

Outline of Anticipated Strategies and Sub-strategies

(Draft, October 13, 2011)

A. Protect and Restore Terrestrial and Freshwater Ecosystems

Smart Growth, Development, Land Use and Land Protection

A1. Focus land development away from ecologically important and sensitive areas

- A1.1 Identify and prioritize areas that should be protected or restored and those that are best suitable for (low impact) development.
- A1.2 Local plans, regulations and policies are consistent with protection and recovery targets for Puget Sound.
- A1.3 Improve local governments' ability and willingness to implement, monitor and enforce plans, regulations and permits that are consistent with protection and recovery targets for Puget Sound.
- A1.4 Strengthen and streamline existing local, state, federal permitting programs.

A2. Permanently protect the intact areas of the Puget Sound ecosystem that still function well

- A2.1 Obtain full or partial property interests for lands at risk of conversion or impacts from human activities.
- A2.2 Use special designations to protect intact areas.

A3. Protect and steward ecologically sensitive rural and resource lands

- A3.1 Create and offer an expanded, integrated suite of incentives and market-based programs that make voluntary stewardship and conservation of private forest and agricultural lands practical and economically rewarding.
- A3.2 Create a Comprehensive Conservation and Ecosystem Services Market focused on resource lands for the Puget Sound Region.
- A3.3 Develop a comprehensive strategy for retaining economically viable and long-term successful, working forestlands through a collaborative process.

A4. Encourage compact regional growth patterns and create dense, attractive and mixed-use and transit-oriented communities

- A4.1 Create a sub-regional network of regional alliances and multi-county scenario visions or plans.

- A4.2 Provide the necessary infrastructure and incentives within urban growth areas to accommodate new and re-development.
- A4.3 Enhance and expand the benefits of living in compact communities to increase consumer demand for them.

A5. Protect and restore floodplain function

- A5.1 Implement priority freshwater (river, stream, wetland, and lake) restoration projects.
- A5.2 Support long-term protection and stewardship of agricultural lands, working farms, and forests to help maintain existing ecosystem function, sustain quality of life, improve the viability of rural communities, and maintain long-term restoration and flood protection options.
- A5.3 Implement and maintain priority ecosystem restoration projects for floodplains, tidal and non-tidal.

Restore Key Terrestrial and Freshwater Habitats

A6. Adapt, where necessary, and implement and maintain freshwater and upland restoration projects

- A6.1 Adapt, where necessary, and implement and maintain stream (river and creek) restoration projects.
- A6.2 Adapt, where necessary, and implement and maintain wetland restoration and creation projects.
- A6.3 Adapt, where necessary, and implement and maintain lake restoration projects.
- A6.4 Establish a stable funding source and local capacity to implement large-scale and complex freshwater and upland restoration projects.

A7. Mitigation that Works

- A7.1 Increase the success rate of mitigation projects to achieve at a minimum no net loss of ecosystem function at a watershed scale.

Sustain Freshwater Availability for Instream and Human Uses

A8. Protect and conserve freshwater resources to increase and sustain water availability for instream flows

- A8.1 Regulation, Monitoring, and Enforcement: Reform state water laws to be more protective of instream flows and to encourage conservation and implement streamflow protection and enhancement programs.
- A8.2 Water Demand and Water User Conservation: Decrease the amount of water withdrawn or diverted and per capita water use.
- A8.3 Implement effective management programs for groundwater.

Protect and Recover Salmon

A9. Protect and recover salmon

- A9.1 Implement regional salmon recovery plan.
- A9.2 Implement the Hood Canal Summer Chum plan.

A9.3 Strategies around other salmonid species.

Protect and Recover other Native Terrestrial and Freshwater Species

A10. Implementation of other plans in a coordinated way and maintenance and enhancement of biodiversity

A10.1 Biodiversity Strategy: Implement existing biodiversity plans in a coordinated way while a more integrated planning approach is created.

A10.2 Terrestrial and Freshwater Species Recovery: Implement existing species recovery plans in a coordinated way.

A11. Prevent and respond to the introduction of freshwater and terrestrial invasive species

A11.1 Prevent and rapidly respond to the introduction and spread of invasive species.

A11.2 Answer key invasive species research questions and fill information gaps.

Fill Key Science and Information Gaps for Terrestrial and Freshwater

A12. Strategies and actions to flow from the Biennial Science Work Plan effort

B. Protect and Restore Marine and Marine Nearshore Ecosystems

Nearshore Growth and Marine Protection

B1. Use anticipated population and economic growth as a catalyst for recovery by building on existing efforts to establish protection and restoration priorities.

B1.1 Ensure complete, accurate and recent information directly assists shoreline planning and decision making at the site-specific and regional levels.

B1.2 Monitor projects to effectively evaluate results and implement adaptive management.

B1.3 Use outreach and education to encourage actions to protect and restore nearshore and marine habitats.

B2. Protect and conserve relatively intact and relatively intact ecosystems to maintain the health of Puget Sound

B2.1 Take actions that protect priority nearshore physical and ecological processes consistent with the Soundwide priorities identified in B1.

B2.2 Prevent new shoreline armoring except where it is required to protect existing infrastructure from imminent risk.

B2.3 Where armoring is aging or non-protective, seek opportunities for permanent removal or the use of soft armoring replacement or landward setback techniques.

B2.4 Take actions to protect migratory corridors and vegetation particularly in sensitive areas such as eelgrass beds.

B2.5 Take actions that protect intact marine environments and priority marine physical and ecological processes consistent with the Soundwide priorities identified in B1.

B2.6 Give permitting agencies and local governments the tools and resources they need to ensure protection of nearshore and marine environments.

B3. Implement and maintain priority nearshore and marine ecosystem restoration projects

B3.1 Use a variety of mechanisms to advance priority restoration projects.

B3.2 Provide incentives to encourage removal of armoring and associated fill and use of soft armoring techniques when bulkheads fail, need repair, and during redevelopment.

B3.3 Implement priority marine restoration actions consistent with the Soundwide priorities identified in B1.

B3.4 Accelerate restoration projects on public lands where government can lead by example.

B3.5 Expand funding for restoration projects.

Working Waterfronts and Public Access

B4. Support economic viability of working waterfronts to help maintain ecosystem function and sustain quality of life

B4.1 Use, coordinate, expand and promote financial incentives and programs for best practices at ports and in the marine industry that are protective of ecosystem health.

B5. Improve Public Access to Puget Sound

B5.1 Increase access to publically owned Puget Sound shorelines

B5.2 Increase public access to the marine ecosystem.

Protect and Recover Native Marine Species

B6. Protect and recover marine and nearshore species

B5.1 Implement existing biodiversity plans in a coordinated way while a more integrated planning approach is created.

B5.2 Implement existing marine and nearshore species recovery plans in a coordinated way.

B7. Prevent and respond to the introduction of marine invasive species

B6.1 Prevent and rapidly respond to the introduction and spread of marine invasive species.

B6.2 Answer key invasive species research questions and fill information gaps.

Fill Key Science and Information Gaps for Marine and Nearshore

B8. Strategies and actions to flow from the Biennial Science Work Plan effort

C. Reduce and Control the Sources of Pollution to Puget Sound

Prevent and Reduce Toxic Loadings into Puget Sound

C1. Reduce the sources of toxic chemicals entering Puget Sound

- C1.1 Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment.
- C1.2 Promote the development and use of safer alternatives to toxic chemicals.
- C1.3 Adopt and implement plans and control strategies to reduce toxic releases into the Puget Sound from air emissions.
- C1.4 Provide education and technical assistance to prevent and reduce toxic releases.
- C1.5 Increase compliance with and enforcement of environmental laws, regulations, and permits.

Control and Manage Stormwater

C2. Use a comprehensive approach to manage urban stormwater runoff at the site and landscape scales

- C2.1 Manage urban runoff at the basin and watershed scale.
- C2.2 Prevent problems from new development at the site and subdivision scale.
- C2.3 Fix problems caused by existing development (structural upgrades; regular and enhanced maintenance).
- C2.4 Control sources of pollutants.
- C2.5 Provide focused stormwater-related education and training.
- C2.6 Assess effectiveness of actions and effects on the environment.

Prevent Pathogen and Nutrient Loadings into Puget Sound

C3. Prevent, reduce and/or eliminate pollution from decentralized wastewater treatment systems

- C3.1 Effectively manage and control pollution from small on-site sewage systems.
- C3.2 Effectively manage and control pollution from large on-site sewage systems.
- C3.3 Improve and expand funding for on-site system maintenance, repair and replacement.

C4. Prevent, reduce and/or eliminate pollution from centralized wastewater systems

- C4.1 Reduce the concentrations of contaminant sources of pollution conveyed to wastewater treatment plants through education and appropriate regulations, including improving pre-treatment requirements.
- C4.2 Reduce pollution loading to Puget Sound by preventing and reducing Combined Sewer Overflows.
- C4.3 Improve the reliability of the wastewater collection system by reducing inflow, infiltration and exfiltration.
- C4.4 Implement priority upgrades of municipal and industrial wastewater facilities in urban and urbanizing areas to increase the effectiveness of treatment and reduce pollution loads to Puget Sound.
- C4.5 Ensure all centralized wastewater treatment plants meet discharge permit limits through compliance monitoring, technical assistance, and enforcement where needed.
- C4.6 Promote appropriate reclaimed water projects to reduce pollutant loading to Puget Sound.

C5. Rethinking how we plan for and approach wastewater control and management

- C5.1 Include assessment of cumulative impacts in planning and permitting for centralized and decentralized wastewater systems in comprehensive plans.

- C6. Control and manage pollution from discharges of wastewater from boats and vessels**
- C6.1 Establish No Discharge Zones for commercial and/or recreational vessels in all or parts of Puget Sound that have nutrient and/or pathogen problems.
- C6.2 Control other sources of boat and vessel pollution including oils and other toxics.

- C7. Improve water quality to lift harvest restrictions in shellfish areas affected by pollution and protect water quality in shellfish areas now approved for tribal, commercial and recreational shellfish harvesting. Coordinate, expand and promote financial incentives and programs for working aquatic lands that are protective of ecosystem health to provide abundant shellfish for commercial, subsistence, and recreational harvest consistent with ecosystem protection.**
- C7.1 Prevent downgrade and achieve upgrades of important current tribal, commercial and recreational shellfish harvesting areas.
- C7.2 Encourage environmentally responsible shellfish culture, gardening, restoration and enhancement based on science.
- C7.3 Resolve conflicts between aquaculture and nearshore, habitat and upland uses.
- C7.4 Implement NOAA's National Shellfish Initiative Policy.

- C8. Agricultural Runoff**
- C8.1 Target voluntary and incentive-based programs in ways that will best contribute to Puget Sound recovery.
- C8.2 Ensure compliance with regulatory programs designed to reduce, control or eliminate pollution from working farms.

- C9. Surface Runoff from Forest Lands**
- C9.1 Demonstrate achievement of water quality standards through implementation of the Forest and Fish Report on state and privately owned working forests.
- C9.2 Complete road maintenance and abandonment plans on public and privately held working forests.
- C9.3 Ensure road systems in Federal forests meet the same substantive standards for maintenance and abandonment under the Washington Forest Practices rules as those state and privately owned forests.

- C10. Effectively prevent, plan for and respond to oil spills**
- C10.1 Prevention: Emphasize risk-based analyses to improve marine safety.
- C10.2 Readiness: Restore State's participation in and evaluation of drills while promoting better integration of tribes and locals.
- C10.3 Response: Integrate best achievable technology (BAT) to promote safe and continuous oil spill recovery.

- C11. Address and Clean Up Cumulative Water Pollution Impacts in Puget Sound**

- C11.1 Complete Total Maximum Daily Load (TMDL) studies and other necessary water cleanup plans for Puget Sound to set pollution discharge limits and determine response strategies to address water quality impairments.
- C11.2 Clean up contaminated sites within and near Puget Sound.
- C11.3 Restore and protect water quality at swimming beaches and recreational areas.
- C11.4 Develop and implement local and tribal pollution identification and correction (PIC) programs.
- C11.5 Develop and implement a monitoring and evaluation program.

Fill Key Science and Information Gaps

C12. Strategies and actions to flow from the BSWP effort

Section D: Implementation Collaboration, Behavior Change and Stewardship and Monitoring

D.1 Foster collaborative partnerships across partner interests and sectors to advance implementation.

- D.1.1. Continue to improve, support and advance the coordination of local recovery actions via local integrating organizations.
- D.1.2. Focus collective partner implementation efforts advance implementation of multiple needs
- D.1.3 Integrate and coordinate Puget Sound ecosystem recovery efforts with related work in Canada and along the west coast.
- D.1.4 Engage and coordinate diverse members and expertise of the scientific community to provide the scientific information that will inform and advance Puget Sound recovery
- D.1.5 Continue to explore and implement creative ways to offer and share technical expertise across sectors and interests.

Continue and Expand Regional Stewardship

D2 Cultivate broad-scale practices and behaviors among Puget Sound Residents that benefit Puget Sound.

- D2.1 Promote science-based targeted communications and behavior change approaches.
- D2.2 Develop and implement comprehensive behavior change strategies (i.e., social marketing, diffusion, and other proven behavior change approaches) targeted to priority actions and audiences.
- D2.3 Enable and encourage residents to take informed stewardship actions beneficial to Puget Sound related to infiltration, pollution reduction, habitat improvement, forest cover, soil development, critical areas, shoreline armoring, and other related issues.
- D2.4 Prioritize investments to address detrimental practices and behaviors based on 1) problem severity, 2) problem frequency (i.e., how frequent and widespread the problem occurs), 3) availability of and confidence in science (natural and social) behind the problem, and 4) ability to influence change.
- D2.5 Integrate vetted messages and technical assistance into existing programs (behavior change, adult education, volunteerism, pollution identification and correction, youth education, and public awareness) to stimulate broad-scale individual stewardship behaviors.

- D2.6 Sustain and expand targeted volunteer and public engagement programs that support Action Agenda priorities and that have demonstrated ongoing measurable progress. Improve the capacity, sustainability, participation, engagement, effectiveness, and outcomes of these programs.
- D2.7 Sustain and expand local, targeted, behavior change programs that support Action Agenda priorities and that have demonstrated ongoing measurable progress. Improve the capacity, sustainability, strategies, effectiveness, and outcomes of these programs.
- D2.8 Provide uniform guidance to partners for the development of Best Management Practice Diffusion Strategies, including 1) the intentional dissemination of priority practices and behaviors and 2) the formative research and analysis needed to develop those strategies.
- D2.9 Compile and disseminate a unified body of market, social, and audience research for priority practices. Link and combine research and data from local governments, state government, federal government, nonprofit, and private sector sources.
- D2.10 Review practices and issues that require solutions beyond the Puget Sound region such as automotive, manufacturing and distribution of toxins, and pharmaceutical waste management. Prioritize and develop strategies to develop solutions with partners outside the Puget Sound region.

D3 Build Issue Awareness and Understanding that fosters beneficial practices and behaviors and removes institutional barriers to those practices.

- D3.1 Implement a long-term, highly visible, coordinated public-awareness effort to increase public understanding of Puget Sound’s health, status, and threats: Conduct regionally-scaled communications to provide a foundation for local communications efforts; Conduct locally-scaled communications to engage residents in local recovery efforts.
- D3.2 Incorporate Puget Sound related messages and actions into the daily activities of diverse social settings (e.g., recreation, education institutions, local government, neighborhood and community groups, nonprofit organizations).
- D3.3 Incorporate Puget Sound specific, place-based learning into K-12 curricula throughout the Puget Sound region. Connect schools with technical assistance, inquiry-based learning opportunities, and non-formal education resources.
- D3.4 Implement locally-based student service projects that are connected to broader local and regional ecosystem recovery efforts. Link schools to local organizations that provide structured opportunities for public engagement in recovery efforts (e.g., Regional Fisheries Enhancement Groups, conservation districts, local governments, nonprofit organizations).
- D3.5 Foster a long-term sense of place among Puget Sound residents. Encourage direct personal contact with Puget Sound’s aquatic and terrestrial resources through recreation, learning opportunities, and public access.
- D3.6 Develop and enhance coordinated regional efforts to link residents with public engagement and stewardship programs, including citizen-science, education, restoration volunteerism, and related efforts.
- D3.7 Build awareness and understanding of stewardship-building efforts and strategies among elected officials, executive staff, funders, resource managers, and others with resource allocation ability. Emphasize program needs, drivers, objectives, accomplishments, progress, and benchmarks. Distinguish long-term from short-term objectives.

D4 Build Social and Institutional Infrastructure that fosters beneficial practices and behaviors and removes institutional barriers to those practices.

- D4.1 Apply appropriate social science relative to Puget Sound recovery to identify targeted actions, audiences, opportunities, strategies, and evaluation metrics.
- D4.2 Build capacity among partner organizations so they can promote beneficial practices and behaviors and build issue awareness and understanding. Provide technical support and training to partners to support program effectiveness, evaluation, and connection to Action Agenda priorities.
- D4.3 Develop and maintain communications infrastructure (e.g., MyPugetSound.net) to effectively collaborate, coordinate, and share information among partner groups.
- D4.4 Develop and maintain the organizational capacity and infrastructure for a sustained regional public communication effort to Puget Sound residents.
- D4.5 Provide easy-to-access public information conduits to connect individuals to local activities and resources related to education, volunteerism, and stewardship.
- D4.6 Enhance and sustain strategic networks to increase collaboration, build long-term sustainability, align efforts, improve messaging, and share results of ongoing work: including ECO-Net, STORM, tribes, municipalities not covered by stormwater permits, public agencies, funders, and NGO's.
- D4.7 Evaluate and align social drivers, remove barriers (e.g., physical, economic, regulatory, enforcement, policy), provide incentives, and provide technical guidance to enable residents and communities to adopt beneficial practices and behaviors.
- D4.8 Foster the development of a distributed network of partners. Promote the development of bonds among priority groups. Advance the development of strategic bridges between key groups.
- D4.9 Encourage and enhance the social capital necessary for the diffusion of beneficial practices and long-term place-based cultural development (communities, associations, watershed councils, individuals, households, and third places, for example).
- D4.10 Enable partner organizations to provide opportunities for facilitated action on the part of residents and communities (e.g. community projects, incentive programs, one-on-one technical assistance, and volunteer experiences). Increase resources to support stewardship actions among residents, communities and targeted groups.

D5. Implement a Coordinated, Integrated Ecosystem Monitoring Program

Funding Strategy: Develop and secure stable and diverse sources of funding to implement Action Agenda Priorities

- FS1.1 Maintain and enhance federal funding for implementation of Action Agenda priorities.
- FS1.2 Focus federal agency budgets and national programs on Action Agenda priorities.
- FS1.3 Maintain, enhance, and focus state funding for implementation of Action Agenda priorities.
- FS1.4 Maintain and enhance local funding for implementation of Action Agenda priorities.
- FS1.5 Develop opportunities for private sector funding for implementation of Action Agenda priorities.
- FS1.6 Develop and implement market-based mechanisms for implementation of priorities in the Action Agenda.