

## Methow Restoration Council

July 15, 2014

### Participants:

Name	Organization/Affiliation
Brian Fisher	MSRF
Char Schumacher	Okanogan County
Chris Johnson	MSRF
George Schneider	Citizen
Hans Smith	Yakama Nation
Jarred Johnson	Yakama Nation
Jeff Fealko	Reclamation
Jennifer Molesworth	Reclamation
Jeri Timm	WWP-TU
Jessica Goldberg	MSRF
John Crandall	MRC
Joy Juelson	UCSRB
Kent Woodruff	Forest Service
Kristen Kirkby	Yakama Nation
Lee Bernheisel	Okanogan Wilderness League
Lucius Caldwell	Yakama Nation
Lynda Hofmann	WDFW
Mike Knutson	Reclamation
Terri Williams	Okanogan Conservation District
Terril Stevenson	Reclamation

### Notes:

**Kent Woodruff—Beaver Project Update:** got a call last week, and someone found a dead beaver up the Chewuch. We have tags in the tails of all of our beavers that we capture. We scanned the dead beaver's tail, and it was a beaver that we first encountered south of Carlton, captured it in August of 2012, found a pair for it and released it up Cub Creek on State land. Then, it was picked up on the tag reader at the mouth of the Chewuch in September. In May the following year, we captured it in Twisp, then released it way up Boulder Creek, it stayed all winter up there, and then last week we found it's carcass in the Chewuch south of the mouth of Boulder Creek. The interesting aspect of this project is to try to be successful in establishing beavers in the sub-watersheds, but another aspect is the monitoring and teaching other groups how to reestablish beavers.

We experienced fewer establishments over the winter from last year's releases; last winter not good for us or for the folks who are releasing beavers in the Yakima basin. We know that beavers move around and are very mobile. We have temperature logger sites, and our goal is establish beavers between the loggers. We are trying to collect flow data before and after; the challenge is that beavers don't often stay where you put them. Mortality and migration are persistent challenges. The success so far has been tremendous, better than other programs. Our education campaign has also been successful, but has also resulted in fewer calls to remove beavers. We need help to try to figure out how to redistribute beavers in the valley.

Chris Johnson—we need help from this forum to re-message that we need people to help us redistribute beavers in the watershed. As people run into beavers and make connections with landowners, we need to connect people with Kent.

Jennifer Molesworth—we need to keep beavers that are established in the anadromous zone where they are—that is where they give the most benefit to fish.

Kent—200 years ago, we fragmented the metapopulation, and we are missing the connections that give a thriving beaver population; if we can saturate the 6<sup>th</sup> field watersheds, then we can get the interconnections that will lead to a thriving populations

Discussions—captive breeding, trapping from the Columbia River, out of area concerns

Kent—we need awareness in helping to get more beavers.

**John Crandall—Monitoring Update:** BPA has begun project effectiveness monitoring; they have the AEM (Action Effectiveness Monitoring) program, and it is selecting projects that are implemented through BPA funding, includes YN Accord funding. They hope to select projects that haven't been implemented yet to get pre-project data, but they also have some that have already been implemented. They are using a BACI (Before, After, Control, Impact) design for the first set, post-project only for the second group. They are looking to have it hit the ground now; it is BPA-anadromous zone wide, a lot of sites in the whole program, and they are still working out how it is all going to look. Looks like there will be a CHaMP site at each site. They have restoration project classes, with about 8 classes that they are interested in, but they are only selecting one class per site, even though each site may have multiple classes. Not sure how that will work out. We have been trying to figure out where they will hit the ground here, there are about 7 total; 4 or 5 are YN sites, not sure if all will hit the ground, Silver may be on the list, CHaMP does the habitat work, on top of that they are having a fairly simple fish survey—which will be once a year fish snorkeling. May make it challenging to understanding what the fish are doing based on one survey. TetraTech is leading the effort; they are contracted with BPA, they are good about talking to people, Jennifer O'Neal is their contact person, and I have their information if you need to contact. It is a very large-scale monitoring effort in the PNW. Still using the CHaMP technology, so trying to define how they are different. Stay tuned.

Chris—we are required by DNR and WDFW to do structural monitoring, but nothing in the AEM addresses that. We are looking at a 5-year requirement under DNR, and three years under WDFW, but generally only have 18 months or so of funding. Any thoughts on how to address this would be welcome.

John—once a year surveys for habitat should be fine, but difficult for fish monitoring because the fish are growing, moving around, changing throughout the year.

John—Appendix C Methow Monitoring Plan is now with the RTT, think they won't have time to look at it until the late summer and get comments back, but hope it is moving forward without anything else from me.

John—hatchery monitoring: at the life history workshop, there were a bunch of hatchery folks there beyond the PUD program we have here. We have a large hatchery program effectiveness monitoring that Charlie Snow and company are doing; they are doing a very good job, and they also collect a lot of information that others can utilize. They will keep adapting as things change in the hatchery world; now a lot of movement into the Twisp and away from the Chewuch and upper Methow, as the fish release areas shift so does the monitoring. Right now there is not a lot of sources of tags in the Chewuch and Upper Methow. Hatcheries are a big influence on fish populations here, but their work is very separate, somewhat of a disjoint. I hope to have some folks from the PUD come talk to the MRC. Yesterday I saw them up the Chewuch capturing wild spring Chinook for brood stock. I would like to get the conversation started about the hatcheries and what they are doing. It is separate, but interesting that with hatcheries, very soon you get to harvest.

**John—Outreach Update:** Watershed Watchers had a really successful spring with five separate programs at the Twisp Ponds; we will probably have three or four more programs in the fall. The program has been very well received by the teachers and parent chaperones who come along.

The Interpretive Center is still working towards a permanent installation on fish and watersheds, if you are interested contact me or Jennifer or Chris J.

As a part of the “Our River” art exhibit at the Confluence, there was a panel convened that looked at how the river affects your life, future of the river, about 7 people on the panel, 15 in the audience. It was an intimate setting, pretty amazing evening, vast perspectives, diverse mix of people, audience was involved, really great to talk about the river.

Kent—I was particularly impressed by how diverse the panel was.

Chris—we did the fourth art installation at the Twisp Ponds; this last dedication was from Steve Love, a nice cast-bronze piece on a pedestal, is an artistic derivation of the name “Twisp.” We will probably start another round this fall to engage the community—Twisp is submitting an application to do a trail that connects with the ponds site, we will be looking at interpretive signs.

Jennifer—the ponds are also a great bird site, good to have info on that.

Kent—a lot of diversity in birds there.

Chris J—we have three kiosks that Eric Portman has designed at WFI, WDFW, Twisp Ponds, just got designs for the Red Barn in Winthrop and the Susie Stephens Bridge. We want to make the kiosks are unique to each site, so ideas of what specific info to have are welcomed.

Jennifer—the Twisp Ponds site is really amazing, trails, art, vegetation, birds, idea of the outdoor classroom.

**Mike Knutson—Large Wood Design Guidelines Presentation:** I am a hydraulic engineer with the Bureau of Reclamation, trying to spread the words on some guidelines that we are drafting on large woody material (LWM). Think it has a lot of benefits for multi-disciplinary folks. My co-author Jeff Fealko is here as well. We work out of Boise, but the guidelines are for everywhere Reclamation works; we are in 11 basins in the Pacific Northwest.

In the beginning, the guidelines were developed in response to some pressure in Chelan County in 2011, work was stalled due to landowner concerns, county commissioners put a moratorium on LWM, so we put together a LWM workshop, a law firm put together a white paper on the legal aspects of putting wood in rivers, so what we’re trying to do is to put together standards of care. We don’t really have those here; engineers prefer to work from a book. Trying to have a collaborative process with these guidelines. We currently have a draft out for comments.

We are looking at ways to limit liability and mitigate risk

- Design
- Public outreach
- Mitigation
- Monitoring

We tried to incorporate these into the guidelines, address head on what the risks are, using a collaborative approach

These guidelines will be required for Reclamation, to include IDIQ contractors when they working for us

Our approach is to do a risk assessment, how dynamic, geomorphology, land use, recreational use, etc. Once you define the risk, it defines minimum design guidelines

The process results in a document that records the assumptions, communications, and decisions; we want it to be consistent

#### Risk assessment—approach

- Matrices
  - Public safety
    - Y axis:
      - Frequency of use
      - Skill level of users
      - Access
      - Children present?
    - X axis
      - Active channel?
      - Is LWM on outside of a bend?
      - What is the potential for pinning?
      - Egress around?
      - Can you see it from upstream?
      - Depth x velocity
  - Property damage
    - High risk
    - Moderate risk
    - Low risk
    - Y axis
      - Are there bridges or other structures?
      - Are there structures in the floodplain?
      - What is the land use/value?
    - X axis
      - Channel type
      - Riparian buffer heath
      - Channel bed composition
      - Annual hydrograph
      - What are banks made of
  - From the matrix, you can get six different combination of risk (high,high; high, moderate; high, low; low, high; etc.)
  - Minimum design guidelines for stability design flow criteria, river use survey needs, geomorph assessment needs, design team needs are all defined for each risk category
- Qualitative—forces the design team to ask and answer a wide range of risk-based questions about the project reach and specific LWM elements
- Quantitative—defines minimum design standards based upon level of risk and more stringency as risk arises
- Consistent—provides consistency in design and documentation

Chris—we need to integrate the funders and the landowners into this process to avoid 11<sup>th</sup> hour changes

Mike—have been working with BPA on these guidelines, and they are on board, and they agree that we need up front involvement; we hope this will provide the documentation that we need to avoid second guessing.

Chris—documentation of how you engage the public is critical; we've used scoping through the SEPA process as a way of meeting the legal requirements. It gives a legal basis for providing and documenting engagement.

Mike—we also have minimum guidelines for hydraulic modeling based on risk level. We require all to have some sort of model except low, low, and for higher risk we require a 2D model, which we usually do anyway.

Structural Design Recommendations—guideline recommends several methods and means for calculating forces and designing structural components of LWM Structures, have factor of safety recommendations based on uncertainty, these are recommendations, not guidelines.

We have prioritized recommendations for engineered fasteners; we recommend no fasteners if you can, then rope, then pins, then chain, least favored is steel cable.

Jennifer—at Whitefish, we had some one or two structures with minimum fasteners, but because of the liability legislation we can't build them like that, but these structures provide great habitat at high flow for small fish when they are at their most vulnerable. Is there a way to make the 100-year standard for those where failure is part of the design?

Discussion—withstanding 100-year flows and meeting the legislation

Brian Fisher—design life and design flow are independent; you could have a higher design flow and a shorter design life. The liability legislation establishes a standard of care, but these guidelines also provide a standard of care that provide some cover; legislation really only covers downstream property, not users

Chris J—I would agree with that in areas that don't have the user groups like the M2.

Discussion—liability, risk to users, standards of care, what makes a structure?

Joy Juelson—I would like to see a paper that goes with this that addresses how to use the assessments while meeting the requirements of the legislation.

Mike—there is a big misunderstanding of what the design discharge is, it is based only on our understanding of the hydrology, moving targets that are always changing; design life is an important subject.

Discussion—design life, recommendations, probability

Chris—we have designed our permitting strategy with DNR/WDFW, that after 5 years the structure becomes part of the a natural environment

Terril—even in the legislation, they hint at that because the tags only have to last for three years.

Chris—I do think we have the responsibility to know how we expect it to look as it fails.

Mike—this is a living document, and we want to improve it over time, but it represents a standard of care that engineers and the federal government are backing.

Mike—Documentation is required as part of the process: a risk assessment design report is required.

- Document all factors for each risk matrix
- Documents all stakeholder communications regarding risk
- How was LWM designed to perform given identified risks?

Also require a documentation signatory page, signature required by all team members

Risk to be evaluated at conceptual design, 60%, and final

Team members; professional engineer, fish habitat biologist, fluvial geomorphologist, hydraulic engineer. Gets everyone following the process all the way through.

Chris—what about signatures by affected landowners?

Mike—that part is up to you, don't want to prescribe that, but encourage that all the way through

Chris—we need help from the engineer to know which landowner is critical to getting buy-in from, who has the risk

Mike—trying to hone in on what is the risk factor that makes something risky

Example—Tye Project (Entiat)

Chris—would be nice if the legislature would adopt these guidelines and throw out 1194.

Mike—would be nice; this is a risk-based problem; there are a lot of well-established guidelines on how to do risk-based design from the Corps for Levees; I used that as a starting point. Final guidelines will be out in early August.

Chris—thoughts on ways that sponsors can come together on ways to evaluate structures?

Hans Smith—I think there is a lot to discuss; think this isn't contradictory to 1194, gives a way to justify a different standard

Chris—could be a way to establish an engineering standard vs. a legislative standard.

**Joy Juelson—UCRSB/SRFB Update:** SRFB is coming to the Methow in September; they will be touring project sites.

RTT scored the projects; scores will be released on the 18<sup>th</sup>; BPA is picking up the Trib-ask portion of Silver; the Barkley-ask to SRFB went up, and the Barkely-ask to Trib went down;

There will likely be a BPA targeted process this fall for 2015 funds

Will be updating the Implementation schedule for NOAA

### **Roundtable/Public Comment**

Joy Juelson—UCSRB: will be putting out another bulletin soon, so get any items to Joy

Chris Johnson—MSRF: we had a lot of effort with DNR this last month on 2014 conservation license requirements; they changed a lot from 2012 requirements. With BPA, Chelan County, and Cascadia, we were able to negotiate back to the 2012 requirements for this year only; hope to have regional help to resolve for the longer term.

John Crandall—annual lamprey sampling first week of August; lamprey guide in the works. USFWS is doing a risk/status assessment for lamprey in the upper Columbia, contact John or Jennifer for more details.

Hans Smith—YN update: we got the Twisp River Reach Assessment going, it is about to go through RTT review, the Upper Methow RA is about to start. Then we've got four habitat restoration projects for implementation this year, two on the Twisp and two on the Methow. We are planning projects for next year on WDFW properties on Big Valley wildlife area, Fender Mill site, and Chewuch WDFW campgrounds. An update on signage—we are still waiting on cultural clearance for our signs, but when we have it they will go up.

Terri Williams—OCD Update: Bob Clark asked me to remind everyone about the CREP program to fund riparian plantings, contact him for more info. It can apply in a lot of situations where you wouldn't think it would.

Chris—is it only available on active eligible ag lands?

Terri—don't know, some restrictions that there used to be may not apply, and they change periodically, so check with Bob. Also livestock related projects, have funding for water systems, exclusion fencing, some riparian fencing, contact me.

Kristen Kirkby—YN: we've been sampling at Hancock Springs. July is a quiet period for us, and if you are looking for help we have a volunteer.

Jarred Johnson—YN: we turned in an initial request to PRCC to purchase three properties for protection up the Twisp River, they will be sending up an appraiser.

Brian Fisher—MSRF: we are starting our 3R construction this week. Palm Construction is the contractor; he is buying a vibratory pile driver. We expect that project to last about three weeks. The property is on a Methow Conservancy Easement.

Brian Fisher—Watershed Council: we have been looking at ways to support base flow in the Methow Basin; a few years ago we did a feasibility study on looking for storage options; not many options for water storage in the Methow Basin that are feasible, beneficial, and don't have major issues. The project that came out is looking at Davis Lake, which is fed from Bear Creek, it has a diversion that takes about .1 cfs from Bear Creek; the lake fluctuates a foot or two during the year. Bear Creek has dry sections due to irrigation from the golf course. Davis Lake has the opportunity to allow Bear Creek to continue having water—we could store water in Davis lake during the winter or freshet to address intermittent flow in the summer. This would increase the variability of the water surface by 4-5 feet. It is feasible; the lake has enough space to supply water for the golf course. We would need to address the water rights issues, likely through the OCPI process. We are looking to find out if there is support, is it worthwhile to pursue, are there concerns?

Lynda Hofmann—think it is a great idea, ASAP

Chris—MSRF would support exploring options, including an economic analysis

John—we need to look at the influence of Chewuch Canal spill into Bear Creek

Chris—we are working under the assumption that those spills have a short life

John—the fish benefit is below the barriers, especially the county road, if there is water

Brian—currently, Davis Lake is not really used as a reservoir, that would need to change so that the golf course was taking directly out of Davis Lake

John—and not any currently any conveyance directly from Davis Lake to golf course

Chris—would like to see an analysis of using Pearrygin as a reservoir for the golf course

Brian—any issues pursuing this as a fish project?

Chris—need to make clear linkage that the economic outlay couldn't be done differently with the same funds to benefit fish

Brian—most of the water would be for the capital improvements to improve the infrastructure

Discussion—Pearrygin and Bear Creek, need to look at the top; need a group to look at Bear Creek to see how different priorities tie together

Jenny—need to make sure it is ready for the next expert panel process

Chris—I think that the MRC could have a sub group to work on this

Brian—Watershed Council has funding from Ecology for design; we could take the Davis Lake portion of the project and the infrastructure through 100% design, but would need construction funding. I think the end date of the grant is 2016, but would need to verify

Brian—also, a heads up from the Corps of Engineers: if you have a project that involves wetlands, involve the Corps early to avoid issues.

Jennifer Molesworth—USBR: yesterday we went to Wolf Ridge to look at potential projects there, looks very beautiful, but someone is accessing the river and driving through it in an ATV on river right, most likely accessing it through MSRF property

Lynda—that is against the law; I recommend that you call the sheriff if you see it

Chris—we can put in a wildlife cam

Jennifer—TU hired a contractor for design for long-term solution for the Barkely; MVID is still coming together.

Lynda Hofmann—WDFW: there is a backlog in processing HPAs with the new system; we must use the APPS system. Ryan Fortier is now the district fish biologist; Graham Simon is doing the coordination for the WDFW habitat projects. They have hired a new Wildlife Area Manager, who will be starting this fall.

**Next MRC meeting August 19<sup>th</sup>**

<b>Definitions of Commonly used Acronyms</b>	
AEM	Action Effectiveness Monitoring
ANS	Aquatic Nuisance Species
AREMP	Aquatic and Riparian Effectiveness Monitoring Program
BACI	Before, After, Control, Impact (study design type)
BEF	Bonneville Environmental Foundation
BO/BiOp	Biological Opinion
BPA	Bonneville Power Administration
CAC	Citizens Advisory Committee (for SRFB funding applications)
CAO	Critical Areas Ordinance
CBFWA	Columbia Basin Fish and Wildlife Authority (pronounced "cubfwah")
CCFEG	Columbia Cascade Fisheries Enhancement Group
CCT	Colville Confederated Tribes
CHaMP	Columbia Habitat Monitoring Program
CMZ	Channel Migration Zone
CREP	Conservation Reserve Enhancement Program
CSF	Community Salmon Fund
EDT	Ecosystem Diagnosis and Treatment
ESA	Endangered Species Act
FCRPS	Federal Columbia River Power System
FFFP	Family Forest Fish Passage Program
FIA	Forest Inventory and Analysis program (USFS)
Four "H"s	The four factors affecting salmon recovery: Hatchery, Hydro, Habitat, Harvest
HACCP	Hazard Analysis and Critical Control Point
HGMP	Hatchery Genetic Management Plan
HPA	Hydraulic Project Approval
HSRG	Hatchery Scientific Review Group
HWS	Habitat Work Schedule
IMW	Intensively Monitored Watershed
IS	Implementation Schedule
ISEMP	Integrated Status and Effectiveness Monitoring Project
ISRP	Independent Scientific Review Panel
IT	Implementation Team
LW/LWD	Large Wood/Large Woody Debris
M2	Middle Methow (a project area defined as the reach between Winthrop and Twisp)
MaDMC	Monitoring and Data Management Committee (pronounced "madmac")
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MRC	Methow Restoration Council
MSRF	Methow Salmon Recovery Foundation (pronounced "em-surf")
MVRD	Methow Valley Ranger District
MWC	Methow Watershed Council
MYAP	Multi-year Action Plan (also sometimes called the 3-year workplan)
NFF	National Forest Foundation
NMFS	National Marine Fisheries Service

NOAA	National Oceanic and Atmospheric Administration
NPCC	Northwest Power and Conservation Council
OBMEP	Okanogan Basin Monitoring and Evaluation Program
OWL	Okanogan Wilderness League
PCSRF	Pacific Coastal Salmon Recovery Fund (pronounced "Pacsurf")
PIBO	PACFISH/INFISH* Biological Opinion
PNAMP	Pacific Northwest Aquatic Monitoring Partnership
PUD	Public Utility District
QAQC	Quality Assurance, Quality Control
RA	Reach Assessment
RCO	(Washington State) Recreation and Conservation Office
REI	Reach-based Ecosystem Indicators (used in Reach Assessments)
RFEG	Regional Fisheries Enhancement Group
RFP	Request for Proposals
RM	River Mile
RPA	Reasonable and Prudent Alternative(s)
RTT	Regional Technical Team
SEPA	State Environmental Policy Act
SMP	Shoreline Management Plan
SOAL	State Owned Aquatic Lands
SOW	Statement of Work
SPIF	Specific Project Information Form (used with the Corps ESA programmatic)
SRFB	(Washington State) Salmon Recovery Funding Board (pronounced "surfboard")
SRP	State Review Panel (for SRFB funding applications)
STEM Database	Status, Trend and Effectiveness Monitoring database at NOAA's Northwest Fisheries Science Center
UCSRB	Upper Columbia Salmon Recovery Board
TRT	Technical Recovery Team (NOAA)
USFS	US Forest Service
USGS	US Geological Survey
VSP	Viable Salmonid Population
WAT	Watershed Action Team (the MRC is our WAT)
WDFW	Washington Department of Fish and Wildlife
WDNR	Washington Department of Natural Resources
WNFH	Winthrop National Fish Hatchery
WWP-TU	Washington Water Project of Trout Unlimited
YN	Yakama Nation

\*PACFISH/INFISH The PACFISH/INFISH Biological Opinion (PIBO) Effectiveness Monitoring Program was initiated in 1998 to provide a consistent framework for monitoring aquatic and riparian resources on most Forest Service and Bureau of Land Management lands within the Upper Columbia River Basin. This 7-year status report gives our funding sources, partners, and the public an overview of past activities, current business practices, products and publications, and future program directions. It is designed to increase accountability and summarize our accomplishments during the initial phase of the program.