

Minnesota Forest Resources Council
Meeting Minutes
Cloquet Forestry Center – Cloquet, Minnesota
September 19, 2007

Council Members Present: Kathleen Preece, Al Sullivan, Bruce Cox, Shaun Hamilton, Bob Oswald, Bob Stine, Wayne Brandt, Dave Parent, Bob Tomlinson (in lieu of Dave Epperly), Jan Green, Bob Lintelmann, Shawn Perich

Absent: Paige Winebarger, Dick Walsh, Dave Epperly, Mary Richards, Jim Sanders

Vacant: Secondary Forest Products Industry representative

Guests: Diane Desotelle, Lucinda Johnson (NRRI), George Ice (NCASI), Art Norton (TNC), Virginia Parent, Steve Betzler (MN Power), Sandy Verry (Ellen River Partners), Rob Mackereth (Ontario Ministry of Natural Resources), Matt Norton (MCEA), Mark Ebbers (DNR Fisheries), Don Pereira (DNR Fisheries), Joe Mix (DNR Fisheries), Brian Palik (USDA-Forest Service)

Staff: Dave Zumeta, Calder Hibbard, Clarence Turner, Leslie McInenly

Staff Absent: Mike Phillips, Lindberg Ekola

Chair's Remarks

Al Sullivan opened the meeting with introductions. He provided an update on the two vacant Council seats. Gene Merriam and John Rajala have applied for Council membership. Al noted that, with help from the Personnel and Finance (P&F) Committee, he drafted and sent a letter to Jim Kochevar and Terri Leoni of the Laurentian Energy Authority in response to their concern about the biomass harvest guidelines. The letter said the Council does not engage in lobbying for one particular interest. A copy of the letter was made available.

Al asked for an update on Dick Walsh. Wayne Brandt responded that Dick is on the mend and doing better.

Al entertained discussion about the location of future summer meetings, noting that during his tenure the Council has never met south of the Twin Cities. He noted that a two-day summer meeting would make the travel distance to the south easier to handle. In addition, the Landscape Committee has received a request to have a southern meeting of the MFRC from the SE regional landscape committee. As another alternative, Council member Mary Richards has offered to host a two-day meeting at the Maplelag Resort north of Detroit Lakes. The resort is booked during the summer but would be available for spring or fall meetings. Al recommended the Council consider meeting in one location in 2008 and the other in 2009.

Dave Parent commented on a past meeting in Fillmore County. Lake City is too close to the Twin Cities, but a meeting in Winona would give the MFRC the opportunity to view the recent flooding destruction with respect to both site-level guidelines and landscape planning. Bob Oswald recalls meeting in locations such as Lanesboro and Grand Marais and noted that the Council used to travel a great deal more for meetings. Bruce Cox commented that Faribault is a valuable place to meet and would offer interesting silviculture and natural reseeding tour options. Wayne Brandt added that the Timber Producers Association (TPA) has a number of members that would be happy to arrange tours in the Southeast.

Bob Stine indicated Maplelag would be a nice location for a winter meeting. Kathleen Preece lent her support to meetings in both places and agreed that Maplelag would be a great location for a winter retreat. Dave

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* denotes action item

Zumeta commented that Maplelag has about 660 acres of land, mostly forested. Many of the resort's buildings were made from wood from the land. Mary and her husband are also past recipients of the Tree Farmer of the Year award. They also have some unique connections with the White Earth band. A meeting at the resort could provide discussion and tour opportunities regarding tourism, private land management, and tribal interests. Dave recommended that summer 2008 would be good for a southern meeting and 2009 for a meeting at Maplelag. Al concurred and stated he would inform the Council of the final decision.

Public Input/Communications to the Minnesota Forest Resources Council

None.

Approval of July 18, 2007 Meeting Minutes*

Bob Oswold moved to approve the July 18, 2007 meeting minutes. Dave Parent seconded. The minutes were approved.

Approval of September 19, 2007 Meeting Agenda*

Bob Stine motioned to approve the Sept 19, 2007 meeting agenda. Wayne Brandt seconded. The agenda was approved.

Executive Director Report

Dave Zumeta reported that he recently attended a national bioenergy conference in New York hosted by the Pinchot Institute. He gave a presentation on MFRC's woody biomass harvest guidelines and facilitated a panel. Conference attendees confirmed that the MFRC biomass guidelines are the first in the U.S.

Dave provided an update on Mike Phillips, who is making steady but very gradual progress toward recovery.

MFRC Committee Reports

Personnel and Finance

Al reported that the P&F Committee reviewed the FY07 accomplishments during its August meeting. He briefly listed a few items from the accomplishment report, noting that a tremendous amount of work is completed throughout the year. The P&F Committee also reviewed the FY08 work plan. This will be a year of challenge with unique personnel issues. Copies of both the accomplishment report and work plan were made available. The committee had a good discussion about site-level monitoring and also talked about the letter from LEA, dated 24 May 2007. Al added that Dave Zumeta's performance review is currently underway and invited Council members to provide comments.

Site Level

Dave Parent stated that much of the site-level update is available in the committee update report. The biomass guidelines are undergoing final formatting and should be available in late October. The Council will be discussing the RSTC report and economic analysis today. The DNR decided that they will not conduct site-level monitoring in the FY08 summer due to a number of factors. Two things will be critical for the 2009 monitoring: Clarence Turner's review of the monitoring program and Rick Dahlman's completion of the three year comparison monitoring report (2000-02 versus 2004-06).

Wayne Brandt stated that Council members ought to be well informed about this decision, adding that most Council members can support the decision, albeit perhaps reluctantly. He continued to state that the underpinning of a voluntary program is regular monitoring. We will have gone two years without monitoring, and he is more comfortable with this given that work will be done by Clarence to assess the program. Until a new process has been vetted and approved, there may be data questions. Wayne would like a rigorous monitoring program and commented that this decision poses some risks to the Council. Al noted that Wayne's

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comments were well spoken and reminded the Council that the decision resulted due to the concurrence of several unfortunate factors. He stated that the DNR and Council can't go three years without monitoring.

Jan Green noted that this move says something about Minnesota's policy toward monitoring. She gave an example of discussions regarding greenhouse gas monitoring and the certification of carbon. This action sends a signal and invites the question whether we can really move in the direction of monitoring at all.

Dave Parent stated his concern that biomass harvest plots will be lost simply through random selection of monitoring plots and recommended consideration of a parallel monitoring effort. He also added that if we are considering a revision of guidelines, we might not even be collecting the data that we do want under the current monitoring protocol. Matt Norton stated his concern that in changing the monitoring system and adopting new monitoring practices, one data set may not relate to the other dataset. The same problem could occur if there is a gap in monitoring and a change in monitoring staff. He suggested current staff train future staff while monitoring is on hold. Bob Tomlinson responded that we are data rich and information poor in the monitoring program. The problem is in analyzing and interpreting the data. In addition to analyzing the monitoring data, we will also assess technology and how it can be used to make monitoring more efficient. Wayne noted that while we will not be in the field for two years, there is a substantial amount of monitoring that will occur (e.g., certification programs and monitoring audits related to the Master Logger program).

Landscape Planning/Coordination

Bob Stine asked members to review the handout from the regional landscape committees. The Landscape Committee is working on developing regional landscape operating guidelines, planning the second landscape summit in January, developing a time frame for landscape plan revisions, and developing a 5-6 year schedule of legislative tasks related to landscape level activities (the 2009 legislative request needs to be given to the DNR by April-June 2008).

Dave Zumeta stated that there has been discussion regarding the need for more staff if we plan to revise the landscape plans. A budget initiative for 2009 to support additional staff is being considered. The Northeast plan will most likely be revised first, followed by the North Central plan. Dave was recently invited to the executive meeting of the USDA Forest Service Northeastern Area State and Private Forestry staff to speak about our landscape-planning program. The program is widely recognized thanks to the hard work of the staff and committees.

Forest Resources Information Management (IMC)

Al announced that, because of Jan Green's resignation from the Council, Jim Sanders agreed to chair the IMC and Kathleen Preece agreed to be Vice-Chair. Calder Hibbard reported that the IMC met in July and discussed current research and policy initiatives. A good deal of the meeting was spent discussing the strategic direction of the IMC with respect to the IIC (Interagency Information Cooperative) and the Research Advisory Committee (RAC). Discussion centered on how best to prioritize and focus work on the Council's priorities.

Jan recommended folks consider these topics that will be with us for a long time: parcelization, globalization, and carbon sequestration. Wayne asked whether the committee is considering the issue of carbon storage and suggested that the Council may want to consider the role of forests in global climate change. Jan responded that the people dealing with this issue are those on the Governor's Climate Change Advisory Group (CCAG). From her perspective the task force is a bit too "pie in the sky." Dave Zumeta responded that the legislature passed significant legislation related to renewable energy and is paying close attention to climate change. The Governor created the 56-person CCAG to develop recommendations to him by February 2008. Dave serves on a technical working group that supports the CCAG, and agrees that MFRC ought to delve deeper into this topic. Jan noted that if we think that the science for riparian management is dicey, the science for climate

change and sequestration is dicier. Shaun Hamilton agreed that the Council ought to deepen, and broaden, our consideration of climate change

Written Communications to the MFRC

Dave Zumeta noted that the only written communication was Al Sullivan's formal response to the LEA, which was provided to members in the meeting mailing.

Committee of the Whole: Council Member Reflections on Implications of the Governor's Primary Forest Products Industry Task Force Report

Al asked for Council member reflections on the task force report. Shawn Perich commented that the little he has heard is primarily alarm at the idea of raising harvest levels in a sustainable manner. Jan partially agreed with that sentiment but contended that focus on the number has overshadowed some things in the report that may actually be doable. She noted that Senator Saxhaug is supportive of land exchange efforts.

Dave Parent asked what could be done to bring the 90,000 acres of state forestland (which had been set aside a number of years ago and subsequently became part of the BWCA), or that amount of land, back into production.

Bob Stine recommended the Council figure out what role MFRC can play to advance specific recommendations. Al asked Council members what they felt would be the best way to address the task force recommendations (e.g., an ad hoc committee or staff). Bob Tomlinson agreed with Jan's comments in that the "5.5 million" should not overshadow the other recommendations. He envisions the Council playing a significant role in having a dialogue regarding parcelization and taxation. The Council should provide direction back to the agencies to help formulate priorities. Dave Zumeta responded that the Council is explicitly mentioned in one place regarding recommendation 1 (the Forest Economy Sub-cabinet). The forestry sub-cabinet is charged with monitoring implementation of the recommendations but MFRC is to determine the metrics.

Jan asked whether this task would be another unfunded mandate. Al responded that the Council needs to start working with legislators as we are getting more things thrown our way. Bob stated that the DNR has been putting proposals together for the legislative session and there is a placeholder for items related to the Governor's task force.

Wayne commented that this report has many recommendations that are similar to those of past reports (e.g. the Blue Ribbon Commission Report). A lesson for the industry is that the economic issues haven't changed. We have made progress through broader and more stable funding for the Division of Forestry, improvements in tax policy, and on some transportation issues. However, we remain stuck in neutral on forest productivity and the challenges related to the physical supply of wood. We have been stuck at 3.7 million cords of harvest (300,000 of which goes to biomass for energy) for over three years. The industry used 4.3 million cords a year, resulting in a 900,000 cord a year annual deficit. We need to have a stable fiber supply and be relatively self-sufficient. Without increased production, new facilities will not open and some existing ones will close. People won't invest in the state to upgrade or expand.

Bruce Cox stated that additional funds are needed if managers are expected to increase production without affecting their other responsibilities. The actual amount is not likely a problem, but there are professional capacity issues out there. We either reduce what we do or put additional investment into it.

Shaun Hamilton asked Wayne for his perspective on where additional resources ought to go (e.g., government or private lands). Wayne feels there is room to increase production safely and sustainably from all landowners. Dave Parent added that perhaps only 50% of the wood available comes off non-industrial private

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lands. Those landowners respond to different stimuli; theirs is not a pure input-output efficiency model. We need to link landowner goals to sustainable forestry, which in some cases would increase harvest.

Al commented that he was pleased to have staff involved in the task force and is now trying to afford Council members the time to recommend items to be taken up by the Council. He asked Council members to volunteer to serve on an ad hoc committee that would advise him regarding an appropriate Council response to the report.

Riparian Science Technical Committee (RSTC) report summary

Dave Parent mentioned that subsequent to a presentation on the RSTC report summary, we will discuss the economic analysis. Dave acknowledged Diane Desotelle's stepping up when Mike Phillips went into the hospital and thanked her for all of her help to move this report forward.

Diane acknowledged the RSTC members in attendance. She also commented that Mike Phillips should be here and noted she has big shoes to fill. Diane distributed a handout of the presentation and commented that the report does not provide black and white answers, as riparian science is very complex.

Diane provided background on recommendations and discussions about revising the voluntary forest management guidelines (FMGs), the subsequent work of the RSTC, and future work pertaining to the economic analysis. She described the role of the committee: to provide the science without specific recommendations. She summarized the RSTC definition of a riparian area and described how the group broke down the literature and topics. The committee addressed specific QTIs (Questions, Topics, Issues) as provided by the Council. Diane summarized the RSTC response to each QTI (details and a copy of the presentation can be found on the MFRC website - http://www.frc.state.mn.us/Info/Minutes/Meeting_presentations.html). She noted that the landscape context, and the importance of watersheds, came up over and over again during the RSTC assessment. George Ice added that one conflicting issue in answering these QTIs is that we tend to use basal area (BA) as a surrogate for other measurements, and that brush is not included in BA calculations.

Wayne stated his concern that the RSTC is indeed providing recommendations (see presentation). Diane responded that the scientists were trying to answer the questions and did not intend to make recommendations. Shaun asked whether the RSTC considered even-age versus uneven-age management systems. Diane responded that the science doesn't necessarily say that even-age or uneven-age matters. By managing based upon BA, the distinction does not need to be made. Brian Palik added that he has always considered uneven-age versus even-age management to be an artificial dichotomy. Sandy Verry stated that it is essential to use basal area because evaluation is based upon impact to the waterbody, not the silvicultural practice. Wayne asked about the availability of data with respect to BA statewide in riparian areas. Jan responded that the inventory is 30 years out of date. Dave Parent said the availability of data will be an important issue when the economic analysis is discussed. Wayne noted that an inventory of seasonal ponds will also be needed.

Brian Palik started his presentation on habitat requirements, noting that this report is the culmination of a challenging effort and a lot of work completed by Diane, Mike, and the committee over three years. He listed caveats related to the habitat synthesis (e.g. habitat indicators were assessed relative to a reference condition [mature forest]; responses were described as increases, decreases, or impacts; the committee assumed no blowdown occurred during the period of consideration; aquatic indicators apply only to streams of small- to moderate size and seasonally-inundated and semi-permanent wetlands, etc.). Discussion related to the committee's decision to use mature forest as the reference condition ensued, as at no point in the past did mature forest cover the entire landscape.

Al asked how important RMZs are to interior forest birds. Brian responded that it depends, because there is a tendency for RMZs to become a key terrestrial habitat for species, but the remaining habitat in the surrounding

landscape is also important. Jan added that riparian areas are identified as one of the key habitat types when habitat diversity is considered and recommended the focus should be on birds dependent upon riparian zones.

Shaun Hamilton noted that the condition of the surrounding landscape was only listed with respect to wood frogs. Diane responded that the RSTC was looking specifically at site-level considerations and, as a result, it was hard to put the surrounding forest into context.

George presented the hydrologic and geochemical synthesis from the report. He added that the committee members really tried to provide a decision space for the Council to look at tradeoffs. There was debate and disagreement regarding both windthrow and beaver effects. One important component of hydrology is how much water you get out of the watershed. It is the condition of the watershed itself (rather than the RMZ) that determines the response to harvest. For water yield, it is the overall basin condition and not the small portion of the RMZ that dominates the response. George reported that microclimate data is scarce; however the committee expects soil moisture would increase with harvesting, but that is also related to the overall watershed condition. Air and relative humidity may be moderated by water. Light will increase after harvest but the system will recover rapidly. The nitrogen (N) concentration in a stream varies due to many factors. The meager data indicates there is very little difference in decomposition between mature versus recently harvested sites. Nitrates and the relative denitrification rate are expected to be lower with a wider RMZ. There is a strong, positive relationship between total phosphorus (P) and the percent of non-forested upland; however, it is strongly connected to geology.

Shaun asked whether N concentrations reflect watershed values. George responded that, yes, the values came from a small watershed completely clearcut to the stream but then burned. Methyl mercury would increase with harvest as a result of increasing soil moisture resulting in anaerobic conditions. However, Dave Grigal did not believe there would be any differences observed due to the width of the RMZ. Dissolved oxygen (DO) is directly related to water temperature. The key is to provide shade and keep fresh slash out of the stream to avoid increasing the biological oxygen demand. As a caveat, George commented that there is some discussion now about times when some debris should be left in the stream (e.g., to provide shade to reduce solar radiation).

George stated that there have been many efforts to synthesize the effectiveness of RMZs with regard to sediment. However, the problem has been considered in a one-dimensional manner (only width considered). Percent slope, and the condition of the filter strip (as opposed to trees), also has an effect. Culverts and other things that concentrate flow increase sedimentation. Matt Norton asked for clarification regarding “strips” (page 25 - RMZ vs. filter strip). George responded that the filter strip is what affects the forest floor and soil surface. As long as the forest floor is not affected, there can be harvest without sediment effects. George is concerned that we need to recognize certain locations (such as swales and ephemeral streams) where the sediment load can be huge with disruption. Discussion regarding water temperature and the temperature of water before it hits the RMZ ensued.

Windthrow can be a factor and it may reduce the function of an RMZ. Trees appear to be most vulnerable on the outside 25 feet of the RMZ. Blowdown as high as 60-70% has been reported in an ongoing reevaluation of the Pokegama creek study. High blowdown in RMZs, particularly those with some vegetation removal, was also observed. However, those sites also had higher amounts of regeneration. The mean percent canopy coverage is actually higher today in all RMZs than at beginning of study.

Beaver impacts were also controversial. Dams increase trapping of sediment and increase exposure to solar radiation, which may cause conditions detrimental to fish. Stream temperature increases below beaver ponds. Sandy added that active management on Blandin lands has actually resulted in more beaver dams.

Wayne asked about the quantity of data available regarding presettlement beaver dams. Sandy described a study conducted by Sieur DuLhut on the Brule River in Wisconsin in 1694 and commented on other studies available from Quebec and Ontario. Jan added that NRRI conducted a study at Voyageurs National Park and found that beaver impacted 12% of the landscape via dams but also an additional 13% via cuts.

George added that there could be legitimate reasons to harvest near riparian areas (for example, Ontario is now harvesting near riparian areas to create a more diverse mosaic of habitats near water after years of conservative RMZ harvest). The RSTC recognizes that RMZs can be considered for management. RSTC members also noted a lack of paired-watershed research studies.

Bob Tomlinson asked whether the committee considered the distribution of slash. George responded that the topic was beyond the scope of their work, although, in his experience, piling is not good as more disturbance is caused. Jan asked whether the RSTC considered that the guidelines will be applied throughout the state, in places with very distinct geology. George responded that soil texture may have an important effect, but other factors (e.g. shade) are pretty independent of geology.

Diane closed the presentation by stressing that the landscape/watershed component is a primary consideration in riparian effects. She summarized some of the questions to the RSTC and listed nine key research needs. Al thanked the committee and acknowledged that the report represents a tremendous amount of work.

Economic analysis of RSTC findings

Dave Parent introduced the discussion of the RSTC economic analysis and asked Council members to disregard the May 2008 completion date on the work plan. Calder commented on previous economic analyses conducted and related work funded by the MFRC. The task now is to look at the economic effects of some different harvest recommendations that are based upon RSTC findings. MFRC funded a nationwide literature review looking at different studies that have tried to quantify the costs/benefits of different management alternatives (some include non-market values). Calder distributed a handout summarizing the expected tasks, output, and completion data. An ad hoc committee of MFRC will be identified to advise staff.

Shaun commented that while this is an economic analysis, the identification of costs and benefits that are difficult to value is in the work plan, suggesting there are aspects outside of the economic analysis. He asked whether real estate appraisers or forest managers would be considered as part of this team. Dave noted that we will reach out to people prior to confirming a panel of economists. Shaun indicated that costs could also be viewed as opportunities. Dave responded that the MFRC ad hoc committee should address that issue.

Shawn Perich stated that he is skeptical the Council can produce a good analysis. He recommended the analysis not simply measure the forest in cords. Dave Zumeta responded that a private contractor, Industrial Economics, conducted the literature review (the same company that did the analysis of the Exxon Valdez oil spill). Their review provided valuable information. Dave thinks the Council can produce a good analysis.

Bob Stine said that he is unclear what the economic analysis will be, as we are not even to the point of making recommendations from the RSTC findings. He feels there may be some value in stating the pure dollar-value cost of protecting riparian areas (a straight up-and-down economic analysis). Jan commented that social benefits have not been addressed. If we want non-industrial private forest landowners to buy into forest management as a good deal, we can't just sell it on the basis of economics. It has to include other values. Bob Tomlinson noted that this is predicated on management actually occurring in the riparian areas. What if there isn't management in riparian areas? Will we be looking at lost opportunity costs? Calder responded that he would hope so, but he doubts the data is available. Dave Parent referred to a Council study that found less than 1% of harvest disturbance activity on RMZs. Al Sullivan stated that the overall approach seems good.

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Forest Protection Task Force update

Al provided background on the Forest Protection Task Force. The DNR and Department of Agriculture (DoA) recognized this is something that needs funding and attention. Dave Zumeta added that Charlie Peterson has been hired by DoA to facilitate task force meetings once they are convened in October. MFRC has agreed to pay for the lunches and room rental. Potential task force members have been contacted and a draft letter has been developed. The task force will meet through November with a report and plan to the legislature by December 15. With respect to the Council role, Al will sign the letters, Dave will be involved to a limited degree, but Charlie Peterson and the task force will do the vast majority of the work.

Research Advisory Committee update

Al provided an update on the Research Advisory Committee (RAC). This year, we received over \$500,000 dollars from the last legislative session for research. As a result, we have contacted a few people to participate in the RAC. The Council received \$200,000 to support research recommendations from the 2006 Governor's task force on competitiveness of the primary forest products industry, \$300,000 to study the ecological effects of woody biomass harvest, and \$40,000 to be used for parcelization research. The RAC has additional responsibilities, such as an assessment of the state of forestry research in Minnesota. Calder is working on scheduling the first RAC meeting. There was some discussion regarding whether RAC members will have alternates. Calder responded that operating protocols will be on the agenda for the first meeting.

Public Communications to the MFRC

Sandy Verry commented that the Council is at risk without a monitoring program. Without site-level monitoring, forest certification wouldn't happen. Given the funding situation and personnel issues, however, the Council has an opportunity to make the program much stronger than it has been. He recommended that the MPCA and DNR Fisheries should also be involved. Sandy described the potential for overlapping monitoring efforts and recommended we approach other agencies/divisions to help fund the program.

Matt Norton requested there be consideration for using a small amount of monitoring staff time to train in new staff. Perhaps pieces of monitoring could be done, allowing for a little data and staff training.

Dave Zumeta responded to Sandy's comments by stating that folks do talk to each other and gave an example of Forestry, Fisheries, and MPCA staff investigating a recent harvest on the Littlefork River.

MFRC Member Comments

Bob Tomlinson emphasized that he listened to the concerns about monitoring and staff transitions and will share those with Dave Epperly. The Division is talking about this and is concerned. Bob added that Rick Dahlman is being asked to be more focused on the monitoring work and has given up other responsibilities. Greg Russell has assumed some of Rick's responsibilities. Dick Rossman will take over lead responsibility for guideline training and working with the Minnesota Logger Education Program (MLEP).

Shaun Hamilton moved to adjourn the meeting. Bob Lintelmann seconded. The meeting was adjourned.