

Working Group on Forest Biomass Utilization Critical Path Draft 4/20/06

Issue/Group	Barriers and Obstacles	Key Outcomes Needed	January–June 2006	July–December 2006	January–June 2007	July 2007 and beyond
Predictable Supply * Scott Aycock , David Schmidt, Jim Hallberg, Ron Saranich, Bill Hatton, Sandy Lonsdale, Joe Misek, and Gary Lettman * Convener	1. Uncertainty as to cost of product 2. Process to implement vision predictably at federal level 3. Lack of landscape level (CROP like) planning across ownerships 4. Vision of the future (and process to develop a vision) --desired future condition 5. NEPA contracting (5-year review) 6. Long-term contracting on public lands 7. Lack of consensus on what forest can sustain environmentally 8. Litigation and appeals on public projects 9. Lack of appropriation—commercial use biomass program 10. Mortality as a threat to predictability 11. Inconsistent federal funding (appropriations)	1. Credible enforceable long-term contract (supply) 2. Define sustainability and desired future condition 3. Coordinated planning effort- federal to local level 4. Investigate feasibility to implement CROP statewide 5. Supportive appropriate NEPA process 6. Project designs that minimize NEPA costs (collaboration prior to NEPA) 7. Monitoring process to assess effectiveness and promote adaptive management 8. Incentive restoration through biomass utilization 9. Working models of projects that use stewardship structures (and others) to demonstrate viability 10. Respond to changing legal environment (e.g. see #2 in 2007)	1. Public and political consensus to ensure long-term supply (multi-administrations) 2. Inventory examples of existing stewardship contracts 3. State to provide clear expectations to federal agencies (short-term) 4. Move on projects to get fuel supply in place while tax credit is in existence (sunsets 12/31/07, takes 18 months to initiate project)	1. Identify existing stewardship contracts we have working now.	1. Policy changes to extend contracts more than 10 years 2. Federal legislation re: managing forests after they burn 3. Demo contract (working models) at multiple scales needed in Oregon (mid 2007)	

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Shared Vision and Public Support *Rod Nichols, Mike Cloughesy, Jim Hallberg, Doug Heiken, Loren Kellog, Tad Mason, David Schmidt, Lorette Ray, and Kathy Shinn *Convener	<ol style="list-style-type: none"> 1. National standards exclude forest biomass from renewable certification 2. Not yet at consensus. “Consensus”—Must define: is 100% possible? Is necessary? 3. Competing interests (balance successes with long-term plan) 4. Biomass supply 5. Prioritization with stakeholder engagement 6. Fear of unknown 7. Energy side barriers – ex. Green E seal of approval 8. Vision for the future (and process to develop a vision) – desired future condition 9. Lack of Consensus on what forests can sustain environmentally 10. Performance measures disconnected with biomass goals (O) 	<ol style="list-style-type: none"> 1. Issue is time-sensitive—consensus of “critical mass” is essential to build capacity to move forward 2. Education—to include: <ul style="list-style-type: none"> – Comprehensive understanding of direct and indirect benefits at social, economic and ecological levels – Need to contrast consequences of choices/or lack thereof – Information on economic value of benefits, i.e. economic value of a clear _____, etc. 3. Maintain open communication and access to information 4. Articulated vision 5. Agreement on “value”—economic, ecological, etc. 6. Viable projects (demo or otherwise) 7. Allowable forest treatment 8. Focus on proven technology (short term) 9. Multi-tiered engagement 10. Strategies for collaboration at the local level on specific projects 11. Scalability of projects to match supply and community scale 12. Connect biomass goals with performance measures (O) 	<ol style="list-style-type: none"> 1. Establish communications sub-committee 2. Establish communications plan with feedback loop 3. Explore potential connections with Tillamook and World Forestry Centers 4. Specialized outreach: rural banks; legislative staffers 5. Recognize and emphasize human as well as resource issues 6. Capitalize on existing resources (programs, websites, etc.) 7. Create clearing house of information (Multi-tiered? Web page?) 8. Strategies to assess concerns and issues of the spectrum of stakeholder groups 9. Strategy for interaction with other active (biomass) groups (O) 	<ol style="list-style-type: none"> 1. 2006 summer tour to view demo projects (OFRI and co-sponsored by FBWG) 2. Outreach to utilities in rural communities as part of projects 3. Focus on a particular project and bring entire community into project 	<ol style="list-style-type: none"> 1. Results-oriented conference or summit to share outcomes of projects 2. Outreach activities for demo projects 3. Outreach to specialized publics <ul style="list-style-type: none"> – rural policy makers – banks – legislative staffers 	<ol style="list-style-type: none"> 1. Summit: share findings from projects 2. Provide information and strategies to state lawmakers (O)

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Economy and Market Development *Martin Desmond, Ron Saranich, and Sandy Lonsdale *Convener	<ol style="list-style-type: none"> 1. Capital—availability 2. Cost of capital 3. Transportation costs 4. People not aware of biomass as a potential for electrical generation especially in the utility industry 5. Infrastructure—need to have it to get the energy out. Includes extraction, processing, and electric delivery infrastructure 6. Human resources need to improve (right skill set) and increase the availability of the workforce 7. Assurance of adequate biomass supply. 8. Concern about regulatory action 9. Need to be able to cost effectively breakdown cellulose to generate biofuels, i.e. ethanol 10. May not be able to sell “Green tags” from forest biomass 11. Lack of validation of CO2 value of land management practices 	<ol style="list-style-type: none"> 1. Sustainable supply 2. Healthy rural economies—position contribution from biomass 3. Family wage jobs with benefits 4. Need to look at multiple market opportunities (energy, biofuels, small wood products) 5. Identify distinct barriers and opportunities related to biofuels 6. Consider broadening incentives to include areas other than electricity – e.g. restoration, etc. 7. Engage rural communities as stakeholders with economic development interests 8. Increase awareness of CO2 values and other air pollutant tradeoffs associated with land management 9. Make recommendations on incentives that make an attractive market environment. 10. Explore symbiosis between value-added products and bioenergy 	<ol style="list-style-type: none"> 1. More integration (such as this group) between state agencies, federal agencies, and economic development agencies 2. Make biomass development a priority for the Governor, state legislature. Refocus and refine issue 3. Communication with utilities Center for Resource Solutions to get biomass certified 	<ol style="list-style-type: none"> 1. One-stop shopping to obtain necessary biomass information 2. Incentives for private timber owners to sell their own biomass; add value to resource (CO₂ credits) 3. Examine recommendations for extension/ expansion of federal energy tax credit and other opportunities (O) 4. Examine transmission pricing & policy issues(O) 	<ol style="list-style-type: none"> 1. Develop models for local businesses and agencies to utilize (Lakeview example) 2. Explore tax credit/ incentives option for biomass utilization on private property 3. Expansion of stewardship contracts, i.e., increase number and size of stewardship contracts. 	

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<p>Extraction and Production Infrastructure Development</p> <p>*Loren Kellog, Rick Wagner, and Jim Giesinger</p> <p>*Convener</p>	<ol style="list-style-type: none"> 1. Costs! 2. Workforce Training 3. Production targets 4. Rare skill set: monitoring capacity 5. Education and outreach of current technology and experiences 6. Road access and conditions 7. Transport costs 8. Sorting and handling integration for multiple markets—who pays for extra moves 9. Identify production efficiencies that can be applied in the field 10. Contract constraints, e.g. timeframes flexible to meet fuel moisture content goals. 11. Freight costs (driven by rising fuel costs) 12. Lack of knowledge about production capabilities in various conditions 13. Capacity of local contractors to get contracts 	<ol style="list-style-type: none"> 1. Prove that this works- tie into pilot projects and showcase them 2. Everyone gets paid 3. Transport incentives 4. Synergy between end users 5. Go beyond 1–1 economic argument—look at social, economic and environmental impacts 6. Improve economies to provide family wage jobs 	<ol style="list-style-type: none"> 1. Identify extract equipment existing and new (OFRI/study) 2. Demonstration projects showing benefits to operations that follow biomass. 	<ol style="list-style-type: none"> 1. Education about product opportunities 2. Understand the economics of biomass utilization. (Case study?) 3. End user connectivity—discussions to identify synergy 	<ol style="list-style-type: none"> 1. Gain more specific information on accessibility, location, amount and type of supply to direct investment in infrastructure 	

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Research and Development *Linc Cannon, Scott Levensgood, DougHeiken, Jamie Barbour, and Loren Kellogg *Convener	<ol style="list-style-type: none"> 1. Conversion technology especially biofuels 2. Cost of transportation 3. Large scale biomass removal/ecologic effects 4. Matching resources extracted to marketable products 5. Small wood handling 6. Funding for research 7. Quantify costs & benefits of economic values – reduced fire threat, cleaner air, less carbon, opportunity for reduced fire costs 	<ol style="list-style-type: none"> 1. Woody biomass vs. other cellulose for bio-fuels 2. Proposed PNW ecological study 3. BEF and Mater study Spring 2006 4. Study on efficient energy use—i.e., heat vs. electric 5. Interface ID needs with Western Governor’s Biomass Report 6. Federal energy bill and appropriation 7. OFRI study 6-06 8. Consortium of western states to research biomass 9. Interface with energy companies and their R & D 10. Gain information and determine ways to share costs related to barrier 7 11. Transfer technology development to users & communities 	<ol style="list-style-type: none"> 1. PNW/ biomass and ecosystem research study initiated (Winter 2006–end 2007) 2. Invite energy companies to participate in BWG (Spring 2006) 3. Invite Potlatch to describe their ethanol research program (Spring 2006) 4. Mater & Bonneville Environmental Foundation (BEF) study results 	<ol style="list-style-type: none"> 1. OFRI study— conference (November 2006) 	<ol style="list-style-type: none"> 1. Interface with Western Governor’s task force and initiatives in other states (Spring 2007) 	

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Supportive Regulatory Environment *Greg Corbin, Lisa Schwartz, Brian Finneran, Mike Ziolk, and Mark Kendall *Convener	<ol style="list-style-type: none"> 1. Public acceptance of NEPA process regarding thinning projects 2. Interrelationship of regulations is not well known and/or not conducive to timeliness 4. Public opposition and distrust of the regulatory process 5. Implementation of regulation may be variably applied or inexpedient 6. Lack of detailed knowledge about regulatory environment 	<ol style="list-style-type: none"> 1. Strong local communities, legislative and executive support 2. Recognize and internalize the resource values (e.g. carbon, burning) 3. Develop public education on forest practice regulation that affects stakeholder interests 4. Streamlined, exciting and fun regulatory process for developers with happy regulators 5. Connect ODE’s model ordinance for developing energy projects to assured supply and contracting issues-seamless 	<ol style="list-style-type: none"> 1. Identify laundry list of regulations <ul style="list-style-type: none"> – Forestry – Energy facility siting – Utility negotiations and contracting 	<ol style="list-style-type: none"> 1. Develop matrix of regulations considering project scale, regulation inter-relationships, sequence, agency... 	<ol style="list-style-type: none"> 1. Evaluate the list for benefit and obstacle 2. Comparison of Oregon regulations to best practice 3. Differentiate regulatory requirement depending on project scale—matrix 4. Map(s) for navigating the regulatory matrix 5. Congressional delegation involvement in crafting regulatory changes 	<ol style="list-style-type: none"> 1. Suggestions for regulatory change 2. Improve regulatory environment