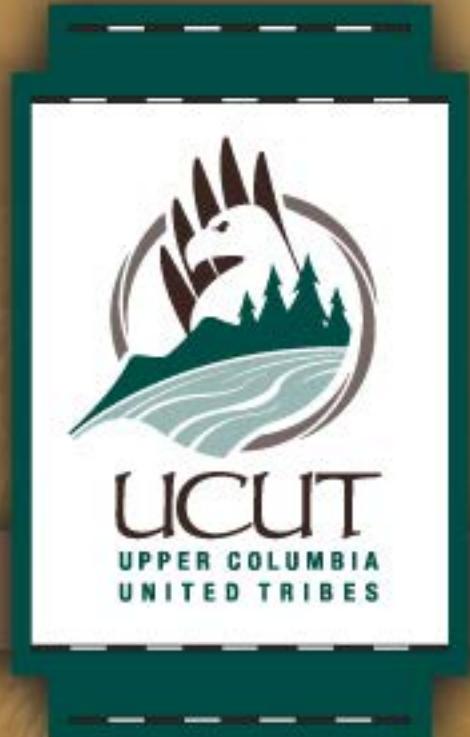


United for the Benefit of All



The Columbia River Treaty – Columbia Basin Tribes' Perspective

Natives Without Borders: Annual NAFWS Conference, May 21, 2015, Juneau, AK

Keith Kutchins, Policy Analyst, UCUT

Columbia Basin Hydrosystem



Columbia River Treaty

- 19 Maf for **Assured Flood Storage**
Goes away in 2024
Flood Control to Flood Risk Management
On-call to Called-Upon
“Effectively Use...”
- **Canadian Entitlement** - 50% of the power that the US produces from “Canadian” water
- No **Ecosystem** considerations
- No consultation with **Tribes** or **First Nations**





Prevent flooding in Portland



Permanent flooding upriver





Pictures of Nec bridge covered by
water. Mouth of Spokane R.







Loss of property, resources, culture, salmon



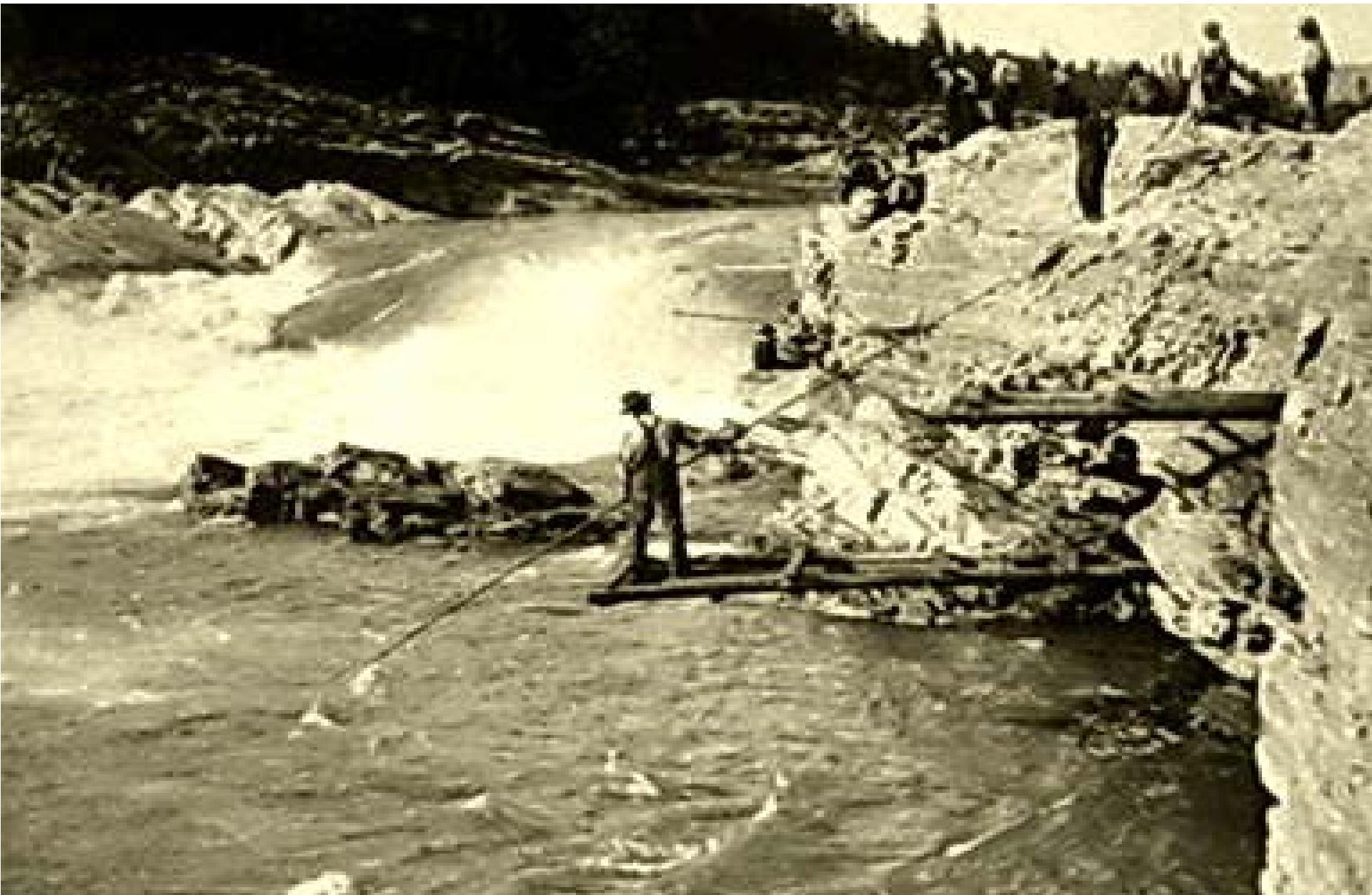
*“What was one a desert inhospitable to man –
well. modern man -*



- is now a Garden of Eden" (Congressman Helen Chenoweth)



“What was once a Garden of Eden, replete with



abundant nutrients, shelter and medicine -



Is now a desert of heavily subsidized monocultured agribusiness.” (Lionel Boyer, Fisheries Policy Representative, Shoshone-Bannock Tribes)

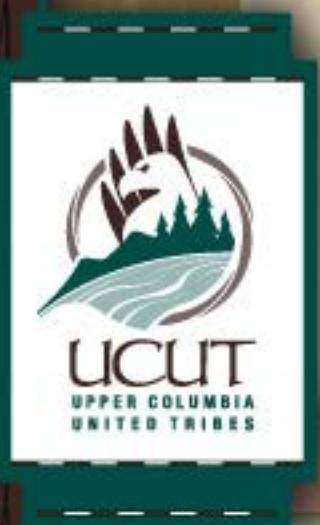




The Columbia Basin Tribes:

15 of the Columbia River Basin tribes with river management authorities and responsibilities.

*Common Views Document –
February 2010*



Tribes Goals for Modern Treaty

1. Secure a seat at the table (Treaty review, negotiation and implementation);
2. Ecosystem-based Function (EbF), equal with power production and flood risk management (stabilize reservoirs and provide spring freshet);
3. Restore fish passage to historical habitats;
4. Equitably share benefits of system; and,
5. Equal access to resource development opportunities, consistent with ecosystem function.



U.S. Regional Recommendation

The region's goal "is for the US and Canada to develop a modernized framework for the Treaty that ensures a more resilient and healthy ecosystem-based function throughout the Columbia River Basin while maintaining an acceptable level of flood risk, and assuring reliable and economic hydropower benefits."

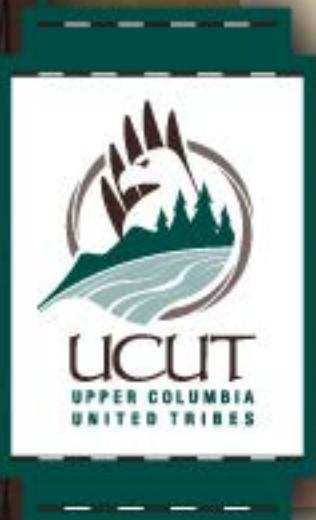


Regional Recommendation (cont.)

Meet regional needs for irrigation, municipal and industrial use, in-stream flows, navigation and recreation

Resilient, adaptable, flexible and timely for changes – including climate change.

Joint US/Canada program to investigate and implement restored fish passage and reintroduction of anadromous fish on the main stem Columbia River to Canadian spawning grounds.



Maintain Support to Modernize Treaty

Meet and coordinate actions with the U.S. Entity.

Meet and coordinate actions with the four states.

Meet and coordinate actions with stakeholders:
Cities, towns, and counties;
Columbia River Treaty Power Group;
Irrigation and water supply interests; and,
Conservation caucus.



National Interests Determination

Dept. of State and National Security Council
co-chair a federal Interagency Policy
Committee

The IPC recommends a NID

OMB Circular 175: ensures U.S. treaty
making is constitutional and legal.

There is a question about whether (or how)
the Dept. of State will consult with tribes.



Consultation with the Dept. of Interior

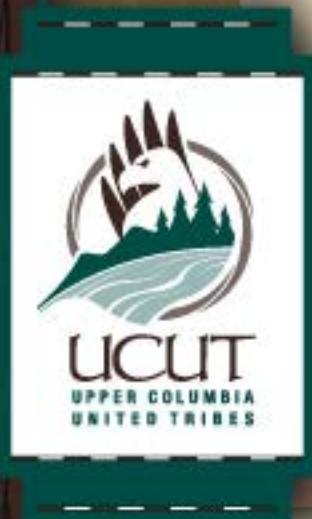
Regular meetings with Deputy Assistant Secretary Lori Faeth and Interior Department staff helps provide tribes' input into IPC and Sub-IPC:

Define ecosystem function; and,

Define reservoir and river guidelines and operations.

Staff forum to collaborate on technical and policy aspects of integrating ecosystem function.

Consult and collaborate with Interior and other departments on additional modeling



Consultation with Secretary of State

Seek face-to-face meeting with the Secretary of State:

DOS has no consultation policy for tribes;

Establish framework for consultation and collaboration on Treaty; and,

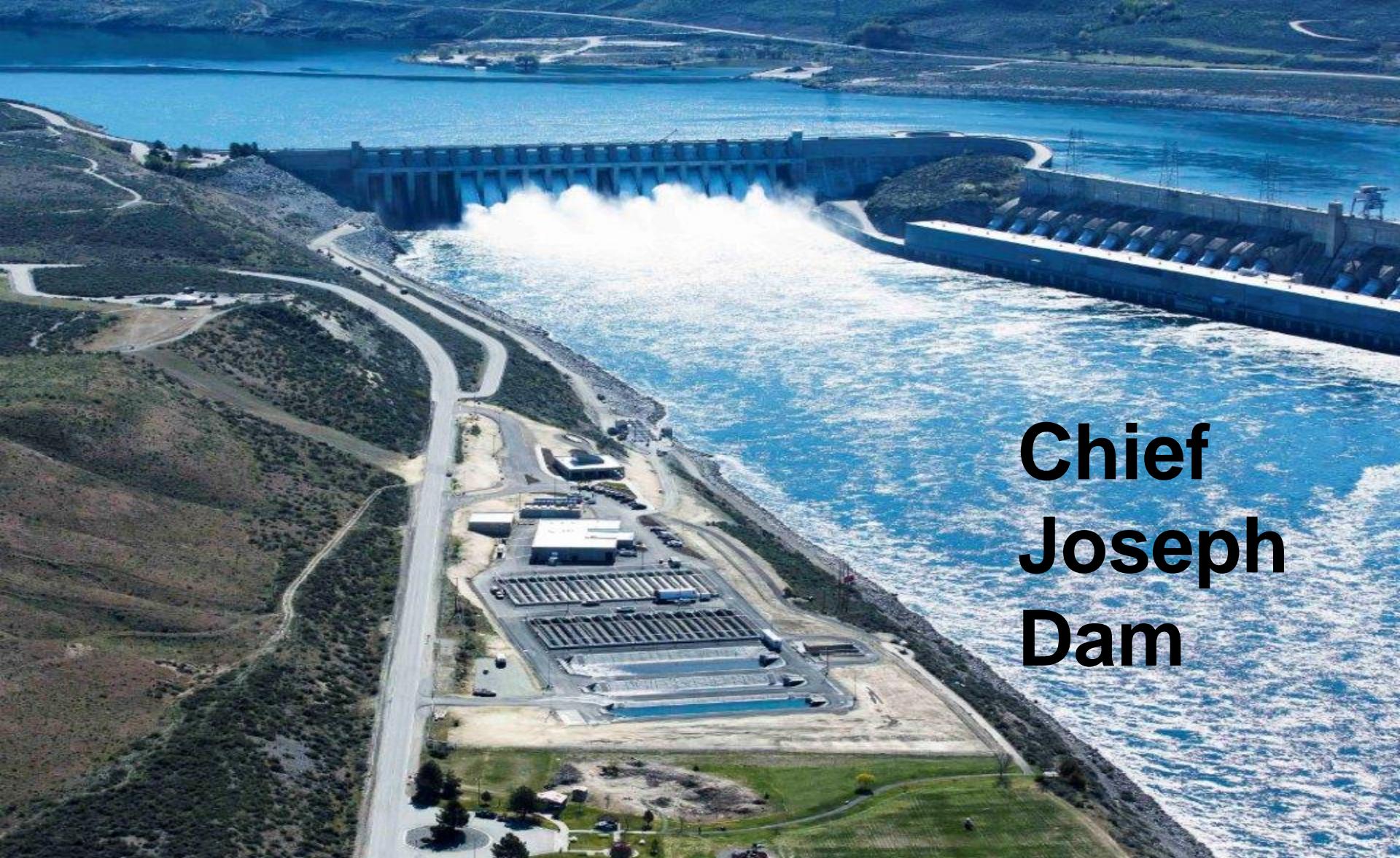
Initiate separate process to define DOS consultation policy with tribes.



Anadromous Fish Reintroduction

- Upper Columbia River Historical View:
 - Lost access to thousands of stream miles of anadromous fish habitat
 - Lost access to the basin's largest nursery lake habitats
 - Lost 40% of Columbia River runs due to Chief Joseph and Grand Coulee dams





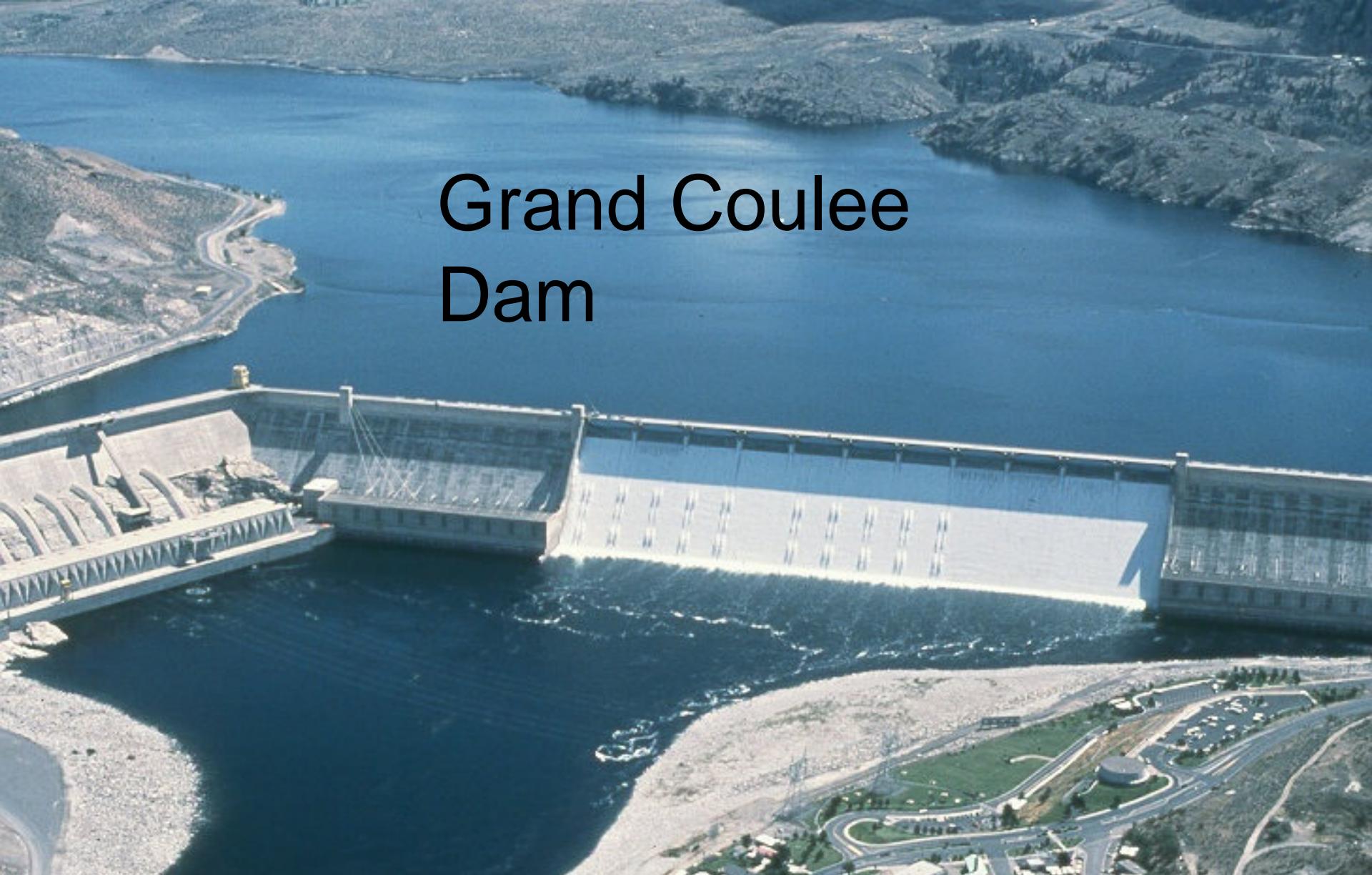
Chief Joseph Dam

Built in 1955

236' high

51 mile reservoir

2,260 Mw capacity

An aerial photograph of the Grand Coulee Dam, a massive concrete structure spanning a wide river. The dam is light-colored and has a flat top. To the left, a large industrial building with multiple arched roofs is attached to the dam. The reservoir behind the dam is a deep blue, stretching far into the background. The surrounding landscape is a mix of green hills and brown, rocky terrain.

Grand Coulee Dam

Built in 1942

550' high

151 mile reservoir

6,809 Mw capacity

Why Now?

- Some UCR runs are healthy / non-ESA
- New fish passage technologies
- New research tools
- Evolving Realities:
 - Balancing industrial and ecological values (costs/benefits) of the river.
 - Addressing historical wrongs



Why Now?

- UCR summer/fall Chinook
 - 250% increase since '80's and 90's.
 - Productive - supporting fisheries from Alaska to Chief Joseph Dam
- Okanagan sockeye
 - 600% increase since '90's
 - Perhaps most productive population in entire Columbia Basin (above 9 mainstem dams)



Why Now?

- Promising technology to collect and pass juvenile salmon and steelhead:
 - The Floating Surface Collector
- The key critical uncertainty in salmon reintroduction at high head dams



Floating Surface Collector



Baker River – Skagit Basin

Rises and falls with the reservoir

285' high dam

Barrier nets

Floating Surface Collector



North Fork Dam ~ Portland

\$33 million



150' L x 60' W x 35' H

14: 40hp pumps

1000cfs to <10 cfs

Grand Coulee Dam



FSC near 3rd Powerhouse

Powerhouse flows to attract fish

Return >500,000 trout & kokanee

Why Now?

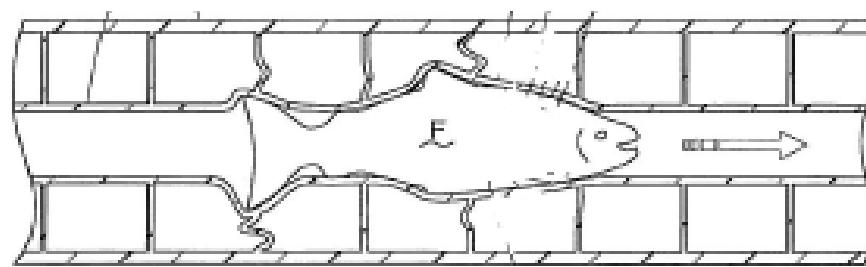
- Promising technology to pass adult and juvenile salmon and steelhead:
- The Whooshh System
- Potentially a highly cost effective means of passing adult fish at high head dams

➤ Whooshh.com



WHOOSH

Adult Passage



WHOOSH

Adult Passage



Rosa Dam – Yakima River

27'/second

Misting amounts of water, not 1000's cfs

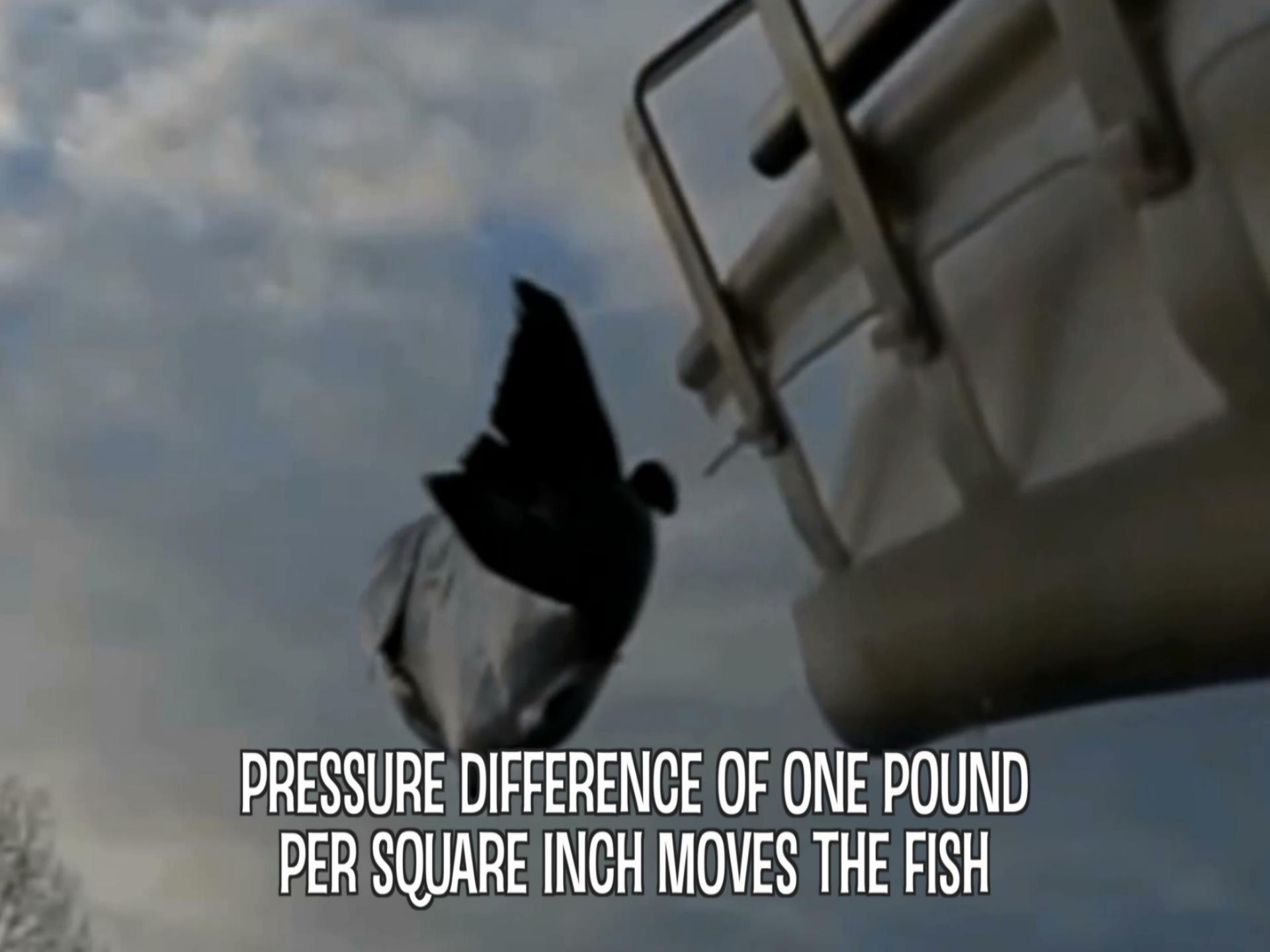
Equal or better survival: 250'

Habitat to test: 500'



GRAND COULEE DAM

- SIMULATION



**PRESSURE DIFFERENCE OF ONE POUND
PER SQUARE INCH MOVES THE FISH**

Why Now?

- Proven research tools
 - PIT tags to promptly and precisely tell us how juvenile fish are surviving their reservoir and river migration, and survival to adults
 - JSAT telemetry tags to understand how fish behave around dams and passage facilities.



Why Now?

- **Societal Values have changed**
 - **Citizens now look to their rivers to provide ecosystem values as well as industrial values**
 - **Both are needed to optimize economic value**
 - **Both are needed to optimize quality of life**



Why Now?

For tribal peoples:

Three quarters of a century
without salmon is long enough

UCR

Most Impacted

Least Mitigated



Columbia River Treaty Fish & Wildlife Program

- **Treaty Regional Recommendation** includes proposal to investigate feasibility of fish passage.
 - Tribes and First Nations informational paper on a 6-dam, comprehensive reintroduction – an international approach
 - ucut.org/fish_passage
- **F&W Program** addresses a 2-dam, domestic mitigation project.
 - nw council.org/fw/program



Fish & Wildlife Program

- 2014 Fish & Wildlife Program Measure
- Feasibility of 2-dam reintroduction
 - Science -based
 - 3 Sequential Phases
- Phase 1: Reconnaissance review & assessment of adult and juvenile fish passage options (2 years)
- Phase 2: Feasibility research with interim passage facilities (15-30 years)
- Phase 3: Permanent reintroduction and passage facilities



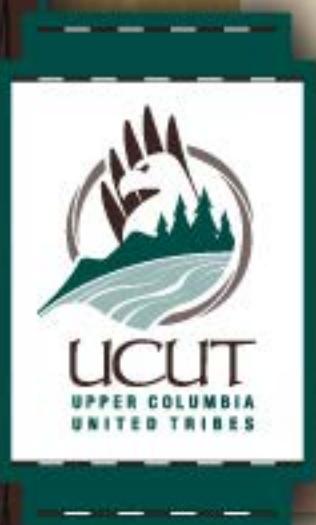
UCUT Phase 1 Work & Coordination Plan

Gather and assess pertinent, reconnaissance level information on fish passage and reintroduction that allows the region to have an informed discussion about proceeding to feasibility investigations with pilot reintroductions and interim fish passage facilities



UCUT Phase 1 Work & Coordination Plan

- 11 objectives 36 tasks (Habitat Assessment; Donor Broodstocks; Life-Cycle Models; Risk Assessments; Compile Current Techniques and Examples)
- Coordination & Collaboration Framework
 - Executive Collaboration Group
 - Management Advisory Group
 - Science Advisory Group
- ucut.org/fish_passage
- john@ucut-nsn.org



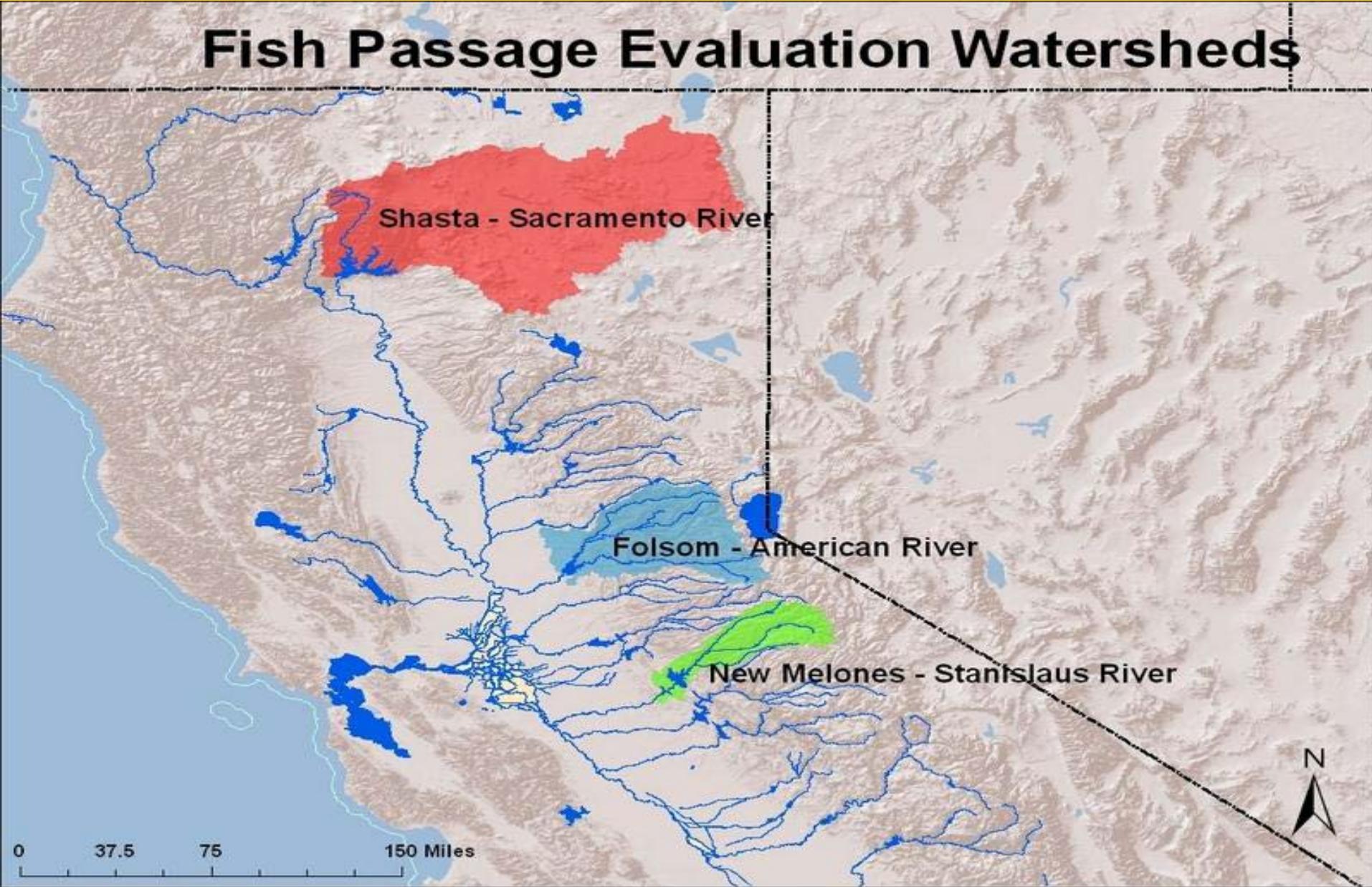
Lamprey at Kettle Falls



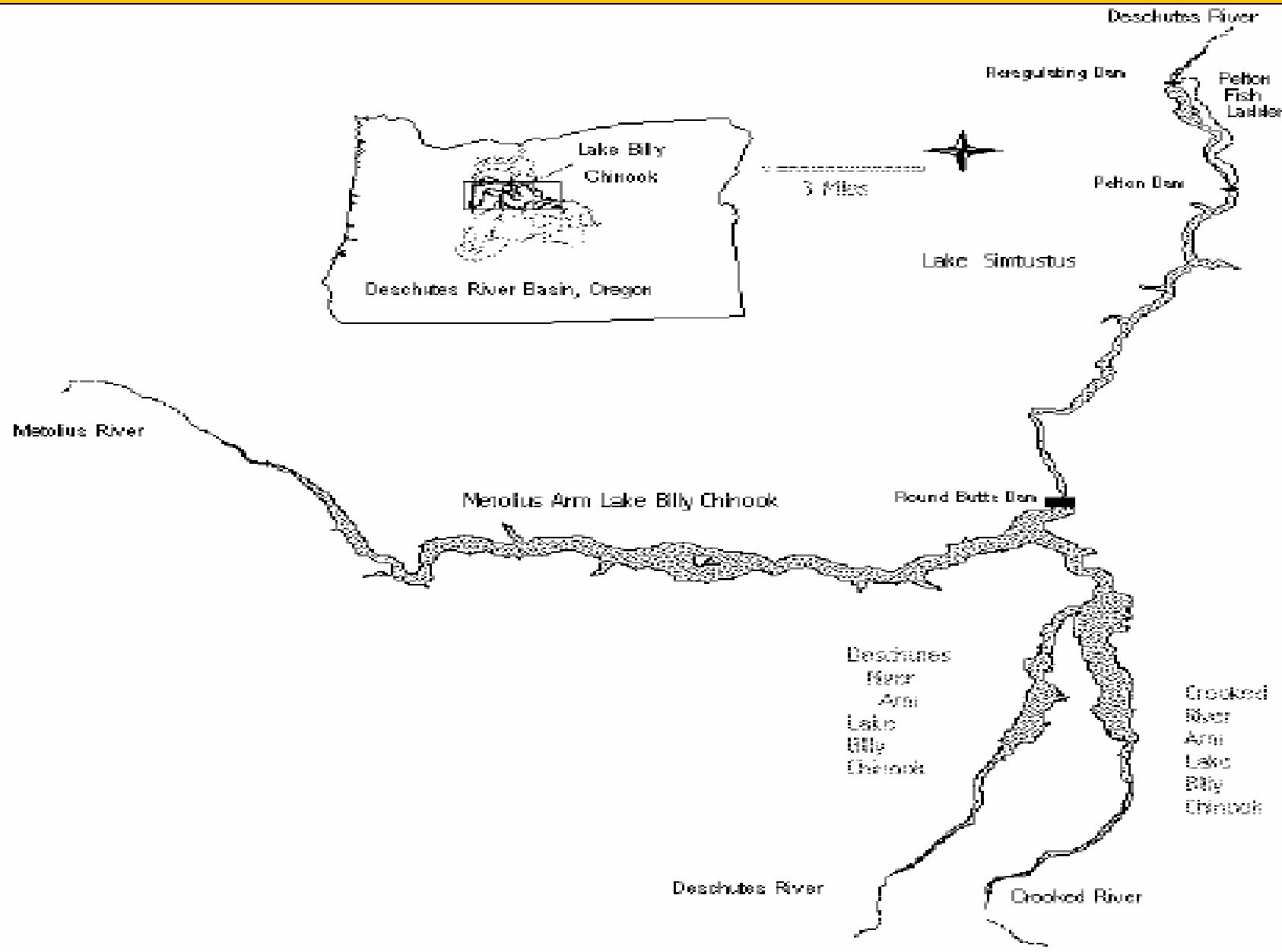
EEL CLINGING To Rock
KETTLE FALLS WASH.

California

Fish Passage Evaluation Watersheds



Deschutes River, Oregon



Willamette Basin, Oregon



- wild fish only (with varying degrees of success)



- reintroduction needed into historically productive habitat

Washington

- Merwin and Swift Dams: Lewis River
- Upper & Lower Baker Dams: Skagit Basin
- Cushman Dam: Puget Sound, Washington

Summary

Tribes success in Regional Recommendation (EbF; Fish Re-introduction above Grand Coulee Dam; consultation with the U.S. Entity; U.S. tribal consistency with First Nations)

Need Regional Flood Risk Review – flood targets are too conservative in low-flow years, needlessly impeding EbF

Need National Interests Determination to support modernizing the treaty for EbF, Fish Re-introduction; and tribal participation in river management.



