Reporting on the Health of the Salish Sea via transboundary ecosystem indicators: Reflecting on twenty years and mobilizing for the future

Sarah Bartnik  
*Government of Canada*

Michael Rylko  
*Government of Canada*

Follow this and additional works at: [https://cedar.wwu.edu/ssec](https://cedar.wwu.edu/ssec)

[https://cedar.wwu.edu/ssec/2022ssec/allsessions/318](https://cedar.wwu.edu/ssec/2022ssec/allsessions/318)

This Event is brought to you for free and open access by the Conferences and Events at Western CEDAR. It has been accepted for inclusion in Salish Sea Ecosystem Conference by an authorized administrator of Western CEDAR. For more information, please contact [westerncedar@wwu.edu](mailto:westerncedar@wwu.edu).
Building on the 2020 results, we are working now to **re-design our scope and approach for Salish Sea transboundary ecosystem health reporting for the future.**

- **We are seeking to better mobilize our ecosystem report from its current, data-driven foundation towards informing adaptive management and environmental actions across the Salish Sea through our Canada-US collaboration efforts.**

- The effects of key large-scale forces (or drivers or pressures) such as climate change and human activity can affect multiple indicators. Our ecosystem indicators should better reflect these relationships, and we plan to work with other partners to better represent and integrate pressures into our ecosystem perspectives at both regional and localized scales.

- We aim to move the ecosystem health reporting forward to be **more inclusive of experiences and ways of knowing and understanding across the Salish Sea and to improve our descriptions of human-ecosystem connections.**

- To do this, **we are seeking and identifying opportunities to expand our base of collaborators to draw more on newer/emerging knowledge networks and further incorporating local Indigenous Knowledge in our reports and helping to build consensus and direct actions to protect the transboundary Salish Sea.**

We want to talk with you, work with you, and learn about how you measure or know about the health of the Salish Sea.


The US EPA and ECCC has reported on the health of the Salish Sea ecosystem since 2002. Our 10 indicators currently cover the states of air, water, human wellbeing, and species.

Our results were posted online in Spring 2021 showing mostly declines and only small successes across the ecosystem:

1. Air Quality (Fine Particulates) – **Neutral**
2. Toxics in the Food Web – **Neutral**
3. Freshwater Quality – **Neutral**
4. Swimming Beaches – **Neutral**
5. Marine Species at Risk – **Declining**
6. Chinook Salmon – **Declining**
7. Southern Resident Killer Whales – **Declining**
8. Marine Water Quality – **Declining**
9. Stream Flow (summer) – **Declining**
10. Shellfish Beaches – **Improving**

**This is a downward rating change compared to prior years.**

**Neutral** means that the indicator was unchanged from the previous reporting period. **Declining** means that the indicator has deteriorated in comparison to the previous reporting period. **Improving** means that the indicator has improved in comparison to the previous reporting period.

Our full online report is at:  [https://www.epa.gov/salish-sea](https://www.epa.gov/salish-sea)

Traditional and local ecological knowledge has been incorporated into the indicators report since 2013. Indigenous knowledge increases the timeline of available information and provides a more holistic view of ecosystem interactions.

We are advancing the reporting framework re-design now. Based on prior recommendations ECCC recently planned and held a pilot discussion with Indigenous communities based in the northern Salish Sea (Georgia Basin) about ways of working together on future indicator reports in Spring 2022. Early feedback from participants told us that our current indicators are important and relevant but that there is support for going beyond our current reporting scope and including more components of the ecosystem or describing issues from different points of view.

The 2020 Health of the Salish Sea Ecosystem Report was a collaboration between the EPA and ECCC, with many supporting partners:

- Fisheries and Oceans Canada
- Puget Sound Partnership
- Metro Vancouver
- Washington State Department of Ecology
- Stormwater Center at Washington State University
- SeaDoc Society
- US National Oceanic and Atmospheric Administration
- Vancouver Coastal Health
- Vancouver Island Health
- Washington State Department of Fish and Wildlife
- Western Washington University
- The Coast Salish Gathering
- British Columbia Ministry of Environment
- United States Geological Survey
- We also acknowledge the guiding advice from our original Indicators Steering Committee members, who brought to us perspective from additional partner organizations.

We’re making more connections with partners in the Salish Sea – and looking to work more with Indigenous communities and other new partners to build collaboration.