

# **Wy-Kan-Ush-Mi Wa-Kish-Wit: How Indigenous Knowledge Has Shaped Modern Fisheries Management in the Columbia River**

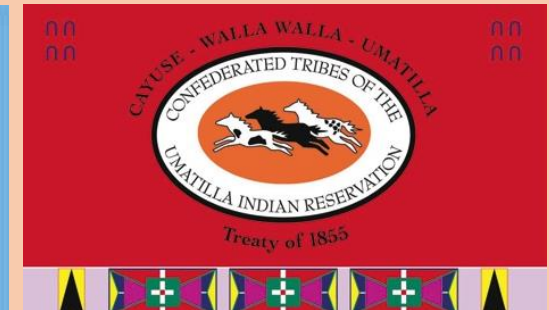
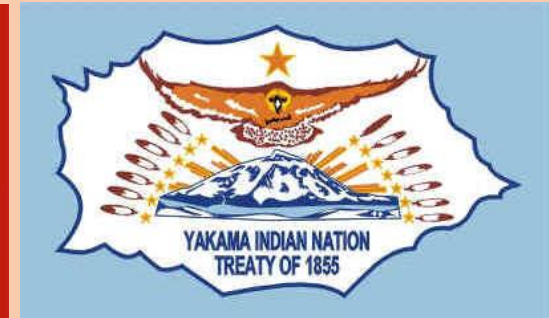
**Zachary Penney, Paul Lumley, & Aja DeCoteau**  
**Columbia River Inter-Tribal Fish Commission (CRITFC)**

**2015 American Fisheries Society Conference**  
**Portland, Oregon**



# Who is CRITFC?

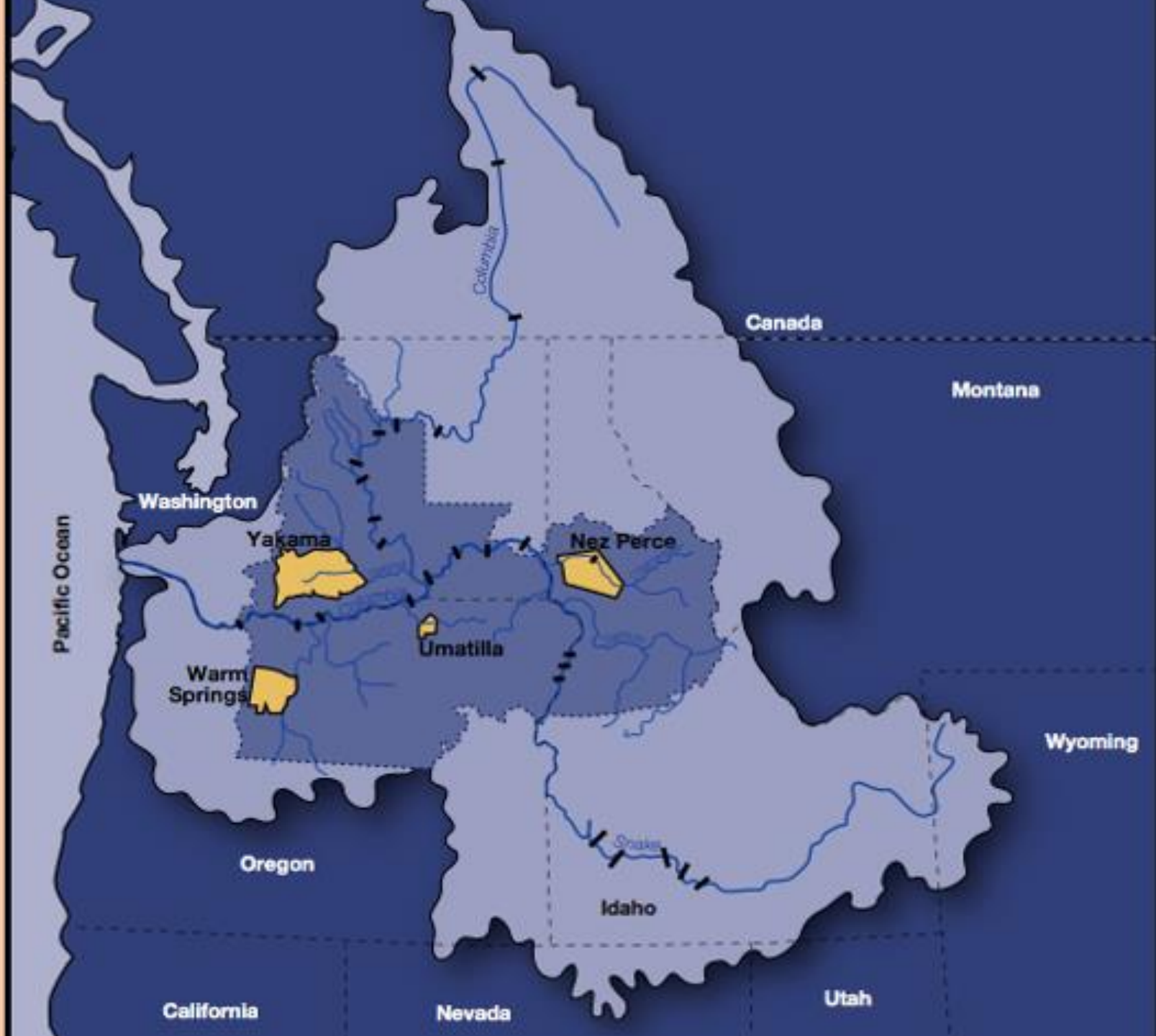
- **Formed in 1977**
- **Confederated Tribes of the Yakama**
- **Nez Perce Tribe**
- **Confederated Tribes of the Umatilla**
- **Confederated Tribes of Warm Springs**





## **CRITFC Mission Statement:**

To ensure a unified voice in the overall management of the fishery resources, & as managers, to protect reserved treaty rights through the exercise of the inherent sovereign powers of the tribes



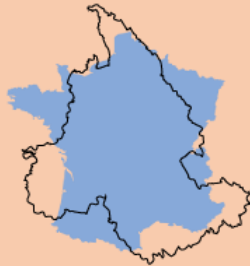


# Columbia River Basin

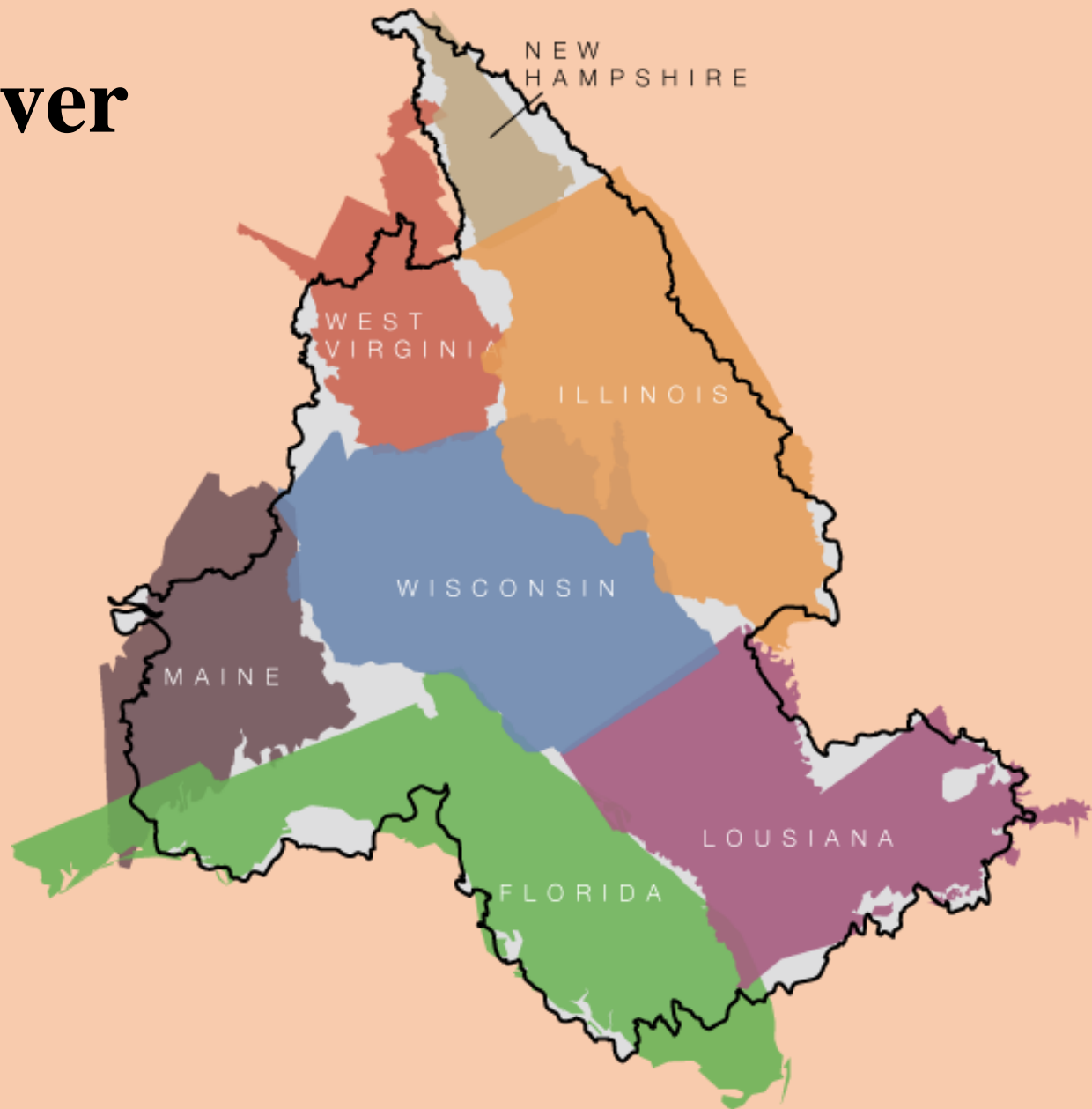
Columbia River basin  
165 million acres



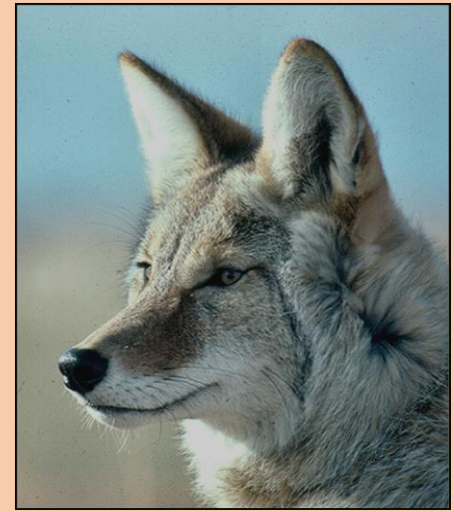
Texas  
172 million acres



France  
159 million acres



# First foods



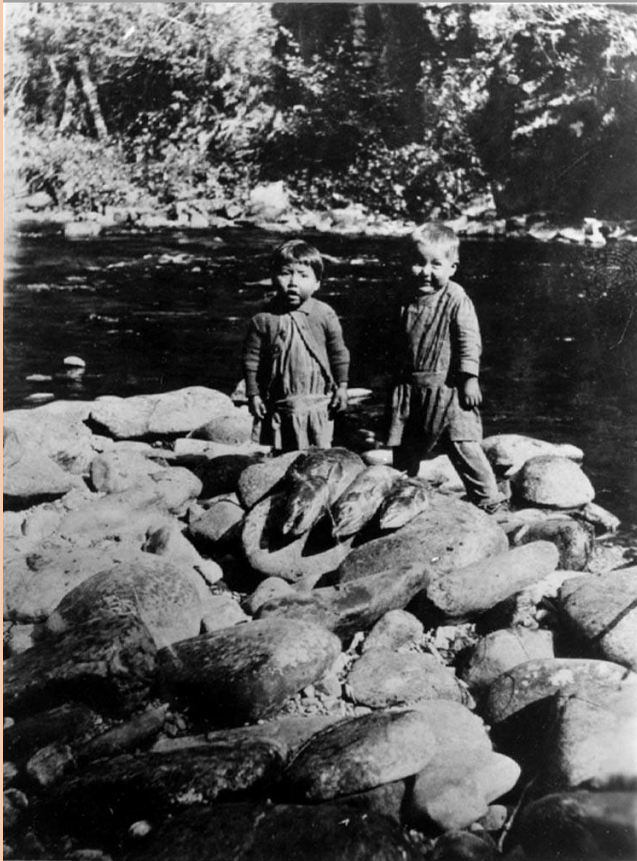




**Tribal elders taught us that if we take care of the salmon, the salmon will take care of us.**

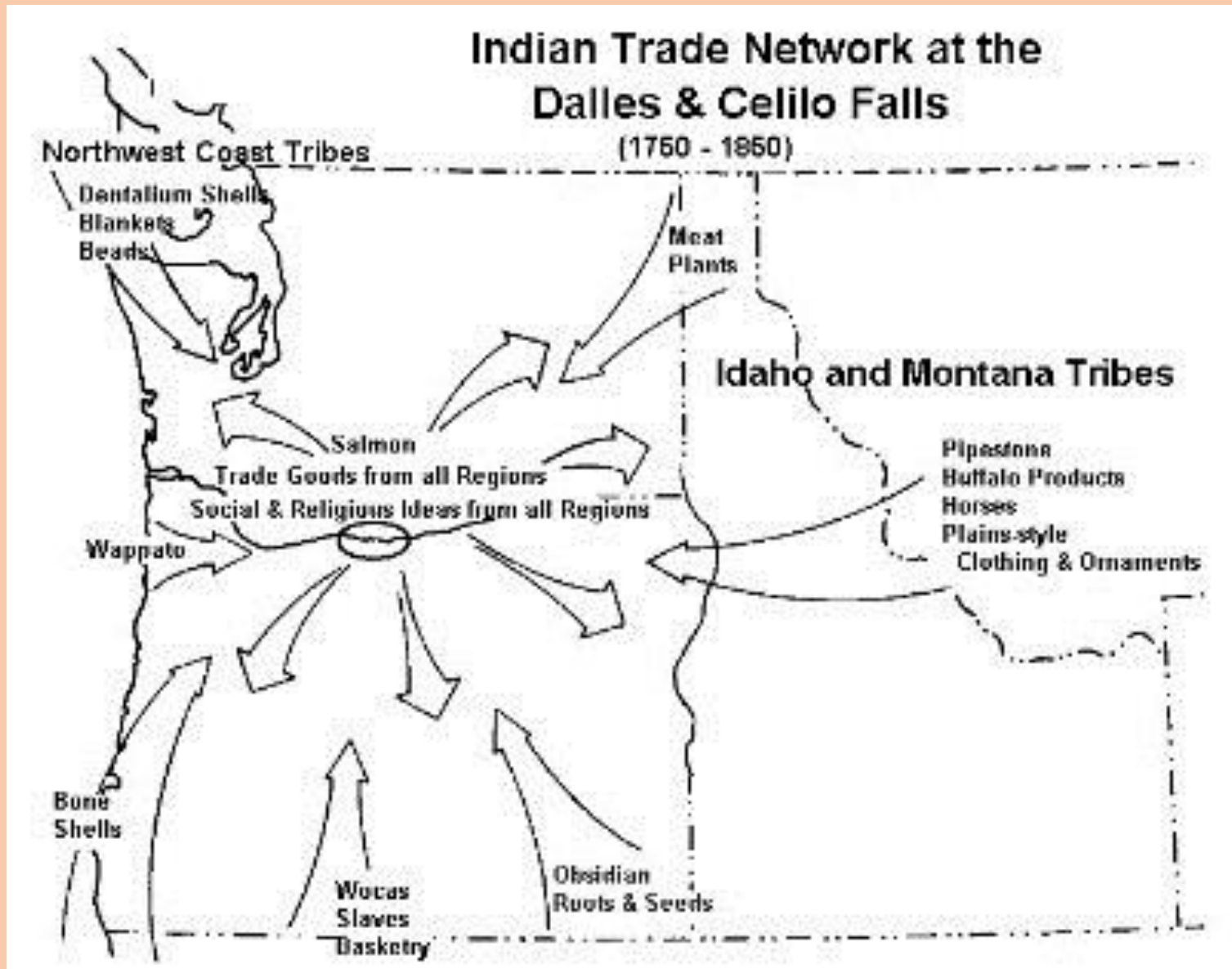


# Fishery resources are central to tribal culture

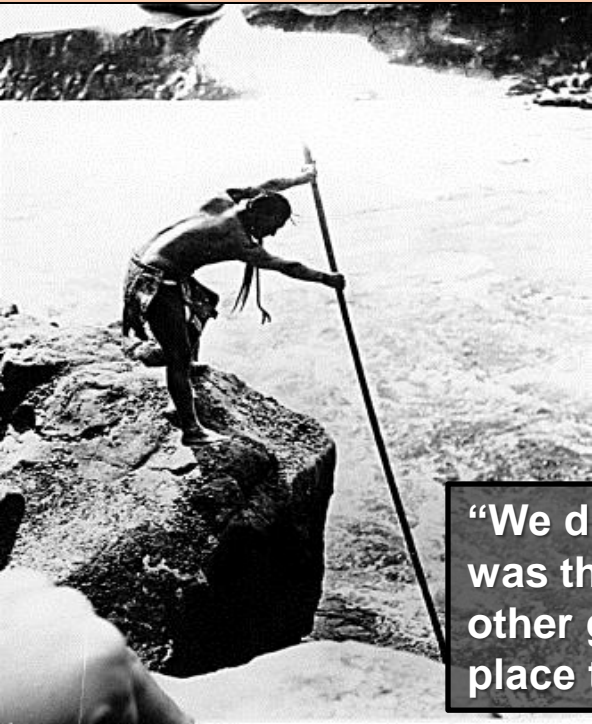




# Celilo Falls



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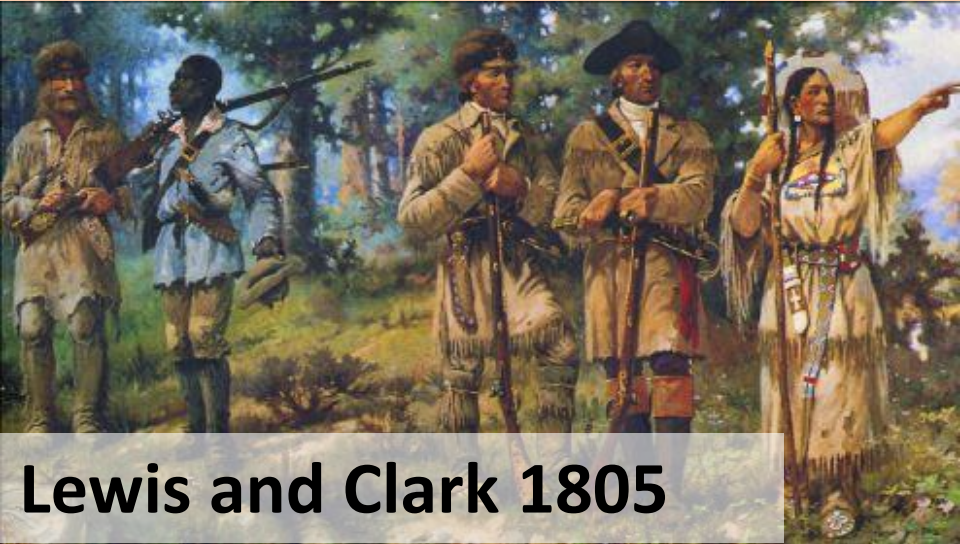


“We didn’t just go to Celilo to catch fish. Celilo was the place to be with your relatives, trade for other goods, to play games, and it was a good place to find a mate.”(Leroy Seth, Nez Perce)

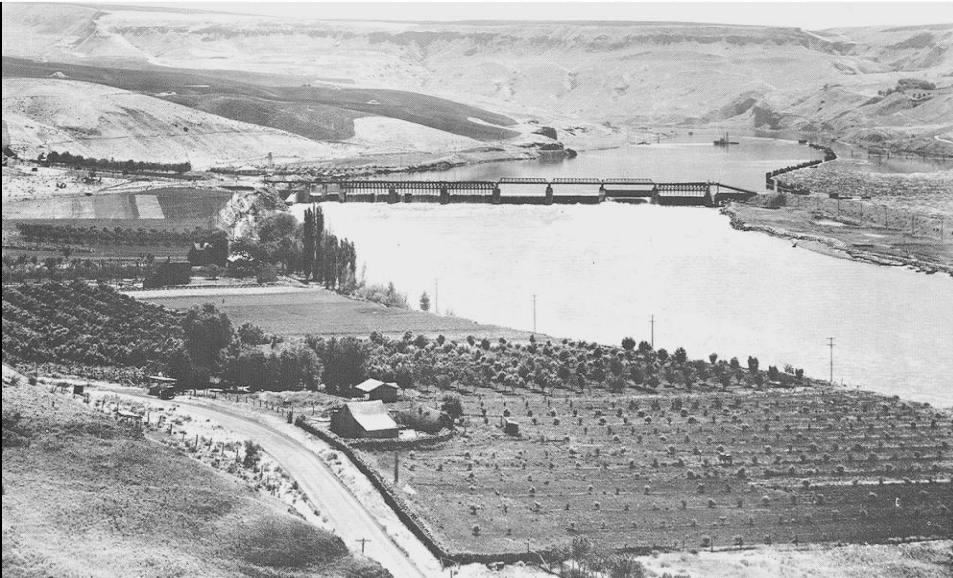
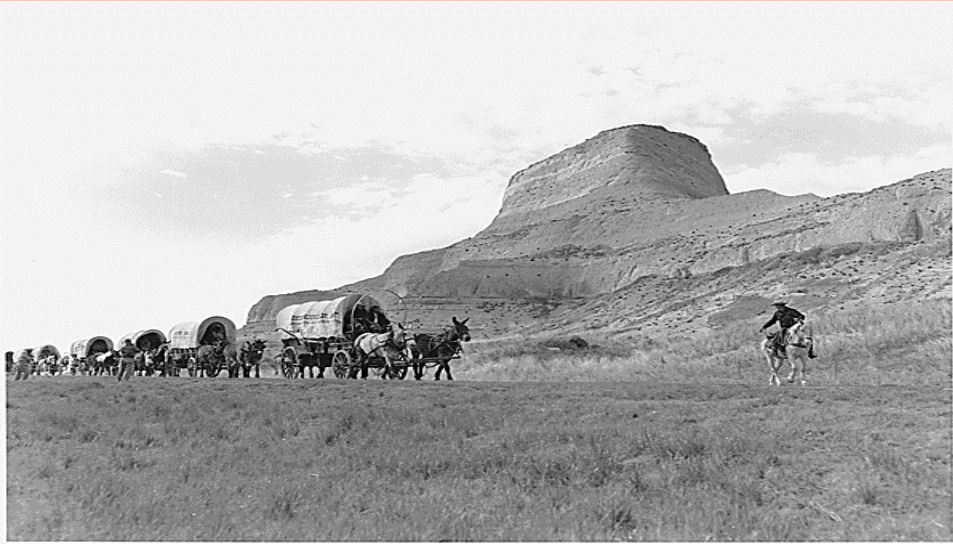




# Arrival of Euro-Americans

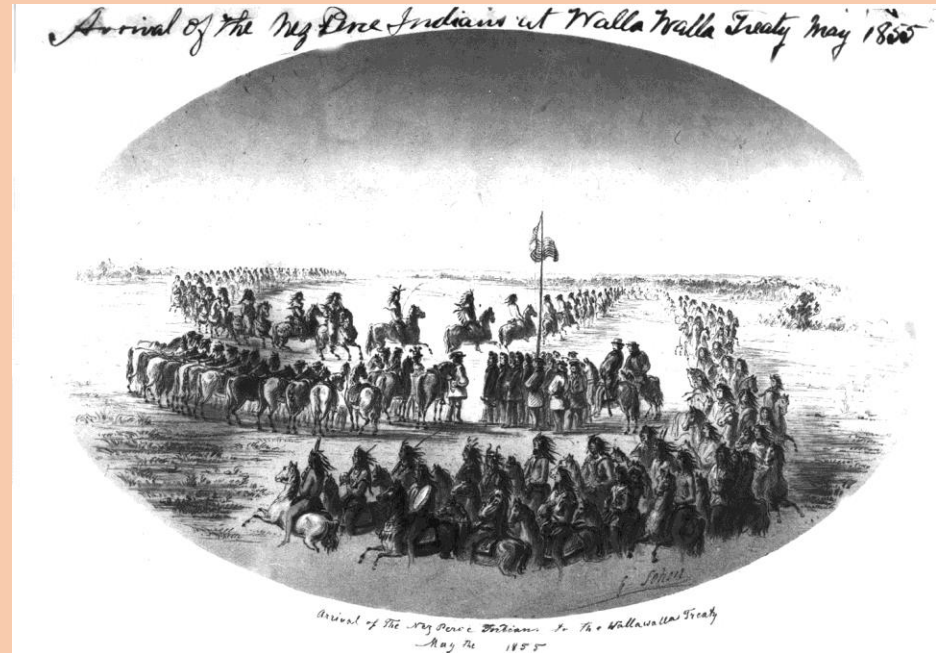


Lewis and Clark 1805



# Columbia River Treaties 1855

- Nez Perce, Walla Walla, Cayuse, Umatilla, Yakama, & Middle Oregon Tribes signed treaties with U.S. Government
- Ceded most of their lands
- Retained the “right to hunt & fish at all usual & accustomed fishing places....”



**Treaty:** legally binding contracts between sovereign nations that established those nations' political and property relations. Article 6 of the U.S. Constitution holds treaties “are the supreme law of the land.”



# Four Tribes' ceded lands

**Combined, the land comprising this ceded area:**

- **66,591 square miles**
- **More than 25% of the entire Columbia Basin**
- **55% of the rivers & streams that are still accessible to salmon**
- **Includes almost all of the salmon habitat above Bonneville Dam**



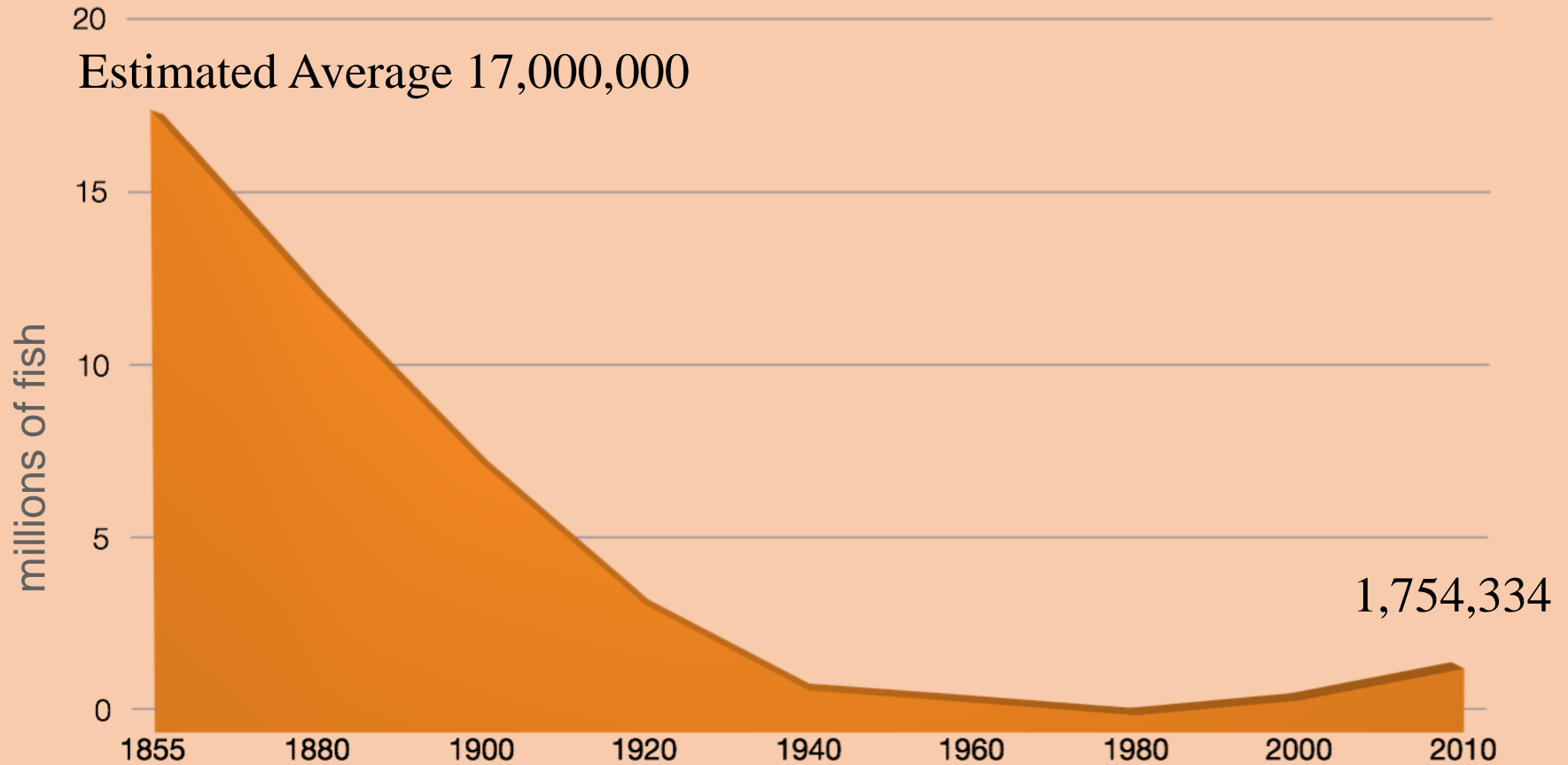
# **Broken promises, war, termination & assimilation**



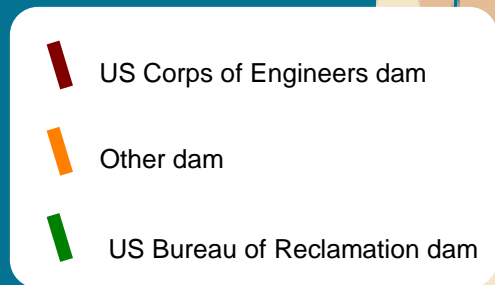


# Salmon decline

**Returning Columbia River salmon (chinook, steelhead, sockeye, coho)**



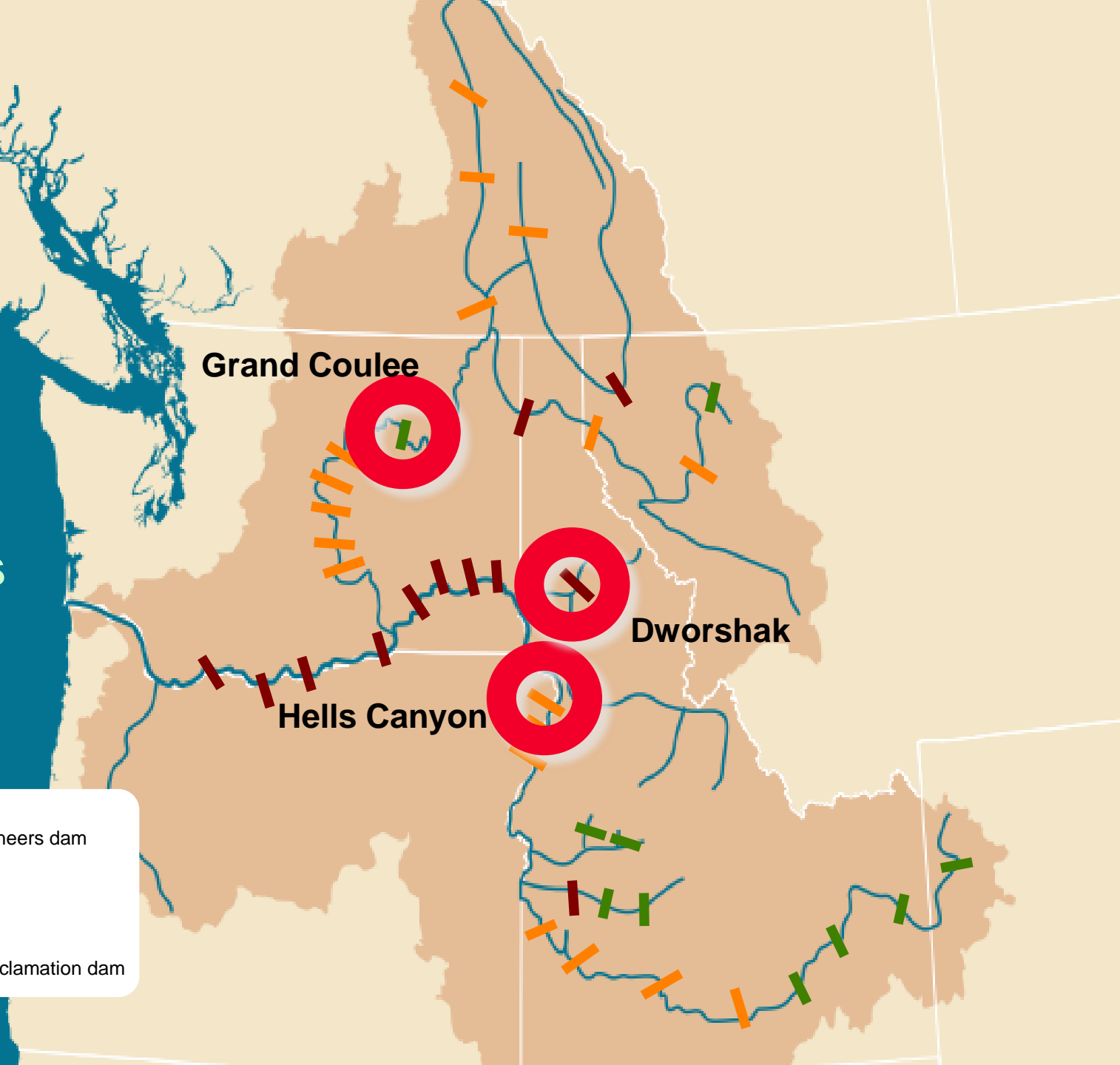
# Primary Salmon Passage Blockages



Grand Coulee

Dworshak

Hells Canyon





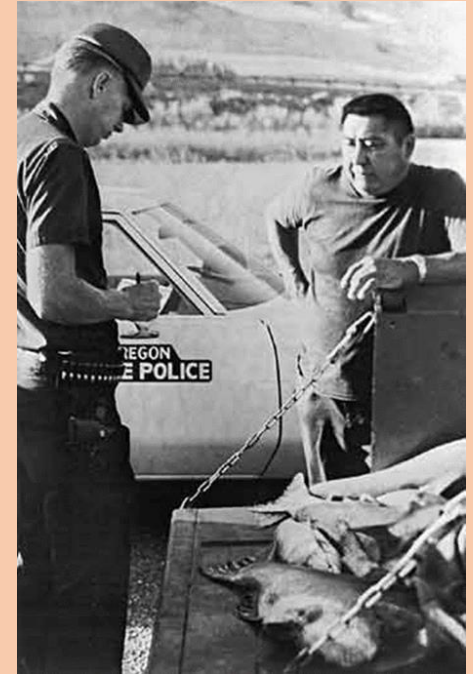


# **Celilo Falls tribal fishery**

On the Columbia River near The Dalles, Oregon  
*(inundated by The Dalles Dam in 1957)*

# Road to co-management

- Sohappy v Smith, US v OR (1968)
- US v Washington, Boldt Decision (1974)
- Settler v Lameer (1974)
- Northwest Power Act passed by Congress (1980)
- Wy-Kan-Ush-Mi Wa-Kish-Wit - “Spirit of the Salmon” (1995)





# Speaking for those that cannot

*“Our cultural teachings tell us we must honor & protect the resources on which we depend. The resources don’t belong to us, we belong to the resources”*

*~ Johnson Meninick, Yakama*

- Considering the odds the tribes & salmon faced both have entered the 21<sup>st</sup> century still intact
- The relationship remains unchanged
- The responsibilities to salmon have not been forgotten

# **Wy-Kan-Ush-Mi Wa-Kish-Wit**

## **“Spirit of the Salmon”**

### **Goals:**

- Put fish back into the rivers (4 million by 2020)
- Rely on natural production & healthy streams to achieve this goal
- Protect tribal sovereignty & treaty rights
- Reclaim anadromous fish & their environments for future generations

# **Wy-Kan-Ush-Mi Wa-Kish-Wit Principles**

- Honor tribal culture & values
- Fulfill tribal sovereignty, treaty rights, & trust responsibilities
- Integrate the best science with tradition ecological knowledge (TEK)
- Restore ecosystems that are holistic, sustainable, & resilient
- Put fish back in the rivers
- Protect watersheds
- Manage gravel to gravel
- Use adaptive management



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# **Sovereignty & consultation**

*“Indian Tribes are governments, not Elks Clubs” ~ Professor Charles Wilkins*

- Tribes were here before U.S./Canada existed
- Retained inherent authority to govern ourselves
- Were not granted rights, these rights were pre-existing
- U.S. obligated to represent best interest of the tribes, protect safety of tribal members, & fulfill treaty obligations
- Federal government & implementing agencies owe a duty to recognize impacts of their activities on tribes

# Consultation

*“Good words do not last long until they amount to something”  
~ Chief Joseph, Nez Perce*

**Duty to consult – to have meaningful & timely process of seeking, discussing, & carefully considering the views of another sovereign in a manner that is cognizant of all parties’ cultural values &, when feasible, seeking agreement**

- Direct dialogue between tribes & federal government
- Occur when tribes may have interest in the outcome of an agency’s action (direct or indirect)



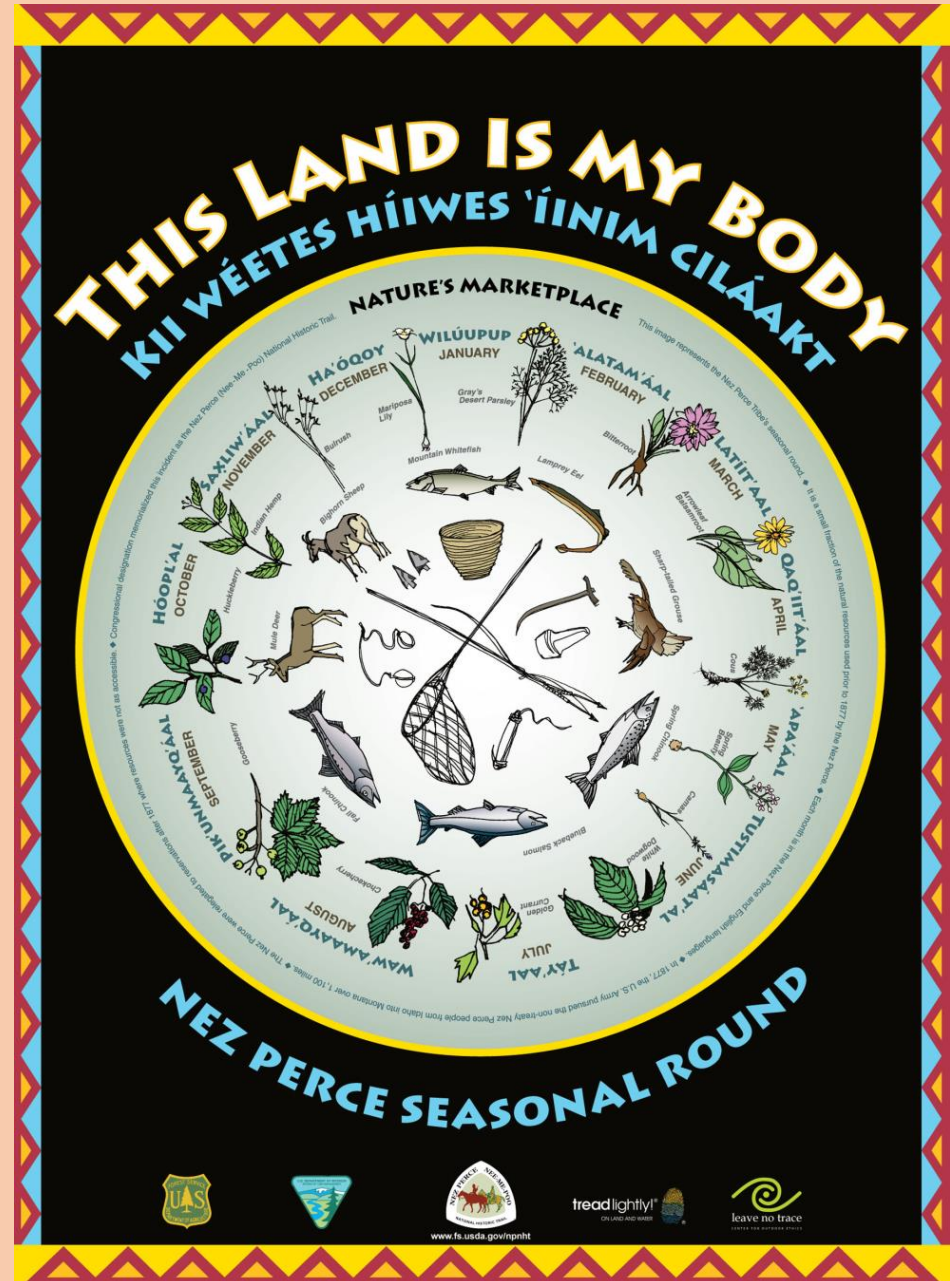
# Consideration

Limits of federal & state restrictions on tribal activities where tribes are exercising their treaty fish rights:

1. The restriction is reasonable & necessary for conservation of the species;
2. The conservation purpose of the restriction cannot be achieved by reasonable regulation of non-Indian activities;
3. The measure is the least restrictive alternative available to achieve the required conservation purpose;
4. The restriction does not discriminate against Indian activities, either as stated or applied; and
5. Voluntary tribal measures are not adequate to achieve the necessary conservation purpose

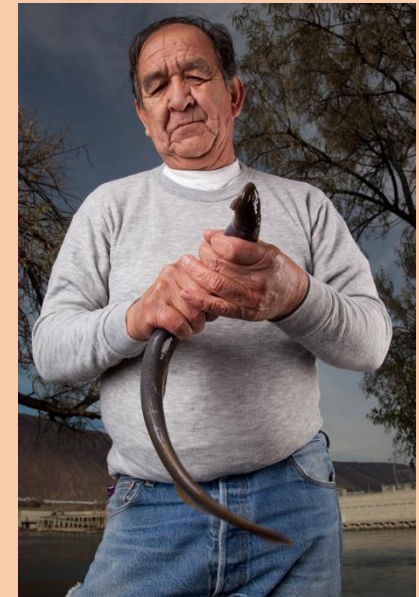
# Traditional & Ecological Knowledge

- Relationship to the resource
- Oral tradition
- Stewardship
- Holistic



# TEK & Western Science

- Integration of TEK & Western Science
- Value-neutral vs. explicit moral and ethics
- If it is not written down does that mean it didn't happen?
- Complementary (what, when, & where)





# **Principles of TEK for “Spirit of the Salmon”**

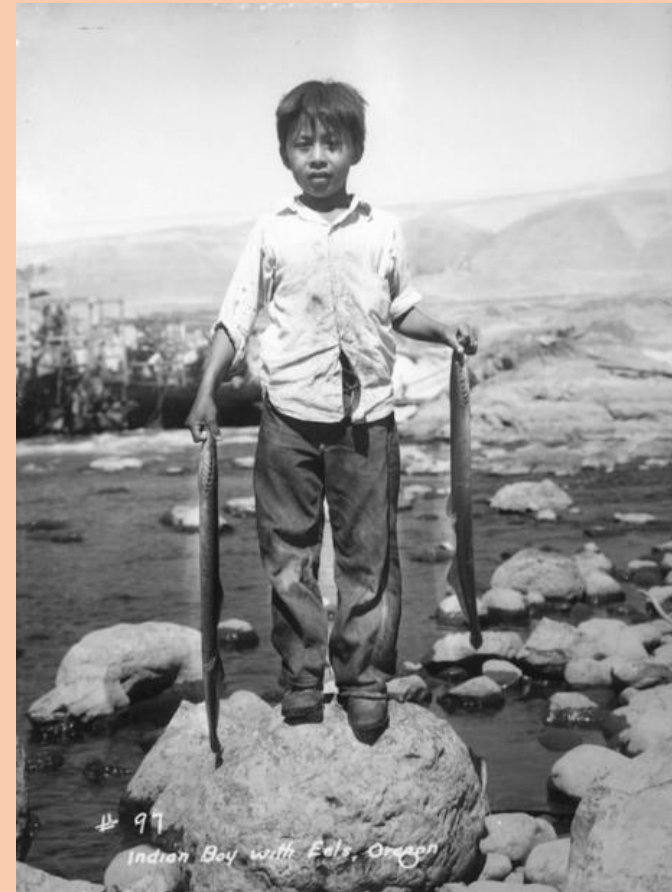
1. Documentation of natural conditions prior to Euro-American settlement, including knowledge about indicators of ecosystem change
2. A framework for holistic management of anadromous fishes based on existing relationships between tribal members & natural resources
3. An adaptive management framework, a result of the tribes' unique ability to accommodate environmental change in their social systems
4. Recognition of the importance of place & the relationship between that place & the community it supports

# Historic baselines

**Principle:** Documentation prior to Euro-American Settlement

**Practical Application:** Quantitative descriptions of the historical distribution & abundance of plants & animals

**TEK Example:** Knowledge of the traditional distribution of fishing places for lamprey based on ethnographic interview of Yakama or other tribes' elders



# Gravel to gravel

**Principle:** Framework for holistic management of anadromous fishes

**Practical Application:** Gravel to gravel approach to restoring anadromous fish

**TEK Example:** “Spirit of the Salmon” recognizes impacts from human activities & importance of all life history stages



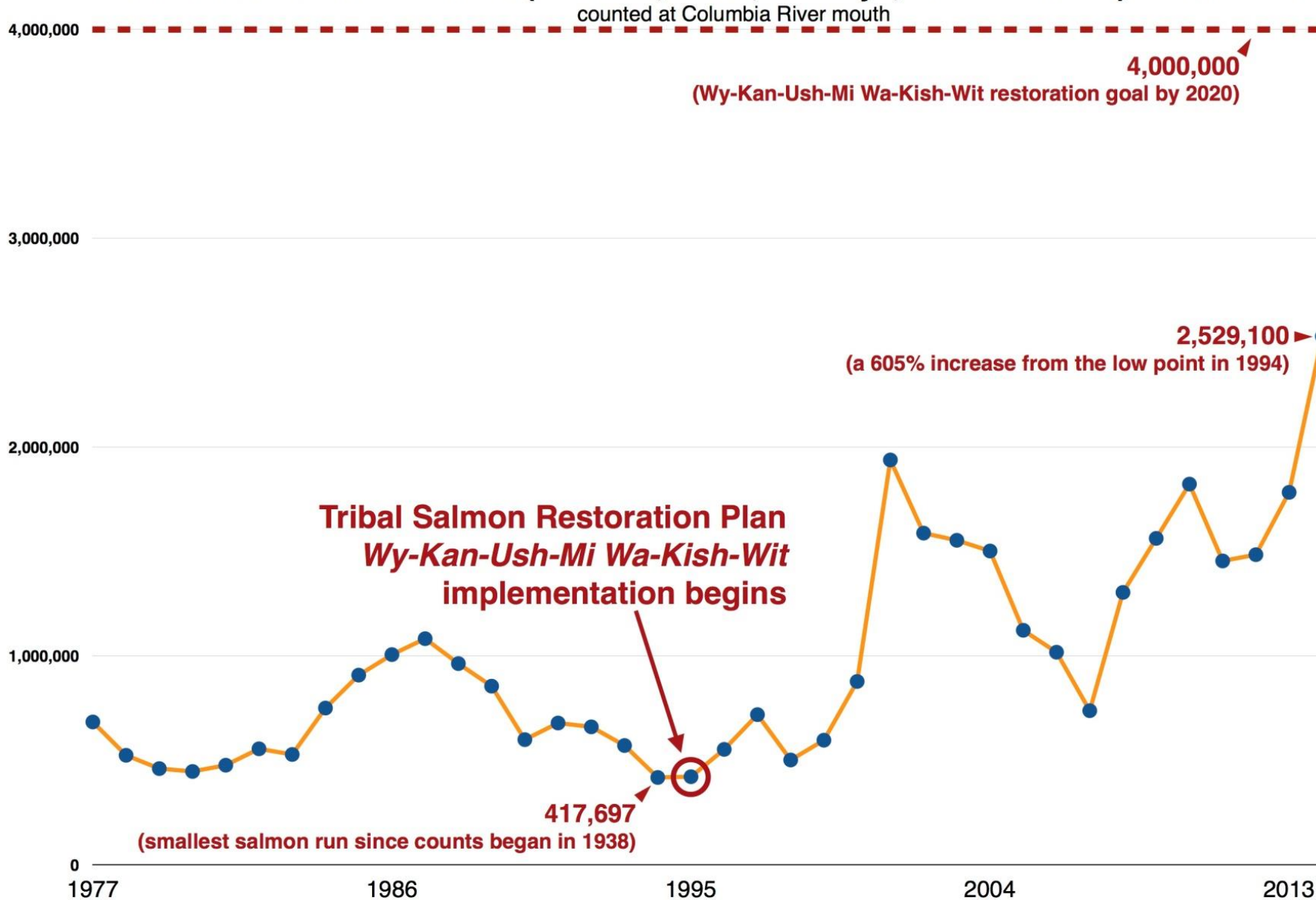


# Ecosystem Based Management

- Not a new concept
- Co-Management & Duty to Consult
- It is personal (relatives)



# Total Columbia River Salmon (Chinook, Coho, Sockeye, and Steelhead) — 1977-2014



# Successes

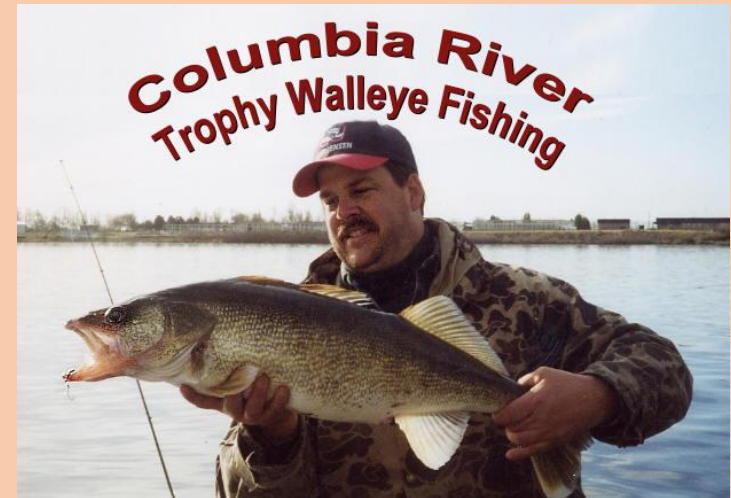
- Decline of salmon halted
- Significant improvements to hydrosystem
- Rise of tribal fisheries programs
- Improved co-management
- Improved science & species coverage





# Challenges

- Changes still need to occur
- Climate change
- Water quality
- Historic abundance
- Elder loss
- Wild v hatchery
- Lamprey, sturgeon,...
- “Schizophrenic” management



***“We are the circle. That’s what life is all about. We take care of one another. So when we have someone in trouble, that’s when the rest of us have to step in.”***

**—Elmer Crow**

