Guy Norman Chair Washington

KC Golden Washington

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Jeffery C. Allen Idaho



Doug Grob Vice Chair Montana

Mike Milburn Montana

Ginny Burdick Oregon

Louie Pitt, Jr. Oregon

July 6, 2022

#### MEMORANDUM

TO: Council Members

FROM: Stacy Horton, Washington Policy Analyst/Biologist

SUBJECT: Presentation from the Upper Columbia United Tribes (UCUT)

#### BACKGROUND:

- Presenters: DR Michel and Laura Robinson, Upper Columbia United Tribes; Tom Biladeau, Coeur d'Alene Tribe; Casey Baldwin, Confederated Tribes of the Colville Reservation; Deane Osterman, Kalispel Tribe of Indians; Shawn Young, Kootenai Tribe of Idaho; Conor Giorgi, Spokane Tribe of Indians
- Representatives from the UCUT organization and its member tribes will Summary: provide an update to the Council on the work of the tribes in the upper Columbia River Basin relevant to the Council's Columbia River Basin Fish and Wildlife Program. The Council will hear from DR Michel, Executive Director of UCUT, on the history of the UCUT organization and its member tribes. Deane Osterman, Executive Director of Natural Resources for the Kalispel Tribe, will speak on a broad suite of Kalispel projects including Northern Pike suppression and fish passage in the Pend Oreille River system. Shawn Young, Natural Resources Director for the Kootenai Tribe, will provide an update on combining early life releases and habitat restoration projects. And the UCUT reintroduction team will share accomplishments of cultural and educational salmon releases, implementation of the pilot study for Phase 2 reintroduction work, an update on funding for reintroduction research, and how the Council can support reintroduction efforts in the upper Columbia. The UCUT reintroduction team is made up of Tom Biladeau, Anadromous Project Lead, Coeur d'Alene Tribe; Casey Baldwin, Senior Research Scientist,

Colville Tribes; Conor Giorgi, Anadromous Program Manager, Spokane Tribe; and Laura Robinson, Policy Analyst, UCUT.

The UCUT organization and its member tribes have made significant progress on reintroduction since last presenting to the Council. Ongoing cultural and educational releases are continuing to provide hope to the tribes as the resiliency of these fish is revealed, if given a chance. The first research project of the 20-year Phase 2 Implementation Plan is currently underway. Over the summer the tribes will continue to monitor juvenile Chinook as they migrate from the blocked area and to the Pacific Ocean. Although the tribes have secured significant funding for Phase 2 research, there are opportunities for the Council to lend its support.

Background: The five member tribes of the Upper Columbia United Tribes (UCUT) are the Coeur d'Alene Tribe, Confederated Tribes of the Colville Reservation, Kalispel Tribe of Indians, Kootenai Tribe of Idaho, and the Spokane Tribe of Indians. UCUT was established in 1982 to unite Upper Columbia River Tribes for the protection, preservation, and enhancement of Treaty/Executive Order Rights, sovereignty, culture, fish, water, wildlife, habitat and other interests and issues of common concern in our respective territories through a structured process of cooperation and coordination for the benefit of all people. Together, the UCUT tribes manage and influence nearly two million acres of reservation land, and influence at least 14 million acres of aboriginal territories, 500 miles of waterways, 40 interior lakes, and 30 dams and reservoirs.

To learn more about the UCUT organization and its member tribes, you can visit the <u>UCUT website</u>.

More Info: The Council received an update on the <u>Kootenai system restoration</u> <u>project</u> in March 2022. Related to upper Columbia reintroduction, the UCUT organization and its member tribes presented the Phase 2 Implementation Plan at the November 2021 meeting (see <u>Fish and Wildlife</u> <u>Committee</u> update and <u>full Council update</u>). And in January 2021, the Fish and Wildlife Committee received an update on the <u>cultural and educational</u> <u>salmon releases</u> done by the Colville Tribes and the successes seen at that time in the Sanpoil River.

# **Upper Columbia United Tribes** Northwest Power and Conservation Council July 2022

Presenters: DR Michel, Upper Columbia United Tribes Deane Osterman, Kalispel Tribe of Indians Shawn Young, Kootenai Tribe of Idaho Tom Biladeau, Coeur d'Alene Tribe Casey Baldwin, Confederated Tribes of the Colville Reservation Conor Giorgi, Spokane Tribe of Indians Laura Robinson, Upper Columbia United Tribes



## Territories of the Upper Columbia United Tribes

- Coeur d'Alene Tribe
- Confederated Tribes of the Colville Reservation
- Kalispel Tribe of Indians
- Kootenai Tribe of Idaho
- Spokane Tribe of Indians



## UCUT's Mission

To unite Upper Columbia River Tribes for the protection, preservation, and enhancement of Treaty/Executive Order Rights, sovereignty, culture, fish, water, wildlife, habitat and other interests and issues of common concern in our respective territories through a structured process of cooperation and coordination for the benefit of all people.

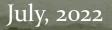
# **Kalispel Tribe of Indians**



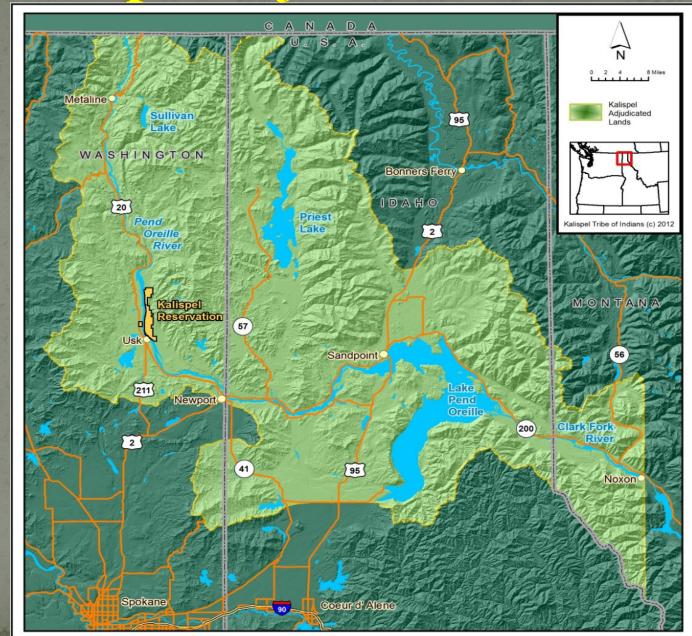


Deane Osterman Executive Director Kalispel Natural Resource Department





## **Kalispel Adjudicated Lands**



### **Department** Organization

Executive Director Dir. Wildlife and Terrestrial Resources Dir. Fisheries and Aquatic Resources Fisheries Water Cultural Wildlife Resources Resources Management Conservation Program Program Program

## Significant Fisheries Recovery Efforts in Pend Oreille

#### Albeni Falls Dam

Upstream fish passage \$6.5 million for design (2019) \$68.1 million appropriated for "New Start" construction (2021)



Kalispel Tribe Fish Accord/BPA Projects
\$39.5 Million over 10 years
Expansion of Existing Projects
Northern Pike Suppression Project



Significant Fisheries Recovery Efforts in Pend Oreille
Pend Oreille PUD FERC Settlement (Box Canyon
Dam)
Restore Tributary Streams
Upstream Fish Passage at Box Canyon

Seattle City Light FERC Settlement (Boundary Dam)

\$392 Million Restoration Deal
Restoration of Tributaries
Removal of Mill Pond Dam
Coldwater Pipe for Sullivan/Outlet Creek
Upstream Fish Passage at Boundary Dam





## Fish Passage

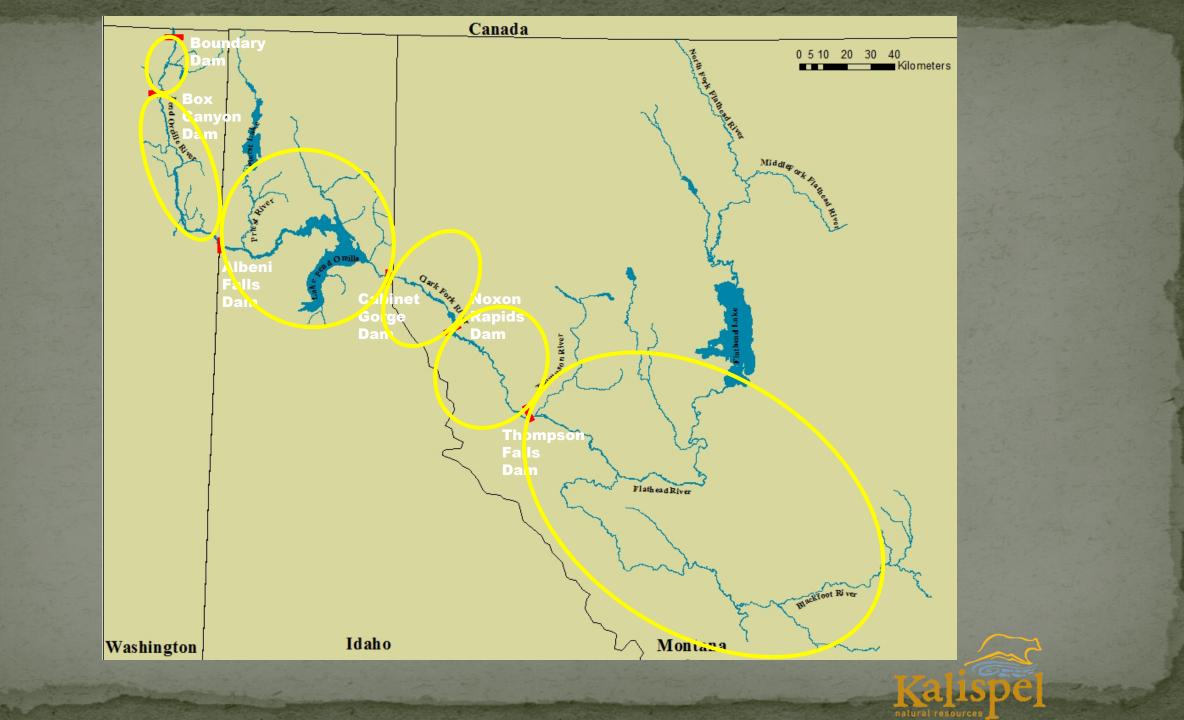
#### Adfluvial

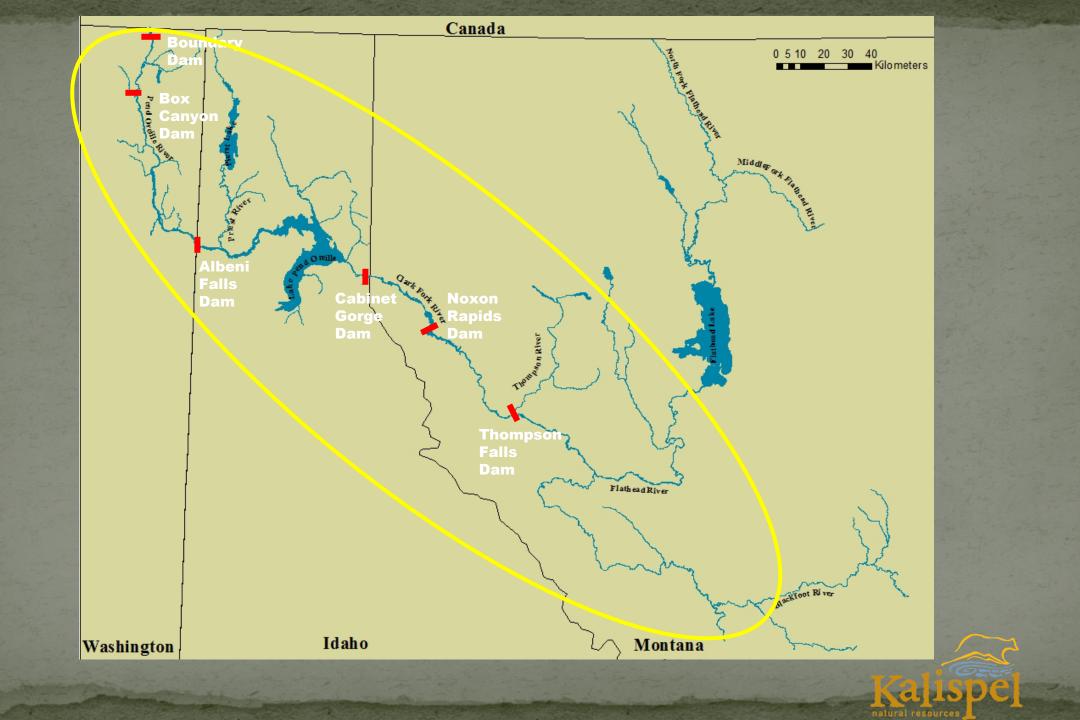
#### Fluvial

### Resident

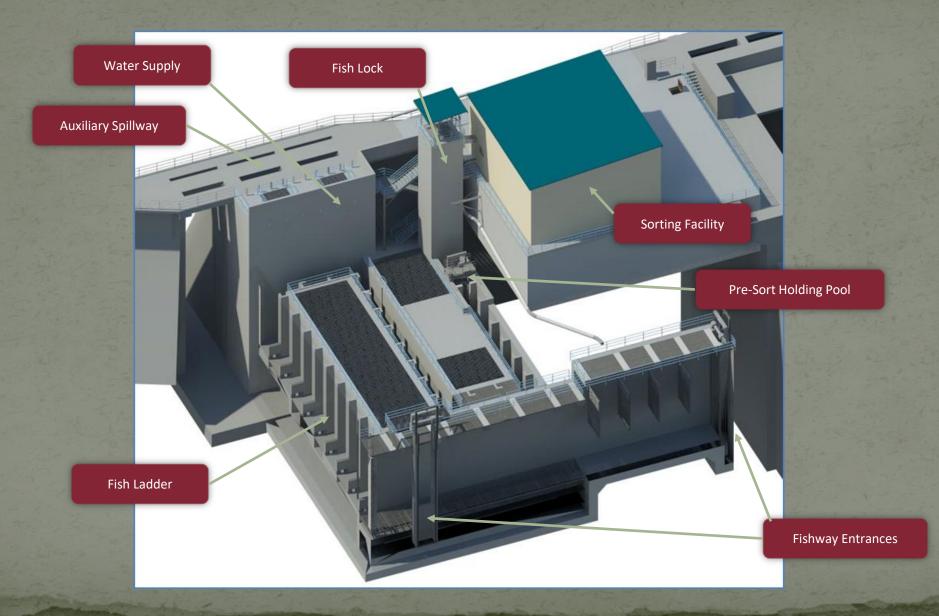




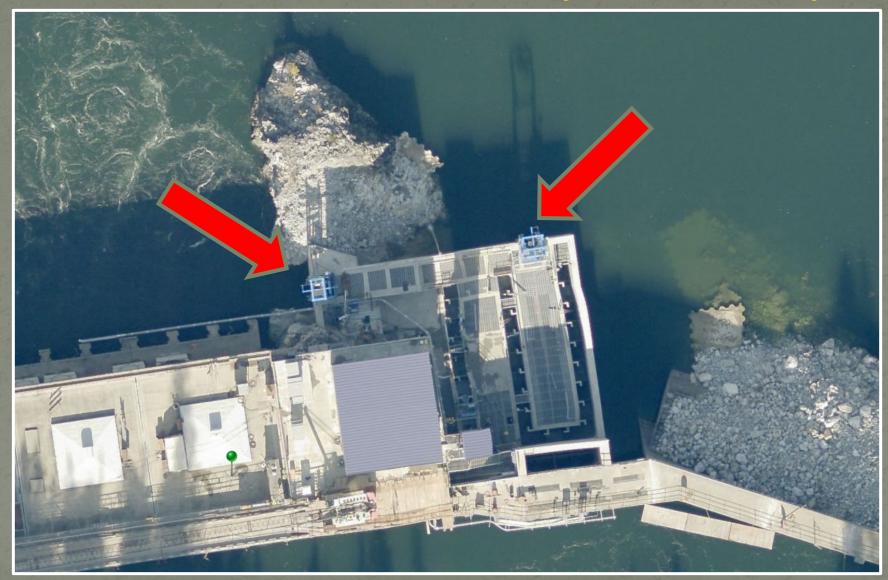




### **Box Canyon – Upstream Fish Passage**

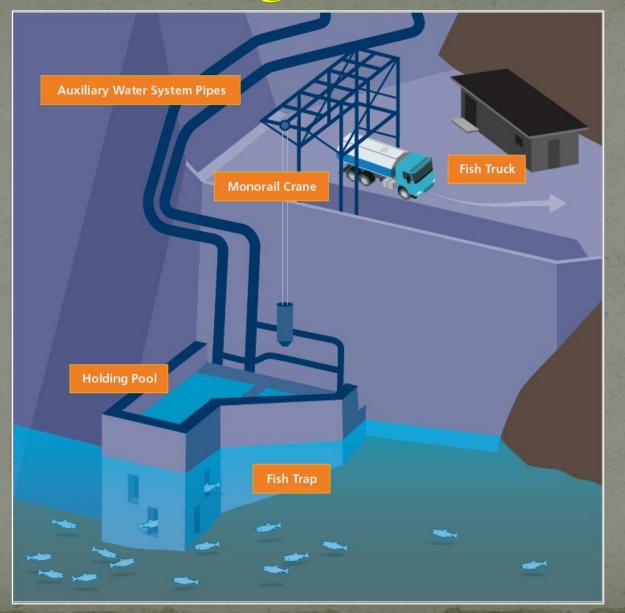


#### **Aerial View of Box Canyon Fishway**



Facility became fully operational on April 11, 2022

## **Cabinet Gorge Dam Fishway**





## **Fisheries Resource Priorities**

- Non-native/Invasive Species Control
- Habitat Restoration
- Native Species Restoration, Conservation, & Enhancement
- Harvest Support & Supplementation
- Water Quality Restoration & Conservation
- Conservation of Water Quantity
- Invasive Aquatic Plant Prevention & Control



## **Thank You! Questions?**



More Information: Websites: http://kalispeltribe.com/kalispel-natural-resourcesdepartment/



Kootenai Ecosystem Restoration: Using Parental Based Tagging (PBT) to Evaluate Native Fish Recruitment and Habitat Dynamics



Shawn Young Kootenai Tribe of Idaho

Northwest Power and Conservation Council July 13, 2022

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Picture of IDFG staff conducting winter hoopnet surveys, which provide almost all recapture data for adult Burbot

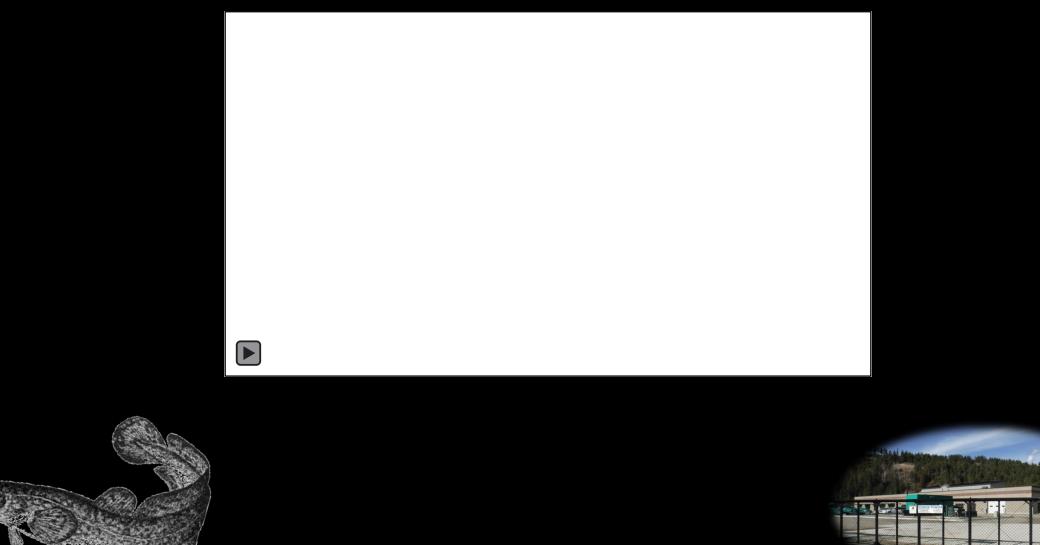
- P

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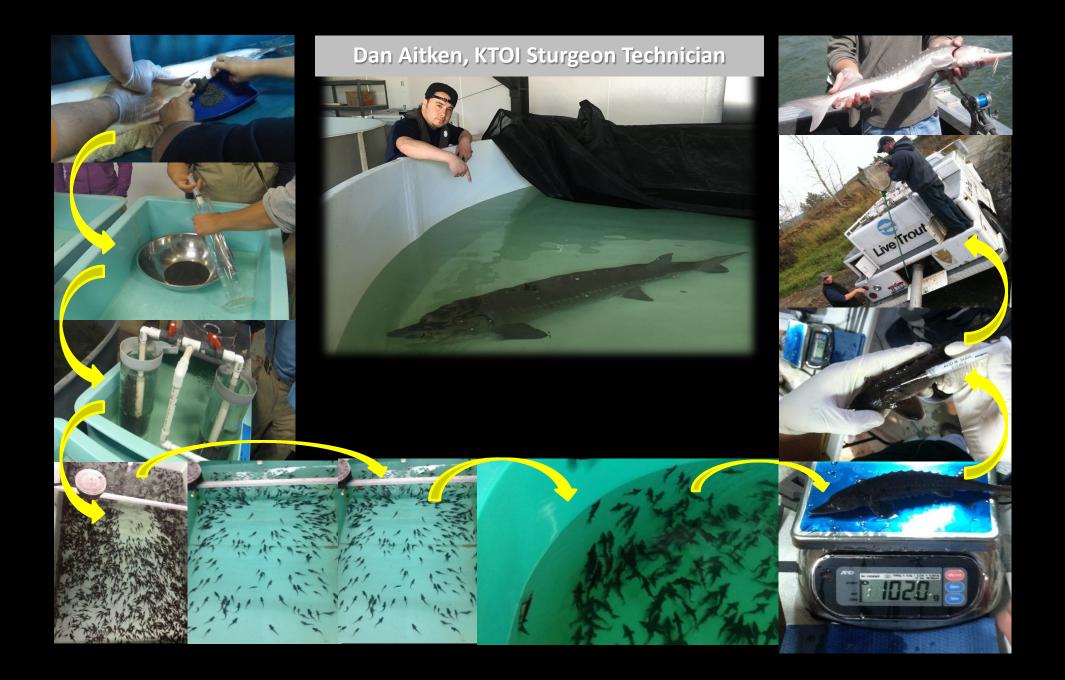
Parental Based Tagging (IDFG)

36

43



Burbot





Parental Based Tagging Univ. CA-Davis: Aviva Fiske, PhD Candidate Dr. Andrea Schreier

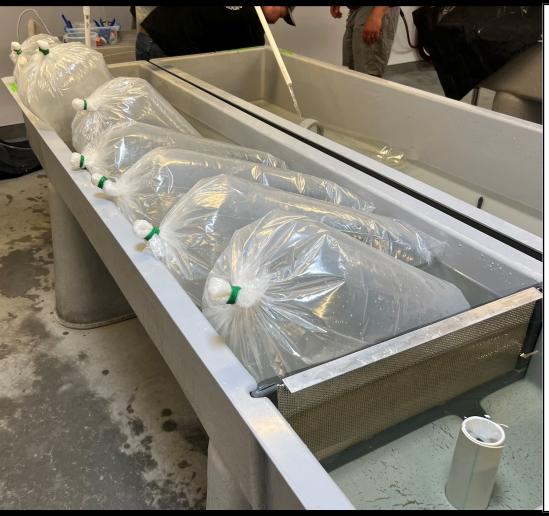


#### Dan Aitken, KTOI Sr. Sturgeon Technician

#### **KTOI Staff Preparing Female**









### 09/27/2012

TIPE





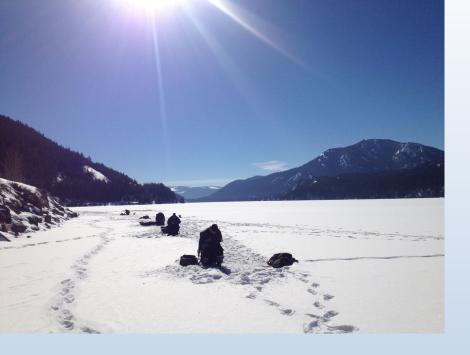


















### Collaboration



# We thank Bonneville Power Administration & Northwest Power and Conservation Council



Commitment

### Reintroduction of Salmon Upstream of Chief Joseph, Grand Coulee, and Spokane River Dams



Tom Biladeau, Coeur d'Alene Tribe Casey Baldwin, Confederated Tribes of the Colville Reservation Conor Giorgi, Spokane Tribe of Indians Laura Robinson, Upper Columbia United Tribes



### Cultural and Educational Releases



### Cultural and Educational Releases UCUT Tribes, 2017-present



Hangman Creek, 2019

Sherman Creek Net Pens, 2021



Hangman Creek, 2020

### Cultural and Educational Releases UCUT Tribes, 2017-present

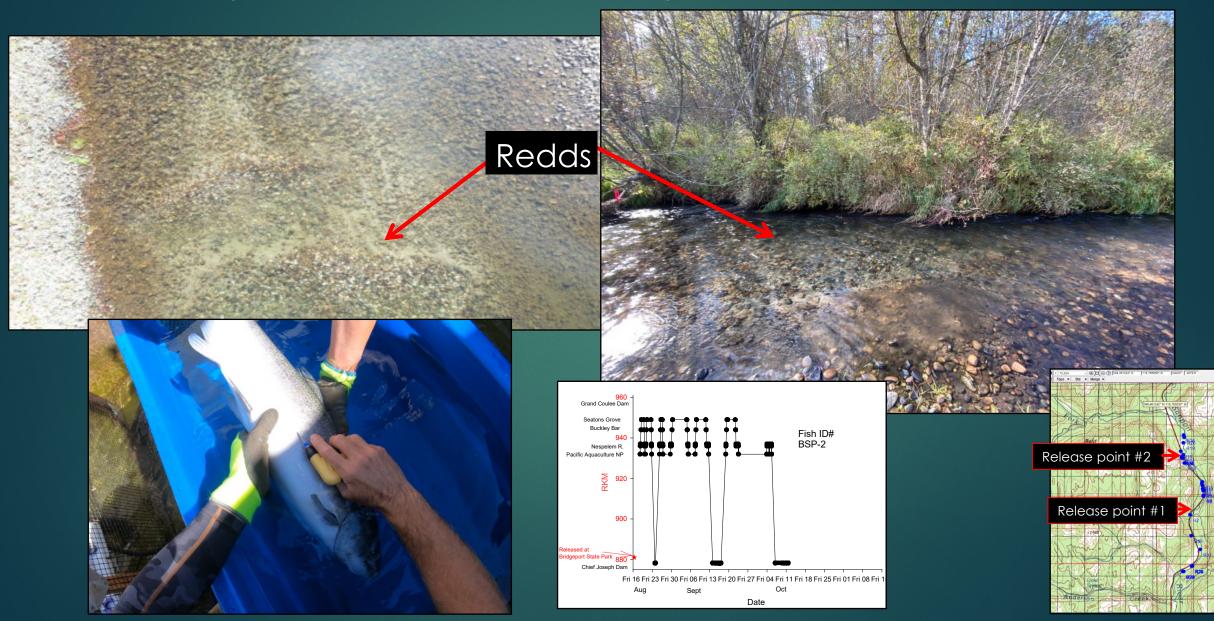




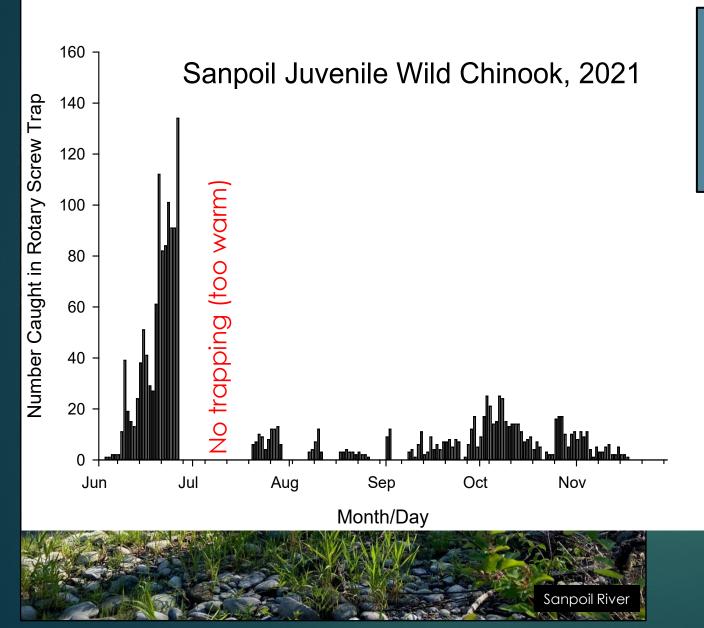
#### > 1,000 Adult Chinook



#### Post-release behavior, documented spawning: Sanpoil R., Tshimikain Ck., Little Spokane R. and Rufus Woods



### Documented production of wild juveniles



- Caught 1,071 juvenile Chinook between June 3-26, 2021
  - (the trap only samples a fraction of the river)
- Caught another 743 between July 20 and Nov 18



### Documented production of wild juveniles



- Caught 1,065 juvenile Chinook between March 3 – April 14, 2022
- Mean length of 39mm





## sye'us'uslsh

"she who repeatedly (swims) dives"





Hangman Creek July 12, 2022

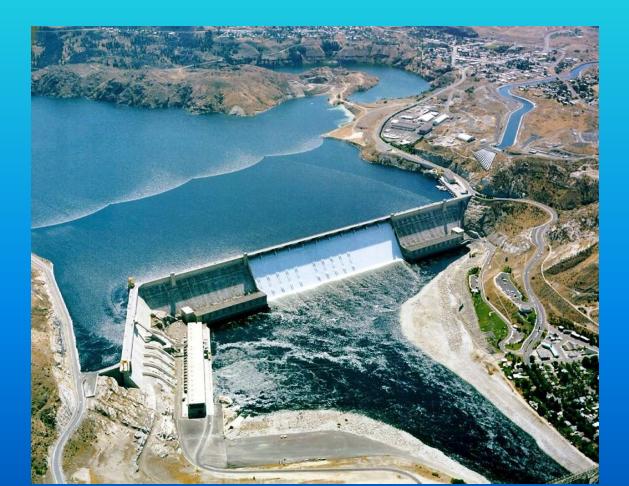


### **Cultural and Educational Releases**

- A successful start to meeting some short-term tribal goals
- Public awareness and education of reintroduction efforts and benefits
- A proof of concept for the Phased approach

### 2022 Pilot Juvenile Chinook Outmigration Study (no results yet!)

#### NPCC, July 13, 2022







### **Key Personnel and Funding**

#### **Key Personnel**

Со	lv	ille	Tribe
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Casey Baldwin Holly McLellan

#### Coeur d'Alene Tribe Tom Biladeau

Aaron Penney

#### Spokane Tribe Conor Giorgi Rick Raymondi

#### Upper Columbia United Tribes Laura Robinson

U.S. Geological Survey

Toby Kock Scott Evans Jamie Sprando Jill Hardiman

Many others participated!

#### **Funding**

Upper Columbia United Tribes U.S. Geological Survey Washington Department of Fish and Wildlife Washington State Legislature Washington State Department of Ecology Confederated Tribes of the Colville Reservation Spokane Tribe of Indians Coeur d'Alene Tribe Washington State Office of the Columbia River U.S. Fish and Wildlife Service Avista Corporation<sup>\*</sup> Bureau of Reclamation<sup>\*</sup> U.S. Army Corps of Engineers<sup>\*</sup>

\*In-kind funding for project planning, equipment installation, and access



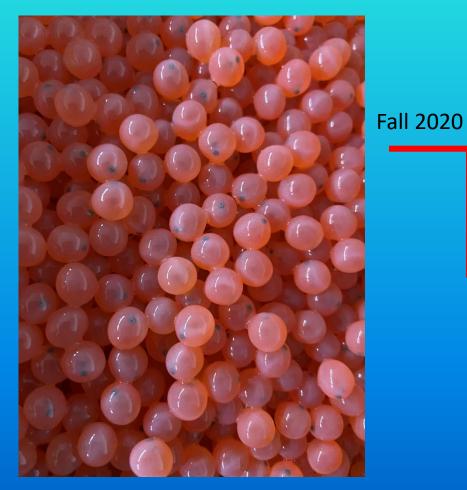


### Objectives

- Juvenile Chinook Survival (reservoir reaches and dams)
- Juvenile Chinook Behavior (travel time, travel routes)

### The beginning....

**Entiat National Fish Hatchery** 



Coeur d' Alene Tribal Hatchery (Plummer, ID)



Spring, 2022

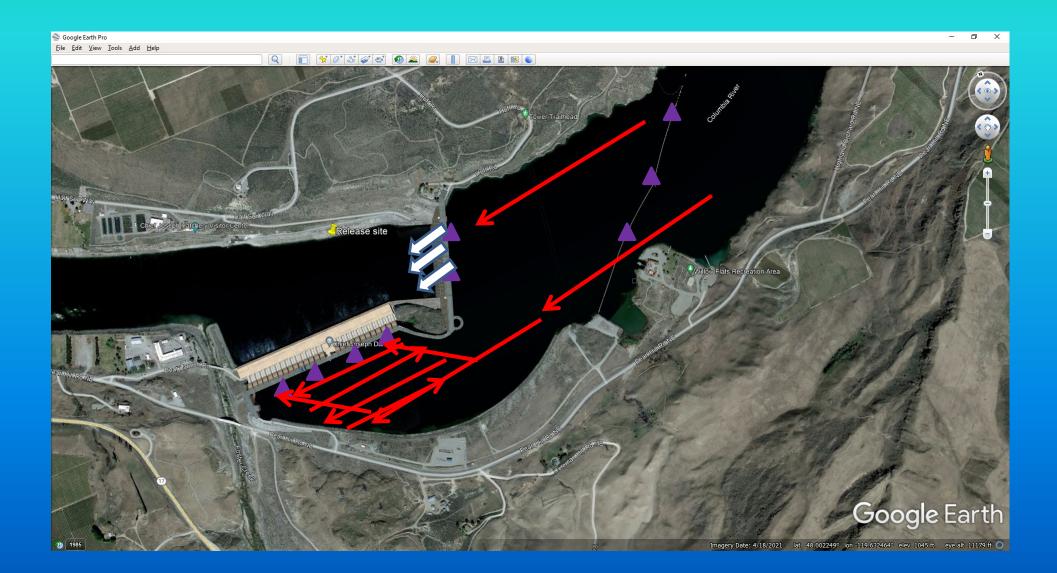


### Receiver Deployment

42 receivers, 5 dams, 4 'gates'

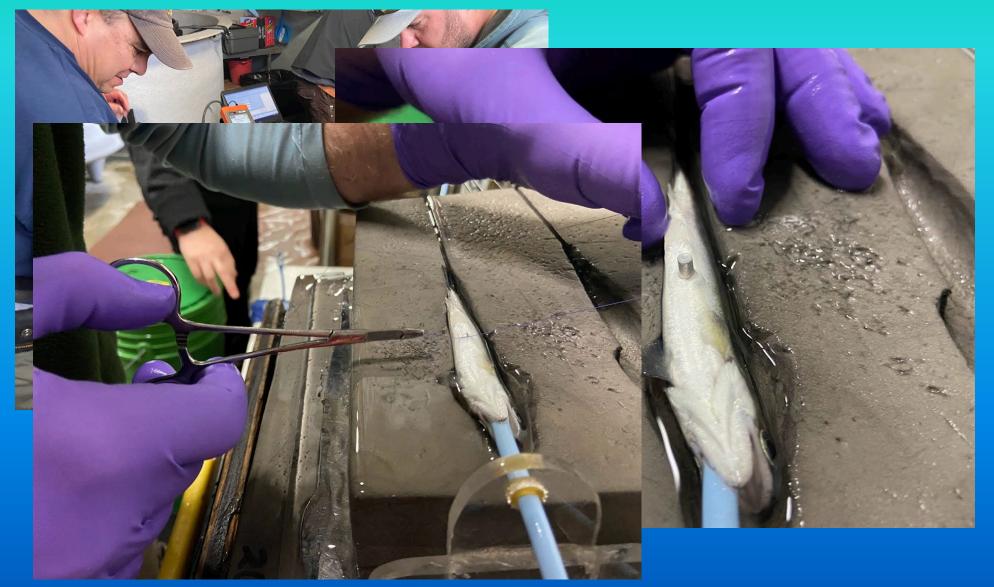


#### 2022 Pilot Juvenile Chinook Outmigration Study Acoustic Receivers at CJD

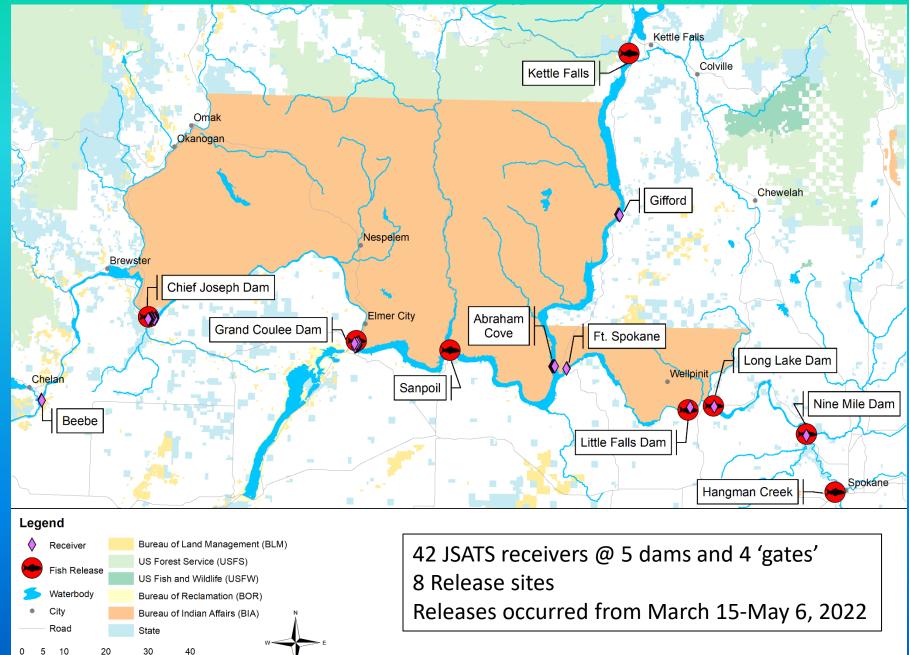


### Tagging (March 14- May 5)

4,588 PIT tag only759 double tagged with PIT and acoustic



#### 2022 Pilot Juvenile Chinook Outmigration Study



Kilometers





### Transport

#### Bucket Brigade!



### **Shore Release**



- Spokane R. sites
- CJD tailrace



### **Boat Release**

- Kettle Falls
- Sanpoil Arm



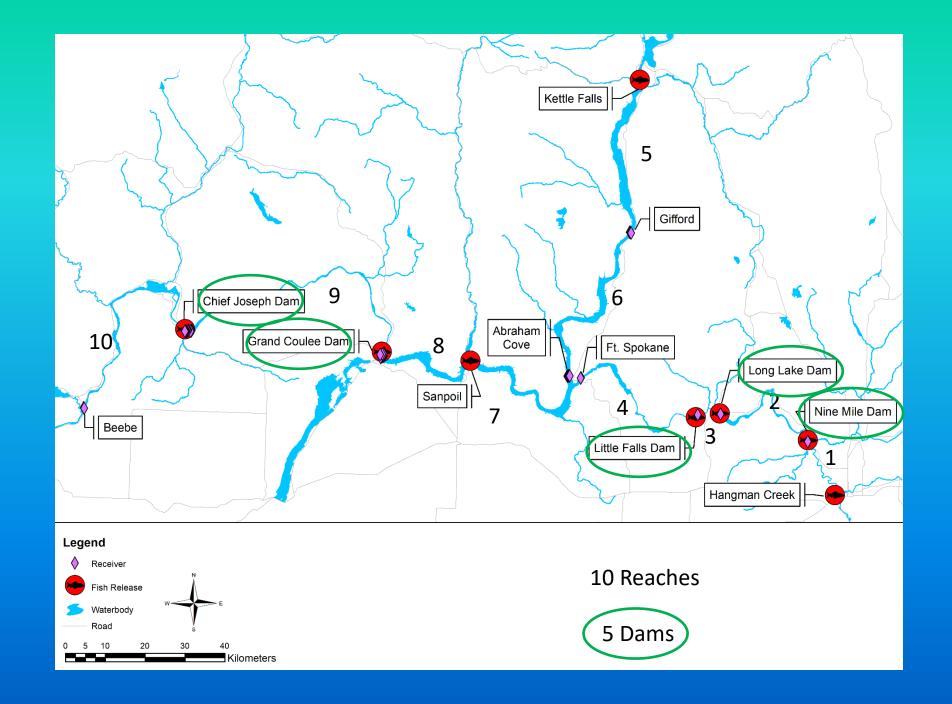


### **Release dates and numbers**

#### (draft-unofficial)

Release Date	Release location	Acoustic & PIT tags released	PIT only released	Total Released
March 15, 17	Kettle Falls	205	903	1108
March 16	Hangman Ck	80	445	525
March 18	Ninemile Falls Dam Tailrace	75	451	526
March 23	Long Lake Dam Tailrace	78	452	530
March 24	Little Falls Tailrace	76	451	527
April 5	Sanpoil Arm	106	461	567
April 15	Grand Coulee Tailrace	71	474	545
May 6	Chief Joseph Tailrace	68	951	1019
		759	4588	5347

Avg. Length 116 mm(4.6 inches)Avg wt. 17.6 grams(26 fish per pound)



#### 2022 Pilot Juvenile Chinook Outmigration Study

Results are pending, data collection goes through mid-July



### Juvenile Hatchery Chinook for UCR Reintroduction

Brood Year(s)	Approx. Number released / Planned	Notes/info
2015-2018	750-1500	PIT/ cultural release
2019	8,000	PIT, overwinter rearing in net pens @ Kettle Falls and Two Rivers
2020	5,000	Acoustic tracking Pilot Study 2022
2021	70,000	For 2023 release, PIT and acoustic studies
2022	Up to 160,000	Egg request, for 2024 release, PIT and acoustic studies

### P2IP Step 1 Review

- Interim fish production facilities
- Local rearing of Chinook and Sockeye
- Acoustic and PIT tag-based juvenile survival studies
- Trap-and-Haul of naïve adult salmon from CJD
- Upstream behavior and passage studies on local-origin adults



### P2IP Funding – Spent (FY21 – FY22)

Entity	Funding	Projects
UCUT Organization	\$140,000	
Individual UCUT Tribes	> \$275,000	<ul> <li>Juvenile Chinook</li> </ul>
WA Dept. of Ecology – Office of Columbia River	\$71,500	<ul><li>Acoustic Study</li><li>PIT Tag Study</li></ul>
WA Dept. of F & W – Orca Recovery Funding	\$40,000	<ul> <li>Rearing Labor and Equipment</li> </ul>
WA State Legislature	\$125,000	
U.S. Geological Survey – Columbia River Research Lab	\$183,000	
TOTAL:	> \$835,000	

In-kind contributions from Corps of Engineers, Reclamation, and Avista Utilities.

### P2IP Funding – Secured (FY23)

Entity	Funding	Projects
UCUT Organization	\$50,000	Juvenile Chinook
Individual UCUT Tribes	> \$460,000	<ul><li>Acoustic Study</li><li>PIT Tag Study</li><li>Rearing Equipment</li></ul>
WA State Legislature	\$3.4 million	<ul> <li>Fish Transport Trucks</li> </ul>
TOTAL:	\$3.9 million	

Total funding previously spent and currently secured = \$4.7 million

### P2IP Funding – Pending Applications (FY23 – FY24)

Entity	Funding	Projects
Bureau of Reclamation – Science and Technology	\$300k over 3 years	<ul> <li>Juvenile Chinook Acoustic Study</li> </ul>
NOAA – Pac. Coast. Salmon Recovery Fund	\$916k over 2 years	<ul> <li>PIT Tag Study</li> <li>Juvenile Chinook Acoustic Study</li> <li>Adult trap-and-haul</li> </ul>
Congressionally Directed Spending	\$5 million	<ul> <li>Juvenile Sockeye Acoustic Study</li> <li>CJD Upstream Collection Planning &amp; Design</li> </ul>
TOTAL:	\$6.2 million	

### P2IP Funding Status

P2IP Schedule		2022	2023	2024	2025	2026	2027
Phase 2 Reintroduction Activities		Step 1 (Years 1 - 6)					
Downstream Behavior and Survival	(yr)	1	2	3	4	5	6
Acoustic Tags Survival and Behavior Chinook		Juvenile Chino	ook Acoustic Study				
Acoustic Tags Survival and Behavior Sockeye			Juvenile Soc	Juvenile Sockeye Acoustic Study			
Juvenile PIT Releases (Chinook)(tag + labor)		Juvenile Chino	ok PIT Study				
Juvenile PIT Releases (Sockeye)(tag + labor)			J	uvenile Sockeye	PIT Release	es	
Upstream Passage Studies	(yr)	1	2	3	4	5	6
Chief Joseph Hatchery Ladder		CID Up Passage Behavior			ehavior		
Grand Coulee (Sanpoil, Transboundary)					GCD Up	Passage B	ehavior
Spokane River		SPO Up Passage Behavio			ehavior		
Interim Upstream/Downstream Design/Build		1	2	3	4	5	6
Agency Preparation to Develop Interim Facilities (permitting)		NEPA, ESA (HGMP), F	ERC, and other pro	cesses and peri	mitting>-	->>	>>->
Adult Trap and Haul - Trucks		Adult Fish Tran	sport Trucks				
Operation		CJD Trap-and-Haul Operations					
Chief Joseph Dam Upstream Passage- Design/Build						Design	
Interim Upstream Passage Facilities Testing	(yr)	1	2	3	4	5	6
RM&E - Spawning, AR/S, PBT, Reproductive Success		Annual RM&E					
Interim Hatchery Facilities	(yr)	1	2	3	4	5	6
Review Exisiting Facilities for Program Use		Facility Planning					
Expand Interim Early Rearing Facilities and Net Pens		Interim Facilities					
Operate Interim Hatchery Facilities			Interim Product	ion Facility Oper	rations		

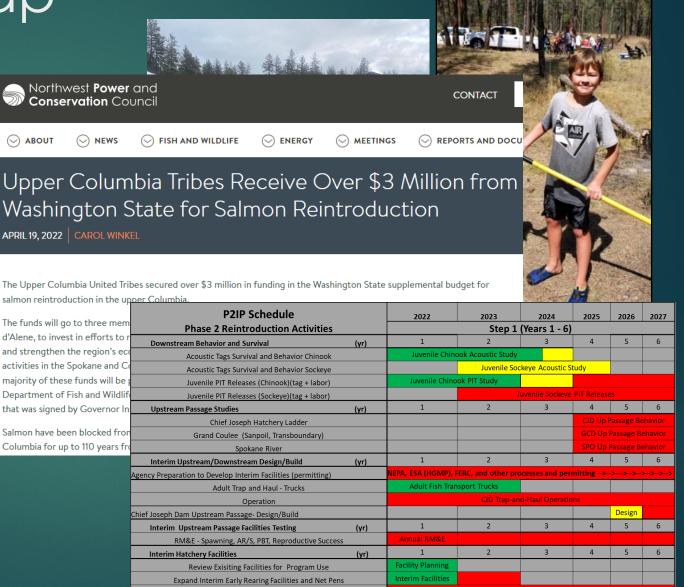
### P2IP Funding – Outstanding Needs

- Development and operation of local rearing facilities
- Long-term PIT tag program at fullscale as described in P2IP
- Agreement and support for adult trap-and-haul at CJD
- Upstream adult behavior and passage studies
- Internal capacity



### P2IP Progress Recap

- Reintroduction activities are being advanced and driven by the Tribes
- Regional momentum has increased with more partners investing in this work
- Needs and gaps remain to be filled



**Operate Interim Hatchery Facilities** 





### Key Considerations

- Work with the UCUT Tribes to develop an approach to determine how to proceed with this work
- Identify Program funds to implement this work
- Aid in securing needed donor stocks and identifying/developing rearing space to support needed studies and cultural and educational releases
- Engage in UCUT outreach efforts and participate in regional discussions
- Support of the P2IP as it satisfies Program measures laid out and adopted in the 2014 Fish and Wildlife Program and further reinforced in the 2020 Addendum

### Questions?

