

**Cooperative Monitoring Evaluation and Research Committee  
April 22, 2008  
DNR Compound  
Final Notes**

**Attendees:**

*Almond, Lyle	Makah Tribe, RSAG Co-chair
*Baldwin, Todd (v)	Kalispel Tribe, SAGE Co-Chair
Black, Jenelle	NWIFC, CMER Project Manager
Bluhm, Andrew	OSU, Hardwood Silviculture Cooperative
*Butts, Sally	USFWS, CMER Co-Chair
Couvelier, Doug (v)	Upper Skagit Tribe
Cramer, Darin	DNR, Adaptive Management Administrator
*Dieu, Julie	Rayonier, UPSAG Co-Chair
*Ehinger, Bill	DOE
Harrington, Connie	USDA Forest Service, PNW Research Station
Heide, Pete	WFPA
*Hicks, Mark	DOE
Hitchens, Dawn	DNR
*Jackson, Terry	WDFW, BTSAG Co-chair
Kurtenbach, Amy	DNR, CMER Project Manager
Marks, Derrick (v)	Tulalip Tribe
*Martin, Doug	WFPA Contractor
*McConnell, Steve (v)	UCUT
*Mendoza, Chris	Conservation Caucus Contractor, RSAG Tri-Chair
*Mobbs, Mark	Quinault
Moon, Teresa	DNR, CMER Project Manager
Robinson, Tom	WSAC, Policy Co-Chair
Roorbach, Ash	NWIFC, CMER staff
*Sturhan, Nancy	NWIFC, CMER Co-chair
Swietzer, Dave	Washington Hardwoods Commission
*Veldhuisen, Curt (v)	Skagit River System Cooperative
Vogel, Bill	USFWS

\* indicates official CMER members and alternates

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

<b>Assignments From April Meeting:</b>	<b>Assigned</b>
Stream simulation study course of action review. CMER Reviewer comments due to Terry by May 10 <sup>th</sup> . It will be revised and come back to CMER at the May meeting.	Todd Baldwin, Doug Martin, Chris Mendoza
WETSAG scoping paper review. Doug, Lyle, Todd, and Nancy will have the document reviewed by May 13.	Doug Martin, Lyle Almond, Todd Baldwin, Nancy Sturhan

Meeting to discuss pd-pc study design directly after CMER meeting with Marc, A.J., Sally, Chris, Curt.	Sally Butts, Marc Hayes, A.J. Kroll, Chris Mendoza, Curt Veldhuisen
Chris will send Darin a copy of Harwood temp memo from RSAG that went out to Mark Hunter and Tim Quinn in January. Darin will take the list of things that need to be fixed and meet with Tim and Mark.	Chris Mendoza and Darin Cramer
Fish passage group – Culvert Test Bed Study. Terry and Doug will set up a meeting with Chris to address his concerns. After the course of action responses are approved by the CMER reviewers, the document can be sent on to the Policy sub-group.	Terry Jackson, Doug Martin, Chris Mendoza, other pertinent CMER reviewers.
Nancy will bring CMER info group proposal to CMER at May meeting.	Nancy Sturhan
Nancy and Sally will prepare a cover memo to the work plan for Policy that explains the situation with chapters 1-4.	Nancy Sturhan and Sally Butts

**Agenda Review – Butts**

Sally asked if there were any other items that needed to be added to this month’s agenda. Doug recommended moving SAG requests towards the front of the agenda because they don’t get the time they need when they are at the end of the agenda.

March minutes will be approved at the May meeting because they came out with the April agenda and people didn’t have enough time to review them prior to the meeting.

**Policy meeting update - Cramer**

Tom Robinson was elected as new co-chair.  
Clean Water Act assurances preview paper on 2009 report was distributed at the meeting.  
UPSAG gave program presentation at meeting.

**FY 09 budget**

Policy added 50K for water typing in tier II because it’s ranked as the number 2 or 3 priority for Policy.

Policy accepted everything in the Type N Rule Group as proposed by CMER but added 50K in tier II for Type N Incompetent Lithologies.

In the Type F Rule Group everything was approved as proposed except for the BTO add-on project. 100K was put in tier I and 35K in tier II because the number of sites that will be surveyed this summer are unknown. This is due to landowners not being able to harvest sites largely due to changing timber markets.

Funding for The Eastside Wood Characterization project was trimmed by \$50K. They added \$50K to the Riparian Extensive Project in Tier II for scoping a sediment component.

The DFC program budget remained the same.

The Bull Trout and Unstable slopes rule group budgets remained the same except for the Landscape Scale Effectiveness Project had Tier II funds added.

The Roads sub-basin scale budget was approved as proposed.

For Roads (?) Site scale effectiveness, Policy put \$20K in tier II because they would like CMER to look at the possibility of using existing information that may inform project scoping. The discussion mostly revolved around existing information related to BMPs. There have been a number of publications regarding the effectiveness of BMPs and we need to look at this to see if we can use any of this information to inform this project.

The fish passage and wildlife rule groups remained the same.

A line item for Policy information and analysis support was added with \$100K in Tier I and II for assistance with the strategy review and prioritization.

Doug commented that the web-site line item has been going up but we aren't getting the service. Darin talked to Lenny about this to make sure we get the service we are paying for. Doug also noticed that the CMER web-site cumulative expenditures were very high and asked if that was a mistake. Darin said it was a typo, showing \$360,000 instead of \$36,000. This is a typo and will be corrected.

Nancy mentioned that Policy needs to give clear direction and prioritization of what they want UPSAG working on because they are at capacity right now. If Policy wants to add work they need to take things off the plate and reprioritize. This is an on-going issue with capacity.

Chris asked what the status is of the new geomorphologist position because this would add capacity. Darin will give an update on this later on in the agenda if time allows.

### **Science Session – Red Alder Growth and Yield Model**

Presentation given by: Dave Sweitzer with Washington Hardwoods commission, Executive Director; Connie Harrington w/USDA Forest Service, Pacific NW Research Station; and Andrew Bluhm with Hardwood Silviculture Cooperative out of OSU. Gary Dickson and Don Vandendriesche at Ft Collins, and Fred Martin with DNR, were supposed to be on the phone but due to no phone access this did not happen.

Dave introduced himself and stance on hardwood management and the need/purpose for this study. Model is primarily for the small forest land owner.

Andrew gave a presentation on the data that's used in the model.

Doug – are these stands riparian oriented or upland? Andrew - There is a mix of upland and riparian stands. They pooled data that they had collected and from other organizations. The sites are located on a variety of landowners land. Most of the sites are in BC and WA with 7% in OR. 78% of sites are natural stands and 22% of the sites are planted stands. Average plot is 1/3 acre. 29% of plots are natural and 71% of plots are planted.

Chris Mendoza asked if you can sort by age of trees because we are interested in older stands and the DFC model kills off alder at a certain age. How many stands are older and where are they located; are they located in the riparian areas or not? Andrew - Results are very robust in older trees compared to younger trees because younger stands are very dynamic. So he is very confident in models ability to project older stand conditions. The model runs on site quality not just on whether it's riparian or upland. So it uses variables such as soil conditions, aspect, and gradient. Alder is more sensitive to site conditions and small changes.

Steve - What does cleaning the data mean? Andrew – It's when we check the model to see if odd things are happening with the data output such as trees shrinking with no damage code or trees disappear and then re-appear in later years. They also look for data entry errors.

Connie gave a presentation on the growth and yield model.

Pete – Is there any separation between managed and unmanaged stands or is this better data? Connie – This is showing primarily natural stands.

Connie/Andrew - Want to emphasis how important bark ratio equations are because physically we measure outside of the bark but the model measures inside the bark.

Site quality declines with increasing slope and S/SW aspects. Maximum basal area is a way that the model can be constrained. Model can also be constrained by maximum stand density index.

Doug – When will the mortality model come out? Connie - It depends on when Ft. Collins FES prioritizes this. It's hard to say when this model will be worked on.

Ash - Do you think the predicted growth of living trees is good? Connie - Once you get past year 80 we get less and less confident in the model results.

Pete - How well does the model work if you have a mixed species stand? Connie - You can break it down by species based on original information that was put into the model. So if you are interested in mixed stand data you can put that information into the model.

Pete - Which model performs the best to look at riparian areas in western Wa? Connie - If you are primarily interested in long-term mortality none of the models have good enough data to give you accurate estimates. Organon has better prediction on managed

stands but it's primarily Douglas-fir but it does have info on other species. It is probably the model of choice for intensely managed Douglas-fir stands but can work pretty well for other species. Andrew - It depends on the user which model is the best. It depends on how familiar the user is with the model because you can tweak the numbers. If you know the conditions you're growing trees in and the assumptions that went into the model you can really fine tune things and get some good numbers. Every user should be as educated as they can on the model they are using so they can know how confident to be in the model results. He would recommend contacting people who developed models with specific questions to get detailed information on specific aspects. User really needs to know what they are doing or work with people that understand the model. No model will keep the user from putting bad data into the model. Can look at user guides or web sites to answer specific questions or assumptions that went into the model. It's all documented, but it doesn't come with the model. When you download model there should be documentation on same web-site.

Steve - Is there any plan to continue data collection and improvement of model?

Andrew – There is always a funding constraint, but as long as there is funding we can collect more data and work on the model and update equations. It depends on funding and people's priorities. Continued data collection is planned at these plots, but it depends on funding if it can be continued into the future. FIA is mandated to collect this data.

Pete - Is there research that site elevation and aspect means poorer site quality? Connie – I did research in 1986 that specifically addresses this, and it did show these correlated. Half of the model is based on these characteristics.

Doug – Are there any studies on leaf litter production and nitrogen and higher production? Andrew – There's nothing recent on this that he knows of. Even old studies are just descriptive not experimental. Not enough work done to make this usable for a high number of diverse sites.

### **Reviewed assignments from last meeting**

<b>Outstanding Items from March Meeting:</b>	<b>Assigned</b>	<b>Completed</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. Temporarily on hold due to work load and staffing changes at NWIFC	Nancy Sturhan	No, Nancy got pulled to work on other things so a meeting hasn't been arranged yet.
Re-write SAG request for \$20,000 for temperature sensors ; make it more accurate to actual request	Bill Ehinger	Need to forward to Linda.
Clarifying details on rules and guidelines that are not being followed.	Steve McConnell	Still working on documents; need to form a committee willing to review these, meet and discuss

## **SAG Requests**

### **Stream simulation culvert review request**

Need to assign CMER reviewers. Discussed that it isn't reasonable to review all CMER review comments during CMER meeting because we don't have time. Julie thinks the final doc needs to be reviewed by CMER not all of the comments. We mainly need to make sure that the reviewers' comments are adequately addressed not that CMER review all of them. Curt - what is the process, is it going to be case by case? It will go back to Policy with recommended changes for them to determine the course of action. Doug - that's reasonable because this was requested by Policy and it's kind of a hybrid project. The reviewers just need to know if their comments were addressed and if not why. Todd, Doug, and Chris volunteered to review the course of action. Comments will go to Terry by May 10<sup>th</sup>. It will be revised and come back to CMER at the May meeting.

### **WETSAG scoping paper reviewers**

Scoping doc has gone through thorough review in WETSAG and they are requesting CMER review of the document. Doug, Lyle, Todd, and Nancy will review scoping doc and send comments Candace Cahill by May 13<sup>th</sup>.

### **RSAG/LWAG Type N experimental study – modification to bedload method**

Bill - The current bedload sampling methodology is similar to that outlined in Bunte et al. (2004), which involves using a bedload trap with a 3.5 mm mesh net to collect bedload over a one-hour time period. After collection, the bedload is separated from detritus, ashed, and weighed to determine the amount of bedload transported.

To date, the samples collected have had little or no bedload because 1) we cannot time our sampling to the high flow events and 2) the sampling time is short.

In contrast, drift is collected with a 250  $\mu\text{m}$  mesh net for about 24 hours in low to moderate flows and as long as practicable in high flows. The entire contents of the net are collected and processed in the lab. Sediments are sorted into the miscellaneous components. We propose to drop the bedload sampling for the remainder of the study and use the weight of the miscellaneous drift component after ashing to estimate bedload.

Jenelle - concerns with this because the time to get bedload transport is during high flow events and we can't do this because it will blow out the net. She suggested that we shouldn't do bedload at all because we aren't capturing an accurate measure of bedload transport anyway. Doug - agrees that we don't need this because it's a waste of time and money. Since ashing all suspended sediments, we are already capturing what we can. CMER agrees that we should drop the bedload component entirely.

### **LWAG SAG request for pd-pc study design approval**

Marc – A couple of things have happened since the SAG request went out to CMER. One is an e-mail from Chris that had some issues regarding forwarding it to ISPR. Since Chris's e-mail didn't go out until April 21<sup>st</sup>, LWAG hasn't had a chance to adequately respond to these comments so they want to pull request. Sally recommended meeting with Curt, Chris, Sally, Marc, and A.J. after CMER meeting to discuss concerns. Curt

thinks the study might not address the necessary policy questions and that it maybe a process discussion.

### **SAG Items**

#### **UPSAG, Post Mortem – Dieu and Kurtenbach**

Julie and Amy met with UW to make sure that study design is robust and will answer our questions. They made sure to include the Hood Canal area in the area to fly. Advertised RFQ and got one bid from Matt O'Connor. He is a good contractor and has worked on CMER projects before. The contract has been signed. Have not fundamentally changed study design, but want to analyze first 6 sites for calibration on the rest of the sites. Plane has flown one day so far and has taken about 600-1,000 photos. They covered about 1/5 of the study area which covered the Westside of the study. Venice and Laura looked at photos and they look great. There are about 4 more days of flying. They are working to find some people to do photo interp. It will take about 40 hours of time. May need to have a training session with photo interp people to make sure they only did fresh landslides. Amy - request that people send her names of people they think may be able to help with the photo interp work. Want to get CMER approval to take pilot project of analyzing first 6 sites to Policy and then to board for approval.

#### **Bull-trout Temp Study Site Selection update and Power Analysis – Ehinger, Jackson, Moon**

From handout, Eddie Cupp calculated change from first post-harvest year (only for sites for which he had data, not all sites) and power analysis of summary of change in max daily temperature. Response of those streams to harvest is shown in figure 1. Min detect difference was selected (for no particular reason) at 1 degree C. e.g. – have 80% chance of detecting a 0.1 degree C change post-harvest for treatment sites. Fig 2 is same for 7-day average of daily max. Fig 3 lumps BTO and F&F sites together.

How to tell difference between BTO response and F&F response? Fig 4 eg - 80% chance of detecting change at BTO versus F&F. Regression developed (Fig 5) that shows at this time that there is not a lot of variability among responses; responses are consistent among streams. Fig 6 is similar to Fig 5. So, looks like we have reasonable power for detecting important temperature differences with 15 sites.

Terry (BTO Temp/Solar Study) – We currently have 15 FFR sites, 12 BTO sites in the post-harvest collection or likely phase. We are still working with a couple landowners, including DNR State Lands to keep a few more sites. So we may be able to keep more sites, but number is unknown at this time. We will continue to try to keep as many sites as possible. May include doing some post-hoc analysis on some sites that have RMZ-only harvest in order to determine the effects of this type of harvest on the study results. Issues to be anticipated are: low-flow (can't get temperature data); fires; windthrow; etc. Having a greater number of sites will help to deal with unanticipated events and will increase the ability to detect smaller temperature differences/changes.

Teresa Moon (BTO Add-on Study) - BTO add-on study loses more sites than BTO temp-shade study because the sites with major site disturbance such as roads in the inner zone and adjacent harvest affect our study differently and have to be dropped. Dave Schuett-Hames talked with Bob Conrad (NWIFC biometrician) to see if we could figure out the minimum number of sites we need. Bob said that variability from the ten sites that we currently have data on are not enough to accurately do an analysis to determine a sample size. He recommended collecting data at our sites this summer and then come back to him to see if we have enough data to complete the analysis of minimum number of sites for BTO add-on, based on results from this summer. RSAG decided that riparian-only harvested sites will not work for this study. Sally states that there might be a possibility to have some of the uplands also harvested to make the sites useable for this study.

Pete - Investigated why DNR State Lands has not been able to harvest these sites. Due to State mandates, the DNR just doesn't have any flexibility to put out an unprofitable harvest for study purposes.

Chris thanks Teresa and Dave Schuett-Hames for their hard work to try to keep sites.

#### **WDFW amphibian reports - Cramer**

Darin - Seep study 1-3 did not come to CMER in March as scheduled. But Dunns and Intermittent Streams phase I did come as scheduled. We update the deliverable schedule table as much as we can but we have nothing to hold WDFW to keep on this schedule because they have already been paid for all the deliverables. Marc Hayes keeps plugging away at them and has committed to finishing them it's just a matter of time. Sally mentioned that we can limit the amount of new projects we give to WDFW until we get these deliverables.

#### **Hardwood Temp Study**

Mark Hunter is in a new job and isn't going to have much more time to contribute to finalizing the hardwood temp study. RSAG sent memo to Mark and Tim Quinn regarding revisions that need to be made to final report in January. These are big revisions that need to be made, not small and they haven't been fixed so RSAG isn't sending it to CMER for review. Darin - concerned that this won't be resolved before the end of the fiscal year, so who will work on seeing this project through? Chris will send Darin a copy of the memo that went out in January. Bill - there are mostly technical writing issues in the report. Terry - Mark told her he doesn't know why it's being held up because he thinks he's addressed the concerns. Bill - maybe he doesn't understand what the concerns are because he's been told several times what they are. The report has gotten better but it's still not fixed. We need to see this as a WDFW issue because the contract is with WDFW not Mark. Chris - all the deliverables haven't been met so we can't forward it to CMER yet. Darin - need to have in writing what is acceptable and meet with his boss, Tim. Chris - RSAG has already done this twice and we don't need to do it again. Darin will take that list of things that need to be fixed and meet with Tim and Mark. Steve - can we use the technical editor that we have talked about or does Mark



have to fix this? Mark Hicks - reviewed this and thinks it's beyond a technical writer because it needs to be redone by someone who is familiar with the raw data.

### **Fish passage group – Culvert Test Bed - Jackson**

Study plan course of action went through fish passage subgroup and didn't get any comments. It was sent to three CMER reviewers and got replies from Nancy, Curt, Todd, and Chris. All thought that this could move forward to Policy subgroup except Chris. Terry expressed confusion and concern over whether or not Chris's comments should have been dealt with during the technical subgroup review (since he is a member of the subgroup) or CMER review. Because he couldn't meet the subgroup review timeline, he had to submit his comments during the CMER review period. Since his comments came in on the last day of the CMER comment period (the day before the CMER meeting), there was a problem addressing his concerns in time for the CMER meeting. Chris - the action plan comments were due yesterday. He said usually there is a two-week response period so it is unrealistic to forward this to CMER the day after comments were received. Terry - since there weren't any substantive comments from the other CMER reviewers, and comments from Chris were more policy-oriented than technical, can we move this forward to policy? Doug - what are the technical concerns? If they are policy concerns not technical issues than it should move forward to Policy and move forward in CMER. Chris - the review table did not say what kind of comments they were (editorial, context, etc.). Feels like he didn't get time to re-review how his comments were addressed before it being forwarded to CMER. Typically there is a two-week window for review. Doug - wants fish passage group to meet with Chris and resolve his comments; and if these are resolved to Chris's satisfaction, will CMER approve this to go to Policy? CMER approved that this can move forward to Policy contingent on Chris's comments being addressed. Chris - concerned that process was not followed and that there wasn't adequate time for review and to address comments. Darin - this is a re-occurring issue on several docs being delayed and requesting more time for review and holding up docs. If reviewers can't get to docs for review in the set timeline they need to contact the pertinent people. Sally - would like to go with Doug's recommendation to meet with Chris and resolve his issue. Todd – what's the process for when reviewers don't get comments in on time and hold up docs. Chris referred to the PSM. People need to follow these guidelines. Sally - as a general rule, when someone commits to being a reviewer, they are committing to reviewing things by a timeline and getting things reviewed on time. Reviewers need to step up and meet these deadlines; and if they cannot, they need to work out an arrangement to meet a new deadline. If someone is not an identified reviewer and they say they need more time, we shouldn't hold up a project for this, but we also have to have consensus. So it's a balance and it will be somewhat on a case-by-case basis.

Meeting with Chris may not work b/c other CMER reviewers won't have the chance to see the responses to these comments prior to it going to Policy. Doug - this is time sensitive so it needs to get to Policy as soon as possible to give them ample time to review. Terry – Since we won't be able to get the budget request to the May Board meeting, it will have to wait until the August meeting. So even if we get it to Policy as soon as possible, it will still be constrained by the August Board meeting timeline. Any

changes that come from Chris's comments need to get re-reviewed by CMER reviewers and then it will go to Policy.

### **CMER info group - Sturhan**

Meeting April 28 at the NRB. Nancy will get a hold of Teresa to make sure they have a meeting room scheduled at the NRB. Nancy will bring proposal to CMER at May meeting.

### **SAGE study strategy**

Todd wants part of science session at May meeting to discuss Riparian Eastside Project and SAGE strategy.

### **FY 09 workplan and budget - Butts**

Need to approve section 1-4 of workplan. Some changes made, mostly referred to strategy. Tried to stick to CMER and Board process and took out the mention of Policy decision-making because there are some pieces in dispute. Steve - thought this was not final and that, based on the voicemail message Sally had left him when she advised him that she had sent the document as it currently existed to CMER, she had wanted him to bring additional comments to this meeting since she was going to be out of her office for the remainder of the week preceding the CMER meeting. Sally - I talked to Steve and I thought the comments I received were his final comments and I incorporated them into the workplan. We need to approve this at this meeting and Sally thought this was pretty clear because this was an action item on the agenda and it was in last month's meeting minutes. Sally - surprised that Steve thinks we were going to have more rounds of review of this doc. Sally asked what Steve's specific concerns were. Steve - his concerns should be addressed in small group not at this meeting because it would be more productive and was the process that had been agreed upon. Sally - we have non consensus on chapter 1-4 so we will have to forward ch. 5 on to Policy for approval with a cover letter stating why.

Doug pointed out that in the workplan on page 1, first paragraph that is highlighted; it should say that reports that are technical docs that would inform CMER would not need to go to ISPR unless CMER decided that they needed to go. The wording in the workplan now says that all final reports will go to ISPR; is that what we intend it to say? Steve - the WAC's, EIS, RCW, etc all say that all final reports go to ISPR. Doug - It says in the Forests and Fish Report that this is only for final reports that inform a rule change not all reports. Steve advised Doug that he was working on a report that addresses this issue specifically that he will distribute to CMER soon that is based on all relevant documentation including WACs, RCWs, FFR, the Board Manual, CMER PSM and etc. Steve suggested that Doug consider the information in this report.

### **Co-chair discussions - Butts**

Sally announced that she is stepping down as Co-chair in July because she is going to law school. We really need to look for more co-chair nominations. Darin - people need to be nominated at this meeting, it can't wait. Nancy nominates Mark Hicks, Julie Dieu, and Chris Mendoza. Terry is already nominated. Sally - recommend that we forward the

names to Policy and they figure out who's going to allow time for their CMER rep to be a co-chair. Nancy suggested that Terry be cautious and NOT accept a co-chair position unless someone else steps forward as well. Terry indicated that this was an important caveat to her availability. She is not willing to do this without a co-chair.

Sally - can we have a CMER meeting on the eastside prior to October? Todd will talk to Linda about when the best month will be to host that meeting. Jenelle recommended having a meeting at Central University in June or July since school is out and there should be availability.

**Items going to Policy meeting in May**

Post Mortem – Policy needs to be informed of the status of the study design and that no substantive changes have been made.

CMER Co-Chair replacements

FY 09 Workplan

Reactivate Policy's fish passage sub-group.