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GREEN SHORES FOR HOMES PILOT PROJECT SUMMARY REPORT

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STEWARDSHIP CENTRE
FOR BRITISH COLUMBIA

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This document does not necessarily represent the views of all individual members of the advisory committee, or the official positions of the organizations with which the individual committee members are associated.

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The Stewardship Centre for BC (SCBC)

This report has been prepared to provide background information for the Green Shores™ program of the Stewardship Centre for BC. SCBC was created to assist governments, businesses, conservation and environmental organizations, and citizens carry out stewardship activities in the most efficient, effective, and rewarding ways. A leader in promoting stewardship values as the foundation for sustainability, the SCBC wants to help make “shared stewardship” – the voluntary adoption of environmentally sustainable practices by all sectors of society – a reality in British Columbia.

For more information about the Stewardship Centre, visit our website at

www.stewardshipcentrebc.ca

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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 communities¹ 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.



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.



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 ecosystems². 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.
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

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.

- 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 armoring 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 armoring 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 armoring 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.



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.

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 erosion³ 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 promoting healthy

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)

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 viewscales; 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

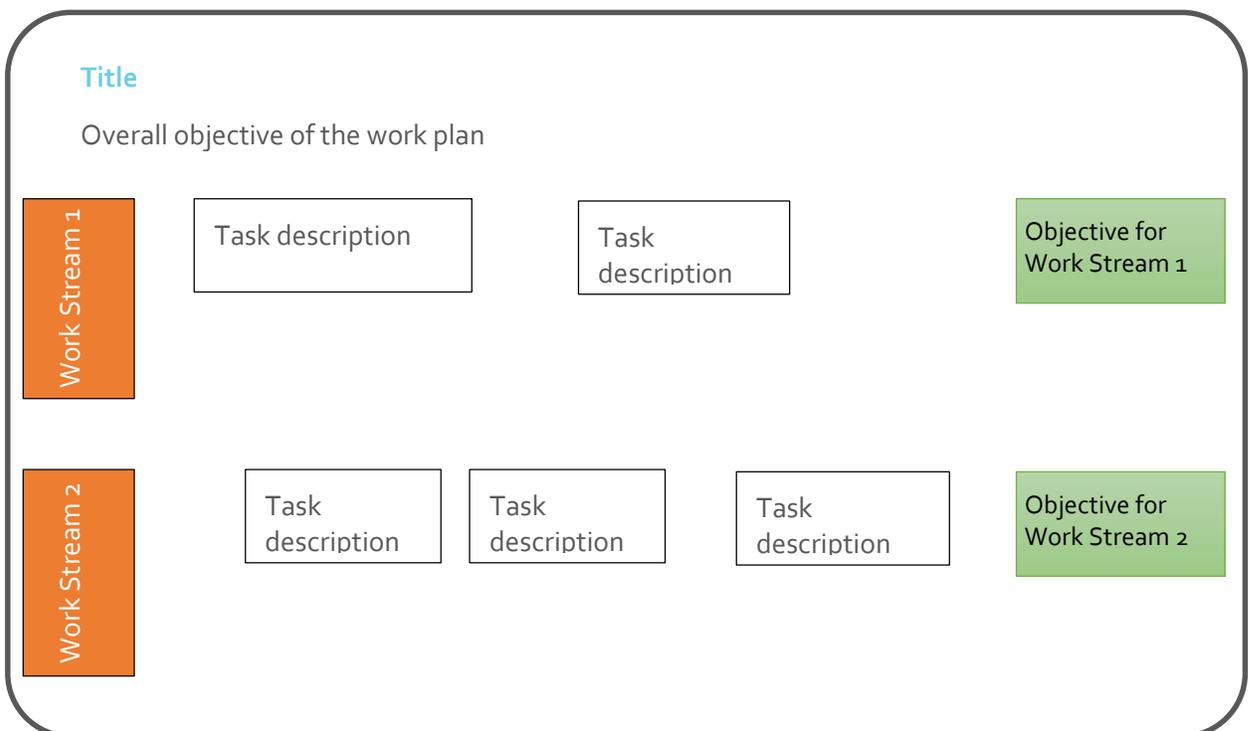
- Regulations and enforcement are typically used at the latter stages of market transformation, to make widespread practices ubiquitous. As Green Shores practices are little-known and not commonly practiced, they are not suited to regulation and enforcement at this time and are not recommended as part 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.

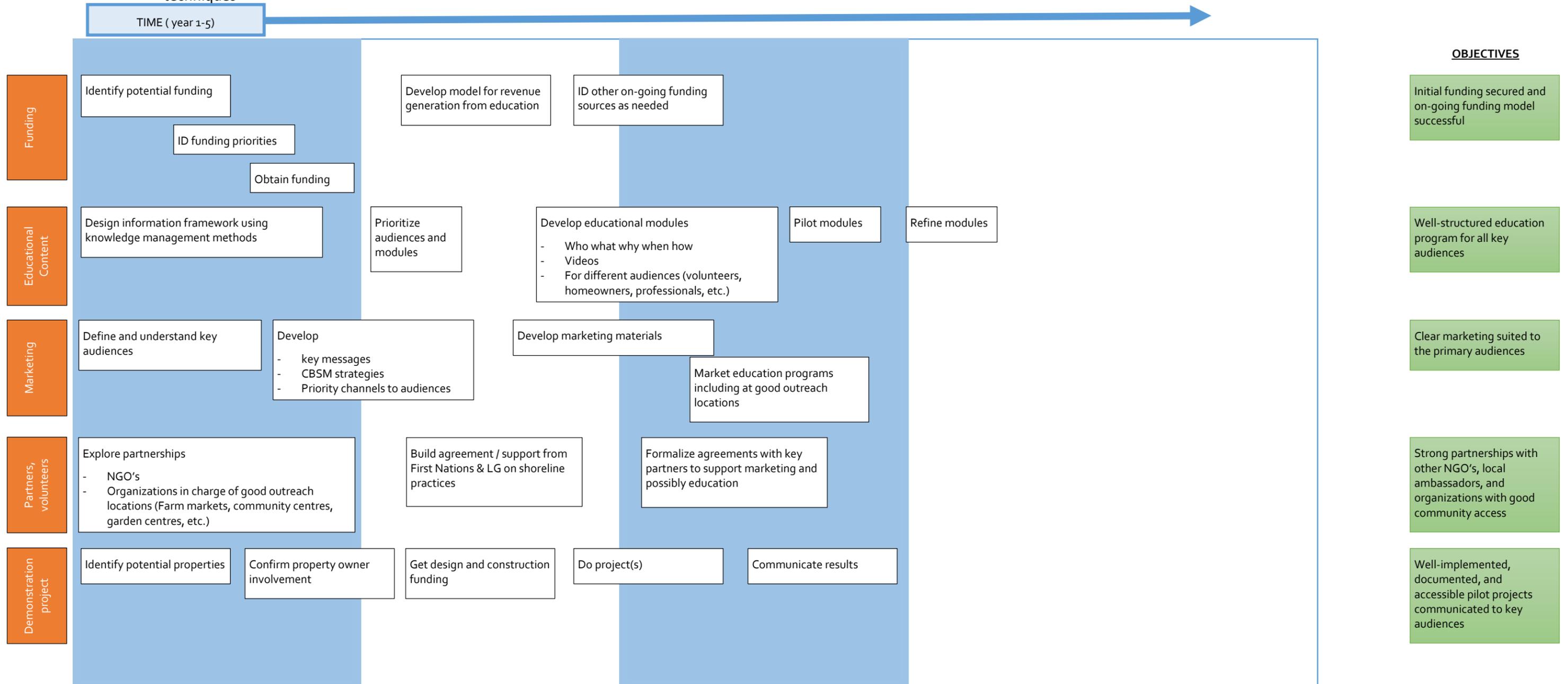
Below is a key to the action plan diagrams on the following pages. Each diagram includes an overall objective at the top. The diagram then breaks the work down into a series of work streams, titled in an orange box on the left. The work streams consist of a series of tasks sequenced over a general timeline 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.



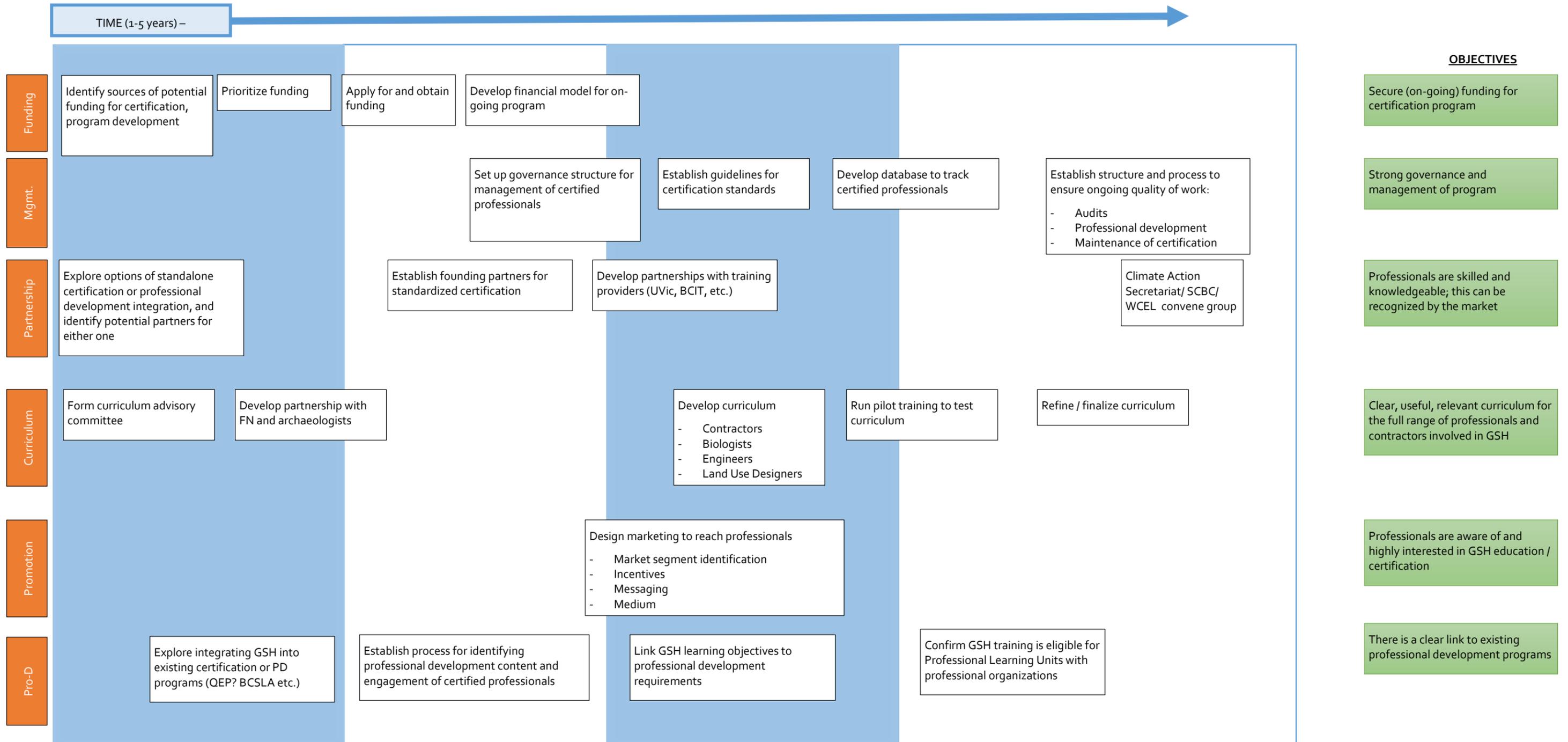
EDUCATIONAL PROGRAM

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



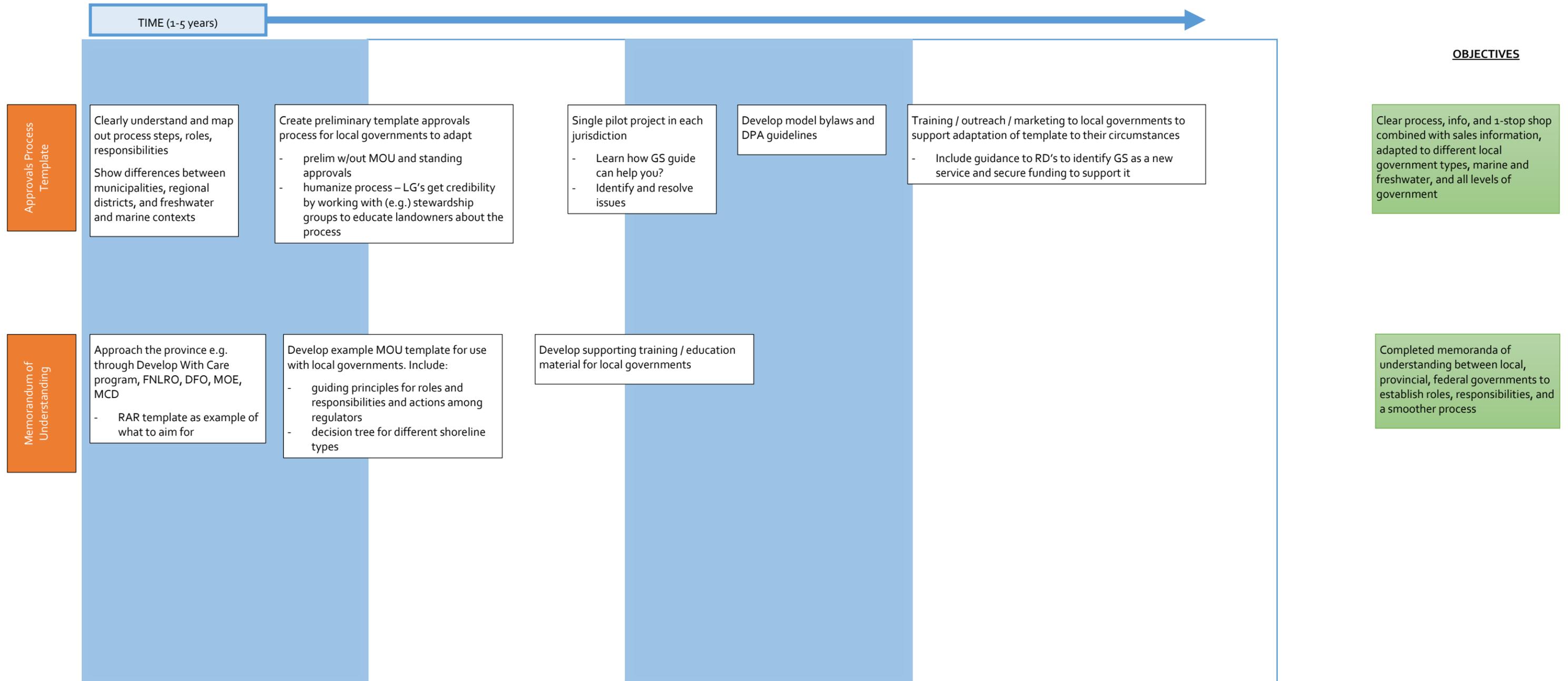
PROFESSIONAL CERTIFICATION -

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



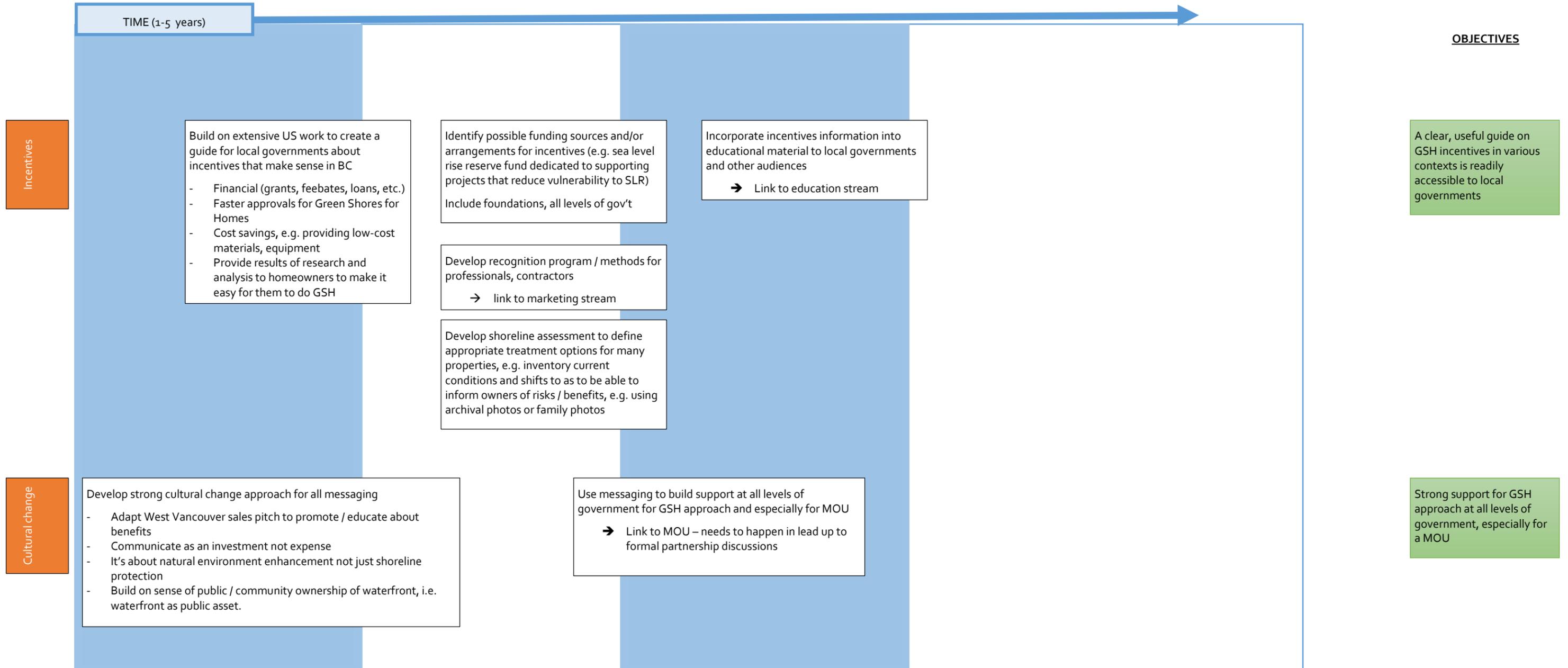
STREAMLINED APPROVALS

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



INCENTIVE PROGRAM

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



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