

Western Washington University Western CEDAR

Salish Sea Ecosystem Conference

2014 Salish Sea Ecosystem Conference (Seattle, Wash.)

May 2nd, 8:30 AM - 10:00 AM

Success in the Sound: Local Examples of How Restoration Efforts Have Succeeded

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Success in the Sound: Local Examples of How Restoration Efforts Have Succeeded

Constance Sullivan¹, Katherine Boyd²

- 1. Puget Sound Institute (UW- Tacoma)
- 2. Puget Sound Partnership



Puget Sound Ecosystem

- Water quality
 - Low DO; eutrophication; organic pollutant contamination; temperature increase
- Habitat
 - Habitat loss and deterioration (forests, nearshore, riparian)
- Species populations
 - Threatened/ endangered: various salmon runs; SRKWs
 - Benthic species assemblages



Puget Sound Ecosystem Restoration

- Critical Area Ordinances
 - Development in critical/ sensitive areas is decreased
- Habitat restoration
 - Tree planting
 - Hedgerow planting
 - Reduction in shoreline armoring
- Water quality improvement
 - TMDLs
 - Stormwater runoff decreased
 - Point source reduction



Puget Sound Partnership

Goal is to restore Puget Sound

 "swimmable, fishable, diggable..."

Strategic Initiatives

PugetSoundPartnership



Puget Sound Partnership

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PugetSoundPartnership



Selected Projects



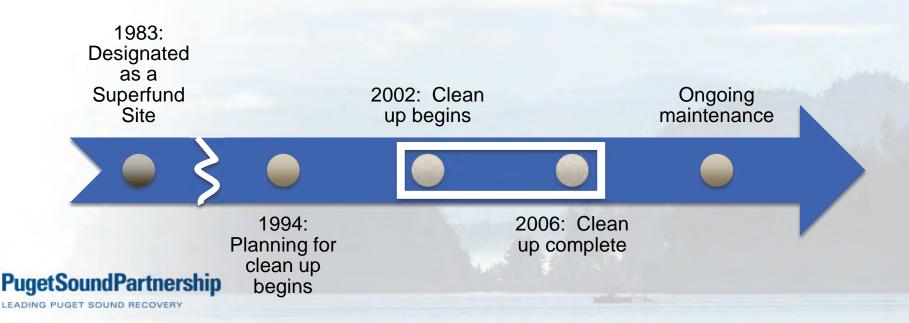


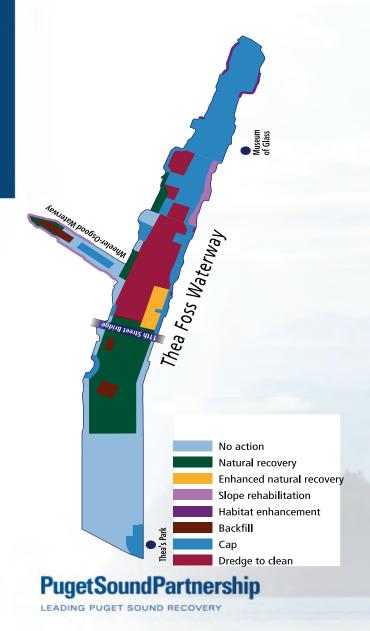
LEADING PUGET SOUND RECOVER

Lots of successes around the Sound

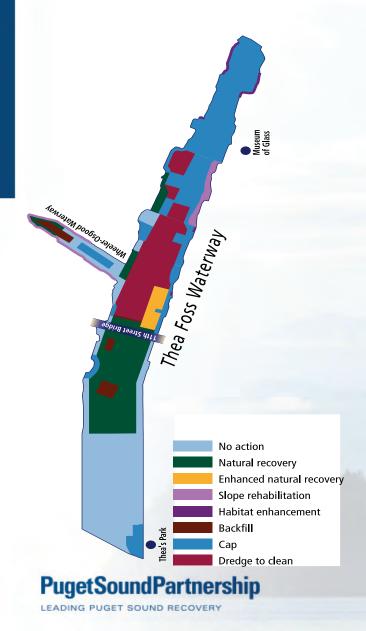
- Thea Foss waterway clean up
 - Restoration of a Superfund site
 - Ongoing maintenance
- 1,000,000th tree planted in Whatcom County
 - Habitat restoration for salmon-bearing streams and rivers
 - Ongoing partnerships

- Led by the City of Tacoma
- Target contaminants
 - Phthalates, petroleum-based products, PCBs, phenols, metals, pesticides



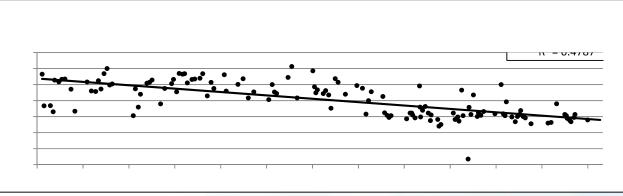


- Clean up activities
 - Capping, dredging, backfill, natural recovery, slope rehabilitation, habitat enhancement
- Current status
 - Year 7 post restoration
 - Recontamination not occurring on a large-scale basis
 - Ecosystem showing recovery
 - Mitigation sites meeting standards

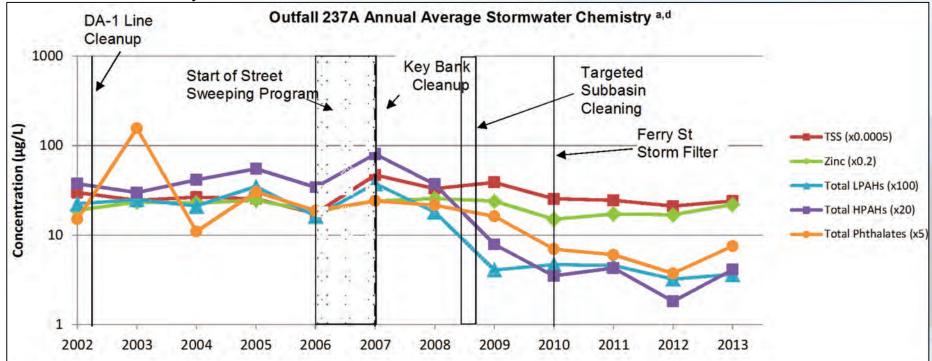


- Ongoing maintenance
 - In-water monitoring
 - NPDES
 - Stormwater control
 - Source controls
 - Filtration systems
 - Rain gardens
 - Street sweeping
 - Basin-wide pipe system cleaning
 - Enforcement

Pyrene levels at an outfall over time



Stormwater chemistry at an outfall over time













- Background issues
 - Elevated stream temps
 - Erosion
 - Water quality
- Tree planting



- Counteracts effects above
- Provides habitat and travel corridors for wildlife
- Privacy and protection for land owners





- State-wide program through the Conservation Reserve Enhancement Program (CREP)
 - Run by the US Dept. of Agriculture
 - Voluntary program
 - Landowners plant native tree buffers on fish bearing streams and rivers
 - Landowners are paid by CREP; CREP coordinates process
 - Federal funds are used to prep and plant the site
 - Twice yearly maintenance: state funds





- Whatcom County
 - Started in 2000
 - Run by the Whatcom County Conservation District
 - Efforts to restore/ conserve made easy for private landowners
 - 1,000,000th tree planted on 4/20/2013
 - Current stats:
 - 359 projects
 - 2,375 acres
 - 166.6 miles of buffer
 - 1,082,365 seedlings planted
 - 1,117,622 seedlings planned





2003



2007



Effective Actions

- Commonalities between these projects (and other successful restoration projects around Puget Sound)
 - Targeted
 - Straightforward
 - Site-specific actions
 - Appropriate scale



Thank you!

- Thea Foss Waterway
 - City of Tacoma
 - Local residents around the waterway
 - Mary Henley, Karen Bartlett (City of Tacoma)
 - For more info: www.cityoftacoma.org/cms/one.aspx?objectId=7283
- Tree Planting Program
 - Landowners who participated in program
 - Emily Hirsch, George Boggs (Whatcom Conservation District)
 - For more info: www.whatcomcd.org/crep

PugetSoundPartnership

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