

Rocky Reach Fish Forum

Wednesday, 5 March 2014

1:00 – 4:00 p.m.

Chelan PUD Second Floor Conference Room

Wenatchee, WA



Meeting called by Steve Hemstrom

Chairperson, Tracy Hillman

Notes taken by Suzanne Hodgson

Attending Representatives:

Hemstrom, Steve	Chelan PUD	(509) 661-4281	steven.hemstrom@chelanpud.org
Irle, Pat (phone)	Ecology	(509) 454-7864	Pirl461@ecy.wa.gov
Lewis, Steve	USFWS	(509) 665-3508 x14	Stephen_lewis@fws.gov
Kerec, Matt (phone)	Alcoa	(412) 553-4361	Matthew.kerec@alcoa.com
Rose, Bob (phone)	YN	(509) 865-5121	rosb@yakamafish-nsn.gov
McLellan, Jason (phone)	CCT	(509) 263-1082	Jason.mclellan@colvilletribes.com
Verhey, Patrick (phone)	WDFW	(509) 754-4624	patrick.verhey@dfw.wa.gov

Attending Participants:

Gale, Bill	USFWS		William_gale@fws.gov
Hatmaker, Teneille	Chelan PUD	(509) 661-4758	Teneille.hatmaker@chelanpud.org
Hillman, Tracy	BioAnalysts	(208) 321-0363	tracy.hillman@bioanalysts.net
Hodgson, Suzanne	Chelan PUD	(509) 661-4758	suzanne.hodgson@chelanpud.org
Jackson, Chad (phone)	WDFW	(509) 754-4624 x250	Chad.jackson@dfw.wa.gov
Keller, Lance	Chelan PUD	(509) 661-4299	lance.keller@chelanpud.org
Nelle, RD	USFWS	(509) 548-7573	Rd_nelle@fws.gov
Skiles, Tom (phone)	CRITFC	(503) 238-0667	skit@critfc.org

Meeting Minutes

I. Welcome and Introductions

Tracy Hillman welcomed everyone to the Rocky Reach Fish Forum (RRFF) meeting and made known that voice recording of the meeting was initiated for note-taking purposes.

II. Review of Agenda

The agenda was approved with one change – moving the White Sturgeon discussion to the beginning of the agenda.

III. Review and Approval of Meeting Minutes

Minutes from the 21 January 2014 meeting were reviewed and approved as written.

Steve Hemstrom provided a brief update on the effects of the problems at Wanapum Dam, noting that Rocky Reach Dam is operating within its normal range. Steve added that Chelan PUD is working closely with Grant PUD on issues related to the current drawdown at Wanapum.

IV. Update on White Sturgeon

Juvenile Rearing and Health

Lance Keller reported that Chelan PUD staff are at Columbia Basin Hatchery scute marking and PIT tagging fish. The fish are of good size and healthy. He noted that about 3,800 fish are on site there. Lance stated that juvenile sturgeon at the Chelan Falls Hatchery will be tagged in about two weeks. Chad Jackson reported that fish at both hatcheries were tested for White Sturgeon iridovirus and that results were negative.

Juvenile Monitoring

Lance Keller reported that he has received the annual monitoring report from Blue Leaf Environmental. He will forward it to the RRF by the end of next week.

Results from Sturgeon Workshop

Tracy Hillman summarized the workshop that took place on 19 February for the Rocky Reach and Priest Rapids Fish Forums, adding that draft notes from the workshop were provided. He reported that there was no consensus at the workshop on the release number proposals of 6,500 and 4,332, but that there was productive discussion about risks associated with the two different release numbers. He also noted that there was discussion around what is meant by “up to 6500 fish” as written in the White Sturgeon Management Plans. Tracy stated that he had compiled the responses from the outside experts into a document that was included with today’s meeting materials. He briefly summarized the responses from the outside experts noting that most outside experts did not believe that there would be much difference between the two release numbers on future population genetics bottlenecks.

CPUD Release Number Proposal

Tracy Hillman stated that Chelan PUD provided an alternate release number of 5,000 fish. The proposal and its rationale were described in a memo that was sent to the RRFF (see Attachment 1). Steve Hemstrom stated that Chelan's proposal was an alternate proposal designed to help resolve the current impasse over the stocking number. This proposal accepts some level of genetic risk; however, as pointed out by the outside experts, the genetic risk associated with releasing 4,332 or 6,500 is likely indistinguishable. Therefore, the release of 5,000 juveniles in 2014 should not be considered any more or less risky than releasing 4,332 or 6,500 fish. In addition, the release of 5,000 fish in 2014 would increase the total number of fish stocked into the Project Area to a level that is commensurate with the vision of the first phase of the WSMP supplementation program; i.e., a total release of up to 19,500 juveniles. Bob Rose noted that while he appreciated Chelan's efforts, he believed that 23,000 fish, not 19,500, would have been the total released over the first four years if the planned release numbers had been achieved each year.

Official Vote on Release Number

Tracy Hillman stated that there are three proposals to consider; 4,332, 5,000, or 6,500. He asked the voting members to cast their votes for one of the three release numbers. Bob Rose representing the Yakama Nation voted for 6,500 and stated that he believed that the RRFF is technically in year three of the release program, and questioned why anyone would vote for a number less than 6,500. Pat Irle and Bob Rose discussed the meanings of the numbers used in the White Sturgeon Management Plan. Bob stated that he believes that Chelan PUD is required to add 6,500 this year based on the language in the Plan. Pat indicated that Chelan PUD is required to release "up to" 6,500, meaning that the release number could be 6,500 or any number less than 6,500. Tracy pointed out that the text in the Management Plan states "up to 6,500" but one table and a footnote in another table states "6,500," adding that this conflict is unlikely to be decided at this time in this group. Jason McLellan representing the Colville Confederated Tribes voted for 4,332. Steve Lewis representing USFWS voted for 4,332. Chad Jackson placed Patrick Verhey's vote representing WDFW for 5,000, adding that his department is flexible on the number because 5,000 balances the need for "front-loading" of the reservoir while also addressing the genetic concerns associated with a larger release number. Matt Kerec representing Alcoa abstained from voting because he had not had time to review all the material. No representatives from the City of Entiat or the National Parks Service were in attendance to vote. Pat Irle representing Ecology abstained from voting. Steve Hemstrom representing Chelan County PUD voted for 5,000. He acknowledged Bob's point about adding more fish in year four, but noted that if 6,500 had been a strict number, the RRFF would not have stocked 7,975 fish in 2013. He added that the RRFF has many years of supplementation work going forward and emphasized that conservation should guide the stocking number in future years.

Tracy summarized the vote: two voted for 4,332, two for 5,000, one for 6,500, and two abstained. After hearing reasons for why parties cast their votes for certain release numbers, Tracy asked if anyone

wanted to change their vote. Bob Rose asked why 5,000 would be good for the RRFF but not be good for the PRFF. Tracy stated that because the two Forums are separate bodies, he did not want to discuss release numbers for the Priest Rapids Project Area within the RRFF. Steve Lewis indicated that his agency would consider 5,000, but not 6,500. Jason McLellan stated that he would need to check with Bret Nine on going up to 5,000. Bob Rose indicated that the Yakama Nation would consider the 5,000 proposal and asked if everyone could go back to their respective agencies and discuss the proposal internally. Tracy asked the group if they would like additional time to think about the 5,000 release number before casting their final vote. Everyone agreed to consider further the release of 5,000 sturgeon. Tracy indicated that he will send the RRFF an e-mail this evening calling for their vote on the release of 5,000 fish. Voting members will have until close of business on Friday, 7 March to cast their votes.

Tracy stated that if any voting member votes “no” on the release of 5,000 sturgeon, he will declare an impasse and initiate the dispute resolution process. He added that in the event of an impasse, according to the RRFF protocols, within three days, all voting parties will need to submit a letter stating the issue and their agency’s position on the issue. He encouraged everyone to read the dispute resolution sections of the License Agreement. He added that voting members should respond to everyone on the distribution list when they cast their e-mail vote. Jason McClellan stated that he would like to see a commitment on how to come up with a number for future releases, adding that clearer targets are needed to balance conservation risks and harvest goals. Lance Keller agreed and stated that the RRFF is moving into a different phase of the conservation program, including monitoring and evaluation. Tracy stated that during the workshop in February, Bob Rose recommended that we convene a small group to develop a decision support matrix for calculating release numbers in future years. The results from the small group would be presented to the RRFF for their approval.

Action items:

- **Lance Keller will send the annual juvenile sturgeon monitoring report to the RRFF within the next two weeks.**
- **Voting members will cast their vote on the 5,000 release proposal by Friday, 7 March. This evening, Tracy Hillman will send an e-mail to the RRFF asking for their vote on the release of 5,000 fish.**

Following the RRFF meeting, voting members cast their vote on the release of 5,000 juvenile sturgeon into the Rocky Reach Project Area. Voting members approved the release of 5,000 sturgeon in 2014. The final vote was six yea’s and one abstain. Both the Colville Tribes and the Yakama Nation provided information that the RRFF will need to consider as they move into the second phase of the supplementation program. Those suggestions will be discussed during the April meeting of the RRFF.

Final Decision: The RRFF approved the release of 5,000 juvenile sturgeon into the Rocky Reach Project Area in 2014.

V. Pacific Lamprey

Rocky Reach Project Effects (No Net Impact)

Bob Rose stated that he would like to meet with Chelan PUD staff in March to discuss NNI. The purpose is to work toward a draft framework document for the RRF in July, and a final by August. Steve Hemstrom stated that he would check with Keith Truscott, who wants to be involved. Bob Rose added that if anyone else wants to participate, they should contact him.

Action item:

- **Steve Hemstrom will check with Keith Truscott on a possible meeting with the Yakama Nation on NNI and get back to Bob Rose. Bob Rose will then set up a small group meeting.**
- **Members who want to participate in the NNI discussion need to contact Bob Rose.**

Rocky Reach Pacific Lamprey Five-Year Adaptive Management Status Report

Steve Hemstrom reported that the Pacific Lamprey Five-Year Adaptive Management Status Report was sent to FERC and the Department of Ecology on 19 February 2014. He stated that the report listed adaptive management efforts since 2008, adding that it did not address future needs and drew no conclusions. Bob Rose asked why he was able to comment on the table of contents, but not provide comments on the report. Steve Hemstrom stated that Bob was sent the table of contents for the Five-Year Biological Objectives report, which is a different report that requires comments from the Forum. According to FERC, the Pacific Lamprey Five-Year Adaptive Management Status Report does not require RRF review. However, Steve stated that he would have preferred to receive comments on the lamprey status report, but was not able to do so under the timeline. Bob Rose stated that an extension could have been requested on the Lamprey Five-Year Adaptive Management Status Report, and that he believed the report could have been more complete and more objective. Steve Hemstrom stated that Bob was welcome to express his concerns in writing to Michelle Smith, and encouraged him to also comment on the biological objectives report. Steve Hemstrom added that the biological objectives report is in the 401 water quality certification for Rocky Reach. Discussion took place around these two reports. Steve Hemstrom stated that Michelle Smith and Keith Truscott had reviewed the Pacific Lamprey Five-Year Adaptive Management Status Report. Bob Rose stated that he will look carefully at the biological status report, adding that he did not feel it was good form for Chelan PUD to send the Lamprey Five-Year Adaptive Management Status Report on without comment from the RRF. Bill Gale asked if the report can be amended. Steve Hemstrom stated that he would check with Michelle Smith.

Action item:

- **Steve Hemstrom will check with Michelle Smith on the possibility of incorporating a formal review period for the RRF to comment on the Pacific Lamprey Five-Year Adaptive Management Status Report that was sent to FERC on 19 February 2014, and future reports.**

Regional Implementation Planning Process

RD Nelle stated that the regional implementation plan for Pacific lamprey is moving forward and he will convene local experts to help populate the templates. The templates are due at the end of April.

Pacific Lamprey at Tumwater Dam

RD Nelle presented a power point on distribution of Pacific lamprey in the Wenatchee River (see Attachment 2). During the meeting, Tracy sent the presentation to the distribution list as a PDF. Slides included historical information on lamprey in the Wenatchee River. Slides also illustrated the current presence of lamprey downstream from Tumwater Dam, but not in reaches sampled upstream from the dam. Upstream reaches extended from Tumwater Dam to Lake Wenatchee, but not the tributaries. RD stated that he and his colleagues are 95% certain that lamprey do not currently exist upstream from the dam. This conclusion is based on the sampling design and the efficiency of the sampling gear. He stated that 669 total juvenile lamprey were captured below Tumwater Dam at 21 sites, with lamprey ranging from 15 to 155 mm in size. Slides also illustrated work done at Prosser Dam, where an angled wall was added to assist passage. Discussion took place around the lamprey issues at Tumwater Dam and the possibility of modifications at the dam that may benefit lamprey. Tracy asked if the RRFF is the right place for this discussion, and if yes, what would a study look like. RD suggested that a radio-telemetry study should be used to evaluate lamprey behavior and passage at Tumwater. Tracy asked about the objectives, design, and mechanics of a radio-telemetry study at Tumwater. RD gave several options. Participants discussed whether or not Tumwater Dam and its fishway are part of the Rocky Reach license and how to best evaluate passage issues.

Action item:

- **Steve Lewis will send Tracy Hillman the specific language in the license that shows the linkage between the fishways at Tumwater Dam and the Rocky Reach project.**

Future Planning, Potential Juvenile Lamprey Measures, Timeframe and Budgeting

There was nothing to report.

Five-Year Biological Objectives Status Report

Tracy Hillman stated that the Five-Year Biological Objectives Status Report was sent to the Department of Ecology and the RRFF for review. Last week both WDFW and the Yakama Nation requested an extension on the comment period. The extension was approved by Chelan PUD. The new deadline for comments on the draft report was extended to Friday, 7 March 2014.

Bob Rose stated that Section 3 of the 401 states that Forum members not in agreement with this report should provide written comments that should be added to the final report. He asked Pat Irle if the 31 March deadline could be moved out a little bit. Pat replied that deadlines can be moved. Steve

Hemstrom stated that he believed the delivery date for the draft was 1 February, and that the final is due on 30 March. Tracy stated that the draft report was sent to the RRF on 31 January. Discussion took place around comments on the draft report. Steve Hemstrom stated that he is building a response table that will include all comments and feedback on each comment. Tracy reiterated that the deadline for comments on the draft report is Friday, 7 March. Chelan PUD will incorporate those comments according to the agreement and submit the final report to Ecology and the RRF.

Action item:

- **RRF members will send their comments on the Five-Year Biological Objectives Status Report to Steve Hemstrom by Friday, 7 March 2014. Based on the comments, Chelan PUD staff will determine if they will need additional time to complete the final report, which is due at the end of the month.**

VI. Bull Trout

Bull Trout and Tumwater Dam

Steve Lewis had no updates at this time.

On a related topic, RD Nelle asked about future plans to do bull trout telemetry studies. Steve Hemstrom replied that a study would begin in April of 2018. RD stated that the USFWS is attempting to convert their telemetry receivers to a different telemetry frequency for future studies. RD asked if Chelan PUD would be willing to convert their receivers to the new frequency for consistency in telemetry monitoring. Brief discussion occurred on the purpose and costs to modify receiver equipment.

Action item:

- **Steve Lewis will provide an update on bull trout and Tumwater Dam during the April meeting.**

VII. Update on City of Entiat Proposal for 65-Slip Boat Marina

Steve Lewis stated that his agency (USFWS) is trying to reduce the number of boat slips from 65 to 45. Brief discussion took place on this issue.

VIII. Next Steps

Tracy Hillman stated that there are benefits having both the PRFF and the RRF meetings on the same day. However, because of the current time slots for the two meetings, he and some Forum members are often forced to rush from Ephrata to Wenatchee, which occasionally results in delays in RRF meeting

start times. In addition, Tracy may rush through PRFF agenda items in order to complete the meeting in time for members to travel to Wenatchee for the RRF. Rushing through agenda items does not always allow adequate discussion. To avoid short-changing the PRFF and preventing delays in start times for the RRF, Tracy asked if the start time for the RRF meeting could be moved from 1:00 p.m. to 1:30 p.m. The group agreed to start future meetings at 1:30 p.m. Members of both the PRFF and RRF asked about the possibility of holding both meetings in Wenatchee at the Grant PUD office or Chelan PUD office. Tracy will ask Grant PUD if they are amenable to moving the PRFF meetings to their office in Wenatchee.

The next regular meeting of the RRF will be Wednesday, 2 April 2014 from 1:30 to 4:00 p.m. in the Chelan PUD Second Floor Conference Room.

Attachment 1

Chelan PUD's Proposal to Release 5,000 Juvenile Sturgeon

Memo

To: Tracy Hillman, Chair, Rocky Reach Fish Forum

From: Steve Hemstrom and Lance Keller, Chelan PUD

Date: 27 February 2014

Re: Chelan PUD's proposal to release 5,000 juvenile white sturgeon into the Rocky Reach Project Area in 2014

The Rocky Reach Fish Forum (RRFF) has been debating the number of juvenile sturgeon to release into the Rocky Reach Project Area in 2014. To date, the RRFF has been unable to decide on whether to release 4,332 juveniles into the project area, which is based on equalized family size (addresses potential future genetic bottlenecks), or to release 6,500 juveniles, which is the maximum annual release number identified in the White Sturgeon Management Plan (WSMP). The purpose of this memo is to offer the RRFF an alternative proposal that gives weight to both the equalization of family size and the maximum number needed to address monitoring and adaptive management questions in the WSMP.

Appendix A to the Rocky Reach WSMP indicates clearly the importance of genetics in planning the supplementation/augmentation program. For example, page 3-25 in Appendix A of the WSMP states, “[t]he effect of a supplementation/augmentation program on the genetics of wild sturgeon populations is a key consideration when the program goals and operations are planned.” In addition, the Plan states, “[b]y year three of the effective date of the New License, Chelan PUD shall begin releasing up to 6,500 yearling white sturgeon into the Reservoir annually for three years.” (Section 4.1.2, page 10). Because stocking began in 2011 (BY 2010) with the release of 6,376 juvenile sturgeon, the first phase of the stocking period should have ended with the 2013 release (Table 1). However, because of an iridovirus (WSIV) outbreak in 2012, which nearly resulted in the total loss of juveniles, the Forum agreed to release 7,979 juveniles in 2013 and to extend the first phase of the stocking period into a fourth year (Table 1).

With the rationale of both proposals in mind (4,332 and 6,500) and differences yet unresolved

after considerable debate, Chelan PUD proposes that the RRF consider the release of 5,000 juvenile white sturgeon into the Rocky Reach Project Area in 2014. This proposal accepts some level of genetic risk; however, as pointed out by the outside experts, the genetic risk associated with releasing 4,332 or 6,500 is likely indistinguishable. Therefore, the release of 5,000 juveniles in 2014 should not be considered any more or less risky than releasing 4,332 or 6,500 fish. And, importantly, the proposal to release 5,000 fish in 2014 would increase the total number of fish stocked into the Project Area to a level that is commensurate with the vision of the first phase of the WSMP supplementation program; i.e., a total release of up to 19,500 juveniles. The release of 5,000 juvenile sturgeon in 2014 achieves the same overall total had 6,500 fish been stocked each year for the first three years ($3 \times 6,500/\text{Yr} = 19,500$). Additionally, a release of 5,000 PIT-tagged juveniles in 2014 would provide the number of marked fish (19,500) envisioned initially by the WSMP as necessary to begin survival, growth, and index monitoring efforts in 2014 and 2015 (Objective 2 in the WSMP).

Table 1. Number of juvenile white sturgeon released into Rocky Reach Reservoir for brood years 2010-2012, the proposed release of 5,000 fish for brood year 2013, and the number of adult crosses that produced the juveniles in each year.


Brood year	Number of Crosses	Number of Juveniles Released	Comments
Rocky Reach Project Area			
2010	8	6,376	1F x 2M wild cross; 3F x 2M captive brood cross.
2011	1	147	1F x 1M wild cross. WSIV and hyper-inflated swim bladder complications prevented the release of larger numbers of juveniles.
2012	7	7,979	3F x 1M wild cross and 1F x 4M wild cross. Excess stocking of 6,500 approved by RRF.
2013	12	5,000 (CPUD Proposal)	3F x 3M wild cross and a 1F x 3M wild cross.
Total	-	19,502 ¹	Total number released is equal to 3 years @ 6,500/Yr

¹ If Chelan PUD's proposal is approved, the total number of juvenile sturgeon released into Rocky Reach reservoir over the four year period, 2011-2014, will be 19,502 fish.


Attachment 2

USFWS Presentation on the Distribution of Pacific Lamprey in the Wenatchee River, WA

Distribution of Pacific lamprey in the Wenatchee River, WA




Tumwater Dam,
Wenatchee River, WA




R.D. Nelle
USFWS
Mid-Columbia River Fishery Resource Office
Leavenworth, WA

Distribution of Pacific lamprey in the Wenatchee River, WA



Tumwater Dam,
Wenatchee River, WA



Mark Nelson, Cal Yonce, Ann Grote, Andy Johnsen
Dan Sulak, Wade Massure, Ken Muir, Hayley Potter

Adult Pacific lamprey passage?



Wenatchee River, WA

FWS Pacific Lamprey Conservation Initiative



- Define historic range wide distribution
- Define present range wide distribution



Wenatchee River, WA

1. Screw trap data

- Chiwawa-No ?
- Nason-No
- White River-No
- Lake Trap-No?
- Monitor-Yes



- Peshastin-No

2. Irrigation diversions

- Jones Shotwell-Yes
- Dryden- Yes



Wenatchee River, WA

3. Historic sampling

- WA Dept Fisheries 1938
 - Lower Wen R. - Peshastin, Icicle, Tumwater Dam fishway
- Gangmark and Fulton 1952
 - Lamprey in stomach samples Lake Wenatchee
- Burke Museum 1950s – Lake Wenatchee
- French and Wahle 1959
 - Tumwater bypass trap
- Hays 1981
 - Electrofishing juvenile sampling



Wenatchee River, WA

4. Passage of adults at Tumwater Dam-?

- No passage recorded since 1999
- Video 1998 WDFW

5. Present distribution data-USFWS 2009



Pacific lamprey distribution



Pacific lamprey distribution



Presence or absence of
juvenile lamprey



Pacific lamprey distribution



2010 –Sampled prime substrate
Non randomized sampling

- Downstream of Tumwater Dam = 18 sites
- Downstream of Tumwater Dam = 5 site



2010



Pacific lamprey distribution

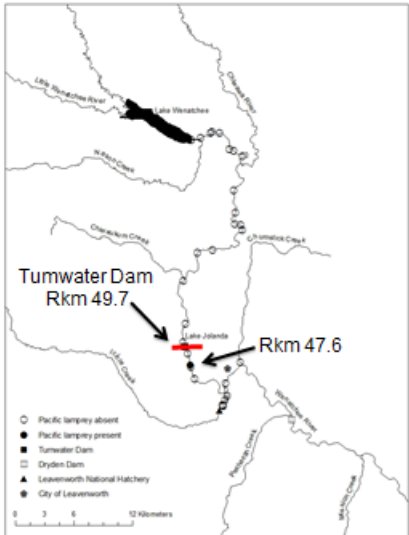


2010 –Sampled prime substrate

- No lamprey collected upstream of Tumwater Dam
- Lamprey collected downstream of Tumwater Dam
- Johnsen and Nelson 2012



2011



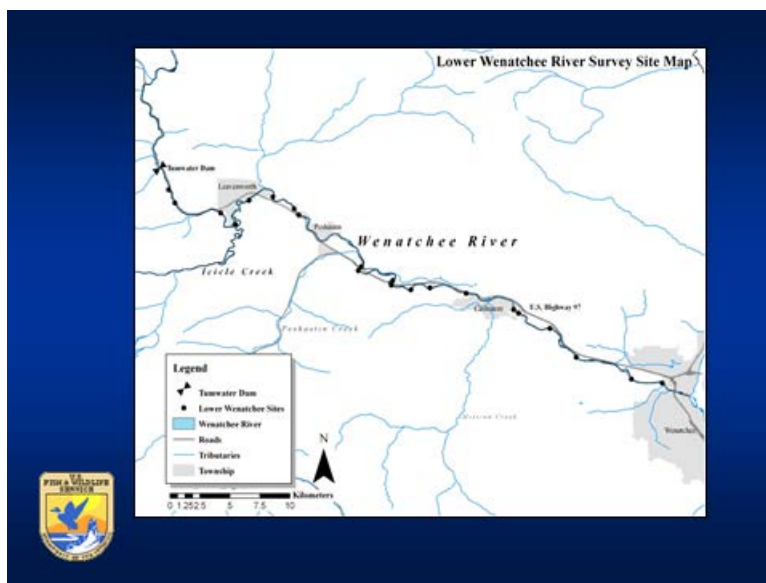
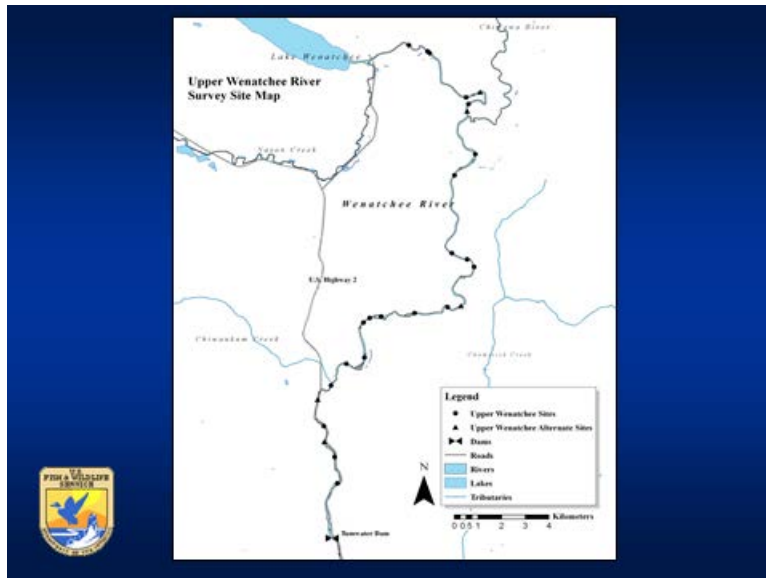
Pacific lamprey distribution



2012 – Probability of occurrence sampling

- GRTS survey design - 50 m sites
- Hybrid design (deepwater and wadeable)
- Sept – Oct, 2012





Pacific lamprey distribution



2012 – Probability of occurrence sampling

- Upstream of Tumwater 21 (23) sites
- No lamprey captured



Pacific lamprey distribution



2012 – Probability of occurrence sampling

- Downstream of Tumwater 21 sites
- 20 of 21 sites captured lamprey



Pacific lamprey distribution

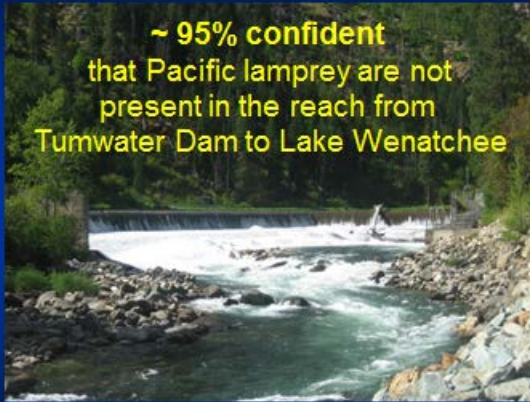


2012 – Probability of occurrence sampling

- 1 to 187 juvenile lamprey/ site
- 669 total captured
- Size from 15 to 155 mm



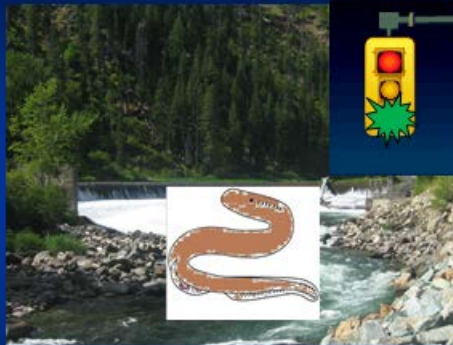
**~ 95% confident
that Pacific lamprey are not
present in the reach from
Tumwater Dam to Lake Wenatchee**



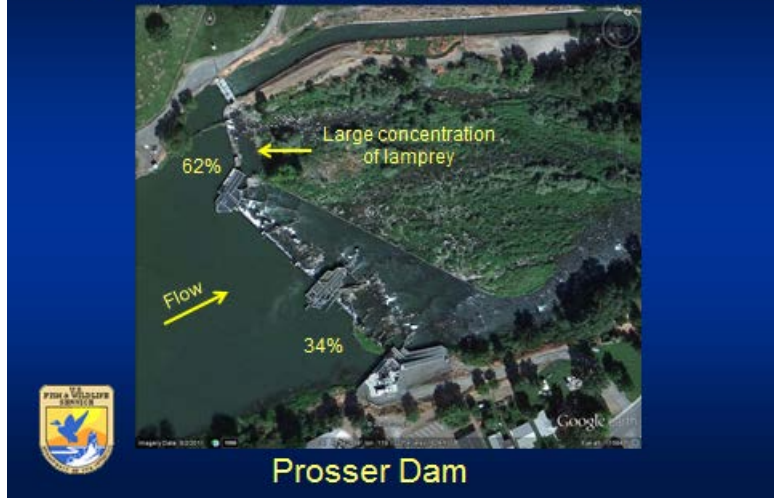
Present



Future



Lessons from the Yakima River



Prosser Dam, Yakima River WA Radio telemetry study



Lessons from the Yakima River

Night tracking to determine site specific movements and behavior



Radio-tagged lamprey behavior at left corner

Climbing ledge at slack water area

Emerging from water



Radio-tagged lamprey behavior at left corner

Moving upstream along seam



Attached on angled wall



Prosser Dam, Yakima River WA Conceptual design



Prosser Dam, Yakima River WA Conceptual Design



Questions?

