Klickitat Subbasin Fish Passage Facility Improvements to Support Hatchery Reform

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Presentation Outline:

Background

Castile Falls Fish Passage

Lyle Falls Fish Passage Facility

Klickitat Hatchery Bridge & Juvenile Transfer

Update and Timeline for Future Actions



Scientific Framework Guiding Klickitat Hatchery Reforms

Yakima/Klickitat Fisheries Project (1982):

Cle Elum Supplementation & Research Facility scientific findings used to reform Klickitat Hatchery production.

Hatchery Scientific Review Group:

Design and operate hatchery programs in a scientifically defensible manner.

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

Monitor, evaluate and adaptively manage hatchery programs.

Klickitat Hatchery - Facility Transition

- Transfer operation of Mitchell Act facilities from WDFW to the Yakama Nation.
- Castile Falls Fishways
- Lyle Falls Fishway
- Klickitat Hatchery



Yakama Nation Washington Department of Fish & Wildlife National Marine Fisheries Service



Klickitat Subbasin

Castile Falls (Rm 64.0)

Klickitat Hatchery (Rm 43.0)

Wahkiacus Hatchery (proposed) (Rm 17.0)

Lyle Falls Adult Trap (Rm 2.2)



Columbia Basin Fish Accords -Klickitat Subbasin

Capital Construction Projects:

- Castile Falls Monitoring Facility 85% complete
- Lyle Falls Passage & Monitoring Facility 70% complete
- Klickitat Hatchery Road/Bridge Complete

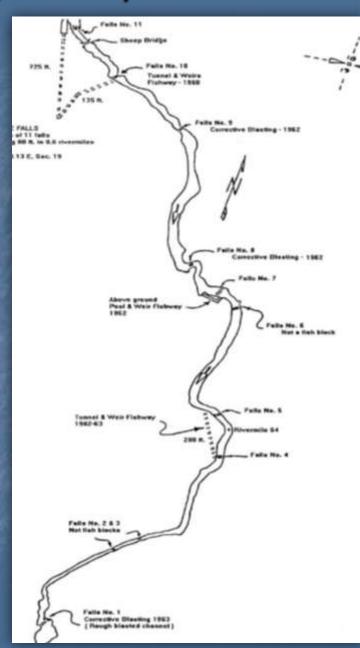
Castile Falls Monitoring Facility

Passage Improvements Completed

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

Monitoring Facility (Digital Imagery PIT Detection)

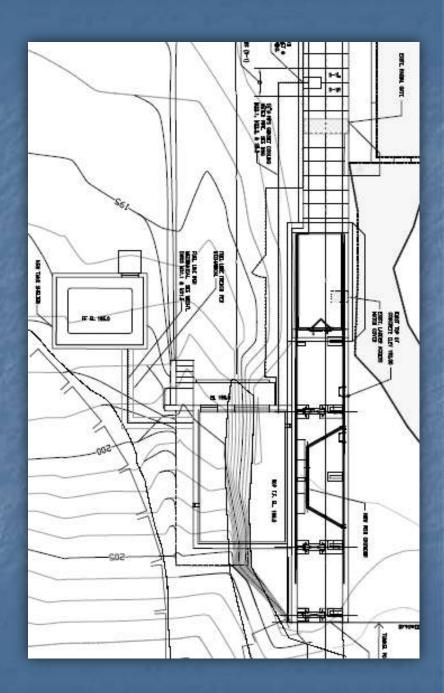




Castile Falls Monitoring Facility









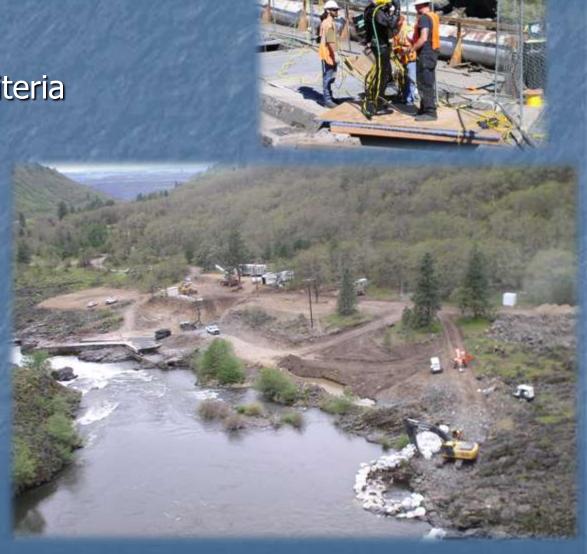






Lyle Falls Fishway #5 Passage & Monitoring Facility

- Construction Underway
- R,M&E Facility
- Meet NOAA passage criteria
- Brood collection
- Lamprey passage
- 90+ highly skilled jobs



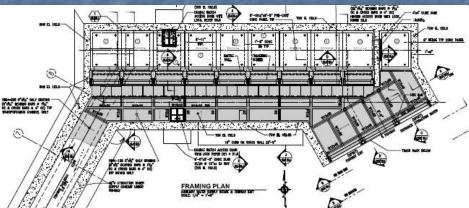


Fishway Exit & Water Intake

- Nine 10' Traveling Screens
- Hydraulically Driven
- High pressures wash
- HMI controls











- 350′ long
- PIT Detection Array
- 110 cfs Aux. Water



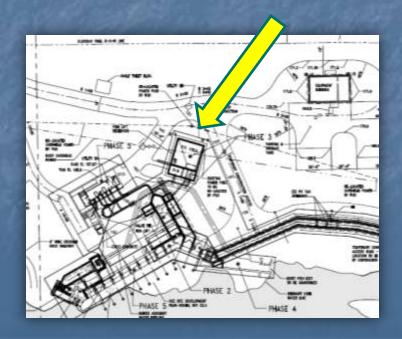
Fish Lift Reservoir

- 56,000 gallons
- 2 40 hp pumps







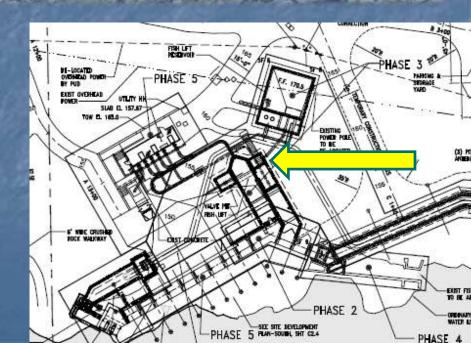


Fish Lift & Mechanical Crowder

- 20,000 gallons/lift
- ~ 10 minute fill time

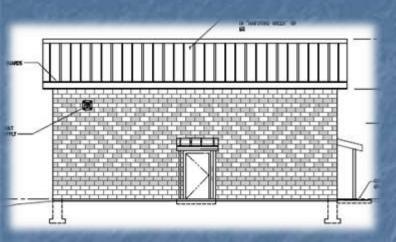






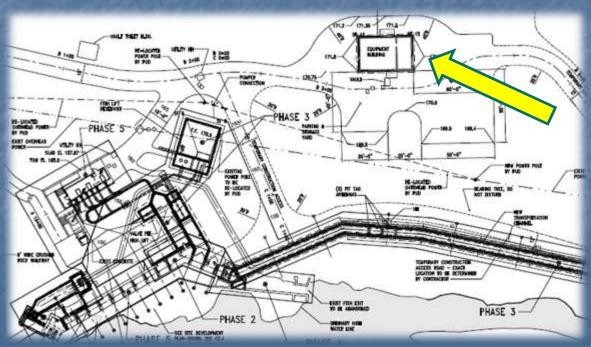
Fish Lift SEE SHEET A2.1 POR FOH LIFT ELFORNION FINISH GRADE 1"-0" POCKET GUIDE FOR BULNHEAD GATE POR COMME. SII DETAL 1/51.20, FOR LOCATION SEE SHEET A2.1 WALL BEYOND NEW CONSTRUCTION SY" P.C. COMC. DECK-TOP OF GRATING EL 152.0 FOCK EL WHES VERTICAL BAR SPATE 14"N ABULT CAPTURE RETURN FLUNE -ROCK EXCAVATION LINE CHAMBER EXESTING FF EL WAVES 137.50-137.00 FLOOR SEYOND -STRUCTURE NEAT LINE, TYP. FISH LOCK BEYOND SLIDE GATE SEE 57.0 5'-117/16" -16"# FISH LET SUPPLY PPE (BETWE) CECTION

Equipment Control Building

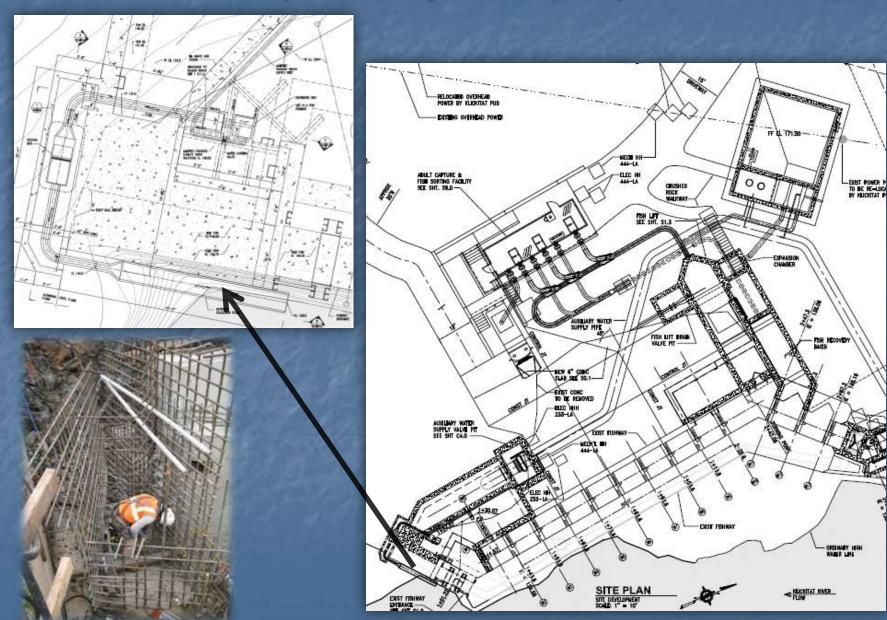








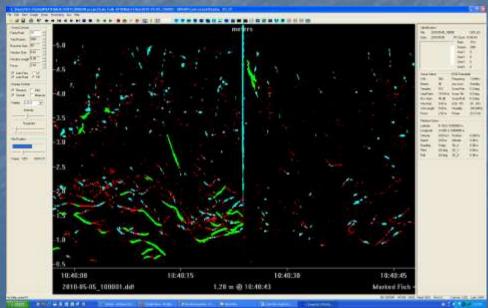
Adult Work Up Facility & Eelway









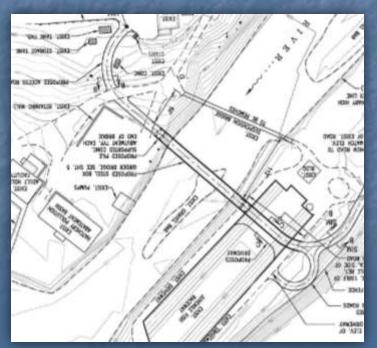


Hatchery Br. & Access Road

Water transmission line Emergency access Facilitate hatchery expansion







Hatchery Br. & Access Road

- 165 ft. single span
- steel box girder
- 80 ton
- 300 ton capacity crane
- 30 highly skilled jobs





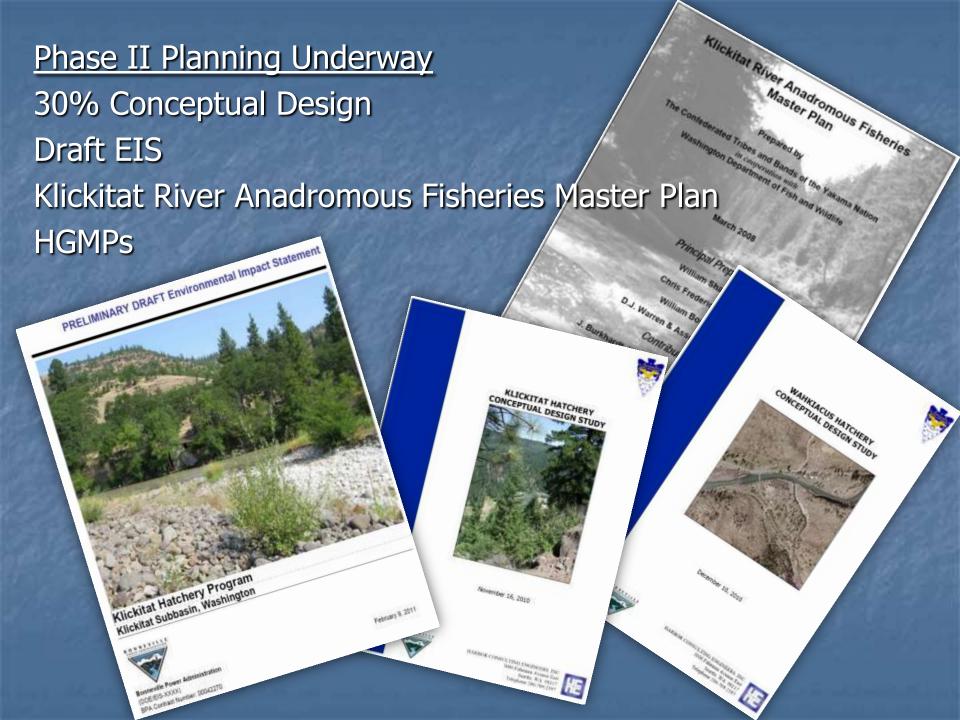












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Wahkiacus Hatchery 30% Conceptual Design

Key to Hatchery Reform, "Free up" 26 miles of quality spawning/rearing habitat



Klickitat Hatchery 30% Conceptual Design



Questions ykfp.org/klickitat

Project Funding:
BPA
NOAA
Yakama Nation

