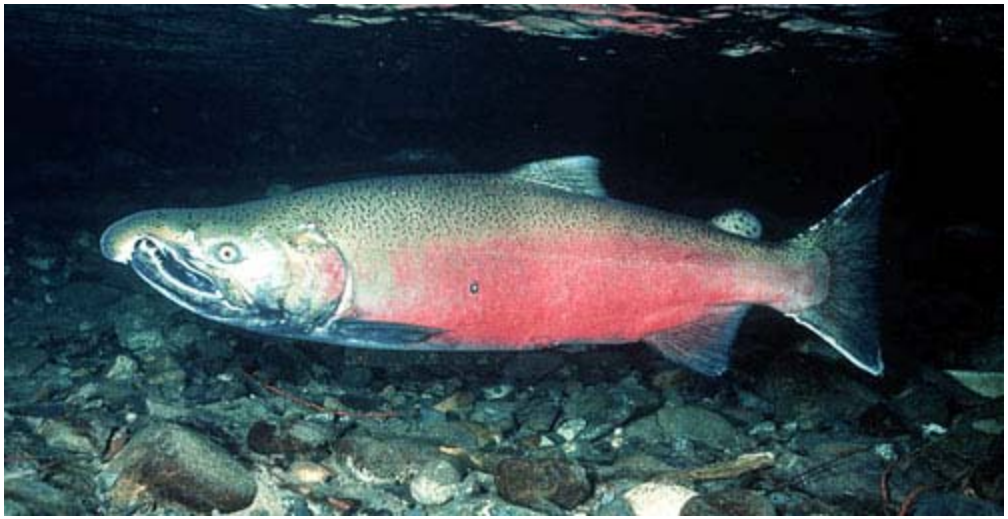
KLICKITAT HATCHERY COMPLEX PROGRAM
PUBLIC MEETING ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

BONNEVILLE POWER ADMINISTRATION

August 10, 2011
5:30-8:30 pm
Lyle Community Center

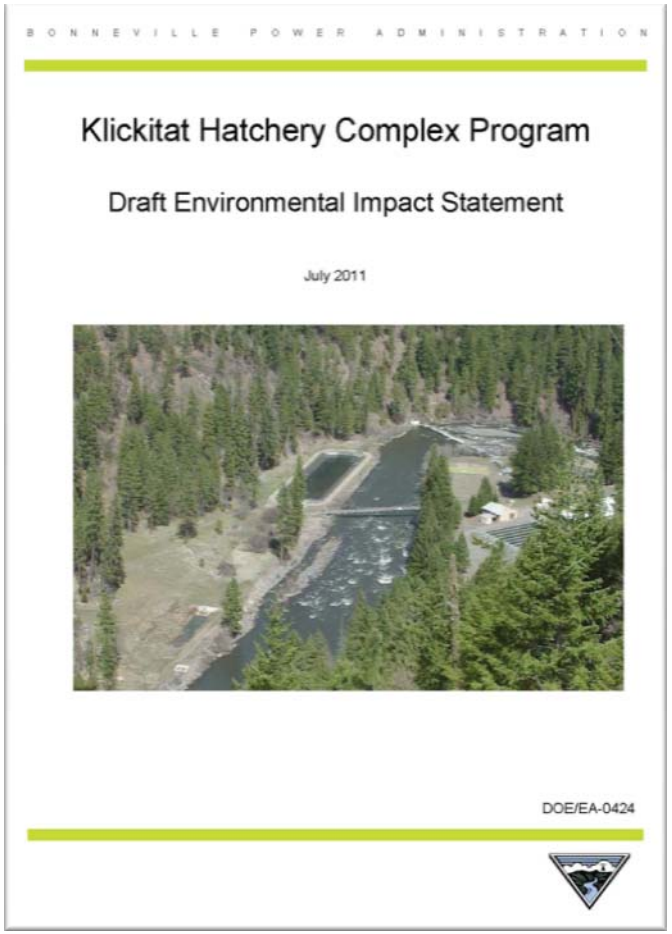
AGENDA

- Need for the project
- Background
- Alternatives
- Project description
- Impacts
- Schedule



AGENCY INVOLVEMENT

- BPA is the lead agency for the EIS
- NMFS, WDFW, BIA, and the Yakama Nation are cooperators
- Regulatory agencies
  - Corp of Engineers
  - USFWS
  - Klickitat County
  - WA Dept. of Ecology



NEPA / SEPA

- ***National Environmental Policy Act***: requires an Environmental Impact Statement (EIS) be prepared for major Federal actions that could significantly affect the quality of the human environment.
- ***State Environmental Policy Act***: requires Washington State and local governments to conduct an environmental review of a major state action before deciding whether to approve it.

THE NEED FOR THE PROJECT

Reduce the impacts of the current hatchery programs in the Klickitat River Subbasin on native steelhead and spring chinook as a way to fulfill BPA's obligations under the Northwest Power Act and the Columbia Basin Fish Accords.

POLICY FRAMEWORK GUIDING KLICKITAT SUBBASIN ACTIONS

Mitchell Act of 1938 & Mitchell Act EIS

First federal response to declining Columbia Basin runs – mandates US to fund hatcheries

NMFS preparing EIS on hatchery operations/fish production

US v OREGON 1974:

Tribes have an absolute right (fair share) to Columbia River fishery

Northwest Power Act 1980:

Mitigate for impacts of hydroelectric operations on fish & wildlife

Columbia Basin Fish Accord Agreement 2008:

Secured long term funding for hatchery & habitat actions

YAKIMA/KLICKITAT FISHERIES PROJECT

- Apply a scientifically rigorous process that fosters application of knowledge gained about hatchery supplementation and habitat restoration throughout the Columbia River Basin.
- Original plan included new hatcheries in both basins.
- Yakima EIS completed in 1996.
- Cle Elum Supplementation and Research Facility collected its first spring Chinook brood stock in 1997.
- Genetic principles include naturally produced Yakima Spring Chinook adults for broodstock.

PRIMARY MONITORING ACTIVITIES

Klickitat Subbasin

- Spawner surveys (redd counts)
- Adult monitoring at Lyle Falls Fishway
- Juvenile outmigration monitoring (rotary screw traps)
- Juvenile and resident salmonid population surveys
- Biological/demographic sampling:
  - Scale sampling
  - Genetic sampling
  - Pathogen sampling
- Sediment monitoring
- Habitat surveys
- Temperature and water quality monitoring
- PIT tagging of Spring Chinook juveniles at Klickitat Hatchery

UPPER KLICKITAT PHASE 2

Pre-treatment – 4/29/10

Post-treatment – 11/2/10

HABITAT ENHANCEMENT EFFECTIVENESS MONITORING KLICKITAT RIVER SUBBASIN

KLICKITAT HATCHERY COMPLEX FACILITY LOCATIONS

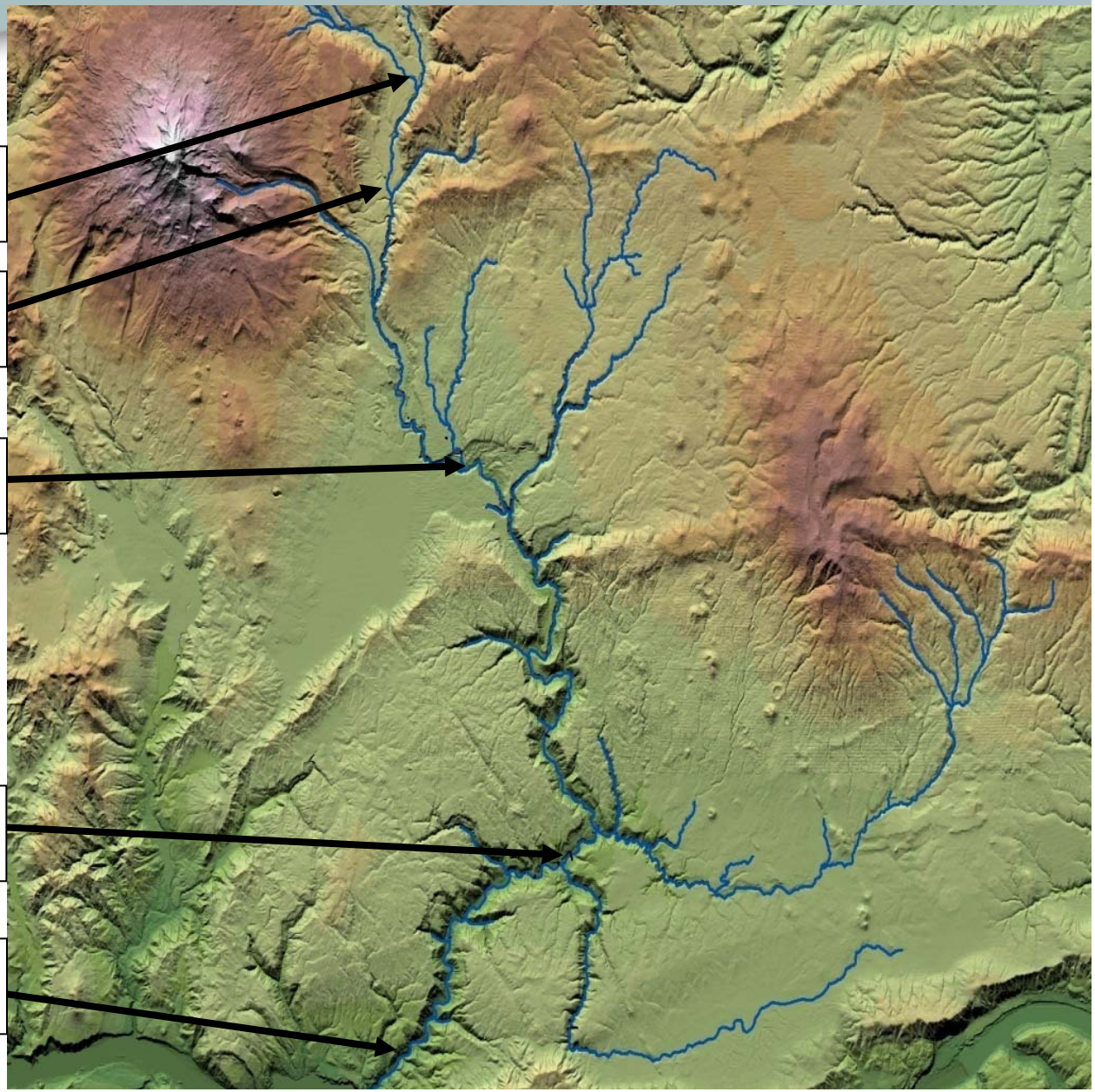
McCreedy Creek Acclimation (proposed) (RM 70.0)

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:

I. Spring Chinook

II. Steelhead

Introduced Stocks:

I. Fall Chinook

II. Coho

- All stocks have existing artificial (hatchery) production
- Programs designed for harvest augmentation

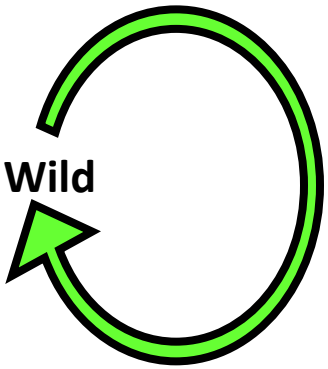
HATCHERY REFORM BASICS

- Proper Broodstock Collection
- Optimal Rearing Densities
- Natural Rearing Techniques
- Volitional Release
- Design and operate hatchery programs in a scientifically defensible manner.

TYPES OF HATCHERY PROGRAMS

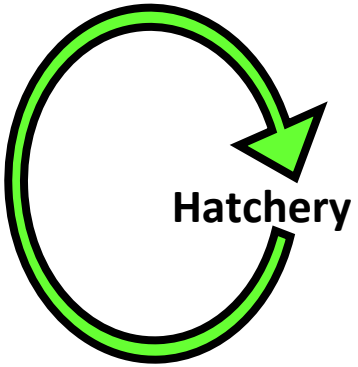
Segregated Program

- ❑ Isolate hatchery/wild populations



Appropriate Conditions

- ❑ Harvest augmentation
- ❑ Minimal habitat
- ❑ Removal of surplus fish



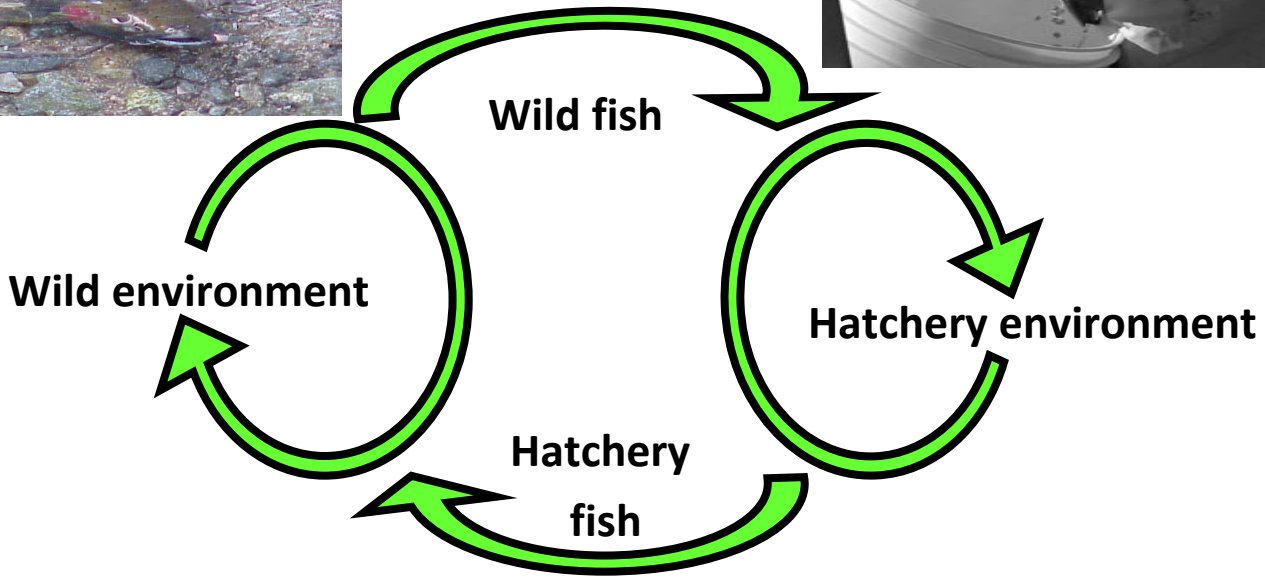
TYPES OF HATCHERY PROGRAMS

Integrated Program

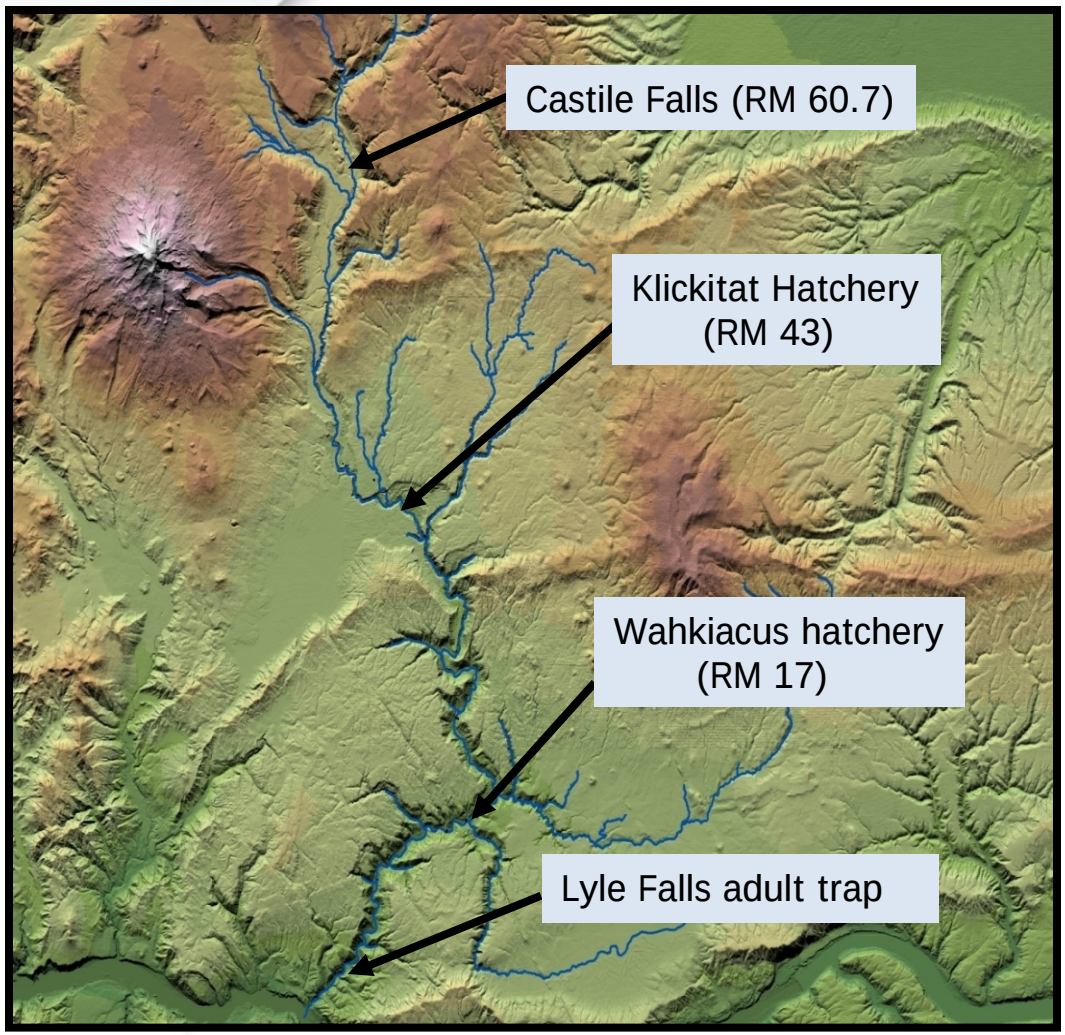
- Single population
- "Integrate" adult reproduction

Appropriate Conditions

- Conservation goals
- Suitable Habitat



KLICKITAT SUBBASIN HATCHERY PRODUCTION & REFORM EFFORTS



Spring Chinook

- 600K yearling smolt release (segregated)
- Integrated Program
- 800K yearling smolt release

Summer Steelhead

- 100K Skamania direct plants
- 130K from local brood
- 70K 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-yearling smolt from local brood

ALTERNATIVES

Alternative One (No Action Alternative)

- Maintain current levels of fish production by using existing facilities at Klickitat Hatchery and by continuing release of fish from out of basin hatcheries.

Alternative Two (Full Master Plan Build Out)

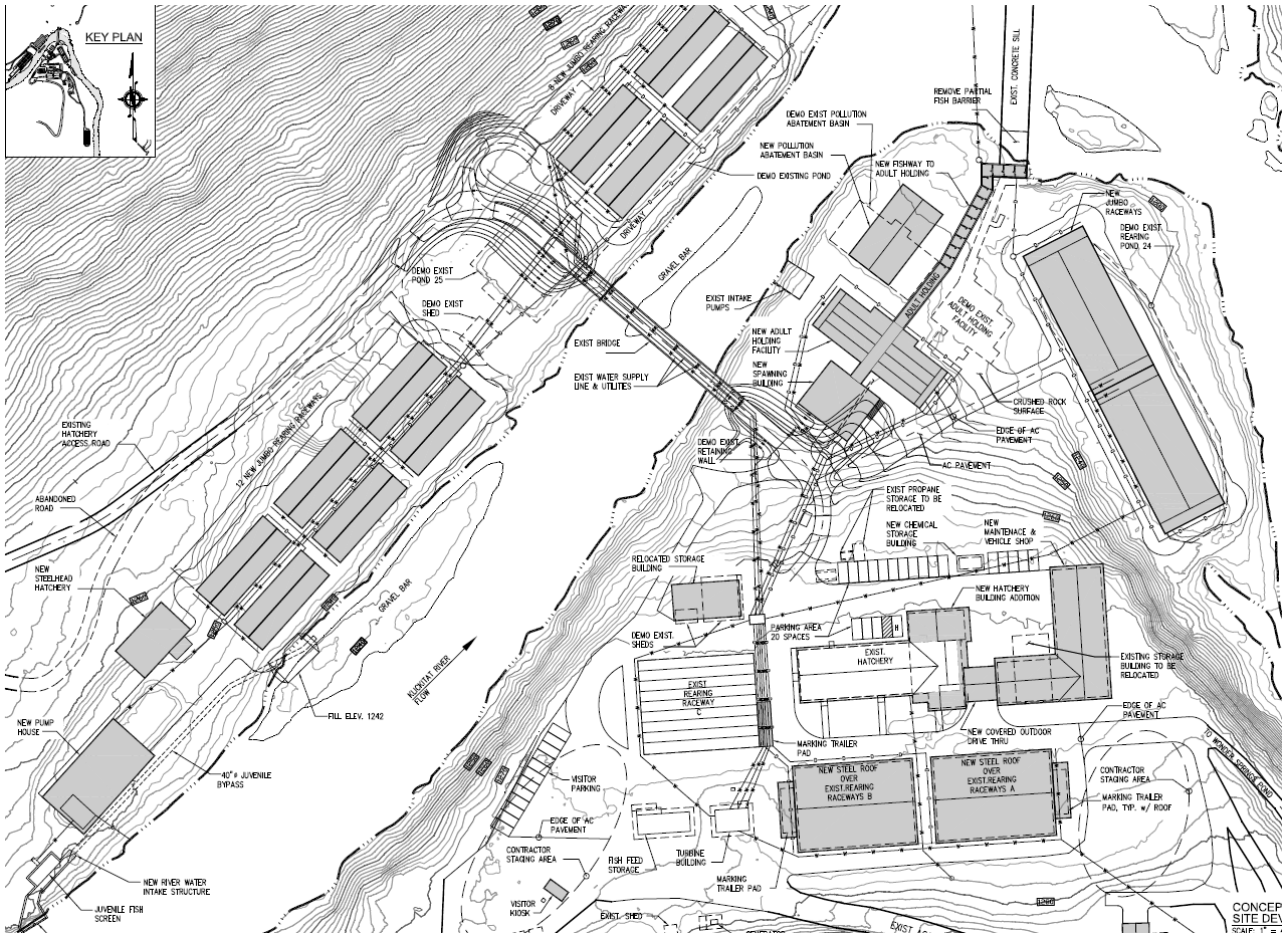
- Infrastructure improvements at Klickitat Hatchery.
- New hatchery construction at Wahkiacus for non-native fall Chinook and coho. Move release locations for fall Chinook and coho to the lower river.
- If needed, future acclimation site at McCreedy Creek for steelhead.

Alternative Three (Klickitat Hatchery Build Out)

- Infrastructure improvements at Klickitat Hatchery.
- No construction at Wahkiacus; continue releases of fall Chinook and coho at Klickitat Hatchery.
- If needed, future acclimation site at McCreedy Creek for steelhead.

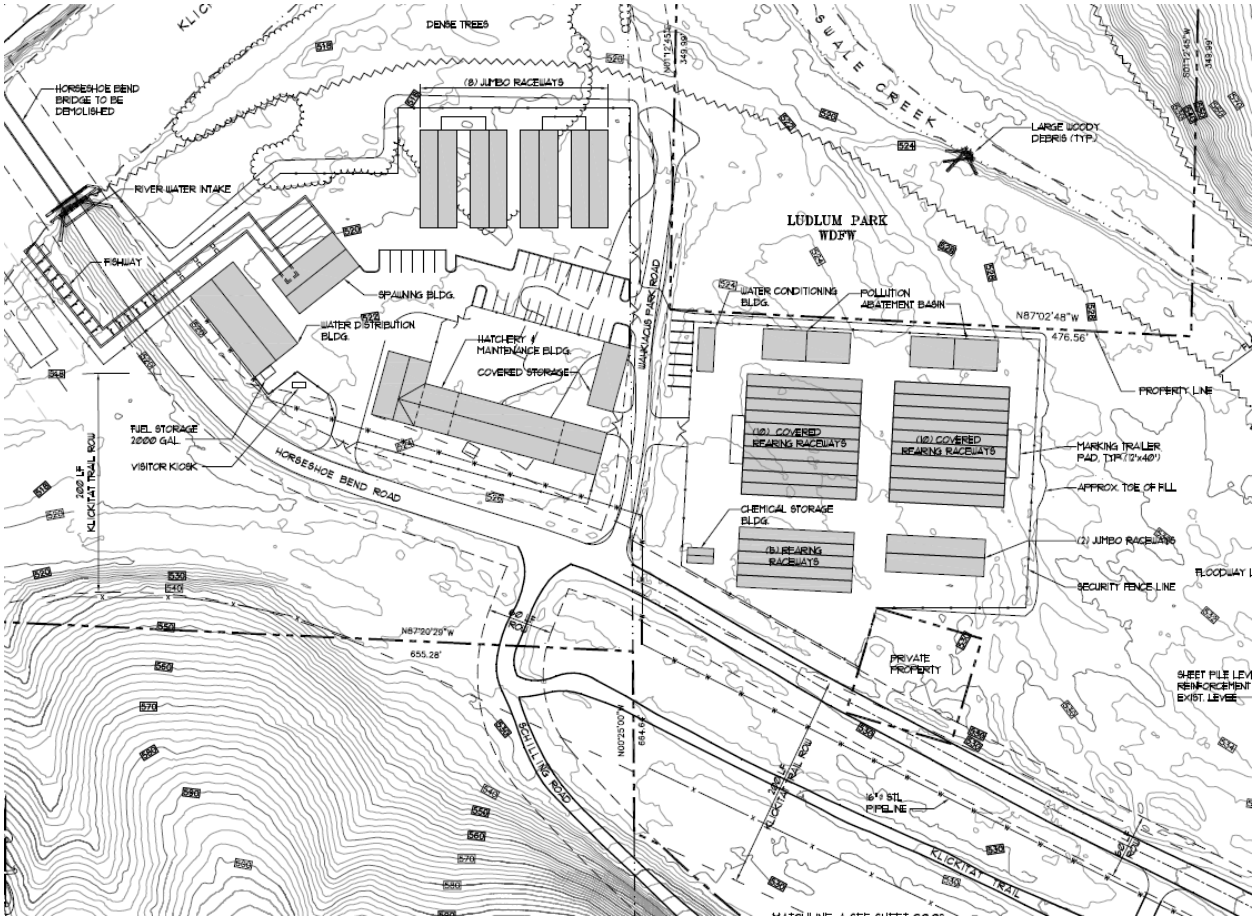
KLICKITAT HATCHERY
(Alternative 2 and 3)

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



WAHKIACUS HATCHERY
(Alternative 2)

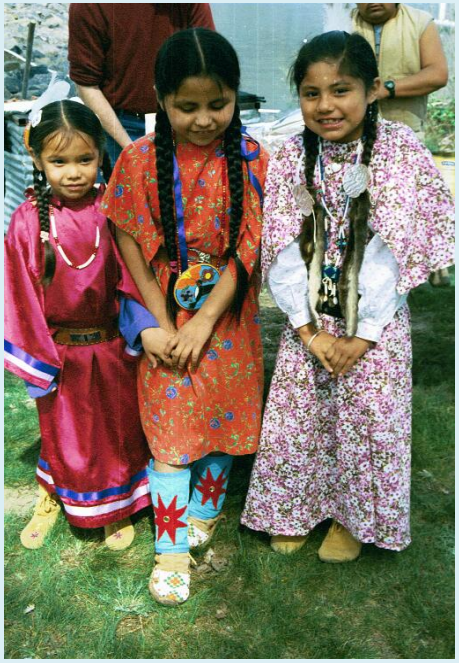
- Move harvest production stocks 26 miles downriver
- Free up water & space at Klickitat Hatchery
- Implement hatchery reform



MCCREEDY CREEK ACCLIMATION SITE
(Alternative 2 and 3)

- Summer Steelhead Conservation Program – if needed
- Access colonization above Castile Falls
- Located in prime spawning & rearing habitat

THE YAKAMA PEOPLE - KEEPING TRADITION ALIVE



ykfp.org/klickitat

IMPACT ANALYSIS

Fish and Fisheries

Alternative 1

- No In-water construction
- Continued effects to fish due to on-going operations

Alternative 2

- Effects to fish due to In-water construction
- Effects to fish due to proposed hatchery programs

Alternative 3

- Effects to fish due to In-water construction
- Effects to fish due to proposed hatchery programs

IMPACT ANALYSIS

Water Resources

Alternative 1

- No effects to groundwater, hydrology, water rights, water quality, or floodplains

Alternative 2

- Effects to water quality during in-water construction
- Reduced stream flow between intake and outfall
- Effects to water quality from effluent discharge at Wahkiacus and McCreedy

Alternative 3

- Effects to water quality during in-water construction
- Reduced stream flow between intake and outfall
- Effects to water quality from effluent discharge at McCreedy

IMPACT ANALYSIS

Wildlife, Wetlands, and Vegetation

Alternative 1

- No effect to the existing status of wildlife habitat and species

Alternative 2

- 5.9 acres of habitat removed during construction
- Effects to wildlife from construction noise
- Effects to species sensitive to human disturbance
- 0.29 acres of wetland would be affected at Wahkiacus

Alternative 3

- 3.7 acres of habitat removed during construction
- Effects to wildlife from construction noise
- Effects to species sensitive to human disturbance

IMPACT ANALYSIS

Recreation

Alternative 1

- Recreation resources and opportunities would continue at the present level

Alternative 2

- Effects to Klickitat Trail from construction
- Improved use of Klickitat River from partial removal of concrete sill
- Seasonal interruption of tribal use of McCreedy site

Alternative 3

- Improved use of Klickitat River from partial removal of concrete sill
- Seasonal interruption of tribal use of McCreedy site

PROJECT SCHEDULE

Draft EIS Public Meeting	August 10, 2011
Close of Draft EIS Public Comment Period	September 12, 2011
Final EIS that responds to questions and comments	February 2012