



**PRCC Habitat Subcommittee  
 Conference Call**

Thursday, 14 April 2022  
 11:00 a.m. – 3:00 p.m.

**Meeting Minutes**

**PRCC Habitat Subcommittee Members**

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Kate Terrell, USFWS	Chris Fisher, CCT
Dave Duvall, Deanne Pavlik-Kunkel (alt), GPUD	Brandon Rogers, Hans Smith (alt), YN
Justin Yeager, NMFS	Carl Merkle, CTUIR
Jeremy Cram, Ben Truscott (alt), WDFW	Erin Harris, GPUD
Tracy Hillman, BioAnalysts, Facilitator	

**Meeting Attendees**

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Chris Fisher, CCT	Justin Yeager, NMFS
Brandon Rogers, YN	Kate Terrell, USFWS
Dave Duvall, GPUD	Jeremy Cram, WDFW
Deanne Pavlik-Kunkel, GPUD	Erin Harris, GPUD
Tom Kahler, DPUD	Catherine Willard, CPUD
Jeff Dengel, WDFW	Aaron Penvose, TU
Theo Burgoon, TU	Clayton Buck, Wanapum
Tracy Hillman, BioAnalysts	

**Action Items:**

- Chris Fisher will ask ONA to provide detailed plan drawings and a description of how they intend to fix the entrance to the ORRI Phase II side channel. ONA will also need to provide a cost estimate for this work.
- Deanne Pavlik-Kunkel and Dave Duvall will check whether Grant PUD has changed the minimum dollar amount (\$300) for equipment purchased that would need to be returned to Grant PUD at the end of the contract.
- Tracy Hillman will update the PRCC Habitat Subcommittee Operating Procedures based on member input. Tracy will send the document to the Habitat Subcommittee for final review.

- Tracy Hillman will update the Deed of Rights document based on member input. Tracy will send the document to the Habitat Subcommittee for final review.
- Jeremy Cram will ask WDFW staff for a list and cost of actions and equipment needed for maintenance on the Libby property.
- Jeremy Cram will determine WDFW's alternate on the PRCC Habitat Subcommittee.
- Tracy Hillman will add Carmen Andonaegui to the PRCC Habitat Subcommittee distribution list.

## I. Welcome and Introductions

Tracy Hillman welcomed everyone to the meeting and noted that the PRCC Habitat Subcommittee and HCP Tributary Committees will meet jointly for the Icicle Creek Projects Presentations by WDFW and Trout Unlimited. Following the presentation, the PRCC Habitat Subcommittee will take a short lunch break and later reconvene to discuss PRCC Habitat Subcommittee items.

## II. Icicle Creek Projects Presentations (with the HCP Tributary Committees)

Jeff Dengel, WDFW, gave a presentation to the PRCC Habitat Subcommittee and HCP Tributary Committees titled, *IPID (Icicle Peshastin Irrigation District) Fish Screen Update* (see Attachment 1). Jeff began his presentation by describing the partners and funders of the project and identified the location of the project. He showed the existing diversion dam for IPID and the City of Leavenworth intakes, existing screens and ditches, and existing access road and trails. He then described the relocation designs. Jeff identified the project costs, including the original costs and costs increases, which were largely due to increases in materials (e.g., steel, lumber, diesel, and concrete) and new design elements (e.g., flume and componentry). Jeff identified the achievements and milestones and noted that remaining tasks include headgate installation, ditch/screen/trash rack demolition, WDFW-component installation, electrical contracting and installation, commission and calibration, and de-mob and completion. The project should be completed by spring 2023.

Jeff described some of the challenges associated with this project. He said the Snow Lake Bridge required extensive negotiations between the Forest Service and IPID. Because of stakeholder complexities, Icicle politics were challenging. In addition, redesign, cost increases (from inflation), labor shortages (from COVID mandate), and excavation were all challenging. He was very grateful to all the funding partners and for their patience. He is confident the project will be completed in mid-2023.

Aaron Penvose, TU, gave a presentation titled, *Icicle Creek Boulder Field Passage Project Retrospective* (see Attachment 2). Aaron began by recapping the components of the project, which included replacing 1,600 feet of the City of Leavenworth mainline, upgrading the City of Leavenworth fish screen facilities, and constructing a step-pool passage channel. Aaron described the process of replacing the mainline, which was a tremendous effort. He then shared the design drawings for the step-pool channel. He also showed before and after photos of the step-pool channel and described the need for adaptive management. Aaron indicated that after construction, some large rock from the bank fell into some of the step pools. This required re-excavation of some of the pools.

Aaron identified several challenges associated with this project. He said a large project such as this one required multiple funding sources. He said managing all the various funding sources was difficult and intensive. He also noted that permitting was challenging because of the short timeframe in which they could construct the instream component of the project. In addition, they were only allowed to break rock using tools that were wrong for this job. Finally, he said construction was difficult because of the unique work involved and the widely variable subsurface conditions. In addition, the work site was constrained because of geomorphology and public interface.

Chris Fisher asked whether the site will need to be adaptively managed into the future. Aaron responded they will likely need to adaptively manage the site until reseeding takes hold. He added that large wood recruited to the step-pool channel could be a problem. Jeremy Cram asked about other opportunities upstream from the boulder field. Aaron said there are other locations upstream from the boulder field where enhancement work may be appropriate.

The PRCC Habitat Subcommittee and Tributary Committees thanked Jeff and Aaron for their presentations.

### III. Lunch Break

### IV. April Agenda Review

The PRCC Habitat Subcommittee reviewed and approved the agenda with the following additions:

- Time Extension on the ORRI VDS Backwatering Project.
- ORRI Phase II Side Channel Project discussion.
- Report on PRCC Habitat Subcommittee Expenditures and Unencumbered Balances.
- Site Tours in Canada.
- WDFW Representation on the PRCC Habitat Subcommittee.

### V. Approve February Meeting Notes

Habitat Subcommittee members approved the 10 February 2022 meeting notes.

### VI. Review Action Items

The Subcommittee reviewed the following action items from the February meeting:

- Kate Terrell will contact Trout Unlimited to see whether the Lower Wenatchee Instream Flow Enhancement Project, Phase II Project should be closed because the project has lingered for a long period of time with no action. **Complete. This project is expected to be completed in 2024.**
- Tracy Hillman will send the draft PRCC Habitat Subcommittee Operating Procedures to the Habitat Subcommittee for review. **Complete.**
- Tracy Hillman will send the draft list of project action types to the Habitat Subcommittee for review. **Complete.**
- Jeremy Cram will let Cascade Fisheries know the Silver Side Channel contract is closed and they will need to submit a new Specifications Sheet for monitoring in the Silver Side Channel.
- Dave Duvall will prepare a standardized Deed of Right template for Habitat Subcommittee review. **Complete.**
- Dave Duvall and Jeremy Cram will continue to investigate how much property maintenance has occurred and will occur on the Libby and Trinidad acquisition projects. **Completed.**

### VII. Project Updates

Members of the Habitat Subcommittee provided the following updates on funded projects:

- **Wenatchee River Juvenile PIT-tag Detection Barge** – Jeremy Cram reported that they resolved the concerns with the language in the contract that identified who owns the barge when the project is complete. The PRCC agreed that WDFW will own the barge after the project is complete. Jeremy added that the barge is ready for placement. He said unfortunately, he did not consider sales tax when he developed the budget for the barge. Thus, WDFW had to come up with about \$30,000 to cover sales tax.
- **Toole/Mardini/Jawa Acquisition Project** – Chris Fisher reported no new updates on this project.
- **McIntyre Dam - Fish Jumping Efficiency Project** – Chris Fisher reported that the next update on this project will be autumn 2022.
- **Lower Wenatchee Instream Flow Enhancement Project, Phase II Project** – Kate Terrell reported there has been no new activity on this project. The sponsor (Trout Unlimited; TU) continues to communicate with

the Jones Shotwell Ditch Company (JSDC) director regarding the Conservation Commission Irrigation Efficiency Grant Program (IEGP) Application review process. Unfortunately, the sponsor has not received any new information at this time.

- **Funding Activities of Barkley Irrigation Company Permanent Point of Diversion – Wilson Property Options Discussion Project** – Justin Yeager reported no new updates on this project. Because this is a PRCC NNI project, the PRCC Habitat Subcommittee decided to delete it from their project list.
- **Weyco (Weyerhaeuser) Mill Creek Land Acquisition – CDLT Developmental Funding/Final Acquisition Project** – No new activity on this project.
- **Icicle-Peshastin Irrigation District Fish Screen Project** – No new activity on this project.
- **Assessment of Sediment Chemistry Behind Enloe Dam on the Similkameen River Project** – Chris Fisher reported that the final Interpretive Report from USGS should be available in May. He added that Washington Department of Ecology has selected a firm to do additional core sampling that will provide a large-scale evaluation (upstream, downstream, and within the reservoir). Sampling should begin this week and will extend over a two-week period. Results from additional core sampling should be available this August.
- **Ben Canyon Creek Fish Passage Project** – No new activity on this project.
- **Cascade Orchards Icicle Creek Flow Restoration Project** – Justin Yeager reported the sponsor (Washington Water Trust; WWT) is working with Ecology on permitting. The sponsor hopes to begin implementation soon.
- **ORRI VDS Backwatering Project** – Chris Fisher reported that the sponsor (Okanagan Nation Alliance; ONA) has completed three of the five riffles. They have about \$45,000 remaining in their budget. ONA would like to know if they can extend the period of the contract through March 2024. Kate Terrell and Dave Duvall responded that is not necessary as the contract ends in 2026. Chris said he would relay this information to ONA.
- **Nason Ridge Acquisition Project** – Brandon Rogers reported this project is set to close mid-April 2022. He added the sponsor (Chelan County Natural Resources Department; CCNRD) is planning a meeting with Resource Committee members this summer.

### **VIII. Restoration/Protection Projects**

**ORRI Phase II Side Channel Project** – Chris Fisher reported that the entrance to the ORRI Phase II side channel has filled with sediment and ONA would like to use the \$35,121 remaining in the budget to fix the side channel entrance. Dave Duvall said this project began in 2012 and the last invoice was received in 2018. The PRCC Habitat Subcommittee noted that because this project has no end date, the funds are still available for use. However, the PRCC Habitat Subcommittee will need to see detailed plan drawings of the proposed fix for the entrance before they approve the use of remaining funds to fix the entrance. Chris said he will ask ONA to provide detailed plan drawings and a description of how they intend to fix the entrance to the side channel. A cost estimate of the proposed work is also needed. Once the PRCC Habitat Subcommittee receives the information from ONA, they will decide whether the remaining funds, or a portion of those funds, can be used to fix the entrance.

### **IX. Administration**

**PRCC Habitat Subcommittee Operating Procedures** – Dave Duvall reported that Tracy Hillman sent the draft PRCC Habitat Subcommittee's Operating Procedures to the group last February. He said he and Tracy identified questions and comments for members to consider. Members walked through the document and responded to the questions and comments. Most of the discussion centered around Land Acquisitions and Conservation Easements. Members agreed to retain the original language that was approved by the PRCC Habitat Subcommittee regarding the sale of property acquired with PRCC Habitat Subcommittee funds. Members agreed to include a reference to "Yellow

Book” appraisals and agreed to remove the section titled, Chelan-Douglas Land Trust Acquisition Agreement. Finally, members agreed to retain the original language in the section titled, Guidance on Ownership of Real or Personal Property. However, the bullet in that section that describes equipment purchased with a value of \$300 or more will be returned to Grant PUD at the end of the contract may need to be updated. Deanne Pavlik-Kunkel and Dave Duvall said they will see whether Grant PUD has changed the minimum dollar amount (\$300). Tracy will make the recommended changes and send the document to members for final review. Members will vote on approving the document during their May meeting.

**Review Standardized Deed of Right Template** – Dave Duvall reported that he and Tracy Hillman transformed the recent Nason Ridge Deed of Rights document into a standardized template that can be used for all acquisition projects. Tracy walked the group through the document and members made edits to the document. Tracy will send the updated Deed of Rights document to the group for final review. Members will vote on approving the document during their May meeting.

**Larry Rees Contract** – Dave Duvall reported that the PRCC Habitat Subcommittee currently has three appraisers under contract. He said Rees and Pacific are identified as primary appraisers, while Walters is a reviewer. Dave asked whether the group would like to end the contract with Rees and work only with Pacific and Walters. Dave noted that Rees has \$4,300 remaining in his contract. Pacific has \$14,740 and Walters has \$8,113 remaining in their contracts. These contracts do not have expiration dates. Kate Terrell and Brandon Rogers commented that the group had previously decided to retain Rees until his funds were exhausted. At that time, the PRCC Habitat Subcommittee would only use Pacific and Walters. Members confirmed this is their desire; retain Rees until his funds are exhausted and then use only Pacific and Walters.

**Standardized Project Type List** – Dave Duvall stated that he and Tracy Hillman have updated the list of projects funded by the Habitat Subcommittee. He said they classified each project into a habitat action type (e.g., fish screening, fish passage, instream flow, instream structure, etc.). Tracy showed the number of projects funded under each habitat fund account and by all accounts combined. Member appreciated the project lists and summary statistics.

Members reviewed the standardized list of habitat action types. They approved the standardized list of action types with minor modifications. Specifically, they changed Predator Control to Predator Management. They also recommended removing Scientific Conferences from the list. Dave noted that Scientific Conferences was included for accounting purposes. However, it can be removed from the pie chart and summary.

Dave asked whether they should include the standardized list of habitat action types in the Specifications Sheet, with the intent that sponsors will identify the type of project they are proposing. After discussion, members determined adding the standardized list to the Specifications Sheet is not necessary. The PRCC Habitat Subcommittee will assign proposed projects to specific project type.

**Assessment, Monitoring, and Evaluation Funding** – Dave Duvall prepared a spreadsheet that identified the amount of money spent on assessment, monitoring, and evaluation projects. Currently, \$1,478,864 has been spent or is allocated to these projects. This leaves an unallocated balance of \$1,021,136 for assessment, monitoring, and evaluation projects. Recall, a total of \$2.5 million was originally established for assessments, monitoring, and evaluation projects.

**Libby and Trinidad Property Maintenance** – Tracy Hillman reminded the group that there is no record of expenses for property maintenance on the Libby and Trinidad parcels. Thus, each project (Libby and Trinidad) still has \$25,000 for property maintenance. Because Jeremy Cram was not present during the last meeting, members were uncertain what maintenance actions WDFW is proposing on the two properties. Jeremy said he discussed this with appropriate WDFW staff and found that the Trinidad parcel is inaccessible and therefore the project can close and the remaining funds returned to the habitat fund account. As for the Libby parcel, grazing occurs all around the parcel and there is a need for weed control and fence repair. Jeremy will ask WDFW staff for a list and cost of actions and equipment needed for maintenance on the Libby property. Once this information is available, the PRCC Habitat Subcommittee will evaluate the request and make a funding decision.

**PRCC Habitat Subcommittee Expenditures and Unencumbered Balances** – Tracy Hillman shared the following financial information with the Habitat Subcommittee:

Habitat Fund	Expenditures through 31 December 2021	Unencumbered Balance
601	\$308,636.93	\$4,326,600
602	\$750,873.22	\$5,824,487
603	\$0.00	\$1,346,088
<i>Total</i>	<i>\$1,059,510.15</i>	<i>\$11,497,176</i>

**Site Tours in Canada** – Chris Fisher reported that ONA would like to schedule site tours this fall. There have been no tours for several years and it would be appropriate to have them now that most COVID restrictions are lifted. Members agreed and noted that they would like to visit some of the tributaries that drain directly into Lake Okanagan.

**WDFW Representation** – Tracy Hillman reported that Ben Truscott is no longer with WDFW and therefore he was removed from the PRCC Habitat Subcommittee distribution list. Tracy asked Jeremy Cram who will serve as WDFW's alternate on the PRCC Habitat Subcommittee. Jeremy said he will look into it. In the meantime, Jeremy asked that Carmen Andonaegui be added to the distribution list. Tracy will add Carmen to the distribution list.

## **X. Adjourn**

Tracy Hillman adjourned the meeting at 3:00 pm.

## **XI. Next Meeting**

The next meeting of the PRCC Habitat Subcommittee will be on 12 May 2022. PRCC Habitat Subcommittee members will meet with the Upper Columbia Regional Technical Team for project tours on 9-11 May.

# Attachment 1

## Presentation by WDFW on the IPID Fish Screen Project








### IPID FISH SCREEN UPDATE

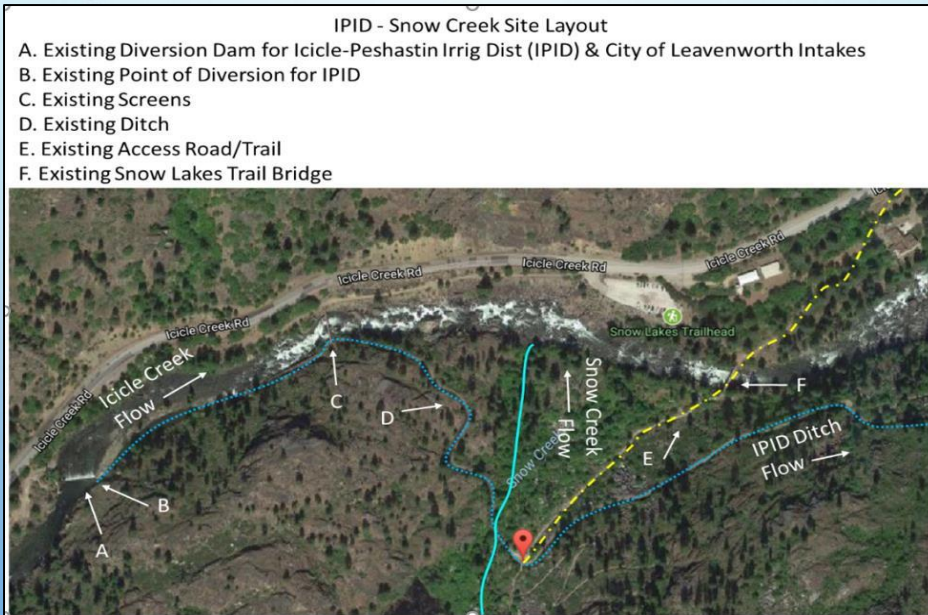
Prepared by: Jeff Dengel, WDFW  
Jeffrey.Dengel@dfw.wa.gov  
Photo: <https://www.westernrivers.org/discover/river-of-the-month/icicle-creek>

## 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

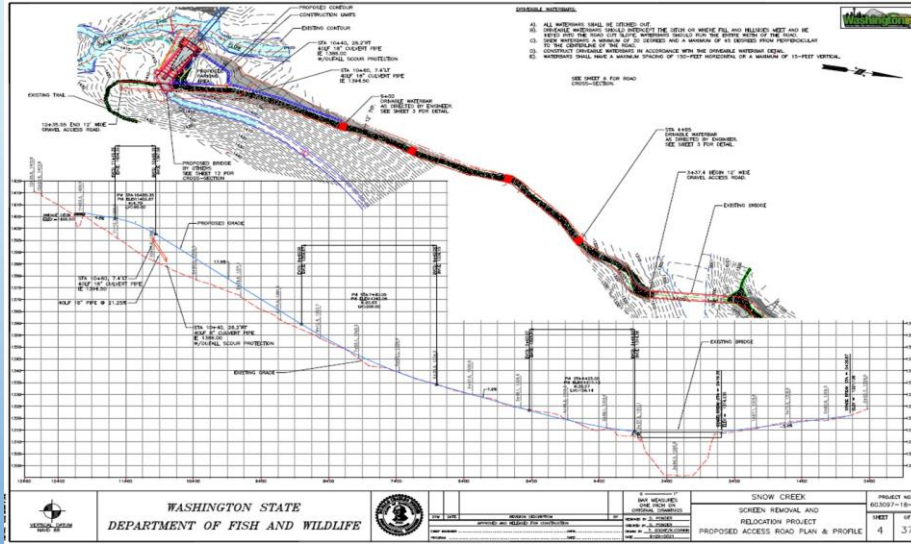


# LOCATION AND EXISTING CONDITIONS

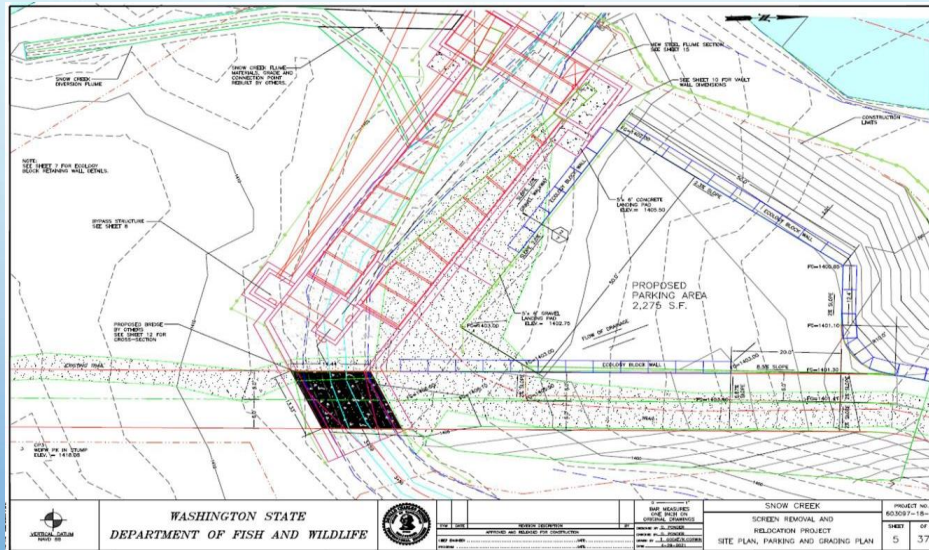




# RELOCATION DESIGN

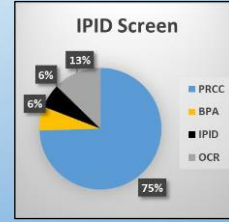
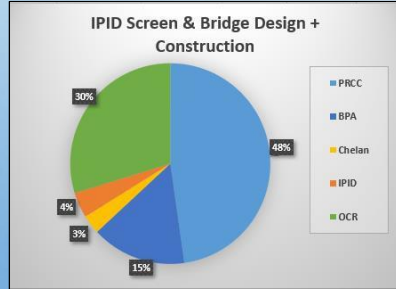


# RELOCATION DESIGN



## PROJECT COST

		PRCC	BPA	Chelan	IPID	OCR	Total Cost
<b>Design</b>	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>
<b>Construction</b>	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

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>-</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)

## ACHIEVEMENTS AND MILESTONES

- BOULDER FIELD PASSAGE (2020 TU)
- SNOW CREEK BRIDGE (2020 CCNRD)
- PERMITTING (2018)
- IPID SCREEN DESIGN (2020)
- IPID RELOCATION DESIGN (2021)
- COMPONENT FABRICATION (WINTER 2022)
- IPID IN-KIND (WINTER 2022)
  - ROAD CONSTRUCTION AND CONDUIT INSTALLATION
  - SCREEN HOUSE CONSTRUCTION
  - FLUME CONSTRUCTION
  - BYPASS CONSTRUCTION



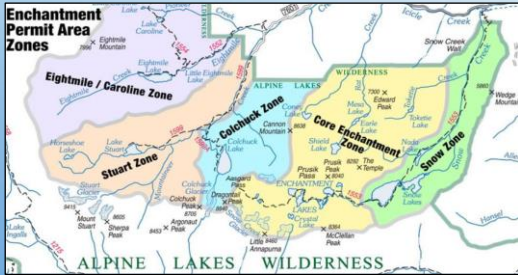
## REMAINING TASKS AND TIMELINE

- IPID STOP-WORK (MAY 2022)
- HEADGATE INSTALLATION (LATE SUMMER/FALL 2022)
- DITCH/SCREEN/TRASH RACK DEMOLITION (FALL/WINTER 2022-2023)
- WDFW-COMPONENT INSTALLATION (FALL/WINTER 2022-2023)
- ELECTRICAL CONTRACTING AND INSTALLATION (FALL/WINTER 2022-2023)
- COMMISSION AND CALIBRATION (WINTER/SPRING 2023)
- DE-MOB AND COMPLETION (SPRING 2023)

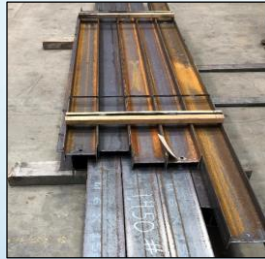


# CHALLENGES

- 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)



# FALL/WINTER CONSTRUCTION



# FALL/WINTER CONSTRUCTION



# FALL/WINTER CONSTRUCTION



# FALL/WINTER CONSTRUCTION



# QUESTIONS?



## Attachment 2

### Presentation by Trout Unlimited the Goodwin Side Channel Monitoring Project



## Recap - Project Components



- Replace ~ 1600 feet of City of Leavenworth Mainline
- Upgrade fish screen facilities for COL
- Construct step-pool passage channel and channel adjustment

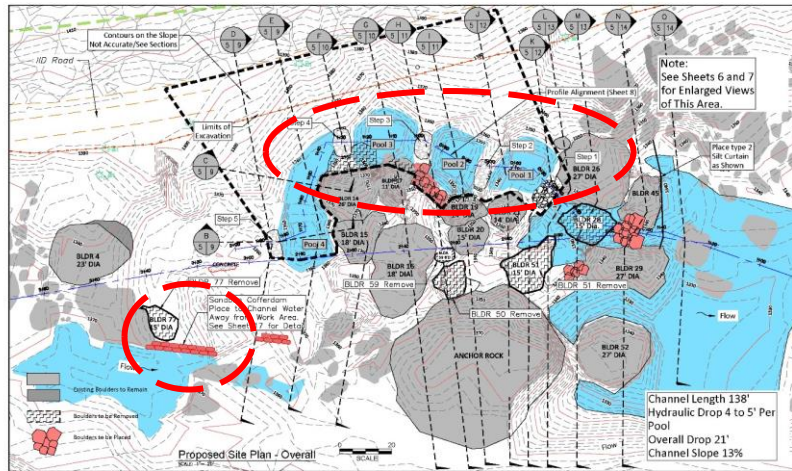
## COL Waterline Replacement







# Step Pool Channel



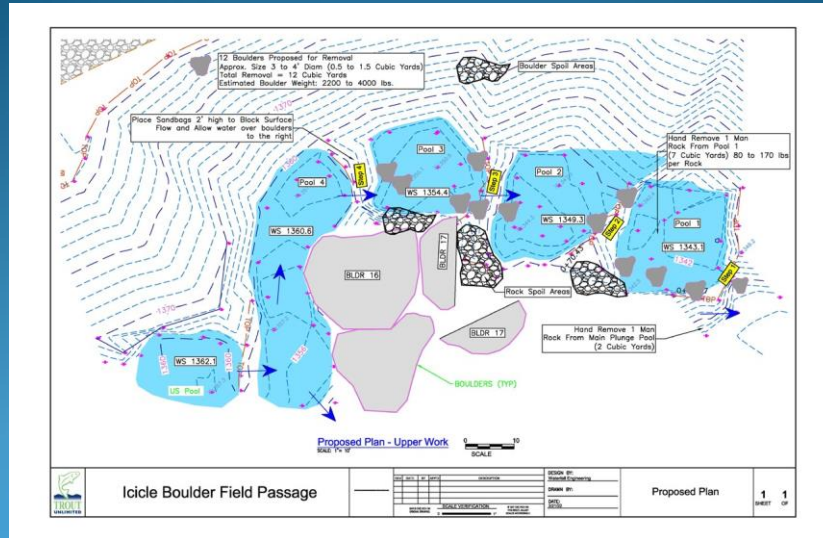
Icicle Boulder Field Passage

Proposed Site Plan Overall

5 OF 17 SHEET

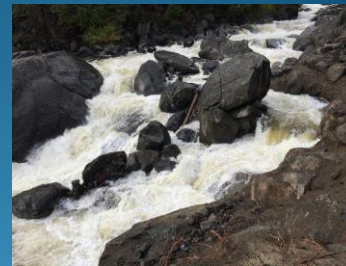


# Boulder Field – Step/Pool Adaptive Management



## Funding Challenges

- Funding
  - Large project, multiple funding sources, project cost side was management intensive
- Permitting
  - Timeframe – narrow fish window, narrowed further by need to construct during low flows
  - Rock breaking methodology/product constraints – only approved options wrong tools for the job
    - Poor precision (boulder17)
    - Ineffective – wrong tool



# Challenges

- Construction
  - Quantifying & tracking pay items
  - Unique Work inherently hard to estimate
  - Widely variable subsurface conditions
  - Constrained work site
  - Public interface, busy road



Questions?

