Human Dimensions of Puget Sound Nearshore Restoration

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ABSTRACT

To be successful, environmental restoration planning must align with social values as well as reflect good science. PSNERP activities that further the goal of incorporating public values and preferences into restoration planning include: 1) developing and implementing models for public participation in program planning and implementation; 2) developing vehicles for communicating restoration goals and expected outcomes to various constituencies and the general public; and 3) developing basic understanding of the values, preferences and beliefs that members of the public have that shape attitudes about environmental restoration. Tools and information from the social sciences and related academic disciplines provide a “human dimensions” (HD) perspective that is essential to effective restoration planning.

Why... a need for human dimensions understanding?

Experts and lay public see human influence on Puget Sound differently

FINDINGS

2006 Washington Governor’s Office Survey

- Environment not a top concern of lay public in Puget Sound region
- Transportation and schools/education are leading concerns; only 8% of respondents mentioned the environment.
- 75% of the region’s residents rated Puget Sound’s environmental health “excellent” (7%) or “pretty good” (66%), compared to 19% who rated it “not so good” and 5% who rated it as “poor”.
- While there were environmental concerns, nobody mentioned Puget Sound specifically. However, 68% rate population growth and increasing development as an environmental threat.

2005 Interviews with Experts

- Puget Sound is suffering from loss of ecosystem structure, function, and process.
- Development patterns are believed to be the most significant causes of this decline:
  - Single-family residences
  - Habitat loss/degradation
  - Pro-growth attitudes and policies
  - Run-off
  - Discharge/spills
- Social, institutional, and political factors are viewed as the main challenges to progress, not scientific understanding.

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Environmental change influences human well being both directly and indirectly and in ways often not readily apparent

HD research helps anticipate feedbacks in coupled human-environment systems that produce unintended consequences; these may adversely affect human well being, triggering responses that produce additional loss of ecosystem services.

Highlights desirability of identifying and communicating ways degraded nearshore condition affects environmental attributes that humans value or that provide necessary ecosystem support.

What’s wrong with this picture? (from possible societal perspectives)

PSNERP is integrating human dimensions by focusing on:
- Valued Ecosystem Components (VECs)
- Ecosystem Functions, Goods & Services (EF&G&S)
- Stakeholder Analysis (getting underway Autumn 2008)

EFG&S: Tools for Weighing Value of Restoration Alternatives

Summary of ecosystem services provided by natural coastal ecosystems as well as by commonly used techniques to mitigate shoreline erosion (hypothetical example)

NOTES: The darker the symbol ( ), the higher the contribution to the valued ecosystem service. Research is needed to determine the actual contribution of valued EFG&S of various restoration alternatives.

References