

## Methow Restoration Council

March 20, 2018

### Participants:

Name	Organization/Affiliation
Chris Johnson	MSRF
Crystal Elliot	TU
Greer Maier	UCSRB
Jarred Johnson	Yakama Nation
Jennifer Ramsay	Stressed Fish Consulting
Jessica Goldberg	MSRF
John Crandall	MSRF
Lee Bernheisel	OWL
Maddie Eckmann	Yakama Nation
Pete Teigen	UCSRB

### Meeting Notes:

**John Crandall – Monitoring Update:** We try to coordinate monitoring here, and it can be difficult. Since about 2010, we've had a fairly extensive temperature logger/monitoring program through Ecology grants and the beaver project. There have been hundreds of loggers and a lot of data. Those grants are coming to an end, and I'm looking at shrinking the number of loggers. We had essentially taken over the Forest Service sites, but funding is going away and we need to start making some choices about where we want loggers. A bunch of others have loggers out, and it can be hard to get the information. Temperature is easy data to collect. So our extensive logger network is going away, and I will try to get it down to about 20 loggers. It would be good to have a conversation about which ones to retain and how to monitor and share the data. Following up on that, we are on the 303(d) list for temperature, which was run off of a few exceedances based on fish life history needs. Different designations have different temperature thresholds. Looking at the data, we are well in violation of the clean water act in the basin. Up and down the river, there are only a few places that don't exceed the criteria for the 7-day daily average for max

Chris Johnson – a lot of it is probably natural

John – likely. You can see places where inputs from tributaries cool the water down, and it affects it for some distance. we have a lot of data. Also along those lines, I'm trying to figure out who has temperature loggers and where. Some are just for projects, but I would like to see a perennial long-term temperature monitoring program, looking for a longitudinal profile from the headwaters down for Methow, Twisp, Chewuch, etc.,. and then try to hit some of the tributary mouths.

Chris – we aren't allowed to use the term RME anymore, now we have P&I, Performance and Identification; curious about including projects that have temperature as a metric, how can we include it in the P&I

John – it would be nice if the information is included in one spot; there is a massive amount of information, but for other programs it is stored on individual computers. We have a whole Access database that we can provide to people.

For riparian plantings, a lot are only 6-7 years old, so they are not doing anything yet, we're not yet less impaired.

**Paper of the month** – *Climate change, aquatic ecosystems, and fishes in the Rocky Mountain West: implications and alternatives for management* (Rieman & Isaak 2010). The paper talks about predictions for climate change and what changes are expected. It talks about what climate change means for fish species, and makes suggestions for what to do about it. Changes in flow and temperature are the most important. Need to collect baseline information, identify cold water areas, and work together to coordinate an overarching strategies

Chris – so MSRF and YN are both doing side channel projects, and I’ve been curious for a long time about what happens when you take water out of the stream for a side channel in a temperature impaired stream, you had better be creating good habitat that isn’t contributing to the problem. I’m wondering if we can coordinate on the P&I to identify how we identify that

Jarred Johnson – we should coordinate on that; it would be site specific

John – I would like to have a network of temperature stations that keeps tabs on how the basin is responding as a whole. You have to stick to a protocol to make sure that the data collected is relevant and useful. Consistency is really important to getting good data.

Chris – makes sense to me to have a system that demonstrates effects

John – there are a lot of large issues that we can’t address

Chris – so it makes sense that fish are going to need stepping stones of cool water, and set loggers are not going to do that, but we need the kind of data on projects that will help us prioritize future projects

Discussion – options for the monitoring; a FLIR camera on a drone would give surface temps, some projects like infiltration galleries often have temperature monitoring, need to understand the tradeoffs of different treatments

John – the Methow is one of the few places for bull trout in the climate change scenarios with enough cold water refugia; some streams have some cold springs, and it would be nice to see if those are changing at all, because once those start changing that would set the stage for change downstream/everywhere.

Greer Maier – in the Wenatchee, Adrian got funding for the thermal mapping, you should consider something similar

John – I’m working with Adrian. We have FLIR, but not sure if/how people use it.

Jarred – we also have a strong network of groundwater temperature loggers in piezometer wells, a lot of them also have pressure sensors so you can also track changes in groundwater. Are you proposing to be the place where we send all of our temperature data?

John – no, but it would be good to find a way to coordinate

Chris – couldn’t each group have a GIS layer of where the loggers are?

John – if you have temperature loggers, send me the lat/long for their locations

Greer – I can take the lat/longs and put it on a layer, we are moving to a GIS platform on our website

John – I have layers for loggers, but the difficulty is that they change year to year and keeping it updated

Last thing – on data gaps, the MaDMC is taking a bit of time, so not done yet, if you are doing a SRFB monitoring project or identify something as a data gap, contact John.

Chris – it is good to make sure that you are addressing something like a data gaps in your proposal

**Pete Teigen – UCSRB Updates:** we have most of the information for this year's SRFB roundup on our website. We're waiting to confirm dates with the CACs, so the master schedule is still partly a draft but it is as accurate as possible at this point. The Methow Tours will be May 15<sup>th</sup>

Jessica Goldberg – SRFB tours are in lieu of MRC in May

Pete – there were a lot of questions about the JotForm for the abstracts and the Regional Applications and Greer and I have been talking about that

Greer – we are working on this and trying to make things simpler, the Regional application has also been streamlined to reduce redundancies. It has drop down menus and should make the application shorter and easier. Ultimately it would be nice to also have the RCO application online. This is a first step in creating an easier process. I can also modify the JotForm at any time, so if you see something that needs fixing contact Greer.

Pete – if people have questions, please contact me. For the most part, SRFB will be much the same as in years past, so there shouldn't be any surprises. Feel free to give me or Greer a call if you have questions. Joy will be working on a contract part time during the process, but she may have limited time available.

We did the straw poll, and it looks like between 10 and 12 projects in the Methow this year, which is more than last year, so may be a little longer of a tour day. Around \$1.8 million available this year.

Greer – as you are doing your application, we are moving to an online GIS platform with Aspect consulting, all the data will be moved there where you can explore and create maps. We hope to have it up by the end of summer, but I'm not sure how long it will take. We've also updated the redd location layer with new data that is up through 2016, might have been changes especially after the fires, it isn't up yet but will be up soon.

The other thing we are working on is a barrier prioritization effort. CCFEG received funding for barrier inventories first in the Wenatchee and coming soon in the Methow, and we've been working with them and the RTT to prioritize the barriers, with Trib Comm, WDFW, NOAA, USFWS, etc. We are aiming to integrate this into the prioritization process. We are working on criteria for the prioritization to get buy-in [presents draft table of prioritization strategy]. This process could also have benefits/uses in other prioritization tasks. There will be some look at habitat upstream of barriers, which will give some indication of the priorities of the barrier. We are also looking at suites of barriers that might have a higher priority over an individual barrier; the idea is to look at continuity within the stream. This will all be in GIS as a barrier prioritization tool. We will upload the Wenatchee information and run it, and then when the Methow is done we can include that information too. We will also look at watershed impairment and cost estimates. Trying to look at optimization of funding across the landscape. This is under development, if you would like to be involved let Greer know. If you have ideas or see red flags also let Greer know.

Lee Bernheisel – the supplemental budget is due for signature and there is \$20 million for natural resource projects, is SRFB going to get any of that? There was earmarks for some specific projects, may be ways to get some of that money

Greer – I'm not sure, but there is a separate pot of money for statewide barriers, and projects that score well with this should score well with that as well

Discussion – budgets, earmarks, whether the governor will sign the earmark portion, nobody in the Methow knew anything about it, an unusual situation

Greer –overall, the RTT is working on the prioritization strategy, YN got some funding for a consultant to gather some data, we have the Assessment Unit Layer approved, so now they will gather the data and prioritize these AUs. The idea is to leverage projects towards achieving these goals. If you haven't looked at the prioritization strategy please do.

The bull trout IP score is difficult, so RTT asked me to work with partners to come up with something for intrinsic potential. We have an IP layer for chinook and steelhead. For bull trout we have the climate shield model and the critical habitat layer and we were hoping to develop something similar. Will be something like the climate shield model and we are honing on what we need but it won't be perfect

John – there is a lot of habitat that is not relevant; almost all of the projects will be within known distributions and critical habitat. It's difficult because bull trout have a very different life history than chinook and steelhead, a very different way that they are using the river. Need to look at spawning and rearing habitat. In a way the climate shield is a better predictor for resident bull trout, but not for migratory bull trout. It will basically show us where small cold water streams are. Trying to keep it as simple as possible will be important; we don't want to override what we already know about bull trout.

Greer – the importance is more about the value of one assessment unit over another in terms of its importance of bull trout

John – we are trying to get at is that; however, the way it goes is that spawning and rearing habitat gets ranked really high

Greer – stay tuned, want you to know how this will be used

John – the first time that bull trout have gotten any weighting in the process

Greer – the Power Council is developing an M&E strategy; they already have a Research strategy. The Power Council is meant to be a clearinghouse for public input. They sent out the draft M&E strategy a few weeks ago, and we drafted a response that emphasized the need for consistency in ecological concerns and that there is coordination with the regions and the watersheds. That is the push that I'm sending to the Council. Not sure how much NOAA and BPA are going that route, but I'm also sending that message to them. It's all about how you roll up inconsistencies among watersheds to the basin level, but I think we can manage that. At some point they will have a more fleshed out strategy. They will be fleshing out ECs and take the data and generate results that will be used across the basin. Not sure how other RME programs are going across the basin, but all programs are looking for efficiencies

Chris – BPA did a GIS-based monitoring on one of our easements that generated a red flag that used the wrong Township, Range, and Section, and it was amusing that it made it all the way through their review before someone noticed that there wasn't a river in the map

Greer – it is important to have regional and local involvement. Phil Roni's group (Cramer) is taking over AEM, and they are just finishing out the monitoring commitments and looking at the data and trying to say something with it.

## **Roundtable**

*John Crandall – Monitoring Coordinator:* the Lower Methow Reach Assessment is coming along. We're going in to gathering information about the reach; the channel is very confined, so there are many places where there is very little difference in channel dimension between the 2 year and 100 year flood, but there are about 25 places where there may be room for potential project areas. There are other things that can be identified, such as point of diversion changes, bank treatment, riparian, etc. projects will be identified in the RA; which will be done in August 2019. In terms of fish use, there is a lot more happening than we have been given credit for; a vastly different fish community

Outreach – the Methow Fish Guide Second Edition revised and expanded is done, and it will be on the street soon. We put a bull trout on the cover. We are trying to get it into the hands of people that would benefit from that kind of thing

*Greer Maier – UCSRB:* The ISAB finished their spring Chinook review, and it is available. Tracy's paper on the effectiveness of Tributary Habitats is available too

A Cheap and Cheerful workshop is in the works, timing and location is still in flux. I really want to make it happen. Last week I was at the Oregon AFS, and across OR the FS is doing a statewide effort to fill in incised channel and putting 1% of harvested wood into the streams and getting great results. I talked to them about coming up, there is a lot of really cool work going on, on Federal Forest Lands. Stay tuned on that, may be part of the Cheap and Cheerful workshop, they have techniques for identifying locations and getting funding

Chris – I would be interested in seeing an anadromous overlay on that

Greer/John – OR National Forests have a lot of anadromous streams, Willamette, Mackenzie, coastal Greer – it is a forest-level initiative, and they can get timber target for the timber they are harvesting and putting instream

Chris – there is an article on Crosscut on the The Nature Conservancy (TNC) doing that over on the coast

Crystal Elliott – they have a lot of latitude because they own a lot of the land. They are doing a lot of cool work; it would be great to do that on the National Forest.

Chris – yes, TNC land on the Naselle

Greer – RTT approved a new version of the Biological Strategy that incorporates EDT, so if you are working in the Okanogan, don't use your old version, go to the web site to get the new ones

*Pete Teigen – UCSRB:* the draft Mission decision came out, we shall see

Crystal – there is a 45 day objection period, they are expecting objections, and then a 45 day response period for the region

*Lee Bernheisel – OWL:* the OWL has been working since 1980 on increasing instream flow, not project oriented, but regulation oriented. We've taken the state on numerous times, the Hurst decision and the recent legislation has an outcome on the use of water for single family homes. We petitioned previously for a general adjudication for the Methow, and recently contacted them about that again. They gave me some encouragement, and a general adjudication would help take some of the guesswork out of what we have available here. There is not a place in the state where they looked at the groundwater. The Methow is small enough and confined and shouldn't take as long as other places. We are looking at a court decision on how much water is left, a wide disparity on what people think and how much water is left in these basins. I encourage people to call me if they are interested and have any questions. Have not decided on whether to petition the state or not.

Chris – in light of Hurst

Lee – also how bill 6091 was written left us with a lot of questions. The county is interpreting it as business as usual for the Methow; a contradiction of terms and facts. The only way I can see on how people can agree would be to have the courts make a decision

Chris – curious on 173548, do you think that what they are considering would work?

Lee – their plan has gone back and forth, and my take is that they don't want to rock the boat and change the WAC, and there are problems that are left hanging out there, and the key is how much water we have left, and if we don't have water left, then we have to make decisions

*Crystal Elliott – Trout Unlimited:* there have been some interesting developments with suction dredge reform work. We've been petitioning the Fish and Wildlife Commission, and did a presentation about a

month ago. It looks like they are going to open rulemaking; I have had conversations with WDFW staff and they are going to act as a neutral facilitator. Right now there is no rule about suction dredging that is being enforced. The fish pamphlet is not enough, and people do not follow it. I would encourage people to participate when it comes up. I would like to show that there are a lot of other interested parties and it isn't just a black and white issue. Stay tuned; I will let you know when the rule making starts.

Pete – where will these be, will there be webinars, etc.?

Crystal – I'm not sure what the ground rules are for rulemaking, but I will push for some kind of flexible participation option for people to be able to participate. Most of the suction dredging happens here on the east side of the state. We have been working with partners

I'm also continuing to work on Red Shirt Mill feasibility and generally getting funding for abandoned mine restoration from the state; RCO money is not available

Also working on the Forest Health Collaborative with Pete and Greer

Jacqueline is working on fish barrier removal on Johnson creek, and the Barkley Irrigation project is ongoing.

*Jarred Johnson – YN:* Hans has gone to Madagascar for a month, so keep that in mind on contacts I've been working with the US Army Corps of Engineers on the Mazama levee, the County, WDFW, and stakeholders. We got feedback from county on their comfort level with actions on levees. The Army Corps wanted to do repair work on the levee and the county turned to us, very interesting and changing situation.

We're working through 5 or 6 acquisitions with BPA and partners, and several habitat projects working on for this year that I've mentioned in previous meetings.

*Chris Johnson– MSRF:* we have a couple of partnerships with Methow Arts, block prints with the kids and fishing day; we used some of our Ecology funds and they have developed some place signage that is going out that are artistic, linking trails folks, schools folks, and public access, increasing awareness to the public about what there are doing

Sugar acquisition – the other Corps levee, between Twisp and Winthrop, we own both ends and we are buying the middle. We are starting modeling on that project with the Bureau, will be developing the risk matrix

TRFP II – we're working on the 30%, moving forward

Barkley Bear Habitat – working on modeling

*Next MRC April 17<sup>th</sup>*

**[update – this meeting CANCELLED; also, no May meeting due to SRFB tours, so next MRC will be June 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
AU	Assessment Unit
BACI	Before, After, Control, Impact (study design type)
BDA	Beaver Dam Analogue
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 (newer acronym is CTCR – see below)
CTCR	Confederated Tribes of the Colville Reservation (older acronym is CCT – see above)
CHaMP	Columbia Habitat Monitoring Program
CMZ	Channel Migration Zone
CREP	Conservation Reserve Enhancement Program
CSF	Community Salmon Fund
DEM	Digital Elevation Model
EDT	Ecosystem Diagnosis and Treatment
EQIP	Environmental Quality Incentives Program
ESA	Endangered Species Act
FCRPS	Federal Columbia River Power System
FFFPP	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
ISAB	Independent Science Advisory Board
ISEMP	Integrated Status and Effectiveness Monitoring Project
ISRP	Independent Scientific Review Panel (reviews BPA projects)
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
NFF	National Forest Foundation
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPCC	Northwest Power and Conservation Council
OCD	Okanogan Conservation District
OBMEP	Okanogan Basin Monitoring and Evaluation Program
OWL	Okanogan Wilderness League
PCSRF	Pacific Coastal Salmon Recovery Fund (pronounced "Pacsurf")
PHABSIM	Physical Habitat Simulation
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
Snerd	Fish Capture-Snorkel Herding
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.