



MEETING SUMMARY
NORTH CAROLINA CLIMATE ACTION PLAN TECHNICAL WORK GROUP

Agriculture, Forestry, and Waste Management TWG Call #9, January 11, 2007

Attendance:

1. TWG Members: John Bonitz, Bob Hazel, Dennis Hazel, Jim Hickman, Chris Hopkins, Max Merrill, Paul Sherman, Anne Coan, Kraig Westerbeek, Bob Slocum, Steve McNulty
2. Public: David Mickey, Michael Sligh, Tony Kleese
3. CCS: Stephen Roe, Katie Bickel
4. DAQ/DENR: Heather Hawkins, Jim Southerland, Brock Nicholson, Gary Saunders

Background documents:

(all posted at http://www.ncclimatechange.us/Agriculture_Forestry.cfm)

1. Agenda
2. AFW TWG Call #8 Summary
3. Power Point Presentation to the AFW TWG
4. AFW Policy Option Document
5. Example Completed Policy Template
6. NC Greenhouse Gas Inventory and Forecast, 1990-2020

Discussion and conclusions:

1. The Call #8 Summary was reviewed. CCS asked whether there were any changes needed to draft Call #8 Summary. None were made.
2. This meeting was spent reviewing the AFW Policy Options document. Several of the policy options are nearing completion (AFW-1, 9&10, 11, and 12). For other options, some work has been completed on the quantification of benefits and costs, but CCS still needs text from the volunteers on policy implementation language. The discussions focused on the implementation text that had been provided by AFW TWG volunteers and the quantification of benefits and costs that CCS and TWG volunteers had completed to date. The following items are a summary of the significant issues raised (see the table at the end of this summary for the AFW Options).
3. AFW 9&10: The ways in which forest productivity can be increased were discussed and the issue of future forest disturbance (e.g. storms, fire) and its affect on productivity was

raised. After discussion, the TWG sensed that there was not a good way to account for the impacts of disturbance on productivity quantitatively; however it should be recognized under the Key Uncertainties section of the policy template. CCS requests text on this issue from AFW volunteers. One TWG member raised the possibility of whole-tree harvesting as a technique to improve productivity. The views of the TWG on this were mixed in terms of feasibility; it was agreed to include a footnote on this issue. Finally, the question of a static forestland area was questioned, with the view that forest land area is likely to decrease in the future.

4. AFW 9&10: Some TWG members felt that the goals for this option should be scaled back (e.g. to 25% of timberlands by 2020 and 50% by 2030). After much debate, clear consensus on the issue was not reached by the TWG, and the goals were not adjusted. CCS suggests that the concerns of the TWG be put into the Feasibility Issues section of the template. CCS requests text from volunteers on this issue for incorporation into the template.
5. AFW 4&7: The TWG discussed assumptions about how much carbon remains in biomass and soils after forests and agricultural lands are converted to developed uses. The TWG felt that nearly all carbon is lost; specifically, that all of the organic matter in topsoil is removed and unlikely to be replaced due to heavy compaction. CCS requested the TWG provide additional information and references for this assumption.
6. AFW 8: A question was raised as to what forest type should be used to estimate the benefits of reforestation. The TWG felt that southern pine forests should be the basis.
7. AFW-11: It was noted that not all of the methane controlled from landfills can be used in energy projects (some will need to be flared). CCS will note this under the analysis section and that some of the energy offset benefits quantified will not be applicable for the methane that ends up being flared.
8. AFW-12: TWG members asked whether the implementation and analysis should focus on high-GHG reducing waste types (e.g. metals and fiber). The current write-up and WARM modeling assume equivalent levels of recycling across all waste types, except as noted in the current write-up. CCS will note that the benefits results can be considered more conservative (low) as a result.
9. AFW-1: CCS will review the application of the electricity offset emission factor for 2020 to assure that it conforms to the forecast 2020 emission factor for that year (CCS will also check with the ES TWG facilitator to determine if an emission factor for new generation is available and should be used instead. CCS requests input from TWG members on the implications of manure digestion (e.g. change in nitrogen content, potential for increase/decrease in value).
10. The issue of adding two new priority options to the slate of options currently under evaluation was reviewed. Two proposals were made to prioritize analysis of urban forestry and organic farming. Some TWG members expressed concern over the need to complete analysis of the initial set of priorities before considering additional options; the process for elevating options was discussed and the need to consider all medium-level priorities for elevation was raised. NC DENR explained that there might be opportunities to evaluate second tier options, depending on resource availability and level of effort.

Next steps:

1. TWG members are asked to work with fellow volunteers and supply text input to the policy options document to Steve Roe (waste management, agriculture) and Katie (forestry) as soon as possible (this text can be submitted in the body of an email). CCS will incorporate this text and the results of additional analysis completed into a revised version of the document for submittal to the CAPAG a week before the next meeting.
2. Next CAPAG meeting, January 24, 2007.
3. Next TWG call scheduled for 1:00 – 3:00 p.m. on February 9, 2007.

TWG Volunteers for Policy Option Development

Option No.	GHG Reduction Policy Option	TWG Volunteers
AFW-1	Manure Digesters/Other Waste Energy Utilization	Mitch Peele, Marion Deerhake, Kraig Westerbeek
AFW-2	Biodiesel Production (incentives for feedstocks and production plants)	John Bonitz, Mitch Peele, [Alex Hobbs, Solar Center, who is not a TWG member was mentioned as a technical resource]
AFW-3	Conservation Tillage/No-Till (carbon sequestration and reduced energy use)	Mitch Peele, Chris Hopkins, David Smith
AFW-4	Preserve Open Space/Agricultural Land	David Smith, Mitch Peele, Max Merrill, (Bill Holman)
AFW-5	Agricultural Biomass Feedstocks for Electricity or Steam Production	Mitch Peele, (Dennis Hazel).
AFW-6	Policies to Promote Ethanol Production	John Bonitz, Mitch Peele, Chris Hopkins, Bob Slocum
AFW-7	Forest Protection – Reduced Clearing and Conversion to Nonforest Cover	Chris Hopkins, Bob Hazel, Stephen Whitfield, Max Merrill
AFW-8	Afforestation and/or Restoration of Nonforested Lands	Bob Slocum, Chris Hopkins, Bob Hazel, Stephen Whitfield, (Dennis Hazel)
AFW-9	Expanded Use of Forest Biomass Feedstocks for Electricity (fuel switching)	Chris Hopkins, Bob Slocum, Stephen Whitfield, (Dennis Hazel)
AFW-10	Expanded Use of Forest Biomass Feedstocks for Residential, Commercial/Institutional, or Industrial Heating	Chris Hopkins, Bob Slocum, Stephen Whitfield, (Dennis Hazel)
AFW-11	Landfill Methane and Biogas Energy Programs	Jim Hickman, (David Mickey, not a member of the TWG offered himself as a technical resource)
AFW-12	Increased Recycling Infrastructure and Collection	Jim Hickman, Chris Hopkins, (David Mickey, not a member of the TWG offered himself as a technical resource)