

Minnesota Forest Resources Council
Meeting Minutes
Shoreview Community Center
May 16, 2007

Council Members Present: Bob Stine (acting Chair), Dave Parent, Bruce Cox, Dave Epperly, Jan Green, Bob Oswald, Susan Schmidt (in lieu of Shaun Hamilton), Bob Lintelman, Kathleen Preece, Wayne Brandt, Mary Richards, Shawn Perich, Dick Walsh, Paige Winebarger

Council Members Absent: Al Sullivan, Jim Sanders, Shaun Hamilton, John Stauber (resigned from Council effective May 14, 2007)

Guests: Dianne Desotelle (Desotelle Consulting), Don Arnosti (Institute for Agriculture and Trade Policy), Stefan Bergman (Great Lakes Forest Alliance), Kurt Rusterholz (DNR), Pat Orent (Ainsworth Engineered), Steve Betzler (MN Power), Lee Pfannmuller (DNR), Gary Cerkvenik (Laurentian Energy Authority). Archie Chelseth (SAPPI Fine Paper), Lee Frelich (UMN)

Staff Present: Dave Zumeta, Calder Hibbard, Lindberg Ekola, Clarence Turner, Leslie McInenly, Dick Rossman

Staff Absent: Mike Phillips

Chair's Remarks

Bob Stine opened the meeting. Al Sullivan's wife had medical appointments and Bob was asked to fill in as chair. Meeting attendees introduced themselves. Bob commented that Jim Sanders couldn't attend the meeting as he is dealing with the Ham Lake fire and John Stauber has submitted his resignation to the Council because of purchasing another business in Duluth (letter distributed to members). Bob also noted that there has been no reappointment to replace Jan Green, so Jan continues to serve.

Dave Zumeta provided an update on Mike Phillips who is in the ICU at Regions hospital in St. Paul. His wife Marge has set up a Caringbridge website for information and updates on his status. His condition is not good. There is some uncertainty as to the exact prognosis. The family would appreciate being kept in your thoughts and prayers. Bob asked meeting attendees for a moment of silence.

Public Input/Communications to the Minnesota Forest Resources Council

Don Arnosti stated that the Council has an opportunity to approve something very important in the biomass guidelines. If approved, these guidelines will be the first in the world. He attended most of the technical committee meetings and has been very pleased with the results, interactions, and the way the technical committee drew in international information and science to bridge gaps in knowledge. Don was also pleased with both the peer and public review processes. He stressed that it is important for the Council to consider the recommended options that the committee couldn't agree upon. The staff-recommended options are in the spirit of what was presented to the peers and public. Our country is rushing headlong into biomass harvest and it is important that we have sound science-based guidelines to assure that we don't harm our natural resources. The Council received \$300,000 from the legislature to help support research on gaps in the science of biomass harvesting. This funding provides a budget to evaluate some of the concerns of technical committee members. Many people in Minnesota are watching this decision.

Approval of March 29, 2007 Meeting Minutes*

Bob Oswald made a motion to approve the March 29 meeting minutes and Jan Green seconded. The minutes were approved.

Approval of May 16, 2007 Meeting Agenda*

Wayne Brandt made a motion, Dave Parent seconded, and the May 16, 2007 agenda was approved.

Executive Director Report

Dave Zumeta briefly commented on the outcomes of legislative session. The Council was reauthorized for another 10 years with an annual operating budget of \$780,000 for the next biennium. We also received \$540,000 in one-time funds for research. Dave expressed a great deal of appreciation to Wayne Brandt, Don Arnosti, and Dave Epperly for their instrumental roles in getting funds for the Council.

Dave introduced Mary Richards, who is the new Council representative for the tourism and resort industry. Mary operates Maplelag resort in Callaway, MN. Mary stated that she is very excited to be on the Council and hopes she can bring something to the Council.

Dave noted that the Council staff is dealing with significant personnel implications because of Mike Phillips' health situation. He also reported that the July 18 Council meeting will be held at the Coates Plaza Hotel (Chippewa ballroom) in Virginia, MN. There will be a field trip on July 19 in coordination with the Laurentian Energy Authority. We have blocked rooms at the Coates Plaza Hotel for both July 17 and 18. Rooms need to be reserved by Council members and guests by 15 June.

MFRC Committee Reports

Personnel and Finance

The Personnel and Finance Committee has not met. Dave Zumeta and Al Sullivan plan to have a meeting in the near future (likely in June).

Site Level

Dave Parent stated that Clarence Turner and others are doing a review of monitoring program. At the last Council meeting, there was a presentation regarding the disconnect between the guideline training program and the Council. The Site-level Committee is working on increasing the number of qualified trainers. The Riparian Science Technical Committee report will be completed with some delay due to Mike Phillips' health condition. The Site-Level Committee also held a meeting to review the draft Biomass Harvest Guidelines. Shawn Perich reported that the results of the meeting regarding the guidelines were summed up in the materials provided via mail by Dick Rossman. The Council will discuss remaining controversial issues today.

Landscape Planning/Coordination

Bob Stine reported that the Landscape Committee held a summit meeting with the southern three regional landscape committees. Approximately 20 people attended the meeting. Lindberg Ekola commented that attendees viewed it as a beneficial event. The goal was to build networks, share the Council perspective, and also get the regional committees to share their issues/concerns. He said that the Landscape Planning program would like to hold another event in late fall/early winter for the northern landscape regions.

Forest Resources Information Management

Jan Green stated that the Information Management Committee is not like the other two committees. It isn't in our legislative mandate, but it is very useful as a portal for information. The committee has focused on parcelization and carbon sequestration. At the last meeting, Pat Miles (USDA Forest Service) presented results from the Forest Inventory Analysis (FIA) report. Jan commented that there are a lot of important statistics in the report and recommended Calder get a hard copy to Council members. Jan also stated that the Committee has discussed their role in "keeping score" on what is going on regarding parcelization, biomass demand, and conservation easements under Forest Legacy.

Written Communications to the MFRC

Dave Zumeta reported that on April 2 he received via cc an e-mail to the DNR Commissioner that included a position statement from the MN chapter of The Wildlife Society regarding OHV impacts on wildlife. The e-mail did not ask the Council to take any specific action. Dave stated that he would forward a copy to the Council.

Dave also reported that he received John Stauber's resignation on May 14 and noted that a couple of people from the secondary forest products industry may have an interest in being appointed to replace John.

Committee of the Whole: Proposed resolution for MFRC approval of the guidelines for sustainable harvest or woody biomass on forests, brushlands, and open lands*

Bob Stine opened the discussion on the draft Biomass Harvest Guidelines, noting that Dick Rossman would give some background on the issues. Bob noted that nine votes would be required to pass a motion, and that Council alternates may not vote. Bob indicated that guests may be called upon for advice/opinions, but most discussion would be among Council members.

Dick Rossman thanked Diane Desotelle for coming today and recognized Pat Orent and all committee members for their involvement on the biomass technical committee. Dick reported on the progress of the biomass committee with regard to development, review, and revision of the guidelines. The committee met with the Site-Level Committee on April 27th and received approval to submit the draft guidelines to the Council. He reviewed the contents of the three-ring binder mailed to Council members. The binder included both sets of guidelines, review comments, project scope, the proposed resolution, and related information.

The guidelines were developed as two documents. The one for forest management is designed to fit into the current Voluntary Forest Management Guidelines (FMGs) as an additional chapter. The guidelines developed for harvest in openlands and brushlands were designed as a stand-alone document, but after review the committee decided to modify the document to also fit into the FMGs. Currently, the guidelines for openlands and brushlands have a lot of references to the FMGs that will be removed.

Dick reported that the biomass committee reached consensus on all but two issues, protecting ecologically sensitive sites and salvage harvesting. With respect to protecting ecologically sensitive sites, the committee used language from M.S. 216B.2424 that refers to the Minnesota County Biological Survey (MCBS). During public review, several comments were received from both ends of the spectrum indicating problems with the draft language. The committee was unable to reach consensus, but made some improvements and drafted four options (described in the proposed resolution) that represent the range of opinions on the biomass committee. Dick reviewed the four options and stated that the committee was at near-consensus on option 1.

Dave Parent noted that, in option 2, the tops and limbs are excluded from harvest as well as everything else. He said that if we are dealing with a harvest site and it is included in this restriction, this wording basically describes roundwood that does not meet the DNR standard for timber harvest. In effect, under option 2, we would be restricting only roundwood that does not meet the DNR utilization standards. This option is extremely restrictive as to the biomass that could be collected. Jan Green asked whether the prohibition on roundwood applies only to the Laurentian Energy Authority (LEA). Wayne Brandt commented that he believes that language only applies to LEA. Jan asked whether biomass could be harvested on a site to improve ecological integrity if the biomass went somewhere other than to the LEA. Dick Rossman responded yes, the biomass harvest could occur.

Paige Winebarger mentioned that part of the reason the committee could not reach consensus and decided to present options to the Council is because there is so much that we don't know about the completeness of the MCBS. She asked how close the DNR is to being done with the MCBS. Lee Pfanmuller (Director, DNR

Division of Ecological Services) responded that the MCBS is mostly done throughout the midsection of the state. The north central, northeast, southeast and southwest counties still need to be completed. She estimated completion of the MCBS would take at least another decade.

Paige asked for clarification about the statutory language (“lands identified by the final survey”) and whether those categories fall within the *high* or *outstanding* categories. Dick responded that the categories are addressed in the different check-marked bullets within the proposed guidelines. Lee added that there are three separate tiers in the MCBS: sites of biodiversity significance, rare and native plant communities, and species. Dick Walsh stated that, from a logger’s point of view, the MCBS is just another way to lock up harvest.

Dave Parent commented that when he looks at the MCBS map at the site-level, there seems to be a degree of granularity (i.e., course resolution). He asked whether the maps and data sets get down to the ownership level. Lee responded that the MCBS delineates boundaries of biodiversity sites anywhere from a couple acres to 1,000 acres. Within that, MCBS staff delineates native plant community sites (NPCS). So, within biodiversity polygons, there may be sites of different quality.

Jan Green stated that the state has a system for identifying rare species and that is ETS (endangered, threatened and special concern species). We know what those species are and, sometimes, where they are. However, there is nothing that talks about critical animal habitat. This is a problematic portion of the legislative language.

Wayne Brandt noted that it is important to recognize that the sampling protocol used in the MCBS is not a shoulder-to-shoulder walk through every site in the woods. Information is extrapolated from sampled sites. It is Wayne’s understanding that the sampling intensity for MCBS is below that of the FIA (Forest Inventory and Analysis). In addition, the definitions for *outstanding* and *high* are qualitative. Wayne is not comfortable applying qualitative judgments to a set of standards that will be rigorously applied on the ground.

Dave Epperly reiterated that the wording is very important and that folks must understand the wording. The definitions from which we work are in M.S. §89.01. This statute includes rare and unique flora and fauna. There is a hierarchy of reasoning, scope and scale. Protection and management are synonymous. As an option, protection may mean either no management or management to protect a particular quality. That is very important at the site-level scale.

Dick Rossman stated that the second item with which the committee wrestled dealt with salvage biomass following blowdown or fire without roundwood harvest. The wildlife subcommittee raised a concern and comments were also received during the public review. Generally, people who commented felt that the guidelines required too much reserve as well as higher snag and CWD (course woody debris) retention compared to the current FMGs. The committee drafted new language but was unable to come to consensus, and therefore drafted new options. Dick reviewed the different options described in proposed resolution.

Shawn Perich commented that he didn’t have strong feelings about retention during the committee meeting, but in the past week, he has had some experience with what happens when woody material is left on the ground (unspoken reference to Ham Lake fire). Shawn noted that there is no mention of fuel reduction and safety in the biomass guidelines.

Dick Walsh commented that there has been no economic analysis and asked whether the analysis will be conducted. Dick Rossman responded that conducting an analysis is up to the Council. Wayne Brandt added that state statute requires an economic review (see item 25). Dick responded that there was inadequate time for an economic analysis and noted that the biomass guidelines committee limited these guidelines to sites in which roundwood is not utilized. These sites will not be under heavy competition. Wayne responded that

there are numbers of loggers who have invested in chippers in response to biomass needs and the lack of an economic analysis will be a big problem.

Dave Zumeta asked Dick to comment on the peer reviewers. Dick listed the peer reviewers (Charles Anderson – DNR Fisheries, Dave Morris – Centre for Northern Forest Ecosystem Research, Mark White - TNC, Grant Domke - UMN, and Amy Schrank - Michigan Tech). In his review, Mark White commented that leaving more material on sites is better. As is typical that with this science, people will say it is important to leave material but are not specific as to how much material to leave.

Dave Zumeta stated that there was a research study, funded through UMN that looked at both ecological and economic aspects of these guidelines. That study was part of the basis for development of the guidelines. Right from the start, the Council faced a tight statutory deadline to complete the guidelines. It has taken an extraordinary effort to get this accomplished, and there was inadequate time to do an economic analysis. Dick Rossman added that, from the perspective of the committee, there was an understanding that the guidelines will have an economic impact. The committee weighed the economic values against the biodiversity values that could benefit from retaining woody material.

Paige Winebarger asked Dave Zumeta about the consequences of not meeting the July 1 deadline mandated by the legislature. Dave Zumeta responded by introducing Gary Cerkvenik, Laurentian Energy Authority (LEA), and asked Gary to respond to Paige's question. Gary said that there might be an economic impact to LEA if the guidelines are delayed. Utilizing closed-loop material is dependent upon the guidelines and it could make it difficult for LEA to achieve the specific numbers that they are required to meet over the next 20 years. In addition, LEA helped pay for the development of these guidelines and expects them to be done.

Dick Walsh anticipates these guidelines could have a greater economic effect on contractors doing the work than what they experienced with the original guidelines. It is an economic hardship to leave 20 percent residuals. Bruce Cox added that these two proposed options take the current guidelines and move things farther from utilization. It doesn't make sense to ignore the current guideline standards because work is being done on a salvage site. The counties are committed to utilization and to following the voluntary guidelines. Bruce expects a lot of guideline deviation notes if the guidelines are approved as is written.

Jan Green stated that the Council tried to do some economic analysis when dealing with riparian issues. It is difficult to balance an equation with numbers only on one side. Numbers that speak to everything on the ecological side are not available. We don't know what the forest needs in the long term. We need to pay some attention to the unknowns and do it in a prudent fashion.

Dave Parent suspected that the small landowner would be below the economic threshold if 25 percent of residuals must be left. This has a site-level impact. He added that the Council is still engaged in supporting the third economic analysis of the original guidelines. Dave stated that it is his fault that an economic analysis was not brought to the Council. The Biomass Guidelines Committee had the feeling that we could rely on the economic study done at the University of Minnesota. The analysis did get pushed off to the margin but we can address it in the next revision of the guidelines.

Dick Walsh asked for clarification on the definition of "closed-loop". Gary Cerkvenik responded that "closed-loop" refers to a crop that is planted, managed and harvested. In Minnesota, it also includes materials from rights-of-way and products that will be harvested under the woody biomass guidelines.

Wayne Brandt noted that page 16 recommends that reentry into the general harvest area by a second operation for the harvest of biomass should be avoided. He asked whether there was any discussion about the possibility of avoiding a second entry only after regeneration has begun. Dick Rossman responded that regeneration was

discussed primarily as it related to winter harvest. Picking a time frame was problematic because it can be so variable. The goal was to see these harvests become one operation rather than two.

Wayne does not understand the controversy on retention following salvage because the committee already decided to leave a lot of residuals as described on page 16 (Managing/Retaining Wildlife Habitat and Structure). In addition, the biomass guidelines mention ETS species in a number of places. Species of special concern make up a long list and the department is in the process of expanding the list. Wayne asked whether there was any discussion about the potential to remove species of special concern from the guidelines. If the ETS species are not dependent upon the material, then why would we avoid gathering material because of those species? Dick responded that the committee didn't consider splitting those three categories. Wayne then asked whether there was any discussion of considering only ETS species that depend upon biomass. Lee Pfannmuller responded that the level of knowledge required to answer Wayne's question is limited. Jan Green added that in Scandinavia, the species that become endangered are those that we don't even think about (fungi, bryophytes). Scandinavia is compiling a list of species that are becoming endangered by biomass removal.

Dave Parent stated that there is a measure of the flexibility in the language. He provided an example dealing with wildlife habitat. The standards guide us but don't answer specifics at the site-level. One needs to talk to the DNR specialist in the area. Deciding whether or not to harvest a site drives much of this discussion. Before we decide to harvest, we need to be conscious of what is there and what rules and regulations apply. As for retention of material, at most the tops will be gathered if one only harvests the roundwood. Everything else is left. If you do basic harvest and leave 30% of what would otherwise be left, you are merely leaving 30% of what you could get from vacuuming the site.

Dick Rossman noted that the difference between what the committee has written on CWD and the existing guidelines is very minimal. The wording is different because we are worried about folks scooping up the partially degraded material that was never before considered.

The Council recessed for lunch.

Dave Parent requested that the proposed motion (as mailed out) be amended to remove the last sentence describing the MCBS and salvage logging issues. The sentence was only an explanation of the issues. Dave moved to approve, and Bob Oswald seconded, the biomass harvest guidelines.

Wayne Brandt requested that the reference to infrastructure on 3% of the site (page 15, forestland guidelines) be replaced with a reference to the existing guidelines for infrastructure (also at 3%). Bob Stine stated that he would like to accept these as friendly amendments as long as the Council agrees.

Wayne then opened discussion on the re-entry after harvest issue. The Council discussed the definition of regeneration and added, "once regeneration has begun or planting has been completed" to the first bullet on page 16.

Jan Green commented that she did not see anything explicit about nutrient poor sands in the guidelines, noting that the soil scientist's review was pretty clear in advocating inclusion of additional soil types (refer to page 14-15 in draft guidelines). Dick Rossman responded that, based upon conversations with Dr. Dave Grigal, Dr. Dick Morris and others, there is new language in the rationale section. However, Dr. Morris was not concerned about those soils due to the retention of woody debris. This language differs from the existing guidelines. New research has indicated that retaining slash is probably not necessary.

The Council began discussing biomass harvest on ecologically sensitive sites. Wayne Brandt moved that the council adopt option 3 with the following change to the second checkmark: "Avoid biomass harvest within specific sites where ETS species dependent upon biomass (plant or animal species listed as endangered or threatened at the state or federal level)...." Wayne also commented that Appendix J is not a list of critically

imperiled or imperiled communities: it is a list of sensitive communities. The words are not consistent and he would like the wording to be clarified. Kurt Rusterholz responded that Appendix J is the list of forest communities Mike Phillips asked the committee to compile. The list includes communities that are S1 (critically imperiled) or S2 (imperiled) at the state level. Kurt described the location of the communities listed in Appendix J. Wayne then recommended that the wording “ranked as critically imperiled or imperiled at the state level” be removed from the checkmark and the parentheses be deleted from around “Appendix J”.

Wayne Brandt made motion and Bruce Cox seconded the motion to adopt option 3 as amended.

Jan Green disagreed with the amendment language to recognize endangered and threatened species only if they are dependent on biomass. The whole point is to protect the species that are rare and those that are endangered, threatened and of special concern. As an example, we do not want a harvest site where somebody wipes out an orchid community. Orchids occur in clusters, and while they might not depend upon biomass, they may depend upon the specific conditions of the site.

Paige Winebarger asked about the proper procedure to request discussion of option 1, given that Wayne’s motion had already been seconded. Bob Stine stated that she could make a massive amendment to the current amendment or we could vote and see whether there will be further discussion. Jan Green commented that she would like to have the high biodiversity sites considered.

Dave Epperly stated that we are talking about critically imperiled or imperiled species. At the start, they would be considered in the sale design. If discovered during operations, they would have to be addressed. When Wayne is talking about biomass-dependent species, it is the habitat that we are trying to protect around the species. Dave proposed the addition of the words “if known to exist, or are discovered during the course of operations” to the previously referenced checkmark. Jan Green responded that the guidelines are not just for the DNR. Someone doing a land conversion activity may not review the Natural Heritage database to see whether any of those species are identified. She understands Wayne’s point, but thinks that he inadvertently wiped out a lot of herbaceous species.

Wayne proposed the following amendment “where ETS species are known to exist or are discovered to exist during operations”.

Jan Green stated that she understands Wayne’s discomfort regarding the location of high biodiversity sites. However, there is a requirement that High Conservation Value (HCV) forests be included in forest certification. It is not a prohibition on harvest, but that harvest on these sites must sustain the biodiversity on this site. Biodiversity is part of our mandate. Jan noted that Wayne previously stated that the way in which biologists assess the land is judgmental. Historically, cruisers judged the land. Even now, foresters only look at specific sites that are samples of the whole sale. That system is similar to what the MCBS does. A variety of professional judgments occur in both forestry and in ecology. High means “rare” and rare means “little” in terms of land disturbance.

Bruce Cox commented that Jan made a good point about the HCV forests, but noted that this is a landscape-level decision rather than a site-level decision. Jan stated that she believes HCV forests are sites. Bob Stine agreed with Bruce’s point that HCVs are not sites, they are large geographic areas.

Dave Parent reiterated that the site-level guidelines exist to implement a decision. That decision is a result of a management decision whether or not to harvest. Many factors are weighed during that decision process. Once one goes through that checklist, these guidelines exist to advise on how to harvest.

Paige Winebarger stated that she would like to find a procedural way to promote option 1 because both staff and a lot of professionals have advised that option 1 is the best option. As she understood the proposal, the

committee was recommending option 1. Dave Parent added that most of the members of the committee recommended option 1, but the entire committee did not. Wayne argued that some members of the committee (that couldn't reach consensus) are disenfranchised by a discussion that only addresses the option promoted by the majority of the committee. Council members briefly discussed the definition of consensus.

Paige Winebarger made a motion to amend the current motion to be that the Council adopt option 1. Shawn Perich seconded. Shawn was troubled that option 1 moves us from utilizing the best science available to making an interpretation of a statute. We are taking a little piece of the law and making a leap to interpret it in a larger sense. Is this the intent of the MCBS?

Dave Epperly stated that he was disappointed with the movement to adopt option 1. The MCBS is an inventory, a collection of information available for us to make management decisions. He was disappointed that we did not get good discussion on option 3. With the current economic status of the forest industry and the emerging biomass industry, we need tools to do biomass harvest. These are guidelines applied once the decision has been made to harvest. When you start mixing landscape-level and site-level scales, you muddy the waters. Some of these same arguments were there when we made the forest management guidelines and discovered that they were moot.

Jan Green stated that this is a question of scale. That is one of the things that worries Wayne and that is why she believed the staff invited Lee Pfammuller. Bob Stine said that we heard from Lee Pfammuller that we are a decade out from finishing the MCBS. Jan offered that the option could be amended to make biomass harvest only applicable to those parts of the state that have been surveyed, noting that this is an opportunity to use silviculture progressively.

Dave Parent called the question. The Council voted on whether to adopt option 1 (3 in favor, 9 opposed, 1 abstention). Option 1 was not adopted.

Dave Epperly stated that he wanted to talk about scale. Anyone certified is required to have management plans and within those plans are landscape approaches. The MCBS is not designed to inhibit management options. It is designed to make better management options. We are talking about site-level guidelines that are applied when the decision is made to harvest. By not correctly understanding MCBS, we are making a mistake. If we totally understood MCBS, we could use option 1. With MCBS incomplete, we have gaps. We have to be careful in how we apply this information. Whether we adopt these guidelines or not, the question of biofuels will not go away. These guidelines will apply to everybody. We will do the economic analysis over time and these things will evolve. We are way ahead of the curve. Option 3 will be okay for now.

Wayne Brandt called the question. Dave Zumeta clarified the language of option 3, as amended. Dave Epperly stressed that he didn't mean to imply that the landscape portion is not important and said that he would like the Council to take a look at the first bullet in option 1. Dave recommended that the first bullet (from option 1) on page 2 of the resolution be added to the current option 3. Wayne recommended that only the first checkmark from the first bullet be added to option 3 as a third bullet. Dave responded that he was trying to include the landscape-level (not site-level). Wayne felt it was more appropriate to make the amendment he had described. Wayne's recommended change was accepted as a friendly amendment.

The Council voted and amended option 3 was approved (10 in favor, 2 opposed, 1 abstention).

Jan Green commented that the landscape committee does not have any guidance on a landscape-scale. The committee is a discussion group and we must not think that the landscape committee can take up the slack.

Bob Stine turned the discussion to salvage harvesting following blowdown. Wayne Brandt moved to adopt option 2. Bruce Cox seconded.

Gary Cerkvenik asked for an opportunity to speak before he had to leave the meeting. He told the Council that LEA is now in effect under different biomass guidelines than everyone else. Wayne noted that Gary Cerkvenik made a good point when he commented that there was a set of not-definitive things to which LEA agreed. Wayne recommended the Council give due consideration to Gary's point at a subsequent meeting.

Jan Green stated that it seems we are throwing out the best recommendation that the technical committee advised by moving to option 2. Wayne responded that if we can't remove dead/down/diseased fuel from the forest, then he fears what that means for the future. In addition, we are never able to remove all of the dead/down material for a host of reasons. Dave Parent responded to Jan Green's comment, stating that the Council certainly is not throwing the committee recommendations out, but that it has broader considerations than those of the technical committee. Jan commented that she has seen some of those salvage sites and there was not a stick of anything left, just bare ground, and those were some of the sites that burned recently.

Bob Stine asked if Dave's comments represent the DNR position. Dave Epperly stated that it did. Dave Zumeta asked why the committee recommended option 1. Dick Rossman responded that the committee was charged with looking at how much material to take off sites from a biomass perspective. The science indicates that these materials are important for some species, but we do not know how much is important. We know we need to leave some material. Wayne argued that this is not a recommendation to vacuum out salvage sites. Existing guidelines will still need to be followed for course woody debris (CWD), leave trees, etc.

The Council voted on, and approved option 2 (10 in favor, 2 opposed, 1 abstention). The Council voted on adoption of the guidelines. The guidelines were adopted (11 in favor, 1 opposed).

2007 Legislative Session, Governor's Primary Forest Products Task Force, and October 2007 Productivity Workshop Status Reports

Wayne Brandt reported that the Forest Resources Council was reauthorized with a 10-year extension and received full funding for most of the proposed studies, including \$300,000 for biomass research. Funding-wise, it was a successful session for the Council.

Dave Zumeta reported that the Governor's Forest Products Task Force met yesterday. The work for that group is essentially completed. There will be some edits to the report but no more meetings. The task force will try to comply with the June 15 deadline set by the Governor for delivery of the report to him.

Kathleen Preece reported that Jim Marshall is now chairing the revised steering committee for the Forest Productivity Conference. The strategies are currently being revised and edited and the committee is moving forward with plans for the fall workshop.

Potential Impacts of Climate Change on Minnesota Forests – Lee Frelich

Bob Stine introduced Lee Frelich, Research Associate and Director, The University of Minnesota Center for Hardwood Ecology. Lee spoke on the direct impacts of global warming and the indirect effects of warming on forests. Dr. Frelich reviewed causes and measures of global warming and discussed predicted migration maps for various tree species. He commented on the effects of soil warming, the increased evaporation/precipitation ratio, and the earthworm invasion. Dr. Frelich discussed potential biome changes in Minnesota (warm and wet conditions will result in mixed forest while warm and dry conditions will result in oak savanna) and noted that Canadian projections indicate that the entire boreal forest biome is likely to move north by 300 miles. Forests will also be affected by changes in wind and fire frequency. Meteorological conditions are likely to cause increased large blow downs in Minnesota. Native and non-native insects will also have greater impacts on forests with warmer weather (e.g., pine bark beetles in Canada and the eastern larch beetle in Minnesota). Dr. Frelich summarized by saying that existing forests will not be here in the future and we can

expect a messy transition to new communities. He posed a number of questions to the Council, including: Can or should we resist change? Should we keep out southerly species? Should we manage natural selection through frequent fires? Are there other forms of resistance?

Council members inquired about the possible effects of oak wilt, the anticipated time scale of species turnover, and the role of water vapor and methane in climate models. To request a copy of the full presentation, please contact Leslie McInenly at mcine017@umn.edu or 651-603-6761.

Public Communications to the MFRC

Don Arnosti stated that he is very disappointed with the discussion on the Biomass Harvest Guidelines. He noted that the technical committee did some important work and that the Council didn't make any consideration of the science. Don was frustrated that the scientists who were available at the meeting to provide information were not called upon. He felt that this discussion would have been better off in the legislature because at least it would have been a public discussion. Don commented that the Council has just passed a radical, risky set of guidelines rather than taking a conservative approach. He added that the guidelines are going forward with a grey cloud over them and that we are messing with things we don't understand. Don argued that we are supposed to be conservative with our resources. He noted that, as a person involved with this industry, he doesn't have complete confidence in the guidelines as passed.

MFRC Member Comments

Dave Parent thanked Dick Rossman, Mike Phillips and all those who participated in the development of the guidelines. He commented that their job was not to make the decision, but to identify the science. They did a good job. Bob Stine also thanked Dick for his work on the guidelines.

Jan Green commented that IREE (Initiative for Renewable Energy and the Environment) put out a request for proposals on cellulosic ethanol and asked about the status of that RFP. Dave Zumeta responded that there is a request for proposals, and researchers in the University can apply for these funds. Funding is in the millions. Dave noted that he is not in the position of reviewing the proposals. Jan added that science may not have driven the Council's discussion and actions on the Biomass Harvest Guidelines, but their approval does move things along.

Dave Zumeta stated that the next Council meeting will be July 18th. The Forest Resources Research Advisory Committee will be reconvened and some of the questions posed by Don Arnosti should get addressed. We need to recognize that there is room for improvement on these guidelines, including practical revisions and research related to their effectiveness. In addition, we need to hear the report developed by the Riparian Science Technical Committee. Dave Parent responded that Diane Desotelle is still working on the report and the Site-level Committee will still meet without the direction of Mike Phillips.

Susan Schmidt commented that the Trust for Public Land is working with John Rajala and has closed on the state's second large Forest Legacy working forest conservation easement on the Sugar Hills property. This represents 1,600 acres of land. She is also happy to report that they will be saying something similar in the near future with regard to 50,000 acres owned by Forest Capital Partners.

Paige Winebarger moved to adjourn the meeting. Dave Parent seconded the motion. The meeting was adjourned at 3:30 p.m.