

Klickitat River Anadromous Fisheries Master Plan & Klickitat Hatchery Complex Expansion

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and

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Region 3 Fish Program Manager



*Washington
Department of*
**FISH and
WILDLIFE**

Presentation Outline

Today's Presentation Outline:

Basin Overview

History & Principles of Yakima/Klickitat Fisheries Project

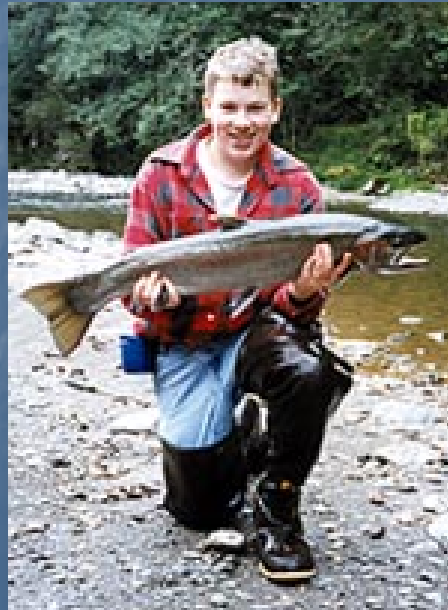
Master Plan Production Objectives

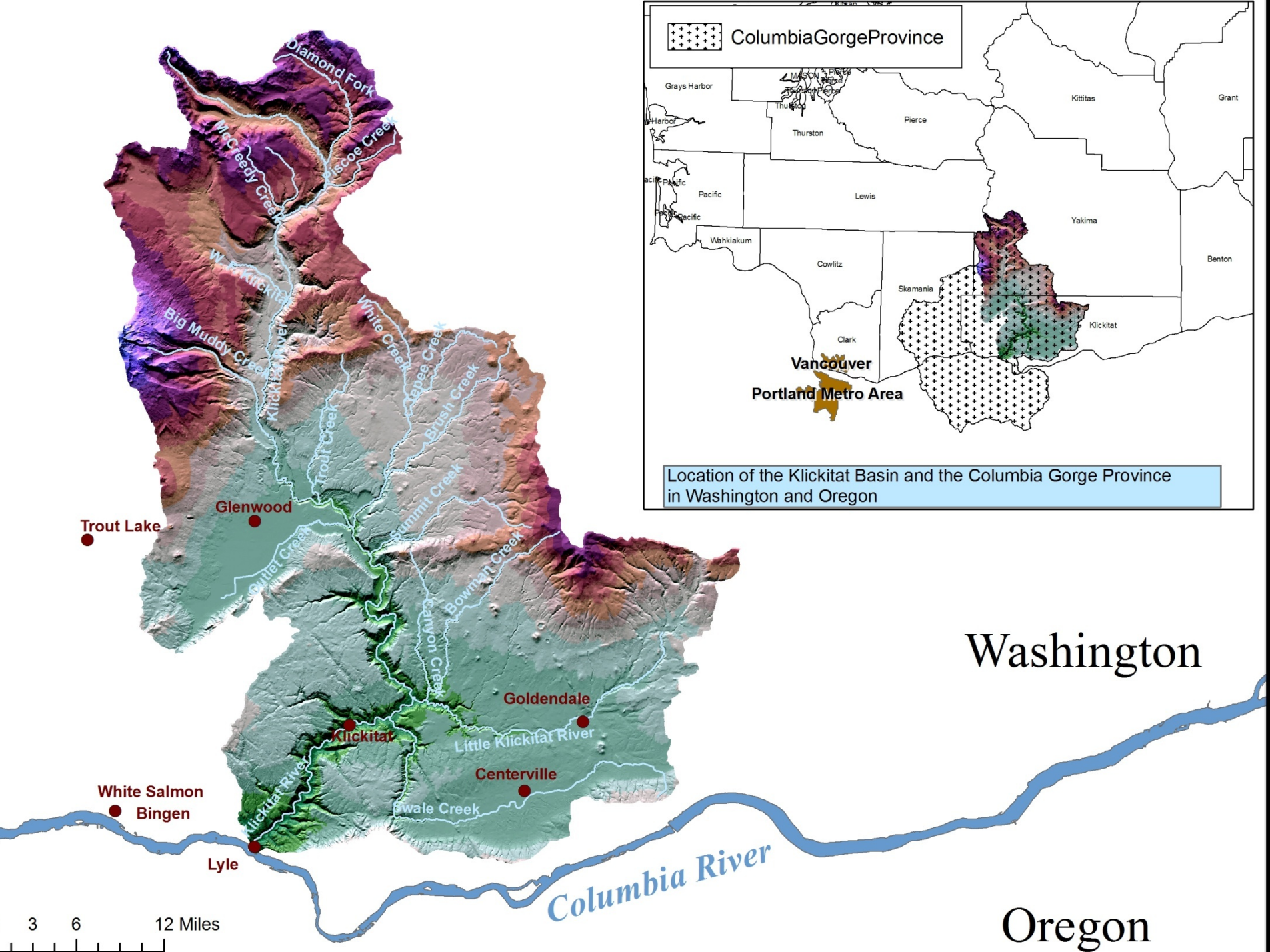
Infrastructure Updates to Date

Habitat Actions

Education and Outreach

Summary & Next Steps





ColumbiaGorgeProvince

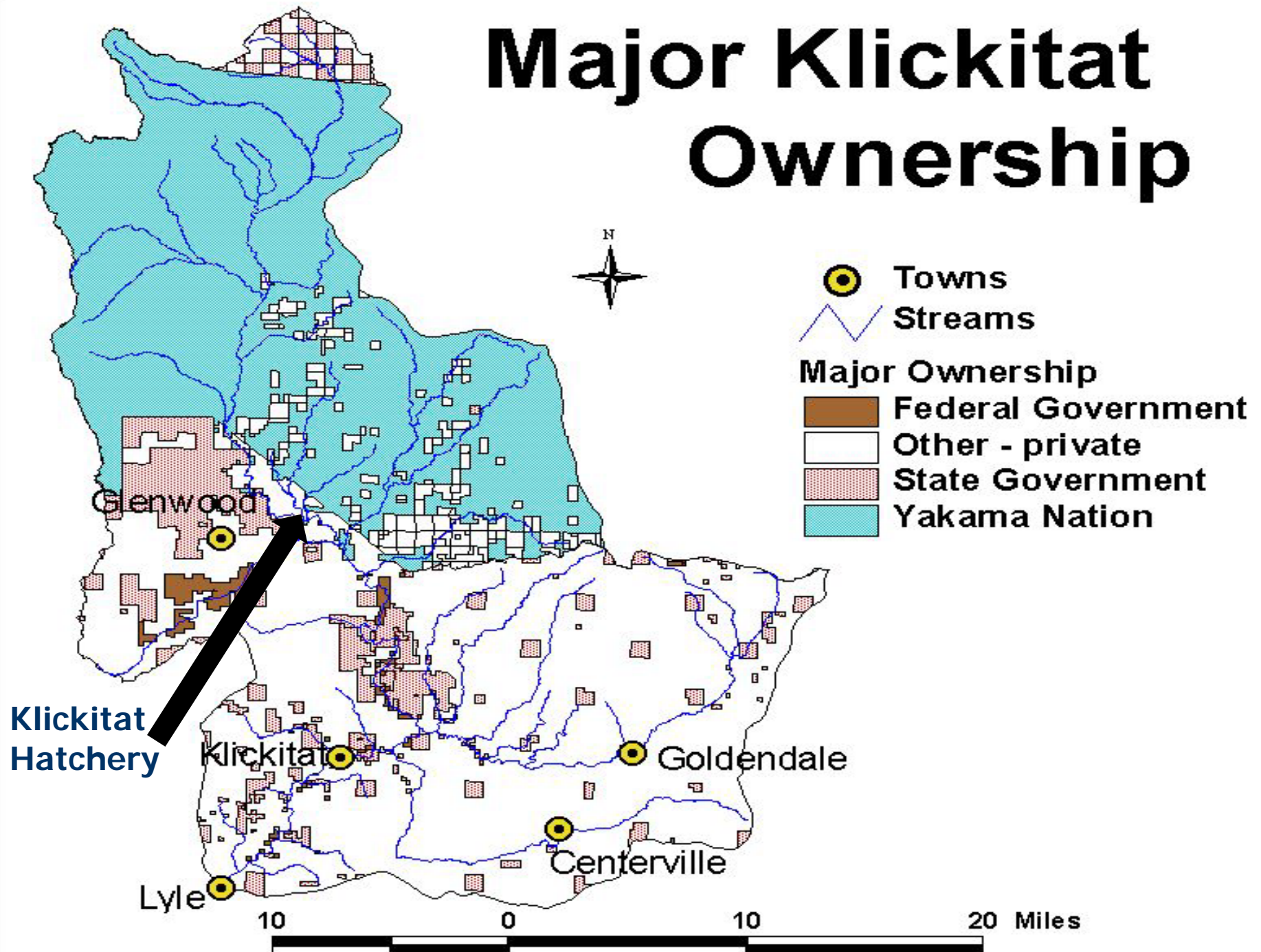
Location of the Klickitat Basin and the Columbia Gorge Province in Washington and Oregon

3 6 12 Miles

Washington

Oregon

Major Klickitat Ownership



Yakima/Klickitat Fisheries Project

- Scientifically rigorous process that fosters application of knowledge gained about hatchery supplementation and habitat restoration throughout the Columbia River Basin.
- Original plan was for new hatcheries in both basins.
- The Yakima EIS completed in 1996.
- The Cle Elum Supplementation and Research Facility collected its first spring Chinook brood stock in 1997.
- Genetic principles included using only naturally produced adults for broodstock.
- Hatchery Scientific Review Group (HSRG) recommends integrating naturally produced adults into conservation hatcheries.

Scientific Framework Guiding Klickitat Complex Reforms

Hatchery Scientific Review Group:

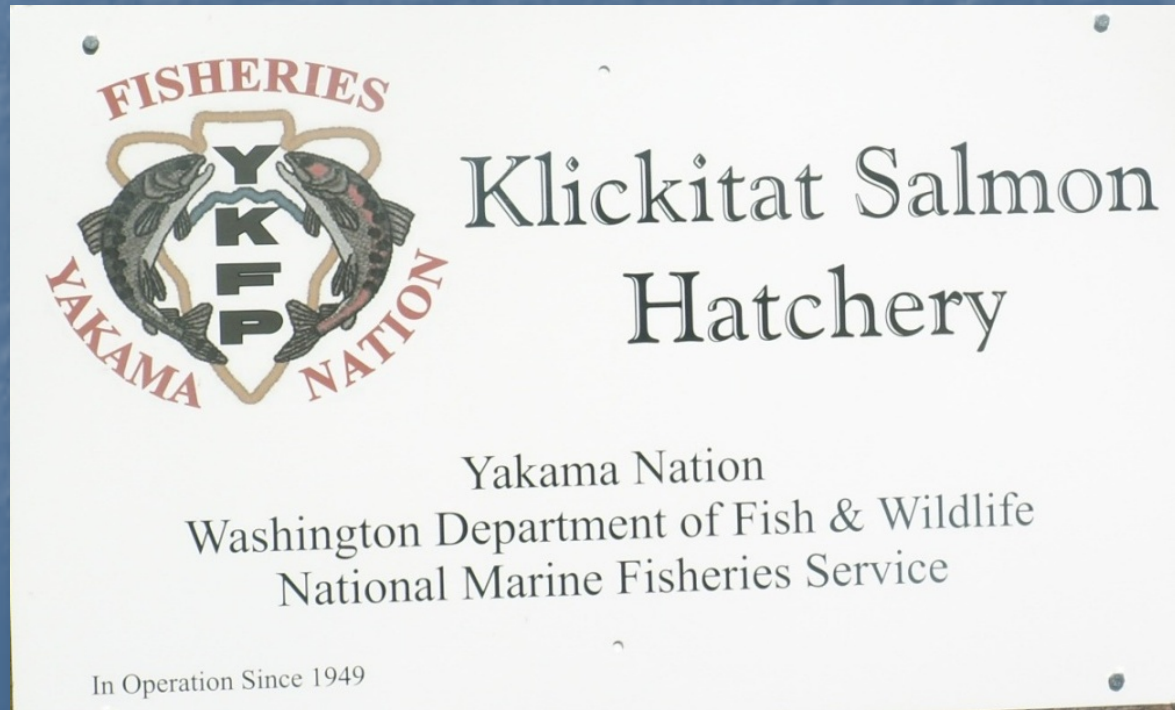
Design and operate hatchery programs to maximize harvest with least biological risk.

Clear, specific, quantifiable harvest and conservation goals for natural & hatchery populations.

Monitor, evaluate and adaptively manage hatchery programs.

Klickitat Complex - Facility Transition

- 2006 Joint Operating Agreement - transferred operation of Mitchell Act facilities from WDFW to the Yakama Nation.
- Castile Falls Fishways
- Lyle Falls Fishway
- Klickitat Hatchery



Klickitat Complex

- Lyle Falls Fishway & Monitoring Station
- Castile Falls Fishway & Monitoring Station
- YKFP Klickitat Field Office
- Upgrades to Klickitat Hatchery – current & proposed
- Wahkiacus Hatchery & Acclimation Facility - proposed
- McCreedy Creek Acclimation Site - proposed

Klickitat Complex Facility Locations

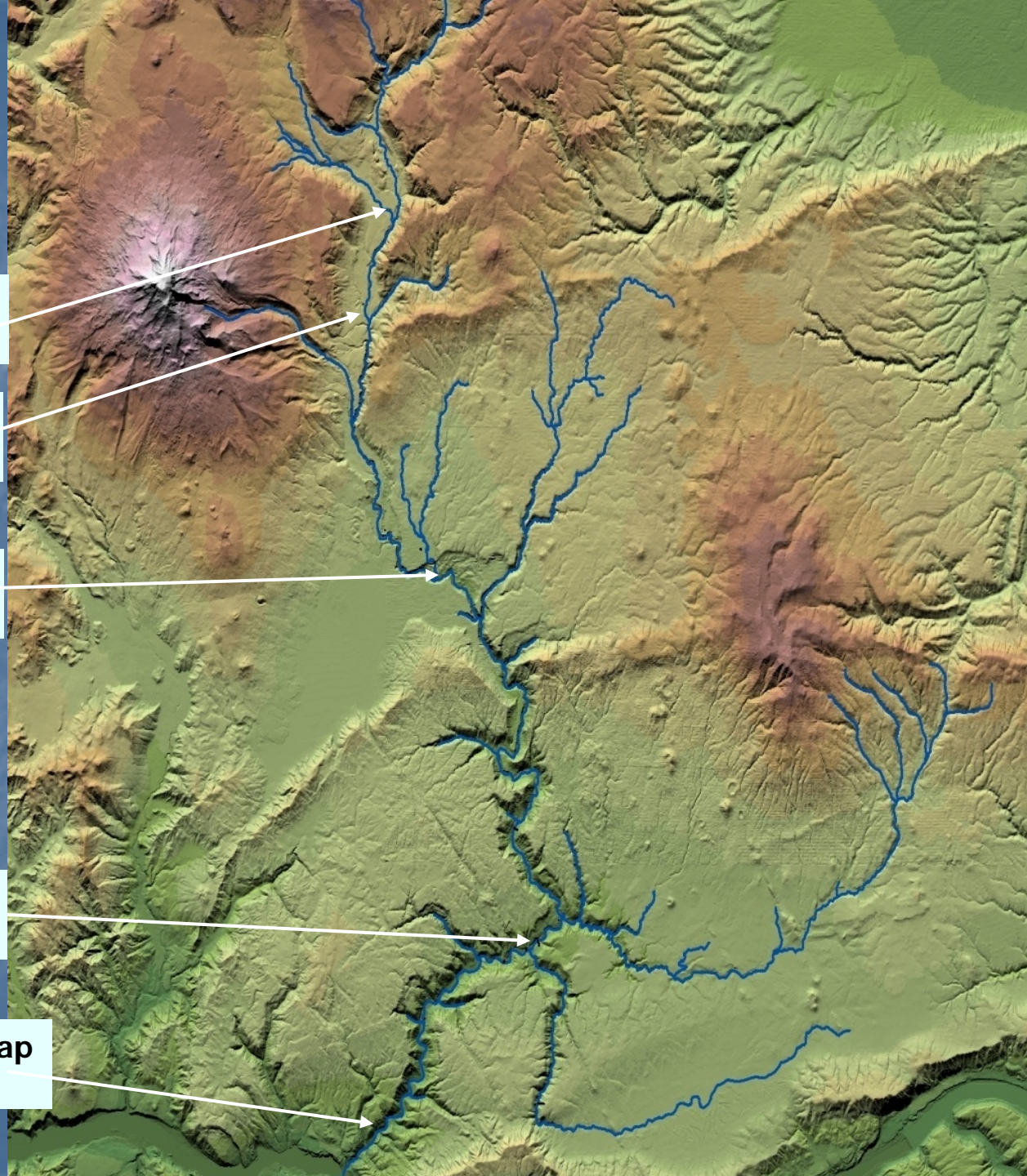
**McCreedy Creek Acclimation
(proposed) (RM 70.0)**

**Castile Falls Fishway
& Monitoring Station (RM 64.0)**

**Klickitat Hatchery
(RM 43.0)**

**Wahkiacus Hatchery
(proposed) (RM 17.0)**

**Lyle Falls Adult Trap
(RM 2.0)**



Klickitat River Anadromous Species

Native Stocks

Spring Chinook



Steelhead



Pacific Lamprey



Introduced Stocks

Fall Chinook



Coho



- All stocks have existing hatchery production programs
- Designed for harvest augmentation under *U.S. v. Oregon*

Planning Documents

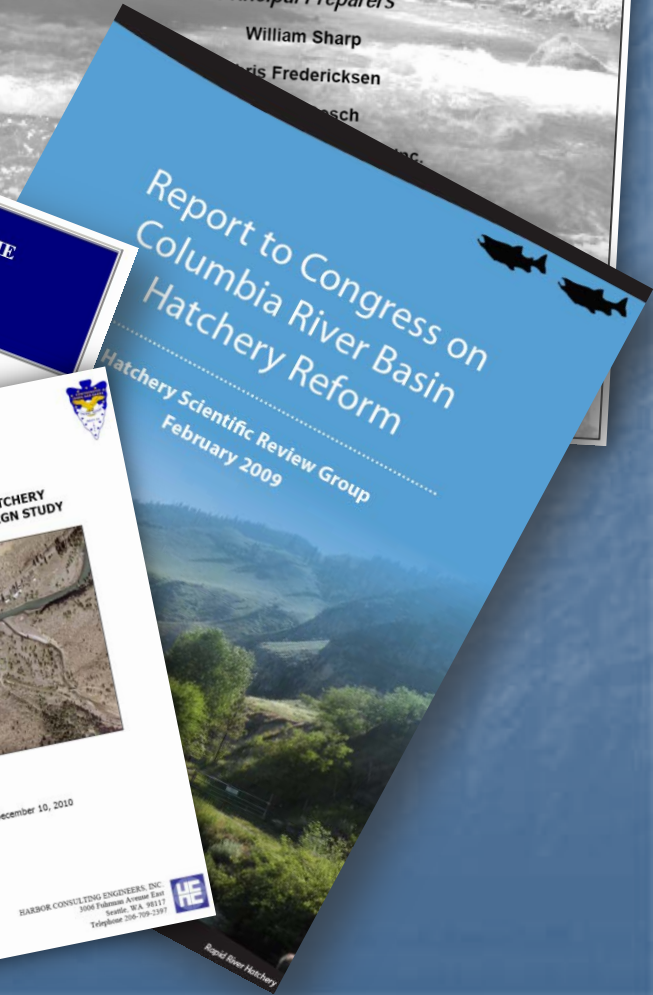
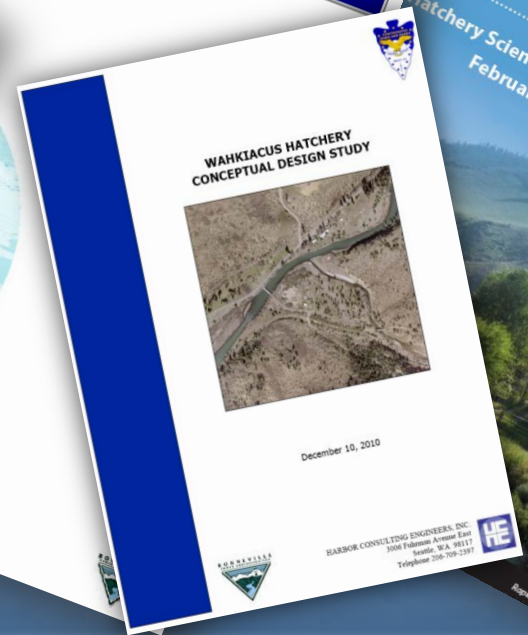
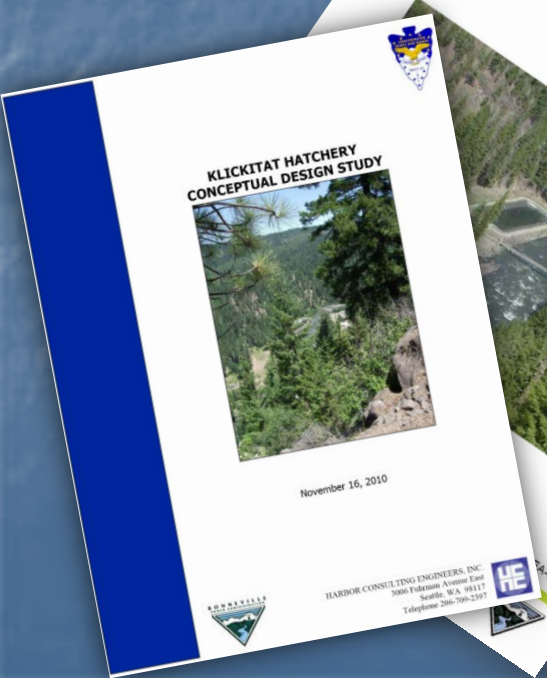
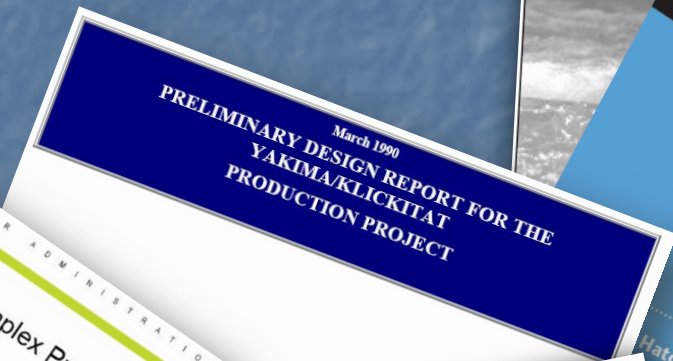
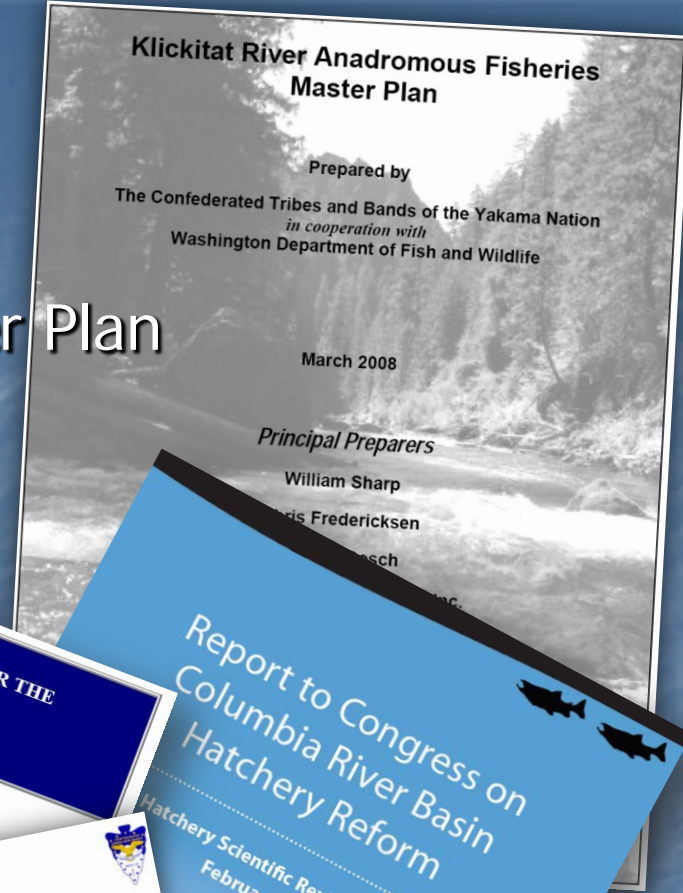
Conceptual Design Plans

Klickitat Hatchery Complex - EIS

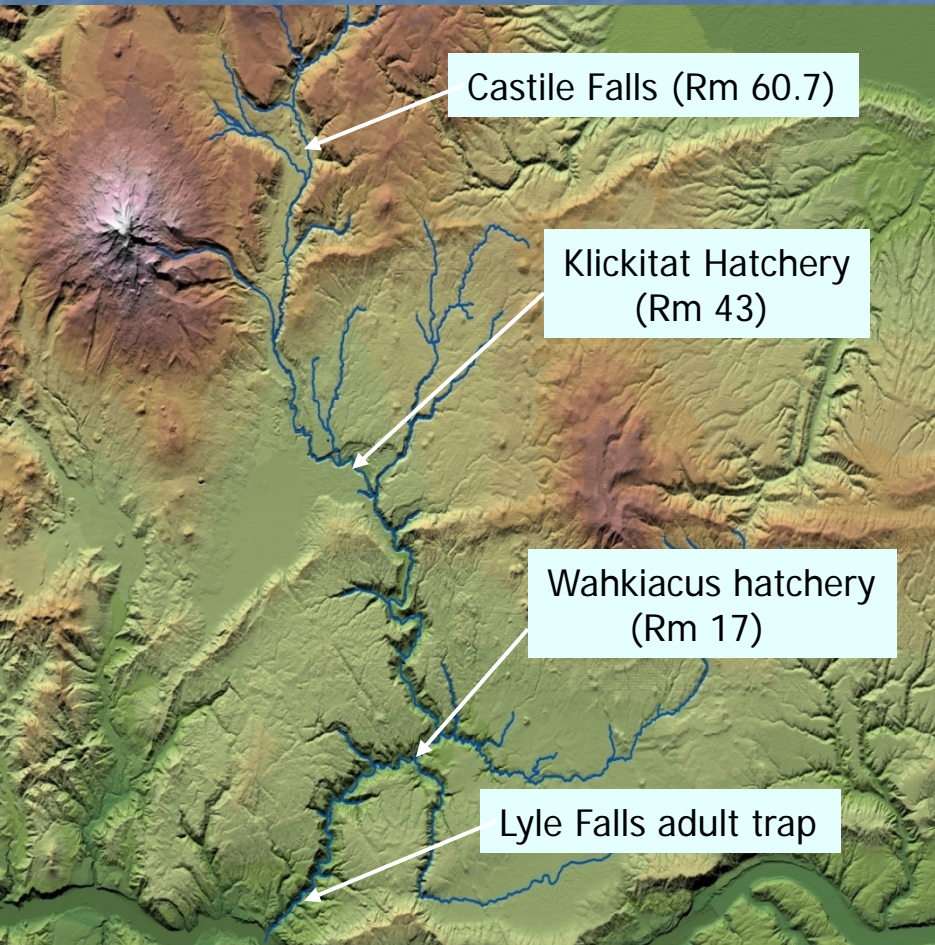
Klickitat River Anadromous Fisheries Master Plan

Hatchery Genetic Management Plans

HSRG Report



Klickitat Master Plan Hatchery Production & Reform Efforts



Spring Chinook (segregated)

- 600K yearling smolt release
- **Integrated Program**
- **800K yearling smolt release**

Summer Steelhead

- 90K Skamania direct plants
- **90K from local brood (seg.)**
- **70K integrated conservation program**

Fall Chinook (URB) LWS NFH

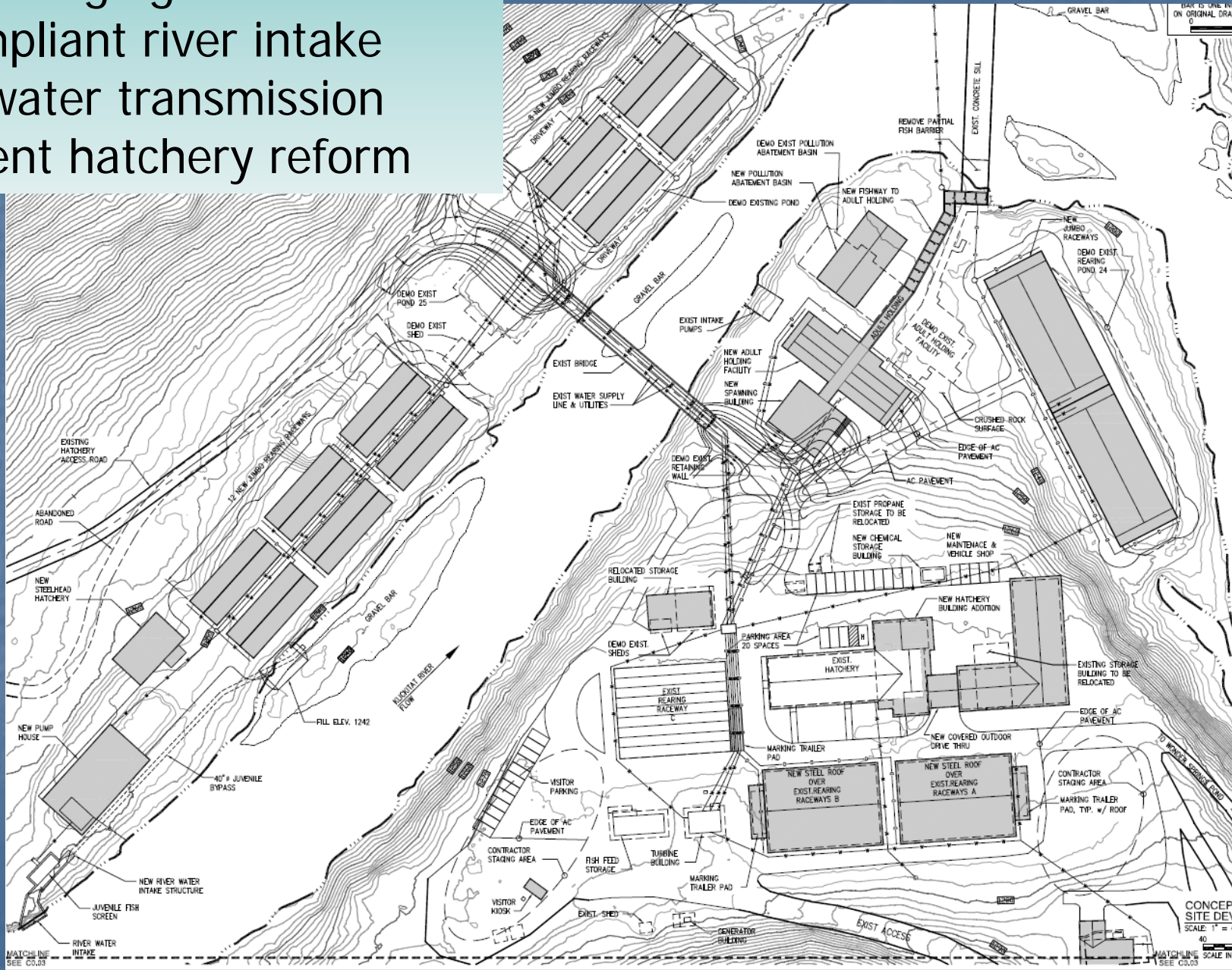
- 4M sub-yearling smolt
- **2M/2M sub-yearling smolt from local brood**

Coho Lewis River Hatchery

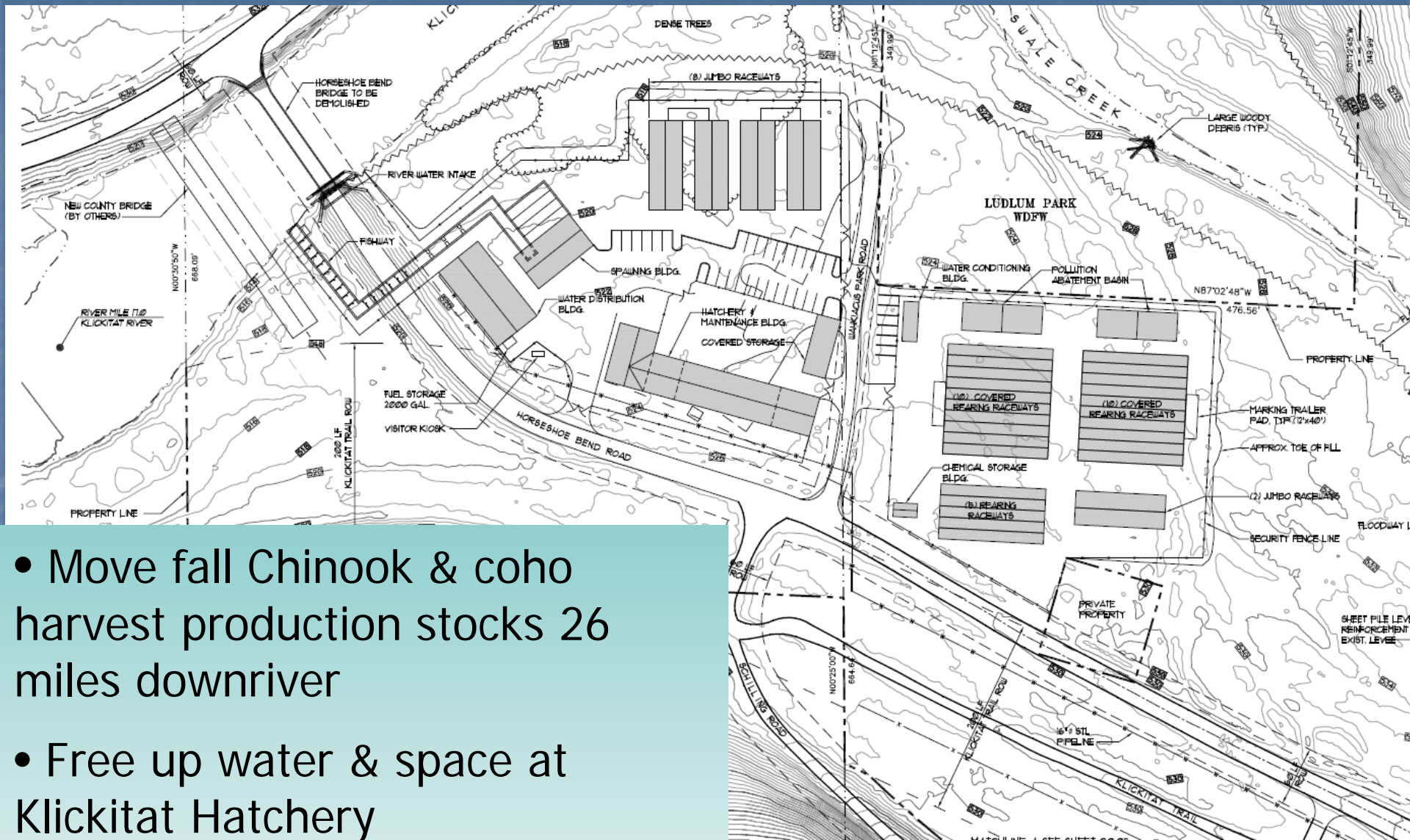
- 1.2M yearling smolt release
- 2.5M Washougal direct plants
- **1M sub-yearlings local brood**

Klickitat Hatchery

- Modernize aging infrastructure
- ESA compliant river intake
- Secure water transmission
- Implement hatchery reform



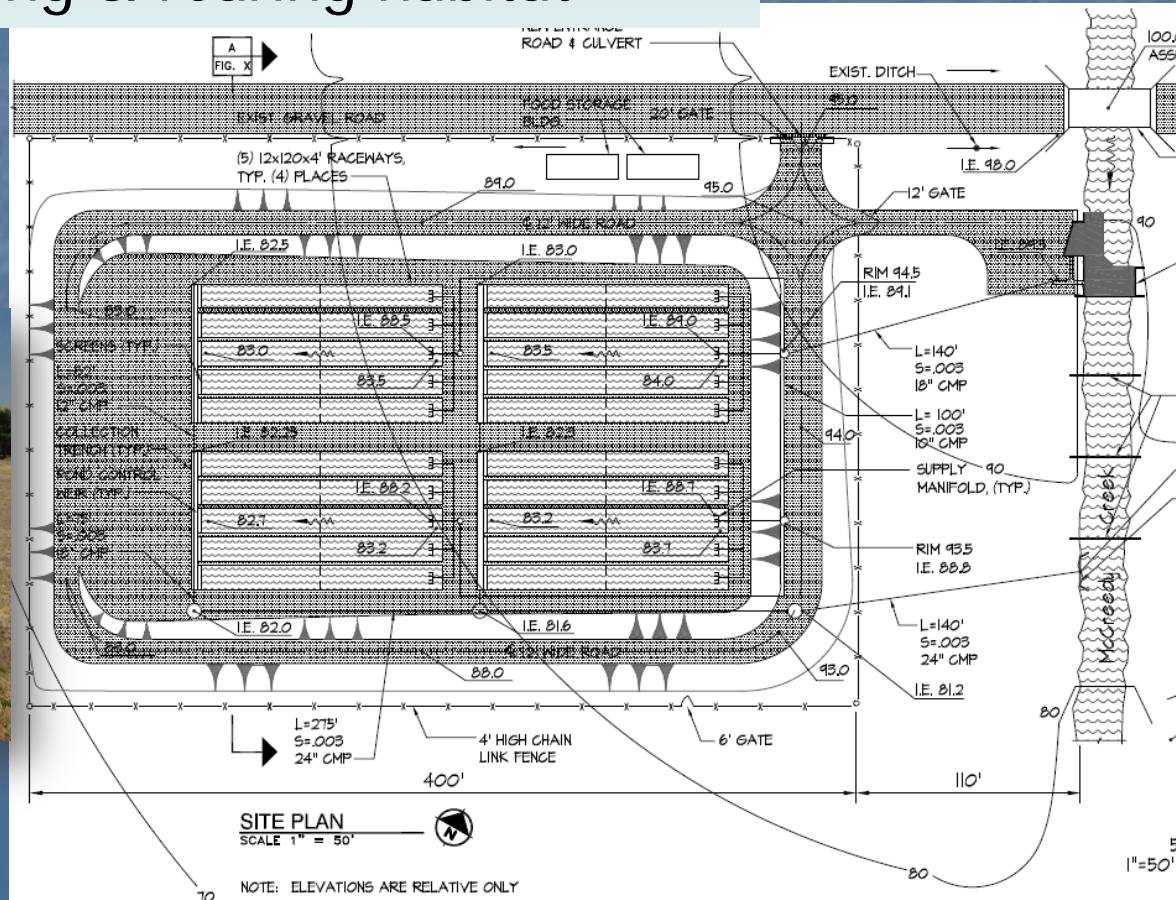
Wahkiacus Hatchery



- Move fall Chinook & coho harvest production stocks 26 miles downriver
- Free up water & space at Klickitat Hatchery
- Implement hatchery reform

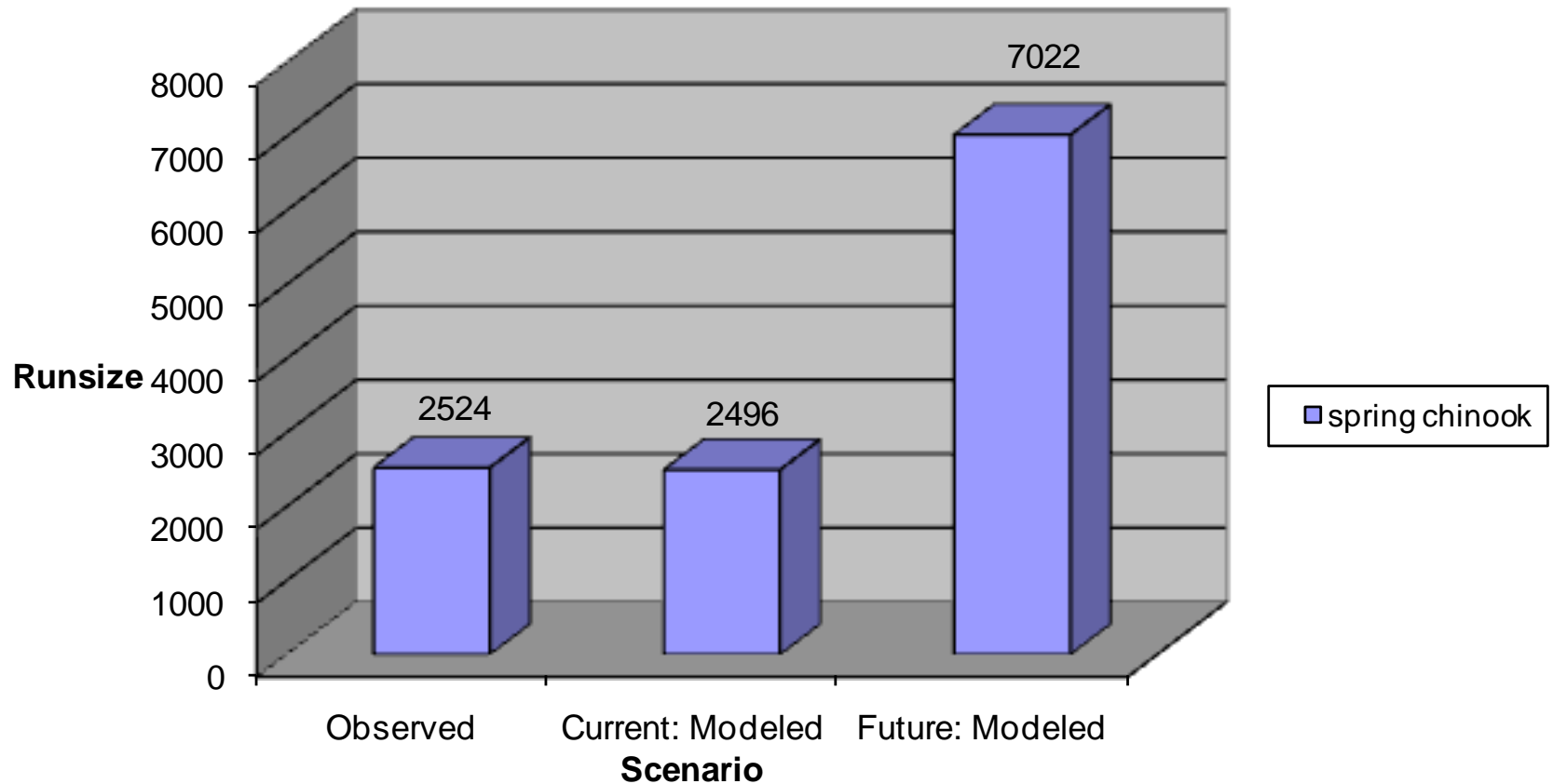
McCreedy Creek Acclimation Site

- Summer Steelhead Integrated Conservation Program (optional...if needed)
- Accelerates colonization above Castile Falls
- Located in prime spawning & rearing habitat



Model Results: Klickitat Spring Chinook

Total Runsize to Columbia River Mouth



Actions to date

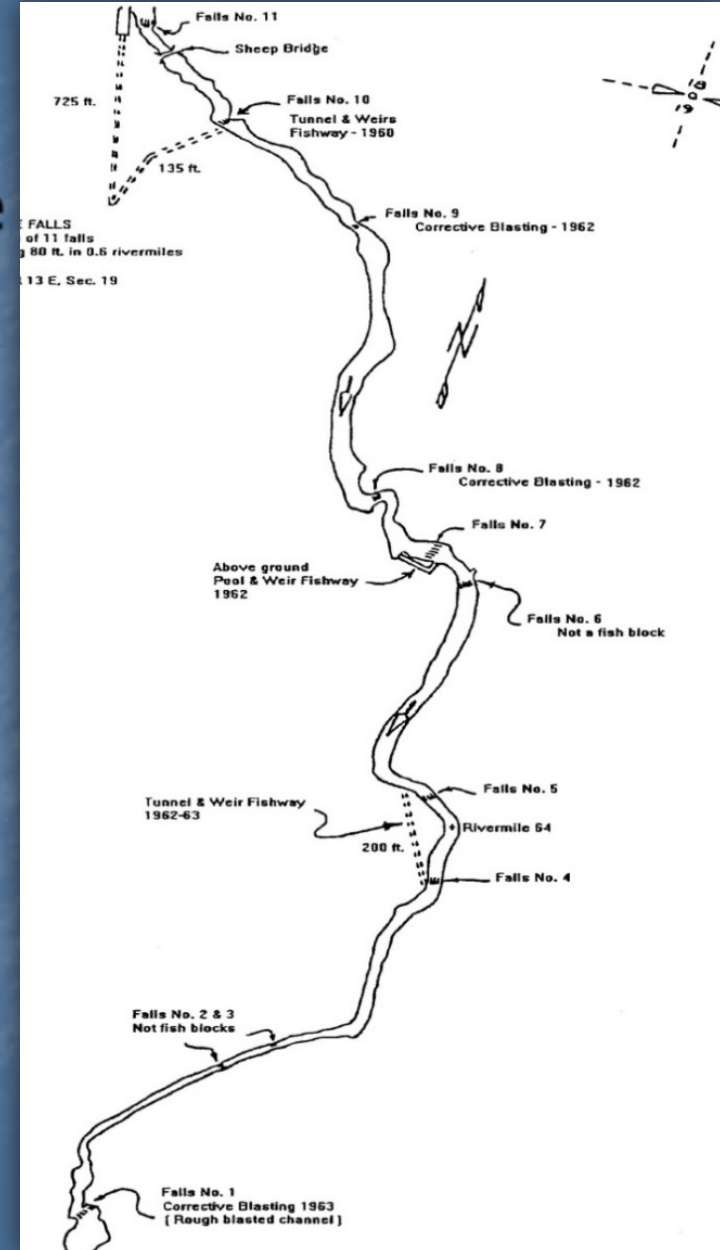
Castile Falls Monitoring Facility

Passage Improvements Completed

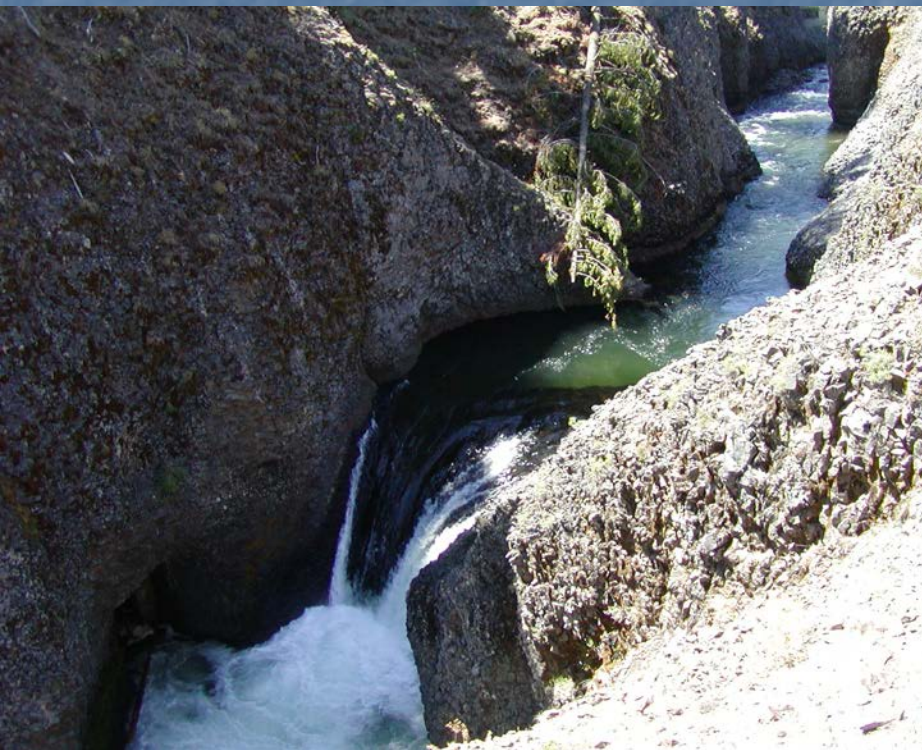
- 2004 - 2005
- Over 55 Miles of Habitat Accessible
- Reduced Fishway O&M

Monitoring Facility:

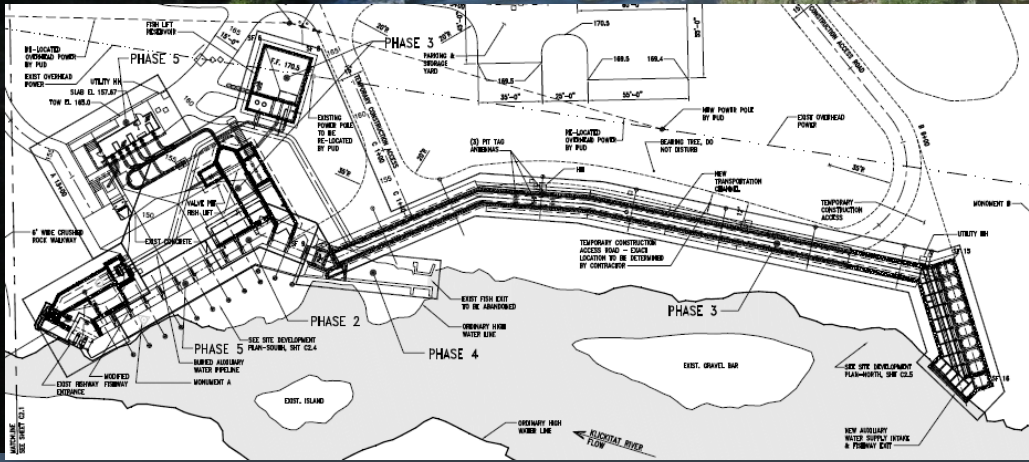
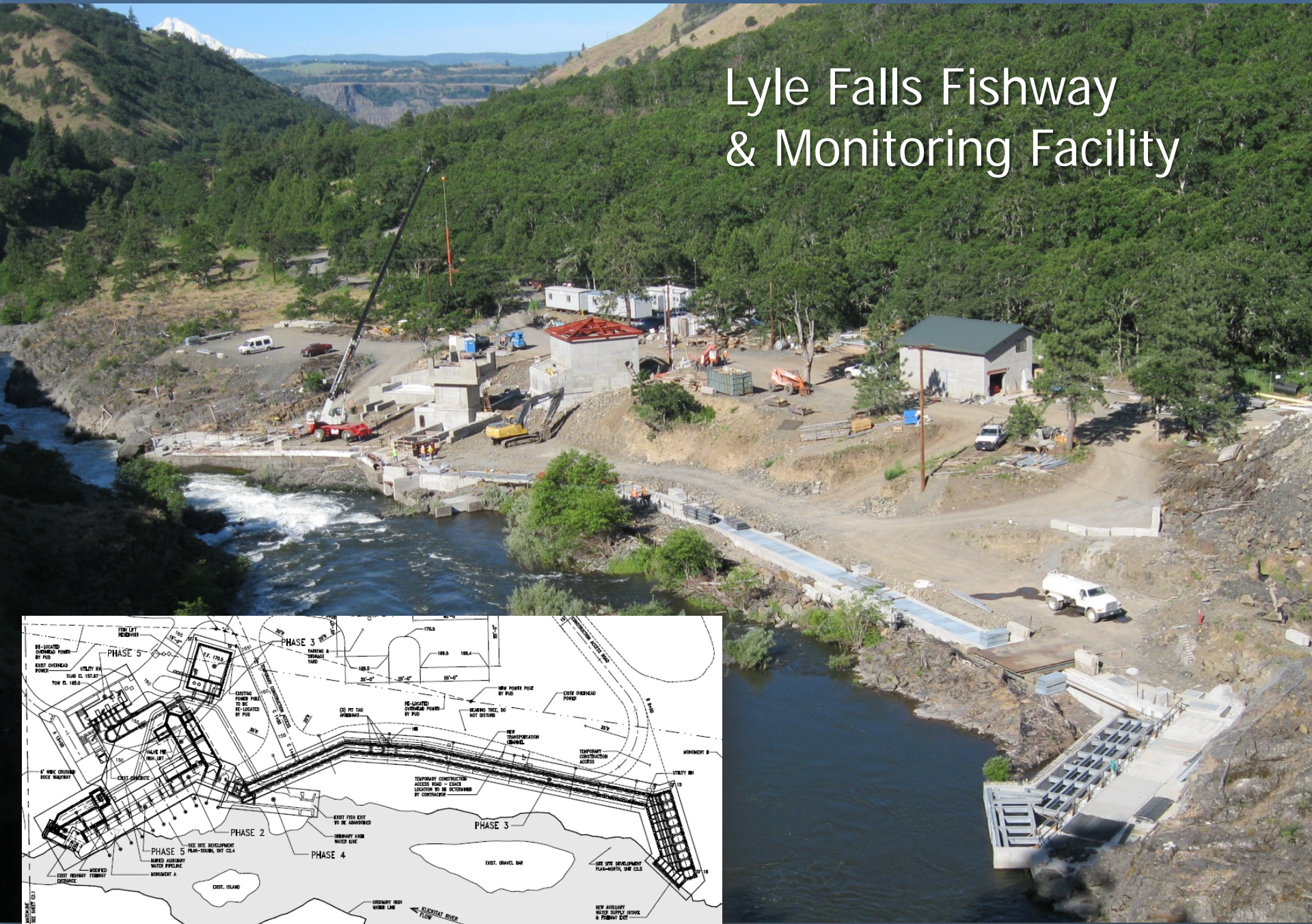
- Digital Imagery
- PIT Detection



Castile Falls 10/11
&
Castile Falls 4/5
Fishways

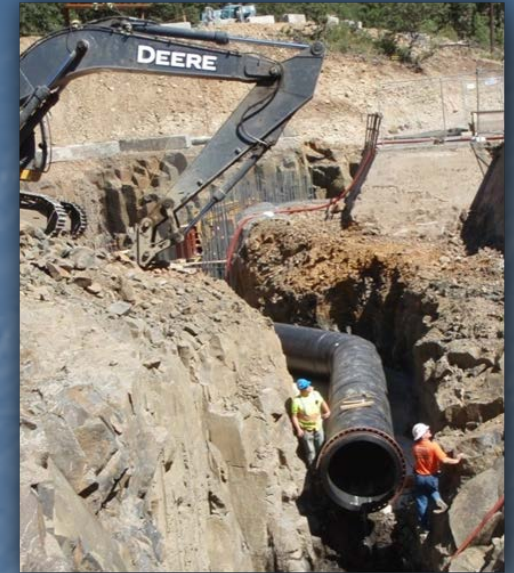


Lyle Falls Fishway & Monitoring Facility



Lyle Falls Fishway #5 Passage & Monitoring Facility

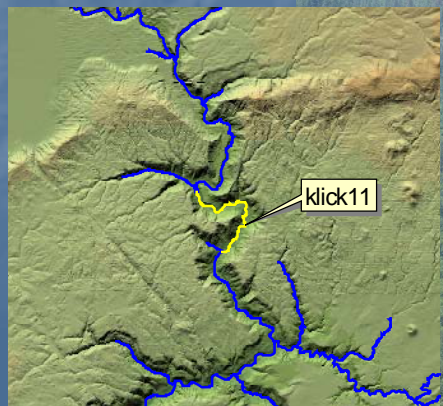
- R,M&E Facility
- Meet NMFS passage and handling criteria
- Brood collection
- Pacific Lamprey passage



Habitat Enhancement

Klickitat Watershed Enhancement Project

***Identify & Prioritize Restoration Reaches.
Protect, Restore, and Enhance Priority Reaches to
Increase Riparian, Wetland and Stream Habitat Values.***



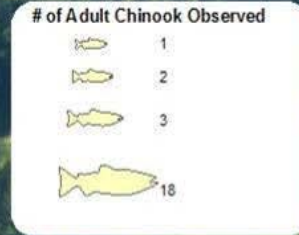
Project Partners:

Washington Dept. Fish & Wildlife
Mid-Columbia RFEG
Columbia Land Trust
Washington Dept. of Natural Resources
Yakama Nation Water Program
Washington State Parks & Recreation
Underwood Conservation District
Central & Eastern Klickitat County CD's
Yakama Forest Products
BIA Forestry and BIA Range
Klickitat County
private individuals

Klickitat Watershed Enhancement Project

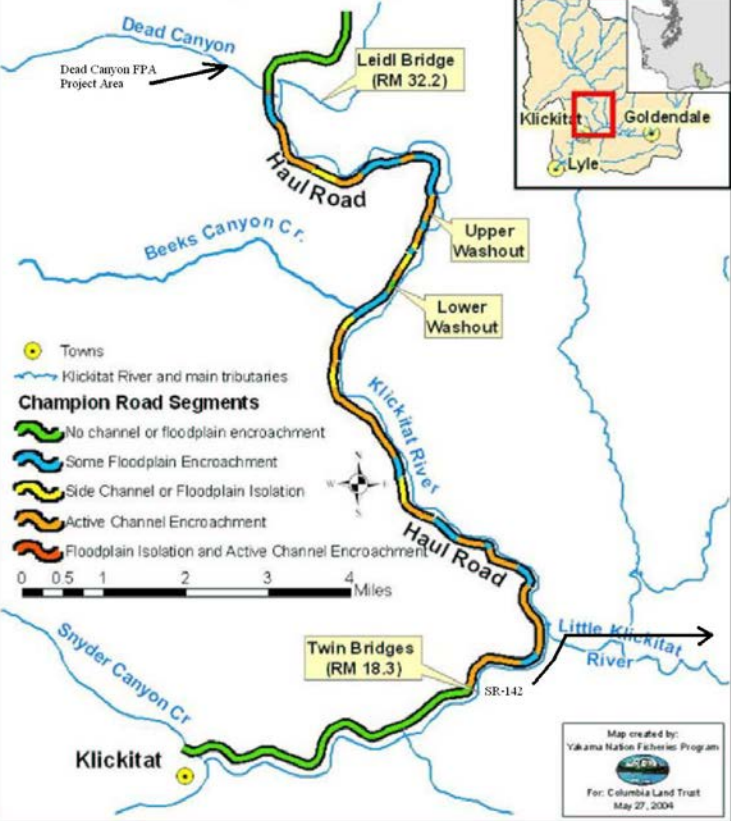
Klickitat River Meadows Restoration Project:

Lower Kessler's Ranch Unit
Constructed 2004
Yakama Nation Fisheries

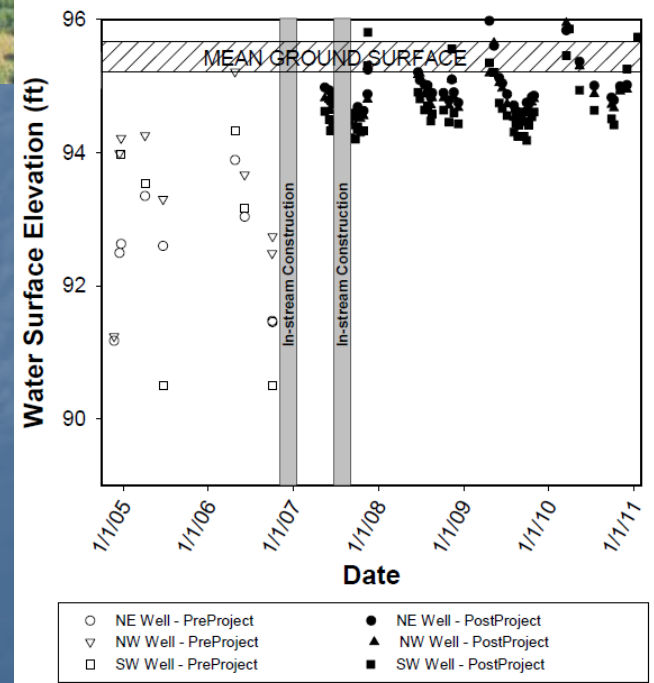


Klickitat River (RM 18 to 32) Floodplain Conservation and Restoration Project

Road Segments Along the Klickitat River



Tepee Creek / IXL Meadows Restoration Project: Pre- and Post-Restoration Groundwater Elevations



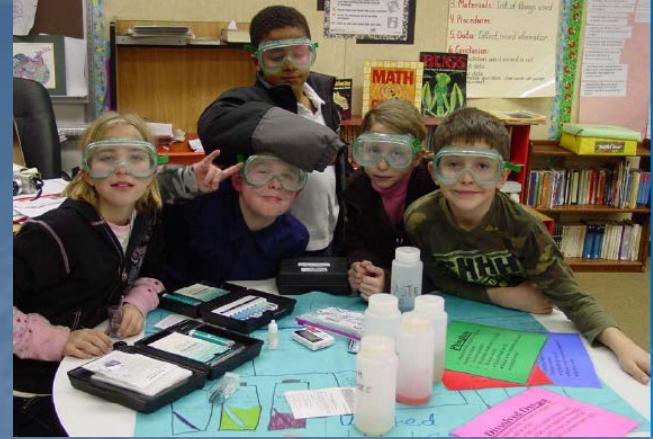
Habitat Enhancement Effectiveness Monitoring Klickitat River Subbasin



Outreach

Education & Outreach

- Hatchery Tours
- Salmon in the Classroom
- Community Events
- Enhanced Rafter Access



Summary & Timelines:

Klickitat Master Plan & ISRP Response – Oct 2012

NPCC Review & Step II Approval – Fall/Winter 2012

Klickitat NEPA FEIS/ROD – Fall 2012

SEPA Review after FEIS

Future Presentations:

WDFW F&W Commission (Hatchery Transition)

Klickitat County Board of Commission

Yakama Nation Tribal Council

Begin Construction 2013; full implementation 2017

Future Operation through the YKFP . . . forever.

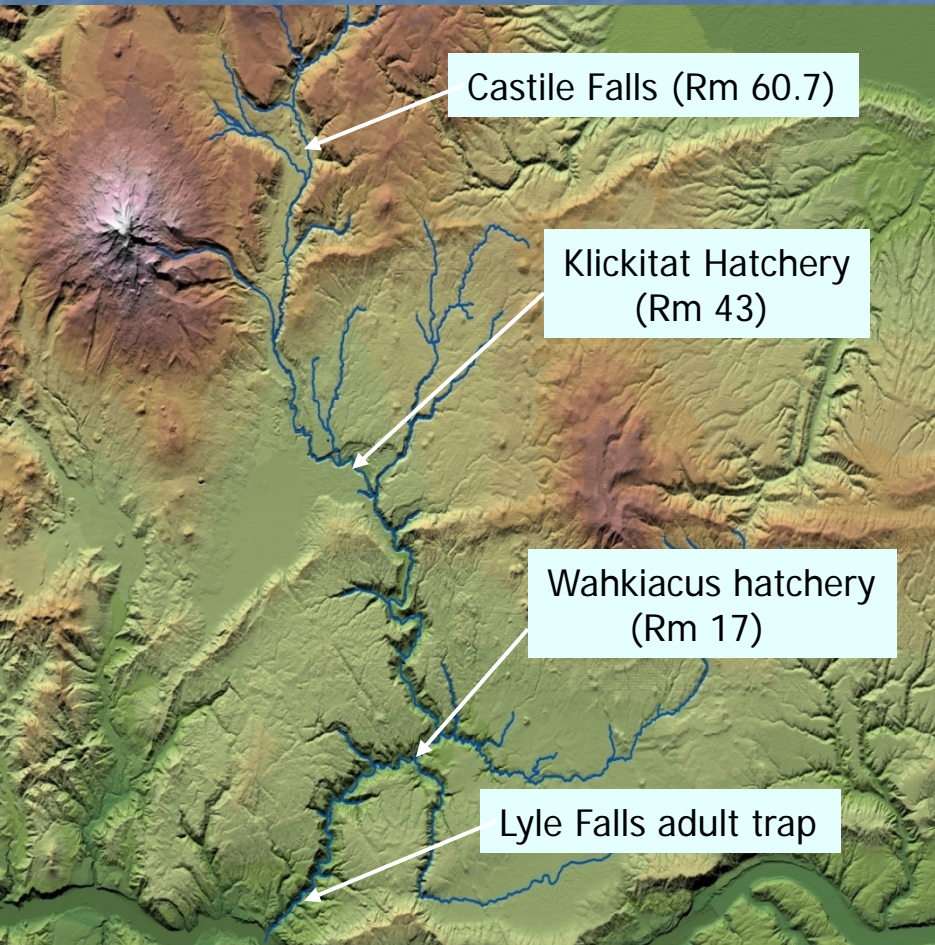
Project Funding:

Bonneville Power Administration
National Marine Fisheries Service
Yakama Nation

Project websites: ykfp.org/klickitat
wdfw.wa.gov



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