

Puget Sound Partnership
Updated approach to setting threat reduction and ecosystem targets
March 1, 2010

For Ecosystem Coordination Board Meeting

This handout was prepared for the ECB meeting on March 5. It reflects content that will be discussed and likely modified by the Cross-Partnership Work Groups on performance, threats and strategies on March 4. If any revisions to this handout are needed as a result of the March 4 discussion, staff and members of those work groups will discuss them at the ECB meeting as needed.

At the ECB meeting, staff and members of the Cross-Performance Work Groups on Performance and threats will:

- Brief the ECB on a revised, integrated approach for setting regional ecosystem and threat reduction targets in 2010
- Present and request input on the ecosystem and threat reduction categories for which to develop targets in 2010
- Present the proposed list of ecosystem components

Background

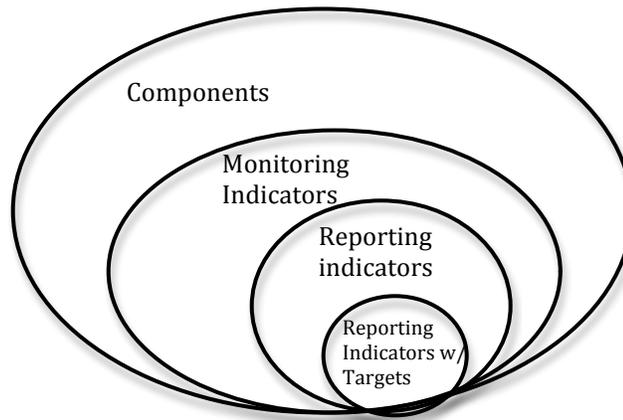
In January and February 2010, Partnership staff proposed an approach to setting regional threat reduction targets. This was discussed with the combined Cross-Partnership Work Groups on performance, threats and strategies, Ecosystem Coordination Board, and Leadership Council.

Staff are now proposing a slightly revised process that:

- Includes setting an initial, small set of ecosystem targets in 2010
- Sets up an integrated approach to setting threat reduction and ecosystem targets in 2010
- Emphasizes the threat groupings in 2010 only for the purpose of selecting threats for threat reduction target setting. Completion of the threat definitions and final ratings will occur in the context of the completed Puget Sound Science Update. This approach will help address concerns raised in the comments on the November 2009 threats memo and state caucus concern over misinterpretation of the ratings during the budget process.
- Strives to balance Partnership stakeholder demands for both increasing the pace of the work and creating more opportunities for participation, and addresses increasing desire for participation and review in the target setting.
- Incorporates EPA's need to set new reporting targets for Puget Sound by December 2010.
- Reflects the Leadership Council's adjusted meeting calendar while still staying on the proposed schedule to adopt targets in fall 2010.

Target Setting Context and Schedule

- Ecosystem Targets:
 - The ideal flow of work would be: 1) confirm the component list, 2) select monitoring and then reporting indicators, and 3) set targets for an initial subset of those indicators.



- The Science Update and its follow-up synthesis will provide the most current information for setting targets. Although this work will not be completed until late in 2010, the Science Panel agrees that there are some no regrets/stable targets that could be set before the Update work is complete.
 - Staff can commission/request some expert groups to review and synthesis existing information on target setting.
 - The results of this work can be presented and discussed with the Cross-Partnership work groups and ECB in spring and summer.
 - Staff anticipate that targets will be approved by the Leadership Council at the November meeting, if not September.
- Threat Reduction Targets
 - Staff recommends that the best use of the threat groupings in early 2010 is to select which threats should have reduction targets set first. (While some of the threat categories have issues related to the definitions and ratings that need to be resolved, staff opinion is that these would not change which threats targets we work on first).
 - Staff will draft criteria and a proposed list of no-regrets threats for which to start for target setting.
 - The combined X-PSP groups, ECB, and LC can give guidance on the criteria and proposed list at their March meetings.
 - Staff can convene small groups of experts to identify target options for specific threats and complete the priority results chains.
 - The Leadership Council would approve the threat reduction targets in September 2010.

Proposed parameters and criteria for selecting ecosystem components and threats for which targets should be developed in 2010

Basic Parameters

- Each Partnership statutory goal should have at least one ecosystem target or threat reduction target.
- The Partnership should strive to set ecosystem and threat reduction targets before setting more programmatic outcome targets, however, in some cases, a programmatic target might be more appropriate to set first.
- Where desired, use targets for ecosystem indicators and threats that the region already must focus on and are already driving monitoring and reporting.

Ecosystem target criteria

- The suite of reporting indicators, including those for which we set ecosystem targets in 2010, should reflect the breadth of the focal ecosystem components.
- Start with ecosystem components and indicators for which the region is highly likely to select because they have been used in prior reporting on ecosystem conditions and/or are viewed as necessary elements of a recovered ecosystem.
- The first ecosystem targets set should reflect prior target request/direction by the Cross-PSP performance management group, LC and ECB in 2009 and 2010 (land use/land cover, stormwater runoff, shoreline armoring)
- Reflect input from the 2008 WRI interviews about important ecosystem goods and services in the region (things we care about most)

Threat reduction criteria

- The suite of threat reduction targets should include a mix of targets aimed at addressing legacy issues and current issues.
- The first threats for target setting set should be rated as high or very high in the draft technical memo (and definitional or ratings questions raised in the comments on the tech memo would not likely lead to downgrading the rating) OR it is considered a managed threat in which we should still invest to keep it managed.
- The first threat reduction targets set should reflect prior target request/direction by the Cross-PSP performance management group, LC and ECB in 2009 and 2010 (land use/land cover, stormwater runoff, shoreline armoring)
- The region has a reasonable chance of setting a target in 2010 (e.g., climate change would not fall into this category).
- Targets would not be set in 2010 for threats that a) were not rated very high or high but still have ratings issues, b) and resolving these issues would still not elevate the threat to target setting in 2010 based on the other criteria.

Proposed suite of “no regrets” 2020 ecosystem targets and threat reduction target topics for development in 2010

To be discussed with the Cross-Partnership Work Groups and Ecosystem Coordination Board

	Partnership Goal					
	Human Health	Human Well-being	Species/bio-diversity/food web	Habitat	Water quality	Freshwater flows
Component • Likely/ possible target “topic”		<i>Working resource lands</i> <ul style="list-style-type: none"> • Acreage of shellfish beds reopened • Farmland acreage <i>Tribal values and resources</i> <ul style="list-style-type: none"> • Commercial Indian harvest of finfish and shellfish 	<i>Marine species and food webs:</i> <ul style="list-style-type: none"> • Chinook salmon • HC Summer Chum • Orca ? (not clear that orca would be selected as a indicator) 	<i>Nearshore water quality and habitats</i> <ul style="list-style-type: none"> • Eelgrass <i>Terrestrial ecological systems</i> <ul style="list-style-type: none"> • Lowland forest cover 		
Threat category • example reduction target “topic”	<i>Wastewater treatment plan discharge and CSOs; and onsite sewage</i> <ul style="list-style-type: none"> • Reduction in pathogen and/or nutrient pollution 		<i>Marine invasives</i> <ul style="list-style-type: none"> • % ballast water treated (might be an output measure) 	<i>Shoreline armoring</i> <ul style="list-style-type: none"> • Reduction in shoreline armoring <i>Dams, levees, and tidegates</i> <ul style="list-style-type: none"> • Restored estuary habitat 	<i>Surface water runoff in the built environment</i> <ul style="list-style-type: none"> • Toxics input reduction • Change in impervious surface <i>Point source pollution</i> <ul style="list-style-type: none"> • Sediment clean up sites (might be an output measure, not a threat target) 	<i>Water withdrawal and diversion</i> <ul style="list-style-type: none"> • Total water withdrawal • Per capita consumption
Output measure				<ul style="list-style-type: none"> • Something programmatic related to growth (e.g., % that occurs in UGAs) 	<ul style="list-style-type: none"> • Something programmatic on stormwater (e.g., LID adoption, permits, etc.) 	

**DRAFT List of Focal Ecosystem Components
for March 5, 2010 discussion by Ecosystem Coordination Board**

Staff note: This table will be discussed at the March 4 Cross-Partnership Work Group meeting. Staff opinion is that the environmental components are stable, but the human dimension components may be adjusted based on Science Update work related to the topic.

The focal components better define the six statutory goals. The components will be used to identify reporting indicators (in 2010), set ecosystem recovery targets (starting in 2010), and build the ecosystem monitoring program.

Puget Sound Partnership's Focal Ecosystem Components	Defined to include ...
Marine species & food webs	Populations, communities, and food webs in pelagic and benthic environments (away from shorelines)
Freshwater species & food webs	Populations, communities, and food webs in rivers and streams (including floodplains and riparian zones), lakes, wetlands
Terrestrial species & food webs	Populations, communities, and food webs in terrestrial ecological systems
Nearshore species & food webs	Populations, communities, and food webs from top-of-bluff and head-of-tide to depth of photic zone
Integrating species	Populations of salmon and other species that use more than one domain &/or systems beyond PS
Marine water quality and habitats	Water quality and other habitat conditions in pelagic and benthic environments away from shorelines
Freshwater quality, quantity, and habitats	Water quality of surface and ground water; other habitat conditions in aquatic environments and riparian zones; ground water level; streamflow
Terrestrial ecological systems	A classification of forests, woodlands, prairies, etc. to encompass system types in the PS region
Nearshore water quality and habitats	Water quality and other habitat conditions in terrestrial and aquatic environments and riparian zones from top-of-bluff and head-of-tide to depth of photic zone
Atmosphere	Air quality and other atmospheric conditions
Human health	Aspects of human health that depend on ecological conditions
Built environment	Elements of human-built infrastructure with a nexus to ecological conditions and human well-being
Working marine industries	Elements of marine industry that depend on ecological conditions
Working resource lands and industries	Elements of natural resource industries (not marine) that depend on ecological conditions
Nature oriented recreation	Elements of recreation with a nexus to ecological conditions
Scenic resources and existence values	Passive, non-consumptive aspects of human well-being with a nexus to ecological conditions
Tribal values and resources	(To be defined by tribes)

Working Threat List for Reference
(as presented in the State of the Sound report)

Table 3-2 Alphabetical list of ecosystem threat categories for Puget Sound

Agriculture and livestock grazing	Air pollution and atmospheric deposition	Aquaculture
Climate change	Dams, levees, and tidegates	Derelict gear and vessels
Dredging and dredged material disposal	Invasive species and other problematic species—terrestrial	Invasive species and other problematic species—freshwater
Invasive species and other problematic species—marine	Large-scale timber harvest	Military exercises
Mineral and gravel mining	Oil and hazardous spills	Onsite sewage systems
Point source pollution	Recreational activities	Recreational marinas
Residential, industrial, commercial, port, and shipyard development	Roads, transportation, and utility infrastructure	Shoreline armoring
Surface water loading and runoff from the built environment	Unsustainable fishing and harvesting	Vessel traffic and interaction
Wastewater treatment plant discharge and combined sewer overflows (CSOs)	Water withdrawals and diversions	Governmental arrangements (indirect threat)

Example Results and Measures

