to build support at all levels of government for GSH approach and especially for MOU

➔ Link to MOU – needs to happen in lead up to formal partnership discussions

Strong support for GSH approach at all levels of government, especially for a MOU

ADVISORY COMMITTEE COMMENTS ON ACTION PLANS

Other comments made during the Advisory Committee workshop are noted below for consideration in further development of strategies and action plans.

Education

- Who will pay for being educated (or for being associated with education)?
- Draw on change management approaches to get people interested
    - Describe Issues (based on lived experience) – establish urgency
    - Describe Benefits – establish vision, get people interested
    - Explain service (GSH) that will address issues, create benefits
- Education content includes
    - Videos
    - Techniques
    - Permitting processes with GSH
    - Training for NGO partners
    - A tool kit
- Consider
    - Resources (e.g. funder priorities and amounts) may define priorities and timing – need a process for reconciling these
- Audiences include
    - Realtors
    - Home-owners
    - Organizations
    - Federal government
    - Provincial government
    - First Nations
    - Local permitting agencies
    - Contractors
    - Professionals (link to certification)
- Create opportunity and ownership and agency in the local marketing program

Certification

- Jury is out on actual certification, the key objective is quality of professionals – so adjust the scope of the strategy as needed to focus on this objective
- A key question is the business model – What do you charge for? Do you pay trainers? How integrated with professional associations and their Professional Development / Education programs?
- QEP 2 means one professional can do both above and below high water line
- Needs further work on
    - Vision: Whether to develop independent certification, or just be part of existing professional development programs, or somewhere in between.

How to provide the market with a signal that someone is GSH expert if they just do a few courses within their PD system? Option like SFU Sustainable Community Planning or Urban Design certificates?
  - Details: Sequencing of tasks and major work categories

Streamlined Approvals

- Also need to deal with longer/more complex approvals and risks
- Include processes for both above and below the natural boundary
- Use completed MOUs between local, provincial and federal governments to establish a smoother process (i.e., RAR agreements)
- Simplify as much as possible, reduce the layers, and include a sales pitch
- In developing the approvals process template and associated guidance, consider
  - how local governments can reduce barriers internally (e.g. development fees, shorter approval (staff instead of council)
  - using approvals to make GSH more attractive than hard armouring, e.g. if a development permit area is in place, allow plans that comply with GSH to be exempt from DP
  - consider using Development Procedures bylaw changes to make GS more attractive

Incentives

Financial incentives are most applicable to accelerating replacement of hard armouring on sites where Green Shores is an appropriate solution

Other incentives are equally or more important than direct financial ones (other related incentives or program elements include):

- Shorter approvals for Green Shores
- Cultural changes
- Reduced costs for Green Shores construction, e.g. through access to low-cost materials
- More local government staff encouraging and supporting homeowners and contractors to do Green Shores
- Providing services that are mutually beneficial ("bake cookies" e.g. providing rock, equipment) in support of Green Shores projects
- Rebate program like low-flow toilet replacement for Green Shores replacement of hard armouring
- Feebates e.g. security bond taken through DP process; rebate given once work is done and GS techniques verified
- Facilitating free or subsidized site-specific advice to homeowners

Other comments

- Pursue GS adoption as part of Provincial Crown Land policies?

CONCLUSIONS

The objective of the GSH Pilot was to engage homeowners in four pilot communities – Thetis Island, Powell River Regional District, Cowichan Valley Regional District, and District of West Vancouver – to identify key barriers and solutions for adopting shore-friendly practices, and to determine strategies for successfully implementing the GSH project province-wide. Building on work done in Washington State, the workshops done as part of the pilot led to deeper understanding of the most important barriers and solutions relevant to BC communities large and small, in both freshwater and marine contexts.

The workshops demonstrated that there is remarkable consistency among the four pilot communities, but also exposed some differences. The most important difference is between freshwater and marine contexts, where the regulatory situations are different, and addressing sea level rise is a motivator only in the marine context.

Drawing on that understanding, the Stewardship Centre for BC now has a strong outline of the four primary strategies it needs to employ to implement the Green Shores for Homes program. These strategies target the most important barriers: lack of awareness and knowledge among professionals and homeowners; complex approvals due to multi-jurisdictional nature of shorelines; and high costs associated with accelerated replacement of hard armouring. Initial work plans for delivering on these strategies form a sequence of interrelated tasks:

1. Develop an educational and promotional initiative.
2. Develop a professional certification program.
3. Work with others to streamline approvals.
4. Explore and then develop carefully targeted financial incentives.

The implementation strategies and work programs are a strong starting point for the next steps of work, but require thoughtful review and considered refinement.

Recommended next steps for the Stewardship Centre for BC are to:

1. Review the scope and objectives of each strategy carefully, and refine to suit SCBC/local government capacity and the needs of key audiences.
2. Consider refining the "target market" for the GSH program as a whole via an assessment of regions and properties most suited to and in need of GSH approaches (e.g. using a similar approach to Washington's shoreline assessment, and/or identifying areas anticipating significant development or renewal of shoreline protection).
3. Review the four work plans together to improve the mapping of synergies and linkages between them.
4. Identify key implementation milestones to target over the next 1-5 years.
5. Assess budget, skills and resources needed for major tasks, so as to anticipate funding and capacity needs associated with achievement of the milestones.

APPENDIX A: LIST OF ACRONYMS

BCIT: BC Institute of Technology

BCSLA: BC Society of Landscape Architects

CBSM: Community-based social marketing

DFO: Department of Fisheries and Oceans

DPA: Development Permit Area

FN: First Nations

FNLRO: Forests, Lands and Natural Resource Operations

FTE: Full-time Equivalent

GSH: Green Shores for Homes

ID: Identify

LG: Local government

MCD: Ministry of Community Development

MOE: Ministry of Environment

MOU: Memorandum of Understanding

NAPTEP: Natural Area Protection Tax Exemption Program

NGO: Non-governmental organization

PD: Professional development

QEP: Qualified Environmental Professional

RAR: Riparian Area Regulations

RD: Regional District

SCBC: Stewardship Society of BC

SLR: Sea Level Rise

UVic: University of Victoria

WCEL: West Coast Environmental Law

MODUS

from insight to impact

GREEN SHORES FOR HOMES – SUMMARY OF WORKSHOP RESULTS

The following summary of results was prepared from an analysis of Green Shores™ for Homes workshops held in Thetis Island, Cowichan Valley Regional District, Powell River Regional District, and District of West Vancouver with homeowners and professionals. It includes summaries of participant priorities and comments on the following topics:

1. Barriers with related interventions
2. Motivators, broken down by workshop
3. Barriers, broken down by workshop
4. Interventions, broken down by workshop

SUMMARY OF BARRIERS AND RECOMMENDATED INTERVENTIONS

The table on the next page summarizes barriers and matching interventions based on the results of the workshops. It is based on the most common barriers identified in the workshops:

1. Strong perception of high costs
2. Cost of removal of existing hard armouring and/or adjusting or replacing existing docks
3. Concern over government involvement in private lives, lack of trust that it will not "over-step" and impose requirements
4. Lack of awareness of Green Shores approaches
5. Lack of knowledge of and belief that they will function well and look good, and that they will provide lasting protection
6. Belief that you can engineer or manage the environment to do as you like
7. Complex, opaque permitting process that is oriented better to hard armouring, coupled with complex regulations
8. Need for coordination among neighbours, with concerns that an unusual approach that will look different from neighbours and may put you at risk if neighbours don't also use it
9. Lack of qualified / certified professionals

Barriers	Interventions
Consistent barriers:	Matching Interventions:
• Strong perception of high costs	

• Cost of removal of existing hard armouring and/or adjusting or replacing existing docks	**Financial incentives (top 4)**
	• Financial incentives are recommended only for those practices that are more expensive than standard practice. This would be focused on removal of hard armouring before the end of its life, although it could be applied to certain stormwater runoff management practices.
	• In the Gulf Islands, NAPTEP covenants could be used as a financial incentive; however, they apply only to the private property portion of Green Shores practices, typically restrict landowners from making any further alterations, and (if they are like most conservation covenants) are not effectively enforced.
	• Hard armouring removals are expensive and would draw significant funding, so incentives should be:
	  ○ tied to and funded partly by other initiatives, like sea level rise adaptation;
	  ○ targeted at high risk properties, so as to focus funding where the risk is highest; and
	  ○ delayed to a later part of the program roll-out once broader program components are in place and "low-hanging fruit" are addressed

Barriers	Interventions
	• Grants are preferred to loans when encouraging hard armouring replacement before end-of-life: for homeowners for whom the cost is relatively significant, a grant is a lower risk incentive.

• Concern over government involvement in private lives, lack of trust that it will not "over-step" and impose requirements	• **Think as a local government, act like a neighbour (new intervention, not ranked)**
	  • This intervention, described by West Vancouver staff, can go a long way to building relationships with homeowners whatever their initial attitude.
	  • The intervention requires significant face-to-face time, e.g. on-site as part of a project; a listening, responsive attitude; and a friendly demeanour on the part of staff. Staff need to respond actively to input, and demonstrate how they have responded, to build trust.
	  • The intervention works with guidelines that leave flexibility, but not with inflexible regulations.
	• As part of any education and communication materials, be very clear about roles, relationships, jurisdiction, and be clear about the intent of the program and the program's owners. A program "owned" by the local government may get much less traction with some homeowners than one "owned" by the BCSC, or even promoted as a partnership.
	• **Adjust regulations and enforcement (middle ranked intervention)** to enable GS approaches, but be very careful about putting new regulations in place: these practices are new to the market, and there is substantial distrust of government from people across the pilot communities.

• Lack of awareness of Green Shores approaches • Lack of knowledge of and belief that they will function well and look good, and that they will provide lasting protection • Belief that you can engineer or manage the environment to do as you like • On Cowichan Lake, people haven't	**Education and resources; Demonstration project, tours, testimonials; Free expert advice and support (top 4); Free erosion assessment (lower ranked)** • Educational programs mentioned are primarily directed at homeowners. The majority of interventions mentioned address barriers related to knowledge and beliefs affecting homeowner behaviour. These were identified consistently as the primary barriers to Green Shores practices, especially given the fact that Green Shores practices are typically less expensive than hard armouring. • Promote homeowner education through municipal and professional

Barriers	Interventions

experienced the downsides of hard armouring so may not believe it is relevant to them unless there is a local example.	champions, and build a network of champions that also includes retailers.
	• In keeping with the message of cost-effectiveness, promote (where appropriate) retention of damaged or end-of-life hard walls and integration into a Green Shores design, as lower-cost approach than removing and replacing the hard armouring.
	• Separate educational packages should be prepared for freshwater and marine regions, because of the regulatory and environmental differences between them.
	• Educational initiatives should emphasise the top four motivators for homeowners:
	  ○ Improving ecosystem health
	  ○ Reducing risk of property damage
	  ○ Cost-effectiveness
	  ○ Maintenance of aesthetics and views
	• Case studies, demonstration projects, tours and testimonials should be used to establish credibility of claims of cost efficiency and should show how concerns over aesthetics and views can be addressed.
	• Sample signage should be prepared for homeowners using Green Shores approaches, to promote the program and practices, and use peer pressure to encourage neighbours to participate. Signage should capture the main benefits of the program (the top motivators, above).
	• Joint action among homeowners should be discussed and encouraged in educational materials – this may include sample joint agreements. Materials should encourage homeowners to work together or to at least consult with one another, reducing the potential for conflict among neighbours with different perceptions of aesthetic quality and risk.
	• Design guidance should target key issues for homeowners: accommodating various aesthetics within a Green Shores approach; maintenance and improvement of viewscapes; protection of privacy and definition of public/private edges.
	• Communicate expectations clearly, including limits of what shoreline work can do

Barriers	Interventions
• Complex, opaque permitting process that is oriented better to hard armouring, coupled with complex regulations	**Simple and streamlined processes and approvals (middle ranked)** • Development of a homeowners' guide to the permitting and approvals needed for shoreline alterations, especially Green Shores approaches, would help homeowners cope with the complex system. This intervention is within the influence of the Stewardship Centre. • Development of a more streamlined process through inter-agency coordination is a broader initiative that would benefit a broader set of stakeholders. Identifying other organizations interested in such an initiative and advocating jointly for it is recommended if resources are available. • Documenting and promoting West Vancouver's head lease as a model to other jurisdictions may make progress on Green Shores practices easier for local governments able to dedicate resources to shoreline rehabilitation. A partnership with West Vancouver, West Coast Environmental Law and/or the Provincial or Federal Ministries responsible is suggested as a way to expedite this tool.
• Need for coordination among neighbours, with concerns that an unusual approach that will look different from neighbours and may put you at risk if neighbours don't also use it	**Sample joint agreements (lower ranked);** • Sample joint agreements could be prepared in conjunction with related educational material (see above) to encourage homeowners to initiate Green Shores treatments jointly, and to simplify that process. • A supporting component could be a model bylaw that enables a system similar to laneway improvements, in which homeowners vote on an improvement, and if the vote succeeds, they all are committed to paying for them through taxes or a similar mechanism, even if they voted against the improvement. However, this should be considered in the context of distrust of government and should perhaps be a later addition to the program.
• Lack of qualified / certified professionals	**Professional education, professional certification (lower ranked)** • While these interventions were lower ranked by workshop participants, they are linked with education and should be delivered in tandem with educational and promotional initiatives.

Barriers	Interventions
	• Education of professionals increases the amount of credible support for the program in the community, and increases the level of professional competence in Green Shores approaches, decreasing the risk of poorly executed projects that make the program less credible. • Educated and certified professionals can act as champions for the program. Where interested homeowners may access the program and target certified professionals, other homeowners may not know of the program until they contact a professional who can promote it to them. • Certification of professionals provides a measure of credibility to the educational information which will help increase confidence of homeowners. • Professional certification also increases the credibility of the professionals, creating an incentive for them to participate in the Green Shores program in order to extend their customer base.
• n/a	**Regulations and enforcement (lower ranked); Recognition and awards (lower ranked)** • Regulations and enforcement are typically used at the latter stages of market transformation, to make widespread practices ubiquitous. As Green Shores practices are little-known and not commonly practiced, they are not suited to regulation and enforcement at this time and are not recommended as part of the Green Shores program. Adjustments to regulations to enable Green Shores approaches (mentioned above) would be appropriate to remove any regulatory barriers. • Formal recognition and awards were not strongly supported by participants. Some people thought a recognition program could work, but noted it is a double-edged sword: if recognition raises property value, it also raises taxes. A simple form of certification and recognition may be appropriate, e.g. a "greenshores" shoreline project would have to be delivered by a certified professional and meet requirements set out in a checklist. Such a program, if adopted, would have to follow development of a professional certification program and a practice checklist simple enough to be suited for homeowner use before the system was in place.

Barriers	Interventions
Unique barriers:	
West Van • City program is not well-understood and there are negative perceptions when people believe the City is paying for private property improvements • Concern over loss of privacy • Concern over loss of use of property right to the property line • Lack of City resources Powell River • No enforcement of Provincial setbacks from waterfront Buildings are already too close to water to be able to use Green Shores approach	• West Vancouver is best situated to address the barriers unique to its program. • If the Stewardship Centre decides to develop a model based on the West Vancouver head lease, the lack of City resources and external perceptions of the program should be addressed in the model guidance. • In the absence of local building regulation in Powell River or similar jurisdictions, the Stewardship Centre's options are limited to education and awareness: playing a whistleblower role would engender anger and resentment, and build opposition, not support of the program. No additional interventions are recommended to the lack of enforcement of Provincial setbacks; however, the Province may see a benefit in supporting the educational initiatives as a means of reducing the number of properties where setbacks are ignored. Powell River and other places with existing buildings too close to the water need education on adapting already developed shorelines, and may need alternatives that suit the situation.
• Other comments:	•
• Certification seen as possible benefit but program would need widespread recognition to make certification valuable Certification may imply permitting, which would mean it is impossible in Powell River Regional District where building permits are not used	
•	

MOTIVATORS

Consistent motivators:

1. The three top motivators were consistent among homeowners and professionals and all three pilot locations. They are:
    - Improving ecosystem health: people recognize their dependence on the ecosystem, are seeing improvements, and want to see further progress
    - Reducing risk of property damage: primary concern related to land value and retention of usable parts of the property, especially if you include sea level rise as part of this motivator
    - Cost-effective infrastructure and maintenance: a good return on investment is important
2. Other important motivators are:
    - Maintenance of aesthetics and views – critical in West Vancouver

Unique motivators:

- West Van
    - Providing an effective privacy screen between private and public space
- Cowichan Valley Regional District
    - Enforcement of Riparian Regulations may be an important tool for freshwater lakes

Other comments:

- People are less motivated by cost-effectiveness on Cowichan Lake than on seashore – seems that there is less concern about replacement costs of existing hard infrastructure
- People are less motivated by economic development in West Vancouver than elsewhere.
- Sea level rise is not a concern for Cowichan Lake (and by extension other lakes)
- Cost-effectiveness is an important motivator for developers and builders, as it affects their bottom line. The importance of lower costs for repairing after a storm should be stressed.
- Some see a program like LEED being a good motivator
- The opportunity to connect the public to the shoreline is a motivator for the community, but a dis-benefit for homeowners who may have restricted public access through hard armouring and hence see a loss of privacy when shifting to a soft shores approach.
- Most homeowners don't understand (or sometimes accept) sea level rise and its implications
- Role of GS → Resource

- How to deal with development along the shore
- "F" a shared motivator and linked to "C". People want to actively support Ecosystem Health. Other motivators are more dependent on the Homeowner's own house and property situation.
- These motivators are closely related

Homeowners							
Motivator	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
C. Enhances ecosystem health and biodiversity by preserving important habitat, minimizing pollutants, and reducing cumulative negative impacts	-Evidence from W. Bay Beach -Embraces all main concerns; very important. -My #1 b/c my philosophy is about ecosystem rehabilitation and impact to the planet; concrete toxic to the water Grass, kelp beds, being scoured, regularly life! -Habitat coolest thing about beach. Very important! -Have to have ecosystem health -Prevent damage -If you get C you get F -Generally good thing = beautiful	12	Synergy – human benefit and ecosystem benefit align; keeping and restoring natural systems is key – without this we have nothing; one of the main reasons people live here so draw on this heavily	13	Perception that things are getting better already and people want to see it continue; algae and nutrient pollution are big issues; septic/sewage pollution; the way these approaches look so pleasant is key; natural plants help save soil, add bird life, mammals, mink, beaver, etc.	10	35

Homeowners							
Motivator	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
B. Reduces risk or property damage caused by flooding or shoreline erosion *(combine this one with G?)*	-House close to water -Residence from retaining wall from neighbor -#1 because paramount! Can't do this if a huge risk to private property -Have experienced damage -Home is sacred -Prevent more damage -"Security" -Important for low property	11	Minimize property damage is key, both to their site and to neighbours; has to be done to protect investment; risk of storm surge more important here than flooding; SLR needs education above all; maintain long term property values is key	13	Significant on lake; people react to problems like erosion and are motivated by it; concern on lake is mainly groundwater not lake action (note that lake bottom owned by timber company); hard armoured walls by neighbours will affect you; lake movement up and down causes damage with storms; vegetation stabilizes a dynamic gravel shoreline; buffering of wave damage from boats	6	30
F. Maintain views and natural feel of waterfront properties (for example, driftwood and vegetation instead of a bulkhead)	-Natural vs concrete -A hidden value!! -Part of C!! -Leave it as natural as possible. Bring it back -Value nature &wilderness	9	Aesthetics play a big role; difficult if neighbours not involved; who are the leaders in practising this stewardship?	8	Beauty; this is one of the main reasons people bought here and love it;	9	26

Homeowners							
Motivator	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
A. Cost-effective infrastructure and maintenance compared to hard armouring options (such as retaining walls, dikes)	-Maintenance fees ↓ -Means something to everybody. Has to be cost effective to the community -Has to make sense financially -Access risk because it is a leap of faith to remove wall and put rock "out there". -Attractive vs wall	8	Retaining walls can be expensive; erosion impacts of same/hard can be major; stress the cost effective angle – very imp. People don't understand the effect of walls! One group said finances above all others. Another said money alone not enough as costs already low.	12	More an issue in eroded marine enviros, not as intense here, floating docks, note there are many different environment types on the lake; people will invest if there is a good return on investment (ROI)	2	22
G. Proactively prepare for sea level rise and climate-related events (increase storm intensity, flooding, etc.)	-Proactive Prepare for the future. Very important and also help maintain property value. Realtors can say "this foreshore has been protected through greenshores!" Need to educate realtors.	6	Has to be done to handle people living near shorelines under these conditions	12		1	19

Homeowners							
Motivator	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
	-Beaches are cleaner then used to be concerned about SLR impacts -Need to prepare proactively -Low property = important						
D. Connects people to the shoreline and improves access for strolling, kayaking, foraging and simple beach fun	-More people access the beach	3	When property owners encroach they can limit people walking on shore; allows property owners better use of their shoreline too	4	This is a common value; use of the lake; strong value; enables access in some areas and restrict it for habitat needs elsewhere?	6	13
E. Support coastal economies such as fishing and tourism by maintaining natural beauty and fish/shellfish habitat	-Jobs -Important to communities perhaps less than West Vancouver	4	Maintaining sustainability – natural beauty for tourism; helps achieve a balance between diff uses (e.g. oyster leases v residential)	2	Use of the waterfront by everyone improves tourism; we all like to support tourism and improving the shoreline helps do that so emphasize; increases value of properties too	2	8

Homeowners							
Motivator	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
New – capability of enforcement; Fear of God					Riparian regs "could be" enforced – motivates people through clear documentation of best practices		
New – continuity and cumulative benefits							
New – coordination and cooperation, collective effort is necessary					How would riverfront properties be affected?		
New – grant funding (provincial/local)			Government allowed the development so have to help address				
New – impacts from adjacent property infrastructure							
New – might reduce setback requirements					GS approaches need to set back?		

Homeowners							
Motivator	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
New – provincial and federal cooperation needed			Foreshore and below				
New – public recognition – opportunity to educate others					Note that there are already several examples of GS4H success on the lake – so don't need new demos! Be an environment leader, setting an example		
New – regulations from fisheries (spawning habitat and streams) and archeological are highly regulated			Regulations are limiting and cumbersome				

Professionals							
Motivator	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
B. Reduces risk of property damage caused by flooding or shoreline erosion *(combine this one with G?)*	Key for homeowners Key linkage: Maintain property size = maintain property value = maintain tax revenue	13	Strong desire out there for flat/usable land so watch anything that cuts back usability	10	Concern with hardening within WMA; people need to learn how to do this right; that it is cost	14	37

Professionals							
Motivator	**West Vancouver**		**Powell River**		**Cowichan Valley Regional District**		**Total Votes**
	Key to do this first. It is why our clients buy waterfront property. We want to avoid damage to the property. Need to have science behind Property assessment				effective can be a key motivator, especially in areas with high habitat value. This was big for people here.		
A. Cost-effective infrastructure and maintenance compared to hard armouring options (such as retaining walls, dikes)	Key for homeowners Cost-effective a positive West Vancouver saves money by using materials on our work sites for foreshore work Value of case study = important need to motivator Especially important to developers, builders	9	Easier and cheaper to maintain – key. Hear this from homeowners regularly. Stress the costs of repairing hard wall damage after a storm. Cost effective strategies are a must even for wealthy homeowners.	7	In the long term it is a cost effective approach; how to convince people of this? Costs are big barrier – should be a cost/benefit analysis	12	28
C. Enhances ecosystem health and biodiversity by preserving important habitat, minimizing pollutants,	Also important to contractors because it is catching ?? by our clients (plus more ethical and aware)	6	Core values for many people; stress protecting shellfish habitat and harvest; show neg impacts of pollution	7	People want local control of watershed health = collective impact; need to be better at	5	18

Professionals							
Motivator	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
and reducing cumulative negative impacts	Like LEED would motivate				communicating cc adaptation as people may react by hardening		
F. Maintain views and natural feel of waterfront properties (for example, driftwood and vegetation instead of a bulkhead)	Related to additions I, J below Homeowners and residents motivated by this Key reason our clients like us. Green Shores is a cheap way to ensure this feature. Want to present most value View and access Views #1 in West Vancouver Best practice can help	9	A key value/motivator. But some owners need to change their views as they don't care and/or don't believe in SLR. Beach is a public place and owners should maintain space for benefit of community	4	Viewscape as a framed picture; definitely from a homeowner's perspective	5	18
D. Connects people to the shoreline and improves access for strolling, kayaking, foraging and	Community interest is greater than homeowners' interest in this Municipal motivation is	6	Think of community benefits not just those of private owners But private use is also a priority	6	Short term benefits easier than long term benefits; some people just want to do what they want to do on	4	16

Professionals							
Motivator	**West Vancouver**		**Powell River**		**Cowichan Valley Regional District**		**Total Votes**
simple beach fun	to realize the (underused) community asset that is the public waterfront Connection is important to old/aging folks Wall vs. soft = access Lots of people want access (balanced with privacy)		Reduce liabilities		their property though		
G. Proactively prepare for sea level rise and climate-related events (increase storm intensity, flooding, etc.)	Homeowners and residents motivated by this People still don't understand this; education is key Most homeowners don't understand	4		3	Communicating impacts and value of GSH key here; some waterfront loss is inevitable so do you let nature take its course? Extreme weather events might force people to use a GSH approach	8	15
E. Support coastal economies such as fishing and tourism by maintaining natural beauty and fish/shellfish habitat			Think about the view of the coast from the water too – more habitat equals more fish is another positive	1		6	07

Professionals							
Motivator	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
New – bringing a non-natural landscape to the shoreline, taming nature, cleaning up, desired future condition					Increased cost to develop might force people to take a longer term view	1	01
H. reclaim public lands (reduce/eliminate existing encroachments)	There are mechanisms for people to continue to use encroachment area (provincial legislation: accretion principle). However West Vancouver has a head lease on the water lot, so if the District helps landowners with remedial work on their shoreline, they put an agreement in place that states that the accretion principle does not apply because the improvement is jointly developed. Otherwise the homeowner could apply to extend his property line outward above the new high water mark.						

Professionals							
Motivator	**West Vancouver**		**Powell River**		**Cowichan Valley Regional District**		**Total Votes**
J. coastal beach / intertidal area becomes a visual extension of the property	Need visual break to define the public / private boundary						
K. perception of giving homeowners more land	Barrier for the public, seems as though the City is doing work for the homeowners when their staff are on-site with machinery						
New – impact on your neighbour's properties							
New – maximizing property values							
New – reduce risks to infrastructure (roads, etc.)							
Provides a soft natural privacy fence between public and private space	Privacy is a key issue for WV homeowners for whom hard edges maximize usable area of property and make						

Professionals							
Motivator	**West Vancouver**		**Powell River**		**Cowichan Valley Regional District**		**Total Votes**
	foreshore less publicly accessible Most homeowners don't want public access across their beachfront						
Risk	main motivator						

BARRIERS

Consistent barriers:

1. Strong perception of high costs
2. Cost of removal of existing hard armouring and/or adjusting or replacing existing docks
3. Concern over government involvement in private lives, lack of trust that it will not "over-step" and impose requirements
4. Lack of awareness of Green Shores approaches
5. Lack of knowledge of and belief that they will function well and look good, and that they will provide lasting protection
6. Belief that you can engineer or manage the environment to do as you like
7. Complex, opaque permitting process that is oriented better to hard armouring, coupled with complex regulations
8. Need for coordination among neighbours, with concerns that an unusual approach that will look different from neighbours and may put you at risk if neighbours don't also use it
9. Lack of qualified / certified professionals

Unique barriers:

- West Van
  - City program is not well-understood and there are negative perceptions when people believe the City is paying for private property improvements
  - Concern over loss of privacy
  - Lack of City resources
  - Concern over loss of use of property right to the property line
  - Much stronger perception of high costs, tied to feeling that City should pay for improvements if they wanted to see them happen
- Powell River
  - No enforcement of Provincial setbacks from waterfront

Other comments:

- Certification seen as possible benefit but program would need widespread recognition to make certification valuable

- Certification may imply permitting, which would mean it is impossible in Powell River Regional District where building permits are not used
- People haven't experienced the downsides of hard armouring so may not believe it is relevant to them unless there is a local example.
- Sea level rise and erosion greater concerns for properties at risk (e.g. low, sandy) – important to distinguish different shoreline types in information/programs
- Fears:
    - The soft approach is described as dynamic – does this imply lack of control?
    - GSH imposing changes on homeowners and private property

Homeowners							
Barrier	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
B. Cost of removing or changing hard armouring to replace with 'softer,' more natural solutions	Need to extend out ___ ___ zone (Longer walkway to mitigate wave impact)	**16**	Some people have invested a lot in building walls to protect properties; unproven so need more proof; lots of hard armouring is present so people know it	9	can especially be a concern for older homeowners; costs to move old docks is high so this must be high; easier to leave it and just build higher	6	31
C. Lack of knowledge of soft shore stabilization techniques and benefits, unsure of who to ask	-Free assessment would help/intervention -Lack of knowledge of property line -Common law says "mean high" -Others say "high high tide" -People need education re: GS	**11**	Combine with E (2 groups suggested this) Many don't believe it works Prove on different slopes/current types Little understanding of shoreline systems – education needed to support a new approach	9	Misunderstanding of the natural environment and processes; putting beaches where they weren't; lack of vegetation affects water quality; lack of education on all of this; people are immediately scared by these ideas; JUST starting to learn about this locally	9	29

Homeowners							
Barrier	**West Vancouver**		**Powell River**		**Cowichan Valley Regional District**		**Total Votes**
	-Needs more evidence -Clarifying property rights vs government intervention. -Fear of this being forced on people		Need people who can guide others and support them to do the work				
F. Lack of incentives and government support from all levels of government (including technical assistance, education, and financial incentives)	-If community benefit then need more community action -Lack of financial incentives -Different approaches: Government should not support this. It's the homeowners responsibility vs they should give an incentive. -Financial aspects are linked -Consistency of government policies over time	**11**	Education key – people need convincing first then go into details; incentives and demos important at the community level; take a community education approach – demo at Myrtle Rocks! Recognition needed; Regulations needed; technical assistance needed	7	Too adversarial with govt inspectors; too many regulations; dislike of CVRD; don't see the programs or think they want to assist homeowners	8	26

Homeowners							
Barrier	**West Vancouver**		**Powell River**		**Cowichan Valley Regional District**		**Total Votes**
E. Lack of confidence that soft shore stabilization techniques will protect property from flooding/erosion	-dynamic system could wash away?? -Could be knowledge related -Linked to C -This is a concern; it is so complex. A lot of legality involved; property rights to protect; prefer sea wall -When you don't know = lack of conf.	**6**	Most people build walls because they think that is strongest/effective way; results are not instant? People try to do things on their own but does not last and does not address SLR *we need local knowledgeable people to show us what to do, what will work/last	8	More education needed; "Is it going to be a long term solution?"; very much linked to C above; the engineering community needs to be brought along to this model	7	21
D. Permitting issues including cost, time, and hassle	-District hassle -DFO went berserk -Need the 3 levels of government to agree on approach -Permitting seams fair. Department of Fisheries is involved -Mistrust of government. Where might this go (surprises) and changes → costs	**9**	Lack of knowledge of what you can or can't do on the shoreline, e.g. remove logs?; DFO already highly regulates activities	1	Rule changes seem subjective and inconsistent; not enough of a collaborative attitude; interaction with govt is inconsistent; too prescriptive rather than collaborative; rules are already stringent and many people ignore them	8	18

Homeowners							
Barrier	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
A. Cost or perception of high costs associated with soft-armouring solutions	-Similar to B -Very expensive -High costs -We think the city would pay for changes	**9**	Proven that costs are lower? Larger samples by govt needed. But still no guarantee	1	Lots of property owners have money so this not an issue; perception that doing a GSH approach will reduce property values; belief that it will reduce access; more costs if an engineer is involved	5	15
G. Lack of market recognition for Green Shores certification		**0**	Certification implies permitting; program is generally unknown with low public awareness	4	Real estate market does not reflect greenshores values; could add value to your home if it were recognized	6	10
H. More extreme flooding and erosion due to sea level rise, more intense storms, and higher storm surges	-Ties into knowledge and education	**7**			Erosion not seen by many (suggest looking near Youbou where there are many hard walls)		07
New – need for cooperation among neighbours	Lack of neighbor support to cover a significant area from engineering and ecological perspective Need for neighbours approval and for their joint participation in shoreline projects makes it harder to	**3**	If they all have long flat lawns you don't want to stand out, offend the neighbours	4			07

Homeowners							
Barrier	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
	get agreement and get things done If one neighbour is willing to pay but not others, what then? Could look funny if only one person does it Higher impacts on some neighbours – affects their level of interest						
I. Concern that erosion assessment could affect insurance rates		**3**	This is a major and growing concern for lots of people	1			04
New – privacy issues and security		**2**					02
New – homeowner wants a hard wall and has no desire to change							
New – "its all about me so MYOB"					Leave me alone / it's a rural area so why should I change		

Homeowners							
Barrier	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
New. Lack of jurisdiction in the intertidal zone							
New. Sharing of costs and benefits → does the homeowner bear the cost and the work will benefit the public.							
New. Lack of clarity of GSH process and government support.	Identification of existing non conforming aspects of property encroachments (and loss of use of these areas). Will government change existing by-laws to support GSH requirements (a concern if imposed)?						

Professionals							
Barrier	West Vancouver		Powell River		Cowichan Valley Regional District		Total Votes
B. Cost of removing or changing hard armouring to replace with 'softer,' more natural solutions	View that the City is charging taxes and should remove sea walls West Vancouver educate the client: you are not giving up property; you are gaining with better protected property	6	Misinformation and lack of education key barrier so education is key note that it is very expensive to remove and dispose of hard wall materials people don't want to spend the money	10		10	26
C. Lack of knowledge of soft shore stabilization techniques and benefits, unsure of who to ask	People think in the present so it is hard for them to see the results of the ir actions, especially for longer term matters like climate change Step 2 after awareness. Also not knowing about West Vancouver program and elements West Vancouver Foreshore 101 program What is it and how does it work If we deal with the lack of knowledge = as else	12	Need education and awareness raising this is tied to E PRRD has lots of info available but…	1	Most owners don't know what GS is do what they want and ask for forgiveness later relates closely to E affected by lack of qualified professionals lack of understanding that hard solutions fail too lack of larger scale planning that shows people where they are/fit in the landscape	9	22

Professionals							
Barrier	**West Vancouver**		**Powell River**		**Cowichan Valley Regional District**		**Total Votes**
	Don't know how the process will help those the participating property owner who funded the project				need engineers to change		
A. Cost or perception of high costs associated with soft-armouring solutions	$1 homeowner investment in West Van program provides $5 homeowner benefit Homeowners have very high incomes This is not a barrier in West Vancouver Cost and permitting included here. Other owners feel they are paying through taxes for the City to do work for waterfront property owners (misperception)	3	Might be applicable to hard barrier failure people with hard armouring have invested heavily need to educate people on cost efficiency	8		10	21
E. Lack of confidence that soft shore stabilization techniques will protect property from flooding/erosion	Once aware, need incentives of permit Framing and education needed I lean towards engineered	7	Because they are not educated increasing storm events but need to know how GS4H works at neighbourhood scale	8	"we need more proof" and examples	6	21

Professionals							
Barrier	**West Vancouver**		**Powell River**		**Cowichan Valley Regional District**		**Total Votes**
	solutions more than soft approaches West Vancouver has examples		city folks don't understand natural process and hence don't understand how natural shorelines can work				
D. Permitting issues including cost, time, and hassle	Straight, hard walls are easy to deal with under old laws. Changes, i.e. to soft edges could lead to complications – so legacy building codes are a key barrier Permitting is complex Key: speed up all the array of permit requirements Need permitting sped up Issue is province is not able to move because of thousands of permits. The province should develop a mechanism to expedite approvals because in West Vancouver, we can expedite Province should examine engagement issues between First Nations and citizens	5	DFO, local govt. (within city boundaries), archeological site, heritage, alteration permits. Does not matter how much info you provide if there is no "stick" if there is no permitting process, homeowners can get screwed	4		4	13

Professionals							
Barrier	**West Vancouver**		**Powell River**		**Cowichan Valley Regional District**		**Total Votes**
F. Lack of incentives and government support from all levels of government (including technical assistance, education, and financial incentives)	No one jurisdiction is positively responsible (i.e. responsible to help people through the system) and the regulatory system is very complex	2	Is WorkSafe BC a good example? Could get fast tracked? Can't get incentives without GS certified contractor – eg septic system model. Permitting is tied to govt support – waiting is a major issue – fast track? Dealing with DFO is cost prohibitive	4	Local govt should use both carrots and sticks (fines) govt needs to provide education to homeowners should provide inventory of low cost native plants	5	11
New – existing dev is too close to high tide line			No enforcement of provincial guidelines for setbacks from sea	4			04
G. Lack of market recognition for Green Shores certification			Need recognition of the GS contractor too key to get their buy-in		Could motivate homeowners and developers	3	03
H. More extreme flooding and erosion due to sea level rise, more intense storms, and higher storm surges		1	Concern for effectiveness is high winter tide and SE storm	1	People overwhelmed by this and "throw up their hands"	1	03

Professionals							
Barrier	**West Vancouver**		**Powell River**		**Cowichan Valley Regional District**		**Total Votes**
I. Concern that erosion assessment could affect insurance rates	More of an issue in the US than Canada re. FEMA protection of flood-prone properties	1	Could local govt lobby insurance agencies for reduced premiums for homes with GS approaches?	1	"sleeping tiger" communicating mitigation	1	03
K. Perception of loss of privacy	with soft edge and new access across the foreshore and in front of properties – property owners are not interested in creating an asset for the community at large	2					02
P. lack of knowledge of the possibility	People see old sea walls and don't realize what is natural beach	1					01
Q. the process to allow adaptive shoreline by the utilization of private and public lands = there is no boundary between private and public		1					01
L. Lack of City resources re. shoreline area	0.5 FTE for 22 km waterfront						

Professionals							
Barrier	**West Vancouver**		**Powell River**		**Cowichan Valley Regional District**		**Total Votes**
M. unsure of how the property will look after the investment							
N. Value for maximizing property use right to the property line (given high land value this is important)							
O. no certification of expertise of contractors, professionals, so homeowners are unsure of buying good services	Default is a wall because we don't have enough consulting professionals; lack of qualified environmental professionals (QEP) to support						
New – neighbourhood esthetics			don't want to stand out, only GS shoreline make you more vulnerable?				
New – lack of action by neighbor will affect my success					Perception that hardwall will be a fixed solution vs a dynamic GS approach		

INTERVENTIONS

- A summary of key points is provided, followed by a table of results. In addition to interventions identified at the three workshops in West Vancouver, Powell River, and Cowichan Valley Regional District, others were documented at a workshop on Thetis Island. These are included in the results table and informed the summary.

SUMMARY

Top 4 interventions received considerably more support than the others (26+ votes):

- Financial incentives – target removal of hard armouring
- Education and resources – emphasised in the Thetis Island report
- Free expert advice and support
- Demonstration project, tours, testimonials

The next 2 interventions were quite well-supported (18-19 votes):

- Simple and streamlined processes and approvals
- Regulations and enforcement

The next three were moderately well-supported (5-12 votes):

- Simple joint agreements
- Free erosion assessment
- Recognition and awards

New intervention suggestions:

- West Van
    - In soft-shore design, guidance for delineating the property line and enhancing privacy
    - Think as a local government, act like a neighbour
    - Communicate expectations clearly, including limits of what shoreline work can do
    - Professional association CPD courses
- Powell River and Cowichan Valley Regional District
    - Modification of hard walls (far cheaper than to remove and replace)

THETIS ISLAND SUMMARY

Note: Homeowners and professionals were not distinguished for this workshop. As the Thetis Island workshop did not use the same format as the other workshops, the results are not in the same format. Below, results are very briefly summarized in relation to the categories of interventions used in the other workshops, providing a sense of the emphasis Thetis Island participants placed on types of interventions.

Interventions

- Education: supported
- Expert advice: supported; free site visit/assessment
- Demonstration projects: not mentioned
- Streamlined permitting: supported
- Regulations and guidelines: not mentioned
- Joint agreements: supported
- Recognition and awards: not mentioned

RESULTS TABLE

Homeowners								
Intervention	West Vancouver		Powell River		Cowichan Valley Regional District		Thetis Island	Total Votes
A. ***Financial incentives for soft shore armouring or removal of hard shore armouring** including tax incentives, interest-free loans, project grants, etc.	Reduce costs; off-set up-front costs Need provincial and federal government involved in funding by way of a grant program -Cost sharing with mu - support cost sharing among neighbours for engineering/design services -Reduced property taxes	11	Better than a regulatory approach or hammer. Need more info and incentives; knowledge of conservation easements When insurance companies raise rates it will influence this one; need to change perceptions Emphasize a collective approach to a collective problem and get all levels of govt. involved Tax incentives and grants through a construction fund; incentives should be obtained through local conservation fund for GSH local govt admin and support Insurance benefits; provincial and federal grant programs to owners don't bear full costs; this issue is of concern to everyone so key to get buy in	15 High	Loans will scare away people without money to do it which is a real issue here. Changing your property triggers assessments and is a tax disincentive. Helps build confidence Finding some support for all or some of the project is appreciated – see it as a reward for doing the right thing Particularly if there is a cost savings Perhaps provincial more than local, esp related to CC adaptation; bring these forward for individuals and large landowners and discuss; recognize unique structure /conditions at Cowichan Lake	12 3rd	tax incentives; grants; Natural Area Protection Tax Exemption Program (NAPTEP) which provides landowners with an annual 65% exemption on the property taxes for the portion of their property protected with a NAPTEP covenant.	38

Homeowners								
Intervention	West Vancouver		Powell River		Cowichan Valley Regional District		Thetis Island	Total Votes
C. Education and resources such as workshops, simple guidelines, and free site assessments for homeowners	People willing to spend if understand benefits Educating developers who are pitching to homeowner, so they become ambassadors -____ suspicion. Prior knowledge and consent from homeowners -"What about riparian nights?" -A huge need to address lack of confidence in GS -Education is key: win people over with demo projects. Show it works. Create videos. See it in action -Need coastal engineers to guide it and take movies of hard shores and	8	People need to know its real, and need an estimate that they will weigh against the investment they have in their home. More outreach and education needed Do target mailings; convince neighbours of the effects; get other agencies like DFO to weigh in too; show that some properties might lose land / scare them Education is so key – many people don't believe it or understand relevance to them Waterfront owners are not perceived as needy; people don't value something that is free; site assessments need to be part of EVERY intervention; its likely best to put training money into certifying professionals Not getting enough participation	11 High	Some of this underway already with local society; do more in schools; profile early adopters then go for the mushy middle; this is the carrot that is needed People don't know they need a permit; they do whatever they want; lack knowledge re septic fields Website with links to credible sources needed; people don't have the science to understand the issues, and there are different audiences (year round v weekenders, newbies v old timers) Educate re financial benefits to both individuals and communities; show	16 2nd	A better understanding of 'the right thing to do' and the process required to do it seemed to be a crucial obstacle clarify processes use GSH ambassadors and/or train locals; ecological education officer; case studies; information for new owners; design guidance and resources (on website); information program for youth (e.g. Camp Capernwray); signage at GSH projects; public workshops –	35

Homeowners								
Intervention	West Vancouver		Powell River		Cowichan Valley Regional District		Thetis Island	Total Votes
	soft shores and show what happens over time. -Risk component is huge. What is storm comes and damages the newly greened shore? Who will cover and protect this? -Could the district offer protection to back up someone for someone trying GS				the human health benefits also Share info about costs; build understanding of link to human health (walk in the forest for stress reduction) Education also for QEP, relative to QEP; pull into RAR course		practical, with site visits; property specific information for new owners	
D. Free expert advice and support (without a sales focus) such as a local Green Shores ambassador or technical ecologist	Linked to incentives Not free though to increase perceived value of advice Not guaranteed connection to the City, so homeowners don't risk "getting on a train" to loss of privacy simply by asking for advice	7	Genuine advice and support. Proactive influence, not sales. More practical and more detailed info helps. EG where do you get the plants? Where do you get technical expertise? Especially for professional contractors Lessens costs to homeowner and developer; protection of enviro is good and people would see this as	11 highest	People want to do the right thing so we need to make it easier; support is key Provide a written plan linked to GSH guide (simple form) Planning and project mgmt support through the life of the project needed; having a budget so know the cost from the outset	10 3rd with H	free site visit/assessment hire technical ecologist or similar to provide technical advice to residents	28

Homeowners								
Intervention	West Vancouver		Powell River		Cowichan Valley Regional District		Thetis Island	Total Votes
	-Find out what the plan/budget are -rocks → kayaking		a real benefit Free is not respected or people don't believe it unless it fits their beginning ideas		Someone will need to get paid; liability is an issue; lots of risk involved Local expert to advise on the project, explain the process, etc.			
H.Demonstration projects, tours, testimonials	Removes the "unknowns" Examples of well-done projects with increase in property value shows return on investment – may be worth a study -Early intervention by local government/province. Break shoreline into areas with different characteristics. -Plan for an area with kinds of plans, kids of costs, amount of corporation needed	5	Habitat for humanity approach – demo that asks for volunteer support – RD to provide profile. See long lasting examples Show people how it would look; Myrtle Beach a perfect demo site as high viz and owned by PRRD; Tla-amin Lease Association would love to work on pilot project with us Provincial agencies working together – e.g. myrtle beach Offer assistance to future projects – create examples of new norms. Public space demo sites provide local example	11 Highest	"Comment – how to work across three levels of govt when applying GS approaches? DFO, Water Mgmt, and RD all involved? Confusing to the avg joe" Tie this into the permit process and make it a knowledge sharing moment; govt needs to help by demos and info sharing Watershed tour, from lake to estuary. Local project examples work best. Helps you talk to your neighbours. Before and after	11 3rd with D	Case Studies with lessons learned and contacts for more information	27

Homeowners								
Intervention	West Vancouver		Powell River		Cowichan Valley Regional District		Thetis Island	Total Votes
	-Need more info – to quantify results e.g. take measurements -Pilot projects can reduce fear and increase trust -Talk to actual homeowners who've been through it -Need to see it in action and homeowners convinced that it works		and trigger other pilots Linked with D		shots of actual projects can motivate people Most important; on the ground and longer term projects will be key; demo of the financial aspects needed as well Show cost savings for projects with multiple properties			
B. Simple and streamlined processes and approvals for permitting, conservation covenants, etc.	If simple – streamlined = less complex and less costly More quick process would help Process of approving and cost-sharing similar to lane improvements could work for groups of	4	Need more clear info; knowledge makes this more accessible and real. Address situations that are difficult to regulate You can educate people but it still comes down to $ and to documentation on paper	7	Requirements should be readily available, clear and easy to understand; permit process currently too adversarial, not helpful even when you try to do the right thing; process encourages cheating Confidence that the	8 1st	Ease the provincial approvals process	19

Homeowners								
Intervention	West Vancouver		Powell River		Cowichan Valley Regional District		Thetis Island	Total Votes
	landowners wanting to do joint project and needing approval				process can be completed Saving time and costs; make it easier; exempt a GS project; could there be a multi year tax incentive? Current costs for existing DPA. Compare with what GSH would costs and avoid DPA? Good approach.			
I. Regulations and enforcement to guide waterfront development setbacks, siting, landscaping ,flood plain, servicing, sewage treatment, run-off, soil removal, etc.)	Enforcement of regulations Currently do with strems, steep slopes Part of OCP – bylaws Rebalance regulations like accretion principle so that there isn't a built-in disincentive Apply Streamside Protection Regulation approach to the waterfront	6	When info is not enough, communicate the OCP tools Need very clear new GSH guidelines, most applicable to new dev "enforcement" too strong a word? Scares people off? Prefer to have example to inspire adoption.	8	Need both sticks and carrots here and stick has been lacking here. RD perceived to have low level of authority Relates to education; helps public comply, realtors don't help generally; consistency across levels of govt an issue; streamlined process and consistent reg f/w	4 1st		18

Homeowners								
Intervention	West Vancouver		Powell River		Cowichan Valley Regional District		Thetis Island	Total Votes
	Change inconsistent laws: if you green your waterfront, your property area is reduced; if you keep it hard, it is increased Need standards – guidelines throughout municipality -Through local government -A supportive approach to meeting changes to regulations -Problem solving approach -cooperative, voluntary initiatives -concern with abrogation of common law riparian (eg. Deep Cove Easement) -Check what Deep				needed – that way you have a clear process and homeowner does not have to hire a QEP for site assessment, saving $			

Homeowners								
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	Cove did to enable easement across private property to protect the foreshore							
G. Simple joint agreements or group rates for projects across multiple properties	Brings property owner together – can save money and improve ecological restoration Economy of scale is important Group residents together with a special agreement mechanism Great for residents to combine money, resources Contractor efficiency to work on several properties at once (demolition etc.) Need more efficient permit process to enable quick access to site for foreshore works	3	Would be a significant influence on others if a group held together and did it Works well with small lots; very important – usually only way to implement GSH with many of these properties Linked strongly with A; lessens impacts of hard walls on neighbours; not all private land – provincial and federal land also part of neighbourhoods	5 High	Show cost savings for projects with multiple properties Timberwest owns much of lakeshore so need agreements	4	Agreements for joint management for shorelines across multiple properties Facilitate continuity over years for waterfront properties	12

Homeowners								
Intervention	West Vancouver		Powell River		Cowichan Valley Regional District		Thetis Island	Total Votes
	-Essential -important b/c to improve shoreline many homeowners need to work together so as not to compete with the shoreline rehabilitation efforts							
E. Free erosion assessment by a third party not linked to government or insurers	Accreditation system needed Document / permit process easier -Good to have independent perspective/assessment -Intervention: Helpful advice and assurance from local government -Already part of C	5	Need impartial info Would give us facts to back up and motivate change People know what is happening on their properties already	3 High	Might be good – not well known here People need to understand the costs of a hard wall failure	1		09

Homeowners								
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F. Recognition and awards for Green Shores properties to help support market recognition		1	Certification and celebration that would kickstart point G Recognition is worth $ to the homeowners regardless if they understand	2	Would raise values and thus taxes Recognition works Not as important	2		05
J. In soft-shore design, guidance for delineating the property line and enhancing privacy	Could be part of development permit guidelines							
K. Think as a local government but act like a neighbour	Do this through in-person and on-site time and effort. The challenge is to engage landowners in acting on private property, because the local government can only control what happens on public land							

Homeowners								
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	Long-term shoreline plan for an area can help establish guidelines collectively for landowners in an area Encourage groups of landowners – they can better take a holistic approach and communicate about the whole picture including public and private Involve people at the block/neighbour level, to build understanding and shared interests. Open attitude from staff is key. Less of a policy, more of a working ethic from staff.							

Homeowners								
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L. Communicate expectations clearly, including limits of what shoreline work can do	Tell people what soft shoreline techniques won't do, e.g. in exceptional storms the water will go over them. Don't forget to do the same for hard shoreline techniques – present a balanced view							
M. Professional association CPD courses	Educate professionals whose values align with the program, building capable champions – more effective point at which to intervene than landowner education							
N. Modification of hard walls is far cheaper than to remove and replace			Site-specific assessment would identify where this is possible					

Homeowners								
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P. Overall prioritization of sites/ locations/ projects								
Q. Local GSFH "ambassador" sponsored by the GSFH program.								