

Forest Practices Biomass Work-Group

Forest Practices Biomass Work-group Members

At the November 2010 Forest Practices Board meeting, Commissioner of Public Lands Peter Goldmark made a commitment that Department of Natural Resources (DNR) would convene interested stakeholders to engage in a dialog about how to ensure biomass harvest from forestland is sustainable and protects public resources. In the same year, the definition of “Forest Practice” was revised by the Forest Practices Board, to include the harvest of forest biomass. During the stakeholder discussions around this rule change, concerns were expressed regarding the potential need for specific best management practices (BMP’s) and/or further modifications to existing Forest Practices Rules related to biomass harvest.

The work-group that was convened was comprised of the following members:

Bridget Moran, Chair	Department of Natural Resources
Rachael Jamison, Co-Chair	Department of Natural Resources
Craig Partridge	Department of Natural Resources, State Lands
Stephen Bernath	Department of Ecology
David Whipple	Department of Fish and Wildlife
Bill Hermann	Hermann Brothers Logging
Chris Mendoza	Conservation Caucus
Kara Whittaker	Conservation Caucus
Doug Hooks	Washington Forest Protection Association
Peter Goldman	Conservation Caucus
Ed Tolan	Nippon Paper, Inc.
George Cave	Port Townsend Paper
Marty Acker	NOAA
Dick Miller	WFFA
Eveleen Muehlethaler	Port Townsend Paper
Norm Schaaf	Merrill & Ring
Marc Engel	Department of Natural Resources, Staff
Darin Cramer	Department of Natural Resources, Staff

A kick-off meeting was held on January 31, 2011 to gain a clear understanding of the specific concerns about forest biomass harvest under existing forest practices rules; to develop a plan for “next steps” by the group; and to determine the efficacy of existing Forest Practices rules in protecting Washington forests and public resources from the collection of biomass.

The group developed a team charter, which defined the purpose of the group to:

“Educate ourselves on the science/policy and available technologies related to biomass harvest, the Forest Practices rules that apply to such harvest and biomass harvest BMPs. Discuss and determine if specific BMP’s and/or Forest Practices rules and/or rule revisions related to biomass harvest are needed in Washington. If so, identify a path toward identifying what is needed.”

The group agreed to the following deliverables at the conclusion of the process:

- Charter
- Regular status reports to the board
- Final recommendations to the board
- Supporting documentation/data.

The aim of the group was to reach consensus in the final recommendations to the Forest Practices Board (board). The group will present final recommendations at the August 2012 Forest Practices Board meeting. In cases where consensus could not be reached on specific recommendations, DNR will present those differences to the Forest Practices Board.

Monthly meetings were conducted from January 2011 through March 2012. The group developed a work-plan that was intended to ensure all relevant topic areas, including available scientific findings, were evaluated in depth, the

group had time to visit biomass collection operations in the field, and adequate time was provided to synthesize information and develop recommendations.

The topics covered by the group were:

1. Forest Practices Rules Overview
2. Best Management Practices/Resource Considerations Overview
3. Soil Health and Productivity
4. Silviculture and Roads
5. Disturbance (pests, disease, fire, conversion)
6. Dead wood, slash disposal, and carbon storage
7. Water Quality, Riparian Zones/Unstable Slopes, and Water Infiltration
8. Wildlife, Biodiversity and Cultural Resources

Each meeting included an overview of the Washington Forest Practices Rules, Best Management Practices for biomass removal from a few other states, and current science that applied to the topic being discussed. The current science reviewed by the group was not the result of a formal literature review process on forest biomass, and should not be considered as such. Rather, it was a collection of related articles (including peer reviewed, field trip hand-outs, and grey literature) known to exist by stakeholder participants. This summary of relevant information provided grounding for the discussions that followed, helped identify follow-up topics of concern, and ensured that potential recommendations were not at odds or redundant to existing rules.

Throughout each meeting, as topics emerged that were of concern to the group or that the group determined would need follow-up action, they were “flagged” and returned to at later meetings when the issues were being synthesized. The flagged items were then grouped into five “buckets” based on their relevance to biomass collection specifically:

1. Topics that related to biomass exclusively.
2. Topics that are primarily timber related but that affect biomass.
3. Topics that are timber specific.
4. Topics that affect state lands only.
5. Topics that fall outside the existing jurisdiction of Forest Practices Rules.

The group evaluated the following topical areas as they relate to biomass collection: soil health and productivity, silviculture, roads, disturbance (pests, disease, fire, and conversion), dead wood, slash disposal, carbon storage, water quality, riparian zones, unstable slopes, water infiltration, wildlife, biodiversity and cultural resources. From these topical discussions, recommendations emerged that address issues such as (but not limited to) definitions in the Forest Practices Rules, retention levels, harvesting on steep slopes, timing of road abandonment.

The working group plans to take at least one field trip to Eastern Washington to further assess differences in biomass harvest strategies from Western Washington. In addition to current biomass harvest, the trip will allow the group to assess potential biomass removal from forest treatments to reduce the threat of fire and treatments addressing other related forest health issues (e.g. beetle infestations). The group, after the final field tour, will review, modify and finalize recommendations.

The following are the final recommendations of the group:

Definitions¹

Add the following definition of “forest biomass” to the Forest Practices Rules:

“Forest Biomass” means material from trees, and woody plants that are by-products of forest management, ecosystem restoration, or hazardous fuel reduction treatments on forest land. Although stumps are a by-product of these activities, only those removed for the purpose of road and landing construction, forest health treatments, or conversion activities may qualify as forest biomass.”

¹ The group determined there is no need to define the word “harvest.” The word “removal” is used throughout the FP rules and is sufficient (with the proposed definition of “forest biomass”) to capture the intent. “Slash,” “harvest” and “salvage” are already defined in rule. If the proposed definition of “forest biomass” is adopted, it will provide the clarification that any revisions to these definitions would have sought to achieve.

Revise the definition of “Forest Practice” to read as follows:

"Forest practice" means any activity conducted on or directly pertaining to forest land and relating to the growing, and removal through harvesting or processing of timber or forest biomass, including but not limited to:

- Road and trail construction;
- Harvesting, final and intermediate; Precommercial thinning;
- Reforestation;
- Fertilization;
- Prevention and suppression of diseases and insects; Salvage of trees; and
- Brush control.

“Forest practice” shall not include: Forest species seed orchard operations and intensive forest nursery operations; or preparatory work such as tree marking, surveying and road flagging; or removal or harvest of incidental vegetation from forest lands such as berries, ferns, greenery, mistletoe, herbs, mushrooms, and other products which cannot normally be expected to result in damage to forest soils, timber or public resources.”

Forest Biomass Retention Levels²

Funding for Landscape Level Wildlife Assessment Models

The Forest Practices Biomass Work-group, by consensus, would like to recommend that the Forest Practices Board prioritize the identification of funding to complete the Landscape Level Wildlife Assessment models. This will provide the necessary information to determine whether existing requirements are sufficient or if a rule change is necessary to ensure wildlife habitat is sufficiently provided for in the Forest Practices Rules.³

RMZ Retention

Given that FP rules don’t currently have fine woody debris (FWD) requirements, increased intensity of biomass harvesting may require an Adaptive Management review of the efficacy of FPR to maintain and protect riparian function with a particular emphasis on fine sediment retention. It is expected that such a review could inform quantitative retention thresholds.

The group would like the FPB to request DNR’s Compliance Monitoring Program to prioritize and implement compliance monitoring of biomass harvest during the time prior to an Adaptive Management process. Add a sentence about DNR enforcement on-site is needed.

Comment [WU1]: Mark will work on the wording of this paragraph.

RMZ Inner Zone Retention

Consensus could not be reached on how to guide harvest of biomass in the RMZ inner zone. There were two perspectives offered:

Position #1.

Group recommends that Board Manual guidance is developed to state: Biomass harvest should not be targeted in the harvestable portions of RMZ inner zones, however, this should not preclude the need to prepare harvestable sites for regeneration, to improve forest health, or reduce fire hazard.

Position #2.

There should be no biomass removal from the inner zone, except for moving it for site preparation reasons. (Conservation Caucus)

² *Large woody debris in unbuffered Type Ns and Np streams.* The Forest Practices Biomass work-group, by consensus, determined that, as it pertains to the potential removal of biomass, there is no need for additional rules regarding large woody debris in unbuffered Type Ns and Np riparian management zones. **ADD CITATIONS OF EXISTING RELEVANT RULES.**

³ A discussion regarding the efficacy of existing WRT/GRT requirements was the catalyst for this outcome.

Slope

Revise WAC 222-30-020 to read:

WAC 222-30-020 Harvest unit planning and design. (1) Logging systems, including forest biomass removal operations, must be appropriate for the terrain, soils, and timber type so that yarding and skidding can be economically accomplished and achieve ecological goals of the rules.

Consensus is that the intent of this revision is captured and Marc will look at the large impacts this revision may have on the rules as a whole to ensure there are no unintended consequences.

Timing

Road abandonment requirements and need for biomass to cure; Landowner notification to DNR.

The Forest Practices Biomass Work-group, by consensus, determined that no rule change or BMP's were needed to address the road abandonment and timing issue.

The Forest Practices Biomass Work-group, by consensus, recommends to the Department of Natural Resources, when biomass is being harvested after the timber harvest is complete (when the biomass has had time to cure on site for a period of time), to condition the FPA with the 48 hour notification requirement. The group formally requests that FP foresters (perhaps at TFW meetings) be reminded of this as it applies to the removal of forest biomass.

State timber contracts and road abandonment/re-abandonment.

The Forest Practices Biomass Work-group, by consensus, determined that no Forest Practices rule action is necessary to address this issue that was raised. The work-group recognizes the high-priority that RMAP's are given by DNR and acknowledges that dialogue will remain open with regard to DNR's progress on developing contracts (short and long term) for forest biomass from state lands that don't conflict with RMAP priorities.

Carbon Storage

Carbon storage is not addressed in Forest Practices rules.

The Forest Practices Biomass Work-group, by consensus, determined that no action is necessary to address this issue that was raised. The workgroup determined that it is beyond the scope of this committee's objectives and, if addressed, would need to be done so in a different forum.

Ecosystem Functionality

The question of whether all FP rules could apply a standard of ecosystem functionality was raised. There are differences of opinion on whether or not the Forest Practices Act and rules addresses ecosystem functionality. The group agreed that no agreement was possible. There are two perspectives that emerged in the discussion. Not all participants' views are represented by these two positions.

Position #1

The FPA and rules state "that coincident with maintenance of a viable forest products industry, it is important to afford protection to forest soils, fisheries, wildlife, water quality and quantity, air quality, recreation and scenic beauty." This legislative finding and declaration does not include ecosystem functionality, a concept that is not universally or well defined. Ecosystem functionality could be applied to biomass harvest and other FPR when directed by the Washington State Legislature. (Forest Product Industry and Landowners)

Position #2:

A policy statement needs to be added to either the FPR or a Board Manual that includes:

-Forest biomass harvest shall be planned in the context of the larger landscape in which it is located across the full harvest cycle, so that biological diversity and ecosystem integrity are maintained and adverse cumulative impacts on public resources and soil productivity are minimized.

-An adaptive process moving towards sustainability is the ultimate outcome.

-Statement should include concepts outlined by the Conservation Caucus text provided in the document prepared for the 3.30.meeting. (Conservation Caucus)

Comment [WU2]: Conservation Caucus will write their position to be included in the final document.

The groups asks the board to understand the dynamic nature of the biomass industry and to check back in 5-years on several issues that may arise as the industry continues to mature⁴:

- The question of whether reforestation species will shift for biomass production was raised, particularly in the outer limits of the RMZ.
- The question of whether the shrub layer be collected in the future for utilization as biomass was raised. Concerns were raised with regard to the clarity of the collection of shrubs from the inner zone. There may be a need to revise the rules that relate to what can/can't be harvested in the inner zone of the RMZ and on unstable slopes.

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⁴ Several items were discussed and the group determined that no further action was necessary:

1. A dynamic forest products market defines end use of all products. Concerns about a greatly expanded biomass market was the focus of the conversation.
2. The FP requirements to leave snags may conflict with L&I safety rules. Leaving snags is important for wildlife habitat. No FP rule action is needed. This is an issue that would need to be addressed with L&I.