

*Columbia River Basin Lamprey Technical Workgroup*  
*Columbia Basin Fish and Wildlife Authority*  
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[fws.gov/columbiariver/lamprey.htm](http://fws.gov/columbiariver/lamprey.htm)

March 11, 2010  
Meeting Notes

Workgroup members present or on the phone: Jody Brostrom (USFWS), Chris Caudill (U of Idaho), Mike Clement (Grant County PUD), David Clugston (US Army Corps), Molly Hallock (WDFW), Bob Heinith (CRITFC), Bao Le (Longview Associates), Christina Luzier (USFWS), Matt Mesa (USGS), Mary Moser (NOAA-Fisheries), Bob Mueller (PNNL), Josh Murauskas (Douglas County PUD), Chris Peery (USFWS), Dave Roberts (BPA), Gene Shippentower (CTUIR), Sean Tackley (US Army Corps), Dave Ward (CBFWA).

1) Discussion of lamprey monitoring framework (CBFWA/NPCC)

Background (from Dave Ward): All proposals for BPA-funded lamprey work will be due to the Northwest Power and Conservation Council on June 11, as part of their Mainstem/Systemwide review. They want a comprehensive look at lamprey work. CBFWA and member entities had already started thinking about putting together a comprehensive framework for lamprey monitoring along the lines of the one being finished up for anadromous salmonids (that one required multiple sub-regional workshops then a multi-day policy-level workshop). However, the lamprey timeline just got advanced by notice of the June deadline. CBFWA thinks the LTWG should play an integral role in the process, which at a very general level includes: (1) developing a monitoring framework; (2) developing some sort of data sharing overview/template; (3) getting policy/management approval of the above products; and (4) developing a data management plan.

Notes from Meeting: Tom Iverson gave an update on a few things going on at CBFWA – being reorganized and building a workplan. The primary thing that was identified was a need for consistent assessment/reporting for fish and wildlife across the basin. CBFWA is not doing analyses. NPCC mainstem and systemwide review calling for proposals in June (due in July/August and final decision in Feb. 2011) for monitoring and evaluation of anadromous fish and all lamprey projects. There is no umbrella monitoring framework for the Fish and Wildlife Program. So one has been developed and it now open for public comment. There is an anadromous fish section, wildlife section, habitat section etc. The listed anadromous fish section is pretty well done but there is nothing for non-listed anadromous fish.

The lamprey workgroup would be a good group to make sense of the all the lamprey projects. A monitoring and research plan is needed and they are due at the end of 2011 but the lamprey projects are being looked at this summer and then not again for three years. So it would be nice to have a monitoring framework in place before lamprey projects are reviewed. Dave Roberts said that BPA will be favoring specific improvement projects instead of RM&E and research for lamprey.

There was concern from the Workgroup about the duplicative nature and volume of plans. The Fish and Wildlife Service Pacific Lamprey Conservation Initiative/Plan is going to be a document which has all existing plans nested in. A draft of this plan will be completed in May/June and will go out for regional review. The Workgroup decided that we should use the draft of the FWS Conservation Plan for review of lamprey projects. Additionally, the MER document should be reviewed by the Workgroup. It was released on Monday, March 15th.

An additional need is for a clearinghouse/website where all info on lamprey can be found.

## 2) Translocation paper update

Dave Ward - Not as close to being done as we thought it might be. Dave received comments in January and then received some more substantive comments (Dave Statler) in the risk/benefit section that might need some attention. There is worry about what is being done to the donor stock, general concept of population is unknown, etc. We should ask Dave what alternative wording he suggests and see if the alternative can be lived with. A lot of the comments from all the reviewers are just that, comments and not really suggestions of anything to be done. Gene Shippentower says that they would like to add more to the benefits section. Dave Close, Yakama, Nez Perce want to make comments. Dave Ward is concerned that the open comment period could continue too long. April 30, 2010 will be the last date to receive comments.

Figures for paper are further along than they were but they still need help and volunteers. Assistance on figures of historic fishing by treaty tribes is especially needed. Chris Peery will work on Nez Perce. Mary suggests using one map with different shades for different tribes. Bob Heinith - There is some work going on with the four tribes making maps for their lamprey plan but it will take some time to get it right. There are cross-cultural fishing areas. Dave Ward is going to work on putting text and a general map together. We won't worry about a super detailed map at this point because the tribes are working on detailed ones.

There is a lot of information in the front of the paper that maybe is not needed? We may write other papers on artificial propagation, etc. so the first information

section would be an introduction chapter for the whole thing. Mary suggests that this would be good to get out in the primary literature as a review paper. This is not really an overlap of Dave Close's Umatilla paper in the lamprey book.

Dates for completion of Translocation Paper:

- April 30 is going to be the drop dead last date to add real concrete edits. Christina will send an email asking reviewers to make concrete suggestions on what needs to be changed and how to change it.
- Dave Ward will pull comments together by May 21 and he will send to subcommittee for review.
- Subcommittee will have until June 11 to get comments back to Dave Ward.
- Dave Ward will incorporate by June 18.

### 3) Passage metrics update

Josh Murauskas - Mike Clement, Chris Peery, Chris Caudill and Bob Rose made a table for Phase II passage metrics (picking metrics that may be measurable). This table has all the metrics but with information filled in regarding 1) are they measurable by scientific rigor; 2) current associated technology; and 3) biological relevance. Another metric was added entitled "individual fate". What proportion are to be thrown out? The majority are measurable with unlimited resources. With the technology we have now Table 2 shows what is measurable now. Dave Clugston asked about what would happen when a good tag is developed. It would change some of these. Cost is also a good category to add.

The next step is for the whole workgroup to review Phase 2 (and Phase 1) and comment on it. Then we start thinking about Phase 3. How are we going to go about doing this? Mary Moser – salmon passage metrics were developed based on extinction of specific populations of fish. Until we have the same level of information for lamprey putting a number on these metrics is just pulling a number out of the air. Part of Phase 3 should be determining what info is needed to make the lamprey metrics. NMFS did the salmon numbers. Mary will get salmon model from NMFS – BAMP. We should look at the sea lamprey models on how quickly populations can be replaced.

Dave Ward – We should make a table on what was used for salmon metrics and then compare this with what we have for lamprey and what we need. Mary will check into the original model. Matt Mesa – the derivation of these passage metrics take into account the success of juveniles and this is dangerous to do with lamprey since we know nothing about juvenile success. Mary – says that we should really just lay out what is needed, what study is needed to get the metric. Umatilla has study on stage survival. Bob Heinith asked about – falling out of ladders? This is included in entrance ratio. Dave Clugston - 82% is the metric right now. It is the average of three years at The Dalles. Past data of passage and conversions.

Dates for Passage Metrics:

- Whole group to review Phases 1 and 2 – comments to Josh Murauskas  
April 30

#### 4) Dredging subgroup report

Molly – At the January meeting of the subgroup they discussed how to go about this project (finding out who is dredging, where, when, sampling spoils, etc). It was a good meeting, well attended, Molly sent out a spreadsheet on to fill in whether dredging is going on and who to contact. It has been kind of hard to get information. The next goal is to visit a site and the next meeting will be after that. They haven't tapped into private contractors yet. Please send Molly any information or contacts.

#### 5) Revising of critical uncertainties, goals

Dave Ward described how the critical uncertainties were reordered for the amendment of the NPCC Fish and Wildlife program. They were reordered to match the tribal restoration plan. Two notable changes are that passage is the first for anadromous lamprey and restoring habitat moved up in the ranks. Overall it is the same uncertainties just slightly different order. Do we want to reorder? Revisit the 5, 10 and 20 year goals the Workgroup had decided on in 2005? Dave Ward suggested we should put out a two pager on the status of how we are doing on our goals.

The Workgroup decided to have a 2 day retreat in September 2010 to work on revising the uncertainties and the goals. Christina will do a Doodle poll to select dates in September. The Edgefield (McMenamins) in Troutdale was suggested as a possible location.

#### 6. Research

Mary Moser – Doing collections of lamprey in Hood Canal – 6 inches long with *Entosphenus dentition*, sent to Margaret Docker for genetic work and Stewart Reid – probably a dwarf Pacific.

Chris Peery – Maybe getting more money to do juvenile surveys. Found ammocoetes in translocated streams Newsome and Lolo. Recruitment failure because of passage. Production potential study.

Bao Le – Douglas County - Ditson imagery showing success in different velocities. Chelan PUD literature review on passage work.

Mike Clement – New relicense ladders taken out of service and plating was installed (18 inch wide plating). All plating at Priest Rapids has been completed, ramps installed at orifices and new count stations. Velocities are going to be

measured. Flow is very laminar now. Mid-July through September acoustic tag study. Lamprey traps at overflow and orifice weir wall underwater slide gate. Underwater cameras installed 24/7 monitoring. Between dam reservoir surveys with acoustic tags.

Bob Mueller- Lower Snake surveys with Walla Walla survey – presence absence underwater video with shocker. And Chris Peery - Walla Walla funding study at McNary for new UC Davis and U Idaho for small slots on the floor at each weir (3 inch slots) to see if lamprey use them. Concern is that salmon may try and use them. 6 tilting weirs. Bob will send pictures.

Matt Mesa – Started fish screen work. Ammocoetes are in the lab. Flume tunnel made and environments for rearing in lab. Pit tagging techniques with young lamprey. Put macrophthalmia in sea water.

Sean Tackley – Similar to LPS in entrance weir. Boxes that are 6x2, fish enter box and go into flume and then into a trap to study. Planning this year for implantation in 2011. U of Idaho tagging 60 adult lamprey with jsats tags using acoustic arrays set up for salmon to mobile track fate in Bonneville pool.

John Day Ladder – Modification in exit section. Count station redone. Velocity cannot be low enough so they will go behind picketed leads instead. Plates on, smooth floor all the way through. Round corners. Designing entrance for John Day north 2012-2014. This is a salmon project that lamprey features are being added to. This will all be monitored for effectiveness for lamprey.

Lower Snake – Ice harbor fitted with antennas for tracking lamprey. Modifications going on in that dam too.

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