

MoFRAC
December 9, 2010
Meeting Minutes

Welcome & Introductions – Chairman Scott Brundage welcomed the group to the meeting. The following members were in attendance-

Lisa Allen, Mo. Dept. of Conservation
Bob Ball, Natural Resources Conservation Service
Anastasia Becker, Mo. Dept. of Agriculture
Peter Becker, Eastern Ozarks Forestry Council
Mike Brown, USDA APHIS PPQ
Scott Brundage, Walnut Council
Martha Clark, Mo. Community Forestry Council
Jack Courtenay, Mark Twain National Forest
Fred Crouse, Tree Farm Committee
Gene Garrett, Mo. Center for Agroforestry
Nate Goodrich, Natural Resources Conservation Service
Roy Hengerson, Mo. Chapter Sierra Club
Allen Powell, USDA Farm Service Agency
Jason Hubbart, University of Missouri SNR

Steve Jarvis, Mo. Forest Products Assoc.
Shelby Jones, Mo. Consulting Foresters Assoc.
Shibu Jose, Mo. Center for Agroforestry
Ed Keyser, Conservation Federation of Missouri
Wayne Lovelace, Missouri Nurseryman's Assoc.
Steve Mahfood, The Nature Conservancy
Ken McCarty, Mo. Dept. of Natural Resources
Dave Murphy, Conservation Federation of Mo.
Harlan Palm, Walnut Council
Gus Raeker, Mo. Society of American Foresters
Kelly Smith, Missouri Farm Bureau
Hank Stelzer, MU Extension
Richard Stricklin, Top of the Ozarks RC&D
Steven Thurman, US Army – Ft. Leonard Wood
Jerry Van Sambeek, USFS Northern Research Station

The following other interested parties were in attendance:

Robert Stout, Mo. Dept. of Natural Resources
Terry Cunningham, Pioneer Forest LLC
Hank Dorst, Mark Twain Forest Watchers
Donna Baldwin, Mo. Dept. of Conservation
Mike Hubberd, Mo. Dept. of Conservation
Rick Merritt, Tree Farm Committee
Bill McGuire, Mo. Dept. of Conservation

Stuart Miller, Mo. Dept. of Conservation
Steve Westin, Mo. Dept. of Conservation
Tony Stafford, Mo. Dept. of Agriculture
Dennis Baird, Mo. Dept. of Agriculture
Denise Vaughn, University of Missouri, Grad Student
Eric Peterson, Tatanka Resources

MoFRAC & Dept. of Ag – Dennis Baird, Deputy Director with Missouri Department of Agriculture, joined the group. He noted that MFPA gave a presentation that he attended on woody biomass. He met with Lisa Allen and wanted a committee to address concerns regarding woody biomass and sustainability and learned about MoFRAC. He noted that Missouri Department of Agriculture supports the industry and he is glad to be on committee. Scott noted MOFRAC is happy to have Ag representation.

Biomass Crop Assistance – Steve Jarvis gave a presentation on the Biomass Crop Assistance Program (BCAP) and distributed 2 fact sheets.

What is BCAP?

Two key positions:

- 1) Support the establishment & production of eligible biomass crops
- 2) Provide matching payments for the collection, harvest, storage and transportation (CHST) of eligible crops

- a. Payments for eligible crops (NIPF landowners) - submit application to FSA for project area; establishment costs up to 75%; annual payments up to 15 years; payment reduction due to end use
- b. Matching payment plan (Landowners/Harvesting Operations) – submit application to FSA project area; eligible material delivered to qualified facility: must follow approved conservation plan; must not be diverted from current markets; matching payments \$1 per dry ton for 2 years.

Summary of key changes:

- Eligible material harvest directly from the land
- Must follow approved written conservation plan
- Biomass must not be diverted from current markets – how will this be determined?
- Biomass conversion facilities must treat all producers equally, i.e. pay for fair market price
- Biomass conversion facilities must certify that biomass is used for bio-based products.

Visit www.fsa.gov/bcap for more information, or contact Eddie Hamill, Missouri Farm Service Agency, Parkade Center Suite 225, 601 Business Loop 70 West, Columbia, MO 65203, (573) 876-0931, or eddie.hamill@mo.usda.gov .

Steve noted that if it can be implemented fairly, it will be a big improvement, but key item is how this will be determined. It could interfere with the current market situation.

Lisa noted quality of plans is critical. Also need to continue dialogue on species (invasive, low value to wildlife, etc). It was noted that FSA is working with state forestry offices on language and will come down through them.

Scott added that we need a unified plan for all users. NRCS and MDC forestry leadership needs to be involved.

Grant Proposal for a Regional Biomass Feedstock Production System – Shibu Jose gave a presentation on *Developing a Biomass/Biofuel Corridor along the Mississippi/Missouri River Floodplain*.

In response to NIFA/AFRI sustainable bioenergy FY2010 RFA

- Target development of regional systems for the sustainable production of bio-energy and bio-based products.
- Integrated research, education & extension/tech transfer
- Feedstock – five dedicated energy crops that include perennial grasses, energy cane, sorghum, woody biomass, and oil crops (oilseeds and algae)
- Crops will serve as feedstock for the production of advanced non-ethanol, infrastructure compatible fuels and bio-based products.
- Approach –systems oriented that links feedstock development, production, logistics, conversion and markets – ultimately leading to environment, economical, and social prosperity for rural communities.
- \$9,000,000 per year, \$45 million total, for project periods up to 5 years
- Program anticipates making 3 to 5 awards in FY10

- MU is leading an effort that involves 16 universities in 10 states, 9 community colleges, 4 federal agencies, 2 national labs, 12 corporate partners, and 4 nonprofit organizations to establish a biomass biofuel corridor along the MO/MS Rivers.

EISA 2007 RFS mandates use of 36 BGY by 2022

- Need to triple the current 12 BGY by 2022
- Up to 15 BGY from ethanol
- The rest 21 BGY from advanced fuels
 - Non-ethanol
 - Drop in fuel like bio-butanol or green diesel
 - Infrastructure compatible

Why the MO/MS River Floodplain?

- This corridor offers large acreage of marginal cropland that is not suitable for most other food or crops.
 - 157 million acres, i.e. 125 million acres is farmland; national average idle land is 10%. For the 10 states it is 9.5%; this translates to 12 million acres.
- High levels of surface and ground water available (but also fear of exacerbating water quality issues).
- Existing industrial infrastructure that can be adapted to make advanced biofuel and bio-based products.
- Existing and cost effective transportation network of barge and railroad systems.
- Leveraging existing investment (\$67 million in research investment; perhaps billions in private sector investment).

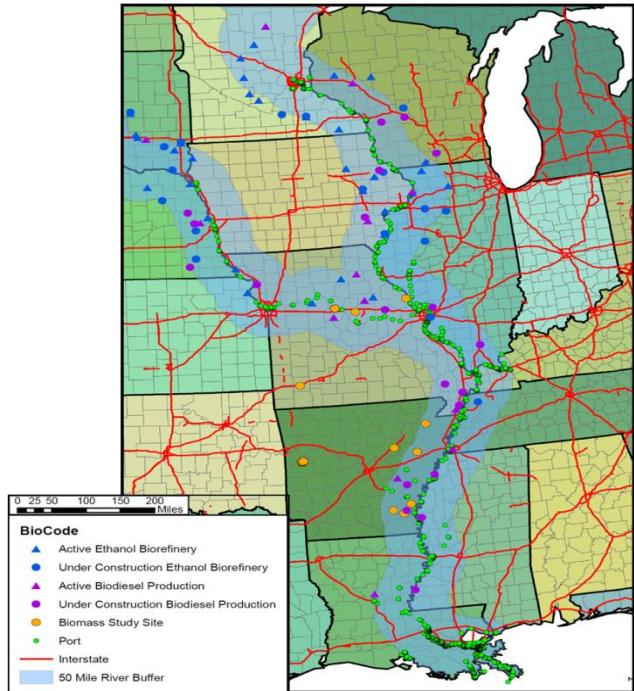


Illustration courtesy of Shibu Jose

Cost Effective Transportation Network (15 barge tow = 216 rail cars or 1,050 semi trailers). Transporting freight by water is also the most energy-efficient. Barges can move 1 ton of cargo 576 miles per gallon of fuel. A rail car would move the same ton of cargo 413 miles, and a truck 155 miles.

Over 40 multiple partners include universities, the Forest Products Lab, USFS, NRCS, MO/AR/TN Depts. Of Ag, Farm Bureau, etc.

Objectives:

- 1) Produce - develop a regional system or biomass/biofuel production along the MO/MS river floodplain (optimize yields by improving feedstock, develop sustainable production systems that allow for reduced inputs with minimal environmental impact).

- 2) Commercialize – identify factors and criteria for successful commercialization with the regional system. (develop harvesting, processing, storage, and transportation logistics with the goal of integrating with existing infrastructure where applicable; identify and link with conversion technologies appropriate for the biomass feedstock; examine social and economic drivers and barriers for markets and distribution strategies and evaluate the scale effects of biomass production and co-products on food, feed and fiber systems and markets regionally and globally.
- 3) Sustain – evaluate the sustainability, production, performance and human dimension of the regional system (generate social, environmental, and economic metrics and data; address health and safety issues in the context of the regional biofuels industry).

Mixed feedstock – increase production to 20 t/ac/yr with minimal environmental impacts (willow, populus, sorghum, switchgrass, energy cane, miscanthus). Some can reach 20-25 t/ac/yr. Goal is 625,000 acres = 20/t/ac/yr * 80 gallon/ton = 1 billion gallons/yr).

Help landowners to establish these mixed species systems. What is the market pull for them? What will happen in 5 years?

- Sustainability – this process (using perennial species except sorghum) will actually improve water quality.
- In five years, the corridor will be the national leader in production of advanced liquid fuel – increase economic vitality of area.

Tree Farm Update – Rick Merritt – filling in for Clayton Lee, chair of Tree Farm Committee

- Received \$5,000 from American Forest Foundation for 2011 Tree Farm Conference.
- \$15,000 from USDA NRCS for outreach
- \$5,000 capacity building grant from American Tree Farm System.
- 2010 Tree Farmer of Year – Dave Murphy
- 2011 tree farm conference will be held on Dave's property in Clark County on May 21st.
- 2011 leadership conference for American Forests Foundation Feb 23-25 in Inglewood, CO.
- National teleconference through American Forests Foundation talked about management plans, and noted they are working on a template for management plan for NRCS, USFS, American Tree Farm System, so same management plan would be for all.

2011 EQIP – Nate Goodrich distributed copies of the NRCS Annual Report. He noted that they are receiving EQIP signups, and as of this morning they had 57 applications for management plans, and 153 applications for forest practices. Last year they had 67 for management plans and 200 for forest management plans (all were funded.)

He also distributed a map of NRCS field offices and service area with contact info, as well as a list of forester's duties.

Lisa Allen wanted to give recognition to NRCS – Missouri is unique in that we have NRCS foresters and it's important we have such great partnerships.

Roy asked about budget cuts. Nate noted that they are looking at cutting staff 5% annually over next two years, and employees won't receive salary increases.

Report on Forest & Woodland Association of Missouri – Nate reported that the Association became official and elected a board at the chestnut roast on October 16th. New chair is Mark Nussbaum, Vice Chair is Ed Keyser, Secretary is Skip Mourglia, and treasurer is Jim Ball. As a board next task is to hire executive director. Ed noted they are waiting on the memorandum of understanding between the Conservation Federation of Missouri and Missouri Department of Conservation. Steve Jarvis is working on a job announcement – it will be a half time position. Logo is completed and online. Hoping this Saturday we get MOU done at the CFM board meeting at Runge.

Emergency Forestry Restoration Program - Allen Powell with FSA rolled out EFRP, a program to reforest areas after large storms. EFRP provides payments to eligible owners of nonindustrial private forests land in order to carry out emergency measures to restore land damaged by a natural disaster. Funding for EFRP is appropriated by congress. He noted we really won't know more about it until we have to deal with it.

Unidentified Logging Trucks – Scott noted we need to form a committee to review this problem. He talked to Steve Jarvis, and he'd been looking it to it as well. As we speak, we are not sure what is required from MoDOT as far as truck identification. Need group to research rules and regulations, and if there is a problem decide what we can do. Steve Jarvis will look into the matter and report back at next meeting.

Carbon Credits –Chicago Exchange was sold and it is now closed. Steve Mahfood introduced Eric Peterson, Tatanka Resources, who has been doing a lot of work in making things happen on the ground.

Chicago Climate Exchange has a short history, and was admirable but difficult to say the least. Voluntary market and also responsible for certification, it's difficult to exist. A lot of what they said was no till agriculture carbon credits, but did not work out as it should have. Weight of those projects and lowering of market (dropped prices) changed views.

We're hearing about demand and getting inquiries on how Missouri landowners can be involved. Just starting to build, and demand from CA will be enough to drive projects here in Midwest. Markets have not gone away and are being driven by CA market. Bring coastal money to Midwest and south central states. Stay tuned, stay involved, things are happening and will continue.

Eric noted that the climate action reserve and prices for contracts have gone from \$6 to \$11 per ton, making projects worthwhile. It is a 100 year commitment, fairly rigorous. Estimated by 2020 will be a 300 Billion dollar business. Some feel it will be the largest commodity traded worldwide. Demand is there, and through people like us, to get word out to landowners we can have a successful program. It's mandatory in California (by vote), but volunteer here in Mo. Could be a mechanism for jobs.

Scott asked they give updates at each MoFRAC meeting.

Woody Biomass Assessment Tool – Hank Stelzer distributed a handout which outlined the problem and objective, a partnership project of MU and the Center for Applied Research & Environmental Systems. He directed folks to look at <http://projects.cares.missouri.edu/MoBAT/> for more information.

MU Power Plant New Boiler – Hank noted that in November started de-construction and will take several months. Hired mid South Engineering to be consultant to come up with Request for Qualifications and solicit input. Plan is for the RFQ goes out in January, in February will be an evaluation process, and Request for Proposal (RFP) will go out to short list in March. May 6 deadline for firms to submit bids. May 9 interview process. Will negotiate in late May and reward contract in early June, and commission boiler in 12 months. Right now we're reviewing feedstock assessments and TPO. Woody biomass guidelines must be in RFP. Boiler will take up to 100,000 tons annually (80,000 tons wood, 20,000 tons grass, etc.).

Biomass BMP Manual – Scott asked if there is anyone that thinks it needs some work. Dave made a motion for MoFRAC to endorse it as is. Martha Clark seconded the motion. Lisa noted that from MDCs perceptive, all partners were included in developing the product. We are now working with MFPA and MU to test the recommendations. Intent is to find out if there is a need for tweaking the future. She suggests we wait to see what comes from that review to see if things need modified. Kelly Smith noted he will refrain from voting for or against it since he was involved in the development process.

Scott asked if the group was in favor of endorsing it as is for now. The motion was approved to endorse the recommendations as they stand.

Pioneer Forest Windstorm – Terry Cunningham noted that on May 8, 2009 straight winds came through. Pioneer estimates 22,000 acres damage. Had sales going on at the time of the storm and moved them to salvage – have been salvaging since then. They have salvaged approximately 29.5 million boardfeet. They were concerned about the dry October and fuel load. Impacts of the storm will be monitored and inventoried. Now they are winding down and transitioning to normal timber harvesting plans.

Scott thanked Terry and asked for another update at the March 2011 meeting. He will also ask for USFS and MDC to give updates on where they are. Jack Courtenay with Mark Twain National Forest noted they had a large fire that consumed even large logs due to dryness and fuel load. They had to back off since we did not want to put folks in harm's way.

Woody Biomass Coordinating Committee – Scott noted that Peter Becker is a great spearhead for this committee. In addition, without Peter the biomass conference would not have been pulled off. Thank you Peter.

At that time, Scott noted that a number of MoFRAC members have comments about the forming a woody biomass coordinating committee. Is such a committee needed? Who would be on it, what would they do, how can they help in developing a woody biomass industry in Missouri, etc.?

Scott would like a committee formed to answer the above questions and report back at the next MoFRAC meeting in March recommendations based on their findings.

Scott noted that as woody biomass projects get going in Missouri, each agency needs someone to be the contact point for entities/agencies for resource information. Dennis Baird noted that we need to have everybody involved, not just the agencies.

Robert Stout added that DNR is ready to discuss with partners what approach they will take to deal with the issues. He noted that new woody biomass facilities will have to come to DNR for air permits. Extent

of regulatory reach would not extend beyond facility and its emissions. Could be a good point to start a process to provide information to that developer.

Scott noted that the committee could be comprised of Robert Stout (DNR), Steve Jarvis (MFPA), Lisa Allen (MDC) and Dennis Baird (MDA) to lead the group and Robert agreed to be chair. Lisa noted that MDCs main reason to be involved is their charge to protect the fish, forest, and wildlife resources. MDC serving as technical advisors seems logical. MDC has access to data but is not in the role of supporting one forest products industry over another.

Shelby noted that there are confidentiality guidelines that may come into play, especially with state agencies. Stuart Miller also noted that state agencies are governed by the Sunshine Law, so if you are looking for something to remain confidential, it may not be best to have state agencies at the table. Steve Westin added that his observation of the process is that these companies show an unwillingness to take advice. Will they listen and care? They will just pay more?

Lisa noted state agencies are willing to serve, but need to resolve the goal of the committee. Need to draft a charter/definition of role of committee. Lisa, Robert, Dennis, Stuart, Shelby, Gene, and Steve will take the lead. Robert will chair.

Introduction – Scott noted it was a pleasure to introduce Blake Hurst, President of Farm Bureau, and Dan Cassidy, CEO. Blake thanked the group for coming and wished them luck with endeavors. Introductions were made around the table.

Third Party BMP Verification – Scott asked Kelly to talk about some of his concerns on the certification process, and the need to protect what is a verification process for one ag crop doesn't foul up with another that's getting subsidy, tax credit, etc. Kelly noted that BMPs are good - most landowners want to operate at that level. When we look at requiring mandatory 3rd party verification for woody biomass, it raises concerns in other sectors of ag already in place and throws up a red flag for those folks. Will others come under same scrutiny? They do not want that. Farm Bureau is a general farm organization, and we consider trees a crop. We have a responsibility to look at everything as a whole and how it affects all the sectors. If this is pushed forward, it may meet with resistance with other sectors of agriculture.

Scott thanked Kelly and noted his comments are timely. Kelly is familiar with forestry and forestry practices. We need to make sure that forestry cuts are different than cornfield cuts. In this development state, we need to appoint a committee - Lisa, Fred Crouse, Steve Jarvis, Shelby Jones, Clayton Lee or Rick Merrit, Kelly Smith, Hank Stelzer, Dennis Baird/Tony Stafford, Nate Goodrich, Scott Brundage. Steve noted we need to avoid a regulatory scheme. Hank noted we don't know who the aggregator will be, but they will be impacted by this.

Committee to Gather Information on Central Hardwoods Region Woody Biomass Delivered Prices, Payments, Stumpage Prices, etc. – Scott reported that we have had a conference, talked biomass for a year or more, know it's coming, people are building business plans, and were not sure what kind of money we're talking about to deliver a load of wood, what specs are on that wood, species, what's in for the landowner, etc. There is a laundry list of questions. Would like a committee of those that are more closely involved to gather info to come back and report to the group. Steve Jarvis, Hank Stelzer, Gene Garrett, Steve Westin, Shelby Jones. Steve Jarvis noted that price information is sensitive, and he must decline.

Discussion ensued on the role of the group. Lisa noted that she hesitates to involve staff, other issues may be more burning. Bill McGuire noted that data collected on prices could be obsolete by the next day, and agrees that we have more burning issues. Shelby added that Minnesota has an extensive report. Steve Jarvis noted the website www.forestmarket.com collects woody biomass prices. Suggest we look at their price report and be done with it. Lisa also noted that Lew McCreery with USFS and other forest products supervisors for other states already have that info. She will make some phone calls; however, price information will be obsolete quickly. Hank also suggested www.biosat.net. Lisa will report back at the next meeting.

Business Meeting –

- Approval of the minutes. Anastasia has a few corrections she will send to Donna. Motion was made by Dave Murphy to accept the minutes as correct, 2nd by Roy, approved.
- Finances – Woody Biomass Conference made \$1,100. Scott asked how we handle money. CFM holds the money in a separate account; can turn it over at any time. Group decided to continue to let CFM hold the money
- Bylaws Revisions – haven't been touched for 3 years and there are a few issues. 1) Official Members/Alternates/Committee Chairs - Says officers *must be a council member*. Who is a member and each member designates an alternate. We suggest we change that to two members. Wording for one vote per organization. Dave made a motion to approve such change, and Scott send it electronically for formal approval at next meeting. Scott also noted that with the present wording, the Vice Chair does not automatically move up. Change wording that it's not automatic. Gene Garrett noted the bylaws on the VC – "in the event chair cannot fulfill responsibility, VC will fill duties until Chair returns or is replaced" (see bylaws). It's vague, but gets the job done. Issue is membership. Need to think about this, would it be better to have 2 individuals from each organization, but only one vote for issues. Richard Stricklin suggested to word it that each organization "may have two members". 2) Excessive absences – how to define? Dave noted it's up to Chair.
- Elections – Wayne Lovelace – Chair; Bob Ball – Vice chair; Martha Clark – Secretary. Approved.
- Upcoming Meetings – March 10, June 23, September 15, December 15.