

Dredge Material Management as a Resource

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US Army Corps of Engineers
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Overview

- Issues at the Mouth of the Columbia River
- Opportunities
- How we connect the opportunities to the issues
- Benefits
- Lessons Learned



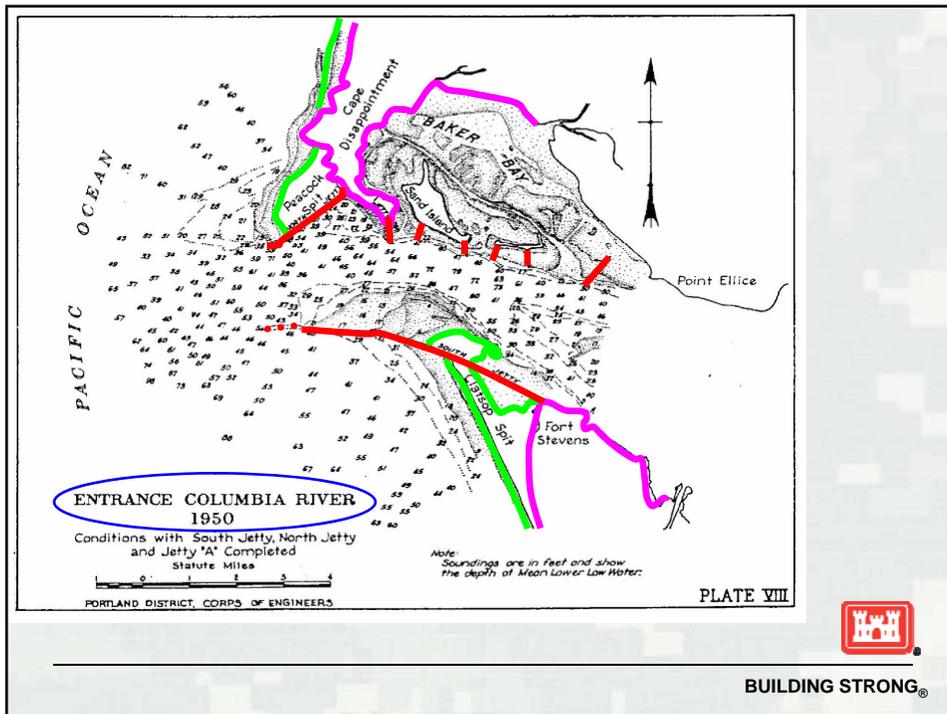
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Issues at the MCR

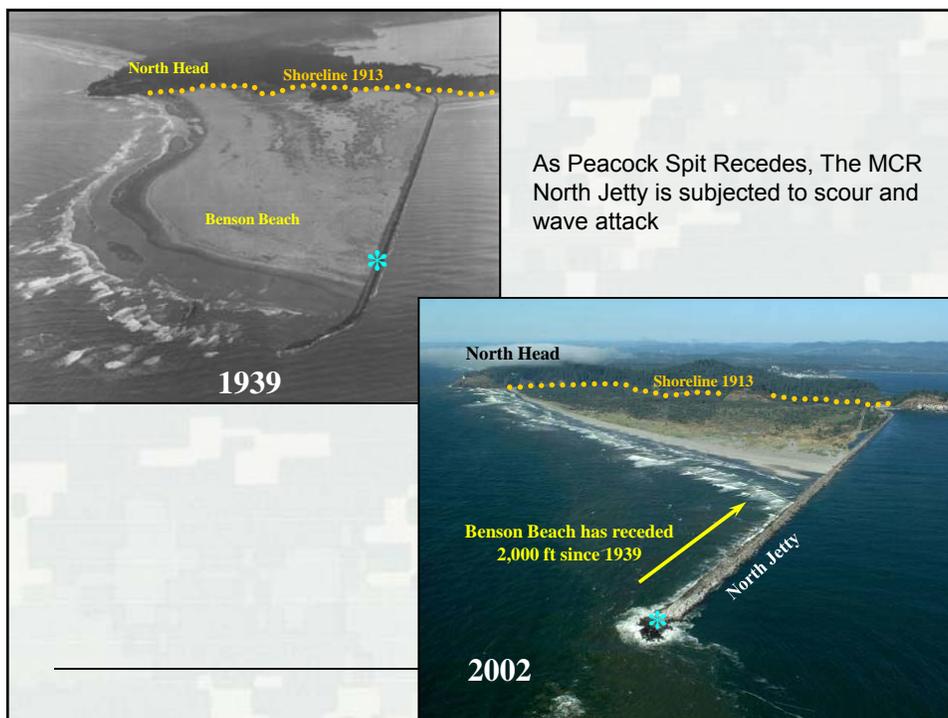
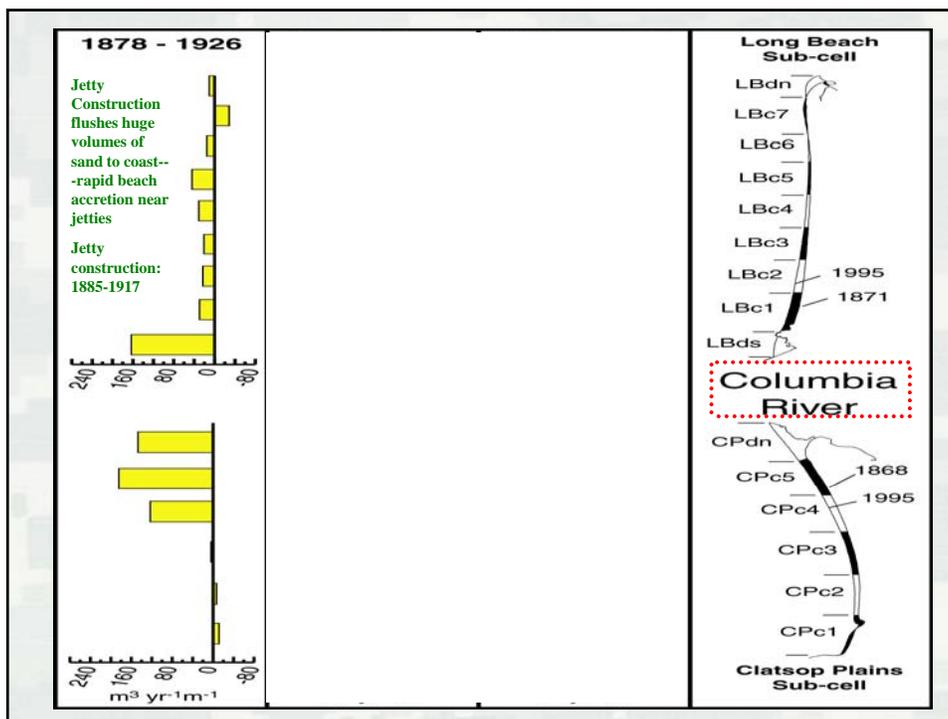
- **Deflating Inlet (morphology)**
 - ▶ **Reduced Sediment Supply**
 - ▶ **Increased Storm Intensities (climate change)**
- **Aging Infrastructure**
- **Budget**
- **Secondary Concern – Columbia Littoral Cell**

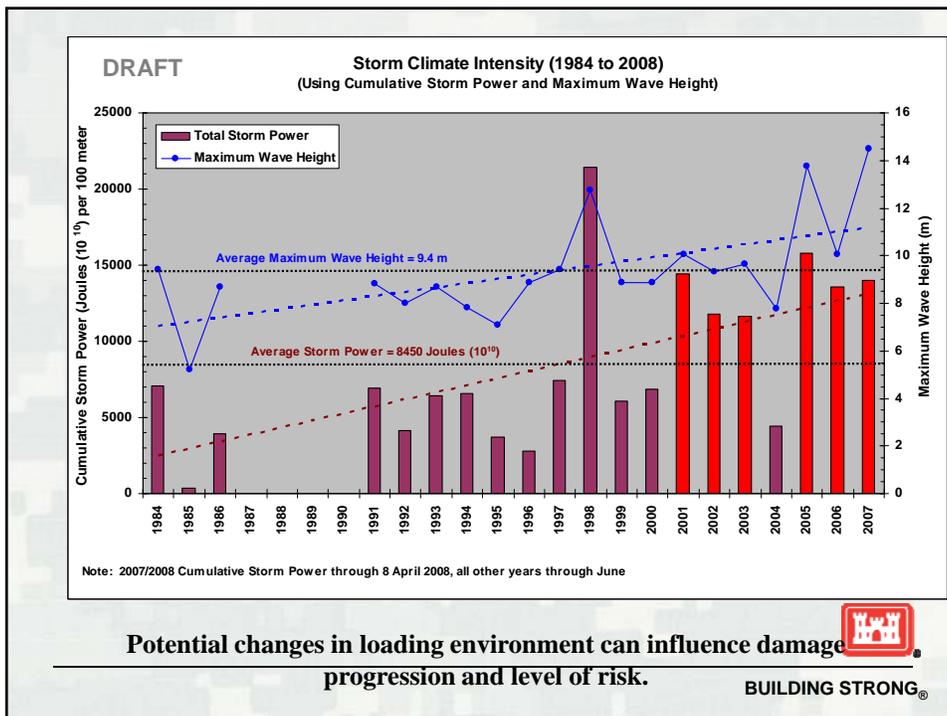
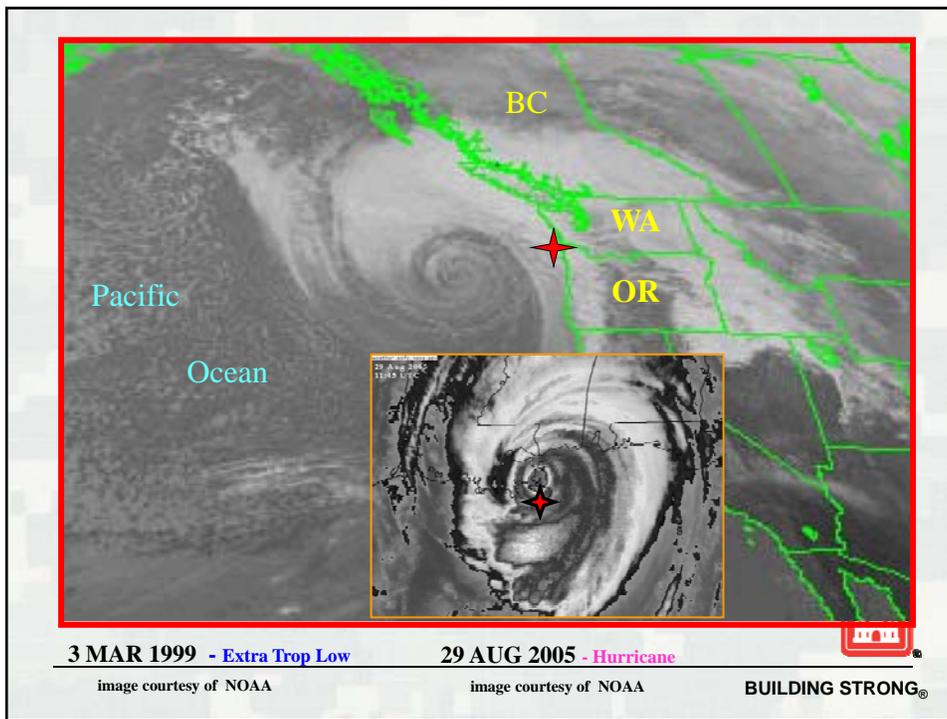


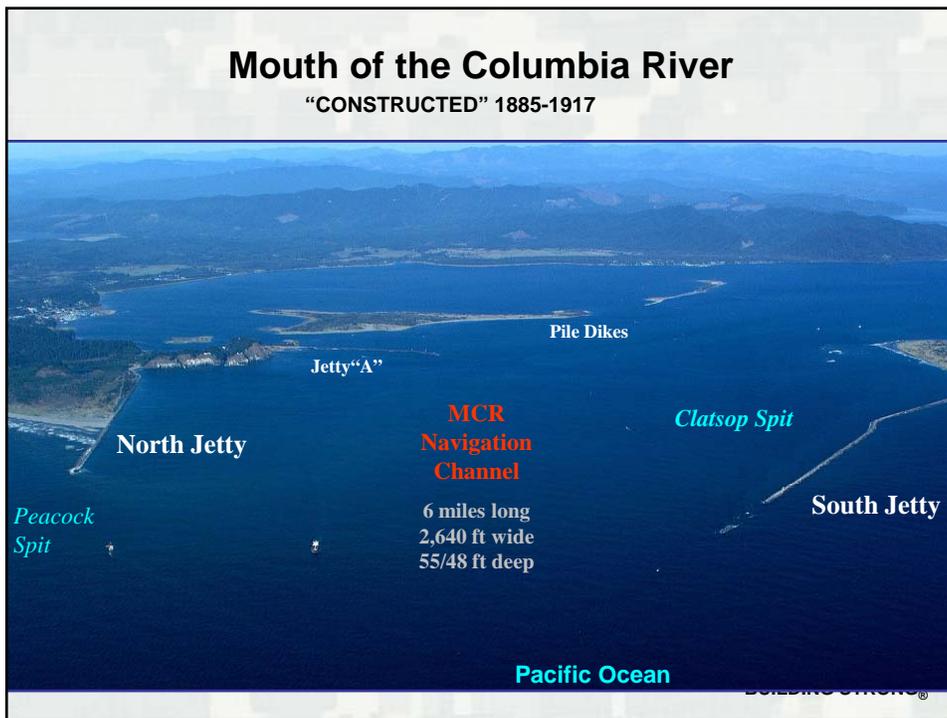
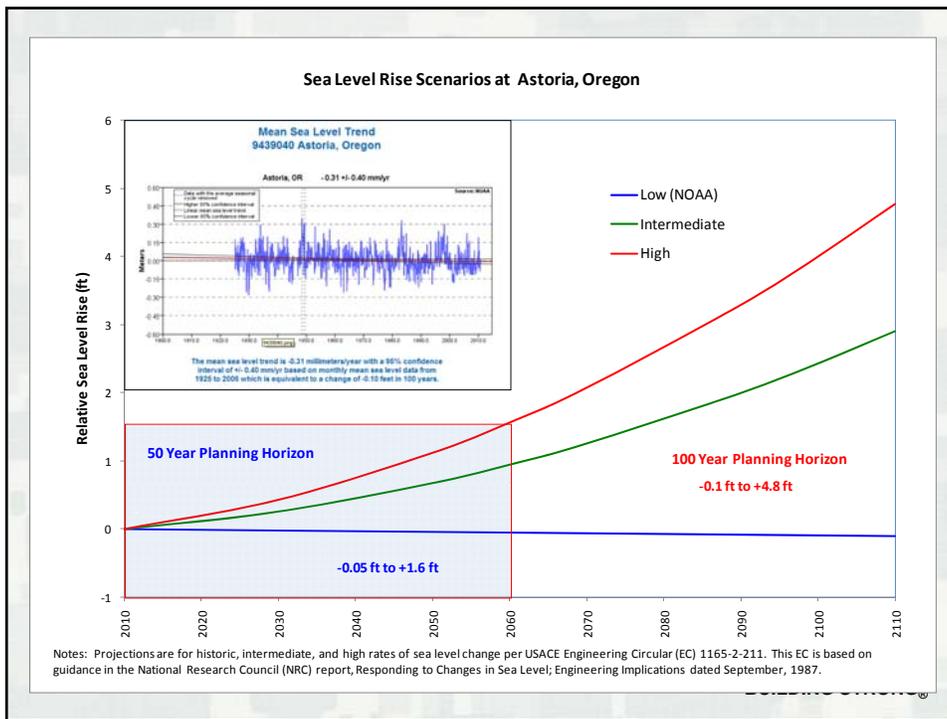
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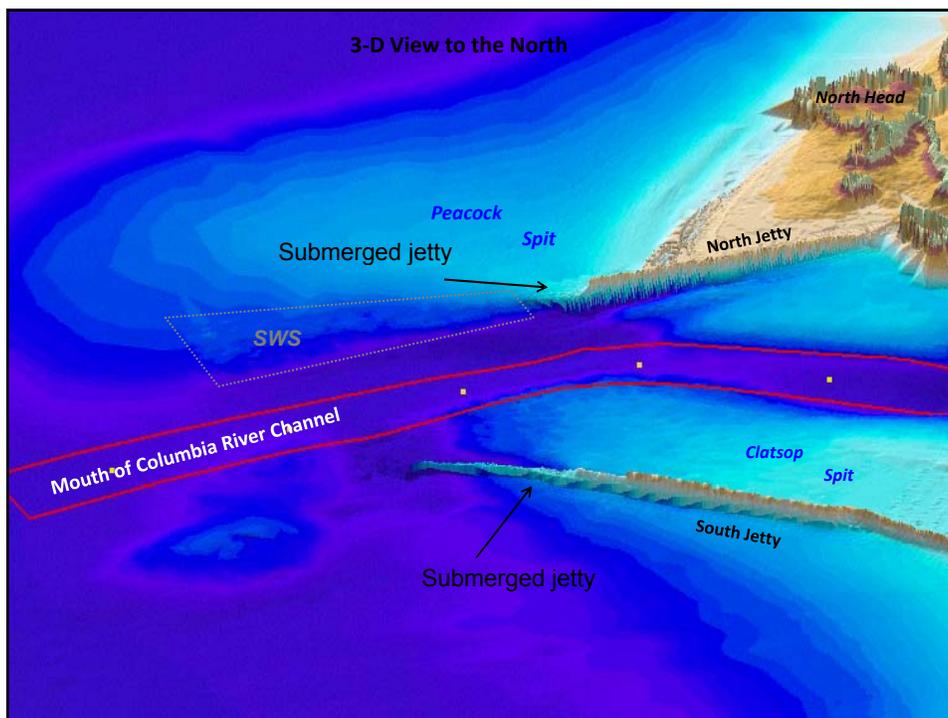
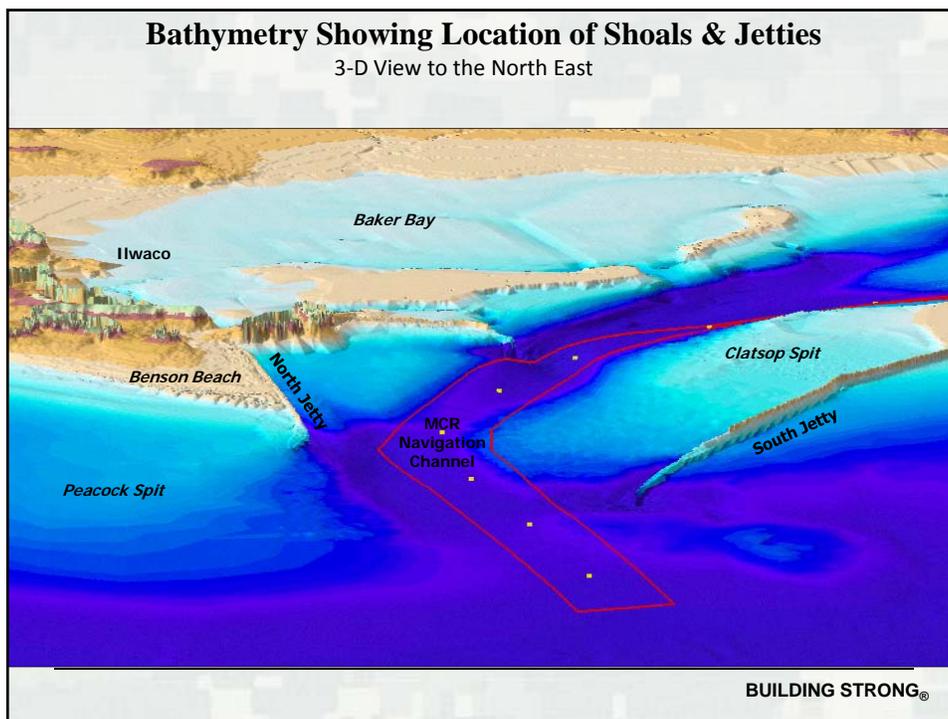


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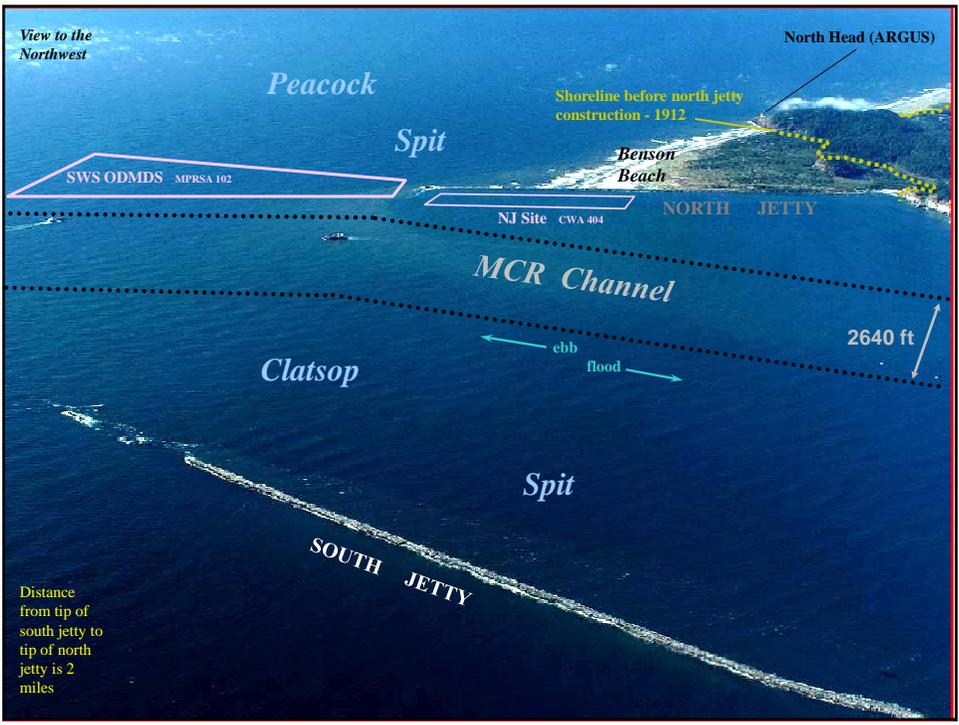
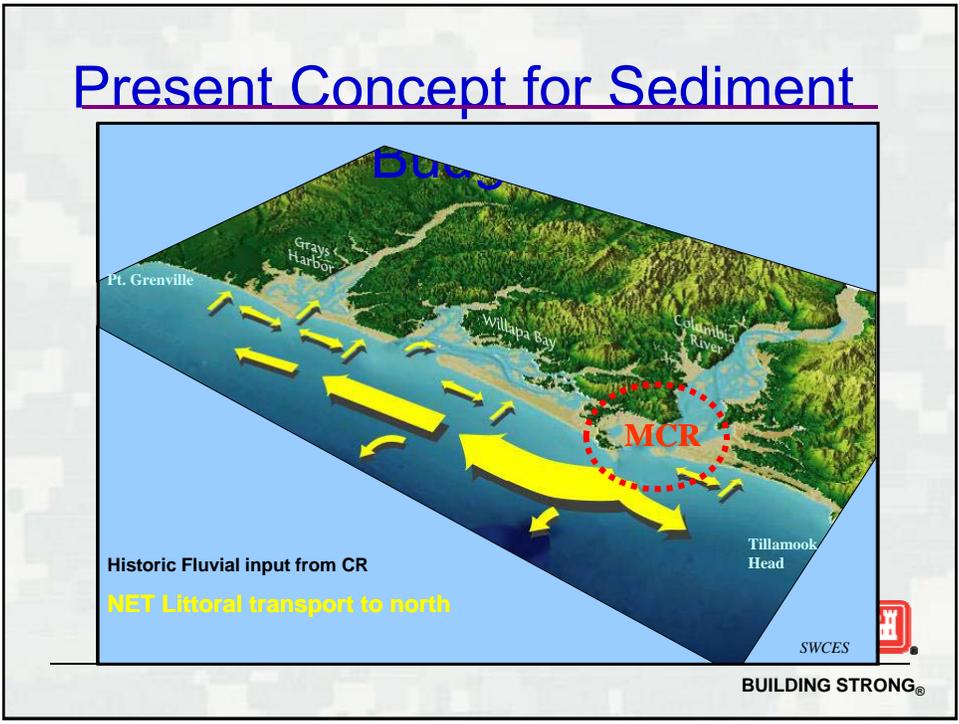


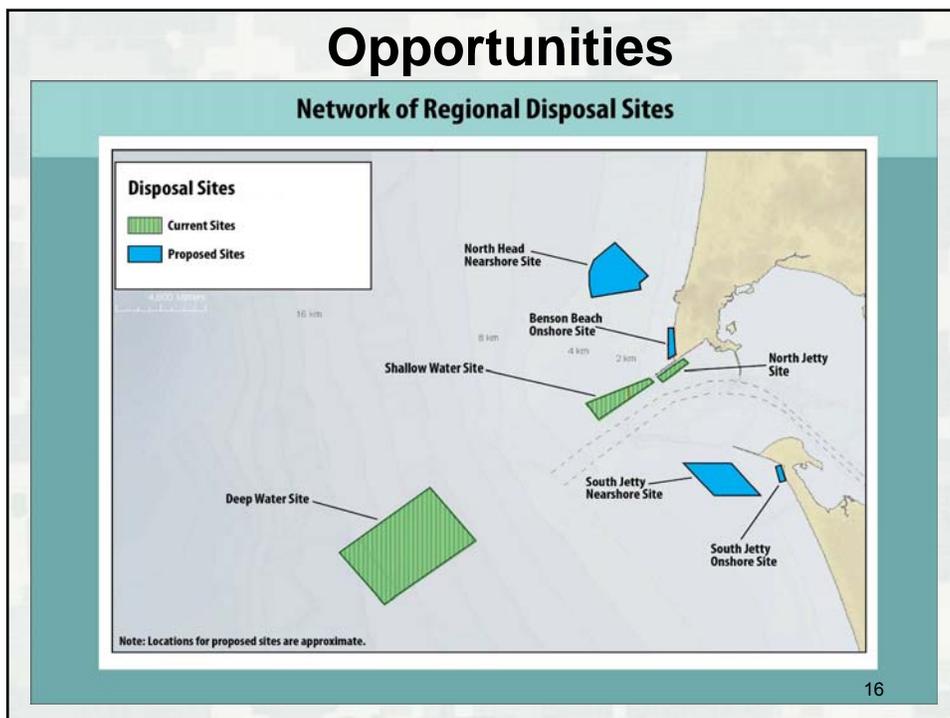
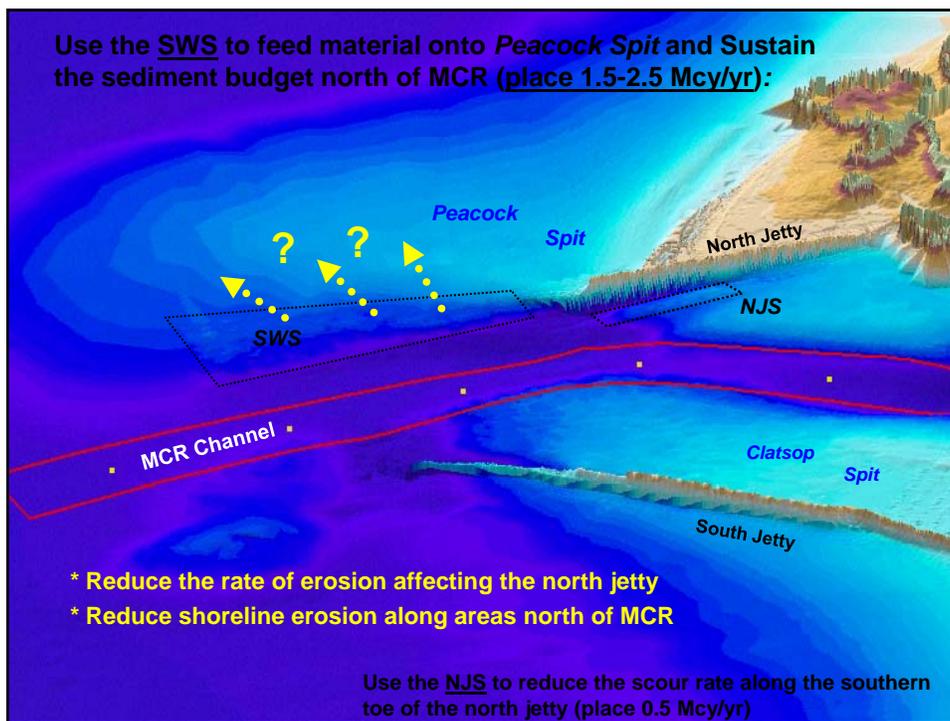


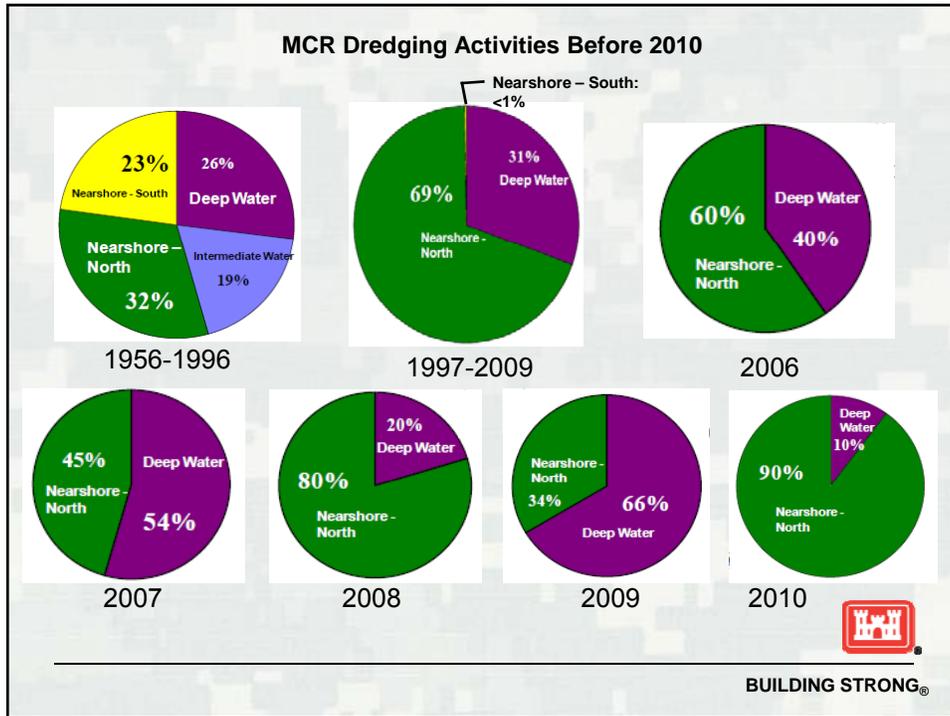




Present Concept for Sediment







MCR RSM Plan Goals

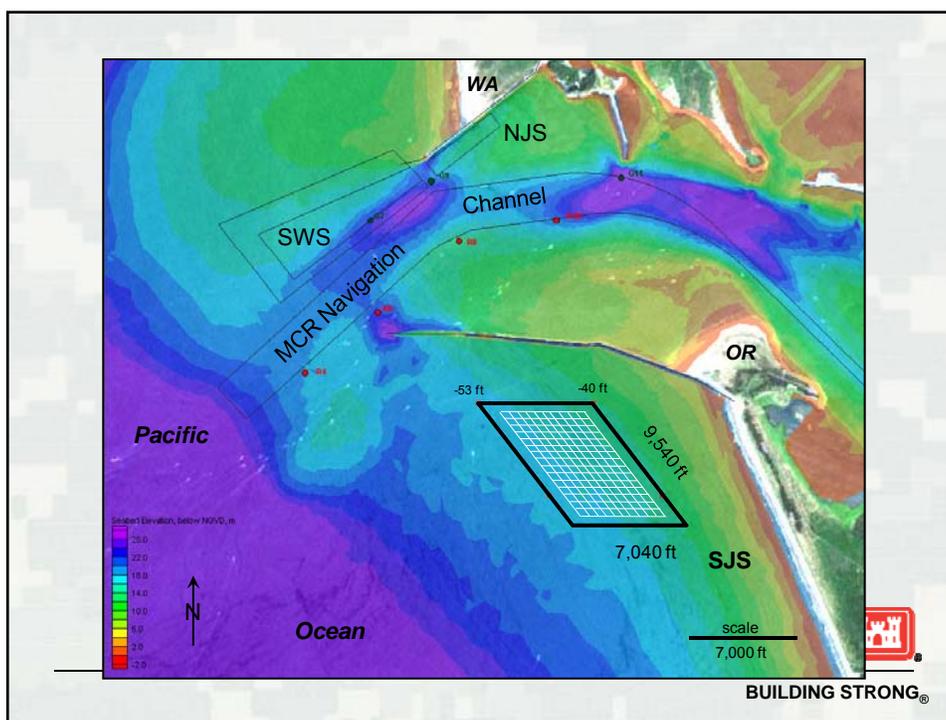
- Plan jointly funded by USACE, EPA, and States of OR and WA
- Long term strategy for sediment management that is sustainable:
 - ▶ Economically
 - ▶ Ecologically
 - ▶ Socially
- Basis for permitting a network of beneficial use sites

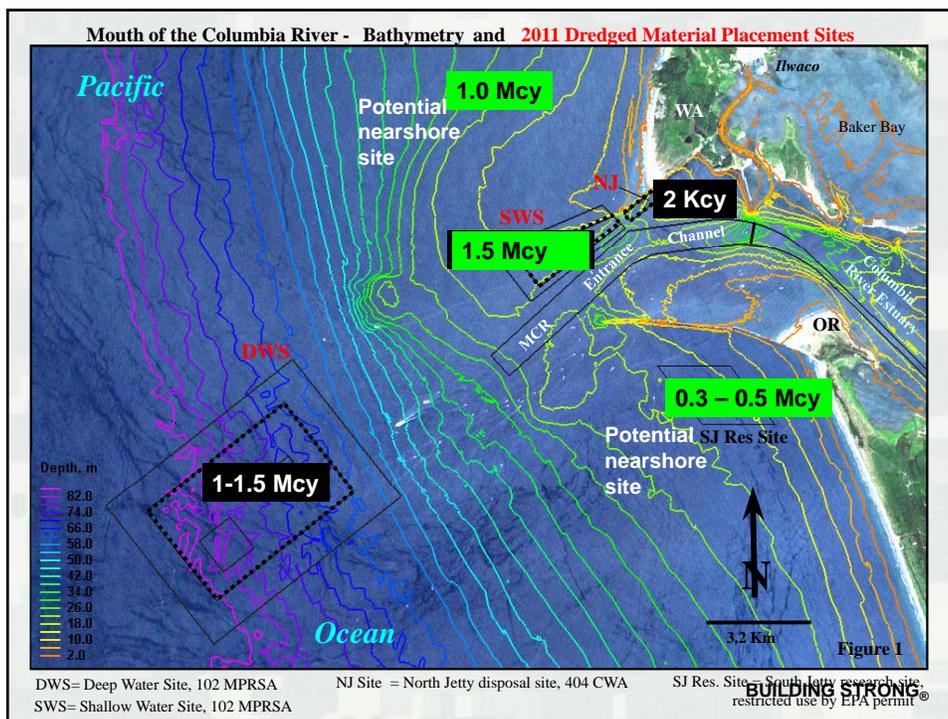
MCR RSM Plan Objectives

- Regional approach to sediment management planning
- Augment present and future sediment budget
- Increase sand shoals that support N and S Jetty foundations
- Continued understanding of Columbia littoral cell
- Ensure placement practices will not result in unacceptable adverse effects in the nearshore environment
- Implementation with the West Coast Governor's Agreement on Ocean Health (Action 7.4)



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Key Benefits

- Multi-layered partnership
 - ▶ Federal
 - ▶ State
 - ▶ Local
- Adaptively managed based upon
 - ▶ Conditions
 - ▶ Impacts
 - ▶ Funding
- Opportunistic Framework
- Reduced Annual Dredging Cost
- Extend Life-Cycle of Major Investments



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MCR RSMP Key Implications

- Streamlined regulatory process (indefinite, reduced staff time)
- Stakeholder ownership
- Long-term sediment management strategy for MCR and potentially C&LW



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Lessons Learned

- Stating limitations creates a skeletal framework to build – not a negative
- This takes time
- Keep the end state in mind – a reminder of why we're doing what we're doing
- Planning is difficult; implementing to what was agreed to is even more difficult



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