

**Puget Sound Partnership
Action Agenda Status Update for Science Panel**

February 21, 2008

Discussion Purpose

- Keep Science Panel up-to-date on Action Agenda status and progress
- Seek Science Panel guidance on scientific aspects of the Action Agenda

Status

The status is organized around the four Action Agenda questions:

1. What is the current status of Puget Sound's health and what are the biggest threats to it?
2. What is a healthy Puget Sound?
3. What actions must be taken that will move us from where we are today towards a healthy Puget Sound by 2020?
4. Where should we start?

1. What is the current status of Puget Sound's health and what are the biggest threats to it?

- The Risk Analysis initiated by NOAA Fisheries will set the overarching framework and context for the ecosystem. A scientific-peer review workshop was held on Feb 20th with several Science Panel members in attendance. Mary Ruckelshaus will review the workshop, workshop guidance, and next steps with the Science Panel at the meeting.
- Nine workshops have scheduled around Puget Sound to discuss the sound-wide risk analysis and bring in the local information. The overarching goal is to work toward a shared understanding of current status and threats to Puget Sound. Attendees will be invited to add their local knowledge and perspectives to the status and threats assessment of Puget Sound through small and large group discussion. The focus is on existing data. Workshop participants will also have the chance to review a summary of a Sound-wide inventory of current actions and make recommendations. The schedule of meetings can be found on the Partnership website.

2. What is a healthy Puget Sound?

- Based on Science Panel guidance at the prior meeting, the Leadership Council will discuss and confirm using the legislative definitions of a healthy Puget Sound.
- A brief progress update on the indicators work will be available at the Science Panel meeting.

- The Leadership Council will begin a discussion about using policy-based targets and benchmarks at their upcoming meeting. We will want Science Panel input on the process as it is developed.

3. What actions must be taken to move from where we are now to a healthy Puget Sound by 2020?

- The Partnership is conducting an inventory of existing responsibilities and work. The deadline for submittal is February 29. Initial results will be available for review at the upcoming Action Area meetings.
- Based on Science Panel guidance, six topic forums (mirroring the Partnership goals) have been initiated to essentially answer the four questions of the Action Area from a scientific perspective. The draft questions are attached to this handout. It would be helpful for Science Panel members to weigh in the questions and help refine them per your individual expertise.

Each Topic Forum will have one topic-focused workshop and we will have one overall synthesis workshop. These have not yet been scheduled. It is a high priority to get the dates set. The Science Panel will have a significant discussion about the work of the topic forums at the April meeting.

Note that the Topic Forums are focused on “what needs to be done”. The Ecosystem Coordination Board will be more focused on the “how”.

- A second set of Action Area meetings will be scheduled for early May to discuss actions, including the work of the topic forums.

4. Where should we start?

- The Leadership Council will have briefing on the draft results of the risk analysis. This will be followed by an initial discussion on criteria that could be considered for setting priorities. We will want more input and guidance from the Science Panel after the initial discussion.
- At the Action Area workshops, participants will be asked about current criteria they are using to prioritize actions.
- The Topic Forums will be asked about criteria.

Attachment for Science Panel Discussion

Proposed Topic Forum Questions February 21, 2008

For Topic Forum Leads and Core Synthesis Teams

The 2020 Action Agenda will answer four basic questions about Puget Sound:

5. What is the current status of the Puget Sound's health and what are the biggest threats to it?
6. What is a healthy Puget Sound?
7. What actions must be taken that will move us from where we are today towards a healthy Puget Sound by 2020?
8. Where should we start?

The six issue-focused "Topic Forums" mirror the Partnership goals: Human health, human quality of life, species/food web/biodiversity, land use, water quality, and water quantity.

The work of the Topic Forums is to essentially address the same four questions by goal area. The specific sub-questions to help answer the main four questions are outlined in draft form below. In conducting this work, the Topic Forums will synthesize existing information and approaches to the problem, conduct a gap analysis of current efforts with risk and threats information, and provide input on priorities. A very small synthesis team will summarize work and bring it to the broad community of interests and expertise for focused review and refinement.

These questions may need to be refined with the core synthesis team, ESA Adolfson, and Partnership staff. Note that "S" questions are scientific and "P" questions are policy. Different people will help to answer the scientific and policy questions. The responses to the questions must include references (not lengthy – example for each science questions, about 10 references may be appropriate). These questions do not yet get at "where do we start" or the synthesis questions across topics.

Species and Biodiversity Forum

- S1: What is the current status of the species, biodiversity, and food web function in Puget Sound, and what are the threats to them? What is the certainty of our understanding?
 - What are the deficiencies in what we currently know about species, biodiversity, and food web function?

- ('Status' of a species is defined as abundance, productivity, spatial distribution, and diversity. For biodiversity and food webs for example, the status discussion could include the number of listed species, areas of high biodiversity, food web status, etc.)
- How does current status compare to a 'healthy' or reference condition for species, biodiversity or food web function in Puget Sound?
- S2: What do we know about the effectiveness and certainty of management approaches or specific actions aimed at addressing needs for species, biodiversity and food web functioning from a science standpoint?
- P1: What are the policy approaches that are used to address biodiversity in Puget Sound? (examples could be species specific plans, species lacking plans, etc.)
- P2: What needs to be done to address the documented threats to species and biodiversity in the Puget Sound region? Could consider short-term and long-term.

Water Quantity Forum

- S1: What is our documented knowledge of freshwater quantity? What is the certainty of our understanding?
 - What is the current amount and timing of the distribution of water flows in surface and groundwater?
 - What are the projected needs for water supply for human uses and species needs (directly and through habitat needs)?
 - Where do we know there are problems in freshwater supply to protect habitat function?
 - Where do we know there are problems for domestic supplies (e.g., agriculture, business, residential, industry, etc.)?
- S2: What do we know about the effectiveness and certainty of freshwater supply (surface and groundwater) management approaches or specific actions from a science standpoint?
- P1: What are policy approaches that are used to manage water supply in the Puget Sound Region, for habitat, species, and for domestic supply?
- P2: What needs to be done to address threats to freshwater supply management in the Puget Sound Region? Could consider short-term and long-term.

Water Quality Forum

- S1: What is the current status of freshwater and marine water quality in PS? What is our documented knowledge about threats to the freshwater and marine ecosystem coming from the attributes below? What is the certainty of our understanding? Summarize thresholds that have been established for human or species health associated with these attributes:
 - Toxics
 - Nutrients
 - Pathogens
 - Toxins
- S2: From a scientific standpoint, what do we know about the effectiveness and certainty of management approaches to address impaired freshwater or marine water quality? For example, what is the certainty of approaches in the broad categories below in improving water quality? What other approaches are known to be effective?
 - Stormwater
 - Wastewater
 - Land Use
- P1: What do we know about our existing water quality management systems? (consider system condition, extent of service, etc.)
 - Stormwater
 - Wastewater
 - Other
- P2: What current policies and practices address:
 - Toxics
 - Nutrients
 - Pathogens
 - Toxins
- P3: What needs to be done to address threats to water quality in the Puget Sound region?

Land Use/Habitat Protection and Restoration

S1: What is the current status of terrestrial, freshwater, estuarine and marine habitats in Puget Sound, relative to a baseline condition? (“Status’ of habitat refers to its amount, condition or quality, spatial distribution and connectedness, and diversity.) What do we know about the primary causes of changes in habitat status over time (include natural drivers such as climate)? What is our documented knowledge about threats to habitat as a result of land use practices? What is the certainty of our understanding?

S2: From a scientific standpoint, what do we know about the effectiveness and certainty of land use management practices or specific actions such as restoration and protection to address threats to habitat?

P1: What land use management approaches and other habitat approaches such as restoration are used to address threats to habitat, and what do we know about their effectiveness?

P2: What should be done to address threats to habitat from land use practices in the Puget Sound Region?

Human Health

S1: What is the current status of human health in Puget Sound? What is our documented knowledge about threats to human health coming from the water, sediment and biota of terrestrial, freshwater, marine, and the air of Puget Sound? What is the certainty of our understanding?

S2: From a scientific standpoint, what do we know about the effectiveness and certainty of measures to address threats to human health in the Puget Sound region?

P1: What policies and programs are currently used to address threats to human health associated with the water, sediments and biota in the Puget Sound region?

P2: What should be done to address threats to human health in the water, sediment and biota in the Puget Sound region?

Human Quality of Life

P1: What attributes of Puget Sound contribute to the quality of life in the region and what is their current status?

- Recreational
- Commercial
- Other Economic
- Social
- Aesthetic
- Cultural
- Other

P2: What are the threats to those attributes?

P3: What do we know about measures to address the threats to the attributes that contribute to the quality of life in the Puget Sound Region?

P4: What should we do to address these threats?