

**APPENDIX 1:
WHITE PAPER DESCRIPTION OF ISSUES**

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This appendix contains the description of issues as they were presented in the March 2010 white paper. These issues are referenced in comment letters and the online survey results.

Overarching Ecological and Land Use Issues

1. *No Net Loss*

In setting “no net loss of shoreline ecological functions” as the environmental protection standard for SMPs to achieve, the State with the support of business and environmental organizations signaled its intent to substantially strengthen protections for Puget Sound shorelines. Even though the SMP update process has been underway for several years, the path for SMPs to meet the no net loss policy objective is still emerging. There is even less clarity on how NNL will be tracked and evaluated in the long term. Evaluating success in achieving no net loss will be a key issue for the future seven-year SMP updates, which were mandated as part of the 2003 legislation.

Accounting for No net loss needs to occur on three levels:

- **Project level:** The shoreline master program guidelines (Chapter 173-26 Part III WAC) indicate that the no net loss standard should be applied to “each permitted development” and that local governments must ensure that “exempt developments in the aggregate” do not cause a net loss of ecological functions without specifying how this should occur. The guidelines also require SMPs to contain policies, programs, and regulations that address cumulative impacts (from new and existing development) and “fairly allocate the burden of addressing cumulative impacts among development opportunities”. There is minimal guidance on how this standard should be implemented.
- **Jurisdiction level:** The SMP update process requires local governments to use detailed information on ecosystem processes and functions to develop shoreline policies and regulations. The policies and regulations apply to a legally defined jurisdictional boundary, not an ecologically defined system or unit, and in most cases the jurisdictional area is already disturbed, developed and/or platted. Despite these constraints, SMPs must prevent detrimental impacts while accommodating planned development, public access and water dependent uses.
- **Sound-wide level:** Protection and restoration of shoreline habitat will be a critical element in sustaining the Puget Sound ecosystem over the long term. The Puget Sound Partnership and other parties will need to assess ecosystem conditions, and link conditions and trends back to shoreline management under local SMPs, to assess whether the NNL objective is being achieved.

To understand the challenges that this presents consider this real-world example:

Example – A marine shoreline within a city is zoned and platted for urban density single-family residential development. Nearly all of the lots have a legal residence, a dock and a protective bulkhead. Most homes are within 50 feet of the ordinary high water mark. Roughly 15 percent of

the shoreline is sparsely developed, but the zoning and comprehensive plan designations are the same as the developed area and future build-out is almost certain. Restoration opportunities within this city are very limited because of existing development on private property. Although the jurisdiction has adequate mitigation provisions written into their SMP, how can the city demonstrate that they will achieve no net loss of ecosystem functions when 'preferred' development of the remaining lots is almost certain and continued ecosystem loss from existing development is certain?

To date, local governments generally have addressed no net loss by:

- Applying a shoreline designation system that differentiates shoreline management goals based on the current shoreline conditions;
- Having policies and regulations that require individual developments, including exempt developments, to mitigate their impacts;
- Integrating critical area regulations into their master programs;
- Having policies and regulations that prohibit developments if they are determined to contribute to cumulative impacts; and
- Having a restoration plan that identifies specific projects or actions that can be taken to improve shoreline functions over time.

While these measures constitute major improvements in shoreline protection, verifying that they achieve no net loss will be difficult because there are no agreed-upon indicators of function for local governments to use and consequently there is no commitment to monitor over time.

There needs to be a technical and policy approach to define no net loss of function and ensure policies and regulations protect these functions. Where there are gaps in the ability of SMP policies and regulations to protect functions, local governments need better strategies for integrating tools that can complement SMP regulations including incentives, technical assistance and restoration.

2. Protection of Private Property/Shoreline Armoring

The region needs additional incentives and strategies for protecting private property with environmentally beneficial practices.

Many shoreline property owners have made significant financial and personal investments in their property. They are concerned that shoreline erosion may cause loss of land or threaten their homes or structures. Hard armoring is one of the most environmentally detrimental forms of erosion control, but many property owners perceive it as the least expensive, most reliable and thus most favorable option. The fact that bulkheading/hard armoring to protect a single-family residence is statutorily exempt from a Shoreline Substantial Development Permit may reinforce these perceptions.

The Shoreline Master Program Guidelines adopted by Ecology allow bulkheading only if there is a demonstrated and imminent threat to an existing residence. This standard often sets up a battle

about the nature and severity of the threat, which can be difficult for a local planning agency to adjudicate. Although there are other property protection techniques that are benign or beneficial to the environment, they are less known, may be more expensive, and may sometimes be more challenging or costly to permit (especially if they involve fill below the ordinary high water mark). In addition, the conditions along some shorelines call for holistic (reach-scale) approaches that make it difficult to site a single bioengineered bank protection project among a reach of hardened shorelines. These factors inadvertently create disincentives for private property owners to pursue using ecologically better techniques for property protection.

In addition to impacts from new armoring, roughly one third of the Puget Sound marine shore is already armored in ways that displace habitat and continue to disrupt processes and functions. Over time this armoring has to be maintained or replaced. With expected impacts from climate change, the desire to maintain or replace these structures with similar armoring will likely increase. The SMP Guidelines encourage replacement with more environmentally benign designs. However, achieving this policy objective will be a significant challenge. Failure to create new incentives and strategies that motivate property owners to replace bulkheads with bio-engineered approaches amounts to a missed opportunity to restore some environmental functions. Seattle's Green Shorelines guidebook is an example of the types of tools that will be needed to address these issues, but additional resources will be needed if we hope to make progress on-the-ground and in more dynamic environments besides Lake Washington. The example below highlights some of the added complexities that this issue presents:

Example: A rural property owner needs to repair their bulkhead due to damage from a winter storm. They are willing to use a soft shore solution that involves creating a sloped beach, logs and native plant materials. The effect of this would be to move the ordinary high water mark (OHWM) further landward putting the home within the setback/buffer zone. The property owner is reluctant to do this because of their concern that it might negatively impact their future use of the property. They are also concerned about the time and expense of obtaining permits for proposed work.

There must be adequate regulations, incentives, technical assistance and procedural support to ensure that property owners can achieve property protection using environmentally benign or beneficial techniques at equal or less cost and time than standard bulkheading/armoring techniques. This may require changes to the SMA or other regulatory programs.

3. Restoration

We need a stronger quantifiable and transparent linkage between restoration planning, projects and potential ecosystem losses projected through the SMP update process.

Local governments are required to develop a restoration plan as part of the update process. It is expected restoration will help compensate for ecosystem losses from on-going degradation caused by past development, new activities not controlled by local government and cumulative impacts. The restoration plans that have been prepared so far in the update process contain descriptions of the best ideas in the city or county for restoration (in some cases based on scientifically vetted prioritization efforts). However, the expected functional gains represented by these projects are not directly correlated with potential losses from new and on-going

development. Since restoration projects are voluntary and depend on the ability of a restoration entity to acquire funding, purchase property and manage the restoration action over time, the likelihood that restoration actions link back to actual losses resulting from shoreline permits or violations in a timely manner is low. Many of the sites and projects that local governments identify as suitable for restoration are privately owned, which creates concern and confusion among private property owners and further calls into question the likelihood of their implementation. Actual restoration is based on the availability of property, funds and projects with no assurance that restoration will occur at a time or pace that matches the impacts from existing, new and on-going development. As the following example shows, we need better strategies for facilitating restoration activities that are directly tied to shoreline impacts.

Example: In a rural county, a home constructed close to the water is threatened by wind- and wave-generated erosion. The property owner wants to construct a bulkhead to protect the structure and provides an engineering study that demonstrates the home is in imminent danger and cannot be protected using soft-shore methods. The County is reluctant to approve the bulkhead because the property is located in an important sediment supply zone, but there are no alternatives. The property owner wants to do the right thing but there are no good ways to mitigate the sediment supply impacts on site. The County's restoration plan includes a recommendation for repairing past sediment supply impacts by replacing bulkheads with soft shore beach protection, but there is no funding for the Marine Resource Committee to complete the project and the landowners are not willing to participate. In the meantime, the County agrees to approve the bulkhead in exchange for some vegetation enhancement elsewhere on the property, but the sediment supply impacts are not directly addressed.

There needs to be better integration of restoration planning that has already occurred through salmon recovery and other Puget Sound efforts like PSNERP with local SMP planning. There need to be commitments for funding and timelines for restoration to occur commensurate with shoreline development and with direct linkages between loss and replacement of function.

4. *Nonconforming Uses and Structures*

When regulations change and previously legal structures and uses are deemed “nonconforming”, some property owners are concerned and feel their investments and current uses are at risk.

Existing development and uses in the shoreline zone that are not consistent with the newly adopted SMP regulations are deemed to be nonconforming. The issue of non conformity is not new or unique to shoreline planning, but it is one of the issues that often confound shoreline property owners. The term “nonconforming” carries a negative connotation and property owners worry that nonconforming uses will be required to conform. Owners are also concerned there will be additional requirements like having to perform expensive special studies or surveys if they want to maintain or expand current uses. Some property rights interests have taken advantage of these concerns to generate opposition to shoreline regulations such as buffer standards.

Most jurisdictions have policies for nonconforming use intended to protect legally established uses and structures. However, local governments are required to address impacts that cause a continued loss of ecosystem functions so there is pressure to minimize continued degradation

from existing developments while balancing the interest of property owners to maintain and in some cases expand their existing structures and uses. .

Example: A homeowner legally constructed her house 50 feet from the riverbank. Two years later the County updated its SMP, increasing the buffer to 150 feet. The landowner wants to build an addition onto the house and is now required to get a conditional use permit, complete a vegetation plan and pay a consultant \$10,000 to prepare the permit application.

Nonconformity is a complex issue local governments face in both the update and implementation phases of the SMP. Better strategies are needed for local governments to address the concerns and acknowledge the rights of property owners. Private property owners on non-conforming lands are often a critical constituency to achieving no net loss. More effort needs to be made to help them understand the ecological impact of their actions while acknowledging and respecting the voluntary nature of their decisions to take less detrimental actions where possible.

5. *Agriculture and Forestry Exemption from Local Control*

The exemption of most agriculture and forestry activities from local SMPs creates an impression that these activities are held to a lesser standard than residential development. Given that the overall goal for local government is to achieve no net loss of function, if these uses are held to a lower standard than no net loss they may ultimately create impacts that in the end are viewed as a failure of the local government SMP.

SMPs are barred by statute from requiring changes in existing agricultural activities. Forestry activities in the shoreline zone are regulated largely by the Forest Practices Act, with limited applicability to local SMPs. This creates a perception that these uses are provided special treatment and have greater flexibility than residential and commercial uses of the shoreline. It is not clear how the State regulation of forestry and agriculture are being monitored to achieve the standard of no net loss required of local governments. This creates the potential for opposition from key stakeholders.

Example: Along a river shoreline, a farm has no buffer along two miles of riverbank and the new homes proposed for the adjoining properties are required to maintain a 150 foot buffer of native vegetation. The property owner questions why they are not allowed to remove the trees to create a view of the water when the farmer is actively farming down to the riverbank. They argue that their development has less of an impact than the farm.

Local governments need clear measures for success and information on how the agriculture and forestry sectors are being managed to meet the no net loss standard they are applying to their other interests.

Update Process Challenges

There are a number of common challenges experienced by local governments and Ecology during the SMP update and approval process. Addressing these issues will increase the efficiency of the process and the effectiveness of shoreline management.

1. Common Solutions for Common Challenges

Local governments face a number of common technical challenges that would benefit from a more unified or comprehensive approach. Although inter-jurisdictional planning is encouraged, it occurs infrequently. Opportunities for improved inter-governmental collaboration include but are not limited to:

- identification and mapping channel migration zones, especially since the SMP grants do not specifically fund this work;
- identification and clarification of approaches for addressing impacts from climate change.
- strategies for integrating SMPs and Critical Areas Ordinances, given this issue has been confounded by recent legislation and court findings; and
- cross-jurisdictional restoration planning.

Example: Three cities in the Nirvana River Valley are each paying a consultant \$40,000 to research and write the required section on ecosystem processes and functions and prepare a restoration plan. The Nirvana River Council has already conducted a watershed characterization and developed a list of restoration priorities. Each City sets out to prepare separate documents for their section of the Valley, while the Nirvana River Council awaits funding to implement their Valley-wide plan.

Resources need to be allocated to more inter-jurisdictional and cross-Sound technical studies that can be tailored by local governments to their individual situations. Local governments need to find ways increase their capacity to work cooperatively with each other to develop solutions to shared challenges. Ecology, the Puget Sound Partnership and others can help by securing funds to support the development of solutions.

2. Public Involvement

Organized property rights groups are increasingly participating in the update of individual shoreline master programs. They are stimulating more interest and concern of property owners to engage in the process. Property owner participation can be beneficial over the long term because it increases mutual understanding and can lead to better environmental solutions. However, when property owners are stimulated to participate from fears raised by information that is not accurate it can derail the update effort and thwart efforts to make improvements to shoreline management. Ecology's recent completion of a communication strategy and reassignment of existing staff to improve public and stakeholder communication is designed to address this situation. Additional work is needed to proactively and constructively engage property owners and property rights groups across the State. Without this work limited resources will be spent on crisis communication, lawsuits and ineffective policies and regulations instead of educating land owners and creating well designed and community supported updates.

Often the most intensive public outreach efforts happen during the local adoption process, after the local jurisdiction has spent the bulk of its SMP grant funds. Local governments may need to work more closely with Ecology to determine when and how grant funds are spent to ensure that money is available at the appropriate times in the update process to enable effective and timely

outreach. This would require careful coordination with Ecology since the grant allocation requirements and process are quite complex and Ecology does not have authority to alter funding cycles.

There needs to be continued effort by Ecology, state agencies including the Puget Sound Partnership, and local governments to implement effective communication strategies. Ecology's new SMP communication strategy can serve as the foundation of this effort.

3. *Ecology Support, Review and Approval*

Ecology and local governments share responsibility for the success of the Shoreline Management Act and the efficiency and effectiveness of local government processes to update their SMPs. Ecology's role is to ensure the overall effort is meeting the intent of the SMA and approve each local government's updated SMP. Local government's role is to work within their community, apply science and develop a SMP that meets the State requirements and is consistent with other local authorities and interests. Ecology's current workload is exponentially greater than ever before to review and approve SMPs, and it will continue to expand over the next few years. Even though their staffing has not increased at the same rate as the work, Ecology has made significant efforts and advancements to facilitate and improve the overall process. As with any new effort of this size and magnitude, there are several areas that could be improved.

a) The feedback and guidance that Ecology staff provides to local governments needs to continue to improve to ensure consistency across all Ecology staff working with local governments. Guidance and feedback need to address the tough issues in a manner that can be used by local governments. There needs to be accountability for both Ecology and the local government to ensure that differences have been resolved during the update process.

b) The timeframe and criteria for Ecology's final approval of a locally adopted SMP is highly uncertain and has sometimes taken more than a year. Local governments are often not meeting their timeline for local adoption which can significantly affect Ecology's schedule and workload. However, Ecology's process of formal review is uncertain and not transparent to the local government as well as those that were involved in the local process. Once a locally adopted SMP is submitted, prompt review is essential. Uncertainty and delay create frustration and tension between Ecology and the local governments about when the new policies and regulations will take effect locally and whether there will be a need for substantial revisions, public process and staff work. This delay also has created a window for confusion and unrest about the SMP because after approximately 5 years of work and agreement there is not decisive endorsement or support to move forward from the state.

There needs to be continued emphasis on providing consistent feedback to local government and continued dedication to increasing predictability in the final review process.

Implementation Issues

1. *Staff resources to implement updated SMPs*

After final adoption of the local SMP, effective implementation will be a significant challenge. Generally, the newly updated SMP's are more complex and resource-intensive than previous regulations.

The adoption of updated SMPs increases the demands in implementation because science is demonstrating more complex interrelationships that must be addressed for protection of the ecosystem; the expectation of achieving no net loss is coming under more scrutiny; the number of communities involved in restoration and environmental protection has diversified, regionalized and grown; and private property owners, businesses and environmental interests are increasingly involved and sophisticated in their expectations and needs. This increase in local effort and expectation is occurring in a time when local governments are severely limited financially and are cutting programs and staff.

The public's trust in government is fragile yet at the same time the public expects high quality and scientifically certain deliverables and dependability from government programs and efforts. There needs to be a strategy for how local governments will successfully address the increased work in implementation in the face of the current financial and political climate.

2. *No Net Loss at the Parcel Level*

The requirement to achieve no net loss from development activity on an individual parcel will be a challenge for local governments and the property owner to address and successfully manage.

Generally, the approach to minimize impacts includes attention to how the property is developed, used and where activities are located. Practices are required and implemented such as setbacks from the ordinary high water mark and stormwater control to reduce environmental effects. However, there are often unavoidable impacts that require compensatory mitigation. Single-family developments often have difficulty finding compensatory mitigation options that can be achieved on-site.

If there are no easy-to-access off-site mitigation options such as in-lieu fee programs or mitigation banks (which is the case in most jurisdictions), parcel by parcel mitigation is problematic. The state and federal agencies are working diligently to fund and implement watershed-based mitigation but it will likely take several more years before off-site mitigation tools are readily available in most areas of the state. In the meantime, there needs to be a serious look at how effective mitigation at the individual parcel level can be and how to fairly pay for and achieve no net loss.

3. *Technical Assistance and Incentives*

Effective implementation of SMPs requires more than just regulation. Because of the complexity of property and environmental management there has to be more technical assistance to landowners. Local governments need to know how to best address unique situations on

individual properties and provide guidance and examples of ecologically benign or beneficial alternatives to property owner needs. Local governments need incentives for known issues they will face like bulkheads, non-conforming structures and vegetation management coupled with an active effort to inform people of these incentives. These best practices need to be made available in an easy and effective manner for property owners.

Without an equal or greater emphasis on assistance and incentives compared to regulation, property owners and the public may become more resistant to shoreline management and suspicious that the only tool governments are using to achieve no net loss is regulation. There needs to be a clear identification of the key regional issues local government faces and the development of tools, incentive programs and examples of best practices. In addition, sufficient resources for implementation of technical assistance and incentives at the local level are necessary to achieve no net loss of function. Partnerships with organizations like land trusts, conservation districts, foundations and others will be critical to success. These partnerships may need to be formed through regional organizing bodies like the Puget Sound Partnership or others with the staff resources and expertise to establish and manage such programs instead of relying on each local government to independently create and maintain these relationships.

Example: A city identifies a last remaining stretch of critical shoreline adjacent to a salmon river that will likely only be protected if it is purchased by a land trust, put into conservation easements or significant landowner outreach and education occurs. Who is making the connection between lands that are unable to be protected through regulations and those with the tools to achieve protection?

4. Enforcement

In the face of budget reductions many local governments and the State are cutting staff to monitor and enforce environmental programs. Many never had enforcement staff to begin with. Without the consequence of enforcement and subsequent penalties, many landowners and people involved in development will not see the benefit of adhering to increasingly complicated and expensive land use restrictions. There needs to be a combined strategy between the State and local governments for effective enforcement.

Example: A property owner learns that his friend paid \$25,000 to permit and site a modest expansion of his waterfront home, which took months to complete because it required a Conditional Use Permit. This property owner wants to convert his kayak shed into a boathouse and he decides to proceed without a permit because he knows he won't get caught. Without ever contacting the county, he converts his 8 x8 shed into an 1100 square foot boat/guest house and clears some trees so that he has better access to the water.

