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Salish Sea Ecosystem Conference

2014 Salish Sea Ecosystem Conference  
(Seattle, Wash.)

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May 2nd, 1:30 PM - 3:00 PM

## Human Dimensions of Puget Sound Ecosystem Health and Recovery: Social Sciences Scale and Scope

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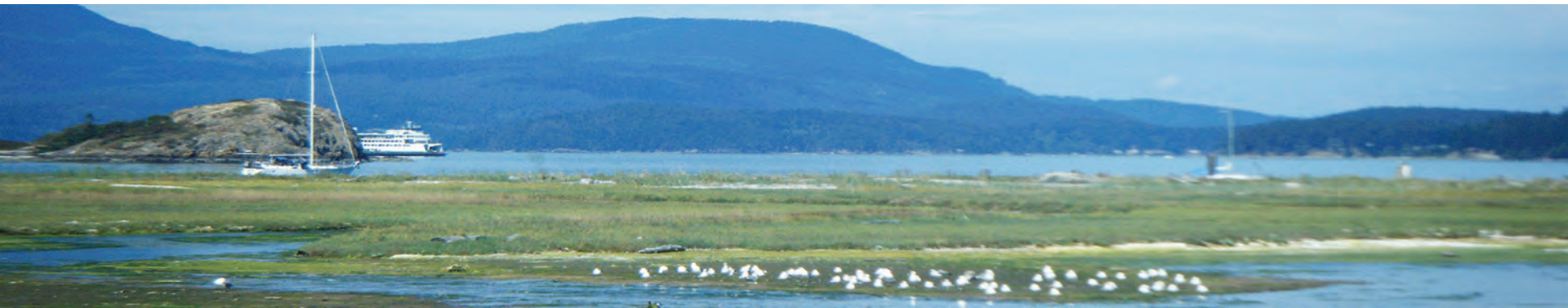
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# Human Dimensions of Puget Sound Ecosystem Health and Recovery:

## Social Sciences Scale and Scope



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Research

May 2, 2014, Salish Sea Conference

# Diverse, Complex, Connected: Social and Ecological Systems



"The idea of nature contains, though often unnoticed, an extraordinary amount of human history."

Raymond Williams, "Ideas of Nature"

# Diverse, Complex, Connected: Social and Ecological Systems



- Studies can serve to describe and highlight the human systems conditions that generate negative impacts on ecosystems.
- The social sciences seek to understand how to better integrate different social scales and human agents in ways that lead to deeper understanding and committed behavior toward ecosystem recovery.

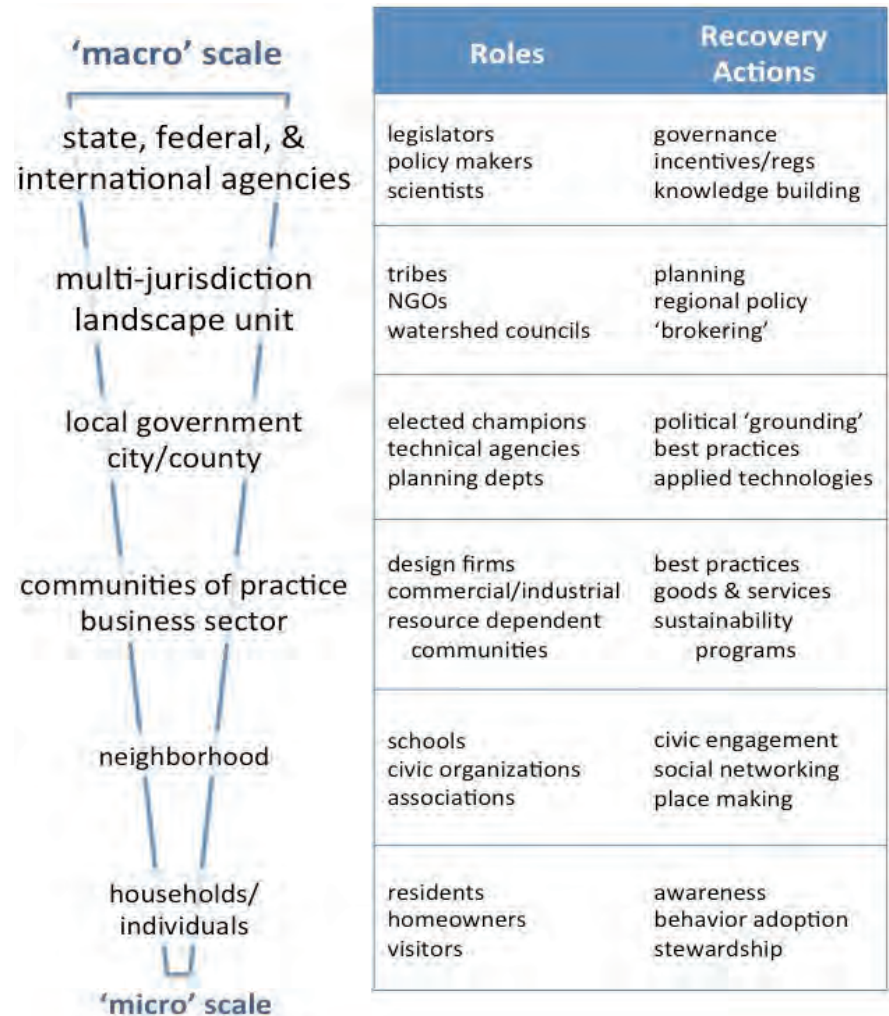
# Research Program

What are the pathways by which the diverse social science disciplines can inform recovery strategies and engage people in recovery solutions?



# Social Science Approaches

- Conducted a literature review of social sciences applied to large scale ecosystems, particularly with urban to rural gradients
- Synthesized findings into a comprehensive framework of eight human dimensions topics, generally aligned with social science disciplines and social scales or processes
- Studies are represented at each of these layers



# Communities and Local Jurisdictions



- Reviews of planning processes or surveys of stakeholder groups, in order to understand how management and policies work across jurisdictions
- Social science theories can be applied to specific settings in order to tailor ecosystem recovery efforts to the local context and characteristics
- Incorporating stakeholders within ecosystem based management planning can help create more robust and comprehensive plans (Brody 2003)
- Characterizing local jurisdictions, resource management capacity
- Ecosystem recovery and stakeholder effects, participatory ecosystem management, environmental justice

# Individual Cognition and Environment



- Research about the knowledge, values, and behaviors of individuals and groups is critical in recovery efforts as environmental perceptions are at the core of how people act in and on their surroundings.
  - This literature spans several disciplines including, philosophy, economics, sociology, and social psychology (Dietz et al. 2005).
  - The Values-Belief-Norm model was developed to describe the foundations of pro-environmental behaviors (Stern 2000)
- Studies show that public landscape preferences (that have consequences for land management practices) can be shifted with depictions of landscape alternatives and offering resources to implement more ecological landscapes.
- A study of Puget Sound landowners would help to develop land treatment alternatives and engage property owners in innovative practices.



# Recommendations

- Demonstrated how social sciences are applied to large-scale ecosystem recovery efforts, particularly ones that are urbanized
- Complex problems needs complex science
- Multi-disciplinary and interdisciplinary approaches at multiple scales
- Illustrates a need to organize research to make it more targeted approach



# Thank You!

- Mary Ann Rozance, rozance@pdx.edu

**PugetSoundPartnership**

LEADING PUGET SOUND RECOVERY

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Urbanizing Areas.”



# References

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# Eight Topics

1. Land and Resources Use Patterns- Historic and Projected
2. Governance, Institutions, and Administrative Processes
3. Science, Policy and Successful Integration
4. Communities and Local Jurisdictions
5. Organizations, Associations, and Firms
6. Place, Meaning, and Traditional Cultures
7. Individual Cognition and Environment
8. Stewardship Action and Participation