

**Cooperative Monitoring Evaluation and Research Committee  
January 22, 2008  
OB2  
Final Notes**

**Attendees:**

*Almond, Lyle	Makah Tribe, RSAG Co-chair
*Baldwin, Todd (ph)	Kalispel Tribe, SAGE Co-Chair
Beach, Eric	Green Diamond Resources
Black, Jenelle (ph)	NWIFC, CMER Project Manager
*Butts, Sally	USFWS, CMER Co-Chair
Cahill, Candace	Rayonier, WETSAG Co-Chair
Dieu, Julie	Rayonier, UPSAG Co-Chair
*Ehinger, Bill	DOE
Fox, Sherry	WFFA
Fransen, Brian	Weyerhaeuser
Godbout, Kevin	Weyerhaeuser
Haque, Sarah	Squaxin Island Tribe
Heckel, Linda	DNR Forest Practices, CMER Coordinator
*Hicks, Mark	DOE
*Jackson, Terry	WDFW, BTSAG Co-chair
Kurtenbach, Amy	DNR, CMER Project Manager
*Martin, Doug	WFPA contractor
*McConnell, Steve (ph)	UCUT
*McCracken, Jim	Longview Timberland, LWAG Co-Chair
*Mendoza, Chris	Conservation Caucus contractor, RSAG Tri-Chair
Miller, Adrian	WPFA
*Miller, Dick	WA Farm Forestry Association
Miller, Ken	WFFA
*Mobbs, Mark	Quinalt Tribe
Moon, Teresa	DNR, CMER Project Manager
*Risenhoover, Ken	Port Blakely Companies
Robinson, Tom	Counties
Schuett-Hames, Dave (ph)	NWIFC, CMER Staff
Sturhan, Nancy	NWIFC, CMER Co-chair
Turner, Ted	Weyerhaeuser
Vaugeois, Laura	DNR, UPSAG Co-Chair

\* indicates official CMER members and alternates

v indicates attended via video-conferencing; ph indicates attended via phone

<b>Assignments From January Meeting:</b>	
Bring to the CMER March meeting a status update on the bulltrout add-on discussion	Sally Butts/Chris Mendoza

<b>Assignments From November Meeting:</b>	
Schedule a meeting of the Type N sub-group for mid-January (week of the 14 <sup>th</sup> ) and send it out via email.	Nancy Sturhan

<b>Assignments From September Meeting:</b>	
Update the CMER membership rosters with phone numbers (still needs to be posted on the website 2/08)	Linda Heckel

**Science Session – Risk Management and Assessment – Dick Miller**

Dick Miller provided a short document, Risk Management and Assessment: Justification and Potential Applications, and guided a group-exercise to develop a risk matrix for increase in stream temperature. There will always be risks. These must be objectively assessed, then prudently managed to create acceptable trade-offs. Are current risk assessments by landowners and Forest Practice regulators objective (free from bias) and consistently based on site-specific conditions and current scientific knowledge? Several types of risk-assessment tools are available or could be created using existing information (Decision-logic tables, computer-based query models, and GIS-based models)

Hicks reminded the group that along with the usual FP Rules, etc. we need to keep an eye on the water -quality regulations that need to be met.

Dick and the group developed a sample risk- matrix. If groups work together to create these matrices, consensus about the final product is more likely.

Example:

<b>Risk</b>	<b>Stream Width</b>	<b>Orientation</b>	<b>Topo Shading</b>	<b>Confinement V-Width</b>	<b>Bedrock</b>
<b>Very Low</b>	Narrow	E-W	Strong	Narrow	Deep gravels
<b>Low</b>					
<b>Mod.</b>					
<b>High</b>	Wide	N-S	None	broad	Hard Bedrock
<b>Very High</b>					

Landowners could use a risk matrix to support alternate plans. If it generates a high risk, the landowner may need to spend extra time and money to mitigate the issues. Risk-assessment tools are available at a watershed-scale but not at the site –specific scale for ID teams. Information from CMER studies could be used in such matrices to assess site-specific risk.

The group decided the next step would be to check in with Policy on this topic. Beyond that it would be to invite interested parties (agencies, PNW Research Station, Batelle, Oregon Department of Forestry) to discuss what is out there and how CMER could coordinate information with them. Different agencies and representatives have different tolerances for these

types of risk models so it would be good to see what could work with WA FP rules. It is important that Policy be aware of these discussions.

Doug Martin mentioned that Policy has not faced up to the level of risk involved in their decisions. Water typing is the best example. They had no understanding of the decision space and risk faced when using that model. For example, we could use a probability of fish passage metric – we could compute that. But, would policy actually use that metric to make a decision? It would help CMER in designing their studies. Mark Mobbs stated that when a model is used to make site-specific decisions, acceptance of model results is difficult because of model inaccuracies. The importance of inaccuracies to an entity depends on whether the inaccuracy is in their favor or not.

Tom Robinson reminded the group that in 1987 someone dreamed up the map system and it was followed by FPARS. It was aimed at the landscape scales. We have poor landscape scale information to do site-specific work. What is different with this proposal, we are designing at the site-specific instead of landscape-scale. We could verify the anomalies in the larger scale and apply them on a site specific scale. The quantification of variables to use in a model and then to apply model results to use with rule implementation is the biggest road block. Model at a local scale and don't rely on the water type model by measuring and putting inputs in a model. Develop it at a site scale. Find out what is the impact of these 40 acres and what are these 40 acres impacting. Those are the questions that need to be answered for a model and formulas.

Sally will follow-up with Policy on this topic.

### **Post-Mortem Study Design – Julie Dieu**

Julie reminded the group where this study design has been and where it stands now. In November of 2006, UPSAG did a presentation on study design and assigned reviewers (Doug Martin, Dick Miller, Nancy Sturhan, Venice Goetz and Chris Mendoza with Paul Kenard). Their comments were incorporated into the January '07 draft and sent to ISPR for review. ISPR's comments were captured by Julie in an 18 page document, discussed with reviewers and their final comments were drafted and sent out to the CMER reviewers last week. Julie received comments back from Doug and Dick and incorporated those changes. They focused on the main body of the study design and appendix 9 sampling strategy. There is another draft dated today and the track changes from Doug and Dicks comments. Julie mentioned that Amy and Jenelle, along with several others, have given a lot of advice as to what could go into an RFQQ for this study. Julie is asking for CMER approval of this draft study design today.

Julie stated that, this study wasn't designed for a particular storm recurrence interval, but for a storm large enough to trigger a population of landslides worthy of the statistical rigor needs. Storm variability is inherent in the study design but that we agree to further address this issue in the near term to verify that the study design was robust enough to accommodate the intense variability. Industry could agree to approve the existing document as the generic underpinnings but it wasn't set up to deal with the extreme variability of precipitation in the December 2007 storm. This point raises new questions of rule effectiveness. Where do you stop having an influence with forest practices? Scientifically, it raises questions of the interaction of land use, precipitation, rules, etc. Interpreting past rainfall data has been real murky because there usually

isn't enough participation. This time there is a whole lot of data. Weyerhaeuser has several weather stations to get information from.

This data has been reviewed by UPSAG, and they recommend to CMER that policy and FP board approve the first stage of a multi-stage implementation. The first stage would include the acquisition of aerial photography and hiring of a PI. The field work involved in this project would be in the second phase. The first phase might also be used to develop an implementation plan to the generic study design that includes the decisions on the final study areas and precipitation intensity. Presentations could be ready for Policy and the Board in May. They would have a better budget and handle on what the steps might be.

Amy mentioned to the group that when UPSAG defines the budget for this project and if it goes higher than the \$400,000, Vicki Christiansen, Executive Director of Regulatory Programs is ready to go to the legislature to ask for more money. Julie suggested that CMER move all the tier two money to tier one for the purchase of air photos and the PI. We need a really good principle investigator for the entire project. Tom asked if we could cooperate with any of the folks that did air photos after the storm, if they have already flown their property. Laura said that most of it was videography and not stereo pairs and Kevin Godbout mentioned the photos they took weren't very good because of cloud cover. CMER is welcome to view what they did capture.

Sally asked how the field work might be affected if phase two doesn't get approved until May. Julie answered that the two things you might lose are drivable road observations and channel data. Having money right now still would not get the field people on the ground immediately. The shortest distance between draft RFQQ and signature is 13 weeks. We will try and get the RFQQ drafted and out prior to getting policy approval.

Chris asked how this storm might change the study design (Weyerhaeuser data about rainfall intensity shows there are areas outside the 60-year box). How big was that area? Couldn't you use the current study design for those areas? If you change what went through the ISPR review it would have to go back to that. Julie assured the group that the statistical approach is very strong. But she would like to run that by Dr. Conquest anyway. The study is leaving the basic analysis in place and not sure if phase II will include the Dec. 2007 high precipitation -storm areas. Laura agreed that the basic study design is set. It may be amended to deal with the red zone but they didn't want to create a level of bias. Critical questions and precipitation data will be added.

Chris mentioned that if Policy is looking at decision space, they should decide whether they want to look at the high precip. zone. Laura said that would be in the conversations in May to Policy and the Board. More collection of the most basic data will be needed so they will have numbers to review. There is no information on how large the high precip. zone is and gathering more data will help us draw our high precip. zone. The implementation plan is looking like a recommendation to Policy and the Board. Rainfall intensity information is not stratified but random samples for a co-variant might be necessary. The high precipitation zone may not be analyzed but the technical advisory group will make a recommendation to policy lining out a plan/budget on an addendum to study that. The technical group needs to figure out what

information going into the high precip. zone will give us. That will be put in a recommendation package to include a discussion if we go here and add more sampling blocks, what it will cost and what information will be gained This isn't known. UPSAG would like to move forward with the most basic data number crunching and get staff to work on these issues. They will come up with a plan on how to move forward with sampling in the high precipitation zone.

Sally asked, if CMER approves the study design and then talk about the high precipitation zone area, are we still waiting for a "normal" 25 year event to go and do what the original study design was meant for? Julie answered; this study was originally narrowly focused to understand triggering mechanisms of landslide-initiation points. We designed the study to answer the question: do Forests and Fish Unstable Slope Rules appear to be effective at limiting landslides? One of the strata is 41+ yr-old stands. When we are done with this, we will still have to study the natural background as one of the strata. Ten years from now we may still be looking for a storm event to study old-growth. This storm wasn't the right one to study old-growth for natural background.

CMER approved this overall study design understanding that it may not be fully capable of dealing with the extreme variation in precipitation and the new scientific and policy questions this storm raises about forest practices effectiveness and how land use, topography and precipitation interact during extreme conditions. We recommend that Policy and the FPB approve the first stage of a multi-staged implementation at their February meetings. The specific steps of this first stage include study area delineation, precipitation analysis, the acquisition of aerial photography, the development of a field manual, the hiring of a principal investigator, and the development of an implementation plan that includes decisions about the final study area and sampling procedures with respect to precipitation intensity, and additional data analysis to answer additional critical questions. We expect monthly updates at CMER in March and April, and anticipate that the Technical Advisory Group (UPSAG, Ted Turner, Cajun James, George Ice, Maryann Rieter and others) will make recommendations for further implementation in May. Future stages include stratification, field data collection, data analysis and preliminary and final reporting.

Chris mentioned his approval was contingent on having Paul Kenard have some time to comment on this new study design. Paul may comment later and hopefully those could be incorporated.

All approved.....

### **Minutes from December meeting – Butts/Heckel**

Minutes from the December meeting, with Julie Dieu, Steve McConnell and Chris Mendoza's comments, were approved. In the future, if comments/changes to the minutes are received by Linda after the due date, she will notify the member and they will have to bring their comments to the next meeting to be approved by the group.

### **Policy Meeting Recap– Butts**

Sally reviewed the items that were discussed at the January Policy meeting:

### **Project Management – Butts**

The quarterly reports for projects were sent out and suggestions to improve these reports included:

- Collate all the information into one report
- The organization of the reports should be organized by rule groups in the same order as the CMER workplan
- Add contract expiration dates on all the reports

Nancy Sturhan commented that it looks like the Bull Trout Project continues to have issues with east-side DNR State Lands sites. Terry reported that things aren't sounding as promising as she would like them to be and Policy should be advised. Sally mentioned she had attended an RSAG meeting and they discussed in-depth the sites and the add-on project. BTSAG is going to do a power analysis to see if losing some sites would still result in a statistically valid study. The treatment area is the RMZ and it was expected that the treatment have an upland harvest. A couple of the sites have RMZ-only harvest for logistical reasons and nothing upslope was harvested. They are looking at additional analyses if that makes sense. Interim reports will be coming to CMER in June, but there will be an update of study sites and the power analysis at the February meeting.

Dick had a question for Jenelle on the Eastside Temperature report. The report stated that data was incorporated into the ECY database. What is that? And does the current budget cover both eastside and Westside sampling? Mark Hicks stated that the ECY database is the EIM database that can be accessed on the Dept. of Ecology website. Part of the contract was for the data to be included into an ECY database. Jenelle followed up to say the budget that is in the report is for the eastern stuff that is done this year and then they'll move on to the Westside. Not sure if further budget will be requested. They are not sure how much analysis they will be doing but will do a brief interim report of findings. Todd asked how it is going to benefit running the thermographs until July when the most of the data folks are interested in was collected last summer. Jenelle answered that they wanted to make sure they were getting the peak times for their data.

Steve McConnell commented that there are six projects that were on the quarterly reports last time for which full payment had already been made, an amount just under \$500,000, but final reports never delivered. These projects need to be completed. Steve requested that the status of these projects be made a permanent, recurring agenda item for CMER meetings, with an update provided each month on the progress of these projects toward completion. Teresa mentioned that Darin is working on getting the reports and she will check with him and bring them to CMER.

Dick asked about a final 5-year post-harvest sampling that is scheduled for the Type N Buffer Characteristics, Integrity, and Function Project, Westside but there isn't any budget to do it. Teresa said there will be a budget submitted for the FY 09 budget to cover this sampling.

### **Project Manager Roles and Responsibilities**

Sally presented the most recent draft of the handout. All edits that got to Darin on time were incorporated. Other comments that came in late will be incorporated when we do the full manual

update. This is a living document. Nancy will start working on this after she steps down as co-chair of CMER in July. If there are any other comments, please route them to Darin.

### **ISPR Update – Butts/Jackson**

Culvert test bed study – Comments are back from the reviewers. The fish passage sub-group needs to decide what to do with it, a draft has been sent out for their review. February 11<sup>th</sup> will be a meeting of the sub-group and hopefully they will have an agreed upon course of action for the February CMER meeting.

Stream simulation – Last month they were looking for reviewers and were told that reviewers had been assigned. We are awaiting comments back. Doug had checked the website and hasn't seen any reviewers assigned.

### **CMER Science Conference Update - Butts**

CMER Conference draft agenda – planning on doing a mass-mailing tomorrow. Send it around for folks to look at.

### **SAG Requests - Butts**

Accuracy and Bias Study – UPSAG is requesting CMER approve a statistician to review this study design instead of going to ISPR. Five CMER members who were not involved in the study design were asked to review and across the board they stated that the study design was straight forward but the statistics were not easy to understand. UPSAG would like to see if the statistics are useful for the questions they are putting forward, will it answer what is needed?

It was decided to send this study to ISPR for review. Because this is such a hot topic right now and very timely for study maybe it won't need all three reviewers but only two. One of those reviewers could be a statistician. Doug Martin stated that CMER should not skip this step because of the volatility of this topic. It needs that true review. Chris mentioned it could be a closed review so that it can be held up as having the stats delineated correctly.

Dick stated he was one of the CMER reviewers and asked the question is this the best use of our money. He questioned using that much money right now when funding is uncertain and so many studies are in process. Sally said that was a policy decision on whether or not to do the study. It should be raised to Policy.

### **Type N Experimental Buffer Study in Basalt – Budget request**

Chris updated the group on the increased cost for the WSU amphibian genetics contract and is requesting an addition \$11,340. This is to cover processing and supplies costs that have increased an unexpected 50%. This would also cover additional sampling this spring for Cope Giant Salamanders in the Olympics. Due to the unanticipated rarity of this species, field crews have been able to collect only 25-50% of the targeted 30-40 samples per stream necessary for rigorous genetic analysis. RSAG/LWAG felt that this is important enough that it needs to be completed. Laura asked if this would get enough samples to make it statistically valid? Teresa answered that it is difficult to predict exactly how many samples we will get, but we will definitely be closer to our target and possibly meet it. RSAG and LWAG will have to make the decision on whether or not to request additional money for further field work if all of the samples

needed aren't collected this spring. Sally asked what is plan B or the consequences if they don't get enough samples after this sample season and don't meet their target goal? Can they still do a rigorous analysis with what they have? Teresa will ask the PI and get back to CMER. Laura asked if CMER approves this request that every effort be made not to let this request come back again next year. Sarah Haque asked what the consequences would be if they don't get enough samples after this sample season if they don't meet their target goal. Sarah also had a concern that if CMER approves this request and the target goals isn't met, would CMER see another request of this type which would continue to add on to the entire price of the project. **All approved**

#### Type N – WSU Interim Methods Report

Teresa informed the group that an interim methods paper report will be published for the DNA markers on the coastal tailed frog and the rocky mountain tailed frog. They aren't reporting any analysis. **This was an FYI only.**

#### Eastside Riparian Condition and Assessment Study

Todd received the phase 1 report from MB&G and it is out for SAG review. He asked for three reviewers for the CMER review. We are a month behind already on this. Doug Martin, Steve McConnell, Mark Hicks and Lyle Almond all volunteered for review. Todd will send it out to CMER reviewers soon.

#### SAG Issues

WETSAG Update – Candace Cahill was present as the new co-chair and there is a vacancy in the other co-chair seat. There is continued active membership from Jill Silver, Deanna Jacobsen and Charles Chesney. Harry Bell has recently joined them and represents WFFA. They are looking for possibly an agency person for the other co-chair spot.

WETSAG is drafting the scoping document for evaluation of the effectiveness of the mitigation sequence implementation regarding road construction and placing fill in wetlands. They are identifying objectives, critical questions, options and processes for identifying samples and evaluating wetland functions.

RSAG Update - Welcome Lyle Almond as the new RSAG co-chair. Chris' term is up this spring and he will help out Lyle in the interim. Their third co-chair Joe Murray has been unable to put in the time commitment needed for this SAG. They might be filling his position also.

Chris then brought up an issue that has come up with the “Model and Manual Report”, one of the reports in the “Desktop Analysis Package of Reports” authored by Steve McConnell. John Heimburg, a co-author to this report, was not available when this document was being finalized and approved by CMER and Policy. John worked on these reports in the capacity of a technician working directly for CMER, but now has a position with WDFW working in Compliance Monitoring. When John was able to read the final draft of the report, he noticed, using what he had learned working in compliance monitoring, that there was a minor error pertaining to outer zone trees. (Note: these reports have not been acted on by the Board!) (Note: Policy's only action so far has been to suggest that whoever eventually revises the Model, the Board Manual, and other guidance materials, read this report and consider using the information provided) .



There were two impediments to implementing the change suggested. First, CMER has moved to a contract based operating framework and the contract for this project was terminated June 30, 2007, before questions pertaining to the disposition of this project by Policy and others were fully resolved. Second, John's time is fully accounted for at DFW, thus he was not available to do this work through an interagency agreement. The approach suggested, having John take on this work as a consultant, was intended to work around these problems. Steve also pointed out that, in addition to correcting a known (although minor) error, John would be able to provide a more complete regulatory overview of the work as well as edit the document to make it more readable. CMER-funded studies are required to go to peer review; however, scientific peer review does not make sense for this document. A regulatory review to make sure that problems with rules identified are accurately interpreted and consistent with how rules are viewed by the entities responsible for evaluating compliance with these rules would make sense for this paper. Proposed changes to the document would not change its' scope or make substantive changes to the document. Steve noted that John's editing work on other reports made substantial improvements to their clarity. Chris and Adrian were uncomfortable with making changes to a document that had already been approved by CMER and Policy. Mark Hicks suggested that it is not too important if the document is entirely accurate from a regulatory point of view because these rules may change soon anyway. CMER suggested John write up an errata statement for the one known error and send that to be attached to the final document. Steve agreed to communicate that request to John.

Chris wanted to point out that CMER needs an editorial person to assist with writing documents. Steve McConnell did a lot of great work and folks don't realize how much work that was. And then RSAG did a lot of editorial work on these documents. CMER has a larger need to edit the documents and that would free up the SAG folks to do the other work. Nancy Sturhan suggested that a proposal should be put together to add editorial help to the next budget cycle. Amy already knew there was a need for this position and has been asking SAG folks on recommendations if they have any suggestions. She is working on writing up those proposals and to pay for it out of the development fund. Sally commented that this doesn't take the place of contractors putting together high quality documents in the first place.

### **Brief Update - Butts**

CMER Leadership had a meeting with DOE to discuss the 2009 DOE report on Clean Water Act Assurances and how CMER work and priorities fit into this effort. If anyone has questions on this, talk to Mark H., Sally or Darin.

### **CMER Report to Policy – Butts**

The following items will be taken to the February Policy meeting for discussion:

Mass Wasting Prescription Scale (post-mortem) project budget request

Risk assessment model idea and get their feedback;

Status update on the bulltrout study sites (DNR state lands issue);

Status update on the Type N – amphibians in basalt approved contingent on the caveat;

Any SAG updates; and

The CMER membership meeting with DOE and the '09 report

Conference reminder

Future Meetings

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**CMER 2008 Regular Meetings:** February 26, March 25, April 22, May 27, June 24, July 22, August 26, September 23, October 28, November 25<sup>th</sup> and December 16.

**2008 Science Conference:** February 20<sup>th</sup>, 2008, OB2