

Biomass Harvesting Guideline Review

Advisory Committee Meeting 2/25/2013

DRAFT Meeting Notes

Present: Sarah Herrick, Tricia Knoot, Joe Schwantes, Matt Dallman, Jim Hoppe, Greg Edge, Marshall Pecore, Carmen Hardin, TJ Morice, Deahn Donner, Don Peterson, Dustin Bronson, Tom Hittle, Karl Welch, Matt St. Pierre, Shawn Hagen, Bob Hanson, Steve Probst, Jeff Plunkett, John Schwarzmann, John Kowalski, Bill O'Brion, Jane Severt, Jonathon Gilbert

Absent: Earl Gustafson, Wayne Wagler, Greg Rebman

Matt Dallman & Jim Hoppe welcomed everyone, facilitated introductions, and went over meeting logistics.

Matt gave a presentation which detailed the scope of the review of the Biomass Harvesting Guidelines and the process the review would follow. There was background information on the development of the Guidelines, an outline of Advisory Committee member responsibilities to the process and to constituents, highlight of the subcommittee process, and COF involvement and the possibility of seeking public comment once the review is complete.

The technical team will be responsible for providing the Advisory Committee with any necessary or requested information, and for drafting and editing of proposed changes to the guidelines. The members of the technical team are: Dustin Bronson, Greg Edge, Carmen Hardin, Sarah Herrick, and Tricia Knoot.

The review will focus on new research and experience gained during implementation. Things that will not be addressed include forest fertilization, urban biomass, intensive culture of trees, non-forest derived biomass, non-woody biomass, specific species, education, training, and monitoring.

Timeline: AC will meet in Feb, June, and August; Subcommittees will meet in late March or Early April. Recommendations will be forwarded to the AC in May – subcommittees will have 1 face to face meeting, the rest of coordination will be via e-mail/conference call. Final recommendations for changes to the Biomass Harvesting Guidelines will be forwarded to the Council on Forestry in September, 2013.

Advisory Committee recommendations for changing the Guidelines will still need to be based on sustainability and where uncertainty exists; the precautionary principle will be employed.

Decisions will be made by team consensus, i.e. general agreement, not unanimous. Any issues that cannot be resolved by the Advisory Committee will be forwarded to the Council on Forestry for a decision.

Carmen Hardin gave a presentation on the details of the existing guidelines and how they were initially developed and implemented. There were several discussions/questions concerning the existing guidelines during the presentation:

The committee discussed the soil nutrient guidelines, especially the restrictions on dry nutrient poor sandy soils. Jane Severt commented that although the acreage of restricted soils does not seem that significant on a statewide level, the soils tend to be clustered, so impact is quite significant locally or regionally.

Don Peterson and Marshall Pecore discussed whether a stump, newly cut or existing, is considered coarse woody debris (CWD), with respect to guideline 1.A: Retain and limit disturbance to CWD already present..... Carmen explained that stumps are considered CWD, but are addressed by a separate guideline (3.A).

Bill O'Brion asked why Guideline 2.A distinguishes between pre-existing fine woody material (FWM) and incidental breakage and how the 5 oven dry tons was determined. Carmen explained that the 5 odt is an average calculated from FIA data on existing FWM.

Marshall asked about Kotar's new wetland habitat classification – it appears that some wetland sites are not as fragile as once thought. On sphagnum sites as long as the sphagnum is intact. Marshall also asked about wetland buffers (BMPS for Water Quality). Often the wetlands are the buffer, so now there is a buffer to the buffer? Carmen explained that it is the nutrient profile of the dysic histisols that is fragile and that filter strips are meant to prevent soil disturbance/ movement/damage. It is an operational rather than vegetation retention requirement.

There was discussion of how soil complexes were figured in the 2.2 million acres of land where biomass harvest is limited by the guidelines due to soil nutrient concerns. Carmen explained that the complexes are lumped together in calculation and that you can field verify and harvest on appropriate soils within the complex.

There has also been some additional direction provided on soil complexes within Appendix D of the Guidelines:

- No biomass harvest restrictions = <26% restricted soils
- Minor biomass harvest restrictions = 26-50% restricted soils
- Major biomass harvest restrictions = 51-80% restricted soils
- Not recommended for biomass harvesting = >80% restricted soils

There was discussion of an oak shelterwood example that Carmen presented. Could prescribed burning be used as a management tool in these areas? Carmen explained that if goal was to manage oak with fire in this area the guidelines would not prevent that.

The Committee discussed canopy gaps and FWM retention. The BHG do not establish whether a harvest is economically feasible, that is up to forester.

There were questions about county soil surveys and their age and accuracy. Carmen explained that the NRCS is working to get all the counties updated and the goal is to improve consistency of soil series names and definitions across counties. The Northern counties were done more recently than southern counties.

Sarah Herrick presented on how our guidelines in WI compare to the biomass harvesting guidelines that have been developed in other states: Minnesota, Michigan, Indiana, Maine Missouri, Pennsylvania, and Maryland.

The Committee discussed guidelines related to soil nutrient restrictions. Many thought that WI seemed more restrictive than other states, though it is hard to tell how soils compare across the states. Sarah explained that during their initial development the Advisory Committee felt comfortable restricting harvest on certain vulnerable soil types, but then allowing for less FWM retention on richer sites, WI FWM retention guideline is less than most of the other states. Bill O'Brion added that Wisconsin's guidelines' being more restrictive than other states is indicative of the culture of regulation in WI, which is too complicated and dissuades harvest.

Matt asked about the target FWM retention levels in other states. In WI it is 5 oven-dry tons per acre. What are other states looking for? Sarah explained that most of the other states do not explicitly state their retention target in their guidelines.

Sarah added that if people are interested, during initial guideline development in 2008, the technical team for that process produced a rationale document which explained much of the science behind the decisions that were made. That document was sent out with the materials for this meeting.

Greg Edge presented new research that has been done on biomass harvesting and its impact on biodiversity since 2008. The presentation covered a number of studies on small mammals, invertebrates, and fungi. The studies showed that different species respond in different ways to the presence/absence of coarse and fine woody debris.

Marshall commented that species needs change as forests change and an inventory is just a snapshot of succession, so results may differ depending on when an inventory is done. Marshall wondered if there was enough science to put a number on levels of woody debris that are necessary? Stakeholders have different approaches to risk. Greg added that we need to look at the state of the science as a whole. You can't cherry pick studies. The committee must decide if there is enough info to move forward or do we need more research?

Matt commented that he hope that the subcommittee process would provide the AC with their best professional judgment based on the state of the science, and then the AC could make a risk-based assessment based on full knowledge.

Dustin Bronson presented new research on soil nutrients and tree growth.

Jane questioned the results from a study in Sweden on wetland soils in light of silvicultural trials done here in WI where regeneration was very successful on these soils. Carmen indicated that this study looks at individual tree growth over time, slightly different than what is measured during Wisconsin's silvicultural trials.

There was discussion about nutrients and fire. Dustin explained that many soil nutrients can volatilize during a fire.

The Committee discussed how different species make use of nutrients in light of the studies presented by Dustin. Dustin explained that species do vary and for most species the nutrient impacts suggested by the research would be ok for n rotations – we just don't know what that number is.

Jane Severt gave a presentation on the implementation of the BHG on the County Forests which included comments from a number of county foresters on how implementing the Biomass Harvesting Guidelines has affected the practice of forestry in their counties.

There was a discussion of the 1 in 10 tops retention guidelines for FWM (2.A) being difficult from an operational stand point due to equipment and time constraints.

An unintended consequence of the Guidelines restriction of biomass harvest on dry nutrient poor sandy soils may be the conversion of scrub oak stands to jack pine, which is an exception to this guideline.

Bill O'Brion asked why the Committee cannot address forest fertilization. Carmen explained that fertilization is not a common practice in Wisconsin, so it doesn't make sense to have a guideline about it. Fertilization is not prohibited by the Biomass Harvesting Guidelines or any other forest management guidance, but it shouldn't be mandated either.

Jane highlighted that many counties where whole tree harvest (WTH) has been historically common are now prohibited from doing it due to the BHG soil restrictions. This means that many sites that could be harvested during spring break up are no longer available, which hurts the loggers and the ability to sell some timber sales.

It was noted that traditional harvest and bole wood chipping could still occur on these sites.

The Committee discussed allowing an exception for red pine on nutrient poor sites, and whether 4" dib is the right size limit for FWM since processors are now routinely harvesting down to 2" or more.

Someone asked whether counties have to follow guidelines and Jane explained that due to certification they do, and also that the counties generally follow state forest management guidelines (with some exceptions). Auditors were asking how much wood was being left to ensure long term sustainability – there were no good answers, so guidelines were developed to give certified lands a standard to fall back on. Guidelines are not required on non-MFL lands, but are implemented on most public lands and private lands enrolled in MFL.

Marshall commented that the auditors know there are gray areas, but they want you to stay abreast of the science, so you are doing the best job possible. Bill commented that under SFI once there is a BMP in place you are responsible for following it.

Tricia Knoot gave a presentation on economic considerations which highlighted trade-offs in ecological and economic considerations and included a brief literature review.

There was a discussion of how markets and profitability as well as operational advances may change the impact of guidelines. Tricia explained that there are a complexity of impacts which can make it hard to determine the precise effects of the guidelines.

Deahn Donner presented some preliminary results from the study "*Impacts of harvesting forest residues at different intensities in northern hardwood forests*" which was conducted on the Chequamegon-Nicolet National Forest.

Matt led a discussion of the Advisory Committees next steps:

- 1) Send sub-committee recommendations to:
 - a. Forest Ecology/Soils/Biodiversity – Dustin Bronson and/ or Greg Edge
 - b. Implementation/Operability/Economics – Tricia Knoot and/or Sarah Herrick
 - c. Subcommittee members can be AC members or someone outside the process
- 2) There will be a Doodle poll sent out to determine the date of the June meeting
- 3) Review sub-committee recommendations when they are ready in late spring

Marshall wondered since the science in this area is open ended, how are we doing these two groups? Matt commented that we probably don't have all the answers, but we are hoping to get the info we do have on the table and then the Advisory Committee has to assess the risk and make recommendations based on acceptable risk. Marshall thinks it is important to have agreement on the general parameters in the science, and then to move forward on economic considerations.

Jane commented that the counties have ecological concerns too, but they need to keep the operators and revenue. The counties are not saying that economics should be the only consideration, but the AC needs to weigh that. Matt added there may be ways that we can maintain those chippers and still maintain the resources and he hopes that these sub-committees will bring these issues forth.

Matt commented that having the sub- committees go first will help clarify what we do and don't know – and help make recommendations. This information will be packaged for the Advisory Committee to aid in their discussions. Subcommittees will be looking at each of the guidelines individually – some will have a lot of uncertainty and for some it will be more clear.

Next Advisory Committee Meeting will be Thursday June 6, 2013.