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

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

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Our Ecosystem Health reporting program was developed under the **Joint Statement of Cooperation on the Georgia Basin and Puget Sound Ecosystem** and is part of the current 2021-2024 Action Plan.

Our program is linked to an overall goal of **Sharing Information and Building Consensus on Sustainability** that continues within the current 2021-2024 Action Plan.

View the current Action Plan:
<https://bit.ly/SOCap2124>

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.

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.

Please contact us: <https://bit.ly/SSEcontactus>



Since 2013, we have used the **Drivers, Pressures, State, Response, and Impact framework (DPSIR)** to select the current indicators.



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 our 2015-2017 web updates**

Our full online report is at:
<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.