

Derelict Creosote Piles and Structures: Problem or Opportunity?



Ken Fellows, PE
GeoEngineers, Inc.

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- Opportunities and Problems
- Types of Structures
- Removal Methods and Costs
- Project Specific Mitigation
- Advance Mitigation

Piles: Opportunity or Problem?

BENEFITS OF RETAINING PILE

- Visual Character
- Historic Interpretation
- Recreation
- Shoreline Protection
- Mitigation Credits

PROBLEMS WITH RETAINING PILE

- Blight
- Navigation Hazard
- Toxicity
- Habitat
- Impediment to Redevelopment
- Loss of mitigation credit

What Do You See?







Whatcom County –

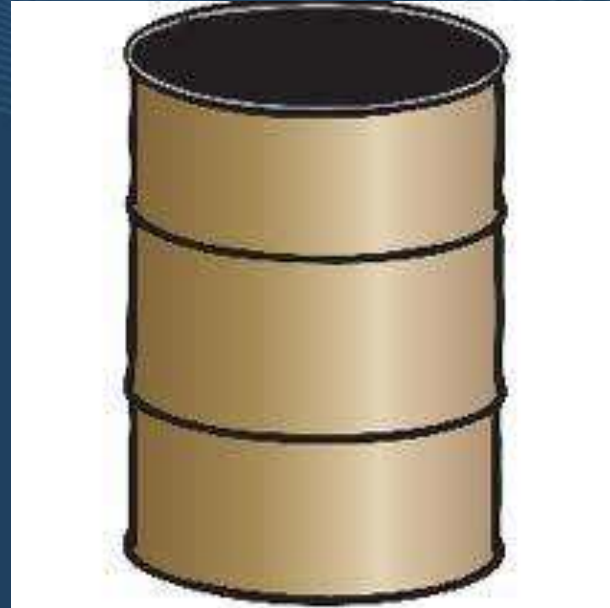
“The number one source of rogue creosote-treated wood on beaches of the bay is derelict dock structures.”



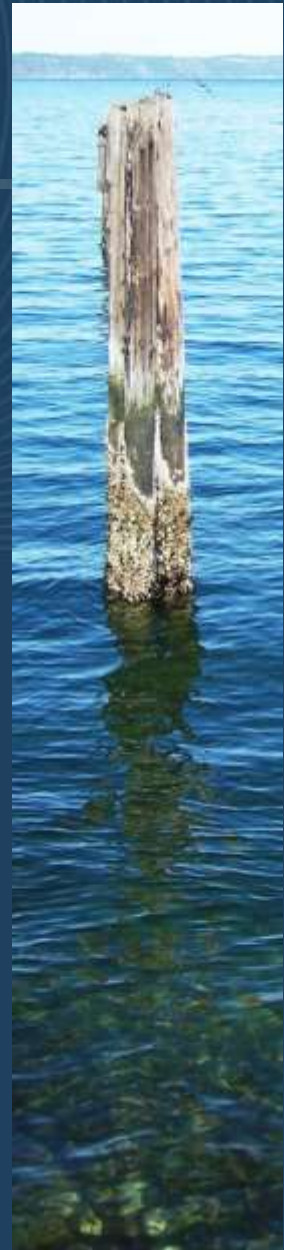
Quotes from Scuba Diver website about pile fields:
“Beautiful” “Fantastic” “Lots of life” “Adjacent areas are barren”

Toxicity

- Piles leach creosote
- Creosote can damage marine organisms:
 - Pile density is high
 - Backwater areas
- Long-term impact:
 - Substantial impact if pile fully deteriorates



Average pile holds 60 gallons of creosote (500 lbs)



Types of Structures









03/04/2013



03/04/2013

Inventory

- San Francisco Bay – Comprehensive inventory
 - 30,546 derelict pile in 630 “pile complexes”
- Puget Sound – No comprehensive inventory
 - 2,000+ pile along Ruston Way, Tacoma
 - 15,000 pile in Bellingham
 - 425 pile in San Juan County
 - 800 pile on Bainbridge Island
- Columbia River
 - 550 “pile complexes” with 100’s to 1,000’s of pile each

LLC

INNER HARBOR LINE

OUTER HARBOR LINE

840 Piles

● 2901 RUSTON WAY

1 Pile,
6 Stubs

8 Piles

89500025

C & I CO

8945000600

RUSTON RETAIL
LAND CO LLC

8945000611

● 2907 N 33RD ST

8945000560

8950002534

METROPLITAN PARK
DIST OF TACOMA



Removal Methods

- Removal Methods
 - Direct-pull w/ crane
 - Break off
 - Shear
- Capping with sand
 - None
 - Spot application, fill holes
 - 6-inch thick for natural recovery
 - 3-foot-thick cap



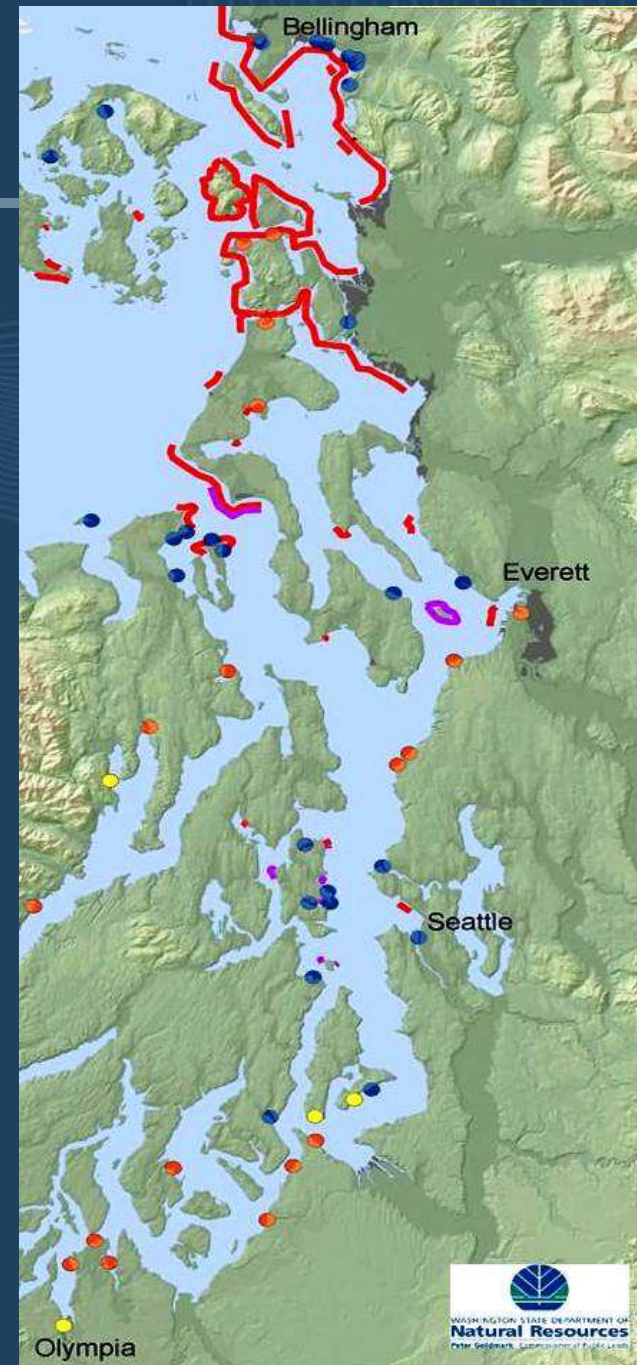
Pile Removal Cost

- Mobilization:
 - \$50,000 to \$80,000
- Cost per pile:
 - \$500 to \$700 each
- Ruston Way, Tacoma
 - 2,000 pile
 - Preliminary Cost Estimate: \$1.2 million



Washington DNR's Removal Program

- Funded \$7 million since 2004
- Removed 13,000+ piles
- Partner with local agencies and groups
- Programmatic permits, approvals
- Programmatic methods
- Public support & opposition with every project
- DNR's primary goal is toxics removal
- No mitigation credit
- Document historic structures
 - Sign or plaque if 50+ years old



Existing Use of Pile Removal for Mitigation

- Project-specific mitigation
 - Common
 - No quantity guidance
 - Encourages retaining pile
 - Local Agency quote:

*“We don’t want to take action now...
...there is interest in including pile
removal in a larger strategy of
mitigation.”*

- Mitigation banking only applicable to wetlands



New Opportunity – Advanced Mitigation

- New Guidance December 2012
- Pile removal as alternative to shoreline/wetland mitigation
 - Simpler, cheaper
 - More environmental benefit
 - No monitoring, maintenance or reporting
- Credit use only by Owner
- Credit value increases over time
- Document before removal
- Port of Longview example



Derelict Piles Are Re-Development Assets

- Use Them or Lose Them!
- Existing derelict structures are deteriorating
- Collapsed piles/structures:
 - No longer available for mitigation
 - May create contaminated site
- Inaction is a missed opportunity



An aerial photograph showing a large, rectangular structure made of dark wooden planks and beams, partially submerged in dark water. The structure appears to be a temporary construction or a large-scale art installation. Below the water, a sandy beach is visible, followed by a concrete wall, a road with a few cars, a parking lot with several vehicles, and a set of railroad tracks. The word "QUESTIONS?" is written in large, white, bold, sans-serif capital letters across the center of the image, overlapping the water and the beach.

QUESTIONS?