

## Methow Restoration Council

March 15, 2016

### Participants:

Name	Organization/Affiliation
Amy Martin	Okanogan Conservation District
Chris Butler	Yakama Nation
Chris Johnson	MSRF
Chuck Peven	RTT
Crystal Elliot	Trout Unlimited
Eric Doyle	ICFI
Gale Parker	Akana
Hans Smith	Yakama Nation
Jarred Johnson	Yakama Nation
Jenni Novak	WDFW
Jessica Goldberg	MSRF
Jim Pacheco	WA Department of Ecology
John Crandall	MRC
Joy Juelson	UCSRB
Mark Ryan	Ryan & Kuehler PLLC
Natalie Kuehler	Ryan & Kuehler PLLC
Paul Wagner	Colville Tribes
Rob Crandall	Methow Natives
Ryan Klett	Colville Tribes
Tim Norman	Akana

### Meeting Notes:

**John Crandall – Outreach and Education Update:** we have an Outreach and Education (O&E) Plan, this is an MRC product, and I update it every year. We used to have an outreach subcommittee of the MRC, which met for about 2 years. We coordinated activities and developed the plan, and had help from the Forest Service from their supervisor's office. Since that time, we haven't done a lot to revise it, think about it, etc. We do a lot of outreach and education, but it isn't super well-coordinated. I update the plan every year to reflect our plans and best thinking on what we are doing with outreach and education that year, who, when, what, etc. I also update the actual activities we did the prior year. Chris Johnson, Jenny Molesworth, and I have worked with Bonneville Environmental Foundation (BEF) on a Model Watershed program for the Methow. It is a 10 year program, and we are halfway through. We have determined that outreach and education is something that could use more energy, so we will put more energy moving forward on O&E. We are hoping to re-enliven the O&E subcommittee to help us be more coordinated and form more partnerships. If you are interested please contact John, anyone is welcome.

Chris Johnson – we recognize that people who are doing O&E are fitting it in, so we are trying to create a coordinator position that could be a resource for everyone to get things done; this would be more of an MRC position that would assist everyone, rather than an MSRF position.

John – in the plan we developed key messages to all target audiences, we work with kids of all ages, but also work a lot on private property, and have many opportunities to interact with a lot of local landowners. Based on the results of the water quality survey I did, it is clear that there is not a lot of understanding of who is doing what. We have a list of talking points that the group developed as part of

the O&E plan. We will send out a revised draft of the O&E plan when it is ready, but there is a lot of opportunity to revise, refine, etc.

Natalie Kuehler – I know that Mike Liu is looking for projects to bring kids to the outdoors, I believe that there is also funding, so you might want to contact him.

Discussion – working with the Forest Service, but funding has been limited, they are interested in taking existing programs and working with partners, also working with the Conservation District

Hans Smith – I have money for the next two years to work with Aero Methow on river safety programs, so there may be opportunities to work with them on that. They did some outreach and trainings with kids a few years ago.

**Tim Norman – Akana – Professional Services Presentation:** I am an environmental scientist based in Portland, OR, and I work for Akana. I am here to tell you a little about what we do. We are a Native American owned company, we rebranded after two native owned firms (Cooper Zietz Engineers and Cascade Design Professionals) merged in 2011. The meaning behind Akana is “to build the lodge.” . We can serve clients through every stage of a project. Plan, design, engineer and manage are the four cornerstones of our services. We do many types of plans, designs, both public works, transit, housing, hatcheries and fish passage, site development, and quality assurance. We do studies, assessments, analysis, environmental compliance, water resources, and professional engineering studies. We do construction management, contract administration, commissioning/decom, site investigation/remediation. As a Native American owned company, we have federal prime contracts with BIA, USFS, GSA schedule, a federal small business, OR/WA DBE & MBE, and Native American owned. [Tim.norman@akana.us](mailto:Tim.norman@akana.us), 503-652-9090.

Chris J – do you do any sort of grant work? Bringing funding in to assist companies?

Tim – we have worked with groups on the procurement process, and I do a lot of grant funding on the personal side with OR Wildlife, where I am on the board. Akana is a for-profit company.

Paul Wagner – how many employees?

Tim – about 50, main office is in Portland with about 32, have full drafting, GIS, engineering. We also have a Bellevue office.

### **Rob Crandall and Chris Johnson – M2 WDFW Floodplain Trail Proposal:**

Chris J – at the M2 WDFW Floodplain project site, we had a fairly weedy large site that was isolated from the river. As part of the initial habitat project, we removed the levee, improved the instream habitat, and Rob has been working on an ongoing effort to improve the riparian areas, but we have additional ideas for improving the overall health of the site.

Rob – there is now a parking area with a kiosk with habitat and river safety information, which changed the public use of the property; now you see several cars there every day, people walking their dogs, etc. It is slowly developing as a recreational opportunity through word of mouth. We would like to expand on the activities that have been undertaken. Our thoughts are to develop a looping trail, some wetland enhancement, look for opportunities to connect the habitats at the top of the site and the lower end of the site. Looking at the site as a partnership opportunity with various groups. We met with Sherry Furnari with WDFW, we presented these ideas and got the go-ahead to develop the plans. We have met with or have contacted several partner groups, including Methow Conservancy, Methow Trails, the school district, CCFEG, and others. We have taken Watershed Watchers groups out, and we have seen how well it works for outdoor education.

Chris J – this is the third trail project that we have taken on with partner collaboration, we are looking at a trail with outreach signs. We have examples at Twisp Ponds and Satiqua trail of this successful model.

Rob – I believe that we will be able to put together a strong partnership to start moving this thing ahead. Meeting with the school next. Anyone can join.

Paul – do you have long-term maintenance funding?

Rob – we have funding now, but longer term funding is part of what we are working on

Chris J – we are working on developing that partnerships to address that, our discussions with WDFW are that the site would be better than when we got there.

Natalie – are you aware of the trails collaborative in Winthrop?

Rob – I met with James DeSalvo at Methow Trails and they were interested, also with Methow Conservancy, think it would fit in really nicely. Is the collaborative part of their efforts?

Natalie – it includes Methow Trails and they are leading, but it's also the FS, State, local mountain bikers, etc. We've had two meetings, I think they've been set on a quarterly basis and we've formed subcommittees. I will forward you that email

Tim – have you had any lessons learned from the project?

Chris J – we are in an adaptive management cycle on the larger project now, we are monitoring it as it adjusts, and we are evaluating the site with WDFW. We meet annually to discuss how it's doing and whether we need to take any actions. We always have a long-term monitoring and management approach for our projects.

John – there is some seasonal stranding in the side channel, but there are also orders of magnitudes more fish now compared with pre-project. Such a different habitat, attracting a wide variety of fish species and age classes. It's pretty neat.

Jarred Johnson – what kinds of recreation are you talking about?

Rob – we haven't gotten to that part yet, whether there would be biking, skiing, horses, etc., but we will talk about all of that.

Chris J – we have to work with WDFW because there are requirements to be consistent with the purpose of the property funding – why it was purchased.

Discussion – land ownership, Corps of Engineers

Rob – the opportunities for enhancing the wetlands on the site are really great. Would add a lot of diversity to the site.

Chris J – when we first went before the RTT for funding, we had a lot more plans for the larger area that they did not want to approve funding for.

**Joy Juelson – UCSRB Updates:** We are working on filling the executive director position, we are interviewing on Thursday; we had two applicants in the first round, and then 13 more the second round. Out of that pool we are giving 5 interviews. The panel is Paul Ward, Char Schumacher, Casey Baldwin, and Melody Kreimes.

The SRFB grant process is starting up again; it has been going on for about 15 years, mainly habitat restoration projects and protection. The process lasts around 7 months, and I am the facilitator. We are having our kickoff next week on the 23<sup>rd</sup>. If anyone new is interested in joining the process, one paragraph abstracts are due March 31, draft proposals are due on April 15<sup>th</sup>, although I may still be able to change that a little. We have a new project type, a monitoring project type, which sponsors have been asking for, it's a little sensitive because it does take money off the ground. Monitoring proposals have to meet regional priorities, and Chuck is on the agenda to present the criteria for the monitoring proposals at the kickoff.

John – but we already had to submit our paragraph descriptions for the monitoring proposals

Joy – the due date for the monitoring proposal paragraph was driven by the RCO

Chris J – the proposed timeline for the paragraphs and then the draft proposals is very tight

Joy – I hear you; I'm getting pushback on either side for the paragraphs too. Schedule is driven by the Tributary schedule, the RTT schedule, the RCO schedule, so we don't have much leeway. If any new people are interested, please let me know. CAC schedule will be similar to last year.

Implementation Team meeting – it was a great meeting on how to address climate change in restoration. Greer presented some good information that we will put on our web site, other good presentation on how to identify cold water, methods, also a good video shown. Then next IT meeting is June 2<sup>nd</sup>. The IT was initially a core group to identify issues/obstacles in restoration, now it has opened up so we also present relevant,/emerging issues in restoration.

Chris J – think everyone is looking at the climate change component after last year’s low flow; a difficult question, but will be interesting process to watch. Not an isolated conversation.

**Paul Wagner – Methow IDT Update:** EDT is Ecosystems Diagnosis and Treatment, initially used for subbasin planning. Used in Okanogan, now we are moving it to the Methow. Eric Doyle presented EDT initially at MRC, then John Arterburn followed up with a longer presentation. Ryann Klett is going to be leading the effort in the Methow for the OBMEP folks. Funding has been secured, and we are looking at finalizing the contract with ICFI. Then we will be working in close contact with Eric and people in the room to feed the model.

Ryan Klett – my expectation is that we will be online with ICFI within a month, and we have an 18-month work window to gather the data, run the models, and QAQC. We will start consecutively with building the reach layer. This has come a long way since the subbasin effort. We’ll be looking for input on that effort. Will also be updating the life history information. We are also looking for a Methow-specific subbasin expert to help us, we are open to suggestions for individuals who might fit well in that spot.

Paul – we have Dave Hopkins on the list of possibilities, let me know if anyone thinks of anyone else

Chris J – will it be expanded out to include lamprey?

Eric – current scope does not include lamprey, and we don’t have habitat rules for lamprey, but it is conceivable that they could be considered in the future, there are ways to do it. We don’t have a scope currently, but it provides a useful platform. Bull trout also not included currently, steelhead and spring Chinook only, but we do have rules for bull trout.

John – there is lots of interest in doing that

Eric – it could be used to look at them in the future. If there is interest in doing it now, CCT is providing the budget and our contract is with them, we would have to address the scope and budget

Chris J – it would be good to find out how we could incorporate that, how much it would cost

Paul – I will make a note

Joy – how are you constructing the reach layer?

Eric – one of the lessons we learned from working on the Okanogan is that we want to avoid having large numbers of very short reaches, but we also want to avoid having any really long reaches. The scale that we are zeroing in is 1-3 km in reach length, while also incorporating relevant geomorphic reaches. The intent is to make it more uniform. We also have a new diagnostic structure coming out of RTT that we have to incorporate.

John – are those the new Assessment Units from the RTT that is coming from the next version of the Biological Strategy?

Chuck Peven – we’re going to go to the HUC 12s and call those Assessment Units in the next Biological Strategy

John – are we going to be able to roll up EDT into an Assessment Unit view?

Eric – yes, EDT can roll up results at multiple scales, but we normally use subbasin/population level, diagnostic/assessment unit, and reach scale. We can also look at life stage performance at the reach scale.

Chris J – so will be shorter than the assessment units but won’t cross them?

Eric – yes

Paul – the best way to get started on this, John Crandall is the keeper of the data for the Methow, so we will work with him to find out where we get access

Chris J – I would like to work with you so we can coordinate with you on what we're doing on Barkley Bear and all the modeling and monitoring efforts related to that project.

Paul – the most important thing is that we identify what information sources are available, getting that information, and getting it in a format that we can feed into the model.

John - we've been working on parameterizing other models, we have habitat suitability, aquatic productivity, so we are getting the information that they need.

Eric – the interest with EDT is describing habitat conditions to the best that we can across the entire subbasin. The way that we've constructed the model in the Okanogan is that we have a level of proof rating so that you can rate the output. Think that in the Methow that there will be a lot of information, in some areas we will have to extrapolate between areas and rate that information. We should be able to rate the information and identify data gaps.

John – we have a lot of stream habitat data, how does that information get from excel spreadsheets into the model? Many miles of stream where you have very good habitat data.

Eric – the data goes into the model at the reach level, and every reach can have up to 46 habitat attributes, some are not very useful, but will have a core set of habitat attributes that will take advantage of that kind of data.

Jim Pacheco – working at Ecology Water Resources – are you planning on using older PHAB SIM (Physical HABitat SIMulation) data?

Eric – if you have good cross-sectional data, we have an estimation model for bed scour that we can use that is proving to be useful where we don't have actual data. We are going to look at all the sources of information that are available and see what we can do with them, and then use our level of proof rating to incorporate the uncertainty into our assessment.

Jim – there are five sites; they were done in the early 90s, but would have to rerun the models using today's preference curves, but I can do that if you would like.

Eric – think we should discuss it, preference curves may not be necessary depending on what we would do with the data.

Paul – we are starting on this and we expect to have a product in 18 months.

Hans – the funding you have is dedicated to updating the model, is there funding to go beyond that?

Paul – it's just for the 18 month period, but it is a living product that needs to be updated, something similar would need to be done here, but we haven't looked at funding

Chris J – would also like to look at expanding the species to lamprey and bull trout

**John Crandall – Monitoring Update:** we had our 2016 monitoring support meeting. We've changed the format of the meeting to make it more engaging for the participants, we had a quiz, a poster session, and lunch from Local Myth Pizza. We've developed the monitoring programmatic worksheet, and the updated version describes what is happening this year. We update it every year, so it should be valuable to people like those doing the EDT model, etc. This depends largely on people getting their information to me. We have 43 different monitoring programs ongoing in the Methow; with some there is a bit of overlap. Some of these are small, and some are large programs. I don't keep anyone's data, but I keep track of who collects what where, how, and where to go to get it. It is always a work in progress, but we are close to having the updated sheet for this year. It will also be uploaded onto the UCSRB web site. We are coordinating this through MaDMC. We had folks from PNAMP, PTAGIS, Robes Parrish gave a presentation on drones and other spatial analysis tools. The monitoring programmatic spreadsheet is an important piece of public accountability

Chuck – the data gaps table and how, we're going to be doing that this year?

John – a while back, around 2010, MaDMC developed a sheet on the information needs that we have and what we need to know, and what we needed but didn't have and that became a data gap, became a

spreadsheet but it wasn't really used. We have been working on sifting out the data gaps and aligning them with the key management questions in the Biological strategy.

Chuck – it's also the revised Appendix P in the Recovery Plan, where the key management questions are. It's not on the UCSRB web site but it probably should be on there – what is there now is a placeholder.

John – at some point it will be available. The take-home is that we are going through the data gaps to see if they really are gaps and whether we need to do some monitoring to close the gap and also see if it is relevant to the current situation.

## Roundtable

*Paul Wagner – Colville Tribes:* I've got six ongoing products in play, all on hold until the snow melts, 8 new projects coming online starting July 1 in partnership with MSRF TU and CCFEG.

*Jessica Goldberg – Ken Bevis* asked me to let you know about the upcoming First Tuesday event that he and Kirsten Cook are doing. From the Methow Conservancy Facebook page:

April 12th: Methow Conservancy "Ecologically Aware Firewise: Backyards and Beyond" with Ken Bevis and Kirsten Cook, 7:00-8:30pm in the Methow Valley Community Center gym (on the second Tuesday!). Join us for a very close-to-home program on how you can prepare your Methow property for fire season while being ecologically smart and sensitive. Ken Bevis with DNR's Small Forest Landowner Stewardship program and Kirsten Cook, a Firewise expert with the Okanogan Conservation District, will co-lead an important and practical presentation on how to consider wildlife habitat elements such as snags, logs, shrubs, brush, openings, thinning, and more as you create defensible space and become more firewise. Ken will also share his personal story of defensible space he calls "Our House almost burned down." The program is free and open to everyone. For more information, contact us at 996-2870 or [mary@methowconservancy.org](mailto:mary@methowconservancy.org).

*Ryan Klett – Colville Tribes:* this is my first MRC, have been with OBMEP for over a month, worked with CCT on habitat work before starting with OBMEP. Working out of Omak.

*Natalie Kuehler – Ryan & Kuehler PLLC:* my partner Mark and I wanted to come and introduce ourselves. I come from east coast, worked with DOJ, Mark has spent his career with EPA. We wanted to say hello and see what's going on.

*Tim Norman – Akana:* looking forward to talking with folks in the future

*Gale Parker – Akana:* we're interested in working with people in the Methow, thanks for having us

*Jarred Johnson – Yakama Nation:* we're still planning on implementing the Big Valley project this year. Also have the Newby Narrows project on the Twisp River, going through permitting; I will likely do a presentation next month. The Beaver Creek Reach assessment is kicking off pretty soon, started outreach with Michael Notaro, letters have gone out, a few phone calls; we will do topo survey with green LiDAR.

We also have the Upper Twisp Recreation Assessment, will fill in the portion that wasn't done earlier from War Creek down to Newby Creek.

Finally, if anyone has a need for 5000 cy of alluvial fill let me know.

*Crystal Elliot – Trout Unlimited:* our brand new employee Jaqueline Wallace is now on maternity leave. I'm doing interviews for positions in Lake Sammamish and Olympic Peninsula, which is taking my time. On suction dredging and our efforts to reform those regulations in the state of Washington. The bill is likely not going anywhere this session, but stay tuned. The video on suction dredging was just on PBS Newshour a few days ago, if you haven't seen it go check it out. It was done by KCTS out of Seattle. I'm continuing work with the Forest Health Collaborative, to help the FS bring in the restoration strategy for the Mission Project; we're still waiting to see what the district will do with the aquatics assessment. We're still waiting to hear on our joint proposal with the Department of Ecology on the mine restoration effort.

Working with Robes and others on the Triple Creek project on Myers Creek near Chesaw, planning on going to construction this fall.

Joy – did UCSRB help with mapping for the suction dredging reform effort?

Crystal – yes, James did overlays with potential areas, which was the message, how big it could be.

Mark – I was the suction dredge lawyer at EPA

Crystal – many of you may have heard of the Methow Headwaters campaign to encourage secretary Jewell and the regional FS folks withdraw the Upper Methow from mineral entry/exploration for large scale mining. Go to [www.methowheadwaters.org](http://www.methowheadwaters.org); there is an online petition if you are interested

*Amy Martin – Okanogan Conservation District:* OCD is getting funding to implement riparian planting to help landowners with erosion control. Hoping to get some from the state and also Ecology. Maybe others.

Joy – how are you prioritizing riparian areas?

Amy – willing landowners; it depends on who comes to us, then areas will be ranked based on need, size.

Finally, in the legal notices, the county has put out advertisement for involvement on the voluntary stewardship committees. They want applications by March 25<sup>th</sup>. County Natural Resources is developing the plan. See <http://methowvalleynews.com/2016/02/26/legal-notices-feb-24-2016/> for details.

*Chris Butler – Yakama Nation:* no new project updates. Jennifer O'Neal's group came in February to do some monitoring, they snowmobiled in, did some night surveys, sent me some videos, and it was really good to see the fish

*Hans Smith – Yakama Nation:* we snorkeled and captured fish at the 1890s side channel a few weeks ago, still fish in there, mykiss, chinook, and coho, about the same quantities as the fall surveys. Did have some recaptures, able to look at growth.

We're continuing to work up the Twisp River on Twisp Ponds reconnecting floodplain there, side channel and veg enhancements

We're looking from Newby Creek up to War Creek, looking at several sites, potential landowner acquisitions. Continue to work in the M2, working with landowners. Hope to present some M2 ideas in the coming months.

Upper Methow we are doing landowner outreach based on the Reach Assessment in areas above the Weeman Bridge.

Chris J – any info on the people mover?

Jarred – not yet, maybe July.

*Mark Ryan – Ryan & Kuehler PLLC:* law partner with Natalie, 25 years at EPA region 10, mostly Idaho, and mostly clean water act work. Good to see all the work you are doing.

*Chris Johnson – Methow Salmon Recovery Foundation:* we're seeing water coming off in areas where people haven't seen it before. We have two bridges going in on Frazer Creek in early April. Seeing a lot of headcutting adjacent to the DOT hard fill along Frazer; we will be putting together an RFP for a consultant to help us in the area. We are far from done with fire recovery. The bridges we have put in so far are re-settable if the creek moves, and we were aware when we built them that they may be need to be adjusted. So far they haven't needed it. We did a little Beaver Dam Analogue (BDA) project last fall below one bridge, initial response has been good. In the upper creek we may need much larger pieces of wood. For a little creek Frazer Creek is doing a lot of sorting.

We are also getting ready to start with additional fencing on Twisp River with CCT and NRCS, a nice cooperative project in an area where we did a nice side channel project and TU did a surface to groundwater conversion. A good example of how MRC brings people together.

We have challenges at the Aspen Meadows surface diversion on the Forest up Twisp River; unfortunately, where we were led to put in a groundwater well, after the initial good results the well collapsed, so we will be trying again.

Paul – last April we started a fish monitoring program in Frazer, might consider getting that started as flows subside.

Joy – what about the barrier at the mouth?

Chris J – that takes time, but it isn't a full barrier

Chris J – the county is having a flood management meeting on the 24<sup>th</sup> at 10 am in the commissioners building. It will be an opportunity to meet with various agencies and discuss ways to address issues, and it will be good to know what they are planning for potential flood fights.

*John Crandall* – we have an Ecology Grant for restoration on Frazer Creek, we are developing an RFP, will send it out through MRC.

Trying to get bull trout redd surveys more organized for the Methow. Our long-time surveyor Dave Hopkins retired. It is clear that our current funding mechanism doesn't cover everything, so will be looking at getting a group of volunteers. Have been falling short. This fall we will be looking for folks to get trained and take on some of these reaches. Great areas to get out and see.

In three days, comments are due on the Shoreline Master Program for Okanogan County. Protections that were for the Methow Review District are not there anymore. Comments are due on the 18<sup>th</sup>. A lot of information is available at [www.mvcitizens.org](http://www.mvcitizens.org). If you are interested in the shorelines in the county you may want to comment.

Chris J – Shoreline code is locally driven, but becomes state law, cities also have them, and all are going through the process of updating them. Comments are important, and there is not a good crosswalk between the communities and the county. Also look at the city plans. They differ quite a bit from the County's. It is better than the draft from a year ago, but there is still a lot to comment on.

*Jenni Novak*– WDFW: we're still working on finalizing design for Frazer Creek Maltais project and starting on permitting. Also for upper Wolf Creek we have finalized designs, permitting with the FS, still planning on construction for this fall.

*Chuck Peven*– RTT: the draft scoring criteria for monitoring projects, comments are due to me from RTT members by tomorrow COB, and also recommendations on what information should be available to project sponsors. We will send the scoring criteria out for broad review through WATs after the RTT weighs in. We will also do a dry run to see how it compares to previous projects.



*Jim Pacheco – WA Ecology:* I'm an instream flow biologist for Ecology Water Resources, I'm currently investigating scientific applicability of PHAB SIM studies, if there has been restoration at the 5 locations, will weight it and run, if that is something that you could use, will make it available. Would like to hear from you folks on what has happened in those areas. Will send the area information to Jessica.

[FOLLOW UP – From Jim via email:]

Thank you for letting me share my research project. As requested, here are the locations where Ecology and WDFW conducted Physical HABitat SIMulation studies in the early 1990's.

We are wanting to conduct follow-up studies in locations where restoration projects have been completed to quantify any fish habitat benefits.

Please let me know if there has been any restoration projects at these location, the type of restoration conducted, and the completion date.

If there are any applicable location, we could start work this spring and be done in the fall. If this research could help the MRC in any way. We would be happy to share the results.

Thanks for looking,

Jim

TOPO! GPS Data Format DegMinSec NAD83 ElevFeet Local-Time  
Methow-Weeman,48,32,8,-120,19,31,1926,09/28/2010,12:48:57,  
Methow-KOA,48,27,40,-120,10,7,1720,09/28/2010,12:50:39,  
Methow-Walsh,48,17,12,-120,4,27,1440,09/28/2010,12:51:35,  
Methow-Chokecherry,48,35,37,-120,25,24,2115,09/28/2010,12:53:50,  
Chewuck,48,29,23,-120,11,14,1783,09/28/2010,12:55:26,  
Twisp,48,22,8,-120,9,4,1659,09/28/2010,12:56:30,

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*Joy Juelson – UCSRB:* the Okanogan subbasin WAT usually meets the last week of the month on a Monday, but the next meeting will be April 4<sup>th</sup> at the Okanogan Conservation District from 1-3.

*Hans Smith:* Just an FYI, there is new aerial imagery rectified 2015 if you go to the counties draft zoning ordinance under background information, they released a DEIS ordinance which is open for comment also.

Chris J – Gene Wylson with GIS at the County is a great contact for information as well

<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
OCD	Okanogan Conservation District
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.