PugetSoundPartnership
our sound, our community, our chance

2012 Action Agenda Update

Programmatic
SEPA Checklist

April 5, 2012

Puget Sound Partnership
326 East D Street
Tacoma, WA 98421

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FIGURE 55

ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Name of the proposal:

Puget Sound Partnership 2012 Action Agenda Update. The 2012 Action Agenda Update includes programs, policies, projects and other activities needed to achieve a healthy Puget Sound ecosystem by 2020.

The 2012 Action Agenda Update builds upon the 2008 Action Agenda, which was published on December 1, 2008 (Partnership, 2008a). A Programmatic SEPA checklist was prepared for the 2008 Action Agenda and a DNS was issued on November 6, 2008 (Partnership, 2008b).

2. Name of Applicant:

Puget Sound Partnership

3. Address and telephone number of applicant and contact person:

Puget Sound Partnership
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ilogan 2/14/12 3:20 PM
Comment: Need to make sure this email address is still setup. Maybe Rae McNally?

4. Date checklist prepared:

April 5, 2012

5. Agency requesting checklist:

Puget Sound Partnership (Partnership)

6. Proposed timing or schedule (including phasing, if applicable):

The 2012 Action Agenda Update is scheduled for adoption in late April 2012. Implementation of the 2012 Action Agenda Update will follow the adoption, with some actions beginning in 2012 and other elements contingent on legislative action. Implementation of the actions will be by the Partnership and by others, as described in the 2012 Action Agenda Update. Some actions will be subject to

additional environmental review by the entities responsible for their implementation.

7. Plans for future additions, expansion, or further activity related to or connected with this proposal:

The Action Agenda is a living document that provides the region with a roadmap for the cleanup, restoration, and protection of Puget Sound, including all of the marine waters of the sound, its surrounding uplands, and contributing watersheds. The 2008 Action Agenda was the first document to be adopted and the 2012 Update and builds upon the framework, strategies, and actions of the 2008 Action Agenda. As described in more detail below and in the 2012 Action Agenda Update itself, implementation will be on-going. Some actions have already been completed, others will begin immediately, others will be completed in the near-term, and others will be implemented over several years. Some actions require further review and study, and others require legislative action before implementation. The Action Agenda is designed to be changed and adapted over time. Implementation strategies will be updated every two years, as required by state law. The goal of the Action Agenda is to restore the health of Puget Sound by 2020.

8. Environmental information that has been prepared, or will be prepared, directly related to this project:

A wide range of environmental information has been prepared over many years relating to Puget Sound. Substantial environmental information has been prepared by the Partnership's predecessor agencies, including the Puget Sound Action Team and the Puget Sound Water Quality Authority. Additional information has been developed by the agencies responsible for salmon recovery plans, water quality cleanup plans, and other local and regional initiatives.

Much of this information was reviewed by the Partnership during the development of the 2008 Action Agenda. One of the goals of the Partnership was to review this largely fragmented, piecemeal body of information and develop an approach to the Puget Sound ecosystem as a whole. This system-wide approach involves—among other things—linking actions taken on land to their effects on adjacent waters, ensuring consistency between programs of protection and restoration, and monitoring program results to determine if they are achieving their goals.

In developing the 2008 Action Agenda and the 2012 Action Agenda Update, significant input and environmental information has been obtained from federal, state, tribal, and local governments and non-governmental organizations around Puget Sound. The Partnership asked scientists, community leaders, and the public about the best way to achieve the goal of a healthy Puget Sound. The results of that inquiry are reflected in the first two sections of the 2008 Action Agenda,

which address the questions: (1) What is a healthy Puget Sound?, and (2) What is the status of Puget Sound and what are the greatest threats to it?

Building on the information gained since 2008, the 2012 Action Agenda Update contains important, strategic advances that generated additional environmental information such as white papers and technical memoranda. The Partnership convened workshops and meetings and received input from scientists, interested citizens, federal, state, tribal, and local governments, and non-governmental organizations around Puget Sound. These advances and refinements are summarized in the following bullet points:

- **Recovery targets set.** Eighteen recovery targets were established by interdisciplinary teams and adopted by the Leadership Council.

- **Two-year strategic initiatives with actions identified.** To bring more focus to the near-term recovery effort, the Partnership and its partners have identified three strategic initiatives. They include: a) Protection of habitat in support of salmon recovery; b) Prevention of water pollution from urban stormwater runoff; and, c) Protection of water quality and nearshore habitat from rural and agricultural runoff.

- **Strategies and actions logically aligned with goals and targets.** Regional strategies and actions focus on goals and recovery targets and are refined to incorporate progress, new information, and lessons learned since 2009. The scientific and logic basis for actions needed to recover Puget Sound are more thoroughly illustrated.

- **Cross-cutting issues for salmon recovery and climate change adaption integrated**. The Puget Sound Salmon Recovery Plan has been more fully integrated into the 2012 Action Agenda Update and initial climate change adaptation needs are identified. The climate change adaptation work will be more fully articulated in the final 2012 Action Agenda Update.

- **Local partners engaged.** Local partners organized to provide considerable input on both regional and local priorities, which have been incorporated in the 2012 Action Agenda Update.

- **Ongoing programs called out.** Ongoing programs are recognized as a critical foundation for Puget Sound recovery and many examples are given of important ongoing work. Additional efforts needed to reach recovery goals are indentified as Near Term Actions.

- **Near-term actions clearly identified and will be prioritized in the final document.** Near-term actions are specific, measurable and assigned to a responsible party or "owner." Performance measures are provided for each near-term action. A robust and scientifically-based prioritization process was used to evaluate the relative importance of sub-strategies and associated near

term actions. The prioritization process relies on ecological, economic, human well-being, and project readiness criteria. Experts and partners evalauted each sub-strategy against the criteria using a relative scale. The Ecosystem Coordination Board reviewed and generally concurred with the process and criteria used in the prioritization process.

- **Action Agenda document simplified.** The 2012 Action Agenda Update has a simpler structure that better aligns with other large ecosystem restoration programs. It will transition to an on-line format.

The 2012 Action Agenda Update has incorporated and relied upon several sources of environmental information developed since 2008, including:

- Puget Sound Science Update (Partnership, 2011a)
- Strategic Science Plan (Partnership, 2010)
- 2009 State of the Sound (Partnership, 2009a)
- Identification, definition and rating of threats to the recovery of Puget Sound (Partnership, 2009b).
- Brief sheets for target setting of Dashboard Indicators
- Technical memoranda for Key Pressures

These materials and several other relevant publications are in the following sections of the Partnership's website:

http://www.psp.wa.gov/documents.php

http://www.psparchives.com/

http://pugetsoundscienceupdate.com/pmwiki.php

Science strategies and actions to support the 2012 Action Agenda Update are contained in a companion document, the Biennial Science Work Plan (Partnership, 2011b).

This information is also available by mail on request from:

Chris Townsend
Puget Sound Partnership
326 East D Street
Tacoma, WA 98421

9. Applications that are pending for governmental approvals or other proposals directly affecting the property covered by the proposal:

The 2012 Action Agenda Update identifies and prioritizes ongoing and new actions needed to restore Puget Sound by 2020. Most of the ongoing actions identified in the 2012 Action Agenda Update are sponsored by an entity other than the Partnership. Ongoing actions would have been required to go through appropriate environmental review prior to implementation. Actions identified in the 2012 Action Agenda Update that have not yet started would go through appropriate environmental review before implementation, with such review led by the entity responsible for the action.

10. List of governmental approvals or permits that will be needed for the proposal:

No specific governmental approvals or permits are needed to approve the 2012 Action Agenda Update. Individual approvals or permits will be required to implement some projects called for by the 2012 Action Agenda Update, and legislative action will be required for others. Additional environmental review by appropriate agencies will be required before some elements of the 2012 Action Agenda Update can be implemented, including (in some cases) review under the National Environmental Policy Act (NEPA).

11. Brief, complete description of the proposal, including the proposed uses and the size of the project and site:

In the spring of 2007, the Washington State Legislature passed Engrossed Substitute Senate Bill 5372 creating the Puget Sound Partnership. The legislature charged the Partnership with adopting and implementing an Action Agenda for Puget Sound. The Action Agenda includes programs, policies, projects, and other activities needed to achieve a healthy Puget Sound ecosystem by 2020. In short, the Action Agenda is a roadmap for protecting and restoring Puget Sound. The 2012 Action Agenda Update is incorporated by reference into this checklist, and copies can be obtained from the contact person identified above.

The purpose of the 2012 Action Agenda Update is to identify and prioritize the actions necessary to protect and restore Puget Sound by 2020. The document establishes priorities for and among recovery activities, creates a systematic approach for coordinating federal, state, local, tribal and private resources in support of the 2020 goals, and identifies activities that will ensure that entities across the region are working cooperatively toward this outcome. Priorities contained in the 2012 Action Agenda Update are based on science, focused on actions that have the most benefit and include measures to hold people and organizations accountable for results. The 2012 Action Agenda Update is designed to ensure that money and resources are spent on programs and projects where they will do the most good to restore the health of Puget Sound.

The 2012 Action Agenda Update further advances and refines the priorities, strategies, and actions described in the 2008 Action Agenda. Since 2009, the Partnership has led focused efforts in several new areas, including: the development of ecosystem indicators and targets; identification of Soundwide strategies and actions; and, identification of local actions. These efforts are described briefly in the following paragraphs.

In 2010, the Partnership convened regional experts and the public to identify and select ecosystem indicators that would help communicate progress toward the six recovery goals set by the Legislature. The Leadership Council adopted 20 indicators recommended by the experts in 2010. In 2011, the Council also adopted science-based recovery targets for 18 of the chosen indicators. The Partnership incorporated the indicators and targets into a Vital Signs Dashboard to help the Partnership track and communicate efforts toward the six recovery goals. The Vital Signs Dashboard is available at www.psp.wa.gov/vitalsigns/index.php.

Also in 2011, the Partnership convened interdisciplinary teams to ensure the initial list of Soundwide strategies and actions developed for the update to the Action Agenda would make meaningful progress towards achieving recovery. Five teams formed to focus on key pressures of: 1) land development, 2) loss of floodplain function, 3) shoreline alteration, 4) urban stormwater runoff, and 5) wastewater. The interdisciplinary teams included representatives of the business, environmental, academic and public interest communities, state and federal agencies, and Tribal governments. Other strategy areas, such as oil spill preparedness and response, toxic cleanup, and invasive species, were assigned to Partnership staff leads who worked with standing or ad hoc groups of efforts to refine and update the existing strategies if and as needed. Over 100 people participated in this process, which included more than 50 intensive meetings and discussions.

At the local level, the Partnership worked with local communities to help form Local Integrating Organizations (LIOs). An LIO is a coordinating body that includes local jurisdictions, tribes, and implementing groups. The purpose is to identify locally relevant strategies and actions to implement the Action Agenda and accomplish Soundwide objectives. As described in the 2012 Action Agenda Update, some LIOs have prioritized strategies and actions with performance measures, while others are in various stages of formation and development.

The Partnership held subject-focused workshops on draft content for the update to the Action Agenda in September 2011, attended by approximately 100 subject experts from a wide range of interests. Six public open houses were held around the Sound around the same time. The Partnership briefed the Ecosystem Coordination Board and Leadership Council on draft content in September, October, and November 2011 and the 2012 Action Agenda Update was released for public review and comment in December 2011.

The Partnership has reorganized the 2012 Action Agenda to clearly link recommended strategies and actions to indicators and targets and ultimately the six recovery goals. Strategies and actions are organized into four broad sub-sections.

A. Freshwater and Terrestrial Protection and Restoration, which includes strategies and actions related to land development, stewardship of working forest and agriculture lands, floodplains;

B. Marine and Nearshore Protection and Restoration, which includes strategies and actions related to shoreline alteration, marine protected areas, working waterfronts;

C. Pollution Prevention and Cleanup, which includes strategies related to polluted runoff from urban and other lands, reducing toxic threats, and wastewater management; and,

D. Strategic Leadership and Collaboration, which includes strategies related to public education and stewardship, ecosystem monitoring, and maintaining and updating the Action Agenda

In each section of the 2012 Action Agenda Update, strategies and sub-strategies describe the overall, long-term directions and approaches needed for Puget Sound protection and recovery. Cross-cutting issues such as salmon recovery and climate adaptation are discussed throughout the 2012 Action Agenda Update. A table of the potential near-term actions is presented in the December 9th, 2011 public review draft. In the final 2012 Action Agenda Update, the sub-strategies related to each near-term actions will be listed in priority order.

This programmatic SEPA evaluation describes the potential impacts associated with implementing the near-term actions contained in the 2012 Action Agenda Update (hereafter referred to as the Action Agenda). The near-term actions include the use of the following general types of protection or restoration tools: regulations, plans and programs, incentives, acquisitions, capital projects, funding, education, and research and monitoring. In this checklist we will refer to them all simply as "actions". The range of actions included in the Action Agenda and their general impact is summarized below.

Regulations

The Action Agenda includes recommendations to modify, strengthen, or accelerate implementation of and compliance with a number of existing regulations. These include the following types of actions:

- Strengthen shoreline protections, land use protections, and water management/instream flow rules;

- Strengthen implementation of regulations aimed at reducing water pollution at its source, such as current wastewater discharge regulations in

sensitive receiving waters, and low impact development regulations for stormwater;

- Complete instream flow setting process in basins without adopted instream flow rules;
- Establish no-discharge zones in Puget Sound;
- Reform and/or streamline the existing regulatory system to support the 2020 goals, using the Action Agenda as a strategic, ecosystem-based guide;
- Improve compliance with existing rules and regulations, such as compliance monitoring for water quality programs;
- Strengthen groundwater management regulations;
- Reform regulations for shoreline armoring and overwater structures to prevent or mitigation impacts to fish life and habitat; and
- Improve compliance with existing rules and regulations for floodplain protection.

Because the Partnership has no regulatory authority, these regulatory actions will be implemented by state and local agencies and jurisdictions rather than by the Partnership. Implementing agencies will include the counties and cities within the Puget Sound watershed basin and the Washington State Departments of Ecology, Health, Natural Resources and Fish and Wildlife. Many of the regulatory changes will require additional evaluation by the implementing entities, including appropriate environmental review with accompanying opportunities for public input.

Additional discussion of regulations as they could affect specific elements of the environment is included below in Section B.

Plans and Programs

The Action Agenda includes recommendations for supporting existing, expanded, or new plans and programs, such as:

- Provide funding and technical assistance to local jurisdictions to complete and update Shoreline Master Programs (SMPs);
- Develop in-lieu-fee mitigation programs;
- Harmonize collaborative watershed planning processes;
- Facilitate development of on-site septic management programs;

- Support transfer of development rights (TDR) programs;
- Support stewardship programs for agriculture and forestry;
- Fund invasive species prevention/response programs;
- Establish or strengthen existing instream flow protection and enhancement programs;
- Develop local and tribal pollution identification and collection (PIC) programs;
- Support programs that provide necessary infrastructure and incentives to create sustainable communities;
- Promote financial incentives and programs for best practices at ports and in the marine industry that are protective of ecosystem health;
- Implement species recovery plans;
- Enable alignment of priorities, regulations, planning, and agency coordination for multi-benefit floodplain management that address flood risk reduction, flood mitigation, and ecosystem protection and restoration; and
- Facilitate development and implementation effective management programs for groundwater.

These plans and programs are intended to promote the protection and restoration of Puget Sound and to promote long-term stewardship of resources. Implementing these programs will require dedicated funding, consistent outreach to affected landowners and other stakeholders, coordination among potentially affected parties, and monitoring following program implementation.

Incentives

Incentives create mechanisms to encourage behaviors that benefit Puget Sound by providing benefits to participants who voluntarily participate. Examples include providing incentives for:

- Landowners to maintain lands as working forests or working farms;
- Protection or restoration of critical habitat;
- Implementation of low impact stormwater management techniques;
- Use of soft armoring techniques; and

- Engagement with local communities on issues related to Puget Sound health.

In general, incentives have beneficial effects on the environment without significant negative tradeoffs. However, all mechanisms that affect land use patterns involve tradeoffs and costs. These include, for example, the capital costs for paying landowners not to develop land and to buy development rights, and the reduced tax revenues for areas included within incentive programs. Development of the incentive program would consider such implications and could incorporate moderating factors.

Acquisition

The Action Agenda includes recommendations for acquisition of high-value habitat and floodplain areas that are vulnerable to conversion and/or loss. Acquisitions would occur consistent with recommendations in existing collaboratively developed and prioritized plans, such as the Puget Sound Salmon Recovery Plan, existing watershed plans, and other plans. The Partnership would support these efforts by direct funding, through prioritization of state or federal funds, and/or advocacy for funding.

Acquisition of sensitive habitats would eliminate the threat to these areas from conversion to other types of land uses. There could be some impacts to individual landowners, however, mitigation measures included within acquisition proposals would be designed to minimize adverse impacts to property owners.

In addition to the publicly funded costs to purchase the land, there are long-term costs of operating and maintaining lands that are acquired. Lands acquired for habitat preservation would be removed from the tax base in their jurisdictions.

Capital Projects

Capital projects are those that result in building or constructing a facility or project. The capital projects considered for support in the Action Agenda have previously been evaluated and recommended by other entities and in general are ready for implementation or are already in development. Examples include:

- Wastewater treatment plant upgrades and modernizations;
- Stormwater retrofits;
- Habitat restoration projects, such as estuary restoration, levee setback restoration, etc.;
- Contaminated site cleanup;
- Floodplain restoration projects and shoreline armor removal projects; and

- Public access points on shoreline.

The Action Agenda supports these projects by recommending additional or accelerated funding. Many of these capital projects will involve work in sensitive areas, such as river or stream channels, shorelines, estuaries, nearshore areas, or wetlands. All projects will comply with applicable federal, state, and local permit requirements. Some of the capital projects will require appropriate SEPA and/or NEPA review conducted by the implementing entity. Discussion of project-level impacts associated with these projects is not included in this programmatic SEPA checklist.

Funding

Funding has been identified as a much needed component for virtually all measures proposed to protect and restore Puget Sound. Recommending funding for the actions within the Action Agenda will support protection and restoration goals for Puget Sound. However, funding these actions could eliminate or reduce the level of funding available for other publicly funded proposals, or will result in the need for additional sources of public funding. Ultimately, difficult decisions regarding priority for publicly funded projects will need to be made by the legislature, the federal government or other funding entities. The Partnership has developed a funding strategy to address this issue, which may help to alleviate some of these tradeoffs. The strategy proposes to increase capacity for funding protection and restoration measures through new sources of funding; using existing funding more strategically and efficiently; and, through the development of innovative, market-based programs. The funding strategy is described in the Action Agenda.

Education

The Partnership has developed a broad and comprehensive education and outreach program to engage a wide range of stakeholders throughout Puget Sound. The purpose of the education program is to increase public awareness about the threats to Puget Sound and understanding about the ways to address these threats. This program is intended to foster broad support for Puget Sound restoration and recovery. The impacts of this education and outreach program on the Puget Sound ecosystem would be indirect.

Research and Monitoring

Research is needed to provide additional clarity about some of the threats to Puget Sound, and will help to increase certainty about the approaches to address these threats. Impacts from research are generally minimal; any research that could result in significant impacts may be subject to a project-specific SEPA review. Monitoring will provide necessary feedback regarding ecosystem responses to actions following implementation. Monitoring efforts are generally low impact;

some may require access to private property, but all appropriate approvals would be obtained prior to the start of the program.

12. Location of the proposal:

Figure 1 illustrates the areas covered by the Action Agenda. The Action Agenda covers all of the marine waters of Puget Sound, its surrounding uplands and watersheds. It covers 12 counties, more than 100 cities, and over 14 watersheds. It includes 10 geographic "Action Areas" around Puget Sound to address problems specific to those areas.

B. ENVIRONMENTAL ELEMENTS

The general implications of all of the actions being considered by the Partnership in the Action Agenda are described above in Section A, and below in Section C. In the section that follows, which separately reviews each element of the environment, only those actions with a potential to cause impacts are discussed.

The tools and tactics for achieving the Action Agenda priorities include the actions summarized in section A.11, above: regulations; plans and programs; incentives; capital projects; acquisition; funding; education; research and monitoring. These measures will affect various elements of the environment in different ways. For example, the regulatory actions are intended to strengthen, modify, or accelerate existing regulatory programs that protect the environment. In the sections that follow, the proposed actions are reviewed and, where relevant, potential environmental impacts are disclosed. Only those actions that are relevant to a section are discussed.

1. Earth

a. General description of the site (underline):

The broad area affected by the Action Agenda includes all of Puget Sound and the surrounding uplands (Figure 1). This "Action Area" includes 19 watershed resource inventory areas (WRIAs).

The terrain of this area was heavily shaped by the Vashon glaciation (15,000 - 20,000 BP) when large volumes of sediment were deposited during the advance and retreat of the glaciers. The glacial landscape has since been modified by stream and river erosion and deposition, coastal processes, and hillslope mass wasting along the steeper slopes bounding streams and the coastline. The major rivers of the Cascade and Olympic mountain ranges carried sediment to their lower reaches, building alluvial valleys and deltas.

b. What is the steepest slope on the site (approximate percent slope)?

Topography in the Action Area varies from mountainous terrain in the upper portions of the watersheds to shallow estuaries and deep marine waters.

c. What general types of soils are found on the site (for example clay, sand, gravel, peat, muck)? Specify the classification of agricultural soils and note any prime farmland.

Soil types in the Action Area, according to the Natural Resource Conservation Service soil surveys, cover a wide range of unsorted glacial till, from clays to sands to gravels and can be very localized. Glacial deposits in Puget Sound lowlands from the last glaciation include dense glacial till, glacial outwash (sand and gravel), and glacial lake sediment (silt and clay). Other soil types are alluvium (of floodplains), residual bedrock in the Olympic and Cascade mountain ranges, and volcanic ash. Agricultural soils and prime farmlands are located within portions of the Action Area.

d. Are there any surface indications or a history of unstable soils in the immediate vicinity? If so, describe.

Unstable soils are common along bluffs and steep slopes throughout the Action Area due to the presence of glacial till deposited over glacial outwash during the last ice age. Landslides are common after winter storm events as these glacial layers become unstable. Coastal feeder bluffs are the primary source of sediment for most Puget Sound beaches.

Most of the Puget Sound region is seismically active, and many of the jurisdictions in the area have designated seismic hazard zones.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate the source of the fill.

In the sections that follow, the proposed actions are reviewed and, where relevant, potential environmental impacts are disclosed. Only those actions that are relevant to a section are discussed.

<u>Regulations/Plans and Programs</u>

Some of the proposed regulatory modifications could affect activities involving earth movement. For example, land use regulations, such as new provisions regarding clearing and grading activities as addressed in local critical area ordinances, are anticipated to result in more stringent criteria relating to development in critical areas. Such measures would be

anticipated to reduce earthwork in critical areas, which would reduce the potential for erosion and sedimentation. Regulatory changes would be subject to appropriate environmental review by the implementing agency.

Strengthening of existing programs, such as Shoreline Master Programs, would reduce construction activities in sensitive shoreline areas prone to erosion, or would include conditions to reduce erosion and sedimentation.

Capital Projects

Adoption of the Action Agenda will prioritize or accelerate development of some capital projects determined to be critical to the protection and/or restoration of Puget Sound. Some of these projects are "ripe" for implementation, in many cases having already been taken through appropriate environmental review. In general, capital projects require construction, and all construction projects require some level of earthwork, including filling and grading.

The types of projects that would involve fill or grading could include:

- Wastewater treatment facility upgrades;
- Low impact development (LID) stormwater management projects (new);
- LID stormwater retrofitting projects (e.g., replacing conventional stormwater conveyance systems with permeable paving, biofilitration, bioretention facilities, such as rain gardens, and other LID methods);
- Habitat enhancement and habitat restoration projects (e.g., levee setbacks and removals, dike modifications, fish barrier removals, dam removals).

Many of these types of projects will involve construction in or near sensitive areas such as existing water bodies, wetlands, or other sensitive areas.

For these activities, if project-specific environmental analysis has not been completed, it will be prepared by the project sponsor during the application and review for federal, state, and local permits. Clearing and grading activities would only be allowed with approved permits.

f. Could erosion occur as a result of clearing, construction, or use?

The Action Agenda recommends tools and tactics intended to both reduce human-caused erosion, for example by reducing overall clearing and grading, and promote natural erosion, for example by restoring drift cell function in nearshore habitats.

Capital Projects

Erosion may be associated with capital projects that require clearing or grading, such as those project types described above under Question 1e. Project sponsors would address erosion control on a project–specific basis through local development regulations, including the use of best management practices (BMPs). In general, actions included in the Action Agenda are intended to reduce the potential for impacts to receiving waters, including potential impacts associated with erosion and sedimentation. For example, retrofits of existing stormwater facilities, or implementation of new stormwater low impact development facilities, would result in reduced stormwater volumes with an accompanying reduced potential for erosion.

Erosion may also be associated with large-scale wetland and/or estuary restoration projects that require grading. Restoration projects and appropriate BMPs will be established on a project-specific basis through local development regulations to limit erosion.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example buildings or asphalt)?

The Action Agenda includes actions that may prioritize or accelerate construction projects proposed by implementing entities. Some of these construction projects could affect impervious areas. In general, the Action Agenda recommends measures to reduce impervious areas and preserve high-quality habitat.

Regulations

Some proposed revisions to existing regulations could affect the amount of new impervious area through such actions as strengthening development standards in critical area ordinances (CAOs) and Shoreline Master Programs. In most areas, these will likely result in a reduction in impervious area compared with existing conditions (for example, encouragement of low impact development). Protection of sensitive areas will result in fewer impervious surfaces within the protected areas; however, there may be increased development pressure in other areas. These tradeoffs would be explored as part of future environmental analysis prior to implementing any regulatory changes.

Incentives

Incentive programs that implement low impact development techniques could affect the amount of new impervious surface associated with new development in cities and counties. In most cases, the amount of

impervious surfaces for future development would be reduced relative to that in existing developed areas, consistent with the overall goals of the low impact development. Implementing jurisdictions would evaluate potential shifts in impervious areas as part of incentive implementation.

Acquisition

Acquisition projects are intended to prevent conversion of high-value habitat areas, and as such, will reduce or eliminate increases in impervious surfaces.

Capital Projects

The types of projects that would result in impervious surfaces generally include infrastructure projects, such as wastewater treatment facility upgrades. Potential increases in impervious areas would be evaluated as part of project-specific environmental studies prepared by project proponents. The majority of the types of projects proposed for prioritization under the Action Agenda will not result in increases in impervious surfaces, but instead aim to reduce impervious areas. Projects that propose stormwater retrofitting will result in impervious areas being converted to pervious area.

h. Describe the proposed measures to reduce or control erosion, or other impacts to the earth, if any.

The Action Agenda includes strategic priorities to: protect intact ecosystem processes, structures and functions; restore ecosystem processes, structures and functions; and reduce sources of water pollution. These priorities are supported by actions to reduce or control erosion and other impacts to earth.

Regulations/Plans and Programs

The Action Agenda recommends prioritizing the revision and enforcement of selected existing regulations, such as strengthening the state Shoreline Management Act (SMA) and providing additional funding for environmental regulation compliance monitoring. Strengthening these regulations and adding compliance monitoring activities would likely reduce impacts associated with erosion and sedimentation. Implementing programs that support the advancement of low impact development and natural infrastructure would also reduce or control erosion.

Incentives

The Action Agenda supports a number of incentive programs aimed at protecting high-quality habitat and restoring priority habitat. These

programs would help reduce erosion and sedimentation associated with development activity in sensitive areas.

Acquisition

The Action Agenda recommends immediate acquisition of high-value habitat vulnerable to conversion or loss. Acquiring sensitive resource areas will prevent construction in these areas, including areas prone to erosion and sedimentation.

Capital Projects

The types of projects that would reduce erosion include those focused on controlling and mitigating stormwater runoff. Projects such as low impact development stormwater retrofitting, including biofiltration and bioretention facilities, are meant to reduce overall stormwater flows, with accompanying reduction in erosion. Projects such as road decommissioning are meant to reduce or eliminate the risk of major landslides associated with failing roads in steep timber production areas.

Funding

The Action Agenda prioritizes resources toward monitoring compliance with environmental regulations (i.e., Best Management Practices). The increase in performance monitoring of BMPs will contribute to the overall understanding of BMP effectiveness, including the effectiveness of erosion control measures.

2. Air

a. What types of emissions to the air would result from the proposal (e.g. dust, automobile, odors, industrial, wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities, if known.

Some of the proposed actions (construction projects) would result in air emissions during construction. Overall the Action Agenda would have minimal effects on air emissions. The Action Agenda supports the implementation of climate change preparation and adaptation strategies, which would include reducing emissions overall, including greenhouse gas emissions. Actions included in the Action Agenda are largely intended to anticipate and address the effects of climate change. The Action Agenda also supports development and implementation of plans and control strategies to reduce toxic releases into the Puget Sound from air emissions.

b. Are there any off-site sources of emissions or odors that may affect your proposal? If so, generally describe.

There are currently multiple sources of odors and emissions in the Action Area. Emissions result from vehicle use, machinery, and burning of fuel for a variety of uses. A significant amount of pollution that is deposited in the Puget Sound region comes from coal-fired plants and other sources outside of the region. In general, implementation of the Action Agenda would not be affected by these emissions.

c. Describe proposed measures to reduce or control emissions or other impacts to air, if any.

Some of the proposed actions, such as wastewater facility upgrades, could reduce emissions. The Action Agenda recommends prioritizing development in existing urban areas or areas adjacent to them, potentially reducing emissions from vehicle travel to more distant areas of development. It also includes actions intended to reduce the level of development intensity in high-value habitat areas, potentially reducing future emissions associated with development in those areas.

3. Water

a. Surface:

1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, and wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The Action Area contains a large saltwater estuary, Puget Sound, which receives freshwater from the Olympic and Cascade mountain ranges. The area contains multiple estuaries, flooded glacial valleys and rivers, as well as hundreds of lakes, ponds, and wetlands. The Action Area Profiles provide general physical descriptions of water bodies, and the *Water Quality and Water Quantity Topic Forum Discussion Papers* (Partnership, 2008c and 2008d) provide specific information on the surface water resources within the Puget Sound area. The Puget Sound Science Update (Partnership, 2011a) describes in detail the biophysical condition and character of the Puget Sound water bodies. These documents and other publications characterizing Puget Sound water resources can be found in the "Documents" and "Archives" sections of the Partnership's website.

One purpose of the Action Agenda is to improve water quality and water quantity conditions in Puget Sound and its tributaries through the use of science-based tactics (as described in A.11 above). Actions to achieve these objectives are described below.

2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Implementing the Action Agenda priorities will involve work within 200 feet of surface waters. The types of potential projects are summarized below. Most of the actions are intended to reduce work within the shoreline zone; however, some of the actions described below would result in work adjacent to watercourses.

<u>Regulations/Plans and Programs</u>

The types of new and/or revised regulations that would be associated with work in or adjacent to surface waters include:

- Shoreline Master Programs. For example, the Action Agenda includes proposals to strengthen protection of

shorelines through more oversight of shoreline armoring proposals. In some areas, this would reduce the amount of construction conducted within the shoreline zone. Some construction could be associated with shoreline restoration;

- New standards and streamlined process for permitting restoration projects. Some of these restoration projects would involve in-water work (e.g., estuary restoration or floodplain reconnection projects).

Incentives/Acquisitions

Actions intended to protect outstanding or high-value areas, including critical habitat areas in shoreline zones, would reduce the potential for construction within these areas. Incentives to provide habitat protection, or acquisition of high-value shoreline and/or riparian areas, would reduce the potential for development in these areas.

Capital Projects

The types of projects that would involve in-water work and work along shorelines could include:

- Septic tank replacement and retrofit projects;
- Stormwater retrofits;
- Wastewater treatment plant upgrades; and
- Habitat enhancement projects that involve stream and/or estuary restoration and floodplain reconnection activities (e.g., levee setbacks and removals, dike modifications, fish barrier removals, dam removals).

For these activities, project-specific environmental analysis will be conducted as appropriate during the application and review for federal, state, and local permits. In-water work would only be allowed with approved permits and required timelines.

3. Estimate the amount of fill and dredge material that could be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill materials.

The Action Agenda includes measures to protect surface water and wetland processes, structures, and functions. The Action Agenda would generally result in reduced potential for fill or dredging in surface waters or wetlands. The actions include regulations, plans and programs, and acquisition or incentive measures to reduce the potential for fill and dredge. Some of the capital projects, however,

could require work in surface waters or wetlands, as described below.

Capital Projects

The types of projects that could result in fill and dredge activities in or near surface waters or wetlands include:

- Septic tank replacement and retrofit projects;
- Habitat enhancement projects that involve wetland, stream and/or estuary restoration (e.g., levee setbacks and removals, dike modifications, fish barrier removals, dam removals, wetland creation and restoration, etc.);
- Barrier removal projects, such as dam removals, fish ladder construction, and/or culvert replacements.

For these activities, project-specific environmental analyses will be conducted during the application and review for federal, state, and local permits. For those projects that have not undergone SEPA review, SEPA compliance would be conducted as appropriate.

4. Will the proposal require surface water withdrawals or diversion? Give general description, purpose, and approximate quantities, if known.

The Action Agenda includes measures that are intended to reduce surface water withdrawals. The Action Agenda is aligned with the Final ESA Recovery Plan for Puget Sound Chinook Salmon. and it prioritizes regulatory revisions and projects that improve instream flows while ensuring out-of-stream uses are supported. The Action Agenda strategic priorities include:

Regulations/Plans and Programs

New and proposed regulations aimed at supporting aquatic species and maintaining flow-related water quality parameters include:

- Update the instream rule program by creating instream flow rules in basins that lack them and revising existing instream flow rules adopted prior to 1986;
- Develop and implement instream flow Protection and Enhancement Program (PEP) for salmon (called for in the Puget Sound Salmon Recovery Plan).

Capital Projects

Some types of capital projects would require surface water diversions. These would generally include floodplain reconnection and other large-scale restoration projects intended to benefit

surface water resources. Proposed projects include levee setbacks and removals, dike modifications, fish barrier removals, dam removals, and wetland creation and/or restoration.

For these activities, project-specific environmental analysis will be prepared during the application and review for federal, state, and local permits. For those projects that have not undergone SEPA review, SEPA compliance would be conducted as appropriate.

5. Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Implementing the Action Agenda priorities will include some actions that could result in work within a 100-year floodplain. Some types of capital projects would occur within the 100-year floodplain, such as stream, estuary and wetland restoration, levee setback projects, or floodplain reconnection projects. These projects are intended to reduce existing floodplain impacts, and provide new and restored fish and wildlife habitat.

Other individual infrastructure projects, such as stormwater retrofits, may occur within 100-year floodplains, and would be subject to the appropriate federal and local permit review.

6. Does the proposal involve discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

The Action Agenda includes measures that prevent pollutants from being introduced into the Puget Sound ecosystem. The majority of actions are meant to reduce discharges and remove pollutant pathways.

Regulations/Plans and Programs

A number of the proposed regulatory modifications aim to strengthen or accelerate implementation of and compliance with existing regulations, such as:

- Accelerate implementation of improved stormwater practices, including adoption of low impact development ordinances by cities and counties;
- Establish “no discharge” zones in Puget Sound;
- Provide technical assistance to local governments for implementation of NPDES Phase II permits.

The proposed actions include plans and programs intended to reduce pollutant loading to Puget Sound, including prioritizing and funding stormwater retrofits, accelerating the implementation of chemical action plans, and helping local jurisdictions develop and implement on-site septic system management plans. These plans and programs will help to reduce pollutant loading.

Incentives

The Action Agenda includes incentive programs to encourage the reduction of waste materials going into surface waters, including incentives to promote the use of low impact stormwater management techniques.

Capital Projects

The Action Agenda prioritizes the development of several types of capital projects that would address the discharge of waste materials to surface waters, such as:

- Upgrading wastewater treatment facilities;
- Replacing and retrofitting septic tanks;
- Implementing low impact development stormwater retrofit projects.

In all cases, the anticipated outcomes for these activities would be reduced pollutant loading into surface waters. Project-specific environmental analysis will be conducted as appropriate during the application and review for federal, state, and local permits.

Funding

The Action Agenda recommends prioritizing resources toward retrofits of stormwater infrastructure using low impact development methods and monitoring compliance with environmental regulations (i.e., implementation of BMPs). The actions include recommendations to prioritize allocation of state funding for modernizing wastewater treatment plants, and establishing a dedicated funding source for Puget Sound recovery. This shift in funding could result in reallocation of other funded efforts that do not have documented effectiveness, or could result in the need to reprioritize activities within some existing programs. Such reallocations would be implemented through close coordination and negotiation with existing water quality management agencies, jurisdictions, and utilities.

b. Ground

1. Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

The Action Agenda supports measures that reduce ground water withdrawals and protect critical areas important to ground water supply. No specific proposals would require ground water withdrawal.

Regulations/Plans and Programs

The Action Agenda includes recommendations to revise regulations that would affect ground water in terms of both ground water removals and recharge, as a result of reducing surface water discharges. Proposed actions include:

- Evaluate and implement solutions to water use issues related to exempt wells;
- Develop and implement instream flow Protection and Enhancement Programs for salmon as identified in the Salmon Recovery Plan, and strengthen instream flow rules in those basins where flow rules were set before 1986. Long-term actions include efforts to expand opportunities for reclamation and reuse of wastewater.

2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any. Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) is expected to serve.

The Action Agenda includes measures intended to reduce waste material discharge that generally focus on regulatory controls and facilities upgrades. Incentive programs to protect and support long-term stewardship are also included.

Regulations/Plans and Programs

New and revised regulations to reduce pollutant loading to ground water from septic systems include the establishment of local septic utility programs that increase the capacity of health departments to implement on-site septic management plans. The evaluation, adjustment and expansion of existing septic loan programs would

aim to increase the number of septic systems in compliance with existing regulations.

Incentives

Incentive programs that encourage landowners to maintain septic systems could affect the amount of waste material discharged to the ground. In most cases, pollutant discharge would be reduced.

Capital Projects

The Action Agenda recommends the identification and replacement of failing septic systems. This priority would be focused on areas with demonstrated water quality problems, such as shellfish closures and hypoxia.

c. Water Runoff (including stormwater)

1. Describe the source of runoff (including storm water) and method of collection and disposal, if any (including quantities if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Surface water runoff (including stormwater) has been identified as the primary transporter of pollution throughout the Puget Sound basin, as described in the *Water Quality Topic Forum Discussion Paper* (Partnership, 2008c). Stormwater is now managed using a hybrid set of conventional surface water management controls, coupled with the expansion of low impact development and natural infrastructure tactics.

The purpose of the Action Agenda is to improve water quality and thus address the problems created by stormwater. The types of tools/tactics to achieve the Action Agenda priorities include:

Regulations/Plans and Programs

Accelerating the implementation of improved stormwater practices, including the adoption of low impact development ordinances by local jurisdictions, would address stormwater collection and disposal. Techniques such as bioretention, vegetated swales, green roofs, and rainwater harvesting would reduce overall stormwater runoff and protect critical areas. Expansion of the area for NPDES Phase I and II permits with requirements for source control and treatment would also improve stormwater management. Strengthening groundwater management regulations would address water shortage issues in specific basins.

Incentives

Incentive programs that implement low impact development techniques would affect the amount of new impervious surface associated with new development in cities and counties. In most cases, stormwater runoff would be reduced.

Capital Projects

The types of projects that would address stormwater runoff are those focused on low impact development stormwater retrofit projects and habitat acquisition or restoration projects.

Funding

The Action Agenda recommends reprioritizing funding toward retrofits of stormwater infrastructure using low impact development methods. Low impact development methods will reduce stormwater runoff and promote ground water recharge.

2. Could waste materials enter ground or surface waters? If so, generally describe.

The major contaminants in surface water runoff are typically grouped and described as pathogens, nutrients, or toxics. Adverse effects can also result when temperature, dissolved oxygen, biochemical oxygen demand, or acidity are outside of natural levels. The Action Agenda recommends measures that would aim to prevent pollutants from being introduced to the Puget Sound ecosystem.

Regulations/Plans and Programs

Some of the recommended actions include new and/or revised regulations intended to reduce contaminants from entering ground or surface waters. Other actions include programs to prevent contaminants from entering surface and ground waters, as summarized below:

- Accelerate implementation of persistent bioaccumulative toxics (PBT) chemical action plans;
- Investigate improvements to field compliance monitoring programs;
- Establish “no discharge” zones in Puget Sound;
- Facilitate the development of on-site septic management plans.

Capital Projects

The Action Agenda includes providing technical and financial assistance to local governments with needed and planned upgrades to their wastewater facilities. Top priority will be those projects that reduce pollutant loadings and support wastewater reclamation and reuse.

d. Describe proposed measures to reduce or control surface, ground, and runoff water impacts, if any.

As described above, the Action Agenda contains actions to mitigate existing impacts to surface water, ground water, and stormwater. The majority of the actions fall into the following categories: source control, surface water management, and wastewater treatment. Implementation or expansion of existing regulations, acceleration of watershed based plans and programs, and low impact development techniques would also reduce impacts to water resources.

4. Plants

a. Types of vegetation found on-site:

The ecosystems of the Action Area have been formed and influenced by the rugged Cascade and coastal mountain ranges, ocean intrusions, river floodplains, and historic glaciations. Climate, soils and geology have directed the formation of plant communities ranging from coniferous forests to open prairies, saltwater marshes, and freshwater riparian corridors. The Action Area Profiles provide general physical descriptions of ecosystem characteristics and physical features, and the *Habitat and Land Use Topic Forum Discussion Paper* (Partnership, 2008e) and *Species, Biodiversity and Food Webs Topic Forum Discussion Paper* (Partnership, 2008f) provide more detailed information.

The Action Area includes a wide variety of deciduous and evergreen trees, shrubs, perennial and annual herbaceous upland plants, wetland plants, and water plants native to Puget Sound habitats. Some nonnative, ornamental species are also present. In the Puget Sound basin, there are several invasive species that threaten native ecosystems, such as purple loosestrife (*Lythrum salicaria*), cordgrass (*Spartina* spp.), knotweed (*Polygonum* spp.), Scot's broom (*Cystisus scoparius*), and brown seaweed (*Sargassum muticum*). Invasive species are a threat to more than a quarter of the plant species in Washington that are of conservation concern.

b. What kind and amount of vegetation will be removed or altered?

Some of the proposed actions would involve vegetation removal as a secondary activity, such as capital projects or habitat enhancement projects. However, the Action Agenda in general recommends a variety of tools and tactics that would strengthen the protection of vegetation and aim to restore and enhance native plant communities. The types of projects that would involve vegetation removal would generally include:

- Wastewater treatment facility upgrades;
- Low impact development stormwater management projects (new);
- Habitat enhancement and habitat restoration projects (e.g., levee setbacks and removals, dike modifications, fish barrier removals, dam removals).

For these activities, project-specific environmental analysis will be prepared during the application and review for federal, state, and local permits. Replacement of removed vegetation would likely be an element of these types of projects.

c. List threatened or endangered species or critical habitat known to be on or near the site.

The Puget Sound basin is home to a wide diversity of plant species that depend upon marine, estuarine, freshwater, and terrestrial environments. Threatened and endangered species include golden paintbrush (*Castilleja levisecta)*, water howellia (*Howellia aquatilis*), and Kincaid's lupine (*Lupinus sulphureus* ssp. *kincaidii*). The *Species, Biodiversity and the Food Web Topic Forum Discussion Paper* (Partnership, 2008f)describes threatened and endangered species in detail and presents golden paintbrush as a case study because it is often used as an indicator of the health of prairie habitat in the Puget Sound lowlands.

d. Describe proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on-site.

The Action Agenda recommends a variety of actions that would involve measures to preserve or enhance vegetation.

<u>Regulations/Plans and Programs</u>

The Action Agenda recommends several types of regulatory revisions and/or additions that would preserve or enhance habitat protection and vegetation. For example, the purchase of development rights to working forests at immediate risk of conversion would protect upland habitats. Other regulations, such as modification of Shoreline Master Programs,

would limit shoreline development and in-water structures. In most cases, this would benefit riparian and aquatic vegetation.

Incentives

Incentives that would protect and/or restore habitat include the development of non-regulatory incentives for small forest landowners to maintain their land in working forest, or farmers to keep their lands in working agriculture.

Capital Projects

The types of projects that would involve vegetation enhancement would generally include habitat enhancement and habitat restoration projects (e.g., levee setbacks and removals, dike modifications, fish barrier removals, dam removals, wetland and estuary restoration, native vegetation protection in upland areas). Project-specific environmental analysis will be prepared during the application and review for federal, state, and local permits.

Acquisitions

Initiatives proposed to acquire habitat would help to preserve sensitive habitat areas at risk of conversions.

5. Animals

a. Underline any birds and animals which have been observed on or near the site or are known to be on or near the site:

The Puget Sound basin is home to a wide diversity of animal species that depend upon marine, estuarine, freshwater, and terrestrial environments. This includes both species native to Puget Sound freshwater and saltwater habitats, as well as many nonnative species.

For example, Puget Sound's waters support numerous residential and migratory marine species, including over 150 species of marine birds, 230 species of fish, 20 mammal species, and numerous invertebrates and microbes. This biodiversity is threatened by declines in the abundance and productivity of many species. As of 2008, 21 species in the region were listed by the federal and/or state government(s) as threatened or endangered. The status of many of the thousands of animal species in the Puget Sound region is not known. The *Species, Biodiversity and the Food Web Topic Forum Discussion Paper* (Partnership, 2008f) **describes animal species in detail and possible reasons for decline of some species. The Puget Sound Sc**ience Update

(Partnership, 2011a**) provides additional detail on the biophysical condition and character of the Puget Sound species and food webs.**

b. List any threatened or endangered species or critical habitat near the site.

Twenty-one species are listed as threatened or endangered by the state and federal governments, and the state government lists 157 species of concern. Most federally-listed species also have critical habitat designated by rule under the Endangered Species Act.

c. Is the site part of a migratory route? If so, explain.

Puget Sound is known to be a migratory route for a large number of marine species, including fish, marine mammals, and marine and upland birds. It is also within the Pacific Flyway, which is a flight corridor for migrating waterfowl, migratory songbirds, and other birds. The Pacific Flyway extends from Alaska to Mexico and South America.

d. Proposed measures to preserve or enhance wildlife, if any.

The Action Agenda recommends a variety of measures to preserve or enhance wildlife and protect existing high-quality habitat in marine, marine nearshore, estuarine, freshwater riparian and upland areas. Many of the actions include priority recommendations developed as part of recent or on-going recovery plans and restoration projects (e.g., Salmon Recovery Plans). The Action Agenda also recommends accelerating the implementation of species recovery plans and coordinating implementation. The types of actions range from large-scale habitat restoration projects, to regulatory revisions that allow the purchase of development rights, to preservation of working forests at immediate risk of conversion. Actions that require project-specific environmental analysis of impacts will be subject to additional review before federal, state, and local permits are issued.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The Action Agenda recommends actions that are intended to help conserve natural resources and energy overall. Some of the capital projects would require additional energy, but the majority of the tools and tactics would not require substantial increases in energy usage. Relevant capital projects that could result in reduced energy consumption include:

- Wastewater treatment facility upgrades;
- Low impact development (LID) stormwater management projects;
- LID stormwater retrofitting projects (e.g., replacing conventional stormwater conveyance systems with permeable paving, biofiltration, bioretention facilities, such as rain gardens, and other LID methods).

For these activities, project-specific environmental analysis will be prepared during the application and review for federal, state, and local permits.

b. Would the project affect the potential use of solar energy by adjacent properties? If so, explain.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

The Action Agenda recommends actions that could enhance energy conservation and promote long-term sustainable development. The types of actions include low impact development projects, acquisition of property for green space, and modernization of wastewater facilities.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spills, or hazardous waste that could occur as a result of this proposal? If so, describe.

A wide array of environmental health risks currently exist in the Puget Sound region. Some human health threats have a direct link to Puget Sound because they relate directly to the marine water column, sediments or biota of the Sound, or because they reach the Sound through a contributory pathway, such as ground and surface water sources or air deposition. The *Human Health Topic Forum Discussion Paper* (Partnership, 2008g) describes existing indirect and direct threats to human health in detail and describes initiatives to address these risks. In summary, human health threats include:

- Toxics in fish, shellfish and other biota;
- Pathogens in fish and shellfish;
- Biotoxins in fish and shellfish;
- Adequacy of food supply (fish and shellfish);
- Toxic air emissions and deposition;

- Toxics and pathogens in surface water (including runoff), ground water, and marine water;
- Toxics in soils, sediment and dust, in localized and broader areas;
- Hazardous waste site soils and sediments;
- Pathogens and toxics in biosolids.

A purpose of the Action Agenda is to improve water quality in Puget Sound and its tributaries through the use of science-based tactics (as described in A.11 and the Topic Forum Papers). Improving water, soil and sediment quality would restore ecosystem processes, food supplies (fish and shellfish) and reduce the threats to human health.

1. Describe special emergency services that might be required.

The Action Agenda recommends several actions to prevent pollutants from being introduced into the Puget Sound ecosystem, including measures to enhance the effectiveness of septic systems, upgrade wastewater facilities, and address stormwater loading. The Action Agenda recommends support for expanded oil spill prevention and response measures.

2. Describe proposed measures to reduce or control environmental health hazards.

The Action Agenda recommends several tactics to address human health risks. Priorities would be focused on areas with demonstrated water quality problems, such as shellfish closures and hypoxia.

<u>Regulations/Plans and Programs</u>

The types of new and revised regulations intended to reduce human health risks include:

- Establishment of local septic utility programs that increase the capacity of health departments to implement on-site septic management plans;
- Evaluation, adjustment, and expansion of existing septic loan programs;
- Implementation and promotion of improvements in oil spill prevention, preparedness, and response programs, policies, or capabilities; and
- An evaluation of marine traffic risk to improve marine safety and oil spill risk reduction measures.

Providing technical support and funding for monitoring programs, including septic tank effectiveness monitoring, implementation and

strengthening of shellfish protection districts, advocacy for reduced household usage of toxic chemicals, and prioritized implementation of chemical action plans would further help to reduce public health risks. Spill prevention and control efforts, including proposals for vessel inspection, are additional examples of measures to reduce human and environmental health risks.

Capital Projects

The types of capital projects that would address threats to human health include:

- Septic tank replacement and retrofit projects;
- Wastewater treatment facility upgrades;
- Outfall replacement projects;
- Habitat restoration at toxic cleanup sites.

Funding

The Action Agenda prioritizes funding to replace poorly functioning on-site sewage systems in key shoreline areas, where nutrient and pathogen loadings are known to be high. Example initiatives include: evaluating, adjusting, and expanding septic loan programs; establishing septic utilities; and increasing the capacity of local health jurisdictions to implement on-site septic management plans.

b. Noise

1. What types of noise exist in the area which may affect your project (for example: traffic, equipment operation, other)?

A wide range of noise sources are present, associated with urban land uses, industrial production, and transportation.

2. What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)?

The types of projects that would generate noise are capital construction projects such as wastewater treatment facility upgrades, low impact development stormwater management projects, and low impact development stormwater retrofitting projects (e.g., replacing conventional stormwater conveyance systems with permeable paving, biofiltration, bioretention facilities, such as rain gardens, and other low impact development

methods). Some habitat enhancement and habitat restoration projects (e.g., levee setbacks and removals, dike modifications, fish barrier removals, dam removals) would generate noise during construction. These projects would comply with applicable noise regulations and their noise impacts would be temporary. Project-specific environmental analysis will be prepared during the application and review for federal, state, and local permits.

3. Describe proposed measures to reduce or control noise impacts, if any.

Noise generating activities would comply with applicable local regulations and noise ordinances.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

The Puget Sound basin encompasses a wide variety of land use types including urban development; suburban, rural, and resource uses; and protected parks, open spaces, wilderness areas, sanctuaries, and wildlife refuges. Urbanized land uses (industrial, commercial, residential, etc.) account for about 2 percent of the Hood Canal drainage and about 23 percent of the main basin drainage. Major urban centers include Seattle, Bellevue, Renton, Tacoma, Everett, Bellingham, Olympia, and Bremerton. Outside of these urban areas, rural residential, forestry, and agriculture are the dominant land uses..

Puget Sound's freshwater and saltwater shorelines are used for myriad water-dependent, water-related and water-enjoyment uses. Industrial uses dominate the shoreline areas in Elliott Bay (the Lower Duwamish Waterway), Commencement Bay, and Sinclair Inlet. The majority of the remaining shoreline areas are platted and developed for residential use. Other common shoreline uses are marinas, waterfront resorts, shellfish farms, hatcheries, and waterfront/marine parks. Roughly one-third of the Puget Sound marine shoreline has been modified with armoring and docks.

Between 1991 and 1999, approximately 1 percent of the total area in the Central Puget Sound region was newly developed. Forest cover decreased 8.5 percent during that same period. The most intense development has occurred within the Urban Growth Areas, with nearly half of the land conversion occurring in the Seattle metro area.

Land use is one of the key drivers of ecological impacts because it customarily involves clearing vegetation, compacting soil, draining surface water, armoring shorelines, and converting pervious areas to

impervious surfaces. Land use is well correlated to increases in impervious surface area, which affects hydrology, water quality, and other ecosystem processes.

b. Has the site been used for agriculture? If so, describe.

Agricultural land uses are scattered throughout the Puget Sound Lowlands and are dominant in Skagit and Whatcom Counties. Additional pockets of agricultural land occur in Island and San Juan Counties, on the Quimper Peninsula, and in almost all of the major river valleys in the region. The region's agricultural lands produce pasture, hay, dairy products, berries, and a variety of other crops.

c. Describe any structures on the site.

As noted above, the Puget Sound basin encompasses a wide variety of land use types and associated structures.

d. Will any structures be demolished? If so, what?

As the Action Agenda is implemented, many different types of structures could be demolished to make way for more environmentally friendly infrastructure and technologies. Public wastewater facilities and treatment systems could be remodeled, demolished and/or replaced by newer treatment technologies. Roads and transportation infrastructure could be demolished to accommodate stormwater retrofits. Some stormwater facilities could be demolished and replaced by low impact development techniques. As ecosystem restoration projects are implemented, shoreline bulkheads, overwater structures, culverts, levees, dikes and other structures may be removed to restore habitats and recover ecosystem processes. All demolition projects would be subject to project-level SEPA review and applicable permit requirements.

e. What is the current zoning classification of the site?

Zoning varies widely throughout the region according to the existing and expected land use. Virtually every type of zoning classification occurs in the Puget Sound region.

f. What is the current comprehensive plan designation of the site?

A wide range of comprehensive plan designations exist. Comprehensive plan designations vary widely by jurisdiction based on the existing and expected land use. Virtually every type of comprehensive plan designation is represented in the Puget Sound region.

g. If applicable, what is the current shoreline master program designation of the site?

Shoreline designations vary widely by jurisdiction and by individual shoreline reach. There is a range of designations including Natural, Conservancy, Rural, Urban and High Intensity. Local jurisdictions within the region are in the process of updating Shoreline Master Programs and shoreline designations to comply with the state's 2003 shoreline guidelines (WAC 173-26).

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

Environmentally sensitive areas are found throughout the Puget Sound basin. Freshwater wetlands are ubiquitous, especially in the less developed lowland areas and in river valleys. Saltwater marshes line the marine shore and major estuaries occur at the mouths of large streams such as the Skagit, Snohomish, Nisqually, Dosewallips, and Stillaguamish Rivers. Critical aquifer recharge areas occur in areas of permeable geologic deposits including large portions of Whatcom County and areas near the King/Snohomish County line. Geologically hazardous areas, including landslide hazard areas and erosion hazard areas, occur throughout the basin. Many of the major river valleys are erosion hazard areas because of their potential for channel migration. In addition, a sizeable percentage of the high bluffs on the marine shore are classified as landslide and/or erosion hazard areas. Frequently flooded areas occur along virtually every stream and river corridor.

i. Approximately how many people would reside or work in the completed project?

In 2005, approximately 4.4 million people resided in the Puget Sound basin. Although estimates vary depending on the area encompassed, according to the State Office of Financial Management, the population is expected to grow to 4.7 to 6.1 million residents by 2025.

j. Approximately how many people would the completed project displace?

Displacements are not anticipated. Should displacements occur due to specific projects, additional project-specific environmental reviews would be conducted.

k. Describe proposed measures to avoid or reduce displacement impacts, if any.

No displacement is anticipated.

l. Describe proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

Because the Action Agenda identifies measures that will protect and restore resources, it is generally compatible with land use and shoreline plans prepared pursuant to the state Growth Management Act (GMA) and SMA. However, the Action Agenda may result in changes to land uses and plans to achieve greater environmental benefit and ecosystem protection. The Action Agenda would strengthen shoreline provisions regarding armoring and overwater structures to further minimize adverse effects on nearshore resources, as required by the SMA. Some land use plans and policies relating to stormwater management, floodplain management, and critical area protection would likely also be modified and strengthened. This would include providing incentives to landowners who engage in desired stewardship practices and promoting transfer of development rights options to achieve land use and environmental goals. The tradeoff is that these changes may place greater restrictions on development in sensitive areas, encourage additional development in developed areas, or increase the costs associated with permitting and review of development projects. Changes to land use plans would be subject to project-level SEPA review.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

The Action Agenda does not provide any housing units.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

The Action Agenda would not directly affect housing. Acquisition of lands could prevent them from being used for housing; demands for housing could be met in other areas. Changes in land use regulations could also influence housing costs and availability. Some studies suggest that land use restrictions can dramatically increase housing costs, but other investigations have yielded conflicting results. The effects of changing regulations on housing availability and cost could be evaluated as part of future project-specific SEPA reviews.

c. Describe proposed measures to reduce or control housing impacts, if any.

The Action Agenda recommends strengthening local critical areas and shoreline regulations. This could result in impacts to residential development by further shifting development densities to avoid critical areas. Any proposed land use measures would be vetted through local agencies, and would receive public input at that time. Such measures would limit impacts to housing availability and overall cost.

10. Aesthetics

a. What is the tallest height of any of the proposed structure(s), not including antennas? What is the principal exterior building material(s) proposed?

No specific structures are proposed.

b. What views in the immediate vicinity would be altered or obstructed?

The Action Agenda supports preserving the aesthetic value of the Puget Sound region. Some of the types of actions recommended in the Action Agenda could alter local views. For example, large and small restoration projects or stormwater retrofits would result in changes to the existing landscape. In most cases, the changes would be considered positive; however, aesthetic perception is highly personalized and subject to individual sentiments.

c. Describe proposed measures to reduce aesthetic impacts, if any.

Projects that could result in alteration of views will receive site-specific review under local, state, and federal permits and additional environmental review, as appropriate. Overall the Action Agenda is anticipated to preserve aesthetic attributes.

11. Light and Glare

a. What type of light and glare will the proposal produce? What time of day would it mainly occur?

The Action Agenda generally does not include the types of projects that would generate light and glare.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

This is unlikely as a result of the Action Agenda.

c. What existing off-site sources of light or glare may affect your proposal?

There may be sources of off-site light or glare in some specific instances. These would be evaluated at a project-specific level if relevant.

d. Describe the proposed measures to reduce or control light and glare impacts, if any.

No measures are needed.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

A wide range of recreational opportunities are present in the Puget Sound basin, such as boating, fishing, shellfish harvest, hunting, bird-watching and hiking. The Action Agenda focuses on recommendations that would preserve such opportunities and restore some lost opportunities (e.g., shellfish harvest).

b. Would the proposed project displace any existing recreational uses? If so, describe.

The Action Agenda recommends actions that are intended to preserve recreational opportunities in the Puget Sound region. If none of the actions are carried forward, there could be a reduction of recreational uses, such as continued loss of fishing, whale watching, shell fishing, and bird-watching opportunities.

The types of projects that could affect recreation range from the regulatory modifications and capital projects that pertain to improving water quality, to those that preserve and enhance plants and animals. In most cases, the result would be increased recreational opportunities. Some of the capital projects would require construction, which would result in temporary construction impacts and loss of recreational opportunities for a limited time. These impacts would be addressed during project-specific review for federal, state, and local permitting.

c. Describe proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant.

In general, all of the actions would be expected to increase recreational opportunities by enhancing water quality, preserving unique areas, and restoring degraded ecosystems.

13. Historic and Cultural Preservation

a. Are there any places or objects listed on or eligible for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

There are many known cultural and historic resources throughout the Puget Sound region and the Action Agenda acknowledges and supports the value of such resources. Initiatives that would help to preserve and protect these resources and sites include recommendations for strengthening critical areas regulations and shoreline protections.

b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site.

Areas of historic, archeological, scientific and cultural importance are known to exist throughout Puget Sound. Puget Sound shorelines, river/stream shorelines, and the areas where these shorelines intersect are particularly important.

c. Describe proposed measures to reduce or control impacts, if any.

Site-specific investigations would occur for any project that could potentially affect historic, archeological, scientific and cultural resources. All activities would be coordinated with affected tribes and appropriate state and federal permitting agencies.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on-site plans, if any.

Puget Sound has a wide range of transportation systems, including surface roadways, rail lines, airports, and marine transportation.

b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The area is served by several public transit entities, which provide bus, train, plane, and ferry transportation service.

c. How many parking spaces would the completed project have? How many would the project eliminate?

Specific projects proposed within the Action Agenda could affect available parking. Impacts would be evaluated as part of project-level SEPA evaluations and permitting.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe.

The Action Agenda would not directly affect roadways, but it contains recommendations that could require modifications to roadways, through storm drainage improvements (retrofits). Accelerating the implementation of improved stormwater practices, including adoption of low impact development ordinances by local jurisdictions, could result in changes to roadway designs or alignments. Other modifications to existing regulations, such as the strengthening of critical areas regulations, are intended to reduce impervious areas and enhance protection. Any improvements to existing roads and streets would be subject to project-specific environmental review.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The types of projects recommended in the Action Agenda that would require water, rail, or air transportation generally include construction of capital projects, such as:

- Wastewater treatment facility upgrade projects;
- Septic tank replacement and retrofit projects;
- Outfall replacement projects;
- Low impact development stormwater retrofit projects.

Impacts to transportation from these types of construction projects would be evaluated during project-specific evaluations prior to construction.

The proposed regulatory modifications that support spill prevention efforts could affect transportation in the region. For example, vessel inspections could have negative effects on marine transportation, including increased costs or schedule implications.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Construction of some projects would generate vehicular trips (e.g., wastewater treatment facility upgrades, low impact development stormwater retrofitting projects). Projects that generate traffic during construction would be evaluated for impacts as part of project-level SEPA evaluations.

g. Describe proposed measures to reduce or control transportation impacts, if any.

Several tools and tactics proposed in the Action Agenda are intended to reduce impacts from transportation systems, particularly impacts from roadway runoff. For example, stormwater retrofits and acceleration of low impact development ordinance implementation would address these pollutant sources and aim to reduce pollutant transport. The proposed revisions to land use codes (critical areas and shoreline regulations) would also address transportation impacts. The emphasis on directing future development to existing developed areas could help control the need for vehicle travel between residential, commercial and industrial centers.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally explain.

The Action Agenda recommends the expansion of outreach and education throughout the Puget Sound basin. It includes a public awareness campaign that increases public understanding of the threats facing Puget Sound and educates the public about ways to reduce the human impact on Puget Sound. This and other actions that promote awareness are likely to be mostly beneficial, but they may require additional training of agency staff.

The agencies, governments, and tribes responsible for evaluating and implementing the Action Agenda will likely experience demands on their staff and financial resources, in some cases requiring a shift in some of their existing priorities. For example, some of the proposed regulatory revisions that pertain to septic systems could have an impact on public service agencies such as health departments. Strengthening of spill response programs could affect fire departments, potentially requiring an increase in training and/or staff. Modifications to existing sensitive areas regulations, plans and programs, many of which have been controversial to implement, will require time and financial commitments from affected

agencies. These increased responsibilities come at a time when many public entities are facing severe budget shortfalls.

b. Describe proposed measures to reduce or control direct impacts on public services.

The Action Agenda recommends funding priorities and would provide advocacy for initiatives. The Partnership will also provide technical assistance for many initiatives. Please refer to Section C for further discussion of mitigation measures that would address the increased demand for public services, and the Partnership's efforts to reduce the impacts to implementing entities.

16. Utilities

a. Underline utilities currently available at the site:

There is a comprehensive range of utilities available throughout the Puget Sound region.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

The Action Agenda recommends a variety of tools and tactics related to source control of pollutants. The majority of initiatives are meant to reduce pollutant discharges and address pollutant source control, but some would have associated resource tradeoffs. Wastewater and stormwater utilities are likely to be the most affected by the proposed actions.

<u>Regulations/Plans and Programs</u>

The types of regulatory modifications intended to enhance the protection of Puget Sound include:

- Establish a "no discharge" zone in Puget Sound;
- Implement a program to review and incorporate pollution prevention strategies during NPDES review and permit issuance.

The utilities and agencies responsible for implementing the modified regulations will likely experience increased demands on staff time and operational costs. The increase in monitoring and permit review will require additional trained staff. Increased wastewater treatment plant standards will require additional funds for implementation. Please refer to Section C below, which describes the tradeoff between the environmental benefit and additional responsibilities of the implementing agencies with regards to the regulatory recommendations in the Action Agenda.

Capital Projects

Some types of capital construction projects could affect utilities, such as:

- Wastewater treatment facility upgrade projects;
- Septic tank replacement and retrofit projects;
- Outfall replacement projects;
- Low impact development stormwater retrofit projects.

In all cases, the anticipated outcomes for these activities would include reduced pollutant loading into surface waters. To implement the initiatives, local agencies would require increased staffing and funding. In some cases, the existing priorities of local utilities will be shifted, resulting in impacts to some existing programs or capital improvement projects. Project-specific environmental analysis will be prepared during the application and review for federal, state, and local permits.

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C. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Implementation of the 2012 Action Agenda Update (hereafter referred to as the Action Agenda) is intended to reduce overall discharges to water and air, and reduce the production, storage, or release of toxic or hazardous substances to the environment. As described in the Action Agenda, the Partnership has been directed to implement priority strategies to restore Puget Sound to a healthy condition. These strategies, which are described in more detail in Section 2 of the Action Agenda, are Sound-wide in scope; include a system for implementation that addresses funding, accountability, and scientific input; and establish linkages with the regional Action Areas, each of which has its own set of conditions and priorities. As compared with the current institutional setting, implementation of the Action Agenda will reduce overall environmental impacts to Puget Sound and its surrounding watersheds.

Proposed measures to avoid or reduce such increases are:

The Partnership has developed the Action Agenda to clearly link the six recovery goals established by the Legislature with targets and indicators, and recommended strategies and actions. The Partnership assembled the public and scientific input it received into a set of science-based strategies and actions that are organized into four broad sub-sections.

A. Freshwater and Terrestrial Protection and Restoration, which includes strategies and actions related to land development, stewardship of working forest and agriculture lands, floodplains;

B. Marine and Nearshore Protection and Restoration, which includes strategies and actions related to shoreline alteration, marine protected areas, working waterfronts;

C. Pollution Prevention and Cleanup, which includes strategies related to polluted runoff from urban and other lands, reducing toxic threats, and wastewater management; and,

D. Strategic Leadership and Collaboration, which includes strategies related to public education and stewardship, ecosystem monitoring, and maintaining and updating the Action Agenda

The near-term actions related to these four areas include regulatory modifications and/or increased support for existing regulations, plans and programs, capital projects, incentive and acquisition projects, education efforts, and proposed areas

for additional research and monitoring. The Partnership will support these actions with funding and/or advocacy for priority in state and federal funding efforts.

Without implementation of the Action Agenda, management of Puget Sound will continue with its currently fragmented, piecemeal approach, rather than an approach focused on ecosystem management. Available data and scientific research indicate that the management approaches used to date have not effectively protected the resources of Puget Sound. Without a coordinated, comprehensive approach to Sound-wide management, existing degradation of habitat within the Puget Sound basin is expected to continue.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

The Action Agenda includes a number of actions intended to protect existing high-quality habitat in marine, marine nearshore, estuarine, freshwater riparian, and upland areas. It also includes actions intended to restore habitats such that they better support ecosystem integrity. Most of these actions reflect years of collaborative work among scientists, policy leaders, and other key stakeholders to identify high-priority actions for ecosystem protection and recovery, such as priority projects identified in the Puget Sound Salmon Recovery Plan. A more detailed discussion of the identification of these priority actions is included in Section 2 of the Action Agenda.

Implementation of some of the actions involves construction work that could have short-term impacts on plants, animals, and their habitats (for example, construction of stormwater system retrofits, in-water restoration projects, outfall repairs or replacements, and other construction projects). However, long-term impacts to plants, animals, fish and marine life are expected to be beneficial. Additional long-term monitoring of water quality and biota will be needed to confirm the effects.

If the Action Agenda is not implemented, protection and/or restoration of habitat will continue in a fragmented and piecemeal fashion. This may result in some locally effective results, but Sound-wide progress will be difficult to achieve and measure. As regional human population growth continues, it is expected that pollutant loads will increase and habitat conversion will continue, resulting in increased threats to plants and animals in the Puget Sound basin.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

All of the actions outlined in the Action Agenda are intended to conserve plants, animals, fish and marine life. (In particular, see the actions outlined for the protection and restoration of ecosystem processes, structures, and functions in Section 2 of the Action Agenda.) Specific actions include, for example, acquisition of high-value habitat, incentives to protect critical habitat, strengthening of existing programs to protect habitat, and implementation of high-priority habitat protection and restoration programs**.**

3. How would the proposal be likely to deplete energy or natural resources?

The priority actions included in the Action Agenda are intended to help conserve energy and natural resources in the Puget Sound region. The actions are generally not energy-intensive. Some of the actions, such as greater implementation of low impact development stormwater technologies and support for preservation of working farms and forests, are anticipated to reduce energy usage or at least maintain but not increase current levels of energy usage. Some of the capital projects, such as upgrades and modernization of wastewater treatment facilities, could result in increased energy usage associated with enhanced treatment processes and disinfection but could also offset those increases at some level through waste-to-resource programs. The tradeoffs associated with higher energy use relative to higher treatment levels will be evaluated as part of the project-specific environmental analyses for proposed projects.

Proposed measures to protect or conserve energy and natural resources are:

The Action Agenda includes actions designed to promote long-term sustainable development, which is intended to provide overall lower levels of energy and natural resource consumption. For example, the Action Agenda includes recommendations to support development of a strategy that balances environmental protection with economic growth, supporting development in urban growth areas and redevelopment in cities that are compact, livable, transit and pedestrian oriented. The Action Agenda includes support for proposed critical areas protections. These types of actions will encourage development of land use codes that will result in energy and natural resource conservation, and discourage development in areas with sensitive natural resources. The Partnership's support of these efforts will help to encourage energy and natural resource conservation throughout the Puget Sound region.

4. How would the proposal be likely to use or affect environmentally critical areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

The Action Agenda includes actions intended to protect or restore high-quality habitat areas, threatened or endangered species habitat, wetlands, and floodplains. It also includes measures to strengthen or accelerate existing protections as well as new actions intended to further existing efforts. Actions could include strengthening shoreline protections through the Shoreline Management Act, supporting completion/update of existing Critical Areas Ordinances, and strengthening floodplain regulations to reduce development in these sensitive areas. Other proposed actions include acquisition of high-quality habitat, including wetlands and estuaries, and/or incentives to promote protection of these areas. The actions include high-priority habitat restoration projects and support for large-scale estuary and nearshore restoration projects. The actions also include measures to support and preserve working farms. The Partnership has worked closely with the tribes, to ensure that tribal priorities are included.

The Action Agenda intends to provide a comprehensive, systemwide approach to managing sensitive areas, including farmlands, forests, floodplains, cultural, and natural resources. Continuing the status quo in the region will result in continuation of current trends, which includes a piecemeal approach to resource management. This fragmented approach could have localized benefits, but it is not expected to achieve the effectiveness of a systemwide management approach.

Proposed measures to protect such resources or to avoid or reduce impacts are:

As noted above, a primary objective of the Action Agenda is to protect natural resources and avoid continuation of existing impacts to wildlife habitat, threatened and endangered species, wetlands, and floodplains. The actions outlined in the Action Agenda provide a comprehensive series of measures to protect sensitive resources as well as restore those high-value resources that are degraded or damaged.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The Action Agenda includes actions intended to strengthen existing land and shoreline use laws and regulations. For example, one recommended measure is to provide the funding and technical support necessary to ensure that all Puget Sound jurisdictions complete their Shoreline Master Program updates on schedule. Another action recommends strengthening the Shoreline Management

Act relating to bulkheads and overwater structures and shoreline hardening. Other actions address the Growth Management Act, and how it manages some forms of commercial development, including aquaculture and agriculture.

Actions resulting in strengthened regulatory requirements that restrict potential for development are likely to be viewed as a reduction in individual property rights by some property owners, and they will likely be controversial. This type of proposed regulation has historically met with opposition from property owners and businesses, who can perceive restrictions on development potential as a significant economic impact. Many landowners have expressed the concern that increasing regulatory controls could result in higher costs for housing development. Implementing these actions will require continued coordination with local agencies and with property owners.

Proposed measures to avoid or reduce shoreline and land use impacts are:

The proposed actions are intended to strengthen existing shoreline and land use regulations, resulting in a higher level of protection for sensitive resources. These proposed modifications, while intended to provide positive environmental benefits, may not be perceived as positive impacts by property owners. In some cases, the Partnership will provide funding to acquire properties, or will support incentive efforts, which provide offsetting benefits to owners of properties with sensitive or unique natural resources. The Partnership may also support local efforts to affect these changes by providing funding for outreach, education and technical support as needed.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Some of the proposed actions could affect public agencies and utilities. These include, for example, support for measures to strengthen shoreline protections through amendments to the Shoreline Management Act; evaluation and implementation of revised regulations, policies or legislation relating to exempt water wells; modifications to critical area ordinances; and, support for establishment of restrictions on vessel discharges. These regulatory modifications are intended to enhance the protection of Puget Sound. The agencies, governments, and tribes responsible for evaluating and implementing these modified regulations could experience increased demands on their staff and financial resources. Some of the demands could be offset by additional funding; however, even with additional funding it is likely that some of the modifications to regulations will require implementing entities to shift some of their existing priorities. This could result in impacts to some existing programs, shift staff responsibilities, or have other operational implications. As these proposed regulatory changes are evaluated, it will be important to consider the full range of

the potential implications to avoid potentially negative impacts to the implementing agencies.

Many of those affected by regulatory changes may resist strengthening or modification of existing regulations. For example, the boating, marine shipping, and cruise ship industries could oppose new regulations on discharges because of increased costs that could result. Local planning departments already dealing with budget deficits could object to regulatory modifications that will increase their workload, such as amendments to the Shoreline Management Act. Changes to existing regulations regarding exempt wells would affect the Department of Ecology and local water utilities, and have historically been controversial. Modifications to the U.S. Army Corps of Engineers' Levee Maintenance Standards to meet ecosystem-based goals will require extensive evaluation and discussion to resolve differing agency objectives.

If no action is taken, current trends in water quality and habitat degradation are expected to continue or worsen as the region's population grows. Demands on existing agencies and utilities could increase relating to continued water quality problems, public health concerns, and reduced availability of recreational opportunities, for example.

Proposed measures to reduce or respond to such demand(s) are:

The Action Agenda includes direct funding for some actions, advocacy for increased state and federal funding for others, and development of incentives that would support activities without direct public funding.

The Partnership will provide staffing and technical assistance for efforts to establish transfer of development rights (TDR) programs, establishment of in-lieu-fee mitigation programs, technical support to assist counties and cities in addressing revenue distribution issues, and technical support to jurisdictions as they work to complete their Shoreline Master Programs on schedule.

All actions that could cause significant adverse environmental impacts would be subject to additional environmental review under SEPA, and mitigation measures would be developed to address impacts as appropriate.

The update to the Action Agenda includes a Funding Strategy as described under Item 8 above. New actions recommended in the update include the establishment of multiple in-lieu-fee mitigation programs in Puget Sound, which will address some revenue distribution issues.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

The Action Agenda includes several actions intended to strengthen existing regulatory programs, including state shoreline regulations and local Shoreline Master Programs.

It also includes a number of actions to improve compliance with rules and regulations, including providing funding for cities and counties to conduct compliance monitoring, providing additional inspectors for toxic compliance and water quality compliance programs, and staffing support for compliance with shoreline and aquatic regulations and instream flow requirements.

These actions are not expected to conflict with local, state, or federal laws or requirements for the protection of the environment, but they could result in a strengthening of existing requirements. In some cases, this might result in state requirements that are more restrictive than those required by the federal government, or local requirements that are more restrictive than those required by the state. While this would represent a difference in requirements, it is not a conflict.

If the Action Agenda is not implemented, the existing laws and requirements would continue unchanged and be inconsistently enforced, and the health of Puget Sound would likely continue to degrade. Existing regulations would continue to be enforced in a piecemeal manner, resulting in inconsistent enforcement of existing local, state and in some cases federal laws or requirements. Areas with high bacteria levels, for example, could continue or worsen without appropriate monitoring and enforcement of water quality regulations, resulting in potential public health concerns associated with water contact or consumption of shellfish. Shoreline development could continue in sensitive areas if shoreline management regulations are not monitored and enforced. The level of compliance with existing laws and regulations will vary at a local level, depending on funding availability, staffing demands, and other factors. While some regulations might be adequately enforced, a systemwide approach to ecosystem management and regulatory implementation is expected to provide more consistent compliance with regulatory requirements.

D. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Name (print): Gerry O'Keefe

Title: Executive Director, Puget Sound Partnership

Date Submitted: February 17, 2012

FIGURE