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

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New wood waste procedures for the Canadian disposal at sea program

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Wood Waste in Dredged Material

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

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

Station DIR7 at Porlier Pass (Sept. 2016)
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
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
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
To Learn More Contact…

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