

Wisconsin Council on Forestry  
**Forestland Biomass Harvesting Guideline Advisory Committee**  
June 19, 2008 - 9:00 AM-3:00 PM (3<sup>rd</sup> Meeting)  
Old Main Hall, UW-Stevens Point

**Minutes**

Committee Members present: Jim Hoppe – WI Council on Forestry; Matt Dallman – The Nature Conservancy; Gary Wyckoff – Plum Creek Timber; Mark Fries – NewPage; Jeff Barkley – WDNR Forestry; Geoff Chandler – USFS; David Mladenoff – UW-Madison Dept of Forest and Wildlife Ecology; Marshall Pecore – MTE; Neil Paisley – WDNR Wildlife; Ed Moberg – WWOA; Earl Gustafson – WI Paper Council; Dave Hvizdak – NRCS; Don Peterson – Consulting Foresters Association; Jane Severt – Wisconsin County Forests Association; Aaron Caylor – Loggers.

Technical Team Members present: Darrell Zastrow; Eunice Padley; Joe Kovach; Carmen Wagner; Kristen Tomaszewski.

## **Welcome and Updates**

Jim Hoppe welcomed everyone and went over a few topics from the Council on Forestry meeting, including whether Guideline 3.A is a floor or ceiling, and whether the standard for fine woody material left on site should be set in tons per acre or as a percentage. He also reiterated the timeline that the Advisory Committee should have proposed guidelines completed by September.

Darrell Zastrow highlighted that the current draft of the guidelines and rationale were produced by the technical team after expert review, but not all experts completed their review by the deadline and some of their comments are not addressed yet. Darrell apologized for recent problems with document dissemination and indicated that everyone should have a copy of a) the clean and edited guidelines, b) clean and edited rationale, and c) expert comments. He noted that as the process moves into a more public phase, the technical team was looking at ways to make the documents readily available, possibly through the Forestry Council website. The AC agreed that this would be desirable. Current draft documents have been posted at <http://council.wisconsinforestry.org/biomass/>.

## **Presentations**

### **Eunice Padley – Soil Nutrient Considerations**

#### **Guideline 8.B**

Committee discussed definition of fine woody debris and expressed concern about the origin and implications of the 4 inch basis. Technical team explained that 4 inches was adopted because FIA data are summarized on this basis, which conforms to traditional timber biometrics. FIA are the only data that can be used to get estimates of the amount of existing biomass statewide. There was some concern about relying on FIA P3 plots for an estimate of existing FWD on the ground, because there are relatively few P3 plots. However, standing biomass estimates are from

traditional FIA plots and are statistically reliable. More discussion of this 4 inch standard took place in the afternoon.

There was also discussion of what percentage of organic soils would be affected by this guideline and whether the revision includes more or less acreage. Dave Hvizdak, Eunice Padley, and Joe Kovach estimated that the guideline includes an estimated 5% to 10% of soils in northern WI and it is about the same amount as the draft 1 guideline.

### **Guideline 7.B**

Committee discussed the jack pine exception to this guideline, which had been previously discussed at the April meeting. Technical team indicated that the nutrient budgets show that base cations are not depleted by jack pine harvest because this species does not take up as many of these nutrients as other tree species.

### **Soils guidelines – formation of an adhoc committee to review soils**

Committee discussed time commitment and possible membership on an adhoc committee to review proposed soils guidelines and make a recommendation to the AC on which soils should have some limitation on harvest of FWM. Time commitment is likely to be a few days. Committee discussed the charge of the adhoc committee and a range of issues that the adhoc committee could address, including developing a list of soil series that would have some limitations, and soil series that are borderline for nutrient concerns; mapping the soils with limitations; reviewing language of the guidelines and guideline flexibility, and whether current data supports the level of detail (restrictiveness) in the guidelines. There was more discussion on the adhoc committee and its range of responsibilities during the afternoon session.

### **Joe Kovach – Biological diversity**

Guideline 1.A - clarifications and reorganization

Guideline 2.A – No change

### **Guideline 3.A**

Committee discussed the origin and implications the 4 tons/acre figure. There is concern about how, if approved, it could reliably be estimated in the field. There was discussion of creating rules of thumb and training workshops to ensure that the guideline could be consistently applied. The technical team indicated the figure is based on FIA data that show an average value of 3 tons/acre of material less than 3" dib on the ground in Wisconsin's forests. The technical team proposed leaving a total of 4 tons/acre, which on the average site would call for leaving one ton/acre of FWM on the ground. The additional one ton would serve to provide nutrients to the regenerating stand during the time period when FWD inputs would be reduced after harvest. Some thought the guideline should be different for clearcuts vs. selection harvests. The committee expressed concern about how much time this would add to setting up sales, and whether new contract stipulations would be needed. There was also concern about how this standard and associated rules of thumb could be implemented, but Jim Hoppe indicated that the guidelines do not deal with implementation, that is the next step. More discussion of the 4 tons/acre standard took place in the afternoon.

Guideline 4.A – No change

Guideline 5.A – draft 1 was deleted

### **Guidelines 1.B – 4.B**

Jeff Barkley expressed concern about the consistency of the language from “consideration” to “do not harvest”. There was concern that NHI community types occur in almost every sale and that the guidelines are too broad removing too much land from eligibility. Joe Kovach indicated that the guideline was meant for very few specific “exceptional” occurrences, ones that have been inventoried and appear in the database. Darrell Zastrow wondered if guidelines 3.B and 4.B could be integrated for consistency. Matt Dallman agreed that these two were very similar - not all sites are exceptional occurrences. Committee wanted a definition of Element Occurrence added to the glossary.

There was some confusion about guidelines versus considerations. Joe explained that guidelines are strong statements with opportunity for variability; a qualifying statement that appears in the guidelines was noted: “In cases where these guidelines are modified or not applied, then documentation of the rationale, including the expected impacts of the deviation, is recommended.” Considerations are not hard and fast rules, just something to think about. Darrell added that this distinction was consistent with the guidelines and considerations seen in the Forest Invasives BMP process. Jane indicated the need to keep these consistent. Matt thought that 3.B and 4.B were flip-flopped and that these are places where “do not” language was appropriate. Joe indicated that this comes from old growth discussions and that this could be covered by combining these guidelines.

Jane proposed combining 1.B, 2.B, 3.B, and 4.B into one guideline with three considerations and would like to see definitions for “old growth” and “old forest” included in the glossary as well as the word potential eliminated from “potential occurrences” in 1.B. Jane was also concerned about who would make these determinations. Darrell noted that after training, foresters knew how to look for Karner Blue habitat, and that this is not intended to be a guideline, just a heads up for an historic occurrence or an occurrence in an adjacent stand. Darrell was in favor of making this a consideration or eliminating the term “potential”. Jim indicated the need to include language distinguishing between a guideline and a consideration. Geoff Chandler proposes using the term fine woody material instead of FWD. He expressed concern about the possibility that FWD could be removed from the ground if there were more than 4 tons/acre on the site; the FS is currently writing NEPA documents for biomass harvest and they do not want existing FWD removed.

**Decision: Combine guidelines 1.B, 2.B, 3.B, and 4.B into one guideline with three considerations.**

#### **Guideline 5.B**

The committee discussed the feasibility of the 5% approach as well as the role of landscapes vs. site level considerations. The committee discussed a possible exception for owners of large tracts of land so the guideline won't tie them down to the site-level. More discussion of this guideline took place in the afternoon session.

#### **Carmen Wagner – Water Quality and Soil Physical Properties**

The committee discussed whether these guideline were consistent with the current Water Quality BMPs. Carmen indicated that they are. The committee discussed several concerns, including going above and beyond the current BMPs with respect to the 100 foot wetland buffer; the inclusion of wooded wetlands and vernal pools (site specific guidelines); beneficial forest management in these areas (i.e. cutting alder, hemlock regen); and that current RMZ guidelines allow equipment to reach in but not to travel in the RMZ. If the FWM had to be separated and left in the RMZ, equipment would have to go in. Many are uncomfortable going beyond the current BMP's. More discussion on these guidelines took place during the afternoon session.

## **Gary Wyckoff – Economics**

Gary highlighted the cost of biomass harvesting to the harvester. Committee discussed sustainability, and the uncertainty in current scientific information vs. the precautionary principle. Marshall noted that the purpose of the committee is to figure out what's sustainable.

## **Decisions**

### **- Define fine woody material (< 4" dib)**

Gary Wyckoff expressed concern that 4" is too large and too much wood must be left behind. It was noted that the draft guideline currently calls for leaving material of <4" dib, so all the material could be 1" dib, for example. Don Peterson added that limiting biomass isn't a concern, it doesn't relate to a regulation. Carmen and Joe noted that fine woody debris and fine woody material are different. David Mladenoff added that there are consequences of the interpretation of the size specifications in the guideline; larger pieces decompose more slowly and last longer. Geoff Chandler indicated that in timber sales this would be two separate contracts separating out biomass – the four inches is critical; all the volume equations are based on 4". Jim thought that a possible consequence of specifying 4" would be that people would not be as likely to harvest material smaller than that.

### **Decision – Continue to use 4" dib as proposed.**

### **- 4 tons/acre: even-aged versus uneven-aged**

Joe Kovach noted that the average value of 3 tons/acre FWD currently on the ground in Wisconsin forests was computed based on a 3 inch diameter, so with a 4 inch diameter we want to go beyond that. Eunice Padley added that we wanted to have a little more than the 3 tons/acre for nutrient release after harvest. Matt Dallman commented that even in a clear cut you have to leave a bottom level of 4 tons. Darrell agreed that we are establishing a floor. David Mladenoff added that if the guidelines are not going to be broken out by forest type to avoid complexity, then the standard is too low, especially for hardwoods. Matt expressed concern that we won't know the long term sustainability of the 4 ton/acre standard for some time. Darrell explained that we're proposing limiting biomass removal on nutrient poor soils and this would help with concerns about sustainability. Don Peterson commented that on an average clear cut approximately 55 tons are removed with 4 inch top standards, while in an average selection cut approximately 22 tons are removed with 4 inch top standards – he thought the selection harvest guideline should be different from that for clearcuts. Eunice noted that in a selection harvest, the difference between existing FWD and 4 tons/acre will likely be made up in breakage. Darrell questioned whether this floor value fits for all situations. David, Matt, and Geoff expressed concern that the proposed 4 ton/acre standard may be too low. Others agreed that we would not want to go below 4 tons/acre. Darrell proposed that we consider 6 tons/acre, and invited the AC to comment on this during the upcoming comment period. Jim added that this number could be re-visited in the future. Marshall commented that from the photo, 4 tons appears to be a fairly minuscule amount. Don added that he didn't see this being an issue as they are currently over the 4 ton mark. Geoff thought there should be exceptions to the guideline to address issues like fire risk or salvage. Geoff and others want to see a concerted effort to measure the amount of FWD that is left after sales – it may be more than we think. Matt asked what was behind the change from 1/3 to 4 tons. Darrell explained that using tons/acre is a more quantifiable measure.

**Decision – Accept the 4 tons/acre standard for now and continue to look at data from FIA and other sources. Committee to comment on whether 4 tons/acre of residual FWD is sufficient as a guideline. Work on developing visual tools for estimating FWD, and develop crosswalks to numbers of crowns that equates to 4 tons/acre.**

**- Soils Committee**

**Does the Advisory Committee want to differentiate the soil types to discern which soils would have limitations for harvesting?**

Geoff commented that many of the restrictions will be based on this so it is something that needs to be done. Don Peterson agreed that the committee should tackle this issue. Matt Dallman asked whether slope would be part of the discussion. David Mladenoff added that a discussion of slope could only be helpful.

**Decision – Form a committee to do this work.**

**Action Item: Send names to Eunice to organize the group (Dave Hoppe, Jim Bockheim, Dave Hvizdak, Eunice, Plum Creek's soil scientist, Jay Gallagher)**

**- Salvage legacy protection: retain 5% unsalvaged (need for exception for large landowners)**

Darrell commented that with respect to large landowners – most of the discussion is at the site level. There could be a rationale for this based on acreage. It may make more sense for large landowners to plan at the landscape level. Joe Kovach added that the guidelines were drafted for the typical case, not for the exceptions.

**Decision – Accept 5% baseline, continue the landscape discussion.**

**- Concerns about water quality BMP (wetland setback etc.)**

Geoff expressed concern about whether this committee should take this on, and whether it could be addressed within 10 years. David Mladenoff agreed that these issues need to be addressed in a timely manner. Jane Severt asked whether there is justification to look at this again and wondered why these updates were not pursued before (by the WQ AC). Carmen responded that the water quality advisory committee was hesitant to change a familiar protocol. Committee seems to be in agreement that the water quality BMP's need to be looked at and that a letter to the BMP AC regarding these concerns should be drafted.

**Decision – Recommend that the Water Quality BMP Advisory Committee address the issue of wetland RMZ's.**

**Next meeting – August 26<sup>th</sup> in Stevens Point**

**Assignments:**

**Advisory Committee comments are due to the technical team on July 21<sup>st</sup>.**

**Third draft of guidelines posted to the website by August 18<sup>th</sup>. A synopsis of changes to be e-mailed to the committee.**