Wisconsin's Forest Sustainability Framework
Advisory Committee Meeting Minutes
April 18, 2007

Forest Products Lab
Room 501
One Gifford Pinchot Drive
Madison, WI 53726
8:30 a.m.-4:00 p.m.

In attendance:
John DuPlissis, Tim Tollefson for Gordy Mouw, Mark Heyde, Lisa MacKinnon, Stefan Bergmann, Nick Miller, Bill Klase, Gene Roark, Darrell Zastrow, Mark Rickenbach, Amy Peterson, Jane Severt, Gene Francisco, Mike Prouty, Lynn Wilson

Technical Advisors:
Vern Everson—DNR, Carmen Wagner—DNR

Absent:
Jonathan Gilbert, Richard Hauer

Meeting was brought together at 8:50am by Bill Klase, facilitator, introductions were made and logistical meeting information was provided.

Welcome
Chair Rickenbach presented an overview of the March meeting noting that background information including ground and voting rules that were established at last months meeting. Recapping, he stated that the task is to evaluate the BASE 18 that was put together by the USDA State and Private Forestry Northeastern Area and NAASF. That evaluation is set against what we will need in Wisconsin to effectively evaluate forest sustainability. This means the group should add indicators and metrics as it sees fit, or it can delete them too if that's necessary. The group should keep in mind data availability, costs associated with new data proposals, and that at some point the group will need to prioritize the proposed additions, along with the wish list. Once the draft framework is set by the Committee, it will go out for public comment, and will then move to the Council on Forestry for their approval. Heyde added that another goal is that the framework will roll up to regional, and national levels as needed in the future. Rickenbach stated that the group struggled a bit with criterion 3 last month as the initial one through the process and today there is more on the agenda, so the timeline is much tighter.

Prouty, asked how will this framework help the forest community in Wisconsin? Wilson stated that Plum Creek may use these in the future as their framework for certification. They have been working on indicators for a number of years on their own for SFI certification. Rickenbach added that this framework has a statewide focus, not necessarily

a property or parcel focus. Ideally the framework, and data gathered will give us a view of how our forests are changing over time.

Review Criterion Three (C3): Maintenance of Forest Ecosystem Health and Vitality

Klase suggested that the group review each indicator and metric in the draft C3 framework. NOTE: *** indicate the need for new or increased data collection.

Indicator 7: Area of forest land affected by potentially damaging agents

Metric 7.1: Tree mortality and damage type

****Add crown dieback and transparency with an expansion to all FIA plots.*
Essentially this is looking at crown and crown dieback as a proxy for forest health. The group discussed natural mortaility vs. mortality from damaging agents. Everson stated the data may show that more trends on the 5 year plot scale. It may show where the baseline is, or we can watch big increases or decreases to give us a place to work from.

>>>VOTE:
The group voted. Prouty voted yellow, and asked when the group would decide if this was feasible data to collect? Rickenbach stated that the group will work through that along with prioritization of identified data needs later in the process. Prouty was ok with that; all others voted green.

Metric 7.2: Catastrophic Events

Existing event reporting with supplementary information from FIA. Includes wind storms, ice, hail, wildfire (acres burned, cover type, fire cause).
The group did not have questions or discussion on this metric.

>>>VOTE:
Duplissis voted yellow, stating that he's not sure what catastrophic events are going to gain us; it's such a small acreage, even if it's a bad year. The group did expand this last time from wildfire to include all catastrophic events such as ice and wind storms. All others in the group voted green.

Metric 7.3: Climate

Existing data gathered from on-line sources including the Palmer Drought Index, average temperature, duration of lake ice, heating/cooling/growing degree days, and frost tubes.
Rickenbach stated that the majority of these data is all existing and easy to get. For the duration of ice on lakes the State Climatologist may need to be contacted. Francisco added that the Department of Transportation has many annual frost tubes across the state and that data are downloadable and easy to get; the group agreed.

>>>VOTE:
All green.

Metric 7.4: Disease and Insects

DNR Risk maps and Forest Health Report.

Francisco asked a general question about climate change and succession and how those changes fit into the criterion and indicator process. Rickenbach stated that this will help us to back cast and look at trends that we should be worried about. MacKinnon stated that we're looking at long term trends in the data, and hopefully use it for short term decision making. Francisco urged that there is the need for a statement in the report regarding how climate and successional changes will affect the framework. Duplissis added that Cummings-Carlson had recommended an increase in FHM plots similar to Michigan, but at this time the group has not forwarded that recommendation.

>>>VOTE:

All green.

Metric 7.5: Animal Damage

****Density relation to herbivory.*

This is primarily deer damage. This is new data collection and we're not sure how it would be collected yet. Duplissis stated that we do have data on deer density per unit and we need to link what is the herbivory that goes along with that unit. We have the deer numbers, what is the damage that goes along with it? Severt stated her concerns that if this is a recommendation, there isn't staff to do this type of monitoring. Wilson had the same concern working for a private landowner. Zastrow urged the group to remember that this is a statewide framework; it's very different from property level. State Forests are being referenced here as an example. This framework shouldn't always be taken down to the property level. Wilson urged that the framework be described as a statewide framework and that it will not always be applicable at the property level.

>>>VOTE:

All green.

Metric 7.6: Invasive Plants

****Creating a common database with standard survey methods, in combination with FIA data*

Everson stated that FIA has been collecting invasive woody and shrub data for 2 years. It is expanding slightly in the future to some herbaceous plant data.

>>>VOTE:

All green.

Indicator 7a: Area and percent of forest land with diminished biological components indicative of changes in fundamental ecological processes.

The group thought that this was more a separate indicator, than a metric under damaging agents. Heyde stated that we need to take a look at how we're

numbering things and watch whether it's an indicator or a metric, so these two will be elevated to the indicator level.

Metric 7a.1: Understory and mid-story plants

The group decided that this metric is too broad and expensive, yet it is important enough to list in the report as an indicator that did not move forward and why.

Metric 7a.2: Fire event reporting

Duplissis, don't have the acreage for catastrophic fire in WI. Miller, not talking about catastrophic fire, it should be shuffled up to 7.2.

>>>VOTE on this indicator:

Group feeling is that this indicator should not move forward, but should be referenced in the report as being set aside due to cost, scale, and focus.

Indicator 7b: Area and percent of forest land subjected to levels of specific air pollutants that may cause negative impacts on forest ecosystems.

Metric W7b.1: Ozone Damage

****Need to intensify ozone FIA and FHM plots*

>>>VOTE:

All green.

BREAK

Criterion Four (C4):Conservation and Maintenance of Soil and Water Resources

Rickenbach recommended moving to C4 since Carmen Wagner is here today and the committee concurred. Klase asked Wagner to provide an overview to C4, please see your Technical Advisor Fact Sheet.

Wagner's overview was essentially that we do have data available for the existing metrics, but the ability to draw conclusions from these data is questionable. You may be able to assign risk ratings, or identify areas to focus on, but there are different factors besides forestry practices that affect water quality and the metrics don't take those outside factors into consideration.

Indicator 8: Soil Quality on Forest Land

The group moved to add drop 8.1 Soil pH, keep 8.2-8.5 and add Wagner's listed recommendations. These are on back of the Technical Advisor sheet that is similar to the proposed 2010 Montreal revision. The two proposals are:

- Area and percent of forest whose designation or land management focus includes protection of soil resources. (Information is available from FIA and from Division of Forestry's Tax Section.)
- Proportion of forest management activities that meet soil management guidelines to protect soil resources. (Information available on state lands and National

Forests. Some industry partners, such as Stora Enso, also collect information through timber sale reviews.)

>>>DECISION ITEM:
Rickenbach stated that the group wouldn't be voting on today's criteria, because those absent are expecting us to review and vote at the next meeting.

Indicator 9: Area of forest land adjacent to surface water, and forest land by watershed
The group moved to keep the two metrics for this indicator, and also to add an increased frequency for WISCLAND to be moved to the wish list.

Indicator 10: Water quality in forested areas
Two discussion points that were brought up include the designation of protected or unique lands, and an evaluation of the forestry community organizations and support processes in WI. Unique lands will be moved to the criterion 1 discussion and the forestry community will be discussed during the criterion 7 discussion.

The group moved to add the first two of Wagner's recommendations to replace 10.1. Also to move the Index of Biological Integrity to the wish list; keep 10.2; add the master logger reporting process to the framework.

Draft of Criterion 4:

Criterion Four (C4):Conservation and Maintenance of Soil and Water Resources

- 8: Soil Quality on Forest Land (B8)
  - 8.1 Area and percent of forest whose designation or land management focus includes protection of soil resources (new)
  - 8.2 Proportion of forest management activities that meet soil management guidelines to protect soil resources (new)
  - 8.3 Total soil carbon (B8.2)
  - 8.4 Estimated bare soil (B8.3)
  - 8.5 Bulk density (B8.4)
  - 8.6 Calcium-aluminum ratio (B8.5)
- 9: Area of forest land adjacent to surface water, and forest land by watershed (B9)
  - 9.1 Forested riparian area (B9.1)
  - 9.2 Forest land by watershed (B9.2)
- 10: Water quality in forested areas (B10)
  - 10.1 Area and percent of forest whose designation or land management focus includes protection of water resources (e.g. national forest, state lands, county forests, MFL participants) (new)
  - 10.2 Proportion of forest management activities that meet BMP's to protect water quality (new)
  - 10.3 Master logger reports (new)
  - 10.4 Stream miles impaired by percentage of watershed forested (B10.2)

LUNCH

Criterion Two (C2): Maintenance of Productive Capacity of Forest Ecosystems

Klase asked Everson to review his evaluation and recommendations for this criterion. Everson stated that this criterion overlaps with other spheres of sustainability, but in particular we're looking at the ability of the forest to produce goods and services for humans. FIA addresses this criterion.

Indicator 5: Amount of timberland

The group discussed that it is important in this process to know how much land is not available or is available. It's the spectrum between protected land and working forest that needs to be evaluated on the large scale. The group debated the metric of parcel size, but decided it might be best addressed in the social end with landowner values. The group moved that amount of timberland is an ok metric as it is as long as we consider the rest of the data that we'll be gathering.

Indicator 6: Annual Removal of merchantable wood volume compared to net growth

These metrics are supported by FIA via timber utilization studies. The group thought that that it would be good to move the TPO from a 5 year to an annual collection. They decided to put it on the wish list. They also discussed Montreal indicator 14—Annual removal of non-timber forest products as being important. Identifying and surveying trade groups could provide the data.

Ultimately the group wanted to keep 6.1 and 6.2, and then add 6.3 as total growing stock of both merchantable timber and non-merchantable tree species on forest land available for timber production. Also add annual removal of non-timber forest products as 6.4. They then added to the wish list upgrading the TPO to an annual collection and expanding it to include non-forest industry of wood fiber producers and consumers for bio-energy.

Draft of Criterion 2:

Criterion Two (C2):Maintenance of Productive Capacity of Forest Ecosystems

- 5: Area of timberland (B5)
  - 5.1 Amount of timberland (B5.1)
- 6: Annual removal of merchantable wood volume compared with net growth (B6)
  - 6.1 Net growth and removals (B6.1)
  - 6.2 Type of removals (B6.2)
  - 6.3 Total growing stock of both merchantable timber and non-merchantable tree species on forest land available for timber production (M11)
  - 6.4 Annual removal of non-timber forest products (M14)

Criterion Five (C5): Maintenance of Forest Contributions to Global Carbon Cycles
Everson reviewed the technical advisor fact sheet.

Indicator 11: Forest ecosystem biomass and forest carbon pools
The group discussed that the information from this indicator is good baseline data to have now, and it's good to be positioned with this information for the future. They then talked about ecological reasons for continuing to collect the data and it was determined that more information is needed to better quantify the volume in a tree from remote sensing.

The group deemed that Montreal 27 was not applicable on a statewide scale so they moved on to a discussion of Montreal 28. Some in the room want this in the framework; others thought it might be best on the wish list.

> *>>>ACTION ITEM:*
> Everson will prepare information on lifecycle analysis including the availability of data and models prior to the next meeting.

Draft of Criterion 5:

Criterion Five (C5): Maintenance of Forest Contribution to Global Carbon Cycles
- 11: Forest ecosystem biomass and forest carbon pools (B11)
  - 11.1 Forest ecosystem biomass (B11.1)
  - 11.2 Forest carbon pools (B11.2)
  - 11.3 Forest carbon by forest type (B11.3)
  - 11.4 Change in forest carbon (B11.4)
  - ???? Contribution of forest products to the global carbon budget (M28)

Wrap Up
Rickenbach wrapped up by stating the next meeting date is May 23rd. There are two upcoming tribal meetings and he will send out more information on those in the next week or so. One public comment for criterion 6 was handed out today; file that for the June meeting. Peterson has the 2003 National Report on Sustainable Forests on CD if anyone would like a copy, contact her.

Meeting adjourned at 3.15 p.m.

Criterion 3: Maintenance of Forest Ecosystem Health and Vitality

7: Area of forest land affected by potentially damaging agents (B7)

7.1: Tree mortality and damage type (B7.1)

****Add crown dieback and transparency with an expansion to all FIA plots.*

7.2: Catastrophic Events (new)

Existing event reporting with supplementary information from FIA. Includes wind storms, ice, hail, wildfire (acres burned, cover type, fire cause).

7.3: Climate (new)

Existing data gathered from on-line sources including the Palmer Drought Index, average temperature, duration of lake ice, heating/cooling/growing degree days, and frost tubes.

7.4: Disease and Insects (B7.4)

DNR Risk maps and Forest Health Report.

7.5: Animal Damage (B7.4)

****Density relation to herbivory.*

7.6: Invasive Plants (B7.4)

****Creating a common database with standard survey methods, in combination with FIA data*

7b: Area and percent of forest land subjected to levels of specific air pollutants that may cause negative impacts on forest ecosystems. (M16)

7b.1: Ozone Damage (new)

****Need to intensify ozone FIA and FHM plots*

WISH LIST

*No priority is implied in the numeric listing of these items

1. Increased frequency of WISCLAND
2. Increased intensity of Index of Biological Integrity (IBI) in forested settings
3. Increase TPO to annual survey
4. Expand TPO to include non-forest industry wood fiber consumers and producers (bio-energy)
5. Better metrics for remote sensing tree volumes (biomass) by species
6. Need better data for models on individual species. Better software/hardware is needed to accomplish this