



Western Washington University  
**Western CEDAR**

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Salish Sea Ecosystem Conference

2018 Salish Sea Ecosystem Conference  
(Seattle, Wash.)

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Apr 5th, 10:00 AM - 11:30 AM

## Ecosystem Recovery in an International Transboundary System

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Murray, Cathryn Clarke; Locke, Andrea; and Sanhuri, Jameal, "Ecosystem Recovery in an International Transboundary System" (2018). *Salish Sea Ecosystem Conference*. 605.

<https://cedar.wvu.edu/ssec/2018ssec/allsessions/605>

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## **Salish Sea 2018 – Ecosystem Recovery in an International Transboundary System**

### **Beyond theory: the assessment and management of cumulative effects in the Salish Sea**

**Convenors – Cathryn Murray, Andrea Locke, Jameal Samhouri**

The Salish Sea is increasingly affected by the interaction of local, regional, and global stressors, necessitating the consideration of cumulative effects at various spatial scales and for a variety of assessment purposes. Some of these stressors are a legacy of historical activities while others reflect ongoing and emerging ocean uses. Cumulative effects frameworks for assessing risks and impacts of stressors abound but are easier to critique than to execute. Users of cumulative effects frameworks have different foci, needs, and preferred outputs that fall under four categories of cumulative effect frameworks depending on the focus of the assessment: species, stressor, activity, or place. Alternatively, or perhaps within the four-category system, frameworks have focussed on ecological units such as habitats, communities, or ecosystems, and/or were specifically developed for coupled human-natural systems.

This session hosted presentations from federal, provincial, First Nations, academic and non-profit organizations featuring applications of cumulative effects frameworks, case studies, and management efforts. The session consisted of five presentations followed by a panel discussion session on the future needs of cumulative effects research and management in the Salish Sea. This diverse session highlighted the importance of collaboration, co-management and local community engagement in cumulative effects assessment. Incorporating restoration and the removal of stressors from ecosystems is an emerging area of interest in cumulative effects research. Spatial and temporal scales are important considerations in assessment and management of cumulative effects. The panel discussion highlighted the need to choose a meaningful baseline – a better understanding of the historical state of the system aids our knowledge and management of cumulative effects.