



# **Integrated Status and Trends Monitoring Demonstration Project**

Pacific Northwest Aquatic Monitoring Partnership  
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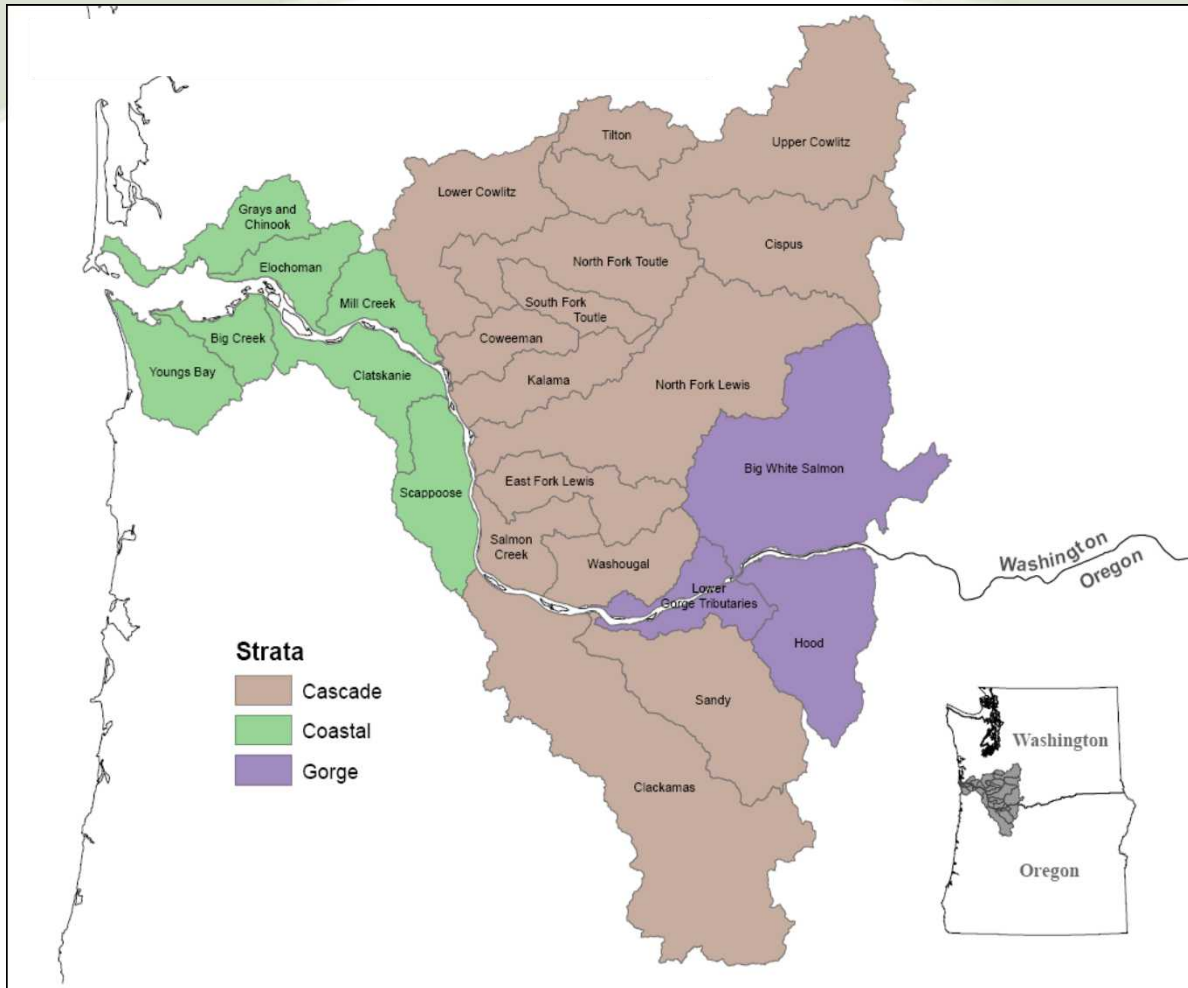
May 4, 2012



# ISTM Goals

- I. Develop an integrated status and trends monitoring design for ESA-listed salmon and steelhead and their ecosystems.
- II. Demonstrate utility of approach and design using Lower Columbia River Recovery Domain as demonstration area.

# Why the Lower Columbia?



- ESA listed chum, coho, Chinook salmon, steelhead, and bull trout
- Draft recovery plans need integrated & coordinated monitoring
- Multi-jurisdictional (OR, WA, COE, NOAA, USGS, USFS, YN, CTWSR)

# Project Partners



Washington  
Department of  
**FISH and  
WILDLIFE**



pacific northwest aquatic  
monitoring partnership





# Five Objectives of ISTM

1. Identify & prioritize decisions, questions, and objectives
2. Determine adequacy of existing programs, potential efficiencies, existing gaps
3. Identify monitoring designs, sampling frames, protocols, and analytical tools
4. Use trade-off analyses to develop recommendations for monitoring including priorities and range of budgets
5. Recommendations for implementation, data management, reporting, and adaptive management

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# Fish Component Progress and Successes

- Completed Objectives 1 and 2
- Policy-level commitment and involvement
  - Committed to the overall process
  - Development of priority management questions
  - Review of methods and results
- Additional agencies expressing interest in using process and tools in other areas

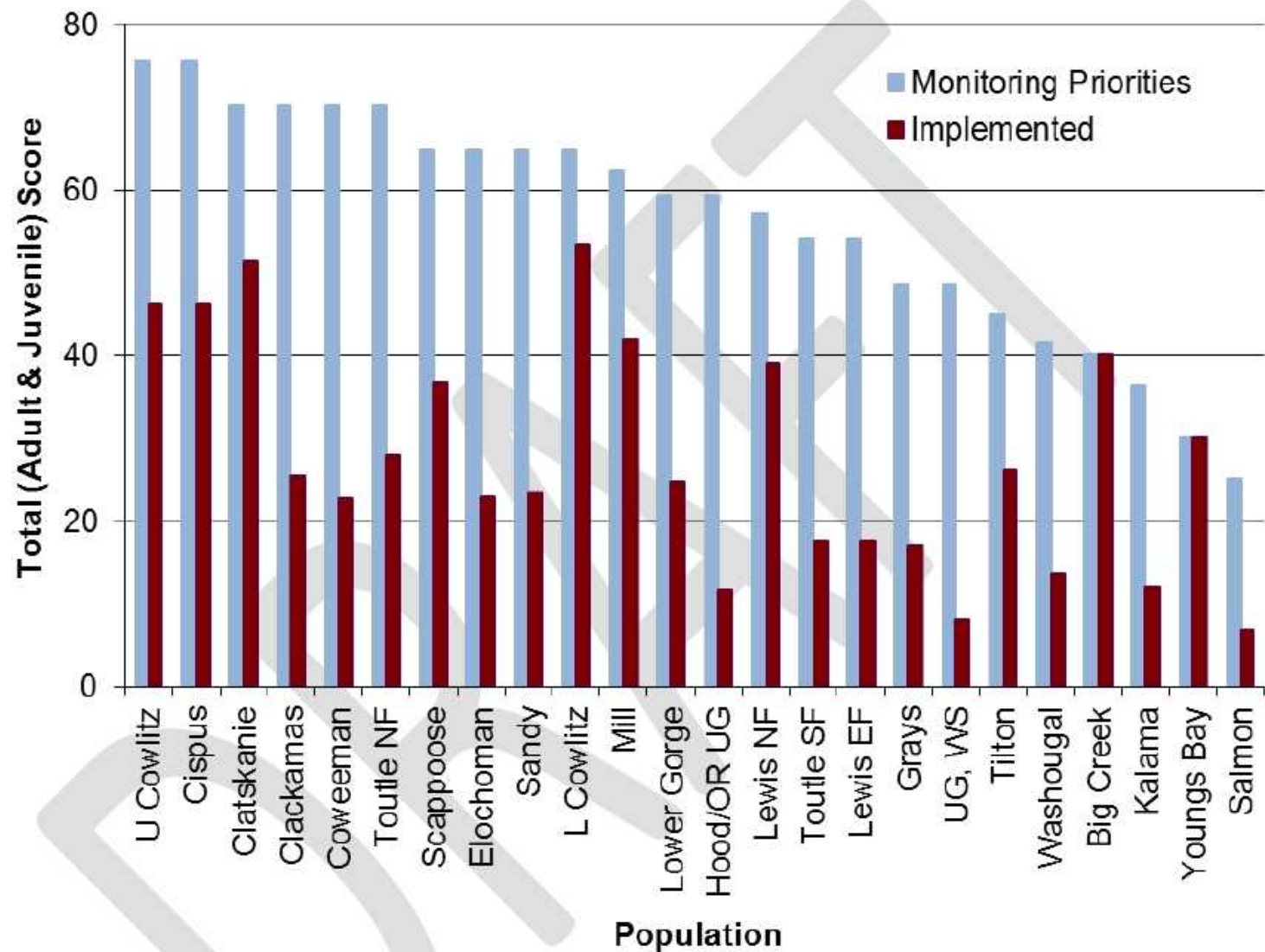


Figure 8. Comparison of coho salmon monitoring priorities and the current monitoring program in the Lower Columbia River by population. (U = Upper; NF = North Fork; L = Lower; Hood/OR UG = Hood/Oregon Upper Gorge; SF = South Fork; EF = East Fork; UG, WS = Upper Gorge, White Salmon)

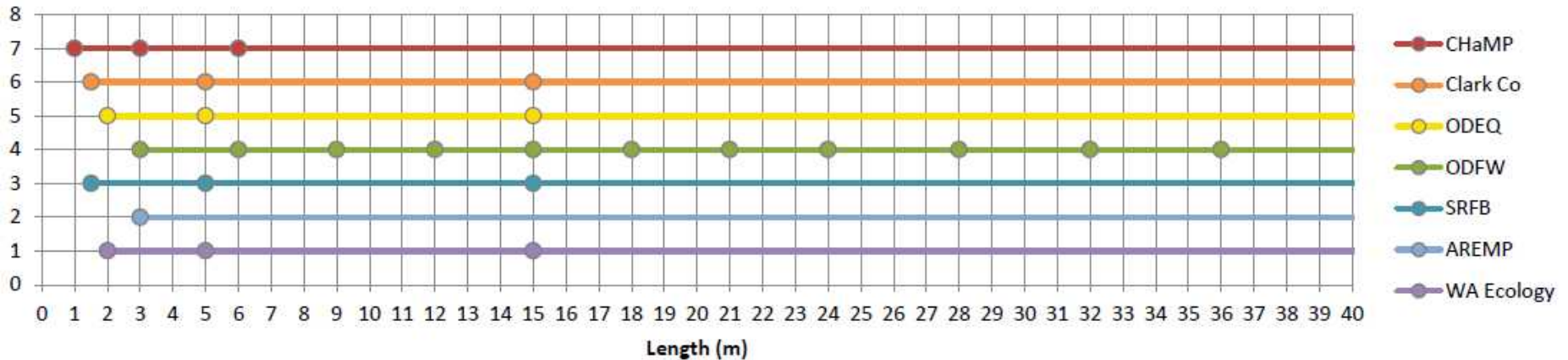


# Habitat Component Progress and Successes

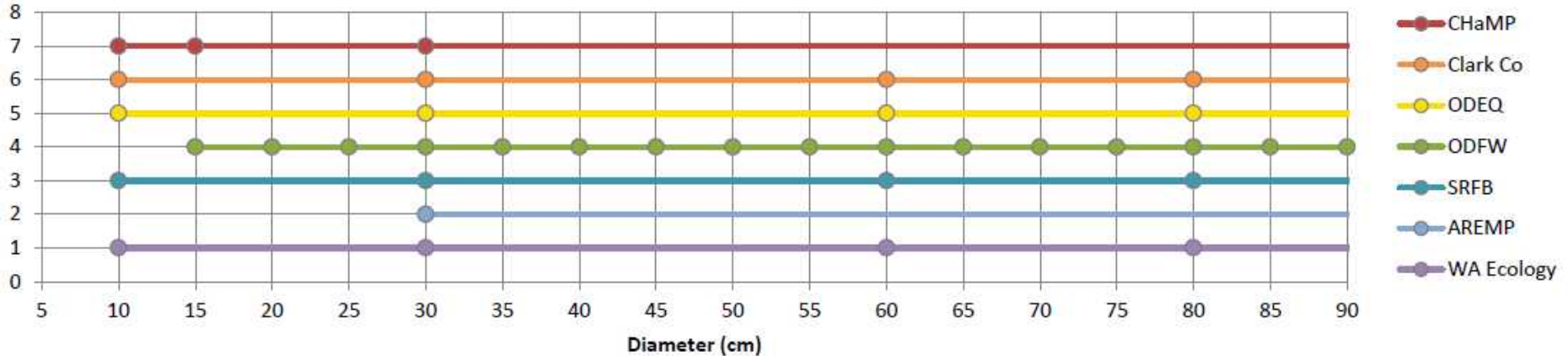
- Nearing completion of Objectives 1 and 2
  - In process of reviewing existing monitoring programs, the attributes they measure, spatial coverage, and current ability to share data
- Policy-level commitment and involvement
  - Committed to the overall process
  - Development of priority management questions
- Additional programs added to expand scope
- Integration with stormwater status and trends monitoring efforts



## Large Wood Length Size Classes



## Large Wood Diameter Size Classes



Large wood size classes for the 7 programs participating in the PNAMP ISTM Habitat project. Filled circles indicate the break points between size classes. For example, WA Ecology length size classes (for western streams) are 2-5 m, >5-15 m, >15 m. AREMP doesn't use classes, but rather records measurements for individual pieces (hence the lack of break points other than the minimum size considered).

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# Tool and Process Development

- Scoring process for VSP parameters and special cases
- Scoring of existing monitoring programs based on how well programs meet precision and bias goals
- Tool for developing appropriate sample frame
- Master Sample Designer website in development



# Monitoring Sample Designer

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Home

Explore

Design Sample

Evaluate Site Status

Analyze Field Data

Discuss

About

Welcome to Sample Designer. Build your survey to exploit the benefits of being part of a master sample.

## Explore

### Learn the steps in designing surveys with master samples.

- Read about GRTS master sample monitoring.
- Investigate individual master samples at Monitoring Sites.

## Design Sample

### Build your sample survey.

- Answer a few questions to see if this tool is for you, and to plan your steps.
- Select one or more master samples as the source of your sample.
- Define your survey's frame.
- If desired, add attributes for your sites, and add legacy sites.
- Create panels and stratify.
- Build multiple surveys easily to find a survey that meets your objectives.

## Evaluate Site Status

### Evaluate and analyze your survey sites.

- Evaluate each site for target status and site access.

## How can we help you?

### New to this site?

Not sure where to begin? Select the user type below that best describes you and we'll show you how to get the most out of the site based on your individual needs and interests.

Select

# Successes and Challenges

## Successes

- Applicability of process and tools for use in other areas
- Additional funding to expand process to integrate stormwater status and trends monitoring efforts
- Alignment between Oregon and Washington will provide greater efficiencies
- Review of existing programs can shed light on need for improvement

- Difficult to maintain momentum
- Complex processes take time
- Limited staff availability among agencies

## Challenges

