

PugetSoundScienceUpdate

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Editor's note

The Puget Sound Science Update is a represents the state-of-the-science supporting the work of the Puget Sound Partnership to restore and protect the Puget Sound ecosystem. The Puget Sound Science Update represents an advancement in the development and use of science to support Puget Sound recovery in two important ways. First, the content of the Puget Sound Science Update was developed following a process modeled after the rigorous peer-review process used by the Intergovernmental Panel on Climate Change (IPCC), in which small author groups produced draft assessment reports synthesizing existing, peer-reviewed scientific information on specific topics identified by policy leaders. These drafts were peer-reviewed before the final reports were posted. Second, the Puget Sound Science Update will be published on-line following a collaborative model, in which further refinements and expansion occur via a moderated dialog using peer-reviewed information. Content eligible for inclusion must be peer-reviewed according to guidelines.

In the future, there will be two versions of the Update available at any time:

- (1) a time-stamped document representing the latest peer-reviewed content (new time-stamped versions are likely to be posted every 4-6 months, depending on the rate at which new information is added); and
- (2) a live, web-based version that is actively being revised and updated by users.

The initial Update you see here is a starting point to what we envision as an on-going process to synthesize scientific information about the lands, waters, and human social systems within the Puget Sound basin. As the document matures, it will become a comprehensive reporting and analysis of science related to the ecosystem-scale protection and restoration of Puget Sound. The Puget Sound Partnership has committed to using it as their 'one stop shopping' for scientific information—thus, it will be a key to ensuring that credible science is used transparently to guide strategic policy decisions.

The Update is comprised of four chapters, and you will note that some are still at earlier stages of completion than others. Over time—through the process of commissioned writing and user input through the web-based system—the content of all four chapters will be more deeply developed. We are relying in part on the scientific community to help ensure that the quality and nature of the scientific information contained in the Update meets the highest scientific standards.

Preface

Who are the authors of the Puget Sound Science Update?

Leading scientists formed teams to author individual chapters of the Puget Sound Science Update. These teams were selected by the Puget Sound Partnership's Science Panel in response to a request for proposals in mid-2009. Chapter authors are identified on the first page of each chapter. Please credit the chapter authors in citing the Puget Sound Science Update.

What are the Puget Sound Partnership and the Science Panel?

Please visit psp.wa.gov to learn about The Puget Sound Partnership.

Please visit [science panel web page](#) to learn about the Science Panel.

Has the Puget Sound Science Update been peer reviewed?

The original chapters of the Puget Sound Science Update were subjected to an anonymous peer review refereed by members of the Puget Sound Partnership's Science Panel. Reviewers are known only to referees on the Science Panel and the Partnership's science advisor.

What is "content pending review"?

The future web presentation is intended to offer a venue for updating, improving, and refining the material presented in the Puget Sound Science Update. Suggested amendments and additions are presented as "content pending review" on each page when an editor, perhaps working with a collaborating author, has developed some new content that has not yet been formally adopted for incorporation into the section. As "content pending review," this content should not be cited or should be cited in a way that makes clear that it is still in preparation.

How can I contribute new material to the Puget Sound Science Update?

Please visit the Puget Sound Partnership website to learn about how you can help improve, update, and refine the Puget Sound Science Update, or send an e-mail to pspu@psp.wa.gov to get the process started.

How can I cite the Puget Sound Science Update?

We recommend citations this version in the following format:

[Authors of specific chapter or section]. April 2011. [Section or chapter title] in Puget Sound Science Update, April 2011 version. Accessed from <http://www.psp.wa.gov/>. Puget Sound Partnership. Tacoma, Washington.

"Content pending review" of the Puget Sound Science Update has not been fully reviewed for publication. If you elect to cite this information, we recommend that you contact the named author(s) to cite as a personal communication or cite the web-presentation using the following format:

[Authors of pending material]. In prep. Content pending review presented in [Section or chapter title] in Puget Sound Science Update. Accessed from <http://www.psp.wa.gov/>. Puget Sound Partnership. Tacoma, Washington.

Chapter 2B. The Socio-economic Condition of Puget Sound (outline)

Section 1. Outline

The current presentation of Section 2B is in an outline form—a more complete section will be posted later. The objectives of Section 2B are: (a) to establish a framework for organizing existing and emerging information from the breadth of the social sciences - what we will refer to as the “human dimensions” of Puget Sound restoration and preservation, and (b) to review existing and potentially high value human dimension data that can be used as indicators for the social and economic “state” of the region, and the “governance” of the Puget Sound marine resources. Outline of Section 2B

1. Approach

- a. Distinction between State and Governance indicators. Data about human populations, economic activity, land use practices, and other ‘state’ indicators can paint a picture of the status of human well-being in the Puget Sound region. “Governance” information describes the characteristics of decision-making processes implicated in Puget Sound recovery.
- b. Analytical frameworks for encompassing state and governance indicators in regional ecosystem planning. Using well-documented frameworks such as the Common Pool Resource and Institutional Analysis and Development approaches as organizing schemes.
- c. Communicating levels of scientific understanding and confidence in assessments of different elements of human well-being.

The State of the Puget Sound Region: PSP Action Agenda in a Regional Context

- a. Restoration Goals/Objectives in PSP Action Agenda
- b. Relevance of the general regional “state” of human well-being and its elements to the PSP Action Agenda. Understanding the human and geographic context of Puget Sound restoration is important because opportunities and threats to restoration are affected by property use in the region; and in turn, restoration and protection actions (or their absence) impact the surrounding population.
- c. Demography and Land Use -describe the state of the built environment and human geography, including population distribution, migration sources and patterns, and existing land-uses and regulations in place.
- d. Population Well-being - focus on general state measures of human health and well-being. Include distributional equity: the social distribution of the environmental goods and services, including human health risks resulting from the Puget Sound marine system.
- e. Economic structure of the Puget Sound –describe the state of the region’s economy; evaluate approaches to disaggregating marine-specific and more generally, economic activities dependent on the state of natural resources in the region.

Land Use and Governance

- a. Review what is known about the governance of land use allocation and distribution decisions.
- b. Review governance of marine waters and tide lands. Include what is known about the capacity for responsible institutions to make fair and competent natural resource allocation and distribution decisions.

Stewardship Capacity. Stewardship is the capacity to act, enabled by available human, social, cultural and economic capital.

- a. Inventory the human, social, financial, built, and cultural capital that can enable stewardship of the Puget Sound marine system.
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