



**PRCC Habitat Subcommittee  
 Meeting/Conference Call**

**Thursday, 14 September 2023  
 11:00 a.m. – 2:00 p.m.**

**Meeting Minutes**

**PRCC Habitat Subcommittee Members**

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Kate Terrell, Shelby Fowler (alt), USFWS	Chris Fisher, CTCR
Dave Duvall, Deanne Pavlik-Kunkel (alt), GPUD	Brandon Rogers, Hans Smith (alt), YN
Justin Yeager, NMFS	Carl Merkle, CTUIR
Jeremy Cram, Amanda Barg (alt), WDFW	Erin Harris, GPUD
Nathan and Clayton Buck, Wanapum	Tracy Hillman, BioAnalysts, Facilitator

**Meeting Attendees**

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Brandon Rogers, YN	Dave Duvall, GPUD
Justin Yeager, NMFS	Chris Fisher, CTCR
Kate Terrell, USFWS	Amanda Barg, WDFW
Deanne Pavlik-Kunkel (GPUD)	Jeff Dengel, WDFW
Tom Kahler, DPUD (for joint agenda item)	Catherine Willard, CPUD (for joint agenda item)
Nathan Buck, Wanapum	Becky Gallaher, CPUD (for joint agenda item)
Tracy Hillman, BioAnalysts	

**Action Items:**

- Amanda Barg and Jeremy Cram will check to see if there will be additional invoices for maintenance work on the Libby Acquisition Project.

## Decision Items<sup>1</sup>:

- The PRCC Habitat Subcommittee members elected to contribute \$765,000 to the Cascade Orchards Icicle Creek Flow Restoration Project. Funding will come from Fund 603.

### I. Welcome and Introductions

Tracy Hillman welcomed everyone to the meeting and participants introduced themselves. Tracy noted that the PRCC Habitat Subcommittee (HabSC) and HCP Tributary Committees will meet jointly for the presentation on the Icicle Peshastin Irrigation District (IPID) Screening Project presentation. Following the presentation, the PRCC HabSC will take a short lunch break and reconvene to discuss PRCC HabSC items.

### II. Icicle Peshastin Irrigation District Screening Project Presentation (with the HCP Tributary Committees)

Jeff Dengel (WDFW) joined the meeting to discuss the Icicle Peshastin Irrigation District Screening Project. This was a joint meeting with the HCP Tributary Committees. Jeff gave a presentation titled "IPID Fish Screen" (see Attachment 1). The purpose of the presentation was to describe the implementation and success of the project. Jeff began by thanking all the project partners and funders, which included the PRCC HabSC, and noted that work in Icicle Creek can be challenging because of political issues and stakeholder interests. Nevertheless, they were able to complete the project.

After describing the location of the project and the conditions that existed before the screening project was implemented, Jeff reviewed the design of the project, including the relocation of the screening structure. He indicated that the total cost of the project was \$2,444,237. This included \$343,221 for design and \$2,101,016 for construction. Jeff added that this project carried with it a large funding gap, which was covered by various funders. There were cost increases associated with materials (e.g., steel, lumber, concrete, and diesel), the large footprint of the project, and new design elements (e.g., flume and componentry). He added that there were many challenges associated with the project, including dealing with ownership of the Snow Lake Bridge, stakeholder complexities, site relocation, inflated material costs, labor shortages and costs, and increased time and excavation work. Jeff was pleased to report that even with all these challenges, they were able to implement the project under budget.

Jeff then walked through the milestones and work that remains to be completed. He said fish passage at the boulder field and the Snow Creek Bridge were completed in 2020. The IPID screen and IPID relocation designs were completed in 2020 and 2021, respectively. Component installation, operational test and water-up, and reprogramming and modifications occurred in 2023. Elements that will be completed this fall include the perimeter fence and bay ladders. Jeff then showed photos of the completed elements of the project. He again thanked the committees for funding, support, and feedback throughout the process.

Chris Fisher asked whether there are any estimates of fish mortalities associated with the previous diversion and screen. Jeff replied no, but he will try to find information on losses. Amanda Barg indicated that there are no estimates of losses because there was no monitoring at that time. Kate Terrell noted that based on the configuration of the older bypass and screen, mortalities were likely close to 100%. Dave Duvall asked whether there will be any ceremony or site visit once the project is entirely completed. Jeff said not at this time, but because Dave asked, Jeff will schedule a site visit during spring 2024. Kate asked whether WDFW intends to do any monitoring within the new system

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<sup>1</sup> All decision items listed here were approved by PRCC HabSC members.

(e.g., PIT-tag monitoring). Jeff indicated that they do not have plans to do monitoring at this time. Amanda indicated that there are PIT-tag arrays in Icicle Creek upstream and downstream of the boulder field. However, the upstream array is dead and will need to be replaced.

The Committees thanked Jeff for the presentation and discussion. Jeff will let the Committees know when there will be a site visit.

### III. Lunch Break

### IV. Agenda Review

The PRCC HabSC reviewed and approved the September agenda.

### V. Approve August Meeting Notes

PRCC HabSC members reviewed and approved the 10 August 2023 meeting notes.

### VI. Review Action Items

The PRCC HabSC reviewed the following action item from the August meeting:

- Dave Duvall will provide the PRCC HabSC with the slides he presented during the PRCC Policy Committee Meeting. **Complete. The slides were sent to the PRCC HabSC following the August meeting.**
- Dave Duvall will check internally to see whether Grant PUD staff intend to join the Okanagan Nation Alliance tour in Canada. **Complete. No other staff from Grant PUD will join the tour in Canada.**

### VII. Project Updates

Members of the PRCC HabSC provided the following updates on funded projects:

- **Lower Wenatchee Instream Flow Enhancement Project, Phase II Project** – Kate Terrell stated that the sponsor (Trout Unlimited; TU) worked on agreements with their consultants (Grette Associates and Pacific Engineering) during August. The sponsor also started meeting with individual stakeholders along the Jones Shotwell Ditch easement to discuss the project and what the end product will look like. Kate noted that the stakeholders are on board with the project.
- **Icicle-Peshastin Irrigation District Fish Screen Project** – See Section II above for a complete description of the status of this project.
- **Cascade Orchards Icicle Creek (COIC) Flow Restoration Project** – This project is discussed under Section VIII.
- **ORRI VDS Backwatering Project** – Chris Fisher said that the Okanagan Nation Alliance (ONA; sponsor) completed two back-watering riffles last year. The sponsor is constructing the remaining three riffles this year. These constructed riffles are associated with vertical drop structures 14-17.
- **Lower Trout Creek Re-naturalization: Stage 1 Construction** – Chris Fisher reported that Phase I is complete and implementation of Phase II (construction of four additional riffles) will begin this year. Members will visit this project during the tours in October.

- **Big Meadow Creek Fish Passage Restoration Project** – Kate Terrell reported that Cascade Fisheries (sponsor) installed the approach guardrails and the project is now complete.
- **Okanagan Lake Dam East Salmon Passage Project** – Chris Fish reported that ONA will provide more details regarding this project during the tour next month.
- **Peshastin Creek RM 2.5 Project** – Kate Terrell reported that Cascade Fisheries (sponsor) is working on the additional insurance requirements associated with Grant PUD funding.
- **Libby Acquisition Project** – Dave Duvall indicated that he received an invoice from WDFW (sponsor) for revegetation and herbicide treatment on the Libby parcel. He asked whether he should add this project to the Project Update list. Members agreed that the project should be added to the list until it is closed. Dave reminded the group that the original project included \$25,000 for maintenance on the site. In September 2022, Jeremy provided a list and costs for maintenance work to be conducted on the property. The total cost was \$7,750. At that time, the PRCC HabSC approved the use of \$7,750 for maintenance work on the Libby parcel. In January 2023, Jeremy reported that the Libby Acquisition Project can be closed once the final invoice for maintenance work is received from WDFW. Amanda Barg and Jeremy Cram will look into whether this is the final invoice for maintenance work on the parcel.

## VIII. Restoration/Protection Projects

**Cascade Orchards Icicle Creek (COIC) Flow Restoration Project** – In January 2023, the PRCC HabSC received a specification sheet from Chelan County Natural Resources Department titled, *Cascade Orchards Icicle Creek Flow Restoration Project (Amended Request from March 2021 Submittal)*. The goal of this project is to permanently restore 11.9 cubic feet per second (cfs) and 4,012.4 acre-feet per year (afy) of instream flow to Icicle Creek through a partial water rights acquisition and construction of a downstream pump station and piped irrigation system. The project will add 11.9 cfs and 4,012.4 afy of flow from RM 4.5 to RM 1.9 and at least 3.9 cfs and 2,694 afy of flow from RM 1.9 to the confluence of Icicle Creek with the Wenatchee River. The total cost of the project is \$5,250,000. The sponsor requested \$765,000 from the PRCC HabSC. In January, the PRCC HabSC decided to table the proposal, because they needed to review the Report of Examination for Water Right Change prepared by the Washington Department of Ecology (Ecology).

Following the recent release of the final Report of Examination by Ecology, the PRCC HabSC re-reviewed the specification sheet. After reviewing the final Report of Examination and the specification sheet, the PRCC HabSC elected to contribute \$765,000 to the project.

***Decision:*** *PRCC Habitat Subcommittee members elected to contribute \$765,000 to the Cascade Orchards Icicle Creek Flow Restoration Project. Funding will come from Fund 603.*

## IX. Information Updates

**Okanagan Tour** – Tracy Hillman reported that the Okanagan Nation Alliance (ONA) will host a tour of potential projects in the Okanagan Basin on 11-12 October. Chris Fisher shared a draft agenda with the PRCC HabSC (see Attachment 2). Chris would like to show the group the culvert replacement project on Johnson Creek. He said the new structure has a natural stream bottom and is designed to maintain a wetland that likely formed because of the previous structure. He stated that most of the tour in Canada will focus on potential projects in tributaries on the eastside of Okanagan Lake. This includes Mission Creek, Trepanier Creek, and Trout Creek. Streams on the westside of the lake are not included because the road along the westside of the lake may be closed due to fires and debris flows. The group will also visit the Penticton Channel and Okanagan Dam, where ONA will construct a fishway for salmon passage.

The following individuals indicated that they plan to attend the tour: Chris Fisher, Dave Duvall, Catherine Willard, Tom Kahler, Tracy Hillman, John Box, Andrew Gingerich, and Elianna Rosenthal.

**X. Adjourn**

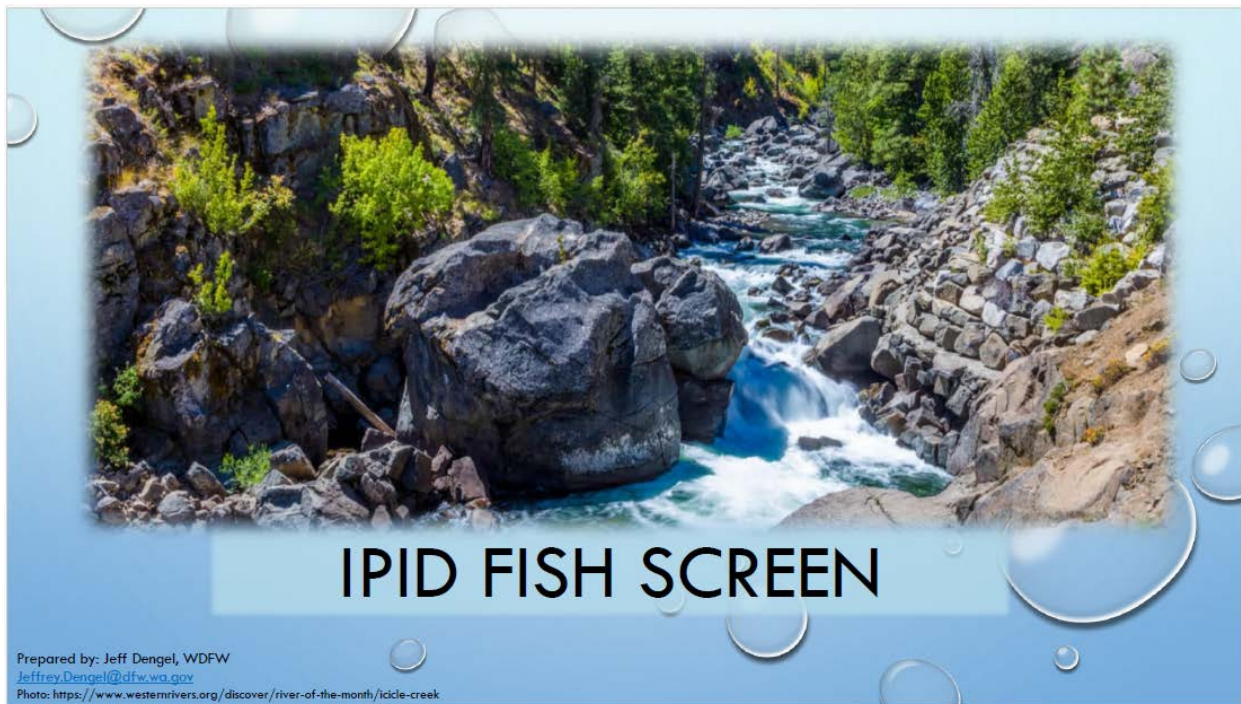
Tracy Hillman adjourned the meeting at 2:00 pm.

**XI. Next Meeting**

The next meeting of the PRCC HabSC will be on 9 November 2023. Some members will attend the tours in Canada on 11-12 October.

# Attachment 1

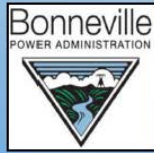
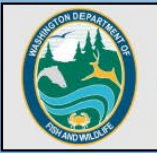
## Presentation by Jeff Dengel on the Iccle Peshastin Irrigation District Screening Project



Prepared by: Jeff Dengel, WDFW  
[Jeffrey.Dengel@dfw.wa.gov](mailto:Jeffrey.Dengel@dfw.wa.gov)  
Photo: <https://www.westernrivers.org/discover/river-of-the-month/icicle-creek>

# PROJECT PARTNERS AND FUNDERS

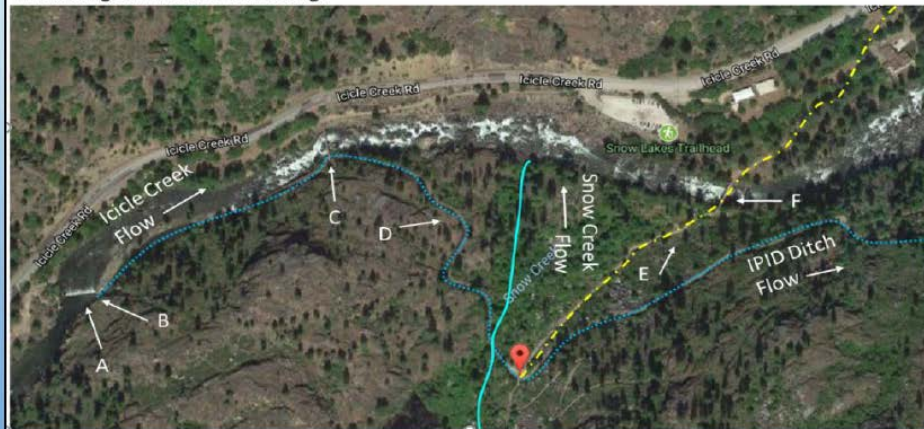
- ICICLE-PESHASTIN IRRIGATION DISTRICT
- WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
- GRANT COUNTY PUBLIC UTILITY DISTRICT (PRCC-HABITAT SUBCOMMITTEE)
- BONNEVILLE POWER ADMINISTRATION
- WASHINGTON DEPARTMENT OF ECOLOGY (OFFICE OF COLUMBIA RIVER)
- ICICLE WORK GROUP



## LOCATION AND EXISTING CONDITIONS

### IPID - Snow Creek Site Layout

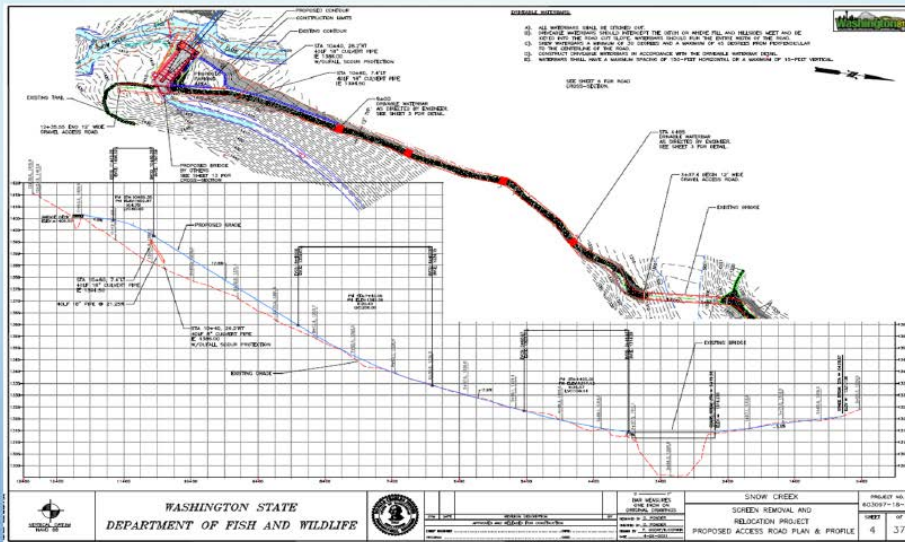
- A. Existing Diversion Dam for Icicle-Peshastin Irrig Dist (IPID) & City of Leavenworth Intakes
- B. Existing Point of Diversion for IPID
- C. Existing Screens
- D. Existing Ditch
- E. Existing Access Road/Trail
- F. Existing Snow Lakes Trail Bridge



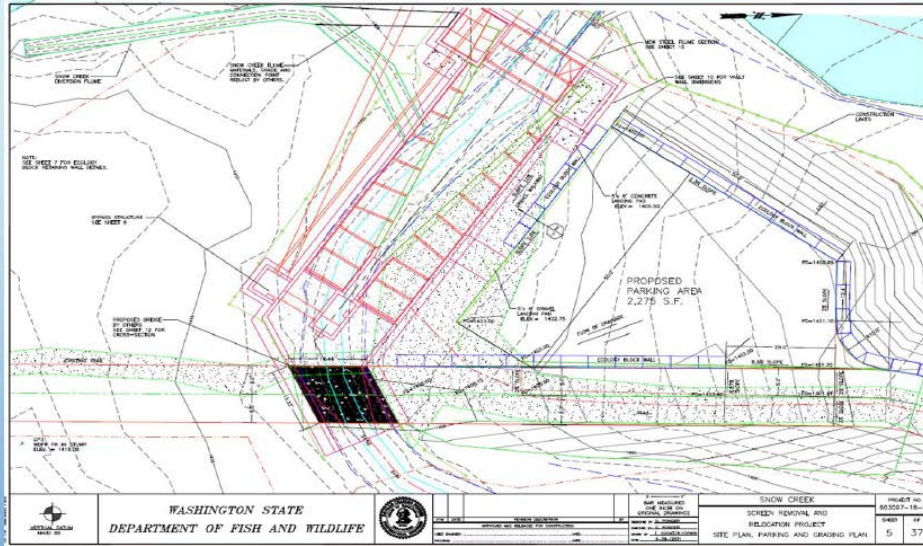
# LOCATION AND FORMER CONDITIONS



# RELOCATION DESIGN

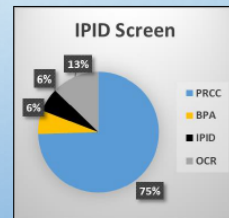
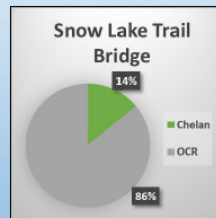
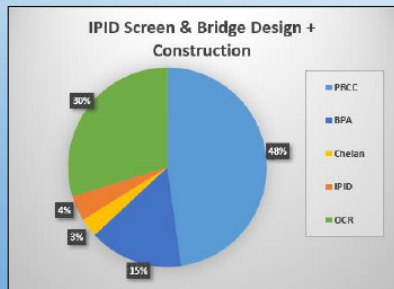


# RELOCATION DESIGN



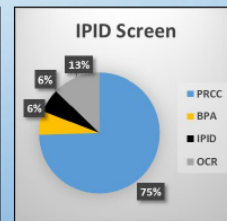
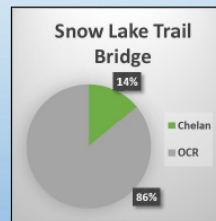
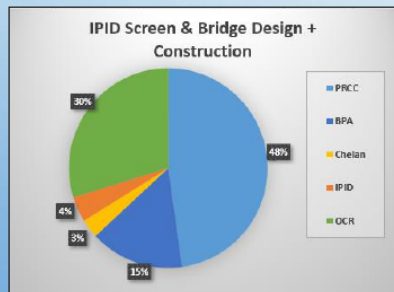
# PROJECT COST

		PRCC	BPA	Chelan	IPID	OCR	Total Cost
Design	IPID Screen + Snow Creek Bridge	-	\$248,810	-	-	\$66,935	\$315,745
	WDFW Admin and Reporting	-	\$25,777	-	-	\$1,699	\$27,476
	<b>Screens + Bridge Combined</b>	<b>-</b>	<b>\$274,587</b>	<b>-</b>	<b>-</b>	<b>\$68,634</b>	<b>\$343,221</b>
Construction	Snow Lake Trail Bridge	-	-	\$75,000	-	\$459,566	\$534,566
	IPID Screen	\$1,167,400	\$100,000	-	\$100,000	\$199,050	\$1,566,450
	<b>Screens + Bridge Combined</b>	<b>\$1,167,400</b>	<b>\$100,000</b>	<b>\$75,000</b>	<b>\$100,000</b>	<b>\$658,616</b>	<b>\$2,101,016</b>
<b>Total Cost</b>		<b>\$1,167,400</b>	<b>\$374,587</b>	<b>\$75,000</b>	<b>\$100,000</b>	<b>\$727,250</b>	<b>\$2,444,237</b>



## PROJECT COST

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Design	IPID Screen + Snow Creek Bridge	-	\$248,810	-	-	\$66,935	\$315,745
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	IPID Screen	\$1,167,400	\$100,000	-	\$100,000	\$199,050	\$1,566,450
	Screens + Bridge Combined	<b>\$1,167,400</b>	<b>\$100,000</b>	<b>\$75,000</b>	<b>\$100,000</b>	<b>\$658,616</b>	<b>\$2,101,016</b>
<b>Total Cost</b>		<b>\$1,167,400</b>	<b>\$374,587</b>	<b>\$75,000</b>	<b>\$100,000</b>	<b>\$727,250</b>	<b>\$2,444,237</b>



## PROJECT COST

Item	2020 Project Cost	2021 Project Cost
Screen Construction & Management	\$1,167,400	\$1,566,450
<b>Subtotal</b>	<b>\$1,167,400</b>	<b>\$1,566,450</b>
IPID (Labor)	(\$100,000)	(\$100,000)
PRCC-HSC 2020	(\$1,067,400)	(\$1,067,400)
PRCC-HSC 2021	-	(\$100,000)
OCR-IWG 2021	-	(\$199,050)
BPA 2021	-	(\$100,000)
<b>Funding Gap</b>	-	<b>\$0</b>

**Project-related cost increase between design phases:**

- 50% of cost increase associated with materials  
(steel +42%, lumber +148%, diesel +92%, concrete +116%)
- 30% associated with enlarged project footprint (relocation)
- 20% associated with new design elements (e.g., flume and componentry)

## CHALLENGES

- SNOW LAKE BRIDGE (USFS/IPID OWNERSHIP NEGOTIATIONS)
- ICICLE POLITICS (STAKEHOLDER COMPLEXITIES)
- SITE RELOCATION (REDESIGN AND COST INCREASE)
- INFLATING MATERIAL COST (\$200K+ COST INCREASE)
- LABOR SHORTAGE AND COSTS (COVID MANDATE/OVERTIME)
- EXCAVATION (INCREASED TIME AND EQUIPMENT/FILL COSTS)



## MILESTONES AND REMAINING WORK

- BOULDER FIELD PASSAGE (2020 TU)
- SNOW CREEK BRIDGE (2020 CCNRD)
- IPID SCREEN DESIGN (2020)
- IPID RELOCATION DESIGN (2021)
- COMPONENT FABRICATION (WINTER 2022)
- IPID IN-KIND (WINTER 2022-SPRING 2023)
- COMPONENT INSTALLATION (WINTER/SPRING 2023)
- OPERATIONAL TEST AND WATER-UP (MAY 2023)
- REPROGRAMING & MODIFICATIONS (JUNE 2023)
- PERIMETER FENCE (FALL/WINTER 2023)
- BAY LADDERS (FALL 2023)





# QUESTIONS?



<https://www.fisheries.noda.gov/species/oregon-head-trout>

# Attachment 2

## Draft Agenda for the Okanagan Tour

### OKANAGAN PROJECT TOUR

Wednesday, October 11<sup>th</sup>, 2023

&

Thursday, October 12<sup>th</sup>, 2023

### TOUR AGENDA

#### October 11<sup>th</sup>, 2023

7:30 am	Arrive at Douglas PUD in East Wenatchee
9:30 am	Arrive at Riverside, Washington, culvert replacement on Johnson Creek
10:00 am	Depart from Riverside
12:40 pm	Lunch in Penticton, <i>Loki's Garage</i>
3:00 pm	Arrive at Mission Creek, Kelowna
4:15 pm	Arrive at Trepanier Creek, Peachland
5:15 pm	Arrive at Ramada Inn
5:45 pm	Dinner at <i>KVR Pub</i>

#### October 12<sup>th</sup>, 2023

8:30 am	Depart <i>Ramada Inn</i> in Penticton and walk along Penticton Channel spawning bed to Okanagan Dam and back to Ramada Inn
10:00 am	Arrive at Trout Creek, Summerland
11:30 am	Arrive at Okanagan River, Okanagan Falls
12:00 pm	Depart for home