



## Priest Rapids Coordinating Committee Meeting

In person at Douglas PUD and Webex  
Tuesday, April 25, 2023  
9:00 a.m. to 10:30 a.m.

### Meeting Minutes

#### **PRCC Representatives and Alternatives**

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Curt Dotson, Tom Dresser (Alt), GPUD  
Kirk Truscott, Casey Baldwin (Alt), CTCR  
Tom Lorz, CTUIR  
Scott Carlon, Justin Yeager (Alt), NMFS

Jim Craig, Bill Gale (Alt) USFWS  
Chad Jackson, Andrew Murdoch (Alt) WDFW  
Keely Murdoch, Brandon Rogers (Alt), YN

#### **Meeting Attendees**

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Larissa Rohrbach, Anchor QEA  
Molly Van Dam, Anchor QEA  
Curt Dotson, GPUD  
Tom Dresser, GPUD  
Rod O'Connor, GPUD  
Tim Taylor, GPUD

Scott Carlon, NMFS  
Jim Craig, USFWS  
Chad Jackson, WDFW  
Andrew Murdoch WDFW  
Keely Murdoch, YN

#### **Actions Items**

- T. Lorz will confirm that Brett Hall will serve as the Policy Representative for the Confederated Tribes of the Umatilla Reservation (CTUIR).

#### **Review Items**

- PRCC policy presentations were distributed on April 18 for review and discussion in the May 22 meeting.

#### **Decisions and Approvals**

- None.

## **I. Welcome, Announcements and Agenda Review**

- L. Rohrbach facilitated the meeting on behalf of B. Nordlund. L. Rohrbach welcomed everyone to the meeting. M. Van Dam (Anchor QEA) supported note-taking remotely.
- No changes to the agenda were requested, and the PRCC approved the agenda.

## **II. Meeting Minutes Status**

- The March 28 PRCC meeting minutes were distributed by L. Rohrbach on April 10, 2023, with comments due by April 21. Revised minutes were distributed by L. Rohrbach on April 24 for approval in today's meeting. The PRCC approved the March 28 minutes without additional revisions.

## **III. Actions Items Review**

- Request for K. Truscott to coordinate a presentation by the Confederated Tribes of the Colville Reservation on 2022 Northern Pike Removal Efforts  
*K. Truscott reported by email that Holly McLellan (CTCR) will provide an update in the May 23 meeting. This item is complete.*
- Tom Lorz will confirm that Brett Hall will serve as the Policy Representative for the CTUIR.  
*B. Nordlund reached out to Brett Hall (CTUIR) but has not received confirmation.*
- Draft Policy Representative meeting presentations will be provided to subcommittees for discussion in their May meetings.  
*The policy meeting has been scheduled for July 20. Presentations were distributed on April 18 for review. This item is complete.*
- T. Dresser will prepare a brief summary of potential insurance requirements for NNI Fund or Habitat Subcommittee-Funded projects to inform potential contractors that may bid on those types of projects.  
*The summary was distributed on April 18. This item is complete.*

## **IV. Policy Meeting Planning – next steps for presentation review.**

L. Rohrbach summarized that in the last meeting, the PRCC decided to review the presentations, which were created by Grant PUD and provide them to the subcommittees for review. The PRCC and subcommittees may discuss them during their May meetings. Grant PUD has asked that any written feedback be provided within 30 days of those discussions.

T. Dresser reminded the group that the intent of the policy meeting is to inform representatives about programs and highlight progress in meeting Grant PUD's Settlement Agreement. The focus will also be on relationship building; there has been staff turnover among Policy Representatives, and Grant PUD would like them to meet to become familiar with each other and the programs. The PRCC Policy Representatives have only met about three times since 2006 when the PRCC was formed, and Grant

PUD would like them to get in the habit of having routine annual meetings, this will help build relationships in case there is a need to convene over policy issues in the future. The July 20 meeting is not intended to discuss potential policy issues; at a minimum, the group may discuss what issues may come to them in the future.

T. Dresser asked the PRCC, when reviewing presentations, to remember that the overall goal is to communicate what the PRCC, and subcommittees have accomplished collaboratively. There has been a lot of great progress, and it's important to highlight those examples.

The policy meeting is planned for July 20, in person, for 3 to 4 hours, likely at the Wanapum Heritage Center near Priest Rapids Dam. Grant PUD to cater lunch.

K. Murdoch asked whether the presentations will be presented in the subcommittee meetings, or just available for review. L. Rohrbach said the intent is for PRCC and subcommittee representatives to review the presentations on their own and bring discussion points to the individual subcommittee meetings in May.

#### **V. Steelhead Fallback – ongoing coordination and discussion.**

L. Rohrbach noted that this is a recurring item on the agenda, at Washington Department of Fish and Wildlife's (WDFW's) request. At this time, the discussions are focused on hydro projects upstream of the Priest Rapids Project. A. Murdoch developed a short presentation to respond to comments from the other Coordinating Committees (HCP). Attendees agreed they were interested to view the presentation (Attachment A).

A. Murdoch said today's presentation represents the third part of data presentations on Upper Columbia River overshoot steelhead. The objective is to update the time series with data from 2018 through 2022 because WDFW's original work ended at 2017 and was published. Rerunning all the models used to estimate overshoots from upstream and downstream of Priest Rapids Dam (PRD) would involve a significant effort from other people involved with the modeling.

A. Murdoch was asked to review potential fishery impacts in the time series, especially in the area upstream of Wells Dam where there is a lot of sport fishery activity. There are 6 years of directed harvest data on the steelhead recreational fishery through 2016; from 2017 until now there has been no recreational fishery.

A. Murdoch showed distributions between the previous dataset and updated through 2022. There are similar data distributions between the two data periods for hatchery and wild overshoots; most of the fish were last observed passing over PRD/Wanapum Dam (WAN), and the second most abundant group passed over Wells Dam, which is very similar to what was observed before 2018.

On average, there was more variability in later years driven by smaller sample size, likely in response to the reduced number of passive integrated transponder (PIT) tags among wild Columbia tributary populations resulting from monitoring activities like the Integrated Status and Effectiveness Monitoring Program and activities in the John Day area winding down and also in response to poor smolt-to-adult survival. Because this was an observational study, the numbers are driven by other tagging activities. Ideally,

all downstream populations would tag the exact same proportion of their fish, but this would be difficult to do for wild populations.

The term “Overshoot success” indicates that an overshoot was later detected downstream of PRD; there is not complete coverage to follow fish all the way back to their natal streams.

A. Murdoch presented relative differences in overshoot success during years with and without harvest, which included both wild and hatchery fish to increase sample size. Project-specific rates were reviewed for WAN and PRD; overshoot data at other projects are intermittent and have small samples sizes. The average conversion rate was 87% during non-fishery years, compared to an average conversion rate of 81%. He noted that this analysis is not trying to evaluate reasons behind differences in overshoot success, but it is an observational study looking at years where there was harvest, representing a direct impact from recreational anglers, and comparing that to a period where there were none of those activities to suggest whether harvest can account for some differences seen in overshoot success.

Although there were slightly lower conversions rates during the non-fishery years, there is not a strong signal in the data. There is not much direct harvest happening at PRD and WAN.

T. Dresser asked whether this only accounts for direct harvest or whether it accounts for hooking mortality, especially in the Chinook fishery, which can be very active.

A. Murdoch confirmed the fall Chinook fishery was consistent across the years, and indirect harvest (e.g., from hooking mortality) below PRD is built into this data. The allowable harvest in the steelhead fishery is regulated by the estimated hooking mortality impact in the Columbia Basin.

At Wells Dam, there is a lot more variability in overshoot success. There is a smaller sample size, but the data show very similar overshoot success rate with and without harvest, on average a little lower during the non-harvest period than in the harvest period.

A. Murdoch used the model runs to estimate the number of fish passing above Wells Dam. Within that data, there is a group of fish of unknown origin passing into Wells Pool, and it's assumed they are moving into the Okanogan River (including Foster Creek), which is a reason why overshoots are being investigated further.

A question is, What proportion of potential overshoots are being impacted by catch-and-release mortality? The analysis assumes all catch-and-release mortality is attributed to overshoots and none is attributed to the rest of the population, which is not valid, but the assumption was made to simplify the analysis as a conservative approach. On average, catch-and-release mortality is less than 2% of overshoots, conservatively, and is controlled by an impact level that can't be exceeded. C. Jackson agreed that the allowable impact rate depends on the population tier for recovery, starting at 2% at lowest tier and increasing from there.

A. Murdoch said, for instance, of 2,150 estimated adults passing over Wells Dam in 2010 (the escapement), 1,139 went to the Methow River, 157 went to the Okanogan River, and

854 were not observed anywhere. That was a basis for looking more closely at overshoots. Why aren't these fish assigning to one of the four Upper Columbia River populations?

A. Murdoch said a small number of unsuccessful overshoots (with numbers in the single digits) are observed spawning in Upper Columbia tributaries. Where it does happen, it occurs more above Wells Dam than any other system. It may be in some cases they can't find their way downstream, but that is not something the data are available to evaluate. To validate some assumptions in the model on fish entering tributaries, he is reviewing some telemetry data to try to understand potential behavior across the whole basin. It appears that not all unsuccessful overshoots are spawning in tributaries. Overshoots are not typically observed acting like native fish. Sometimes these fish are observed ascending a dam, then days or months later, moving back downstream, and it's unknown why they behave that way. There is especially more variability in the amount of time overshoots spend upstream of dam at PRD compared to other projects. If these are unsuccessful overshoots from tributaries below PRD, as they move further upstream and cross more dams, they then have to cross more dams to go downstream, so it makes sense to assume they experience higher mortality than other populations.

R. O'Connor said that to support recalculation of hatchery production in the Hatchery Subcommittee, an analysis done by Mike Tonseth (WDFW) arrived at an average harvest rate of 16% between Bonneville and PRD (for both wild and hatchery origin fish). O'Connor said he is surprised to see harvest is so low above PRD. A. Murdoch said there haven't been many fisheries executed above PRD; harvest rules above PRD are different from downstream reaches. K. Murdoch said if there's a harvest fishery executed on hatchery fish, the impact would be expected to be higher on hatchery fish but would the impact to remain within the 2 to 3% rate allowable for wild fish.

A. Murdoch summarized that there is not a large signal evident in the data for an impact of harvest on unsuccessful overshoots. They are also not being observed moving into the tributaries. It's uncertain what the mechanism is for their lack of success. The group of fish that overshoot over PRD only have much a much higher overshoot success rate.

This item will be maintained as a recurring agenda topic, and A. Murdoch will provide updates as the data continue to be evaluated.

## **VI. Survival study planning – ongoing coordination and discussion.**

C. Dotson said Grant PUD has had internal discussions and has made decisions on revisions to the survival study plan. They are now preparing version 3.0 for committee review.

## **VII. GPUD Requirement for Insurance for Funded Projects – brief follow-up.**

T. Dresser said he misspoke at the last PRCC meeting regarding the need to add Grant PUD as additional insured party on contracts and wanted to correct the record.

T. Dresser said he spoke to Grant PUD's risk management and procurement staff and found out that Grand PUD does need to be included as an additional insured party within the contract. Grant PUD would be included on general liability, auto liability, excess insurance, and watercraft liability. A summary from T. Dresser, which can be used to communicate with contractors, was distributed on April 18.

## **VIII. 2023 Fish Passage Operations Report**

Fish passage operations have started their 2023 season, summarized below.

### **IX. Fish Ladder Inspections**

Ladder inspections were being conducted by T. Skiles in coordination with staff from Grant PUD. It's uncertain who will take on that role now that T. Skiles has left Columbia Inter-Tribal Fish Commission (CRITFC). L. Rohrbach asked whether this is consistently a CRITFC role. S. Carlon said that prior to T. Skiles taking this on approximately 4 years ago, National Oceanic and Atmospheric Administration Fisheries did ladder inspections. K. Murdoch said she saw an email from the Fish Passage Center looking for someone to fill the role but does not know if anyone has been selected.

### **X. Fish Spill Updates**

Spill for downstream migrating juveniles started April 19 at WAN and April 20 at PRD. A. Murdoch asked what the criteria are for juvenile spill; C. Dotson said it's based on observing index numbers from the smolt index facility at Rock Island Dam (RIS), with the intent to start fish spill when 2.5% of the run has passed RIS. As of April 18, the count was 60 fish on the Fish Passage Center website, with reports running a couple days behind. A day later the count was 316 fish.

Chelan PUD starts juvenile fish spill at RIS on April 15, even if the fish numbers have not increased; Grant PUD's spill starts strictly based on fish number and not a calendar date. These start dates are associated with the different documents that are in place for Grant and Chelan.

A. Murdoch commented that the problem is that less than 1% of juvenile fish go through the RIS juvenile fish bypass. It is expected that more Wenatchee River juveniles would be collected at RIS compared to other populations, given proximity to the Wenatchee River and that the bypass is on right bank, but that's not what is observed. The Smolt Index should represent populations at large, but we are not certain whether it does. RIS was the first constructed, and a lot of metrics for river management are based on observations made there. C. Dotson said that 1% is considered to be a subset of the population; that a given percentage of a subset represents the same of that percentage of the whole.

### **XI. Fish Counts for 2022**

C. Dotson said adult fish counts started on April 15. T. Dresser said counts are being posted for both WAN and PRD on Grant PUD's external site. There has so far been low passage counts at both projects.

T. Dresser said he has more confidence in the counts than end of last season. A third-party contractor, Four Peaks Environmental, is doing the fish counts this year. T. Dresser said he feels confident that the contractor will be able to keep up with counting activities if they see large returns this year, as happened last year during the Sockeye Salmon run. Grant PUD made several system upgrades over the winter and is still waiting on additional equipment but doesn't expect anything to impact fish counts going forward.

T. Dresser said Grant PUD is continuing to log crowder cleaning activities at both fishways, as was conducted in 2022. Internal Grant PUD has been reminded that they need to minimize the duration of crowder openings when they cycle them to clean them. Data collected will include how long the crowdors were open and whether they documented any fish passing through while the crowdors when in the open position. T. Dresser will update the PRCC on monthly basis going forward.

K. Truscott asked whether Grant PUD has the ability to store data for long periods of time. T. Dresser said Grant PUD don't yet have expanded server capacity and we can store data between 7 to 12 days.

## **Updates**

### **XII. Review of Outstanding NNI Funded Projects**

- **Lower Wenatchee Instream Flow Enhancement Project Phase II**

No update.

- **Northern Pike Removal (2022 to 2024).**

H. McLellan will give a virtual presentation during the May 23 meeting.

- **WDFW PIT tag detection barge.**

C. Jackson and A. Murdoch will provide a presentation in mid-summer, following the 2023 yearling outmigration, focused on detection results and overwinter survival.

A. Murdoch said the barge is being reassembled and will hopefully be deployed this week. Last fall it became beached on a gravel bar during an extended period of very low flows. The barge became trapped in ice, then the river rapidly froze, then the ice broke up within in one day, and the barge was pushed downstream. WDFW has now installed a second anchor to be able to operate in a low-flow location farther downstream, then will restore the anchor point to its original position during peak flows. The local WDFW office has developed its own capacity for pulling the barge in and out of the river rather than relying on a contractor from out of the area. The plan moving forward is to operate the barge in the fall in the low-flow location, then pull the barge out for the winter, and once conditions allow in the spring, to deploy in the low-flow location again. Once the flows increase to 3,000 cubic feet per second (cfs) in the spring, the barge will be towed and anchored in the upper, high-flow location. Fortunately, the barge suffered very minor damage, with minor cracks on some fins, which were repaired, and a bent handrail. It is well built and durable, and WDFW is now more experienced in operation.

A. Murdoch said the data suggests the barge is performing well with detections in low-flow events.

L. Rohrbach asked whether there is a firm date when the barge is pull out of the river. A. Murdoch answered that it will be pulled out before ice shows up. Last fall, the flows declined to approximately 450 cfs and never increased until 0°

weather locked it in ice. When the ice broke up, it shifted to rest on top of 5 feet of ice.

L. Rohrbach asked whether there are concerns about conflicts with recreation in the lower Wenatchee River. A. Murdoch said WDFW does have concerns and has become more mobile and has figured out an operational window based on flows and smolt detections; as soon as the smolt run is over this spring, local staff can pull it out of the river the next day.

- **Quincy Northern Pikeminnow Derby (planned for May 12 to 14).**

T, Dresser said Grant PUD will sign a contract with Quincy Valley Tourism within the next couple of days.

- **2023 RTR Avian Predation Study.**

C. Dotson said the avian predation study will kick off this month.

Preparation for the Real Time Research (RTR) avian predation study is tied to Bureau of Reclamation (BOR) activities at Goose Island and Potholes Reservoir; it seems that this year there have been some staff changes and more-engaged people are involved, as demonstrated by better communication between BOR and their contractor, U.S. Department of Agriculture. At Crescent Island, where 149 nests were observed last year, agencies (Army Corps of Engineers and CTUIR) placed brush on nesting areas to dissuade the terns by covering the nesting habitat. It's uncertain where they will go and if they move elsewhere, whether agencies will be able to respond to it or not. There is speculation that the terns will most likely move into the Potholes area and/or the tern colony at Lenore Lake. Better communication is occurring with BOR and ground crews to respond if bird density shifts. BOR appears more engaged in dialogue this year to coordinate between predation surveys and bird dissuasion activities.

BOR has also taken the initiative to communicate with Portland U.S. Fish and Wildlife Service to answer questions about the number of tern eggs that are allowed to be collected, which was as high as 200 eggs as in previous years. Sarah Fesenmyer and Juddson Sechrist are the new contact for BOR.

RTR has seeded the islands with PIT tags for predation evaluation and set out markers used to quantify nest counts with aerial work. PIT tagging of steelhead at RIS started on April 1.

### **XIII. Subcommittee Updates.**

B. Nordlund has forwarded the latest subcommittee distributions he has received to date via email to PRCC members and alternates.

- Priest Rapids Fish Forum – next meeting is May 3.
- Habitat Subcommittee – next meeting is May 11.
- Fall Chinook Work Group – next meeting is May 2.
- Hatchery Subcommittee – next meeting is May 17.



**XIV. SOAs Discussed in 2023**

<b>SOA number</b>	<b>Key Words</b>	<b>Last Discussed</b>	<b>Status</b>
2022-03	Fish Mode revision	January 24, 2023	Closed
2023-01	Sockeye Salmon Program	January 24, 2023	Closed
2022-02	Hatchery Production Objectives, 2024–2033	February 28, 2023	Closed

**XV. Next Meetings**

The next PRCC meetings are scheduled for May 23 and June 27 at 9:00 a.m., in person, at the Douglas PUD Auditorium and on Webex.

The July 25 meeting will meet in person in the afternoon at Wanapum HB 103.

# UCR Overshoot Steelhead

## Part 3

Andrew R. Murdoch

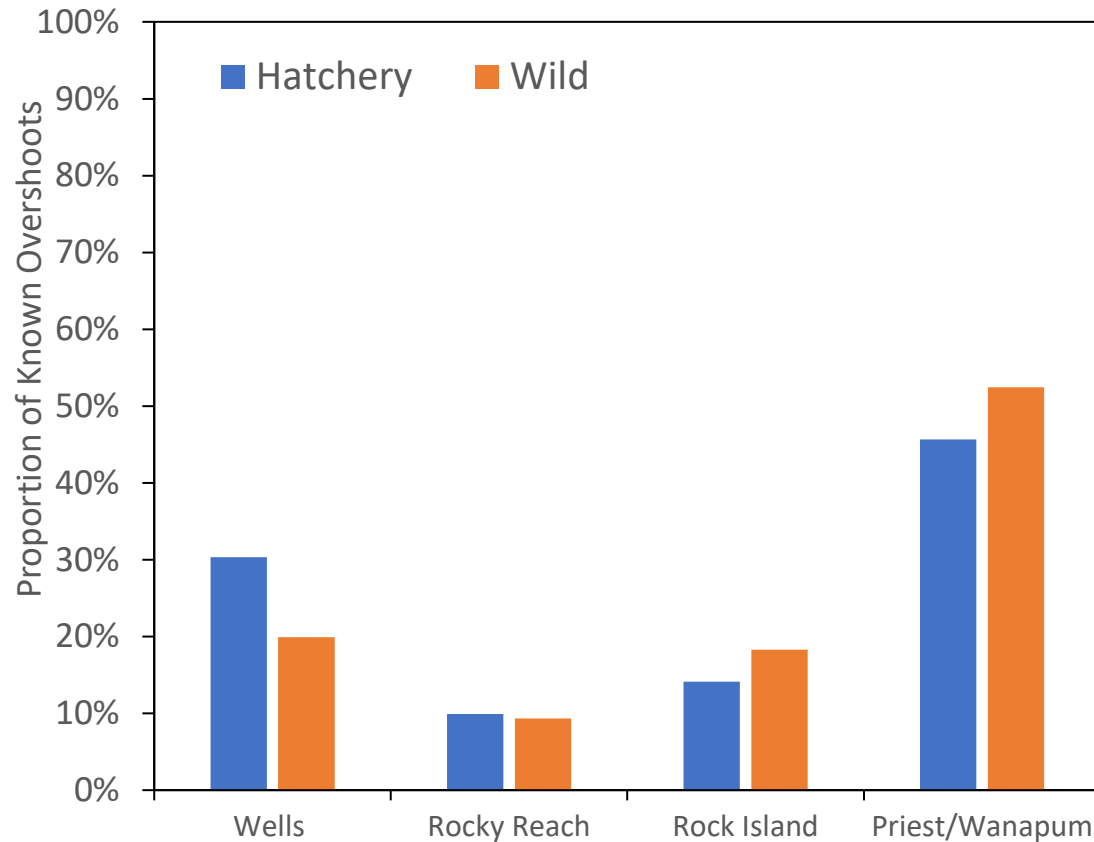
WDFW

# Objective

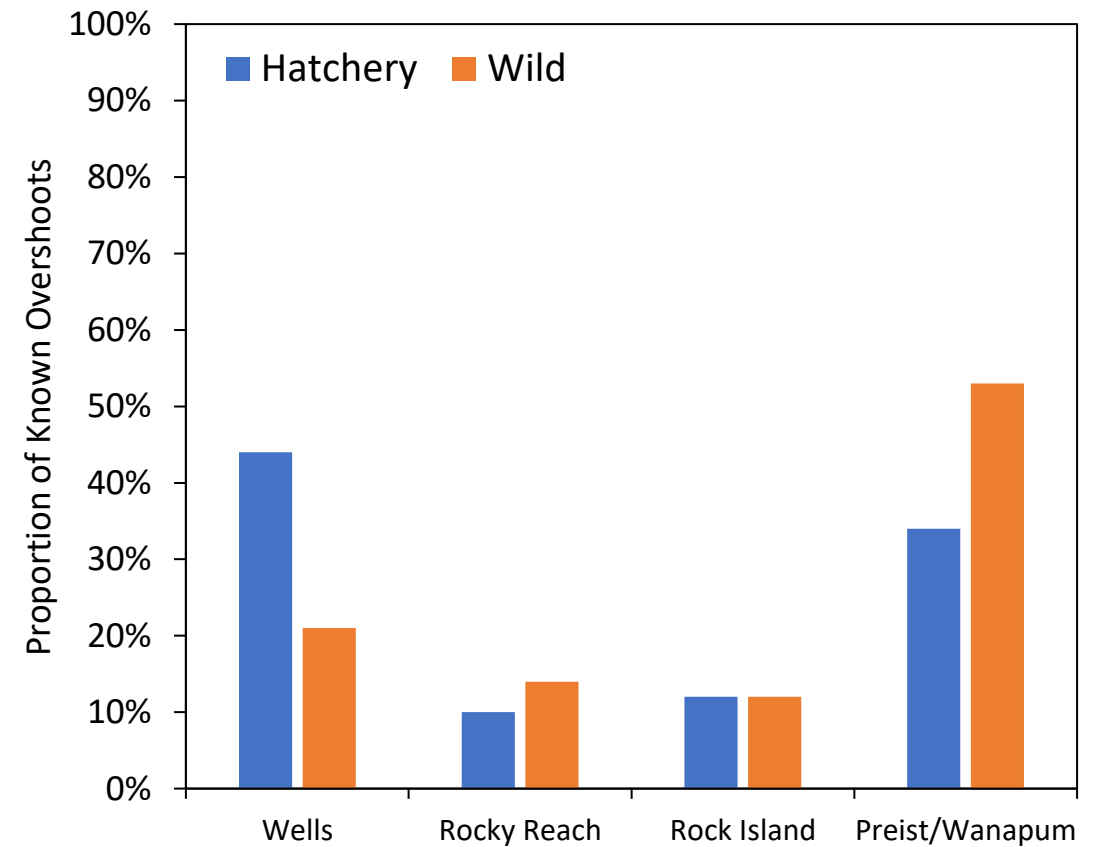
- Update overshoot fallback success (2018-2022)
  - Data presented are just known overshoots (fish PIT tagged as juveniles)
- Examine potential effects of hooking mortality on fallback success
  - 2010 – 2015 sport fishery
  - 2016 – 2022 no fishery (included hatchery fish to increase sample size)

# Steelhead Overshoot Distribution

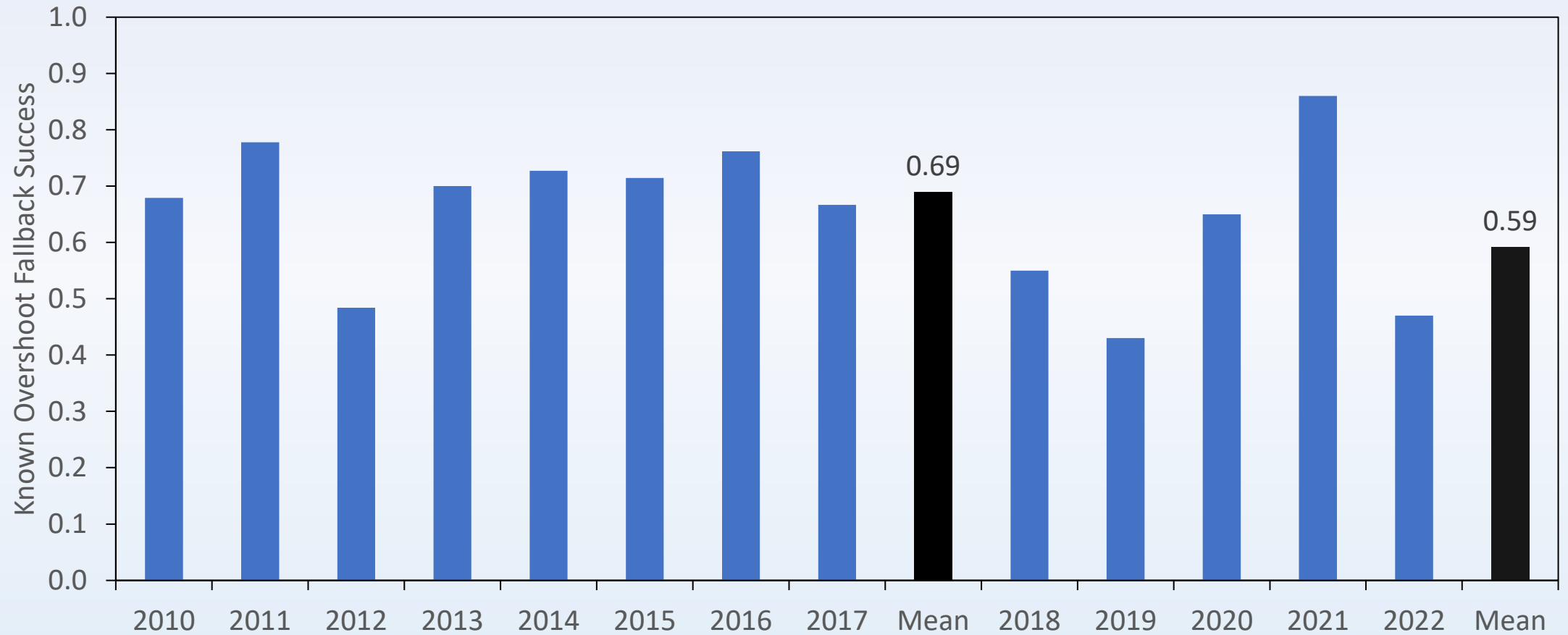
(2010-2017)



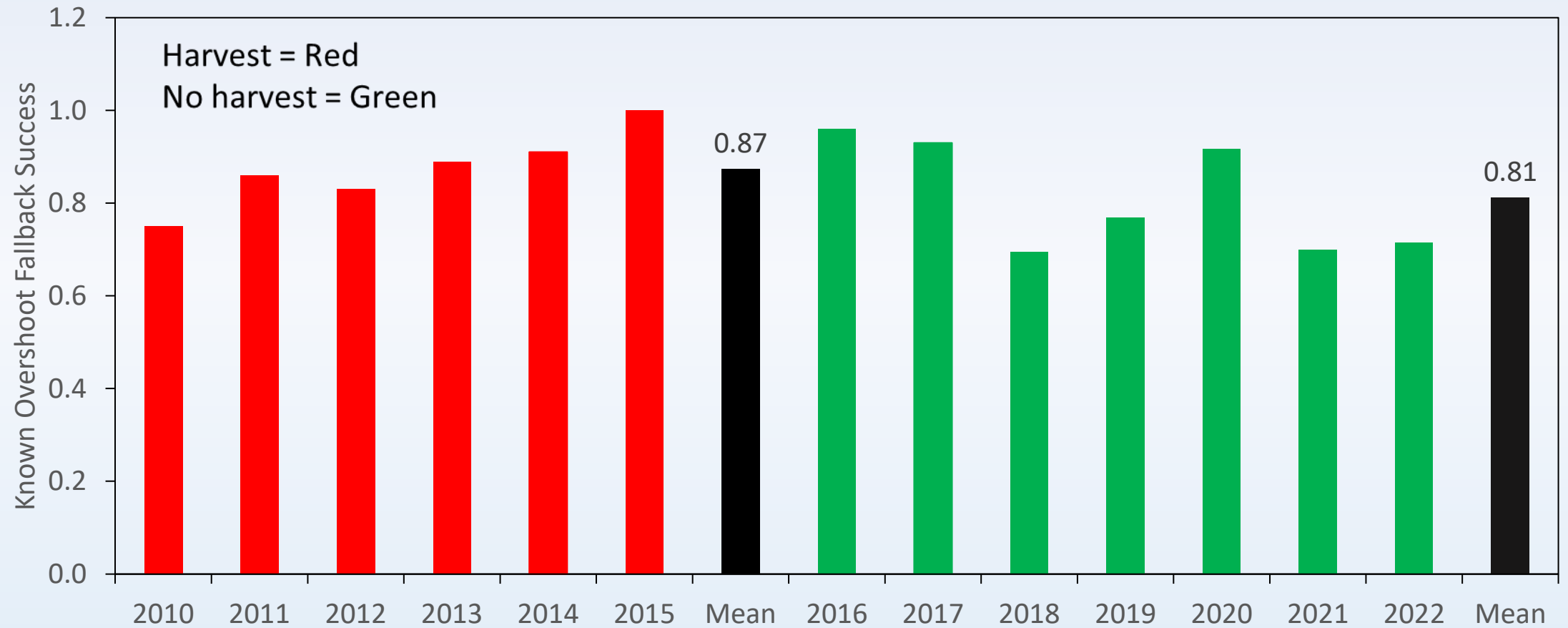
(2018-2022)



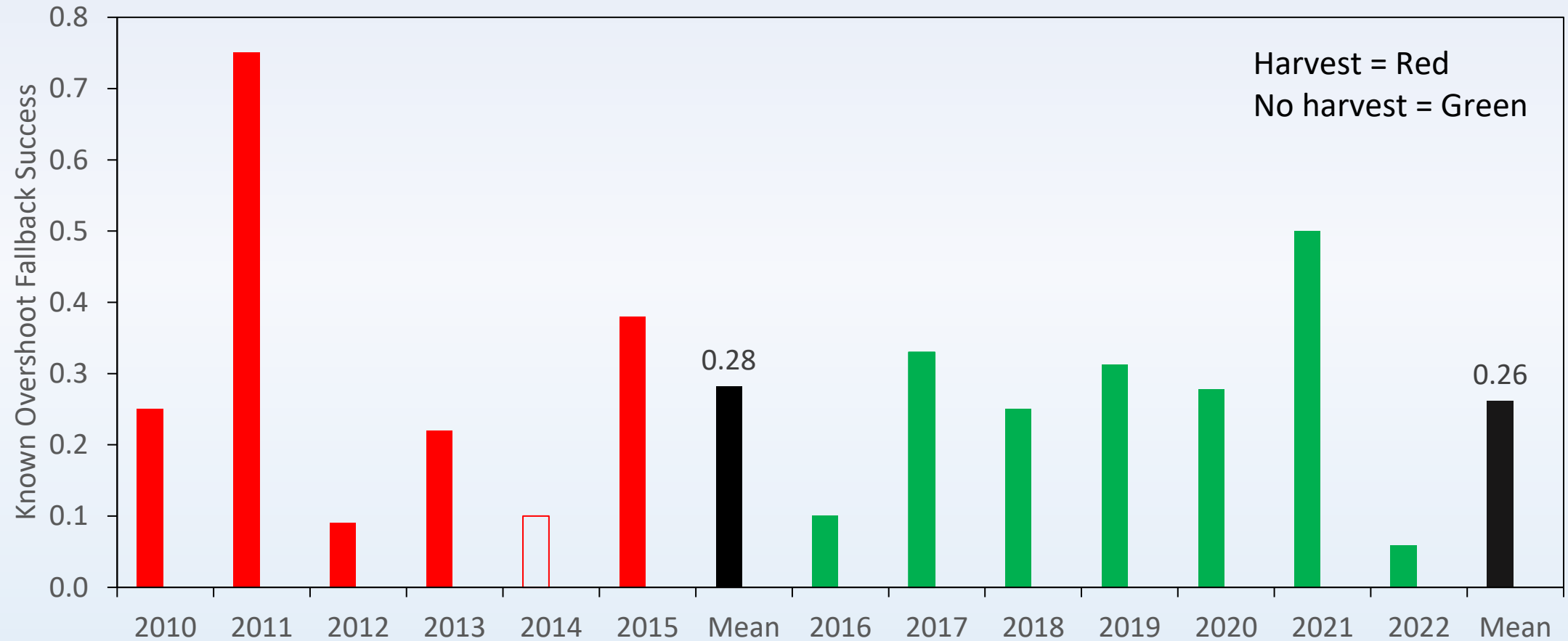
# Wild Steelhead: Known Fallback Migration Success



# Priest/Wanapum Project: Harvest effects



# Wells Project: Harvest effects



# Wells Pool Harvest Data

Year	Wells Dam	Methow	Okanogan	Wells Pool		
				Unknown (overshoots)	C & R Mortality	%
2010	2150	1139	157	854	19	2.2
2011	1609	1008	73	529	6	1.1
2012	1028	524	126	378	12	3.2
2013	1853	1005	443	405	6	1.5
2014	2026	1020	433	562	7	1.2
2015	1883	1021	377	470	6	1.3
Mean	1758	953	268	533	9	1.8



# Wells Pool Harvest Data

Year	Known Overshoots		C&R/ Unsuccess
	Success	Unsuccess	
2010	0.25	0.75	0.03
2011	0.75	0.25	0.05
2012	0.09	0.91	0.03
2013	0.22	0.78	0.02
2014	0.00	1.00	0.01
2015	0.38	0.62	0.02
Mean	0.28	0.72	0.03

# Summary

- In general, 2018-2022 was similar to 2010-2017
- Harvest impacts are minor (< 2%) relative to overshoot fallback success