



Grant County **PUBLIC UTILITY DISTRICT**

Priest Rapids Coordinating Committee

Friday, April 04, 2014

2:00 – 5:00

Conference Call

PRCC Members

Scott Carlon/Bryan Nordlund, NMFS

Bob Rose, YN

Jeff Korth, C. Andonaegui, P. Verhey, WDFW

Tom Dresser/Curt Dotson, GCPUD

Jim Craig, USFWS

Kirk Truscott, CCT

Tom Skiles, representing CTUIR

Denny Rohr, Facilitator

Attendees

Scott Carlon/Bryan Nordlund, NMFS

Bob Rose, YN

Jeff Korth, WDFW

Tom Skiles, representing CTUIR

Russell Langshaw, GCPUD

Denny Rohr, Facilitator

Jim Craig, USFWS

Kirk Truscott, CCT

Tom Lorz, CRITFC

Tom Dresser/Curt Dotson, GCPUD

Debbie Williams, GCPUD

Decision Summary:

1. See approval under each numbered item.

Distributed Items:

1. SOA 2014-02 – Draft Statement of Agreement on Evaluations to be Implemented in 2014 as Part of Existing Requirements or as a Result of the Wanapum Spillway Fracture and Wanapum Reservoir Drawdown.

Action Items:

1. Item 1d - Rose will notify Rohr of the Yakama Nation's decision by April 8th. Rohr will notify the PRCC of that decision.
2. Item 1e - Dresser will notify Rohr by April 8th if Grant PUD will accept NNI Funds as a loan.
3. Trap and Haul - Korth will send the WDFW passage evaluation metrics to Dresser, so that it can be incorporated into Grant PUD's study plans.

Final Meeting Minutes

- I. Welcome and Introductions
- II. SOA 2014-02 DRAFT State of Agreement on Evaluations to be Implemented in 2014 as Part of Existing Requirements or as a Result of the Wanapum Spillway Fracture and

Wanapum Reservoir Drawdown – Rohr reminded PRCC members that on three separate occasions (March 6th, March 14th, and March 26th) subsequent to the Wanapum Spillway Fracture, the PRCC met to discuss how the fracture would affect the 2014 Survival Study Plan that was approved by the PRCC in November 2013. On March 14th, the PRCC agreed to conduct only the Priest Rapids Reservoir survival study and also the Priest Rapids Bypass Behavior portion of the study. Carlon asked that the record reflect that NMFS recommended that the 2014 juvenile survival study include the Wanapum Development during the meeting. On March 26th, Rohr affirmed the PRCC's March 14th vote, thus, an approved Survival and Behavior Study Plan does exist right now. To address concerns brought up after the March 14th vote, Grant PUD drafted "SOA 2014-02 - Statement of Agreement on Evaluations to be Implemented in 2014 as Part of Existing Requirements or as a Result of the Wanapum Spillway Fracture and Wanapum Reservoir Drawdown," (distributed on 04-04-14) to all PRCC members. Rohr asked if anyone disagreed with his summary. No one did.

Discussion of SOA 2014-02 was opened by Dresser, who thanked PRCC members for all of the conversations and feedback he had received in the last few days while drafting this document. Dresser explained that the Statement of Agreement (SOA) is consistent with what FERC has asked of and required from Grant PUD, in order to document that consultation is taking place. PRCC members agreed that each item of the SOA would be discussed and approved or modified prior to moving to the next topic. The following is a summary of item:

- (1) **PRCC approved with the following edits:** remove 3D, correct spelling of presence.
 - (a) **PRCC approved with the following edits:** remove 3D, after juvenile, add salmonid and steelhead, add will cover two species.
 - (b) **PRCC approved with the following edits:** Grant PUD will make an effort to collect route specific information related to the Wanapum spillway, Wanapum Fish Bypass and Wanapum turbines. PRCC understands that due to repairs to Pier Monolith #4, there will be no access to install equipment in the forebay or tailrace of Wanapum Dam.
 - (c) **PRCC approved with the following edits:** Standard error is +5% within the Wanapum Reservoir and at Wanapum Dam.
 - (d) **PRCC approved with the exception of the Yakama Nation and Colville Confederated Tribe.** Dresser explained that survival studies will be conducted as outlined in the Salmon Steelhead Settlement Agreement (SSSA), and if additional mitigation is deemed necessary after the fracture is repaired, the PRCC will determine that mitigation. Rose said that the SSSA has a tribal sovereignty clause and asked that a line be added to the SOA stating that tribes need not seek PRCC approval prior to decision making. Dresser noted that Section 8.1 of the SSSA relates to "Reservation of Tribal Rights" and that all tribes would be covered under this language. Before approving Item (d), Rose will discuss internally. **Rose will notify Rohr of the Yakama Nation's decision by April 8th. Rohr will notify the PRCC of that decision.**
 - (e) PRCC members did not agree that Grant PUD use \$225,000 from the NNI Fund for implementation of the of the Wanapum Reservoir acoustic tag evaluation. Grant PUD stressed that data collected from this evaluation will provide important information to regional co-managers on potential impacts to the run-at-large, and that this is work that the PRCC previously said Grant PUD didn't need to do. All PRCC members except Grant PUD agreed that \$225,000 from the NNI Fund could be used as a loan to

Grant PUD. Dresser will notify Rohr by April 8th if Grant PUD will accept NNI Funds as a loan.

- (2) **PRCC approved with the following edits:** remove 3D, add juvenile sockeye to list of species that may not be feasible to evaluate via acoustic tags in 2014.
- (3) **PRCC approved with the following edits:** remove 3D, it isn't necessary to apply additional PIT-tags at other upstream locations and to conduct additional analysis.
- (4) **PRCC approved**
- (5) **PRCC approved with the following edits:** Combine Item 5 and 5(a), add the PRCC will examine the root cause and extent on the invalidation. Based on this assessment, the PRCC may determine that study results could be included into survival standard calculations.
- (6) **PRCC approved with the following edits:** add Rock Island Dam modifications.
- (7) **PRCC approved with the following edits:** add observers will be stationed at peak passage times and that passage will be documented via direct observations and video sampling.
- (8) **PRCC approved**
- (9) **PRCC approved:** Dresser asked that all PRCC members communicate within their organizations what was decided by the PRCC today.
- (10) **Evaluation - PRCC approved**

III. Trap & Haul

PRCC members agreed that, starting April 15th, as long as normal ladder entrances at Rock Island Dam (RI) are available, trucking fish to the Rocky Coulee release site in Wanapum Reservoir would be their first preference. Trap and haul will run in parallel to fish ladder operations until there is confidence that the ladders at Wanapum Dam (WD), are working.

Two hundred adult hatchery fish will be PIT-tagged and 50 adult hatchery fish will be double tagged with JSATS and PIT-tags at the Off-ladder Adult Fish Trap (OLAFT). They will then be released back into the ladder to migrate through the Priest Rapids Reservoir, and through the ladders at WD. WDFW and CCT, requested that all natural origin fish be trucked past WD. Grant PUD noted that all fish will be directed through the Priest Rapids Left Bank Ladder, and that if there is no passage at WD or RI, then all fish will be trapped and hauled. **Korth will send the WDFW passage evaluation metrics to Dresser, so that it can be incorporated into Grant PUD's study plans.**

IV. Next Meeting – April 11, 2014, 1:30 p.m., Conference Call.

**Priest Rapids Coordinating Committee
Statement of Agreement on Evaluations
To be implemented in 2014 as part of existing requirements or as a result of the
Wanapum Spillway Fracture and Wanapum Reservoir Drawdown.**

Submitted to the Priest Rapids Coordinating Committee: April 4, 2014
Approved by the Priest Rapids Coordinating Committee: _____

Statement: The Priest Rapids Coordinating Committee (PRCC) recognizes and agrees to the following evaluations and actions to be implemented in 2014 as part of the Public Utility District No.2 of Grant County's (Grant PUD) existing requirements or as a result of the Wanapum Spillway Fracture and Wanapum Reservoir Drawdown.

- (1) The PRCC agrees that a Wanapum Reservoir juvenile acoustic tag evaluation (presence/absence) is necessary to inform NOAA-Fisheries and PRCC on the potential impacts on the juvenile salmonid and steelhead run at large as it relates to the necessary drawdown of Wanapum Reservoir and stabilization of Wanapum Spillway Monolith #4.
 - a. The juvenile acoustic tag evaluation conducted within the Wanapum Reservoir will cover 2 species juvenile steelhead and yearling Chinook). Releases will occur in the tailrace of Rock Island Dam with presence/absence detections occurring at transects located at various location within Wanapum Reservoir (e.g. Crescent Bar, Sunland Estates and in the Wanapum Forebay).
 - b. An effort will be made to collect route specific information related to the Wanapum spillway, Wanapum Future Unit Bypass and Wanapum Turbines. However, the PRCC understands that both upstream (forebay) and downstream (tailrace) areas of Wanapum Dam will need to remain clear to facilitate repair activities.
 - c. Release groups will be appropriated size to achieve at least $\pm 5\%$ Confidence Interval within the Wanapum Reservoir and at Wanapum Dam.
 - d. The PRCC agrees that results from the Wanapum acoustic tag evaluation will be used to inform ESA consultations and will not be used in current NNI-Fund calculations as defined in Priest Rapids Salmon and Steelhead Settlement Agreement (SSSA). If additional mitigation is determined to be necessary the PRCC and/or PRCC Policy group will determine the most appropriate means and methods to address future mitigation needs.
 - e. NNI Funds in a total amount not exceed to \$225,000 will be used to facilitate implementation of the Wanapum Reservoir juvenile steelhead and yearling

Chinook acoustic tag evaluation. Information collected will be used to inform the PRCC on potential impacts on the juvenile steelhead and yearling Chinook run-at-large.

- (2) The PRCC agrees that juvenile acoustic tag survival evaluations for other covered species (e.g. sockeye summer sub-yearling) per the SSSA within the Wanapum Reservoir may not be feasible for juvenile sockeye during 2014.
- (3) The PRCC agrees that if the Wanapum Reservoir acoustic tag survival evaluation for juvenile steelhead and yearling Chinook is conducted, the need to apply additional Passive Integrated Transponders (PIT Tags) in migrating juvenile salmonids and steelhead (at other upstream locations and conduct additional analysis) is not necessary.
- (4) The PRCC agrees that the Priest Rapids Reservoir Survival and Priest Rapids Top-spill survival and behavior evaluations (if valid) will be counted as progress towards meeting standards for the Priest Rapids Project for juvenile steelhead and yearling Chinook. The PRCC will determine how valid results would be incorporated into future survival calculations.
- (5) The PRCC agrees that implementation of the Hanford Reach Fall Chinook Protection Agreement (HRFCPA) takes precedent over the Priest Rapids Reservoir Survival and Priest Rapids Top-spill survival and behavior evaluations.
 - a. If through implementation of the HRFCPA; the Priest Rapids Reservoir Survival and Priest Rapids Top-spill survival and behavior evaluations are invalidated (e.g. error falls outside 2.5%); the PRCC will examine the root cause and extent on the invalidation. Based on this assessment, the PRCC may determine that study results could be included into survival standard calculations.
- (6) The PRCC agrees that an adult salmonid evaluation using active tags is necessary to inform NOAA-Fisheries, PRCC and Grant PUD on the Wanapum and Rock Island modifications.
- (7) The PRCC agrees that an adult salmonid observational evaluation needs to occur at both the Wanapum left and right bank ladder exit modifications. Observers would be stationed at collect information during peak passage times at each modified exit of Wanapum Dam. Information on adult salmonid passage over the false weir, through the flume and entry into the forebay would be documented via direct observations and video sampling.
- (8) The PRCC agrees that in addition to an active tag adult salmonid evaluation, PIT tags will also be applied to further inform NOAA-Fisheries, PRCC and Grant PUD on

the Wanapum fishway exit modifications. Priority would be given to the application of PIT tags at the Priest Rapids Off Ladder Adult Fish Trap.

- (9) If this SOA is approved, each PRCC member agrees that they will inform and facilitate communication within their respective agency and will support the actions identified within this SOA. The PRCC also agrees to support/advocate on behalf of Grant PUD's to secure the necessary tags, equipment and permits, if necessary.

**EVALUATIONS/AGREEMENTS THAT GRANT PUD WOULD BE SUPPORTING
AS A RESULT OF THIS SOA**

- Juvenile steelhead and yearling Chinook 3-D acoustic tag survival evaluation through Wanapum Reservoir (preference/absence).
- Juvenile steelhead and yearling Chinook 3-D acoustic tag route specific survival evaluation through Wanapum Dam (if possible).
- Juvenile steelhead and yearling Chinook 3-D acoustic tag survival evaluation through Priest Rapids Reservoir.
- Juvenile steelhead and yearling Chinook 3-D acoustic tag survival and behavior evaluation through the Priest Rapids Top-spill Bypass
- Adult spring Chinook active tag evaluation (3-D acoustic tag) from Priest Rapids Off Ladder Adult Trap to Rock Island Exit.
- Adult salmonid passage observational evaluation at both the Wanapum left and right bank ladder exit modifications.
- Adult spring Chinook passive tag evaluation from Priest Rapids Off Ladder Adult Trap to Rock Island.
- Hanford Reach Fall Chinook Protection Agreement

and 20 and Tainter gates 21 and 22) are presented in Figure 16 and 17. Fish that pass through the top-spill bays 19 and 20 exhibited similar RPP patterns as seen in the prototype bypass figures, where the highest RPP values were found along the face of the spillway. Fish

that pass the bottom-spill show highest RPP values extending from Tainter gates 21 and 22 out into the forebay along the path of predominant flow.

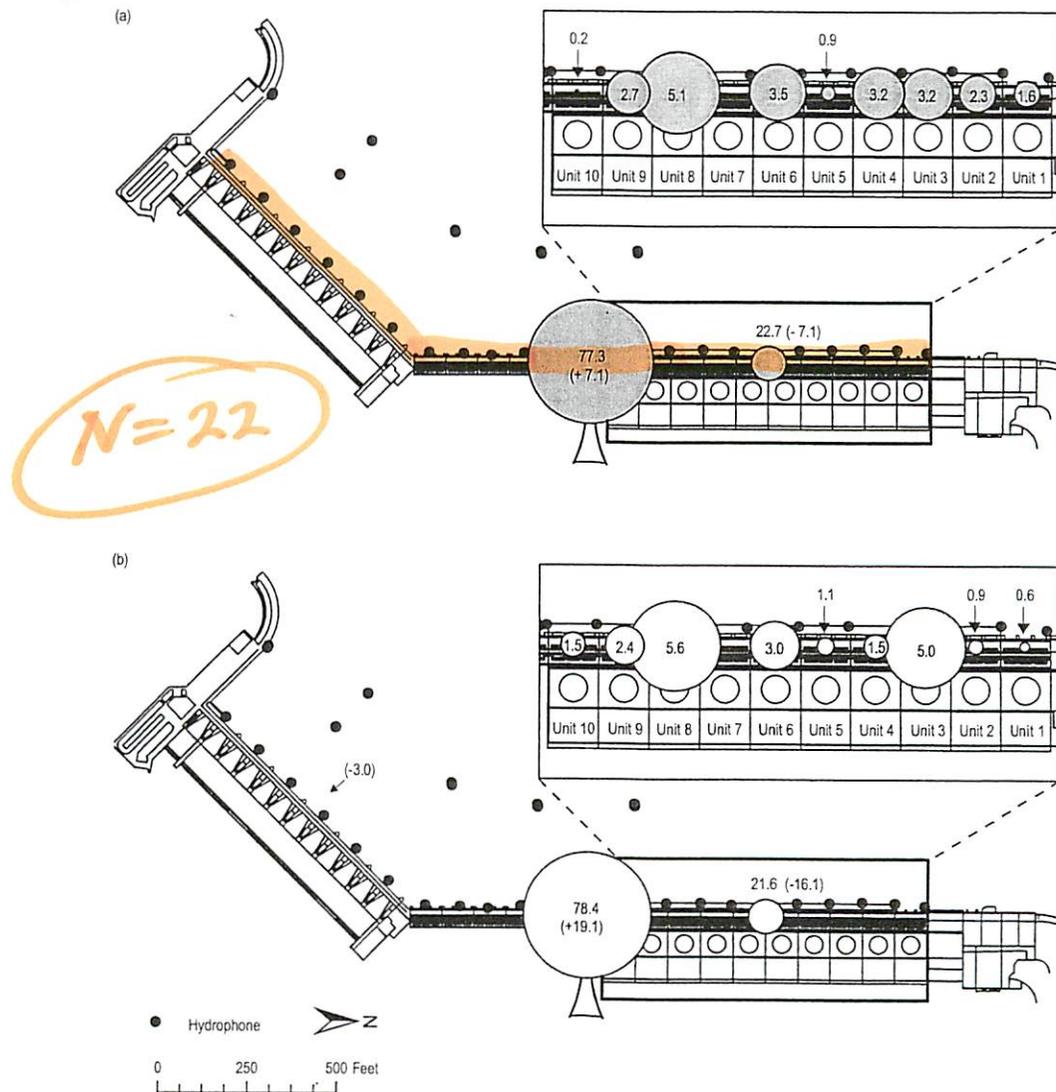


Figure 12. Passage proportions at Wanapum Dam in the spring of 2010; the top figure (a) presents steelhead (green) and the bottom figure (b) presents sockeye (blue). Detailed passage proportions shown by circles are proportional to percentages, with the detailed powerhouse passage two times larger than overall dam passage proportions. The 2010 passage proportions are compared to the 2009 in parenthesis (e.g., + indicates an increase in passage from 2009).

Summary of PIT-tag releases above Wanapum Dam, 2010-2013. Detail by run, origin, and release location.

Applying PIT-tags to assess juvenile survival through the Priest Rapids Project requires 1) a sufficient number of tags (dependent on detection efficiencies and precision needs), and 2) detection systems above and below the Project. Below are figures showing the current situation of these two requirements.

Figures 1-3 summarize Chinook PIT-tagging releases in the Columbia River system above the Priest Rapids Project from 2010-2013. Over the past 4 years, PIT-tag releases reached a peak of 270k in 2010 and low of 150k in 2012. No major changes in current hatchery production is expected in the near future and as production begins from Chief Joe the number of PIT-tagged fish migrating through the system should increase.

Figure 1. Number of PIT-tagged fish released above Wanapum Dam by year and stock.

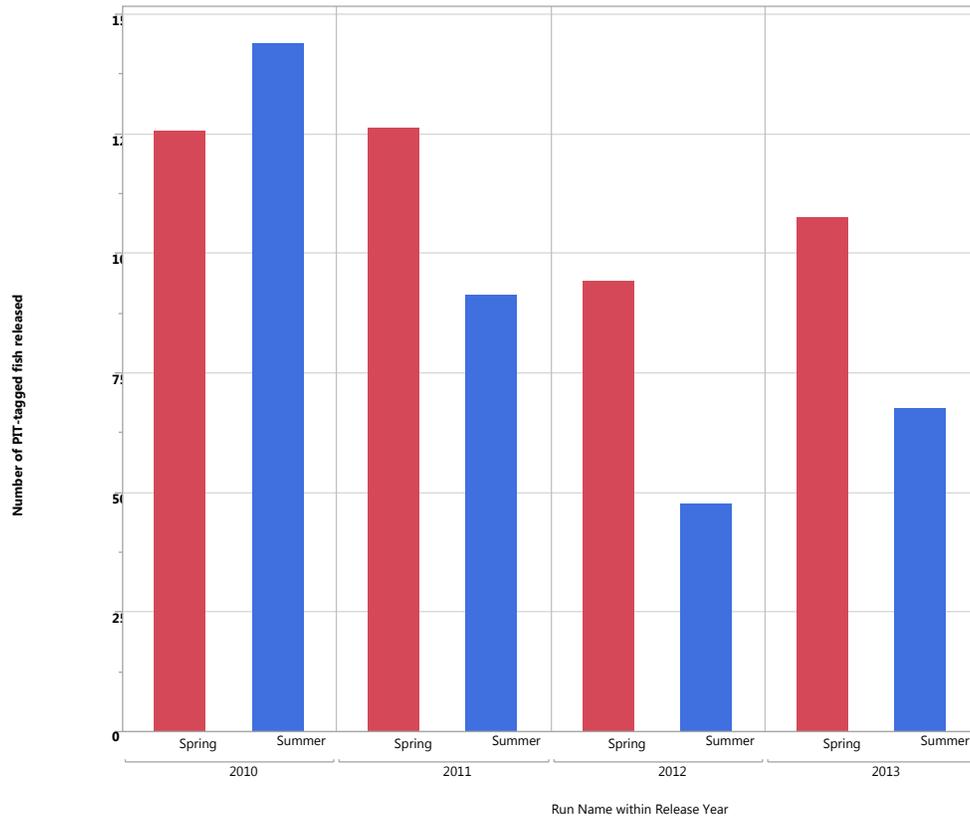


Figure 2. Number of PIT-tagged fish released above Wanapum Dam by year and origin.

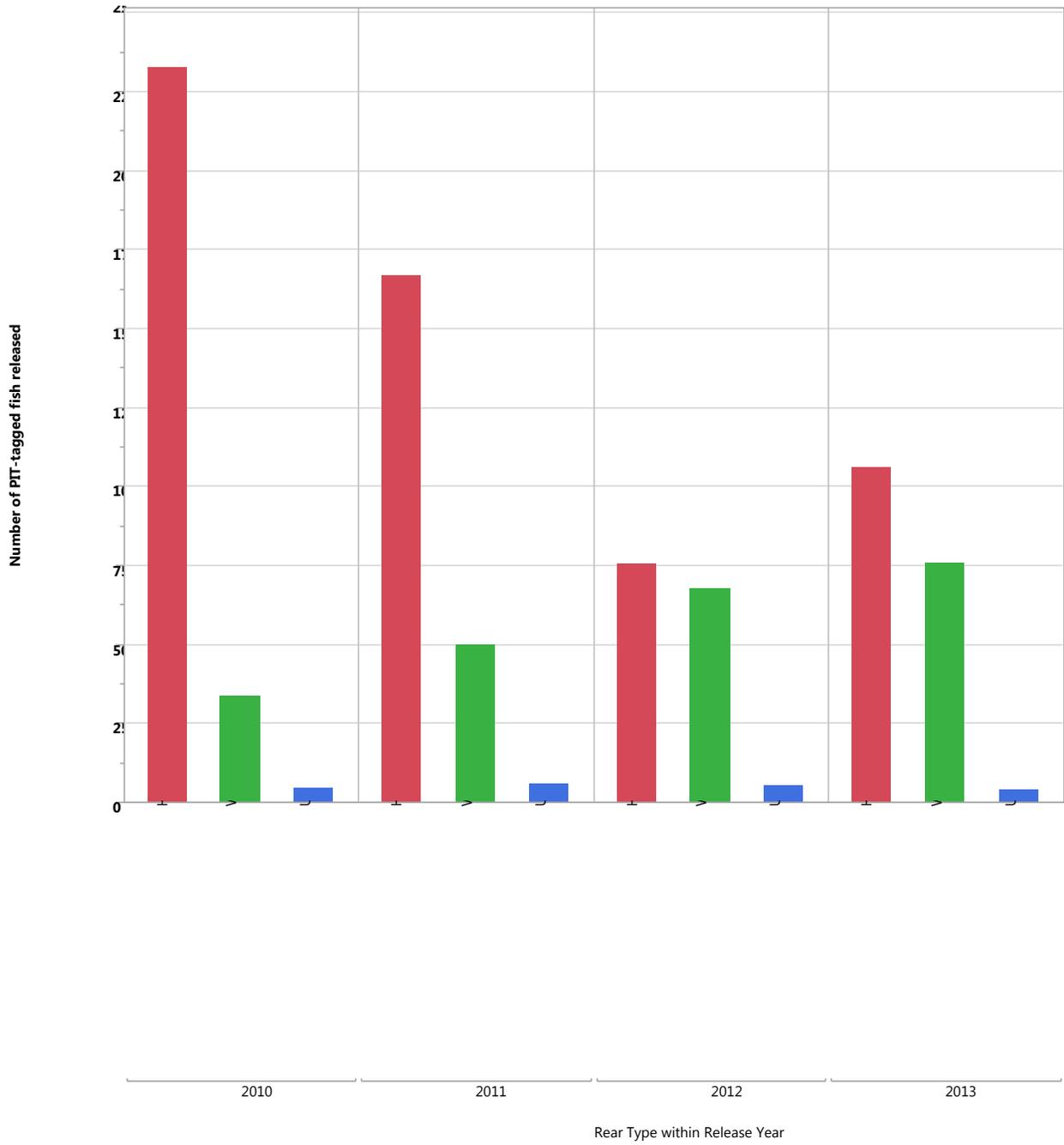
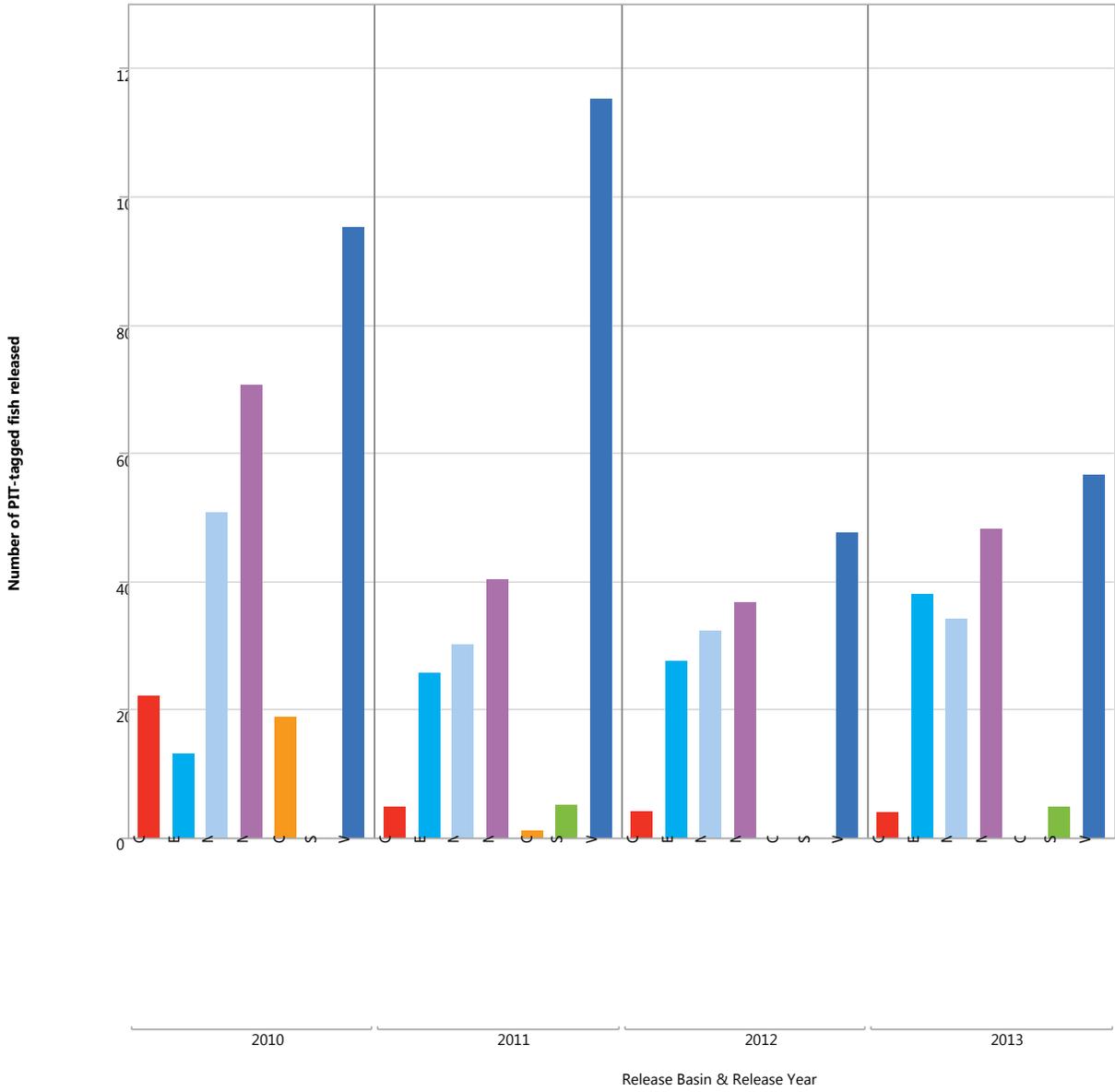


Figure 3. Number of PIT-tagged fish released above Wanapum Dam by year and location.



Release Basin

■ Chelan
 ■ Entiat
 ■ Mainstem Columbia
 ■ Methow
 ■ Okanogan
 ■ Wenatchee
 ■ Similkameen

Survival Through the Priest Rapids Project using PIT-tags and Existing Detections Systems

To directly measure juvenile survival through the Priest Rapids Project using run-of-river PIT-tags and existing detection arrays, tagged fish would need to be detected and released at Rock Island Dam and subsequently detected at McNary Dam. Under this scenario, survival through the Hanford Reach would be incorporated into the project survival estimate, unless paired releases below Priest Rapids Dam are included in the analysis. Rock Island does intercept and interrogate run-of-river PIT-tags, however the interrogation system has limited juvenile detection capabilities. Despite the high number of run-of-river PIT-tags moving through the system (Figure 1), very few fish are interrogated at Rock Island Dam (Figure 4). Between the interrogation rate at Rock Island Dam and at the detection efficiency at McNary Dam (~24%), measuring survival through the Priest Rapids Project using run-of-river PIT-tags and the current detection array system appears not to be a viable option.

Figure 4. Number of juvenile PIT-tagged fish captured and released at Rock Island Dam.

