

*Columbia River Basin Lamprey Technical Workgroup  
Columbia Basin Fish and Wildlife Authority  
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Portland, OR 97204  
[www.cbfa.org/committees/LTWG](http://www.cbfa.org/committees/LTWG)*

11-29-11 Meeting Notes

Workgroup members and guests present or on the phone: Aaron Jackson (CTUIR), Andrew Wildbill (CTWS), Jeff Jolley (USFWS), Chris Peery (FWS), Dave Statler (Nez Perce), Jody Brostrom (USFWS), Molly Hallock (WDFW), Brian McIlraith (CRITFC), Bao Le (Longview Associates), Christina Luzier (USFWS), Matt Mesa (USGS), Mary Moser (NOAA-Fisheries), Josh Murauskas (Chelan County PUD), Bob Mueller (Battelle), Jeff Osborn (Chelan PUD), Dave Roberts (BPA), Sue Camp (BOR-ID), Dave Ward (HDR), David Clugston (USACE), Mike Clement (Grant PUD), Beau Patterson (Douglas County PUD), Chris Caudill (UID), Lawrence Schwabe (Grand Ronde), Bob Rose (Yakama), Marcie Mangold (Ecology), Peter Johnson (LGL), Margaret Filardo (FPC), Jerry McCann (FPC), Erin Cooper (FPC), Howard Schaller (USFWS), Helena Christiansen (USGS).

1. Limits for study fish

The number was originally plucked out of the air without a scientific basis. What would it take to have the number scientifically based? When we go through a permitting process risk is determined by what is done to the fish. The limit now is 2% of the daily count at Bonneville and it is currently limiting research. Handling should be considered. Run size should be considered. So should the efficacy of the work. Having more tags in the system would benefit everybody. The number now was based on radio telemetry results but not sure this is the right way to go. Warm Springs would like to have more fish tagged, they have detected 29 from Bonneville and 40 in the Deschutes. Having more tagged would mean less handling upriver. A strategy could be raising the numbers by tagging more fish below. One way would be to take all of the research going on now and project by project decide how many fish are needed to give statistically reliable answers. Could there be a development of a sliding scale similar to what the tribes use for their translocation work? What are the rough guidelines for translocation? 4% of the 2 yr return for

Bonneville. Each tribe is allowed 1%. There are procedures for revising this number mid-stream. If larger fish are targeted for tagging these are also probably the ones going further. There is also a problem of getting fish earlier and the later ones not going as far so that needs to be built in as well. It seems like the tribal method may be a good way to go. As more and more studies get going the more demand for fish there will be. As the studies are reviewed through AFEP, SCT, etc. this is the place for figuring out where fish are needed and some prioritization of them. The workgroup seems to think that 2% should not be set in stone. The actual number will be set by managers. Perhaps we should come up with a high limit over which we won't go. In the mid-Columbia and Snake there just aren't enough fish. Is there a way to up the numbers if the run is looking good early? There seemed to be no resolution to this discussion and really no indication of who really has the authority to decide how many fish are taken (States?). The following actions were discussed regarding this issue.

1. Tribes and PUDs put together numbers on what they need (Priest and Wanapum want 300 fish)
2. Collectively the probability of run size should be determined and how often the 2% or 4%, etc. was met. Work with NOAA.
3. Subgroup to work on coming up with numbers that are needed throughout the river (#1 above) – Sean Tackley, Derek Fryer, Steve Juhnke, PUDs, Aaron Jackson – same group that met last March.

## 2. Passage Metrics

Josh gave update on what has been going on with passage metrics. He referenced the supporting document that the subgroup has been working on which describes where projects are with passage improvements. Josh would like comments from the subgroup by December 23, he will get them incorporated by January 6, and January 23 there will be a conference call. The subgroup plans to update the whole workgroup at the next meeting.

Workgroup members talked about the value of passage information from an unimpeded system. There was a pilot study in the Fraser River this year with 20 radiotagged fish. Mary will find out what the preliminary results were. We have 50% at Bonneville so we are shooting for somewhere between 50 and 100%. Not sure radio

tagging is the way to go for passage studies, tag effects probably not taken into account fully. Matt Keifer's work could help.

### 3. Passage/Engineering Paper Update

Ann Gray, Mary Moser, and Chris Peery are working on it. They will give the group an update at the next meeting.

### 4. NPCC Synthesis Report

Dave and Christina put together a draft of the synthesis report requested by NPCC. Part 1 is a synthesis of ongoing and past Fish and Wildlife Program projects. Part II is the answers to the questions that ISRP regarding lamprey status. Dave Statler asked if this has to be sent through CBFWA for review and Dave Ward thought it probably did but that it wouldn't take long. Christina will send out draft to the group for review, especially the individual project synopses.

### 5. Translocation Paper – submitting to journal

Dave cut down the translocation paper to a size that is submittable to a journal. It was submitted to Fisheries in November.

### 6. Future of Workgroup

CBFWA is losing members and will likely be dissolved in the future. Dave Ward thinks that they may last another year. There is a proposal for the Lamprey workgroup to be a stand-alone committee funded by Bonneville but not sure if this will occur. Howard Schaller on behalf of the USFWS said that they would be willing to sponsor the workgroup under the Pacific Lamprey Conservation Initiative. Other options: jointly sponsored by USFWS and CRITFC; no oversight with rotating chair (i.e., pallid sturgeon group). The group thought it was very important for it to remain the lamprey "technical" workgroup and not become policy driven. This would be a good topic of discussion for the Summit.

### 7. Lamprey Supplementation Plan

Bob Rose discussed that the tribes are very interested in pursuing supplementation further, that there is a lot more info to be gained from supplementation studies. They are not pushing hatcheries but rather to enhance populations in key areas. Aaron Jackson described the outline for a supplementation planning framework that was developed at a two day workshop in November. They would like the lamprey workgroup to provide technical feedback on the framework. They want outside agencies to be involved with this, perhaps a subgroup of the workgroup to help flesh this out. They will have information to review probably by February or March. Bob reinforced that there will be a strict monitoring plan that goes with the supplementation plan. Aaron and Bob will send out parts of the outline to the whole workgroup as they get filled in. They will do a check in/update at the next workgroup meeting in May. Aaron and Bob and other workgroup members from tribes will act as the subgroup on this task.

#### 8. Smolt Monitoring Program – 2011 results/2012 plans

1. Identification – The smolt monitoring program staff were trained to identify lamprey life stage and species. They recorded lamprey as a target species in 2011.
2. Sample rate from 0.5% to 100% sample based on when the gate is open to collecting lamprey - minimum of 6 times per hour for a certain amount of time - the sample rate is expanded to collection count which is what has passed through the power house.
3. Condition monitoring was conducted only at John Day Dam in 2011. Mortality and injuries were recorded for a subsample of lamprey.

#### Questions from the Workgroup

- a. Determination of cause of death, arriving dead or dying from sampling – could indicate in records
- b. Method of anesthesia – MS222, 4 minutes, held for 30 minutes after for recovery
- c. They are going to continue identification and continue sampling rates
- d. Expand condition monitoring to Bonneville and McNary (and continue John Day)? Yes it should be continued until results are repeatable after a while depending on how much variability is seen. Can Lower Granite be included? Numbers are so low that a representative sample would be hard to get. Snake maybe down the road?

- e. Size information is really important - and can be done easily at sites where condition is done
- f. Time period expansion may be possible at some time in the future but not 2012 because of the cost and existing facilities. Could tribes kick in some money/assistance for winter sampling? If there was a regional mandate to monitor in the winter the FPC could provide the staff. The projects are gun shy about operating during the winter because of damage caused by ice/weather. Bonneville starts March 1.
- g. Workgroup should give input or ideas to FPC directly or through Christina.

#### 9. USFWS Conservation Initiative and CRITFC Tribal Restoration Plan Update

The FWS has finalized the Pacific Lamprey Assessment and Template for Conservation Measures. They are working on the next steps in the Initiative which is a Conservation Agreement and Implementation Plans. They are hoping that members of the workgroup will participate in the next steps. The Tribal Restoration Plan will be released soon as well. The FWS and CRITFC are working together to plan the Lamprey Summit III. Tentative dates for the Summit are in April 2012.

#### 10. Critical Uncertainties Progress Report and Revision

Dave Ward put together a draft of the critical uncertainties progress report and Christina added to it. It needs some review and fill in from the rest of the workgroup. Christina will send it out for review.

#### 11. Research Updates and New Business

- a. Sue Camp - BLM - agreement in place with Yakama further evaluating BLM project impacts; juvenile sampling in canals, toxicants, adult passage structures, propagation support, providing overwintering facilities, finding WBL, installing receivers on dams, Umatilla basin to develop SOW, PIT tag juveniles for interactions with BLM structures. Feed diversion sampled - one lamprey found above and none below. No lamprey found in \_\_\_\_\_ canal, in the west extension found teens of lamprey in front of screens, doing other canal sampling. Continuing to fund more of Matt's screen work. Assessment report getting comments and finishing annual

- report. Talking to water users and providing information on what they are doing and making them aware of lamprey issues.
- b. Aaron Jackson - Umatilla – holding brood to be release this may. Working with Walla Walla Community College and tribe in new lab on campus to work with lamprey and mussels, pit tagging for in basin travel time and route info in mainstem facilities. Continuing RT work this spring. Evaluating 3 passage structures Feed, Three mile and Dillon. Working with PIT tag committee on tagging macrophthalmia and macs don't seem to have a problem with it.
  - c. Jeff Jolley – USFWS – Continuing mainstem sampling in tributary mouths and deltas. Found high detectability in the Wind river. Before and after Condit dam removal evaluation. Is there a wash-in effect from Bonneville reservoir to river mouths? Found both western brook and PCL. Working on salinity tolerance in ammocoetes and how it affects distribution. Capture efficiency of deep water shocker 70% efficient in a tank with very controlled conditions.
  - d. Matt Mesa – USGS – building large flume for screen work, manipulating screens and velocities. Aquaculture protocols, feeding.
  - e. Mary Moser - NOAA Fisheries– Continuing PIT monitoring. Full and half duplex data on PTAGIS. We need to make sure it's a regional priority – no problem with doing full duplex tagging? We need to have the discussion now. Christina will send out an email to solicit a call, to be conducted in January, regarding the PIT tag issue. Mary will find out when PIT Tag Steering Committee meeting is. We will present our viewpoint. Mary is also working on providing lamprey with refuges in the fishways, designing those and evaluating.
  - f. Brian McIlraith – CRITFC – They are funding genetics work and screen design work.
  - g. Jeff Osborn – Chelan PUD – Working on putting platings on orifices at lower ladder section and artificial propagation culture manual looking into rearing/feeding is next.
  - h. Lawrence Schwabe - Grand Ronde – Radio tagging, genetic work, and working with Corps.
  - i. Mike Clement – Grant PUD – Fish ladders being taken out of service right now, in the last 2 years 70 tags at Priest, 40 at Wanapum. 2001-2002 RT 50-70% efficiency, 65-75% passage at Priest, 85-95% at Wanapum with small sample sizes. Small tagging study of fish and released in tailrace at Priest.
  - j. Bob Mueller – Batelle – Finished deep water shocking from Asotin to Ice Harbor pool. Dredging deposits. Pilot study didn't

find any ammocoetes in those shocking surveys. Did lab study and did efficiency which was 60%. Have a paper coming out on that study.

- k. Andrew Wildbill – Warm Springs – They are monitoring 15mile 1100 adults going up, pit tagged 122, 100 have been detected on upper antenna. No fish have left. Twenty-two of the fish have not been detected. One was detected on The Dalles dam. Starting work on Hood River this year trying to collect adults on Hood. Mary suggested contacting Ralph Lampman for advice on trapping techniques.