



Implementing the 2008 FCRPS BiOp Using Emerging Tools and Strategies

Tracey Yerxa
Bonneville Power
Administration

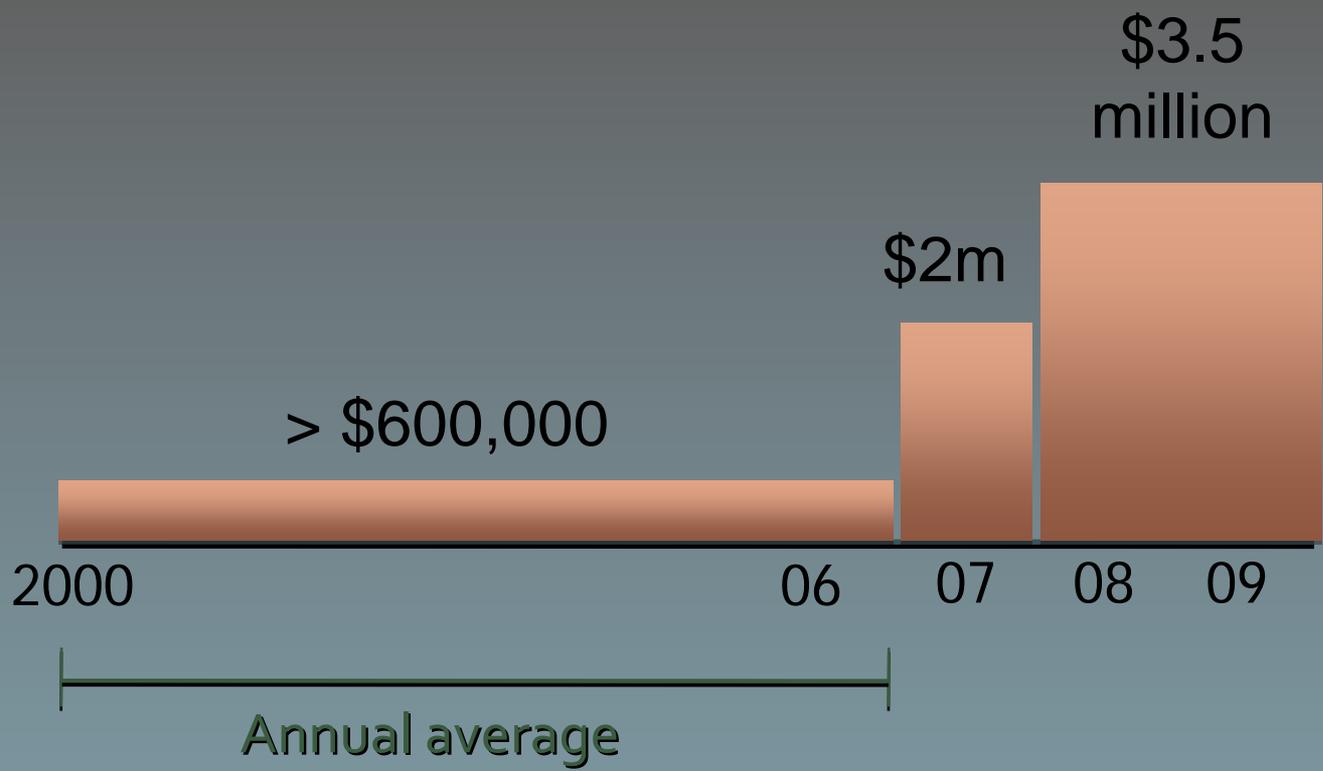
tyerxa@bpa.gov



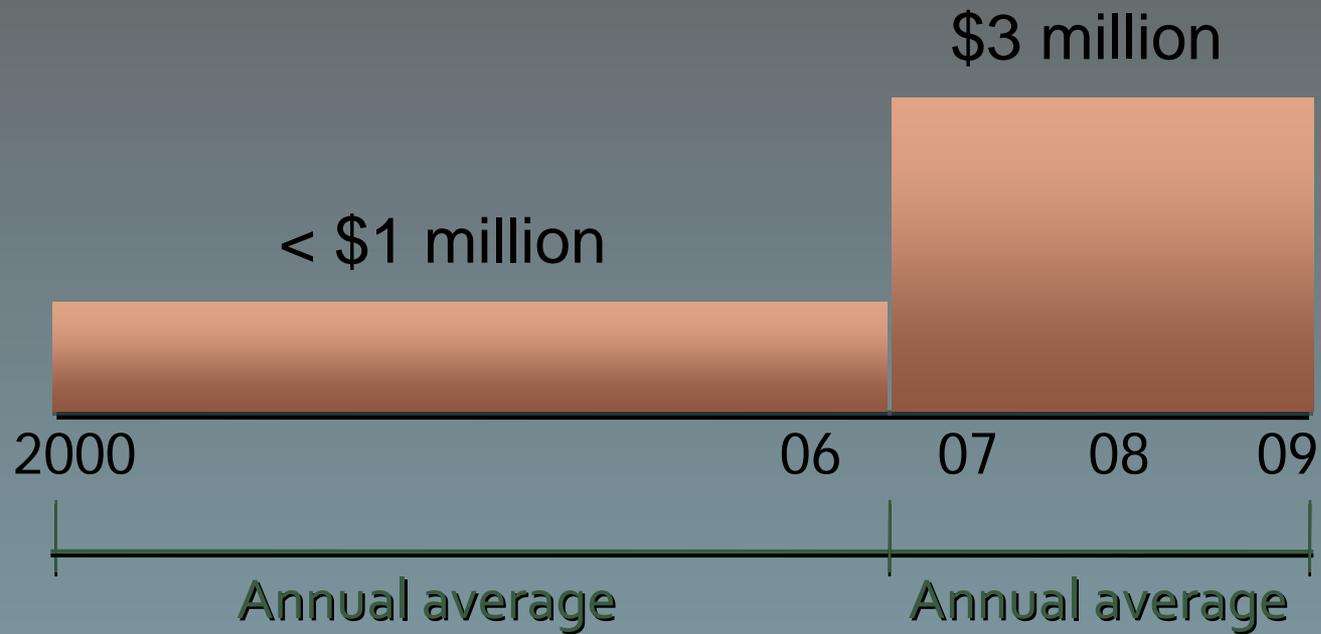
Overview

- BPA BiOp estuary funding
- Washington estuary MOA funding
- BiOp requirements
- Strategic approach

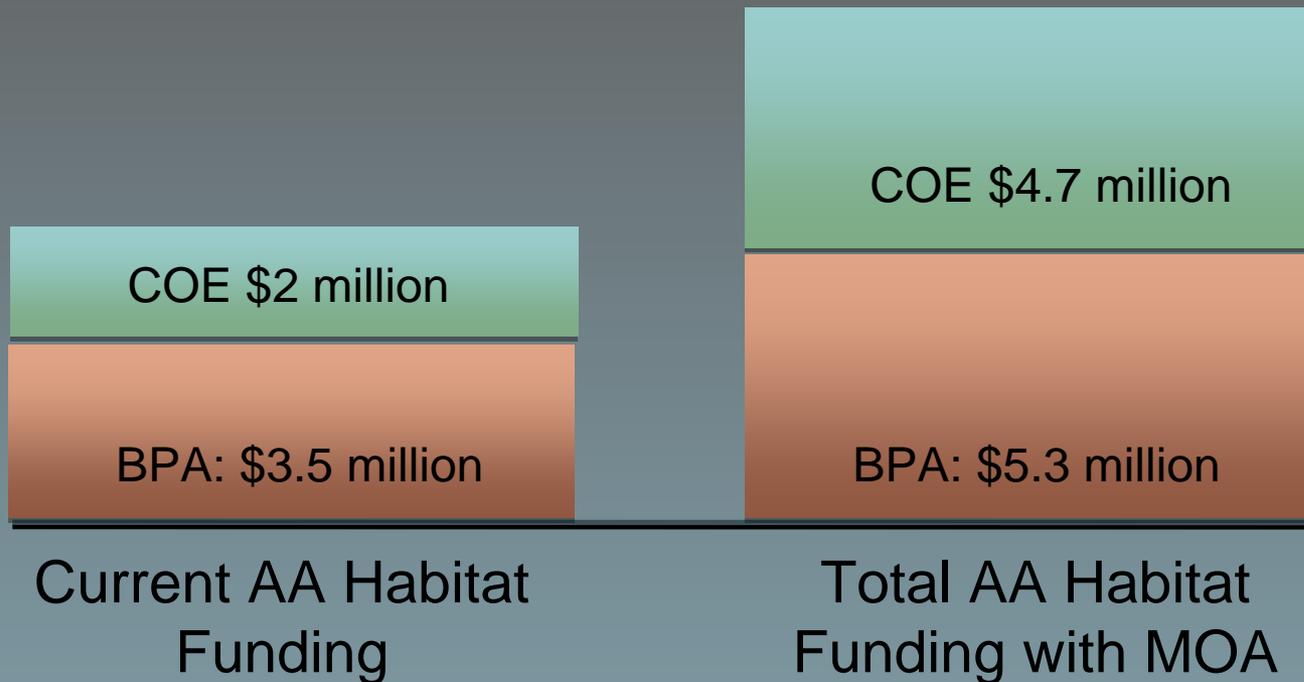
BPA BiOp Estuary Habitat Funding



BPA BiOp Estuary RM&E Funding



Washington Estuary MOA Habitat Funding



Estuary BiOp RPAs

- Habitat
 - RPAs 36, 37, & 38
 - Estuary habitat implementation 2010 – 2018 (RPA 37)
- Research, Monitoring & Evaluation
 - RPAs 59, 60, & 61
 - Establish habitat classification system (RPA 59.2)

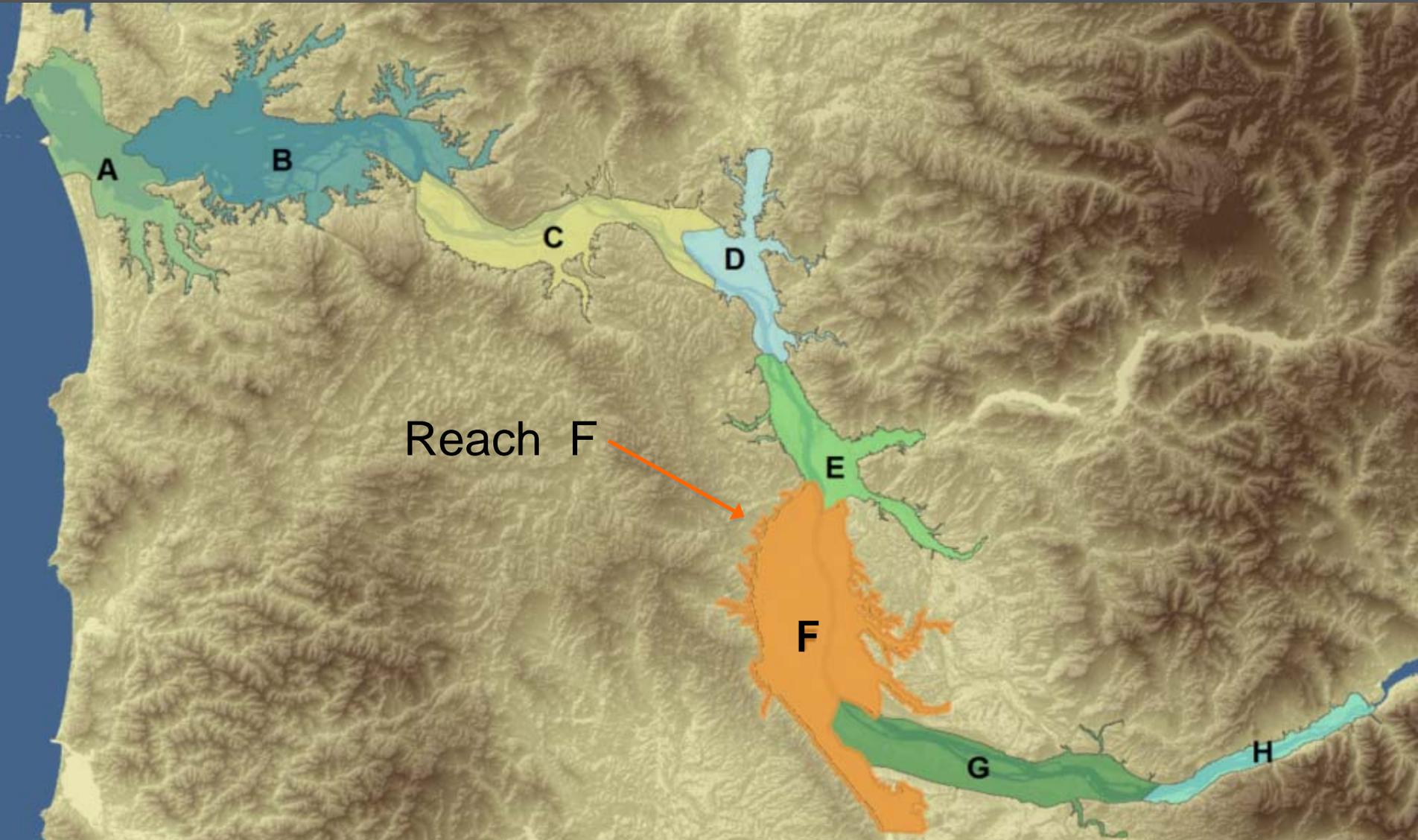


Applying Science

- Currently:
 - Classification system
 - Genetics and monitoring
 - Habitat gaps and needs
- Near Future:
 - Use key habitat metrics (e.g., size and distance)
 - Identify and prioritize projects
- Always:
 - Adaptive management



Estuary Reaches A - H



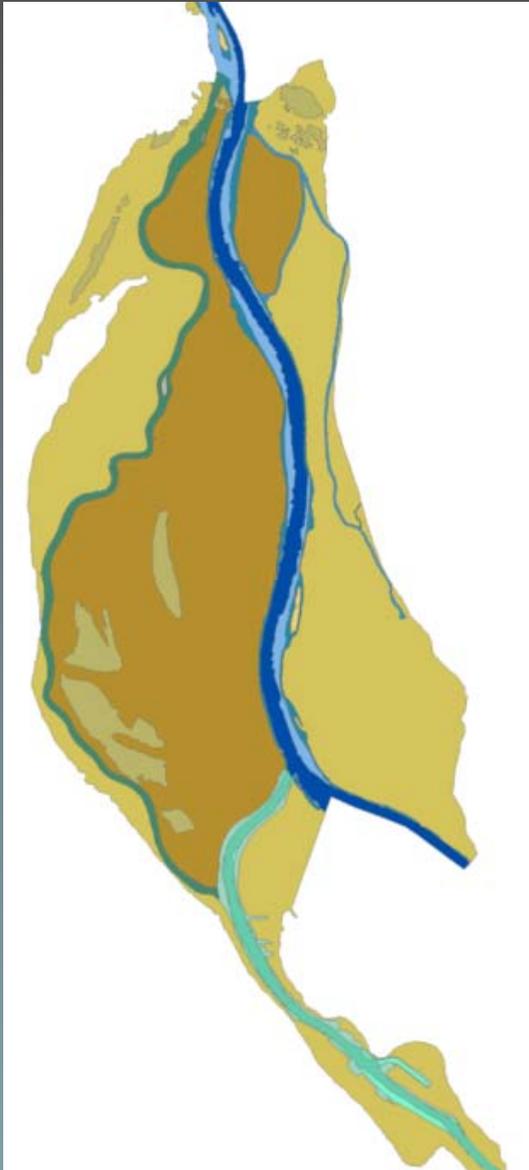


Reach F

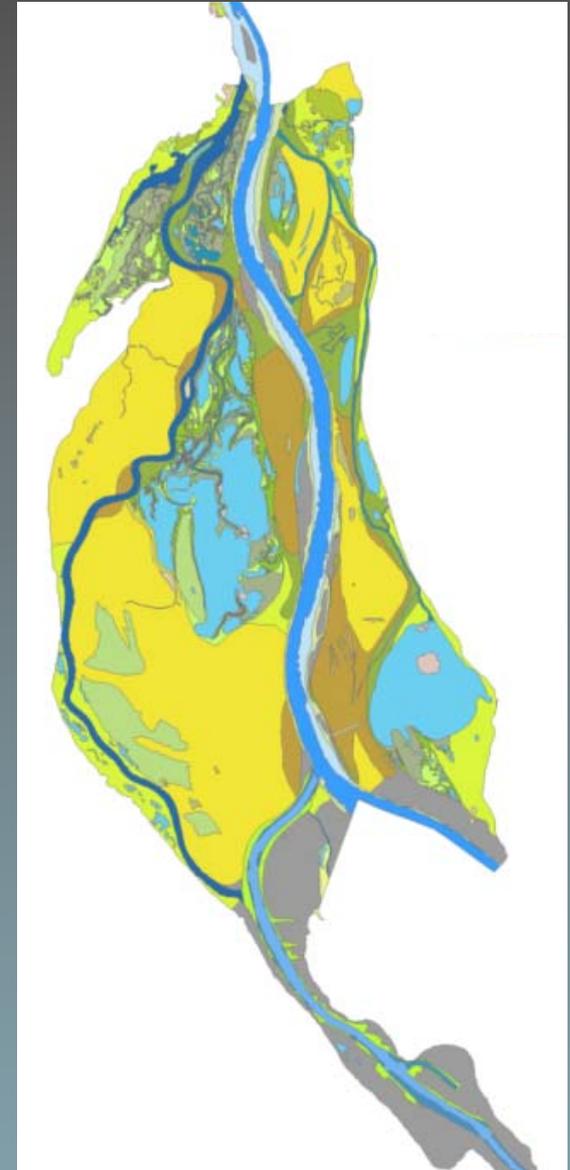
- Key features:
 - Willamette River
 - Large floodplain lakes
 - Multnomah Channel
 - Lake River
 - Scappoose Bay
 - Lewis River

Reach F Complex & Catena

Ecosystem
Complex



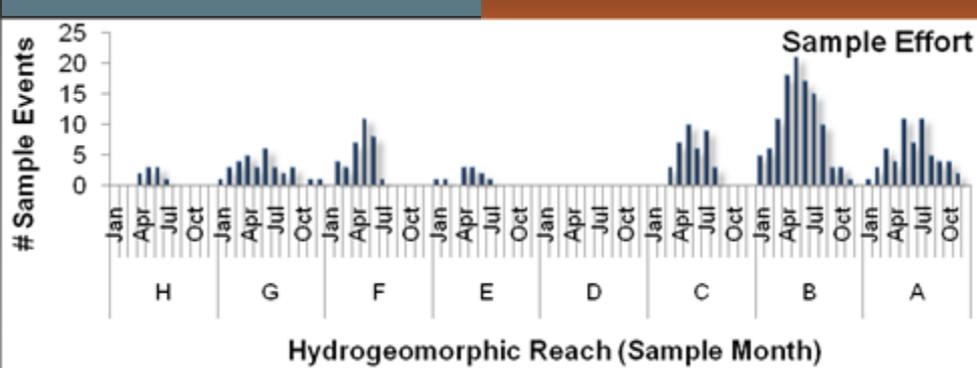
Geomorphic
Catena



Ecological Principles & Rules

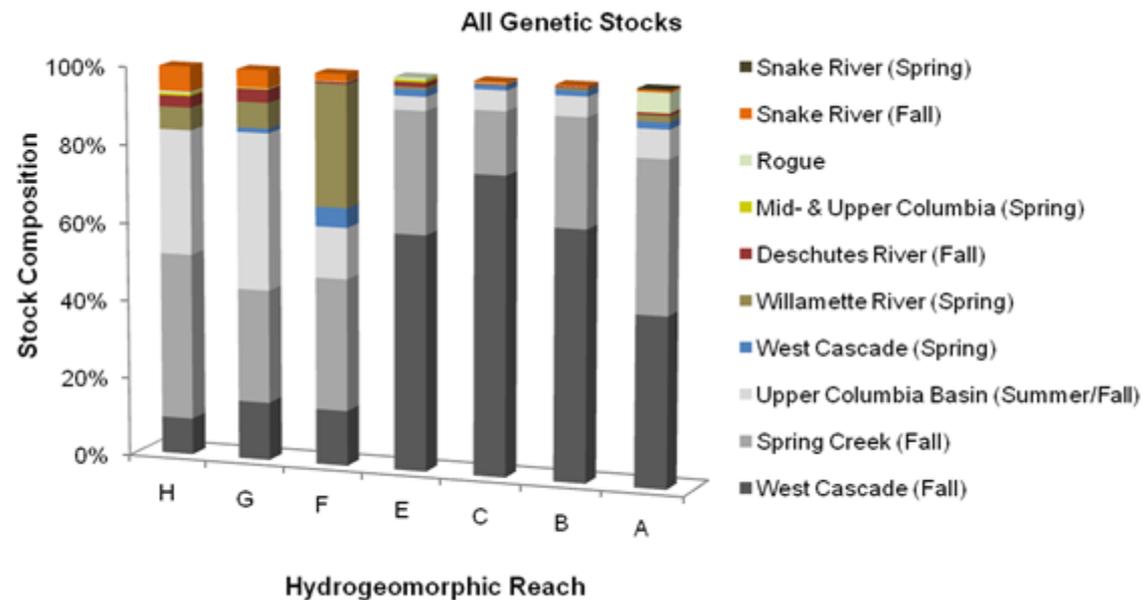
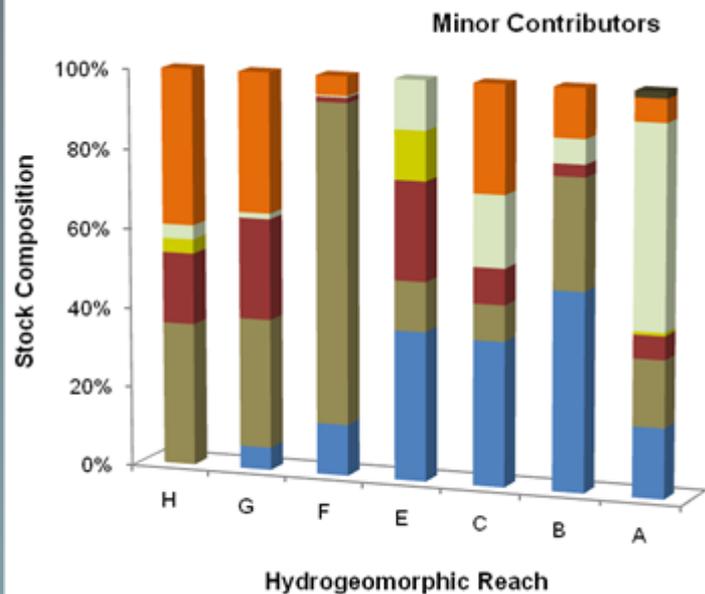
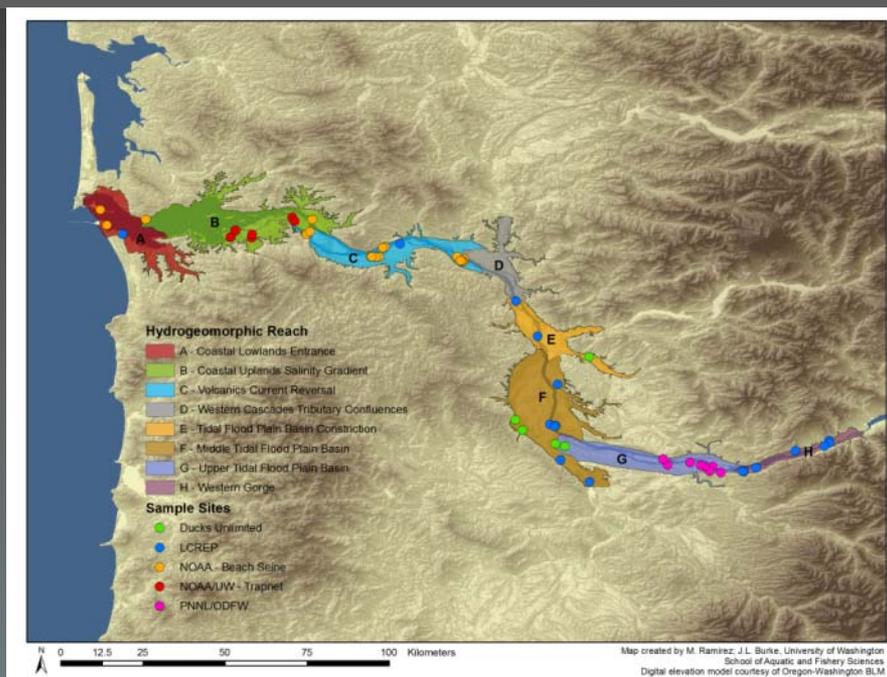
- Principles = Broad guidance
 - Connect tributaries, mainstem and floodplain wetland
 - Restore historical channels
- Rules = Focused, specific
 - Patch size (number of acres)
 - Connectivity (distance between patches)



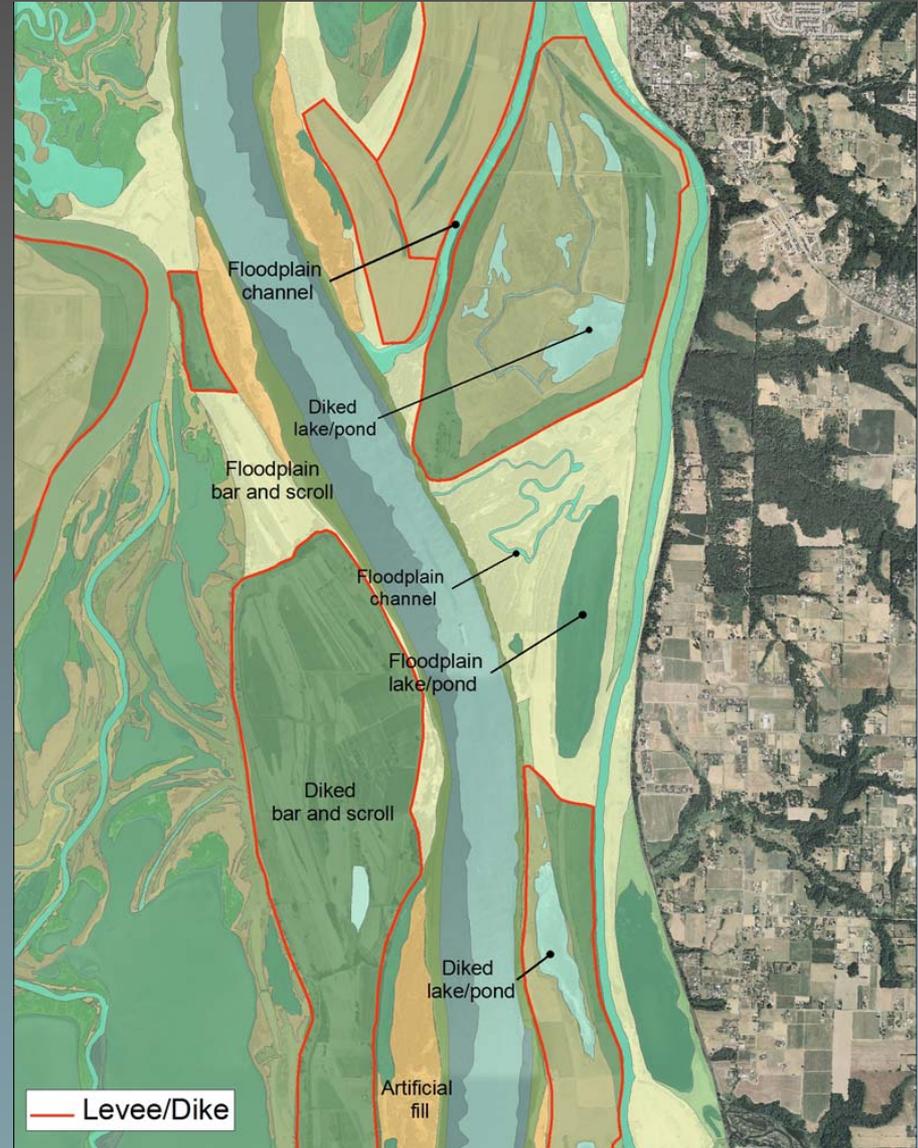
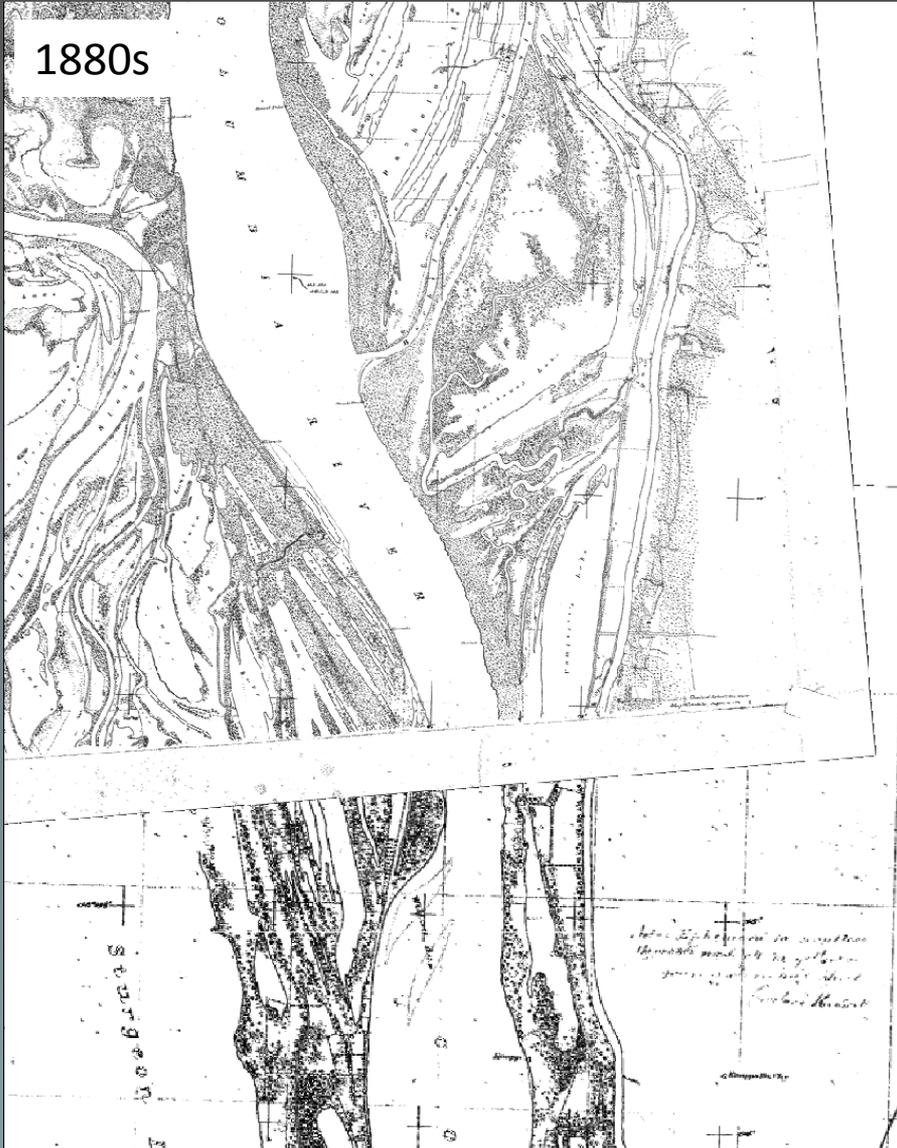


Dominant Stocks

West Cascade (Fall), Spring Creek (Fall), and Upper Columbia Basin (Summer/Fall) account for approximately 52%, 30%, and 9% respectively of all samples.



T-sheets & Catena





Moving Toward Implementation

- Additional analysis:
 - Land use
 - Ownership
 - Feasibility
- End result:
 - Identify projects
 - Prioritize projects
 - Develop projects

Partners

- States
 - Estuary Partnership
 - CREST
 - Columbia Land Trust
 - Lower Columbia Fish Recovery Board
 - Cowlitz Tribe
 - Conservation districts
 - Watershed councils
 - Others
- 
- A decorative wavy line in a light blue color, spanning the width of the slide near the bottom.

Next Steps

- Science workshop
- Complete demonstration reach
- Complete classification system
- Additional reaches





New Tools Allow Strategic Decisions

- Align ESU, area, project
 - Roadmap for restoration
 - Collaboration
 - More confidence
- 