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Salish Sea Ecosystem Conference

2018 Salish Sea Ecosystem Conference (Seattle, Wash.)

Apr 6th, 2:15 PM - 2:30 PM

New wood waste standard operating procedures for Canadian disposal at sea program

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LaRusic, Adam and Seifert, Rebecca, "New wood waste standard operating procedures for Canadian disposal at sea program" (2018). *Salish Sea Ecosystem Conference*. 577. https://cedar.wwu.edu/ssec/2018ssec/allsessions/577

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New wood waste procedures for the Canadian disposal at sea program

Rebecca Seifert Salish Sea Ecosystem Conference Seattle WA | April 6, 2018

Wood Waste in Dredged Material

- Wood waste accumulates in water lots at forestry facilities
- Maintenance dredging necessary to continue operations



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Disposal at Sea in Canada

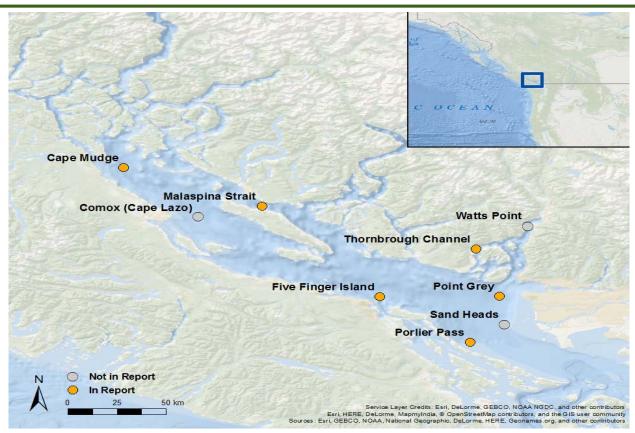
- Disposal at Sea Permits for dredged material under the Canadian Environmental Protection Act (CEPA)
 - Characterize Material
 - Waste Audit
 - Alternatives Assessments
- Monitoring disposal sites
 - Sediment quality
 - Benthic infauna





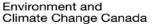


Wood Waste at Disposal at Sea Sites



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Study: Assessment of Alternatives to Disposing of Wood Waste at Sea in the Pacific and Yukon Region

- 1. Environmental effects of wood waste
- 2. Management practices for reducing dredged wood waste
- 3. Alternatives for wood waste disposal



Study Findings: Wood Waste Effects at Disposal at Sea sites



Station DIR7 at Porlier Pass (Sept. 2016)

no gross adverse impacts resulting from disposal of wood waste

Finding based on:

- Sediment chemistry
- Toxicity tests
- ROV photos and video
- Sediment Profile Imaging
- Benthic grab sampling



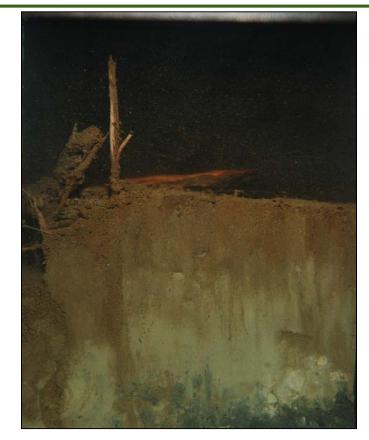
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Recommendations for Monitoring

- Measuring quantity of wood waste
- Choosing monitoring tools
 - Sediment Profile Imaging (SPI) as primary tool
 - Quantitative measures
- If SPI shows adverse effects:
 - Follow up with detailed sampling & formal ecological risk assessment
- Holistically reporting results

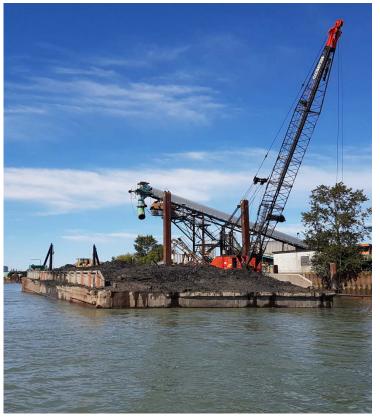




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Study Findings: Wood Waste Permitting

- Limited estimates of how much wood waste
- Low level of detail in waste audits and alternative assessments
- Waste reduction = cost reduction
- Perception that alternatives are unfeasible or unavailable

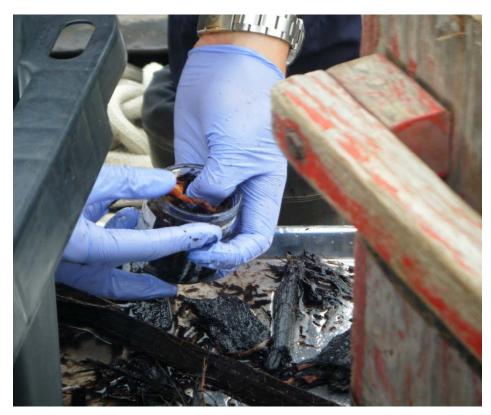






Permitting Procedures - Characterization

- Information for Dredged Material Characterization
 - Sampling & analysis
 - Estimating % wood waste
- Quantify amount of wood
 waste in permit application
 - Verify during dredging





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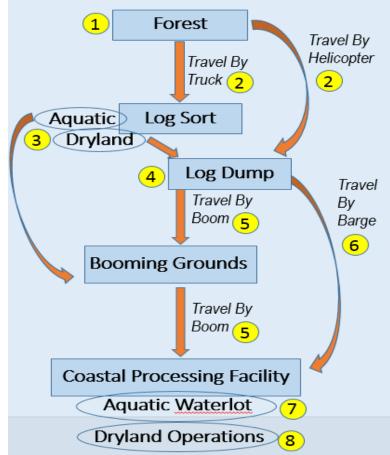
Permitting Procedures - BMPs

Best Management Practices:

- Debarking
- Log bundling
- Log loading techniques
- Log booming
- Upland containment
- Barges for log transport

Recommendations:

- Require BMPs in permit application
- Visit sites to confirm application BMPs



Wood Waste in Disposal at Sea

- Implementing new procedures
- Improving characterization of wood waste and impacts
- Requiring detailed information on best management practices for waste reduction and alternative measures



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To Learn More Contact...

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Azimuth Consulting Group Partnership Vancouver BC www.azimuthgroup.ca

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