

Methow Restoration Council

March 21, 2017

Participants:

| Name | Organization/Affiliation |
|----------------------|--|
| Brian Fisher | MSRF |
| Chris Butler | Yakama Nation |
| Crystal Elliot | TU |
| Hans Smith | Yakama Nation |
| Heide Andersen | Methow Conservancy |
| Jaqueline Wallace | TU |
| Jarred Johnson | Yakama Nation |
| Jasmine Wildman | Community Member/6th Grader Parent |
| Jeff McLaughlin | Reclamation |
| Jennifer Molesworth | Reclamation |
| Jessica Goldberg | MSRF |
| John Crandall | MSRF |
| Joy Juelson | UCSRB |
| Kelly Wiest | Methow Valley Elementary 6th Grade Teacher |
| Ken Muir | USFWS |
| Kira Christensen | Reclamation |
| Kristen Kirkby | CCFEG |
| Lee Bernheisel | OWL |
| Linda Dunn | Community Member/6th Grader Grandparent |
| Maddie Eckmann | Yakama Nation |
| Mariah Mayfield | USFS |
| Matt Shales | CCFEG |
| Paul Wagner | Colville Tribes |
| Rob Crandall | Methow Natives |
| Sixth Grade Students | Methow Valley Elementary |
| Steve Kolk | Reclamation |
| Zen Brandon | Community Member/6th Grader Grandparent |

Meeting Notes:

John Crandall – Salmon Recovery in and out of the Classroom: A few years ago, we reinvigorated the Salmon in the Classroom program with the sixth graders at Methow Valley Elementary. With the International Baccalaureate (IB) program the school is following, the salmon program is now part of the curriculum, and there is lot more effort and intention. This year we added a field component. The students look at how fish grow, and the program includes writing, public speaking, math. The kids put in a lot of work, and they are here to present on it.

Presentation by sixth graders from Methow Valley Elementary School: Six 6th grade students from the MVE presented their experiences in the Salmon Recovery in and out of the Classroom program. Students discussed salmon life stages and the tanks in the school where they are raising salmon from eggs from Wells Dam. Students also described their field studies at two sites where they looked at different types of macroinvertebrates and riparian communities. Two posters were presented with the

findings of their work and their conclusions regarding water quality at the two sites. Students also described a town hall where they role-played stakeholders at a salmon recovery meeting. The students then took questions from the group about the program and their studies.

Rob Crandall – Presentation – Strategies for Process Based Riparian Restoration: I wanted to share a presentation that I put together for the Ecology conference in February where I was unable to present. The work described is at the M2 WDFW Floodplain site, where we have been working for 3 years.

A lot of the riparian work we have been doing is not process based. Often these sites are old, cleared agricultural lands where we plant strips along the stream to create a buffer. We are able to grow riparian vegetation through supplemental irrigation to establish a buffer. However, without re-establishing river process, there will not be natural regeneration over time.

At the WDFW site on Old Twisp Highway, the project team looked at the whole reach. There was a levee, the vegetation had been removed, and there was no natural regeneration. The floodplain was disconnected, there was competition from perennial grass, and there were soil moisture issues. Solutions included levee removal and three log structures in the channel. The construction contractor put in micro-topography in the area behind the former levee. We planted the area, and protected the plants with a combination of exclusion fences and individual cages. We maintained the plants with supplemental watering and weed control. The area connected with the river at two-year flood intervals. The first two years we didn't get very high flows. Then, in April 2016, we had a 5-year flow, and the area was inundated.

Restoration in the active floodplain does create some issues. The biggest thing to deal with is the fencing during inundation, but it is necessary to protect the plants from deer browse. Before the river reached the peak flow, we went out, removed many of the individual cages and irrigation, and pulled the fencing up above the flows. After the floodwaters receded, there was a lot of deposition, with many types of substrates, varied from large cobbles to silt. This promotes a lot of natural regeneration. When the flows go down, there is a great substrate for the natural recruitment and the variety leads to a diversity of species. Challenges of inundation include erosion, weed dispersal, and increased maintenance responsibility.

Deposits of moist mineral soil provide ideal substrate for germination of cottonwood seedlings. Leaf litter contributes additional inputs to nutrient cycle.

Opportunities to enhance natural process: cage management, supplemental irrigation, pruning browsed plants, transplanting, seed distribution. Once plants are about five feet high, in three years, they are above browse height and the fences/cages can be removed.

Limiting Factor: Deer browse. Deer and beaver browse pressure affects buffer establishment.

Adaptively manage fences and cages to protect both planted material and natural regeneration. High flows provide management opportunity.

Buffer establishment: After three seasons, the buffer plantings are self-sufficient. Fencing and irrigation to be removed in 2017 and moved to new zones. Natural processes speed and enhance development; build resiliency.

Future opportunities: there is still a cross levee at the top of the site, a small project to remove that and see what that does. 20 acre abandoned Ag land, remove cross levee, expand riparian buffer. Planning for interpretive trail, community stewardship, partnership.

Heide Andersen – there can be water rights issues on private property, DOE can be resistant to give water rights to do the supplemental irrigation.

Rob – each property will have its own set of issues. Some private properties have existing water rights, but sometimes the location of the site is challenging. It would be nice to have a watershed process for working with Ecology.

Crystal Elliot – have you looked at using a water truck?

Rob – it's hard, and expensive, if you have a lot of plants – each one needs 4-5 gallons. We do a lot with mulching to retain moisture, and there are deep planting options. If you get inundation in the spring, you get 6 weeks to two months of moist soils. In July and August we might water every two weeks, depends on weather, etc.

Joy Juelson – UCSRB Updates: Funding – we have been working on this a lot. We put many resources towards keeping funding in the area. The board facilitates two processes, one is the BPA funds/targeted solicitation; we also have SRFB/open solicitation funds. BPA brings in about 3.5 million annually, and SRFB has been a little less than 2 million annually. We have been getting 10.85% of the annual PCSRF funds, they were looking at the funding formula, and it looked like we were going to get about 40% cut. The SRFB decided to delay the decision, and we were cut to 10.31%. This was more of a political decision, and they will go back to the drawing board again for next year. Now the question is 10.31% of what. So far this year, the president's budget has \$0 for PCSRF. For the state, the governor's budget had \$30 million for all salmon projects. We will see what congress and the state house and senate do. One question is whether the state house and senate still provide match if we don't get any federal funding.

The other work we have been doing is that we provided a report and presentation to the ISRP for them to review the targeted solicitation under the BPA programmatic. We are hopeful that they will continue to fund that program.

We are on our third Targeted Solicitation. Decisions will come out any minute, possibly today or tomorrow. This Targeted is redirected funds from the Middle Entiat. This time, design and assessments were eligible. We received 10 construction proposals, 9 designs and 1 assessment. Project are binned into three groups: funded, provisional, and proposal (least likely to be funded).

We had our SRFB kickoff meeting last week. We are moving forward hoping we get PCSRF funds. Project abstracts are due March 31st, and draft proposals are due April 14th. Final decision makers are the local citizens committees. There are two openings on the Okanogan Committee; there will be a call for nominations. We are looking for a member in the Okanogan Subbasin and one from either the Okanogan or Methow subbasins. You can nominate someone, or people can self-nominate. Jerry Barnes and Dale Swedberg are leaving. Send nominations to Jessica and she will forward them to me.

ISRP comments on our report included a comment that we need to be working more in the uplands. On March 7th at the Implementation Team had a meeting regarding the Forest Health Collaborative, which works on the upland component. ISRP also brought up that we needed better prioritization for future projects.

Kristen Kirkby – is the connection with the uplands going to be communicated with the funders?

Joy – they really highlighted the Tucannon, they have done a lot of work there and they talk about that as a model, falling of trees, roads.

Heide – where is the funding from?

Joy – from BPA. One of the things were learned is that for each of these umbrella projects like our Targeted, each one is different. We think that BPA is warming to the idea of upland work. We had some upland proposals in this targeted round. I'm feeling optimistic that we are working towards that.

Jennifer – so roads, fencing, falling trees into creeks, forest treatments

Joy – yes. The hard part is making the connections to the ecological concerns, but I think we can get there and the last few years this information is coming to the RTT. We will also see what is in the next BiOp.

Prioritization is another thing that the RTT mentioned. We are working on a framework; one potential framework is a 9-step process. RTT is working on updating the Biological Strategy with a lot of new information that can go into prioritization. The RTT is defining the spatial framework, or “Okanoganizing” the assessment units into smaller units. The RTT is also working on metric selection to be used in prioritization. The WATs will be pulled in the later parts of the framework to get information on feasibility and area and biological actions prioritization. The process will take about 2 years, and we are still fundraising to be able to get all of the work done. We believe that the way to get funds into the region is by having a good plan. We will need help to get it all done.

John Crandall – Monitoring Update: update from MaDMC – we are updating the data gaps list for the Upper Columbia. They started the list in 2009/10. The list takes on more significance now, because it is tied to the monitoring criteria for monitoring projects under the SRFB process. We are trying to do it in a way that is significant. There are many different ways to go; other documents were mined for data gaps/information gaps. Scoring includes biological benefit, geographic scale, species benefit, etc. The data gaps were all scored and put on the list, but we have some funky ones. There was an effort to tie them to Appendix P of the Recovery plan, the key management questions. NOAA uses information on the key management questions to make decisions on listings. We are now taking a fresh approach. Many of the gaps have been addressed, and some are taken out. Each person on MaDMC has been tasked with going over the list, and we will have a re-ranked list likely by June

Matt Shales – do the data gaps extend into the mainstem Columbia?

John – there was a column for the mainstem Columbia, but for the most part, they are up in the tributaries. We will see how it plays out.

Matt – what about uplands?

John – they are not specifically called out, but that is a good one to add in

John – another thing we are working on is the annual update to the monitoring programmatic worksheet. Many things have dropped off, and several research projects have ended, but more monitoring is happening. AEM, Ecology’s program all this year. I will send out the list for people to coordinate.

I also wanted to share a paper – *Hot eats and cool creeks: juvenile Pacific salmonids use mainstem prey while in thermal refuges* (available [here](#)), from folks out of NOAA working on the Klamath River in CA. They have thermal issues, mainstem dams, agriculture in the upper basin. They looked at juvenile Chinook and steelhead in the mid-Klamath river, and at places where fish are occupying thermal refugia in the tributaries. They found that although fish are occupying these thermal refugia, they are feeding in the mainstem. They are moving out into the mainstem to do their feeding and then going back to the refugia for digestion where it is cooler/slower. It is a good reminder that fish move around and use many habitats.

Roundtable

Crystal Elliot – TU: I have been working with UCSRB and the Forest Health Collaborative to develop aquatics components of FS projects, working with people on brainstorming. Still working on abandoned mine cleanup within the state, but looking at more private sources. Using the Red Shirt Mill site in Twisp as a pilot project. Recently got some base funding to do more abandoned mine work on FS lands, many sites in the Methow and NCW. Still trying to work on suction dredging reform in the state. We had an interesting first session in Olympia, didn’t get anywhere with the two bills. TU is not trying to stop

suction dredging, just trying to make it so that it is done more responsibly, with permitting, common sense reform. Many legislators did not agree.

Jennifer – it would be nice if our restoration projects had the same permitting process as suction dredging does now.

Jeff Peterson – Bureau of Reclamation: we went by some projects; it was pretty amazing that there was no MVID diversion off of the Twisp River last year. Many good projects in the works.

John Crandall – Methow Monitoring: we completed the Frazer Creek rehabilitation plan, response to changes post-fire and flooding. It was a quick take, had green LiDAR to back it up, a lot of landowners, something to share with them. Very dynamic situation with people living right there. Many constraints, in many places we can see what we really want to do but those constraints are there. That document is available [here](#).

We are hoping to have the MRC education subcommittee meeting, so if you want on the list let me know.

I'm also working on getting a bull trout working group together.

We have begun a second edition of the Methow Fish Guide, should be ready in about 6 months.

Jacqueline Wallace – TU: we are still moving forward on the Barkley irrigation project, and we hope to go to construction this summer. Also doing project development work in the Methow. If anyone has information on Ramsey Creek, fish use, etc., please let me know.

John – it goes into the Chewuch ditch

Jarred Johnson – Yakama Nation: we are still working on many projects that I have updated on recently, so I won't go over the whole list again. If anyone has any questions about previous updates let me know. We are moving along with the Beaver Creek RA and the Upper Twisp Habitat Assessment. Expect those to be reviewed by RTT, and I think they should be available in August.

John – is Big Valley going in this year?

Jarred – probably

Rob Crandall – Methow Natives: I'm working on coordinating a UCSRB outreach and education grant for MSRF. Working at the WDFW floodplain site, there will be a series of three workshops. For the first, on May 17 we will have Watershed Watchers with middle school students from Liberty Bell and the Pascal Sherman Indian School for a joint educational experience. Students will collect scientific data and examine aquatic and riparian communities. There will also be a Salish language station focusing on environmental terminology.

On May 30, Jenn Bountry, an engineer from Bureau of Reclamation will host a process restoration workshop and lead a site tour. The audience will be high school students and community members. Jenn is also giving a First Tuesday lecture that evening.

Jessica – For those who haven't heard, Jenn Bountry was named 2017 Engineer of the Year for the Bureau of Reclamation, and then later she was named 2017 Engineer of the Year for the entire federal government. We are very fortunate to be able to work with her – not only is she a great engineer, she is a very good communicator.

Rob – for the third workshop, on June 30 there will be a community restoration and fly fishing day. There will be trail tours, riparian buffer planting, guides will give a casting demo/lessons, and fly tying in conjunction with aquatic invertebrate ecology.

Fun outreach activities, and we are excited to keep working at that site. I have also been working with Kristen on outreach in school in Okanogan, Omak HS, Pascal Sherman, and Pateros.

Heide Andersen – Methow Conservancy: we have the WA Conservation Corps coming again, working on riparian easements, forest health projects, etc. In the next couple of weeks, on our Davis Conservation Easement on Wenner Lakes, they are repairing the dam on lake #5 using sediment from the lake to repair the plug that blew out and the settling pond, and repairing the irrigation system.

Restoration projects – will continue to work with Rob on the Lehman riparian, Wenner Lakes – OCD got a grant to do some assessment work in that drainage, riparian work.

Mariah Mayfield – USFS: if you want to comment on the Mission project, the comment period has been extended to April 1. We are moving forward with the expectation that the decision will be some ways out. We are moving forward with some planning on the beaver enhancement areas. Early Winters project has been postponed, due to US Fish and Wildlife and their thoughts on whether it fits under our programmatic.

Matt Shales, Kristin Kirkby – CCFEG: Silver went through its first winter, exciting. We will have a stakeholder site visit later in the spring.

Kristen – I went out to Silver with WDFW and we sampled the state reach, found salmonids, only one brook trout. Low numbers of suckers and dace. Didn't see any crayfish. We did find most of the fish using wood structures, and we have been having a conversation about putting more wood in at some point. Also, Ben Goodman told me that he has noticed with their PIT tag readers, that fish are using the channels during the day and the hemi-marshes at night. Think Robes and Ken were going to use cameras to capture high flows.

Kristen – we will be putting in a SRFB proposal for Methow basin barrier assessment, also Silver Design. We are still working on Burns Garrity.

Maddie Eckmann – Yakama Nation: Wolf Creek ponds, formerly Biddles Ponds, we are looking to reroute the inlet and outlet to prevent fish stranding

Jeff McLaughlin – Reclamation: we are pulling our upper Columbia team together here to work on our long-term planning. We will get out and look at things while we are here.

Brian Fisher – MSRF: we are working on alternatives for the Barkley Bear area after the diversion goes away. We are excited about the Twisp Floodplain site, and looking forward to seeing it through high water. At Frazer Creek, we are actively working on two of the last three human caused barriers in the system. At one, we are looking at using BDAs to backwater the culvert due to the constraints on the ground.

Lee Bernheisel – any treatment for the riprap on the right side of the river [at the Barkley site]?

Brian – at the Barkley site, we are working with the landowner for potential possibilities

Hans Smith – Yakama Nation: we just started our bidding process for 2017 construction work on habitat restoration projects in the Upper Columbia, 7 total, 4 in the Methow. Big Valley, Chewuch, two on the Twisp – Newby and Horseshoe side channel. Busy year.

1890s – we are still seeking funding for monitoring, we are piece-mealing our monitoring effort, Maddie and Jarred went out to help snerd fish. Still collecting the pre-spring data.

We continue to generate new projects, working with the FS on the Upper Twisp Habitat Assessment, looking at changes from previous surveys.

WE have a draft concepts report for Fawn and Weeman, working with many of the landowners, notified DOT that we are interested in working with them. In the Fawn area, we have some good ideas about the levee that we are starting to approach local folks about.

Kira Christensen – Reclamation: civil engineer out of Boise, up with Jeff and Jeff, seeing projects.

Chris Butler – YN: comment period closed last week for the Chewuch projects, no comments but waiting for the mail

Joy Juelson – UCSRB: SRFB Conference, deadline was yesterday for early registration

Paul Wagner – Colville Tribes: my funding cycle runs July 1 through June 30. Ongoing projects – M2 trail loop and signage project with MSRF, Rob, and LB environmental studies class, Silver reach design, Burns Garrity design, wetlands on Gann with MSRF, supporting the beaver project, red shirt production well with TU, Lawson, etc.

Looking at side channel project with MSRF, working on master cost share project with FS, Volstead Road with FS and Bureau, and BDA project on mission project with MSRF and TU, culvert surveys, also partnering with TU on a production well, and Barkley.

Jennifer Molesworth – Reclamation: MSRF and CCFEG already talked about a lot of the projects we are helping with. Three times a year, we have our crew from Boise and Denver come to work with Grace and John to do fish sampling before/after and for the nutrient food web model. One more year to go, and a draft interim report will be coming out in a few months. Fish come out at night, especially when it's cold, so the crew does their sampling at night in some pretty brutal weather. Also snorkeling. It takes a lot of effort to get some really basic answers to things. We are also starting to plan the National Fishing Day; we did the art projects for the block prints this year. The theme they picked for this year is "Water Provides." Fishing Day should be June 10 and we will need all of your help.

Next MRC April 18th

| Definitions of Commonly used Acronyms | |
|--|--|
| AEM | Action Effectiveness Monitoring |
| ANS | Aquatic Nuisance Species |
| AREMP | Aquatic and Riparian Effectiveness Monitoring Program |
| 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 |
| EDT | Ecosystem Diagnosis and Treatment |
| EQIP | Environmental Quality Incentives Program |
| 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 |
| 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 |
| MYAP | Multi-year Action Plan (also sometimes called the 3-year workplan) |

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| 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.