

Meeting Notes

12 November 2008

Location: Chelan PUD Auditorium, 327 N. Wenatchee Ave.

For more info contact: Casey Baldwin 509-664-3148 baldwcmb@dfw.wa.gov

RTT members present: Carmen Andonaegui, John Arterburn, Casey Baldwin, Steve Hays, Joe Kelly, Michelle McClure, Keely Murdoch, Chuck Peven, Bob Rose, Kate Terrell, Cam Thomas

Others Present: Ken Bevis, Barbara Carrillo, Pat Connolly, John Crandall, Chris Jordan, Chuck Jones, Joe Miller, Phil Miller, Julie Morgan, Andrew Murdoch, Jennifer O'Neal, Pamela Nelle, Scott Rumsey, Char Schumacher, Steve Tussing, Carol Volk, James White

Agenda Review & Meeting Overview: Casey reviewed the agenda for the day and stated the purpose of the meeting was two-fold: 1) to provide the RTT with an update of the kinds of information that would likely be available and 2) obtain direction from the RTT to begin preparations for the RTT Analysis Workshop in November 2009. Julie Morgan discussed how the Recovery Plan identifies the need for an analysis workshop and is a key component of the Adaptive Management Framework. She discussed scientific evaluation, public evaluation, decision-making evaluation, input from independent scientists and others including the RTT, stakeholders and general public and noted all are related to recommended actions in the recovery plan. She noted the RTT Analysis is part of the Upper Columbia Adaptive Management Framework and that the key people to lead the workshop are the RTT and MaDMC chairs.

ISEMP Analysis Update: Chris Jordan and Pamela Nelle gave an overview regarding ISEMP, the Integrated Status and Effectiveness Monitoring Program. This is a BPA funded, NOAA Fisheries project that the RTT was a part of some of the early planning and implementation. Chris Jordan gave an overview of the work they do in research and development for monitoring and design. They are implementing status and trend monitoring in the Wenatchee and effectiveness monitoring in the Entiat. Their goal is to design and implement monitoring and data analysis that answers management questions, is cost effective and integrates existing programs to the maximum extent. The three areas of the program are status and trend, project effectiveness and informatics. Chris then reviewed the three pilot basins they are currently working in: Wenatchee/Entiat (data driven design), Salmon River (Model driven design), and the John Day River (mechanism driven design). Chris provided a list of products that ISEMP is working on and stated that if the natural resource managers, RTT, or others have specific data analysis needs they (ISEMP) are willing to work on it but will need a specific request.

Carol Volk, NOAA Fisheries, gave a brief review on data collection and functionality of the ISEMP Stem Databank. She reviewed login procedures and data sets available for review within the data portal. She stated that the online data query tools will be available the 15th (Dec?). Carol will send out the web address (*to James and Casey?*) and users will need to get set up with a username and password.

OBMEP Analysis Update: John Arterburn, gave an overview of OBMEP, the Okanogan Basin Monitoring and Evaluation Program and noted its inception was about six months after the ISEMP, but still created in 2004. OBMEP was developed to address data gaps for status and trend in the Okanogan Basin. Additional objectives include collecting standardized data and assimilation of data and to compliment ISEMP. The focus is data collection for a monitoring program that targets habitat and summer steelhead status and trend. Funding has been relatively difficult to obtain for effectiveness monitoring, however, it may be back on the table with the new funding coming from the Fish Accords. OBMEP is working with ISEMP to coordinate analysis information to become available. The five-year analysis information will not be ready by November 2009 since funding was approximately 6 months behind ISEMP. However, they will have an updated yearly report ready by November 2009. These yearly reports are available on line at the OBMEP website. John noted they could, however, possibly provide some minimal effectiveness reporting like barrier removal and/or land management changes to affect riparian restoration as a special report at the workshop.

Regarding the workshop, Chris Jordan asked for specific requests for analysis and how things are improving for recovery plans. Chuck Peven noted the FCRPS Bi-Op is organizing some beginning R M & E groups to answer those management questions.

John Arterburn mentioned the Plan's adaptive management language talks about using monitoring data to make assessments and hypothesis that are within the plan. John asked if we could pull out the plan goals and hypothesis that are to be tested and then have the monitoring folks pull out the data needed. Chuck Peven noted that Appendix P is not quite complete yet and there is some guidance from NOAA in draft form right now. Those items should inform monitoring to answer the recovery questions so the science center can complete their task. John Arterburn then mentioned that there is a lot of information included in Appendix P, so how do we sift out what we need for the next nine months? Casey then asked the group what they would like to focus on for the Workshop. Chris Jordan mentioned that he has a group that deals with data reduction and analysis and this group has the ability to answer those types of questions. Julie then mentioned that for the analysis workshop, two of the days will be focused directly on results of analysis of the data and policy makers will not be interested in methodology.

PUD Analysis Update: Joe Miller gave an overview of the Chelan PUD M & E Program and Andrew Murdoch gave an overview of the Douglas PUD program. The CPUD is required to implement a hatchery program to ensure that they are meeting the objective of NNI (no net impact). The M & E program is administered by committees within the PUD, that include the fish co-managers. The M & E Program provides feedback to the committees. The first five-year cumulative report will be available in 2009. *(Casey Note: The RTT needs to consider the content of that analysis and it's relevance to the analysis workshop. If determined relevant for the workshop, the RTT will need to work with the HCP committees to see if final results will be available by Nov 2009).* Julie asked regarding hatchery/wild interaction, are the PUDs interested in how the hatchery fish interact with the wild fish and is that a priority of the PUDs program? Andrew Murdoch said yes, the goal is to get the signatories to the HCP's their numbers in

terms of hatchery production and returning adults. The M & E plans funded by the PUD use status and trend, VSP monitoring is in collaboration with ISEMP and tribes and other co-managers. Andrew explained that most of the status and trend data needed for the VSP assessments are already being collected as part of the hatchery monitoring. Julie said that the M & E Plan for the recovery plan is still under development.

Paths Forward for Workshop: James White gave an overview of the paths forward toward organizing the 2009 RTT Analysis Workshop. He reviewed coordination of information, project implementation and record information. He also reviewed workshop logistics, data compilation, QA/QC and delivery, key questions and analysis and who is doing what analysis and comparing those with our key management questions.

SRFB Analysis Update: Jennifer O'Neal, Tetra Tech, EC, Inc., SRFB, gave an overview of the reach-scale effectiveness-monitoring program and noted they are moving into their fifth year of data collection. She reviewed projects and monitoring categories, data collection, sample designs, project locations, fish passage indicators, sample data, instream structures, riparian plantings, addressed invasive plants, livestock exclusions, constrained channels, channel connectivity, spawning gravel projects, diversion screening projects, habitat protection and indicators measured. Jennifer noted that their data analysis is tied to sample design. She then reviewed a summary of results for 2004-2007 and lessons learned and noted that effectiveness monitoring helps to answer questions regarding project effectiveness. Several of the sites are in the Upper Columbia and could provide some good information for the analysis workshop. Similarly, their "rolled up" results that include other parts of the state (Lower Columbia and Puget Sound) may also be relevant and should be considered.

Methow Monitoring Analysis Update: John Crandall gave an overview of monitoring in the Methow and noted they do not have a coordinated monitoring program yet, but are working toward that end. John has been working on an inventory of monitoring in the Methow and comparing that inventory to the Recovery Plan's Appendix P questions to see where there are data gaps. In the Methow, there are a number of groups collecting data on a lot of fish and habitat related parameters, but that water quality and bull trout biological monitoring are initially jumping out as data gaps. Cam noted that one of the groups, the Forest Service (AREMP; out of Corvallis), is looking at the effectiveness of the NW Forest Plan watershed trends. There is also PIBO, (PACFish, In-Fish, Biological Opinion). John noted that they (*MRC??*) are trying to coordinate with the various monitoring programs. Also work is being done with the Yakama Nation, Washington Fish and Wildlife, Douglas PUD, USBR, and USGS. He also discussed a regional lamprey genetic effort that the Wild Fish Conservancy is working on. John Arterburn noted that he would be interested in information regarding status and trend efforts with lamprey.

Lower Methow Basin Tributary Effectiveness Monitoring & Analysis Update: Pat Connolly, USGS, reviewed a study funded by BoR, which involved collaboration among USGS, Univ. of Idaho, landowners and NOAA. The primary objective of this study was to monitor and evaluate effectiveness of redesigning diversion structures at the bottom of

Beaver Creek, Gold Creek and Libby Creek. Incompliant culverts and diversion dams were replaced with larger compliant culverts and rock weirs. Methods to assess fish response were fish weirs, PIT tagging, and PIT – tag interrogation. Years of analysis were 2004-2007. He also reviewed the assessment of fish response to the project implementation by monitoring juvenile salmonids and returning adults to Beaver Creek, Gold Creek and Libby Creek. He then reviewed the statistical analysis regarding flow, length, and season, which showed that rock vortex weirs were allowing juvenile salmonids to successfully pass upstream and over these structures during a wide range of flows. Pat briefly showed a couple of peer-reviewed literature publications that have resulted, or planned to be, from their work and indicated that the results would be available for inclusion in the November 2009 RTT analysis workshop.

NOAA Fisheries Service Analysis Update: Scott Rumsey discussed NOAA's five-year status reviews. The 5-yr review uses available information and recent updates to determine if species status has changed enough to warrant a formal review. The Biological Review Team (BRT) would then do the much more in depth formal review with respect to VSP parameters and would work with the NOAA Regional Office regarding the other listing factors (i.e. limiting factors and threats). Outcomes from those reviews are recommendations in listing status. He also noted that five-year reviews are based on information and analyses made available since the last review and that it would not necessarily be a very detailed review. He said that the stronger the status of VSP parameters the less emphasis would be placed on limiting factors and threats.

He reviewed other NOAA RME efforts currently underway. He reviewed data being collected, the data dictionary, inventory, monitoring guidance, gap analysis assessment, ranking, redundancies and resources resulting in collaborative monitoring and implementation strategy. Scott then reviewed next steps, deadlines, timelines from fall 2008 to spring 2009 for review of the NOAA Fisheries data dictionary, the monitoring guidance and the inventory and gap analyses. Scott suggested that we could work together regarding the approach for the workshop and do a test on data and gaps and use whatever approach needs to come first. Scott also reviewed NWFSC efforts and discussed periodic status updates and his desire for more frequent updates on some parameters (abundance, productivity, distribution). He reviewed limiting factors and threats and development of dictionaries, description of inter-relationships, identification of metrics and development of analyses. He discussed the next steps of the PCSRF Phase II, to include refining data definitions, updating limiting factors and threats, adding metrics, and expanding databases. John Arterburn asked for a feedback loop regarding reporting. Scott Rumsey mentioned contacting Lynn Hatcher with any requests for NWFSC and RIST technical assistance or review. Chris Jordan's folks will map out the differences between limiting factors and threats and develop analyses to look at influences of limiting factors and threats.

NWFSC/Interior Columbia TRT Analysis Update: Michelle McClure gave an overview of the NWFSC/Interior Columbia TRT and her role as well as gave a presentation regarding spatial structure diversity criteria and abundance and productivity numbers. She discussed genetic signals and issues and trends between upper Columbia

Chinook and Snake River Chinook. John Arterburn asked about guidance for monitoring on a genetic basis. Andrew Murdoch noted that there is an historic genetic monitoring component and there is new data that has been gathered which will be available in the next year or two. Michelle also discussed the proportion of hatchery spawners within the population and reproductive issues. She also reviewed habitat and All-H modeling (Shiraz model) where specific actions affect a suite of habitat conditions that in turn affect fish survival. Scenarios have been done using estimates of historical conditions, continuation of current policies, ongoing degradation and full implementation. She also briefly presented ongoing work examining spawning effectiveness of hatchery-origin spawners in the Wenatchee, and traits (spawning location) that appear to be associated with decreases in spawning effectiveness. The work itself is being conducted collaboratively by WDFW (Andrew Murdoch) and NOAA (Mike Ford).

Content and organization of the 2009 RTT Analysis Workshop: Casey noted that, given the lack of sufficient time to cover the remaining agenda items, the group should brainstorm through some options for content and organization, then re-visit it in more detail at the next RTT meeting. Casey briefly went through the initial outline for content and organization of the workshop that was on the agenda. Regarding a product of the workshop, Casey noted we will have a professionally synthesized document detailing the workshop to get out to the watershed action teams so they can use it. The public part of that would be at the watershed action team level. Julie also noted that we will invite the public and implementers and policy makers. She noted we will provide information to the public, implementers and policy makers through the synthesis paper. Ken Bevis suggested that we tier the two days strategically and order the day from very general to very specific to share the excitement of what is going on in the Upper Columbia. Ken also suggested the public and policy makers come the first day and share the enthusiasm and then we could delve into more specific information.

James White then discussed his suggestions regarding the structure of the RTT Analysis Workshop. He discussed starting with panel discussions for the first two days with one panel discussion in the morning and then another in the afternoon. James suggested a translator for each panel discussion to translate to the general public. Julie then noted it could be a purely technical workshop. Julie asked the RTT how they would like to organize the day and what would they like to see.

Chuck Peven asked about the meaning of the workshop. Julie went back to the adaptive management diagram and noted that it says RTT/NMFS/USFWS scientific evaluation and identification of information gaps led by the RTT and MaDMC Chairs. Chuck noted that what he heard was that we need to focus on the VSP.

Julie noted that on page 269 of the Plan it talks about anticipated results and recommended changes in policies. Michelle noted that we need to discuss genetic signals and distribution of hatchery fish. She noted that the next question would focus on key threats. Chuck suggested that we might discuss answers to those threats.

James noted that we need to have policy folks around to witness the discussion to begin to understand the process by which the process is created. Pamela Nelle noted that there may not be much public coming to begin with. Casey agreed and said his original vision would be to distill out the results of the workshop to the WAT's at a later time. Carmen discussed that we would need to have it very well facilitated to help the public understand projects. Michelle noted the questions that drive the workshop need to be carefully looked at and specific topics need to be decided. The bigger questions seem to be less useful. Which group would this workshop best benefit? Casey noted that the lack of an agreed to objective and target audience seemed to be keeping the group from moving forward with the planning for the workshop. John Arterburn thought that the objective was to inform the WATs so they could adaptively manage the Implementation Schedules. The group generally agreed. Casey said if that is the case then the workshop will need to focus on the science and that secondary products, such as the synthesis report, could meet secondary objectives. The public interface would not happen at the workshop, it would happen when the roll out of the synthesis occurred to the WATs.

Julie noted that she has asked James to write a paper on what the objectives of the RTT Analysis workshop are. Julie and James will work with Casey on that paper and then they will run it past everyone. Julie asked about habitat and noted that our adaptive management model is habitat related. Michelle noted that our issues may be different from a scientific standpoint and asked if we want the workshop to go into some of the other H's? John Arterburn said yes. Kate noted that the other H's do need to be addressed. Julie also added that we have been struggling with the audience for the scientific evaluation and process and we will come back to you with a couple of different scenarios. Casey will work with James and Julie and we will come back at the December meeting with additional information. Ken Bevis suggested David Montgomery as a keynote speaker.

The meeting adjourned 4:10 p.m.