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Climate Change Canada


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Contaminants and Southern Resident Killer Whales

Georgia Strait Alliance
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Southern Resident Killer Whales




Jared Towers

- Listed as endangered since 2003
- Current population size: 74
- Icons of the Salish Sea: revered by coastal and Indigenous communities.
- Diet: Chinook salmon (primarily)



CBC News, 2019

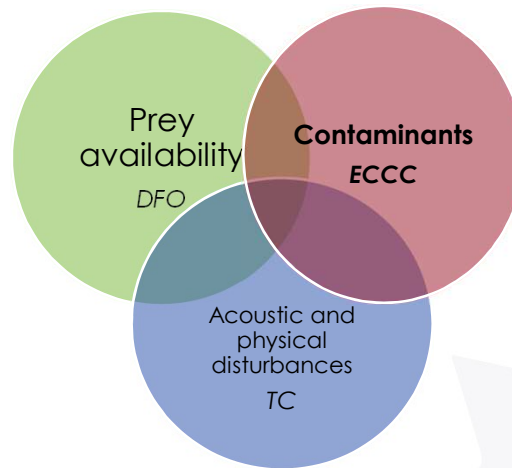


Cetacean Research Program, DFO

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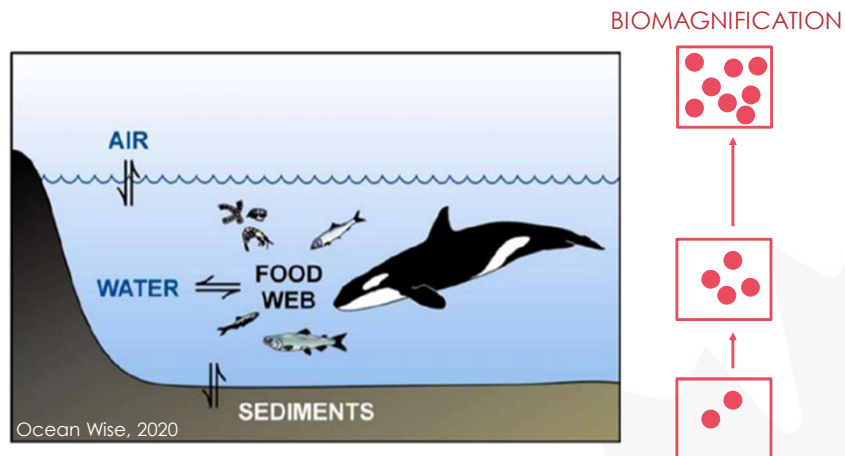
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Anthropogenic Threats to Recovery



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Exposure to Contaminants



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Whales Initiative



- Launched by the federal government in June 2018
- Supports recovery of 3 endangered whale species

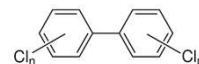
Imminent Threat Assessment

- Additional funds for Southern Resident Killer Whales (Oct 2018)
- Technical Working Groups:
 - 1) Prey availability
 - 2) Sanctuaries
 - 3) Commercial Vessel Noise
 - 4) General Vessel Noise
 - 5) **Contaminants**

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Contaminants of concern

Level of Concern	Southern Resident Killer Whales	Chinook salmon
Tier 1 Major concern	PCBs, DDT, PFOS, PFOA	PCBs, DDT, PFOS, PFOA, copper, phthalates (DEHP), bisphenol family (BPA), Current-Use Pesticides
Tier 2 Medium concern	PBDEs, HBCD, mercury and organic mercury	PBDEs, HBCD, mercury and organic mercury, pharmaceuticals and Personal Care Products
Tier 3 Minor concern	chlorinated alkanes, 4-nonylphenol, dieldrin, tributyltin, dibutyltin, triclosan, current use pesticides, biological contaminants	PAHs, hydrocarbons, volatile organic compounds, cadmium, lead, microplastics, biological contaminants



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Contaminant sources

- Wastewater treatment plants
- Pulp and paper plants
- Surface runoff
- Landfill leachate
- Contaminated Sites
- Agricultural runoff
- Mining



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Contaminants Technical Working Group Progress

- Launching a **mapping inventory tool** to identify contaminant sources using all available data
- Recommending **guidelines** protective of predatory marine mammals
- **Sharing data** among partners to address information and knowledge gaps
- Increasing **outreach** to the public and stakeholders
- Conducting **monitoring and research** to better quantify sources of contaminants



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Other ongoing efforts

The Government of Canada is also:

- Enhancing [regulatory controls](#) to further restrict certain persistent contaminants (*Prohibition of Certain Toxic Substances Regulations*)
- Reducing contaminant releases by supporting upgrades to [wastewater systems](#) (required under the *Wastewater Systems Effluent Regulations*)
- [Enforcing regulations](#) by detecting offenders with high non-compliance for contaminants of concern to endangered whales
- Banning the use of certain [single-use plastics](#)



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What can you do?

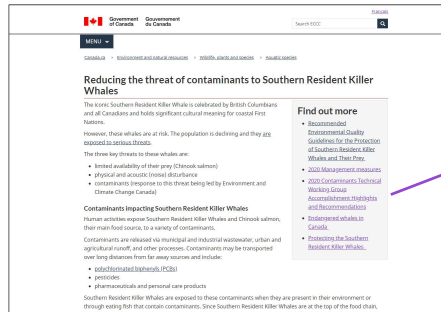
- Talk to family/friends about how they can help
- Household [Hazardous Waste](#) programs
- Practice [green](#) boating
- Shoreline clean-up events



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Find out more

Environment and Climate Change Canada webpage launched in 2020



2020 Contaminants TWG Accomplishments and recommendations

2020 Southern Resident Killer Whale Contaminants Technical Working Group Accomplishment Highlights and Recommendations

One of the threats Southern Resident Killer Whales (SRKW) are facing for their survival and recovery is the threat of contaminants. To improve contaminants, in 2020, the Southern Resident Killer Whale Contaminants Technical Working Group (TWG) was established to investigate the contaminants threat. The Contaminants TWG mandate was to:

1. Identify key contaminants of concern, including emerging contaminants;
2. Identify and evaluate the contribution of various contaminant sources to the SRKW, their habitat and their prey;
3. Develop a framework to assess the effectiveness of existing controls on contaminants that affect SRKW and
4. Develop recommendations for additional measures to address contaminants affecting SRKW, their habitat and their prey.

The Contaminants TWG was led by ECCC and included representation and engagement from a range of agencies, international organizations, and stakeholders including:

- BC Environment and Climate Change Strategy
- BC Ministry of Municipal Affairs and Housing
- BC Ministry of Water, Land and Air Protection
- British Columbia Regional District
- Clean Water
- Clean Water Canada

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