Confederated Tribes of the Warm
Springs Reservation of Oregon

Habitat Restoration within the Ceded lands of The Confederated Tribes of the Warm Springs Reservation of Oregon

River Restoration Northwest 2009

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Presentation Outline

- Brief overview of Tribal history
- Define Ceded lands and Treaty of 1855
- Discuss Ceded lands habitat objectives
- Present our strategy to achieve these objectives
- The climate change slide
- Present one specific example of this strategy in action in the John Day Basin.
  - Conservation property management
  - Restoration on private lands
    - Coming up next

Tribal History

- The Confederated Tribes of the Warm Springs consist of three different tribal groups
  - Wasco
  - Warm Springs
    - Lived along the Columbia and Cascade Mountains
  - Paiutes
    - Lived throughout the vast plateaus of southeastern Oregon

Over the centuries the three Tribes developed an extensive economic network that centered on Mid-Columbia region which depended on the Columbia River and its resources, particularly salmon.

Treaty of 1855

- Established the Warm Springs Reservation ~600,000 acres for exclusive use and management

- Treaty was not a granting of rights, but rather a reservation of rights by the Tribes
  - Reserved exclusive use rights to all Reservation lands

- Ceded or (relinquished) the ownership of 10 million acres of ancestral lands to the United States
  - The Tribes retained the right to harvest fish, wildlife, and cultural plants along with the right to pasture livestock within these lands.

  - Also retained the right to co-management of the resources within these Ceded lands

The Confederated Tribes of Warm Springs - Ceded Lands

Our rights and privileges secured to us from the Treaty of 1855 are as follows:
"Provided also, that the exclusive right of taking fish in the streams running through and bordering said reservation is hereby secured to said Indians; and at all other Usual and Accustomed Stations, in common with citizens of the United States, and of erecting suitable houses for curing the same; also the privilege of hunting, gathering roots and berries and pasturing their stock on unclaimed lands, in common with citizens, is secured to them."

Ceded lands boundary description from the Treaty of 1855 as follows: Commencing in the middle of the Columbia River, at the Cascade Falls, and running thence southerly to the summit of the Cascade Mountains; thence along said summit to the forty-fourth parallel of north latitude; thence east on that parallel to the summit of the Blue Mountains, or the western boundary of the Sho-sho-ne or Snake country; thence northerly along that summit to a point due east from the headwaters of Willow creek; thence west to the headwaters of said creek; thence down said stream to its junction with the Columbia River; and thence down the channel of the Columbia River to the place of beginning.

Pine Creek Conservation Area, Oxbow, Middle Fork and John Forrest are mitigation Lands managed for the benefit of fish and wildlife habitat.

Multiple sources have been used to generate this map. The sources may vary in accuracy, origin, extent and date collection methods. This map is for display purposes and is not intended for use as a legal document.

Columbia River

NORTH FORK JOHN DAY

LOWER JOHN DAY

MIDDLE FORK JOHN DAY

UPPER JOHN DAY

Pine Creek Ranch

Oxbow

Middle Fork

John Forrest

CEDED LANDS

10 5 0 10 Miles

1:300,000

Ceded Lands

Oregon

Tribal Ceded Lands Habitat Objectives

- Protect and enhance habitat for all culturally significant Tribal resources
  - Recovery to sustainable harvest levels
- Ensure Tribal membership has access to these resources
- Promote and restore diversity and sustainability
  - Ecological process
- Foster partnerships with private landowners, co-managers and resource managers to achieve greater results.

Strategy

How will we achieve these objectives

- Actively participate in planning and management activities that affect culturally significant resources or access to the resources.
  - Regional salmon, steelhead and lamprey recovery planning
  - USFS planning at the Forest and Project Level
  - Wild and Scenic River Management Plans
  - Federal Land Exchanges
  - Assist in the development of conservation planning with the State, Counties and Irrigation Districts.

- Acquire and manage conservation properties that have high restoration and recovery values
  - Integrate ecological process and function into restoration designs
  - Demonstrate that both agricultural and conservation values can be managed in harmony with minimal economic impact

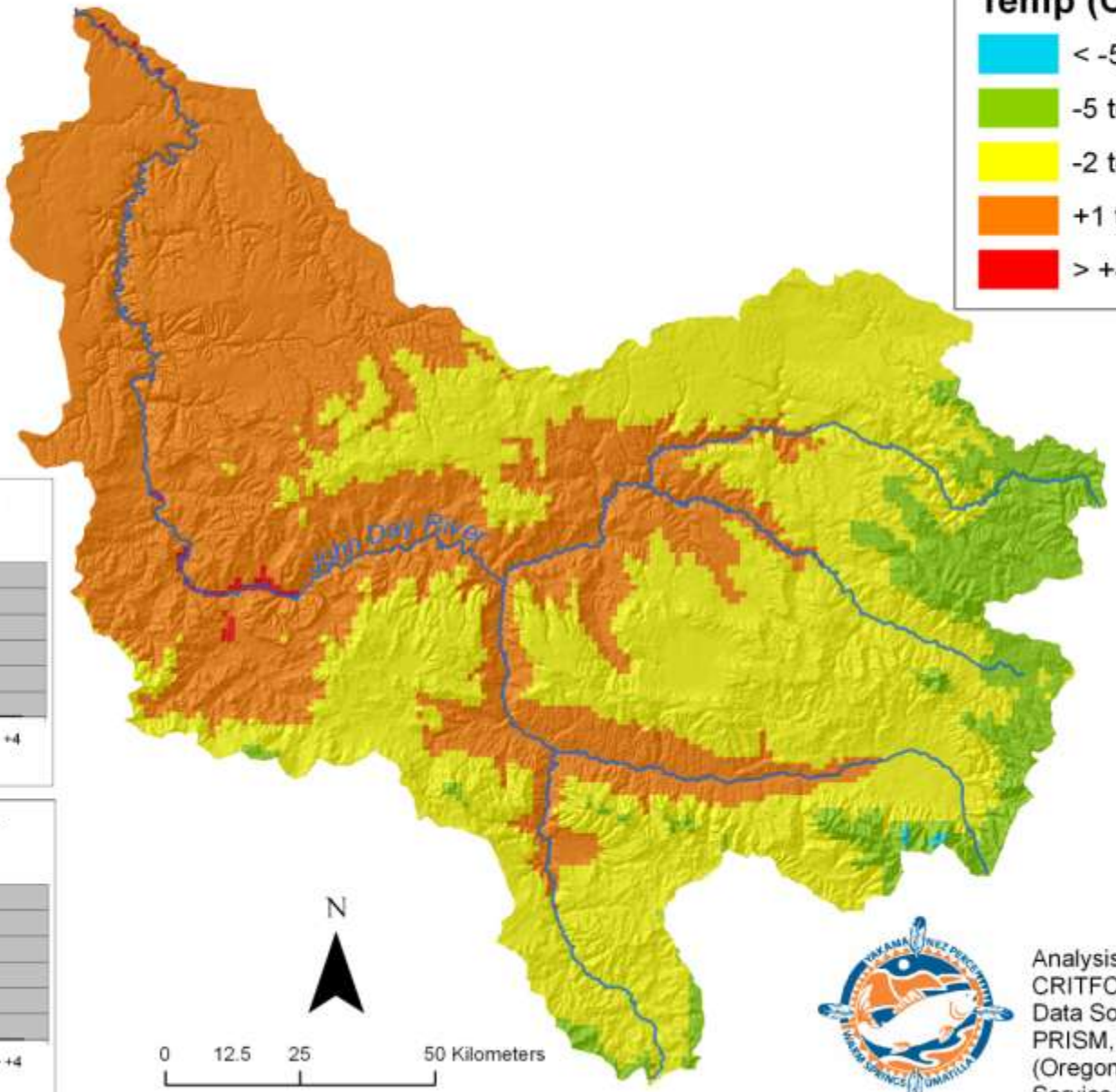
- Work with private landowners
  - Improve irrigation efficiency
  - Ensure fish passage
  - Riparian protection
  - Instream habitat projects
  - Livestock management
  - Upland health

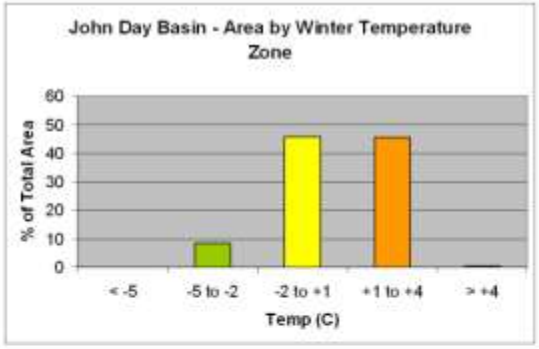
John Day River Subbasin

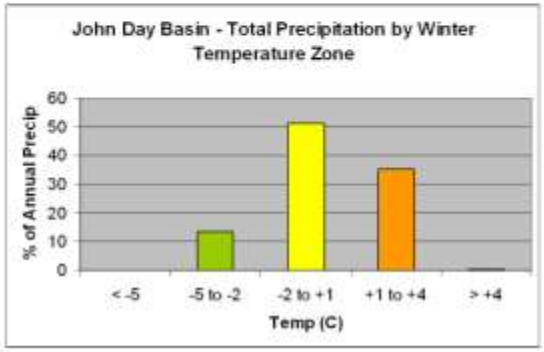
- Second longest undammed river in the United States (lower 48)
- Rural watershed: Size 8,000 sq. mi., Population <8,000
- No Fish Hatcheries (Managed for wild salmonids)
- Contains wild spring Chinook Salmon, summer steelhead/redband trout
  - Pacific lamprey
  - westslope cutthroat trout, and bull trout
  - all three native mussel species

John Day River Basin
Mean Winter (Nov-Mar) Temperatures (1971-2000)

Areas shown in yellow are likely most at risk for loss of snowpack from near-term climate change.







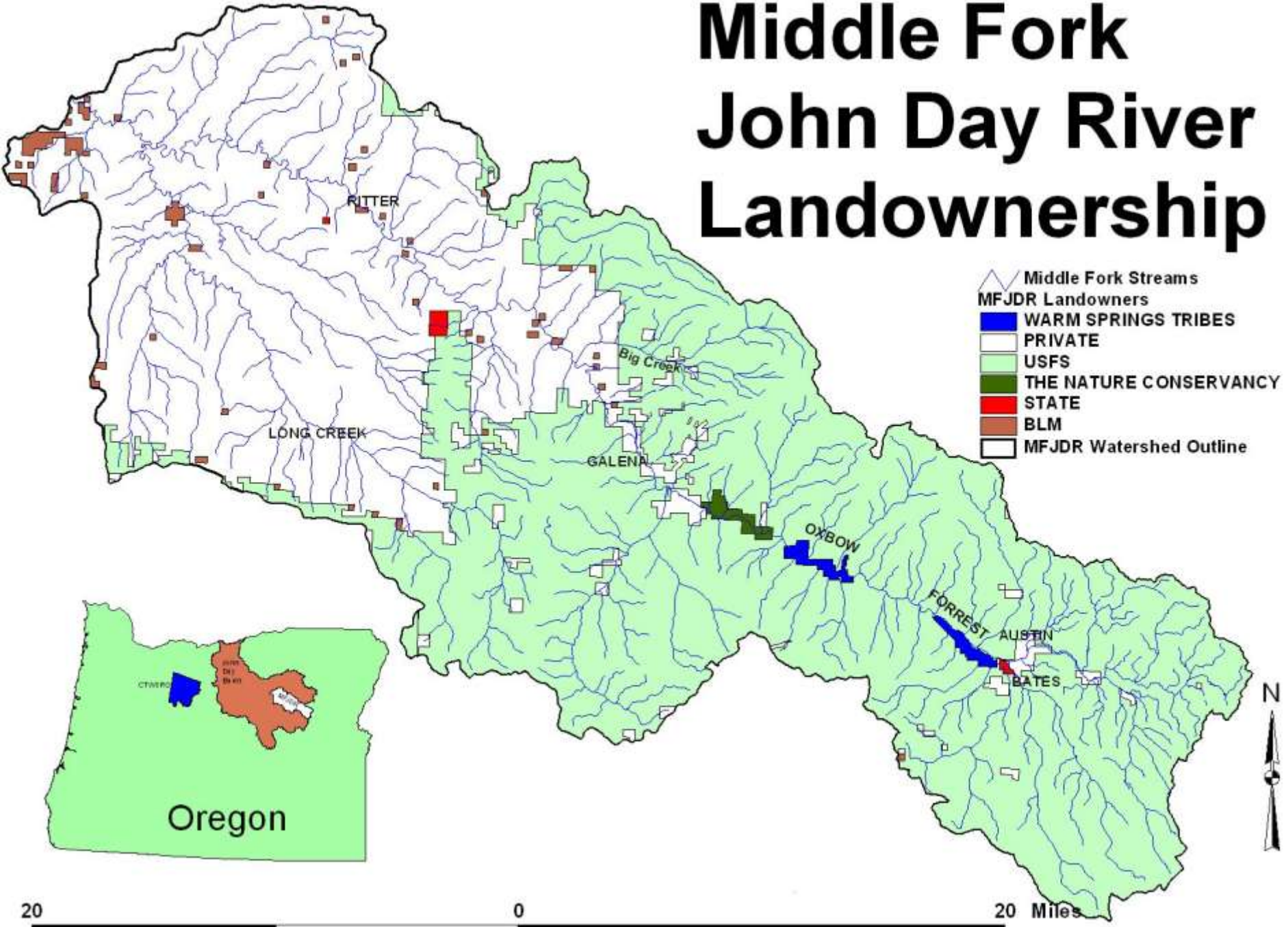
Analysis by CRITFC
Data Source: PRISM, 2007 (Oregon Climate Service Group)

The Middle Fork represents one of the best opportunities in wild salmonid population recovery efforts

Middle Fork John Day River

- Target Species:
  - Spring Chinook Salmon
  - Mid-Columbia Summer Steelhead (ESA – Threatened)
  - Bull trout (ESA – Threatened)
- No major irrigation withdrawals threatening flow
- Unique landownership in critical habitat areas
- Intensive momentum in habitat protection and recovery

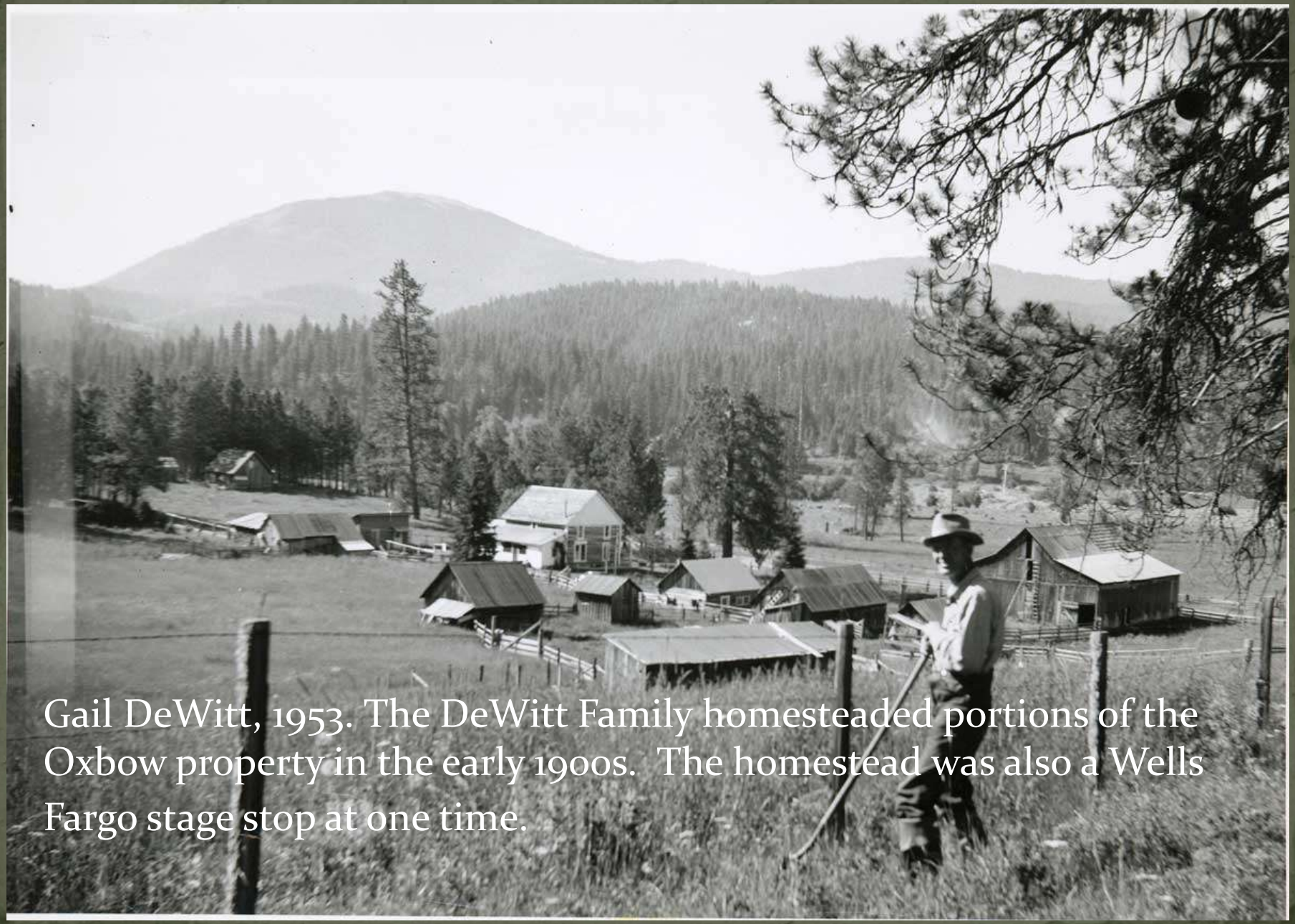
Middle Fork John Day River Landownership



Tribal Conservation Areas

- Bonneville Power Administration funded
- Acquired for anadromous fish critical habitat values
- Habitat in marginal quality after decades of over-grazing, land clearing, logging, and mining activities
- Limiting factors include water temperature, lack of riparian habitat, lack of instream habitat
- Tribes have recognized these MFJD River properties of vast importance, so. . .

. . . *Restoration!*



Gail DeWitt, 1953. The DeWitt Family homesteaded portions of the Oxbow property in the early 1900s. The homestead was also a Wells Fargo stage stop at one time.

Chinook Salmon Spawning

Year	Oxbow Redds	OCA % of River	Forrest Redds	FCA % of River	Total Redds on MFJD
2008	20	11.8%	59	34.9%	169
2007	18	21.2%	41	48.2%	85
2006	23	11.6%	89	44.7%	199
2005	19	10.7%	75	42.1%	178
2004	39	12.2%	105	23.8%	319
2003	39	16.5%	141	44.5%	236
2002	35	9.0%	104	36.2%	389
2001	47	13.3%	162	29.4%	354
Averages	30	13.2%	97	38.0%	251.4

Property Management Goals

Enhancing the aquatic habitat is a primary goal.

Demonstrating that agricultural and conservation values can be managed in harmony is a key element in our strategy.

Enhancement Projects to Date

- Various fencing, planting, irrigation, grazing, and screening efforts.
- Management of properties is focused on habitat enhancement and protection.

RESTORATION

CREP

CONSERVATION RESERVE ENHANCEMENT PROGRAM

- ~250 acres of riparian enrolled/protected via riparian fencing
- Provided funding for 72,000 trees and shrubs

Check out our poster on plant survival

CREP (con't.)

- Thorough monitoring
- Heavy ungulate browse supression

Dead Cow Gulch Project – 2007/2008

Eliminated a fish passage barrier opening up 1.5 miles of habitat

Used a remnant channel to create over a quarter mile of additional habitat

Dead Cow Gulch Project – Con't.

Placer to Davis Project - 2008

Rock Barb Removal (Before & After)

Large Woody Debris Structures

Post-Project Fish Use Comparison

Placer to Davis Snorkel Surveys	Aug. 29, 2006 – All Pools within restoration reach, mean temp ~66.2°F	Aug. 1, 2008 – 17 constructed LWD sites only, mean temp. ~60.6°F
Chinook salmon parr	13	39
O. mykiss (<6”) Steelhead/trout parr	9	28
O. mykiss (>6”) Redband trout	4	10

Future Restoration . . .

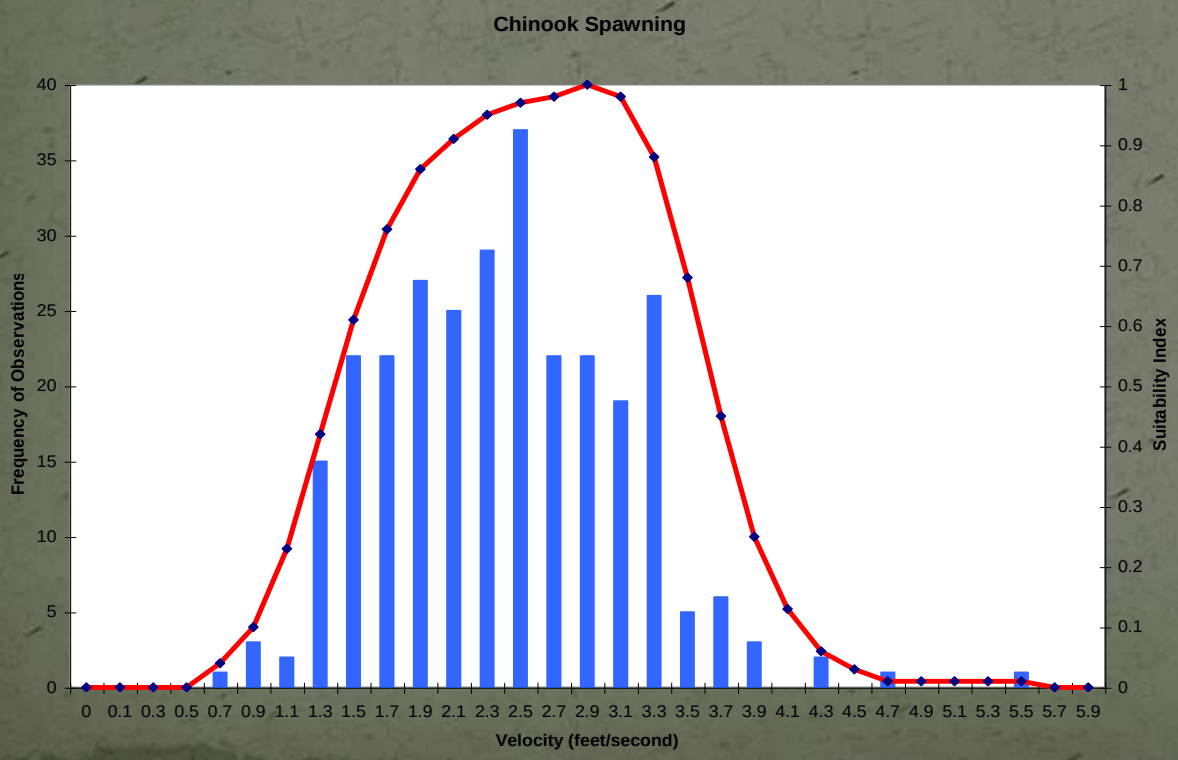
Habitat?

How does a biologist characterize habitat for an engineer?

HSC Habitat Suitability Criteria

Represent how suitable a particular gradient of depth, velocity, substrate, cover, etc is to a target species and life stage.

Fall Chinook spawning



Frequency distribution of velocity observations

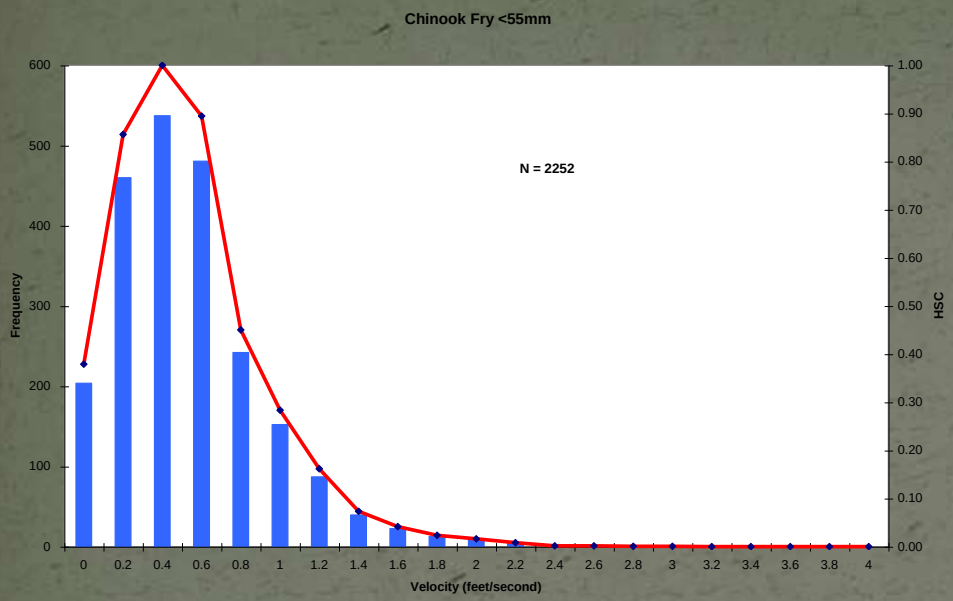
1.5-3.5 ft/sec

from

Dr . Tom Hardy

Klamath Flow Study 2001

Chinook Fry <55mm

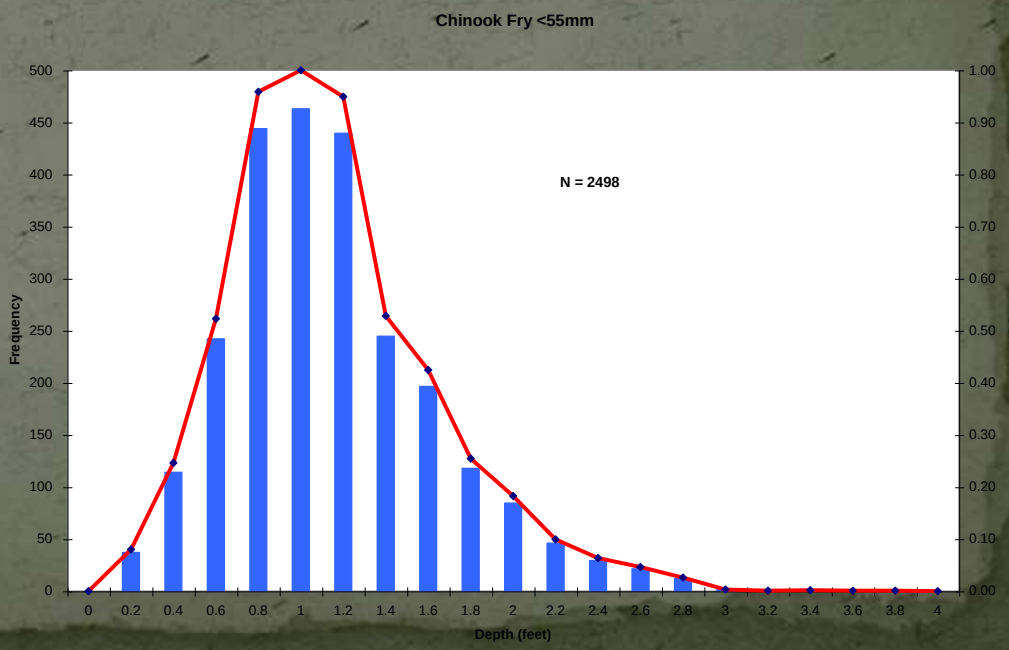


Velocity distributions

0-1.2 ft/sec

Depth observations

0.5-1.5 ft

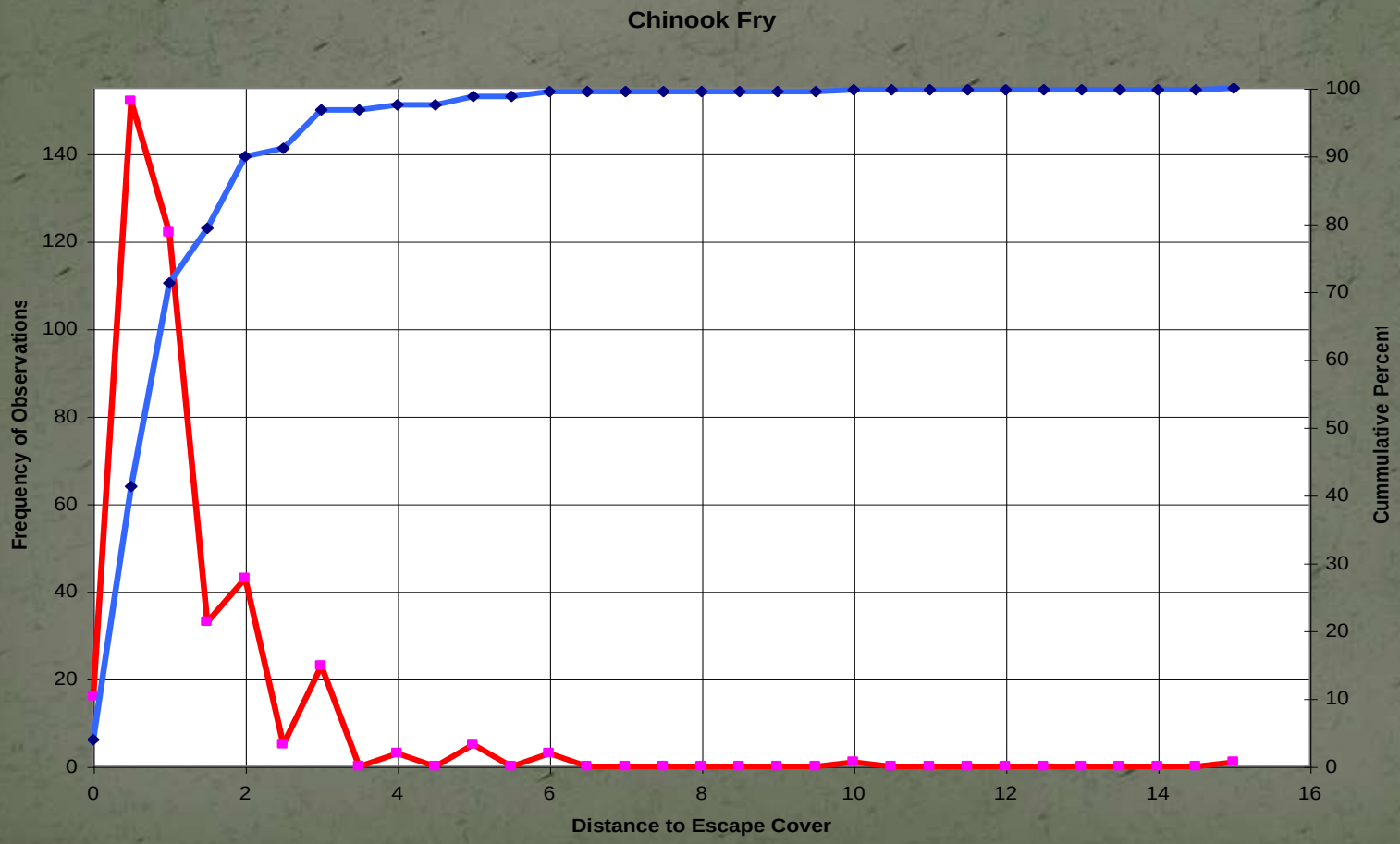


Cover

Observations based on distance to cover

Cumulative percentage (blue)

less than 2 feet



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Identified Projects

Oxbow property

- Beaver to Ragged Reach Instream Habitat - 2009
  - Similar to Placer to Davis, 0.5-mile, install 15 log jams, remove 34 rock barbs

Bureau of Reclamation staff from Boise and Denver are completing the design for these projects

Future Projects (continued)

- Oxbow Tailings Channel Restoration – Start 2010
  - Likely phased over 2+ years, 1.5 miles of river
    - Currently split into two channels
  - Severely degraded habitat, channel construction planned currently working on design.
    - Three major creeks enter the river through this reach

Future Projects (continued)

Forrest property

- Forrest Floodplain Re-connect 2011-2012?
  - Historic railroad grade bisects the valley

Monitoring

Partners with Intensively Monitored Watershed (ISEMP/NOAA)

Property scale status and trend monitoring

Watershed scale fish population monitoring

Dr John Selker at OSU is using fiber optic to define the role ground water has on water temperatures

Conclusions

- Exciting times for the Tribes and Fish on the Middle Fork John Day River
  - "Accords MOA" with BPA is providing additional funds for program and project expansion
  - Starting to see results with our initial projects
  - Interdisciplinary Team formed for our restoration design development
  - Monitoring in place to measure results
  - Great staff in place determined to obtain results

Questions?