# **Cooperative Monitoring Evaluation and Research Committee** (CMER)

# October 25, 2011 DNR/DOC Compound

**Attendees** Representing

*Hicks, Mark	Department of Ecology, CMER Co-chair	
Hitchens, Dawn	Dept. of Natural Resources, CMER Coordinator	
Hotvedt, Jim	Dept. of Natural Resources, AMPA	
*Jackson, Terry	Washington Dept. of Fish & Wildlife	
Kay, Debbie	Suquamish Tribe	
Kurtenbach, Amy	Dept. of Natural Resources, Project Manager	
*Kroll, AJ	Weyerhaeuser	
*Lingley, Leslie	Dept. of Natural Resources	
*Martin, Doug	Washington Forest Protection Association	
McCrea, Chad (ph)	Spokane Tribe of Indians	
*Mendoza, Chris	Conservation Caucus Contractor, CMER Co-Chair	
*Miller, Dick	Washington Family Forestry Association	
Roorbach, Ash	CMER Staff, Northwest Indian Fisheries Commission	
Sturhan, Nancy	NWIFC	
Schuett-Hames, Dave	CMER Staff, Northwest Indian Fisheries Commission	

<sup>\*</sup> Indicates official CMER members and alternates; ph indicates attended via phone & v indicates attended by video conferencing.

## Agenda:

Amy Kurtenbach requested to add an update for the CMER reviewers for the Bull Trout Temperature study. This is the study Terrapin is completing.

Nancy Sturhan announced Lyle Almond is no longer with RSAG, as he went to Europe to work on his graduate studies. This is a CMER member position and this will need to be replaced. Chris Mendoza added that Joe Murray is chairing RSAG and needs assistance. RSAG is now in need of a co-chair.

## **Business Session**

## ➤ CMER Science Topics (Monthly Meetings)

Mark Hicks facilitated the discussion on topics and need for work sessions for the next CMER science sessions. He is looking for presenters on extensive temperature monitoring that are doing something different from the work CMER is doing. He would like to get a presenter that has used the rotating panel and share this with CMER.

Doug Martin shared there is a researcher in Victoria, B.C. that has done extensive work on 1,000 sites and used pre and post treatments.

Chris Mendoza asked CMER members to follow up on their suggestions for the monthly CMER science sessions so that CMER can update the list and plan accordingly.

➤ CMER Science Conference – *Update on Date, Logistics, Timeline & Guidelines*The CMER Coordinator announced the date and location for the 2012 science conference has been secured. The date is March 27, 2012. The location is the auditorium at the Department of

Social and Health Services Office Building 2. This is the traditional place where the previous conferences have been held. CMER will be charged for an hour of technical support to set up the microphones, lights, but not for the auditorium. Dawn will be investigating the coffee service and videotaping the conference costs. CMER members agreed to the following outline of the conference.

Presentations for the morning science session include:
RSAG - Hardwood Conversion case studies & Type N BCIF
LWAG -Type N Amphibian project, Buffer Integrity-Shade Effectiveness
CMER Information Management System Project
WETSAG - Wetlands Literature Synthesis Review
SAGE - Site Selection by Greg Stewart

The afternoon session will be devoted to the Adaptive Management Program: Framework & structure – Jim Hotvedt & Chris Mendoza CMER research resulting in FP Board rule making – Mark Hicks & Chris Mendoza Other Habitat Conservation Plans – Doug Martin has two tentative commitments (Plum Creek & Port Blakely) to talk about their AMP structural framework, what they are actually measuring, and if research findings validate the assumptions in their HCP. He is still looking for a 3<sup>rd</sup> organization.

Terry Jackson suggested "challenges and successes" be added to the CMER research prompting FP Board rule making presentation. She added that the lessons learned matrix that Nancy Sturhan developed could be a part of this presentation.

Amy Kurtenbach asked about the use of contingency funds to support contractors to present on the wetlands literature synthesis project and the amphibian genetics study. Chris Mendoza shared that typically the SAG sends in a request itemizing the contractor's science conference costs for CMER to review and approve. This allows CMER to track and compare contractor costs to ensure the most efficient use of a limited funding source.

The CMER coordinator will send out the overview of the timeline and presentation protocol to SAG co-chairs. December 20<sup>th</sup> is the first deadline for SAG confirmation of presenters and topics.

#### **Science Session:** CMER Information Management Systems Project (CMER IMS)

Bruce Jones, Director & Ron McFarlane, GIS Analyst from the Salmon and Steelhead Habitat Inventory and Assessment Program at the Northwest Indian Fisheries Commission (SSHIAP – NWIFC) presented on the CMER information management system project. The CMER IMS project will be moved from a compact disk to a web-based application. This is due to the Windows applications changing this year and next (thereby changing GIS capability). SSHIAP will need to move the Access database into a sequel server application. The sequel server will have the same query capabilities as Access in addition to other capabilities. All eight CMER projects will be transferred to the sequel server. This system is web-based with secured log in access. The NWIFC can organize the log in for secured groups; they can carve off layers for public and CMER-only access. The sequel server should be a little more intuitive to work with and there is a secured map interface for CMER use. They will have training for CMER members. They plan to start in January, once the contract is finalized, and to meet with the subgroup in order to get CMER projects updated and to develop a list of CMER users for the webbased application. This will be presented at the CMER annual science conference on March 27<sup>th</sup>.

## **CMER/SAG Items:**

#### RSAG

➤ Solar /Shade Study – CMER Conditionally Approved ISPR Comment Matrix

Amy Kurtenbach reported RSAG is requesting CMER approval (final or conditional) of the ISPR Peer Review Response Plan. RSAG and Leslie Lingley had a chance to review the comment matrix from ISPR. Originally there were three CMER reviewers: Leslie Lingley, Todd Baldwin and Steve McConnell. Steve McConnell is no longer a part of CMER. Leslie Lingley has reviewed the peer review response plan as prepared and approved by RSAG. This is the response plan to the ISPR comments to the Bull trout Solar/Shade report as completed by MB&G.

Amy Kurtenbach requested CMER approval of the ISPR Peer Review Response Plan & to direct the contractor to complete the final report based on the direction provided in the response plan. This request for CMER conditional approval will avoid waiting until the November CMER meeting for approval thereby delaying a month. This will maintain the schedule with the consultant's contract and associated work product milestones.

Leslie Lingley shared she did not have any problems with the matrix of the response plan, but that based on the associate editor's comment this study cannot answer the critical question with the results of this project by itself. CMER needs to understand that this conditional approval is based on the reviewers' comment as quoted from the ISPR response matrix:

- "...However, the lack of a random sampling procedure for site selection and the rather wide variations in computed treatment effects at individual sites contained in the pooled average (range was -69 Wm-2 to +60 Wm-2, while pooled average was 3.0 Wm-2), which were not separately tested or adequately explained, raises serious concerns over unconditional adoption of the "all available shade rule" based on this study alone. Reviewers and the AE concur that the conclusions from the study should be carefully qualified to note possible extraneous factors and non-representative conditions that may have affected these results. In addition to consideration of other comments in this review, two major recommendations for improvement of this study are: (#1, #2 below)..."
- "The representativeness of the streams sampled should be clarified through comparisons with conditions elsewhere in the entire Bull
  Trout Overlay region. Representativeness of conditions such as riparian forest characteristics, stream widths, topographic shading,
  stream azimuths and other site characteristic that can affect stream shading need to be documented.
- 2. Despite the emphasis on a pooled statistical analysis of data from all 16 sites in the study, variations in treatment effects at individual sites should be examined in more detail to help clarify the role of forest harvesting versus the role of other factors. Some variations may be due to experimental difficulties such as variations in the usable number of observations at each site, site changes during the sometimes lengthy period between the pre-harvest and post-harvest measurements, variations in cloud cover between pre- and post-harvest measurements or variations in the day-of-year or solar angle between pre- and post-harvest measurement times. Alternatively, computed treatment effects may have been influenced by other site conditions such as initial forest characteristics, topographic shading and/or stream azimuth. Without a more detailed documentation and analysis of such effects, the causes of variations in computed treatment effects in this study remain uncertain."

Chris Mendoza motioned for CMER approval of the ISPR Peer Review Response Plan for the Bull Trout Solar/Shade report.

Mark Hicks seconded the motion.

CMER members approved the ISPR Peer Review Response Plan and directed the contractor to complete the final report based on the direction provided in the response plan.

#### CMER Protocol & Standard Manual (PSM)

➤ AMP Diagram – CMER Conditionally Approved the diagram (Option #3)

Ash Roorbach shared the diagram that is an updated version from the last CMER meeting. The purpose of the diagram is to describe the different elements of the AMP and their relationships to

one another. The older version that A. Pleuss developed worked for its time, but it is time to update the illustration of the AMP process. This updated version is an outgrowth of the work by Ash Roorbach, Mark Hicks, Terry Jackson, Chris Mendoza and Amy Kurtenbach.

Chris Mendoza stated when reading this flowchart, it's important to understand that there are different structural frameworks and administrative flow paths in the AMP. This flowchart is intended to show the connections and information flow paths between AMP participants. The flowchart is not intended to detail every single interaction. The older version had a solid line depicting a "fire wall" that separates Policy from CMER that has been replaced with a dashed line. The dashed line is meant to imply that while Policy and CMER interact as required by the AMP, Policy does not influence the way in which CMER science is conducted.

Leslie Lingley stated the PSM is being overhauled and that it may be premature to revise the flow chart before the rest of the sections. For example, CMER can mean SAG in the PSM, those sections in the PSM need to be updated. Does CMER want this diagram to be a representation of the PSM or a higher level? Leslie added that the diagram needs to have something that represents DNR's administrative support, especially the contracts and records management responsibility.

Mark Hicks stated the diagram is to reflect the structural relationships. The diagram needs to match up with the text. This is to show the general relationships. The administrative responsibility is true with the other agencies around the table as they have records management responsibilities as well.

Chris Mendoza added the administrative support is already discussed in the text, and will also be revised, and that assuming readers will solely rely on one flowchart to understand the details of AMP participant interactions is unrealistic. He suggested that the flowchart maintain simplicity complemented by details of administrative interactions in the text.

Doug Martin stated on the surface the ISPR location is incorrect in the diagram. ISPR goes through the AMPA. There is no direct connection with CMER, as this is an independent body from CMER. There is a solid line between AMPA and ISPR.

Mark Hicks replied CMER does do all of the work to set up the ISPR, so it makes sense to show some linkage between CMER & ISPR.

Doug Martin added this was his point - there is a firewall between the AMPA and the ISPR committee. It is supposed to be independent and the lines do not reflect that.

Ash Roorbach stated this diagram is intended to describe working or functional relationships. CMER needs to ask the question - who does the work? The AMPA does not. The CMER members are doing the work to prepare for the ISPR. Why not reflect that? It seems misleading not to reflect that in the diagram.

Amy Kurtenbach replied what Doug is trying to communicate is the perception that ISPR is independent. The way it is linked up in this diagram it is not independent.

Terry Jackson shared she thought the diagram shows it - ISPR answers to the AMPA, but the difference is that there is a working relationship with CMER. As far as the point of independence, the reviewers are independent, they do the blind review. There is a functional relationship with CMER and ISPR.

Nancy Sturhan added the legend below the diagram provides detail about the lines and their relationships.

Jim Hotvedt stated he understood both arguments. He proposed that CMER vote on this specific item related to the interaction line and if there is a disagreement, CMER should default to the old document where there is a line between ISPR & CMER. In this case it sounds like no changes are warranted for this one interaction line. Keep it a solid line and then move on to discuss the AMPA.

Chis Mendoza added the functional relationships are all different depending on who's doing the interacting; again, simply drawing interaction lines in a flowchart cannot tell you the full story, and you have to read about them in the chapter on ISPR in the PSM.

Amy Kurtenbach made the suggestion to hold off on deciding about the diagram as a lot of folks have not read the PSM. The next chapter talks about roles and responsibilities and this will need revisions. It may be best for CMER to have the discussion on the diagram in the context of updating the descriptions. There is a paragraph about the diagram and it might be beneficial to revise and clarify the paragraph. She added the circle identifying regions is not current. All the records and retention functions are housed at the DNR headquarters. The contract support should be on the diagram since regions do not have a role in CMER.

Nancy Sturhan suggested the DNR is really DNR Forest Practices Division (FPD) and under that box is where board staff and project managers should be located. The rest of DNR is not involved in CMER. She agreed to drop the regions and add the contracting part in the FPD. Mark Hicks agreed that that will work visually. Jim Hotvedt agreed to the need to simplify and that the regions are not part of CMER.

Terry Jackson added CMER needed to think about how to do the connections if you add the contract and coordinator functions. How much to lump and how much to provide detail? Mark Hicks suggested adding a dotted line showing functional relationship in CMER. Jim Hotvedt added that if we need to prove that we can administer contracts, need to show that the relationship is in CMER and not DNR.

Ash Roorbach suggested changing operations to implementation.

Chris Mendoza added he understood Jim's statement about contracting purposes and that initially when they updated the diagram, they did not think about it. If CMER wants to show general relationships, simplicity is best. He is concerned about having a flowchart that is more complex than needed.

Chris Mendoza suggested CMER take a vote on this and that if the vote is a non-consensus vote, then the process requires that CMER return to the current version (approved in 2005) of the AMP flowchart since that is what was last approved by CMER consensus. He advised the TAG in updating the SAGs.

Ash Roorabch added where there is a disagreement, CMER can decide to default to what is in the PSM, and where accuracy is needed, CMER can take it to the TAG.

Chris Mendoza added in this case there already was a TAG and CMER weighed in on it.

Ash Roorbach suggested CMER may want to have the discussion on process first before voting on the diagram.

Chris Mendoza asserted CMER needs to vote on this decision item.

Nancy Sturhan added not to forget Amy Kurtenbach's suggestion about reviewing the chapter on roles and responsibilities first, while there is a conditional approval on the diagram, and revise where needed after the chapter revisions.

Chris Mendoza motioned for a vote of approval on the following three options:

- 1.) If CMER members were opposed to the AMP diagram without changes. Two CMER members voted yes, they were in opposition (Leslie Lingley & Dick Miller).
- 2.) If CMER members agree to the AMP diagram with suggested changes (shrinking DNR box to DNR FPD, eliminate operations & regions, ISPR line with AMPA, & the contract & records function in DNR).

CMER members were in non-consensus and they did not approve the AMP diagram with suggested changes.

3.) If CMER members conditionally approve the AMP diagram as recently updated with the understanding that it will be revisited and revised based on reviewing the chapter on roles and responsibilities in the PSM.

CMER members were in consensus and approved option #3.

➤ Process to Revise the CMER Protocols and Standards Manual – CMER approved the process for revisions with suggested changes

Ash Roorbach reported that in an attempt by the CMER co-chairs, the AMPA, Nancy Sturhan and himself to restructure the process of updating the PSM, and based on experiences so far, it has not been an efficient process. The work group has developed a revision process in order to focus CMER efforts in the substantive issues and decisions. There are three types of revisions occurring in the PSM:

- 1) Rule
- 2) Update
- 3) Style

#### Steps in the PSM revision process

**Non-TAG** content track - Ash Roorbach and Nancy Sturhan will be responsible for reviewing and facilitating chapter revisions; submitting to CMER when decisions need to be made using comment matrix & then returning to CMER with suggested revisions; and they along with CMER co-chairs and the AMPA will develop final recommendations on PSM revisions based on CMER and TAG discussions and input.

TAG content track – TAG will meet to develop alternatives that address the issue(s); Ash and Nancy will present the alternatives developed by the TAG to CMER members; CMER members will review alternatives; Ash and Nancy will generate a response matrix based on comments received from CMER members and will discuss with TAG members; and Comment matrix with responses from TAG will be presented to CMER for discussion.

The time frame established for both routes are 3-6 months. Both routes end up at CMER with final decision/approval for finalization in the PSM.

Amy Kurtenbach suggested this document be added as an appendix to the PSM. She also suggested that names be removed and insert titles.

Leslie Lingley added she thought this was a good document and with some minor changes it would work for CMER.

Mark Hicks stated the flow chart needed to be updated to be technically correct.

CMER members were in consensus and approved to use this document as the process guidance for the PSM revisions. These changes were requested: take out names and put in editor and lead editor; change #9 in flow chart to say up or down vote and if no, goes to the default language; make technical corrections; and if there are disagreements they need to be identified as a parking lot issues and send them to Policy.

#### **Updates:**

#### **CMER**

#### ➤ CMER 2013 Work Plan

Chris Mendoza announced it was that time of year to update the work plan for 2013. The main emphasis will be for SAGs to update their information in their respective sections and the link to adaptive management. CMER needs to have this completed by February 2012 in time for Policy and their budget retreat in April 2012 and for the Forest Practices Board meeting in May 2012.

Terry Jackson has volunteered to be the editor for the work plan. She requested that the CMER coordinator send out the 2012 work plan with the title SAG review. She asked SAGs to starting updating their sections in track edit changes and send their updates to her.

#### LWAG

#### > Type N Buffer/Shade Project

Amy Kurtenbach reported Marc Hayes is working with Jim McCracken to get his completed and handing in. This is scheduled to be done early next year.

#### RSAG -

#### ➤ Hardwood Conversion Project

Ash Roorbach sent out letters to landowners and Pete Heide followed up with phone calls. The landowners are okay with CMER coming back in 2016 for data collection. This has yet to be determined by RSAG. Ash and Dick Miller presented to RSAG an outline of the synthesis chapter of the final report. They received feedback from RSAG members. Ash has weekly meetings set up to continue the work. The contractor will have a final draft for CMER to review by end of December for the case studies.

#### > Type N Hardrock Study

Dave Schuett-Hames reported Bill Ehinger presented some initial analysis of the turbidity data. He asked RSAG if he could continue to collect data to the end of year without additional cost. This was discussed as an option to extend one more year of data collection. He is technically done with the study design. The Department of Ecology has agreed to take on the costs of this extension. Bill Ehinger will need to think about this extension of an additional year of data collection.

#### ➤ Bull Trout Temperature Study – Terrapin Environmental

Amy Kurtenbach stated RSAG needs CMER reviewers for the temperature study report. The contractor has to the end of November as the deadline for a draft report. She would like to get CMER reviewers lined up so as to include them in the process now. CMER reviewers so far are Leslie Lingley and Todd Baldwin.

#### SAGE -

## > Forest Hydrology Project

Amy Kurtenbach reported SAGE is actively looking for sites. SAGE is close (80 sites now). Greg Stewart is filling in the holes for the site selection process and expected to get 100-120 sites. Hancock is expected to provide 25 sites and SAGE members are working with them. If SAGE is unable to get the 100 plus sites, she is working with Greg to have the contractor work on getting the rest of the sites in the following field season (as a backup plan, if SAGE is unable to get the full 120).

## Eastern Washington Riparian Assessment Project

Ash Roorbach stated he has resolved some of the data quality questions with SAGE. George McFadden works for Bureau of Land Management and has opened up a slot for the FES training. Ash will be able to attend that training. This will help EWRAP and there is no charge to CMER as BLM is covering the training cost.

#### UPSAG-

## Unstable Slope Criteria Scoping Strategy

Amy Kurtenbach relayed UPSAG is working on a draft charter; they are working through the problem statement and the content of the charter. The charter will be a part of the CMER November meeting. The UPSAG meeting has been moved to the November 3&4. Please coordinate with one of the UPSAG members for details.

Leslie Lingley announced Casey Hanell from state lands has joined UPSAG. He replaced Jeff Grizzel.

## ➤ Post Mortem ISPR Review Response Process & Schedule

Amy Kurtenbach identified the proposed schedule and process steps for the ISPR stage. The following table reflects this:

Schedule	Mtg. Venue	Task
October 2011	CMER	CMER process review Briefing/update
November 2011	UPSAG	Draft Matrix (UPSAG review comments, co-authors comments).
	UPSAG/ CMER	Complete ISPR matrix for UPSAG/CMER review and comment. Following the Color coding process, send matrix to CMER for approval or to forward non-consensus responses (color coding process). This should comply with "three months of receiving the comments from the AMPA." (PSM 7.9.1, C,2) UPSAG meets first Tuesday of the month. Issues that cannot be resolved (red) can
December 2011	OT OTOT CIVILITY	be forwarded to CMER for the December meeting.  Matrix discussion based on decision made at December CMER meeting. If the matrix is approved, work on the completion of the
January 2012	UPSAG/CMER	final report. If not, CMER will be following ISPR review non- consensus process in accordance with the PSM.
February 2012 & Steps Forward	UPSAG/CMER	Pending CMER outcome.

#### WETSAG

## ➤ Literature Synthesis

Debbie Kay reported Dr. Adamus has provided his first memo to WETSAG. She requested that if CMER members have any research papers that would be useful to the project to send them to Amy Kurtenbach before November 21<sup>st</sup>.

## ➤ Stillwater Report Recommendations – *Discussion on Draft Response Table*

Chris Mendoza provided an overview: In 2009, the CMER and Policy co-chairs, the AMPA and CMER coordinator developed a response matrix to the Stillwater report recommendations from their April 2009 report. A TAG has been working on completing the CMER response that reflects which recommendations are directed at CMER, Policy or both. This table is an outcome of the subgroup that includes Chris Mendoza, Mark Hicks, Jim Hotvedt, Amy Kurtenbach, Dick Miller and Leslie Lingley. The section identified as "CMER Stillwater Subgroup Comments" is a reflection of this subgroup's work thus far.

#### **Discussion Points:**

Dick Miller commented on #1 where it is indicated that the SAGs will revisit L1 questions during year; SAGs do not revisit L1 questions. The headings need to line up correctly for Policy /CMER sub group; need to put all the step 1 information for CMER in step 2. Put them in the right box.

Terry Jackson added CMER revisits the research question.

Dick Miller suggested changing remedy status to status; as it has clarity in meaning.

Dave Schuett-Hames suggested comment #2 needs to be revised to reflect that CMER writes the critical questions. Policy does not write the research critical questions. He suggested consistent use of language and to clearly define the differences.

Chris Mendoza requested to have comments due by November 7<sup>th</sup> (soft deadline) in time for the mailing for the November 15<sup>th</sup> meeting.

#### ➤ CMER Task List – *Prioritization of tasks and identification of work groups*

Mark Hicks stated CMER needs to work on this after the Stillwater report response matrix is done. He has gone through the task list and will condense and refine some of the tasks; move some of them over to the updating of the PSM, and have it cleaned up for next CMER meeting. A revised CMER work list will be ready in time for the CMER November 15<sup>th</sup> meeting.

## ➤ Follow-Up from *October* 6<sup>th</sup> *Policy meeting*

Chris Mendoza reported Policy met for half a day. Policy continued discussion on their work list priorities and expect to have them completed in time for reporting to the Forest Practice Board on November 8th. Top priority is Type N/Type F - Water Typing Issues. They are working on developing a charter. This is one of the CWA milestones. Policy agreed to the content & approach of the science conference. Chris requested recruitment assistance for SAG co-chairs.

Nancy Sturhan suggested having this agenda item at the start of every CMER meeting and the CMER co-chairs agreed.

Dick Miller suggested at some point CMER will need to have a discussion concerning what will be scoped. If we have 60 projects that are ready for scoping, which ones will take priority?

Mark Hicks agreed the active discussion is important. CMER is clear in the work plan what the priorities are and Policy has approved them or re-prioritized them based on CWA or budget impacts.

Jim Hotvedt added CMER is completing a good number of reports, so eventually there will be capacity to start new projects. It would be advisable for CMER to have the discussion about what is next in line. The discussion needs to happen at the CMER level so as to come to agreement with what the priorities are in terms of Policy and our structural reality. This is critical at the CMER level as CMER does need to think beyond the CWA projects.

- ➤ CMER Report to Policy *Discussion on Items to take to Policy* 
  - Science conference date.
  - CMER four action items.
  - CMER discussion on what is next in line for project & priorities.

## ➤ CMER/SAG Recap of Assignments

- CMER coordinator will send out the science conference overview of the timelines and presentation protocol to SAG co-chairs.
- AJ Kroll will check in with Marc Hayes about the Amphibian Genetics presentation for the CMER Science Conference. Doug Martin will confirm with the three organizations he has contacted to present on their HCPs for the afternoon section of the science conference.
- CMER 2013 Work Plan CMER Coordinator will send the CMER 2012 work plan to SAG co-chairs for them to use for updating their sections. Entitle the CMER 2013 work plan - <u>SAG REVIEW</u>.
- The UPSAG meeting has been moved to the 3&4 of November. Coordinate with one of the UPSAG members for details.
- CMER coordinator will send out to the CMER listserv the request from WETSAG to send research papers for the Literature Synthesis project to Amy Kurtenbach before November 20th.
- Stillwater Report Recommendations Draft Response Table Comments due by November 7<sup>th</sup> (soft deadline) to Chris Mendoza in time for the mailing for the November 15<sup>th</sup> meeting.
- CMER Coordinator will send out the "CMER Review of Science Final Report" by Stillwater Sciences (April 20, 2009) to the CMER List serv.
- Mark Hicks will refine the CMER task list in time for next CMER meeting. This will be sent out before next CMER meeting November 15<sup>th</sup>.

#### Meeting Adjourned.