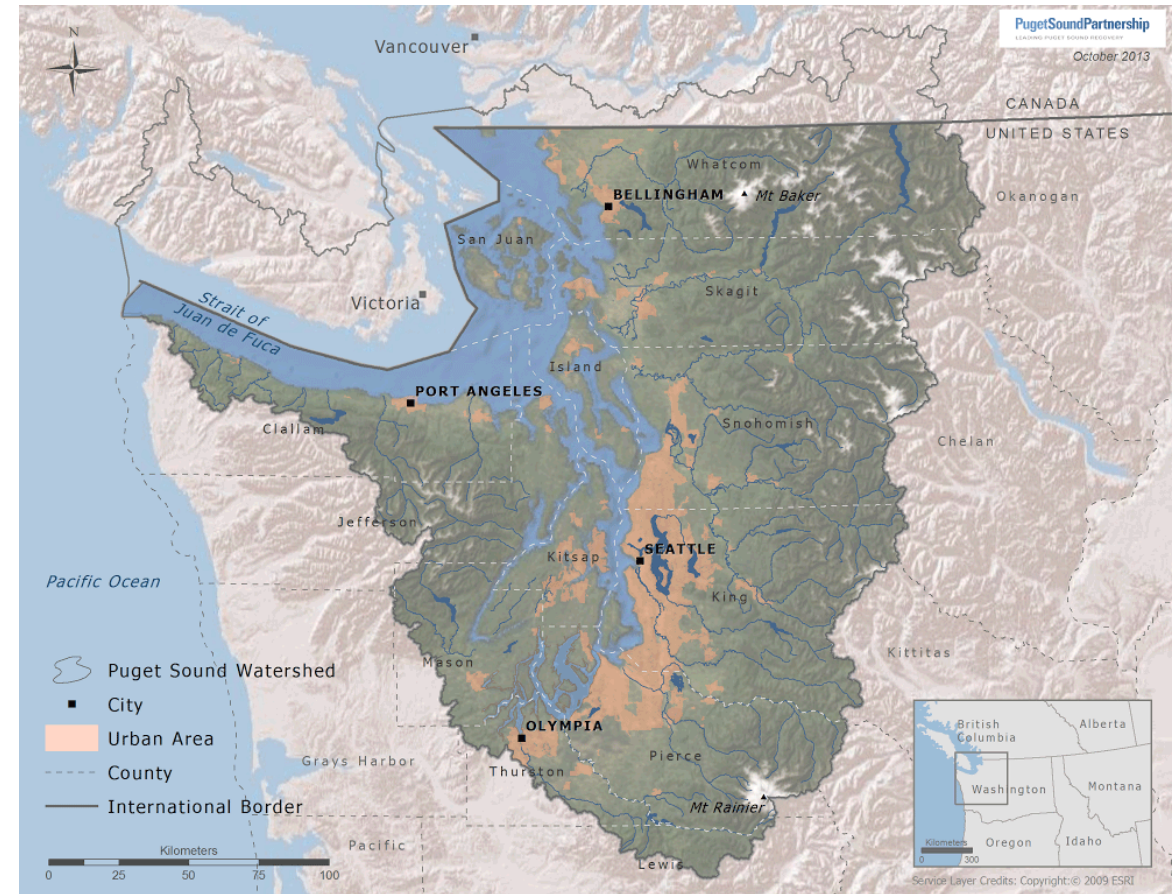


Mitigation Banking, Market-based Instruments and Ecosystem Services in Puget Sound, Washington State

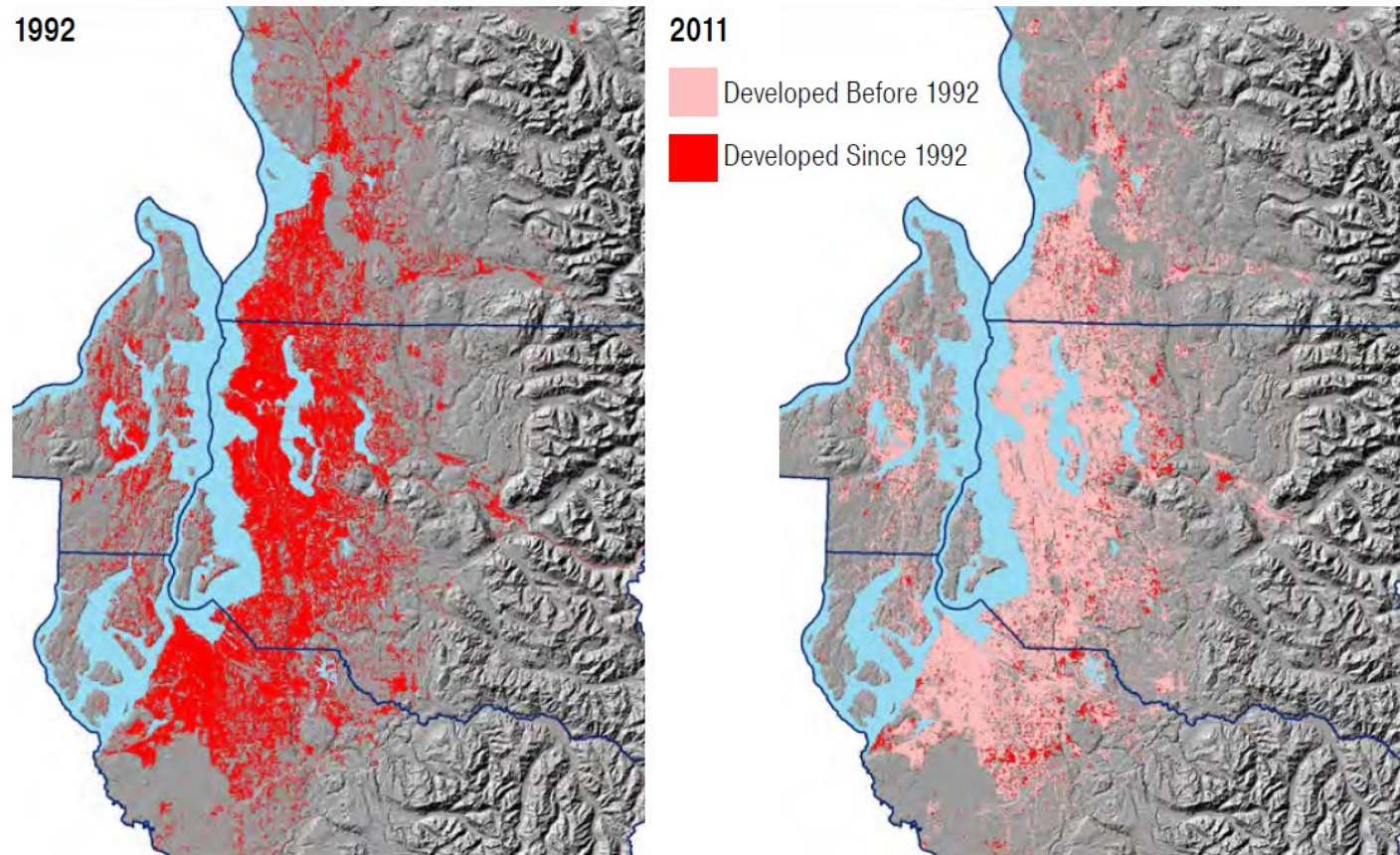


Chris Wally Wright, Research Scientist

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Developed Land (in red), 1992 and 2011



Source: PSRC, 2018. NOAA land cover change analysis.

Puget Sound has a population of 4.2+ million people across 1.6 million acres

Losing over 14,000 acres of farmland annually

Less than 600,000 acres of farmland still exist and only 30,000 acres protected by easements

From 2001 to 2016 – 97,800 acres of agricultural land were converted

Why and what can be done about it?

*Source: <https://www.pugetsoundstartshere.org/Facts.aspx>

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From speaking with over 30 agency representatives, landowners, conservation non-profits, city, county and state government officials...

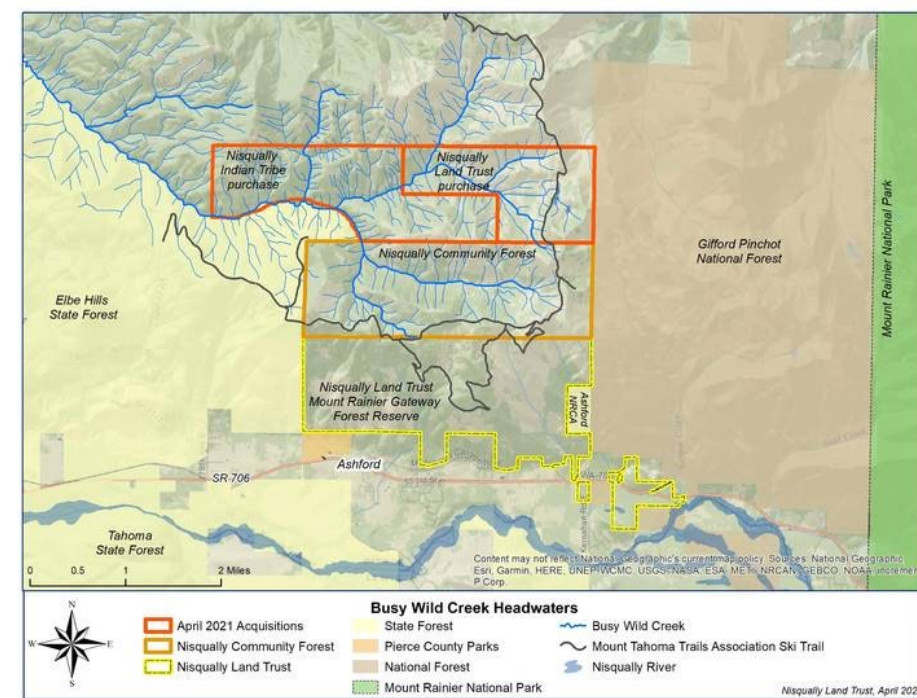
- Measuring success is challenging (ecological vs. administrative)
- Regulations and “stick” are successful but heavily reliant on agencies’ capacity for enforcement and should be supplemented with voluntary measures
- ES markets are emerging but supply is high and demand is low

Compensatory mitigation mechanisms for losses of aquatic resources

- Mitigation banking – 19 banks, 3 in development
- In-lieu fee programs – 3 in Puget Sound
- Challenge with Identifying suitable private property for sale – particularly marine shoreline is challenging if project takes too long to materialize, then that property may no longer be available
- Challenge working with agencies (US Army Corps of Engineers)

Community Forests

- Nisqually Community Forest (1,920 + 2,200 acres - \$9.6M)*
- Mt. Adams Community Forest (~1000+ acres)
- Teanaway Community Forest (50,241 acres)



Market-Based Mechanisms, Conservation Finance

- Forest Resilience Bonds are “financials tools that enable private investment for forest enhancements on public land”
- Currently no market-based bonds in Washington State but United States Forest Services’ [Innovative Finance for National Forests grant program](#) provides funding for feasibility studies
- Transfer, Purchase of Development Rights

*<https://www.theolympian.com/outdoors/article251515793.html>

Carbon Credit Efforts in Washington State

- Legislative – SHB 2714 (Valuing the carbon in forest riparian easements)
- Agency – NRCS’s [COMET-Farm Tool](#) (a farm and ranch carbon and greenhouse gas accounting system) to quantify the impacts of adopting carbon practices
- Municipal – State of Oregon’s City of Astoria’s [voluntary carbon program](#) with the Climate Trust
- Private sector – IBM’s emerging carbon credit management system through a [block chain platform](#) and start-up firms like [Nori](#) that pay farmers for carbon removal
- Academic – applying carbon accounting techniques such as WWU’s 2019 study “A Blue Carbon Assessment for The Stillaguamish River Estuary: Quantifying the Climate Benefits of Tidal Marsh Restoration”

Thank you

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Mount Tahoma



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