Roadmap to recovery: Climate change and ecosystem recovery in Puget Sound

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MISSION

Accelerate the collective effort to recover and sustain the Puget Sound

• Coordinate action around a common agenda
• Smart investments through shared science-based system of measurement and monitoring
• Support priority actions
PUGET SOUND

VITAL SIGNS

INDICATORS OF PUGET SOUND'S HEALTH AND RECOVERY
Background

• 2014 Puget Sound Pressures Assessment (McManus et al. 2014)
• State of Knowledge: Climate Change in Puget Sound (Mauger et al 2015)
• The 2016 Action Agenda Comprehensive Plan
• National Estuary Program – Climate Ready Estuaries
Climate adaptation for a backbone organization

- Inform Investments
- Promote Resilience
- Align Work / Coordinate Action
PSP Climate Assessment

WHAT ARE THE SHARED MEASURES OF PROGRESS?

RECOVERY GOALS

- Healthy human population. Healthy people are supported by a healthy Puget Sound.
- Human quality of life. Our quality of life is sustained by a healthy Puget Sound.
- Species and food web. Puget Sound species and the web of life thrive.
- Protect and restore habitat. Puget Sound habitat is protected and restored.
- Water quantity. Puget Sound rivers and streams flow at levels that support people, fish, and wildlife.
- Water quality. Puget Sound marine and fresh waters are clean.

What are we trying to achieve?

And how will climate change affect our ability to achieve it?
### E.g.: Pacific Herring VS

<table>
<thead>
<tr>
<th>Risk</th>
<th>Likelihood of Impact</th>
<th>Rating</th>
<th>Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td></td>
<td>High for herring</td>
<td>High for herring</td>
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<tr>
<td></td>
<td></td>
<td>Medium for forage fish guild</td>
<td>Medium for forage fish guild</td>
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<td></td>
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<td>Medium for pelagic food web</td>
<td>Medium for pelagic food web</td>
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<td>Consequence</td>
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**Attributes assessed:**

- Health of forage fish in Puget Sound, including Pacific herring, surf smelt and sand lance.
- Annual tonnage of spawning herring.
Guidance for Chinook Salmon Project Evaluation

1. Project selection considers effectiveness
2. Identify project that address emerging risks or suggest strategy changes
3. Projects developed with explicit climate considerations
2018 Action Agenda, Soliciting for Actions

- Vital Signs
- Targets and Indicators
- Regional Priorities
- Approaches
- Outcomes
- Proposal Guidance
2018 Action Agenda, Near Term Actions

Desired result = NTAs that better account for future climate
Implementation Strategies

- Define *mechanisms and causal pathways* for recovery targets
- Articulate *actions and approaches* to achieve a recovery target
- Indicate *barriers, pressures, synergies, opportunities, tradeoffs and conflicts*
1. Complete set of sub-strategies focused on reducing pressures to increase extent and quality of major river estuaries
No single pathway to resiliency

Stream Channels, Sauk River
Where are we going?

• Guidance and support for Implementation Strategies
• Science priorities
• Continue to assess climate risks
• Capacity building
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Puget Sound Partnership

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